Junctions 9

ARCADY 9 - Roundabout Module

Filename: 1 - A2 Chatham Hill Magpie Hall Rd Existing.j9
Path: P:\17-035 Hempstead Valley, Medway\Trans\Arcady\2019 TA Submission\2019-03-19
Report generation date: 02/04/2019 14:08:06

Summary of junction performance

	AM					PM				
	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity
	Do Minimum									
1 - High St (NW)	3.6	23.23	0.77	C	-33 %	133.3	626.49	1.48	F	-33 %
2 - Chatham Hill (E)	450.8	1155.57	1.51	F	[2 - Chatham Hill (E)]	443.6	1264.77	1.47	F	[2 - Chatham Hill (E)]
4 - New Rd (W)	1.1	4.02	0.53	A		3.4	8.23	0.78	A	
	Do Something (800)									
1 - High St (NW)	2.5	18.10	0.70	C	-30 %	39.2	193.09	1.10	F	-25 %
2 - Chatham Hill (E)	371.3	925.60	1.43	F	[2 - Chatham Hill (E)]	238.1	634.19	1.31	F	[2 - Chatham Hill (E)]
4 - New Rd (W)	1.2	4.10	0.54	A		2.5	6.38	0.71	A	

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	High St Chatham Hill Magpie Hall Rd Existing RBT
Location	
Site number	
Date	22/03/2019
Version	
Status	
Identifier	
Client	
Jobnumber	17-035
Enumerator	CA_WKS12\PLimbu
Description	

Units

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

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75			✓	Delay	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	Do Minimum	AM	ONE HOUR	08:00	09:30	15	✓
D2	Do Minimum	PM	ONE HOUR	17:00	18:30	15	✓
D3	Do Something (800)	AM	ONE HOUR	08:00	09:30	15	✓
D4	Do Something (800)	PM	ONE HOUR	17:00	18:30	15	✓

Analysis Set Details

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

Do Minimum, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	High St Chatham Hill Magpie Hall Rd Existing RBT	Standard Roundabout		1, 2, 3, 4	636.75	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-33	2 - Chatham Hill (E)

Arms

Arms

Arm	Name	Description
1	High St (NW)	
2	Chatham Hill (E)	
3	Magpie Hall Rd (SE)	
4	New Rd (W)	

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 - High St (NW)	3.54	6.98	12.9	13.0	30.0	23.5	
2 - Chatham Hill (E)	7.00	7.00	0.0	3.0	30.0	18.5	
3 - Magpie Hall Rd (SE)							✓
4 - New Rd (W)	7.55	8.50	5.1	9.9	30.0	34.5	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - High St (NW)	0.642	1628
2 - Chatham Hill (E)	0.568	1618
3 - Magpie Hall Rd (SE)		
4 - New Rd (W)	0.761	2306

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	Do Minimum	AM	ONE HOUR	08:00	09:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - High St (NW)		ONE HOUR	✓	520	100.000
2 - Chatham Hill (E)		ONE HOUR	✓	1743	100.000
3 - Magpie Hall Rd (SE)					
4 - New Rd (W)		ONE HOUR	✓	925	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - High St (NW)	2 - Chatham Hill (E)	3 - Magpie Hall Rd (SE)	4 - New Rd (W)
From	1 - High St (NW)	3	315	170	32
	2 - Chatham Hill (E)	142	512	0	1089
	3 - Magpie Hall Rd (SE)	Exit-only	Exit-only	Exit-only	Exit-only
	4 - New Rd (W)	18	561	325	21

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - High St (NW)	2 - Chatham Hill (E)	3 - Magpie Hall Rd (SE)	4 - New Rd (W)
From	1 - High St (NW)	0	19	6	12
	2 - Chatham Hill (E)	47	0	0	2
	3 - Magpie Hall Rd (SE)	Exit-only	Exit-only	Exit-only	Exit-only
	4 - New Rd (W)	1	4	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - High St (NW)	0.77	23.23	3.6	C	477	716
2 - Chatham Hill (E)	1.51	1155.57	450.8	F	1599	2399
3 - Magpie Hall Rd (SE)						
4 - New Rd (W)	0.53	4.02	1.1	A	849	1273

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - High St (NW)	391	98	1053	952	0.411	388	119	0.0	0.8	7.238	A
2 - Chatham Hill (E)	1312	328	413	1384	0.948	1267	1028	0.0	11.3	26.106	D
3 - Magpie Hall Rd (SE)			1309				371				
4 - New Rd (W)	696	174	478	1942	0.359	694	831	0.0	0.6	2.960	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - High St (NW)	467	117	1205	854	0.547	465	127	0.8	1.3	10.480	B
2 - Chatham Hill (E)	1567	392	494	1337	1.172	1330	1176	11.3	70.4	121.736	F
3 - Magpie Hall Rd (SE)			1380				444				
4 - New Rd (W)	832	208	502	1924	0.432	831	879	0.6	0.8	3.384	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - High St (NW)	573	143	1372	747	0.766	564	127	1.3	3.4	21.510	C
2 - Chatham Hill (E)	1919	480	603	1276	1.504	1275	1333	70.4	231.3	431.982	F
3 - Magpie Hall Rd (SE)			1337				542				
4 - New Rd (W)	1018	255	482	1939	0.525	1017	855	0.8	1.1	4.008	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - High St (NW)	573	143	1373	747	0.767	572	127	3.4	3.6	23.228	C
2 - Chatham Hill (E)	1919	480	606	1274	1.507	1274	1338	231.3	392.7	865.082	F
3 - Magpie Hall Rd (SE)			1335				545				
4 - New Rd (W)	1018	255	481	1939	0.525	1018	854	1.1	1.1	4.017	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - High St (NW)	467	117	1209	852	0.549	476	128	3.6	1.4	11.136	B
2 - Chatham Hill (E)	1567	392	499	1335	1.174	1335	1186	392.7	450.8	1133.293	F
3 - Magpie Hall Rd (SE)			1385				448				
4 - New Rd (W)	832	208	503	1922	0.433	833	882	1.1	0.8	3.401	A

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - High St (NW)	391	98	1089	929	0.421	394	128	1.4	0.8	7.691	A
2 - Chatham Hill (E)	1312	328	416	1382	0.950	1379	1066	450.8	434.2	1155.567	F
3 - Magpie Hall Rd (SE)			1421				374				
4 - New Rd (W)	696	174	520	1910	0.365	697	901	0.8	0.6	3.053	A

Do Minimum, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	High St Chatham Hill Magpie Hall Rd Existing RBT	Standard Roundabout		1, 2, 3, 4	685.95	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-33	2 - Chatham Hill (E)

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	Do Minimum	PM	ONE HOUR	17:00	18:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - High St (NW)		ONE HOUR	✓	709	100.000
2 - Chatham Hill (E)		ONE HOUR	✓	1698	100.000
3 - Magpie Hall Rd (SE)					
4 - New Rd (W)		ONE HOUR	✓	1388	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - High St (NW)	2 - Chatham Hill (E)	3 - Magpie Hall Rd (SE)	4 - New Rd (W)
From	1 - High St (NW)	0	389	138	182
	2 - Chatham Hill (E)	335	257	0	1106
	3 - Magpie Hall Rd (SE)	Exit-only	Exit-only	Exit-only	Exit-only
	4 - New Rd (W)	5	1042	325	16

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - High St (NW)	2 - Chatham Hill (E)	3 - Magpie Hall Rd (SE)	4 - New Rd (W)
From	1 - High St (NW)	0	16	4	1
	2 - Chatham Hill (E)	19	2	0	1
	3 - Magpie Hall Rd (SE)	Exit-only	Exit-only	Exit-only	Exit-only
	4 - New Rd (W)	0	1	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - High St (NW)	1.48	626.49	133.3	F	651	976
2 - Chatham Hill (E)	1.47	1264.77	443.6	F	1558	2337
3 - Magpie Hall Rd (SE)						
4 - New Rd (W)	0.78	8.23	3.4	A	1274	1910

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - High St (NW)	534	133	1223	843	0.633	526	247	0.0	1.8	12.186	B
2 - Chatham Hill (E)	1278	320	493	1338	0.955	1231	1256	0.0	11.9	27.940	D
3 - Magpie Hall Rd (SE)			1378				346				
4 - New Rd (W)	1045	261	429	1979	0.528	1040	949	0.0	1.1	3.854	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - High St (NW)	637	159	1435	707	0.902	617	257	1.8	6.9	37.445	E
2 - Chatham Hill (E)	1526	382	584	1286	1.187	1280	1467	11.9	73.5	130.740	F
3 - Magpie Hall Rd (SE)			1453				412				
4 - New Rd (W)	1248	312	446	1966	0.635	1245	1007	1.1	1.7	5.027	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - High St (NW)	781	195	1708	531	1.469	529	256	6.9	69.9	278.281	F
2 - Chatham Hill (E)	1870	467	612	1270	1.472	1270	1625	73.5	223.4	426.790	F
3 - Magpie Hall Rd (SE)			1423				459				
4 - New Rd (W)	1528	382	443	1969	0.776	1522	981	1.7	3.4	8.015	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - High St (NW)	781	195	1715	527	1.481	527	256	69.9	133.3	626.488	F
2 - Chatham Hill (E)	1870	467	613	1270	1.472	1270	1628	223.4	373.3	852.231	F
3 - Magpie Hall Rd (SE)			1423				460				
4 - New Rd (W)	1528	382	443	1969	0.776	1528	980	3.4	3.4	8.234	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - High St (NW)	637	159	1441	703	0.907	697	254	133.3	118.4	614.621	F
2 - Chatham Hill (E)	1526	382	623	1264	1.207	1264	1516	373.3	438.9	1161.254	F
3 - Magpie Hall Rd (SE)			1458				429				
4 - New Rd (W)	1248	312	441	1970	0.633	1254	1017	3.4	1.8	5.127	A

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - High St (NW)	534	133	1234	836	0.639	828	252	118.4	44.9	358.268	F
2 - Chatham Hill (E)	1278	320	631	1260	1.015	1259	1431	438.9	443.6	1264.768	F
3 - Magpie Hall Rd (SE)			1484				406				
4 - New Rd (W)	1045	261	439	1971	0.530	1047	1045	1.8	1.1	3.946	A

Do Something (800), AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	High St Chatham Hill Magpie Hall Rd Existing RBT	Standard Roundabout		1, 2, 3, 4	506.24	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-30	2 - Chatham Hill (E)

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	Do Something (800)	AM	ONE HOUR	08:00	09:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - High St (NW)		ONE HOUR	✓	466	100.000
2 - Chatham Hill (E)		ONE HOUR	✓	1680	100.000
3 - Magpie Hall Rd (SE)					
4 - New Rd (W)		ONE HOUR	✓	950	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - High St (NW)	2 - Chatham Hill (E)	3 - Magpie Hall Rd (SE)	4 - New Rd (W)
From	1 - High St (NW)	2	284	157	23
	2 - Chatham Hill (E)	117	501	0	1062
	3 - Magpie Hall Rd (SE)	Exit-only	Exit-only	Exit-only	Exit-only
	4 - New Rd (W)	33	574	319	24

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - High St (NW)	2 - Chatham Hill (E)	3 - Magpie Hall Rd (SE)	4 - New Rd (W)
From	1 - High St (NW)	0	15	5	10
	2 - Chatham Hill (E)	39	0	0	1
	3 - Magpie Hall Rd (SE)	Exit-only	Exit-only	Exit-only	Exit-only
	4 - New Rd (W)	0	3	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - High St (NW)	0.70	18.10	2.5	C	428	641
2 - Chatham Hill (E)	1.43	925.60	371.3	F	1542	2312
3 - Magpie Hall Rd (SE)						
4 - New Rd (W)	0.54	4.10	1.2	A	872	1308

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - High St (NW)	351	88	1056	950	0.369	348	112	0.0	0.6	6.619	A
2 - Chatham Hill (E)	1265	316	393	1395	0.907	1233	1011	0.0	7.9	20.093	C
3 - Magpie Hall Rd (SE)			1270				357				
4 - New Rd (W)	715	179	455	1959	0.365	713	815	0.0	0.6	2.945	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - High St (NW)	419	105	1222	843	0.497	417	125	0.6	1.1	9.348	A
2 - Chatham Hill (E)	1510	378	471	1351	1.118	1337	1168	7.9	51.2	90.952	F
3 - Magpie Hall Rd (SE)			1381				427				
4 - New Rd (W)	854	214	494	1930	0.443	853	887	0.6	0.8	3.411	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - High St (NW)	513	128	1393	734	0.699	508	128	1.1	2.4	17.297	C
2 - Chatham Hill (E)	1850	462	575	1291	1.432	1291	1325	51.2	190.9	344.005	F
3 - Magpie Hall Rd (SE)			1345				522				
4 - New Rd (W)	1046	261	477	1943	0.538	1044	867	0.8	1.2	4.087	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - High St (NW)	513	128	1394	733	0.700	513	128	2.4	2.5	18.103	C
2 - Chatham Hill (E)	1850	462	578	1290	1.434	1290	1329	190.9	330.9	718.178	F
3 - Magpie Hall Rd (SE)			1344				524				
4 - New Rd (W)	1046	261	477	1943	0.538	1046	867	1.2	1.2	4.099	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - High St (NW)	419	105	1228	840	0.499	424	125	2.5	1.1	9.757	A
2 - Chatham Hill (E)	1510	378	475	1349	1.120	1348	1178	330.9	371.3	925.598	F
3 - Magpie Hall Rd (SE)			1393				430				
4 - New Rd (W)	854	214	498	1927	0.443	855	895	1.2	0.8	3.438	A

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - High St (NW)	351	88	1105	918	0.382	353	123	1.1	0.7	7.094	A
2 - Chatham Hill (E)	1265	316	396	1393	0.908	1389	1062	371.3	340.2	922.125	F
3 - Magpie Hall Rd (SE)			1426				359				
4 - New Rd (W)	715	179	513	1916	0.373	716	914	0.8	0.6	3.069	A

Do Something (800), PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	High St Chatham Hill Magpie Hall Rd Existing RBT	Standard Roundabout		1, 2, 3, 4	318.24	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-25	2 - Chatham Hill (E)

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	Do Something (800)	PM	ONE HOUR	17:00	18:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - High St (NW)		ONE HOUR	✓	610	100.000
2 - Chatham Hill (E)		ONE HOUR	✓	1505	100.000
3 - Magpie Hall Rd (SE)					
4 - New Rd (W)		ONE HOUR	✓	1280	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - High St (NW)	2 - Chatham Hill (E)	3 - Magpie Hall Rd (SE)	4 - New Rd (W)
From	1 - High St (NW)	0	332	132	146
	2 - Chatham Hill (E)	294	217	0	994
	3 - Magpie Hall Rd (SE)	Exit-only	Exit-only	Exit-only	Exit-only
	4 - New Rd (W)	5	961	299	15

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - High St (NW)	2 - Chatham Hill (E)	3 - Magpie Hall Rd (SE)	4 - New Rd (W)
From	1 - High St (NW)	0	11	3	0
	2 - Chatham Hill (E)	13	1	0	1
	3 - Magpie Hall Rd (SE)	Exit-only	Exit-only	Exit-only	Exit-only
	4 - New Rd (W)	0	1	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - High St (NW)	1.10	193.09	39.2	F	560	840
2 - Chatham Hill (E)	1.31	634.19	238.1	F	1381	2072
3 - Magpie Hall Rd (SE)						
4 - New Rd (W)	0.71	6.38	2.5	A	1175	1762

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - High St (NW)	459	115	1117	911	0.504	455	222	0.0	1.1	8.328	A
2 - Chatham Hill (E)	1133	283	443	1367	0.829	1115	1129	0.0	4.6	13.884	B
3 - Magpie Hall Rd (SE)			1235				323				
4 - New Rd (W)	964	241	379	2018	0.478	960	856	0.0	0.9	3.426	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - High St (NW)	548	137	1328	775	0.707	543	254	1.1	2.4	16.117	C
2 - Chatham Hill (E)	1353	338	529	1318	1.027	1275	1342	4.6	23.9	51.956	F
3 - Magpie Hall Rd (SE)			1419				386				
4 - New Rd (W)	1151	288	433	1976	0.582	1149	986	0.9	1.4	4.385	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - High St (NW)	672	168	1582	612	1.097	591	253	2.4	22.6	94.203	F
2 - Chatham Hill (E)	1657	414	614	1269	1.305	1268	1559	23.9	121.2	214.527	F
3 - Magpie Hall Rd (SE)			1426				456				
4 - New Rd (W)	1409	352	430	1978	0.712	1405	995	1.4	2.4	6.298	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - High St (NW)	672	168	1586	610	1.101	605	253	22.6	39.2	193.090	F
2 - Chatham Hill (E)	1657	414	621	1265	1.310	1265	1570	121.2	219.3	488.338	F
3 - Magpie Hall Rd (SE)			1426				460				
4 - New Rd (W)	1409	352	430	1979	0.712	1409	997	2.4	2.5	6.380	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - High St (NW)	548	137	1335	771	0.711	693	254	39.2	3.0	84.510	F
2 - Chatham Hill (E)	1353	338	599	1278	1.059	1277	1429	219.3	238.1	634.194	F
3 - Magpie Hall Rd (SE)			1457				420				
4 - New Rd (W)	1151	288	434	1976	0.582	1155	1023	2.5	1.4	4.451	A

18:15 - 18:30

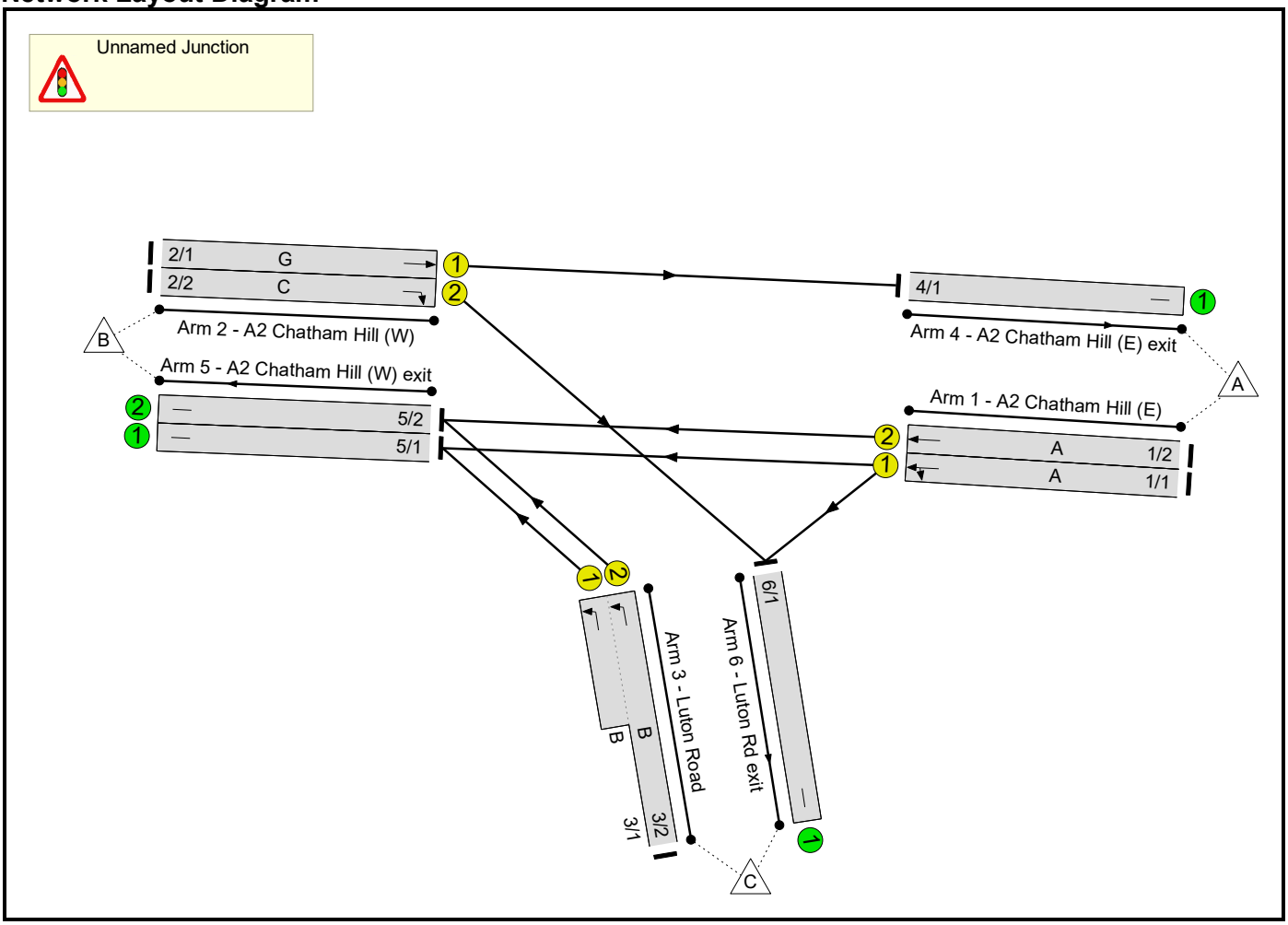
Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - High St (NW)	459	115	1157	885	0.519	467	269	3.0	1.2	9.309	A
2 - Chatham Hill (E)	1133	283	449	1363	0.831	1357	1174	238.1	182.2	558.150	F
3 - Magpie Hall Rd (SE)			1480				326				
4 - New Rd (W)	964	241	461	1955	0.493	965	1019	1.4	1.0	3.679	A

Full Input Data And Results

User and Project Details

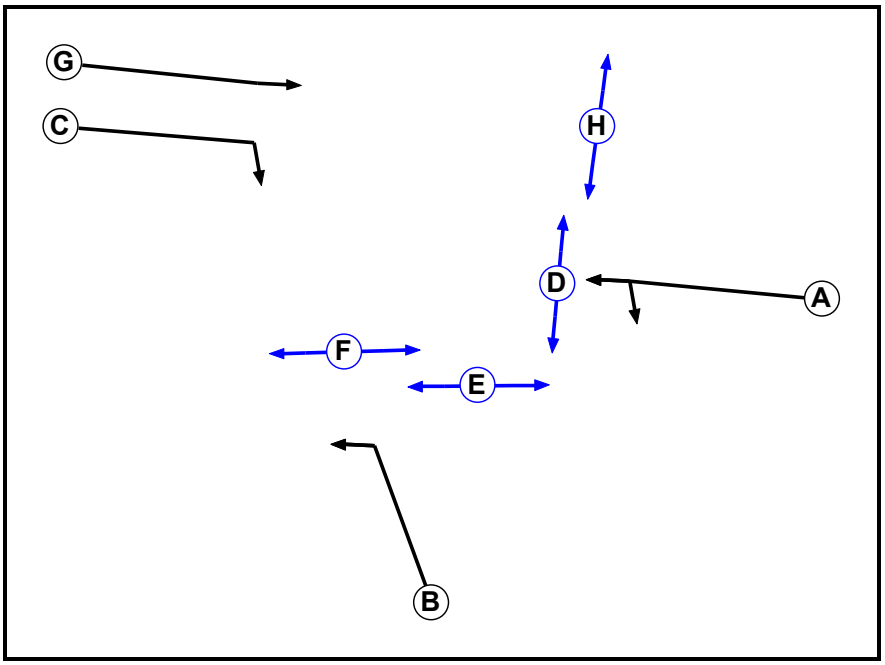
Project:	**East Hill, Medway**
Title:	**Jct 2 – A2/Luton Rd Capacity Assessment**
File name:	Jct 2 - A2 Chatham Hill_Luton Rd.lsg3x

Network Layout Diagram



Full Input Data And Results

Phase Diagram

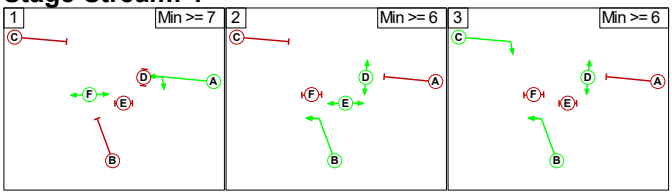


Phase Intergreens Matrix

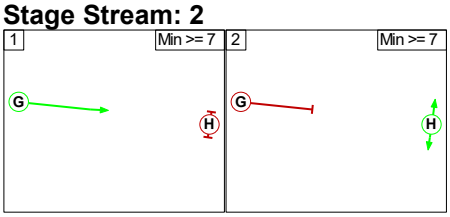
Terminating Phase \ Starting Phase	A	B	C	D	E	F	G	H
A		6	5	5	7	-	-	-
B	5		-	-	-	5	-	-
C	5	-		-	7	-	-	-
D	6	-	-		-	-	-	-
E	6	-	6	-		-	-	-
F	-	6	-	-	-		-	-
G	-	-	-	-	-	-		0
H	-	-	-	-	-	-	0	

Stage Diagram

Stage Stream: 1



Stage Stream: 2



Full Input Data And Results

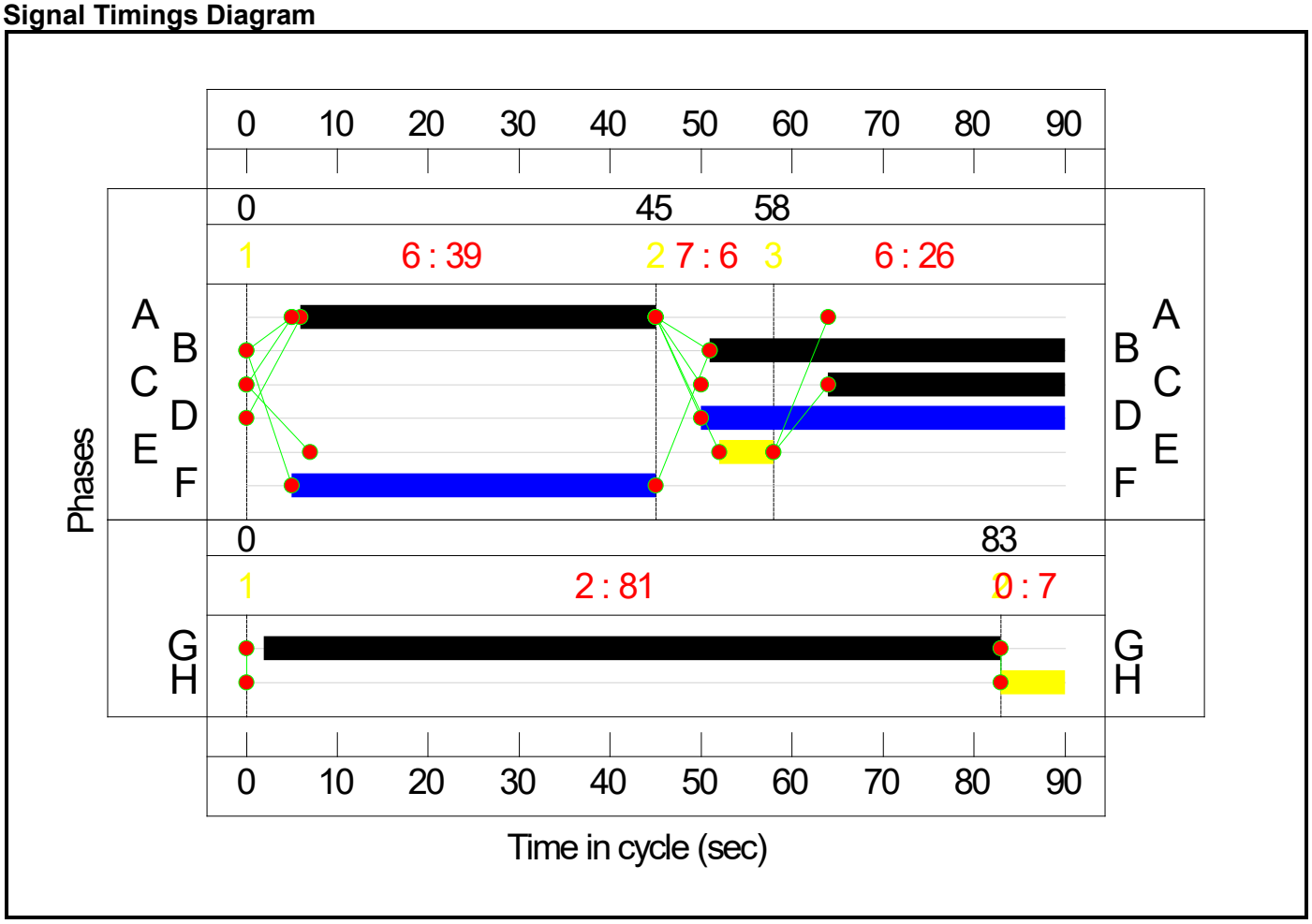
Scenario 1: '2035 Do Min - AM Peak' (FG3: '2035 Do Min AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	1037	101	1138
	B	1070	0	322	1392
	C	0	709	0	709
	Tot.	1070	1746	423	3239

Signal Timings Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**66.6%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**66.6%**
1/1	A2 Chatham Hill (E) Ahead Left	U	1	N/A	A		1	39	-	562	1911	849	66.2%
1/2	A2 Chatham Hill (E) Ahead	U	1	N/A	A		1	39	-	576	1945	864	66.6%
2/1	A2 Chatham Hill (W) Ahead	U	2	N/A	G		1	81	-	1070	1945	1772	60.4%
2/2	A2 Chatham Hill (W) Right	U	1	N/A	C		1	26	-	322	1641	492	65.4%
3/2+3/1	Luton Road Left	U	1	N/A	B		1	39	-	709	1795:1768	539+532	66.2 : 66.2%
4/1	A2 Chatham Hill (E) exit	U	N/A	N/A	-		-	-	-	1070	Inf	Inf	0.0%
5/1	A2 Chatham Hill (W) exit	U	N/A	N/A	-		-	-	-	813	Inf	Inf	0.0%
5/2	A2 Chatham Hill (W) exit	U	N/A	N/A	-		-	-	-	933	Inf	Inf	0.0%
6/1	Luton Rd exit	U	N/A	N/A	-		-	-	-	423	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**12.3**	**4.6**	**0.0**	**17.0**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**0**	**0**	**0**	**12.3**	**4.6**	**0.0**	**17.0**	**-**	**-**	**-**	**-**
1/1	562	562	-	-	-	3.1	1.0	-	4.0	25.9	10.9	1.0	11.9
1/2	576	576	-	-	-	3.2	1.0	-	4.1	25.9	11.4	1.0	12.4
2/1	1070	1070	-	-	-	0.2	0.8	-	1.0	3.3	5.1	0.8	5.8
2/2	322	322	-	-	-	2.5	0.9	-	3.4	37.9	7.0	0.9	7.9
3/2+3/1	709	709	-	-	-	3.4	1.0	-	4.4	22.3	6.1	1.0	7.1
4/1	1070	1070	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	813	813	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	933	933	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	423	423	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 Stream: 1 PRC for Signalled Lanes (%): 35.1 Total Delay for Signalled Lanes (pcuHr): 15.97 Cycle Time (s): 90
C1 Stream: 2 PRC for Signalled Lanes (%): 49.1 Total Delay for Signalled Lanes (pcuHr): 1.00 Cycle Time (s): 90
PRC Over All Lanes (%): 35.1 Total Delay Over All Lanes(pcuHr): 16.97

Full Input Data And Results

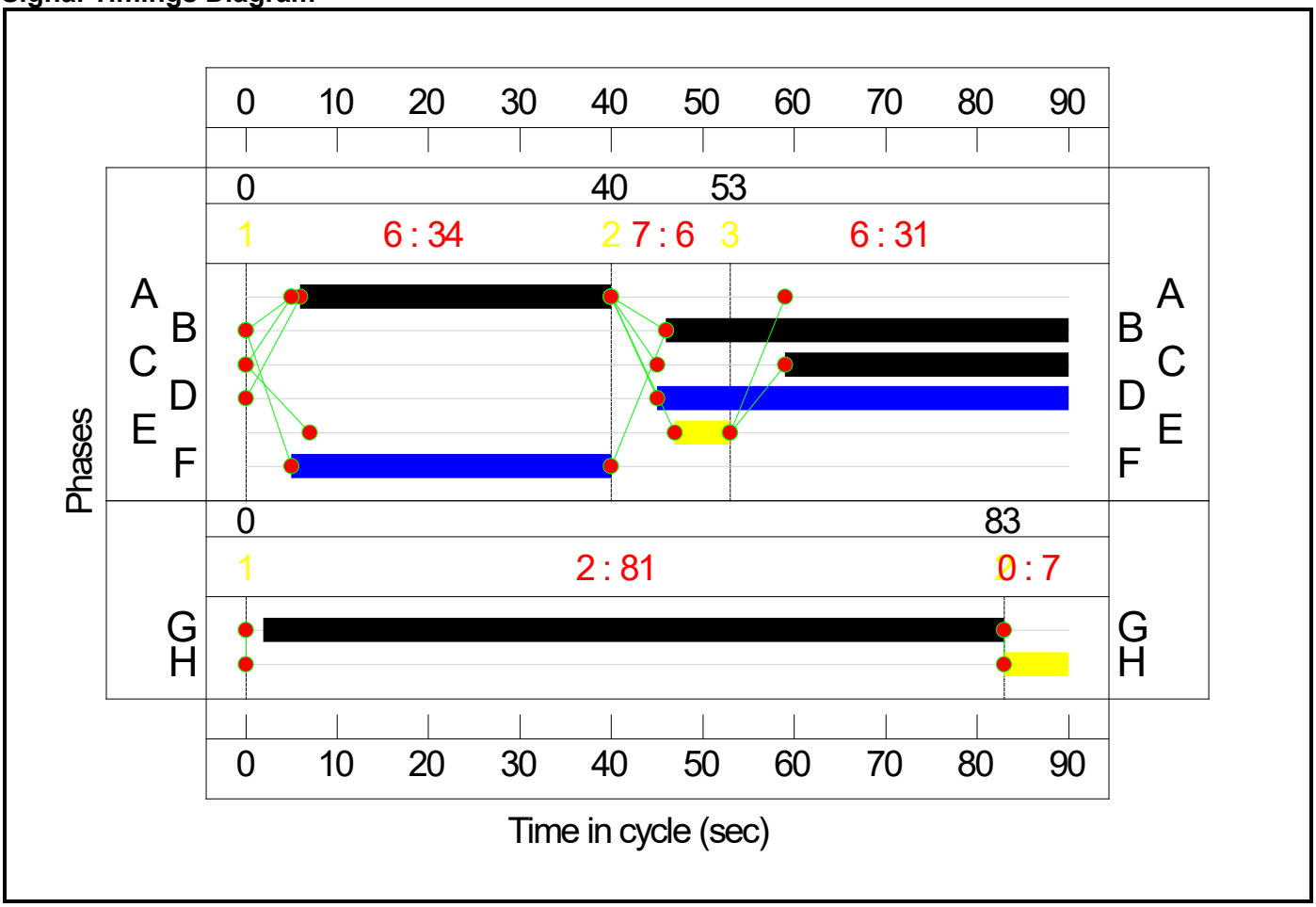
Scenario 2: '2035 Do Min - PM Peak' (FG4: '2035 Do Min PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	976	153	1129
	B	1262	0	441	1703
	C	0	730	0	730
	Tot.	1262	1706	594	3562

Signal Timings Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**76.2%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**76.2%**
1/1	A2 Chatham Hill (E) Ahead Left	U	1	N/A	A		1	34	-	553	1893	736	75.1%
1/2	A2 Chatham Hill (E) Ahead	U	1	N/A	A		1	34	-	576	1945	756	76.2%
2/1	A2 Chatham Hill (W) Ahead	U	2	N/A	G		1	81	-	1262	1945	1772	71.2%
2/2	A2 Chatham Hill (W) Right	U	1	N/A	C		1	31	-	441	1641	583	75.6%
3/2+3/1	Luton Road Left	U	1	N/A	B		1	44	-	730	1795:1768	589+580	62.4 : 62.4%
4/1	A2 Chatham Hill (E) exit	U	N/A	N/A	-		-	-	-	1262	Inf	Inf	0.0%
5/1	A2 Chatham Hill (W) exit	U	N/A	N/A	-		-	-	-	762	Inf	Inf	0.0%
5/2	A2 Chatham Hill (W) exit	U	N/A	N/A	-		-	-	-	944	Inf	Inf	0.0%
6/1	Luton Rd exit	U	N/A	N/A	-		-	-	-	594	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**13.8**	**6.6**	**0.0**	**20.5**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**0**	**0**	**0**	**13.8**	**6.6**	**0.0**	**20.5**	**-**	**-**	**-**	**-**
1/1	553	553	-	-	-	3.6	1.5	-	5.1	33.4	11.8	1.5	13.3
1/2	576	576	-	-	-	3.8	1.6	-	5.4	33.7	12.5	1.6	14.0
2/1	1262	1262	-	-	-	0.4	1.2	-	1.6	4.5	7.7	1.2	8.9
2/2	441	441	-	-	-	3.1	1.5	-	4.6	37.9	9.7	1.5	11.2
3/2+3/1	730	730	-	-	-	2.9	0.8	-	3.7	18.2	5.7	0.8	6.6
4/1	1262	1262	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	762	762	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	944	944	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	594	594	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1	Stream: 1 PRC for Signalled Lanes (%):	18.2	Total Delay for Signalled Lanes (pcuHr):	18.87	Cycle Time (s): 90
C1	Stream: 2 PRC for Signalled Lanes (%):	26.4	Total Delay for Signalled Lanes (pcuHr):	1.59	Cycle Time (s): 90
	PRC Over All Lanes (%):	18.2	Total Delay Over All Lanes(pcuHr):	20.45	

Full Input Data And Results

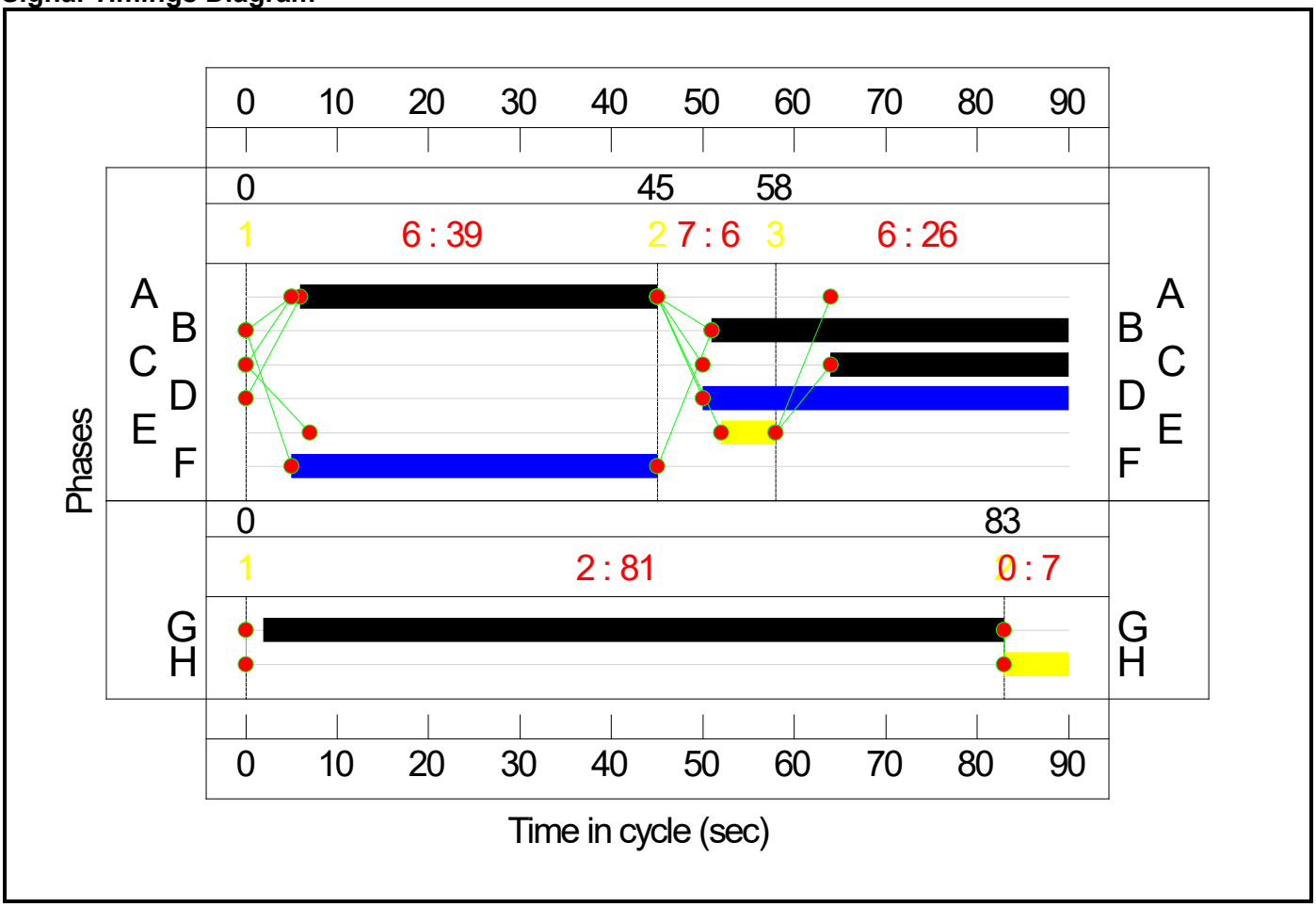
Scenario 3: '2035 DS - AM Peak' (FG5: '2035 DS AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	1008	109	1117
	B	1049	0	313	1362
	C	0	686	0	686
	Tot.	1049	1694	422	3165

Signal Timings Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**65.6%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**65.6%**
1/1	A2 Chatham Hill (E) Ahead Left	U	1	N/A	A		1	39	-	550	1907	848	64.9%
1/2	A2 Chatham Hill (E) Ahead	U	1	N/A	A		1	39	-	567	1945	864	65.6%
2/1	A2 Chatham Hill (W) Ahead	U	2	N/A	G		1	81	-	1049	1945	1772	59.2%
2/2	A2 Chatham Hill (W) Right	U	1	N/A	C		1	26	-	313	1641	492	63.6%
3/2+3/1	Luton Road Left	U	1	N/A	B		1	39	-	686	1795:1768	540+530	64.1 : 64.1%
4/1	A2 Chatham Hill (E) exit	U	N/A	N/A	-		-	-	-	1049	Inf	Inf	0.0%
5/1	A2 Chatham Hill (W) exit	U	N/A	N/A	-		-	-	-	781	Inf	Inf	0.0%
5/2	A2 Chatham Hill (W) exit	U	N/A	N/A	-		-	-	-	913	Inf	Inf	0.0%
6/1	Luton Rd exit	U	N/A	N/A	-		-	-	-	422	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**11.9**	**4.3**	**0.0**	**16.3**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**0**	**0**	**0**	**11.9**	**4.3**	**0.0**	**16.3**	**-**	**-**	**-**	**-**
1/1	550	550	-	-	-	3.0	0.9	-	3.9	25.5	10.7	0.9	11.6
1/2	567	567	-	-	-	3.1	0.9	-	4.0	25.6	11.0	0.9	12.0
2/1	1049	1049	-	-	-	0.2	0.7	-	0.9	3.3	5.0	0.7	5.7
2/2	313	313	-	-	-	2.4	0.9	-	3.2	37.2	6.7	0.9	7.6
3/2+3/1	686	686	-	-	-	3.3	0.9	-	4.2	21.9	5.9	0.9	6.8
4/1	1049	1049	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	781	781	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	913	913	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	422	422	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 Stream: 1 PRC for Signalled Lanes (%): 37.2 Total Delay for Signalled Lanes (pcuHr): 15.34 Cycle Time (s): 90
C1 Stream: 2 PRC for Signalled Lanes (%): 52.0 Total Delay for Signalled Lanes (pcuHr): 0.95 Cycle Time (s): 90
PRC Over All Lanes (%): 37.2 Total Delay Over All Lanes(pcuHr): 16.29

Full Input Data And Results

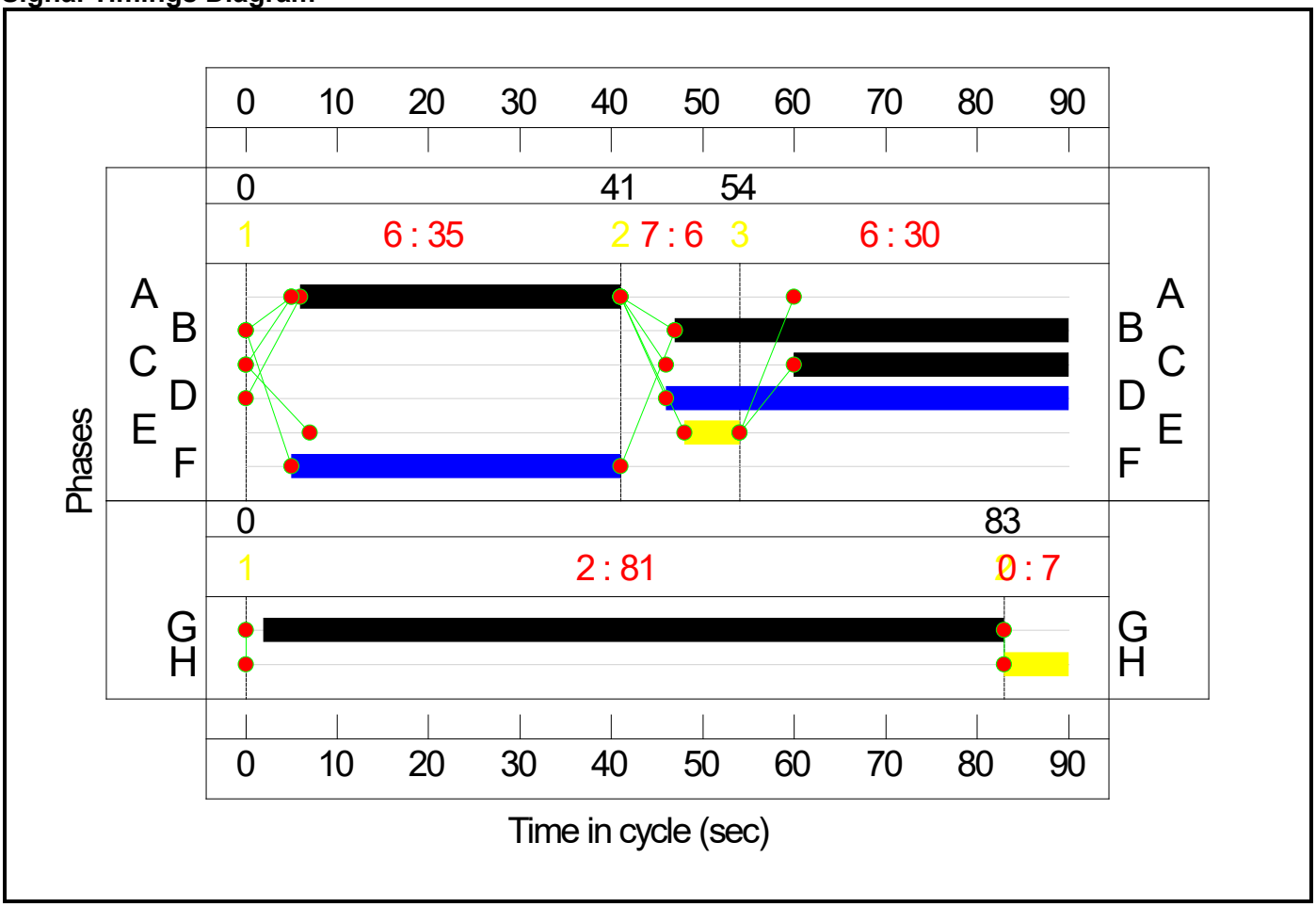
Scenario 4: '2035 DS - PM Peak' (FG6: '2035 DS PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	886	135	1021
	B	1146	0	373	1519
	C	0	629	0	629
	Tot.	1146	1515	508	3169

Signal Timings Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**67.0%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**67.0%**
1/1	A2 Chatham Hill (E) Ahead Left	U	1	N/A	A		1	35	-	500	1894	758	66.0%
1/2	A2 Chatham Hill (E) Ahead	U	1	N/A	A		1	35	-	521	1945	778	67.0%
2/1	A2 Chatham Hill (W) Ahead	U	2	N/A	G		1	81	-	1146	1945	1772	64.7%
2/2	A2 Chatham Hill (W) Right	U	1	N/A	C		1	30	-	373	1641	565	66.0%
3/2+3/1	Luton Road Left	U	1	N/A	B		1	43	-	629	1795:1768	579+570	54.7 : 54.7%
4/1	A2 Chatham Hill (E) exit	U	N/A	N/A	-		-	-	-	1146	Inf	Inf	0.0%
5/1	A2 Chatham Hill (W) exit	U	N/A	N/A	-		-	-	-	677	Inf	Inf	0.0%
5/2	A2 Chatham Hill (W) exit	U	N/A	N/A	-		-	-	-	838	Inf	Inf	0.0%
6/1	Luton Rd exit	U	N/A	N/A	-		-	-	-	508	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**11.6**	**4.4**	**0.0**	**16.1**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**0**	**0**	**0**	**11.6**	**4.4**	**0.0**	**16.1**	**-**	**-**	**-**	**-**
1/1	500	500	-	-	-	3.1	1.0	-	4.0	28.9	10.1	1.0	11.1
1/2	521	521	-	-	-	3.2	1.0	-	4.2	29.1	10.6	1.0	11.6
2/1	1146	1146	-	-	-	0.3	0.9	-	1.2	3.7	6.0	0.9	7.0
2/2	373	373	-	-	-	2.6	1.0	-	3.6	34.3	7.9	1.0	8.8
3/2+3/1	629	629	-	-	-	2.5	0.6	-	3.1	17.7	4.8	0.6	5.4
4/1	1146	1146	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	677	677	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	838	838	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	508	508	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

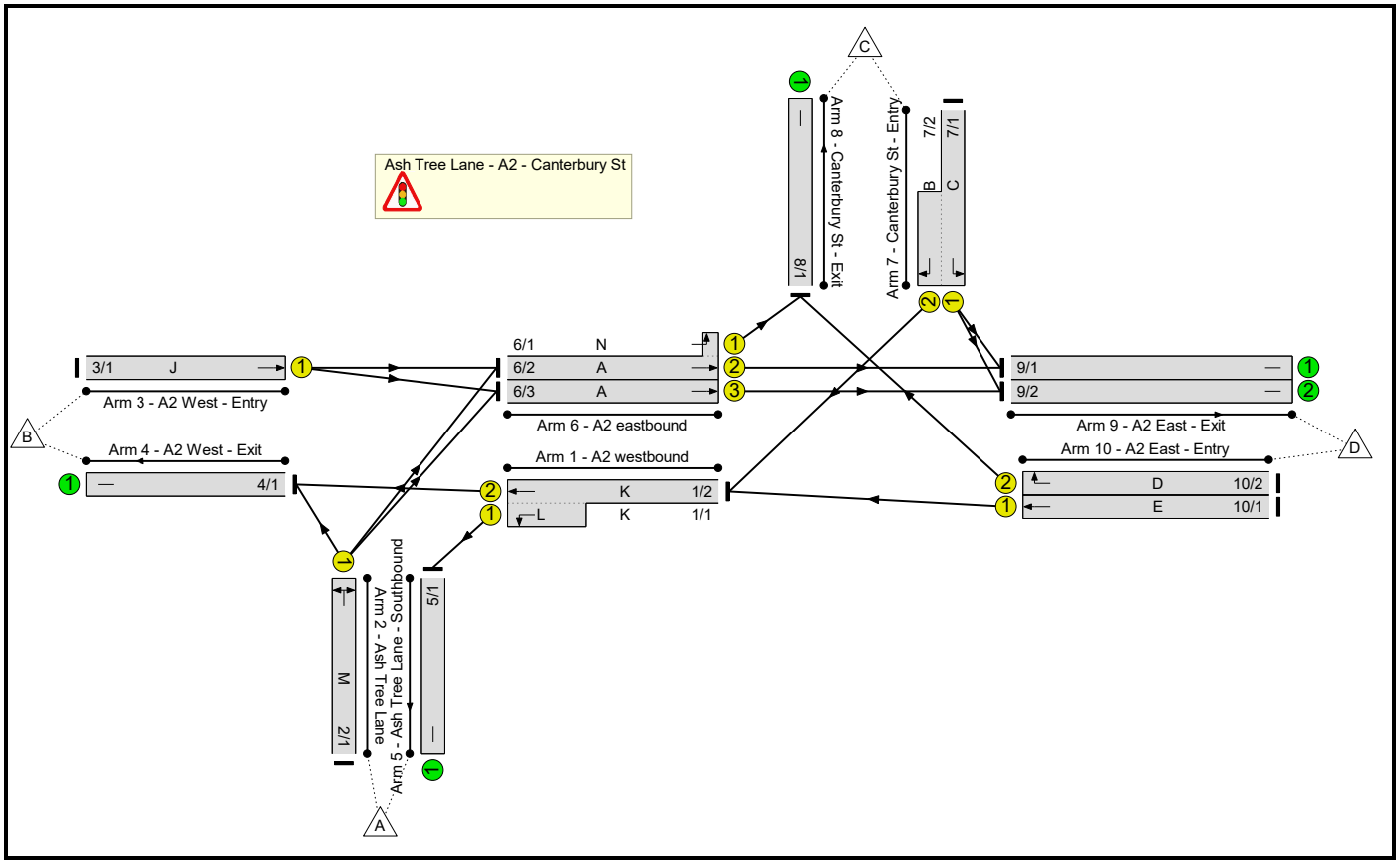
C1 Stream: 1 PRC for Signalled Lanes (%): 34.4 Total Delay for Signalled Lanes (pcuHr): 14.88 Cycle Time (s): 90
C1 Stream: 2 PRC for Signalled Lanes (%): 39.2 Total Delay for Signalled Lanes (pcuHr): 1.19 Cycle Time (s): 90
PRC Over All Lanes (%): 34.4 Total Delay Over All Lanes(pcuHr): 16.07

Full Input Data And Results

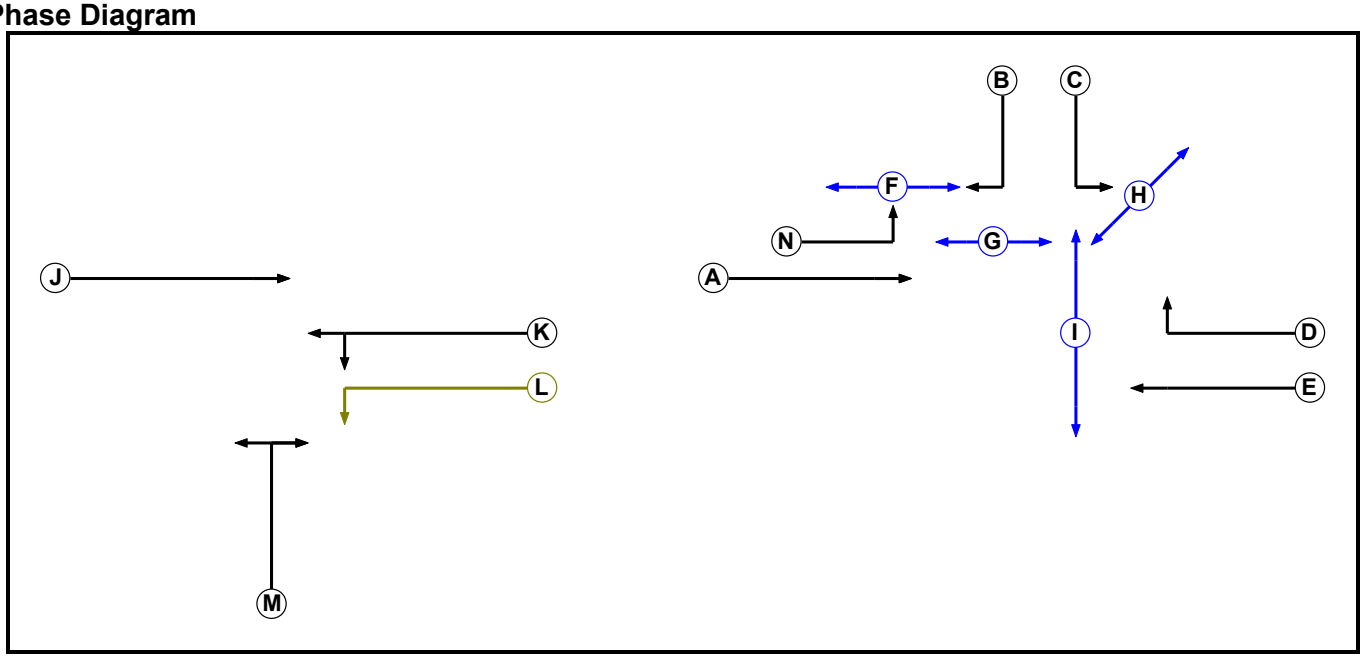
User and Project Details

Project:	**East Hill, Medway**
Title:	**Jct 3 – A2/Ash Tree Ln/Canterbury St – Capacity Assessment**
File name:	Jct 3 - A2_Ash Tree Ln_Canterbury St.lsg3x

Network Layout Diagram



Phase Diagram



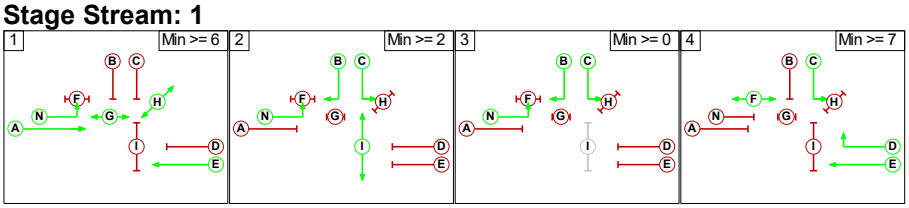
Full Input Data And Results

Phase Intergreens Matrix

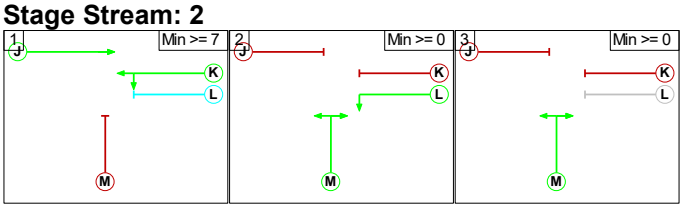
Terminating Phase \ Starting Phase	A	B	C	D	E	F	G	H	I	J	K	L	M	N
A		5	7	5	-	-	-	-	7	-	-	-	-	-
B	5		-	5	5	-	5	-	-	-	-	-	-	-
C	5	-		-	-	-	-	5	-	-	-	-	-	-
D	6	5	-		-	-	8	-	5	-	-	-	-	8
E	-	5	-	-		-	-	-	5	-	-	-	-	-
F	-	-	-	-	-		-	-	-	-	-	-	-	8
G	-	11	-	11	-	-		-	-	-	-	-	-	-
H	-	-	6	-	-	-	-		-	-	-	-	-	-
I	15	-	-	15	15	-	-	-		-	-	-	-	-
J	-	-	-	-	-	-	-	-	-		-	-	6	-
K	-	-	-	-	-	-	-	-	-	-		-	5	-
L	-	-	-	-	-	-	-	-	-	-	-		-	-
M	-	-	-	-	-	-	-	-	-	5	5	-		-
N	-	-	-	5	-	5	-	-	-	-	-	-	-	

Stage Diagram

Stage Stream: 1



Stage Stream: 2



Scenario 11: '2035 Do Min AM' (FG11: '2035 Do Min AM', Plan 1: 'Network Control Plan 1')

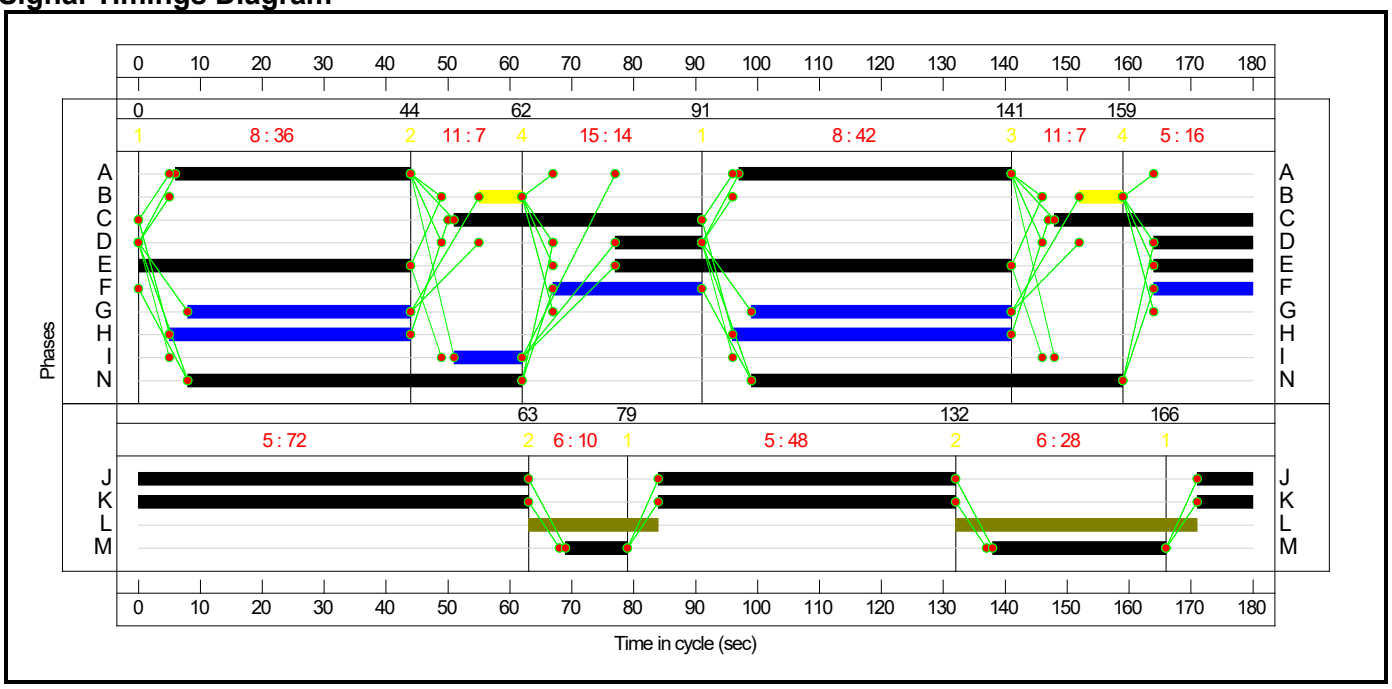
Traffic Flows, Actual

Actual Flow :

Origin \ Destination	A	B	C	D	Tot.
A	0	273	0	158	431
B	0	0	89	434	523
C	0	11	0	308	319
D	120	770	270	0	1160
Tot.	120	1054	359	900	2433

Full Input Data And Results

Signal Timings Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**121.2%**
Ash Tree Lane - A2 - Canterbury St	-	-	**N/A**	-	-		-	-	-	-	-	-	**121.2%**
1/2+1/1	A2 westbound Ahead Left	U	2	N/A	K	L	2	120:180	60	901	1950:1700	1158+178	67.5 : 67.5%
2/1	Ash Tree Lane Left Right	U	2	N/A	M		2	38	-	431	1600	356	121.2%
3/1	A2 West - Entry Ahead	U	2	N/A	J		2	120	-	523	1950	1322	39.6%
4/1	A2 West - Exit	U	N/A	N/A	-		-	-	-	1054	Inf	Inf	0.0%
5/1	Ash Tree Lane - Southbound	U	N/A	N/A	-		-	-	-	120	Inf	Inf	0.0%
6/2+6/1	A2 eastbound Left Ahead	U	1	N/A	A N		2	82:114	-	302	1700:1700	573+239	37.0 : 37.2%
6/3	A2 eastbound Ahead	U	1	N/A	A		2	82	-	379	1950	910	38.7%
7/1+7/2	Canterbury St - Entry Right Left	U	1	N/A	C B		2	72:14	-	319	1700:1600	677+24	45.5 : 45.5%
8/1	Canterbury St - Exit	U	N/A	N/A	-		-	-	-	359	Inf	Inf	0.0%
9/1	A2 East - Exit	U	N/A	N/A	-		-	-	-	367	Inf	Inf	0.0%
9/2	A2 East - Exit	U	N/A	N/A	-		-	-	-	533	Inf	Inf	0.0%
10/1	A2 East - Entry Ahead	U	1	N/A	E		2	124	-	890	1950	1365	65.2%
10/2	A2 East - Entry Right	U	1	N/A	D		2	30	-	270	1600	284	94.9%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**24.9**	**49.1**	**0.0**	**74.0**	**-**	**-**	**-**	**-**
Ash Tree Lane - A2 - Canterbury St	**-**	**-**	**0**	**0**	**0**	**24.9**	**49.1**	**0.0**	**74.0**	**-**	**-**	**-**	**-**
1/2+1/1	901	901	-	-	-	1.1	1.0	-	2.1	8.6	18.5	1.0	19.5
2/1	431	356	-	-	-	13.7	40.4	-	54.1	451.7	22.9	40.4	63.3
3/1	523	523	-	-	-	1.0	0.3	-	1.3	9.3	7.4	0.3	7.7
4/1	1006	1006	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	120	120	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2+6/1	301	301	-	-	-	0.7	0.3	-	1.0	12.4	4.7	0.3	5.0
6/3	352	352	-	-	-	1.8	0.3	-	2.2	22.1	8.7	0.3	9.1
7/1+7/2	319	319	-	-	-	1.8	0.4	-	2.2	24.5	5.8	0.4	6.2
8/1	359	359	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	366	366	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2	506	506	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	890	890	-	-	-	1.9	0.9	-	2.8	11.5	14.3	0.9	15.3
10/2	270	270	-	-	-	2.8	5.4	-	8.2	109.2	6.8	5.4	12.2

C1 Stream: 1 PRC for Signalled Lanes (%): -5.5 Total Delay for Signalled Lanes (pcuHr): 16.39 Cycle Time (s): 180
C1 Stream: 2 PRC for Signalled Lanes (%): -34.7 Total Delay for Signalled Lanes (pcuHr): 57.57 Cycle Time (s): 180
PRC Over All Lanes (%): -34.7 Total Delay Over All Lanes(pcuHr): 73.96

Full Input Data And Results

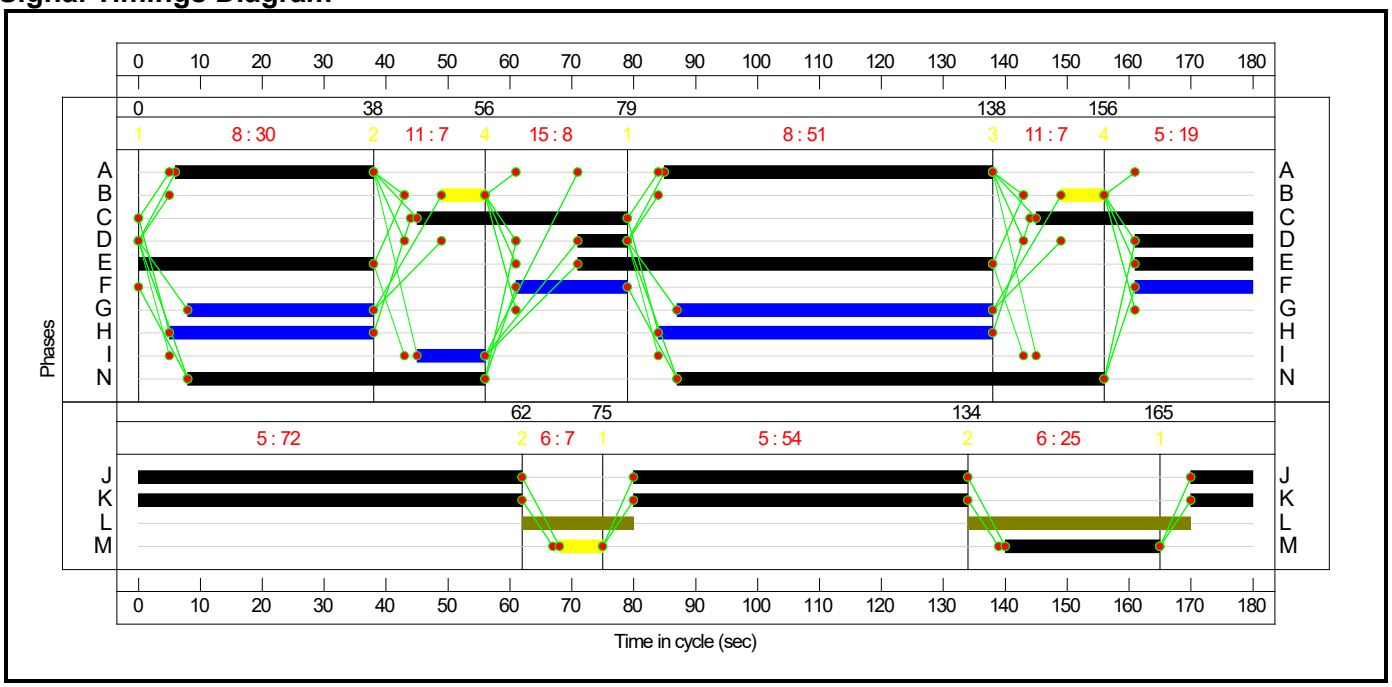
Scenario 12: '2035 Do Min PM' (FG12: '2035 Do Min PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	137	0	169	306
	B	0	0	89	523	612
	C	0	1	0	472	473
	D	237	707	248	0	1192
	Tot.	237	845	337	1164	2583

Signal Timings Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**101.3%**
Ash Tree Lane - A2 - Canterbury St	-	-	**N/A**	-	-		-	-	-	-	-	-	**101.3%**
1/2+1/1	A2 westbound Ahead Left	U	2	N/A	K	L	2	126:180	54	945	1950:1700	1061+355	66.7 : 66.7%
2/1	Ash Tree Lane Left Right	U	2	N/A	M		2	32	-	306	1600	302	101.3%
3/1	A2 West - Entry Ahead	U	2	N/A	J		2	126	-	612	1950	1387	44.1%
4/1	A2 West - Exit	U	N/A	N/A	-		-	-	-	845	Inf	Inf	0.0%
5/1	Ash Tree Lane - Southbound	U	N/A	N/A	-		-	-	-	237	Inf	Inf	0.0%
6/2+6/1	A2 eastbound Left Ahead	U	1	N/A	A N		2	85:117	-	348	1700:1700	623+214	41.5 : 41.5%
6/3	A2 eastbound Ahead	U	1	N/A	A		2	85	-	433	1950	943	45.7%
7/1+7/2	Canterbury St - Entry Right Left	U	1	N/A	C B		2	69:14	-	473	1700:1600	664+1	71.1 : 71.1%
8/1	Canterbury St - Exit	U	N/A	N/A	-		-	-	-	337	Inf	Inf	0.0%
9/1	A2 East - Exit	U	N/A	N/A	-		-	-	-	495	Inf	Inf	0.0%
9/2	A2 East - Exit	U	N/A	N/A	-		-	-	-	669	Inf	Inf	0.0%
10/1	A2 East - Entry Ahead	U	1	N/A	E		2	124	-	944	1950	1365	69.2%
10/2	A2 East - Entry Right	U	1	N/A	D		2	27	-	248	1600	258	96.2%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**18.6**	**20.0**	**0.0**	**38.7**	**-**	**-**	**-**	**-**
Ash Tree Lane - A2 - Canterbury St	**-**	**-**	**0**	**0**	**0**	**18.6**	**20.0**	**0.0**	**38.7**	**-**	**-**	**-**	**-**
1/2+1/1	945	945	-	-	-	0.8	1.0	-	1.8	6.7	20.7	1.0	21.7
2/1	306	302	-	-	-	5.2	9.7	-	14.9	175.3	11.9	9.7	21.7
3/1	612	612	-	-	-	1.0	0.4	-	1.4	8.5	8.7	0.4	9.1
4/1	843	843	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	237	237	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2+6/1	348	348	-	-	-	0.8	0.4	-	1.1	11.9	5.5	0.4	5.8
6/3	431	431	-	-	-	2.2	0.4	-	2.7	22.3	11.4	0.4	11.8
7/1+7/2	473	473	-	-	-	3.1	1.2	-	4.3	33.1	11.8	1.2	13.0
8/1	337	337	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	495	495	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2	667	667	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	944	944	-	-	-	2.1	1.1	-	3.2	12.4	16.3	1.1	17.4
10/2	248	248	-	-	-	3.4	5.8	-	9.2	133.0	8.3	5.8	14.1

C1 Stream: 1 PRC for Signalled Lanes (%): -6.9 Total Delay for Signalled Lanes (pcuHr): 20.57 Cycle Time (s): 180
C1 Stream: 2 PRC for Signalled Lanes (%): -12.5 Total Delay for Signalled Lanes (pcuHr): 18.10 Cycle Time (s): 180
PRC Over All Lanes (%): -12.5 Total Delay Over All Lanes(pcuHr): 38.68

Full Input Data And Results

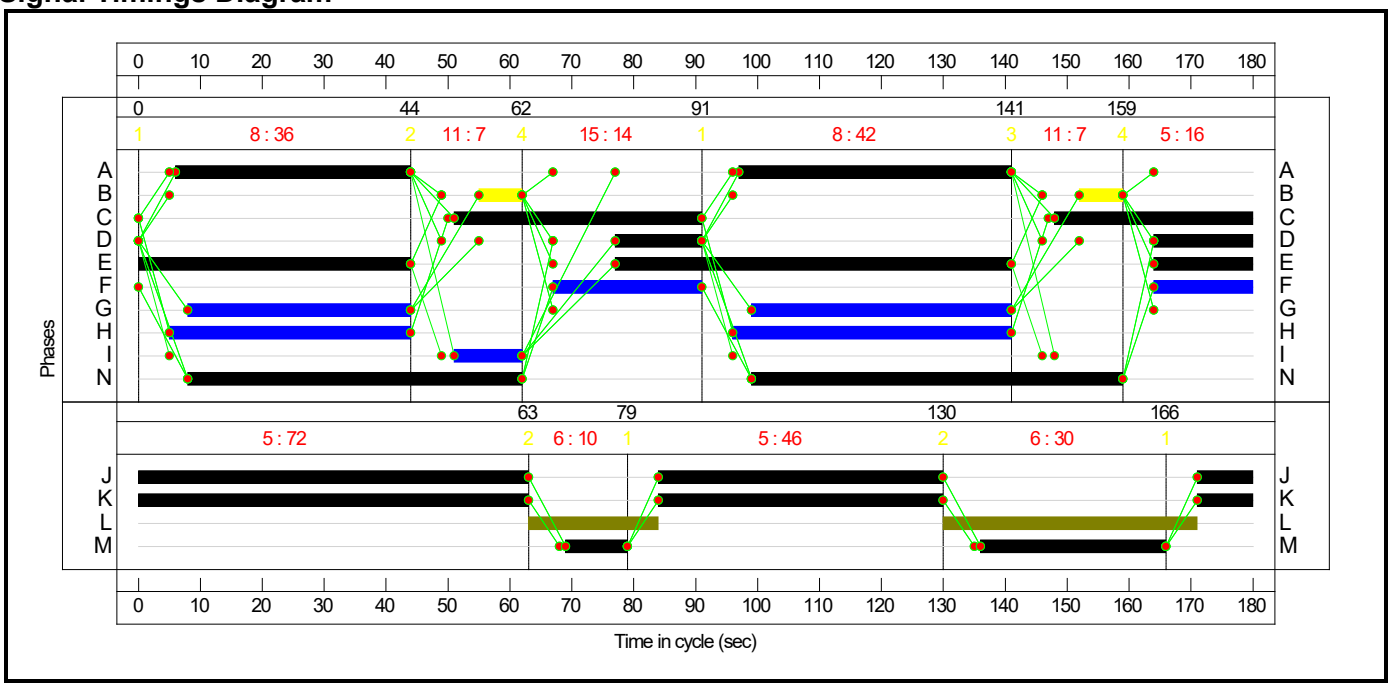
Scenario 13: '2035 DS AM' (FG13: '2035 DS AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	273	0	171	444
	B	0	0	104	436	540
	C	0	2	0	300	302
	D	112	780	268	0	1160
	Tot.	112	1055	372	907	2446

Signal Timings Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**118.9%**
Ash Tree Lane - A2 - Canterbury St	-	-	**N/A**	-	-		-	-	-	-	-	-	**118.9%**
1/2+1/1	A2 westbound Ahead Left	U	2	N/A	K	L	2	118:180	62	894	1950:1700	1149+165	68.1 : 68.1%
2/1	Ash Tree Lane Left Right	U	2	N/A	M		2	40	-	444	1600	373	118.9%
3/1	A2 West - Entry Ahead	U	2	N/A	J		2	118	-	540	1950	1300	41.5%
4/1	A2 West - Exit	U	N/A	N/A	-		-	-	-	1055	Inf	Inf	0.0%
5/1	Ash Tree Lane - Southbound	U	N/A	N/A	-		-	-	-	112	Inf	Inf	0.0%
6/2+6/1	A2 eastbound Left Ahead	U	1	N/A	A N		2	82:114	-	315	1700:1700	546+269	38.5 : 38.6%
6/3	A2 eastbound Ahead	U	1	N/A	A		2	82	-	396	1950	910	40.6%
7/1+7/2	Canterbury St - Entry Right Left	U	1	N/A	C B		2	72:14	-	302	1700:1600	690+5	43.5 : 43.5%
8/1	Canterbury St - Exit	U	N/A	N/A	-		-	-	-	372	Inf	Inf	0.0%
9/1	A2 East - Exit	U	N/A	N/A	-		-	-	-	361	Inf	Inf	0.0%
9/2	A2 East - Exit	U	N/A	N/A	-		-	-	-	546	Inf	Inf	0.0%
10/1	A2 East - Entry Ahead	U	1	N/A	E		2	124	-	892	1950	1365	65.3%
10/2	A2 East - Entry Right	U	1	N/A	D		2	30	-	268	1600	284	94.2%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**24.8**	**46.7**	**0.0**	**71.5**	**-**	**-**	**-**	**-**
Ash Tree Lane - A2 - Canterbury St	**-**	**-**	**0**	**0**	**0**	**24.8**	**46.7**	**0.0**	**71.5**	**-**	**-**	**-**	**-**
1/2+1/1	894	894	-	-	-	1.2	1.1	-	2.3	9.3	18.5	1.1	19.5
2/1	444	373	-	-	-	13.3	38.2	-	51.6	418.2	23.0	38.2	61.3
3/1	540	540	-	-	-	1.2	0.4	-	1.5	10.1	8.2	0.4	8.6
4/1	1012	1012	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	112	112	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2+6/1	314	314	-	-	-	0.8	0.3	-	1.1	12.3	5.0	0.3	5.3
6/3	369	369	-	-	-	2.0	0.3	-	2.3	22.8	9.4	0.3	9.8
7/1+7/2	302	302	-	-	-	1.6	0.4	-	2.0	23.7	5.6	0.4	6.0
8/1	372	372	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	360	360	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2	519	519	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	892	892	-	-	-	1.9	0.9	-	2.9	11.5	14.4	0.9	15.3
10/2	268	268	-	-	-	2.8	5.0	-	7.8	105.1	6.8	5.0	11.8

C1 Stream: 1 PRC for Signalled Lanes (%): -4.7 Total Delay for Signalled Lanes (pcuHr): 16.08 Cycle Time (s): 180
C1 Stream: 2 PRC for Signalled Lanes (%): -32.1 Total Delay for Signalled Lanes (pcuHr): 55.39 Cycle Time (s): 180
PRC Over All Lanes (%): -32.1 Total Delay Over All Lanes(pcuHr): 71.47

Full Input Data And Results

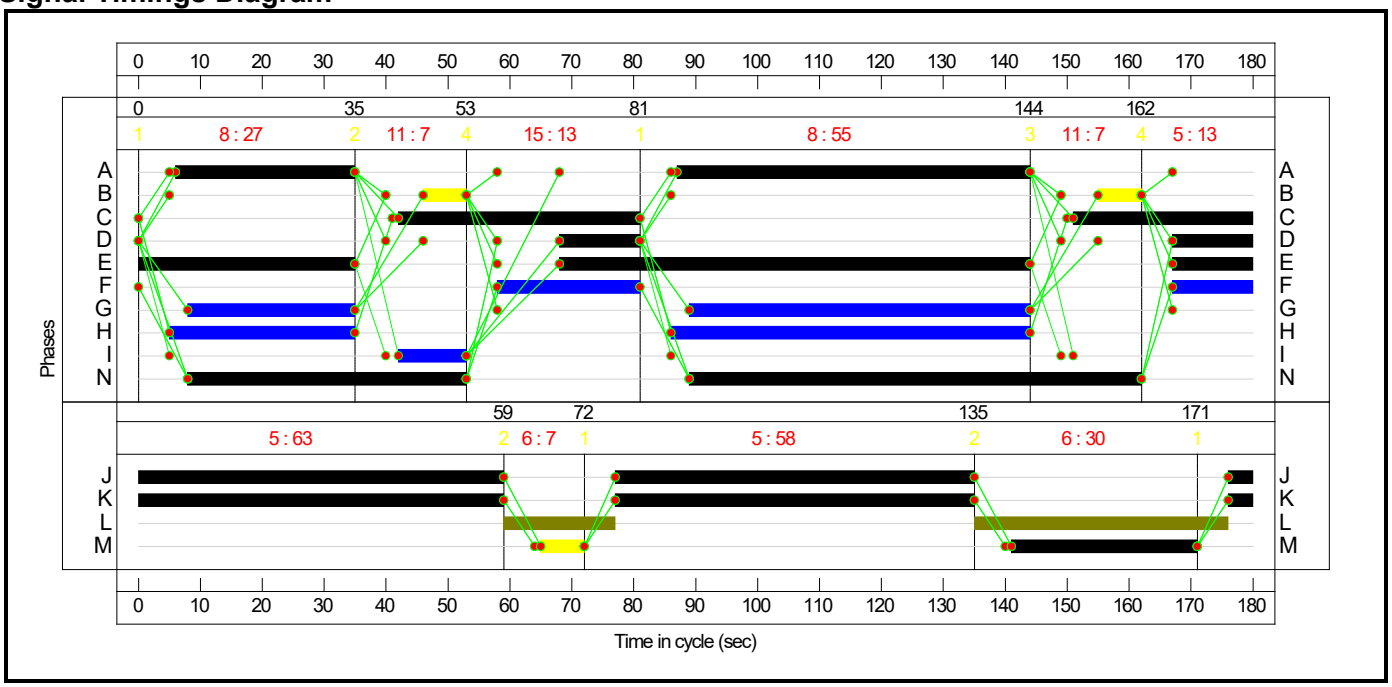
Scenario 14: '2035 DS PM' (FG14: '2035 DS PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	143	0	165	308
	B	0	0	84	502	586
	C	0	3	0	459	462
	D	213	696	238	0	1147
	Tot.	213	842	322	1126	2503

Signal Timings Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**95.6%**
Ash Tree Lane - A2 - Canterbury St	-	-	**N/A**	-	-		-	-	-	-	-	-	**95.6%**
1/2+1/1	A2 westbound Ahead Left	U	2	N/A	K	L	2	121:180	59	912	1950:1700	1043+318	67.0 : 67.0%
2/1	Ash Tree Lane Left Right	U	2	N/A	M		2	37	-	308	1600	347	88.8%
3/1	A2 West - Entry Ahead	U	2	N/A	J		2	121	-	586	1950	1333	44.0%
4/1	A2 West - Exit	U	N/A	N/A	-		-	-	-	842	Inf	Inf	0.0%
5/1	Ash Tree Lane - Southbound	U	N/A	N/A	-		-	-	-	213	Inf	Inf	0.0%
6/2+6/1	A2 eastbound Left Ahead	U	1	N/A	A N		2	86:118	-	334	1700:1700	634+213	39.4 : 39.4%
6/3	A2 eastbound Ahead	U	1	N/A	A		2	86	-	417	1950	953	43.7%
7/1+7/2	Canterbury St - Entry Right Left	U	1	N/A	C B		2	68:14	-	462	1700:1600	653+4	70.3 : 70.3%
8/1	Canterbury St - Exit	U	N/A	N/A	-		-	-	-	322	Inf	Inf	0.0%
9/1	A2 East - Exit	U	N/A	N/A	-		-	-	-	480	Inf	Inf	0.0%
9/2	A2 East - Exit	U	N/A	N/A	-		-	-	-	646	Inf	Inf	0.0%
10/1	A2 East - Entry Ahead	U	1	N/A	E		2	124	-	909	1950	1365	66.6%
10/2	A2 East - Entry Right	U	1	N/A	D		2	26	-	238	1600	249	95.6%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**17.6**	**13.1**	**0.0**	**30.7**	**-**	**-**	**-**	**-**
Ash Tree Lane - A2 - Canterbury St	**-**	**-**	**0**	**0**	**0**	**17.6**	**13.1**	**0.0**	**30.7**	**-**	**-**	**-**	**-**
1/2+1/1	912	912	-	-	-	1.1	1.0	-	2.2	8.5	19.3	1.0	20.3
2/1	308	308	-	-	-	4.5	3.4	-	7.9	92.3	11.3	3.4	14.7
3/1	586	586	-	-	-	1.2	0.4	-	1.6	9.9	9.3	0.4	9.7
4/1	842	842	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	213	213	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2+6/1	334	334	-	-	-	0.7	0.3	-	1.0	11.3	5.4	0.3	5.7
6/3	417	417	-	-	-	2.2	0.4	-	2.6	22.1	11.0	0.4	11.4
7/1+7/2	462	462	-	-	-	3.2	1.2	-	4.4	33.9	12.2	1.2	13.3
8/1	322	322	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	480	480	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2	646	646	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	909	909	-	-	-	2.0	1.0	-	3.0	11.8	14.9	1.0	15.9
10/2	238	238	-	-	-	2.7	5.5	-	8.1	122.9	6.5	5.5	12.0

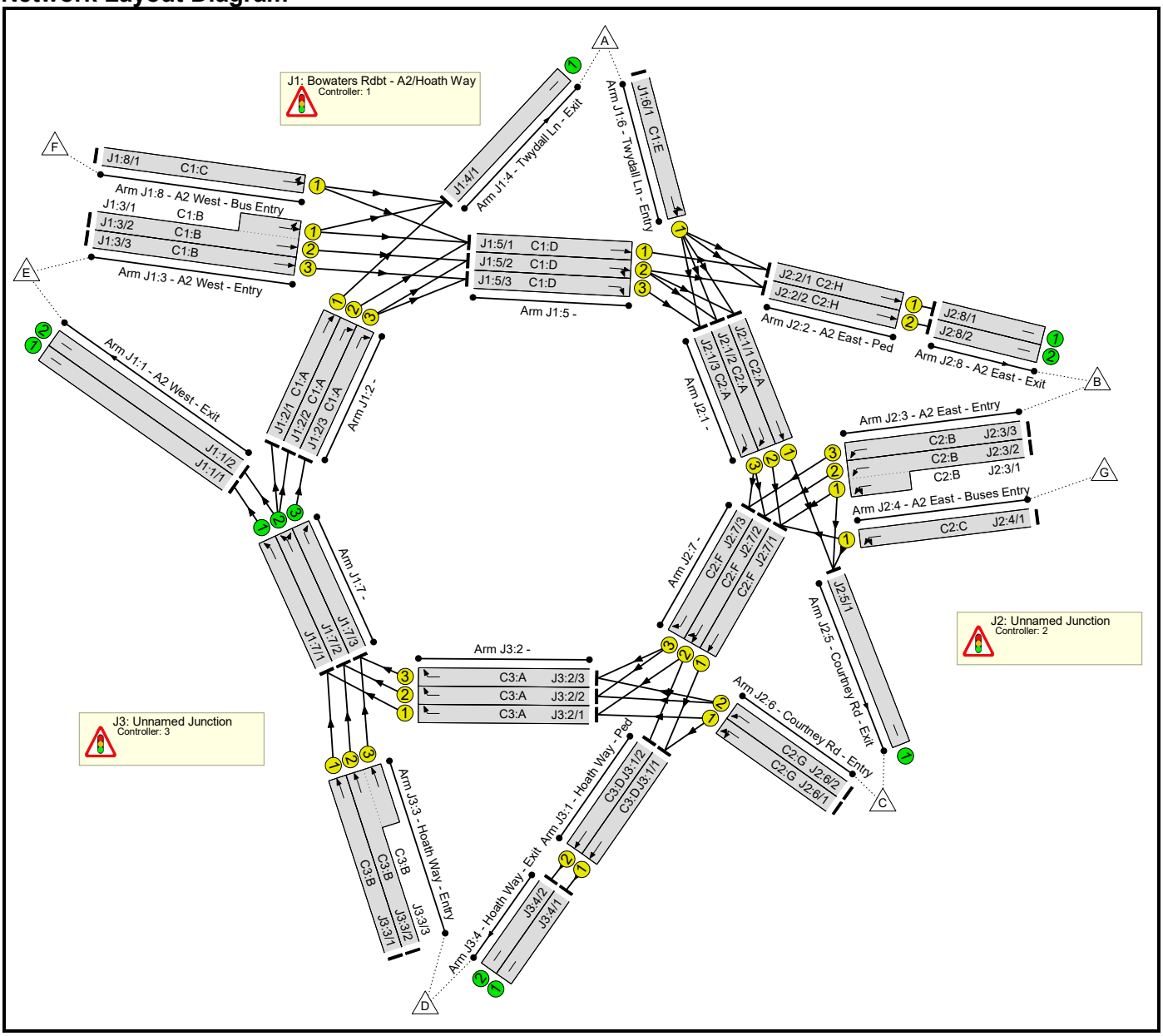
C1	Stream: 1 PRC for Signalled Lanes (%):	-6.3	Total Delay for Signalled Lanes (pcuHr):	19.07	Cycle Time (s): 180
C1	Stream: 2 PRC for Signalled Lanes (%):	1.3	Total Delay for Signalled Lanes (pcuHr):	11.67	Cycle Time (s): 180
	PRC Over All Lanes (%):	-6.3	Total Delay Over All Lanes(pcuHr):	30.74	

Full Input Data And Results

User and Project Details

Project:	**East Hill, Medway**
Title:	**Jct 4 – A2/Courteney Rd/Hoath Way/Twydall Ln – Capacity Assessment**
File name:	Jct 4 - A2_Hoath Way.lsg3x

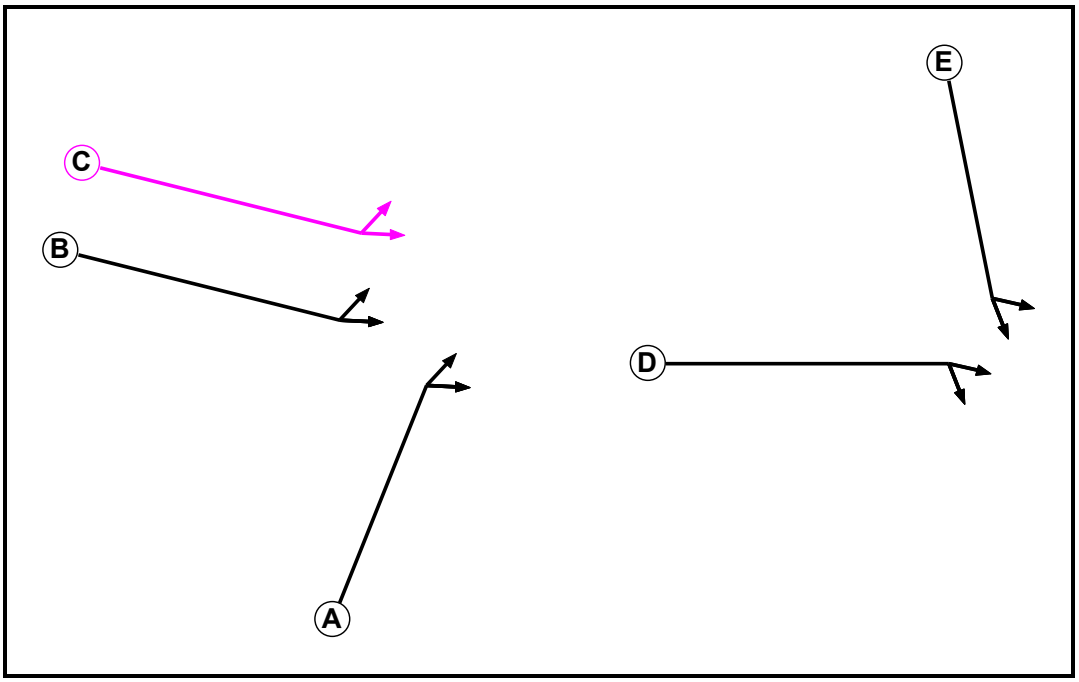
Network Layout Diagram



Full Input Data And Results

C1

Phase Diagram

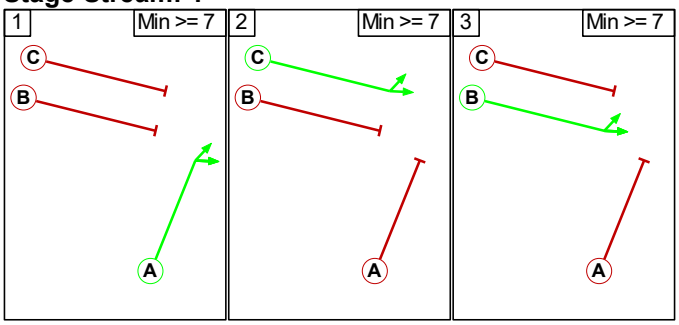


Phase Intergreens Matrix

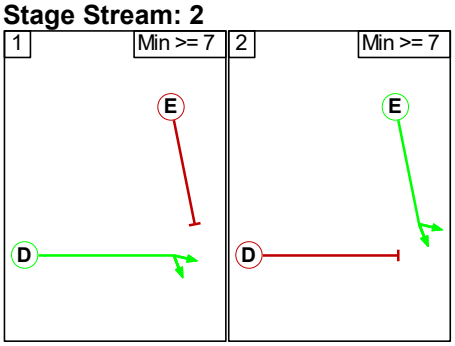
		Starting Phase				
		A	B	C	D	E
Terminating Phase	A		5	5	-	-
	B	6		5	-	-
	C	5	5		-	-
	D	-	-	-		5
	E	-	-	-	5	

Stage Diagram

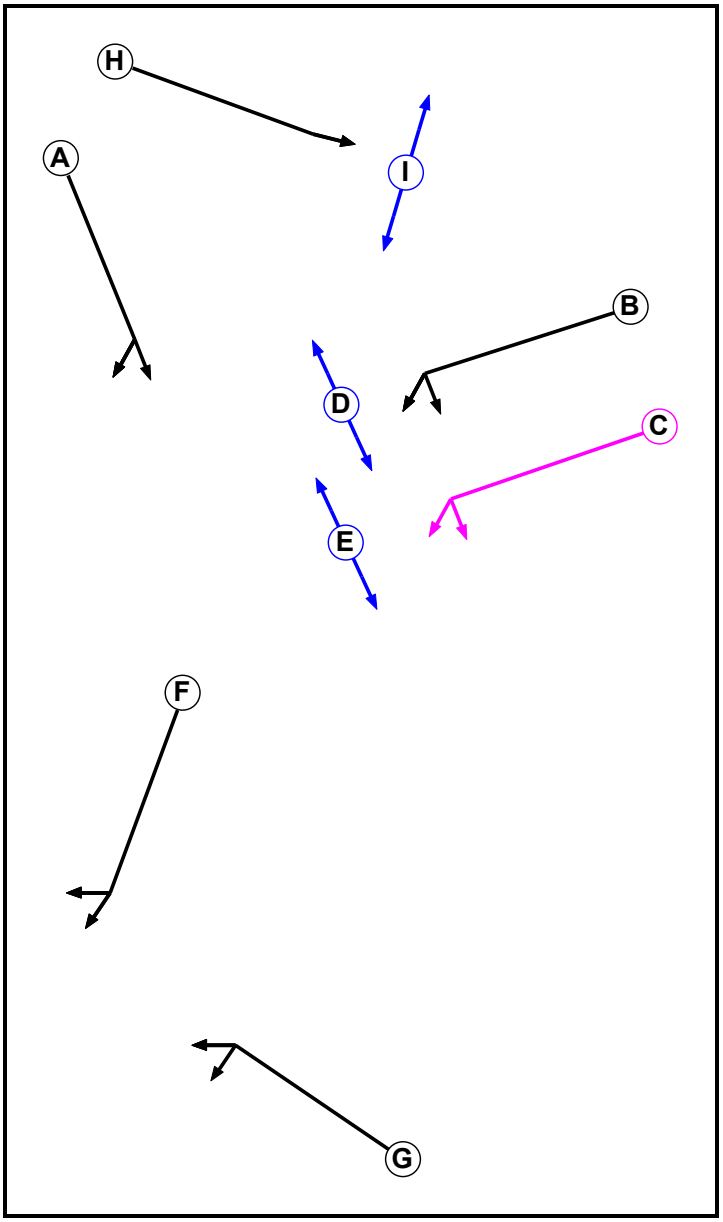
Stage Stream: 1



Stage Stream: 2



C2
Phase Diagram



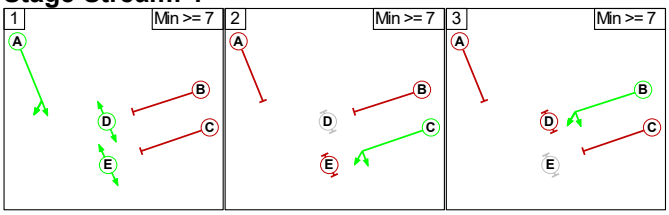
Full Input Data And Results

Phase Intergreens Matrix

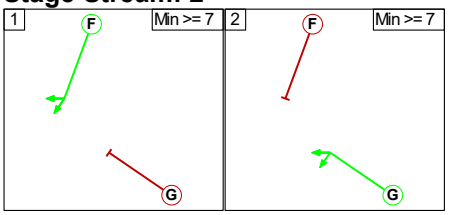
Terminating Phase \ Starting Phase	A	B	C	D	E	F	G	H	I
A		5	5	-	-	-	-	-	-
B	7		6	5	-	-	-	-	-
C	5	5		-	5	-	-	-	-
D	-	14	-		-	-	-	-	-
E	-	-	7	-		-	-	-	-
F	-	-	-	-	-		5	-	-
G	-	-	-	-	-	6		-	-
H	-	-	-	-	-	-	-		5
I	-	-	-	-	-	-	-	8	

Stage Diagram

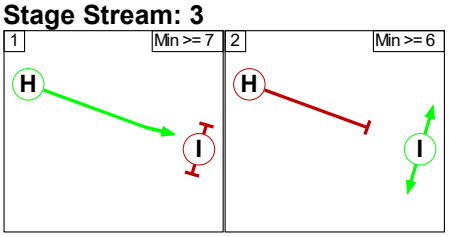
Stage Stream: 1



Stage Stream: 2



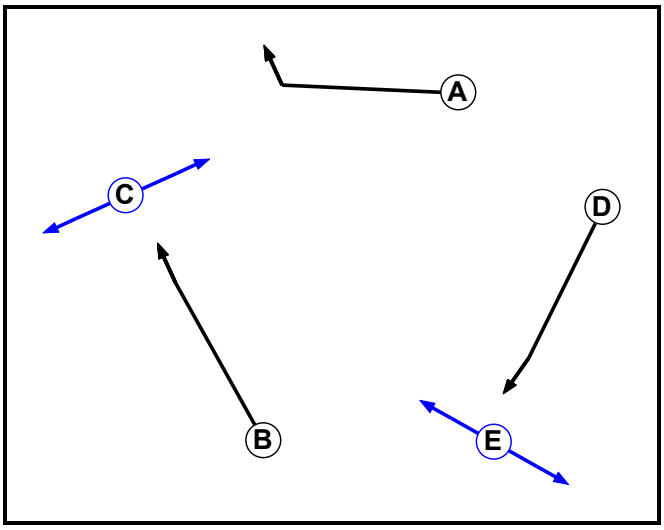
Stage Stream: 3



Full Input Data And Results

C3

Phase Diagram

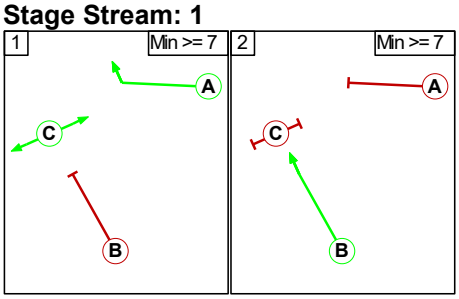


Phase Intergreens Matrix

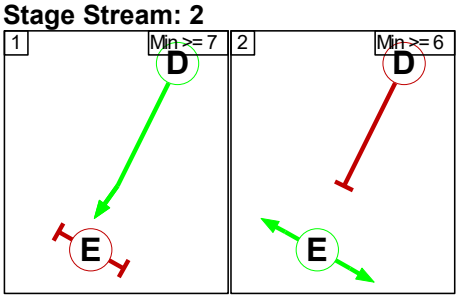
		Starting Phase				
		A	B	C	D	E
Terminating Phase	A		5	-	-	-
	B	5		5	-	-
	C	-	12		-	-
	D	-	-	-		5
	E	-	-	-	10	

Stage Diagram

Stage Stream: 1



Stage Stream: 2



Full Input Data And Results

Scenario 3: '2035 Do Min AM' (FG3: '2035 Do Min AM Peak', Plan 1: 'Network Control Plan 1')

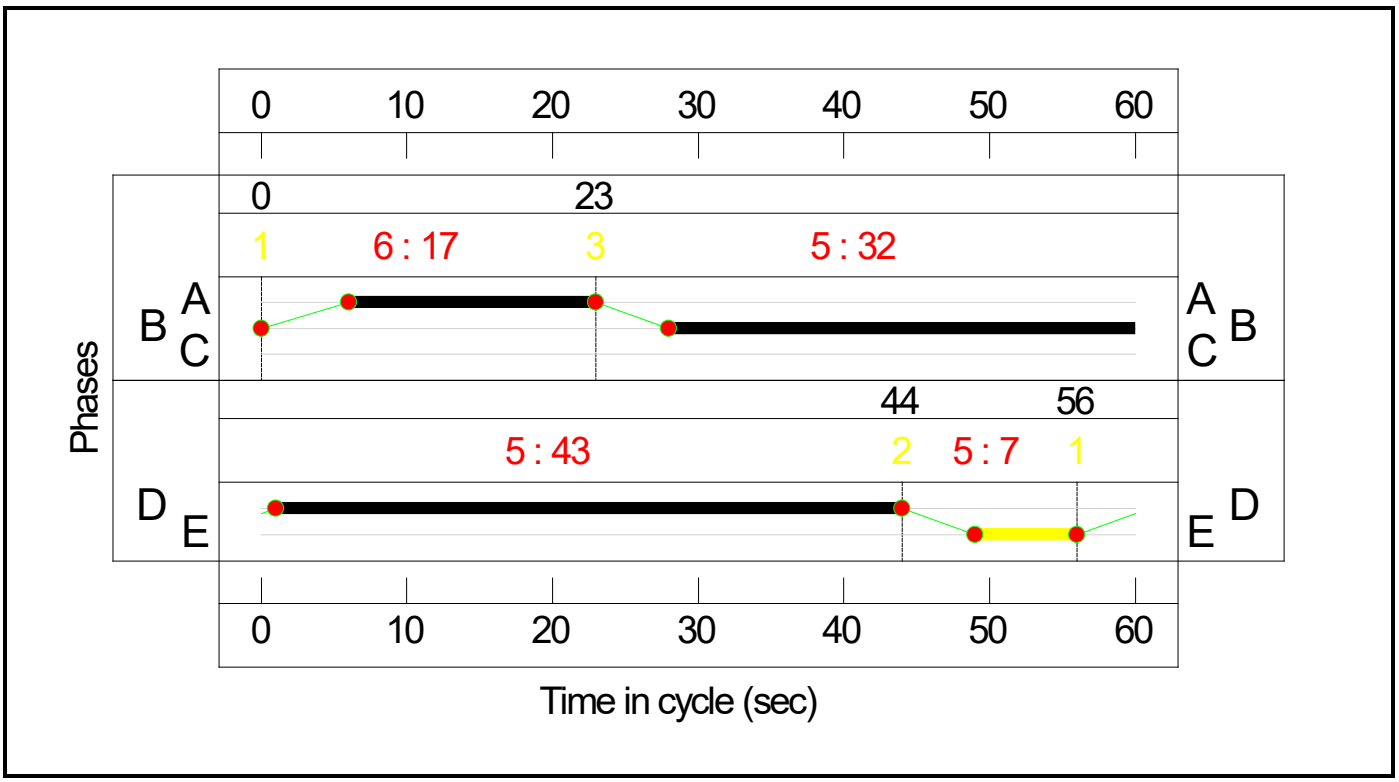
Traffic Flows, Actual

Actual Flow :

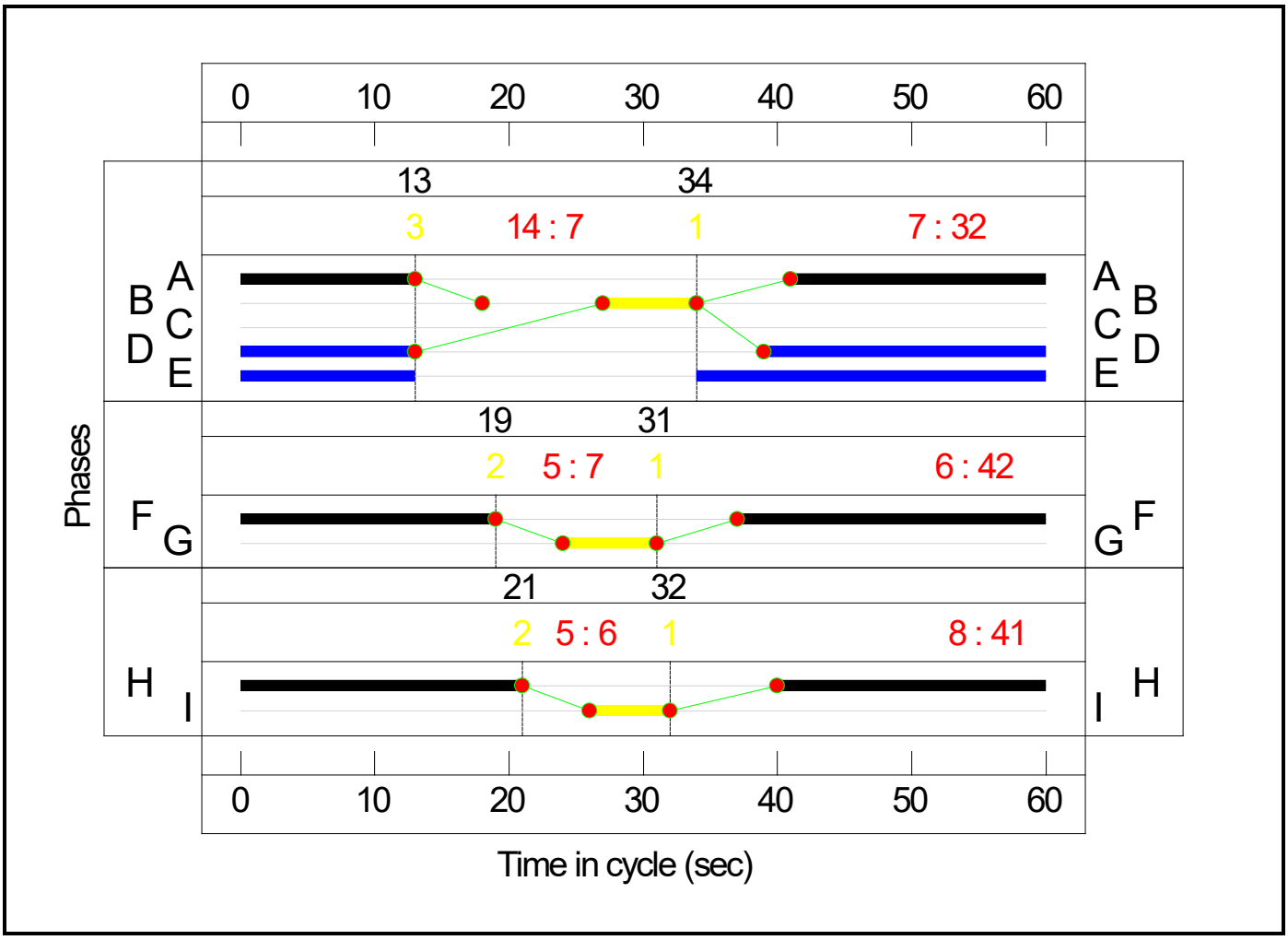
		Destination							
		A	B	C	D	E	F	G	Tot.
Origin	A	0	28	39	280	93	0	0	440
	B	14	0	150	342	637	0	0	1143
	C	46	42	0	0	158	0	0	246
	D	335	300	300	0	1058	0	0	1993
	E	75	489	282	886	61	0	0	1793
	F	0	0	0	0	0	0	0	0
	G	0	0	0	0	0	0	0	0
	Tot.	470	859	771	1508	2007	0	0	5615

Signal Timings Diagram

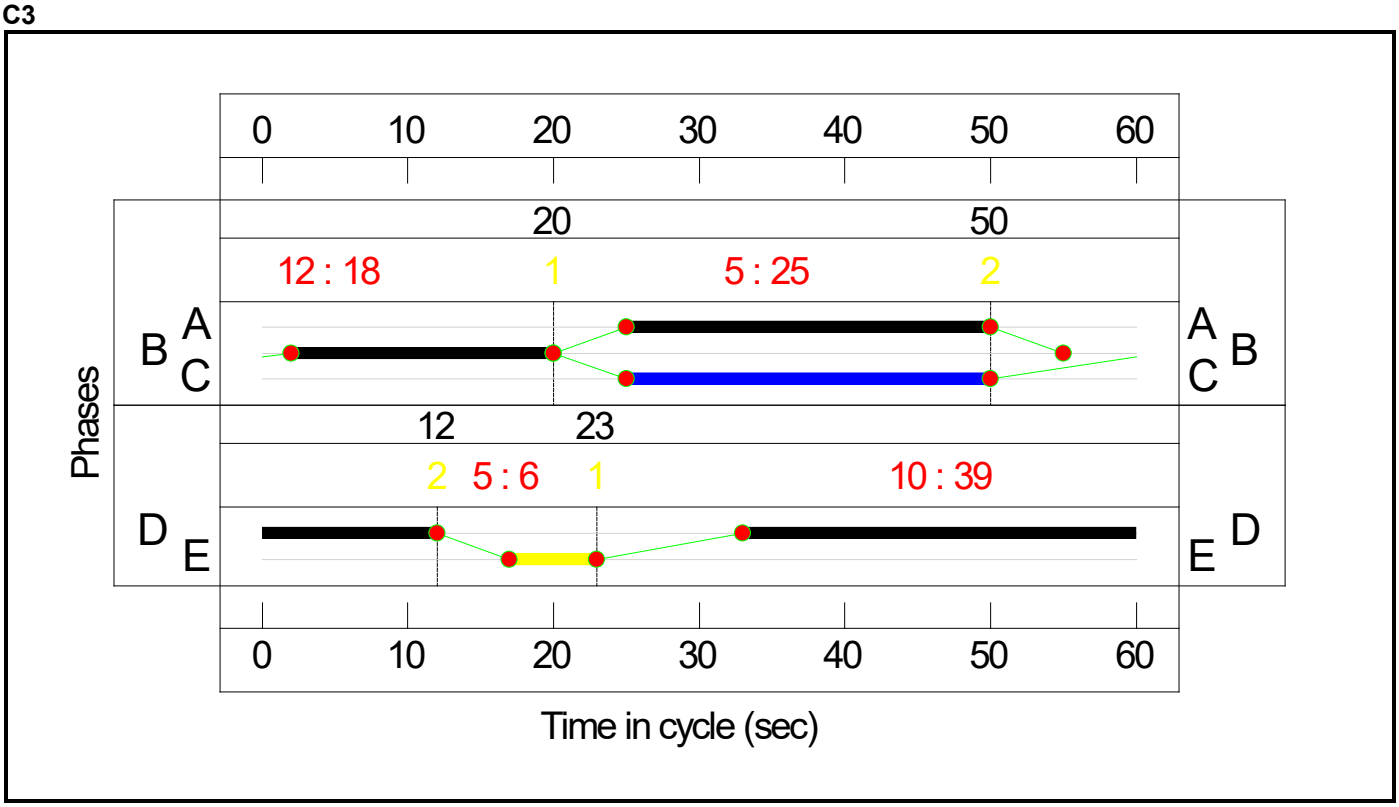
C1



C2


0
10
20
30
40
50
60
13
34
3
14 : 7
1
7 : 32
A
B
C
D
E
19
31
2
5 : 7
1
6 : 42
F
G
21
32
2
5 : 6
1
8 : 41
H
I
Phases
Time in cycle (sec)

C3


0
10
20
30
40
50
60
20
50
12 : 18
1
5 : 25
2
A
B
C
12
23
2
5 : 6
1
10 : 39
D
E
Phases
Time in cycle (sec)

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
J1: - A2/Hoath Way	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**173.7%**
1/1	A2 West - Exit	U	N/A	N/A	-		-	-	-	1166	Inf	Inf	0.0%
1/2	A2 West - Exit	U	N/A	N/A	-		-	-	-	841	Inf	Inf	0.0%
2/1	Ahead	U	1:1	N/A	C1:A		1	17	-	395	1900	570	49.4%
2/2	Right	U	1:1	N/A	C1:A		1	17	-	21	1900	570	3.7%
2/3	Right	U	1:1	N/A	C1:A		1	17	-	621	1900	570	74.8%
3/2+3/1	A2 West - Entry Left Ahead	U	1:1	N/A	C1:B		1	32	-	1178	1900:1900	696+639	88.2 : 88.2%
3/3	A2 West - Entry Ahead	U	1:1	N/A	C1:B		1	32	-	615	1900	1045	58.9%
4/1	Twydall Ln - Exit	U	N/A	N/A	-		-	-	-	470	Inf	Inf	0.0%
5/1	Ahead	U	1:2	N/A	C1:D		1	43	-	510	1900	1393	36.6%
5/2	Right Ahead	U	1:2	N/A	C1:D		1	43	-	1235	1900	1393	74.7%
5/3	Right	U	1:2	N/A	C1:D		1	43	-	615	1900	1393	44.1%
6/1	Twydall Ln - Entry Ahead Left	U	1:2	N/A	C1:E		1	7	-	440	1900	253	173.7%
7/1	Ahead	U	N/A	N/A	-		-	-	-	1166	1950	1950	49.3%
7/2	Ahead Right	U	N/A	N/A	-		-	-	-	1257	1950	1950	45.3%
7/3	Right	U	N/A	N/A	-		-	-	-	621	1950	1950	21.9%
8/1	A2 West - Bus Entry Left Ahead	U	1:1	N/A	C1:C		0	0	-	0	1900	0	0.0%
J2	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**150.4%**
1/1	Ahead	U	2:1	N/A	C2:A		1	32	-	621	1900	1045	48.5%
1/2	Right	U	2:1	N/A	C2:A		1	32	-	472	1900	1045	39.5%
1/3	Right	U	2:1	N/A	C2:A		1	32	-	848	1900	1045	71.7%
2/1	A2 East - Ped Ahead	U	2:3	N/A	C2:H		1	41	-	524	1900	1330	39.0%

Full Input Data And Results

2/2	A2 East - Ped Ahead	U	2:3	N/A	C2:H		1	41	-	335	1900	1330	17.4%
3/2+3/1	A2 East - Entry Left Left2	U	2:1	N/A	C2:B		1	7	-	762	1900:1900	253+253	150.4 : 150.4%
3/3	A2 East - Entry Left	U	2:1	N/A	C2:B		1	7	-	381	1900	253	150.4%
4/1	A2 East - Buses Entry Left Left2	U	2:1	N/A	C2:C		0	0	-	0	1900	0	0.0%
5/1	Courtney Rd - Exit	U	N/A	N/A	-		-	-	-	771	Inf	Inf	0.0%
6/1	Courtney Rd - Entry Left Ahead	U	2:2	N/A	C2:G		1	7	-	123	1900	253	48.6%
6/2	Courtney Rd - Entry Ahead	U	2:2	N/A	C2:G		1	7	-	123	1900	253	48.6%
7/1	Ahead	U	2:2	N/A	C2:F		1	42	-	703	1900	1362	41.6%
7/2	Ahead Right	U	2:2	N/A	C2:F		1	42	-	1151	1900	1362	69.4%
7/3	Right	U	2:2	N/A	C2:F		1	42	-	459	1900	1362	22.9%
8/1	A2 East - Exit	U	N/A	N/A	-		-	-	-	524	Inf	Inf	0.0%
8/2	A2 East - Exit	U	N/A	N/A	-		-	-	-	335	Inf	Inf	0.0%
J3	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**148.1%**
1/1	Hoath Way - Ped Ahead	U	3:2	N/A	C3:D		1	39	-	703	1900	1267	44.7%
1/2	Hoath Way - Ped Ahead	U	3:2	N/A	C3:D		1	39	-	805	1900	1267	55.9%
2/1	Right	U	3:1	N/A	C3:A		1	25	-	469	1900	823	43.6%
2/2	Right	U	3:1	N/A	C3:A		1	25	-	561	1900	823	50.2%
2/3	Right	U	3:1	N/A	C3:A		1	25	-	21	1900	823	2.6%
3/1	Hoath Way - Entry Ahead	U	3:1	N/A	C3:B		1	18	-	697	1900	602	115.8%
3/2+3/3	Hoath Way - Entry Ahead	U	3:1	N/A	C3:B		1	18	-	1296	1900:1900	470+405	148.1 : 148.1%
4/1	Hoath Way - Exit	U	N/A	N/A	-		-	-	-	703	Inf	Inf	0.0%
4/2	Hoath Way - Exit	U	N/A	N/A	-		-	-	-	805	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**69.3**	**568.3**	**0.0**	**637.6**	**-**	**-**	**-**	**-**
J1: Bowaters Rdbt - A2/Hoath Way	**-**	**-**	**0**	**0**	**0**	**17.7**	**103.9**	**0.0**	**121.6**	**-**	**-**	**-**	**-**
1/1	961	961	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
1/2	581	581	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
2/1	282	282	-	-	-	0.7	0.5	-	1.2	14.7	1.7	0.5	2.2
2/2	21	21	-	-	-	0.2	0.0	-	0.2	32.9	0.4	0.0	0.4
2/3	426	426	-	-	-	0.6	1.5	-	2.1	17.4	4.8	1.5	6.2
3/2+3/1	1178	1178	-	-	-	3.0	3.6	-	6.6	20.2	10.5	3.6	14.0
3/3	615	615	-	-	-	1.5	0.7	-	2.2	13.2	6.7	0.7	7.4
4/1	357	357	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	510	510	-	-	-	0.6	0.3	-	0.9	6.3	3.6	0.3	3.9
5/2	1040	1040	-	-	-	0.8	1.5	-	2.3	7.9	4.6	1.5	6.0
5/3	615	615	-	-	-	0.7	0.4	-	1.1	6.4	4.1	0.4	4.5
6/1	440	253	-	-	-	9.6	94.5	-	104.1	851.4	13.4	94.5	107.9
7/1	961	961	-	-	-	0.0	0.5	-	0.5	1.8	0.0	0.5	0.5
7/2	883	883	-	-	-	0.0	0.4	-	0.4	1.7	0.0	0.4	0.4
7/3	426	426	-	-	-	0.0	0.1	-	0.1	1.2	0.0	0.1	0.1
8/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J2: Unnamed Junction	**-**	**-**	**0**	**0**	**0**	**23.0**	**199.5**	**0.0**	**222.4**	**-**	**-**	**-**	**-**
1/1	507	507	-	-	-	1.5	0.5	-	2.0	14.3	6.2	0.5	6.7
1/2	413	413	-	-	-	0.2	0.3	-	0.5	4.6	2.1	0.3	2.5
1/3	749	749	-	-	-	0.5	1.3	-	1.8	8.4	6.4	1.3	7.7
2/1	518	518	-	-	-	0.2	0.3	-	0.6	3.9	4.5	0.3	4.8
2/2	232	232	-	-	-	0.4	0.1	-	0.5	7.3	1.5	0.1	1.6
3/2+3/1	762	507	-	-	-	11.7	129.1	-	140.9	665.4	12.8	129.1	141.9

Full Input Data And Results

3/3	381	253	-	-	-	5.9	65.3	-	71.1	672.3	8.5	65.3	73.8
4/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	607	607	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	123	123	-	-	-	0.8	0.5	-	1.3	37.8	1.9	0.5	2.3
6/2	123	123	-	-	-	0.8	0.5	-	1.3	37.8	1.9	0.5	2.3
7/1	566	566	-	-	-	0.2	0.4	-	0.5	3.4	2.5	0.4	2.9
7/2	944	944	-	-	-	0.4	1.1	-	1.5	5.8	4.4	1.1	5.5
7/3	311	311	-	-	-	0.3	0.1	-	0.5	5.5	4.2	0.1	4.3
8/1	518	518	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/2	232	232	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J3: Unnamed Junction	**-**	**-**	**0**	**0**	**0**	**28.6**	**264.9**	**0.0**	**293.5**	**-**	**-**	**-**	**-**
1/1	566	566	-	-	-	0.6	0.4	-	1.0	6.1	2.0	0.4	2.4
1/2	708	708	-	-	-	0.9	0.6	-	1.6	8.0	3.1	0.6	3.7
2/1	359	359	-	-	-	0.4	0.4	-	0.8	7.9	1.1	0.4	1.5
2/2	413	413	-	-	-	0.4	0.5	-	0.9	8.2	1.2	0.5	1.7
2/3	21	21	-	-	-	0.0	0.0	-	0.0	2.2	0.0	0.0	0.0
3/1	697	602	-	-	-	6.8	51.1	-	57.9	299.0	13.2	51.1	64.3
3/2+3/3	1296	875	-	-	-	19.5	211.9	-	231.4	642.7	25.7	211.9	237.6
4/1	566	566	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	708	708	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1	Stream: 1 PRC for Signalled Lanes (%):	2.0	Total Delay for Signalled Lanes (pcuHr):	12.26	Cycle Time (s): 60
C1	Stream: 2 PRC for Signalled Lanes (%):	-93.0	Total Delay for Signalled Lanes (pcuHr):	108.35	Cycle Time (s): 60
C2	Stream: 1 PRC for Signalled Lanes (%):	-67.1	Total Delay for Signalled Lanes (pcuHr):	216.29	Cycle Time (s): 60
C2	Stream: 2 PRC for Signalled Lanes (%):	29.8	Total Delay for Signalled Lanes (pcuHr):	5.11	Cycle Time (s): 60
C2	Stream: 3 PRC for Signalled Lanes (%):	131.1	Total Delay for Signalled Lanes (pcuHr):	1.03	Cycle Time (s): 60
C3	Stream: 1 PRC for Signalled Lanes (%):	-64.5	Total Delay for Signalled Lanes (pcuHr):	291.01	Cycle Time (s): 60
C3	Stream: 2 PRC for Signalled Lanes (%):	60.9	Total Delay for Signalled Lanes (pcuHr):	2.53	Cycle Time (s): 60
	PRC Over All Lanes (%):	-93.0	Total Delay Over All Lanes(pcuHr):	637.62	

Full Input Data And Results

Scenario 4: '2035 Do Min PM' (FG4: '2035 Do Min PM Peak', Plan 1: 'Network Control Plan 1')

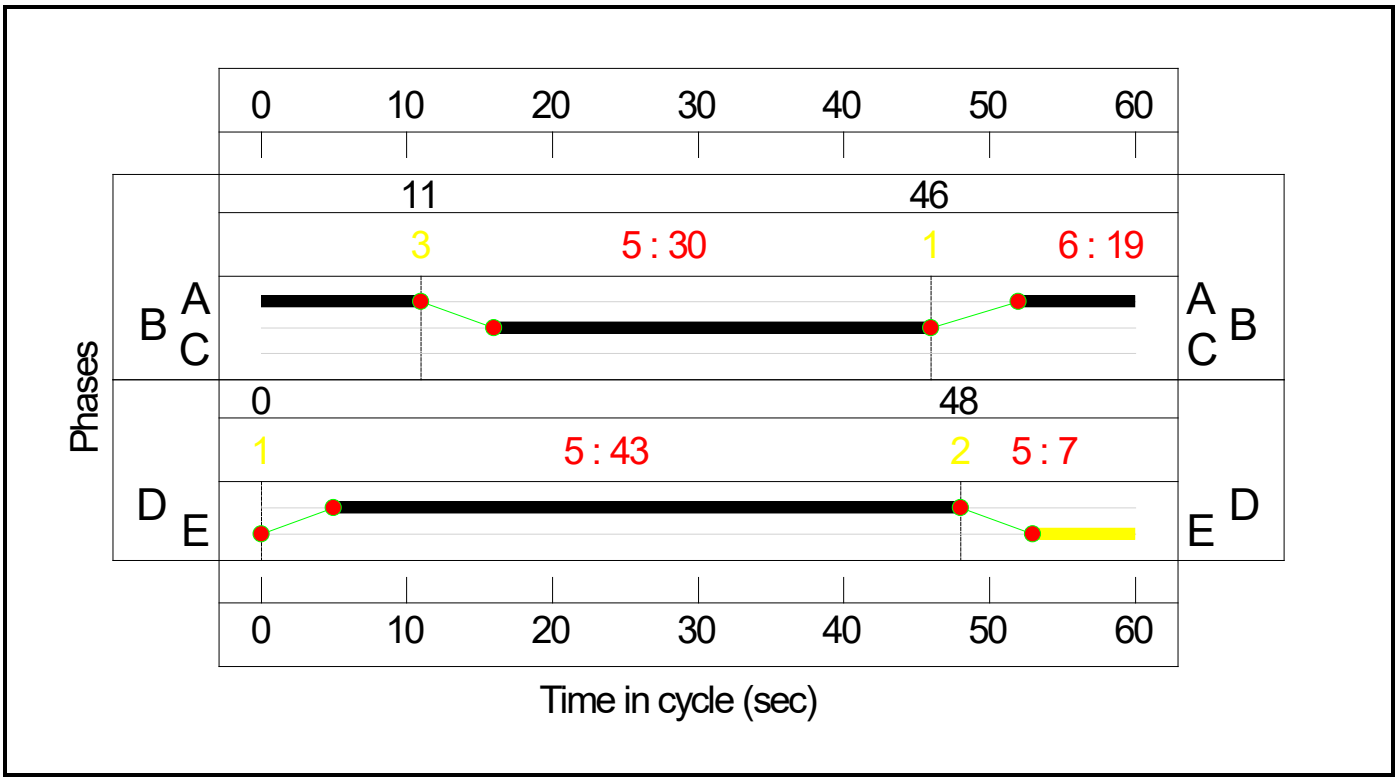
Traffic Flows, Actual

Actual Flow :

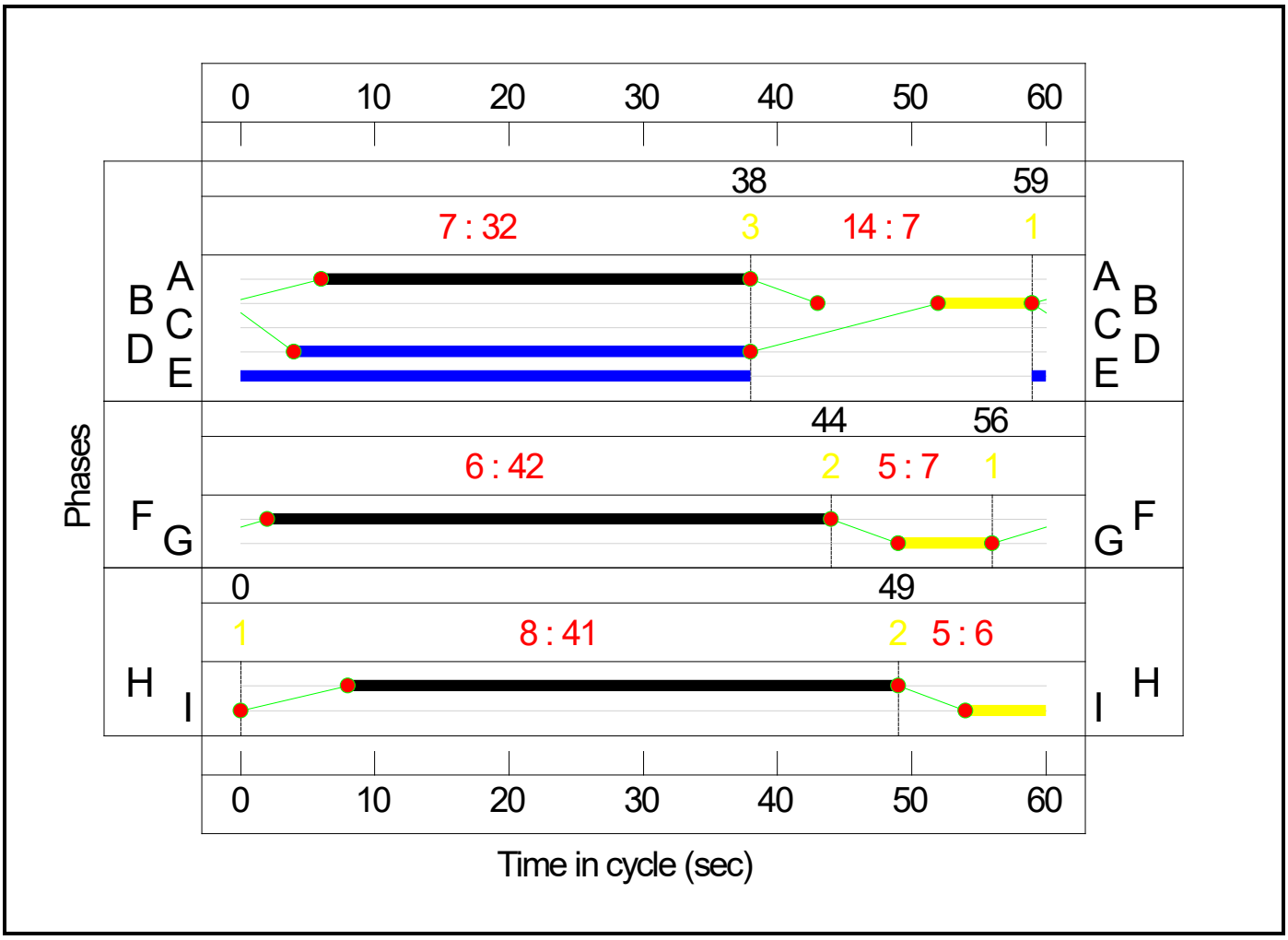
		Destination							
		A	B	C	D	E	F	G	Tot.
Origin	A	0	37	36	196	21	0	0	290
	B	5	0	190	295	560	0	0	1050
	C	101	101	0	1	505	0	0	708
	D	521	328	328	0	1014	0	0	2191
	E	41	714	403	858	37	0	0	2053
	F	0	0	0	0	0	0	0	0
	G	0	0	0	0	0	0	0	0
	Tot.	668	1180	957	1350	2137	0	0	6292

Signal Timings Diagram

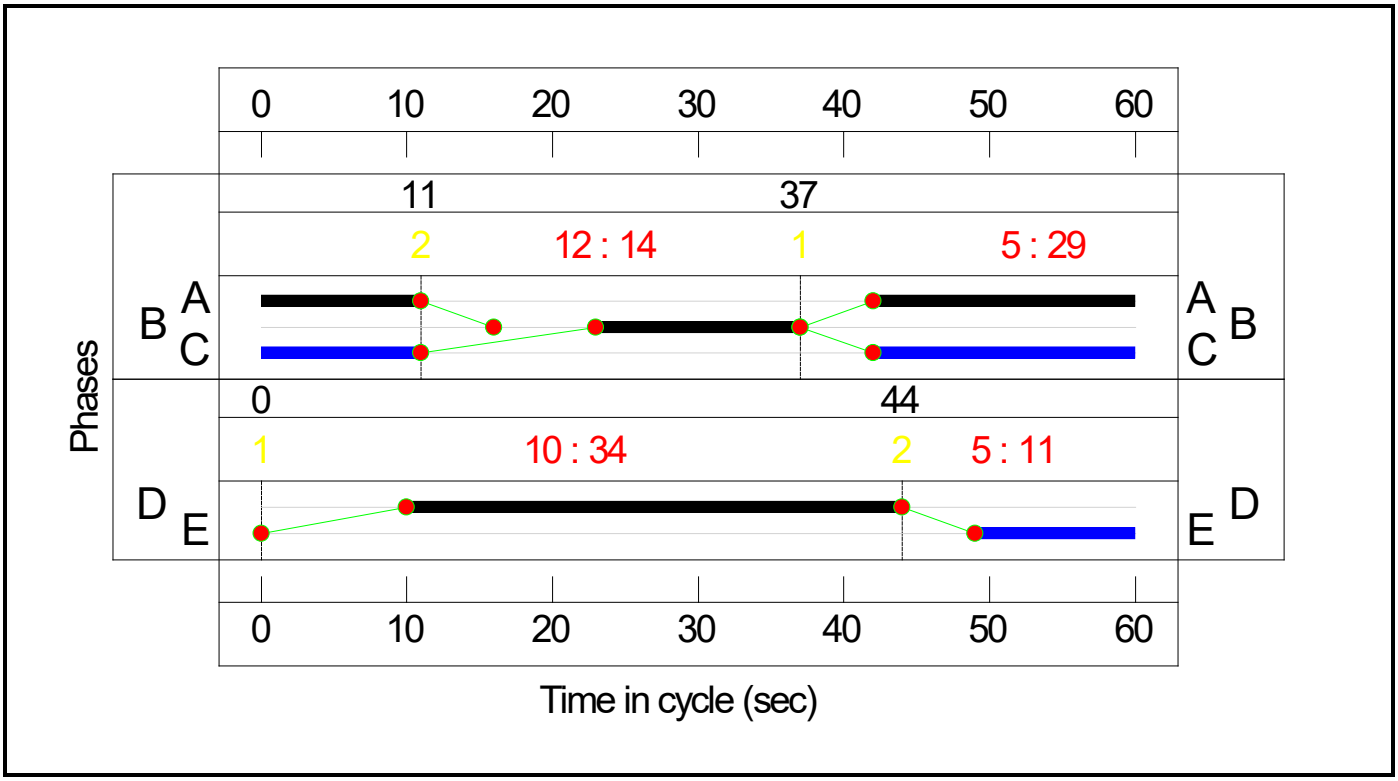
C1



C2


0 10 20 30 40 50 60
38 59
7 : 32 3 14 : 7 1
A B C D E
44 56
6 : 42 2 5 : 7 1
F G
0 49
1 8 : 41 2 5 : 6
H I
Phases
Time in cycle (sec)

C3


0 10 20 30 40 50 60
11 37
2 12 : 14 1 5 : 29
A B C
0 44
1 10 : 34 2 5 : 11
D E
Phases
Time in cycle (sec)

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
J1: A2/Hoath Way	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**114.5%**
1/1	A2 West - Exit	U	N/A	N/A	-		-	-	-	1365	Inf	Inf	0.0%
1/2	A2 West - Exit	U	N/A	N/A	-		-	-	-	772	Inf	Inf	0.0%
2/1	Ahead	U	1:1	N/A	C1:A		1	19	-	627	1900	633	55.1%
2/2	Right	U	1:1	N/A	C1:A		1	19	-	50	1900	633	5.6%
2/3	Right	U	1:1	N/A	C1:A		1	19	-	707	1900	633	60.1%
3/2+3/1	A2 West - Entry Left Ahead	U	1:1	N/A	C1:B		1	30	-	1369	1900:1900	649+648	105.6 : 105.6%
3/3	A2 West - Entry Ahead	U	1:1	N/A	C1:B		1	30	-	684	1900	982	69.7%
4/1	Twydall Ln - Exit	U	N/A	N/A	-		-	-	-	668	Inf	Inf	0.0%
5/1	Ahead	U	1:2	N/A	C1:D		1	43	-	693	1900	1393	46.3%
5/2	Right Ahead	U	1:2	N/A	C1:D		1	43	-	1392	1900	1393	73.9%
5/3	Right	U	1:2	N/A	C1:D		1	43	-	684	1900	1393	49.1%
6/1	Twydall Ln - Entry Ahead Left	U	1:2	N/A	C1:E		1	7	-	290	1900	253	114.5%
7/1	Ahead	U	N/A	N/A	-		-	-	-	1365	1950	1950	46.7%
7/2	Ahead Right	U	N/A	N/A	-		-	-	-	1449	1950	1950	46.2%
7/3	Right	U	N/A	N/A	-		-	-	-	707	1950	1950	19.5%
8/1	A2 West - Bus Entry Left Ahead	U	1:1	N/A	C1:C		0	0	-	0	1900	0	0.0%
J2	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**139.7%**
1/1	Ahead	U	2:1	N/A	C2:A		1	32	-	767	1900	1045	56.0%
1/2	Right	U	2:1	N/A	C2:A		1	32	-	309	1900	1045	27.3%
1/3	Right	U	2:1	N/A	C2:A		1	32	-	803	1900	1045	75.4%
2/1	A2 East - Ped Ahead	U	2:3	N/A	C2:H		1	41	-	711	1900	1330	49.6%

Full Input Data And Results

2/2	A2 East - Ped Ahead	U	2:3	N/A	C2:H		1	41	-	469	1900	1330	22.0%
3/2+3/1	A2 East - Entry Left Left2	U	2:1	N/A	C2:B		1	7	-	700	1900:1900	253+253	138.2 : 138.2%
3/3	A2 East - Entry Left	U	2:1	N/A	C2:B		1	7	-	350	1900	253	138.2%
4/1	A2 East - Buses Entry Left Left2	U	2:1	N/A	C2:C		0	0	-	0	1900	0	0.0%
5/1	Courtney Rd - Exit	U	N/A	N/A	-		-	-	-	957	Inf	Inf	0.0%
6/1	Courtney Rd - Entry Left Ahead	U	2:2	N/A	C2:G		1	7	-	354	1900	253	139.7%
6/2	Courtney Rd - Entry Ahead	U	2:2	N/A	C2:G		1	7	-	354	1900	253	139.7%
7/1	Ahead	U	2:2	N/A	C2:F		1	42	-	469	1900	1362	29.5%
7/2	Ahead Right	U	2:2	N/A	C2:F		1	42	-	1124	1900	1362	74.4%
7/3	Right	U	2:2	N/A	C2:F		1	42	-	379	1900	1362	20.6%
8/1	A2 East - Exit	U	N/A	N/A	-		-	-	-	711	Inf	Inf	0.0%
8/2	A2 East - Exit	U	N/A	N/A	-		-	-	-	469	Inf	Inf	0.0%
J3	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**190.6%**
1/1	Hoath Way - Ped Ahead	U	3:2	N/A	C3:D		1	34	-	470	1900	1108	36.3%
1/2	Hoath Way - Ped Ahead	U	3:2	N/A	C3:D		1	34	-	880	1900	1108	74.9%
2/1	Right	U	3:1	N/A	C3:A		1	29	-	597	1900	950	45.9%
2/2	Right	U	3:1	N/A	C3:A		1	29	-	682	1900	950	52.4%
2/3	Right	U	3:1	N/A	C3:A		1	29	-	51	1900	950	3.8%
3/1	Hoath Way - Entry Ahead	U	3:1	N/A	C3:B		1	14	-	768	1900	475	161.7%
3/2+3/3	Hoath Way - Entry Ahead	U	3:1	N/A	C3:B		1	14	-	1423	1900:1900	402+344	190.6 : 190.6%
4/1	Hoath Way - Exit	U	N/A	N/A	-		-	-	-	470	Inf	Inf	0.0%
4/2	Hoath Way - Exit	U	N/A	N/A	-		-	-	-	880	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**93.2**	**818.8**	**0.0**	**912.0**	**-**	**-**	**-**	**-**
J1: Bowaters Rdbt - A2/Hoath Way	**-**	**-**	**0**	**0**	**0**	**17.2**	**71.7**	**0.0**	**88.9**	**-**	**-**	**-**	**-**
1/1	911	911	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
1/2	515	515	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
2/1	349	349	-	-	-	1.7	0.6	-	2.3	23.5	4.9	0.6	5.5
2/2	36	36	-	-	-	0.0	0.0	-	0.0	3.6	0.0	0.0	0.0
2/3	381	381	-	-	-	2.2	0.7	-	3.0	28.0	6.0	0.7	6.8
3/2+3/1	1369	1296	-	-	-	6.4	44.1	-	50.5	132.8	20.6	44.1	64.7
3/3	684	684	-	-	-	2.1	1.1	-	3.2	17.0	8.6	1.1	9.7
4/1	388	388	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	645	645	-	-	-	0.2	0.4	-	0.6	3.6	1.0	0.4	1.4
5/2	1029	1029	-	-	-	1.2	1.4	-	2.6	9.1	7.2	1.4	8.6
5/3	684	684	-	-	-	0.2	0.5	-	0.6	3.4	0.6	0.5	1.1
6/1	290	253	-	-	-	3.3	21.7	-	25.0	310.5	5.8	21.7	27.5
7/1	911	911	-	-	-	0.0	0.4	-	0.4	1.7	0.0	0.4	0.4
7/2	900	900	-	-	-	0.0	0.4	-	0.4	1.7	0.0	0.4	0.4
7/3	381	381	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
8/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J2: Unnamed Junction	**-**	**-**	**0**	**0**	**0**	**33.9**	**257.3**	**0.0**	**291.3**	**-**	**-**	**-**	**-**
1/1	585	585	-	-	-	1.0	0.6	-	1.6	9.9	3.8	0.6	4.4
1/2	285	285	-	-	-	0.6	0.2	-	0.8	10.2	2.9	0.2	3.0
1/3	788	788	-	-	-	2.3	1.5	-	3.8	17.2	6.7	1.5	8.2
2/1	660	660	-	-	-	0.2	0.5	-	0.7	3.7	1.8	0.5	2.2
2/2	292	292	-	-	-	0.1	0.1	-	0.2	2.4	0.4	0.1	0.5
3/2+3/1	700	507	-	-	-	11.2	98.4	-	109.7	564.1	12.3	98.4	110.8

Full Input Data And Results

3/3	350	253	-	-	-	5.8	50.1	-	55.9	574.9	8.9	50.1	58.9
4/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	723	723	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	354	253	-	-	-	6.0	52.0	-	58.0	589.8	9.2	52.0	61.2
6/2	354	253	-	-	-	6.0	52.0	-	58.0	589.8	9.2	52.0	61.2
7/1	401	401	-	-	-	0.1	0.2	-	0.3	2.8	1.8	0.2	2.0
7/2	1014	1014	-	-	-	0.4	1.4	-	1.9	6.6	4.4	1.4	5.9
7/3	281	281	-	-	-	0.3	0.1	-	0.5	5.9	4.2	0.1	4.3
8/1	660	660	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/2	292	292	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J3: Unnamed Junction	**-**	**-**	**0**	**0**	**0**	**42.1**	**489.8**	**0.0**	**531.9**	**-**	**-**	**-**	**-**
1/1	402	402	-	-	-	0.3	0.3	-	0.6	5.0	4.2	0.3	4.5
1/2	830	830	-	-	-	0.5	1.5	-	2.0	8.8	7.5	1.5	9.0
2/1	436	436	-	-	-	0.7	0.4	-	1.1	9.2	1.6	0.4	2.0
2/2	498	498	-	-	-	1.0	0.5	-	1.5	11.1	2.2	0.5	2.7
2/3	36	36	-	-	-	0.0	0.0	-	0.0	2.0	0.0	0.0	0.0
3/1	768	475	-	-	-	12.6	147.8	-	160.4	751.8	18.3	147.8	166.1
3/2+3/3	1423	747	-	-	-	27.0	339.3	-	366.2	926.5	34.1	339.3	373.3
4/1	402	402	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	830	830	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1	Stream: 1 PRC for Signalled Lanes (%):	-17.3	Total Delay for Signalled Lanes (pcuHr):	58.99	Cycle Time (s): 60
C1	Stream: 2 PRC for Signalled Lanes (%):	-27.2	Total Delay for Signalled Lanes (pcuHr):	28.88	Cycle Time (s): 60
C2	Stream: 1 PRC for Signalled Lanes (%):	-53.5	Total Delay for Signalled Lanes (pcuHr):	171.77	Cycle Time (s): 60
C2	Stream: 2 PRC for Signalled Lanes (%):	-55.3	Total Delay for Signalled Lanes (pcuHr):	118.63	Cycle Time (s): 60
C2	Stream: 3 PRC for Signalled Lanes (%):	81.3	Total Delay for Signalled Lanes (pcuHr):	0.88	Cycle Time (s): 60
C3	Stream: 1 PRC for Signalled Lanes (%):	-111.8	Total Delay for Signalled Lanes (pcuHr):	529.28	Cycle Time (s): 60
C3	Stream: 2 PRC for Signalled Lanes (%):	20.1	Total Delay for Signalled Lanes (pcuHr):	2.58	Cycle Time (s): 60
	PRC Over All Lanes (%):	-111.8	Total Delay Over All Lanes(pcuHr):	912.01	

Full Input Data And Results

Scenario 5: '2035 DS AM' (FG5: '2035 DS AM Peak', Plan 1: 'Network Control Plan 1')

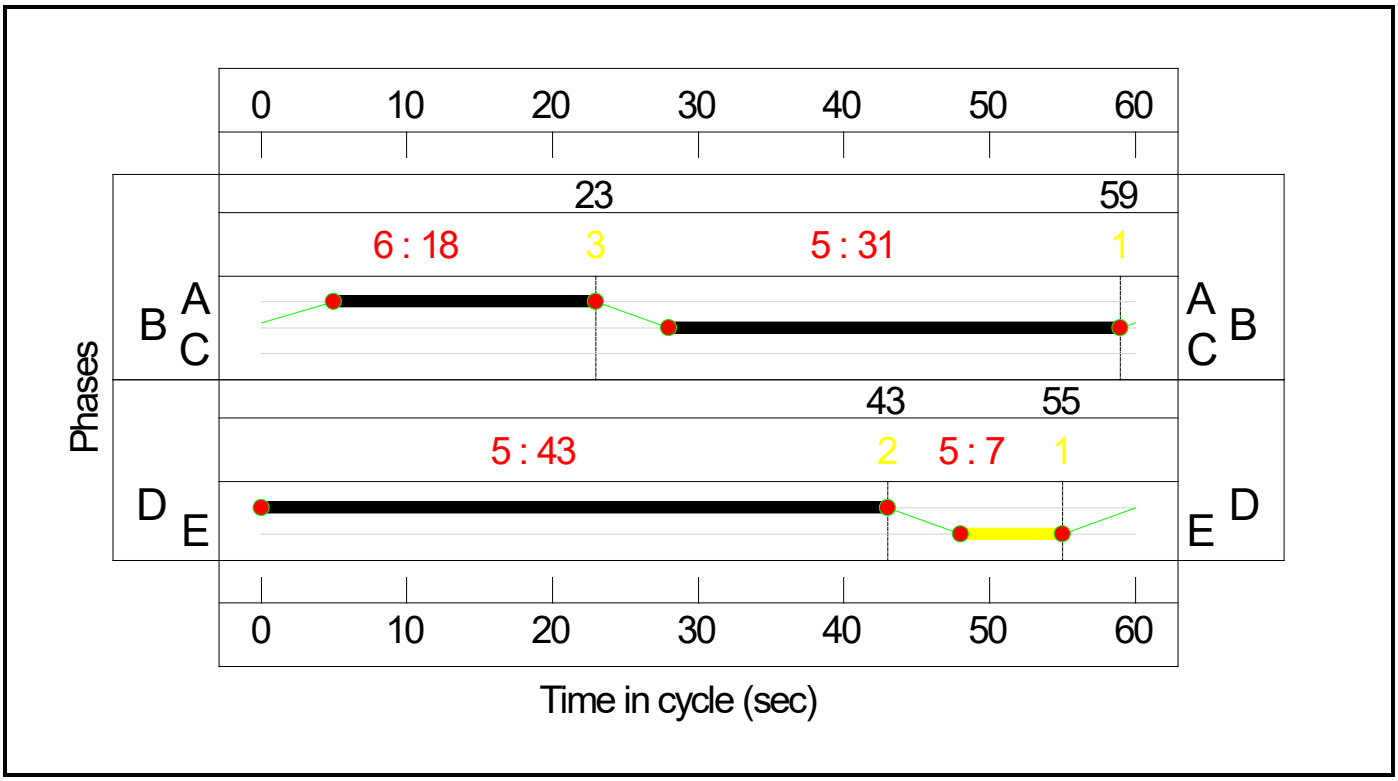
Traffic Flows, Actual

Actual Flow :

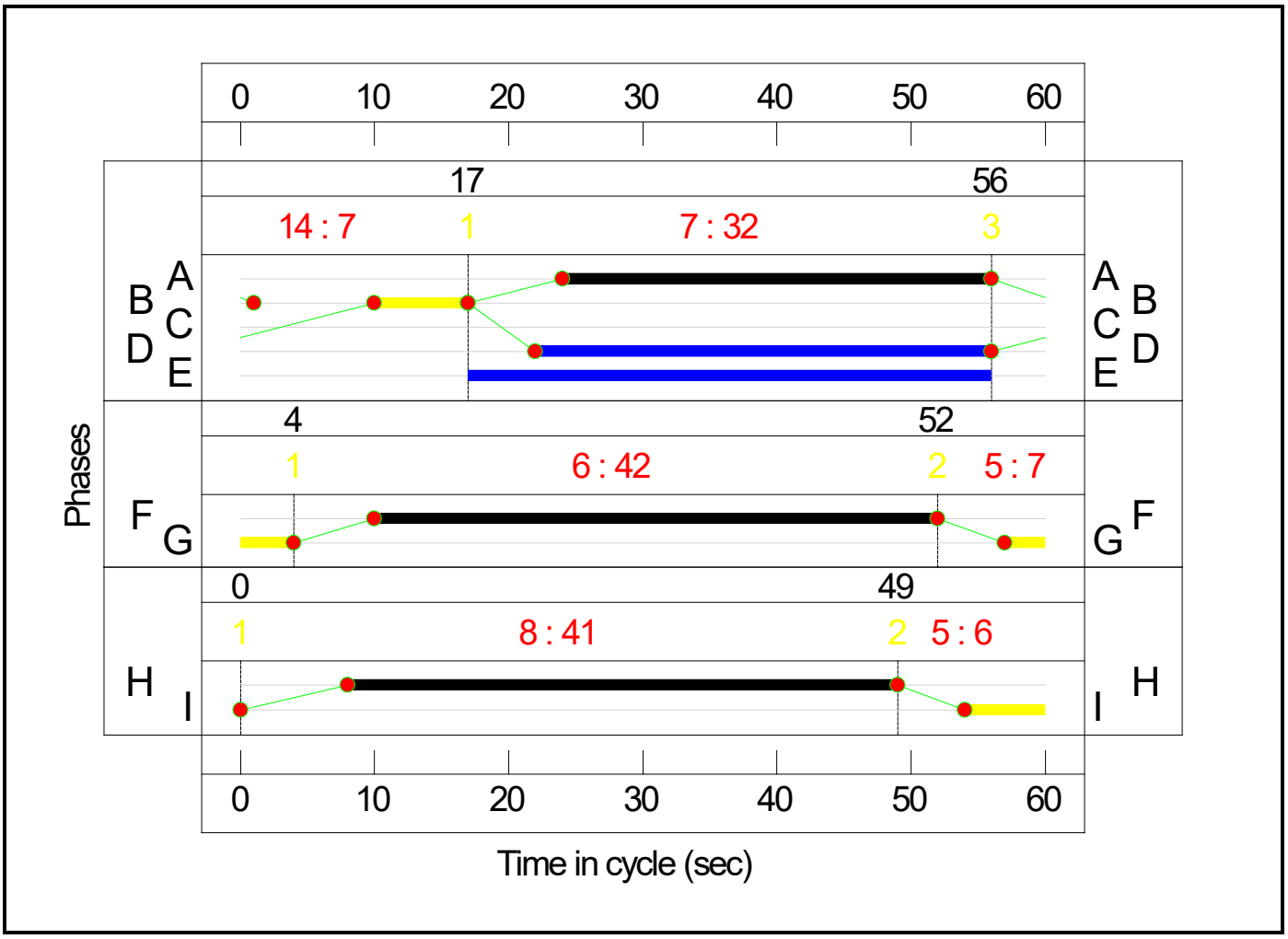
		Destination							
		A	B	C	D	E	F	G	Tot.
Origin	A	0	26	38	265	76	0	0	405
	B	9	0	149	318	658	0	0	1134
	C	52	45	0	2	170	0	0	269
	D	318	285	285	0	1005	0	0	1893
	E	62	511	288	829	58	0	0	1748
	F	0	0	0	0	0	0	0	0
	G	0	0	0	0	0	0	0	0
	Tot.	441	867	760	1414	1967	0	0	5449

Signal Timings Diagram

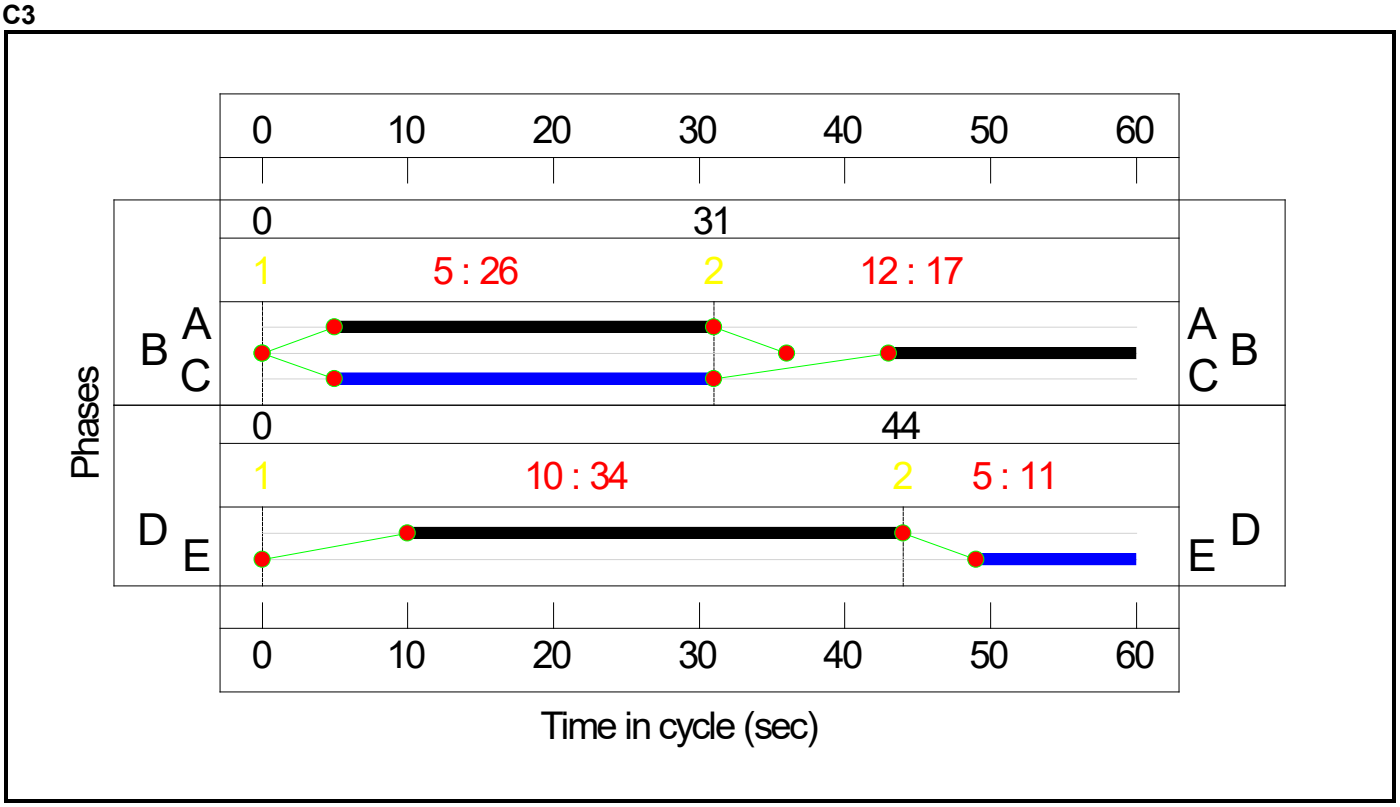
C1



C2


0
10
20
30
40
50
60
17
56
14 : 7
1
7 : 32
3
B A
D C
E
A B
C D
E
4
52
1
6 : 42
2
5 : 7
F G
G F
0
49
1
8 : 41
2
5 : 6
H I
I H
Phases
Time in cycle (sec)

C3


0
10
20
30
40
50
60
0
31
1
5 : 26
2
12 : 17
B A
C
A B
C
0
44
1
10 : 34
2
5 : 11
D E
E D
Phases
Time in cycle (sec)

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
J1: A2/Hoath Way	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**159.9%**
1/1	A2 West - Exit	U	N/A	N/A	-		-	-	-	1150	Inf	Inf	0.0%
1/2	A2 West - Exit	U	N/A	N/A	-		-	-	-	817	Inf	Inf	0.0%
2/1	Ahead	U	1:1	N/A	C1:A		1	18	-	379	1900	602	45.9%
2/2	Right	U	1:1	N/A	C1:A		1	18	-	22	1900	602	3.7%
2/3	Right	U	1:1	N/A	C1:A		1	18	-	593	1900	602	68.8%
3/2+3/1	A2 West - Entry Left Ahead	U	1:1	N/A	C1:B		1	31	-	1160	1900:1900	669+651	87.9 : 87.9%
3/3	A2 West - Entry Ahead	U	1:1	N/A	C1:B		1	31	-	588	1900	1013	58.0%
4/1	Twydall Ln - Exit	U	N/A	N/A	-		-	-	-	441	Inf	Inf	0.0%
5/1	Ahead	U	1:2	N/A	C1:D		1	43	-	532	1900	1393	38.2%
5/2	Right Ahead	U	1:2	N/A	C1:D		1	43	-	1181	1900	1393	71.9%
5/3	Right	U	1:2	N/A	C1:D		1	43	-	588	1900	1393	42.2%
6/1	Twydall Ln - Entry Ahead Left	U	1:2	N/A	C1:E		1	7	-	405	1900	253	159.9%
7/1	Ahead	U	N/A	N/A	-		-	-	-	1150	1950	1950	48.6%
7/2	Ahead Right	U	N/A	N/A	-		-	-	-	1218	1950	1950	44.7%
7/3	Right	U	N/A	N/A	-		-	-	-	593	1950	1950	21.2%
8/1	A2 West - Bus Entry Left Ahead	U	1:1	N/A	C1:C		0	0	-	0	1900	0	0.0%
J2	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**149.2%**
1/1	Ahead	U	2:1	N/A	C2:A		1	32	-	611	1900	1045	48.5%
1/2	Right	U	2:1	N/A	C2:A		1	32	-	432	1900	1045	36.6%
1/3	Right	U	2:1	N/A	C2:A		1	32	-	796	1900	1045	68.7%
2/1	A2 East - Ped Ahead	U	2:3	N/A	C2:H		1	41	-	545	1900	1330	40.6%

Full Input Data And Results

2/2	A2 East - Ped Ahead	U	2:3	N/A	C2:H		1	41	-	322	1900	1330	17.1%
3/2+3/1	A2 East - Entry Left Left2	U	2:1	N/A	C2:B		1	7	-	756	1900:1900	253+253	149.2 : 149.2%
3/3	A2 East - Entry Left	U	2:1	N/A	C2:B		1	7	-	378	1900	253	149.2%
4/1	A2 East - Buses Entry Left Left2	U	2:1	N/A	C2:C		0	0	-	0	1900	0	0.0%
5/1	Courtney Rd - Exit	U	N/A	N/A	-		-	-	-	760	Inf	Inf	0.0%
6/1	Courtney Rd - Entry Left Ahead	U	2:2	N/A	C2:G		1	7	-	134	1900	253	52.9%
6/2	Courtney Rd - Entry Ahead	U	2:2	N/A	C2:G		1	7	-	135	1900	253	53.3%
7/1	Ahead	U	2:2	N/A	C2:F		1	42	-	661	1900	1362	39.3%
7/2	Ahead Right	U	2:2	N/A	C2:F		1	42	-	1107	1900	1362	67.5%
7/3	Right	U	2:2	N/A	C2:F		1	42	-	445	1900	1362	22.5%
8/1	A2 East - Exit	U	N/A	N/A	-		-	-	-	545	Inf	Inf	0.0%
8/2	A2 East - Exit	U	N/A	N/A	-		-	-	-	322	Inf	Inf	0.0%
J3	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**145.9%**
1/1	Hoath Way - Ped Ahead	U	3:2	N/A	C3:D		1	34	-	663	1900	1108	48.5%
1/2	Hoath Way - Ped Ahead	U	3:2	N/A	C3:D		1	34	-	751	1900	1108	60.7%
2/1	Right	U	3:1	N/A	C3:A		1	26	-	488	1900	855	44.3%
2/2	Right	U	3:1	N/A	C3:A		1	26	-	557	1900	855	48.9%
2/3	Right	U	3:1	N/A	C3:A		1	26	-	23	1900	855	2.7%
3/1	Hoath Way - Entry Ahead	U	3:1	N/A	C3:B		1	17	-	662	1900	570	116.1%
3/2+3/3	Hoath Way - Entry Ahead	U	3:1	N/A	C3:B		1	17	-	1231	1900:1900	453+391	145.9 : 145.9%
4/1	Hoath Way - Exit	U	N/A	N/A	-		-	-	-	663	Inf	Inf	0.0%
4/2	Hoath Way - Exit	U	N/A	N/A	-		-	-	-	751	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**74.2**	**527.4**	**0.0**	**601.6**	**-**	**-**	**-**	**-**
J1: Bowaters Rdbt - A2/Hoath Way	**-**	**-**	**0**	**0**	**0**	**17.5**	**85.8**	**0.0**	**103.3**	**-**	**-**	**-**	**-**
1/1	948	948	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
1/2	573	573	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
2/1	276	276	-	-	-	0.8	0.4	-	1.2	16.2	3.9	0.4	4.3
2/2	22	22	-	-	-	0.0	0.0	-	0.0	3.1	0.0	0.0	0.0
2/3	414	414	-	-	-	1.7	1.1	-	2.8	24.5	6.9	1.1	8.0
3/2+3/1	1160	1160	-	-	-	3.1	3.5	-	6.6	20.5	10.3	3.5	13.8
3/3	588	588	-	-	-	1.5	0.7	-	2.2	13.7	6.5	0.7	7.2
4/1	338	338	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	532	532	-	-	-	0.7	0.3	-	1.0	6.6	3.8	0.3	4.1
5/2	1002	1002	-	-	-	0.8	1.3	-	2.1	7.5	4.5	1.3	5.7
5/3	588	588	-	-	-	0.8	0.4	-	1.1	6.8	4.2	0.4	4.5
6/1	405	253	-	-	-	8.0	77.1	-	85.2	757.1	11.6	77.1	88.7
7/1	948	948	-	-	-	0.0	0.5	-	0.5	1.8	0.0	0.5	0.5
7/2	871	871	-	-	-	0.0	0.4	-	0.4	1.7	0.0	0.4	0.4
7/3	414	414	-	-	-	0.0	0.1	-	0.1	1.2	0.0	0.1	0.1
8/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J2: Unnamed Junction	**-**	**-**	**0**	**0**	**0**	**26.2**	**194.9**	**0.0**	**221.1**	**-**	**-**	**-**	**-**
1/1	507	507	-	-	-	1.2	0.5	-	1.7	12.1	5.7	0.5	6.1
1/2	382	382	-	-	-	1.0	0.3	-	1.3	12.1	3.0	0.3	3.3
1/3	718	718	-	-	-	2.0	1.1	-	3.0	15.3	5.4	1.1	6.5
2/1	540	540	-	-	-	0.4	0.3	-	0.7	4.9	4.0	0.3	4.4
2/2	227	227	-	-	-	0.0	0.1	-	0.1	2.1	0.1	0.1	0.2
3/2+3/1	756	507	-	-	-	12.7	126.2	-	138.9	661.2	12.6	126.2	138.8

Full Input Data And Results

3/3	378	253	-	-	-	6.3	63.8	-	70.2	668.2	8.4	63.8	72.2
4/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	607	607	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	134	134	-	-	-	0.9	0.6	-	1.5	39.2	2.0	0.6	2.6
6/2	135	135	-	-	-	0.9	0.6	-	1.5	39.3	2.1	0.6	2.6
7/1	536	536	-	-	-	0.2	0.3	-	0.6	3.7	1.1	0.3	1.4
7/2	919	919	-	-	-	0.4	1.0	-	1.5	5.7	1.8	1.0	2.8
7/3	306	306	-	-	-	0.0	0.1	-	0.2	2.2	0.2	0.1	0.4
8/1	540	540	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/2	227	227	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J3: Unnamed Junction	**-**	**-**	**0**	**0**	**0**	**30.5**	**246.7**	**0.0**	**277.2**	**-**	**-**	**-**	**-**
1/1	538	538	-	-	-	0.8	0.5	-	1.3	8.5	3.2	0.5	3.7
1/2	672	672	-	-	-	1.7	0.8	-	2.4	13.0	5.9	0.8	6.7
2/1	378	378	-	-	-	0.4	0.4	-	0.8	7.9	2.9	0.4	3.3
2/2	418	418	-	-	-	0.4	0.5	-	0.9	7.7	2.5	0.5	3.0
2/3	23	23	-	-	-	0.0	0.0	-	0.0	3.6	0.2	0.0	0.3
3/1	662	570	-	-	-	7.1	49.4	-	56.4	307.0	13.5	49.4	62.9
3/2+3/3	1231	844	-	-	-	20.1	195.2	-	215.3	629.7	27.7	195.2	223.0
4/1	538	538	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	672	672	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1	Stream: 1 PRC for Signalled Lanes (%):	2.4	Total Delay for Signalled Lanes (pcuHr):	12.91	Cycle Time (s): 60
C1	Stream: 2 PRC for Signalled Lanes (%):	-77.6	Total Delay for Signalled Lanes (pcuHr):	89.36	Cycle Time (s): 60
C2	Stream: 1 PRC for Signalled Lanes (%):	-65.8	Total Delay for Signalled Lanes (pcuHr):	215.06	Cycle Time (s): 60
C2	Stream: 2 PRC for Signalled Lanes (%):	33.4	Total Delay for Signalled Lanes (pcuHr):	5.13	Cycle Time (s): 60
C2	Stream: 3 PRC for Signalled Lanes (%):	121.6	Total Delay for Signalled Lanes (pcuHr):	0.87	Cycle Time (s): 60
C3	Stream: 1 PRC for Signalled Lanes (%):	-62.1	Total Delay for Signalled Lanes (pcuHr):	273.52	Cycle Time (s): 60
C3	Stream: 2 PRC for Signalled Lanes (%):	48.4	Total Delay for Signalled Lanes (pcuHr):	3.69	Cycle Time (s): 60
	PRC Over All Lanes (%):	-77.6	Total Delay Over All Lanes(pcuHr):	601.56	

Full Input Data And Results

Scenario 6: '2035 DS PM' (FG6: '2035 DS PM Peak', Plan 1: 'Network Control Plan 1')

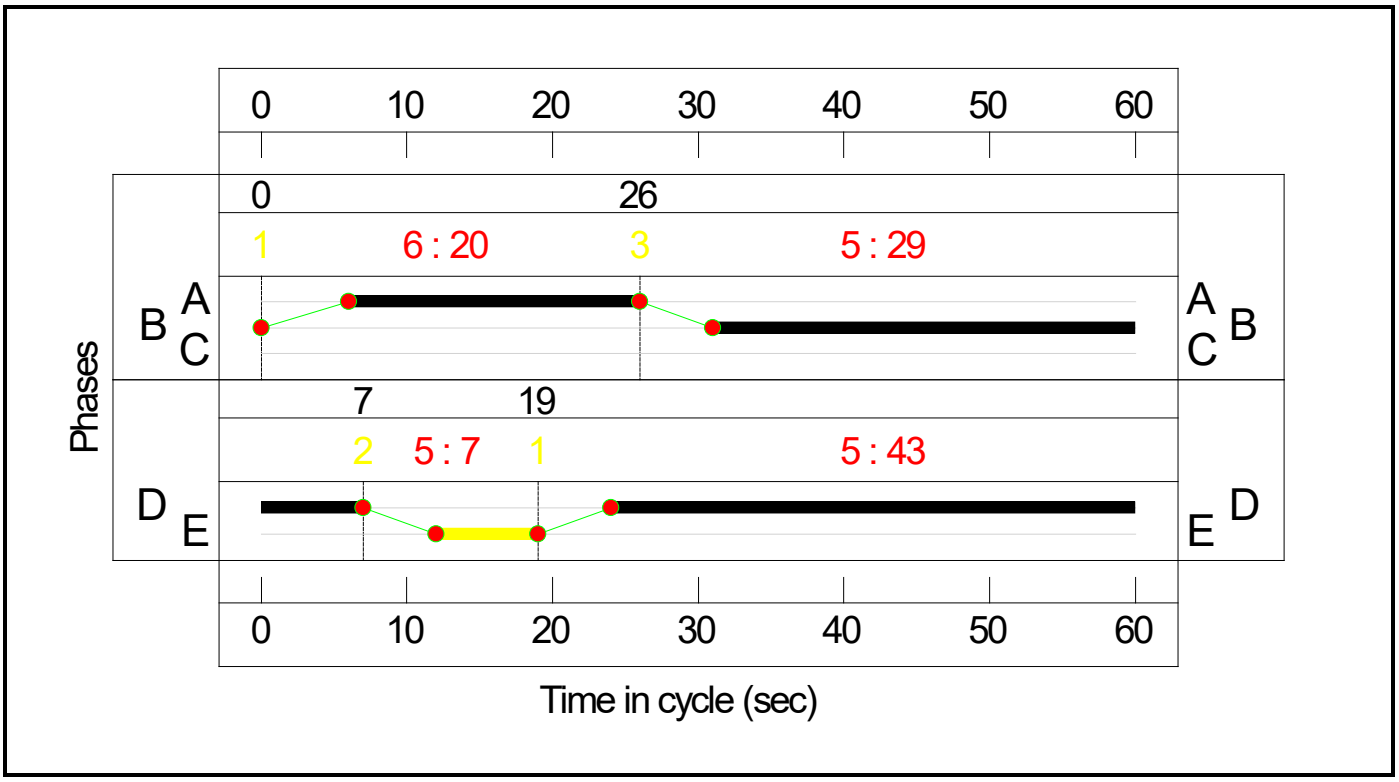
Traffic Flows, Actual

Actual Flow :

		Destination							
		A	B	C	D	E	F	G	Tot.
Origin	A	0	43	33	190	26	0	0	292
	B	7	0	193	306	546	0	0	1052
	C	93	99	0	0	520	0	0	712
	D	478	336	336	0	964	0	0	2114
	E	46	680	426	826	22	0	0	2000
	F	0	0	0	0	0	0	0	0
	G	0	0	0	0	0	0	0	0
	Tot.	624	1158	988	1322	2078	0	0	6170

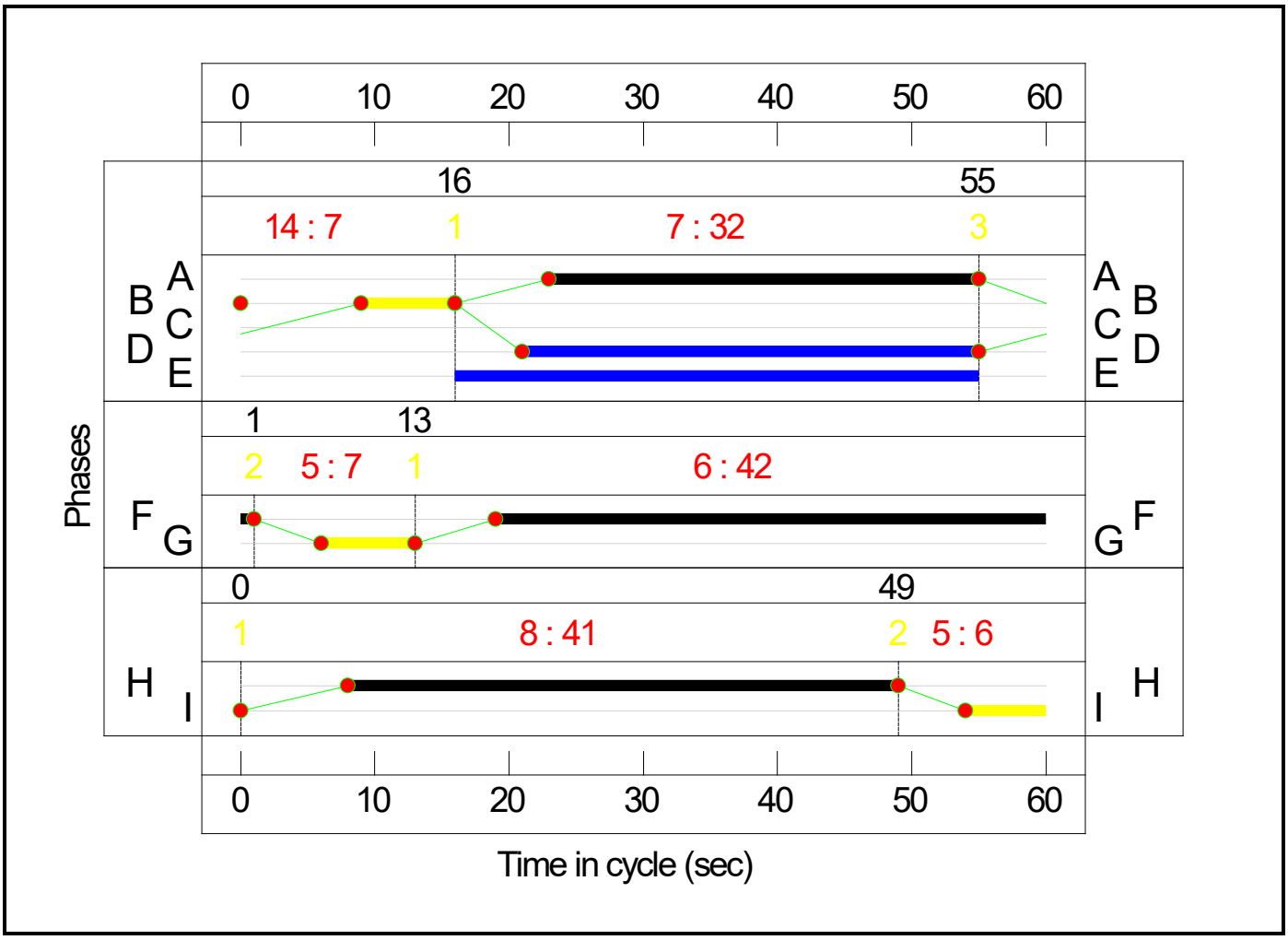
Signal Timings Diagram

C1

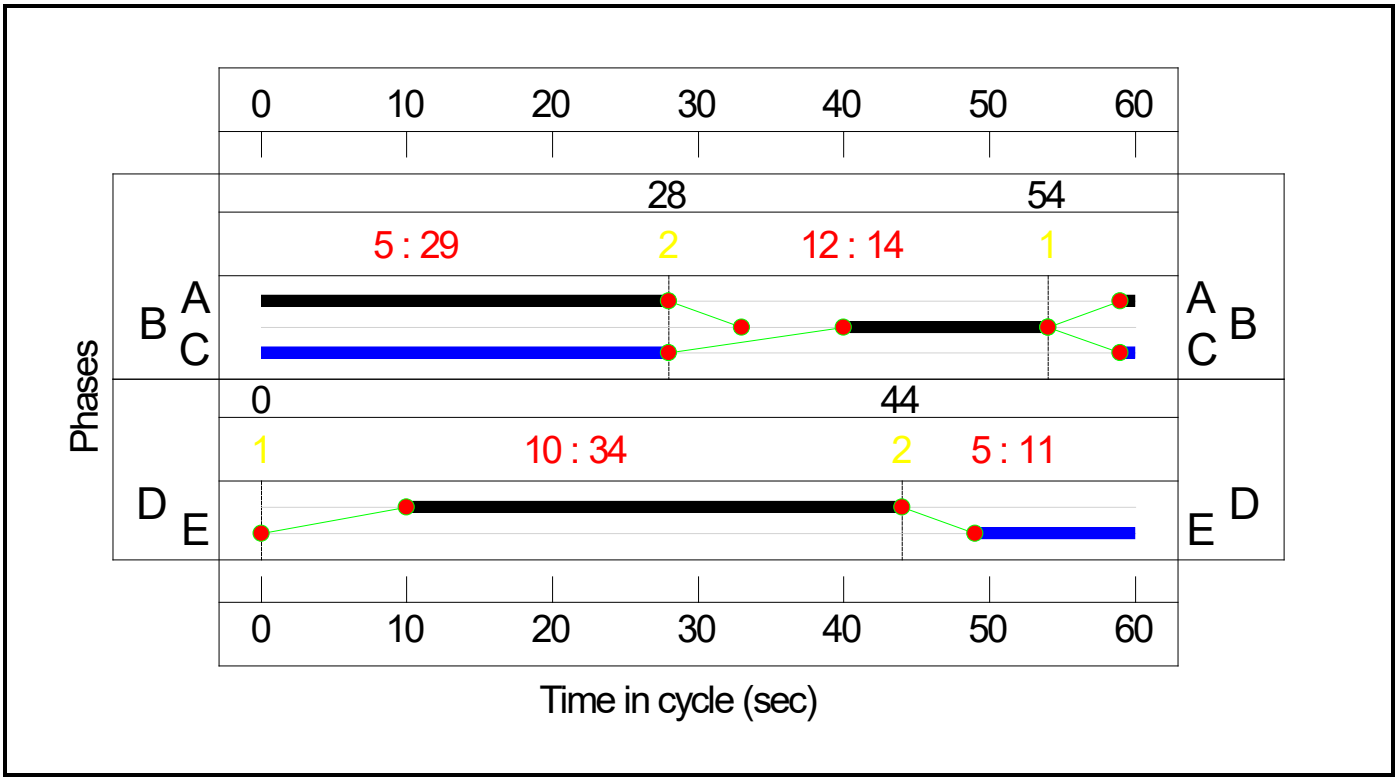


Full Input Data And Results

C2



C3



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
J1: A2/Hoath Way	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**115.3%**
1/1	A2 West - Exit	U	N/A	N/A	-		-	-	-	1303	Inf	Inf	0.0%
1/2	A2 West - Exit	U	N/A	N/A	-		-	-	-	775	Inf	Inf	0.0%
2/1	Ahead	U	1:1	N/A	C1:A		1	20	-	578	1900	665	50.4%
2/2	Right	U	1:1	N/A	C1:A		1	20	-	49	1900	665	5.2%
2/3	Right	U	1:1	N/A	C1:A		1	20	-	722	1900	665	61.2%
3/2+3/1	A2 West - Entry Left Ahead	U	1:1	N/A	C1:B		1	29	-	1333	1900:1900	632+633	105.4 : 105.4%
3/3	A2 West - Entry Ahead	U	1:1	N/A	C1:B		1	29	-	667	1900	950	70.2%
4/1	Twydall Ln - Exit	U	N/A	N/A	-		-	-	-	624	Inf	Inf	0.0%
5/1	Ahead	U	1:2	N/A	C1:D		1	43	-	670	1900	1393	44.8%
5/2	Right Ahead	U	1:2	N/A	C1:D		1	43	-	1388	1900	1393	74.5%
5/3	Right	U	1:2	N/A	C1:D		1	43	-	667	1900	1393	47.9%
6/1	Twydall Ln - Entry Ahead Left	U	1:2	N/A	C1:E		1	7	-	292	1900	253	115.3%
7/1	Ahead	U	N/A	N/A	-		-	-	-	1303	1950	1950	46.0%
7/2	Ahead Right	U	N/A	N/A	-		-	-	-	1402	1950	1950	45.7%
7/3	Right	U	N/A	N/A	-		-	-	-	722	1950	1950	20.9%
8/1	A2 West - Bus Entry Left Ahead	U	1:1	N/A	C1:C		0	0	-	0	1900	0	0.0%
J2	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**140.5%**
1/1	Ahead	U	2:1	N/A	C2:A		1	32	-	795	1900	1045	59.2%
1/2	Right	U	2:1	N/A	C2:A		1	32	-	276	1900	1045	24.3%
1/3	Right	U	2:1	N/A	C2:A		1	32	-	788	1900	1045	73.9%
2/1	A2 East - Ped Ahead	U	2:3	N/A	C2:H		1	41	-	691	1900	1330	48.3%

Full Input Data And Results

2/2	A2 East - Ped Ahead	U	2:3	N/A	C2:H		1	41	-	467	1900	1330	22.3%
3/2+3/1	A2 East - Entry Left Left2	U	2:1	N/A	C2:B		1	7	-	701	1900:1900	253+253	138.2 : 138.6%
3/3	A2 East - Entry Left	U	2:1	N/A	C2:B		1	7	-	351	1900	253	138.6%
4/1	A2 East - Buses Entry Left Left2	U	2:1	N/A	C2:C		0	0	-	0	1900	0	0.0%
5/1	Courtney Rd - Exit	U	N/A	N/A	-		-	-	-	988	Inf	Inf	0.0%
6/1	Courtney Rd - Entry Left Ahead	U	2:2	N/A	C2:G		1	7	-	356	1900	253	140.5%
6/2	Courtney Rd - Entry Ahead	U	2:2	N/A	C2:G		1	7	-	356	1900	253	140.5%
7/1	Ahead	U	2:2	N/A	C2:F		1	42	-	434	1900	1362	27.0%
7/2	Ahead Right	U	2:2	N/A	C2:F		1	42	-	1114	1900	1362	73.7%
7/3	Right	U	2:2	N/A	C2:F		1	42	-	375	1900	1362	20.2%
8/1	A2 East - Exit	U	N/A	N/A	-		-	-	-	691	Inf	Inf	0.0%
8/2	A2 East - Exit	U	N/A	N/A	-		-	-	-	467	Inf	Inf	0.0%
J3	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**181.0%**
1/1	Hoath Way - Ped Ahead	U	3:2	N/A	C3:D		1	34	-	434	1900	1108	33.2%
1/2	Hoath Way - Ped Ahead	U	3:2	N/A	C3:D		1	34	-	888	1900	1108	75.3%
2/1	Right	U	3:1	N/A	C3:A		1	29	-	582	1900	950	44.4%
2/2	Right	U	3:1	N/A	C3:A		1	29	-	681	1900	950	51.9%
2/3	Right	U	3:1	N/A	C3:A		1	29	-	50	1900	950	3.7%
3/1	Hoath Way - Entry Ahead	U	3:1	N/A	C3:B		1	14	-	721	1900	475	151.8%
3/2+3/3	Hoath Way - Entry Ahead	U	3:1	N/A	C3:B		1	14	-	1393	1900:1900	398+371	181.0 : 181.0%
4/1	Hoath Way - Exit	U	N/A	N/A	-		-	-	-	434	Inf	Inf	0.0%
4/2	Hoath Way - Exit	U	N/A	N/A	-		-	-	-	888	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**95.7**	**770.6**	**0.0**	**866.2**	**-**	**-**	**-**	**-**
J1: Bowaters Rdbt - A2/Hoath Way	**-**	**-**	**0**	**0**	**0**	**17.2**	**70.5**	**0.0**	**87.7**	**-**	**-**	**-**	**-**
1/1	897	897	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
1/2	522	522	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
2/1	335	335	-	-	-	1.4	0.5	-	1.9	20.6	4.5	0.5	5.0
2/2	35	35	-	-	-	0.0	0.0	-	0.0	4.3	0.0	0.0	0.1
2/3	407	407	-	-	-	2.1	0.8	-	2.9	25.5	6.3	0.8	7.1
3/2+3/1	1333	1265	-	-	-	6.8	42.1	-	49.0	132.2	19.5	42.1	61.6
3/3	667	667	-	-	-	2.1	1.2	-	3.3	17.9	8.5	1.2	9.7
4/1	379	379	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	624	624	-	-	-	0.0	0.4	-	0.4	2.5	0.3	0.4	0.7
5/2	1039	1039	-	-	-	1.5	1.5	-	2.9	10.2	12.1	1.5	13.6
5/3	667	667	-	-	-	0.0	0.5	-	0.5	2.5	0.1	0.5	0.5
6/1	292	253	-	-	-	3.2	22.6	-	25.8	317.8	5.5	22.6	28.1
7/1	897	897	-	-	-	0.0	0.4	-	0.4	1.7	0.0	0.4	0.4
7/2	892	892	-	-	-	0.0	0.4	-	0.4	1.7	0.0	0.4	0.4
7/3	407	407	-	-	-	0.0	0.1	-	0.1	1.2	0.0	0.1	0.1
8/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J2: Unnamed Junction	**-**	**-**	**0**	**0**	**0**	**32.7**	**260.1**	**0.0**	**292.8**	**-**	**-**	**-**	**-**
1/1	618	618	-	-	-	1.0	0.7	-	1.7	10.1	3.2	0.7	4.0
1/2	254	254	-	-	-	0.5	0.2	-	0.7	9.3	2.5	0.2	2.6
1/3	772	772	-	-	-	1.7	1.4	-	3.1	14.6	5.4	1.4	6.8
2/1	642	642	-	-	-	1.0	0.5	-	1.5	8.5	4.8	0.5	5.3
2/2	296	296	-	-	-	0.1	0.1	-	0.2	2.6	0.4	0.1	0.6
3/2+3/1	701	507	-	-	-	10.8	98.9	-	109.7	563.3	10.7	98.9	109.7

Full Input Data And Results

3/3	351	253	-	-	-	5.4	50.6	-	56.0	574.0	7.5	50.6	58.0
4/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	758	758	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	356	253	-	-	-	5.7	53.0	-	58.7	593.4	7.8	53.0	60.8
6/2	356	253	-	-	-	5.7	53.0	-	58.7	593.4	7.8	53.0	60.8
7/1	368	368	-	-	-	0.1	0.2	-	0.3	2.7	1.8	0.2	1.9
7/2	1003	1003	-	-	-	0.4	1.4	-	1.8	6.5	4.4	1.4	5.8
7/3	276	276	-	-	-	0.3	0.1	-	0.5	5.9	4.2	0.1	4.3
8/1	642	642	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/2	296	296	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J3: Unnamed Junction	**-**	**-**	**0**	**0**	**0**	**45.7**	**440.0**	**0.0**	**485.7**	**-**	**-**	**-**	**-**
1/1	368	368	-	-	-	0.4	0.2	-	0.7	6.6	1.7	0.2	1.9
1/2	835	835	-	-	-	2.4	1.5	-	3.9	16.8	7.7	1.5	9.2
2/1	422	422	-	-	-	0.6	0.4	-	1.0	8.9	1.5	0.4	1.9
2/2	493	493	-	-	-	1.0	0.5	-	1.5	11.0	2.1	0.5	2.6
2/3	36	36	-	-	-	0.0	0.0	-	0.0	2.0	0.0	0.0	0.0
3/1	721	475	-	-	-	12.9	124.4	-	137.3	685.6	19.6	124.4	144.1
3/2+3/3	1393	770	-	-	-	28.5	312.8	-	341.3	881.9	37.8	312.8	350.6
4/1	368	368	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	835	835	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1	Stream: 1 PRC for Signalled Lanes (%):	-17.1	Total Delay for Signalled Lanes (pcuHr):	57.12	Cycle Time (s): 60
C1	Stream: 2 PRC for Signalled Lanes (%):	-28.1	Total Delay for Signalled Lanes (pcuHr):	29.63	Cycle Time (s): 60
C2	Stream: 1 PRC for Signalled Lanes (%):	-53.9	Total Delay for Signalled Lanes (pcuHr):	171.18	Cycle Time (s): 60
C2	Stream: 2 PRC for Signalled Lanes (%):	-56.1	Total Delay for Signalled Lanes (pcuHr):	119.89	Cycle Time (s): 60
C2	Stream: 3 PRC for Signalled Lanes (%):	86.4	Total Delay for Signalled Lanes (pcuHr):	1.73	Cycle Time (s): 60
C3	Stream: 1 PRC for Signalled Lanes (%):	-101.1	Total Delay for Signalled Lanes (pcuHr):	481.13	Cycle Time (s): 60
C3	Stream: 2 PRC for Signalled Lanes (%):	19.5	Total Delay for Signalled Lanes (pcuHr):	4.58	Cycle Time (s): 60
	PRC Over All Lanes (%):	-101.1	Total Delay Over All Lanes(pcuHr):	866.24	

Junctions 9

ARCADY 9 - Roundabout Module

Filename: 8 Capstone Rd - Street End Rd Mini Roundabout.j9
Path: \\EgnyteDrive\cace\Shared\Projects\17-035 Hempstead Valley, Medway\Trans\Arcady\2019 TA Submission
Report generation date: 19/03/2019 12:01:31

Summary of junction performance

	AM					PM				
	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity
	Do Minimum									
1 - Luton High St (N)	3.1	17.49	0.75	C	5 %	88.4	417.72	1.21	F	-25 %
2 - Capstone Rd (SE)	1.3	13.31	0.55	B		0.7	10.18	0.38	B	
3 - Street End Rd (SW)	4.0	26.13	0.81	D	[3 - Street End Rd (SW)]	10.3	53.04	0.93	F	[1 - Luton High St (N)]
	Do Something (800)									
1 - Luton High St (N)	3.3	18.57	0.76	C	6 %	107.2	533.22	1.26	F	-28 %
2 - Capstone Rd (SE)	1.4	13.63	0.56	B		0.9	11.09	0.45	B	
3 - Street End Rd (SW)	3.9	25.11	0.80	D	[3 - Street End Rd (SW)]	25.2	116.05	1.03	F	[1 - Luton High St (N)]

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. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	Capstone Rd - Street End Rd Mini Roundabout
Location	Hempstead Valley
Site number	
Date	01/03/2019
Version	
Status	
Identifier	
Client	
Jobnumber	17-035
Enumerator	CA_WKS12\PLimbu
Description	

Units

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

Analysis Options

Mini-roundabout model	Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
JUNCTIONS 9	5.75			✓	Delay	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	Do Minimum	AM	ONE HOUR	07:45	09:15	15	✓
D2	Do Minimum	PM	ONE HOUR	16:45	18:15	15	✓
D3	Do Something (800)	AM	ONE HOUR	07:45	09:15	15	✓
D4	Do Something (800)	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

Do Minimum, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Capstone Rd - Street End Rd Mini Roundabout	Mini-roundabout		1, 2, 3	19.74	C

Junction Network Options

Driving side	Lighting	Road surface	In London	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	Normal/unknown		5	3 - Street End Rd (SW)

Arms

Arms

Arm	Name	Description
1	Luton High St (N)	
2	Capstone Rd (SE)	
3	Street End Rd (SW)	

Mini Roundabout Geometry

Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
1 - Luton High St (N)	2.90	2.90	5.00	1.0	16.40	14.20	0.0	
2 - Capstone Rd (SE)	4.01	4.01	4.90	1.0	12.80	10.20	0.0	
3 - Street End Rd (SW)	4.30	4.30	4.40	1.0	14.30	11.50	0.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Luton High St (N)	0.613	875
2 - Capstone Rd (SE)	0.639	954
3 - Street End Rd (SW)	0.647	918

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	Do Minimum	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Luton High St (N)		ONE HOUR	✓	590	100.000
2 - Capstone Rd (SE)		ONE HOUR	✓	318	100.000
3 - Street End Rd (SW)		ONE HOUR	✓	528	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - Luton High St (N)	2 - Capstone Rd (SE)	3 - Street End Rd (SW)
From	1 - Luton High St (N)	0	140	450
	2 - Capstone Rd (SE)	277	0	41
	3 - Street End Rd (SW)	510	18	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - Luton High St (N)	2 - Capstone Rd (SE)	3 - Street End Rd (SW)
From	1 - Luton High St (N)	0	10	3
	2 - Capstone Rd (SE)	7	0	3
	3 - Street End Rd (SW)	4	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Luton High St (N)	0.75	17.49	3.1	C	541	812
2 - Capstone Rd (SE)	0.55	13.31	1.3	B	292	438
3 - Street End Rd (SW)	0.81	26.13	4.0	D	485	727

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Luton High St (N)	444	111	13	867	0.512	440	587	0.0	1.1	8.724	A
2 - Capstone Rd (SE)	239	60	335	740	0.324	237	118	0.0	0.5	7.597	A
3 - Street End Rd (SW)	398	99	207	785	0.507	393	366	0.0	1.0	9.461	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Luton High St (N)	530	133	16	866	0.613	528	704	1.1	1.6	11.088	B
2 - Capstone Rd (SE)	286	71	403	697	0.410	285	141	0.5	0.7	9.288	A
3 - Street End Rd (SW)	475	119	248	758	0.626	472	440	1.0	1.7	12.974	B

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Luton High St (N)	650	162	20	863	0.752	644	857	1.6	3.0	16.747	C
2 - Capstone Rd (SE)	350	88	491	640	0.547	348	172	0.7	1.2	13.025	B
3 - Street End Rd (SW)	581	145	303	722	0.805	573	536	1.7	3.8	23.766	C

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Luton High St (N)	650	162	20	863	0.752	649	866	3.0	3.1	17.493	C
2 - Capstone Rd (SE)	350	88	495	638	0.549	350	174	1.2	1.3	13.308	B
3 - Street End Rd (SW)	581	145	305	721	0.806	580	540	3.8	4.0	26.132	D

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Luton High St (N)	530	133	16	865	0.613	536	718	3.1	1.7	11.604	B
2 - Capstone Rd (SE)	286	71	409	693	0.412	288	144	1.3	0.8	9.509	A
3 - Street End Rd (SW)	475	119	251	756	0.628	483	446	4.0	1.8	14.131	B

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Luton High St (N)	444	111	14	867	0.512	447	596	1.7	1.1	9.002	A
2 - Capstone Rd (SE)	239	60	341	737	0.325	240	120	0.8	0.5	7.740	A
3 - Street End Rd (SW)	398	99	209	783	0.508	400	372	1.8	1.1	9.852	A

Do Minimum, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 1 and 3 have 86% of the total flow for the roundabout for one or more time segments]

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Capstone Rd - Street End Rd Mini Roundabout	Mini-roundabout		1, 2, 3	219.06	F

Junction Network Options

Driving side	Lighting	Road surface	In London	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	Normal/unknown		-25	1 - Luton High St (N)

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	Do Minimum	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Luton High St (N)		ONE HOUR	✓	799	100.000
2 - Capstone Rd (SE)		ONE HOUR	✓	221	100.000
3 - Street End Rd (SW)		ONE HOUR	✓	678	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - Luton High St (N)	2 - Capstone Rd (SE)	3 - Street End Rd (SW)
From	1 - Luton High St (N)	0	249	550
	2 - Capstone Rd (SE)	168	0	53
	3 - Street End Rd (SW)	453	225	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - Luton High St (N)	2 - Capstone Rd (SE)	3 - Street End Rd (SW)
From	1 - Luton High St (N)	0	17	3
	2 - Capstone Rd (SE)	15	0	0
	3 - Street End Rd (SW)	3	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Luton High St (N)	1.21	417.72	88.4	F	733	1100
2 - Capstone Rd (SE)	0.38	10.18	0.7	B	203	304
3 - Street End Rd (SW)	0.93	53.04	10.3	F	622	933

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Luton High St (N)	602	150	167	773	0.778	588	462	0.0	3.4	19.607	C
2 - Capstone Rd (SE)	166	42	405	696	0.239	165	351	0.0	0.3	7.511	A
3 - Street End Rd (SW)	510	128	125	837	0.610	504	444	0.0	1.5	10.870	B

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Luton High St (N)	718	180	201	752	0.955	691	555	3.4	10.2	48.489	E
2 - Capstone Rd (SE)	199	50	476	650	0.306	198	416	0.3	0.5	8.829	A
3 - Street End Rd (SW)	610	152	151	821	0.742	605	523	1.5	2.8	16.645	C

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Luton High St (N)	880	220	240	728	1.208	723	668	10.2	49.4	163.924	F
2 - Capstone Rd (SE)	243	61	498	636	0.382	243	465	0.5	0.7	10.130	B
3 - Street End Rd (SW)	746	187	184	799	0.934	723	556	2.8	8.6	39.667	E

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Luton High St (N)	880	220	246	725	1.214	724	679	49.4	88.4	351.051	F
2 - Capstone Rd (SE)	243	61	498	636	0.383	243	471	0.7	0.7	10.182	B
3 - Street End Rd (SW)	746	187	185	799	0.934	740	557	8.6	10.3	53.040	F

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Luton High St (N)	718	180	212	746	0.963	737	578	88.4	83.7	417.719	F
2 - Capstone Rd (SE)	199	50	507	630	0.315	199	441	0.7	0.5	9.292	A
3 - Street End Rd (SW)	610	152	152	820	0.743	638	555	10.3	3.2	22.745	C

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Luton High St (N)	602	150	171	770	0.781	761	472	83.7	44.0	305.107	F
2 - Capstone Rd (SE)	166	42	524	620	0.269	167	408	0.5	0.4	8.835	A
3 - Street End Rd (SW)	510	128	127	836	0.610	517	564	3.2	1.7	11.727	B

Do Something (800), AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Capstone Rd - Street End Rd Mini Roundabout	Mini-roundabout		1, 2, 3	19.81	C

Junction Network Options

Driving side	Lighting	Road surface	In London	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	Normal/unknown		6	3 - Street End Rd (SW)

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	Do Something (800)	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Luton High St (N)		ONE HOUR	✓	598	100.000
2 - Capstone Rd (SE)		ONE HOUR	✓	331	100.000
3 - Street End Rd (SW)		ONE HOUR	✓	527	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - Luton High St (N)	2 - Capstone Rd (SE)	3 - Street End Rd (SW)
From	1 - Luton High St (N)	0	163	435
	2 - Capstone Rd (SE)	270	0	61
	3 - Street End Rd (SW)	506	21	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - Luton High St (N)	2 - Capstone Rd (SE)	3 - Street End Rd (SW)
From	1 - Luton High St (N)	0	10	4
	2 - Capstone Rd (SE)	9	0	2
	3 - Street End Rd (SW)	4	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Luton High St (N)	0.76	18.57	3.3	C	549	823
2 - Capstone Rd (SE)	0.56	13.63	1.4	B	304	456
3 - Street End Rd (SW)	0.80	25.11	3.9	D	484	725

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Luton High St (N)	450	113	16	866	0.520	446	579	0.0	1.1	8.956	A
2 - Capstone Rd (SE)	249	62	324	747	0.334	247	137	0.0	0.5	7.719	A
3 - Street End Rd (SW)	397	99	202	788	0.503	393	370	0.0	1.0	9.366	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Luton High St (N)	538	134	19	864	0.622	535	694	1.1	1.7	11.482	B
2 - Capstone Rd (SE)	298	74	389	705	0.422	297	165	0.5	0.8	9.456	A
3 - Street End Rd (SW)	474	118	242	762	0.622	471	444	1.0	1.6	12.759	B

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Luton High St (N)	658	165	23	861	0.764	652	845	1.7	3.2	17.678	C
2 - Capstone Rd (SE)	364	91	475	651	0.560	362	201	0.8	1.3	13.320	B
3 - Street End Rd (SW)	580	145	295	727	0.798	572	541	1.6	3.7	22.984	C

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Luton High St (N)	658	165	23	861	0.764	658	853	3.2	3.3	18.573	C
2 - Capstone Rd (SE)	364	91	479	648	0.562	364	202	1.3	1.4	13.629	B
3 - Street End Rd (SW)	580	145	297	726	0.799	579	546	3.7	3.9	25.110	D

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Luton High St (N)	538	134	19	864	0.622	544	707	3.3	1.8	12.084	B
2 - Capstone Rd (SE)	298	74	395	702	0.424	300	167	1.4	0.8	9.695	A
3 - Street End Rd (SW)	474	118	245	760	0.623	482	451	3.9	1.8	13.824	B

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Luton High St (N)	450	113	16	866	0.520	453	588	1.8	1.2	9.259	A
2 - Capstone Rd (SE)	249	62	329	744	0.335	250	139	0.8	0.5	7.867	A
3 - Street End Rd (SW)	397	99	204	786	0.505	400	375	1.8	1.1	9.738	A

Do Something (800), PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 1 and 3 have 84% of the total flow for the roundabout for one or more time segments]

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Capstone Rd - Street End Rd Mini Roundabout	Mini-roundabout		1, 2, 3	288.57	F

Junction Network Options

Driving side	Lighting	Road surface	In London	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	Normal/unknown		-28	1 - Luton High St (N)

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	Do Something (800)	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Luton High St (N)		ONE HOUR	✓	805	100.000
2 - Capstone Rd (SE)		ONE HOUR	✓	277	100.000
3 - Street End Rd (SW)		ONE HOUR	✓	696	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - Luton High St (N)	2 - Capstone Rd (SE)	3 - Street End Rd (SW)
From	1 - Luton High St (N)	0	299	506
	2 - Capstone Rd (SE)	241	0	36
	3 - Street End Rd (SW)	432	264	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - Luton High St (N)	2 - Capstone Rd (SE)	3 - Street End Rd (SW)
From	1 - Luton High St (N)	0	11	3
	2 - Capstone Rd (SE)	15	0	0
	3 - Street End Rd (SW)	3	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Luton High St (N)	1.26	533.22	107.2	F	739	1108
2 - Capstone Rd (SE)	0.45	11.09	0.9	B	254	381
3 - Street End Rd (SW)	1.03	116.05	25.2	F	639	958

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Luton High St (N)	606	152	196	755	0.802	591	500	0.0	3.8	21.534	C
2 - Capstone Rd (SE)	209	52	371	717	0.291	207	415	0.0	0.5	7.931	A
3 - Street End Rd (SW)	524	131	180	802	0.653	517	398	0.0	1.8	12.587	B

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Luton High St (N)	724	181	234	732	0.989	687	600	3.8	13.0	58.910	F
2 - Capstone Rd (SE)	249	62	432	678	0.367	248	490	0.5	0.6	9.426	A
3 - Street End Rd (SW)	626	156	216	779	0.803	618	464	1.8	3.7	21.908	C

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Luton High St (N)	886	222	271	709	1.250	706	708	13.0	58.1	196.119	F
2 - Capstone Rd (SE)	305	76	444	671	0.455	304	533	0.6	0.9	11.036	B
3 - Street End Rd (SW)	766	192	264	747	1.025	714	483	3.7	16.8	67.244	F

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Luton High St (N)	886	222	278	705	1.257	705	720	58.1	103.6	422.394	F
2 - Capstone Rd (SE)	305	76	443	671	0.454	305	540	0.9	0.9	11.086	B
3 - Street End Rd (SW)	766	192	265	747	1.026	733	482	16.8	25.2	116.055	F

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Luton High St (N)	724	181	268	711	1.018	709	656	103.6	107.2	533.216	F
2 - Capstone Rd (SE)	249	62	446	669	0.372	250	531	0.9	0.7	9.708	A
3 - Street End Rd (SW)	626	156	218	778	0.804	706	478	25.2	5.1	65.729	F

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Luton High St (N)	606	152	203	751	0.807	743	515	107.2	72.8	437.402	F
2 - Capstone Rd (SE)	209	52	467	656	0.318	209	480	0.7	0.5	9.109	A
3 - Street End Rd (SW)	524	131	182	801	0.654	536	494	5.1	2.0	14.495	B

Junctions 9

ARCADY 9 - Roundabout Module

Filename: 9 N Dane Way - Capstone Rd Rdbt Existing.j9
Path: \\EgnyteDrive\cace\Shared\Projects\17-035 Hempstead Valley, Medway\Trans\Arcady\2019 TA Submission\2019-03-19
Report generation date: 19/03/2019 17:16:08

Summary of junction performance

	AM							PM						
	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
Do Minimum														
1 - Capstone Rd (SE)	5.9	23.52	0.86	C	14.79	B	6 % [1 - Capstone Rd (SE)]	9.8	41.62	0.93	E	19.81	C	-2 % [1 - Capstone Rd (SE)]
2 - N Dan Way (S)	3.6	9.85	0.78	A				1.2	4.46	0.53	A			
3 - Capstone Rd (NW)	0.4	7.99	0.26	A				1.6	10.96	0.61	B			
4 - Capstone Green Access (NE)	0.2	9.65	0.14	A				0.5	14.12	0.33	B			
Do Something (800)														
1 - Capstone Rd (SE)	0.8	5.64	0.42	A	4.61	A	94 % [2 - N Dan Way (S)]	1.8	10.58	0.65	B	7.38	A	30 % [1 - Capstone Rd (SE)]
2 - N Dan Way (S)	0.8	3.87	0.45	A				0.4	2.90	0.28	A			
3 - Capstone Rd (NW)	0.3	4.64	0.21	A				1.3	7.37	0.56	A			
4 - Capstone Green Access (NE)	0.1	5.73	0.08	A				0.3	8.69	0.24	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. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	N Dane Way - Capstone Rd Roundabout
Location	Hempstead, Medway
Site number	
Date	23/01/2018
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	17-035
Enumerator	CA_WKS12\PLimbu
Description	

Units

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

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75	✓		✓	Delay	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	Do Minimum	AM	ONE HOUR	07:45	09:15	15	✓
D2	Do Minimum	PM	ONE HOUR	16:45	18:15	15	✓
D3	Do Something (800)	AM	ONE HOUR	07:45	09:15	15	✓
D4	Do Something (800)	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

Do Minimum, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	N Dane Way - Capstone Rd Roundabout	Standard Roundabout		1, 2, 3, 4	14.79	B

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	6	1 - Capstone Rd (SE)

Arms

Arms

Arm	Name	Description
1	Capstone Rd (SE)	
2	N Dan Way (S)	
3	Capstone Rd (NW)	
4	Capstone Green Access (NE)	

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 - Capstone Rd (SE)	3.46	7.43	3.8	22.9	18.3	63.8	
2 - N Dan Way (S)	5.52	8.04	2.9	17.3	18.3	30.2	
3 - Capstone Rd (NW)	3.53	7.87	5.2	31.8	18.3	56.1	
4 - Capstone Green Access (NE)	3.32	5.65	1.6	16.9	18.3	70.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Capstone Rd (SE)	0.522	1179
2 - N Dan Way (S)	0.696	1860
3 - Capstone Rd (NW)	0.564	1322
4 - Capstone Green Access (NE)	0.466	962

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	Do Minimum	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Capstone Rd (SE)		ONE HOUR	✓	859	100.000
2 - N Dan Way (S)		ONE HOUR	✓	1236	100.000
3 - Capstone Rd (NW)		ONE HOUR	✓	163	100.000
4 - Capstone Green Access (NE)		ONE HOUR	✓	56	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Capstone Rd (SE)	2 - N Dan Way (S)	3 - Capstone Rd (NW)	4 - Capstone Green Access (NE)
From	1 - Capstone Rd (SE)	0	703	83	73
	2 - N Dan Way (S)	832	26	275	103
	3 - Capstone Rd (NW)	72	82	0	9
	4 - Capstone Green Access (NE)	21	31	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Capstone Rd (SE)	2 - N Dan Way (S)	3 - Capstone Rd (NW)	4 - Capstone Green Access (NE)
From	1 - Capstone Rd (SE)	0	2	2	1
	2 - N Dan Way (S)	1	100	7	3
	3 - Capstone Rd (NW)	2	22	0	0
	4 - Capstone Green Access (NE)	5	0	5	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Capstone Rd (SE)	0.86	23.52	5.9	29.6	C	788	1182
2 - N Dan Way (S)	0.78	9.85	3.6	13.9	A	1134	1701
3 - Capstone Rd (NW)	0.26	7.99	0.4	1.6	A	150	224
4 - Capstone Green Access (NE)	0.14	9.65	0.2	0.5	A	51	77

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Capstone Rd (SE)	647	162	107	1123	0.576	641	693	0.0	1.4	7.537	A
2 - N Dan Way (S)	931	233	119	1777	0.524	926	629	0.0	1.1	4.357	A
3 - Capstone Rd (NW)	123	31	774	885	0.139	122	271	0.0	0.2	5.235	A
4 - Capstone Green Access (NE)	42	11	758	609	0.069	42	138	0.0	0.1	6.484	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Capstone Rd (SE)	772	193	128	1112	0.695	769	830	1.4	2.2	10.586	B
2 - N Dan Way (S)	1111	278	143	1761	0.631	1109	754	1.1	1.7	5.695	A
3 - Capstone Rd (NW)	147	37	927	799	0.183	146	325	0.2	0.2	6.123	A
4 - Capstone Green Access (NE)	50	13	908	539	0.093	50	166	0.1	0.1	7.522	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Capstone Rd (SE)	946	236	157	1097	0.862	933	1013	2.2	5.5	20.871	C
2 - N Dan Way (S)	1361	340	174	1739	0.782	1354	916	1.7	3.6	9.485	A
3 - Capstone Rd (NW)	179	45	1132	683	0.263	179	396	0.2	0.4	7.915	A
4 - Capstone Green Access (NE)	62	15	1109	445	0.138	61	202	0.1	0.2	9.572	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Capstone Rd (SE)	946	236	157	1096	0.863	944	1018	5.5	5.9	23.520	C
2 - N Dan Way (S)	1361	340	176	1738	0.783	1361	926	3.6	3.6	9.852	A
3 - Capstone Rd (NW)	179	45	1138	680	0.264	179	398	0.4	0.4	7.988	A
4 - Capstone Green Access (NE)	62	15	1114	443	0.139	62	204	0.2	0.2	9.646	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Capstone Rd (SE)	772	193	129	1111	0.695	786	837	5.9	2.4	11.728	B
2 - N Dan Way (S)	1111	278	146	1758	0.632	1118	769	3.6	1.8	5.891	A
3 - Capstone Rd (NW)	147	37	936	794	0.185	147	328	0.4	0.3	6.190	A
4 - Capstone Green Access (NE)	50	13	915	536	0.094	51	168	0.2	0.1	7.590	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Capstone Rd (SE)	647	162	108	1122	0.576	651	698	2.4	1.4	7.843	A
2 - N Dan Way (S)	931	233	121	1776	0.524	933	637	1.8	1.2	4.437	A
3 - Capstone Rd (NW)	123	31	781	881	0.139	123	274	0.3	0.2	5.272	A
4 - Capstone Green Access (NE)	42	11	764	606	0.070	42	140	0.1	0.1	6.523	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Capstone Rd (SE)	1.36	0.58	1.18	1.62	1.83			N/A	N/A
2 - N Dan Way (S)	1.13	0.57	1.04	1.45	1.50			N/A	N/A
3 - Capstone Rd (NW)	0.18	0.00	0.00	0.18	0.18			N/A	N/A
4 - Capstone Green Access (NE)	0.08	0.00	0.00	0.08	0.08			N/A	N/A

08:00 - 08:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Capstone Rd (SE)	2.24	0.06	0.92	5.77	8.65			N/A	N/A
2 - N Dan Way (S)	1.74	0.05	0.51	4.52	7.06			N/A	N/A
3 - Capstone Rd (NW)	0.25	0.00	0.00	0.25	0.25			N/A	N/A
4 - Capstone Green Access (NE)	0.10	0.00	0.00	0.10	0.10			N/A	N/A

08:15 - 08:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Capstone Rd (SE)	5.48	0.04	0.40	14.34	29.64			N/A	N/A
2 - N Dan Way (S)	3.55	0.03	0.30	3.55	13.89			N/A	N/A
3 - Capstone Rd (NW)	0.39	0.03	0.28	0.51	0.54			N/A	N/A
4 - Capstone Green Access (NE)	0.16	0.03	0.26	0.48	0.50			N/A	N/A

08:30 - 08:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Capstone Rd (SE)	5.87	0.03	0.33	8.37	29.25			N/A	N/A
2 - N Dan Way (S)	3.64	0.03	0.28	3.64	4.68			N/A	N/A
3 - Capstone Rd (NW)	0.40	0.04	0.36	1.33	1.64			N/A	N/A
4 - Capstone Green Access (NE)	0.16	0.03	0.26	0.46	0.49			N/A	N/A

08:45 - 09:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Capstone Rd (SE)	2.41	0.04	0.45	6.63	11.39			N/A	N/A
2 - N Dan Way (S)	1.81	0.06	0.90	4.40	6.45			N/A	N/A
3 - Capstone Rd (NW)	0.25	0.00	0.00	0.25	0.25			N/A	N/A
4 - Capstone Green Access (NE)	0.11	0.00	0.00	0.11	0.11			N/A	N/A

09:00 - 09:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Capstone Rd (SE)	1.41	0.03	0.34	3.19	7.23			N/A	N/A
2 - N Dan Way (S)	1.15	0.04	0.42	2.90	4.88			N/A	N/A
3 - Capstone Rd (NW)	0.18	0.00	0.00	0.18	0.18			N/A	N/A
4 - Capstone Green Access (NE)	0.08	0.00	0.00	0.08	0.08			N/A	N/A

Do Minimum, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	N Dane Way - Capstone Rd Roundabout	Standard Roundabout		1, 2, 3, 4	19.81	C

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-2	1 - Capstone Rd (SE)

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	Do Minimum	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Capstone Rd (SE)		ONE HOUR	✓	828	100.000
2 - N Dan Way (S)		ONE HOUR	✓	853	100.000
3 - Capstone Rd (NW)		ONE HOUR	✓	488	100.000
4 - Capstone Green Access (NE)		ONE HOUR	✓	113	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Capstone Rd (SE)	2 - N Dan Way (S)	3 - Capstone Rd (NW)	4 - Capstone Green Access (NE)
From	1 - Capstone Rd (SE)	0	731	59	38
	2 - N Dan Way (S)	623	28	175	27
	3 - Capstone Rd (NW)	225	259	0	4
	4 - Capstone Green Access (NE)	61	48	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Capstone Rd (SE)	2 - N Dan Way (S)	3 - Capstone Rd (NW)	4 - Capstone Green Access (NE)
From	1 - Capstone Rd (SE)	0	1	2	1
	2 - N Dan Way (S)	1	100	11	2
	3 - Capstone Rd (NW)	1	6	0	0
	4 - Capstone Green Access (NE)	0	0	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Capstone Rd (SE)	0.93	41.62	9.8	52.2	E	760	1140
2 - N Dan Way (S)	0.53	4.46	1.2	1.5	A	783	1174
3 - Capstone Rd (NW)	0.61	10.96	1.6	3.5	B	448	672
4 - Capstone Green Access (NE)	0.33	14.12	0.5	1.9	B	104	156

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Capstone Rd (SE)	623	156	254	1046	0.596	618	681	0.0	1.5	8.379	A
2 - N Dan Way (S)	642	161	75	1808	0.355	640	796	0.0	0.6	3.221	A
3 - Capstone Rd (NW)	367	92	537	1019	0.361	365	178	0.0	0.6	5.684	A
4 - Capstone Green Access (NE)	85	21	850	566	0.150	84	52	0.0	0.2	7.481	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Capstone Rd (SE)	744	186	304	1020	0.730	740	816	1.5	2.6	12.778	B
2 - N Dan Way (S)	767	192	90	1797	0.427	766	954	0.6	0.8	3.647	A
3 - Capstone Rd (NW)	439	110	643	959	0.457	438	213	0.6	0.9	7.132	A
4 - Capstone Green Access (NE)	102	25	1019	487	0.208	101	62	0.2	0.3	9.332	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Capstone Rd (SE)	912	228	371	985	0.926	888	998	2.6	8.4	31.915	D
2 - N Dan Way (S)	939	235	108	1785	0.526	938	1151	0.8	1.2	4.439	A
3 - Capstone Rd (NW)	537	134	786	878	0.612	534	260	0.9	1.6	10.750	B
4 - Capstone Green Access (NE)	124	31	1246	382	0.326	124	75	0.3	0.5	13.938	B

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Capstone Rd (SE)	912	228	373	984	0.927	906	1001	8.4	9.8	41.618	E
2 - N Dan Way (S)	939	235	111	1783	0.527	939	1169	1.2	1.2	4.463	A
3 - Capstone Rd (NW)	537	134	788	877	0.612	537	262	1.6	1.6	10.958	B
4 - Capstone Green Access (NE)	124	31	1250	380	0.328	124	76	0.5	0.5	14.121	B

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Capstone Rd (SE)	744	186	307	1018	0.731	772	820	9.8	2.9	16.244	C
2 - N Dan Way (S)	767	192	94	1795	0.427	768	985	1.2	0.8	3.677	A
3 - Capstone Rd (NW)	439	110	646	957	0.458	442	216	1.6	0.9	7.272	A
4 - Capstone Green Access (NE)	102	25	1024	485	0.210	102	63	0.5	0.3	9.457	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Capstone Rd (SE)	623	156	256	1045	0.597	629	686	2.9	1.5	8.856	A
2 - N Dan Way (S)	642	161	77	1807	0.355	643	808	0.8	0.6	3.241	A
3 - Capstone Rd (NW)	367	92	540	1017	0.361	369	180	0.9	0.6	5.761	A
4 - Capstone Green Access (NE)	85	21	856	563	0.151	85	52	0.3	0.2	7.556	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Capstone Rd (SE)	1.46	0.59	1.36	1.81	1.94			N/A	N/A
2 - N Dan Way (S)	0.57	0.57	1.05	1.47	1.52			N/A	N/A
3 - Capstone Rd (NW)	0.58	0.57	1.04	1.45	1.50			N/A	N/A
4 - Capstone Green Access (NE)	0.18	0.00	0.00	0.18	0.18			N/A	N/A

17:00 - 17:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Capstone Rd (SE)	2.60	0.06	0.99	6.87	10.38			N/A	N/A
2 - N Dan Way (S)	0.77	0.10	0.87	1.47	1.54			N/A	N/A
3 - Capstone Rd (NW)	0.86	0.09	0.89	1.55	1.57			N/A	N/A
4 - Capstone Green Access (NE)	0.26	0.00	0.00	0.26	0.26			N/A	N/A

17:15 - 17:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Capstone Rd (SE)	8.45	0.07	1.24	24.43	38.82			N/A	N/A
2 - N Dan Way (S)	1.15	0.03	0.27	1.15	1.15			N/A	N/A
3 - Capstone Rd (NW)	1.58	0.03	0.28	1.58	2.57			N/A	N/A
4 - Capstone Green Access (NE)	0.47	0.03	0.26	0.47	0.49			N/A	N/A

17:30 - 17:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Capstone Rd (SE)	9.85	0.05	0.48	27.75	52.17			N/A	N/A
2 - N Dan Way (S)	1.16	0.03	0.28	1.16	1.27			N/A	N/A
3 - Capstone Rd (NW)	1.61	0.03	0.28	1.61	3.45			N/A	N/A
4 - Capstone Green Access (NE)	0.48	0.03	0.32	1.45	1.93			N/A	N/A

17:45 - 18:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Capstone Rd (SE)	2.90	0.04	0.42	7.91	14.65			N/A	N/A
2 - N Dan Way (S)	0.79	0.54	1.03	1.46	1.52			N/A	N/A
3 - Capstone Rd (NW)	0.89	0.08	0.87	1.32	1.78			N/A	N/A
4 - Capstone Green Access (NE)	0.27	0.00	0.00	0.27	0.27			N/A	N/A

18:00 - 18:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Capstone Rd (SE)	1.53	0.03	0.31	2.58	7.80			N/A	N/A
2 - N Dan Way (S)	0.58	0.07	0.74	1.40	1.49			N/A	N/A
3 - Capstone Rd (NW)	0.59	0.05	0.46	1.28	1.28			N/A	N/A
4 - Capstone Green Access (NE)	0.18	0.00	0.00	0.18	0.18			N/A	N/A

Do Something (800), AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	N Dane Way - Capstone Rd Roundabout	Standard Roundabout		1, 2, 3, 4	4.61	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	94	2 - N Dan Way (S)

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	Do Something (800)	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Capstone Rd (SE)		ONE HOUR	✓	437	100.000
2 - N Dan Way (S)		ONE HOUR	✓	703	100.000
3 - Capstone Rd (NW)		ONE HOUR	✓	188	100.000
4 - Capstone Green Access (NE)		ONE HOUR	✓	52	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Capstone Rd (SE)	2 - N Dan Way (S)	3 - Capstone Rd (NW)	4 - Capstone Green Access (NE)
From	1 - Capstone Rd (SE)	0	253	112	72
	2 - N Dan Way (S)	340	0	271	92
	3 - Capstone Rd (NW)	127	48	0	13
	4 - Capstone Green Access (NE)	20	27	5	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Capstone Rd (SE)	2 - N Dan Way (S)	3 - Capstone Rd (NW)	4 - Capstone Green Access (NE)
From	1 - Capstone Rd (SE)	0	3	1	1
	2 - N Dan Way (S)	1	0	1	3
	3 - Capstone Rd (NW)	3	2	0	11
	4 - Capstone Green Access (NE)	0	3	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Capstone Rd (SE)	0.42	5.64	0.8	2.6	A	401	601
2 - N Dan Way (S)	0.45	3.87	0.8	2.0	A	645	968
3 - Capstone Rd (NW)	0.21	4.64	0.3	1.1	A	173	259
4 - Capstone Green Access (NE)	0.08	5.73	0.1	0.5	A	48	72

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Capstone Rd (SE)	329	82	60	1147	0.287	327	365	0.0	0.4	4.475	A
2 - N Dan Way (S)	529	132	142	1762	0.300	528	246	0.0	0.4	2.949	A
3 - Capstone Rd (NW)	142	35	378	1109	0.128	141	291	0.0	0.2	3.839	A
4 - Capstone Green Access (NE)	39	10	386	782	0.050	39	133	0.0	0.1	4.935	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Capstone Rd (SE)	393	98	72	1141	0.344	392	437	0.4	0.5	4.907	A
2 - N Dan Way (S)	632	158	170	1742	0.363	631	295	0.4	0.6	3.279	A
3 - Capstone Rd (NW)	169	42	453	1066	0.158	169	348	0.2	0.2	4.141	A
4 - Capstone Green Access (NE)	47	12	463	747	0.063	47	159	0.1	0.1	5.241	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Capstone Rd (SE)	481	120	88	1133	0.425	480	535	0.5	0.7	5.629	A
2 - N Dan Way (S)	774	194	208	1716	0.451	773	361	0.6	0.8	3.862	A
3 - Capstone Rd (NW)	207	52	554	1009	0.205	207	427	0.2	0.3	4.631	A
4 - Capstone Green Access (NE)	57	14	566	698	0.082	57	195	0.1	0.1	5.722	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Capstone Rd (SE)	481	120	88	1133	0.425	481	536	0.7	0.8	5.643	A
2 - N Dan Way (S)	774	194	208	1716	0.451	774	361	0.8	0.8	3.871	A
3 - Capstone Rd (NW)	207	52	555	1009	0.205	207	427	0.3	0.3	4.635	A
4 - Capstone Green Access (NE)	57	14	567	698	0.082	57	195	0.1	0.1	5.725	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Capstone Rd (SE)	393	98	72	1141	0.344	394	439	0.8	0.5	4.925	A
2 - N Dan Way (S)	632	158	170	1742	0.363	633	295	0.8	0.6	3.292	A
3 - Capstone Rd (NW)	169	42	454	1066	0.159	169	349	0.3	0.2	4.147	A
4 - Capstone Green Access (NE)	47	12	464	746	0.063	47	159	0.1	0.1	5.246	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Capstone Rd (SE)	329	82	60	1147	0.287	330	367	0.5	0.4	4.501	A
2 - N Dan Way (S)	529	132	143	1761	0.301	530	247	0.6	0.4	2.963	A
3 - Capstone Rd (NW)	142	35	380	1108	0.128	142	292	0.2	0.2	3.849	A
4 - Capstone Green Access (NE)	39	10	388	781	0.050	39	133	0.1	0.1	4.943	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Capstone Rd (SE)	0.41	0.00	0.00	0.41	0.41			N/A	N/A
2 - N Dan Way (S)	0.43	0.00	0.00	0.43	0.43			N/A	N/A
3 - Capstone Rd (NW)	0.15	0.00	0.00	0.15	0.15			N/A	N/A
4 - Capstone Green Access (NE)	0.05	0.00	0.00	0.05	0.05			N/A	N/A

08:00 - 08:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Capstone Rd (SE)	0.53	0.53	1.02	1.43	1.48			N/A	N/A
2 - N Dan Way (S)	0.57	0.08	0.79	1.37	1.45			N/A	N/A
3 - Capstone Rd (NW)	0.19	0.00	0.00	0.19	0.19			N/A	N/A
4 - Capstone Green Access (NE)	0.07	0.03	0.26	0.46	0.49			N/A	N/A

08:15 - 08:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Capstone Rd (SE)	0.75	0.03	0.26	0.75	0.75			N/A	N/A
2 - N Dan Way (S)	0.83	0.03	0.26	0.83	0.83			N/A	N/A
3 - Capstone Rd (NW)	0.26	0.03	0.26	0.47	0.50			N/A	N/A
4 - Capstone Green Access (NE)	0.09	0.03	0.26	0.48	0.50			N/A	N/A

08:30 - 08:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Capstone Rd (SE)	0.75	0.03	0.28	0.75	2.57			N/A	N/A
2 - N Dan Way (S)	0.83	0.03	0.28	0.83	1.99			N/A	N/A
3 - Capstone Rd (NW)	0.27	0.03	0.29	0.71	1.14			N/A	N/A
4 - Capstone Green Access (NE)	0.09	0.00	0.00	0.09	0.09			N/A	N/A

08:45 - 09:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Capstone Rd (SE)	0.54	0.54	1.02	1.43	1.48			N/A	N/A
2 - N Dan Way (S)	0.58	0.56	1.01	1.42	1.47			N/A	N/A
3 - Capstone Rd (NW)	0.20	0.00	0.00	0.20	0.20			N/A	N/A
4 - Capstone Green Access (NE)	0.07	0.00	0.00	0.07	0.07			N/A	N/A

09:00 - 09:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Capstone Rd (SE)	0.41	0.00	0.00	0.41	0.41			N/A	N/A
2 - N Dan Way (S)	0.44	0.00	0.00	0.44	0.44			N/A	N/A
3 - Capstone Rd (NW)	0.15	0.00	0.00	0.15	0.15			N/A	N/A
4 - Capstone Green Access (NE)	0.05	0.00	0.00	0.05	0.05			N/A	N/A

Do Something (800), PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	N Dane Way - Capstone Rd Roundabout	Standard Roundabout		1, 2, 3, 4	7.38	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	30	1 - Capstone Rd (SE)

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	Do Something (800)	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Capstone Rd (SE)		ONE HOUR	✓	580	100.000
2 - N Dan Way (S)		ONE HOUR	✓	447	100.000
3 - Capstone Rd (NW)		ONE HOUR	✓	579	100.000
4 - Capstone Green Access (NE)		ONE HOUR	✓	116	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Capstone Rd (SE)	2 - N Dan Way (S)	3 - Capstone Rd (NW)	4 - Capstone Green Access (NE)
From	1 - Capstone Rd (SE)	5	434	100	41
	2 - N Dan Way (S)	237	0	185	25
	3 - Capstone Rd (NW)	283	291	0	5
	4 - Capstone Green Access (NE)	66	45	5	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Capstone Rd (SE)	2 - N Dan Way (S)	3 - Capstone Rd (NW)	4 - Capstone Green Access (NE)
From	1 - Capstone Rd (SE)	0	1	3	0
	2 - N Dan Way (S)	0	0	2	0
	3 - Capstone Rd (NW)	1	1	0	0
	4 - Capstone Green Access (NE)	0	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Capstone Rd (SE)	0.65	10.58	1.8	4.0	B	532	798
2 - N Dan Way (S)	0.28	2.90	0.4	1.3	A	410	615
3 - Capstone Rd (NW)	0.56	7.37	1.3	1.5	A	531	797
4 - Capstone Green Access (NE)	0.24	8.69	0.3	1.3	A	106	160

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Capstone Rd (SE)	437	109	255	1045	0.418	434	443	0.0	0.7	5.934	A
2 - N Dan Way (S)	337	84	113	1782	0.189	336	576	0.0	0.2	2.508	A
3 - Capstone Rd (NW)	436	109	231	1191	0.366	434	217	0.0	0.6	4.783	A
4 - Capstone Green Access (NE)	87	22	612	677	0.129	87	53	0.0	0.1	6.113	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Capstone Rd (SE)	521	130	306	1019	0.512	520	531	0.7	1.0	7.290	A
2 - N Dan Way (S)	402	100	135	1766	0.228	402	691	0.2	0.3	2.659	A
3 - Capstone Rd (NW)	521	130	277	1166	0.446	520	260	0.6	0.8	5.618	A
4 - Capstone Green Access (NE)	104	26	733	621	0.168	104	64	0.1	0.2	6.990	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Capstone Rd (SE)	639	160	374	983	0.650	635	649	1.0	1.8	10.390	B
2 - N Dan Way (S)	492	123	165	1745	0.282	492	844	0.3	0.4	2.895	A
3 - Capstone Rd (NW)	637	159	339	1131	0.564	636	319	0.8	1.3	7.314	A
4 - Capstone Green Access (NE)	128	32	896	544	0.235	127	78	0.2	0.3	8.655	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Capstone Rd (SE)	639	160	375	983	0.650	638	651	1.8	1.8	10.584	B
2 - N Dan Way (S)	492	123	166	1745	0.282	492	848	0.4	0.4	2.897	A
3 - Capstone Rd (NW)	637	159	339	1131	0.564	637	319	1.3	1.3	7.372	A
4 - Capstone Green Access (NE)	128	32	898	543	0.235	128	78	0.3	0.3	8.692	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Capstone Rd (SE)	521	130	308	1018	0.512	524	533	1.8	1.1	7.434	A
2 - N Dan Way (S)	402	100	137	1765	0.228	402	696	0.4	0.3	2.665	A
3 - Capstone Rd (NW)	521	130	277	1165	0.447	522	261	1.3	0.8	5.670	A
4 - Capstone Green Access (NE)	104	26	736	619	0.168	105	64	0.3	0.2	7.029	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Capstone Rd (SE)	437	109	257	1044	0.418	438	446	1.1	0.7	6.028	A
2 - N Dan Way (S)	337	84	114	1781	0.189	337	581	0.3	0.2	2.513	A
3 - Capstone Rd (NW)	436	109	232	1191	0.366	437	219	0.8	0.6	4.829	A
4 - Capstone Green Access (NE)	87	22	615	675	0.129	88	54	0.2	0.2	6.151	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Capstone Rd (SE)	0.72	0.56	1.01	1.42	1.47			N/A	N/A
2 - N Dan Way (S)	0.23	0.00	0.00	0.23	0.23			N/A	N/A
3 - Capstone Rd (NW)	0.58	0.56	1.01	1.41	1.46			N/A	N/A
4 - Capstone Green Access (NE)	0.15	0.00	0.00	0.15	0.15			N/A	N/A

17:00 - 17:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Capstone Rd (SE)	1.04	0.09	0.94	1.78	2.26			N/A	N/A
2 - N Dan Way (S)	0.30	0.00	0.00	0.30	0.30			N/A	N/A
3 - Capstone Rd (NW)	0.81	0.10	0.88	1.16	1.16			N/A	N/A
4 - Capstone Green Access (NE)	0.20	0.00	0.00	0.20	0.20			N/A	N/A

17:15 - 17:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Capstone Rd (SE)	1.82	0.03	0.28	1.82	3.99			N/A	N/A
2 - N Dan Way (S)	0.39	0.03	0.25	0.46	0.48			N/A	N/A
3 - Capstone Rd (NW)	1.28	0.03	0.27	1.28	1.28			N/A	N/A
4 - Capstone Green Access (NE)	0.30	0.03	0.26	0.46	0.49			N/A	N/A

17:30 - 17:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Capstone Rd (SE)	1.85	0.03	0.27	1.85	2.66			N/A	N/A
2 - N Dan Way (S)	0.40	0.03	0.33	1.29	1.31			N/A	N/A
3 - Capstone Rd (NW)	1.29	0.03	0.27	1.29	1.51			N/A	N/A
4 - Capstone Green Access (NE)	0.31	0.03	0.31	1.06	1.34			N/A	N/A

17:45 - 18:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Capstone Rd (SE)	1.08	0.08	0.92	1.89	2.57			N/A	N/A
2 - N Dan Way (S)	0.30	0.00	0.00	0.30	0.30			N/A	N/A
3 - Capstone Rd (NW)	0.82	0.14	0.92	1.44	1.50			N/A	N/A
4 - Capstone Green Access (NE)	0.21	0.00	0.00	0.21	0.21			N/A	N/A

18:00 - 18:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Capstone Rd (SE)	0.74	0.05	0.48	1.41	1.94			N/A	N/A
2 - N Dan Way (S)	0.24	0.00	0.00	0.24	0.24			N/A	N/A
3 - Capstone Rd (NW)	0.59	0.05	0.58	1.35	1.44			N/A	N/A
4 - Capstone Green Access (NE)	0.15	0.00	0.00	0.15	0.15			N/A	N/A

Junctions 9

PICADY 9 - Priority Intersection Module

Filename: Ash Tree Ln - Beacon Rd.j9
Path: \\EgnyteDrive\cace\Shared\Projects\17-035 Hempstead Valley, Medway\Trans\Picady\2019 TA Submission\2019-03-19
Report generation date: 19/03/2019 11:37:40

Summary of junction performance

	AM					PM				
	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity
	Do Minimum									
Stream B-AC	4.1	77.62	0.83	F	-10 %	25.7	308.98	1.16	F	-21 %
Stream C-AB	3.7	13.36	0.66	B	[Stream B-AC]	0.5	3.95	0.17	A	[Stream B-AC]
	Do Something									
Stream B-AC	1.3	29.10	0.56	D	4 %	7.6	110.71	0.94	F	-13 %
Stream C-AB	2.8	9.68	0.56	A	[Stream B-AC]	1.0	4.24	0.25	A	[Stream B-AC]

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. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	
Location	
Site number	
Date	01/03/2019
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	CA_WKS12\PLimbu
Description	

Units

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

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75			✓	Delay	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	Do Minimum	AM	ONE HOUR	08:00	09:30	15	✓
D2	Do Minimum	PM	ONE HOUR	17:00	18:30	15	✓
D3	Do Something	AM	ONE HOUR	08:00	09:30	15	✓
D4	Do Something	PM	ONE HOUR	17:00	18:30	15	✓

Analysis Set Details

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

Do Minimum, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - Ash Tree Ln (N) - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Ash Tree Ln - Beacon Rd	T-Junction	Two-way		12.01	B

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-10	Stream B-AC

Arms

Arms

Arm	Name	Description	Arm type
A	Ash Tree Ln (S)		Major
B	Beacon Rd (NW)		Minor
C	Ash Tree Ln (N)		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 - Ash Tree Ln (N)	5.20			45.1	✓	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 - Beacon Rd (NW)	One lane	4.18	12	30

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	555	0.105	0.264	0.166	0.378
1	B-C	719	0.114	0.288	-	-
1	C-B	600	0.241	0.241	-	-

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	Do Minimum	AM	ONE HOUR	08:00	09:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Ash Tree Ln (S)		ONE HOUR	✓	820	100.000
B - Beacon Rd (NW)		ONE HOUR	✓	188	100.000
C - Ash Tree Ln (N)		ONE HOUR	✓	667	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Ash Tree Ln (S)	B - Beacon Rd (NW)	C - Ash Tree Ln (N)
From	A - Ash Tree Ln (S)	0	139	681
	B - Beacon Rd (NW)	105	0	83
	C - Ash Tree Ln (N)	512	155	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Ash Tree Ln (S)	B - Beacon Rd (NW)	C - Ash Tree Ln (N)
From	A - Ash Tree Ln (S)	0	1	3
	B - Beacon Rd (NW)	3	0	3
	C - Ash Tree Ln (N)	2	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.83	77.62	4.1	F	173	259
C-AB	0.66	13.36	3.7	B	380	570
C-A					232	348
A-B					128	191
A-C					625	937

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	142	35	377	0.375	139	0.0	0.6	15.420	C
C-AB	243	61	740	0.329	240	0.0	0.8	7.299	A
C-A	259	65			259				
A-B	105	26			105				
A-C	513	128			513				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	169	42	326	0.519	167	0.6	1.1	23.134	C
C-AB	346	86	776	0.445	343	0.8	1.4	8.496	A
C-A	254	63			254				
A-B	125	31			125				
A-C	612	153			612				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	207	52	250	0.827	197	1.1	3.5	61.181	F
C-AB	543	136	829	0.654	534	1.4	3.5	12.592	B
C-A	192	48			192				
A-B	153	38			153				
A-C	750	187			750				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	207	52	248	0.834	205	3.5	4.1	77.619	F
C-AB	549	137	834	0.658	548	3.5	3.7	13.364	B
C-A	185	46			185				
A-B	153	38			153				
A-C	750	187			750				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	169	42	323	0.523	181	4.1	1.2	27.860	D
C-AB	351	88	783	0.449	360	3.7	1.6	8.949	A
C-A	248	62			248				
A-B	125	31			125				
A-C	612	153			612				

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	142	35	376	0.376	144	1.2	0.6	16.116	C
C-AB	246	62	743	0.332	249	1.6	0.9	7.490	A
C-A	256	64			256				
A-B	105	26			105				
A-C	513	128			513				

Do Minimum, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - Ash Tree Ln (N) - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Ash Tree Ln - Beacon Rd	T-Junction	Two-way		40.78	E

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-21	Stream B-AC

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	Do Minimum	PM	ONE HOUR	17:00	18:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Ash Tree Ln (S)		ONE HOUR	✓	763	100.000
B - Beacon Rd (NW)		ONE HOUR	✓	261	100.000
C - Ash Tree Ln (N)		ONE HOUR	✓	967	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Ash Tree Ln (S)	B - Beacon Rd (NW)	C - Ash Tree Ln (N)
From	A - Ash Tree Ln (S)	0	228	535
	B - Beacon Rd (NW)	165	0	96
	C - Ash Tree Ln (N)	941	26	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Ash Tree Ln (S)	B - Beacon Rd (NW)	C - Ash Tree Ln (N)
From	A - Ash Tree Ln (S)	0	2	1
	B - Beacon Rd (NW)	0	0	0
	C - Ash Tree Ln (N)	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	1.16	308.98	25.7	F	239	359
C-AB	0.17	3.95	0.5	A	128	193
C-A					759	1138
A-B					209	314
A-C					491	736

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	196	49	370	0.531	192	0.0	1.1	19.796	C
C-AB	69	17	989	0.070	69	0.0	0.1	3.941	A
C-A	659	165			659				
A-B	172	43			172				
A-C	403	101			403				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	235	59	320	0.733	229	1.1	2.4	37.647	E
C-AB	110	27	1077	0.102	109	0.1	0.2	3.752	A
C-A	760	190			760				
A-B	205	51			205				
A-C	481	120			481				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	287	72	247	1.161	237	2.4	15.0	162.285	F
C-AB	206	51	1205	0.170	204	0.2	0.5	3.629	A
C-A	859	215			859				
A-B	251	63			251				
A-C	589	147			589				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	287	72	247	1.162	245	15.0	25.7	308.985	F
C-AB	206	52	1206	0.171	206	0.5	0.5	3.639	A
C-A	858	215			858				
A-B	251	63			251				
A-C	589	147			589				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	235	59	320	0.734	308	25.7	7.4	204.340	F
C-AB	110	28	1078	0.102	112	0.5	0.2	3.766	A
C-A	759	190			759				
A-B	205	51			205				
A-C	481	120			481				

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	196	49	370	0.531	221	7.4	1.2	27.882	D
C-AB	70	17	989	0.070	70	0.2	0.1	3.951	A
C-A	658	165			658				
A-B	172	43			172				
A-C	403	101			403				

Do Something, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - Ash Tree Ln (N) - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Ash Tree Ln - Beacon Rd	T-Junction	Two-way		4.79	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	4	Stream B-AC

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	Do Something	AM	ONE HOUR	08:00	09:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Ash Tree Ln (S)		ONE HOUR	✓	794	100.000
B - Beacon Rd (NW)		ONE HOUR	✓	146	100.000
C - Ash Tree Ln (N)		ONE HOUR	✓	708	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Ash Tree Ln (S)	B - Beacon Rd (NW)	C - Ash Tree Ln (N)
From	A - Ash Tree Ln (S)	0	102	692
	B - Beacon Rd (NW)	60	0	86
	C - Ash Tree Ln (N)	581	127	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Ash Tree Ln (S)	B - Beacon Rd (NW)	C - Ash Tree Ln (N)
From	A - Ash Tree Ln (S)	0	0	1
	B - Beacon Rd (NW)	2	0	2
	C - Ash Tree Ln (N)	3	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.56	29.10	1.3	D	134	201
C-AB	0.56	9.68	2.8	A	345	518
C-A					304	456
A-B					94	140
A-C					635	952

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	110	27	413	0.266	108	0.0	0.4	12.001	B
C-AB	217	54	783	0.277	214	0.0	0.7	6.459	A
C-A	316	79			316				
A-B	77	19			77				
A-C	521	130			521				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	131	33	363	0.362	130	0.4	0.6	15.752	C
C-AB	313	78	828	0.378	311	0.7	1.2	7.155	A
C-A	324	81			324				
A-B	92	23			92				
A-C	622	156			622				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	161	40	288	0.559	158	0.6	1.2	27.828	D
C-AB	501	125	893	0.561	495	1.2	2.7	9.373	A
C-A	278	70			278				
A-B	112	28			112				
A-C	762	190			762				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	161	40	286	0.561	161	1.2	1.3	29.098	D
C-AB	506	126	897	0.564	506	2.7	2.8	9.685	A
C-A	274	68			274				
A-B	112	28			112				
A-C	762	190			762				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	131	33	361	0.363	134	1.3	0.6	16.330	C
C-AB	317	79	832	0.381	323	2.8	1.3	7.390	A
C-A	320	80			320				
A-B	92	23			92				
A-C	622	156			622				

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	110	27	412	0.267	111	0.6	0.4	12.224	B
C-AB	219	55	785	0.279	222	1.3	0.8	6.585	A
C-A	314	78			314				
A-B	77	19			77				
A-C	521	130			521				

Do Something, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - Ash Tree Ln (N) - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Ash Tree Ln - Beacon Rd	T-Junction	Two-way		15.31	C

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-13	Stream B-AC

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	Do Something	PM	ONE HOUR	17:00	18:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Ash Tree Ln (S)		ONE HOUR	✓	625	100.000
B - Beacon Rd (NW)		ONE HOUR	✓	238	100.000
C - Ash Tree Ln (N)		ONE HOUR	✓	914	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Ash Tree Ln (S)	B - Beacon Rd (NW)	C - Ash Tree Ln (N)
From	A - Ash Tree Ln (S)	0	87	538
	B - Beacon Rd (NW)	140	0	98
	C - Ash Tree Ln (N)	869	45	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Ash Tree Ln (S)	B - Beacon Rd (NW)	C - Ash Tree Ln (N)
From	A - Ash Tree Ln (S)	0	2	1
	B - Beacon Rd (NW)	0	0	0
	C - Ash Tree Ln (N)	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.94	110.71	7.6	F	218	328
C-AB	0.25	4.24	1.0	A	185	277
C-A					654	981
A-B					80	120
A-C					494	741

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	179	45	395	0.454	176	0.0	0.8	16.247	C
C-AB	105	26	964	0.109	104	0.0	0.2	4.216	A
C-A	583	146			583				
A-B	65	16			65				
A-C	405	101			405				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	214	53	348	0.615	211	0.8	1.5	25.796	D
C-AB	162	40	1045	0.155	161	0.2	0.4	4.106	A
C-A	660	165			660				
A-B	78	20			78				
A-C	484	121			484				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	262	66	280	0.935	244	1.5	5.9	77.354	F
C-AB	285	71	1161	0.245	282	0.4	1.0	4.143	A
C-A	722	180			722				
A-B	96	24			96				
A-C	592	148			592				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	262	66	280	0.936	255	5.9	7.6	110.707	F
C-AB	287	72	1163	0.247	287	1.0	1.0	4.168	A
C-A	720	180			720				
A-B	96	24			96				
A-C	592	148			592				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	214	53	347	0.616	237	7.6	1.7	38.170	E
C-AB	163	41	1047	0.156	165	1.0	0.5	4.139	A
C-A	659	165			659				
A-B	78	20			78				
A-C	484	121			484				

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	179	45	394	0.455	183	1.7	0.9	17.290	C
C-AB	106	27	965	0.110	107	0.5	0.3	4.237	A
C-A	582	145			582				
A-B	65	16			65				
A-C	405	101			405				

Junctions 9

ARCADY 9 - Roundabout Module

Filename: 8 - Capstone Rd - Ash Tree Lane Rdbt Existing.j9
Path: P:\17-035 Hempstead Valley, Medway\Trans\Arcady\2019-03-19
Report generation date: 02/04/2019 14:25:33

Summary of junction performance

	AM							PM						
	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
Do Minimum														
1 - Darland Farm Private Rd	0.0	0.00	0.00	A	917.80	F	-40 % [2 - Capstone Rd South]	0.0	0.00	0.00	A	2522.53	F	-55 % [4 - Ash Tree Lane]
2 - Capstone Rd South	322.8	1412.18	1.51	F				325.2	1441.08	1.51	F			
3 - Capstone Rd West	109.8	476.37	1.22	F				103.9	452.22	1.21	F			
4 - Ash Tree Lane	103.7	689.49	1.31	F				773.0	5305.33	2.49	F			
Do Something (800)														
1 - Darland Farm Private Rd	0.0	0.00	0.00	A	57.81	F	-9 % [4 - Ash Tree Lane]	0.0	0.00	0.00	A	768.96	F	-41 % [4 - Ash Tree Lane]
2 - Capstone Rd South	14.1	68.71	0.97	F				4.1	24.41	0.81	C			
3 - Capstone Rd West	2.5	17.13	0.72	C				4.4	25.39	0.83	D			
4 - Ash Tree Lane	14.5	77.00	0.97	F				339.6	1603.78	1.61	F			

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

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	(untitled)
Location	
Site number	
Date	19/01/2018
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	CA_WKS03\atsolaki
Description	

Units

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

Analysis Options

Mini-roundabout model	Calculate Queue Percentiles	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
JUNCTIONS 9		✓	Delay	0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	Do Minimum	AM	ONE HOUR	07:45	09:15	15
D2	Do Minimum	PM	ONE HOUR	16:45	18:15	15
D3	Do Something (800)	AM	ONE HOUR	07:45	09:15	15
D4	Do Something (800)	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Do Minimum, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 2 and 3 have 76% of the total flow for the roundabout for one or more time segments]

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Capstone Rd - Ash Tree Ln	Mini-roundabout		1, 2, 3, 4	917.80	F

Junction Network Options

Driving side	Lighting	Road surface	In London	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	Normal/unknown		-40	2 - Capstone Rd South

Arms

Arms

Arm	Name	Description
1	Darland Farm Private Rd	
2	Capstone Rd South	
3	Capstone Rd West	
4	Ash Tree Lane	

Mini Roundabout Geometry

Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
1 - Darland Farm Private Rd	2.60	2.60	3.90	0.5	12.50	9.00	0.0	✓
2 - Capstone Rd South	3.10	3.10	5.20	2.7	16.00	12.70	0.0	✓
3 - Capstone Rd West	3.20	3.20	5.00	5.8	14.16	9.93	0.0	✓
4 - Ash Tree Lane	2.90	2.90	3.25	4.4	11.90	11.00	0.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Darland Farm Private Rd	0.470	712
2 - Capstone Rd South	0.514	919
3 - Capstone Rd West	0.523	1031
4 - Ash Tree Lane	0.600	861

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	Do Minimum	AM	ONE HOUR	07:45	09:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Darland Farm Private Rd		✓	0	100.000
2 - Capstone Rd South		✓	1119	100.000
3 - Capstone Rd West		✓	931	100.000
4 - Ash Tree Lane		✓	623	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Darland Farm Private Rd	2 - Capstone Rd South	3 - Capstone Rd West	4 - Ash Tree Lane
From	1 - Darland Farm Private Rd	0	0	0	0
	2 - Capstone Rd South	0	0	614	505
	3 - Capstone Rd West	0	621	0	310
	4 - Ash Tree Lane	0	390	233	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Darland Farm Private Rd	2 - Capstone Rd South	3 - Capstone Rd West	4 - Ash Tree Lane
From	1 - Darland Farm Private Rd	0	0	0	0
	2 - Capstone Rd South	0	0	1	3
	3 - Capstone Rd West	0	1	0	1
	4 - Ash Tree Lane	0	2	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - Darland Farm Private Rd	0.00	0.00	0.0	A
2 - Capstone Rd South	1.51	1412.18	322.8	F
3 - Capstone Rd West	1.22	476.37	109.8	F
4 - Ash Tree Lane	1.31	689.49	103.7	F

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Darland Farm Private Rd	0	911	283	0.000	0	0.0	0.000	A
2 - Capstone Rd South	842	170	832	1.013	780	15.5	49.997	E
3 - Capstone Rd West	701	352	847	0.828	684	4.2	20.571	C
4 - Ash Tree Lane	469	456	587	0.799	455	3.5	25.666	D

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Darland Farm Private Rd	0	1046	219	0.000	0	0.0	0.000	A
2 - Capstone Rd South	1006	193	820	1.227	817	62.8	185.532	F
3 - Capstone Rd West	837	369	838	0.998	796	14.6	56.359	F
4 - Ash Tree Lane	560	531	542	1.033	516	14.6	82.198	F

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Darland Farm Private Rd	0	1081	203	0.000	0	0.0	0.000	A
2 - Capstone Rd South	1232	196	818	1.506	818	166.3	512.281	F
3 - Capstone Rd West	1025	369	838	1.223	835	62.2	178.343	F
4 - Ash Tree Lane	686	557	527	1.302	525	55.0	255.472	F

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Darland Farm Private Rd	0	1084	202	0.000	0	0.0	0.000	A
2 - Capstone Rd South	1232	196	818	1.506	818	269.8	965.983	F
3 - Capstone Rd West	1025	369	838	1.223	837	109.1	377.078	F
4 - Ash Tree Lane	686	559	525	1.305	525	95.2	526.488	F

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Darland Farm Private Rd	0	1082	202	0.000	0	0.0	0.000	A
2 - Capstone Rd South	1006	197	818	1.230	818	316.8	1296.435	F
3 - Capstone Rd West	837	369	838	0.999	834	109.8	476.374	F
4 - Ash Tree Lane	560	556	527	1.063	526	103.7	689.493	F

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Darland Farm Private Rd	0	1077	205	0.000	0	0.0	0.000	A
2 - Capstone Rd South	842	196	819	1.029	818	322.8	1412.177	F
3 - Capstone Rd West	701	369	838	0.836	830	77.5	407.298	F
4 - Ash Tree Lane	469	554	528	0.888	523	90.1	667.453	F

Do Minimum, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 2 and 4 have 70% of the total flow for the roundabout for one or more time segments]

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Capstone Rd - Ash Tree Ln	Mini-roundabout		1, 2, 3, 4	2522.53	F

Junction Network Options

Driving side	Lighting	Road surface	In London	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	Normal/unknown		-55	4 - Ash Tree Lane

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	Do Minimum	PM	ONE HOUR	16:45	18:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Darland Farm Private Rd		✓	0	100.000
2 - Capstone Rd South		✓	1106	100.000
3 - Capstone Rd West		✓	921	100.000
4 - Ash Tree Lane		✓	1115	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Darland Farm Private Rd	2 - Capstone Rd South	3 - Capstone Rd West	4 - Ash Tree Lane
From	1 - Darland Farm Private Rd	0	0	0	0
	2 - Capstone Rd South	0	0	594	512
	3 - Capstone Rd West	0	676	0	245
	4 - Ash Tree Lane	0	628	487	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Darland Farm Private Rd	2 - Capstone Rd South	3 - Capstone Rd West	4 - Ash Tree Lane
From	1 - Darland Farm Private Rd	0	0	0	0
	2 - Capstone Rd South	0	0	1	1
	3 - Capstone Rd West	0	1	0	1
	4 - Ash Tree Lane	0	1	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - Darland Farm Private Rd	0.00	0.00	0.0	A
2 - Capstone Rd South	1.51	1441.08	325.2	F
3 - Capstone Rd West	1.21	452.22	103.9	F
4 - Ash Tree Lane	2.49	5305.33	773.0	F

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Darland Farm Private Rd	0	1052	217	0.000	0	0.0	0.000	A
2 - Capstone Rd South	833	242	795	1.048	755	19.3	60.204	F
3 - Capstone Rd West	693	350	848	0.817	677	4.0	19.747	C
4 - Ash Tree Lane	839	497	562	1.493	555	71.2	247.838	F

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Darland Farm Private Rd	0	1093	198	0.000	0	0.0	0.000	A
2 - Capstone Rd South	994	224	804	1.237	802	67.5	207.199	F
3 - Capstone Rd West	828	371	837	0.989	790	13.5	53.303	F
4 - Ash Tree Lane	1002	580	513	1.955	513	193.6	960.201	F

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Darland Farm Private Rd	0	1105	192	0.000	0	0.0	0.000	A
2 - Capstone Rd South	1218	216	808	1.507	808	170.0	536.966	F
3 - Capstone Rd West	1014	374	836	1.214	832	59.1	170.146	F
4 - Ash Tree Lane	1228	610	494	2.483	494	377.0	2086.267	F

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Darland Farm Private Rd	0	1106	191	0.000	0	0.0	0.000	A
2 - Capstone Rd South	1218	215	808	1.506	808	272.3	991.568	F
3 - Capstone Rd West	1014	374	835	1.214	835	103.9	360.628	F
4 - Ash Tree Lane	1228	613	493	2.490	493	560.6	3415.583	F

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Darland Farm Private Rd	0	1104	192	0.000	0	0.0	0.000	A
2 - Capstone Rd South	994	217	808	1.231	808	318.9	1323.374	F
3 - Capstone Rd West	828	374	836	0.991	828	103.9	452.222	F
4 - Ash Tree Lane	1002	608	496	2.021	496	687.2	4535.126	F

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Darland Farm Private Rd	0	1104	192	0.000	0	0.0	0.000	A
2 - Capstone Rd South	833	217	808	1.031	808	325.2	1441.082	F
3 - Capstone Rd West	693	374	836	0.830	828	70.4	380.541	F
4 - Ash Tree Lane	839	607	496	1.692	496	773.0	5305.330	F

Do Something (800), AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 2 and 4 have 73% of the total flow for the roundabout for one or more time segments]

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Capstone Rd - Ash Tree Ln	Mini-roundabout		1, 2, 3, 4	57.81	F

Junction Network Options

Driving side	Lighting	Road surface	In London	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	Normal/unknown		-9	4 - Ash Tree Lane

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	Do Something (800)	AM	ONE HOUR	07:45	09:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Darland Farm Private Rd		✓	0	100.000
2 - Capstone Rd South		✓	703	100.000
3 - Capstone Rd West		✓	492	100.000
4 - Ash Tree Lane		✓	644	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Darland Farm Private Rd	2 - Capstone Rd South	3 - Capstone Rd West	4 - Ash Tree Lane
From	1 - Darland Farm Private Rd	0	0	0	0
	2 - Capstone Rd South	0	0	212	491
	3 - Capstone Rd West	0	200	0	292
	4 - Ash Tree Lane	0	428	216	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Darland Farm Private Rd	2 - Capstone Rd South	3 - Capstone Rd West	4 - Ash Tree Lane
From	1 - Darland Farm Private Rd	0	0	0	0
	2 - Capstone Rd South	0	0	1	1
	3 - Capstone Rd West	0	2	0	1
	4 - Ash Tree Lane	0	2	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - Darland Farm Private Rd	0.00	0.00	0.0	A
2 - Capstone Rd South	0.97	68.71	14.1	F
3 - Capstone Rd West	0.72	17.13	2.5	C
4 - Ash Tree Lane	0.97	77.00	14.5	F

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Darland Farm Private Rd	0	627	416	0.000	0	0.0	0.000	A
2 - Capstone Rd South	529	160	837	0.633	523	1.7	11.365	B
3 - Capstone Rd West	370	365	840	0.441	367	0.8	7.667	A
4 - Ash Tree Lane	485	149	771	0.629	478	1.7	12.313	B

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Darland Farm Private Rd	0	752	358	0.000	0	0.0	0.000	A
2 - Capstone Rd South	632	192	820	0.770	626	3.1	18.182	C
3 - Capstone Rd West	442	437	802	0.551	441	1.2	10.037	B
4 - Ash Tree Lane	579	179	753	0.769	573	3.1	19.813	C

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Darland Farm Private Rd	0	896	290	0.000	0	0.0	0.000	A
2 - Capstone Rd South	774	227	802	0.965	743	10.8	46.500	E
3 - Capstone Rd West	542	519	760	0.713	537	2.4	16.063	C
4 - Ash Tree Lane	709	218	730	0.972	677	11.1	51.661	F

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Darland Farm Private Rd	0	915	281	0.000	0	0.0	0.000	A
2 - Capstone Rd South	774	233	799	0.968	761	14.1	68.708	F
3 - Capstone Rd West	542	531	753	0.719	541	2.5	17.126	C
4 - Ash Tree Lane	709	220	729	0.973	695	14.5	77.004	F

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Darland Farm Private Rd	0	803	334	0.000	0	0.0	0.000	A
2 - Capstone Rd South	632	209	812	0.778	673	3.9	31.408	D
3 - Capstone Rd West	442	470	786	0.563	447	1.3	10.925	B
4 - Ash Tree Lane	579	182	752	0.770	622	3.8	34.666	D

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Darland Farm Private Rd	0	644	409	0.000	0	0.0	0.000	A
2 - Capstone Rd South	529	165	834	0.634	538	1.8	12.590	B
3 - Capstone Rd West	370	376	835	0.444	372	0.8	7.932	A
4 - Ash Tree Lane	485	151	770	0.630	493	1.8	13.659	B

Do Something (800), PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 2 and 4 have 72% of the total flow for the roundabout for one or more time segments][Arms 3 and 4 have 74% of the total flow for the roundabout for one or more time segments]

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Capstone Rd - Ash Tree Ln	Mini-roundabout		1, 2, 3, 4	768.96	F

Junction Network Options

Driving side	Lighting	Road surface	In London	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	Normal/unknown		-41	4 - Ash Tree Lane

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	Do Something (800)	PM	ONE HOUR	16:45	18:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Darland Farm Private Rd		✓	0	100.000
2 - Capstone Rd South		✓	571	100.000
3 - Capstone Rd West		✓	597	100.000
4 - Ash Tree Lane		✓	1041	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Darland Farm Private Rd	2 - Capstone Rd South	3 - Capstone Rd West	4 - Ash Tree Lane
From	1 - Darland Farm Private Rd	0	0	0	0
	2 - Capstone Rd South	0	0	162	409
	3 - Capstone Rd West	0	226	0	371
	4 - Ash Tree Lane	0	631	410	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Darland Farm Private Rd	2 - Capstone Rd South	3 - Capstone Rd West	4 - Ash Tree Lane
From	1 - Darland Farm Private Rd	0	0	0	0
	2 - Capstone Rd South	0	0	2	1
	3 - Capstone Rd West	0	0	0	1
	4 - Ash Tree Lane	0	1	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - Darland Farm Private Rd	0.00	0.00	0.0	A
2 - Capstone Rd South	0.81	24.41	4.1	C
3 - Capstone Rd West	0.83	25.39	4.4	D
4 - Ash Tree Lane	1.61	1603.78	339.6	F

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Darland Farm Private Rd	0	885	295	0.000	0	0.0	0.000	A
2 - Capstone Rd South	430	282	774	0.555	425	1.2	10.303	B
3 - Capstone Rd West	449	304	872	0.515	445	1.0	8.410	A
4 - Ash Tree Lane	784	169	760	1.032	717	16.8	57.017	F

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Darland Farm Private Rd	0	939	270	0.000	0	0.0	0.000	A
2 - Capstone Rd South	513	290	770	0.667	510	1.9	13.891	B
3 - Capstone Rd West	537	366	840	0.639	534	1.7	11.733	B
4 - Ash Tree Lane	936	202	739	1.266	737	66.5	218.249	F

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Darland Farm Private Rd	0	959	261	0.000	0	0.0	0.000	A
2 - Capstone Rd South	629	281	775	0.811	621	3.9	22.598	C
3 - Capstone Rd West	657	445	799	0.823	648	4.1	22.680	C
4 - Ash Tree Lane	1146	245	714	1.606	713	174.7	617.775	F

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Darland Farm Private Rd	0	960	260	0.000	0	0.0	0.000	A
2 - Capstone Rd South	629	280	775	0.811	628	4.1	24.408	C
3 - Capstone Rd West	657	450	796	0.826	656	4.4	25.388	D
4 - Ash Tree Lane	1146	248	712	1.610	712	283.3	1138.853	F

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Darland Farm Private Rd	0	943	268	0.000	0	0.0	0.000	A
2 - Capstone Rd South	513	290	770	0.667	521	2.1	15.077	C
3 - Capstone Rd West	537	373	836	0.642	547	1.9	12.939	B
4 - Ash Tree Lane	936	207	737	1.271	736	333.1	1495.633	F

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Darland Farm Private Rd	0	929	275	0.000	0	0.0	0.000	A
2 - Capstone Rd South	430	298	766	0.561	433	1.3	11.057	B
3 - Capstone Rd West	449	310	869	0.517	453	1.1	8.762	A
4 - Ash Tree Lane	784	171	758	1.034	758	339.6	1603.780	F

Junctions 9

ARCADY 9 - Roundabout Module

Filename: 9 - Pear Tree Ln - Hempstead Valley Dr - Hempstead Rd Double Mini Existing.j9
Path: P:\17-035 Hempstead Valley, Medway\Trans\Arcady\2019-03-19
Report generation date: 02/04/2019 14:26:51

Summary of junction performance

	AM					PM				
	Queue (Veh)	Delay (s)	RFC	LOS	Junction LOS	Queue (Veh)	Delay (s)	RFC	LOS	Junction LOS
	Do Minimum									
20 - Pear Tree Lane/ Hempstead Valley Dr. - 1 - Hempstead Valley Drive (S)	2.6	14.68	0.73	B	F	2.9	16.18	0.75	C	F
20 - Pear Tree Lane/ Hempstead Valley Dr. - 2 - Hempstead Road (SW)	11.1	177.79	1.07	F		114.4	1366.65	1.71	F	
20 - Pear Tree Lane/ Hempstead Valley Dr. - 3 - Pear Tree Lane (N)	32.8	126.04	1.09	F		67.3	387.38	1.20	F	
21 - Hempstead Valley Dr/ Hempstead Rd - 1 - Hempstead Valley Drive (S)	0.1	4.20	0.12	A	D	0.1	4.29	0.09	A	D
21 - Hempstead Valley Dr/ Hempstead Rd - 2 - Hempstead Valley Drive (N)	8.6	39.76	0.93	E		8.6	39.50	0.93	E	
21 - Hempstead Valley Dr/ Hempstead Rd - 3 - Hempstead Road (NE)	2.6	15.26	0.73	C		4.2	23.45	0.82	C	
	Do Something (800)									
20 - Pear Tree Lane/ Hempstead Valley Dr. - 1 - Hempstead Valley Drive (S)	2.4	13.61	0.71	B	F	3.4	18.30	0.78	C	F
20 - Pear Tree Lane/ Hempstead Valley Dr. - 2 - Hempstead Road (SW)	23.4	330.01	1.22	F		79.9	1022.49	1.58	F	
20 - Pear Tree Lane/ Hempstead Valley Dr. - 3 - Pear Tree Lane (N)	50.4	213.96	1.15	F		55.6	315.46	1.16	F	
21 - Hempstead Valley Dr/ Hempstead Rd - 1 - Hempstead Valley Drive (S)	0.1	4.16	0.10	A	D	0.1	4.53	0.10	A	D
21 - Hempstead Valley Dr/ Hempstead Rd - 2 - Hempstead Valley Drive (N)	8.6	39.57	0.93	E		8.7	41.65	0.92	E	
21 - Hempstead Valley Dr/ Hempstead Rd - 3 - Hempstead Road (NE)	2.7	15.94	0.74	C		5.5	29.42	0.86	D	

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	Pear Tree Lane, Hempstead Valley Drive & Hempstead Road Double Mini
Location	Hempstead Valley, Medway
Site number	
Date	22/01/2018
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	17-035
Enumerator	CA_WKS12\PLimbu
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

Mini-roundabout model	Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
JUNCTIONS 9	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	Do Minimum	AM	ONE HOUR	07:45	09:15	15	✓
D2	Do Minimum	PM	ONE HOUR	16:45	18:15	15	✓
D3	Do Something (800)	AM	ONE HOUR	07:45	09:15	15	✓
D4	Do Something (800)	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

Do Minimum, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout	20 - Pear Tree Lane/ Hempstead Valley Dr.	Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 1 and 3 have 86% of the total flow for the roundabout for one or more time segments]
Warning	Mini-roundabout	21 - Hempstead Valley Dr/ Hempstead Rd	Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 2 and 3 have 92% of the total flow for the roundabout for one or more time segments]
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
20	Pear Tree Lane/ Hempstead Valley Dr.	Mini-roundabout		1, 2, 3	90.58	F
21	Hempstead Valley Dr/ Hempstead Rd	Mini-roundabout		1, 2, 3	27.59	D

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

Junction	Arm	Name	Description
20 - Pear Tree Lane/ Hempstead Valley Dr.	**1**	Hempstead Valley Drive (S)	
	2	Hempstead Road (SW)	
	3	Pear Tree Lane (N)	
21 - Hempstead Valley Dr/ Hempstead Rd	**1**	Hempstead Valley Drive (S)	
	2	Hempstead Valley Drive (N)	
	3	Hempstead Road (NE)	

Mini Roundabout Geometry

Junction	Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
20 - Pear Tree Lane/ Hempstead Valley Dr.	**1 - Hempstead Valley Drive (S)**	2.77	2.77	5.30	3.6	10.39	7.46	0.0	
	2 - Hempstead Road (SW)	2.98	2.55	3.67	1.1	11.83	10.06	0.0	
	3 - Pear Tree Lane (N)	2.49	2.49	4.80	13.3	17.84	18.85	0.0	
21 - Hempstead Valley Dr/ Hempstead Rd	**1 - Hempstead Valley Drive (S)**	3.55	3.55	4.62	4.4	17.67	20.00	0.0	
	2 - Hempstead Valley Drive (N)	3.15	2.83	6.00	2.5	9.90	5.54	0.0	
	3 - Hempstead Road (NE)	3.88	3.68	6.20	3.1	11.39	8.50	0.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Junction	Arm	Final slope	Final intercept (PCU/hr)
20 - Pear Tree Lane/ Hempstead Valley Dr.	1 - Hempstead Valley Drive (S)	0.611	949
	2 - Hempstead Road (SW)	0.585	661
	3 - Pear Tree Lane (N)	0.798	1373
21 - Hempstead Valley Dr/ Hempstead Rd	1 - Hempstead Valley Drive (S)	0.938	1581
	2 - Hempstead Valley Drive (N)	0.607	917
	3 - Hempstead Road (NE)	0.643	910

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	Do Minimum	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (Veh/hr)	Flow multiplier (%)	Internal storage space (PCU)
20 - Pear Tree Lane/ Hempstead Valley Dr.	1 - Hempstead Valley Drive (S)	21	2	Queue limited	Normal	0	100.00	8.75
21 - Hempstead Valley Dr/ Hempstead Rd	2 - Hempstead Valley Drive (N)	20	1	Queue limited	Normal	0	100.00	8.75

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
20 - Pear Tree Lane/ Hempstead Valley Dr.	1 - Hempstead Valley Drive (S)	✓				
	2 - Hempstead Road (SW)		ONE HOUR	✓	201	100.000
	3 - Pear Tree Lane (N)		ONE HOUR	✓	748	100.000
21 - Hempstead Valley Dr/ Hempstead Rd	1 - Hempstead Valley Drive (S)		ONE HOUR	✓	102	100.000
	2 - Hempstead Valley Drive (N)	✓				
	3 - Hempstead Road (NE)		ONE HOUR	✓	572	100.000

Origin-Destination Data

Demand (Veh/hr)

20 - Pear Tree Lane/ Hempstead Valley Dr.

		To		
		1 - Hempstead Valley Drive (S)	2 - Hempstead Road (SW)	3 - Pear Tree Lane (N)
From	1 - Hempstead Valley Drive (S)	0	211	382
	2 - Hempstead Road (SW)	85	0	116
	3 - Pear Tree Lane (N)	698	50	0

Demand (Veh/hr)

21 - Hempstead Valley Dr/ Hempstead Rd

		To		
		1 - Hempstead Valley Drive (S)	2 - Hempstead Valley Drive (N)	3 - Hempstead Road (NE)
From	1 - Hempstead Valley Drive (S)	0	55	47
	2 - Hempstead Valley Drive (N)	43	0	741
	3 - Hempstead Road (NE)	34	538	0

Vehicle Mix

Heavy Vehicle Percentages

20 - Pear Tree Lane/ Hempstead Valley Dr.

		To		
		1 - Hempstead Valley Drive (S)	2 - Hempstead Road (SW)	3 - Pear Tree Lane (N)
From	1 - Hempstead Valley Drive (S)	0	4	2
	2 - Hempstead Road (SW)	8	0	11
	3 - Pear Tree Lane (N)	1	1	0

Heavy Vehicle Percentages

21 - Hempstead Valley Dr/ Hempstead Rd

		To		
		1 - Hempstead Valley Drive (S)	2 - Hempstead Valley Drive (N)	3 - Hempstead Road (NE)
From	1 - Hempstead Valley Drive (S)	0	6	3
	2 - Hempstead Valley Drive (N)	5	0	2
	3 - Hempstead Road (NE)	1	2	0

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
20 - Pear Tree Lane/ Hempstead Valley Dr.	1 - Hempstead Valley Drive (S)	0.73	14.68	2.6	10.8	B	542	813
	2 - Hempstead Road (SW)	1.07	177.79	11.1	32.0	F	184	277
	3 - Pear Tree Lane (N)	1.09	126.04	32.8	79.0	F	686	1030
21 - Hempstead Valley Dr/ Hempstead Rd	1 - Hempstead Valley Drive (S)	0.12	4.20	0.1	0.5	A	94	140
	2 - Hempstead Valley Drive (N)	0.93	39.76	8.6	46.7	E	715	1073
	3 - Hempstead Road (NE)	0.73	15.26	2.6	11.5	C	525	787

Main Results for each time segment

07:45 - 08:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)
20 - Pear Tree Lane/ Hempstead Valley Dr.	1 - Hempstead Valley Drive (S)	441	110	37	902	0.489	437	586	0.0
	2 - Hempstead Road (SW)	151	38	282	449	0.337	149	193	0.0
	3 - Pear Tree Lane (N)	563	141	63	1306	0.431	560	368	0.0
21 - Hempstead Valley Dr/ Hempstead Rd	1 - Hempstead Valley Drive (S)	77	19	401	1144	0.067	77	57	0.0
	2 - Hempstead Valley Drive (N)	583	146	35	876	0.666	576	443	0.0
	3 - Hempstead Road (NE)	431	108	32	872	0.494	427	579	0.0

08:00 - 08:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)
20 - Pear Tree Lane/ Hempstead Valley Dr.	1 - Hempstead Valley Drive (S)	530	132	45	897	0.590	528	702	0.9
	2 - Hempstead Road (SW)	181	45	340	418	0.433	180	233	0.5
	3 - Pear Tree Lane (N)	672	168	76	1295	0.519	671	444	0.8
21 - Hempstead Valley Dr/ Hempstead Rd	1 - Hempstead Valley Drive (S)	92	23	482	1071	0.086	92	68	0.1
	2 - Hempstead Valley Drive (N)	700	175	42	872	0.802	692	531	1.9
	3 - Hempstead Road (NE)	514	129	38	868	0.593	512	697	1.0

08:15 - 08:30

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)
20 - Pear Tree Lane/ Hempstead Valley Dr.	1 - Hempstead Valley Drive (S)	646	162	52	893	0.724	642	809	1.4
	2 - Hempstead Road (SW)	221	55	414	242	0.914	204	280	0.7
	3 - Pear Tree Lane (N)	824	206	86	829	0.993	775	532	1.1
21 - Hempstead Valley Dr/ Hempstead Rd	1 - Hempstead Valley Drive (S)	112	28	588	973	0.115	112	80	0.1
	2 - Hempstead Valley Drive (N)	806	202	52	866	0.931	787	649	3.7
	3 - Hempstead Road (NE)	630	157	43	864	0.729	625	795	1.4

08:30 - 08:45

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)
20 - Pear Tree Lane/ Hempstead Valley Dr.	1 - Hempstead Valley Drive (S)	650	163	50	894	0.727	650	779	2.5
	2 - Hempstead Road (SW)	221	55	419	207	1.070	197	281	5.0
	3 - Pear Tree Lane (N)	824	206	83	754	1.092	745	532	13.2
21 - Hempstead Valley Dr/ Hempstead Rd	1 - Hempstead Valley Drive (S)	112	28	592	970	0.116	112	80	0.1
	2 - Hempstead Valley Drive (N)	775	194	52	866	0.895	775	653	8.6
	3 - Hempstead Road (NE)	630	157	43	865	0.728	630	785	2.5

08:45 - 09:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)
20 - Pear Tree Lane/ Hempstead Valley Dr.	1 - Hempstead Valley Drive (S)	536	134	50	894	0.599	540	784	2.6
	2 - Hempstead Road (SW)	181	45	348	223	0.811	202	242	11.1
	3 - Pear Tree Lane (N)	672	168	85	771	0.872	749	464	32.8
21 - Hempstead Valley Dr/ Hempstead Rd	1 - Hempstead Valley Drive (S)	92	23	488	1065	0.086	92	74	0.1
	2 - Hempstead Valley Drive (N)	781	195	42	872	0.895	781	537	8.6
	3 - Hempstead Road (NE)	514	129	43	865	0.595	519	780	2.6

09:00 - 09:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)
20 - Pear Tree Lane/ Hempstead Valley Dr.	1 - Hempstead Valley Drive (S)	447	112	41	900	0.497	449	647	1.5
	2 - Hempstead Road (SW)	151	38	289	445	0.340	173	201	5.9
	3 - Pear Tree Lane (N)	563	141	73	1297	0.434	615	389	13.8
21 - Hempstead Valley Dr/ Hempstead Rd	1 - Hempstead Valley Drive (S)	77	19	407	1139	0.067	77	62	0.1
	2 - Hempstead Valley Drive (N)	645	161	35	876	0.736	667	448	8.6
	3 - Hempstead Road (NE)	431	108	37	869	0.496	433	666	1.5

Queue Variation Results for each time segment

07:45 - 08:00

Junction	Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
20 - Pear Tree Lane/ Hempstead Valley Dr.	1 - Hempstead Valley Drive (S)	0.94	0.55	1.00	1.40	1.45			N/A	N/A
	2 - Hempstead Road (SW)	0.50	0.00	0.00	0.50	0.50			N/A	N/A
	3 - Pear Tree Lane (N)	0.75	0.38	0.97	1.39	1.45			N/A	N/A
21 - Hempstead Valley Dr/ Hempstead Rd	1 - Hempstead Valley Drive (S)	0.07	0.00	0.00	0.07	0.07			N/A	N/A
	2 - Hempstead Valley Drive (N)	1.92	0.66	1.39	2.57	2.87			N/A	N/A
	3 - Hempstead Road (NE)	0.96	0.55	1.00	1.40	1.45			N/A	N/A

08:00 - 08:15

Junction	Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
20 - Pear Tree Lane/ Hempstead Valley Dr.	1 - Hempstead Valley Drive (S)	1.40	0.08	1.04	2.85	3.87			N/A	N/A
	2 - Hempstead Road (SW)	0.74	0.04	0.45	1.53	2.16			N/A	N/A
	3 - Pear Tree Lane (N)	1.07	0.03	0.34	2.51	5.27			N/A	N/A
21 - Hempstead Valley Dr/ Hempstead Rd	1 - Hempstead Valley Drive (S)	0.09	0.03	0.25	0.45	0.48			N/A	N/A
	2 - Hempstead Valley Drive (N)	3.68	0.10	1.47	9.08	12.77			N/A	N/A
	3 - Hempstead Road (NE)	1.42	0.08	1.04	2.87	3.90			N/A	N/A

08:15 - 08:30

Junction	Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
20 - Pear Tree Lane/ Hempstead Valley Dr.	1 - Hempstead Valley Drive (S)	2.49	0.03	0.30	2.49	10.84			N/A	N/A
	2 - Hempstead Road (SW)	5.01	0.10	1.76	13.10	18.85			N/A	N/A
	3 - Pear Tree Lane (N)	13.24	0.34	7.52	32.21	43.49			N/A	N/A
21 - Hempstead Valley Dr/ Hempstead Rd	1 - Hempstead Valley Drive (S)	0.13	0.03	0.26	0.46	0.49			N/A	N/A
	2 - Hempstead Valley Drive (N)	8.56	0.08	1.64	24.50	38.06			N/A	N/A
	3 - Hempstead Road (NE)	2.54	0.03	0.30	2.54	11.51			N/A	N/A

08:30 - 08:45

Junction	Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
20 - Pear Tree Lane/ Hempstead Valley Dr.	1 - Hempstead Valley Drive (S)	2.58	0.03	0.28	2.58	6.04			N/A	N/A
	2 - Hempstead Road (SW)	11.11	0.69	7.45	24.63	31.95			N/A	N/A
	3 - Pear Tree Lane (N)	32.84	4.89	26.75	64.33	78.99			N/A	N/A
21 - Hempstead Valley Dr/ Hempstead Rd	1 - Hempstead Valley Drive (S)	0.13	0.00	0.00	0.13	0.13			N/A	N/A
	2 - Hempstead Valley Drive (N)	8.56	0.04	0.42	22.87	46.68			N/A	N/A
	3 - Hempstead Road (NE)	2.60	0.03	0.28	2.60	6.40			N/A	N/A

08:45 - 09:00

Junction	Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
20 - Pear Tree Lane/ Hempstead Valley Dr.	1 - Hempstead Valley Drive (S)	1.53	0.06	0.83	3.63	5.24			N/A	N/A
	2 - Hempstead Road (SW)	5.90	1.95	5.06	8.79	10.04			N/A	N/A
	3 - Pear Tree Lane (N)	13.82	7.52	12.95	18.53	20.34			N/A	N/A
21 - Hempstead Valley Dr/ Hempstead Rd	1 - Hempstead Valley Drive (S)	0.09	0.00	0.00	0.09	0.09			N/A	N/A
	2 - Hempstead Valley Drive (N)	8.56	0.13	3.47	22.57	32.14			N/A	N/A
	3 - Hempstead Road (NE)	1.51	0.06	0.72	3.65	5.39			N/A	N/A

09:00 - 09:15

Junction	Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
20 - Pear Tree Lane/ Hempstead Valley Dr.	1 - Hempstead Valley Drive (S)	1.00	0.04	0.42	2.45	3.88			N/A	N/A
	2 - Hempstead Road (SW)	0.53	0.03	0.29	1.03	2.28			N/A	N/A
	3 - Pear Tree Lane (N)	0.77	0.03	0.29	1.16	3.31			N/A	N/A
21 - Hempstead Valley Dr/ Hempstead Rd	1 - Hempstead Valley Drive (S)	0.07	0.00	0.00	0.07	0.07			N/A	N/A
	2 - Hempstead Valley Drive (N)	2.97	0.04	0.41	8.09	15.07			N/A	N/A
	3 - Hempstead Road (NE)	1.00	0.04	0.41	2.46	3.95			N/A	N/A

Do Minimum, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout	21 - Hempstead Valley Dr/ Hempstead Rd	Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 2 and 3 have 95% of the total flow for the roundabout for one or more time segments]
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
20	Pear Tree Lane/ Hempstead Valley Dr.	Mini-roundabout		1, 2, 3	481.17	F
21	Hempstead Valley Dr/ Hempstead Rd	Mini-roundabout		1, 2, 3	31.30	D

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	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	Do Minimum	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (Veh/hr)	Flow multiplier (%)	Internal storage space (PCU)
20 - Pear Tree Lane/ Hempstead Valley Dr.	1 - Hempstead Valley Drive (S)	21	2	Queue limited	Normal	0	100.00	8.75
21 - Hempstead Valley Dr/ Hempstead Rd	2 - Hempstead Valley Drive (N)	20	1	Queue limited	Normal	0	100.00	8.75

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
20 - Pear Tree Lane/ Hempstead Valley Dr.	1 - Hempstead Valley Drive (S)	✓				
	2 - Hempstead Road (SW)		ONE HOUR	✓	397	100.000
	3 - Pear Tree Lane (N)		ONE HOUR	✓	685	100.000
21 - Hempstead Valley Dr/ Hempstead Rd	1 - Hempstead Valley Drive (S)		ONE HOUR	✓	76	100.000
	2 - Hempstead Valley Drive (N)	✓				
	3 - Hempstead Road (NE)		ONE HOUR	✓	606	100.000

Origin-Destination Data

Demand (Veh/hr)

20 - Pear Tree Lane/ Hempstead Valley Dr.

		To		
		1 - Hempstead Valley Drive (S)	2 - Hempstead Road (SW)	3 - Pear Tree Lane (N)
From	1 - Hempstead Valley Drive (S)	0	131	473
	2 - Hempstead Road (SW)	319	0	78
	3 - Pear Tree Lane (N)	623	62	0

Demand (Veh/hr)

21 - Hempstead Valley Dr/ Hempstead Rd

		To		
		1 - Hempstead Valley Drive (S)	2 - Hempstead Valley Drive (N)	3 - Hempstead Road (NE)
From	1 - Hempstead Valley Drive (S)	0	36	40
	2 - Hempstead Valley Drive (N)	122	0	822
	3 - Hempstead Road (NE)	40	566	0

Vehicle Mix

Heavy Vehicle Percentages

20 - Pear Tree Lane/ Hempstead Valley Dr.

		To		
		1 - Hempstead Valley Drive (S)	2 - Hempstead Road (SW)	3 - Pear Tree Lane (N)
From	1 - Hempstead Valley Drive (S)	0	11	1
	2 - Hempstead Road (SW)	1	0	1
	3 - Pear Tree Lane (N)	2	4	0

Heavy Vehicle Percentages

21 - Hempstead Valley Dr/ Hempstead Rd

		To		
		1 - Hempstead Valley Drive (S)	2 - Hempstead Valley Drive (N)	3 - Hempstead Road (NE)
From	1 - Hempstead Valley Drive (S)	0	12	1
	2 - Hempstead Valley Drive (N)	6	0	1
	3 - Hempstead Road (NE)	1	3	0

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
20 - Pear Tree Lane/ Hempstead Valley Dr.	1 - Hempstead Valley Drive (S)	0.75	16.18	2.9	12.7	C	554	830
	2 - Hempstead Road (SW)	1.71	1366.65	114.4	200.0	F	364	546
	3 - Pear Tree Lane (N)	1.20	387.38	67.3	122.1	F	629	943
21 - Hempstead Valley Dr/ Hempstead Rd	1 - Hempstead Valley Drive (S)	0.09	4.29	0.1	0.5	A	70	105
	2 - Hempstead Valley Drive (N)	0.93	39.50	8.6	47.4	E	778	1168
	3 - Hempstead Road (NE)	0.82	23.45	4.2	21.3	C	556	834

Main Results for each time segment

16:45 - 17:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)
20 - Pear Tree Lane/ Hempstead Valley Dr.	1 - Hempstead Valley Drive (S)	450	113	46	892	0.505	446	700	0.0
	2 - Hempstead Road (SW)	299	75	349	450	0.664	292	143	0.0
	3 - Pear Tree Lane (N)	516	129	234	1159	0.445	513	407	0.0
21 - Hempstead Valley Dr/ Hempstead Rd	1 - Hempstead Valley Drive (S)	57	14	422	1105	0.052	57	119	0.0
	2 - Hempstead Valley Drive (N)	701	175	30	884	0.792	687	449	0.0
	3 - Hempstead Road (NE)	456	114	89	826	0.552	451	628	0.0

17:00 - 17:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)
20 - Pear Tree Lane/ Hempstead Valley Dr.	1 - Hempstead Valley Drive (S)	540	135	55	887	0.609	538	820	1.0
	2 - Hempstead Road (SW)	357	89	422	384	0.930	338	171	1.8
	3 - Pear Tree Lane (N)	616	154	272	748	0.824	603	488	0.8
21 - Hempstead Valley Dr/ Hempstead Rd	1 - Hempstead Valley Drive (S)	68	17	506	1028	0.066	68	139	0.1
	2 - Hempstead Valley Drive (N)	820	205	36	881	0.931	800	538	3.5
	3 - Hempstead Road (NE)	545	136	103	816	0.667	542	732	1.2

17:15 - 17:30

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)
20 - Pear Tree Lane/ Hempstead Valley Dr.	1 - Hempstead Valley Drive (S)	658	164	56	886	0.742	653	784	1.5
	2 - Hempstead Road (SW)	437	109	511	277	1.580	275	198	6.5
	3 - Pear Tree Lane (N)	754	189	221	628	1.200	619	565	4.1
21 - Hempstead Valley Dr/ Hempstead Rd	1 - Hempstead Valley Drive (S)	84	21	616	929	0.090	84	145	0.1
	2 - Hempstead Valley Drive (N)	785	196	44	876	0.896	785	655	8.6
	3 - Hempstead Road (NE)	667	167	101	818	0.816	659	727	1.9

17:30 - 17:45

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)
20 - Pear Tree Lane/ Hempstead Valley Dr.	1 - Hempstead Valley Drive (S)	664	166	58	885	0.751	664	784	2.7
	2 - Hempstead Road (SW)	437	109	520	255	1.711	255	202	47.0
	3 - Pear Tree Lane (N)	754	189	205	638	1.183	636	570	37.8
21 - Hempstead Valley Dr/ Hempstead Rd	1 - Hempstead Valley Drive (S)	84	21	622	923	0.091	84	145	0.1
	2 - Hempstead Valley Drive (N)	785	196	44	876	0.896	785	662	8.6
	3 - Hempstead Road (NE)	667	167	101	818	0.816	666	727	3.9

17:45 - 18:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)
20 - Pear Tree Lane/ Hempstead Valley Dr.	1 - Hempstead Valley Drive (S)	551	138	57	885	0.622	556	788	2.9
	2 - Hempstead Road (SW)	357	89	435	269	1.325	269	177	92.5
	3 - Pear Tree Lane (N)	616	154	216	632	0.975	629	488	67.3
21 - Hempstead Valley Dr/ Hempstead Rd	1 - Hempstead Valley Drive (S)	68	17	517	1019	0.067	68	138	0.1
	2 - Hempstead Valley Drive (N)	789	197	36	881	0.896	789	549	8.6
	3 - Hempstead Road (NE)	545	136	102	817	0.667	553	723	4.2

18:00 - 18:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)
20 - Pear Tree Lane/ Hempstead Valley Dr.	1 - Hempstead Valley Drive (S)	458	114	55	887	0.516	460	792	1.7
	2 - Hempstead Road (SW)	299	75	360	303	0.985	303	154	114.4
	3 - Pear Tree Lane (N)	516	129	244	612	0.843	603	420	64.1
21 - Hempstead Valley Dr/ Hempstead Rd	1 - Hempstead Valley Drive (S)	57	14	429	1098	0.052	57	133	0.1
	2 - Hempstead Valley Drive (N)	792	198	30	884	0.896	792	456	8.6
	3 - Hempstead Road (NE)	456	114	102	817	0.558	459	720	2.1

Queue Variation Results for each time segment

16:45 - 17:00

Junction	Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
20 - Pear Tree Lane/ Hempstead Valley Dr.	1 - Hempstead Valley Drive (S)	1.00	0.55	1.00	1.40	1.45			N/A	N/A
	2 - Hempstead Road (SW)	1.84	0.03	0.25	1.84	1.84			N/A	N/A
	3 - Pear Tree Lane (N)	0.79	0.03	0.27	0.79	1.43			N/A	N/A
21 - Hempstead Valley Dr/ Hempstead Rd	1 - Hempstead Valley Drive (S)	0.05	0.00	0.00	0.05	0.05			N/A	N/A
	2 - Hempstead Valley Drive (N)	3.48	0.54	2.40	6.46	7.99			N/A	N/A
	3 - Hempstead Road (NE)	1.20	0.55	1.00	1.40	1.45			N/A	N/A

17:00 - 17:15

Junction	Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
20 - Pear Tree Lane/ Hempstead Valley Dr.	1 - Hempstead Valley Drive (S)	1.52	0.08	1.06	3.19	4.42			N/A	N/A
	2 - Hempstead Road (SW)	6.50	0.03	0.27	6.50	6.50			N/A	N/A
	3 - Pear Tree Lane (N)	4.06	0.04	0.40	10.93	21.42			N/A	N/A
21 - Hempstead Valley Dr/ Hempstead Rd	1 - Hempstead Valley Drive (S)	0.07	0.03	0.25	0.45	0.48			N/A	N/A
	2 - Hempstead Valley Drive (N)	8.61	0.65	5.85	18.55	23.86			N/A	N/A
	3 - Hempstead Road (NE)	1.93	0.08	1.15	4.48	6.30			N/A	N/A

17:15 - 17:30

Junction	Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
20 - Pear Tree Lane/ Hempstead Valley Dr.	1 - Hempstead Valley Drive (S)	2.71	0.03	0.30	3.09	12.74			N/A	N/A
	2 - Hempstead Road (SW)	47.03	0.30	20.85	126.68	180.05			N/A	N/A
	3 - Pear Tree Lane (N)	37.83	12.52	34.27	62.54	72.60			N/A	N/A
21 - Hempstead Valley Dr/ Hempstead Rd	1 - Hempstead Valley Drive (S)	0.10	0.03	0.26	0.47	0.49			N/A	N/A
	2 - Hempstead Valley Drive (N)	8.61	0.06	1.45	25.01	40.60			N/A	N/A
	3 - Hempstead Road (NE)	3.95	0.04	0.36	9.29	21.35			N/A	N/A

17:30 - 17:45

Junction	Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
20 - Pear Tree Lane/ Hempstead Valley Dr.	1 - Hempstead Valley Drive (S)	2.89	0.03	0.28	2.89	8.17			N/A	N/A
	2 - Hempstead Road (SW)	92.47	>199	>199	>199	>199			N/A	N/A
	3 - Pear Tree Lane (N)	67.32	29.87	63.38	102.29	115.60			N/A	N/A
21 - Hempstead Valley Dr/ Hempstead Rd	1 - Hempstead Valley Drive (S)	0.10	0.00	0.00	0.10	0.10			N/A	N/A
	2 - Hempstead Valley Drive (N)	8.61	0.04	0.40	21.50	47.09			N/A	N/A
	3 - Hempstead Road (NE)	4.16	0.03	0.30	4.16	18.77			N/A	N/A

17:45 - 18:00

Junction	Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
20 - Pear Tree Lane/ Hempstead Valley Dr.	1 - Hempstead Valley Drive (S)	1.70	0.06	0.80	4.16	6.17			N/A	N/A
	2 - Hempstead Road (SW)	114.39	>199	>199	>199	>199			N/A	N/A
	3 - Pear Tree Lane (N)	64.06	22.14	58.56	105.46	122.11			N/A	N/A
21 - Hempstead Valley Dr/ Hempstead Rd	1 - Hempstead Valley Drive (S)	0.07	0.00	0.00	0.07	0.07			N/A	N/A
	2 - Hempstead Valley Drive (N)	8.61	0.04	0.37	19.15	47.39			N/A	N/A
	3 - Hempstead Road (NE)	2.08	0.05	0.45	5.67	9.46			N/A	N/A

18:00 - 18:15

Junction	Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
20 - Pear Tree Lane/ Hempstead Valley Dr.	1 - Hempstead Valley Drive (S)	1.09	0.04	0.41	2.72	4.50			N/A	N/A
	2 - Hempstead Road (SW)	113.33	>199	>199	>199	>199			N/A	N/A
	3 - Pear Tree Lane (N)	42.31	6.65	34.76	82.59	101.21			N/A	N/A
21 - Hempstead Valley Dr/ Hempstead Rd	1 - Hempstead Valley Drive (S)	0.06	0.00	0.00	0.06	0.06			N/A	N/A
	2 - Hempstead Valley Drive (N)	8.61	0.05	0.49	24.62	44.79			N/A	N/A
	3 - Hempstead Road (NE)	1.29	0.04	0.36	3.21	6.35			N/A	N/A

Do Something (800), AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout	20 - Pear Tree Lane/ Hempstead Valley Dr.	Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 1 and 3 have 83% of the total flow for the roundabout for one or more time segments]
Warning	Mini-roundabout	21 - Hempstead Valley Dr/ Hempstead Rd	Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 2 and 3 have 93% of the total flow for the roundabout for one or more time segments]
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
20	Pear Tree Lane/ Hempstead Valley Dr.	Mini-roundabout		1, 2, 3	161.66	F
21	Hempstead Valley Dr/ Hempstead Rd	Mini-roundabout		1, 2, 3	28.25	D

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	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	Do Something (800)	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (Veh/hr)	Flow multiplier (%)	Internal storage space (PCU)
20 - Pear Tree Lane/ Hempstead Valley Dr.	**1 - Hempstead Valley Drive (S)**	21	2	Queue limited	Normal	0	100.00	8.75
21 - Hempstead Valley Dr/ Hempstead Rd	**2 - Hempstead Valley Drive (N)**	20	1	Queue limited	Normal	0	100.00	8.75

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
20 - Pear Tree Lane/ Hempstead Valley Dr.	**1 - Hempstead Valley Drive (S)**	✓				
	2 - Hempstead Road (SW)		ONE HOUR	✓	238	100.000
	3 - Pear Tree Lane (N)		ONE HOUR	✓	773	100.000
21 - Hempstead Valley Dr/ Hempstead Rd	**1 - Hempstead Valley Drive (S)**		ONE HOUR	✓	87	100.000
	2 - Hempstead Valley Drive (N)	✓				
	3 - Hempstead Road (NE)		ONE HOUR	✓	579	100.000

Origin-Destination Data

20 - Pear Tree Lane/ Hempstead Valley Dr.

Demand (Veh/hr)

		To		
		1 - Hempstead Valley Drive (S)	2 - Hempstead Road (SW)	3 - Pear Tree Lane (N)
From	1 - Hempstead Valley Drive (S)	0	186	404
	2 - Hempstead Road (SW)	78	0	160
	3 - Pear Tree Lane (N)	743	30	0

21 - Hempstead Valley Dr/ Hempstead Rd

Demand (Veh/hr)

		To		
		1 - Hempstead Valley Drive (S)	2 - Hempstead Valley Drive (N)	3 - Hempstead Road (NE)
From	1 - Hempstead Valley Drive (S)	0	46	41
	2 - Hempstead Valley Drive (N)	49	0	774
	3 - Hempstead Road (NE)	37	542	0

Vehicle Mix

20 - Pear Tree Lane/ Hempstead Valley Dr.

Heavy Vehicle Percentages

		To		
		1 - Hempstead Valley Drive (S)	2 - Hempstead Road (SW)	3 - Pear Tree Lane (N)
From	1 - Hempstead Valley Drive (S)	0	2	2
	2 - Hempstead Road (SW)	2	0	28
	3 - Pear Tree Lane (N)	2	1	0

21 - Hempstead Valley Dr/ Hempstead Rd

Heavy Vehicle Percentages

		To		
		1 - Hempstead Valley Drive (S)	2 - Hempstead Valley Drive (N)	3 - Hempstead Road (NE)
From	1 - Hempstead Valley Drive (S)	0	8	2
	2 - Hempstead Valley Drive (N)	7	0	2
	3 - Hempstead Road (NE)	0	2	0

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
20 - Pear Tree Lane/ Hempstead Valley Dr.	1 - Hempstead Valley Drive (S)	0.71	13.61	2.4	9.2	B	541	812
	2 - Hempstead Road (SW)	1.22	330.01	23.4	48.8	F	218	328
	3 - Pear Tree Lane (N)	1.15	213.96	50.4	98.1	F	709	1064
21 - Hempstead Valley Dr/ Hempstead Rd	1 - Hempstead Valley Drive (S)	0.10	4.16	0.1	0.5	A	80	120
	2 - Hempstead Valley Drive (N)	0.93	39.57	8.6	47.2	E	750	1125
	3 - Hempstead Road (NE)	0.74	15.94	2.7	12.6	C	531	797

Main Results for each time segment

07:45 - 08:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)
20 - Pear Tree Lane/ Hempstead Valley Dr.	1 - Hempstead Valley Drive (S)	441	110	22	917	0.481	437	614	0.0
	2 - Hempstead Road (SW)	179	45	299	404	0.444	176	160	0.0
	3 - Pear Tree Lane (N)	582	145	58	1301	0.447	579	418	0.0
21 - Hempstead Valley Dr/ Hempstead Rd	1 - Hempstead Valley Drive (S)	65	16	404	1135	0.058	65	64	0.0
	2 - Hempstead Valley Drive (N)	612	153	31	878	0.697	603	439	0.0
	3 - Hempstead Road (NE)	436	109	36	869	0.501	432	598	0.0

08:00 - 08:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)
20 - Pear Tree Lane/ Hempstead Valley Dr.	1 - Hempstead Valley Drive (S)	529	132	27	915	0.579	527	736	0.9
	2 - Hempstead Road (SW)	214	53	361	373	0.574	212	193	0.8
	3 - Pear Tree Lane (N)	695	174	69	1291	0.538	694	504	0.8
21 - Hempstead Valley Dr/ Hempstead Rd	1 - Hempstead Valley Drive (S)	78	20	485	1062	0.074	78	76	0.1
	2 - Hempstead Valley Drive (N)	734	183	37	874	0.840	724	527	2.2
	3 - Hempstead Road (NE)	521	130	43	864	0.602	519	718	1.0

08:15 - 08:30

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)
20 - Pear Tree Lane/ Hempstead Valley Dr.	1 - Hempstead Valley Drive (S)	646	161	30	913	0.707	642	809	1.3
	2 - Hempstead Road (SW)	262	66	440	240	1.092	223	232	1.3
	3 - Pear Tree Lane (N)	851	213	73	796	1.069	766	590	1.1
21 - Hempstead Valley Dr/ Hempstead Rd	1 - Hempstead Valley Drive (S)	96	24	592	965	0.099	96	88	0.1
	2 - Hempstead Valley Drive (N)	807	202	45	869	0.928	791	643	4.6
	3 - Hempstead Road (NE)	637	159	47	862	0.740	633	789	1.5

08:30 - 08:45

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)
20 - Pear Tree Lane/ Hempstead Valley Dr.	1 - Hempstead Valley Drive (S)	650	163	29	913	0.712	650	780	2.3
	2 - Hempstead Road (SW)	262	66	445	215	1.219	212	234	10.9
	3 - Pear Tree Lane (N)	851	213	70	743	1.145	740	588	22.5
21 - Hempstead Valley Dr/ Hempstead Rd	1 - Hempstead Valley Drive (S)	96	24	596	961	0.100	96	87	0.1
	2 - Hempstead Valley Drive (N)	778	195	45	869	0.895	778	647	8.6
	3 - Hempstead Road (NE)	637	159	46	862	0.739	637	777	2.7

08:45 - 09:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)
20 - Pear Tree Lane/ Hempstead Valley Dr.	1 - Hempstead Valley Drive (S)	536	134	29	913	0.586	539	785	2.4
	2 - Hempstead Road (SW)	214	53	369	239	0.894	230	199	23.4
	3 - Pear Tree Lane (N)	695	174	75	753	0.923	738	524	50.4
21 - Hempstead Valley Dr/ Hempstead Rd	1 - Hempstead Valley Drive (S)	78	20	492	1056	0.074	78	80	0.1
	2 - Hempstead Valley Drive (N)	783	196	37	874	0.895	783	533	8.6
	3 - Hempstead Road (NE)	521	130	47	862	0.604	525	773	2.7

09:00 - 09:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)
20 - Pear Tree Lane/ Hempstead Valley Dr.	1 - Hempstead Valley Drive (S)	447	112	29	914	0.489	449	788	1.5
	2 - Hempstead Road (SW)	179	45	307	285	0.628	249	170	19.5
	3 - Pear Tree Lane (N)	582	145	82	1084	0.537	735	474	39.5
21 - Hempstead Valley Dr/ Hempstead Rd	1 - Hempstead Valley Drive (S)	65	16	410	1130	0.058	66	75	0.1
	2 - Hempstead Valley Drive (N)	786	196	31	878	0.895	786	445	8.6
	3 - Hempstead Road (NE)	436	109	47	862	0.506	438	770	1.6

Queue Variation Results for each time segment

07:45 - 08:00

Junction	Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
20 - Pear Tree Lane/ Hempstead Valley Dr.	1 - Hempstead Valley Drive (S)	0.91	0.55	1.00	1.40	1.45			N/A	N/A
	2 - Hempstead Road (SW)	0.77	0.13	0.89	1.40	1.47			N/A	N/A
	3 - Pear Tree Lane (N)	0.80	0.13	0.90	1.42	1.48			N/A	N/A
21 - Hempstead Valley Dr/ Hempstead Rd	1 - Hempstead Valley Drive (S)	0.06	0.00	0.00	0.06	0.06			N/A	N/A
	2 - Hempstead Valley Drive (N)	2.20	0.14	1.11	4.49	5.88			N/A	N/A
	3 - Hempstead Road (NE)	0.99	0.55	1.00	1.40	1.45			N/A	N/A

08:00 - 08:15

Junction	Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
20 - Pear Tree Lane/ Hempstead Valley Dr.	1 - Hempstead Valley Drive (S)	1.34	0.08	1.03	2.67	3.60			N/A	N/A
	2 - Hempstead Road (SW)	1.28	0.04	0.43	3.24	5.26			N/A	N/A
	3 - Pear Tree Lane (N)	1.15	0.03	0.32	2.35	5.84			N/A	N/A
21 - Hempstead Valley Dr/ Hempstead Rd	1 - Hempstead Valley Drive (S)	0.08	0.03	0.26	0.46	0.49			N/A	N/A
	2 - Hempstead Valley Drive (N)	4.56	0.08	1.26	12.23	18.05			N/A	N/A
	3 - Hempstead Road (NE)	1.47	0.08	1.05	3.02	4.18			N/A	N/A

08:15 - 08:30

Junction	Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
20 - Pear Tree Lane/ Hempstead Valley Dr.	1 - Hempstead Valley Drive (S)	2.31	0.03	0.29	2.31	9.15			N/A	N/A
	2 - Hempstead Road (SW)	10.95	1.13	8.47	21.47	26.59			N/A	N/A
	3 - Pear Tree Lane (N)	22.48	3.39	18.31	43.43	53.17			N/A	N/A
21 - Hempstead Valley Dr/ Hempstead Rd	1 - Hempstead Valley Drive (S)	0.11	0.03	0.26	0.47	0.49			N/A	N/A
	2 - Hempstead Valley Drive (N)	8.55	0.07	1.25	24.76	39.39			N/A	N/A
	3 - Hempstead Road (NE)	2.68	0.03	0.30	3.10	12.61			N/A	N/A

08:30 - 08:45

Junction	Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
20 - Pear Tree Lane/ Hempstead Valley Dr.	1 - Hempstead Valley Drive (S)	2.40	0.03	0.28	2.40	4.82			N/A	N/A
	2 - Hempstead Road (SW)	23.38	5.79	20.31	41.11	48.78			N/A	N/A
	3 - Pear Tree Lane (N)	50.36	16.29	45.60	84.23	98.08			N/A	N/A
21 - Hempstead Valley Dr/ Hempstead Rd	1 - Hempstead Valley Drive (S)	0.11	0.00	0.00	0.11	0.11			N/A	N/A
	2 - Hempstead Valley Drive (N)	8.55	0.04	0.40	21.83	46.80			N/A	N/A
	3 - Hempstead Road (NE)	2.75	0.03	0.28	2.75	7.32			N/A	N/A

08:45 - 09:00

Junction	Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
20 - Pear Tree Lane/ Hempstead Valley Dr.	1 - Hempstead Valley Drive (S)	1.45	0.06	0.88	3.28	4.69			N/A	N/A
	2 - Hempstead Road (SW)	19.47	7.28	17.73	30.48	34.91			N/A	N/A
	3 - Pear Tree Lane (N)	39.50	38.05	38.50	39.50	39.50			N/A	N/A
21 - Hempstead Valley Dr/ Hempstead Rd	1 - Hempstead Valley Drive (S)	0.08	0.00	0.00	0.08	0.08			N/A	N/A
	2 - Hempstead Valley Drive (N)	8.55	0.04	0.38	19.87	47.16			N/A	N/A
	3 - Hempstead Road (NE)	1.57	0.05	0.66	3.87	5.83			N/A	N/A

09:00 - 09:15

Junction	Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
20 - Pear Tree Lane/ Hempstead Valley Dr.	1 - Hempstead Valley Drive (S)	0.97	0.04	0.44	2.27	3.54			N/A	N/A
	2 - Hempstead Road (SW)	2.07	0.04	0.38	5.42	10.48			N/A	N/A
	3 - Pear Tree Lane (N)	1.19	0.03	0.30	1.55	5.69			N/A	N/A
21 - Hempstead Valley Dr/ Hempstead Rd	1 - Hempstead Valley Drive (S)	0.06	0.00	0.00	0.06	0.06			N/A	N/A
	2 - Hempstead Valley Drive (N)	8.55	0.05	0.77	24.82	43.36			N/A	N/A
	3 - Hempstead Road (NE)	1.04	0.04	0.40	2.60	4.30			N/A	N/A

Do Something (800), PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout	21 - Hempstead Valley Dr/ Hempstead Rd	Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 2 and 3 have 95% of the total flow for the roundabout for one or more time segments]
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
20	Pear Tree Lane/ Hempstead Valley Dr.	Mini-roundabout		1, 2, 3	350.42	F
21	Hempstead Valley Dr/ Hempstead Rd	Mini-roundabout		1, 2, 3	34.68	D

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	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	Do Something (800)	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (Veh/hr)	Flow multiplier (%)	Internal storage space (PCU)
20 - Pear Tree Lane/ Hempstead Valley Dr.	1 - Hempstead Valley Drive (S)	21	2	Queue limited	Normal	0	100.00	8.75
21 - Hempstead Valley Dr/ Hempstead Rd	2 - Hempstead Valley Drive (N)	20	1	Queue limited	Normal	0	100.00	8.75

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
20 - Pear Tree Lane/ Hempstead Valley Dr.	1 - Hempstead Valley Drive (S)	✓				
	2 - Hempstead Road (SW)		ONE HOUR	✓	344	100.000
	3 - Pear Tree Lane (N)		ONE HOUR	✓	687	100.000
21 - Hempstead Valley Dr/ Hempstead Rd	1 - Hempstead Valley Drive (S)		ONE HOUR	✓	76	100.000
	2 - Hempstead Valley Drive (N)	✓				
	3 - Hempstead Road (NE)		ONE HOUR	✓	649	100.000

Origin-Destination Data

Demand (Veh/hr)

20 - Pear Tree Lane/ Hempstead Valley Dr.

		To		
		1 - Hempstead Valley Drive (S)	2 - Hempstead Road (SW)	3 - Pear Tree Lane (N)
From	1 - Hempstead Valley Drive (S)	0	134	499
	2 - Hempstead Road (SW)	277	0	67
	3 - Pear Tree Lane (N)	626	61	0

Demand (Veh/hr)

21 - Hempstead Valley Dr/ Hempstead Rd

		To		
		1 - Hempstead Valley Drive (S)	2 - Hempstead Valley Drive (N)	3 - Hempstead Road (NE)
From	1 - Hempstead Valley Drive (S)	0	29	47
	2 - Hempstead Valley Drive (N)	112	0	793
	3 - Hempstead Road (NE)	46	603	0

Vehicle Mix

Heavy Vehicle Percentages

20 - Pear Tree Lane/ Hempstead Valley Dr.

		To		
		1 - Hempstead Valley Drive (S)	2 - Hempstead Road (SW)	3 - Pear Tree Lane (N)
From	1 - Hempstead Valley Drive (S)	0	8	2
	2 - Hempstead Road (SW)	2	0	10
	3 - Pear Tree Lane (N)	1	4	0

Heavy Vehicle Percentages

21 - Hempstead Valley Dr/ Hempstead Rd

		To		
		1 - Hempstead Valley Drive (S)	2 - Hempstead Valley Drive (N)	3 - Hempstead Road (NE)
From	1 - Hempstead Valley Drive (S)	0	16	3
	2 - Hempstead Valley Drive (N)	1	0	1
	3 - Hempstead Road (NE)	0	2	0

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
20 - Pear Tree Lane/ Hempstead Valley Dr.	1 - Hempstead Valley Drive (S)	0.78	18.30	3.4	15.9	C	575	863
	2 - Hempstead Road (SW)	1.58	1022.49	79.9	129.7	F	316	473
	3 - Pear Tree Lane (N)	1.16	315.46	55.6	105.8	F	630	946
21 - Hempstead Valley Dr/ Hempstead Rd	1 - Hempstead Valley Drive (S)	0.10	4.53	0.1	0.5	A	70	105
	2 - Hempstead Valley Drive (N)	0.92	41.65	8.7	47.7	E	776	1163
	3 - Hempstead Road (NE)	0.86	29.42	5.5	29.2	D	596	893

Main Results for each time segment

16:45 - 17:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)
20 - Pear Tree Lane/ Hempstead Valley Dr.	1 - Hempstead Valley Drive (S)	468	117	46	891	0.525	464	672	0.0
	2 - Hempstead Road (SW)	259	65	365	428	0.605	253	144	0.0
	3 - Pear Tree Lane (N)	517	129	204	1192	0.434	514	415	0.0
21 - Hempstead Valley Dr/ Hempstead Rd	1 - Hempstead Valley Drive (S)	57	14	449	1067	0.054	57	116	0.0
	2 - Hempstead Valley Drive (N)	674	169	35	886	0.761	663	471	0.0
	3 - Hempstead Road (NE)	489	122	82	841	0.581	483	616	0.0

17:00 - 17:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)
20 - Pear Tree Lane/ Hempstead Valley Dr.	1 - Hempstead Valley Drive (S)	561	140	55	886	0.634	559	804	1.1
	2 - Hempstead Road (SW)	309	77	441	385	0.804	302	173	1.4
	3 - Pear Tree Lane (N)	618	154	243	1161	0.532	616	499	0.8
21 - Hempstead Valley Dr/ Hempstead Rd	1 - Hempstead Valley Drive (S)	68	17	539	987	0.069	68	139	0.1
	2 - Hempstead Valley Drive (N)	807	202	42	882	0.915	788	565	3.0
	3 - Hempstead Road (NE)	583	146	98	831	0.702	580	733	1.3

17:15 - 17:30

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)
20 - Pear Tree Lane/ Hempstead Valley Dr.	1 - Hempstead Valley Drive (S)	681	170	57	884	0.770	675	800	1.7
	2 - Hempstead Road (SW)	379	95	532	266	1.422	262	200	3.4
	3 - Pear Tree Lane (N)	756	189	211	665	1.137	646	583	1.1
21 - Hempstead Valley Dr/ Hempstead Rd	1 - Hempstead Valley Drive (S)	84	21	653	886	0.094	84	149	0.1
	2 - Hempstead Valley Drive (N)	802	201	52	876	0.916	798	685	7.5
	3 - Hempstead Road (NE)	715	179	99	831	0.860	703	751	2.2

17:30 - 17:45

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)
20 - Pear Tree Lane/ Hempstead Valley Dr.	1 - Hempstead Valley Drive (S)	690	173	58	884	0.781	689	783	3.1
	2 - Hempstead Road (SW)	379	95	543	239	1.583	239	203	32.4
	3 - Pear Tree Lane (N)	756	189	192	651	1.162	649	590	28.7
21 - Hempstead Valley Dr/ Hempstead Rd	1 - Hempstead Valley Drive (S)	84	21	662	877	0.095	84	148	0.1
	2 - Hempstead Valley Drive (N)	785	196	52	876	0.897	785	694	8.7
	3 - Hempstead Road (NE)	715	179	97	832	0.859	713	740	5.1

17:45 - 18:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)
20 - Pear Tree Lane/ Hempstead Valley Dr.	1 - Hempstead Valley Drive (S)	576	144	57	885	0.651	582	788	3.4
	2 - Hempstead Road (SW)	309	77	459	259	1.192	259	180	67.4
	3 - Pear Tree Lane (N)	618	154	209	637	0.969	636	509	55.6
21 - Hempstead Valley Dr/ Hempstead Rd	1 - Hempstead Valley Drive (S)	68	17	553	974	0.070	68	140	0.1
	2 - Hempstead Valley Drive (N)	791	198	42	882	0.897	791	580	8.7
	3 - Hempstead Road (NE)	583	146	98	831	0.702	596	735	5.5

18:00 - 18:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)
20 - Pear Tree Lane/ Hempstead Valley Dr.	1 - Hempstead Valley Drive (S)	477	119	54	886	0.538	480	792	1.9
	2 - Hempstead Road (SW)	259	65	378	300	0.862	297	155	79.9
	3 - Pear Tree Lane (N)	517	129	239	619	0.836	607	436	50.9
21 - Hempstead Valley Dr/ Hempstead Rd	1 - Hempstead Valley Drive (S)	57	14	458	1059	0.054	57	133	0.1
	2 - Hempstead Valley Drive (N)	794	199	35	886	0.897	794	480	8.7
	3 - Hempstead Road (NE)	489	122	98	831	0.588	493	732	2.5

Queue Variation Results for each time segment

16:45 - 17:00

Junction	Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
20 - Pear Tree Lane/ Hempstead Valley Dr.	1 - Hempstead Valley Drive (S)	1.08	0.55	1.00	1.40	1.45			N/A	N/A
	2 - Hempstead Road (SW)	1.45	0.03	0.26	1.45	1.45			N/A	N/A
	3 - Pear Tree Lane (N)	0.76	0.04	0.35	1.79	3.24			N/A	N/A
21 - Hempstead Valley Dr/ Hempstead Rd	1 - Hempstead Valley Drive (S)	0.06	0.00	0.00	0.06	0.06			N/A	N/A
	2 - Hempstead Valley Drive (N)	2.96	0.23	1.77	5.93	7.69			N/A	N/A
	3 - Hempstead Road (NE)	1.35	0.57	1.17	1.60	1.80			N/A	N/A

17:00 - 17:15

Junction	Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
20 - Pear Tree Lane/ Hempstead Valley Dr.	1 - Hempstead Valley Drive (S)	1.68	0.08	1.08	3.73	5.18			N/A	N/A
	2 - Hempstead Road (SW)	3.37	0.03	0.29	3.37	13.65			N/A	N/A
	3 - Pear Tree Lane (N)	1.12	0.03	0.28	1.12	3.92			N/A	N/A
21 - Hempstead Valley Dr/ Hempstead Rd	1 - Hempstead Valley Drive (S)	0.07	0.03	0.25	0.45	0.48			N/A	N/A
	2 - Hempstead Valley Drive (N)	7.55	0.31	4.51	17.39	23.05			N/A	N/A
	3 - Hempstead Road (NE)	2.24	0.07	1.19	5.46	7.80			N/A	N/A

17:15 - 17:30

Junction	Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
20 - Pear Tree Lane/ Hempstead Valley Dr.	1 - Hempstead Valley Drive (S)	3.11	0.03	0.32	4.92	15.89			N/A	N/A
	2 - Hempstead Road (SW)	32.44	6.24	27.36	60.73	73.44			N/A	N/A
	3 - Pear Tree Lane (N)	28.67	8.11	25.40	49.15	57.80			N/A	N/A
21 - Hempstead Valley Dr/ Hempstead Rd	1 - Hempstead Valley Drive (S)	0.10	0.03	0.26	0.47	0.49			N/A	N/A
	2 - Hempstead Valley Drive (N)	8.66	0.06	1.46	25.17	40.80			N/A	N/A
	3 - Hempstead Road (NE)	5.13	0.04	0.43	14.14	27.00			N/A	N/A

17:30 - 17:45

Junction	Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
20 - Pear Tree Lane/ Hempstead Valley Dr.	1 - Hempstead Valley Drive (S)	3.37	0.03	0.29	3.37	11.79			N/A	N/A
	2 - Hempstead Road (SW)	67.38	31.93	63.88	99.94	112.13			N/A	N/A
	3 - Pear Tree Lane (N)	55.63	20.17	51.11	90.11	103.87			N/A	N/A
21 - Hempstead Valley Dr/ Hempstead Rd	1 - Hempstead Valley Drive (S)	0.10	0.00	0.00	0.10	0.10			N/A	N/A
	2 - Hempstead Valley Drive (N)	8.66	0.04	0.40	21.73	47.38			N/A	N/A
	3 - Hempstead Road (NE)	5.52	0.03	0.33	9.93	29.22			N/A	N/A

17:45 - 18:00

Junction	Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
20 - Pear Tree Lane/ Hempstead Valley Dr.	1 - Hempstead Valley Drive (S)	1.93	0.06	0.74	4.95	7.55			N/A	N/A
	2 - Hempstead Road (SW)	79.92	39.97	76.26	116.31	129.73			N/A	N/A
	3 - Pear Tree Lane (N)	50.94	13.72	45.07	89.44	105.76			N/A	N/A
21 - Hempstead Valley Dr/ Hempstead Rd	1 - Hempstead Valley Drive (S)	0.08	0.00	0.00	0.08	0.08			N/A	N/A
	2 - Hempstead Valley Drive (N)	8.66	0.04	0.37	19.33	47.70			N/A	N/A
	3 - Hempstead Road (NE)	2.47	0.04	0.43	6.81	11.92			N/A	N/A

18:00 - 18:15

Junction	Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
20 - Pear Tree Lane/ Hempstead Valley Dr.	1 - Hempstead Valley Drive (S)	1.19	0.04	0.39	3.00	5.29			N/A	N/A
	2 - Hempstead Road (SW)	70.50	28.97	65.82	110.03	125.34			N/A	N/A
	3 - Pear Tree Lane (N)	28.48	4.03	23.02	56.04	68.97			N/A	N/A
21 - Hempstead Valley Dr/ Hempstead Rd	1 - Hempstead Valley Drive (S)	0.06	0.00	0.00	0.06	0.06			N/A	N/A
	2 - Hempstead Valley Drive (N)	8.66	0.05	0.49	24.72	45.17			N/A	N/A
	3 - Hempstead Road (NE)	1.47	0.03	0.34	3.43	7.54			N/A	N/A

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.5.0.6896

Filename: 10 - Hoath Way Hemptead Road Existing Roundabouts.j9
Path: P:\17-035 Hempstead Valley, Medway\Trans\Arcady\2019-03-19
Report generation date: 02/04/2019 14:28:12

Summary of junction performance

	AM					PM				
	Queue (Veh)	Delay (s)	RFC	LOS	Network Residual Capacity	Queue (Veh)	Delay (s)	RFC	LOS	Network Residual Capacity
	[Lane Simulation] - Do Minimum									
1 - Left - 1 - Hoath Way (E)	0.6	2.92		A		0.4	2.57		A	
1 - Left - 2 - Hempstead Road (S)	0.5	4.59		A		1.8	9.77		A	
1 - Left - 3 - Ambley Road (N)	0.2	2.75		A		0.6	5.00		A	
2 - Centre - 1 - Hoath Way (E)	0.9	9.73		A		0.4	5.19		A	
2 - Centre - 2 - Hoath Way (S)	2.2	4.85		A	%	3.0	4.71		A	%
2 - Centre - 3 - Hoath Way (W)	0.9	5.85		A	[ ]	2.7	13.50		B	[ ]
2 - Centre - 4 - Hoath Way (N)	1.7	2.70		A		1.4	2.90		A	
3 - Right - 1 - Hoath Lane (S)	0.6	4.67		A		0.2	3.90		A	
3 - Right - 2 - Hoath Way (W)	0.4	4.52		A		0.9	5.82		A	
3 - Right - 3 - Courteney Road (N)	0.1	3.20		A		0.2	3.86		A	
	[Lane Simulation] - Do Something (800)									
1 - Left - 1 - Hoath Way (E)	0.5	2.76		A		0.4	2.62		A	
1 - Left - 2 - Hempstead Road (S)	0.6	4.48		A		1.0	5.21		A	
1 - Left - 3 - Ambley Road (N)	0.2	2.77		A		0.4	3.70		A	
2 - Centre - 1 - Hoath Way (E)	1.0	8.65		A		0.3	5.10		A	
2 - Centre - 2 - Hoath Way (S)	1.8	4.28		A	%	1.9	3.99		A	%
2 - Centre - 3 - Hoath Way (W)	0.8	5.16		A	[ ]	2.1	10.11		B	[ ]
2 - Centre - 4 - Hoath Way (N)	1.2	2.58		A		1.1	2.78		A	
3 - Right - 1 - Hoath Lane (S)	0.5	4.82		A		0.2	3.76		A	
3 - Right - 2 - Hoath Way (W)	0.3	4.47		A		0.8	6.17		A	
3 - Right - 3 - Courteney Road (N)	0.1	3.35		A		0.2	4.05		A	

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

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Arm and junction delays are averages for all movements, including movements with zero delay. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	Hoath Way Hempstead Road Roundabouts
Location	
Site number	
Date	07/02/2019
Version	
Status	
Identifier	
Client	
Jobnumber	17-035
Enumerator	CA_WKS12\PLimbu
Description	

Units

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

Analysis Options

Mini-roundabout model	Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
JUNCTIONS 9	5.75			✓	Delay	0.85	36.00	20.00

Lane Simulation options

Criteria type	Stop criteria (%)	Stop criteria time (s)	Stop criteria number of trials	Random seed	Results refresh speed (s)	Individual vehicle animation number of trials	Average animation capture interval (s)	Use quick response	Do flow sampling	Suppress automatic lane creation	Last run random seed	Last run number of trials	Last run time taken (s)
Delay	1.00	100000	100000	-1	3	1	60	✓			1125122446	61	7.75

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	Do Minimum	AM	ONE HOUR	07:30	09:00	15	✓
D2	Do Minimum	PM	ONE HOUR	16:15	17:45	15	✓
D3	Do Something (800)	AM	ONE HOUR	07:30	09:00	15	✓
D4	Do Something (800)	PM	ONE HOUR	16:15	17:45	15	✓

Analysis Set Details

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

Do Minimum, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A1 - [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.
Warning	Mini-roundabout	3 - Right	Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 1 and 2 have 91% of the total flow for the roundabout for one or more time segments]

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Left	Standard Roundabout		1, 2, 3	3.49	A
2	Centre	Large Roundabout		1, 2, 3, 4	4.51	A
3	Right	Mini-roundabout		1, 2, 3	4.49	A

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

Junction	Arm	Name	Description
1 - Left	1	Hoath Way (E)	
	2	Hempstead Road (S)	
	3	Ambley Road (N)	
2 - Centre	1	Hoath Way (E)	
	2	Hoath Way (S)	
	3	Hoath Way (W)	
	4	Hoath Way (N)	
3 - Right	1	Hoath Lane (S)	
	2	Hoath Way (W)	
	3	Courteney Road (N)	

Roundabout Geometry

Junction	Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Left	1 - Hoath Way (E)	7.29	8.29	1.9	5.2	29.8	34.5	
	2 - Hempstead Road (S)	3.00	6.75	8.4	96.6	19.0	29.8	
	3 - Ambley Road (N)	4.52	6.50	14.7	35.4	29.8	27.0	
2 - Centre	1 - Hoath Way (E)	5.50	5.50	0.0	18.9	73.0	19.0	
	2 - Hoath Way (S)	7.40	7.40	0.0	37.7	73.0	15.0	
	3 - Hoath Way (W)	7.40	7.40	0.0	12.8	73.0	28.0	
	4 - Hoath Way (N)	8.70	8.70	0.0	38.2	73.0	25.0	

Mini Roundabout Geometry

Junction	Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
3 - Right	1 - Hoath Lane (S)	3.68	3.68	6.52	35.6	16.99	11.92	0.0	
	2 - Hoath Way (W)	5.72	5.72	7.04	2.1	18.50	11.31	0.0	
	3 - Courteney Road (N)	4.27	4.27	4.27	0.0	20.00	20.00	0.0	

Large Roundabout Data

Junction	Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
2 - Centre	1 - Hoath Way (E)	950	20.88
	2 - Hoath Way (S)	675	32.49
	3 - Hoath Way (W)	756	25.43
	4 - Hoath Way (N)	502	27.77

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Junction	Arm	Final slope	Final intercept (PCU/hr)
1 - Left	1 - Hoath Way (E)	0.664	1963
	2 - Hempstead Road (S)	0.622	1433
	3 - Ambley Road (N)	0.698	1845
2 - Centre	1 - Hoath Way (E)	0.898	2328
	2 - Hoath Way (S)	1.166	3054
	3 - Hoath Way (W)	1.045	2835
	4 - Hoath Way (N)	1.291	3439
3 - Right	1 - Hoath Lane (S)	0.707	1211
	2 - Hoath Way (W)	0.714	1093
	3 - Courteney Road (N)	0.942	1399

The slope and intercept shown above include any corrections and adjustments.

Lane Simulation: Arm options

Junction	Arm	Lane capacity source	Traffic considering secondary lanes (%)
1 - Left	1 - Hoath Way (E)	Evenly split	10.00
	2 - Hempstead Road (S)	Evenly split	10.00
	3 - Ambley Road (N)	Evenly split	10.00
2 - Centre	1 - Hoath Way (E)	Evenly split	10.00
	2 - Hoath Way (S)	Evenly split	10.00
	3 - Hoath Way (W)	Evenly split	10.00
	4 - Hoath Way (N)	Evenly split	10.00
3 - Right	1 - Hoath Lane (S)	Evenly split	10.00
	2 - Hoath Way (W)	Evenly split	10.00
	3 - Courteney Road (N)	Evenly split	10.00

Lanes

Junction	Arm	Side	Lane level	Lane	Destination arms	Has limited storage	Storage (PCU)	Has bottleneck	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)	Signalised
1 - Left	1 - Hoath Way (E)	Entry	1	2	1, 2, 3	✓	6.00		0	99999	
		Exit	1	1		✓	6.00				
	2 - Hempstead Road (S)	Entry	1	1	1, 2, 3		Infinity		0	99999	
		Exit	1	1			Infinity				
	3 - Ambley Road (N)	Entry	1	1	1, 2, 3		Infinity		0	99999	
		Exit	1	1			Infinity				
2 - Centre	1 - Hoath Way (E)	Entry	1	1	1, 2, 3, 4	✓	6.00		0	99999	
		Exit	1	1		✓	6.00				
	2 - Hoath Way (S)	Entry	1	1	1, 2, 3, 4		Infinity		0	99999	
		Exit	1	1			Infinity				
	3 - Hoath Way (W)	Entry	1	1	1, 2, 3, 4	✓	6.00		0	99999	
		Exit	1	1		✓	6.00				
	4 - Hoath Way (N)	Entry	1	1	1, 2, 3, 4		Infinity		0	99999	
		Exit	1	1			Infinity				
3 - Right	1 - Hoath Lane (S)	Entry	1	1	1, 2, 3		Infinity		0	99999	
		Exit	1	1			Infinity				
	2 - Hoath Way (W)	Entry	1	2	1, 2, 3	✓	6.00		0	99999	
		Exit	1	1		✓	6.00				
	3 - Courteney Road (N)	Entry	1	1	1, 2, 3		Infinity		0	99999	
		Exit	1	1			Infinity				

Entry Lane slope and intercept

Junction	Arm	Side	Lane level	Lane	Final slope	Final intercept (PCU/hr)
1 - Left	1 - Hoath Way (E)	Entry	1	2	0.664	1963
	2 - Hempstead Road (S)	Entry	1	1	0.622	1433
	3 - Ambley Road (N)	Entry	1	1	0.698	1845
2 - Centre	1 - Hoath Way (E)	Entry	1	1	0.898	2328
	2 - Hoath Way (S)	Entry	1	1	1.166	3054
	3 - Hoath Way (W)	Entry	1	1	1.045	2835
	4 - Hoath Way (N)	Entry	1	1	1.291	3439
3 - Right	1 - Hoath Lane (S)	Entry	1	1	0.707	1211
	2 - Hoath Way (W)	Entry	1	2	0.714	1093
	3 - Courteney Road (N)	Entry	1	1	0.942	1399

Summary of Entry Lane allowed movements

Junction	Arm	Lane Level	Lane	Destination arm		
				Hoath Way (E)	Hempstead Road (S)	Ambley Road (N)
1 - Left	1 - Hoath Way (E)	1	2	✓	✓	✓
	2 - Hempstead Road (S)	1	1	✓	✓	✓
	3 - Ambley Road (N)	1	1	✓	✓	✓

Summary of Entry Lane allowed movements

Junction	Arm	Lane Level	Lane	Destination arm			
				Hoath Way (E)	Hoath Way (S)	Hoath Way (W)	Hoath Way (N)
2 - Centre	1 - Hoath Way (E)	1	1	✓	✓	✓	✓
	2 - Hoath Way (S)	1	1	✓	✓	✓	✓
	3 - Hoath Way (W)	1	1	✓	✓	✓	✓
	4 - Hoath Way (N)	1	1	✓	✓	✓	✓

Summary of Entry Lane allowed movements

Junction	Arm	Lane Level	Lane	Destination arm		
				Hoath Lane (S)	Hoath Way (W)	Courteney Road (N)
3 - Right	1 - Hoath Lane (S)	1	1	✓	✓	✓
	2 - Hoath Way (W)	1	2	✓	✓	✓
	3 - Courteney Road (N)	1	1	✓	✓	✓

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	Do Minimum	AM	ONE HOUR	07:30	09:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
1 - Left	1 - Hoath Way (E)	2	3	Simple (vertical queueing)	Normal	0	100.00	
2 - Centre	1 - Hoath Way (E)	3	2	Queue limited	Normal	0	100.00	12.00
	3 - Hoath Way (W)	1	1	Simple (vertical queueing)	Normal	0	100.00	
3 - Right	2 - Hoath Way (W)	2	1	Queue limited	Normal	0	100.00	12.00

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Left	1 - Hoath Way (E)	✓				
	2 - Hempstead Road (S)		ONE HOUR	✓	410	100.000
	3 - Ambley Road (N)		ONE HOUR	✓	203	100.000
2 - Centre	1 - Hoath Way (E)	✓				
	2 - Hoath Way (S)		ONE HOUR	✓	1462	100.000
	3 - Hoath Way (W)	✓				
	4 - Hoath Way (N)		ONE HOUR	✓	1565	100.000
3 - Right	1 - Hoath Lane (S)		ONE HOUR	✓	317	100.000
	2 - Hoath Way (W)	✓				
	3 - Courteney Road (N)		ONE HOUR	✓	52	100.000

Origin-Destination Data

1 - Left

Demand (PCU/hr)

		To		
		1 - Hoath Way (E)	2 - Hempstead Road (S)	3 - Ambley Road (N)
From	1 - Hoath Way (E)	0	252	261
	2 - Hempstead Road (S)	323	0	87
	3 - Ambley Road (N)	147	56	0

2 - Centre

Demand (PCU/hr)

		To			
		1 - Hoath Way (E)	2 - Hoath Way (S)	3 - Hoath Way (W)	4 - Hoath Way (N)
From	1 - Hoath Way (E)	0	20	43	266
	2 - Hoath Way (S)	39	0	263	1160
	3 - Hoath Way (W)	80	148	0	245
	4 - Hoath Way (N)	130	1231	204	0

3 - Right

Demand (PCU/hr)

		To		
		1 - Hoath Lane (S)	2 - Hoath Way (W)	3 - Courteney Road (N)
From	1 - Hoath Lane (S)	0	301	16
	2 - Hoath Way (W)	179	0	71
	3 - Courteney Road (N)	32	20	0

Vehicle Mix

1 - Left

Heavy Vehicle Percentages

		To		
		1 - Hoath Way (E)	2 - Hempstead Road (S)	3 - Ambley Road (N)
From	1 - Hoath Way (E)	0	2	6
	2 - Hempstead Road (S)	2	0	5
	3 - Ambley Road (N)	4	7	0

2 - Centre

Heavy Vehicle Percentages

		To			
		1 - Hoath Way (E)	2 - Hoath Way (S)	3 - Hoath Way (W)	4 - Hoath Way (N)
From	1 - Hoath Way (E)	0	5	0	7
	2 - Hoath Way (S)	12	0	5	2
	3 - Hoath Way (W)	1	3	0	3
	4 - Hoath Way (N)	1	2	2	0

3 - Right

Heavy Vehicle Percentages

		To		
		1 - Hoath Lane (S)	2 - Hoath Way (W)	3 - Courteney Road (N)
From	1 - Hoath Lane (S)	0	6	1
	2 - Hoath Way (W)	1	0	7
	3 - Courteney Road (N)	1	5	0

Results

Results Summary for whole modelled period

Junction	Arm	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Left	1 - Hoath Way (E)	2.92	0.6	A	456	683
	2 - Hempstead Road (S)	4.59	0.5	A	368	551
	3 - Ambley Road (N)	2.75	0.2	A	182	274
2 - Centre	1 - Hoath Way (E)	9.73	0.9	A	276	414
	2 - Hoath Way (S)	4.85	2.2	A	1305	1958
	3 - Hoath Way (W)	5.85	0.9	A	426	639
	4 - Hoath Way (N)	2.70	1.7	A	1401	2101
3 - Right	1 - Hoath Lane (S)	4.67	0.6	A	274	410
	2 - Hoath Way (W)	4.52	0.4	A	223	334
	3 - Courteney Road (N)	3.20	0.1	A	45	68

Main Results for each time segment

07:30 - 07:45

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Left	1 - Hoath Way (E)	377	94	38	377	387	351	0.0	0.2	2.455	A
	2 - Hempstead Road (S)	311	78	187	314	318	228	0.0	0.1	3.788	A
	3 - Ambley Road (N)	142	35	247	142	150	253	0.0	0.2	2.587	A
2 - Centre	1 - Hoath Way (E)	222	56	1134	221	236	183	0.0	0.3	3.703	A
	2 - Hoath Way (S)	1091	273	359	1090	1099	995	0.0	0.6	2.544	A
	3 - Hoath Way (W)	351	88	1073	351	359	377	0.0	0.3	2.815	A
	4 - Hoath Way (N)	1119	280	196	1120	1161	1228	0.0	0.5	1.850	A
3 - Right	1 - Hoath Lane (S)	220	55	13	221	234	160	0.0	0.2	3.955	A
	2 - Hoath Way (W)	183	46	11	183	184	222	0.0	0.1	4.031	A
	3 - Courteney Road (N)	37	9	135	37	41	59	0.0	0.0	2.965	A

07:45 - 08:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Left	1 - Hoath Way (E)	449	112	54	446	458	410	0.2	0.5	2.565	A
	2 - Hempstead Road (S)	353	88	226	351	357	274	0.1	0.5	3.850	A
	3 - Ambley Road (N)	183	46	280	184	186	297	0.2	0.2	2.609	A
2 - Centre	1 - Hoath Way (E)	269	67	1376	268	286	229	0.3	0.3	5.171	A
	2 - Hoath Way (S)	1255	314	430	1260	1299	1214	0.6	0.8	3.038	A
	3 - Hoath Way (W)	410	102	1242	409	418	449	0.3	0.4	3.528	A
	4 - Hoath Way (N)	1375	344	234	1372	1403	1417	0.5	1.0	2.100	A
3 - Right	1 - Hoath Lane (S)	265	66	17	267	284	197	0.2	0.1	4.154	A
	2 - Hoath Way (W)	229	57	16	229	223	268	0.1	0.4	4.321	A
	3 - Courteney Road (N)	45	11	169	45	46	75	0.0	0.0	2.944	A

08:00 - 08:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Left	1 - Hoath Way (E)	533	133	56	536	569	514	0.5	0.2	2.821	A
	2 - Hempstead Road (S)	441	110	265	443	446	327	0.5	0.5	4.536	A
	3 - Ambley Road (N)	220	55	350	220	221	358	0.2	0.2	2.747	A
2 - Centre	1 - Hoath Way (E)	326	82	1690	330	349	268	0.3	0.9	9.596	A
	2 - Hoath Way (S)	1561	390	522	1559	1597	1497	0.8	2.3	4.855	A
	3 - Hoath Way (W)	514	128	1548	511	513	533	0.4	0.9	5.615	A
	4 - Hoath Way (N)	1671	418	291	1666	1720	1768	1.0	1.7	2.637	A
3 - Right	1 - Hoath Lane (S)	326	81	20	325	348	227	0.1	0.3	4.476	A
	2 - Hoath Way (W)	268	67	19	268	266	326	0.4	0.3	4.326	A
	3 - Courteney Road (N)	53	13	194	53	57	93	0.0	0.1	2.941	A

08:15 - 08:30

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Left	1 - Hoath Way (E)	548	137	58	549	558	507	0.2	0.5	2.915	A
	2 - Hempstead Road (S)	438	110	269	443	457	339	0.5	0.4	4.589	A
	3 - Ambley Road (N)	214	53	351	214	222	361	0.2	0.2	2.651	A
2 - Centre	1 - Hoath Way (E)	348	87	1705	346	352	265	0.9	0.9	9.732	A
	2 - Hoath Way (S)	1586	396	553	1586	1610	1499	2.3	2.2	4.840	A
	3 - Hoath Way (W)	507	127	1590	511	527	548	0.9	0.7	5.845	A
	4 - Hoath Way (N)	1681	420	279	1691	1715	1823	1.7	1.0	2.705	A
3 - Right	1 - Hoath Lane (S)	345	86	22	343	348	227	0.3	0.5	4.673	A
	2 - Hoath Way (W)	265	66	18	265	273	348	0.3	0.3	4.518	A
	3 - Courteney Road (N)	57	14	192	57	56	91	0.1	0.0	3.027	A

08:30 - 08:45

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Left	1 - Hoath Way (E)	454	114	44	454	476	428	0.5	0.3	2.586	A
	2 - Hempstead Road (S)	366	91	228	366	371	270	0.4	0.3	3.958	A
	3 - Ambley Road (N)	177	44	296	176	184	298	0.2	0.1	2.639	A
2 - Centre	1 - Hoath Way (E)	262	66	1400	260	290	212	0.9	0.5	5.480	A
	2 - Hoath Way (S)	1275	319	424	1273	1322	1236	2.2	1.2	3.152	A
	3 - Hoath Way (W)	428	107	1243	430	429	454	0.7	0.4	3.973	A
	4 - Hoath Way (N)	1381	345	228	1384	1406	1445	1.0	0.9	2.131	A
3 - Right	1 - Hoath Lane (S)	260	65	15	261	285	186	0.5	0.3	4.242	A
	2 - Hoath Way (W)	212	53	14	211	220	262	0.3	0.3	4.183	A
	3 - Courteney Road (N)	43	11	158	43	45	67	0.0	0.0	3.202	A

08:45 - 09:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Left	1 - Hoath Way (E)	371	93	42	368	386	347	0.3	0.4	2.452	A
	2 - Hempstead Road (S)	296	74	195	293	313	216	0.3	0.5	3.757	A
	3 - Ambley Road (N)	158	39	232	158	157	255	0.1	0.1	2.566	A
2 - Centre	1 - Hoath Way (E)	229	57	1190	228	244	181	0.5	0.3	4.005	A
	2 - Hoath Way (S)	1063	266	364	1063	1109	1054	1.2	0.6	2.586	A
	3 - Hoath Way (W)	347	87	1056	349	360	371	0.4	0.2	2.972	A
	4 - Hoath Way (N)	1180	295	191	1179	1184	1214	0.9	0.6	1.812	A
3 - Right	1 - Hoath Lane (S)	225	56	15	225	240	149	0.3	0.2	3.916	A
	2 - Hoath Way (W)	181	45	11	179	190	229	0.3	0.3	4.057	A
	3 - Courteney Road (N)	38	9	126	37	40	63	0.0	0.1	2.942	A

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

07:30 - 07:45

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalise level of service
1 - Left	1 - Hoath Way (E)	Entry	1	2	1, 2, 3	377	1855	0.203	377	387	0.0	0.2	2.455	A
		Exit	1	1		351			351	362	0.0	0.0	0.001	A
	2 - Hempstead Road (S)	Entry	1	1	1, 2, 3	311	1274	0.244	314	318	0.0	0.1	3.788	A
		Exit	1	1		228			228	235	0.0	0.0	0.000	A
	3 - Ambley Road (N)	Entry	1	1	1, 2, 3	142	1594	0.089	142	150	0.0	0.2	2.587	A
		Exit	1	1		253			253	259	0.0	0.0	0.000	A
2 - Centre	1 - Hoath Way (E)	Entry	1	1	1, 2, 3, 4	222	1215	0.183	221	236	0.0	0.3	3.703	A
		Exit	1	1		183			183	184	0.0	0.0	0.000	A
	2 - Hoath Way (S)	Entry	1	1	1, 2, 3, 4	1091	2544	0.429	1090	1099	0.0	0.6	2.544	A
		Exit	1	1		995			995	1040	0.0	0.0	0.000	A
	3 - Hoath Way (W)	Entry	1	1	1, 2, 3, 4	351	1644	0.214	351	359	0.0	0.3	2.815	A
		Exit	1	1		377			377	387	0.0	0.0	0.000	A
	4 - Hoath Way (N)	Entry	1	1	1, 2, 3, 4	1119	3115	0.359	1120	1161	0.0	0.5	1.850	A
		Exit	1	1		1228			1228	1243	0.0	0.0	0.000	A
3 - Right	1 - Hoath Lane (S)	Entry	1	1	1, 2, 3	220	1133	0.195	221	234	0.0	0.2	3.955	A
		Exit	1	1		160			160	158	0.0	0.0	0.000	A
	2 - Hoath Way (W)	Entry	1	2	1, 2, 3	183	1064	0.172	183	184	0.0	0.1	4.031	A
		Exit	1	1		222			222	236	0.0	0.0	0.000	A
	3 - Courteney Road (N)	Entry	1	1	1, 2, 3	37	1245	0.030	37	41	0.0	0.0	2.965	A
		Exit	1	1		59			59	65	0.0	0.0	0.000	A

07:45 - 08:00

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalise level of service
1 - Left	1 - Hoath Way (E)	Entry	1	2	1, 2, 3	449	1845	0.243	446	458	0.2	0.5	2.565	A
		Exit	1	1		410			410	416	0.0	0.0	0.006	A
	2 - Hempstead Road (S)	Entry	1	1	1, 2, 3	353	1257	0.281	351	357	0.1	0.5	3.850	A
		Exit	1	1		274			274	285	0.0	0.0	0.000	A
	3 - Ambley Road (N)	Entry	1	1	1, 2, 3	183	1584	0.116	184	186	0.2	0.2	2.609	A
		Exit	1	1		297			297	300	0.0	0.0	0.000	A
2 - Centre	1 - Hoath Way (E)	Entry	1	1	1, 2, 3, 4	269	1012	0.265	268	286	0.3	0.3	5.171	A
		Exit	1	1		229			229	224	0.0	0.0	0.000	A
	2 - Hoath Way (S)	Entry	1	1	1, 2, 3, 4	1255	2464	0.509	1260	1299	0.6	0.8	3.038	A
		Exit	1	1		1214			1214	1247	0.0	0.0	0.000	A
	3 - Hoath Way (W)	Entry	1	1	1, 2, 3, 4	410	1457	0.281	409	418	0.3	0.4	3.528	A
		Exit	1	1		449			449	457	0.0	0.0	0.000	A
	4 - Hoath Way (N)	Entry	1	1	1, 2, 3, 4	1375	3061	0.449	1372	1403	0.5	1.0	2.100	A
		Exit	1	1		1417			1417	1477	0.0	0.0	0.000	A
3 - Right	1 - Hoath Lane (S)	Entry	1	1	1, 2, 3	265	1146	0.231	267	284	0.2	0.1	4.154	A
		Exit	1	1		197			197	192	0.0	0.0	0.000	A
	2 - Hoath Way (W)	Entry	1	2	1, 2, 3	229	1058	0.216	229	223	0.1	0.4	4.321	A
		Exit	1	1		268			268	286	0.0	0.0	0.007	A
	3 - Courteney Road (N)	Entry	1	1	1, 2, 3	45	1203	0.038	45	46	0.0	0.0	2.944	A
		Exit	1	1		75			75	76	0.0	0.0	0.000	A

08:00 - 08:15

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalise level of service
1 - Left	1 - Hoath Way (E)	Entry	1	2	1, 2, 3	533	1851	0.288	536	569	0.5	0.2	2.821	A
		Exit	1	1		514			514	515	0.0	0.1	0.098	A
	2 - Hempstead Road (S)	Entry	1	1	1, 2, 3	441	1225	0.360	443	446	0.5	0.5	4.536	A
		Exit	1	1		327			327	337	0.0	0.0	0.000	A
	3 - Ambley Road (N)	Entry	1	1	1, 2, 3	220	1515	0.145	220	221	0.2	0.2	2.747	A
		Exit	1	1		358			358	384	0.0	0.0	0.000	A
2 - Centre	1 - Hoath Way (E)	Entry	1	1	1, 2, 3, 4	326	744	0.439	330	349	0.3	0.9	9.596	A
		Exit	1	1		268			268	266	0.0	0.0	0.000	A
	2 - Hoath Way (S)	Entry	1	1	1, 2, 3, 4	1561	2355	0.663	1559	1597	0.8	2.3	4.855	A
		Exit	1	1		1497			1497	1538	0.0	0.0	0.000	A
	3 - Hoath Way (W)	Entry	1	1	1, 2, 3, 4	514	1133	0.453	511	513	0.4	0.9	5.615	A
		Exit	1	1		533			533	563	0.0	0.0	0.002	A
	4 - Hoath Way (N)	Entry	1	1	1, 2, 3, 4	1671	2991	0.558	1666	1720	1.0	1.7	2.637	A
		Exit	1	1		1768			1768	1811	0.0	0.0	0.000	A
3 - Right	1 - Hoath Lane (S)	Entry	1	1	1, 2, 3	326	1121	0.290	325	348	0.1	0.3	4.476	A
		Exit	1	1		227			227	227	0.0	0.0	0.000	A
	2 - Hoath Way (W)	Entry	1	2	1, 2, 3	268	1055	0.254	268	266	0.4	0.3	4.326	A
		Exit	1	1		326			326	351	0.0	0.0	0.409	A
	3 - Courteney Road (N)	Entry	1	1	1, 2, 3	53	1183	0.045	53	57	0.0	0.1	2.941	A
		Exit	1	1		93			93	93	0.0	0.0	0.000	A

08:15 - 08:30

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalise level of service
1 - Left	1 - Hoath Way (E)	Entry	1	2	1, 2, 3	548	1850	0.297	549	558	0.2	0.5	2.915	A
		Exit	1	1		506			507	524	0.1	0.0	0.054	A
	2 - Hempstead Road (S)	Entry	1	1	1, 2, 3	438	1223	0.358	443	457	0.5	0.4	4.589	A
		Exit	1	1		339			339	340	0.0	0.0	0.000	A
	3 - Ambley Road (N)	Entry	1	1	1, 2, 3	214	1541	0.139	214	222	0.2	0.2	2.651	A
		Exit	1	1		361			361	373	0.0	0.0	0.000	A
2 - Centre	1 - Hoath Way (E)	Entry	1	1	1, 2, 3, 4	348	725	0.480	346	352	0.9	0.9	9.732	A
		Exit	1	1		265			265	273	0.0	0.0	0.002	A
	2 - Hoath Way (S)	Entry	1	1	1, 2, 3, 4	1586	2309	0.687	1586	1610	2.3	2.2	4.840	A
		Exit	1	1		1499			1499	1525	0.0	0.0	0.000	A
	3 - Hoath Way (W)	Entry	1	1	1, 2, 3, 4	507	1089	0.466	511	527	0.9	0.7	5.845	A
		Exit	1	1		548			548	558	0.0	0.0	0.008	A
	4 - Hoath Way (N)	Entry	1	1	1, 2, 3, 4	1681	3009	0.558	1691	1715	1.7	1.0	2.705	A
		Exit	1	1		1823			1823	1848	0.0	0.0	0.000	A
3 - Right	1 - Hoath Lane (S)	Entry	1	1	1, 2, 3	345	1129	0.306	343	348	0.3	0.5	4.673	A
		Exit	1	1		227			227	231	0.0	0.0	0.000	A
	2 - Hoath Way (W)	Entry	1	2	1, 2, 3	265	1052	0.252	265	273	0.3	0.3	4.518	A
		Exit	1	1		347			348	350	0.0	0.0	0.418	A
	3 - Courteney Road (N)	Entry	1	1	1, 2, 3	57	1196	0.047	57	56	0.1	0.0	3.027	A
		Exit	1	1		91			91	96	0.0	0.0	0.000	A

08:30 - 08:45

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalise level of service
1 - Left	1 - Hoath Way (E)	Entry	1	2	1, 2, 3	454	1840	0.247	454	476	0.5	0.3	2.586	A
		Exit	1	1		428			428	429	0.0	0.0	0.005	A
	2 - Hempstead Road (S)	Entry	1	1	1, 2, 3	366	1254	0.292	366	371	0.4	0.3	3.958	A
		Exit	1	1		270			270	281	0.0	0.0	0.000	A
	3 - Ambley Road (N)	Entry	1	1	1, 2, 3	177	1556	0.114	176	184	0.2	0.1	2.639	A
		Exit	1	1		298			298	321	0.0	0.0	0.000	A
2 - Centre	1 - Hoath Way (E)	Entry	1	1	1, 2, 3, 4	262	987	0.266	260	290	0.9	0.5	5.480	A
		Exit	1	1		212			212	220	0.0	0.0	0.000	A
	2 - Hoath Way (S)	Entry	1	1	1, 2, 3, 4	1275	2468	0.517	1273	1322	2.2	1.2	3.152	A
		Exit	1	1		1236			1236	1260	0.0	0.0	0.000	A
	3 - Hoath Way (W)	Entry	1	1	1, 2, 3, 4	428	1455	0.294	430	429	0.7	0.4	3.973	A
		Exit	1	1		454			454	468	0.0	0.0	0.000	A
	4 - Hoath Way (N)	Entry	1	1	1, 2, 3, 4	1381	3075	0.449	1384	1406	1.0	0.9	2.131	A
		Exit	1	1		1445			1445	1498	0.0	0.0	0.000	A
3 - Right	1 - Hoath Lane (S)	Entry	1	1	1, 2, 3	260	1132	0.229	261	285	0.5	0.3	4.242	A
		Exit	1	1		186			186	189	0.0	0.0	0.000	A
	2 - Hoath Way (W)	Entry	1	2	1, 2, 3	212	1053	0.201	211	220	0.3	0.3	4.183	A
		Exit	1	1		262			262	287	0.0	0.0	0.016	A
	3 - Courteney Road (N)	Entry	1	1	1, 2, 3	43	1211	0.035	43	45	0.0	0.0	3.202	A
		Exit	1	1		67			67	75	0.0	0.0	0.000	A

08:45 - 09:00

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalise level of service
1 - Left	1 - Hoath Way (E)	Entry	1	2	1, 2, 3	371	1876	0.198	368	386	0.3	0.4	2.452	A
		Exit	1	1		347			347	358	0.0	0.0	0.001	A
	2 - Hempstead Road (S)	Entry	1	1	1, 2, 3	296	1276	0.232	293	313	0.3	0.5	3.757	A
		Exit	1	1		216			216	231	0.0	0.0	0.000	A
	3 - Ambley Road (N)	Entry	1	1	1, 2, 3	158	1595	0.099	158	157	0.1	0.1	2.566	A
		Exit	1	1		255			255	267	0.0	0.0	0.000	A
2 - Centre	1 - Hoath Way (E)	Entry	1	1	1, 2, 3, 4	229	1162	0.197	228	244	0.5	0.3	4.005	A
		Exit	1	1		181			181	190	0.0	0.0	0.000	A
	2 - Hoath Way (S)	Entry	1	1	1, 2, 3, 4	1063	2542	0.418	1063	1109	1.2	0.6	2.586	A
		Exit	1	1		1054			1054	1062	0.0	0.0	0.000	A
	3 - Hoath Way (W)	Entry	1	1	1, 2, 3, 4	347	1639	0.212	349	360	0.4	0.2	2.972	A
		Exit	1	1		371			371	385	0.0	0.0	0.000	A
	4 - Hoath Way (N)	Entry	1	1	1, 2, 3, 4	1180	3119	0.378	1179	1184	0.9	0.6	1.812	A
		Exit	1	1		1214			1214	1261	0.0	0.0	0.000	A
3 - Right	1 - Hoath Lane (S)	Entry	1	1	1, 2, 3	225	1145	0.197	225	240	0.3	0.2	3.916	A
		Exit	1	1		149			149	160	0.0	0.0	0.000	A
	2 - Hoath Way (W)	Entry	1	2	1, 2, 3	181	1054	0.172	179	190	0.3	0.3	4.057	A
		Exit	1	1		229			229	243	0.0	0.0	0.001	A
	3 - Courteney Road (N)	Entry	1	1	1, 2, 3	38	1240	0.030	37	40	0.0	0.1	2.942	A
		Exit	1	1		63			63	66	0.0	0.0	0.000	A

Do Minimum, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A1 - [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.
Warning	Mini-roundabout	3 - Right	Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 1 and 2 have 88% of the total flow for the roundabout for one or more time segments]

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Left	Standard Roundabout		1, 2, 3	6.07	A
2	Centre	Large Roundabout		1, 2, 3, 4	5.58	A
3	Right	Mini-roundabout		1, 2, 3	5.12	A

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Mini Roundabout Geometry

[same as above]

Large Roundabout Data

Junction	Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
2 - Centre	1 - Hoath Way (E)	1086	20.88
	2 - Hoath Way (S)	536	32.49
	3 - Hoath Way (W)	800	25.43
	4 - Hoath Way (N)	731	27.77

Slope / Intercept / Capacity
[same as above]

Lane Simulation: Arm options
[same as above]

Lanes
[same as above]

Entry Lane slope and intercept
[same as above]

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	Do Minimum	PM	ONE HOUR	16:15	17:45	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
1 - Left	1 - Hoath Way (E)	2	3	Simple (vertical queueing)	Normal	0	100.00	
2 - Centre	1 - Hoath Way (E)	3	2	Queue limited	Normal	0	100.00	12.00
	3 - Hoath Way (W)	1	1	Simple (vertical queueing)	Normal	0	100.00	
3 - Right	2 - Hoath Way (W)	2	1	Queue limited	Normal	0	100.00	12.00

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Left	1 - Hoath Way (E)	✓				
	2 - Hempstead Road (S)		ONE HOUR	✓	502	100.000
	3 - Ambley Road (N)		ONE HOUR	✓	368	100.000
2 - Centre	1 - Hoath Way (E)	✓				
	2 - Hoath Way (S)		ONE HOUR	✓	1692	100.000
	3 - Hoath Way (W)	✓				
	4 - Hoath Way (N)		ONE HOUR	✓	1383	100.000
3 - Right	1 - Hoath Lane (S)		ONE HOUR	✓	167	100.000
	2 - Hoath Way (W)	✓				
	3 - Courteney Road (N)		ONE HOUR	✓	79	100.000

Origin-Destination Data

Demand (PCU/hr)

1 - Left

		To		
		1 - Hoath Way (E)	2 - Hempstead Road (S)	3 - Ambley Road (N)
From	1 - Hoath Way (E)	0	214	206
	2 - Hempstead Road (S)	399	0	103
	3 - Ambley Road (N)	269	99	0

2 - Centre

Demand (PCU/hr)

		To			
		1 - Hoath Way (E)	2 - Hoath Way (S)	3 - Hoath Way (W)	4 - Hoath Way (N)
From	1 - Hoath Way (E)	0	15	76	133
	2 - Hoath Way (S)	80	0	223	1389
	3 - Hoath Way (W)	100	270	0	304
	4 - Hoath Way (N)	266	997	120	0

3 - Right

Demand (PCU/hr)

		To		
		1 - Hoath Lane (S)	2 - Hoath Way (W)	3 - Courteney Road (N)
From	1 - Hoath Lane (S)	0	166	1
	2 - Hoath Way (W)	329	0	118
	3 - Courteney Road (N)	27	52	0

Vehicle Mix

1 - Left

Heavy Vehicle Percentages

		To		
		1 - Hoath Way (E)	2 - Hempstead Road (S)	3 - Ambley Road (N)
From	1 - Hoath Way (E)	0	3	2
	2 - Hempstead Road (S)	1	0	1
	3 - Ambley Road (N)	1	7	0

2 - Centre

Heavy Vehicle Percentages

		To			
		1 - Hoath Way (E)	2 - Hoath Way (S)	3 - Hoath Way (W)	4 - Hoath Way (N)
From	1 - Hoath Way (E)	0	0	5	3
	2 - Hoath Way (S)	1	0	2	1
	3 - Hoath Way (W)	0	1	0	1
	4 - Hoath Way (N)	1	1	3	0

3 - Right

Heavy Vehicle Percentages

		To		
		1 - Hoath Lane (S)	2 - Hoath Way (W)	3 - Courteney Road (N)
From	1 - Hoath Lane (S)	0	3	0
	2 - Hoath Way (W)	0	0	0
	3 - Courteney Road (N)	0	3	0

Results

Results Summary for whole modelled period

Junction	Arm	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Left	1 - Hoath Way (E)	2.57	0.4	A	372	557
	2 - Hempstead Road (S)	9.77	1.8	A	452	678
	3 - Ambley Road (N)	5.00	0.6	A	324	487
2 - Centre	1 - Hoath Way (E)	5.19	0.4	A	197	296
	2 - Hoath Way (S)	4.71	3.0	A	1534	2302
	3 - Hoath Way (W)	13.50	2.7	B	601	902
	4 - Hoath Way (N)	2.90	1.4	A	1248	1873
3 - Right	1 - Hoath Lane (S)	3.90	0.2	A	151	226
	2 - Hoath Way (W)	5.82	0.9	A	401	602
	3 - Courteney Road (N)	3.86	0.2	A	73	110

Main Results for each time segment

16:15 - 16:30

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Left	1 - Hoath Way (E)	301	75	71	300	313	493	0.0	0.3	2.375	A
	2 - Hempstead Road (S)	362	90	147	363	375	224	0.0	0.4	3.776	A
	3 - Ambley Road (N)	271	68	291	272	276	219	0.0	0.1	2.664	A
2 - Centre	1 - Hoath Way (E)	162	41	1004	162	170	335	0.0	0.1	3.172	A
	2 - Hoath Way (S)	1277	319	236	1278	1285	931	0.0	0.7	2.380	A
	3 - Hoath Way (W)	493	123	1212	493	498	301	0.0	0.4	3.401	A
	4 - Hoath Way (N)	1012	253	326	1013	1042	1379	0.0	0.6	1.895	A
3 - Right	1 - Hoath Lane (S)	125	31	38	125	130	263	0.0	0.1	3.518	A
	2 - Hoath Way (W)	335	84	0.83	337	337	162	0.0	0.4	4.784	A
	3 - Courteney Road (N)	57	14	244	56	62	94	0.0	0.1	3.305	A

16:30 - 16:45

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Left	1 - Hoath Way (E)	365	91	80	364	371	598	0.3	0.3	2.438	A
	2 - Hempstead Road (S)	448	112	171	447	455	273	0.4	0.5	4.379	A
	3 - Ambley Road (N)	322	80	357	322	329	262	0.1	0.2	2.842	A
2 - Centre	1 - Hoath Way (E)	198	49	1227	198	199	400	0.1	0.2	3.551	A
	2 - Hoath Way (S)	1495	374	281	1498	1518	1145	0.7	1.1	3.052	A
	3 - Hoath Way (W)	598	150	1414	595	600	365	0.4	1.0	4.947	A
	4 - Hoath Way (N)	1228	307	400	1227	1229	1608	0.6	0.7	2.192	A
3 - Right	1 - Hoath Lane (S)	151	38	48	151	151	314	0.1	0.1	3.716	A
	2 - Hoath Way (W)	400	100	0.48	400	391	198	0.4	0.6	5.275	A
	3 - Courteney Road (N)	69	17	294	68	70	107	0.1	0.1	3.519	A

16:45 - 17:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Left	1 - Hoath Way (E)	449	112	95	449	454	712	0.3	0.3	2.555	A
	2 - Hempstead Road (S)	539	135	223	533	546	321	0.5	1.2	5.947	A
	3 - Ambley Road (N)	380	95	427	379	400	329	0.2	0.5	3.848	A
2 - Centre	1 - Hoath Way (E)	240	60	1487	240	241	478	0.2	0.4	5.073	A
	2 - Hoath Way (S)	1840	460	354	1843	1849	1373	1.1	2.6	4.712	A
	3 - Hoath Way (W)	712	178	1748	713	717	449	1.0	2.7	10.701	B
	4 - Hoath Way (N)	1485	371	475	1489	1510	1986	0.7	1.0	2.879	A
3 - Right	1 - Hoath Lane (S)	182	45	59	182	184	386	0.1	0.2	3.901	A
	2 - Hoath Way (W)	478	119	0.95	479	477	240	0.6	0.9	5.820	A
	3 - Courteney Road (N)	91	23	354	91	88	126	0.1	0.1	3.774	A

17:00 - 17:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Left	1 - Hoath Way (E)	447	112	104	448	460	730	0.3	0.2	2.574	A
	2 - Hempstead Road (S)	564	141	223	562	560	329	1.2	1.8	9.769	A
	3 - Ambley Road (N)	384	96	448	385	403	337	0.5	0.6	5.004	A
2 - Centre	1 - Hoath Way (E)	228	57	1485	229	241	485	0.4	0.3	5.187	A
	2 - Hoath Way (S)	1856	464	342	1847	1871	1372	2.6	3.0	4.568	A
	3 - Hoath Way (W)	730	183	1742	734	743	448	2.7	2.6	13.499	B
	4 - Hoath Way (N)	1484	371	485	1485	1514	1991	1.0	1.4	2.899	A
3 - Right	1 - Hoath Lane (S)	173	43	55	174	182	394	0.2	0.1	3.717	A
	2 - Hoath Way (W)	485	121	1	486	487	228	0.9	0.7	5.800	A
	3 - Courteney Road (N)	89	22	360	88	88	127	0.1	0.1	3.855	A

17:15 - 17:30

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Left	1 - Hoath Way (E)	360	90	81	358	377	579	0.2	0.4	2.495	A
	2 - Hempstead Road (S)	423	106	175	424	444	263	1.8	0.4	4.781	A
	3 - Ambley Road (N)	326	82	335	325	336	264	0.6	0.3	3.143	A
2 - Centre	1 - Hoath Way (E)	194	48	1240	192	198	389	0.3	0.3	4.018	A
	2 - Hoath Way (S)	1495	374	284	1496	1522	1148	3.0	1.2	3.084	A
	3 - Hoath Way (W)	579	145	1420	580	612	360	2.6	0.9	6.281	A
	4 - Hoath Way (N)	1248	312	382	1247	1269	1618	1.4	0.8	2.299	A
3 - Right	1 - Hoath Lane (S)	148	37	48	147	151	316	0.1	0.1	3.556	A
	2 - Hoath Way (W)	389	97	1	386	399	194	0.7	0.7	5.036	A
	3 - Courteney Road (N)	74	19	289	75	71	98	0.1	0.1	3.737	A

17:30 - 17:45

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Left	1 - Hoath Way (E)	308	77	68	308	312	496	0.4	0.2	2.380	A
	2 - Hempstead Road (S)	378	94	153	377	381	223	0.4	0.4	3.786	A
	3 - Ambley Road (N)	264	66	301	264	280	229	0.3	0.2	2.786	A
2 - Centre	1 - Hoath Way (E)	161	40	1033	161	171	320	0.3	0.2	3.168	A
	2 - Hoath Way (S)	1245	311	243	1244	1265	952	1.2	0.8	2.394	A
	3 - Hoath Way (W)	496	124	1179	500	506	308	0.9	0.3	3.580	A
	4 - Hoath Way (N)	1034	259	321	1032	1045	1358	0.8	0.6	1.897	A
3 - Right	1 - Hoath Lane (S)	125	31	37	125	130	262	0.1	0.1	3.559	A
	2 - Hoath Way (W)	320	80	0.24	322	331	161	0.7	0.4	4.640	A
	3 - Courteney Road (N)	58	15	241	58	59	82	0.1	0.0	3.252	A

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

16:15 - 16:30

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Left	1 - Hoath Way (E)	Entry	1	2	1, 2, 3	301	1871	0.161	300	313	0.0	0.3	2.375	A
		Exit	1	1		493			493	500	0.0	0.0	0.003	A
	2 - Hempstead Road (S)	Entry	1	1	1, 2, 3	362	1325	0.273	363	375	0.0	0.4	3.776	A
		Exit	1	1		224			224	235	0.0	0.0	0.000	A
	3 - Ambley Road (N)	Entry	1	1	1, 2, 3	271	1606	0.169	272	276	0.0	0.1	2.664	A
		Exit	1	1		219			219	229	0.0	0.0	0.000	A
2 - Centre	1 - Hoath Way (E)	Entry	1	1	1, 2, 3, 4	162	1364	0.119	162	170	0.0	0.1	3.172	A
		Exit	1	1		335			335	341	0.0	0.0	0.002	A
	2 - Hoath Way (S)	Entry	1	1	1, 2, 3, 4	1277	2766	0.461	1278	1285	0.0	0.7	2.380	A
		Exit	1	1		931			931	957	0.0	0.0	0.000	A
	3 - Hoath Way (W)	Entry	1	1	1, 2, 3, 4	493	1541	0.320	493	498	0.0	0.4	3.401	A
		Exit	1	1		301			301	315	0.0	0.0	0.000	A
	4 - Hoath Way (N)	Entry	1	1	1, 2, 3, 4	1012	2947	0.343	1013	1042	0.0	0.6	1.895	A
		Exit	1	1		1379			1379	1381	0.0	0.0	0.000	A
3 - Right	1 - Hoath Lane (S)	Entry	1	1	1, 2, 3	125	1149	0.109	125	130	0.0	0.1	3.518	A
		Exit	1	1		263			263	268	0.0	0.0	0.000	A
	2 - Hoath Way (W)	Entry	1	2	1, 2, 3	335	1092	0.306	337	337	0.0	0.4	4.784	A
		Exit	1	1		162			162	170	0.0	0.0	0.013	A
	3 - Courteney Road (N)	Entry	1	1	1, 2, 3	57	1147	0.050	56	62	0.0	0.1	3.305	A
		Exit	1	1		94			94	90	0.0	0.0	0.000	A

16:30 - 16:45

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Left	1 - Hoath Way (E)	Entry	1	2	1, 2, 3	365	1858	0.197	364	371	0.3	0.3	2.438	A
		Exit	1	1		599			598	602	0.0	0.0	0.054	A
	2 - Hempstead Road (S)	Entry	1	1	1, 2, 3	448	1311	0.342	447	455	0.4	0.5	4.379	A
		Exit	1	1		273			273	279	0.0	0.0	0.000	A
	3 - Ambley Road (N)	Entry	1	1	1, 2, 3	322	1550	0.208	322	329	0.1	0.2	2.842	A
		Exit	1	1		262			262	273	0.0	0.0	0.000	A
2 - Centre	1 - Hoath Way (E)	Entry	1	1	1, 2, 3, 4	198	1168	0.170	198	199	0.1	0.2	3.551	A
		Exit	1	1		400			400	395	0.0	0.0	0.002	A
	2 - Hoath Way (S)	Entry	1	1	1, 2, 3, 4	1495	2707	0.552	1498	1518	0.7	1.1	3.052	A
		Exit	1	1		1145			1145	1146	0.0	0.0	0.000	A
	3 - Hoath Way (W)	Entry	1	1	1, 2, 3, 4	598	1335	0.448	595	600	0.4	1.0	4.947	A
		Exit	1	1		365			365	372	0.0	0.0	0.001	A
	4 - Hoath Way (N)	Entry	1	1	1, 2, 3, 4	1228	2855	0.430	1227	1229	0.6	0.7	2.192	A
		Exit	1	1		1608			1608	1632	0.0	0.0	0.000	A
3 - Right	1 - Hoath Lane (S)	Entry	1	1	1, 2, 3	151	1140	0.132	151	151	0.1	0.1	3.716	A
		Exit	1	1		314			314	311	0.0	0.0	0.000	A
	2 - Hoath Way (W)	Entry	1	2	1, 2, 3	400	1093	0.366	400	391	0.4	0.6	5.275	A
		Exit	1	1		198			198	198	0.0	0.0	0.000	A
	3 - Courteney Road (N)	Entry	1	1	1, 2, 3	69	1090	0.063	68	70	0.1	0.1	3.519	A
		Exit	1	1		107			107	104	0.0	0.0	0.000	A

16:45 - 17:00

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalise level of service
1 - Left	1 - Hoath Way (E)	Entry	1	2	1, 2, 3	449	1849	0.243	449	454	0.3	0.3	2.555	A
		Exit	1	1		711			712	725	0.0	0.7	1.869	A
	2 - Hempstead Road (S)	Entry	1	1	1, 2, 3	539	1275	0.422	533	546	0.5	1.2	5.947	A
		Exit	1	1		321			321	338	0.0	0.0	0.000	A
	3 - Ambley Road (N)	Entry	1	1	1, 2, 3	380	1503	0.253	379	400	0.2	0.5	3.848	A
		Exit	1	1		329			329	334	0.0	0.0	0.000	A
2 - Centre	1 - Hoath Way (E)	Entry	1	1	1, 2, 3, 4	240	955	0.252	240	241	0.2	0.4	5.073	A
		Exit	1	1		477			478	482	0.0	0.0	0.059	A
	2 - Hoath Way (S)	Entry	1	1	1, 2, 3, 4	1840	2619	0.703	1843	1849	1.1	2.6	4.712	A
		Exit	1	1		1373			1373	1387	0.0	0.0	0.000	A
	3 - Hoath Way (W)	Entry	1	1	1, 2, 3, 4	712	987	0.721	713	717	1.0	2.7	10.701	B
		Exit	1	1		449			449	456	0.0	0.0	0.000	A
	4 - Hoath Way (N)	Entry	1	1	1, 2, 3, 4	1485	2765	0.537	1489	1510	0.7	1.0	2.879	A
		Exit	1	1		1986			1986	1992	0.0	0.0	0.000	A
3 - Right	1 - Hoath Lane (S)	Entry	1	1	1, 2, 3	182	1145	0.159	182	184	0.1	0.2	3.901	A
		Exit	1	1		386			386	381	0.0	0.0	0.000	A
	2 - Hoath Way (W)	Entry	1	2	1, 2, 3	478	1092	0.437	479	477	0.6	0.9	5.820	A
		Exit	1	1		240			240	241	0.0	0.0	0.005	A
	3 - Courteney Road (N)	Entry	1	1	1, 2, 3	91	1045	0.087	91	88	0.1	0.1	3.774	A
		Exit	1	1		126			126	128	0.0	0.0	0.000	A

17:00 - 17:15

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalise level of service
1 - Left	1 - Hoath Way (E)	Entry	1	2	1, 2, 3	447	1845	0.242	448	460	0.3	0.2	2.574	A
		Exit	1	1		729			730	744	0.7	0.7	3.968	A
	2 - Hempstead Road (S)	Entry	1	1	1, 2, 3	564	1279	0.441	562	560	1.2	1.8	9.769	A
		Exit	1	1		329			329	343	0.0	0.0	0.000	A
	3 - Ambley Road (N)	Entry	1	1	1, 2, 3	384	1490	0.258	385	403	0.5	0.6	5.004	A
		Exit	1	1		337			337	336	0.0	0.0	0.000	A
2 - Centre	1 - Hoath Way (E)	Entry	1	1	1, 2, 3, 4	228	962	0.237	229	241	0.4	0.3	5.187	A
		Exit	1	1		485			485	489	0.0	0.0	0.025	A
	2 - Hoath Way (S)	Entry	1	1	1, 2, 3, 4	1856	2637	0.704	1847	1871	2.6	3.0	4.568	A
		Exit	1	1		1372			1372	1403	0.0	0.0	0.000	A
	3 - Hoath Way (W)	Entry	1	1	1, 2, 3, 4	730	995	0.734	734	743	2.7	2.6	13.499	B
		Exit	1	1		448			448	461	0.0	0.0	0.000	A
	4 - Hoath Way (N)	Entry	1	1	1, 2, 3, 4	1484	2751	0.539	1485	1514	1.0	1.4	2.899	A
		Exit	1	1		1991			1991	2015	0.0	0.0	0.000	A
3 - Right	1 - Hoath Lane (S)	Entry	1	1	1, 2, 3	173	1143	0.151	174	182	0.2	0.1	3.717	A
		Exit	1	1		394			394	391	0.0	0.0	0.000	A
	2 - Hoath Way (W)	Entry	1	2	1, 2, 3	485	1092	0.445	486	487	0.9	0.7	5.800	A
		Exit	1	1		228			228	239	0.0	0.0	0.000	A
	3 - Courteney Road (N)	Entry	1	1	1, 2, 3	89	1048	0.085	88	88	0.1	0.1	3.855	A
		Exit	1	1		127			127	127	0.0	0.0	0.000	A

17:15 - 17:30

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalise level of service
1 - Left	1 - Hoath Way (E)	Entry	1	2	1, 2, 3	360	1857	0.194	358	377	0.2	0.4	2.495	A
		Exit	1	1		579			579	605	0.7	0.0	0.632	A
	2 - Hempstead Road (S)	Entry	1	1	1, 2, 3	423	1308	0.324	424	444	1.8	0.4	4.781	A
		Exit	1	1		263			263	282	0.0	0.0	0.000	A
	3 - Ambley Road (N)	Entry	1	1	1, 2, 3	326	1577	0.207	325	336	0.6	0.3	3.143	A
		Exit	1	1		264			264	274	0.0	0.0	0.000	A
2 - Centre	1 - Hoath Way (E)	Entry	1	1	1, 2, 3, 4	194	1161	0.167	192	198	0.3	0.3	4.018	A
		Exit	1	1		389			389	403	0.0	0.0	0.001	A
	2 - Hoath Way (S)	Entry	1	1	1, 2, 3, 4	1495	2704	0.553	1496	1522	3.0	1.2	3.084	A
		Exit	1	1		1148			1148	1170	0.0	0.0	0.000	A
	3 - Hoath Way (W)	Entry	1	1	1, 2, 3, 4	579	1325	0.437	580	612	2.6	0.9	6.281	A
		Exit	1	1		360			360	378	0.0	0.0	0.000	A
	4 - Hoath Way (N)	Entry	1	1	1, 2, 3, 4	1248	2874	0.434	1247	1269	1.4	0.8	2.299	A
		Exit	1	1		1618			1618	1650	0.0	0.0	0.000	A
3 - Right	1 - Hoath Lane (S)	Entry	1	1	1, 2, 3	148	1133	0.130	147	151	0.1	0.1	3.556	A
		Exit	1	1		316			316	324	0.0	0.0	0.000	A
	2 - Hoath Way (W)	Entry	1	2	1, 2, 3	389	1092	0.356	386	399	0.7	0.7	5.036	A
		Exit	1	1		194			194	196	0.0	0.0	0.000	A
	3 - Courteney Road (N)	Entry	1	1	1, 2, 3	74	1111	0.067	75	71	0.1	0.1	3.737	A
		Exit	1	1		98			98	102	0.0	0.0	0.000	A

17:30 - 17:45

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalise level of service
1 - Left	1 - Hoath Way (E)	Entry	1	2	1, 2, 3	308	1869	0.165	308	312	0.4	0.2	2.380	A
		Exit	1	1		496			496	505	0.0	0.0	0.004	A
	2 - Hempstead Road (S)	Entry	1	1	1, 2, 3	378	1321	0.286	377	381	0.4	0.4	3.786	A
		Exit	1	1		223			223	234	0.0	0.0	0.000	A
	3 - Ambley Road (N)	Entry	1	1	1, 2, 3	264	1584	0.167	264	280	0.3	0.2	2.786	A
		Exit	1	1		229			229	233	0.0	0.0	0.000	A
2 - Centre	1 - Hoath Way (E)	Entry	1	1	1, 2, 3, 4	161	1341	0.120	161	171	0.3	0.2	3.168	A
		Exit	1	1		320			320	332	0.0	0.0	0.005	A
	2 - Hoath Way (S)	Entry	1	1	1, 2, 3, 4	1245	2754	0.452	1244	1265	1.2	0.8	2.394	A
		Exit	1	1		952			952	964	0.0	0.0	0.000	A
	3 - Hoath Way (W)	Entry	1	1	1, 2, 3, 4	496	1576	0.315	500	506	0.9	0.3	3.580	A
		Exit	1	1		308			308	312	0.0	0.0	0.001	A
	4 - Hoath Way (N)	Entry	1	1	1, 2, 3, 4	1034	2953	0.350	1032	1045	0.8	0.6	1.897	A
		Exit	1	1		1358			1358	1379	0.0	0.0	0.000	A
3 - Right	1 - Hoath Lane (S)	Entry	1	1	1, 2, 3	125	1150	0.108	125	130	0.1	0.1	3.559	A
		Exit	1	1		262			262	265	0.0	0.0	0.000	A
	2 - Hoath Way (W)	Entry	1	2	1, 2, 3	320	1093	0.293	322	331	0.7	0.4	4.640	A
		Exit	1	1		161			161	169	0.0	0.0	0.000	A
	3 - Courteney Road (N)	Entry	1	1	1, 2, 3	58	1139	0.051	58	59	0.1	0.0	3.252	A
		Exit	1	1		82			82	87	0.0	0.0	0.000	A

Do Something (800), AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A1 - [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.
Warning	Mini-roundabout	3 - Right	Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 1 and 2 have 90% of the total flow for the roundabout for one or more time segments]

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Left	Standard Roundabout		1, 2, 3	3.38	A
2	Centre	Large Roundabout		1, 2, 3, 4	4.14	A
3	Right	Mini-roundabout		1, 2, 3	4.55	A

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Mini Roundabout Geometry

[same as above]

Large Roundabout Data

Junction	Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
2 - Centre	1 - Hoath Way (E)	950	20.88
	2 - Hoath Way (S)	675	32.49
	3 - Hoath Way (W)	756	25.43
	4 - Hoath Way (N)	502	27.77

Slope / Intercept / Capacity
[same as above]

Lane Simulation: Arm options
[same as above]

Lanes
[same as above]

Entry Lane slope and intercept
[same as above]

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	Do Something (800)	AM	ONE HOUR	07:30	09:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
1 - Left	1 - Hoath Way (E)	2	3	Simple (vertical queueing)	Normal	0	100.00	
2 - Centre	1 - Hoath Way (E)	3	2	Queue limited	Normal	0	100.00	12.00
	3 - Hoath Way (W)	1	1	Simple (vertical queueing)	Normal	0	100.00	
3 - Right	2 - Hoath Way (W)	2	1	Queue limited	Normal	0	100.00	12.00

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Left	1 - Hoath Way (E)	✓				
	2 - Hempstead Road (S)		ONE HOUR	✓	398	100.000
	3 - Ambley Road (N)		ONE HOUR	✓	184	100.000
2 - Centre	1 - Hoath Way (E)	✓				
	2 - Hoath Way (S)		ONE HOUR	✓	1366	100.000
	3 - Hoath Way (W)	✓				
	4 - Hoath Way (N)		ONE HOUR	✓	1470	100.000
3 - Right	1 - Hoath Lane (S)		ONE HOUR	✓	342	100.000
	2 - Hoath Way (W)	✓				
	3 - Courteney Road (N)		ONE HOUR	✓	60	100.000

Origin-Destination Data

Demand (PCU/hr)

1 - Left

		To		
		1 - Hoath Way (E)	2 - Hempstead Road (S)	3 - Ambley Road (N)
From	1 - Hoath Way (E)	0	255	255
	2 - Hempstead Road (S)	315	0	83
	3 - Ambley Road (N)	132	52	0

2 - Centre

Demand (PCU/hr)

		To			
		1 - Hoath Way (E)	2 - Hoath Way (S)	3 - Hoath Way (W)	4 - Hoath Way (N)
From	1 - Hoath Way (E)	0	31	47	286
	2 - Hoath Way (S)	35	0	268	1063
	3 - Hoath Way (W)	68	145	0	238
	4 - Hoath Way (N)	127	1150	193	0

3 - Right

Demand (PCU/hr)

		To		
		1 - Hoath Lane (S)	2 - Hoath Way (W)	3 - Courteney Road (N)
From	1 - Hoath Lane (S)	0	328	14
	2 - Hoath Way (W)	161	0	69
	3 - Courteney Road (N)	29	31	0

Vehicle Mix

1 - Left

Heavy Vehicle Percentages

		To		
		1 - Hoath Way (E)	2 - Hempstead Road (S)	3 - Ambley Road (N)
From	1 - Hoath Way (E)	0	1	5
	2 - Hempstead Road (S)	2	0	5
	3 - Ambley Road (N)	3	7	0

2 - Centre

Heavy Vehicle Percentages

		To			
		1 - Hoath Way (E)	2 - Hoath Way (S)	3 - Hoath Way (W)	4 - Hoath Way (N)
From	1 - Hoath Way (E)	0	13	3	7
	2 - Hoath Way (S)	14	0	5	2
	3 - Hoath Way (W)	0	3	0	2
	4 - Hoath Way (N)	0	3	0	0

3 - Right

Heavy Vehicle Percentages

		To		
		1 - Hoath Lane (S)	2 - Hoath Way (W)	3 - Courteney Road (N)
From	1 - Hoath Lane (S)	0	7	0
	2 - Hoath Way (W)	0	0	7
	3 - Courteney Road (N)	1	13	0

Results

Results Summary for whole modelled period

Junction	Arm	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Left	1 - Hoath Way (E)	2.76	0.5	A	455	682
	2 - Hempstead Road (S)	4.48	0.6	A	352	528
	3 - Ambley Road (N)	2.77	0.2	A	164	247
2 - Centre	1 - Hoath Way (E)	8.65	1.0	A	312	467
	2 - Hoath Way (S)	4.28	1.8	A	1221	1831
	3 - Hoath Way (W)	5.16	0.8	A	401	601
	4 - Hoath Way (N)	2.58	1.2	A	1315	1973
3 - Right	1 - Hoath Lane (S)	4.82	0.5	A	300	450
	2 - Hoath Way (W)	4.47	0.3	A	204	306
	3 - Courteney Road (N)	3.35	0.1	A	52	77

Main Results for each time segment

07:30 - 07:45

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Left	1 - Hoath Way (E)	378	94	32	379	381	334	0.0	0.2	2.447	A
	2 - Hempstead Road (S)	290	72	183	290	296	228	0.0	0.3	3.635	A
	3 - Ambley Road (N)	135	34	232	134	140	242	0.0	0.1	2.397	A
2 - Centre	1 - Hoath Way (E)	257	64	1104	254	275	175	0.0	0.4	3.839	A
	2 - Hoath Way (S)	1015	254	387	1013	1030	971	0.0	0.7	2.339	A
	3 - Hoath Way (W)	334	83	1023	334	337	378	0.0	0.2	2.686	A
	4 - Hoath Way (N)	1098	275	177	1102	1125	1179	0.0	0.4	1.807	A
3 - Right	1 - Hoath Lane (S)	249	62	20	249	265	142	0.0	0.3	4.175	A
	2 - Hoath Way (W)	175	44	12	174	171	257	0.0	0.2	3.962	A
	3 - Courteney Road (N)	38	9	124	38	45	63	0.0	0.0	2.994	A

07:45 - 08:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Left	1 - Hoath Way (E)	435	109	47	437	450	390	0.2	0.3	2.552	A
	2 - Hempstead Road (S)	340	85	215	339	349	268	0.3	0.3	3.842	A
	3 - Ambley Road (N)	162	41	276	160	161	279	0.1	0.2	2.443	A
2 - Centre	1 - Hoath Way (E)	302	76	1277	303	322	198	0.4	0.4	4.535	A
	2 - Hoath Way (S)	1185	296	447	1184	1212	1133	0.7	1.0	2.880	A
	3 - Hoath Way (W)	390	98	1196	391	390	435	0.2	0.3	3.163	A
	4 - Hoath Way (N)	1261	315	214	1262	1311	1373	0.4	0.7	1.996	A
3 - Right	1 - Hoath Lane (S)	290	73	25	290	309	168	0.3	0.4	4.453	A
	2 - Hoath Way (W)	198	50	12	199	204	302	0.2	0.2	4.128	A
	3 - Courteney Road (N)	52	13	141	52	52	71	0.0	0.0	3.050	A

08:00 - 08:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Left	1 - Hoath Way (E)	548	137	53	546	565	475	0.3	0.5	2.732	A
	2 - Hempstead Road (S)	421	105	267	422	432	331	0.3	0.5	4.390	A
	3 - Ambley Road (N)	193	48	334	194	203	355	0.2	0.1	2.625	A
2 - Centre	1 - Hoath Way (E)	375	94	1595	375	393	237	0.4	1.0	8.221	A
	2 - Hoath Way (S)	1462	365	554	1464	1505	1416	1.0	1.8	4.224	A
	3 - Hoath Way (W)	475	119	1470	475	483	548	0.3	0.7	4.614	A
	4 - Hoath Way (N)	1578	394	255	1576	1611	1690	0.7	1.2	2.513	A
3 - Right	1 - Hoath Lane (S)	360	90	32	360	379	199	0.4	0.5	4.819	A
	2 - Hoath Way (W)	237	59	16	235	248	375	0.2	0.3	4.389	A
	3 - Courteney Road (N)	64	16	167	63	66	84	0.0	0.1	3.349	A

08:15 - 08:30

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Left	1 - Hoath Way (E)	546	137	55	548	565	481	0.5	0.3	2.757	A
	2 - Hempstead Road (S)	426	106	269	424	436	333	0.5	0.7	4.476	A
	3 - Ambley Road (N)	197	49	337	198	204	356	0.1	0.1	2.767	A
2 - Centre	1 - Hoath Way (E)	376	94	1600	376	399	244	1.0	0.9	8.649	A
	2 - Hoath Way (S)	1481	370	552	1479	1508	1423	1.8	1.7	4.282	A
	3 - Hoath Way (W)	481	120	1485	479	488	546	0.7	0.8	5.159	A
	4 - Hoath Way (N)	1588	397	256	1588	1626	1709	1.2	1.2	2.580	A
3 - Right	1 - Hoath Lane (S)	360	90	31	361	380	209	0.5	0.4	4.671	A
	2 - Hoath Way (W)	244	61	15	243	252	376	0.3	0.3	4.466	A
	3 - Courteney Road (N)	64	16	177	63	68	82	0.1	0.1	3.349	A

08:30 - 08:45

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Left	1 - Hoath Way (E)	443	111	44	443	459	399	0.3	0.3	2.508	A
	2 - Hempstead Road (S)	346	86	216	347	364	271	0.7	0.2	3.986	A
	3 - Ambley Road (N)	166	41	277	166	169	286	0.1	0.1	2.466	A
2 - Centre	1 - Hoath Way (E)	309	77	1303	309	332	203	0.9	0.5	5.456	A
	2 - Hoath Way (S)	1161	290	464	1161	1225	1148	1.7	0.9	3.000	A
	3 - Hoath Way (W)	399	100	1182	399	411	443	0.8	0.4	3.532	A
	4 - Hoath Way (N)	1289	322	220	1286	1329	1361	1.2	0.9	2.100	A
3 - Right	1 - Hoath Lane (S)	298	74	27	296	316	167	0.4	0.4	4.310	A
	2 - Hoath Way (W)	203	51	14	204	213	309	0.3	0.1	4.414	A
	3 - Courteney Road (N)	52	13	141	53	56	76	0.1	0.0	3.281	A

08:45 - 09:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Left	1 - Hoath Way (E)	378	94	40	378	384	327	0.3	0.2	2.416	A
	2 - Hempstead Road (S)	290	72	188	292	298	230	0.2	0.2	3.590	A
	3 - Ambley Road (N)	134	34	233	134	141	247	0.1	0.1	2.527	A
2 - Centre	1 - Hoath Way (E)	250	62	1085	249	272	168	0.5	0.2	3.923	A
	2 - Hoath Way (S)	1021	255	376	1022	1034	958	0.9	0.7	2.520	A
	3 - Hoath Way (W)	327	82	1020	327	338	378	0.4	0.3	2.760	A
	4 - Hoath Way (N)	1075	269	177	1076	1105	1170	0.9	0.5	1.780	A
3 - Right	1 - Hoath Lane (S)	242	60	20	241	260	138	0.4	0.2	4.138	A
	2 - Hoath Way (W)	168	42	11	168	168	250	0.1	0.2	4.066	A
	3 - Courteney Road (N)	40	10	117	40	46	61	0.0	0.0	2.799	A

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

07:30 - 07:45

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Left	1 - Hoath Way (E)	Entry	1	2	1, 2, 3	378	1879	0.201	379	381	0.0	0.2	2.447	A
		Exit	1	1		334			334	337	0.0	0.0	0.000	A
	2 - Hempstead Road (S)	Entry	1	1	1, 2, 3	290	1276	0.227	290	296	0.0	0.3	3.635	A
		Exit	1	1		228			228	230	0.0	0.0	0.000	A
	3 - Ambley Road (N)	Entry	1	1	1, 2, 3	135	1628	0.083	134	140	0.0	0.1	2.397	A
		Exit	1	1		242			242	250	0.0	0.0	0.000	A
2 - Centre	1 - Hoath Way (E)	Entry	1	1	1, 2, 3, 4	257	1217	0.211	254	275	0.0	0.4	3.839	A
		Exit	1	1		175			175	172	0.0	0.0	0.000	A
	2 - Hoath Way (S)	Entry	1	1	1, 2, 3, 4	1015	2509	0.404	1013	1030	0.0	0.7	2.339	A
		Exit	1	1		971			971	1010	0.0	0.0	0.000	A
	3 - Hoath Way (W)	Entry	1	1	1, 2, 3, 4	334	1692	0.197	334	337	0.0	0.2	2.686	A
		Exit	1	1		378			378	380	0.0	0.0	0.000	A
	4 - Hoath Way (N)	Entry	1	1	1, 2, 3, 4	1098	3123	0.352	1102	1125	0.0	0.4	1.807	A
		Exit	1	1		1179			1179	1205	0.0	0.0	0.000	A
3 - Right	1 - Hoath Lane (S)	Entry	1	1	1, 2, 3	249	1126	0.221	249	265	0.0	0.3	4.175	A
		Exit	1	1		142			142	140	0.0	0.0	0.000	A
	2 - Hoath Way (W)	Entry	1	2	1, 2, 3	175	1057	0.166	174	171	0.0	0.2	3.962	A
		Exit	1	1		257			257	278	0.0	0.0	0.007	A
	3 - Courteney Road (N)	Entry	1	1	1, 2, 3	38	1178	0.032	38	45	0.0	0.0	2.994	A
		Exit	1	1		63			63	64	0.0	0.0	0.000	A

07:45 - 08:00

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Left	1 - Hoath Way (E)	Entry	1	2	1, 2, 3	435	1875	0.232	437	450	0.2	0.3	2.552	A
		Exit	1	1		390			390	391	0.0	0.0	0.000	A
	2 - Hempstead Road (S)	Entry	1	1	1, 2, 3	340	1257	0.270	339	349	0.3	0.3	3.842	A
		Exit	1	1		268			268	272	0.0	0.0	0.000	A
	3 - Ambley Road (N)	Entry	1	1	1, 2, 3	162	1580	0.103	160	161	0.1	0.2	2.443	A
		Exit	1	1		279			279	297	0.0	0.0	0.000	A
2 - Centre	1 - Hoath Way (E)	Entry	1	1	1, 2, 3, 4	302	1077	0.281	303	322	0.4	0.4	4.535	A
		Exit	1	1		198			198	203	0.0	0.0	0.000	A
	2 - Hoath Way (S)	Entry	1	1	1, 2, 3, 4	1185	2449	0.484	1184	1212	0.7	1.0	2.880	A
		Exit	1	1		1133			1133	1183	0.0	0.0	0.000	A
	3 - Hoath Way (W)	Entry	1	1	1, 2, 3, 4	390	1520	0.256	391	390	0.2	0.3	3.163	A
		Exit	1	1		435			435	449	0.0	0.0	0.000	A
	4 - Hoath Way (N)	Entry	1	1	1, 2, 3, 4	1261	3068	0.411	1262	1311	0.4	0.7	1.996	A
		Exit	1	1		1373			1373	1401	0.0	0.0	0.000	A
3 - Right	1 - Hoath Lane (S)	Entry	1	1	1, 2, 3	290	1117	0.260	290	309	0.3	0.4	4.453	A
		Exit	1	1		168			168	170	0.0	0.0	0.000	A
	2 - Hoath Way (W)	Entry	1	2	1, 2, 3	198	1061	0.187	199	204	0.2	0.2	4.128	A
		Exit	1	1		302			302	322	0.0	0.0	0.011	A
	3 - Courteney Road (N)	Entry	1	1	1, 2, 3	52	1199	0.044	52	52	0.0	0.0	3.050	A
		Exit	1	1		71			71	73	0.0	0.0	0.000	A

08:00 - 08:15

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalise level of service
1 - Left	1 - Hoath Way (E)	Entry	1	2	1, 2, 3	548	1873	0.292	546	565	0.3	0.5	2.732	A
		Exit	1	1		475			475	486	0.0	0.0	0.020	A
	2 - Hempstead Road (S)	Entry	1	1	1, 2, 3	421	1226	0.344	422	432	0.3	0.5	4.390	A
		Exit	1	1		331			331	340	0.0	0.0	0.000	A
	3 - Ambley Road (N)	Entry	1	1	1, 2, 3	193	1557	0.124	194	203	0.2	0.1	2.625	A
		Exit	1	1		355			355	373	0.0	0.0	0.000	A
2 - Centre	1 - Hoath Way (E)	Entry	1	1	1, 2, 3, 4	375	806	0.465	375	393	0.4	1.0	8.221	A
		Exit	1	1		237			237	249	0.0	0.0	0.000	A
	2 - Hoath Way (S)	Entry	1	1	1, 2, 3, 4	1462	2322	0.629	1464	1505	1.0	1.8	4.224	A
		Exit	1	1		1416			1416	1448	0.0	0.0	0.000	A
	3 - Hoath Way (W)	Entry	1	1	1, 2, 3, 4	475	1233	0.385	475	483	0.3	0.7	4.614	A
		Exit	1	1		548			548	566	0.0	0.0	0.001	A
	4 - Hoath Way (N)	Entry	1	1	1, 2, 3, 4	1578	3033	0.520	1576	1611	0.7	1.2	2.513	A
		Exit	1	1		1690			1690	1730	0.0	0.0	0.000	A
3 - Right	1 - Hoath Lane (S)	Entry	1	1	1, 2, 3	360	1108	0.326	360	379	0.4	0.5	4.819	A
		Exit	1	1		199			199	206	0.0	0.0	0.000	A
	2 - Hoath Way (W)	Entry	1	2	1, 2, 3	237	1065	0.222	235	248	0.2	0.3	4.389	A
		Exit	1	1		375			375	396	0.0	0.1	0.149	A
	3 - Courteney Road (N)	Entry	1	1	1, 2, 3	64	1162	0.055	63	66	0.0	0.1	3.349	A
		Exit	1	1		84			84	91	0.0	0.0	0.000	A

08:15 - 08:30

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalise level of service
1 - Left	1 - Hoath Way (E)	Entry	1	2	1, 2, 3	546	1875	0.291	548	565	0.5	0.3	2.757	A
		Exit	1	1		481			481	491	0.0	0.0	0.021	A
	2 - Hempstead Road (S)	Entry	1	1	1, 2, 3	426	1227	0.347	424	436	0.5	0.7	4.476	A
		Exit	1	1		333			333	343	0.0	0.0	0.000	A
	3 - Ambley Road (N)	Entry	1	1	1, 2, 3	197	1528	0.129	198	204	0.1	0.1	2.767	A
		Exit	1	1		356			356	371	0.0	0.0	0.000	A
2 - Centre	1 - Hoath Way (E)	Entry	1	1	1, 2, 3, 4	376	802	0.470	376	399	1.0	0.9	8.649	A
		Exit	1	1		244			244	251	0.0	0.0	0.000	A
	2 - Hoath Way (S)	Entry	1	1	1, 2, 3, 4	1481	2322	0.638	1479	1508	1.8	1.7	4.282	A
		Exit	1	1		1423			1423	1458	0.0	0.0	0.000	A
	3 - Hoath Way (W)	Entry	1	1	1, 2, 3, 4	481	1214	0.395	479	488	0.7	0.8	5.159	A
		Exit	1	1		546			546	564	0.0	0.0	0.000	A
	4 - Hoath Way (N)	Entry	1	1	1, 2, 3, 4	1588	3020	0.526	1588	1626	1.2	1.2	2.580	A
		Exit	1	1		1709			1709	1748	0.0	0.0	0.000	A
3 - Right	1 - Hoath Lane (S)	Entry	1	1	1, 2, 3	360	1117	0.323	361	380	0.5	0.4	4.671	A
		Exit	1	1		209			209	209	0.0	0.0	0.000	A
	2 - Hoath Way (W)	Entry	1	2	1, 2, 3	244	1065	0.229	243	252	0.3	0.3	4.466	A
		Exit	1	1		376			376	401	0.1	0.0	0.262	A
	3 - Courteney Road (N)	Entry	1	1	1, 2, 3	64	1151	0.055	63	68	0.1	0.1	3.349	A
		Exit	1	1		82			82	90	0.0	0.0	0.000	A

08:30 - 08:45

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalise level of service
1 - Left	1 - Hoath Way (E)	Entry	1	2	1, 2, 3	443	1879	0.236	443	459	0.3	0.3	2.508	A
		Exit	1	1		399			399	410	0.0	0.0	0.000	A
	2 - Hempstead Road (S)	Entry	1	1	1, 2, 3	346	1260	0.274	347	364	0.7	0.2	3.986	A
		Exit	1	1		271			271	276	0.0	0.0	0.000	A
	3 - Ambley Road (N)	Entry	1	1	1, 2, 3	166	1576	0.105	166	169	0.1	0.1	2.466	A
		Exit	1	1		286			286	305	0.0	0.0	0.000	A
2 - Centre	1 - Hoath Way (E)	Entry	1	1	1, 2, 3, 4	309	1053	0.293	309	332	0.9	0.5	5.456	A
		Exit	1	1		203			203	211	0.0	0.0	0.001	A
	2 - Hoath Way (S)	Entry	1	1	1, 2, 3, 4	1161	2423	0.479	1161	1225	1.7	0.9	3.000	A
		Exit	1	1		1148			1148	1194	0.0	0.0	0.000	A
	3 - Hoath Way (W)	Entry	1	1	1, 2, 3, 4	399	1527	0.261	399	411	0.8	0.4	3.532	A
		Exit	1	1		443			443	458	0.0	0.0	0.001	A
	4 - Hoath Way (N)	Entry	1	1	1, 2, 3, 4	1289	3078	0.419	1286	1329	1.2	0.9	2.100	A
		Exit	1	1		1361			1361	1433	0.0	0.0	0.000	A
3 - Right	1 - Hoath Lane (S)	Entry	1	1	1, 2, 3	298	1119	0.266	296	316	0.4	0.4	4.310	A
		Exit	1	1		167			167	175	0.0	0.0	0.000	A
	2 - Hoath Way (W)	Entry	1	2	1, 2, 3	203	1064	0.191	204	213	0.3	0.1	4.414	A
		Exit	1	1		309			309	332	0.0	0.0	0.045	A
	3 - Courteney Road (N)	Entry	1	1	1, 2, 3	52	1190	0.044	53	56	0.1	0.0	3.281	A
		Exit	1	1		76			76	78	0.0	0.0	0.000	A

08:45 - 09:00

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalise level of service
1 - Left	1 - Hoath Way (E)	Entry	1	2	1, 2, 3	378	1880	0.201	378	384	0.3	0.2	2.416	A
		Exit	1	1		327			327	338	0.0	0.0	0.000	A
	2 - Hempstead Road (S)	Entry	1	1	1, 2, 3	290	1278	0.227	292	298	0.2	0.2	3.590	A
		Exit	1	1		230			230	234	0.0	0.0	0.000	A
	3 - Ambley Road (N)	Entry	1	1	1, 2, 3	134	1617	0.083	134	141	0.1	0.1	2.527	A
		Exit	1	1		247			247	252	0.0	0.0	0.000	A
2 - Centre	1 - Hoath Way (E)	Entry	1	1	1, 2, 3, 4	250	1251	0.200	249	272	0.5	0.2	3.923	A
		Exit	1	1		168			168	168	0.0	0.0	0.000	A
	2 - Hoath Way (S)	Entry	1	1	1, 2, 3, 4	1021	2523	0.405	1022	1034	0.9	0.7	2.520	A
		Exit	1	1		958			958	994	0.0	0.0	0.000	A
	3 - Hoath Way (W)	Entry	1	1	1, 2, 3, 4	327	1702	0.192	327	338	0.4	0.3	2.760	A
		Exit	1	1		378			378	382	0.0	0.0	0.000	A
	4 - Hoath Way (N)	Entry	1	1	1, 2, 3, 4	1075	3134	0.343	1076	1105	0.9	0.5	1.780	A
		Exit	1	1		1170			1170	1204	0.0	0.0	0.000	A
3 - Right	1 - Hoath Lane (S)	Entry	1	1	1, 2, 3	242	1118	0.216	241	260	0.4	0.2	4.138	A
		Exit	1	1		138			138	138	0.0	0.0	0.000	A
	2 - Hoath Way (W)	Entry	1	2	1, 2, 3	168	1063	0.158	168	168	0.1	0.2	4.066	A
		Exit	1	1		250			250	273	0.0	0.0	0.024	A
	3 - Courteney Road (N)	Entry	1	1	1, 2, 3	40	1217	0.033	40	46	0.0	0.0	2.799	A
		Exit	1	1		61			61	64	0.0	0.0	0.000	A

Do Something (800), PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A1 - [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.
Warning	Mini-roundabout	3 - Right	Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 1 and 2 have 88% of the total flow for the roundabout for one or more time segments]

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Left	Standard Roundabout		1, 2, 3	3.93	A
2	Centre	Large Roundabout		1, 2, 3, 4	4.69	A
3	Right	Mini-roundabout		1, 2, 3	5.35	A

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Mini Roundabout Geometry

[same as above]

Large Roundabout Data

Junction	Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
2 - Centre	1 - Hoath Way (E)	1086	20.88
	2 - Hoath Way (S)	536	32.49
	3 - Hoath Way (W)	800	25.43
	4 - Hoath Way (N)	731	27.77

Slope / Intercept / Capacity
[same as above]

Lane Simulation: Arm options
[same as above]

Lanes
[same as above]

Entry Lane slope and intercept
[same as above]

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	Do Something (800)	PM	ONE HOUR	16:15	17:45	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
1 - Left	1 - Hoath Way (E)	2	3	Simple (vertical queueing)	Normal	0	100.00	
2 - Centre	1 - Hoath Way (E)	3	2	Queue limited	Normal	0	100.00	12.00
	3 - Hoath Way (W)	1	1	Simple (vertical queueing)	Normal	0	100.00	
3 - Right	2 - Hoath Way (W)	2	1	Queue limited	Normal	0	100.00	12.00

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Left	1 - Hoath Way (E)	✓				
	2 - Hempstead Road (S)		ONE HOUR	✓	488	100.000
	3 - Ambley Road (N)		ONE HOUR	✓	378	100.000
2 - Centre	1 - Hoath Way (E)	✓				
	2 - Hoath Way (S)		ONE HOUR	✓	1586	100.000
	3 - Hoath Way (W)	✓				
	4 - Hoath Way (N)		ONE HOUR	✓	1359	100.000
3 - Right	1 - Hoath Lane (S)		ONE HOUR	✓	174	100.000
	2 - Hoath Way (W)	✓				
	3 - Courteney Road (N)		ONE HOUR	✓	79	100.000

Origin-Destination Data

Demand (PCU/hr)

1 - Left

		To		
		1 - Hoath Way (E)	2 - Hempstead Road (S)	3 - Ambley Road (N)
From	1 - Hoath Way (E)	0	230	179
	2 - Hempstead Road (S)	402	0	86
	3 - Ambley Road (N)	264	114	0

2 - Centre

Demand (PCU/hr)

		To			
		1 - Hoath Way (E)	2 - Hoath Way (S)	3 - Hoath Way (W)	4 - Hoath Way (N)
From	1 - Hoath Way (E)	0	16	63	142
	2 - Hoath Way (S)	79	0	219	1288
	3 - Hoath Way (W)	87	274	0	311
	4 - Hoath Way (N)	295	938	126	0

3 - Right

Demand (PCU/hr)

		To		
		1 - Hoath Lane (S)	2 - Hoath Way (W)	3 - Courteney Road (N)
From	1 - Hoath Lane (S)	0	172	2
	2 - Hoath Way (W)	361	0	102
	3 - Courteney Road (N)	34	45	0

Vehicle Mix

1 - Left

Heavy Vehicle Percentages

		To		
		1 - Hoath Way (E)	2 - Hempstead Road (S)	3 - Ambley Road (N)
From	1 - Hoath Way (E)	0	2	1
	2 - Hempstead Road (S)	1	0	3
	3 - Ambley Road (N)	2	6	0

2 - Centre

Heavy Vehicle Percentages

		To			
		1 - Hoath Way (E)	2 - Hoath Way (S)	3 - Hoath Way (W)	4 - Hoath Way (N)
From	1 - Hoath Way (E)	0	0	3	3
	2 - Hoath Way (S)	1	0	1	2
	3 - Hoath Way (W)	1	2	0	1
	4 - Hoath Way (N)	0	0	3	0

3 - Right

Heavy Vehicle Percentages

		To		
		1 - Hoath Lane (S)	2 - Hoath Way (W)	3 - Courteney Road (N)
From	1 - Hoath Lane (S)	0	3	0
	2 - Hoath Way (W)	1	0	1
	3 - Courteney Road (N)	1	2	0

Results

Results Summary for whole modelled period

Junction	Arm	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Left	1 - Hoath Way (E)	2.62	0.4	A	367	551
	2 - Hempstead Road (S)	5.21	1.0	A	440	659
	3 - Ambley Road (N)	3.70	0.4	A	335	503
2 - Centre	1 - Hoath Way (E)	5.10	0.3	A	196	295
	2 - Hoath Way (S)	3.99	1.9	A	1422	2133
	3 - Hoath Way (W)	10.11	2.1	B	599	899
	4 - Hoath Way (N)	2.78	1.1	A	1245	1867
3 - Right	1 - Hoath Lane (S)	3.76	0.2	A	158	237
	2 - Hoath Way (W)	6.17	0.8	A	425	637
	3 - Courteney Road (N)	4.05	0.2	A	72	108

Main Results for each time segment

16:15 - 16:30

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Left	1 - Hoath Way (E)	299	75	77	301	301	488	0.0	0.2	2.308	A
	2 - Hempstead Road (S)	355	89	128	355	370	250	0.0	0.3	3.761	A
	3 - Ambley Road (N)	269	67	295	270	286	187	0.0	0.2	2.754	A
2 - Centre	1 - Hoath Way (E)	162	40	984	160	165	349	0.0	0.2	2.906	A
	2 - Hoath Way (S)	1170	293	244	1171	1191	901	0.0	0.7	2.321	A
	3 - Hoath Way (W)	489	122	1115	487	504	299	0.0	0.5	3.368	A
	4 - Hoath Way (N)	1014	254	321	1013	1015	1281	0.0	0.6	1.828	A
3 - Right	1 - Hoath Lane (S)	130	33	33	130	135	303	0.0	0.2	3.647	A
	2 - Hoath Way (W)	349	87	2	350	349	162	0.0	0.3	4.959	A
	3 - Courteney Road (N)	62	15	275	61	63	77	0.0	0.1	3.269	A

16:30 - 16:45

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Left	1 - Hoath Way (E)	357	89	89	358	361	608	0.2	0.2	2.331	A
	2 - Hempstead Road (S)	441	110	158	440	444	289	0.3	0.5	4.095	A
	3 - Ambley Road (N)	333	83	364	333	337	234	0.2	0.3	2.925	A
2 - Centre	1 - Hoath Way (E)	191	48	1211	190	191	429	0.2	0.2	3.558	A
	2 - Hoath Way (S)	1404	351	286	1404	1422	1115	0.7	0.9	2.776	A
	3 - Hoath Way (W)	608	152	1333	606	601	357	0.5	0.8	4.222	A
	4 - Hoath Way (N)	1230	308	411	1229	1227	1528	0.6	0.7	2.157	A
3 - Right	1 - Hoath Lane (S)	156	39	38	156	152	361	0.2	0.1	3.549	A
	2 - Hoath Way (W)	429	107	2	429	419	191	0.3	0.7	5.322	A
	3 - Courteney Road (N)	69	17	331	68	72	100	0.1	0.1	3.547	A

16:45 - 17:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Left	1 - Hoath Way (E)	437	109	125	435	441	705	0.2	0.4	2.624	A
	2 - Hempstead Road (S)	531	133	186	530	534	374	0.5	0.8	4.937	A
	3 - Ambley Road (N)	394	98	433	394	406	283	0.3	0.4	3.386	A
2 - Centre	1 - Hoath Way (E)	241	60	1438	240	237	504	0.2	0.4	4.730	A
	2 - Hoath Way (S)	1712	428	360	1715	1737	1318	0.9	1.8	3.982	A
	3 - Hoath Way (W)	705	176	1639	703	715	437	0.8	2.1	8.341	A
	4 - Hoath Way (N)	1483	371	458	1484	1503	1884	0.7	1.1	2.746	A
3 - Right	1 - Hoath Lane (S)	194	49	49	194	191	431	0.1	0.2	3.657	A
	2 - Hoath Way (W)	504	126	3	505	510	241	0.7	0.8	6.171	A
	3 - Courteney Road (N)	91	23	390	90	87	117	0.1	0.2	3.777	A

17:00 - 17:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Left	1 - Hoath Way (E)	450	113	120	451	453	714	0.4	0.4	2.565	A
	2 - Hempstead Road (S)	520	130	201	516	537	370	0.8	1.0	5.214	A
	3 - Ambley Road (N)	407	102	424	409	419	293	0.4	0.2	3.698	A
2 - Centre	1 - Hoath Way (E)	233	58	1455	233	241	502	0.4	0.3	5.099	A
	2 - Hoath Way (S)	1693	423	357	1698	1742	1331	1.8	1.8	3.994	A
	3 - Hoath Way (W)	714	179	1605	716	736	450	2.1	1.8	10.111	B
	4 - Hoath Way (N)	1493	373	464	1492	1497	1856	1.1	1.1	2.780	A
3 - Right	1 - Hoath Lane (S)	187	47	49	186	192	424	0.2	0.2	3.763	A
	2 - Hoath Way (W)	502	125	2	502	506	233	0.8	0.7	5.845	A
	3 - Courteney Road (N)	86	22	388	85	89	117	0.2	0.2	4.049	A

17:15 - 17:30

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Left	1 - Hoath Way (E)	355	89	99	355	362	583	0.4	0.2	2.341	A
	2 - Hempstead Road (S)	428	107	157	427	442	296	1.0	0.5	4.201	A
	3 - Ambley Road (N)	328	82	353	328	335	232	0.2	0.2	2.943	A
2 - Centre	1 - Hoath Way (E)	190	48	1183	190	196	410	0.3	0.3	3.759	A
	2 - Hoath Way (S)	1399	350	283	1401	1434	1089	1.8	1.0	2.892	A
	3 - Hoath Way (W)	583	146	1329	581	604	355	1.8	0.8	4.976	A
	4 - Hoath Way (N)	1211	303	381	1211	1224	1528	1.1	0.7	2.155	A
3 - Right	1 - Hoath Lane (S)	151	38	40	151	156	345	0.2	0.1	3.662	A
	2 - Hoath Way (W)	410	103	1	414	419	190	0.7	0.5	5.336	A
	3 - Courteney Road (N)	68	17	318	68	73	97	0.2	0.1	3.657	A

17:30 - 17:45

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Left	1 - Hoath Way (E)	305	76	86	304	306	496	0.2	0.2	2.271	A
	2 - Hempstead Road (S)	363	91	130	362	366	260	0.5	0.5	3.684	A
	3 - Ambley Road (N)	281	70	301	282	286	192	0.2	0.3	2.749	A
2 - Centre	1 - Hoath Way (E)	162	41	1007	162	163	356	0.3	0.1	3.023	A
	2 - Hoath Way (S)	1153	288	240	1150	1184	929	1.0	0.9	2.289	A
	3 - Hoath Way (W)	496	124	1086	498	501	305	0.8	0.4	3.349	A
	4 - Hoath Way (N)	1037	259	327	1036	1034	1257	0.7	0.6	1.846	A
3 - Right	1 - Hoath Lane (S)	129	32	34	130	131	302	0.1	0.1	3.509	A
	2 - Hoath Way (W)	356	89	2	357	355	162	0.5	0.5	4.894	A
	3 - Courteney Road (N)	59	15	278	59	59	81	0.1	0.1	3.361	A

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

16:15 - 16:30

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalise level of service
1 - Left	1 - Hoath Way (E)	Entry	1	2	1, 2, 3	299	1884	0.159	301	301	0.0	0.2	2.308	A
		Exit	1	1		488			488	506	0.0	0.0	0.024	A
	2 - Hempstead Road (S)	Entry	1	1	1, 2, 3	355	1334	0.266	355	370	0.0	0.3	3.761	A
		Exit	1	1		250			250	259	0.0	0.0	0.000	A
	3 - Ambley Road (N)	Entry	1	1	1, 2, 3	269	1590	0.169	270	286	0.0	0.2	2.754	A
		Exit	1	1		187			187	192	0.0	0.0	0.000	A
2 - Centre	1 - Hoath Way (E)	Entry	1	1	1, 2, 3, 4	162	1398	0.116	160	165	0.0	0.2	2.906	A
		Exit	1	1		349			349	348	0.0	0.0	0.005	A
	2 - Hoath Way (S)	Entry	1	1	1, 2, 3, 4	1170	2737	0.427	1171	1191	0.0	0.7	2.321	A
		Exit	1	1		901			901	916	0.0	0.0	0.000	A
	3 - Hoath Way (W)	Entry	1	1	1, 2, 3, 4	489	1623	0.301	487	504	0.0	0.5	3.368	A
		Exit	1	1		299			299	302	0.0	0.0	0.000	A
	4 - Hoath Way (N)	Entry	1	1	1, 2, 3, 4	1014	2976	0.341	1013	1015	0.0	0.6	1.828	A
		Exit	1	1		1281			1281	1310	0.0	0.0	0.000	A
3 - Right	1 - Hoath Lane (S)	Entry	1	1	1, 2, 3	130	1147	0.114	130	135	0.0	0.2	3.647	A
		Exit	1	1		303			303	303	0.0	0.0	0.000	A
	2 - Hoath Way (W)	Entry	1	2	1, 2, 3	349	1081	0.323	350	349	0.0	0.3	4.959	A
		Exit	1	1		162			162	167	0.0	0.0	0.000	A
	3 - Courteney Road (N)	Entry	1	1	1, 2, 3	62	1127	0.055	61	63	0.0	0.1	3.269	A
		Exit	1	1		77			77	77	0.0	0.0	0.000	A

16:30 - 16:45

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalise level of service
1 - Left	1 - Hoath Way (E)	Entry	1	2	1, 2, 3	357	1872	0.191	358	361	0.2	0.2	2.331	A
		Exit	1	1		608			608	602	0.0	0.0	0.011	A
	2 - Hempstead Road (S)	Entry	1	1	1, 2, 3	441	1313	0.336	440	444	0.3	0.5	4.095	A
		Exit	1	1		289			289	306	0.0	0.0	0.000	A
	3 - Ambley Road (N)	Entry	1	1	1, 2, 3	333	1538	0.216	333	337	0.2	0.3	2.925	A
		Exit	1	1		234			234	234	0.0	0.0	0.000	A
2 - Centre	1 - Hoath Way (E)	Entry	1	1	1, 2, 3, 4	191	1201	0.159	190	191	0.2	0.2	3.558	A
		Exit	1	1		429			429	418	0.0	0.0	0.007	A
	2 - Hoath Way (S)	Entry	1	1	1, 2, 3, 4	1404	2687	0.522	1404	1422	0.7	0.9	2.776	A
		Exit	1	1		1115			1115	1109	0.0	0.0	0.000	A
	3 - Hoath Way (W)	Entry	1	1	1, 2, 3, 4	608	1398	0.435	606	601	0.5	0.8	4.222	A
		Exit	1	1		357			357	363	0.0	0.0	0.000	A
	4 - Hoath Way (N)	Entry	1	1	1, 2, 3, 4	1230	2863	0.430	1229	1227	0.6	0.7	2.157	A
		Exit	1	1		1528			1528	1551	0.0	0.0	0.000	A
3 - Right	1 - Hoath Lane (S)	Entry	1	1	1, 2, 3	156	1151	0.136	156	152	0.2	0.1	3.549	A
		Exit	1	1		361			361	357	0.0	0.0	0.000	A
	2 - Hoath Way (W)	Entry	1	2	1, 2, 3	429	1082	0.397	429	419	0.3	0.7	5.322	A
		Exit	1	1		191			191	191	0.0	0.0	0.000	A
	3 - Courteney Road (N)	Entry	1	1	1, 2, 3	69	1083	0.063	68	72	0.1	0.1	3.547	A
		Exit	1	1		100			100	96	0.0	0.0	0.000	A

16:45 - 17:00

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalise level of service
1 - Left	1 - Hoath Way (E)	Entry	1	2	1, 2, 3	437	1845	0.237	435	441	0.2	0.4	2.624	A
		Exit	1	1		703			705	720	0.0	0.2	0.877	A
	2 - Hempstead Road (S)	Entry	1	1	1, 2, 3	531	1302	0.408	530	534	0.5	0.8	4.937	A
		Exit	1	1		374			374	373	0.0	0.0	0.000	A
	3 - Ambley Road (N)	Entry	1	1	1, 2, 3	394	1491	0.264	394	406	0.3	0.4	3.386	A
		Exit	1	1		283			283	288	0.0	0.0	0.000	A
2 - Centre	1 - Hoath Way (E)	Entry	1	1	1, 2, 3, 4	241	1004	0.239	240	237	0.2	0.4	4.730	A
		Exit	1	1		504			504	507	0.0	0.0	0.065	A
	2 - Hoath Way (S)	Entry	1	1	1, 2, 3, 4	1712	2602	0.658	1715	1737	0.9	1.8	3.982	A
		Exit	1	1		1318			1318	1343	0.0	0.0	0.000	A
	3 - Hoath Way (W)	Entry	1	1	1, 2, 3, 4	705	1082	0.651	703	715	0.8	2.1	8.341	A
		Exit	1	1		437			437	443	0.0	0.0	0.001	A
	4 - Hoath Way (N)	Entry	1	1	1, 2, 3, 4	1483	2805	0.529	1484	1503	0.7	1.1	2.746	A
		Exit	1	1		1884			1884	1899	0.0	0.0	0.000	A
3 - Right	1 - Hoath Lane (S)	Entry	1	1	1, 2, 3	194	1141	0.170	194	191	0.1	0.2	3.657	A
		Exit	1	1		431			431	436	0.0	0.0	0.000	A
	2 - Hoath Way (W)	Entry	1	2	1, 2, 3	504	1082	0.466	505	510	0.7	0.8	6.171	A
		Exit	1	1		241			241	237	0.0	0.0	0.002	A
	3 - Courteney Road (N)	Entry	1	1	1, 2, 3	91	1010	0.090	90	87	0.1	0.2	3.777	A
		Exit	1	1		117			117	115	0.0	0.0	0.000	A

17:00 - 17:15

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalise level of service
1 - Left	1 - Hoath Way (E)	Entry	1	2	1, 2, 3	450	1853	0.243	451	453	0.4	0.4	2.565	A
		Exit	1	1		712			714	735	0.2	0.2	1.437	A
	2 - Hempstead Road (S)	Entry	1	1	1, 2, 3	520	1289	0.403	516	537	0.8	1.0	5.214	A
		Exit	1	1		370			370	382	0.0	0.0	0.000	A
	3 - Ambley Road (N)	Entry	1	1	1, 2, 3	407	1501	0.271	409	419	0.4	0.2	3.698	A
		Exit	1	1		293			293	292	0.0	0.0	0.000	A
2 - Centre	1 - Hoath Way (E)	Entry	1	1	1, 2, 3, 4	233	988	0.236	233	241	0.4	0.3	5.099	A
		Exit	1	1		502			502	503	0.0	0.0	0.041	A
	2 - Hoath Way (S)	Entry	1	1	1, 2, 3, 4	1693	2597	0.652	1698	1742	1.8	1.8	3.994	A
		Exit	1	1		1331			1331	1349	0.0	0.0	0.000	A
	3 - Hoath Way (W)	Entry	1	1	1, 2, 3, 4	714	1112	0.642	716	736	2.1	1.8	10.111	B
		Exit	1	1		450			450	454	0.0	0.0	0.001	A
	4 - Hoath Way (N)	Entry	1	1	1, 2, 3, 4	1493	2793	0.534	1492	1497	1.1	1.1	2.780	A
		Exit	1	1		1856			1856	1911	0.0	0.0	0.000	A
3 - Right	1 - Hoath Lane (S)	Entry	1	1	1, 2, 3	187	1139	0.164	186	192	0.2	0.2	3.763	A
		Exit	1	1		424			424	431	0.0	0.0	0.000	A
	2 - Hoath Way (W)	Entry	1	2	1, 2, 3	502	1082	0.464	502	506	0.8	0.7	5.845	A
		Exit	1	1		233			233	241	0.0	0.0	0.016	A
	3 - Courteney Road (N)	Entry	1	1	1, 2, 3	86	1012	0.086	85	89	0.2	0.2	4.049	A
		Exit	1	1		117			117	116	0.0	0.0	0.000	A

17:15 - 17:30

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalise level of service
1 - Left	1 - Hoath Way (E)	Entry	1	2	1, 2, 3	355	1869	0.190	355	362	0.4	0.2	2.341	A
		Exit	1	1		583			583	599	0.2	0.0	0.160	A
	2 - Hempstead Road (S)	Entry	1	1	1, 2, 3	428	1316	0.326	427	442	1.0	0.5	4.201	A
		Exit	1	1		296			296	305	0.0	0.0	0.000	A
	3 - Ambley Road (N)	Entry	1	1	1, 2, 3	328	1541	0.212	328	335	0.2	0.2	2.943	A
		Exit	1	1		232			232	235	0.0	0.0	0.000	A
2 - Centre	1 - Hoath Way (E)	Entry	1	1	1, 2, 3, 4	190	1229	0.155	190	196	0.3	0.3	3.759	A
		Exit	1	1		410			410	415	0.0	0.0	0.026	A
	2 - Hoath Way (S)	Entry	1	1	1, 2, 3, 4	1399	2692	0.520	1401	1434	1.8	1.0	2.892	A
		Exit	1	1		1089			1089	1101	0.0	0.0	0.000	A
	3 - Hoath Way (W)	Entry	1	1	1, 2, 3, 4	583	1400	0.416	581	604	1.8	0.8	4.976	A
		Exit	1	1		355			355	363	0.0	0.0	0.000	A
	4 - Hoath Way (N)	Entry	1	1	1, 2, 3, 4	1211	2898	0.418	1211	1224	1.1	0.7	2.155	A
		Exit	1	1		1528			1528	1578	0.0	0.0	0.000	A
3 - Right	1 - Hoath Lane (S)	Entry	1	1	1, 2, 3	151	1134	0.133	151	156	0.2	0.1	3.662	A
		Exit	1	1		345			345	356	0.0	0.0	0.000	A
	2 - Hoath Way (W)	Entry	1	2	1, 2, 3	410	1078	0.380	414	419	0.7	0.5	5.336	A
		Exit	1	1		190			190	196	0.0	0.0	0.001	A
	3 - Courteney Road (N)	Entry	1	1	1, 2, 3	68	1082	0.062	68	73	0.2	0.1	3.657	A
		Exit	1	1		97			97	95	0.0	0.0	0.000	A

17:30 - 17:45

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalise level of service
1 - Left	1 - Hoath Way (E)	Entry	1	2	1, 2, 3	305	1872	0.163	304	306	0.2	0.2	2.271	A
		Exit	1	1		496			496	499	0.0	0.0	0.005	A
	2 - Hempstead Road (S)	Entry	1	1	1, 2, 3	363	1330	0.273	362	366	0.5	0.5	3.684	A
		Exit	1	1		260			260	262	0.0	0.0	0.000	A
	3 - Ambley Road (N)	Entry	1	1	1, 2, 3	281	1582	0.178	282	286	0.2	0.3	2.749	A
		Exit	1	1		192			192	196	0.0	0.0	0.000	A
2 - Centre	1 - Hoath Way (E)	Entry	1	1	1, 2, 3, 4	162	1371	0.118	162	163	0.3	0.1	3.023	A
		Exit	1	1		356			356	351	0.0	0.0	0.007	A
	2 - Hoath Way (S)	Entry	1	1	1, 2, 3, 4	1153	2738	0.421	1150	1184	1.0	0.9	2.289	A
		Exit	1	1		929			929	933	0.0	0.0	0.000	A
	3 - Hoath Way (W)	Entry	1	1	1, 2, 3, 4	496	1652	0.300	498	501	0.8	0.4	3.349	A
		Exit	1	1		305			305	306	0.0	0.0	0.000	A
	4 - Hoath Way (N)	Entry	1	1	1, 2, 3, 4	1037	2968	0.349	1036	1034	0.7	0.6	1.846	A
		Exit	1	1		1257			1257	1293	0.0	0.0	0.000	A
3 - Right	1 - Hoath Lane (S)	Entry	1	1	1, 2, 3	129	1151	0.112	130	131	0.1	0.1	3.509	A
		Exit	1	1		302			302	304	0.0	0.0	0.000	A
	2 - Hoath Way (W)	Entry	1	2	1, 2, 3	356	1077	0.330	357	355	0.5	0.5	4.894	A
		Exit	1	1		162			162	162	0.0	0.0	0.000	A
	3 - Courteney Road (N)	Entry	1	1	1, 2, 3	59	1124	0.052	59	59	0.1	0.1	3.361	A
		Exit	1	1		81			81	78	0.0	0.0	0.000	A

Junctions 9

PICADY 9 - Priority Intersection Module

Filename: N Dane Way Lords Wood Ln Existing.j9
Path: P:\17-035 Hempstead Valley, Medway\Trans\Picady\2019 TA Submission\2019-03-19
Report generation date: 27/03/2019 11:56:11

Summary of junction performance

	AM					PM				
	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity
	Do Minimum									
Stream B-C	0.6	10.09	0.37	B	29 %	0.4	8.00	0.27	A	52 %
Stream B-A	0.4	16.22	0.31	C		0.2	13.32	0.13	B	
Stream C-AB	0.4	8.61	0.28	A	[Stream B-A]	0.6	9.32	0.38	A	[Stream B-A]
	Do Something (800)									
Stream B-C	1.7	17.64	0.63	C	10 %	0.7	9.75	0.42	A	19 %
Stream B-A	0.5	21.94	0.35	C		0.2	19.80	0.17	C	
Stream C-AB	0.6	10.18	0.38	B	[Stream B-A]	1.8	16.45	0.65	C	[Stream B-A]

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	N Dane Way Lords Wood Ln
Location	
Site number	
Date	20/03/2019
Version	
Status	
Identifier	
Client	
Jobnumber	17-035
Enumerator	CA_WKS12\PLimbu
Description	

Units

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

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75			✓	Delay	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	Do Minimum	AM	ONE HOUR	08:00	09:30	15	✓
D2	Do Minimum	PM	ONE HOUR	17:00	18:30	15	✓
D3	Do Something (800)	AM	ONE HOUR	08:00	09:30	15	✓
D4	Do Something (800)	PM	ONE HOUR	17:00	18:30	15	✓

Analysis Set Details

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

Do Minimum, AM

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	N Dane Way Lords Wood Ln	T-Junction	Two-way		3.63	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	29	Stream B-A

Arms

Arms

Arm	Name	Description	Arm type
A	N Dane Way (S)		Major
B	Lords Wood Ln (W)		Minor
C	N Dane Way (N)		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 - N Dane Way (N)	7.34		✓	3.64	100.0	✓	20.00

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 - Lords Wood Ln (W)	One lane plus flare	10.00	9.73	6.07	4.17	3.80	✓	2.00	85	85

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	596	0.102	0.259	0.163	0.369
1	B-C	794	0.115	0.290	-	-
1	C-B	731	0.267	0.267	-	-

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	Do Minimum	AM	ONE HOUR	08:00	09:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - N Dane Way (S)		ONE HOUR	✓	486	100.000
B - Lords Wood Ln (W)		ONE HOUR	✓	288	100.000
C - N Dane Way (N)		ONE HOUR	✓	529	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - N Dane Way (S)	B - Lords Wood Ln (W)	C - N Dane Way (N)
From	A - N Dane Way (S)	0	0	486
	B - Lords Wood Ln (W)	91	0	197
	C - N Dane Way (N)	382	147	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - N Dane Way (S)	B - Lords Wood Ln (W)	C - N Dane Way (N)
From	A - N Dane Way (S)	0	0	1
	B - Lords Wood Ln (W)	1	0	3
	C - N Dane Way (N)	1	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.37	10.09	0.6	B	181	271
B-A	0.31	16.22	0.4	C	84	125
C-AB	0.28	8.61	0.4	A	135	202
C-A					351	526
A-B					0	0
A-C					446	669

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	148	37	659	0.225	147	0.0	0.3	7.229	A
B-A	69	17	413	0.166	68	0.0	0.2	10.498	B
C-AB	111	28	633	0.175	110	0.0	0.2	7.002	A
C-A	288	72			288				
A-B	0	0			0				
A-C	366	91			366				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	177	44	629	0.281	177	0.3	0.4	8.183	A
B-A	82	20	377	0.217	81	0.2	0.3	12.308	B
C-AB	132	33	614	0.215	132	0.2	0.3	7.607	A
C-A	343	86			343				
A-B	0	0			0				
A-C	437	109			437				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	217	54	585	0.371	216	0.4	0.6	10.038	B
B-A	100	25	325	0.309	100	0.3	0.4	16.109	C
C-AB	162	40	588	0.275	161	0.3	0.4	8.595	A
C-A	421	105			421				
A-B	0	0			0				
A-C	535	134			535				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	217	54	584	0.371	217	0.6	0.6	10.094	B
B-A	100	25	324	0.309	100	0.4	0.4	16.217	C
C-AB	162	40	588	0.275	162	0.4	0.4	8.611	A
C-A	421	105			421				
A-B	0	0			0				
A-C	535	134			535				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	177	44	629	0.282	178	0.6	0.4	8.239	A
B-A	82	20	376	0.217	82	0.4	0.3	12.398	B
C-AB	132	33	614	0.215	133	0.4	0.3	7.629	A
C-A	343	86			343				
A-B	0	0			0				
A-C	437	109			437				

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	148	37	658	0.225	149	0.4	0.3	7.282	A
B-A	69	17	413	0.166	69	0.3	0.2	10.579	B
C-AB	111	28	633	0.175	111	0.3	0.2	7.034	A
C-A	288	72			288				
A-B	0	0			0				
A-C	366	91			366				

Do Minimum, PM

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	N Dane Way Lords Wood Ln	T-Junction	Two-way		3.04	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	52	Stream B-A

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	Do Minimum	PM	ONE HOUR	17:00	18:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - N Dane Way (S)		ONE HOUR	✓	354	100.000
B - Lords Wood Ln (W)		ONE HOUR	✓	199	100.000
C - N Dane Way (N)		ONE HOUR	✓	697	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - N Dane Way (S)	B - Lords Wood Ln (W)	C - N Dane Way (N)
From	A - N Dane Way (S)	0	0	354
	B - Lords Wood Ln (W)	38	0	161
	C - N Dane Way (N)	482	215	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - N Dane Way (S)	B - Lords Wood Ln (W)	C - N Dane Way (N)
From	A - N Dane Way (S)	0	0	0
	B - Lords Wood Ln (W)	0	0	5
	C - N Dane Way (N)	1	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.27	8.00	0.4	A	148	222
B-A	0.13	13.32	0.2	B	35	52
C-AB	0.38	9.32	0.6	A	197	296
C-A					442	663
A-B					0	0
A-C					325	487

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	121	30	695	0.174	120	0.0	0.2	6.565	A
B-A	29	7	399	0.072	28	0.0	0.1	9.708	A
C-AB	162	40	660	0.245	161	0.0	0.3	7.263	A
C-A	363	91			363				
A-B	0	0			0				
A-C	267	67			267				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	145	36	677	0.214	144	0.2	0.3	7.100	A
B-A	34	9	362	0.094	34	0.1	0.1	10.958	B
C-AB	193	48	646	0.299	193	0.3	0.4	8.016	A
C-A	433	108			433				
A-B	0	0			0				
A-C	318	80			318				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	177	44	650	0.273	177	0.3	0.4	7.987	A
B-A	42	10	312	0.134	42	0.1	0.2	13.289	B
C-AB	237	59	627	0.378	236	0.4	0.6	9.283	A
C-A	531	133			531				
A-B	0	0			0				
A-C	390	97			390				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	177	44	650	0.273	177	0.4	0.4	8.004	A
B-A	42	10	312	0.134	42	0.2	0.2	13.320	B
C-AB	237	59	627	0.378	237	0.6	0.6	9.316	A
C-A	531	133			531				
A-B	0	0			0				
A-C	390	97			390				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	145	36	676	0.214	145	0.4	0.3	7.123	A
B-A	34	9	362	0.094	34	0.2	0.1	10.992	B
C-AB	193	48	646	0.299	194	0.6	0.4	8.054	A
C-A	433	108			433				
A-B	0	0			0				
A-C	318	80			318				

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	121	30	695	0.174	121	0.3	0.2	6.595	A
B-A	29	7	398	0.072	29	0.1	0.1	9.746	A
C-AB	162	40	660	0.245	162	0.4	0.3	7.313	A
C-A	363	91			363				
A-B	0	0			0				
A-C	267	67			267				

Do Something (800), AM

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	N Dane Way Lords Wood Ln	T-Junction	Two-way		6.20	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	10	Stream B-A

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	Do Something (800)	AM	ONE HOUR	08:00	09:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - N Dane Way (S)		ONE HOUR	✓	520	100.000
B - Lords Wood Ln (W)		ONE HOUR	✓	403	100.000
C - N Dane Way (N)		ONE HOUR	✓	610	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - N Dane Way (S)	B - Lords Wood Ln (W)	C - N Dane Way (N)
From	A - N Dane Way (S)	0	0	520
	B - Lords Wood Ln (W)	81	0	322
	C - N Dane Way (N)	409	201	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - N Dane Way (S)	B - Lords Wood Ln (W)	C - N Dane Way (N)
From	A - N Dane Way (S)	0	0	1
	B - Lords Wood Ln (W)	0	0	2
	C - N Dane Way (N)	2	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.63	17.64	1.7	C	295	443
B-A	0.35	21.94	0.5	C	74	111
C-AB	0.38	10.18	0.6	B	184	277
C-A					375	563
A-B					0	0
A-C					477	716

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	242	61	644	0.377	240	0.0	0.6	9.039	A
B-A	61	15	375	0.163	60	0.0	0.2	11.404	B
C-AB	151	38	627	0.242	150	0.0	0.3	7.611	A
C-A	308	77			308				
A-B	0	0			0				
A-C	391	98			391				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	289	72	613	0.473	288	0.6	0.9	11.284	B
B-A	73	18	328	0.222	72	0.2	0.3	14.051	B
C-AB	181	45	606	0.298	180	0.3	0.4	8.527	A
C-A	368	92			368				
A-B	0	0			0				
A-C	467	117			467				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	355	89	563	0.630	351	0.9	1.7	17.143	C
B-A	89	22	255	0.350	88	0.3	0.5	21.521	C
C-AB	221	55	578	0.383	221	0.4	0.6	10.142	B
C-A	450	113			450				
A-B	0	0			0				
A-C	573	143			573				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	355	89	562	0.631	354	1.7	1.7	17.644	C
B-A	89	22	253	0.352	89	0.5	0.5	21.943	C
C-AB	221	55	578	0.383	221	0.6	0.6	10.184	B
C-A	450	113			450				
A-B	0	0			0				
A-C	573	143			573				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	289	72	612	0.473	293	1.7	0.9	11.613	B
B-A	73	18	327	0.223	74	0.5	0.3	14.264	B
C-AB	181	45	606	0.298	181	0.6	0.4	8.575	A
C-A	368	92			368				
A-B	0	0			0				
A-C	467	117			467				

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	242	61	643	0.377	244	0.9	0.6	9.218	A
B-A	61	15	374	0.163	61	0.3	0.2	11.521	B
C-AB	151	38	627	0.242	152	0.4	0.3	7.664	A
C-A	308	77			308				
A-B	0	0			0				
A-C	391	98			391				

Do Something (800), PM

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	N Dane Way Lords Wood Ln	T-Junction	Two-way		5.59	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	19	Stream B-A

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	Do Something (800)	PM	ONE HOUR	17:00	18:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - N Dane Way (S)		ONE HOUR	✓	374	100.000
B - Lords Wood Ln (W)		ONE HOUR	✓	275	100.000
C - N Dane Way (N)		ONE HOUR	✓	962	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - N Dane Way (S)	B - Lords Wood Ln (W)	C - N Dane Way (N)
From	A - N Dane Way (S)	0	0	374
	B - Lords Wood Ln (W)	34	0	241
	C - N Dane Way (N)	598	364	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - N Dane Way (S)	B - Lords Wood Ln (W)	C - N Dane Way (N)
From	A - N Dane Way (S)	0	0	1
	B - Lords Wood Ln (W)	1	0	1
	C - N Dane Way (N)	1	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.42	9.75	0.7	A	221	332
B-A	0.17	19.80	0.2	C	31	47
C-AB	0.65	16.45	1.8	C	334	501
C-A					549	823
A-B					0	0
A-C					343	515

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	181	45	691	0.262	180	0.0	0.4	7.089	A
B-A	26	6	339	0.076	25	0.0	0.1	11.586	B
C-AB	274	69	656	0.418	271	0.0	0.7	9.384	A
C-A	450	113			450				
A-B	0	0			0				
A-C	282	70			282				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	217	54	671	0.323	216	0.4	0.5	7.990	A
B-A	31	8	290	0.105	30	0.1	0.1	14.012	B
C-AB	327	82	641	0.510	326	0.7	1.0	11.485	B
C-A	538	134			538				
A-B	0	0			0				
A-C	336	84			336				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	265	66	639	0.415	264	0.5	0.7	9.691	A
B-A	37	9	222	0.169	37	0.1	0.2	19.618	C
C-AB	401	100	621	0.645	398	1.0	1.8	16.070	C
C-A	658	165			658				
A-B	0	0			0				
A-C	412	103			412				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	265	66	638	0.416	265	0.7	0.7	9.747	A
B-A	37	9	221	0.169	37	0.2	0.2	19.801	C
C-AB	401	100	621	0.645	401	1.8	1.8	16.454	C
C-A	658	165			658				
A-B	0	0			0				
A-C	412	103			412				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	217	54	670	0.323	218	0.7	0.5	8.048	A
B-A	31	8	288	0.106	31	0.2	0.1	14.148	B
C-AB	327	82	641	0.510	330	1.8	1.1	11.789	B
C-A	538	134			538				
A-B	0	0			0				
A-C	336	84			336				

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	181	45	691	0.263	182	0.5	0.4	7.149	A
B-A	26	6	337	0.076	26	0.1	0.1	11.682	B
C-AB	274	69	656	0.418	275	1.1	0.7	9.593	A
C-A	450	113			450				
A-B	0	0			0				
A-C	282	70			282				

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.5.0.6896

Filename: Albemarle Rd Clandon Rd Existing.j9
Path: P:\17-035 Hempstead Valley, Medway\Trans\Picady\2019 TA Submission\2019-03-19
Report generation date: 21/03/2019 17:56:26

Summary of junction performance

	AM					PM				
	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity
	Do Minimum									
Stream B-AC	1.1	17.09	0.51	C	26 %	0.6	12.23	0.35	B	59 %
Stream C-AB	0.5	7.13	0.22	A	[Stream B-AC]	0.5	6.69	0.20	A	[Stream B-AC]
	Do Something (800)									
Stream B-AC	1.4	20.02	0.58	C	18 %	0.6	12.99	0.39	B	49 %
Stream C-AB	0.5	7.12	0.22	A	[Stream B-AC]	0.5	6.98	0.20	A	[Stream B-AC]

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	Albemarle Rd Clandon Rd Junction
Location	
Site number	
Date	21/03/2019
Version	
Status	
Identifier	
Client	
Jobnumber	17-035
Enumerator	CA_WKS12\PLimbu
Description	

Units

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

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75			✓	Delay	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	Do Minimum	AM	ONE HOUR	08:00	09:30	15	✓
D2	Do Minimum	PM	ONE HOUR	17:00	18:30	15	✓
D3	Do Something (800)	AM	ONE HOUR	08:00	09:30	15	✓
D4	Do Something (800)	PM	ONE HOUR	17:00	18:30	15	✓

Analysis Set Details

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

Do Minimum, AM

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	Albemarle Rd Clandon Rd Junction	T-Junction	Two-way		4.08	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	26	Stream B-AC

Arms

Arms

Arm	Name	Description	Arm type
A	Albemarle Rd N		Major
B	Clandon Rd SW		Minor
C	Albemarle Rd S		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Albemarle Rd S	7.17			100.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - Clandon Rd SW	One lane	4.26	27	34

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	567	0.098	0.248	0.156	0.354
1	B-C	727	0.106	0.267	-	-
1	C-B	632	0.232	0.232	-	-

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	Do Minimum	AM	ONE HOUR	08:00	09:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Albemarle Rd N		ONE HOUR	✓	521	100.000
B - Clandon Rd SW		ONE HOUR	✓	205	100.000
C - Albemarle Rd S		ONE HOUR	✓	359	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Albemarle Rd N	B - Clandon Rd SW	C - Albemarle Rd S
From	A - Albemarle Rd N	0	121	400
	B - Clandon Rd SW	116	0	89
	C - Albemarle Rd S	278	81	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Albemarle Rd N	B - Clandon Rd SW	C - Albemarle Rd S
From	A - Albemarle Rd N	0	0	1
	B - Clandon Rd SW	2	0	0
	C - Albemarle Rd S	1	20	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.51	17.09	1.1	C	188	282
C-AB	0.22	7.13	0.5	A	119	179
C-A					210	315
A-B					111	167
A-C					367	551

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	154	39	500	0.309	153	0.0	0.4	10.434	B
C-AB	88	22	687	0.128	87	0.0	0.2	6.801	A
C-A	183	46			183				
A-B	91	23			91				
A-C	301	75			301				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	184	46	474	0.389	184	0.4	0.6	12.494	B
C-AB	114	28	701	0.162	113	0.2	0.3	6.932	A
C-A	209	52			209				
A-B	109	27			109				
A-C	360	90			360				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	226	56	439	0.515	224	0.6	1.0	16.849	C
C-AB	156	39	720	0.216	155	0.3	0.5	7.130	A
C-A	239	60			239				
A-B	133	33			133				
A-C	440	110			440				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	226	56	438	0.515	226	1.0	1.1	17.094	C
C-AB	156	39	720	0.217	156	0.5	0.5	7.099	A
C-A	239	60			239				
A-B	133	33			133				
A-C	440	110			440				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	184	46	474	0.389	186	1.1	0.7	12.703	B
C-AB	114	28	701	0.162	114	0.5	0.3	6.859	A
C-A	209	52			209				
A-B	109	27			109				
A-C	360	90			360				

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	154	39	499	0.309	155	0.7	0.5	10.599	B
C-AB	88	22	687	0.128	88	0.3	0.2	6.788	A
C-A	182	46			182				
A-B	91	23			91				
A-C	301	75			301				

Do Minimum, PM

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	Albemarle Rd Clandon Rd Junction	T-Junction	Two-way		2.77	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	59	Stream B-AC

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	Do Minimum	PM	ONE HOUR	17:00	18:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Albemarle Rd N		ONE HOUR	✓	427	100.000
B - Clandon Rd SW		ONE HOUR	✓	149	100.000
C - Albemarle Rd S		ONE HOUR	✓	389	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Albemarle Rd N	B - Clandon Rd SW	C - Albemarle Rd S
From	A - Albemarle Rd N	0	117	310
	B - Clandon Rd SW	80	0	69
	C - Albemarle Rd S	313	76	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Albemarle Rd N	B - Clandon Rd SW	C - Albemarle Rd S
From	A - Albemarle Rd N	0	1	1
	B - Clandon Rd SW	1	0	6
	C - Albemarle Rd S	1	26	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.35	12.23	0.6	B	137	205
C-AB	0.20	6.69	0.5	A	116	174
C-A					241	361
A-B					107	161
A-C					284	427

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	112	28	521	0.215	111	0.0	0.3	9.037	A
C-AB	85	21	720	0.118	84	0.0	0.2	6.598	A
C-A	208	52			208				
A-B	88	22			88				
A-C	233	58			233				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	134	33	499	0.268	134	0.3	0.4	10.159	B
C-AB	111	28	739	0.150	110	0.2	0.3	6.634	A
C-A	239	60			239				
A-B	105	26			105				
A-C	279	70			279				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	164	41	468	0.350	163	0.4	0.5	12.168	B
C-AB	153	38	768	0.199	152	0.3	0.5	6.692	A
C-A	276	69			276				
A-B	129	32			129				
A-C	341	85			341				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	164	41	468	0.351	164	0.5	0.6	12.225	B
C-AB	153	38	768	0.199	153	0.5	0.5	6.648	A
C-A	276	69			276				
A-B	129	32			129				
A-C	341	85			341				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	134	33	499	0.268	135	0.6	0.4	10.221	B
C-AB	111	28	740	0.150	112	0.5	0.3	6.539	A
C-A	239	60			239				
A-B	105	26			105				
A-C	279	70			279				

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	112	28	521	0.215	113	0.4	0.3	9.110	A
C-AB	85	21	720	0.119	86	0.3	0.2	6.566	A
C-A	207	52			207				
A-B	88	22			88				
A-C	233	58			233				

Do Something (800), AM

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	Albemarle Rd Clandon Rd Junction	T-Junction	Two-way		5.05	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	18	Stream B-AC

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	Do Something (800)	AM	ONE HOUR	08:00	09:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Albemarle Rd N		ONE HOUR	✓	510	100.000
B - Clandon Rd SW		ONE HOUR	✓	231	100.000
C - Albemarle Rd S		ONE HOUR	✓	361	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Albemarle Rd N	B - Clandon Rd SW	C - Albemarle Rd S
From	A - Albemarle Rd N	0	122	388
	B - Clandon Rd SW	136	0	95
	C - Albemarle Rd S	278	83	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Albemarle Rd N	B - Clandon Rd SW	C - Albemarle Rd S
From	A - Albemarle Rd N	0	1	2
	B - Clandon Rd SW	2	0	1
	C - Albemarle Rd S	0	20	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.58	20.02	1.4	C	212	318
C-AB	0.22	7.12	0.5	A	122	183
C-A					209	314
A-B					112	168
A-C					356	534

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	174	43	497	0.350	172	0.0	0.5	11.165	B
C-AB	90	22	689	0.130	89	0.0	0.2	6.783	A
C-A	182	46			182				
A-B	92	23			92				
A-C	292	73			292				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	208	52	472	0.440	207	0.5	0.8	13.735	B
C-AB	116	29	703	0.165	116	0.2	0.3	6.913	A
C-A	208	52			208				
A-B	110	27			110				
A-C	349	87			349				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	254	64	437	0.583	252	0.8	1.4	19.565	C
C-AB	159	40	723	0.220	159	0.3	0.5	7.118	A
C-A	238	60			238				
A-B	134	34			134				
A-C	427	107			427				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	254	64	436	0.583	254	1.4	1.4	20.022	C
C-AB	159	40	723	0.221	159	0.5	0.5	7.085	A
C-A	238	59			238				
A-B	134	34			134				
A-C	427	107			427				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	208	52	472	0.440	210	1.4	0.8	14.084	B
C-AB	116	29	703	0.166	117	0.5	0.3	6.840	A
C-A	208	52			208				
A-B	110	27			110				
A-C	349	87			349				

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	174	43	497	0.350	175	0.8	0.6	11.393	B
C-AB	90	23	689	0.131	90	0.3	0.2	6.768	A
C-A	182	45			182				
A-B	92	23			92				
A-C	292	73			292				

Do Something (800), PM

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	Albemarle Rd Clandon Rd Junction	T-Junction	Two-way		2.91	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	49	Stream B-AC

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	Do Something (800)	PM	ONE HOUR	17:00	18:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Albemarle Rd N		ONE HOUR	✓	500	100.000
B - Clandon Rd SW		ONE HOUR	✓	165	100.000
C - Albemarle Rd S		ONE HOUR	✓	371	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Albemarle Rd N	B - Clandon Rd SW	C - Albemarle Rd S
From	A - Albemarle Rd N	0	139	361
	B - Clandon Rd SW	79	0	86
	C - Albemarle Rd S	295	76	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Albemarle Rd N	B - Clandon Rd SW	C - Albemarle Rd S
From	A - Albemarle Rd N	0	1	1
	B - Clandon Rd SW	0	0	5
	C - Albemarle Rd S	1	25	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.39	12.99	0.6	B	151	227
C-AB	0.20	6.98	0.5	A	114	172
C-A					226	339
A-B					128	191
A-C					331	497

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	124	31	523	0.238	123	0.0	0.3	9.207	A
C-AB	84	21	699	0.120	83	0.0	0.2	6.784	A
C-A	195	49			195				
A-B	105	26			105				
A-C	272	68			272				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	148	37	499	0.297	148	0.3	0.4	10.501	B
C-AB	109	27	715	0.152	109	0.2	0.3	6.863	A
C-A	225	56			225				
A-B	125	31			125				
A-C	325	81			325				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	182	45	466	0.390	181	0.4	0.6	12.917	B
C-AB	150	38	738	0.203	150	0.3	0.5	6.983	A
C-A	258	65			258				
A-B	153	38			153				
A-C	397	99			397				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	182	45	466	0.390	182	0.6	0.6	12.994	B
C-AB	150	38	738	0.204	150	0.5	0.5	6.942	A
C-A	258	65			258				
A-B	153	38			153				
A-C	397	99			397				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	148	37	499	0.297	149	0.6	0.4	10.583	B
C-AB	109	27	715	0.153	110	0.5	0.3	6.772	A
C-A	224	56			224				
A-B	125	31			125				
A-C	325	81			325				

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	124	31	522	0.238	125	0.4	0.3	9.293	A
C-AB	84	21	700	0.120	85	0.3	0.2	6.756	A
C-A	195	49			195				
A-B	105	26			105				
A-C	272	68			272				