

Junctions 11										
ARCADY 11 - Roundabout Module										
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Filename: Junction 7 - Wrotham Road_A2 Linked Rbt - Sensitivity Uncalibrated.j11
Path: C:\Users\MatthewJohnson\Hub Transport Planning Ltd\Hub Transport Planning - General\Projects\T25526 Longfield Road, Meopham\Modelling\Arcady
Report generation date: 21/05/2026 10:27:03

»D1 - 2025 | Base | AM
»D2 - 2025 | Base | PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	95% Queue (PCU)	Delay (s)	RFC	Set ID	Queue (PCU)	95% Queue (PCU)	Delay (s)	RFC
	2025 - Base									
Junction 1 - Arm 2	D1	0.9	1.5	2.78	0.48	D2	0.8	1.7	2.59	0.45
Junction 1 - Arm 3		1.4	1.6	4.86	0.58		2.6	4.4	6.85	0.72
Junction 1 - Arm 4		5.8	29.2	13.12	0.85		3.7	13.6	9.26	0.79
Junction 1 - Arm 5		0.0	~1	0.00	0.00		0.0	~1	0.00	0.00
Junction 2 - Arm 1		2.5	8.4	12.35	0.71		1.8	2.8	9.07	0.64
Junction 2 - Arm 2		5.2	26.3	20.35	0.85		2.0	3.2	8.64	0.67
Junction 2 - Arm 4		1.3	1.7	3.43	0.55		1.1	1.5	3.05	0.51

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.
Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

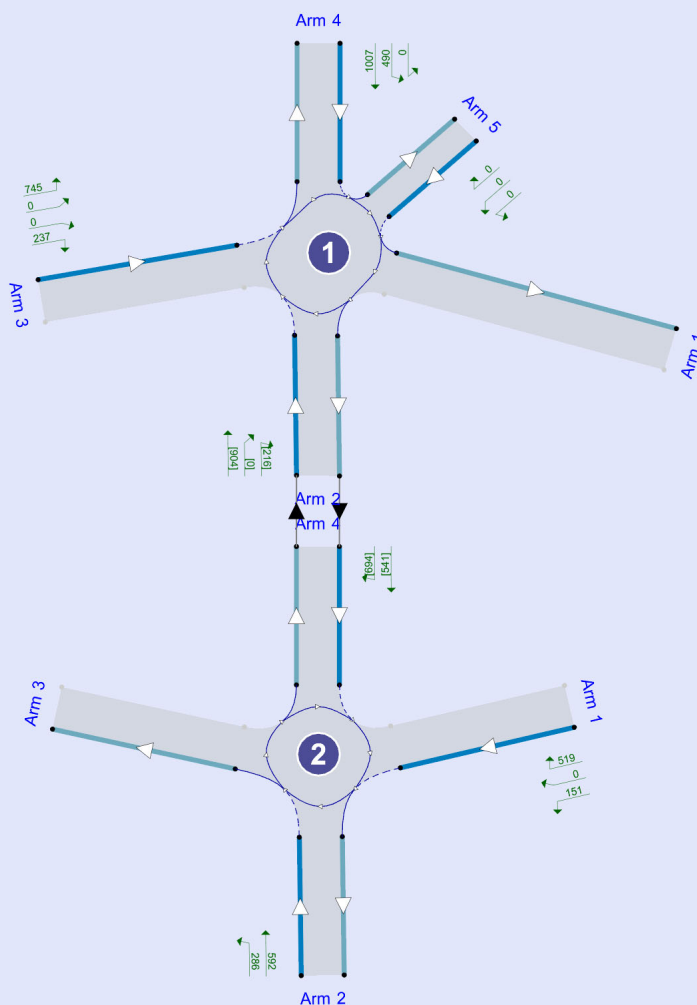
File summary

File Description

Title	
Location	Wrotham Road/A2 Southern Roundabout
Site number	7
Date	09/04/2026
Version	
Status	(new file)
Identifier	MJ
Client	Richborough
Jobnumber	T25512
Enumerator	AzureAD\MatthewJohnson
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



Flows show original traffic demand (PCU/hr)

The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)	Use simulation for HCM roundabouts	Use iterations for HCM roundabouts
5.75	✓					0.85	36.00	20.00		

Demand Set Summary

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2025	Base	AM	ONE HOUR	07:45	09:15	15	✓
D2	2025	Base	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

D1 - 2025 | Base | 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	Arm order	Junction Delay (s)	Junction LOS
1	Northern Rbt	Standard Roundabout	1, 2, 3, 4, 5	7.66	A
2	Southern Rbt	Standard Roundabout	1, 2, 3, 4	10.90	B

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	9.08	A

Arms

Arms

Junction	Arm	Name	Description	No give-way line
1	1	A2 (E) On-Slip		
	2	Wrotham Road S - Internal Link		
	3	A2 (W) Off-Slip		
	4	Wrotham Road N		
	5	Hotel access		
2	1	A2 (E) Off-Slip		
	2	Wrotham Road S		
	3	A2 (W) On-Slip		
	4	Wrotham Road N - Internal Link		

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)	Entry only	Exit only
1	1								✓
	2	7.10	8.50	18.0	31.1	60.0	27.0		
	3	7.30	9.40	17.0	34.4	60.0	22.0	✓	
	4	4.80	8.30	22.3	43.1	60.0	24.0		
	5	3.10	6.10	5.1	13.0	60.0	42.0		
2	1	3.80	8.70	14.3	20.1	60.0	35.0	✓	
	2	4.20	8.40	12.8	25.5	60.0	22.0		
	3								✓
	4	7.20	8.30	15.0	20.5	60.0	28.0		

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Junction	Arm	Final slope	Final intercept (PCU/hr)
1	1		
	2	0.713	2560
	3	0.760	2797
	4	0.667	2262
	5	0.447	1168
2	1	0.575	1828
	2	0.613	1966
	3		
	4	0.693	2471

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

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2025	Base	AM	ONE HOUR	07:45	09:15	15	✓

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
1	2	2	4	Queue limited	Normal	0	100.00	33.00
2	4	1	2	Queue limited	Normal	0	100.00	33.00

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1	1					
	2	✓				
	3		ONE HOUR	✓	982	100.000
	4		ONE HOUR	✓	1497	100.000
	5		ONE HOUR	✓	0	100.000
2	1		ONE HOUR	✓	670	100.000
	2		ONE HOUR	✓	878	100.000
	3					
	4	✓				

Origin-Destination Data

Demand (PCU/hr)

Junction 2

	To				
		1	2	3	4
From	1	0	151	0	519
	2	0	0	286	592
	3	0	0	0	0
	4	0	541	694	0

Demand (PCU/hr)

Junction 1

	To					
		1	2	3	4	5
From	1	0	0	0	0	0
	2	216	0	0	904	0
	3	0	237	0	745	0
	4	490	1007	0	0	0
	5	0	0	0	0	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

Junction 2

	To				
		1	2	3	4
From	1	0	6	0	4
	2	0	0	3	3
	3	0	0	0	0
	4	0	3	7	0

Heavy Vehicle %

Junction 1

	To					
		1	2	3	4	5
	1	0	0	0	0	0
	2	5	0	0	3	0
	3	0	7	0	6	0
	4	3	5	0	0	0
	5	3	5	0	0	0

Results

Results Summary for whole modelled period

Junction	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	1							
	2	0.48	2.78	0.9	1.5	A	1019	1528
	3	0.58	4.86	1.4	1.6	A	901	1352
	4	0.85	13.12	5.8	29.2	B	1374	2061
	5	0.00	0.00	0.0	~1	A	0	0
2	1	0.71	12.35	2.5	8.4	B	615	922
	2	0.85	20.35	5.2	26.3	C	806	1209
	3							
	4	0.55	3.43	1.3	1.7	A	1141	1711

Main Results for each time segment

07:45 - 08:00

Junction	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	1			933				527				
	2	832	208	0	2560	0.325	830	933	0.0	0.5	2.149	A
	3	739	185	830	2166	0.341	737	0	0.0	0.5	2.673	A
	4	1127	282	338	2037	0.553	1122	1229	0.0	1.3	4.084	A
	5	0	0	1460	515	0.000	0	0	0.0	0.0	0.000	A
2	1	504	126	930	1293	0.390	502	0	0.0	0.7	4.736	A
	2	661	165	911	1407	0.470	657	520	0.0	0.9	4.922	A
	3			832				737				
	4	933	233	0	2471	0.377	930	832	0.0	0.6	2.453	A

08:00 - 08:15

Junction	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	1			1116				631				
	2	996	249	0	2560	0.389	995	1116	0.5	0.7	2.376	A
	3	883	221	995	2041	0.433	882	0	0.5	0.8	3.297	A
	4	1346	336	405	1992	0.676	1342	1472	1.3	2.1	5.751	A
	5	0	0	1747	387	0.000	0	0	0.0	0.0	0.000	A
2	1	602	151	1115	1187	0.507	601	0	0.7	1.1	6.393	A
	2	789	197	1092	1296	0.609	787	624	0.9	1.6	7.236	A
	3			996				883				
	4	1116	279	0	2471	0.451	1115	996	0.6	0.9	2.791	A

08:15 - 08:30

Junction	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	1			1360				768				
	2	1210	303	0	2560	0.473	1209	1360	0.7	0.9	2.751	A
	3	1081	270	1209	1878	0.576	1079	0	0.8	1.4	4.772	A
	4	1648	412	494	1933	0.853	1635	1794	2.1	5.5	12.074	B
	5	0	0	2128	217	0.000	0	0	0.0	0.0	0.000	A
2	1	738	184	1358	1047	0.704	732	0	1.1	2.4	11.759	B
	2	967	242	1331	1150	0.841	954	760	1.6	4.8	17.821	C
	3			1210				1074				
	4	1360	340	0	2471	0.550	1358	1210	0.9	1.3	3.398	A

08:30 - 08:45

Junction	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	1			1369				775				
	2	1222	305	0	2560	0.477	1222	1369	0.9	0.9	2.780	A
	3	1081	270	1222	1868	0.579	1081	0	1.4	1.4	4.858	A
	4	1648	412	497	1931	0.854	1647	1806	5.5	5.8	13.123	B
	5	0	0	2144	210	0.000	0	0	0.0	0.0	0.000	A
2	1	738	184	1369	1041	0.709	737	0	2.4	2.5	12.348	B
	2	967	242	1340	1144	0.845	965	766	4.8	5.2	20.352	C
	3			1222				1084				
	4	1369	342	0	2471	0.554	1369	1222	1.3	1.3	3.434	A

08:45 - 09:00

Junction	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	1			1129				641				
	2	1013	253	0	2560	0.395	1014	1129	0.9	0.7	2.407	A
	3	883	221	1014	2027	0.436	885	0	1.4	0.8	3.360	A
	4	1346	336	409	1989	0.677	1360	1490	5.8	2.2	6.103	A
	5	0	0	1769	377	0.000	0	0	0.0	0.0	0.000	A
2	1	602	151	1130	1178	0.511	608	0	2.5	1.1	6.651	A
	2	789	197	1106	1288	0.613	803	632	5.2	1.7	7.870	A
	3			1013				897				
	4	1129	282	0	2471	0.457	1130	1013	1.3	0.9	2.828	A

09:00 - 09:15

Junction	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	1			939				532				
	2	840	210	0	2560	0.328	840	939	0.7	0.5	2.164	A
	3	739	185	840	2158	0.343	740	0	0.8	0.6	2.701	A
	4	1127	282	341	2035	0.554	1131	1240	2.2	1.3	4.172	A
	5	0	0	1471	510	0.000	0	0	0.0	0.0	0.000	A
2	1	504	126	940	1287	0.392	506	0	1.1	0.7	4.822	A
	2	661	165	920	1402	0.472	664	526	1.7	0.9	5.048	A
	3			840				745				
	4	939	235	0	2471	0.380	940	840	0.9	0.6	2.474	A

Queue Variation Results for each time segment

07:45 - 08:00

Junction	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	1									
	2	0.50	0.00	0.00	0.50	0.50			N/A	N/A
	3	0.55	0.55	1.06	1.49	1.54			N/A	N/A
	4	1.28	0.58	1.14	1.44	1.77			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A
2	1	0.66	0.57	1.04	1.46	1.51			N/A	N/A
	2	0.90	0.57	1.03	1.44	1.49			N/A	N/A
	3									
	4	0.63	0.58	1.05	1.47	1.53			N/A	N/A

08:00 - 08:15

Junction	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	1									
	2	0.66	0.09	0.82	1.41	1.48			N/A	N/A
	3	0.80	0.07	0.79	1.57	1.58			N/A	N/A
	4	2.13	0.05	0.46	5.81	9.85			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A
2	1	1.06	0.06	0.79	2.02	2.88			N/A	N/A
	2	1.57	0.05	0.49	4.02	6.36			N/A	N/A
	3									
	4	0.86	0.08	0.84	1.23	1.75			N/A	N/A

08:15 - 08:30

Junction	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	1									
	2	0.92	0.03	0.26	0.92	0.92			N/A	N/A
	3	1.42	0.03	0.27	1.42	1.42			N/A	N/A
	4	5.54	0.03	0.35	9.79	29.19			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A
2	1	2.39	0.03	0.30	2.39	8.40			N/A	N/A
	2	4.83	0.04	0.37	11.20	26.30			N/A	N/A
	3									
	4	1.28	0.03	0.27	1.28	1.28			N/A	N/A

08:30 - 08:45

Junction	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	1									
	2	0.94	0.03	0.28	0.94	1.11			N/A	N/A
	3	1.45	0.03	0.28	1.45	1.47			N/A	N/A
	4	5.80	0.03	0.30	5.80	19.23			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A
2	1	2.47	0.03	0.29	2.47	5.99			N/A	N/A
	2	5.21	0.03	0.32	5.93	24.48			N/A	N/A
	3									
	4	1.30	0.03	0.28	1.30	1.30			N/A	N/A

08:45 - 09:00

Junction	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	1									
	2	0.68	0.57	1.03	1.45	1.50			N/A	N/A
	3	0.83	0.38	1.02	1.48	1.54			N/A	N/A
	4	2.23	0.05	0.52	6.00	9.59			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A
2	1	1.11	0.07	0.84	2.08	2.96			N/A	N/A
	2	1.67	0.05	0.46	4.40	7.17			N/A	N/A
	3									
	4	0.89	0.58	1.05	1.47	1.53			N/A	N/A

09:00 - 09:15

Junction	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	1									
	2	0.51	0.00	0.00	0.51	0.51			N/A	N/A
	3	0.56	0.05	0.53	1.38	1.49			N/A	N/A
	4	1.31	0.04	0.36	3.11	6.56			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A
2	1	0.68	0.04	0.41	1.46	2.24			N/A	N/A
	2	0.93	0.03	0.33	1.93	4.59			N/A	N/A
	3									
	4	0.65	0.13	0.92	1.45	1.51			N/A	N/A

D2 - 2025 | Base | 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	Arm order	Junction Delay (s)	Junction LOS
1	Northern Rbt	Standard Roundabout	1, 2, 3, 4, 5	6.50	A
2	Southern Rbt	Standard Roundabout	1, 2, 3, 4	6.26	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.40	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2025	Base	PM	ONE HOUR	16:45	18:15	15	✓

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
1	2	2	4	Queue limited	Normal	0	100.00	33.00
2	4	1	2	Queue limited	Normal	0	100.00	33.00

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1	1					
	2	✓				
	3		ONE HOUR	✓	1254	100.000
	4		ONE HOUR	✓	1334	100.000
	5		ONE HOUR	✓	0	100.000
2	1		ONE HOUR	✓	642	100.000
	2		ONE HOUR	✓	781	100.000
	3					
	4	✓				

Origin-Destination Data

Demand (PCU/hr)

Junction 2

	To				
From		1	2	3	4
	1	0	166	0	476
	2	0	0	204	577
	3	0	0	0	0
	4	0	601	531	0

Demand (PCU/hr)

Junction 1

	To					
		1	2	3	4	5
From	1	0	0	0	0	0
	2	216	0	0	846	0
	3	0	327	0	927	0
	4	519	815	0	0	0
	5	0	0	0	0	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

Junction 2

	To				
		1	2	3	4
From	1	0	2	0	0
	2	0	0	1	2
	3	0	0	0	0
	4	0	2	4	0

Heavy Vehicle %

Junction 1

	To					
		1	2	3	4	5
From	1	0	0	0	0	0
	2	1	0	0	1	0
	3	0	2	0	2	0
	4	1	3	0	0	0
	5	1	3	0	0	0

Results

Results Summary for whole modelled period

Junction	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	1							
	2	0.45	2.59	0.8	1.7	A	966	1448
	3	0.72	6.85	2.6	4.4	A	1151	1726
	4	0.79	9.26	3.7	13.6	A	1224	1836
	5	0.00	0.00	0.0	~1	A	0	0
2	1	0.64	9.07	1.8	2.8	A	589	884
	2	0.67	8.64	2.0	3.2	A	717	1075
	3							
	4	0.51	3.05	1.1	1.5	A	1047	1571

Main Results for each time segment

16:45 - 17:00

Junction	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	1			856				549				
	2	789	197	0	2560	0.308	787	856	0.0	0.4	2.049	A
	3	944	236	787	2198	0.429	941	0	0.0	0.8	2.913	A
	4	1004	251	406	1992	0.504	1000	1323	0.0	1.0	3.697	A
	5	0	0	1406	540	0.000	0	0	0.0	0.0	0.000	A
2	1	483	121	854	1337	0.362	481	0	0.0	0.6	4.217	A
	2	588	147	757	1501	0.392	585	578	0.0	0.7	3.987	A
	3			789				554				
	4	856	214	0	2471	0.347	854	789	0.0	0.5	2.288	A

17:00 - 17:15

Junction	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	1			1025				658				
	2	945	236	0	2560	0.369	944	1025	0.4	0.6	2.250	A
	3	1127	282	944	2079	0.542	1126	0	0.8	1.2	3.843	A
	4	1199	300	486	1938	0.619	1197	1584	1.0	1.6	4.947	A
	5	0	0	1682	416	0.000	0	0	0.0	0.0	0.000	A
2	1	577	144	1024	1239	0.466	576	0	0.6	0.9	5.444	A
	2	702	176	907	1410	0.498	701	693	0.7	1.0	5.156	A
	3			945				663				
	4	1025	256	0	2471	0.415	1024	945	0.5	0.7	2.558	A

17:15 - 17:30

Junction	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	1			1251				803				
	2	1154	288	0	2560	0.451	1153	1251	0.6	0.8	2.582	A
	3	1381	345	1153	1921	0.719	1375	0	1.2	2.5	6.668	A
	4	1469	367	593	1866	0.787	1461	1935	1.6	3.6	8.903	A
	5	0	0	2054	250	0.000	0	0	0.0	0.0	0.000	A
2	1	707	177	1250	1109	0.637	703	0	0.9	1.7	8.837	A
	2	860	215	1108	1287	0.668	856	845	1.0	2.0	8.426	A
	3			1154				810				
	4	1251	313	0	2471	0.506	1250	1154	0.7	1.0	3.030	A

17:30 - 17:45

Junction	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	1			1257				807				
	2	1159	290	0	2560	0.453	1159	1257	0.8	0.8	2.594	A
	3	1381	345	1159	1916	0.721	1380	0	2.5	2.6	6.850	A
	4	1469	367	596	1865	0.788	1468	1944	3.6	3.7	9.261	A
	5	0	0	2064	245	0.000	0	0	0.0	0.0	0.000	A
2	1	707	177	1257	1105	0.639	707	0	1.7	1.8	9.069	A
	2	860	215	1114	1283	0.670	860	850	2.0	2.0	8.644	A
	3			1159				814				
	4	1257	314	0	2471	0.509	1257	1159	1.0	1.1	3.050	A

17:45 - 18:00

Junction	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	1			1033				664				
	2	952	238	0	2560	0.372	953	1033	0.8	0.6	2.263	A
	3	1127	282	953	2073	0.544	1133	0	2.6	1.2	3.929	A
	4	1199	300	489	1936	0.620	1207	1597	3.7	1.7	5.105	A
	5	0	0	1697	410	0.000	0	0	0.0	0.0	0.000	A
2	1	577	144	1034	1233	0.468	581	0	1.8	0.9	5.573	A
	2	702	176	916	1404	0.500	706	699	2.0	1.0	5.273	A
	3			952				670				
	4	1033	258	0	2471	0.418	1034	952	1.1	0.7	2.579	A

18:00 - 18:15

Junction	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	1			862				553				
	2	795	199	0	2560	0.310	795	862	0.6	0.5	2.062	A
	3	944	236	795	2192	0.431	946	0	1.2	0.8	2.951	A
	4	1004	251	408	1990	0.505	1007	1333	1.7	1.1	3.755	A
	5	0	0	1415	535	0.000	0	0	0.0	0.0	0.000	A
2	1	483	121	863	1332	0.363	485	0	0.9	0.6	4.277	A
	2	588	147	764	1498	0.393	589	583	1.0	0.7	4.041	A
	3			795				559				
	4	862	215	0	2471	0.349	863	795	0.7	0.6	2.303	A

Queue Variation Results for each time segment

16:45 - 17:00

Junction	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	1									
	2	0.45	0.00	0.00	0.45	0.45			N/A	N/A
	3	0.76	0.56	1.02	1.43	1.48			N/A	N/A
	4	1.03	0.56	1.02	1.43	1.48			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A
2	1	0.57	0.55	1.01	1.41	1.46			N/A	N/A
	2	0.65	0.56	1.02	1.42	1.48			N/A	N/A
	3									
	4	0.54	0.54	1.03	1.44	1.49			N/A	N/A

17:00 - 17:15

Junction	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	1									
	2	0.59	0.08	0.77	1.37	1.44			N/A	N/A
	3	1.20	0.05	0.48	2.87	4.42			N/A	N/A
	4	1.64	0.05	0.47	4.28	6.93			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A
2	1	0.87	0.07	0.79	1.43	1.84			N/A	N/A
	2	1.00	0.06	0.77	1.88	2.63			N/A	N/A
	3									
	4	0.73	0.08	0.82	1.43	1.51			N/A	N/A

17:15 - 17:30

Junction	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	1									
	2	0.82	0.03	0.26	0.82	0.82			N/A	N/A
	3	2.54	0.03	0.28	2.54	3.85			N/A	N/A
	4	3.61	0.03	0.30	3.61	13.62			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A
2	1	1.72	0.03	0.27	1.72	2.18			N/A	N/A
	2	1.99	0.03	0.28	1.99	3.22			N/A	N/A
	3									
	4	1.05	0.03	0.26	1.05	1.05			N/A	N/A

17:30 - 17:45

Junction	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	1									
	2	0.83	0.03	0.27	0.83	1.67			N/A	N/A
	3	2.59	0.03	0.27	2.59	2.59			N/A	N/A
	4	3.70	0.03	0.28	3.70	4.51			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A
2	1	1.75	0.03	0.27	1.75	2.81			N/A	N/A
	2	2.03	0.03	0.28	2.03	2.36			N/A	N/A
	3									
	4	1.06	0.03	0.27	1.06	1.06			N/A	N/A

17:45 - 18:00

Junction	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	1									
	2	0.60	0.56	1.01	1.41	1.46			N/A	N/A
	3	1.23	0.10	1.05	2.10	2.85			N/A	N/A
	4	1.69	0.06	0.90	4.00	5.84			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A
2	1	0.89	0.09	0.88	1.32	1.74			N/A	N/A
	2	1.03	0.09	0.94	1.72	2.04			N/A	N/A
	3									
	4	0.74	0.57	1.03	1.44	1.49			N/A	N/A

18:00 - 18:15

Junction	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	1									
	2	0.46	0.00	0.00	0.46	0.46			N/A	N/A
	3	0.78	0.05	0.47	1.59	2.23			N/A	N/A
	4	1.05	0.04	0.40	2.63	4.42			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A
2	1	0.58	0.04	0.44	1.25	1.25			N/A	N/A
	2	0.66	0.05	0.46	1.11	1.74			N/A	N/A
	3									
	4	0.55	0.55	1.03	1.44	1.49			N/A	N/A

Junctions 11
ARCADY 11 - Roundabout Module
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Filename: Junction 7 - Wrotham Road_A2 Linked Rbt - Sensitivity Calibrated.j11
Path: C:\Users\MatthewJohnson\Hub Transport Planning Ltd\Hub Transport Planning - General\Projects\T25526 Longfield Road, Meopham\Modelling\Arcady
Report generation date: 21/05/2026 10:23:51

- »D1 - 2025 | Base | AM
- »D2 - 2025 | Base | PM
- »D3 - 2026 | Base | AM
- »D4 - 2026 | Base | PM
- »D5 - 2032 | Reference Case | AM
- »D6 - 2032 | Reference Case | PM
- »D7 - 2032 | Reference Case + Committed | AM
- »D8 - 2032 | Reference Case + Committed | PM
- »D9 - 2032 | Reference Case + Committed + Development | AM
- »D10 - 2032 | Reference Case + Committed + Development | PM
- »D11 - 2042 | Local Plan | AM
- »D12 - 2042 | Local Plan | PM
- »D13 - 2042 | Local Plan + Committed | AM
- »D14 - 2042 | Local Plan + Committed | PM
- »D15 - 2042 | Local Plan + Committed + Development | AM
- »D16 - 2042 | Local Plan + Committed + Development | PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	95% Queue (PCU)	Delay (s)	RFC	Set ID	Queue (PCU)	95% Queue (PCU)	Delay (s)	RFC
	2025 - Base									
Junction 1 - Arm 2	D1	0.9	1.5	2.77	0.47	D2	0.8	1.7	2.59	0.45
Junction 1 - Arm 3		2.5	5.0	8.64	0.71		6.9	34.4	18.98	0.88
Junction 1 - Arm 4		5.8	28.9	13.08	0.85		3.7	13.4	9.25	0.79
Junction 1 - Arm 5		0.0	~1	0.00	0.00		0.0	~1	0.00	0.00
Junction 2 - Arm 1		10.0	50.3	52.16	0.93		4.4	22.1	23.63	0.83
Junction 2 - Arm 2		5.1	25.2	19.90	0.84		2.0	3.0	8.62	0.67
Junction 2 - Arm 4		1.3	1.7	3.43	0.55		1.1	1.5	3.05	0.51
	2026 - Base									
Junction 1 - Arm 2	D3	0.9	1.5	2.79	0.48	D4	0.8	1.6	2.61	0.46
Junction 1 - Arm 3		2.7	6.1	9.04	0.72		7.8	41.0	21.32	0.90
Junction 1 - Arm 4		6.3	31.9	14.06	0.86		3.9	15.1	9.67	0.80
Junction 1 - Arm 5		0.0	~1	0.00	0.00		0.0	~1	0.00	0.00
Junction 2 - Arm 1		12.2	56.1	61.82	0.95		4.9	25.0	25.92	0.84
Junction 2 - Arm 2		5.6	27.5	21.78	0.86		2.1	3.8	8.95	0.68
Junction 2 - Arm 4		1.3	1.8	3.48	0.56		1.1	1.5	3.08	0.51
	2032 - Reference Case									
Junction 1 - Arm 2	D5	1.0	1.5	2.81	0.48	D6	0.9	1.6	2.63	0.46
Junction 1 - Arm 3		2.9	7.8	9.59	0.74		8.5	46.2	23.16	0.91
Junction 1 - Arm 4		7.0	35.9	15.55	0.88		4.1	16.5	10.05	0.80
Junction 1 - Arm 5		0.0	~1	0.00	0.00		0.0	~1	0.00	0.00
Junction 2 - Arm 1		15.6	62.4	76.21	0.98		5.2	27.7	27.73	0.85
Junction 2 - Arm 2		6.4	34.0	24.76	0.88		2.2	4.4	9.20	0.69
Junction 2 - Arm 4		1.4	1.9	3.54	0.57		1.1	1.5	3.10	0.52
	2032 - Reference Case + Committed									
Junction 1 - Arm 2	D7	1.0	1.5	2.83	0.49	D8	0.9	1.5	2.77	0.48
Junction 1 - Arm 3		3.4	12.4	10.89	0.77		22.3	90.4	55.17	0.99
Junction 1 - Arm 4		9.8	53.1	21.82	0.91		5.4	26.2	13.28	0.85
Junction 1 - Arm 5		1.5	7.1	46.33	0.60		1.3	6.3	36.30	0.57
Junction 2 - Arm 1		45.7	93.6	184.02	1.11		9.5	48.8	47.93	0.93
Junction 2 - Arm 2		8.6	47.0	33.32	0.91		2.5	7.2	10.51	0.72
Junction 2 - Arm 4		1.5	2.3	3.78	0.59		1.2	1.5	3.22	0.53
	2032 - Reference Case + Committed + Development									
Junction 1 - Arm 2	D9	1.0	1.5	2.84	0.49	D10	0.9	1.5	2.78	0.49
Junction 1 - Arm 3		3.5	13.5	11.27	0.77		26.9	96.3	64.12	1.00
Junction 1 - Arm 4		10.4	57.1	23.17	0.92		5.7	28.5	14.15	0.86
Junction 1 - Arm 5		1.6	7.7	50.37	0.62		1.4	7.0	40.23	0.60
Junction 2 - Arm 1		49.1	96.9	196.82	1.12		11.4	54.3	56.79	0.95
Junction 2 - Arm 2		10.9	57.2	41.02	0.94		2.7	8.4	10.94	0.73
Junction 2 - Arm 4		1.6	2.4	3.82	0.60		1.2	1.6	3.28	0.54
	2042 - Local Plan									
Junction 1 - Arm 2	D11	1.0	1.5	2.86	0.49	D12	0.9	1.5	2.76	0.49
Junction 1 - Arm 3		3.9	16.2	12.20	0.79		23.6	92.6	57.36	0.99
Junction 1 - Arm 4		13.0	71.5	27.85	0.94		6.0	30.4	14.23	0.86
Junction 1 - Arm 5		0.0	~1	0.00	0.00		0.0	~1	0.00	0.00
Junction 2 - Arm 1		46.0	93.5	187.09	1.11		11.5	54.3	57.37	0.95
Junction 2 - Arm 2		12.4	62.4	45.04	0.95		3.0	10.9	11.83	0.75
Junction 2 - Arm 4		1.6	2.5	3.84	0.60		1.2	1.6	3.30	0.55
	2042 - Local Plan + Committed									
Junction 1 - Arm 2	D13	1.0	1.5	2.84	0.49	D14	1.0	1.5	2.89	0.50
Junction 1 - Arm 3		4.5	21.0	13.61	0.81		63.3	132.0	130.12	1.07
Junction 1 - Arm 4		21.4	96.7	44.04	0.98		8.3	42.5	19.68	0.90
Junction 1 - Arm 5		3.0	13.2	99.35	0.80		2.1	10.5	62.97	0.71
Junction 2 - Arm 1		86.6	134.7	339.11	1.24		23.9	72.3	103.55	1.02
Junction 2 - Arm 2		16.8	72.4	59.50	0.97		3.4	14.3	13.40	0.78
Junction 2 - Arm 4		1.7	3.0	4.09	0.63		1.3	1.8	3.38	0.56
	2042 - Local Plan + Committed + Development									
Junction 1 - Arm 2	D15	1.0	1.5	2.88	0.50	D16	1.0	1.5	2.88	0.50
Junction 1 - Arm 3		4.6	22.1	14.01	0.82		70.0	138.6	142.02	1.08
Junction 1 - Arm 4		23.2	100.1	47.37	0.98		8.9	47.7	21.22	0.91

Junction 1 - Arm 5	3.4	14.2	110.90	0.83	2.4	11.7	72.69	0.74
Junction 2 - Arm 1	90.6	138.7	355.89	1.26	29.3	77.6	122.96	1.05
Junction 2 - Arm 2	22.5	81.1	75.02	1.00	3.6	15.7	13.88	0.78
Junction 2 - Arm 4	1.8	3.1	4.12	0.63	1.3	1.9	3.44	0.56

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

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

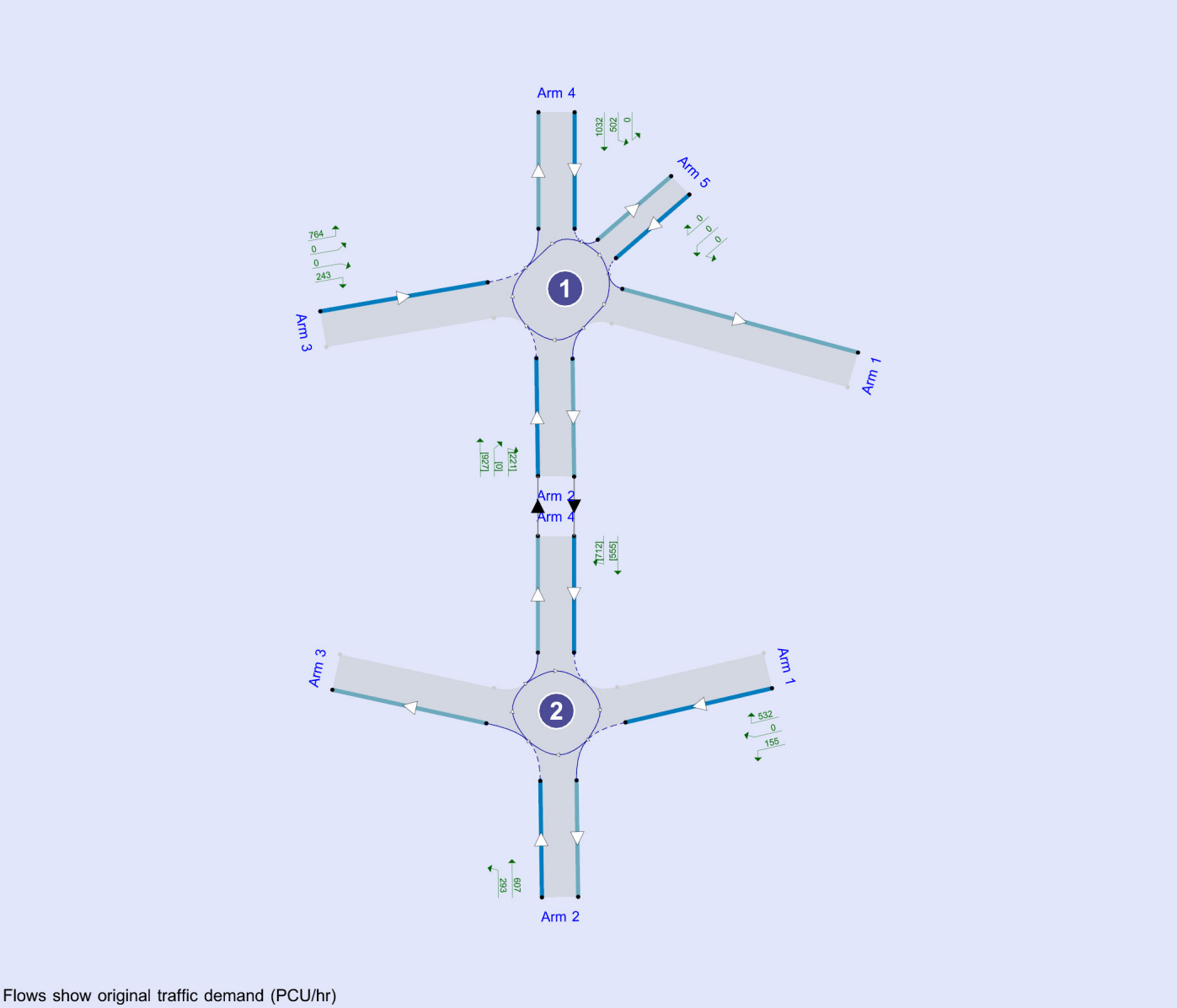
File summary

File Description

Title	
Location	Wrotham Road/A2 Southern Roundabout
Site number	7
Date	09/04/2026
Version	
Status	(new file)
Identifier	MJ
Client	Richborough
Jobnumber	T25512
Enumerator	AzureAD\MatthewJohnson
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



Flows show original traffic demand (PCU/hr)

The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)	Use simulation for HCM roundabouts	Use iterations for HCM roundabouts
5.75	✓					0.85	36.00	20.00		

Demand Set Summary

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2025	Base	AM	ONE HOUR	07:45	09:15	15	✓
D2	2025	Base	PM	ONE HOUR	16:45	18:15	15	✓
D3	2026	Base	AM	ONE HOUR	07:45	09:15	15	✓
D4	2026	Base	PM	ONE HOUR	16:45	18:15	15	✓
D5	2032	Reference Case	AM	ONE HOUR	07:45	09:15	15	✓
D6	2032	Reference Case	PM	ONE HOUR	16:45	18:15	15	✓
D7	2032	Reference Case + Committed	AM	ONE HOUR	07:45	09:15	15	✓
D8	2032	Reference Case + Committed	PM	ONE HOUR	16:45	18:15	15	✓
D9	2032	Reference Case + Committed + Development	AM	ONE HOUR	07:45	09:15	15	✓
D10	2032	Reference Case + Committed + Development	PM	ONE HOUR	16:45	18:15	15	✓
D11	2042	Local Plan	AM	ONE HOUR	07:45	09:15	15	✓
D12	2042	Local Plan	PM	ONE HOUR	16:45	18:15	15	✓
D13	2042	Local Plan + Committed	AM	ONE HOUR	07:45	09:15	15	✓
D14	2042	Local Plan + Committed	PM	ONE HOUR	16:45	18:15	15	✓
D15	2042	Local Plan + Committed + Development	AM	ONE HOUR	07:45	09:15	15	✓
D16	2042	Local Plan + Committed + Development	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

D1 - 2025 | Base | 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	Arm order	Junction Delay (s)	Junction LOS
1	Northern Rbt	Standard Roundabout	1, 2, 3, 4, 5	8.67	A
2	Southern Rbt	Standard Roundabout	1, 2, 3, 4	20.31	C

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	13.76	B

Arms

Arms

Junction	Arm	Name	Description	No give-way line
1	1	A2 (E) On-Slip		
	2	Wrotham Road S - Internal Link		
	3	A2 (W) Off-Slip		
	4	Wrotham Road N		
	5	Hotel access		
2	1	A2 (E) Off-Slip		
	2	Wrotham Road S		
	3	A2 (W) On-Slip		
	4	Wrotham Road N - Internal Link		

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)	Entry only	Exit only
1	1								✓
	2	7.10	8.50	18.0	31.1	60.0	27.0		
	3	7.30	9.40	17.0	34.4	60.0	22.0	✓	
	4	4.80	8.30	22.3	43.1	60.0	24.0		
	5	3.10	6.10	5.1	13.0	60.0	42.0		
2	1	3.80	8.70	14.3	20.1	60.0	35.0	✓	
	2	4.20	8.40	12.8	25.5	60.0	22.0		
	3								✓
	4	7.20	8.30	15.0	20.5	60.0	28.0		

Slope / Intercept / Capacity

Arm Intercept Adjustments

Junction	Arm	Type	Reason	Direct intercept adjustment (PCU/hr)
1	1			
	2	None		
	3	Direct	Calibration	-350
	4	None		
	5	None		
2	1	Direct	Calbration	-250
	2	None		
	3			
	4	None		

Roundabout Slope and Intercept used in model

Junction	Arm	Final slope	Final intercept (PCU/hr)
1	1		
	2	0.713	2560
	3	0.760	2447
	4	0.667	2262
	5	0.447	1168
2	1	0.575	1578
	2	0.613	1966
	3		
	4	0.693	2471

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

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2025	Base	AM	ONE HOUR	07:45	09:15	15	✓

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
1	2	2	4	Queue limited	Normal	0	100.00	33.00
2	4	1	2	Queue limited	Normal	0	100.00	33.00

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1	1					
	2	✓				
	3		ONE HOUR	✓	982	100.000
	4		ONE HOUR	✓	1497	100.000
	5		ONE HOUR	✓	0	100.000
2	1		ONE HOUR	✓	670	100.000
	2		ONE HOUR	✓	878	100.000
	3					
	4	✓				

Origin-Destination Data

Demand (PCU/hr)

Junction 2

	To				
		1	2	3	4
From	1	0	151	0	519
	2	0	0	286	592
	3	0	0	0	0
	4	0	541	694	0

Demand (PCU/hr)

Junction 1

	To					
		1	2	3	4	5
From	1	0	0	0	0	0
	2	216	0	0	904	0
	3	0	237	0	745	0
	4	490	1007	0	0	0
	5	0	0	0	0	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

Junction 2

	To				
		1	2	3	4
	1	0	6	0	4
	2	0	0	3	3
	3	0	0	0	0
	4	0	3	7	0

Heavy Vehicle %

Junction 1

	To					
		1	2	3	4	5
	1	0	0	0	0	0
	2	5	0	0	3	0
	3	0	7	0	6	0
	4	3	5	0	0	0

Results

Results Summary for whole modelled period

Junction	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	1							
	2	0.47	2.77	0.9	1.5	A	1019	1528
	3	0.71	8.64	2.5	5.0	A	901	1352
	4	0.85	13.08	5.8	28.9	B	1374	2061
	5	0.00	0.00	0.0	~1	A	0	0
2	1	0.93	52.16	10.0	50.3	F	615	922
	2	0.84	19.90	5.1	25.2	C	806	1209
	3							
	4	0.55	3.43	1.3	1.7	A	1141	1711

Main Results for each time segment

07:45 - 08:00

Junction	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	1			932				527				
	2	831	208	0	2560	0.325	829	932	0.0	0.5	2.148	A
	3	739	185	829	1817	0.407	736	0	0.0	0.7	3.532	A
	4	1127	282	338	2037	0.553	1122	1228	0.0	1.3	4.082	A
	5	0	0	1460	515	0.000	0	0	0.0	0.0	0.000	A
2	1	504	126	930	1043	0.483	501	0	0.0	1.0	6.880	A
	2	661	165	910	1408	0.470	657	520	0.0	0.9	4.918	A
	3			831				737				
	4	932	233	0	2471	0.377	930	831	0.0	0.6	2.452	A

08:00 - 08:15

Junction	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	1			1116				631				
	2	994	249	0	2560	0.388	994	1116	0.5	0.7	2.374	A
	3	883	221	994	1692	0.522	881	0	0.7	1.1	4.709	A
	4	1346	336	404	1992	0.675	1342	1471	1.3	2.1	5.749	A
	5	0	0	1747	387	0.000	0	0	0.0	0.0	0.000	A
2	1	602	151	1115	937	0.643	599	0	1.0	1.8	11.005	B
	2	789	197	1090	1297	0.608	787	623	0.9	1.6	7.223	A
	3			994				883				
	4	1116	279	0	2471	0.451	1115	994	0.6	0.9	2.790	A

08:15 - 08:30

Junction	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	1			1359				765				
	2	1196	299	0	2560	0.467	1195	1359	0.7	0.9	2.724	A
	3	1081	270	1195	1539	0.703	1076	0	1.1	2.4	8.169	A
	4	1648	412	490	1935	0.852	1635	1781	2.1	5.5	11.994	B
	5	0	0	2125	218	0.000	0	0	0.0	0.0	0.000	A
2	1	738	184	1358	798	0.925	713	0	1.8	8.1	36.808	E
	2	967	242	1315	1160	0.834	954	755	1.6	4.6	17.142	C
	3			1196				1074				
	4	1359	340	0	2471	0.550	1358	1196	0.9	1.3	3.396	A

08:30 - 08:45

Junction	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	1			1369				774				
	2	1216	304	0	2560	0.475	1216	1369	0.9	0.9	2.767	A
	3	1081	270	1216	1523	0.710	1081	0	2.4	2.5	8.636	A
	4	1648	412	495	1932	0.853	1647	1801	5.5	5.8	13.077	B
	5	0	0	2142	210	0.000	0	0	0.0	0.0	0.000	A
2	1	738	184	1369	791	0.932	730	0	8.1	10.0	52.156	F
	2	967	242	1335	1148	0.842	965	764	4.6	5.1	19.904	C
	3			1216				1083				
	4	1369	342	0	2471	0.554	1369	1216	1.3	1.3	3.434	A

08:45 - 09:00

Junction	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	1			1129				644				
	2	1033	258	0	2560	0.403	1034	1129	0.9	0.7	2.440	A
	3	883	221	1034	1661	0.531	888	0	2.5	1.2	4.980	A
	4	1346	336	414	1986	0.678	1360	1508	5.8	2.2	6.128	A
	5	0	0	1774	375	0.000	0	0	0.0	0.0	0.000	A
2	1	602	151	1131	928	0.649	634	0	10.0	2.0	14.118	B
	2	789	197	1127	1275	0.619	803	638	5.1	1.7	8.069	A
	3			1033				897				
	4	1129	282	0	2471	0.457	1131	1033	1.3	0.9	2.830	A

09:00 - 09:15

Junction	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	1			940				533				
	2	842	210	0	2560	0.329	842	940	0.7	0.5	2.166	A
	3	739	185	842	1807	0.409	741	0	1.2	0.7	3.598	A
	4	1127	282	341	2034	0.554	1131	1242	2.2	1.3	4.175	A
	5	0	0	1472	510	0.000	0	0	0.0	0.0	0.000	A
2	1	504	126	940	1037	0.486	508	0	2.0	1.0	7.161	A
	2	661	165	922	1400	0.472	664	527	1.7	0.9	5.059	A
	3			842				745				
	4	940	235	0	2471	0.380	940	842	0.9	0.6	2.475	A

Queue Variation Results for each time segment

07:45 - 08:00

Junction	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	1									
	2	0.50	0.00	0.00	0.50	0.50			N/A	N/A
	3	0.72	0.58	1.06	1.49	1.54			N/A	N/A
	4	1.28	0.58	1.14	1.43	1.76			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A
2	1	0.96	0.56	1.04	1.47	1.53			N/A	N/A
	2	0.90	0.57	1.03	1.44	1.49			N/A	N/A
	3									
	4	0.63	0.58	1.05	1.47	1.53			N/A	N/A

08:00 - 08:15

Junction	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	1									
	2	0.65	0.09	0.83	1.41	1.48			N/A	N/A
	3	1.15	0.06	0.66	2.51	3.63			N/A	N/A
	4	2.13	0.05	0.46	5.81	9.83			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A
2	1	1.82	0.05	0.52	4.75	7.40			N/A	N/A
	2	1.57	0.05	0.50	4.00	6.25			N/A	N/A
	3									
	4	0.86	0.08	0.84	1.23	1.74			N/A	N/A

08:15 - 08:30

Junction	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	1									
	2	0.90	0.03	0.26	0.90	0.90			N/A	N/A
	3	2.44	0.03	0.29	2.44	5.00			N/A	N/A
	4	5.50	0.03	0.35	9.58	28.89			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A
2	1	8.09	0.08	1.66	23.00	35.46			N/A	N/A
	2	4.63	0.04	0.36	10.23	25.20			N/A	N/A
	3									
	4	1.28	0.03	0.27	1.28	1.28			N/A	N/A

08:30 - 08:45

Junction	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	1									
	2	0.93	0.03	0.28	0.93	1.26			N/A	N/A
	3	2.54	0.03	0.29	2.54	2.94			N/A	N/A
	4	5.77	0.03	0.30	5.77	19.02			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A
2	1	10.00	0.06	1.01	29.13	50.26			N/A	N/A
	2	5.09	0.03	0.32	5.46	23.54			N/A	N/A
	3									
	4	1.30	0.03	0.28	1.30	1.30			N/A	N/A

08:45 - 09:00

Junction	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	1									
	2	0.70	0.57	1.03	1.45	1.50			N/A	N/A
	3	1.22	0.09	1.05	2.08	2.84			N/A	N/A
	4	2.24	0.05	0.52	6.02	9.57			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A
2	1	2.01	0.04	0.40	5.22	10.04			N/A	N/A
	2	1.71	0.05	0.49	4.48	7.12			N/A	N/A
	3									
	4	0.89	0.58	1.05	1.47	1.53			N/A	N/A

09:00 - 09:15

Junction	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	1									
	2	0.51	0.00	0.00	0.51	0.51			N/A	N/A
	3	0.74	0.05	0.46	1.50	2.10			N/A	N/A
	4	1.31	0.04	0.36	3.12	6.55			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A
2	1	1.00	0.03	0.30	1.44	4.43			N/A	N/A
	2	0.93	0.03	0.33	1.98	4.59			N/A	N/A
	3									
	4	0.65	0.13	0.92	1.45	1.51			N/A	N/A

D2 - 2025 | Base | 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	Arm order	Junction Delay (s)	Junction LOS
1	Northern Rbt	Standard Roundabout	1, 2, 3, 4, 5	10.68	B
2	Southern Rbt	Standard Roundabout	1, 2, 3, 4	9.90	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	10.36	B

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2025	Base	PM	ONE HOUR	16:45	18:15	15	✓

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
1	2	2	4	Queue limited	Normal	0	100.00	33.00
2	4	1	2	Queue limited	Normal	0	100.00	33.00

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1	1					
	2	✓				
	3		ONE HOUR	✓	1254	100.000
	4		ONE HOUR	✓	1334	100.000
	5		ONE HOUR	✓	0	100.000
2	1		ONE HOUR	✓	642	100.000
	2		ONE HOUR	✓	781	100.000
	3					
	4	✓				

Origin-Destination Data

Demand (PCU/hr)

Junction 2

	To				
From		1	2	3	4
	1	0	166	0	476
	2	0	0	204	577
	3	0	0	0	0
	4	0	601	531	0

Demand (PCU/hr)

Junction 1

	To					
		1	2	3	4	5
From	1	0	0	0	0	0
	2	216	0	0	846	0
	3	0	327	0	927	0
	4	519	815	0	0	0
	5	0	0	0	0	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

Junction 2

	To				
		1	2	3	4
From	1	0	2	0	0
	2	0	0	1	2
	3	0	0	0	0
	4	0	2	4	0

Heavy Vehicle %

Junction 1

	To					
		1	2	3	4	5
From	1	0	0	0	0	0
	2	1	0	0	1	0
	3	0	2	0	2	0
	4	1	3	0	0	0
	5	1	3	0	0	0

Results

Results Summary for whole modelled period

Junction	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	1							
	2	0.45	2.59	0.8	1.7	A	966	1448
	3	0.88	18.98	6.9	34.4	C	1151	1726
	4	0.79	9.25	3.7	13.4	A	1224	1836
	5	0.00	0.00	0.0	~1	A	0	0
2	1	0.83	23.63	4.4	22.1	C	589	884
	2	0.67	8.62	2.0	3.0	A	717	1075
	3							
	4	0.51	3.05	1.1	1.5	A	1047	1571

Main Results for each time segment

16:45 - 17:00

Junction	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	1			856				549				
	2	788	197	0	2560	0.308	787	856	0.0	0.4	2.048	A
	3	944	236	787	1849	0.511	940	0	0.0	1.1	4.021	A
	4	1004	251	405	1992	0.504	1000	1321	0.0	1.0	3.696	A
	5	0	0	1405	540	0.000	0	0	0.0	0.0	0.000	A
2	1	483	121	854	1087	0.445	480	0	0.0	0.8	5.932	A
	2	588	147	757	1502	0.391	585	578	0.0	0.6	3.984	A
	3			788				553				
	4	856	214	0	2471	0.346	854	788	0.0	0.5	2.288	A

17:00 - 17:15

Junction	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	1			1024				657				
	2	944	236	0	2560	0.369	943	1024	0.4	0.6	2.248	A
	3	1127	282	943	1730	0.652	1124	0	1.1	1.9	6.028	A
	4	1199	300	485	1939	0.619	1197	1582	1.0	1.6	4.945	A
	5	0	0	1682	416	0.000	0	0	0.0	0.0	0.000	A
2	1	577	144	1024	990	0.583	575	0	0.8	1.4	8.676	A
	2	702	176	906	1410	0.498	701	692	0.6	1.0	5.151	A
	3			944				663				
	4	1024	256	0	2471	0.414	1024	944	0.5	0.7	2.557	A

17:15 - 17:30

Junction	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	1			1248				802				
	2	1148	287	0	2560	0.449	1148	1248	0.6	0.8	2.572	A
	3	1381	345	1148	1575	0.877	1363	0	1.9	6.3	16.143	C
	4	1469	367	589	1869	0.786	1461	1922	1.6	3.6	8.844	A
	5	0	0	2050	252	0.000	0	0	0.0	0.0	0.000	A
2	1	707	177	1247	861	0.821	696	0	1.4	4.1	20.680	C
	2	860	215	1101	1291	0.666	856	842	1.0	2.0	8.346	A
	3			1148				808				
	4	1248	312	0	2471	0.505	1247	1148	0.7	1.0	3.023	A

17:30 - 17:45

Junction	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	1			1256				807				
	2	1158	290	0	2560	0.452	1158	1256	0.8	0.8	2.592	A
	3	1381	345	1158	1567	0.881	1378	0	6.3	6.9	18.984	C
	4	1469	367	595	1865	0.787	1468	1941	3.6	3.7	9.247	A
	5	0	0	2063	246	0.000	0	0	0.0	0.0	0.000	A
2	1	707	177	1256	856	0.826	706	0	4.1	4.4	23.632	C
	2	860	215	1112	1284	0.670	860	849	2.0	2.0	8.620	A
	3			1158				814				
	4	1256	314	0	2471	0.508	1256	1158	1.0	1.1	3.049	A

17:45 - 18:00

Junction	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	1			1037				665				
	2	958	240	0	2560	0.374	959	1037	0.8	0.6	2.271	A
	3	1127	282	959	1718	0.656	1147	0	6.9	2.0	6.648	A
	4	1199	300	494	1932	0.621	1207	1612	3.7	1.7	5.129	A
	5	0	0	1701	407	0.000	0	0	0.0	0.0	0.000	A
2	1	577	144	1038	981	0.588	589	0	4.4	1.5	9.485	A
	2	702	176	924	1400	0.502	706	703	2.0	1.0	5.309	A
	3			958				671				
	4	1037	259	0	2471	0.419	1038	958	1.1	0.7	2.586	A

18:00 - 18:15

Junction	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	1			862				554				
	2	796	199	0	2560	0.311	796	862	0.6	0.5	2.063	A
	3	944	236	796	1842	0.513	948	0	2.0	1.1	4.125	A
	4	1004	251	409	1989	0.505	1007	1335	1.7	1.1	3.757	A
	5	0	0	1416	535	0.000	0	0	0.0	0.0	0.000	A
2	1	483	121	863	1082	0.447	486	0	1.5	0.8	6.100	A
	2	588	147	765	1497	0.393	589	584	1.0	0.7	4.043	A
	3			796				559				
	4	862	216	0	2471	0.349	863	796	0.7	0.6	2.306	A

Queue Variation Results for each time segment

16:45 - 17:00

Junction	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	1									
	2	0.45	0.00	0.00	0.45	0.45			N/A	N/A
	3	1.05	0.56	1.04	1.47	1.53			N/A	N/A
	4	1.03	0.56	1.02	1.43	1.48			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A
2	1	0.80	0.55	1.01	1.41	1.46			N/A	N/A
	2	0.65	0.56	1.02	1.42	1.48			N/A	N/A
	3									
	4	0.54	0.54	1.03	1.44	1.49			N/A	N/A

17:00 - 17:15

Junction	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	1									
	2	0.59	0.08	0.77	1.37	1.44			N/A	N/A
	3	1.87	0.04	0.43	5.03	8.69			N/A	N/A
	4	1.63	0.05	0.47	4.28	6.92			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A
2	1	1.38	0.05	0.63	3.30	4.90			N/A	N/A
	2	1.00	0.06	0.78	1.87	2.61			N/A	N/A
	3									
	4	0.73	0.09	0.82	1.43	1.51			N/A	N/A

17:15 - 17:30

Junction	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	1									
	2	0.82	0.03	0.26	0.82	0.82			N/A	N/A
	3	6.32	0.04	0.39	15.64	34.36			N/A	N/A
	4	3.59	0.03	0.30	3.59	13.37			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A
2	1	4.08	0.04	0.36	9.64	22.07			N/A	N/A
	2	1.98	0.03	0.28	1.98	3.03			N/A	N/A
	3									
	4	1.04	0.03	0.26	1.04	1.04			N/A	N/A

17:30 - 17:45

Junction	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	1									
	2	0.83	0.03	0.27	0.83	1.73			N/A	N/A
	3	6.91	0.03	0.33	9.12	33.75			N/A	N/A
	4	3.69	0.03	0.28	3.69	4.47			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A
2	1	4.42	0.03	0.32	5.76	21.46			N/A	N/A
	2	2.03	0.03	0.28	2.03	2.37			N/A	N/A
	3									
	4	1.06	0.03	0.27	1.06	1.08			N/A	N/A

17:45 - 18:00

Junction	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	1									
	2	0.61	0.56	1.01	1.41	1.46			N/A	N/A
	3	1.99	0.05	0.45	5.37	8.99			N/A	N/A
	4	1.70	0.06	0.92	4.00	5.82			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A
2	1	1.47	0.04	0.45	3.82	6.20			N/A	N/A
	2	1.04	0.09	0.96	1.72	2.03			N/A	N/A
	3									
	4	0.75	0.57	1.03	1.44	1.49			N/A	N/A

18:00 - 18:15

Junction	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	1									
	2	0.46	0.00	0.00	0.46	0.46			N/A	N/A
	3	1.08	0.03	0.32	2.08	5.49			N/A	N/A
	4	1.05	0.04	0.40	2.63	4.41			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A
2	1	0.82	0.03	0.32	1.74	3.98			N/A	N/A
	2	0.66	0.05	0.46	1.09	1.73			N/A	N/A
	3									
	4	0.55	0.55	1.03	1.44	1.49			N/A	N/A

D3 - 2026 | Base | 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	Arm order	Junction Delay (s)	Junction LOS
1	Northern Rbt	Standard Roundabout	1, 2, 3, 4, 5	9.20	A
2	Southern Rbt	Standard Roundabout	1, 2, 3, 4	23.25	C

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	15.35	C

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2026	Base	AM	ONE HOUR	07:45	09:15	15	✓

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
1	2	2	4	Queue limited	Normal	0	100.00	33.00
2	4	1	2	Queue limited	Normal	0	100.00	33.00

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1	1					
	2	✓				
	3		ONE HOUR	✓	993	100.000
	4		ONE HOUR	✓	1513	100.000
	5		ONE HOUR	✓	0	100.000
2	1		ONE HOUR	✓	678	100.000
	2		ONE HOUR	✓	887	100.000
	3					
	4	✓				

Origin-Destination Data

Demand (PCU/hr)

Junction 2

	To				
From		1	2	3	4
	1	0	153	0	525
	2	0	0	289	598
	3	0	0	0	0
	4	0	547	701	0

Demand (PCU/hr)

Junction 1

	To					
		1	2	3	4	5
From	1	0	0	0	0	0
	2	218	0	0	914	0
	3	0	240	0	753	0
	4	495	1018	0	0	0
	5	0	0	0	0	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

Junction 2

	To				
From		1	2	3	4
	1	0	6	0	4
	2	0	0	3	3
	3	0	0	0	0
	4	0	3	7	0

Heavy Vehicle %

Junction 1

	To					
		1	2	3	4	5
From	1	0	0	0	0	0
	2	5	0	0	3	0
	3	0	7	0	6	0
	4	3	5	0	0	0
	5	3	5	0	0	0

Results

Results Summary for whole modelled period

Junction	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	1							
	2	0.48	2.79	0.9	1.5	A	1030	1544
	3	0.72	9.04	2.7	6.1	A	911	1367
	4	0.86	14.06	6.3	31.9	B	1388	2083
	5	0.00	0.00	0.0	~1	A	0	0
2	1	0.95	61.82	12.2	56.1	F	622	933
	2	0.86	21.78	5.6	27.5	C	814	1221
	3							
	4	0.56	3.48	1.3	1.8	A	1154	1730

Main Results for each time segment

07:45 - 08:00

Junction	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	1			943				532				
	2	840	210	0	2560	0.328	838	943	0.0	0.5	2.159	A
	3	748	187	838	1810	0.413	745	0	0.0	0.7	3.579	A
	4	1139	285	341	2034	0.560	1134	1241	0.0	1.3	4.147	A
	5	0	0	1475	508	0.000	0	0	0.0	0.0	0.000	A
2	1	510	128	940	1037	0.492	506	0	0.0	1.0	7.031	A
	2	668	167	920	1402	0.476	664	526	0.0	0.9	5.003	A
	3			840				745				
	4	943	236	0	2471	0.381	940	840	0.0	0.6	2.469	A

08:00 - 08:15

Junction	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	1			1128				637				
	2	1005	251	0	2560	0.392	1004	1128	0.5	0.7	2.390	A
	3	893	223	1004	1684	0.530	891	0	0.7	1.2	4.813	A
	4	1360	340	409	1989	0.684	1357	1486	1.3	2.2	5.900	A
	5	0	0	1765	379	0.000	0	0	0.0	0.0	0.000	A
2	1	610	152	1127	930	0.655	606	0	1.0	1.9	11.467	B
	2	797	199	1102	1290	0.618	795	631	0.9	1.6	7.440	A
	3			1005				892				
	4	1128	282	0	2471	0.456	1127	1005	0.6	0.9	2.816	A

08:15 - 08:30

Junction	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	1			1374				772				
	2	1204	301	0	2560	0.470	1203	1374	0.7	0.9	2.741	A
	3	1093	273	1203	1533	0.713	1088	0	1.2	2.6	8.496	A
	4	1666	416	495	1932	0.862	1651	1796	2.2	5.9	12.734	B
	5	0	0	2146	209	0.000	0	0	0.0	0.0	0.000	A
2	1	746	187	1372	789	0.946	717	0	1.9	9.4	41.185	E
	2	977	244	1326	1153	0.847	963	763	1.6	5.0	18.342	C
	3			1204				1084				
	4	1374	343	0	2471	0.556	1372	1204	0.9	1.3	3.434	A

08:30 - 08:45

Junction	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	1			1384				781				
	2	1226	307	0	2560	0.479	1226	1384	0.9	0.9	2.788	A
	3	1093	273	1226	1515	0.722	1093	0	2.6	2.7	9.036	A
	4	1666	416	500	1928	0.864	1665	1819	5.9	6.3	14.062	B
	5	0	0	2165	200	0.000	0	0	0.0	0.0	0.000	A
2	1	746	187	1384	782	0.954	735	0	9.4	12.2	61.817	F
	2	977	244	1347	1140	0.857	974	773	5.0	5.6	21.781	C
	3			1226				1095				
	4	1384	346	0	2471	0.560	1384	1226	1.3	1.3	3.482	A

08:45 - 09:00

Junction	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	1			1143				653				
	2	1051	263	0	2560	0.410	1052	1143	0.9	0.7	2.468	A
	3	893	223	1052	1648	0.542	898	0	2.7	1.3	5.142	A
	4	1360	340	420	1982	0.686	1376	1530	6.3	2.3	6.348	A
	5	0	0	1796	365	0.000	0	0	0.0	0.0	0.000	A
2	1	610	152	1145	920	0.663	650	0	12.2	2.1	15.858	C
	2	797	199	1146	1263	0.631	813	648	5.6	1.8	8.494	A
	3			1051				908				
	4	1143	286	0	2471	0.462	1145	1051	1.3	0.9	2.857	A

09:00 - 09:15

Junction	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	1			950				538				
	2	851	213	0	2560	0.332	852	950	0.7	0.5	2.179	A
	3	748	187	852	1799	0.415	750	0	1.3	0.8	3.649	A
	4	1139	285	345	2032	0.561	1143	1256	2.3	1.3	4.246	A
	5	0	0	1488	503	0.000	0	0	0.0	0.0	0.000	A
2	1	510	128	951	1031	0.495	515	0	2.1	1.0	7.342	A
	2	668	167	933	1394	0.479	671	533	1.8	1.0	5.156	A
	3			851				753				
	4	950	238	0	2471	0.384	951	851	0.9	0.7	2.492	A

Queue Variation Results for each time segment

07:45 - 08:00

Junction	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	1									
	2	0.50	0.00	0.00	0.50	0.50			N/A	N/A
	3	0.74	0.58	1.06	1.49	1.54			N/A	N/A
	4	1.31	0.59	1.18	1.59	1.84			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A
2	1	1.00	0.54	1.05	1.50	1.56			N/A	N/A
	2	0.93	0.57	1.03	1.44	1.49			N/A	N/A
	3									
	4	0.65	0.58	1.05	1.47	1.53			N/A	N/A

08:00 - 08:15

Junction	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	1									
	2	0.66	0.09	0.83	1.41	1.48			N/A	N/A
	3	1.19	0.06	0.63	2.67	3.89			N/A	N/A
	4	2.21	0.05	0.46	6.04	10.27			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A
2	1	1.92	0.05	0.52	5.05	7.98			N/A	N/A
	2	1.63	0.05	0.49	4.20	6.67			N/A	N/A
	3									
	4	0.88	0.08	0.84	1.34	1.82			N/A	N/A

08:15 - 08:30

Junction	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	1									
	2	0.91	0.03	0.26	0.91	0.91			N/A	N/A
	3	2.56	0.03	0.30	2.56	6.14			N/A	N/A
	4	5.92	0.04	0.36	11.67	31.93			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A
2	1	9.38	0.11	3.01	25.75	37.85			N/A	N/A
	2	5.03	0.04	0.38	12.06	27.31			N/A	N/A
	3									
	4	1.31	0.03	0.27	1.31	1.31			N/A	N/A

08:30 - 08:45

Junction	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	1									
	2	0.95	0.03	0.28	0.95	1.12			N/A	N/A
	3	2.69	0.03	0.29	2.69	3.44			N/A	N/A
	4	6.25	0.03	0.31	6.25	23.40			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A
2	1	12.18	0.08	2.01	35.45	56.14			N/A	N/A
	2	5.60	0.03	0.33	7.59	27.50			N/A	N/A
	3									
	4	1.33	0.03	0.28	1.33	1.33			N/A	N/A

08:45 - 09:00

Junction	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	1									
	2	0.72	0.57	1.03	1.45	1.50			N/A	N/A
	3	1.27	0.09	1.05	2.30	3.06			N/A	N/A
	4	2.33	0.05	0.51	6.32	10.25			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A
2	1	2.14	0.04	0.39	5.54	10.94			N/A	N/A
	2	1.81	0.05	0.48	4.80	7.77			N/A	N/A
	3									
	4	0.91	0.57	1.05	1.47	1.53			N/A	N/A

09:00 - 09:15

Junction	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	1									
	2	0.52	0.00	0.00	0.52	0.52			N/A	N/A
	3	0.76	0.05	0.45	1.62	2.38			N/A	N/A
	4	1.35	0.04	0.35	3.12	6.83			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A
2	1	1.04	0.03	0.30	1.28	4.32			N/A	N/A
	2	0.96	0.03	0.33	1.93	4.76			N/A	N/A
	3									
	4	0.66	0.13	0.92	1.45	1.51			N/A	N/A

D4 - 2026 | Base | 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	Arm order	Junction Delay (s)	Junction LOS
1	Northern Rbt	Standard Roundabout	1, 2, 3, 4, 5	11.64	B
2	Southern Rbt	Standard Roundabout	1, 2, 3, 4	10.59	B

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	11.21	B

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2026	Base	PM	ONE HOUR	16:45	18:15	15	✓

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
1	2	2	4	Queue limited	Normal	0	100.00	33.00
2	4	1	2	Queue limited	Normal	0	100.00	33.00

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1	1					
	2	✓				
	3		ONE HOUR	✓	1267	100.000
	4		ONE HOUR	✓	1347	100.000
	5		ONE HOUR	✓	0	100.000
2	1		ONE HOUR	✓	649	100.000
	2		ONE HOUR	✓	789	100.000
	3					
	4	✓				

Origin-Destination Data

Demand (PCU/hr)

Junction 2

	To				
From		1	2	3	4
	1	0	168	0	481
	2	0	0	206	583
	3	0	0	0	0
	4	0	607	536	0

Demand (PCU/hr)

Junction 1

	To					
		1	2	3	4	5
From	1	0	0	0	0	0
	2	218	0	0	855	0
	3	0	330	0	937	0
	4	524	823	0	0	0
	5	0	0	0	0	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

Junction 2

	To				
		1	2	3	4
From	1	0	2	0	0
	2	0	0	1	2
	3	0	0	0	0
	4	0	2	4	0

Heavy Vehicle %

Junction 1

	To					
		1	2	3	4	5
From	1	0	0	0	0	0
	2	1	0	0	1	0
	3	0	2	0	2	0
	4	1	3	0	0	0
	5	1	3	0	0	0

Results

Results Summary for whole modelled period

Junction	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	1							
	2	0.46	2.61	0.8	1.6	A	976	1463
	3	0.90	21.32	7.8	41.0	C	1163	1744
	4	0.80	9.67	3.9	15.1	A	1236	1854
	5	0.00	0.00	0.0	~1	A	0	0
2	1	0.84	25.92	4.9	25.0	D	596	893
	2	0.68	8.95	2.1	3.8	A	724	1086
	3							
	4	0.51	3.08	1.1	1.5	A	1057	1586

Main Results for each time segment

16:45 - 17:00

Junction	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	1			864				554				
	2	797	199	0	2560	0.311	795	864	0.0	0.5	2.058	A
	3	954	238	795	1843	0.518	950	0	0.0	1.1	4.091	A
	4	1014	254	409	1989	0.510	1010	1336	0.0	1.1	3.742	A
	5	0	0	1419	534	0.000	0	0	0.0	0.0	0.000	A
2	1	489	122	862	1082	0.451	485	0	0.0	0.8	6.029	A
	2	594	149	764	1497	0.397	591	583	0.0	0.7	4.031	A
	3			797				559				
	4	864	216	0	2471	0.350	862	797	0.0	0.6	2.299	A

17:00 - 17:15

Junction	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	1			1034				664				
	2	954	238	0	2560	0.372	953	1034	0.5	0.6	2.262	A
	3	1139	285	953	1723	0.661	1136	0	1.1	2.0	6.218	A
	4	1211	303	489	1936	0.626	1208	1599	1.1	1.7	5.043	A
	5	0	0	1698	409	0.000	0	0	0.0	0.0	0.000	A
2	1	583	146	1033	984	0.593	581	0	0.8	1.4	8.925	A
	2	709	177	915	1405	0.505	708	699	0.7	1.0	5.245	A
	3			954				669				
	4	1034	259	0	2471	0.418	1033	954	0.6	0.7	2.575	A

17:15 - 17:30

Junction	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	1			1259				809				
	2	1159	290	0	2560	0.453	1159	1259	0.6	0.8	2.592	A
	3	1395	349	1159	1566	0.891	1375	0	2.0	7.0	17.581	C
	4	1483	371	593	1866	0.795	1475	1940	1.7	3.8	9.206	A
	5	0	0	2068	243	0.000	0	0	0.0	0.0	0.000	A
2	1	715	179	1258	855	0.836	703	0	1.4	4.4	22.195	C
	2	869	217	1110	1285	0.676	865	850	1.0	2.1	8.627	A
	3			1159				816				
	4	1259	315	0	2471	0.509	1258	1159	0.7	1.1	3.050	A

17:30 - 17:45

Junction	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	1			1268				814				
	2	1170	293	0	2560	0.457	1170	1268	0.8	0.8	2.614	A
	3	1395	349	1170	1558	0.896	1392	0	7.0	7.8	21.317	C
	4	1483	371	600	1862	0.797	1483	1962	3.8	3.9	9.675	A
	5	0	0	2083	237	0.000	0	0	0.0	0.0	0.000	A
2	1	715	179	1268	849	0.842	713	0	4.4	4.9	25.923	D
	2	869	217	1123	1277	0.680	868	858	2.1	2.1	8.948	A
	3			1170				821				
	4	1268	317	0	2471	0.513	1268	1170	1.1	1.1	3.079	A

17:45 - 18:00

Junction	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	1			1048				672				
	2	970	242	0	2560	0.379	970	1048	0.8	0.6	2.289	A
	3	1139	285	970	1709	0.666	1162	0	7.8	2.1	6.979	A
	4	1211	303	500	1929	0.628	1219	1633	3.9	1.8	5.248	A
	5	0	0	1719	399	0.000	0	0	0.0	0.0	0.000	A
2	1	583	146	1049	975	0.598	597	0	4.9	1.5	9.889	A
	2	709	177	934	1393	0.509	714	712	2.1	1.1	5.424	A
	3			970				678				
	4	1048	262	0	2471	0.424	1049	970	1.1	0.8	2.608	A

18:00 - 18:15

Junction	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	1			871				559				
	2	804	201	0	2560	0.314	805	871	0.6	0.5	2.073	A
	3	954	238	805	1835	0.520	958	0	2.1	1.1	4.202	A
	4	1014	254	413	1987	0.510	1017	1350	1.8	1.1	3.803	A
	5	0	0	1430	529	0.000	0	0	0.0	0.0	0.000	A
2	1	489	122	871	1077	0.454	491	0	1.5	0.8	6.209	A
	2	594	149	773	1492	0.398	596	590	1.1	0.7	4.092	A
	3			804				564				
	4	871	218	0	2471	0.352	871	804	0.8	0.6	2.318	A

Queue Variation Results for each time segment

16:45 - 17:00

Junction	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	1									
	2	0.45	0.00	0.00	0.45	0.45			N/A	N/A
	3	1.08	0.55	1.06	1.43	1.43			N/A	N/A
	4	1.05	0.56	1.02	1.43	1.48			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A
2	1	0.82	0.55	1.01	1.41	1.46			N/A	N/A
	2	0.66	0.56	1.02	1.42	1.48			N/A	N/A
	3									
	4	0.55	0.55	1.03	1.44	1.49			N/A	N/A

17:00 - 17:15

Junction	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	1									
	2	0.60	0.08	0.78	1.37	1.44			N/A	N/A
	3	1.95	0.04	0.43	5.26	9.12			N/A	N/A
	4	1.68	0.05	0.46	4.45	7.21			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A
2	1	1.43	0.05	0.60	3.50	5.24			N/A	N/A
	2	1.03	0.06	0.77	1.95	2.77			N/A	N/A
	3									
	4	0.74	0.08	0.82	1.44	1.52			N/A	N/A

17:15 - 17:30

Junction	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	1									
	2	0.83	0.03	0.26	0.83	0.83			N/A	N/A
	3	7.01	0.04	0.42	18.78	37.99			N/A	N/A
	4	3.77	0.03	0.30	3.77	15.09			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A
2	1	4.45	0.04	0.38	11.31	23.98			N/A	N/A
	2	2.06	0.03	0.28	2.06	3.80			N/A	N/A
	3									
	4	1.06	0.03	0.26	1.06	1.06			N/A	N/A

17:30 - 17:45

Junction	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	1									
	2	0.85	0.03	0.27	0.85	1.62			N/A	N/A
	3	7.80	0.03	0.34	13.47	40.99			N/A	N/A
	4	3.89	0.03	0.28	3.89	5.57			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A
2	1	4.87	0.03	0.33	7.79	25.03			N/A	N/A
	2	2.12	0.03	0.28	2.12	2.64			N/A	N/A
	3									
	4	1.08	0.03	0.27	1.08	1.08			N/A	N/A

17:45 - 18:00

Junction	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	1									
	2	0.62	0.56	1.01	1.41	1.46			N/A	N/A
	3	2.08	0.04	0.44	5.67	9.70			N/A	N/A
	4	1.75	0.06	0.88	4.23	6.19			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A
2	1	1.54	0.04	0.43	4.01	6.71			N/A	N/A
	2	1.07	0.09	0.95	1.81	2.33			N/A	N/A
	3									
	4	0.76	0.57	1.03	1.44	1.49			N/A	N/A

18:00 - 18:15

Junction	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	1									
	2	0.46	0.00	0.00	0.46	0.46			N/A	N/A
	3	1.11	0.03	0.32	1.97	5.65			N/A	N/A
	4	1.07	0.04	0.39	2.71	4.67			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A
2	1	0.84	0.03	0.32	1.68	4.13			N/A	N/A
	2	0.68	0.05	0.45	1.24	1.84			N/A	N/A
	3									
	4	0.56	0.56	1.03	1.44	1.49			N/A	N/A

D5 - 2032 | Reference Case | 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	Arm order	Junction Delay (s)	Junction LOS
1	Northern Rbt	Standard Roundabout	1, 2, 3, 4, 5	9.98	A
2	Southern Rbt	Standard Roundabout	1, 2, 3, 4	27.67	D

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	17.72	C

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2032	Reference Case	AM	ONE HOUR	07:45	09:15	15	✓

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
1	2	2	4	Queue limited	Normal	0	100.00	33.00
2	4	1	2	Queue limited	Normal	0	100.00	33.00

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1	1					
	2	✓				
	3		ONE HOUR	✓	1007	100.000
	4		ONE HOUR	✓	1534	100.000
	5		ONE HOUR	✓	0	100.000
2	1		ONE HOUR	✓	687	100.000
	2		ONE HOUR	✓	900	100.000
	3					
	4	✓				

Origin-Destination Data

Demand (PCU/hr)

	To					
Junction 2	From		1	2	3	4
		1	0	155	0	532
		2	0	0	293	607
		3	0	0	0	0
		4	0	555	712	0

Demand (PCU/hr)

Junction 1

	To					
		1	2	3	4	5
From	1	0	0	0	0	0
	2	221	0	0	927	0
	3	0	243	0	764	0
	4	502	1032	0	0	0
	5	0	0	0	0	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

Junction 2

	To				
From		1	2	3	4
	1	0	6	0	4
	2	0	0	3	3
	3	0	0	0	0
	4	0	3	7	0

Heavy Vehicle %

Junction 1

	To					
		1	2	3	4	5
From	1	0	0	0	0	0
	2	5	0	0	3	0
	3	0	7	0	6	0
	4	3	5	0	0	0
	5	3	5	0	0	0

Results

Results Summary for whole modelled period

Junction	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	1							
	2	0.48	2.81	1.0	1.5	A	1044	1566
	3	0.74	9.59	2.9	7.8	A	924	1386
	4	0.88	15.55	7.0	35.9	C	1408	2111
	5	0.00	0.00	0.0	~1	A	0	0
2	1	0.98	76.21	15.6	62.4	F	630	946
	2	0.88	24.76	6.4	34.0	C	826	1239
	3							
	4	0.57	3.54	1.4	1.9	A	1169	1754

Main Results for each time segment

07:45 - 08:00

Junction	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	1			955				540				
	2	852	213	0	2560	0.333	850	955	0.0	0.5	2.172	A
	3	758	190	850	1801	0.421	755	0	0.0	0.8	3.645	A
	4	1155	289	346	2031	0.569	1149	1259	0.0	1.4	4.233	A
	5	0	0	1495	500	0.000	0	0	0.0	0.0	0.000	A
2	1	517	129	953	1030	0.502	513	0	0.0	1.0	7.214	A
	2	678	169	933	1394	0.486	674	533	0.0	1.0	5.122	A
	3			852				755				
	4	955	239	0	2471	0.387	953	852	0.0	0.7	2.490	A

08:00 - 08:15

Junction	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	1			1143				646				
	2	1019	255	0	2560	0.398	1018	1143	0.5	0.7	2.411	A
	3	905	226	1018	1673	0.541	903	0	0.8	1.2	4.957	A
	4	1379	345	414	1986	0.694	1375	1507	1.4	2.3	6.111	A
	5	0	0	1789	368	0.000	0	0	0.0	0.0	0.000	A
2	1	618	154	1142	921	0.670	614	0	1.0	2.0	12.058	B
	2	809	202	1117	1281	0.632	806	639	1.0	1.7	7.757	A
	3			1019				904				
	4	1143	286	0	2471	0.463	1142	1019	0.7	0.9	2.848	A

08:15 - 08:30

Junction	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	1			1391				781				
	2	1215	304	0	2560	0.475	1214	1391	0.7	0.9	2.763	A
	3	1109	277	1214	1524	0.727	1103	0	1.2	2.7	8.948	A
	4	1689	422	500	1929	0.876	1672	1817	2.3	6.5	13.809	B
	5	0	0	2172	197	0.000	0	0	0.0	0.0	0.000	A
2	1	756	189	1389	779	0.971	720	0	2.0	11.2	47.092	E
	2	991	248	1338	1145	0.865	975	771	1.7	5.7	20.169	C
	3			1215				1098				
	4	1391	348	0	2471	0.563	1389	1215	0.9	1.3	3.493	A

08:30 - 08:45

Junction	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	1			1402				791				
	2	1238	310	0	2560	0.484	1238	1402	0.9	1.0	2.814	A
	3	1109	277	1238	1506	0.736	1108	0	2.7	2.9	9.589	A
	4	1689	422	506	1925	0.878	1687	1841	6.5	7.0	15.550	C
	5	0	0	2193	188	0.000	0	0	0.0	0.0	0.000	A
2	1	756	189	1402	772	0.980	739	0	11.2	15.6	76.213	F
	2	991	248	1360	1132	0.875	988	781	5.7	6.4	24.761	C
	3			1238				1110				
	4	1402	351	0	2471	0.567	1402	1238	1.3	1.4	3.542	A

08:45 - 09:00

Junction	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	1			1160				665				
	2	1077	269	0	2560	0.421	1078	1160	1.0	0.8	2.513	A
	3	905	226	1078	1628	0.556	911	0	2.9	1.3	5.384	A
	4	1379	345	427	1977	0.698	1397	1562	7.0	2.5	6.673	A
	5	0	0	1825	352	0.000	0	0	0.0	0.0	0.000	A
2	1	618	154	1162	910	0.679	671	0	15.6	2.3	19.003	C
	2	809	202	1172	1247	0.649	827	660	6.4	2.0	9.183	A
	3			1077				922				
	4	1160	290	0	2471	0.469	1162	1077	1.4	0.9	2.894	A

09:00 - 09:15

Junction	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	1			963				546				
	2	864	216	0	2560	0.337	865	963	0.8	0.5	2.197	A
	3	758	190	865	1790	0.424	760	0	1.3	0.8	3.723	A
	4	1155	289	350	2029	0.569	1159	1275	2.5	1.4	4.340	A
	5	0	0	1509	493	0.000	0	0	0.0	0.0	0.000	A
2	1	517	129	964	1024	0.505	522	0	2.3	1.1	7.569	A
	2	678	169	946	1386	0.489	681	540	2.0	1.0	5.294	A
	3			864				764				
	4	963	241	0	2471	0.390	964	864	0.9	0.7	2.516	A

Queue Variation Results for each time segment

07:45 - 08:00

Junction	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	1									
	2	0.51	0.00	0.00	0.51	0.51			N/A	N/A
	3	0.77	0.58	1.06	1.49	1.54			N/A	N/A
	4	1.36	0.59	1.24	1.72	1.91			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A
2	1	1.04	0.45	1.06	1.51	1.51			N/A	N/A
	2	0.96	0.57	1.03	1.44	1.50			N/A	N/A
	3									
	4	0.66	0.58	1.05	1.47	1.53			N/A	N/A

08:00 - 08:15

Junction	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	1									
	2	0.68	0.09	0.84	1.41	1.48			N/A	N/A
	3	1.24	0.05	0.59	2.86	4.18			N/A	N/A
	4	2.32	0.05	0.46	6.35	10.89			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A
2	1	2.04	0.05	0.51	5.43	8.64			N/A	N/A
	2	1.73	0.05	0.49	4.53	7.18			N/A	N/A
	3									
	4	0.90	0.07	0.83	1.46	1.90			N/A	N/A

08:15 - 08:30

Junction	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	1									
	2	0.93	0.03	0.26	0.93	0.93			N/A	N/A
	3	2.74	0.03	0.30	2.74	7.79			N/A	N/A
	4	6.54	0.04	0.38	14.70	35.87			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A
2	1	11.22	0.19	5.16	29.01	40.62			N/A	N/A
	2	5.65	0.04	0.41	14.87	30.54			N/A	N/A
	3									
	4	1.34	0.03	0.27	1.34	1.34			N/A	N/A

08:30 - 08:45

Junction	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	1									
	2	0.96	0.03	0.28	0.96	1.50			N/A	N/A
	3	2.89	0.03	0.29	2.89	4.23			N/A	N/A
	4	6.98	0.03	0.32	6.98	29.98			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A
2	1	15.61	0.15	5.67	42.85	62.39			N/A	N/A
	2	6.43	0.03	0.35	11.47	33.99			N/A	N/A
	3									
	4	1.37	0.03	0.28	1.37	1.37			N/A	N/A

08:45 - 09:00

Junction	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	1									
	2	0.75	0.57	1.03	1.45	1.50			N/A	N/A
	3	1.35	0.09	1.06	2.63	3.51			N/A	N/A
	4	2.46	0.05	0.49	6.75	11.12			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A
2	1	2.32	0.04	0.39	5.93	12.04			N/A	N/A
	2	1.95	0.05	0.47	5.23	8.65			N/A	N/A
	3									
	4	0.94	0.57	1.05	1.47	1.53			N/A	N/A

09:00 - 09:15

Junction	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	1									
	2	0.53	0.53	1.03	1.45	1.50			N/A	N/A
	3	0.79	0.04	0.44	1.75	2.70			N/A	N/A
	4	1.39	0.03	0.35	3.08	7.12			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A
2	1	1.08	0.03	0.30	1.08	4.11			N/A	N/A
	2	1.00	0.03	0.32	1.85	5.00			N/A	N/A
	3									
	4	0.68	0.13	0.92	1.45	1.51			N/A	N/A

D6 - 2032 | Reference Case | 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	Arm order	Junction Delay (s)	Junction LOS
1	Northern Rbt	Standard Roundabout	1, 2, 3, 4, 5	12.42	B
2	Southern Rbt	Standard Roundabout	1, 2, 3, 4	11.12	B

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	11.88	B

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2032	Reference Case	PM	ONE HOUR	16:45	18:15	15	✓

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
1	2	2	4	Queue limited	Normal	0	100.00	33.00
2	4	1	2	Queue limited	Normal	0	100.00	33.00

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1	1					
	2	✓				
	3		ONE HOUR	✓	1276	100.000
	4		ONE HOUR	✓	1357	100.000
	5		ONE HOUR	✓	0	100.000
2	1		ONE HOUR	✓	653	100.000
	2		ONE HOUR	✓	795	100.000
	3					
	4	✓				

Origin-Destination Data

Demand (PCU/hr)

	To					
Junction 2	From		1	2	3	4
		1	0	169	0	484
		2	0	0	208	587
		3	0	0	0	0
		4	0	612	540	0

Demand (PCU/hr)

Junction 1

	To					
		1	2	3	4	5
From	1	0	0	0	0	0
	2	220	0	0	861	0
	3	0	333	0	943	0
	4	528	829	0	0	0
	5	0	0	0	0	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

Junction 2

	To				
		1	2	3	4
From	1	0	2	0	0
	2	0	0	1	2
	3	0	0	0	0
	4	0	2	4	0

Heavy Vehicle %

Junction 1

	To					
		1	2	3	4	5
From	1	0	0	0	0	0
	2	1	0	0	1	0
	3	0	2	0	2	0
	4	1	3	0	0	0
	5	1	3	0	0	0

Results

Results Summary for whole modelled period

Junction	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	1							
	2	0.46	2.63	0.9	1.6	A	982	1473
	3	0.91	23.16	8.5	46.2	C	1171	1756
	4	0.80	10.05	4.1	16.5	B	1245	1868
	5	0.00	0.00	0.0	~1	A	0	0
2	1	0.85	27.73	5.2	27.7	D	599	899
	2	0.69	9.20	2.2	4.4	A	730	1094
	3							
	4	0.52	3.10	1.1	1.5	A	1066	1598

Main Results for each time segment

16:45 - 17:00

Junction	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	1			871				559				
	2	802	200	0	2560	0.313	800	871	0.0	0.5	2.064	A
	3	961	240	800	1839	0.522	956	0	0.0	1.1	4.140	A
	4	1022	255	412	1987	0.514	1017	1344	0.0	1.1	3.777	A
	5	0	0	1430	529	0.000	0	0	0.0	0.0	0.000	A
2	1	492	123	869	1078	0.456	488	0	0.0	0.8	6.097	A
	2	599	150	769	1494	0.401	596	588	0.0	0.7	4.064	A
	3			802				563				
	4	871	218	0	2471	0.352	869	802	0.0	0.6	2.309	A

17:00 - 17:15

Junction	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	1			1042				669				
	2	960	240	0	2560	0.375	959	1042	0.5	0.6	2.271	A
	3	1147	287	959	1718	0.668	1143	0	1.1	2.0	6.352	A
	4	1220	305	494	1933	0.631	1217	1609	1.1	1.7	5.124	A
	5	0	0	1711	403	0.000	0	0	0.0	0.0	0.000	A
2	1	587	147	1041	979	0.599	584	0	0.8	1.5	9.107	A
	2	715	179	921	1401	0.510	713	704	0.7	1.0	5.313	A
	3			960				675				
	4	1042	261	0	2471	0.422	1041	960	0.6	0.7	2.589	A

17:15 - 17:30

Junction	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	1			1268				815				
	2	1166	292	0	2560	0.456	1165	1268	0.6	0.8	2.605	A
	3	1405	351	1165	1561	0.900	1383	0	2.0	7.5	18.657	C
	4	1494	374	598	1863	0.802	1485	1950	1.7	3.9	9.518	A
	5	0	0	2083	237	0.000	0	0	0.0	0.0	0.000	A
2	1	719	180	1267	850	0.846	706	0	1.5	4.7	23.343	C
	2	875	219	1117	1281	0.683	871	856	1.0	2.1	8.842	A
	3			1166				822				
	4	1268	317	0	2471	0.513	1267	1166	0.7	1.1	3.073	A

17:30 - 17:45

Junction	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	1			1278				821				
	2	1177	294	0	2560	0.460	1177	1278	0.8	0.9	2.628	A
	3	1405	351	1177	1552	0.905	1401	0	7.5	8.5	23.161	C
	4	1494	374	605	1858	0.804	1494	1973	3.9	4.1	10.049	B
	5	0	0	2099	230	0.000	0	0	0.0	0.0	0.000	A
2	1	719	180	1278	843	0.853	717	0	4.7	5.2	27.727	D
	2	875	219	1130	1273	0.688	875	864	2.1	2.2	9.196	A
	3			1177				828				
	4	1278	320	0	2471	0.517	1278	1177	1.1	1.1	3.104	A

17:45 - 18:00

Junction	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	1			1057				677				
	2	977	244	0	2560	0.382	978	1057	0.9	0.6	2.298	A
	3	1147	287	978	1704	0.673	1173	0	8.5	2.1	7.230	A
	4	1220	305	505	1925	0.634	1229	1645	4.1	1.8	5.351	A
	5	0	0	1734	393	0.000	0	0	0.0	0.0	0.000	A
2	1	587	147	1058	970	0.605	602	0	5.2	1.6	10.201	B
	2	715	179	942	1388	0.515	719	718	2.2	1.1	5.507	A
	3			977				684				
	4	1057	264	0	2471	0.428	1058	977	1.1	0.8	2.623	A

18:00 - 18:15

Junction	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	1			878				563				
	2	810	202	0	2560	0.316	810	878	0.6	0.5	2.078	A
	3	961	240	810	1831	0.525	965	0	2.1	1.1	4.257	A
	4	1022	255	417	1984	0.515	1024	1358	1.8	1.1	3.845	A
	5	0	0	1441	524	0.000	0	0	0.0	0.0	0.000	A
2	1	492	123	878	1073	0.458	495	0	1.6	0.9	6.287	A
	2	599	150	778	1489	0.402	600	595	1.1	0.7	4.130	A
	3			810				569				
	4	878	219	0	2471	0.355	878	810	0.8	0.6	2.328	A

Queue Variation Results for each time segment

16:45 - 17:00

Junction	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	1									
	2	0.46	0.00	0.00	0.46	0.46			N/A	N/A
	3	1.11	0.55	1.08	1.12	1.58			N/A	N/A
	4	1.07	0.56	1.02	1.43	1.48			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A
2	1	0.83	0.55	1.01	1.41	1.46			N/A	N/A
	2	0.67	0.56	1.02	1.42	1.48			N/A	N/A
	3									
	4	0.56	0.56	1.03	1.44	1.49			N/A	N/A

17:00 - 17:15

Junction	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	1									
	2	0.60	0.08	0.78	1.37	1.44			N/A	N/A
	3	2.01	0.04	0.43	5.43	9.45			N/A	N/A
	4	1.72	0.05	0.46	4.58	7.48			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A
2	1	1.47	0.05	0.58	3.64	5.50			N/A	N/A
	2	1.05	0.06	0.76	2.01	2.88			N/A	N/A
	3									
	4	0.75	0.08	0.82	1.45	1.53			N/A	N/A

17:15 - 17:30

Junction	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	1									
	2	0.84	0.03	0.26	0.84	0.84			N/A	N/A
	3	7.55	0.05	0.45	20.94	40.22			N/A	N/A
	4	3.93	0.03	0.30	3.93	16.54			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A
2	1	4.72	0.04	0.40	12.52	25.34			N/A	N/A
	2	2.13	0.03	0.28	2.13	4.39			N/A	N/A
	3									
	4	1.08	0.03	0.26	1.08	1.08			N/A	N/A

17:30 - 17:45

Junction	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	1									
	2	0.86	0.03	0.27	0.86	1.55			N/A	N/A
	3	8.51	0.04	0.36	17.06	46.21			N/A	N/A
	4	4.07	0.03	0.28	4.07	6.64			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A
2	1	5.23	0.03	0.34	9.47	27.69			N/A	N/A
	2	2.20	0.03	0.28	2.20	2.86			N/A	N/A
	3									
	4	1.10	0.03	0.27	1.10	1.10			N/A	N/A

17:45 - 18:00

Junction	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	1									
	2	0.63	0.56	1.01	1.41	1.46			N/A	N/A
	3	2.15	0.04	0.43	5.85	10.14			N/A	N/A
	4	1.80	0.06	0.85	4.44	6.57			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A
2	1	1.58	0.04	0.43	4.18	7.04			N/A	N/A
	2	1.09	0.08	0.95	1.88	2.51			N/A	N/A
	3									
	4	0.77	0.57	1.03	1.44	1.49			N/A	N/A

18:00 - 18:15

Junction	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	1									
	2	0.47	0.00	0.00	0.47	0.47			N/A	N/A
	3	1.14	0.03	0.31	1.88	5.72			N/A	N/A
	4	1.09	0.04	0.39	2.76	4.86			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A
2	1	0.86	0.03	0.31	1.64	4.26			N/A	N/A
	2	0.69	0.04	0.45	1.33	1.92			N/A	N/A
	3									
	4	0.57	0.57	1.03	1.44	1.49			N/A	N/A

D7 - 2032 | Reference Case + Committed | 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	Arm order	Junction Delay (s)	Junction LOS
1	Northern Rbt	Standard Roundabout	1, 2, 3, 4, 5	13.77	B
2	Southern Rbt	Standard Roundabout	1, 2, 3, 4	57.40	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	32.64	D

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2032	Reference Case + Committed	AM	ONE HOUR	07:45	09:15	15	✓

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
1	2	2	4	Queue limited	Normal	0	100.00	33.00
2	4	1	2	Queue limited	Normal	0	100.00	33.00

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1	1					
	2	✓				
	3		ONE HOUR	✓	1045	100.000
	4		ONE HOUR	✓	1553	100.000
	5		ONE HOUR	✓	109	100.000
2	1		ONE HOUR	✓	737	100.000
	2		ONE HOUR	✓	901	100.000
	3					
	4	✓				

Origin-Destination Data

		Demand (PCU/hr)				
Junction 2	From	To				
			1	2	3	4
		1	0	155	0	582
		2	0	0	288	613
		3	0	0	0	0
		4	0	557	773	0

Demand (PCU/hr)

Junction 1

		To				
From		1	2	3	4	5
	1	0	0	0	0	0
	2	217	0	0	929	57
	3	0	243	0	769	33
	4	495	1030	0	0	28
	5	45	64	0	0	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

Junction 2

		To			
From		1	2	3	4
	1	0	6	0	4
	2	0	0	3	3
	3	0	0	0	0
	4	0	3	7	0

Heavy Vehicle %

Junction 1

		To				
From		1	2	3	4	5
	1	0	0	0	0	0
	2	5	0	0	3	0
	3	0	7	0	6	0
	4	3	5	0	0	0
	5	3	5	0	0	0

Results

Results Summary for whole modelled period

Junction	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	1							
	2	0.49	2.83	1.0	1.5	A	1095	1643
	3	0.77	10.89	3.4	12.4	B	959	1438
	4	0.91	21.82	9.8	53.1	C	1425	2138
	5	0.60	46.33	1.5	7.1	E	100	150
2	1	1.11	184.02	45.7	93.6	F	676	1014
	2	0.91	33.32	8.6	47.0	D	827	1240
	3							
	4	0.59	3.78	1.5	2.3	A	1226	1839

Main Results for each time segment

07:45 - 08:00

Junction	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	1			1001				565				
	2	893	223	0	2560	0.349	891	1001	0.0	0.6	2.222	A
	3	787	197	891	1770	0.444	783	0	0.0	0.8	3.856	A
	4	1169	292	410	1989	0.588	1163	1264	0.0	1.5	4.516	A
	5	82	21	1485	504	0.163	81	88	0.0	0.2	8.853	A
2	1	555	139	999	1004	0.553	550	0	0.0	1.3	8.190	A
	2	678	170	1015	1344	0.505	674	534	0.0	1.0	5.503	A
	3			893				796				
	4	1001	250	0	2471	0.405	999	893	0.0	0.7	2.569	A

08:00 - 08:15

Junction	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	1			1198				676				
	2	1067	267	0	2560	0.417	1066	1198	0.6	0.7	2.485	A
	3	939	235	1066	1637	0.574	937	0	0.8	1.4	5.439	A
	4	1396	349	490	1935	0.722	1391	1513	1.5	2.6	6.847	A
	5	98	24	1777	374	0.262	97	105	0.2	0.4	13.535	B
2	1	663	166	1197	890	0.744	656	0	1.3	2.9	15.668	C
	2	810	202	1214	1222	0.663	806	639	1.0	2.0	8.847	A
	3			1067				953				
	4	1198	299	0	2471	0.485	1197	1067	0.7	1.0	2.970	A

08:15 - 08:30

Junction	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	1			1452				807				
	2	1231	308	0	2560	0.481	1230	1452	0.7	0.9	2.791	A
	3	1151	288	1230	1512	0.761	1143	0	1.4	3.2	10.150	B
	4	1710	427	582	1874	0.913	1685	1791	2.6	8.8	17.936	C
	5	120	30	2142	210	0.571	116	125	0.4	1.3	38.667	E
2	1	811	203	1450	745	1.090	722	0	2.9	25.2	85.902	F
	2	992	248	1413	1100	0.902	971	759	2.0	7.3	25.452	D
	3			1231				1153				
	4	1452	363	0	2471	0.587	1450	1231	1.0	1.5	3.701	A

08:30 - 08:45

Junction	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	1			1469				818				
	2	1247	312	0	2560	0.487	1247	1469	0.9	1.0	2.829	A
	3	1151	288	1247	1499	0.768	1150	0	3.2	3.4	10.891	B
	4	1710	427	588	1870	0.914	1706	1809	8.8	9.8	21.824	C
	5	120	30	2168	199	0.603	119	126	1.3	1.5	46.325	E
2	1	811	203	1469	734	1.106	729	0	25.2	45.7	184.022	F
	2	992	248	1430	1089	0.911	987	768	7.3	8.6	33.322	D
	3			1247				1169				
	4	1469	367	0	2471	0.594	1469	1247	1.5	1.5	3.779	A

08:45 - 09:00

Junction	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	1			1224				716				
	2	1221	305	0	2560	0.477	1222	1224	1.0	0.9	2.777	A
	3	939	235	1222	1519	0.619	946	0	3.4	1.8	6.742	A
	4	1396	349	528	1910	0.731	1424	1639	9.8	2.9	8.130	A
	5	98	24	1838	346	0.283	102	113	1.5	0.4	15.609	C
2	1	663	166	1226	873	0.759	829	0	45.7	4.2	102.971	F
	2	810	202	1367	1128	0.718	833	688	8.6	2.7	13.506	B
	3			1221				979				
	4	1224	306	0	2471	0.495	1226	1221	1.5	1.0	3.049	A

09:00 - 09:15

Junction	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	1			1012				574				
	2	913	228	0	2560	0.357	915	1012	0.9	0.6	2.259	A
	3	787	197	915	1752	0.449	790	0	1.8	0.9	3.985	A
	4	1169	292	417	1984	0.589	1175	1288	2.9	1.5	4.670	A
	5	82	21	1502	496	0.165	83	89	0.4	0.2	9.088	A
2	1	555	139	1013	996	0.557	566	0	4.2	1.3	8.971	A
	2	678	170	1036	1331	0.510	685	543	2.7	1.1	5.800	A
	3			913				808				
	4	1012	253	0	2471	0.409	1013	913	1.0	0.7	2.602	A

Queue Variation Results for each time segment

07:45 - 08:00

Junction	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	1									
	2	0.55	0.55	1.03	1.44	1.50			N/A	N/A
	3	0.84	0.58	1.06	1.48	1.54			N/A	N/A
	4	1.47	0.58	1.36	1.90	2.05			N/A	N/A
	5	0.20	0.00	0.00	0.20	0.20			N/A	N/A
2	1	1.26	0.12	1.12	2.05	2.76			N/A	N/A
	2	1.04	0.56	1.05	1.49	1.54			N/A	N/A
	3									
	4	0.71	0.58	1.05	1.47	1.53			N/A	N/A

08:00 - 08:15

Junction	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	1									
	2	0.73	0.10	0.87	1.43	1.50			N/A	N/A
	3	1.41	0.05	0.53	3.44	5.22			N/A	N/A
	4	2.63	0.05	0.46	7.25	12.48			N/A	N/A
	5	0.36	0.00	0.00	0.36	0.36			N/A	N/A
2	1	2.85	0.05	0.60	7.88	12.69			N/A	N/A
	2	1.97	0.05	0.49	5.24	8.43			N/A	N/A
	3									
	4	0.98	0.07	0.82	1.79	2.32			N/A	N/A

08:15 - 08:30

Junction	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	1									
	2	0.95	0.03	0.26	0.95	0.95			N/A	N/A
	3	3.22	0.03	0.31	3.22	12.40			N/A	N/A
	4	8.81	0.05	0.48	24.71	46.71			N/A	N/A
	5	1.26	0.03	0.30	1.52	5.46			N/A	N/A
2	1	25.18	4.89	21.21	46.63	56.26			N/A	N/A
	2	7.30	0.05	0.69	21.12	36.65			N/A	N/A
	3									
	4	1.48	0.03	0.27	1.48	1.48			N/A	N/A

08:30 - 08:45

Junction	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	1									
	2	0.98	0.03	0.27	0.98	1.03			N/A	N/A
	3	3.39	0.03	0.29	3.39	6.40			N/A	N/A
	4	9.77	0.04	0.37	19.57	53.08			N/A	N/A
	5	1.46	0.04	0.38	3.70	7.11			N/A	N/A
2	1	45.70	12.68	40.54	79.42	93.65			N/A	N/A
	2	8.59	0.04	0.41	21.86	47.01			N/A	N/A
	3									
	4	1.53	0.03	0.28	1.53	1.53			N/A	N/A

08:45 - 09:00

Junction	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	1									
	2	0.95	0.57	1.03	1.44	1.50			N/A	N/A
	3	1.75	0.09	1.25	3.68	4.97			N/A	N/A
	4	2.92	0.05	0.47	8.12	13.92			N/A	N/A
	5	0.42	0.04	0.37	1.22	1.41			N/A	N/A
2	1	4.16	0.04	0.44	11.40	21.52			N/A	N/A
	2	2.75	0.06	0.73	7.49	11.81			N/A	N/A
	3									
	4	1.04	0.57	1.07	1.51	1.56			N/A	N/A

09:00 - 09:15

Junction	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	1									
	2	0.57	0.57	1.03	1.44	1.50			N/A	N/A
	3	0.87	0.04	0.40	2.04	3.52			N/A	N/A
	4	1.51	0.03	0.33	2.79	7.82			N/A	N/A
	5	0.21	0.03	0.29	0.63	1.11			N/A	N/A
2	1	1.34	0.03	0.28	1.34	2.58			N/A	N/A
	2	1.08	0.03	0.31	1.48	5.22			N/A	N/A
	3									
	4	0.73	0.13	0.92	1.45	1.52			N/A	N/A

D8 - 2032 | Reference Case + Committed | 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	Arm order	Junction Delay (s)	Junction LOS
1	Northern Rbt	Standard Roundabout	1, 2, 3, 4, 5	25.20	D
2	Southern Rbt	Standard Roundabout	1, 2, 3, 4	16.83	C

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	21.80	C

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2032	Reference Case + Committed	PM	ONE HOUR	16:45	18:15	15	✓

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
1	2	2	4	Queue limited	Normal	0	100.00	33.00
2	4	1	2	Queue limited	Normal	0	100.00	33.00

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1	1					
	2	✓				
	3		ONE HOUR	✓	1338	100.000
	4		ONE HOUR	✓	1368	100.000
	5		ONE HOUR	✓	119	100.000
2	1		ONE HOUR	✓	691	100.000
	2		ONE HOUR	✓	803	100.000
	3					
	4	✓				

Origin-Destination Data

		Demand (PCU/hr)				
Junction 2	From	To				
			1	2	3	4
		1	0	165	0	526
		2	0	0	208	595
		3	0	0	0	0
		4	0	613	549	0

Demand (PCU/hr)

Junction 1

	To					
		1	2	3	4	5
From	1	0	0	0	0	0
	2	220	0	0	857	49
	3	0	326	0	940	72
	4	530	838	0	0	0
	5	48	43	0	28	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

Junction 2

	To				
		1	2	3	4
From	1	0	2	0	0
	2	0	0	1	2
	3	0	0	0	0
	4	0	2	4	0

Heavy Vehicle %

Junction 1

	To					
		1	2	3	4	5
From	1	0	0	0	0	0
	2	1	0	0	1	0
	3	0	2	0	2	0
	4	1	3	0	0	0
	5	1	3	0	0	0

Results

Results Summary for whole modelled period

Junction	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	1							
	2	0.48	2.77	0.9	1.5	A	1028	1542
	3	0.99	55.17	22.3	90.4	F	1228	1842
	4	0.85	13.28	5.4	26.2	B	1255	1883
	5	0.57	36.30	1.3	6.3	E	109	164
2	1	0.93	47.93	9.5	48.8	E	634	951
	2	0.72	10.51	2.5	7.2	B	737	1105
	3							
	4	0.53	3.22	1.2	1.5	A	1107	1660

Main Results for each time segment

16:45 - 17:00

Junction	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	1			925				597				
	2	839	210	21	2545	0.330	837	904	0.0	0.5	2.126	A
	3	1007	252	858	1795	0.561	1002	0	0.0	1.3	4.598	A
	4	1030	257	498	1930	0.534	1025	1362	0.0	1.2	4.048	A
	5	90	22	1433	527	0.170	89	90	0.0	0.2	8.315	A
2	1	520	130	902	1059	0.491	516	0	0.0	1.0	6.615	A
	2	605	151	819	1464	0.413	602	599	0.0	0.7	4.236	A
	3			839				582				
	4	904	226	0	2471	0.366	902	839	0.0	0.6	2.358	A

17:00 - 17:15

Junction	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	1			1107				714				
	2	1004	251	25	2543	0.395	1003	1082	0.5	0.7	2.359	A
	3	1203	301	1028	1665	0.722	1198	0	1.3	2.6	7.758	A
	4	1230	307	596	1865	0.660	1227	1630	1.2	1.9	5.739	A
	5	107	27	1715	401	0.266	106	108	0.2	0.4	12.352	B
2	1	621	155	1081	957	0.649	618	0	1.0	1.8	10.570	B
	2	722	180	981	1364	0.529	720	718	0.7	1.1	5.670	A
	3			1004				697				
	4	1082	270	0	2471	0.438	1081	1004	0.6	0.8	2.663	A

17:15 - 17:30

Junction	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	1			1337				867				
	2	1213	303	30	2539	0.478	1212	1307	0.7	0.9	2.735	A
	3	1473	368	1242	1503	0.980	1421	0	2.6	15.7	32.931	D
	4	1506	377	712	1787	0.843	1494	1950	1.9	5.1	12.058	B
	5	131	33	2077	240	0.547	128	129	0.4	1.1	31.887	D
2	1	761	190	1306	827	0.920	737	0	1.8	7.6	33.982	D
	2	884	221	1178	1243	0.711	879	865	1.1	2.4	9.914	A
	3			1213				845				
	4	1307	327	0	2471	0.529	1306	1213	0.8	1.1	3.175	A

17:30 - 17:45

Junction	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	1			1352				876				
	2	1228	307	31	2538	0.484	1228	1322	0.9	0.9	2.773	A
	3	1473	368	1259	1490	0.989	1447	0	15.7	22.3	55.170	F
	4	1506	377	724	1779	0.847	1505	1982	5.1	5.4	13.282	B
	5	131	33	2097	230	0.569	131	131	1.1	1.3	36.304	E
2	1	761	190	1321	818	0.930	753	0	7.6	9.5	47.933	E
	2	884	221	1198	1231	0.718	884	877	2.4	2.5	10.507	B
	3			1228				853				
	4	1322	330	0	2471	0.535	1321	1228	1.1	1.2	3.221	A

17:45 - 18:00

Junction	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	1			1139				728				
	2	1034	259	26	2542	0.407	1035	1113	0.9	0.7	2.413	A
	3	1203	301	1061	1640	0.733	1280	0	22.3	2.9	12.389	B
	4	1230	307	628	1843	0.667	1243	1713	5.4	2.1	6.260	A
	5	107	27	1757	382	0.280	110	114	1.3	0.4	13.592	B
2	1	621	155	1115	937	0.663	651	0	9.5	2.1	13.858	B
	2	722	180	1022	1339	0.539	727	743	2.5	1.2	6.033	A
	3			1034				715				
	4	1113	278	0	2471	0.450	1115	1034	1.2	0.8	2.732	A

18:00 - 18:15

Junction	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	1			934				603				
	2	849	212	21	2545	0.333	849	913	0.7	0.5	2.143	A
	3	1007	252	871	1785	0.564	1014	0	2.9	1.3	4.791	A
	4	1030	257	504	1926	0.535	1034	1380	2.1	1.2	4.141	A
	5	90	22	1446	521	0.172	90	92	0.4	0.2	8.490	A
2	1	520	130	914	1053	0.494	524	0	2.1	1.0	6.902	A
	2	605	151	831	1456	0.415	606	607	1.2	0.7	4.320	A
	3			849				589				
	4	913	228	0	2471	0.369	914	849	0.8	0.6	2.381	A

Queue Variation Results for each time segment

16:45 - 17:00

Junction	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	1									
	2	0.49	0.00	0.00	0.49	0.49			N/A	N/A
	3	1.29	0.23	1.19	1.88	2.27			N/A	N/A
	4	1.16	0.57	1.06	1.21	1.21			N/A	N/A
	5	0.21	0.00	0.00	0.21	0.21			N/A	N/A
2	1	0.96	0.54	1.01	1.43	1.48			N/A	N/A
	2	0.71	0.56	1.02	1.42	1.48			N/A	N/A
	3									
	4	0.59	0.57	1.03	1.44	1.49			N/A	N/A

17:00 - 17:15

Junction	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	1									
	2	0.66	0.09	0.80	1.38	1.45			N/A	N/A
	3	2.57	0.04	0.43	7.06	12.60			N/A	N/A
	4	1.94	0.05	0.45	5.24	8.80			N/A	N/A
	5	0.36	0.00	0.00	0.36	0.36			N/A	N/A
2	1	1.80	0.05	0.50	4.73	7.43			N/A	N/A
	2	1.13	0.06	0.72	2.41	3.42			N/A	N/A
	3									
	4	0.80	0.08	0.82	1.40	1.40			N/A	N/A

17:15 - 17:30

Junction	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	1									
	2	0.92	0.03	0.26	0.92	0.92			N/A	N/A
	3	15.73	0.19	6.95	41.64	58.92			N/A	N/A
	4	5.05	0.03	0.33	8.37	26.20			N/A	N/A
	5	1.14	0.03	0.29	1.14	4.00			N/A	N/A
2	1	7.65	0.07	1.20	21.98	34.64			N/A	N/A
	2	2.41	0.03	0.29	2.41	7.21			N/A	N/A
	3									
	4	1.15	0.03	0.26	1.15	1.15			N/A	N/A

17:30 - 17:45

Junction	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	1									
	2	0.94	0.03	0.27	0.94	1.46			N/A	N/A
	3	22.30	0.16	8.04	61.85	90.41			N/A	N/A
	4	5.35	0.03	0.30	5.35	17.53			N/A	N/A
	5	1.26	0.03	0.35	2.99	6.33			N/A	N/A
2	1	9.48	0.05	0.68	27.45	48.83			N/A	N/A
	2	2.52	0.03	0.28	2.52	4.36			N/A	N/A
	3									
	4	1.18	0.03	0.27	1.18	1.18			N/A	N/A

17:45 - 18:00

Junction	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	1									
	2	0.70	0.56	1.01	1.41	1.46			N/A	N/A
	3	2.91	0.04	0.40	7.78	15.06			N/A	N/A
	4	2.09	0.05	0.61	5.55	8.66			N/A	N/A
	5	0.40	0.04	0.35	1.16	1.35			N/A	N/A
2	1	2.05	0.04	0.40	5.51	10.13			N/A	N/A
	2	1.21	0.08	0.95	2.32	3.06			N/A	N/A
	3									
	4	0.85	0.57	1.03	1.44	1.49			N/A	N/A

18:00 - 18:15

Junction	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	1									
	2	0.51	0.51	1.01	1.41	1.46			N/A	N/A
	3	1.34	0.03	0.29	1.34	5.33			N/A	N/A
	4	1.19	0.04	0.35	2.85	5.87			N/A	N/A
	5	0.21	0.03	0.28	0.54	1.04			N/A	N/A
2	1	1.00	0.03	0.29	1.48	4.51			N/A	N/A
	2	0.73	0.04	0.42	1.59	2.43			N/A	N/A
	3									
	4	0.61	0.57	1.03	1.44	1.49			N/A	N/A

D9 - 2032 | Reference Case + Committed + Development | 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	Arm order	Junction Delay (s)	Junction LOS
1	Northern Rbt	Standard Roundabout	1, 2, 3, 4, 5	14.49	B
2	Southern Rbt	Standard Roundabout	1, 2, 3, 4	62.61	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	35.39	E

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2032	Reference Case + Committed + Development	AM	ONE HOUR	07:45	09:15	15	✓

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
1	2	2	4	Queue limited	Normal	0	100.00	33.00
2	4	1	2	Queue limited	Normal	0	100.00	33.00

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1	1					
	2	✓				
	3		ONE HOUR	✓	1052	100.000
	4		ONE HOUR	✓	1556	100.000
	5		ONE HOUR	✓	109	100.000
2	1		ONE HOUR	✓	739	100.000
	2		ONE HOUR	✓	929	100.000
	3					
	4	✓				

Origin-Destination Data

Demand (PCU/hr)

Junction 2		To				
	From		1	2	3	4
		1	0	157	0	582
		2	0	0	304	625
		3	0	0	0	0
		4	0	567	773	0

Demand (PCU/hr)

Junction 1

	To					
		1	2	3	4	5
From	1	0	0	0	0	0
	2	223	0	0	935	57
	3	0	250	0	769	33
	4	495	1033	0	0	28
	5	45	64	0	0	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

Junction 2

	To				
From		1	2	3	4
	1	0	6	0	4
	2	0	0	3	3
	3	0	0	0	0
	4	0	3	7	0

Heavy Vehicle %

Junction 1

	To					
		1	2	3	4	5
From	1	0	0	0	0	0
	2	5	0	0	3	0
	3	0	7	0	6	0
	4	3	5	0	0	0
	5	3	5	0	0	0

Results

Results Summary for whole modelled period

Junction	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	1							
	2	0.49	2.84	1.0	1.5	A	1106	1659
	3	0.77	11.27	3.5	13.5	B	965	1448
	4	0.92	23.17	10.4	57.1	C	1428	2142
	5	0.62	50.37	1.6	7.7	F	100	150
2	1	1.12	196.82	49.1	96.9	F	678	1017
	2	0.94	41.02	10.9	57.2	E	852	1279
	3							
	4	0.60	3.82	1.6	2.4	A	1235	1853

Main Results for each time segment

07:45 - 08:00

Junction	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	1			1009				569				
	2	902	225	0	2560	0.352	899	1009	0.0	0.6	2.234	A
	3	792	198	899	1763	0.449	789	0	0.0	0.9	3.903	A
	4	1171	293	419	1982	0.591	1165	1269	0.0	1.5	4.563	A
	5	82	21	1497	499	0.165	81	88	0.0	0.2	8.966	A
2	1	556	139	1006	1000	0.557	551	0	0.0	1.3	8.292	A
	2	699	175	1014	1344	0.520	695	543	0.0	1.1	5.676	A
	3			902				808				
	4	1009	252	0	2471	0.408	1006	902	0.0	0.7	2.580	A

08:00 - 08:15

Junction	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	1			1207				681				
	2	1077	269	0	2560	0.421	1076	1207	0.6	0.7	2.502	A
	3	946	236	1076	1629	0.581	943	0	0.9	1.4	5.549	A
	4	1399	350	502	1927	0.726	1394	1518	1.5	2.7	6.975	A
	5	98	24	1791	367	0.267	97	105	0.2	0.4	13.848	B
2	1	664	166	1206	885	0.751	658	0	1.3	2.9	16.096	C
	2	835	209	1214	1222	0.684	831	650	1.1	2.2	9.385	A
	3			1077				967				
	4	1207	302	0	2471	0.488	1206	1077	0.7	1.0	2.991	A

08:15 - 08:30

Junction	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	1			1462				811				
	2	1236	309	0	2560	0.483	1235	1462	0.7	1.0	2.802	A
	3	1158	290	1235	1508	0.768	1151	0	1.4	3.3	10.456	B
	4	1713	428	594	1866	0.918	1687	1792	2.7	9.3	18.729	C
	5	120	30	2157	204	0.589	116	124	0.4	1.3	41.133	E
2	1	814	203	1459	739	1.101	718	0	2.9	26.7	90.376	F
	2	1023	256	1408	1103	0.928	996	770	2.2	8.9	29.357	D
	3			1236				1168				
	4	1462	365	0	2471	0.591	1459	1236	1.0	1.5	3.736	A

08:30 - 08:45

Junction	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	1			1479				823				
	2	1253	313	0	2560	0.489	1253	1479	1.0	1.0	2.841	A
	3	1158	290	1253	1495	0.775	1158	0	3.3	3.5	11.268	B
	4	1713	428	600	1862	0.920	1709	1810	9.3	10.4	23.171	C
	5	120	30	2183	192	0.625	119	126	1.3	1.6	50.370	F
2	1	814	203	1479	728	1.118	724	0	26.7	49.1	196.817	F
	2	1023	256	1424	1093	0.936	1015	780	8.9	10.9	41.024	E
	3			1253				1185				
	4	1479	370	0	2471	0.599	1479	1253	1.5	1.6	3.819	A

08:45 - 09:00

Junction	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	1			1235				725				
	2	1245	311	0	2560	0.486	1245	1235	1.0	1.0	2.825	A
	3	946	236	1245	1500	0.630	952	0	3.5	1.8	7.048	A
	4	1399	350	543	1900	0.736	1428	1655	10.4	3.0	8.432	A
	5	98	24	1858	338	0.290	103	114	1.6	0.4	16.249	C
2	1	664	166	1237	867	0.766	841	0	49.1	4.9	119.494	F
	2	835	209	1376	1122	0.744	866	702	10.9	3.2	16.036	C
	3			1245				997				
	4	1235	309	0	2471	0.500	1237	1245	1.6	1.1	3.075	A

09:00 - 09:15

Junction	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	1			1019				579				
	2	925	231	0	2560	0.361	927	1019	1.0	0.6	2.276	A
	3	792	198	927	1743	0.454	796	0	1.8	0.9	4.049	A
	4	1171	293	428	1977	0.593	1177	1295	3.0	1.5	4.730	A
	5	82	21	1515	491	0.167	83	90	0.4	0.2	9.220	A
2	1	556	139	1021	991	0.561	570	0	4.9	1.4	9.215	A
	2	699	175	1038	1329	0.526	707	553	3.2	1.2	6.037	A
	3			925				820				
	4	1019	255	0	2471	0.412	1021	925	1.1	0.7	2.613	A

Queue Variation Results for each time segment

07:45 - 08:00

Junction	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	1									
	2	0.56	0.56	1.03	1.45	1.50			N/A	N/A
	3	0.86	0.58	1.06	1.48	1.54			N/A	N/A
	4	1.49	0.58	1.38	1.93	2.08			N/A	N/A
	5	0.20	0.00	0.00	0.20	0.20			N/A	N/A
2	1	1.28	0.11	1.11	2.14	2.89			N/A	N/A
	2	1.10	0.54	1.09	1.21	1.64			N/A	N/A
	3									
	4	0.72	0.58	1.05	1.47	1.53			N/A	N/A

08:00 - 08:15

Junction	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	1									
	2	0.75	0.10	0.87	1.43	1.50			N/A	N/A
	3	1.45	0.05	0.52	3.58	5.44			N/A	N/A
	4	2.69	0.05	0.47	7.42	12.77			N/A	N/A
	5	0.37	0.00	0.00	0.37	0.37			N/A	N/A
2	1	2.94	0.05	0.63	8.13	13.10			N/A	N/A
	2	2.16	0.05	0.49	5.84	9.43			N/A	N/A
	3									
	4	1.00	0.07	0.82	1.83	2.45			N/A	N/A

08:15 - 08:30

Junction	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	1									
	2	0.96	0.03	0.26	0.96	0.96			N/A	N/A
	3	3.34	0.03	0.31	3.34	13.52			N/A	N/A
	4	9.27	0.05	0.51	26.44	48.40			N/A	N/A
	5	1.34	0.03	0.31	1.52	6.21			N/A	N/A
2	1	26.73	5.89	22.90	48.37	57.90			N/A	N/A
	2	8.90	0.07	1.23	25.79	41.20			N/A	N/A
	3									
	4	1.51	0.03	0.27	1.51	1.51			N/A	N/A

08:30 - 08:45

Junction	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	1									
	2	0.98	0.03	0.27	0.98	0.98			N/A	N/A
	3	3.53	0.03	0.29	3.53	7.21			N/A	N/A
	4	10.37	0.04	0.38	22.70	57.11			N/A	N/A
	5	1.58	0.04	0.39	4.06	7.71			N/A	N/A
2	1	49.13	15.29	44.25	82.97	96.91			N/A	N/A
	2	10.93	0.05	0.52	31.30	57.20			N/A	N/A
	3									
	4	1.56	0.03	0.28	1.56	1.56			N/A	N/A

08:45 - 09:00

Junction	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	1									
	2	0.98	0.57	1.03	1.45	1.50			N/A	N/A
	3	1.84	0.09	1.28	3.92	5.28			N/A	N/A
	4	3.00	0.05	0.47	8.35	14.39			N/A	N/A
	5	0.44	0.04	0.38	1.26	1.43			N/A	N/A
2	1	4.85	0.05	0.50	13.81	24.22			N/A	N/A
	2	3.17	0.06	0.80	8.77	13.89			N/A	N/A
	3									
	4	1.06	0.57	1.07	1.52	1.58			N/A	N/A

09:00 - 09:15

Junction	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	1									
	2	0.59	0.57	1.03	1.45	1.50			N/A	N/A
	3	0.89	0.04	0.40	2.09	3.70			N/A	N/A
	4	1.54	0.03	0.33	2.72	7.89			N/A	N/A
	5	0.21	0.03	0.30	0.69	1.16			N/A	N/A
2	1	1.37	0.03	0.28	1.37	2.41			N/A	N/A
	2	1.16	0.03	0.30	1.18	5.26			N/A	N/A
	3									
	4	0.74	0.12	0.91	1.45	1.52			N/A	N/A

D10 - 2032 | Reference Case + Committed + Development | 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	Arm order	Junction Delay (s)	Junction LOS
1	Northern Rbt	Standard Roundabout	1, 2, 3, 4, 5	28.72	D
2	Southern Rbt	Standard Roundabout	1, 2, 3, 4	19.15	C

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	24.82	C

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2032	Reference Case + Committed + Development	PM	ONE HOUR	16:45	18:15	15	✓

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
1	2	2	4	Queue limited	Normal	0	100.00	33.00
2	4	1	2	Queue limited	Normal	0	100.00	33.00

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1	1					
	2	✓				
	3		ONE HOUR	✓	1353	100.000
	4		ONE HOUR	✓	1374	100.000
	5		ONE HOUR	✓	119	100.000
2	1		ONE HOUR	✓	696	100.000
	2		ONE HOUR	✓	818	100.000
	3					
	4	✓				

Origin-Destination Data

Demand (PCU/hr)	
Junction 2	
	To
	1234
	From
	101700526
	200216602
	30000
	406345490

Demand (PCU/hr)

Junction 1

	To					
		1	2	3	4	5
From	1	0	0	0	0	0
	2	223	0	0	860	49
	3	0	341	0	940	72
	4	530	844	0	0	0
	5	48	43	0	28	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

Junction 2

	To				
		1	2	3	4
From	1	0	2	0	0
	2	0	0	1	2
	3	0	0	0	0
	4	0	2	4	0

Heavy Vehicle %

Junction 1

	To					
		1	2	3	4	5
From	1	0	0	0	0	0
	2	1	0	0	1	0
	3	0	2	0	2	0
	4	1	3	0	0	0
	5	1	3	0	0	0

Results

Results Summary for whole modelled period

Junction	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	1							
	2	0.49	2.78	0.9	1.5	A	1034	1551
	3	1.00	64.12	26.9	96.3	F	1242	1862
	4	0.86	14.15	5.7	28.5	B	1261	1891
	5	0.60	40.23	1.4	7.0	E	109	164
2	1	0.95	56.79	11.4	54.3	F	639	958
	2	0.73	10.94	2.7	8.4	B	751	1126
	3							
	4	0.54	3.28	1.2	1.6	A	1126	1689

Main Results for each time segment

16:45 - 17:00

Junction	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	1			941				599				
	2	844	211	21	2545	0.332	842	920	0.0	0.5	2.132	A
	3	1019	255	863	1791	0.569	1013	0	0.0	1.3	4.685	A
	4	1034	259	512	1921	0.539	1030	1365	0.0	1.2	4.109	A
	5	90	22	1451	519	0.173	89	90	0.0	0.2	8.469	A
2	1	524	131	918	1050	0.499	520	0	0.0	1.0	6.770	A
	2	616	154	819	1464	0.421	613	619	0.0	0.7	4.289	A
	3			844				588				
	4	920	230	0	2471	0.372	918	844	0.0	0.6	2.381	A

17:00 - 17:15

Junction	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	1			1125				717				
	2	1010	252	25	2543	0.397	1009	1100	0.5	0.7	2.369	A
	3	1216	304	1034	1661	0.732	1211	0	1.3	2.7	8.054	A
	4	1235	309	612	1854	0.666	1232	1633	1.2	2.0	5.885	A
	5	107	27	1736	392	0.273	106	108	0.2	0.4	12.762	B
2	1	626	156	1099	946	0.661	622	0	1.0	1.9	11.044	B
	2	735	184	980	1365	0.539	734	741	0.7	1.2	5.786	A
	3			1010				704				
	4	1100	275	0	2471	0.445	1099	1010	0.6	0.8	2.699	A

17:15 - 17:30

Junction	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	1			1357				869				
	2	1217	304	30	2539	0.479	1216	1327	0.7	0.9	2.744	A
	3	1490	372	1246	1500	0.993	1429	0	2.7	18.0	36.229	E
	4	1513	378	728	1776	0.852	1499	1946	2.0	5.4	12.708	B
	5	131	33	2099	230	0.571	128	129	0.4	1.2	34.721	D
2	1	766	192	1326	816	0.939	739	0	1.9	8.8	37.981	E
	2	901	225	1173	1246	0.723	895	891	1.2	2.5	10.270	B
	3			1217				852				
	4	1327	332	0	2471	0.537	1326	1217	0.8	1.2	3.229	A

17:30 - 17:45

Junction	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	1			1373				879				
	2	1234	308	31	2538	0.486	1234	1342	0.9	0.9	2.784	A
	3	1490	372	1264	1486	1.002	1454	0	18.0	26.9	64.123	F
	4	1513	378	740	1768	0.855	1511	1978	5.4	5.7	14.146	B
	5	131	33	2121	220	0.596	130	131	1.2	1.4	40.231	E
2	1	766	192	1342	807	0.950	756	0	8.8	11.4	56.789	F
	2	901	225	1194	1234	0.730	900	904	2.5	2.7	10.944	B
	3			1234				860				
	4	1342	335	0	2471	0.543	1342	1234	1.2	1.2	3.279	A

17:45 - 18:00

Junction	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	1			1164				733				
	2	1046	262	26	2542	0.412	1047	1138	0.9	0.7	2.432	A
	3	1216	304	1073	1631	0.746	1312	0	26.9	3.1	14.933	B
	4	1235	309	652	1827	0.676	1249	1733	5.7	2.2	6.518	A
	5	107	27	1786	369	0.290	111	115	1.4	0.4	14.326	B
2	1	626	156	1139	923	0.678	663	0	11.4	2.2	15.717	C
	2	735	184	1029	1335	0.551	741	772	2.7	1.3	6.227	A
	3			1046				724				
	4	1138	285	0	2471	0.460	1139	1046	1.2	0.9	2.783	A

18:00 - 18:15

Junction	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	1			950				605				
	2	854	214	21	2545	0.336	855	929	0.7	0.5	2.152	A
	3	1019	255	876	1781	0.572	1026	0	3.1	1.4	4.902	A
	4	1034	259	519	1916	0.540	1038	1383	2.2	1.2	4.209	A
	5	90	22	1465	513	0.175	90	92	0.4	0.2	8.664	A
2	1	524	131	930	1043	0.502	529	0	2.2	1.0	7.091	A
	2	616	154	831	1456	0.423	618	628	1.3	0.8	4.378	A
	3			854				595				
	4	929	232	0	2471	0.376	930	854	0.9	0.6	2.406	A

Queue Variation Results for each time segment

16:45 - 17:00

Junction	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	1									
	2	0.50	0.00	0.00	0.50	0.50			N/A	N/A
	3	1.33	0.20	1.21	1.97	2.56			N/A	N/A
	4	1.18	0.57	1.07	1.49	1.49			N/A	N/A
	5	0.21	0.00	0.00	0.21	0.21			N/A	N/A
2	1	0.99	0.53	1.02	1.07	1.07			N/A	N/A
	2	0.73	0.56	1.02	1.42	1.48			N/A	N/A
	3									
	4	0.61	0.57	1.03	1.44	1.49			N/A	N/A

17:00 - 17:15

Junction	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	1									
	2	0.66	0.09	0.80	1.38	1.45			N/A	N/A
	3	2.70	0.04	0.44	7.46	13.24			N/A	N/A
	4	2.00	0.05	0.45	5.43	9.12			N/A	N/A
	5	0.37	0.00	0.00	0.37	0.37			N/A	N/A
2	1	1.90	0.05	0.50	4.99	7.92			N/A	N/A
	2	1.17	0.06	0.70	2.59	3.71			N/A	N/A
	3									
	4	0.82	0.08	0.83	1.54	1.57			N/A	N/A

17:15 - 17:30

Junction	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	1									
	2	0.92	0.03	0.26	0.92	0.92			N/A	N/A
	3	17.99	0.33	9.68	45.19	61.85			N/A	N/A
	4	5.36	0.03	0.34	9.96	28.54			N/A	N/A
	5	1.24	0.03	0.29	1.36	5.12			N/A	N/A
2	1	8.80	0.09	2.37	24.61	36.94			N/A	N/A
	2	2.55	0.03	0.29	2.55	8.45			N/A	N/A
	3									
	4	1.18	0.03	0.26	1.18	1.18			N/A	N/A

17:30 - 17:45

Junction	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	1									
	2	0.95	0.03	0.27	0.95	1.42			N/A	N/A
	3	26.92	0.34	13.67	69.47	96.28			N/A	N/A
	4	5.71	0.03	0.30	5.71	20.84			N/A	N/A
	5	1.39	0.04	0.36	3.42	7.01			N/A	N/A
2	1	11.42	0.07	1.39	33.40	54.29			N/A	N/A
	2	2.67	0.03	0.28	2.67	4.98			N/A	N/A
	3									
	4	1.21	0.03	0.27	1.21	1.21			N/A	N/A

17:45 - 18:00

Junction	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	1									
	2	0.71	0.56	1.01	1.41	1.46			N/A	N/A
	3	3.12	0.04	0.40	8.36	16.24			N/A	N/A
	4	2.18	0.05	0.58	5.83	9.16			N/A	N/A
	5	0.42	0.04	0.37	1.21	1.38			N/A	N/A
2	1	2.21	0.04	0.40	5.90	11.04			N/A	N/A
	2	1.27	0.07	0.95	2.56	3.49			N/A	N/A
	3									
	4	0.88	0.57	1.03	1.44	1.49			N/A	N/A

18:00 - 18:15

Junction	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	1									
	2	0.51	0.51	1.01	1.41	1.46			N/A	N/A
	3	1.38	0.03	0.29	1.38	5.18			N/A	N/A
	4	1.21	0.03	0.35	2.84	6.07			N/A	N/A
	5	0.22	0.03	0.29	0.68	1.12			N/A	N/A
2	1	1.03	0.03	0.29	1.34	4.43			N/A	N/A
	2	0.75	0.04	0.41	1.69	2.66			N/A	N/A
	3									
	4	0.62	0.14	0.92	1.42	1.48			N/A	N/A

D11 - 2042 | Local Plan | 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	Arm order	Junction Delay (s)	Junction LOS
1	Northern Rbt	Standard Roundabout	1, 2, 3, 4, 5	15.84	C
2	Southern Rbt	Standard Roundabout	1, 2, 3, 4	60.76	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	35.49	E

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2042	Local Plan	AM	ONE HOUR	07:45	09:15	15	✓

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
1	2	2	4	Queue limited	Normal	0	100.00	33.00
2	4	1	2	Queue limited	Normal	0	100.00	33.00

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1	1					
	2	✓				
	3		ONE HOUR	✓	1070	100.000
	4		ONE HOUR	✓	1631	100.000
	5		ONE HOUR	✓	0	100.000
2	1		ONE HOUR	✓	729	100.000
	2		ONE HOUR	✓	957	100.000
	3					
	4	✓				

Origin-Destination Data

Demand (PCU/hr)

Junction 2

	To				
		1	2	3	4
From	1	0	164	0	565
	2	0	0	312	645
	3	0	0	0	0
	4	0	589	756	0

Demand (PCU/hr)

Junction 1

	To					
		1	2	3	4	5
From	1	0	0	0	0	0
	2	235	0	0	985	0
	3	0	258	0	812	0
	4	534	1097	0	0	0
	5	0	0	0	0	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

Junction 2

	To				
From		1	2	3	4
	1	0	6	0	4
	2	0	0	3	3
	3	0	0	0	0
	4	0	3	7	0

Heavy Vehicle %

Junction 1

	To					
		1	2	3	4	5
From	1	0	0	0	0	0
	2	5	0	0	3	0
	3	0	7	0	6	0
	4	3	5	0	0	0
	5	3	5	0	0	0

Results

Results Summary for whole modelled period

Junction	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	1							
	2	0.49	2.86	1.0	1.5	A	1109	1664
	3	0.79	12.20	3.9	16.2	B	982	1473
	4	0.94	27.85	13.0	71.5	D	1497	2245
	5	0.00	0.00	0.0	~1	A	0	0
2	1	1.11	187.09	46.0	93.5	F	669	1003
	2	0.95	45.04	12.4	62.4	E	878	1317
	3							
	4	0.60	3.84	1.6	2.5	A	1242	1864

Main Results for each time segment

07:45 - 08:00

Junction	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	1			1015				574				
	2	904	226	0	2560	0.353	902	1015	0.0	0.6	2.241	A
	3	806	201	902	1762	0.457	802	0	0.0	0.9	3.972	A
	4	1228	307	367	2017	0.609	1221	1337	0.0	1.6	4.684	A
	5	0	0	1589	458	0.000	0	0	0.0	0.0	0.000	A
2	1	549	137	1012	996	0.551	544	0	0.0	1.3	8.224	A
	2	720	180	990	1359	0.530	716	566	0.0	1.1	5.730	A
	3			904				802				
	4	1015	254	0	2471	0.411	1012	904	0.0	0.7	2.589	A

08:00 - 08:15

Junction	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	1			1214				686				
	2	1080	270	0	2560	0.422	1079	1214	0.6	0.8	2.511	A
	3	962	240	1079	1627	0.591	959	0	0.9	1.5	5.708	A
	4	1466	367	439	1969	0.745	1461	1599	1.6	3.0	7.315	A
	5	0	0	1900	319	0.000	0	0	0.0	0.0	0.000	A
2	1	655	164	1213	881	0.744	649	0	1.3	2.8	15.800	C
	2	860	215	1185	1239	0.694	856	677	1.1	2.3	9.555	A
	3			1080				961				
	4	1214	303	0	2471	0.491	1213	1080	0.7	1.0	3.006	A

08:15 - 08:30

Junction	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	1			1467				816				
	2	1243	311	0	2560	0.485	1242	1467	0.8	1.0	2.821	A
	3	1178	295	1242	1503	0.784	1170	0	1.5	3.6	11.187	B
	4	1796	449	521	1914	0.938	1763	1890	3.0	11.3	21.222	C
	5	0	0	2284	147	0.000	0	0	0.0	0.0	0.000	A
2	1	803	201	1465	736	1.091	713	0	2.8	25.1	86.762	F
	2	1054	263	1377	1122	0.939	1023	802	2.3	9.8	31.089	D
	3			1243				1157				
	4	1467	367	0	2471	0.594	1465	1243	1.0	1.5	3.756	A

08:30 - 08:45

Junction	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	1			1487				828				
	2	1261	315	0	2560	0.492	1261	1487	1.0	1.0	2.862	A
	3	1178	295	1261	1489	0.791	1177	0	3.6	3.9	12.196	B
	4	1796	449	527	1911	0.940	1789	1911	11.3	13.0	27.851	D
	5	0	0	2315	133	0.000	0	0	0.0	0.0	0.000	A
2	1	803	201	1487	723	1.110	719	0	25.1	46.0	187.095	F
	2	1054	263	1393	1112	0.948	1043	813	9.8	12.4	45.041	E
	3			1261				1176				
	4	1487	372	0	2471	0.602	1487	1261	1.5	1.6	3.845	A

08:45 - 09:00

Junction	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	1			1246				732				
	2	1242	310	0	2560	0.485	1242	1246	1.0	1.0	2.823	A
	3	962	240	1242	1503	0.640	970	0	3.9	1.9	7.266	A
	4	1466	367	473	1947	0.753	1505	1738	13.0	3.3	9.214	A
	5	0	0	1978	284	0.000	0	0	0.0	0.0	0.000	A
2	1	655	164	1248	860	0.762	822	0	46.0	4.3	107.793	F
	2	860	215	1339	1145	0.751	897	732	12.4	3.3	16.850	C
	3			1242				994				
	4	1246	312	0	2471	0.504	1248	1242	1.6	1.1	3.102	A

09:00 - 09:15

Junction	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	1			1026				583				
	2	926	231	0	2560	0.362	927	1026	1.0	0.6	2.280	A
	3	806	201	927	1742	0.462	810	0	1.9	0.9	4.118	A
	4	1228	307	374	2013	0.610	1234	1363	3.3	1.7	4.868	A
	5	0	0	1608	449	0.000	0	0	0.0	0.0	0.000	A
2	1	549	137	1027	988	0.556	561	0	4.3	1.3	9.046	A
	2	720	180	1012	1345	0.535	729	576	3.3	1.2	6.092	A
	3			926				815				
	4	1026	256	0	2471	0.415	1027	926	1.1	0.7	2.623	A

Queue Variation Results for each time segment

07:45 - 08:00

Junction	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	1									
	2	0.56	0.56	1.03	1.45	1.50			N/A	N/A
	3	0.89	0.58	1.06	1.49	1.54			N/A	N/A
	4	1.60	0.56	1.48	2.09	2.70			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A
2	1	1.26	0.11	1.11	2.04	2.75			N/A	N/A
	2	1.15	0.53	1.11	1.46	1.78			N/A	N/A
	3									
	4	0.73	0.58	1.05	1.47	1.53			N/A	N/A

08:00 - 08:15

Junction	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	1									
	2	0.75	0.10	0.87	1.44	1.51			N/A	N/A
	3	1.51	0.05	0.51	3.82	5.93			N/A	N/A
	4	2.95	0.05	0.47	8.20	14.13			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A
2	1	2.85	0.05	0.61	7.86	12.64			N/A	N/A
	2	2.26	0.05	0.49	6.13	10.00			N/A	N/A
	3									
	4	1.01	0.07	0.82	1.86	2.52			N/A	N/A

08:15 - 08:30

Junction	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	1									
	2	0.97	0.03	0.26	0.97	0.97			N/A	N/A
	3	3.64	0.03	0.32	3.64	16.18			N/A	N/A
	4	11.26	0.06	1.43	33.01	55.27			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A
2	1	25.14	4.93	21.20	46.48	56.06			N/A	N/A
	2	9.84	0.08	2.00	28.19	43.59			N/A	N/A
	3									
	4	1.52	0.03	0.27	1.52	1.52			N/A	N/A

08:30 - 08:45

Junction	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	1									
	2	1.00	0.03	0.27	1.00	1.00			N/A	N/A
	3	3.87	0.03	0.30	3.87	9.52			N/A	N/A
	4	13.03	0.05	0.45	34.78	71.51			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A
2	1	46.00	13.04	40.92	79.49	93.55			N/A	N/A
	2	12.42	0.06	1.25	36.35	62.40			N/A	N/A
	3									
	4	1.58	0.03	0.28	1.58	1.58			N/A	N/A

08:45 - 09:00

Junction	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	1									
	2	0.98	0.57	1.03	1.45	1.50			N/A	N/A
	3	1.93	0.09	1.24	4.24	5.96			N/A	N/A
	4	3.30	0.05	0.46	9.21	16.30			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A
2	1	4.34	0.05	0.46	12.11	22.19			N/A	N/A
	2	3.30	0.05	0.73	9.19	14.80			N/A	N/A
	3									
	4	1.08	0.57	1.08	1.20	1.20			N/A	N/A

09:00 - 09:15

Junction	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	1									
	2	0.59	0.57	1.03	1.45	1.50			N/A	N/A
	3	0.92	0.04	0.38	2.19	4.03			N/A	N/A
	4	1.65	0.03	0.32	2.60	8.32			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A
2	1	1.33	0.03	0.28	1.33	2.51			N/A	N/A
	2	1.20	0.03	0.30	1.20	5.35			N/A	N/A
	3									
	4	0.75	0.12	0.91	1.45	1.52			N/A	N/A

D12 - 2042 | Local Plan | 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	Arm order	Junction Delay (s)	Junction LOS
1	Northern Rbt	Standard Roundabout	1, 2, 3, 4, 5	25.78	D
2	Southern Rbt	Standard Roundabout	1, 2, 3, 4	19.43	C

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	23.15	C

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2042	Local Plan	PM	ONE HOUR	16:45	18:15	15	✓

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
1	2	2	4	Queue limited	Normal	0	100.00	33.00
2	4	1	2	Queue limited	Normal	0	100.00	33.00

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1	1					
	2	✓				
	3		ONE HOUR	✓	1354	100.000
	4		ONE HOUR	✓	1440	100.000
	5		ONE HOUR	✓	0	100.000
2	1		ONE HOUR	✓	693	100.000
	2		ONE HOUR	✓	843	100.000
	3					
	4	✓				

Origin-Destination Data

Demand (PCU/hr)

Junction 2

	To				
	1	2	3	4	
From	1	0	179	0	514
	2	0	0	220	623
	3	0	0	0	0
	4	0	649	573	0

Demand (PCU/hr)

Junction 1

	To					
		1	2	3	4	5
From	1	0	0	0	0	0
	2	233	0	0	913	0
	3	0	353	0	1001	0
	4	560	880	0	0	0
	5	0	0	0	0	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

Junction 2

	To				
		1	2	3	4
From	1	0	2	0	0
	2	0	0	1	2
	3	0	0	0	0
	4	0	2	4	0

Heavy Vehicle %

Junction 1

	To					
		1	2	3	4	5
From	1	0	0	0	0	0
	2	1	0	0	1	0
	3	0	2	0	2	0
	4	1	3	0	0	0
	5	1	3	0	0	0

Results

Results Summary for whole modelled period

Junction	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	1							
	2	0.49	2.76	0.9	1.5	A	1042	1564
	3	0.99	57.36	23.6	92.6	F	1242	1864
	4	0.86	14.23	6.0	30.4	B	1321	1982
	5	0.00	0.00	0.0	~1	A	0	0
2	1	0.95	57.37	11.5	54.3	F	636	954
	2	0.75	11.83	3.0	10.9	B	774	1160
	3							
	4	0.55	3.30	1.2	1.6	A	1131	1696

Main Results for each time segment

16:45 - 17:00

Junction	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	1			924				592				
	2	851	213	0	2560	0.332	849	924	0.0	0.5	2.123	A
	3	1019	255	849	1802	0.566	1014	0	0.0	1.3	4.632	A
	4	1084	271	437	1971	0.550	1079	1426	0.0	1.2	4.109	A
	5	0	0	1516	490	0.000	0	0	0.0	0.0	0.000	A
2	1	522	130	921	1048	0.498	518	0	0.0	1.0	6.772	A
	2	635	159	816	1465	0.433	632	623	0.0	0.8	4.376	A
	3			851				597				
	4	924	231	0	2471	0.374	921	851	0.0	0.6	2.386	A

17:00 - 17:15

Junction	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	1			1105				709				
	2	1018	255	0	2560	0.398	1017	1105	0.5	0.7	2.355	A
	3	1217	304	1017	1674	0.727	1212	0	1.3	2.6	7.863	A
	4	1295	324	523	1913	0.677	1291	1706	1.2	2.1	5.880	A
	5	0	0	1814	357	0.000	0	0	0.0	0.0	0.000	A
2	1	623	156	1104	943	0.660	619	0	1.0	1.9	11.048	B
	2	758	189	977	1367	0.554	756	746	0.8	1.2	5.976	A
	3			1018				715				
	4	1105	276	0	2471	0.447	1104	1018	0.6	0.8	2.708	A

17:15 - 17:30

Junction	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	1			1335				860				
	2	1227	307	0	2560	0.479	1226	1335	0.7	0.9	2.720	A
	3	1491	373	1226	1516	0.984	1436	0	2.6	16.4	33.698	D
	4	1585	396	623	1846	0.859	1571	2038	2.1	5.7	12.768	B
	5	0	0	2195	187	0.000	0	0	0.0	0.0	0.000	A
2	1	763	191	1333	812	0.940	735	0	1.9	8.8	38.270	E
	2	928	232	1170	1248	0.744	922	898	1.2	2.8	11.014	B
	3			1227				866				
	4	1335	334	0	2471	0.540	1333	1227	0.8	1.2	3.250	A

17:30 - 17:45

Junction	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	1			1349				869				
	2	1244	311	0	2560	0.486	1243	1349	0.9	0.9	2.760	A
	3	1491	373	1243	1502	0.993	1462	0	16.4	23.6	57.364	F
	4	1585	396	634	1839	0.862	1584	2071	5.7	6.0	14.231	B
	5	0	0	2218	176	0.000	0	0	0.0	0.0	0.000	A
2	1	763	191	1349	802	0.951	752	0	8.8	11.5	57.367	F
	2	928	232	1191	1236	0.751	928	911	2.8	3.0	11.832	B
	3			1244				875				
	4	1349	337	0	2471	0.546	1349	1244	1.2	1.2	3.300	A

17:45 - 18:00

Junction	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	1			1139				724				
	2	1055	264	0	2560	0.412	1055	1139	0.9	0.7	2.417	A
	3	1217	304	1055	1645	0.740	1300	0	23.6	3.0	13.189	B
	4	1295	324	553	1893	0.684	1310	1802	6.0	2.3	6.465	A
	5	0	0	1863	335	0.000	0	0	0.0	0.0	0.000	A
2	1	623	156	1141	922	0.675	660	0	11.5	2.2	15.635	C
	2	758	189	1024	1338	0.567	764	776	3.0	1.4	6.459	A
	3			1055				734				
	4	1139	285	0	2471	0.461	1141	1055	1.2	0.9	2.786	A

18:00 - 18:15

Junction	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	1			932				598				
	2	861	215	0	2560	0.336	862	932	0.7	0.5	2.143	A
	3	1019	255	862	1792	0.569	1026	0	3.0	1.4	4.837	A
	4	1084	271	443	1967	0.551	1088	1445	2.3	1.3	4.206	A
	5	0	0	1531	484	0.000	0	0	0.0	0.0	0.000	A
2	1	522	130	933	1041	0.501	526	0	2.2	1.0	7.090	A
	2	635	159	828	1458	0.435	637	632	1.4	0.8	4.473	A
	3			861				604				
	4	932	233	0	2471	0.377	933	861	0.9	0.6	2.410	A

Queue Variation Results for each time segment

16:45 - 17:00

Junction	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	1									
	2	0.50	0.00	0.00	0.50	0.50			N/A	N/A
	3	1.31	0.22	1.21	1.92	2.41			N/A	N/A
	4	1.24	0.57	1.12	1.39	1.72			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A
2	1	0.98	0.53	1.02	1.04	1.04			N/A	N/A
	2	0.77	0.56	1.02	1.42	1.48			N/A	N/A
	3									
	4	0.61	0.57	1.03	1.44	1.49			N/A	N/A

17:00 - 17:15

Junction	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	1									
	2	0.66	0.09	0.80	1.38	1.45			N/A	N/A
	3	2.64	0.04	0.44	7.26	12.92			N/A	N/A
	4	2.10	0.04	0.45	5.72	9.70			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A
2	1	1.89	0.05	0.50	4.98	7.90			N/A	N/A
	2	1.25	0.05	0.65	2.86	4.16			N/A	N/A
	3									
	4	0.83	0.08	0.83	1.06	1.61			N/A	N/A

17:15 - 17:30

Junction	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	1									
	2	0.92	0.03	0.26	0.92	0.92			N/A	N/A
	3	16.41	0.22	7.70	42.83	60.03			N/A	N/A
	4	5.65	0.03	0.35	10.97	30.37			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A
2	1	8.84	0.09	2.44	24.68	36.96			N/A	N/A
	2	2.82	0.03	0.30	2.82	10.93			N/A	N/A
	3									
	4	1.20	0.03	0.26	1.20	1.20			N/A	N/A

17:30 - 17:45

Junction	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	1									
	2	0.95	0.03	0.27	0.95	1.41			N/A	N/A
	3	23.64	0.19	9.54	64.38	92.64			N/A	N/A
	4	6.02	0.03	0.30	6.02	22.63			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A
2	1	11.49	0.07	1.47	33.56	54.33			N/A	N/A
	2	2.97	0.03	0.28	2.97	6.49			N/A	N/A
	3									
	4	1.23	0.03	0.27	1.23	1.23			N/A	N/A

17:45 - 18:00

Junction	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	1									
	2	0.71	0.56	1.01	1.41	1.46			N/A	N/A
	3	3.03	0.04	0.41	8.12	15.63			N/A	N/A
	4	2.26	0.05	0.52	6.08	9.73			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A
2	1	2.18	0.04	0.39	5.81	10.94			N/A	N/A
	2	1.35	0.07	0.90	2.90	4.03			N/A	N/A
	3									
	4	0.88	0.57	1.03	1.44	1.49			N/A	N/A

18:00 - 18:15

Junction	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	1									
	2	0.51	0.51	1.01	1.41	1.46			N/A	N/A
	3	1.36	0.03	0.29	1.36	5.38			N/A	N/A
	4	1.27	0.03	0.35	2.94	6.41			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A
2	1	1.02	0.03	0.29	1.33	4.39			N/A	N/A
	2	0.79	0.04	0.39	1.84	3.00			N/A	N/A
	3									
	4	0.63	0.14	0.92	1.42	1.48			N/A	N/A

D13 - 2042 | Local Plan + Committed | 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	Arm order	Junction Delay (s)	Junction LOS
1	Northern Rbt	Standard Roundabout	1, 2, 3, 4, 5	24.73	C
2	Southern Rbt	Standard Roundabout	1, 2, 3, 4	103.70	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	58.91	F

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2042	Local Plan + Committed	AM	ONE HOUR	07:45	09:15	15	✓

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
1	2	2	4	Queue limited	Normal	0	100.00	33.00
2	4	1	2	Queue limited	Normal	0	100.00	33.00

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1	1					
	2	✓				
	3		ONE HOUR	✓	1108	100.000
	4		ONE HOUR	✓	1650	100.000
	5		ONE HOUR	✓	109	100.000
2	1		ONE HOUR	✓	779	100.000
	2		ONE HOUR	✓	958	100.000
	3					
	4	✓				

Origin-Destination Data

Demand (PCU/hr)

Junction 2	From	To				
			1	2	3	4
		1	0	164	0	615
		2	0	0	307	651
		3	0	0	0	0
		4	0	591	817	0

Demand (PCU/hr)

Junction 1

	To					
		1	2	3	4	5
From	1	0	0	0	0	0
	2	231	0	0	987	57
	3	0	258	0	817	33
	4	527	1095	0	0	28
	5	45	64	0	0	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

Junction 2

	To				
From		1	2	3	4
	1	0	6	0	4
	2	0	0	3	3
	3	0	0	0	0
	4	0	3	7	0

Heavy Vehicle %

Junction 1

	To					
		1	2	3	4	5
From	1	0	0	0	0	0
	2	5	0	0	3	0
	3	0	7	0	6	0
	4	3	5	0	0	0
	5	3	5	0	0	0

Results

Results Summary for whole modelled period

Junction	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	1							
	2	0.49	2.84	1.0	1.5	A	1160	1740
	3	0.81	13.61	4.5	21.0	B	1017	1525
	4	0.98	44.04	21.4	96.7	E	1514	2271
	5	0.80	99.35	3.0	13.2	F	100	150
2	1	1.24	339.11	86.6	134.7	F	715	1072
	2	0.97	59.50	16.8	72.4	F	879	1319
	3							
	4	0.63	4.09	1.7	3.0	A	1299	1949

Main Results for each time segment

07:45 - 08:00

Junction	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	1			1061				599				
	2	945	236	0	2560	0.369	942	1061	0.0	0.6	2.294	A
	3	834	209	942	1731	0.482	830	0	0.0	1.0	4.223	A
	4	1242	311	431	1975	0.629	1235	1342	0.0	1.7	5.030	A
	5	82	21	1578	462	0.177	81	88	0.0	0.2	9.816	A
2	1	586	147	1058	970	0.605	580	0	0.0	1.6	9.502	A
	2	721	180	1072	1309	0.551	716	566	0.0	1.2	6.207	A
	3			945				843				
	4	1061	265	0	2471	0.429	1058	945	0.0	0.8	2.675	A

08:00 - 08:15

Junction	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	1			1268				716				
	2	1126	281	0	2560	0.440	1125	1268	0.6	0.8	2.587	A
	3	996	249	1125	1592	0.626	993	0	1.0	1.7	6.339	A
	4	1483	371	515	1919	0.773	1477	1603	1.7	3.4	8.366	A
	5	98	24	1887	325	0.302	97	105	0.2	0.4	16.426	C
2	1	700	175	1267	850	0.824	689	0	1.6	4.3	22.079	C
	2	861	215	1279	1181	0.729	856	677	1.2	2.7	11.190	B
	3			1126				1009				
	4	1268	317	0	2471	0.513	1267	1126	0.8	1.1	3.144	A

08:15 - 08:30

Junction	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	1			1519				835				
	2	1240	310	0	2560	0.484	1239	1519	0.8	1.0	2.811	A
	3	1220	305	1239	1505	0.811	1210	0	1.7	4.2	12.534	B
	4	1817	454	598	1863	0.975	1764	1852	3.4	16.5	28.806	D
	5	120	30	2241	166	0.722	113	121	0.4	2.1	64.384	F
2	1	858	214	1517	706	1.215	697	0	4.3	44.5	141.490	F
	2	1055	264	1430	1089	0.969	1015	783	2.7	12.6	38.218	E
	3			1240				1205				
	4	1519	380	0	2471	0.615	1517	1240	1.1	1.7	3.960	A

08:30 - 08:45

Junction	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	1			1545				848				
	2	1249	312	0	2560	0.488	1249	1545	1.0	1.0	2.833	A
	3	1220	305	1249	1497	0.815	1219	0	4.2	4.5	13.610	B
	4	1817	454	602	1860	0.977	1797	1866	16.5	21.4	44.041	E
	5	120	30	2277	150	0.800	116	123	2.1	3.0	99.347	F
2	1	858	214	1545	690	1.243	689	0	44.5	86.6	339.105	F
	2	1055	264	1440	1083	0.974	1038	793	12.6	16.8	59.497	F
	3			1249				1229				
	4	1545	386	0	2471	0.625	1545	1249	1.7	1.7	4.087	A

08:45 - 09:00

Junction	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	1			1328				768				
	2	1255	314	0	2560	0.490	1255	1328	1.0	1.0	2.844	A
	3	996	249	1255	1494	0.667	1005	0	4.5	2.2	7.957	A
	4	1483	371	547	1897	0.782	1553	1712	21.4	3.9	12.984	B
	5	98	24	1988	279	0.351	108	112	3.0	0.6	23.015	C
2	1	700	175	1330	813	0.861	804	0	86.6	60.7	324.304	F
	2	861	215	1406	1104	0.780	912	727	16.8	4.0	23.519	C
	3			1255				1064				
	4	1328	332	0	2471	0.537	1330	1255	1.7	1.2	3.328	A

09:00 - 09:15

Junction	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	1			1074				641				
	2	1146	286	0	2560	0.447	1146	1074	1.0	0.8	2.630	A
	3	834	209	1146	1576	0.529	838	0	2.2	1.2	5.202	A
	4	1242	311	479	1943	0.639	1250	1505	3.9	1.9	5.485	A
	5	82	21	1632	438	0.187	83	97	0.6	0.2	10.603	B
2	1	586	147	1076	960	0.611	822	0	60.7	1.8	79.052	F
	2	721	180	1273	1185	0.609	731	625	4.0	1.6	8.317	A
	3			1146				858				
	4	1074	268	0	2471	0.435	1076	1146	1.2	0.8	2.717	A

Queue Variation Results for each time segment

07:45 - 08:00

Junction	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	1									
	2	0.60	0.57	1.03	1.45	1.50			N/A	N/A
	3	0.98	0.58	1.06	1.48	1.54			N/A	N/A
	4	1.74	0.38	1.54	2.74	3.24			N/A	N/A
	5	0.22	0.00	0.00	0.22	0.22			N/A	N/A
2	1	1.55	0.07	0.94	3.54	5.03			N/A	N/A
	2	1.25	0.31	1.18	1.77	1.99			N/A	N/A
	3									
	4	0.79	0.58	1.05	1.47	1.53			N/A	N/A

08:00 - 08:15

Junction	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	1									
	2	0.81	0.12	0.90	1.46	1.53			N/A	N/A
	3	1.74	0.05	0.51	4.52	7.12			N/A	N/A
	4	3.42	0.05	0.49	9.61	16.33			N/A	N/A
	5	0.44	0.04	0.37	1.20	1.38			N/A	N/A
2	1	4.30	0.07	1.27	11.94	18.43			N/A	N/A
	2	2.65	0.05	0.60	7.25	11.64			N/A	N/A
	3									
	4	1.10	0.06	0.79	2.12	3.03			N/A	N/A

08:15 - 08:30

Junction	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	1									
	2	0.96	0.03	0.26	0.96	0.96			N/A	N/A
	3	4.23	0.03	0.33	5.93	20.95			N/A	N/A
	4	16.53	0.15	6.12	45.30	65.80			N/A	N/A
	5	2.13	0.04	0.40	5.61	10.68			N/A	N/A
2	1	44.45	18.93	41.52	68.12	77.27			N/A	N/A
	2	12.58	0.15	5.08	33.66	48.17			N/A	N/A
	3									
	4	1.66	0.03	0.27	1.66	1.66			N/A	N/A

08:30 - 08:45

Junction	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	1									
	2	0.98	0.03	0.27	0.98	0.98			N/A	N/A
	3	4.46	0.03	0.30	4.46	13.20			N/A	N/A
	4	21.37	0.10	4.53	62.15	96.70			N/A	N/A
	5	3.03	0.06	0.79	8.31	13.15			N/A	N/A
2	1	86.58	46.99	83.29	121.94	134.72			N/A	N/A
	2	16.77	0.11	4.48	47.83	72.41			N/A	N/A
	3									
	4	1.74	0.03	0.27	1.74	1.74			N/A	N/A

08:45 - 09:00

Junction	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	1									
	2	0.99	0.57	1.03	1.45	1.50			N/A	N/A
	3	2.18	0.07	1.08	5.36	7.86			N/A	N/A
	4	3.93	0.04	0.45	10.92	20.05			N/A	N/A
	5	0.58	0.04	0.40	1.56	1.81			N/A	N/A
2	1	60.73	35.76	58.71	82.17	89.77			N/A	N/A
	2	3.97	0.05	0.56	11.26	18.82			N/A	N/A
	3									
	4	1.23	0.57	1.16	1.55	1.84			N/A	N/A

09:00 - 09:15

Junction	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	1									
	2	0.84	0.57	1.03	1.45	1.50			N/A	N/A
	3	1.21	0.04	0.40	3.04	5.44			N/A	N/A
	4	1.88	0.03	0.31	2.34	8.98			N/A	N/A
	5	0.24	0.03	0.29	0.72	1.42			N/A	N/A
2	1	1.76	0.03	0.28	1.76	1.83			N/A	N/A
	2	1.64	0.03	0.31	2.29	8.04			N/A	N/A
	3									
	4	0.81	0.11	0.91	1.49	1.56			N/A	N/A

D14 - 2042 | Local Plan + Committed | 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	Arm order	Junction Delay (s)	Junction LOS
1	Northern Rbt	Standard Roundabout	1, 2, 3, 4, 5	53.63	F
2	Southern Rbt	Standard Roundabout	1, 2, 3, 4	31.98	D

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	44.82	E

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2042	Local Plan + Committed	PM	ONE HOUR	16:45	18:15	15	✓

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
1	2	2	4	Queue limited	Normal	0	100.00	33.00
2	4	1	2	Queue limited	Normal	0	100.00	33.00

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1	1					
	2	✓				
	3		ONE HOUR	✓	1416	100.000
	4		ONE HOUR	✓	1451	100.000
	5		ONE HOUR	✓	119	100.000
2	1		ONE HOUR	✓	731	100.000
	2		ONE HOUR	✓	851	100.000
	3					
	4	✓				

Origin-Destination Data

Demand (PCU/hr)

	To					
Junction 2	From	1	2	3	4	
		1	0	175	0	556
		2	0	0	220	631
		3	0	0	0	0
		4	0	650	582	0

Demand (PCU/hr)

Junction 1

	To					
		1	2	3	4	5
From	1	0	0	0	0	0
	2	233	0	0	909	49
	3	0	346	0	998	72
	4	562	889	0	0	0
	5	48	43	0	28	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

Junction 2

	To				
		1	2	3	4
From	1	0	2	0	0
	2	0	0	1	2
	3	0	0	0	0
	4	0	2	4	0

Heavy Vehicle %

Junction 1

	To					
		1	2	3	4	5
From	1	0	0	0	0	0
	2	1	0	0	1	0
	3	0	2	0	2	0
	4	1	3	0	0	0
	5	1	3	0	0	0

Results

Results Summary for whole modelled period

Junction	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	1							
	2	0.50	2.89	1.0	1.5	A	1088	1632
	3	1.07	130.12	63.3	132.0	F	1299	1949
	4	0.90	19.68	8.3	42.5	C	1331	1997
	5	0.71	62.97	2.1	10.5	F	109	164
2	1	1.02	103.55	23.9	72.3	F	671	1006
	2	0.78	13.40	3.4	14.3	B	781	1171
	3							
	4	0.56	3.38	1.3	1.8	A	1172	1758

Main Results for each time segment

16:45 - 17:00

Junction	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	1			978				630				
	2	888	222	21	2545	0.349	886	957	0.0	0.5	2.186	A
	3	1066	267	906	1758	0.606	1060	0	0.0	1.5	5.210	A
	4	1092	273	523	1914	0.571	1087	1444	0.0	1.3	4.424	A
	5	90	22	1519	489	0.183	89	90	0.0	0.2	9.111	A
2	1	550	138	954	1029	0.535	546	0	0.0	1.1	7.415	A
	2	641	160	866	1435	0.447	637	634	0.0	0.8	4.575	A
	3			888				616				
	4	957	239	0	2471	0.387	954	888	0.0	0.6	2.438	A

17:00 - 17:15

Junction	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	1			1169				754				
	2	1062	265	25	2543	0.418	1061	1144	0.5	0.7	2.451	A
	3	1273	318	1086	1622	0.785	1265	0	1.5	3.5	10.066	B
	4	1304	326	625	1845	0.707	1300	1726	1.3	2.4	6.696	A
	5	107	27	1817	356	0.301	106	108	0.2	0.4	14.589	B
2	1	657	164	1143	921	0.714	652	0	1.1	2.4	13.223	B
	2	765	191	1036	1331	0.575	763	759	0.8	1.4	6.426	A
	3			1062				737				
	4	1144	286	0	2471	0.463	1143	1062	0.6	0.9	2.788	A

17:15 - 17:30

Junction	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	1			1392				908				
	2	1263	316	30	2539	0.497	1262	1362	0.7	1.0	2.841	A
	3	1559	390	1291	1466	1.064	1434	0	3.5	34.9	58.993	F
	4	1598	399	722	1781	0.897	1577	2003	2.4	7.5	16.624	C
	5	131	33	2174	196	0.668	126	125	0.4	1.8	48.871	E
2	1	805	201	1360	796	1.011	754	0	2.4	15.2	56.585	F
	2	937	234	1216	1220	0.768	930	898	1.4	3.2	12.302	B
	3			1263				883				
	4	1362	340	0	2471	0.551	1360	1263	0.9	1.3	3.331	A

17:30 - 17:45

Junction	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	1			1407				920				
	2	1280	320	30	2539	0.504	1280	1377	1.0	1.0	2.886	A
	3	1559	390	1310	1451	1.074	1445	0	34.9	63.3	130.118	F
	4	1598	399	730	1775	0.900	1595	2026	7.5	8.3	19.683	C
	5	131	33	2198	185	0.707	130	126	1.8	2.1	62.972	F
2	1	805	201	1377	786	1.023	770	0	15.2	23.9	103.549	F
	2	937	234	1236	1208	0.776	936	911	3.2	3.4	13.401	B
	3			1280				892				
	4	1377	344	0	2471	0.557	1377	1280	1.3	1.3	3.384	A

17:45 - 18:00

Junction	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	1			1248				781				
	2	1135	284	27	2541	0.447	1136	1221	1.0	0.8	2.586	A
	3	1273	318	1162	1564	0.814	1504	0	63.3	5.6	78.025	F
	4	1304	326	713	1787	0.730	1326	1953	8.3	2.9	8.343	A
	5	107	27	1916	312	0.343	113	123	2.1	0.5	18.971	C
2	1	657	164	1222	875	0.751	739	0	23.9	3.3	38.402	E
	2	765	191	1140	1267	0.604	772	822	3.4	1.6	7.503	A
	3			1135				777				
	4	1221	305	0	2471	0.494	1222	1135	1.3	1.0	2.970	A

18:00 - 18:15

Junction	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	1			991				639				
	2	902	226	21	2545	0.355	903	970	0.8	0.6	2.216	A
	3	1066	267	925	1744	0.611	1082	0	5.6	1.6	5.669	A
	4	1092	273	533	1906	0.573	1098	1473	2.9	1.4	4.585	A
	5	90	22	1539	480	0.187	91	92	0.5	0.2	9.422	A
2	1	550	138	971	1019	0.540	559	0	3.3	1.2	7.992	A
	2	641	160	884	1424	0.450	644	646	1.6	0.8	4.713	A
	3			902				625				
	4	970	243	0	2471	0.392	971	902	1.0	0.7	2.474	A

Queue Variation Results for each time segment

16:45 - 17:00

Junction	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	1									
	2	0.54	0.54	1.01	1.41	1.46			N/A	N/A
	3	1.55	0.11	1.21	2.94	3.90			N/A	N/A
	4	1.34	0.57	1.24	1.74	1.91			N/A	N/A
	5	0.22	0.00	0.00	0.22	0.22			N/A	N/A
2	1	1.13	0.22	1.09	1.64	1.89			N/A	N/A
	2	0.81	0.56	1.02	1.42	1.48			N/A	N/A
	3									
	4	0.65	0.57	1.03	1.44	1.49			N/A	N/A

17:00 - 17:15

Junction	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	1									
	2	0.72	0.09	0.82	1.40	1.48			N/A	N/A
	3	3.54	0.05	0.47	9.95	17.17			N/A	N/A
	4	2.40	0.05	0.46	6.63	11.28			N/A	N/A
	5	0.43	0.03	0.34	1.13	1.33			N/A	N/A
2	1	2.38	0.05	0.55	6.49	10.37			N/A	N/A
	2	1.35	0.05	0.62	3.21	4.81			N/A	N/A
	3									
	4	0.88	0.08	0.84	1.37	1.81			N/A	N/A

17:15 - 17:30

Junction	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	1									
	2	0.99	0.03	0.26	0.99	0.99			N/A	N/A
	3	34.87	6.48	29.28	65.78	79.73			N/A	N/A
	4	7.55	0.04	0.42	20.07	41.03			N/A	N/A
	5	1.75	0.03	0.34	3.84	9.16			N/A	N/A
2	1	15.17	0.71	9.85	34.80	45.65			N/A	N/A
	2	3.18	0.03	0.31	3.18	14.31			N/A	N/A
	3									
	4	1.25	0.03	0.26	1.25	1.25			N/A	N/A

17:30 - 17:45

Junction	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	1									
	2	1.02	0.03	0.27	1.02	1.02			N/A	N/A
	3	63.32	16.95	56.03	111.58	132.03			N/A	N/A
	4	8.27	0.03	0.34	13.09	42.48			N/A	N/A
	5	2.13	0.04	0.41	5.74	10.47			N/A	N/A
2	1	23.85	1.08	15.68	55.15	72.32			N/A	N/A
	2	3.38	0.03	0.29	3.38	9.25			N/A	N/A
	3									
	4	1.29	0.03	0.27	1.29	1.29			N/A	N/A

17:45 - 18:00

Junction	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	1									
	2	0.82	0.56	1.01	1.41	1.46			N/A	N/A
	3	5.57	0.05	0.67	16.02	27.20			N/A	N/A
	4	2.85	0.05	0.55	7.90	12.82			N/A	N/A
	5	0.55	0.04	0.41	1.41	1.41			N/A	N/A
2	1	3.33	0.04	0.43	9.27	16.72			N/A	N/A
	2	1.58	0.07	0.97	3.60	5.05			N/A	N/A
	3									
	4	1.01	0.57	1.03	1.44	1.49			N/A	N/A

18:00 - 18:15

Junction	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	1									
	2	0.56	0.56	1.01	1.41	1.46			N/A	N/A
	3	1.63	0.03	0.28	1.63	3.97			N/A	N/A
	4	1.39	0.03	0.33	2.70	7.15			N/A	N/A
	5	0.24	0.03	0.29	0.83	1.34			N/A	N/A
2	1	1.20	0.03	0.28	1.20	3.89			N/A	N/A
	2	0.84	0.04	0.37	1.98	3.60			N/A	N/A
	3									
	4	0.67	0.17	0.94	1.42	1.48			N/A	N/A

D15 - 2042 | Local Plan + Committed + Development | 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	Arm order	Junction Delay (s)	Junction LOS
1	Northern Rbt	Standard Roundabout	1, 2, 3, 4, 5	26.41	D
2	Southern Rbt	Standard Roundabout	1, 2, 3, 4	112.14	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	63.68	F

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D15	2042	Local Plan + Committed + Development	AM	ONE HOUR	07:45	09:15	15	✓

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
1	2	2	4	Queue limited	Normal	0	100.00	33.00
2	4	1	2	Queue limited	Normal	0	100.00	33.00

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1	1					
	2	✓				
	3		ONE HOUR	✓	1115	100.000
	4		ONE HOUR	✓	1653	100.000
	5		ONE HOUR	✓	109	100.000
2	1		ONE HOUR	✓	782	100.000
	2		ONE HOUR	✓	986	100.000
	3					
	4	✓				

Origin-Destination Data

		Demand (PCU/hr)				
Junction 2	From	To				
			1	2	3	4
		1	0	167	0	615
		2	0	0	323	663
		3	0	0	0	0
		4	0	601	817	0

Demand (PCU/hr)

Junction 1

	To					
		1	2	3	4	5
From	1	0	0	0	0	0
	2	237	0	0	993	57
	3	0	265	0	817	33
	4	527	1098	0	0	28
	5	45	64	0	0	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

Junction 2

	To				
From		1	2	3	4
	1	0	6	0	4
	2	0	0	3	3
	3	0	0	0	0
	4	0	3	7	0

Heavy Vehicle %

Junction 1

	To					
		1	2	3	4	5
From	1	0	0	0	0	0
	2	5	0	0	3	0
	3	0	7	0	6	0
	4	3	5	0	0	0
	5	3	5	0	0	0

Results

Results Summary for whole modelled period

Junction	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	1							
	2	0.50	2.88	1.0	1.5	A	1171	1756
	3	0.82	14.01	4.6	22.1	B	1023	1535
	4	0.98	47.37	23.2	100.1	E	1517	2275
	5	0.83	110.90	3.4	14.2	F	100	150
2	1	1.26	355.89	90.6	138.7	F	718	1076
	2	1.00	75.02	22.5	81.1	F	905	1357
	3							
	4	0.63	4.12	1.8	3.1	A	1308	1962

Main Results for each time segment

07:45 - 08:00

Junction	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	1			1068				603				
	2	954	238	0	2560	0.372	951	1068	0.0	0.6	2.306	A
	3	839	210	951	1724	0.487	835	0	0.0	1.0	4.278	A
	4	1244	311	441	1968	0.632	1237	1346	0.0	1.8	5.088	A
	5	82	21	1590	457	0.180	81	88	0.0	0.2	9.952	A
2	1	589	147	1065	966	0.610	582	0	0.0	1.6	9.655	A
	2	742	186	1072	1309	0.567	737	576	0.0	1.3	6.426	A
	3			954				855				
	4	1068	267	0	2471	0.432	1065	954	0.0	0.8	2.689	A

08:00 - 08:15

Junction	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	1			1277				721				
	2	1135	284	0	2560	0.443	1135	1277	0.6	0.8	2.605	A
	3	1002	251	1135	1585	0.633	999	0	1.0	1.8	6.486	A
	4	1486	372	526	1911	0.778	1479	1608	1.8	3.5	8.552	A
	5	98	24	1900	318	0.308	97	105	0.2	0.5	16.877	C
2	1	703	176	1276	845	0.832	691	0	1.6	4.5	22.965	C
	2	886	222	1279	1182	0.750	880	688	1.3	2.9	12.032	B
	3			1135				1023				
	4	1277	319	0	2471	0.517	1276	1135	0.8	1.1	3.166	A

08:15 - 08:30

Junction	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	1			1527				837				
	2	1241	310	0	2560	0.485	1240	1527	0.8	1.0	2.813	A
	3	1228	307	1240	1504	0.816	1217	0	1.8	4.4	12.862	B
	4	1820	455	609	1856	0.981	1764	1849	3.5	17.6	30.197	D
	5	120	30	2252	161	0.744	113	121	0.5	2.3	69.122	F
2	1	861	215	1525	702	1.227	693	0	4.5	46.4	147.807	F
	2	1086	271	1424	1093	0.993	1035	794	2.9	15.7	44.431	E
	3			1241				1217				
	4	1527	382	0	2471	0.618	1525	1241	1.1	1.7	3.993	A

08:30 - 08:45

Junction	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	1			1553				851				
	2	1250	312	0	2560	0.488	1250	1553	1.0	1.0	2.835	A
	3	1228	307	1250	1497	0.820	1227	0	4.4	4.6	14.006	B
	4	1820	455	613	1853	0.982	1797	1863	17.6	23.2	47.368	E
	5	120	30	2289	145	0.829	116	122	2.3	3.4	110.899	F
2	1	861	215	1553	685	1.257	684	0	46.4	90.6	355.890	F
	2	1086	271	1433	1087	0.999	1058	804	15.7	22.5	75.022	F
	3			1250				1241				
	4	1553	388	0	2471	0.629	1553	1250	1.7	1.8	4.124	A

08:45 - 09:00

Junction	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	1			1342				777				
	2	1270	318	0	2560	0.496	1270	1342	1.0	1.0	2.879	A
	3	1002	251	1270	1482	0.676	1012	0	4.6	2.3	8.276	A
	4	1486	372	561	1888	0.787	1563	1721	23.2	4.1	14.059	B
	5	98	24	2011	269	0.364	109	113	3.4	0.6	24.883	C
2	1	703	176	1344	805	0.873	796	0	90.6	67.3	349.234	F
	2	886	222	1401	1107	0.801	958	740	22.5	4.6	32.794	D
	3			1270				1088				
	4	1342	336	0	2471	0.543	1344	1270	1.8	1.3	3.367	A

09:00 - 09:15

Junction	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	1			1082				651				
	2	1176	294	0	2560	0.459	1176	1082	1.0	0.9	2.687	A
	3	839	210	1176	1553	0.541	843	0	2.3	1.3	5.412	A
	4	1244	311	494	1932	0.644	1253	1526	4.1	1.9	5.591	A
	5	82	21	1649	431	0.190	84	98	0.6	0.2	10.844	B
2	1	589	147	1084	955	0.616	851	0	67.3	1.8	102.422	F
	2	742	186	1293	1173	0.633	753	641	4.6	1.8	9.063	A
	3			1176				871				
	4	1082	270	0	2471	0.438	1084	1176	1.3	0.8	2.735	A

Queue Variation Results for each time segment

07:45 - 08:00

Junction	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	1									
	2	0.61	0.57	1.03	1.45	1.50			N/A	N/A
	3	1.00	0.58	1.06	1.48	1.54			N/A	N/A
	4	1.77	0.34	1.55	2.82	3.42			N/A	N/A
	5	0.22	0.00	0.00	0.22	0.22			N/A	N/A
2	1	1.59	0.06	0.90	3.70	5.27			N/A	N/A
	2	1.33	0.22	1.22	1.95	2.45			N/A	N/A
	3									
	4	0.80	0.58	1.05	1.47	1.53			N/A	N/A

08:00 - 08:15

Junction	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	1									
	2	0.82	0.12	0.91	1.47	1.54			N/A	N/A
	3	1.79	0.05	0.51	4.68	7.36			N/A	N/A
	4	3.50	0.05	0.50	9.86	16.70			N/A	N/A
	5	0.45	0.04	0.38	1.24	1.40			N/A	N/A
2	1	4.50	0.07	1.36	12.45	19.09			N/A	N/A
	2	2.94	0.05	0.70	8.10	12.94			N/A	N/A
	3									
	4	1.12	0.06	0.79	2.21	3.10			N/A	N/A

08:15 - 08:30

Junction	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	1									
	2	0.97	0.03	0.26	0.97	0.97			N/A	N/A
	3	4.37	0.03	0.34	6.59	22.09			N/A	N/A
	4	17.57	0.19	7.36	47.13	67.26			N/A	N/A
	5	2.30	0.04	0.43	6.23	11.24			N/A	N/A
2	1	46.43	20.50	43.55	70.26	79.38			N/A	N/A
	2	15.67	0.34	8.72	38.67	52.50			N/A	N/A
	3									
	4	1.68	0.03	0.27	1.68	1.68			N/A	N/A

08:30 - 08:45

Junction	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	1									
	2	0.98	0.03	0.27	0.98	0.98			N/A	N/A
	3	4.61	0.03	0.30	4.61	14.34			N/A	N/A
	4	23.23	0.13	6.50	66.32	100.07			N/A	N/A
	5	3.38	0.06	1.08	9.22	14.20			N/A	N/A
2	1	90.56	50.56	87.36	125.99	138.67			N/A	N/A
	2	22.51	0.29	11.16	58.33	81.14			N/A	N/A
	3									
	4	1.76	0.03	0.27	1.76	1.76			N/A	N/A

08:45 - 09:00

Junction	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	1									
	2	1.01	0.57	1.03	1.45	1.50			N/A	N/A
	3	2.28	0.07	1.09	5.71	8.34			N/A	N/A
	4	4.06	0.04	0.45	11.29	20.77			N/A	N/A
	5	0.62	0.04	0.40	1.23	1.97			N/A	N/A
2	1	67.32	41.23	65.35	89.57	97.38			N/A	N/A
	2	4.60	0.05	0.66	13.16	22.01			N/A	N/A
	3									
	4	1.26	0.57	1.19	1.62	1.87			N/A	N/A

09:00 - 09:15

Junction	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	1									
	2	0.88	0.57	1.03	1.45	1.50			N/A	N/A
	3	1.26	0.04	0.40	3.18	5.77			N/A	N/A
	4	1.92	0.03	0.31	2.29	9.07			N/A	N/A
	5	0.25	0.03	0.29	0.65	1.45			N/A	N/A
2	1	1.83	0.03	0.28	1.83	1.98			N/A	N/A
	2	1.82	0.03	0.31	2.42	8.85			N/A	N/A
	3									
	4	0.82	0.11	0.91	1.50	1.57			N/A	N/A

D16 - 2042 | Local Plan + Committed + Development | 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	Arm order	Junction Delay (s)	Junction LOS
1	Northern Rbt	Standard Roundabout	1, 2, 3, 4, 5	58.64	F
2	Southern Rbt	Standard Roundabout	1, 2, 3, 4	36.92	E

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	49.77	E

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D16	2042	Local Plan + Committed + Development	PM	ONE HOUR	16:45	18:15	15	✓

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
1	2	2	4	Queue limited	Normal	0	100.00	33.00
2	4	1	2	Queue limited	Normal	0	100.00	33.00

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1	1					
	2	✓				
	3		ONE HOUR	✓	1431	100.000
	4		ONE HOUR	✓	1457	100.000
	5		ONE HOUR	✓	119	100.000
2	1		ONE HOUR	✓	737	100.000
	2		ONE HOUR	✓	866	100.000
	3					
	4	✓				

Origin-Destination Data

Demand (PCU/hr)	
Junction 2	
	To
	1234
	From
	101810556
	200229637
	30000
	406715820

Demand (PCU/hr)

Junction 1

	To					
		1	2	3	4	5
From	1	0	0	0	0	0
	2	236	0	0	913	49
	3	0	361	0	998	72
	4	562	895	0	0	0
	5	48	43	0	28	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

Junction 2

	To				
		1	2	3	4
From	1	0	2	0	0
	2	0	0	1	2
	3	0	0	0	0
	4	0	2	4	0

Heavy Vehicle %

Junction 1

	To					
		1	2	3	4	5
From	1	0	0	0	0	0
	2	1	0	0	1	0
	3	0	2	0	2	0
	4	1	3	0	0	0
	5	1	3	0	0	0

Results

Results Summary for whole modelled period

Junction	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	1							
	2	0.50	2.88	1.0	1.5	A	1094	1640
	3	1.08	142.02	70.0	138.6	F	1313	1970
	4	0.91	21.22	8.9	47.7	C	1337	2005
	5	0.74	72.69	2.4	11.7	F	109	164
2	1	1.05	122.96	29.3	77.6	F	676	1014
	2	0.78	13.88	3.6	15.7	B	795	1192
	3							
	4	0.56	3.44	1.3	1.9	A	1191	1787

Main Results for each time segment

16:45 - 17:00

Junction	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	1			994				632				
	2	892	223	21	2545	0.350	890	973	0.0	0.5	2.192	A
	3	1077	269	911	1755	0.614	1071	0	0.0	1.6	5.318	A
	4	1097	274	536	1905	0.576	1091	1446	0.0	1.4	4.496	A
	5	90	22	1537	481	0.186	89	90	0.0	0.2	9.293	A
2	1	555	139	970	1020	0.544	550	0	0.0	1.2	7.621	A
	2	652	163	866	1435	0.454	649	655	0.0	0.8	4.637	A
	3			892				622				
	4	973	243	0	2471	0.394	970	892	0.0	0.7	2.463	A

17:00 - 17:15

Junction	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	1			1188				756				
	2	1067	267	25	2543	0.420	1066	1163	0.5	0.7	2.460	A
	3	1286	322	1091	1618	0.795	1278	0	1.6	3.7	10.530	B
	4	1310	327	640	1835	0.714	1305	1729	1.4	2.5	6.890	A
	5	107	27	1838	346	0.309	106	108	0.2	0.4	15.149	C
2	1	663	166	1162	910	0.728	657	0	1.2	2.5	13.992	B
	2	779	195	1035	1331	0.585	776	783	0.8	1.4	6.572	A
	3			1067				745				
	4	1163	291	0	2471	0.470	1162	1067	0.7	0.9	2.827	A

17:15 - 17:30

Junction	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	1			1409				909				
	2	1262	316	29	2539	0.497	1261	1380	0.7	1.0	2.840	A
	3	1576	394	1291	1466	1.075	1438	0	3.7	38.2	63.154	F
	4	1604	401	735	1772	0.905	1582	1993	2.5	8.1	17.612	C
	5	131	33	2193	188	0.698	125	124	0.4	2.0	54.132	F
2	1	811	203	1378	786	1.033	751	0	2.5	17.7	63.601	F
	2	953	238	1207	1226	0.778	946	922	1.4	3.3	12.724	B
	3			1262				890				
	4	1380	345	0	2471	0.558	1378	1262	0.9	1.3	3.384	A

17:30 - 17:45

Junction	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	1			1426				921				
	2	1278	319	30	2539	0.503	1278	1395	1.0	1.0	2.881	A
	3	1576	394	1308	1453	1.084	1448	0	38.2	70.0	142.024	F
	4	1604	401	742	1767	0.908	1601	2014	8.1	8.9	21.216	C
	5	131	33	2218	176	0.742	129	125	2.0	2.4	72.692	F
2	1	811	203	1395	776	1.046	765	0	17.7	29.3	122.964	F
	2	953	238	1225	1215	0.785	953	935	3.3	3.6	13.885	B
	3			1278				900				
	4	1395	349	0	2471	0.565	1395	1278	1.3	1.3	3.441	A

17:45 - 18:00

Junction	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	1			1272				788				
	2	1155	289	27	2541	0.454	1156	1245	1.0	0.8	2.625	A
	3	1286	322	1182	1548	0.831	1526	0	70.0	10.1	99.729	F
	4	1310	327	737	1771	0.740	1333	1972	8.9	3.0	8.841	A
	5	107	27	1946	298	0.359	114	124	2.4	0.6	20.639	C
2	1	663	166	1247	861	0.769	764	0	29.3	3.8	56.351	F
	2	779	195	1156	1257	0.619	786	855	3.6	1.7	7.891	A
	3			1155				787				
	4	1245	311	0	2471	0.504	1247	1155	1.3	1.1	3.026	A

18:00 - 18:15

Junction	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	1			1012				641				
	2	908	227	21	2545	0.357	909	991	0.8	0.6	2.224	A
	3	1077	269	931	1739	0.619	1111	0	10.1	1.7	6.150	A
	4	1097	274	553	1894	0.579	1103	1489	3.0	1.4	4.694	A
	5	90	22	1563	469	0.191	91	93	0.6	0.2	9.690	A
2	1	555	139	992	1007	0.551	565	0	3.8	1.3	8.359	A
	2	652	163	887	1422	0.459	655	670	1.7	0.9	4.798	A
	3			908				634				
	4	991	248	0	2471	0.401	992	908	1.1	0.7	2.508	A

Queue Variation Results for each time segment

16:45 - 17:00

Junction	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	1									
	2	0.54	0.54	1.01	1.41	1.46			N/A	N/A
	3	1.60	0.10	1.21	3.13	4.20			N/A	N/A
	4	1.37	0.57	1.27	1.79	1.95			N/A	N/A
	5	0.23	0.00	0.00	0.23	0.23			N/A	N/A
2	1	1.18	0.17	1.11	1.77	2.00			N/A	N/A
	2	0.84	0.56	1.02	1.42	1.48			N/A	N/A
	3									
	4	0.66	0.57	1.03	1.44	1.49			N/A	N/A

17:00 - 17:15

Junction	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	1									
	2	0.73	0.09	0.82	1.41	1.48			N/A	N/A
	3	3.74	0.05	0.49	10.58	18.08			N/A	N/A
	4	2.48	0.05	0.46	6.86	11.70			N/A	N/A
	5	0.44	0.04	0.37	1.20	1.36			N/A	N/A
2	1	2.55	0.05	0.60	6.95	11.10			N/A	N/A
	2	1.41	0.05	0.60	3.42	5.08			N/A	N/A
	3									
	4	0.91	0.08	0.84	1.50	1.90			N/A	N/A

17:15 - 17:30

Junction	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	1									
	2	0.99	0.03	0.26	0.99	0.99			N/A	N/A
	3	38.18	8.54	32.89	69.49	83.20			N/A	N/A
	4	8.08	0.04	0.45	22.28	43.36			N/A	N/A
	5	1.95	0.04	0.36	4.82	10.14			N/A	N/A
2	1	17.68	1.02	12.80	37.95	48.38			N/A	N/A
	2	3.35	0.03	0.31	3.76	15.66			N/A	N/A
	3									
	4	1.29	0.03	0.26	1.29	1.29			N/A	N/A

17:30 - 17:45

Junction	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	1									
	2	1.02	0.03	0.27	1.02	1.02			N/A	N/A
	3	70.04	21.91	63.27	118.67	138.62			N/A	N/A
	4	8.92	0.04	0.35	16.50	47.68			N/A	N/A
	5	2.44	0.04	0.44	6.70	11.70			N/A	N/A
2	1	29.31	2.55	22.21	61.60	77.62			N/A	N/A
	2	3.56	0.03	0.29	3.56	10.34			N/A	N/A
	3									
	4	1.33	0.03	0.27	1.33	1.33			N/A	N/A

17:45 - 18:00

Junction	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	1									
	2	0.85	0.56	1.01	1.41	1.46			N/A	N/A
	3	10.13	0.19	4.86	25.80	35.85			N/A	N/A
	4	3.00	0.05	0.56	8.34	13.59			N/A	N/A
	5	0.59	0.04	0.41	1.51	1.68			N/A	N/A
2	1	3.83	0.05	0.46	10.80	18.94			N/A	N/A
	2	1.69	0.07	1.00	3.90	5.57			N/A	N/A
	3									
	4	1.05	0.57	1.03	1.45	1.50			N/A	N/A

18:00 - 18:15

Junction	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	1									
	2	0.56	0.56	1.01	1.41	1.46			N/A	N/A
	3	1.69	0.03	0.28	1.69	3.86			N/A	N/A
	4	1.42	0.03	0.32	2.65	7.33			N/A	N/A
	5	0.24	0.03	0.29	0.80	1.39			N/A	N/A
2	1	1.26	0.03	0.28	1.26	3.69			N/A	N/A
	2	0.87	0.04	0.36	2.04	3.82			N/A	N/A
	3									
	4	0.69	0.18	0.94	1.42	1.48			N/A	N/A

Basic Results Summary

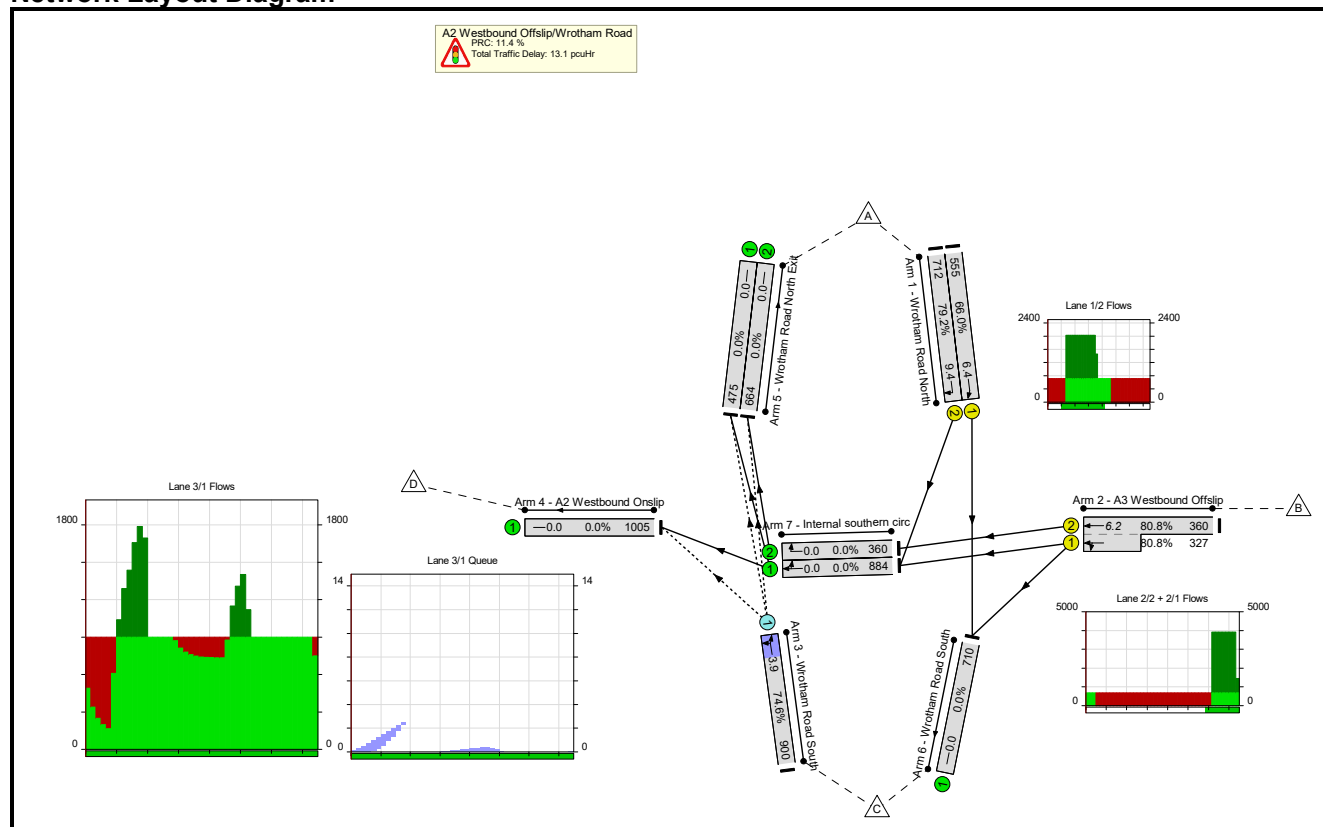
Basic Results Summary

User and Project Details

Project:	Land south of Longfield Road
Title:	A2/Wrotham Road Southern Rbt Signalisation
Location:	
Client:	Richborough
Design Layout Ref:	Mayer Brown Drawing PHCOLDHARBOURRD.1/01
Additional detail:	
File name:	T25526 A2_Wrotham Road - Southern Rbt Signalisation.lsg3x
Author:	
Company:	
Address:	

Scenario 1: '2032 Reference Case AM' (FG1: '2032 Reference Case AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



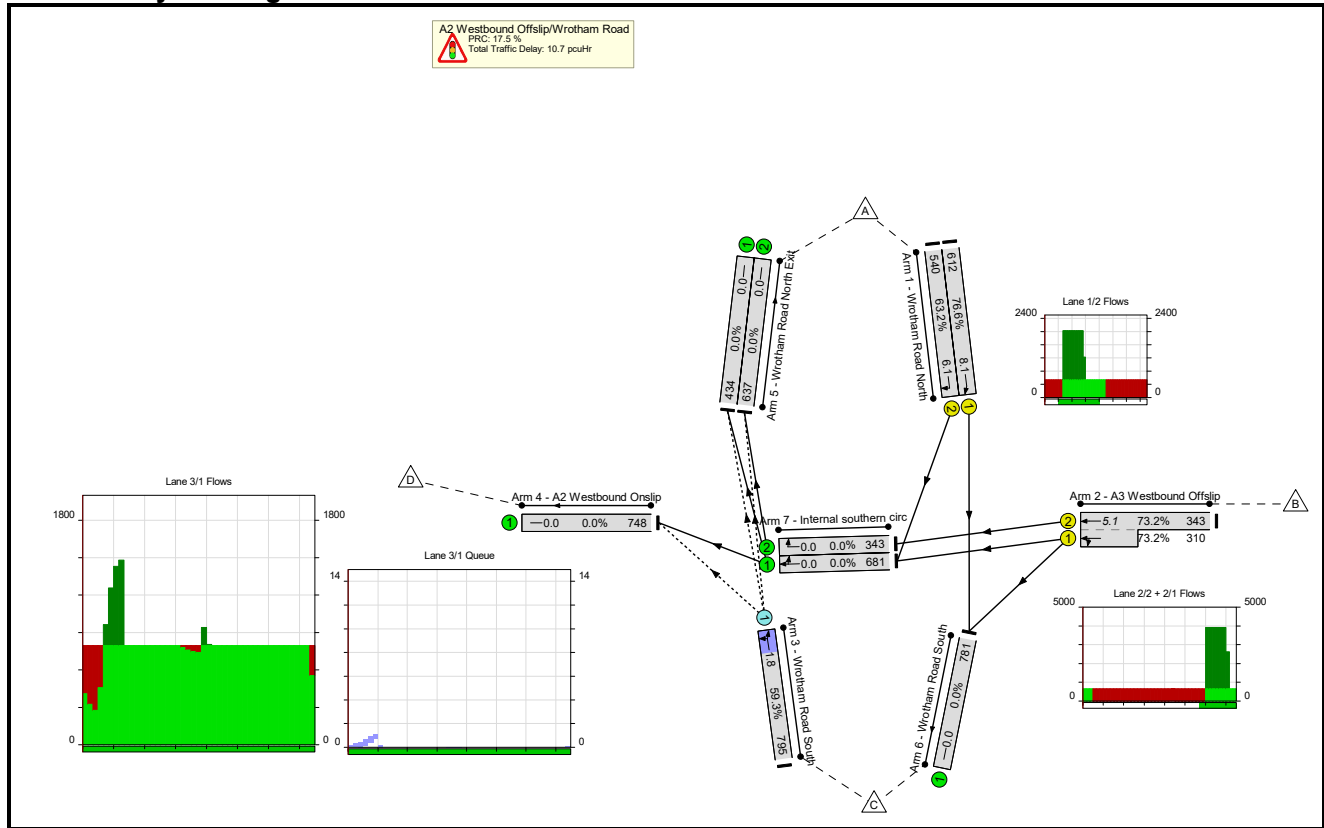
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: A2/Wrotham Road Southern Rbt Signalisation	-	-	-		-	-	-	-	-	-	80.8%	900	0	0	13.1	-	-
A2 Westbound Offslip/Wrotham Road	-	-	-		-	-	-	-	-	-	80.8%	900	0	0	13.1	-	-
1/1	Wrotham Road North Ahead	U	A		1	19	-	555	1892	841	66.0%	-	-	-	2.5	16.1	6.4
1/2	Wrotham Road North Right	U	A		1	19	-	712	2024	900	79.2%	-	-	-	4.0	20.1	9.4
2/2+2/1	A3 Westbound Offslip Left Ahead	U	B		1	10	-	687	2024:1892	446+405	80.8 : 80.8%	-	-	-	5.0	26.3	6.2
3/1	Wrotham Road South Left Ahead	O	-		-	-	-	900	1966	1207	74.6%	900	0	0	1.7	6.6	3.9
C1 PRC for Signalled Lanes (%): 11.4 Total Delay for Signalled Lanes (pcuHr): 11.49 Cycle Time (s): 45 PRC Over All Lanes (%): 11.4 Total Delay Over All Lanes(pcuHr): 13.15																	

Basic Results Summary

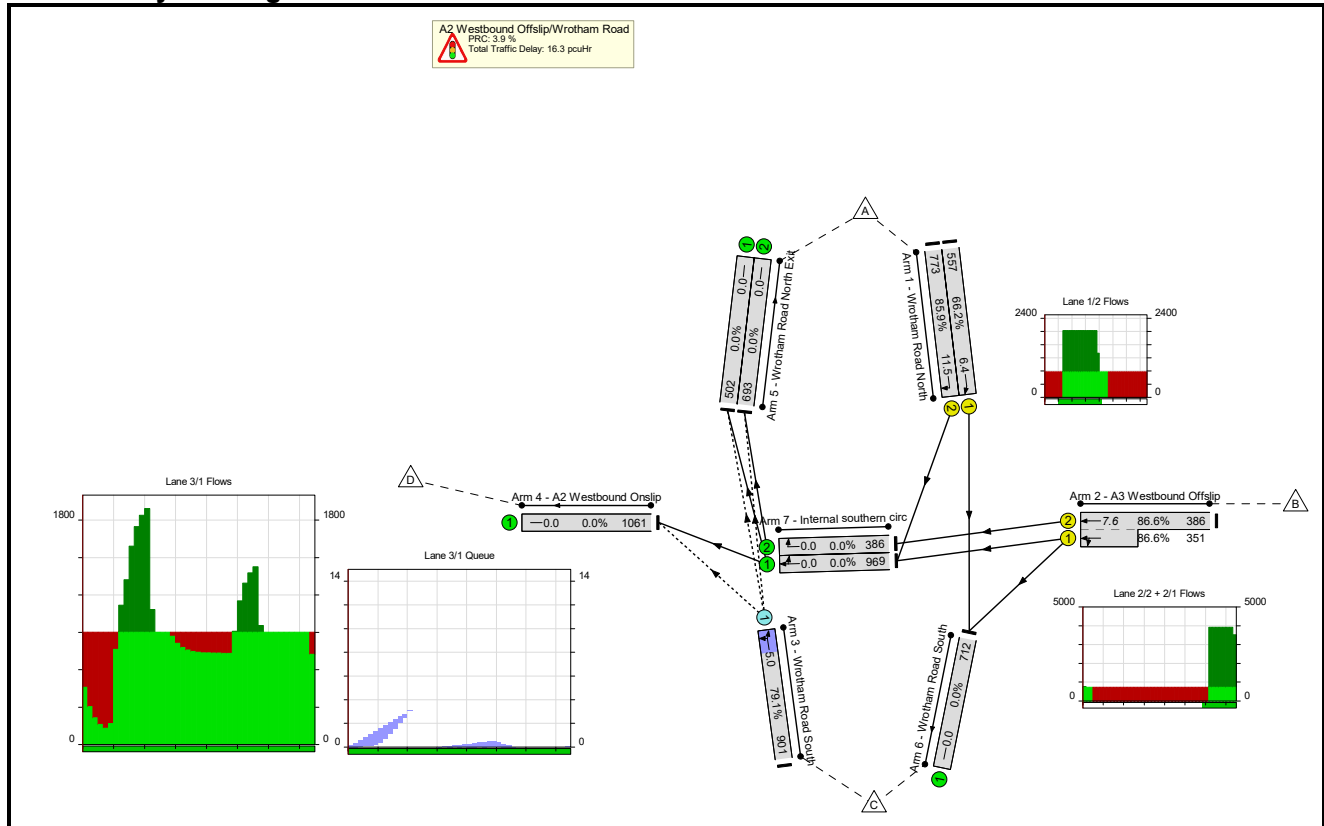
Scenario 2: '2032 Reference Case PM' (FG2: '2032 Reference Case PM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Network Results

Network Layout Diagram



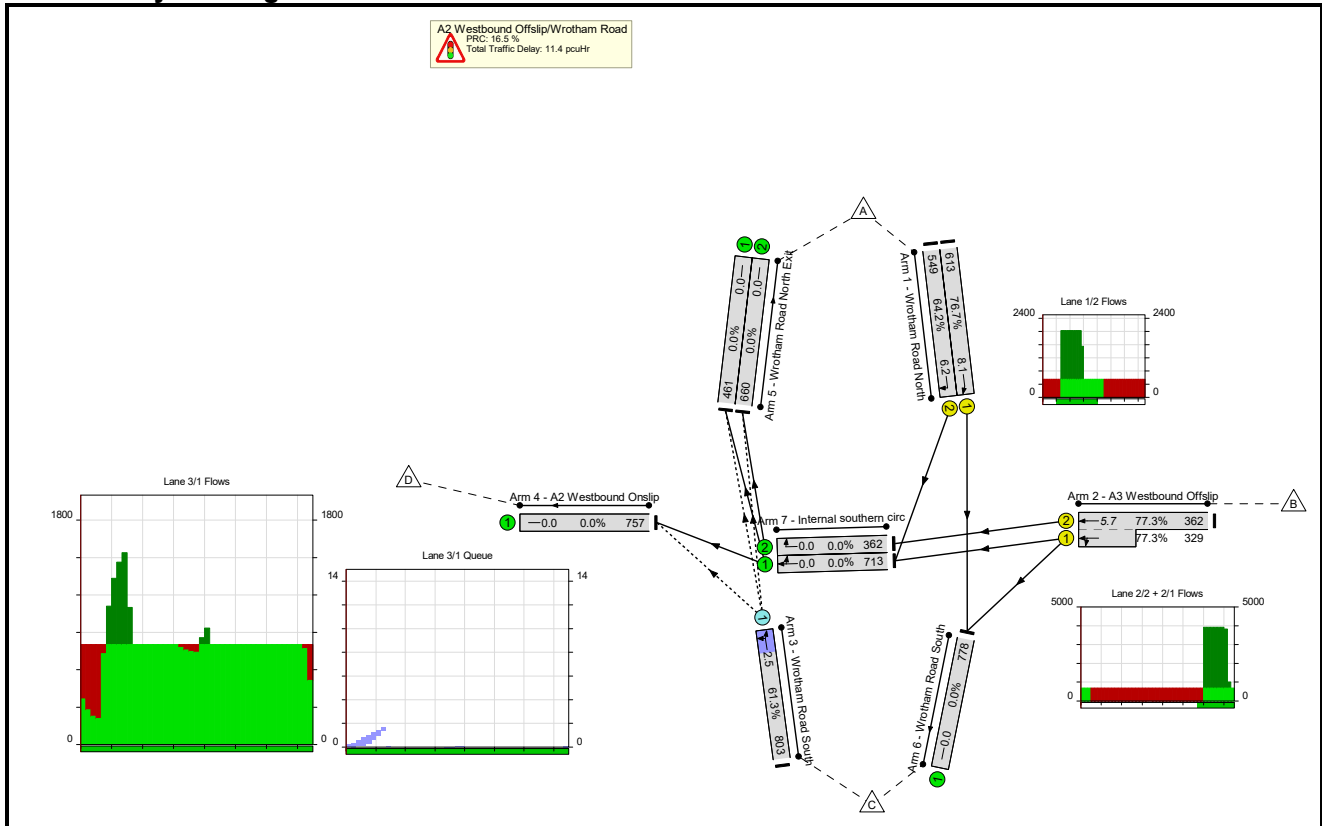
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: A2/Wrotham Road Southern Rbt Signalisation	-	-	-		-	-	-	-	-	-	86.6%	901	0	0	16.3	-	-
A2 Westbound Offslip/Wrotham Road	-	-	-		-	-	-	-	-	-	86.6%	901	0	0	16.3	-	-
1/1	Wrotham Road North Ahead	U	A		1	19	-	557	1892	841	66.2%	-	-	-	2.5	16.1	6.4
1/2	Wrotham Road North Right	U	A		1	19	-	773	2024	900	85.9%	-	-	-	5.3	24.8	11.5
2/2+2/1	A3 Westbound Offslip Left Ahead	U	B		1	10	-	737	2024:1892	446+405	86.6 : 86.6%	-	-	-	6.3	30.8	7.6
3/1	Wrotham Road South Left Ahead	O	-		-	-	-	901	1966	1139	79.1%	901	0	0	2.2	8.6	5.0
C1 PRC for Signalled Lanes (%): 3.9 Total Delay for Signalled Lanes (pcuHr): 14.14 Cycle Time (s): 45 PRC Over All Lanes (%): 3.9 Total Delay Over All Lanes(pcuHr): 16.29																	

Basic Results Summary

Scenario 4: '2032 Reference Case + Committed PM' (FG4: '2032 Reference Case + Committed PM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



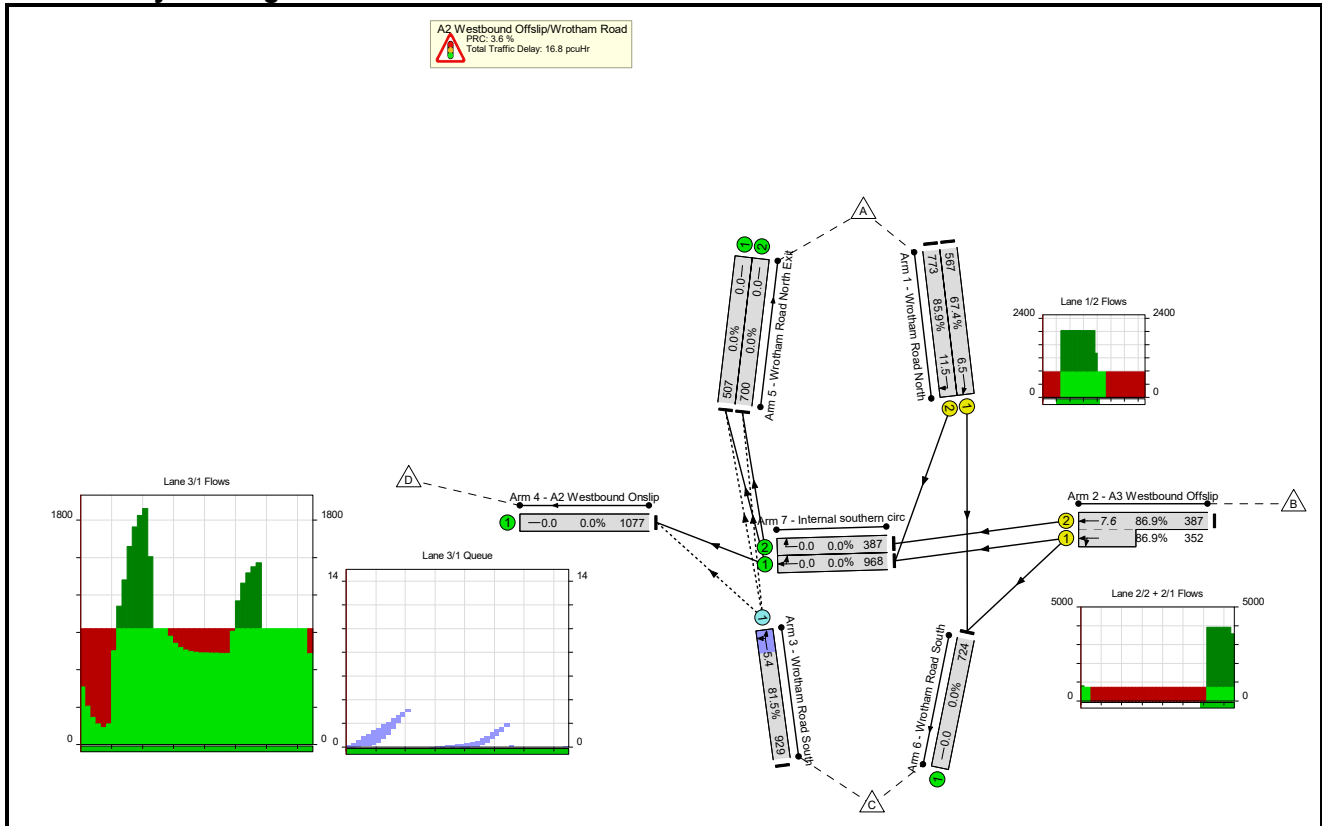
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: A2/Wrotham Road Southern Rbt Signalisation	-	-	-		-	-	-	-	-	-	77.3%	803	0	0	11.4	-	-
A2 Westbound Offslip/Wrotham Road	-	-	-		-	-	-	-	-	-	77.3%	803	0	0	11.4	-	-
1/1	Wrotham Road North Ahead	U	A		1	18	-	613	1892	799	76.7%	-	-	-	3.5	20.6	8.1
1/2	Wrotham Road North Right	U	A		1	18	-	549	2024	855	64.2%	-	-	-	2.5	16.2	6.2
2/2+2/1	A3 Westbound Offslip Left Ahead	U	B		1	11	-	691	2024:1892	468+426	77.3 : 77.3%	-	-	-	4.5	23.4	5.7
3/1	Wrotham Road South Left Ahead	O	-		-	-	-	803	1966	1310	61.3%	803	0	0	0.9	4.0	2.5
C1 PRC for Signalled Lanes (%): 16.5 Total Delay for Signalled Lanes (pcuHr): 10.47 Cycle Time (s): 45 PRC Over All Lanes (%): 16.5 Total Delay Over All Lanes(pcuHr): 11.36																	

Basic Results Summary

Scenario 5: '2032 Reference Case + Committed + Development AM' (FG5: '2032 Reference Case + Committed + Development AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



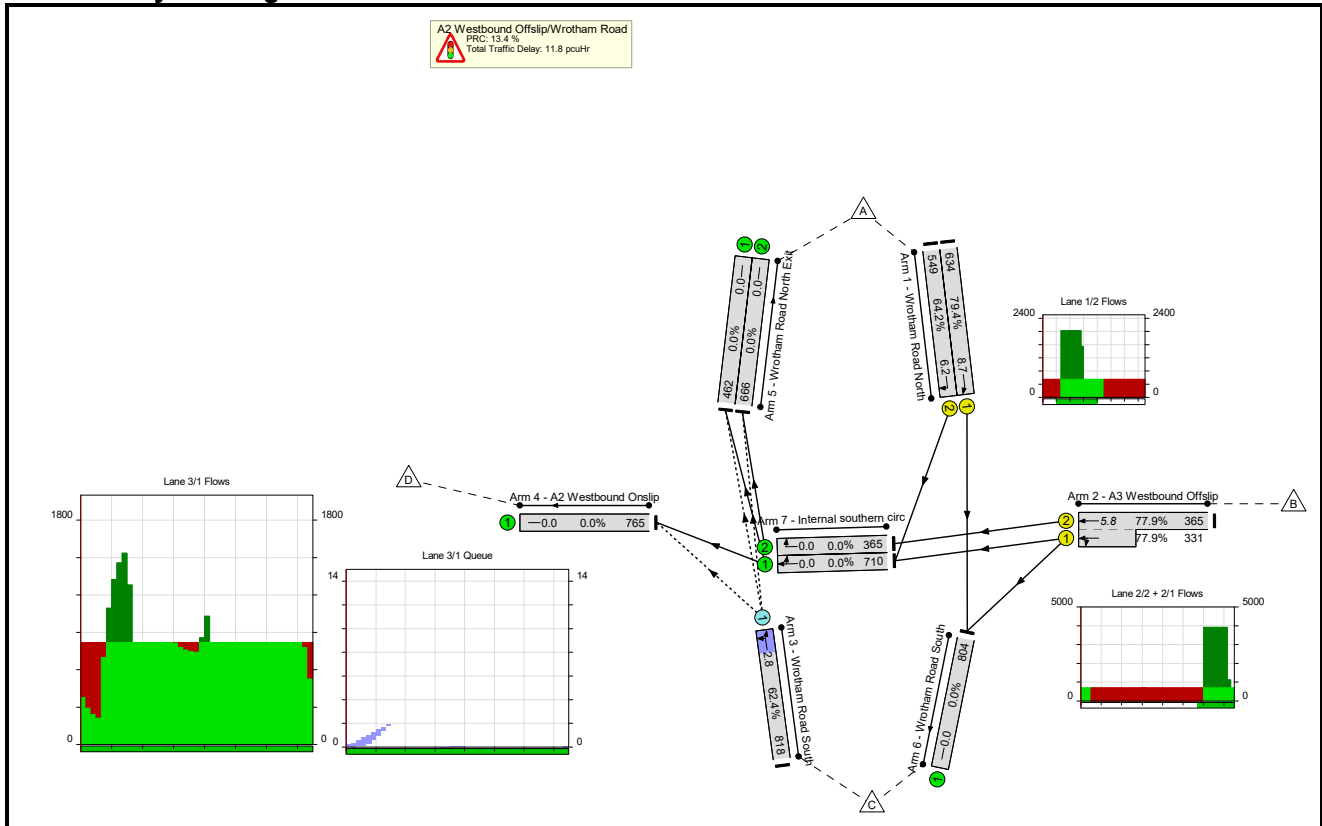
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: A2/Wrotham Road Southern Rbt Signalisation	-	-	-		-	-	-	-	-	-	86.9%	929	0	0	16.8	-	-
A2 Westbound Offslip/Wrotham Road	-	-	-		-	-	-	-	-	-	86.9%	929	0	0	16.8	-	-
1/1	Wrotham Road North Ahead	U	A		1	19	-	567	1892	841	67.4%	-	-	-	2.6	16.4	6.5
1/2	Wrotham Road North Right	U	A		1	19	-	773	2024	900	85.9%	-	-	-	5.3	24.8	11.5
2/2+2/1	A3 Westbound Offslip Left Ahead	U	B		1	10	-	739	2024:1892	446+405	86.9 : 86.9%	-	-	-	6.4	31.1	7.6
3/1	Wrotham Road South Left Ahead	O	-		-	-	-	929	1966	1139	81.5%	929	0	0	2.5	9.7	5.4
C1 PRC for Signalled Lanes (%): 3.6 Total Delay for Signalled Lanes (pcuHr): 14.30 Cycle Time (s): 45 PRC Over All Lanes (%): 3.6 Total Delay Over All Lanes(pcuHr): 16.80																	

Basic Results Summary

Scenario 6: '2032 Reference Case + Committed + Development PM' (FG6: '2032 Reference Case + Committed + Development PM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



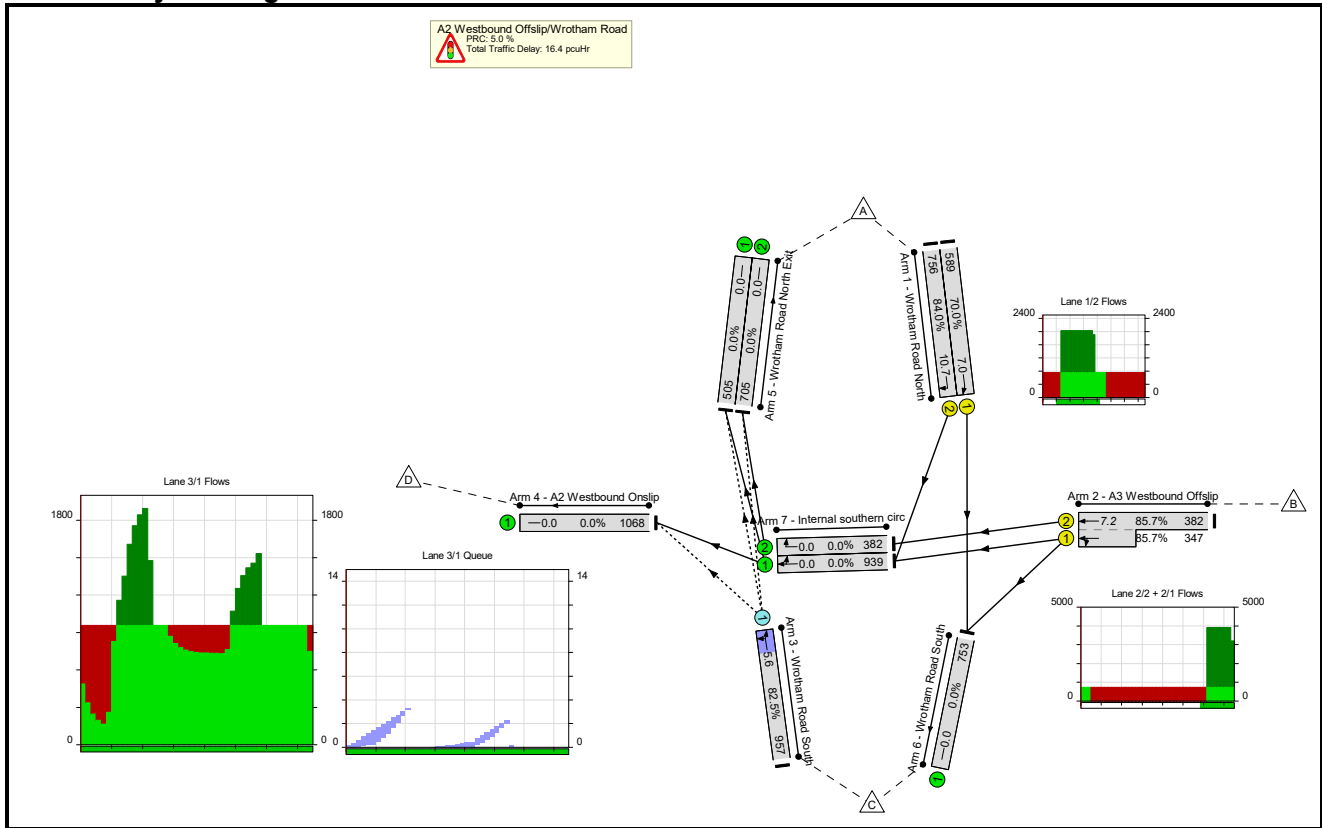
Network Results

[illegible]

Basic Results Summary

Scenario 7: '2042 Local Plan AM' (FG7: '2042 Local Plan AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



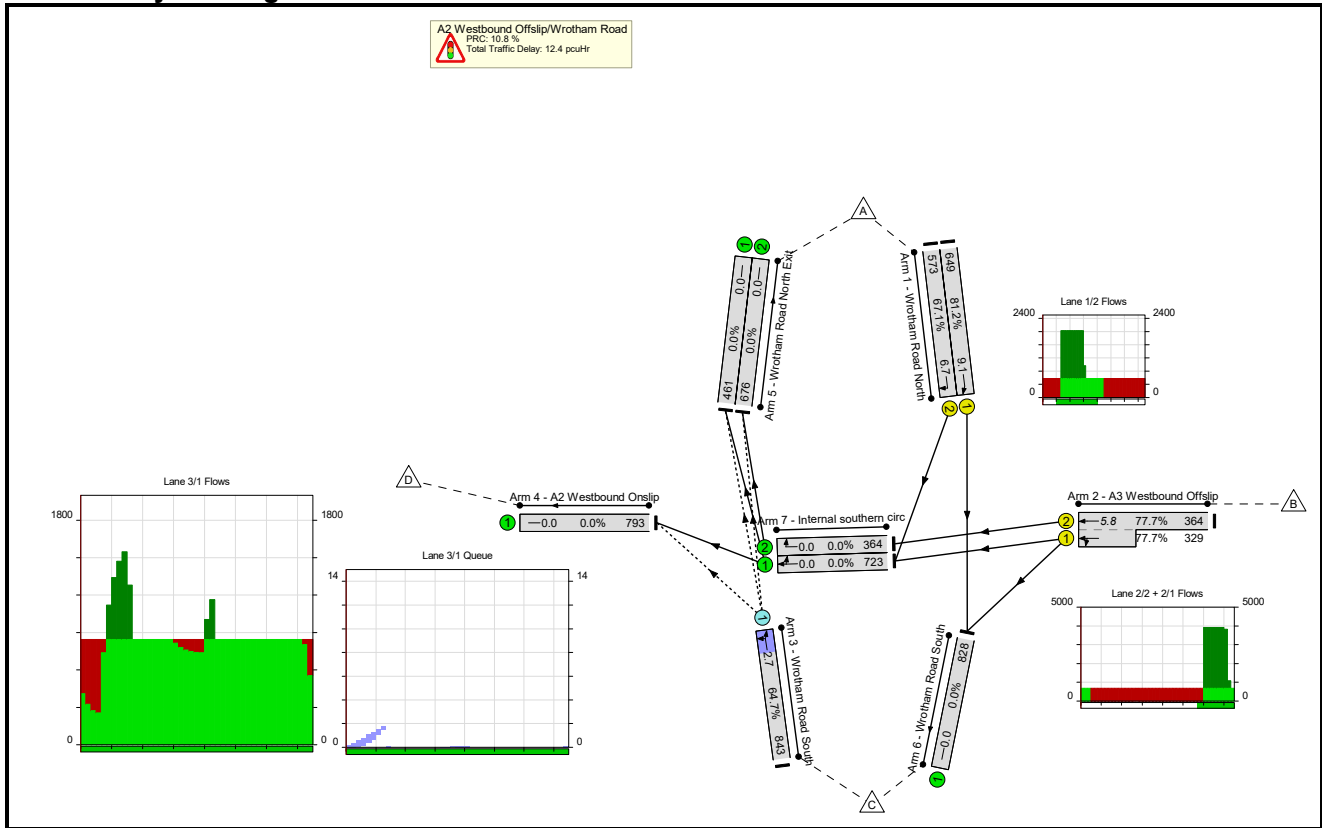
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: A2/Wrotham Road Southern Rbt Signalisation	-	-	-		-	-	-	-	-	-	85.7%	957	0	0	16.4	-	-
A2 Westbound Offslip/Wrotham Road	-	-	-		-	-	-	-	-	-	85.7%	957	0	0	16.4	-	-
1/1	Wrotham Road North Ahead	U	A		1	19	-	589	1892	841	70.0%	-	-	-	2.8	17.2	7.0
1/2	Wrotham Road North Right	U	A		1	19	-	756	2024	900	84.0%	-	-	-	4.9	23.2	10.7
2/2+2/1	A3 Westbound Offslip Left Ahead	U	B		1	10	-	729	2024:1892	446+405	85.7 : 85.7%	-	-	-	6.1	29.9	7.2
3/1	Wrotham Road South Left Ahead	O	-		-	-	-	957	1966	1160	82.5%	957	0	0	2.6	10.0	5.6
C1 PRC for Signalled Lanes (%): 5.0 Total Delay for Signalled Lanes (pcuHr): 13.74 Cycle Time (s): 45 PRC Over All Lanes (%): 5.0 Total Delay Over All Lanes(pcuHr): 16.39																	

Basic Results Summary

Scenario 8: '2042 Local Plan PM' (FG8: '2042 Local Plan PM', Plan 1: 'Network Control Plan 1')

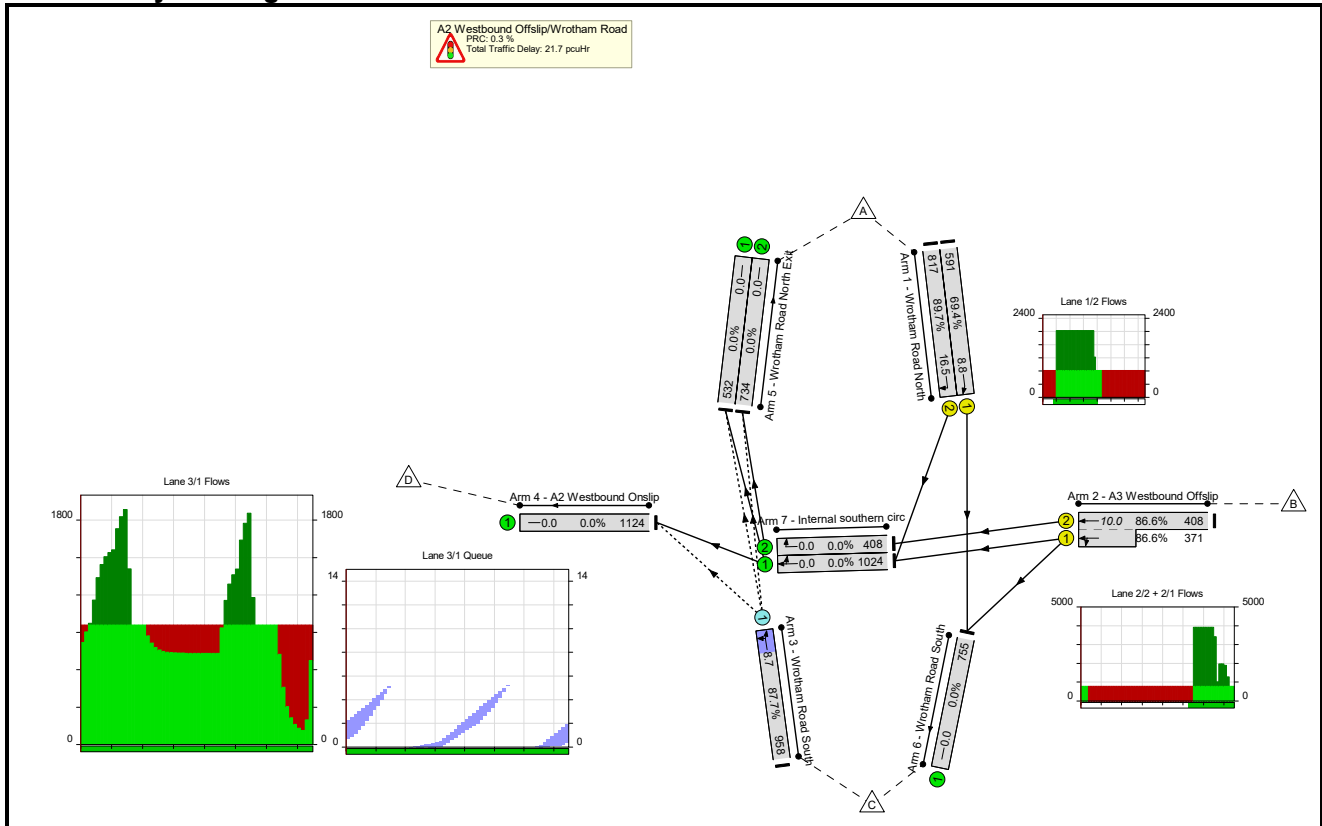
Network Layout Diagram



Basic Results Summary

Scenario 9: '2042 Local Plan + Committed AM' (FG9: '2042 Local Plan + Committed AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



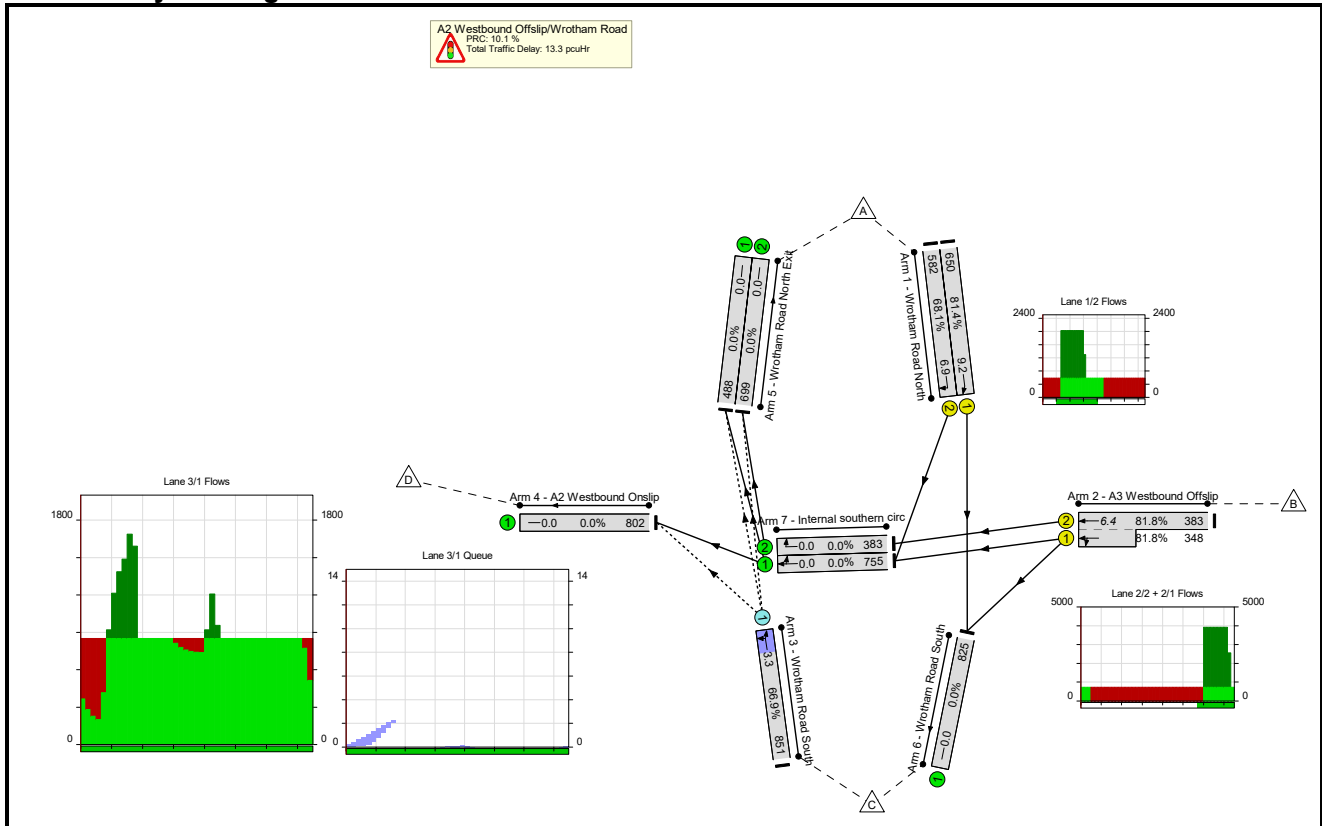
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: A2/Wrotham Road Southern Rbt Signalisation	-	-	-		-	-	-	-	-	-	89.7%	958	0	0	21.7	-	-
A2 Westbound Offslip/Wrotham Road	-	-	-		-	-	-	-	-	-	89.7%	958	0	0	21.7	-	-
1/1	Wrotham Road North Ahead	U	A		1	26	-	591	1892	851	69.4%	-	-	-	3.3	20.1	8.8
1/2	Wrotham Road North Right	U	A		1	26	-	817	2024	911	89.7%	-	-	-	7.5	32.9	16.5
2/2+2/1	A3 Westbound Offslip Left Ahead	U	B		1	18	-	779	2024:1892	471+428	86.6 : 86.6%	-	-	-	6.9	31.9	10.0
3/1	Wrotham Road South Left Ahead	O	-		-	-	-	958	1966	1092	87.7%	958	0	0	4.0	15.0	8.7
C1 PRC for Signalled Lanes (%): 0.3 Total Delay for Signalled Lanes (pcuHr): 17.66 Cycle Time (s): 60 PRC Over All Lanes (%): 0.3 Total Delay Over All Lanes(pcuHr): 21.67																	

Basic Results Summary

Scenario 10: '2042 Local Plan + Committed PM' (FG10: '2042 Local Plan + Committed PM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



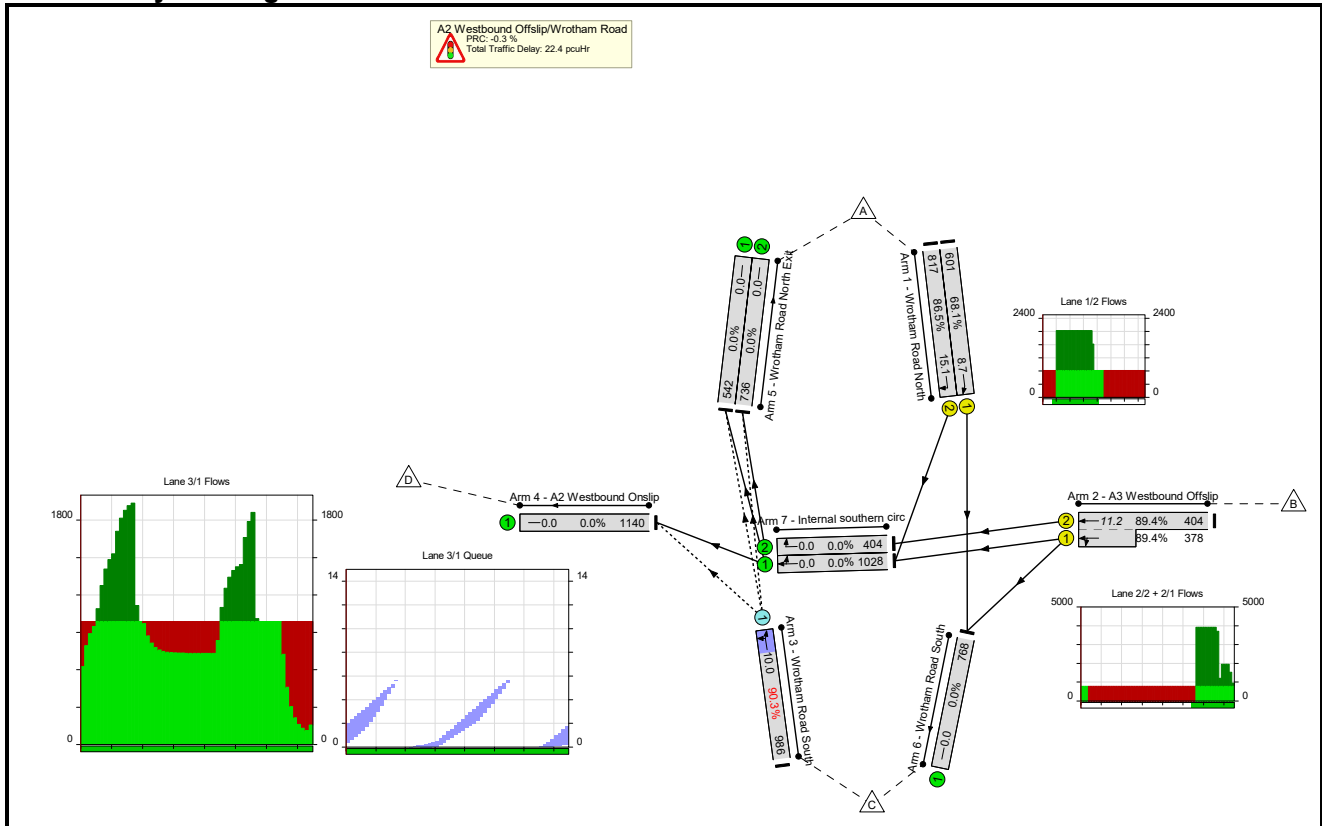
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: A2/Wrotham Road Southern Rbt Signalisation	-	-	-		-	-	-	-	-	-	81.8%	851	0	0	13.3	-	-
A2 Westbound Offslip/Wrotham Road	-	-	-		-	-	-	-	-	-	81.8%	851	0	0	13.3	-	-
1/1	Wrotham Road North Ahead	U	A		1	18	-	650	1892	799	81.4%	-	-	-	4.2	23.2	9.2
1/2	Wrotham Road North Right	U	A		1	18	-	582	2024	855	68.1%	-	-	-	2.8	17.1	6.9
2/2+2/1	A3 Westbound Offslip Left Ahead	U	B		1	11	-	731	2024:1892	468+426	81.8 : 81.8%	-	-	-	5.2	25.6	6.4
3/1	Wrotham Road South Left Ahead	O	-		-	-	-	851	1966	1272	66.9%	851	0	0	1.2	4.9	3.3
C1 PRC for Signalled Lanes (%): 10.1 Total Delay for Signalled Lanes (pcuHr): 12.16 Cycle Time (s): 45 PRC Over All Lanes (%): 10.1 Total Delay Over All Lanes(pcuHr): 13.31																	

Basic Results Summary

Scenario 11: '2042 Local Plan + Committed + Development AM' (FG11: '2042 Local Plan + Committed + Development AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



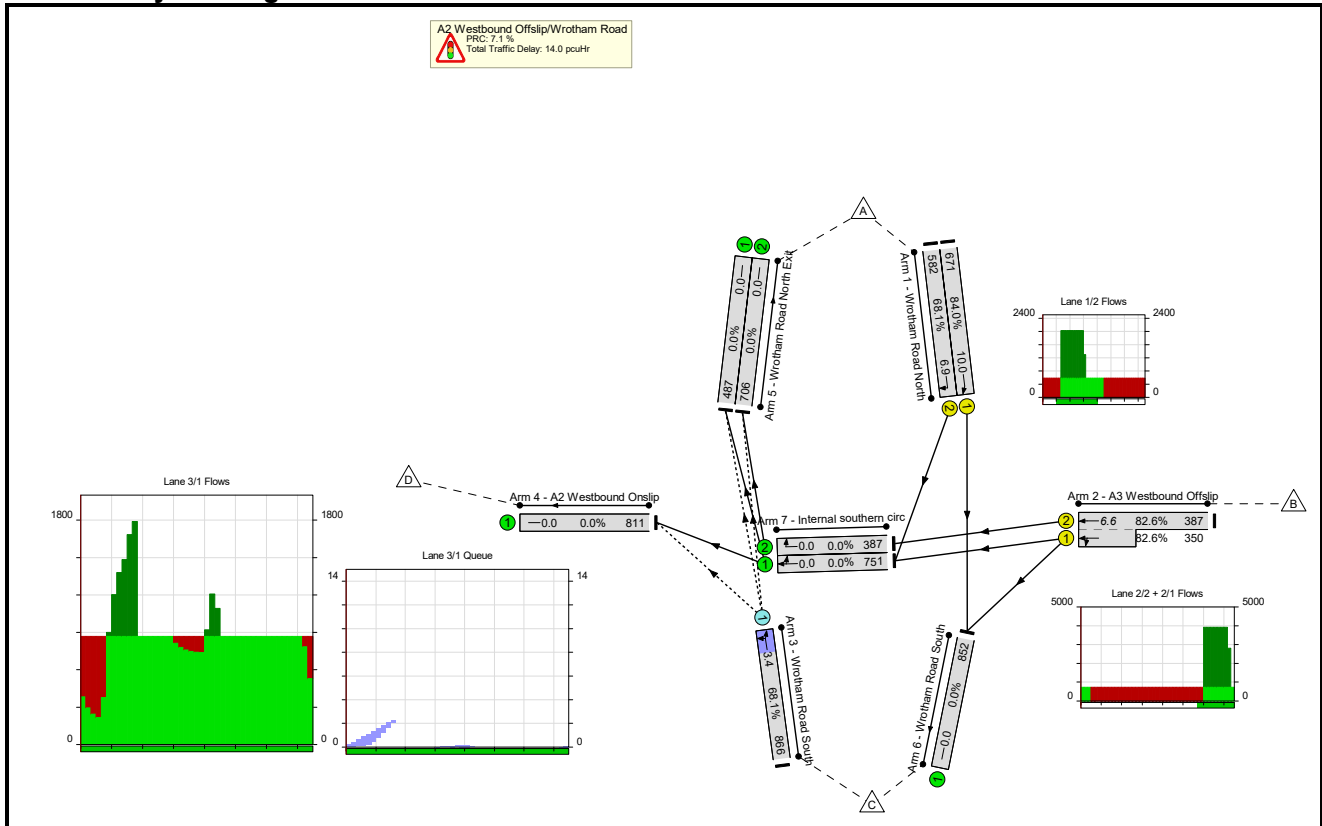
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: A2/Wrotham Road Southern Rbt Signalisation	-	-	-		-	-	-	-	-	-	90.3%	986	0	0	22.4	-	-
A2 Westbound Offslip/Wrotham Road	-	-	-		-	-	-	-	-	-	90.3%	986	0	0	22.4	-	-
1/1	Wrotham Road North Ahead	U	A		1	27	-	601	1892	883	68.1%	-	-	-	3.1	18.8	8.7
1/2	Wrotham Road North Right	U	A		1	27	-	817	2024	945	86.5%	-	-	-	6.3	27.8	15.1
2/2+2/1	A3 Westbound Offslip Left Ahead	U	B		1	17	-	782	2024:1892	452+423	89.4 : 89.4%	-	-	-	7.9	36.5	11.2
3/1	Wrotham Road South Left Ahead	O	-		-	-	-	986	1966	1092	90.3%	986	0	0	5.0	18.2	10.0
C1 PRC for Signalled Lanes (%): 0.6 Total Delay for Signalled Lanes (pcuHr): 17.39 Cycle Time (s): 60 PRC Over All Lanes (%): -0.3 Total Delay Over All Lanes(pcuHr): 22.37																	

Basic Results Summary

Scenario 12: '2042 Local Plan + Committed + Development PM' (FG12: '2042 Local Plan + Committed + Development PM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: A2/Wrotham Road Southern Rbt Signalisation	-	-	-		-	-	-	-	-	-	84.0%	866	0	0	14.0	-	-
A2 Westbound Offslip/Wrotham Road	-	-	-		-	-	-	-	-	-	84.0%	866	0	0	14.0	-	-
1/1	Wrotham Road North Ahead	U	A		1	18	-	671	1892	799	84.0%	-	-	-	4.7	25.2	10.0
1/2	Wrotham Road North Right	U	A		1	18	-	582	2024	855	68.1%	-	-	-	2.8	17.1	6.9
2/2+2/1	A3 Westbound Offslip Left Ahead	U	B		1	11	-	737	2024:1892	469+424	82.6 : 82.6%	-	-	-	5.4	26.2	6.6
3/1	Wrotham Road South Left Ahead	O	-		-	-	-	866	1966	1272	68.1%	866	0	0	1.2	5.0	3.4
C1 PRC for Signalled Lanes (%): 7.1 Total Delay for Signalled Lanes (pcuHr): 12.82 Cycle Time (s): 45 PRC Over All Lanes (%): 7.1 Total Delay Over All Lanes(pcuHr): 14.03																	