

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.0.1.4646 []
© Copyright TRL Limited, 2017

For sales and distribution information, program advice and maintenance, contact TRL:
Tel: +44 (0)1344 770758 email: software@trl.co.uk Web: http://www.trlsoftware.co.uk

The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution

Filename: A437-North Hyde Road-Dawley Road-Millington Road-Bourne Avenue.j9
Path: C:\Users\Jenny Baker\Dropbox (Markides Associates)\Markides Associates Team
Folder\Projects\16018.01 - Former Nestle Site, Hayes\Technical\Arcady\2024 and 2029 scenarios
Report generation date: 25/01/2017 17:16:21

- »2016 Peak , AM
- »2016 Peak , PM
- »2024 Baseline , AM
- »2024 Baseline , PM
- »2024 Baseline+Dev, AM
- »2024 Baseline+Dev , PM
- »2029 Baseline , AM
- »2029 Baseline , PM
- »2029 Baseline+Dev, AM
- »2029 Baseline+Dev , PM

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
2016 Peak								
A - Dawley Road (N)	2.9	8.41	0.73	A	2.1	6.52	0.66	A
B - North Hyde Road	0.8	6.16	0.41	A	0.8	6.03	0.43	A
C - Millington Road	0.1	5.52	0.10	A	0.8	9.13	0.43	A
D - Dawley Road (S)	2.5	11.45	0.70	B	2.1	10.83	0.66	B
E - Bourne Avenue	1.4	13.40	0.56	B	0.7	9.34	0.39	A
2024 Baseline								
A - Dawley Road (N)	12.5	30.80	0.93	D	13.3	31.01	0.94	D
B - North Hyde Road	3.7	18.01	0.78	C	2.0	11.19	0.65	B
C - Millington Road	0.3	9.00	0.20	A	5.1	45.37	0.85	E
D - Dawley Road (S)	65.5	190.02	1.11	F	5.6	25.03	0.85	D
E - Bourne Avenue	15.3	125.95	1.01	F	1.3	15.49	0.54	C
2024 Baseline+Dev								
A - Dawley Road (N)	11.5	28.41	0.93	D	16.8	38.03	0.96	E
B - North Hyde Road	4.4	20.75	0.81	C	2.0	11.38	0.66	B
C - Millington Road	0.3	9.36	0.21	A	5.4	47.46	0.86	E
D - Dawley Road (S)	71.1	206.49	1.12	F	5.9	26.05	0.85	D
E - Bourne Avenue	17.7	143.44	1.03	F	1.3	15.75	0.55	C
2029 Baseline								

A - Dawley Road (N)	15.7	37.60	0.95	E	17.2	39.00	0.96	E
B - North Hyde Road	4.1	19.94	0.80	C	2.2	12.00	0.67	B
C - Millington Road	0.3	9.42	0.22	A	7.0	60.43	0.90	F
D - Dawley Road (S)	77.5	221.65	1.13	F	6.8	29.93	0.88	D
E - Bourne Avenue	19.0	149.45	1.03	F	1.4	16.85	0.57	C
2029 Baseline+Dev								
A - Dawley Road (N)	14.2	34.47	0.95	D	21.2	46.47	0.97	E
B - North Hyde Road	5.0	23.30	0.83	C	2.2	12.19	0.68	B
C - Millington Road	0.3	9.81	0.22	A	7.0	60.87	0.90	F
D - Dawley Road (S)	83.9	241.05	1.15	F	6.9	30.25	0.88	D
E - Bourne Avenue	21.8	169.45	1.06	F	1.4	17.08	0.57	C

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	Base Model - Roundabout 1
Location	North Hyde Road/Dawley Road
Site number	
Date	23/04/2012
Version	
Status	Draft 1
Identifier	
Client	
Jobnumber	VN50026
Enumerator	rhussain [IE-D00135]
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	-Hour	perHour

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2016 Peak	AM	ONE HOUR	07:45	09:15	15	✓
D2	2016 Peak	PM	ONE HOUR	07:45	09:15	15	✓
D3	2024 Baseline	AM	ONE HOUR	07:45	09:15	15	✓
D4	2024 Baseline	PM	ONE HOUR	07:45	09:15	15	✓
D5	2024 Baseline+Dev	AM	ONE HOUR	07:45	09:15	15	✓
D6	2024 Baseline+Dev	PM	ONE HOUR	07:45	09:15	15	✓
D7	2029 Baseline	AM	ONE HOUR	07:45	09:15	15	✓
D8	2029 Baseline	PM	ONE HOUR	07:45	09:15	15	✓
D9	2029 Baseline+Dev	AM	ONE HOUR	07:45	09:15	15	✓
D10	2029 Baseline+Dev	PM	ONE HOUR	07:45	09:15	15	✓

Analysis Set Details

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

2016 Peak , AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A,B,C,D,E	9.45	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	Dawley Road (N)	
B	North Hyde Road	
C	Millington Road	
D	Daweley Road (S)	
E	Bourne Avenue	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
A - Dawley Road (N)	3.65	9.50	13.0	22.0	75.0	20.0	
B - North Hyde Road	3.50	8.00	16.0	10.0	72.0	40.0	
C - Millington Road	4.00	6.00	8.0	22.0	54.0	36.0	
D - Daweley Road (S)	3.50	5.50	12.0	20.0	76.0	46.0	
E - Bourne Avenue	3.65	4.50	3.0	32.0	56.0	35.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A - Dawley Road (N)	0.526	1904
B - North Hyde Road	0.467	1629
C - Millington Road	0.553	1523
D - Daweley Road (S)	0.422	1375
E - Bourne Avenue	0.497	1242

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2016 Peak	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Dawley Road (N)		ONE HOUR	✓	1132	100.000
B - North Hyde Road		ONE HOUR	✓	413	100.000
C - Millington Road		ONE HOUR	✓	75	100.000
D - Daweley Road (S)		ONE HOUR	✓	728	100.000
E - Bourne Avenue		ONE HOUR	✓	347	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A - Dawley Road (N)	B - North Hyde Road	C - Millington Road	D - Daweley Road (S)	E - Bourne Avenue
From	A - Dawley Road (N)	0	240	171	609	112
	B - North Hyde Road	289	0	5	83	36
	C - Millington Road	47	1	0	20	7
	D - Daweley Road (S)	543	86	67	0	32
	E - Bourne Avenue	178	93	16	60	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - Dawley Road (N)	B - North Hyde Road	C - Millington Road	D - Daweley Road (S)	E - Bourne Avenue
From	A - Dawley Road (N)	10	10	10	10	10
	B - North Hyde Road	10	10	10	10	10
	C - Millington Road	10	10	10	10	10
	D - Daweley Road (S)	10	10	10	10	10
	E - Bourne Avenue	10	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Dawley Road (N)	0.73	8.41	2.9	A	1039	1558
B - North Hyde Road	0.41	6.16	0.8	A	379	568
C - Millington Road	0.10	5.52	0.1	A	69	103
D - Daweley Road (S)	0.70	11.45	2.5	B	668	1002
E - Bourne Avenue	0.56	13.40	1.4	B	318	478

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	852	213	241	1777	0.480	848	791	0.0	1.0	4.246	A
B - North Hyde Road	311	78	775	1268	0.245	310	314	0.0	0.4	4.127	A
C - Millington Road	56	14	891	1031	0.055	56	194	0.0	0.1	4.061	A
D - Dawley Road (S)	548	137	369	1219	0.449	545	578	0.0	0.9	5.837	A
E - Bourne Avenue	261	65	773	858	0.304	259	140	0.0	0.5	6.592	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1018	254	290	1752	0.581	1016	948	1.0	1.5	5.363	A
B - North Hyde Road	371	93	928	1196	0.310	371	377	0.4	0.5	4.794	A
C - Millington Road	67	17	1067	934	0.072	67	232	0.1	0.1	4.570	A
D - Dawley Road (S)	654	164	442	1189	0.551	653	693	0.9	1.3	7.364	A
E - Bourne Avenue	312	78	927	782	0.399	311	168	0.5	0.7	8.391	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1246	312	353	1718	0.725	1241	1158	1.5	2.8	8.210	A
B - North Hyde Road	455	114	1134	1100	0.413	454	460	0.5	0.8	6.116	A
C - Millington Road	83	21	1304	803	0.103	82	284	0.1	0.1	5.496	A
D - Dawley Road (S)	802	200	540	1147	0.699	797	846	1.3	2.5	11.166	B
E - Bourne Avenue	382	96	1132	680	0.562	379	205	0.7	1.4	13.076	B

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1246	312	356	1717	0.726	1246	1164	2.8	2.9	8.406	A
B - North Hyde Road	455	114	1139	1098	0.414	455	462	0.8	0.8	6.158	A
C - Millington Road	83	21	1309	800	0.103	83	285	0.1	0.1	5.518	A
D - Dawley Road (S)	802	200	542	1147	0.699	801	850	2.5	2.5	11.453	B
E - Bourne Avenue	382	96	1137	677	0.564	382	206	1.4	1.4	13.396	B

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1018	254	293	1750	0.581	1023	956	2.9	1.5	5.482	A
B - North Hyde Road	371	93	936	1193	0.311	372	380	0.8	0.5	4.832	A
C - Millington Road	67	17	1074	930	0.073	68	234	0.1	0.1	4.594	A
D - Dawley Road (S)	654	164	444	1188	0.551	659	698	2.5	1.4	7.552	A
E - Bourne Avenue	312	78	934	778	0.401	315	169	1.4	0.7	8.587	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	852	213	244	1776	0.480	854	798	1.5	1.0	4.308	A
B - North Hyde Road	311	78	781	1265	0.246	311	317	0.5	0.4	4.157	A
C - Millington Road	56	14	897	1028	0.055	57	196	0.1	0.1	4.078	A
D - Dawley Road (S)	548	137	371	1218	0.450	550	583	1.4	0.9	5.941	A
E - Bourne Avenue	261	65	780	855	0.306	262	141	0.7	0.5	6.694	A

2016 Peak , PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A,B,C,D,E	8.01	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2016 Peak	PM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Dawley Road (N)		ONE HOUR	✓	1069	100.000
B - North Hyde Road		ONE HOUR	✓	453	100.000
C - Millington Road		ONE HOUR	✓	294	100.000
D - Dawley Road (S)		ONE HOUR	✓	652	100.000
E - Bourne Avenue		ONE HOUR	✓	246	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
From		A - Dawley Road (N)	B - North Hyde Road	C - Millington Road	D - Daweley Road (S)	E - Bourne Avenue
	A - Dawley Road (N)	0	228	75	639	127
	B - North Hyde Road	280	0	8	88	77
	C - Millington Road	127	3	0	149	15
	D - Daweley Road (S)	521	51	19	0	61
	E - Bourne Avenue	111	73	14	48	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
From		A - Dawley Road (N)	B - North Hyde Road	C - Millington Road	D - Daweley Road (S)	E - Bourne Avenue
	A - Dawley Road (N)	10	10	10	10	10
	B - North Hyde Road	10	10	10	10	10
	C - Millington Road	10	10	10	10	10
	D - Daweley Road (S)	10	10	10	10	10
	E - Bourne Avenue	10	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Dawley Road (N)	0.66	6.52	2.1	A	981	1471
B - North Hyde Road	0.43	6.03	0.8	A	416	624
C - Millington Road	0.43	9.13	0.8	A	270	405
D - Daweley Road (S)	0.66	10.83	2.1	B	598	897
E - Bourne Avenue	0.39	9.34	0.7	A	226	339

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	805	201	156	1822	0.442	801	778	0.0	0.9	3.865	A
B - North Hyde Road	341	85	691	1307	0.261	339	266	0.0	0.4	4.086	A
C - Millington Road	221	55	944	1002	0.221	220	87	0.0	0.3	5.049	A
D - Daweley Road (S)	491	123	471	1176	0.417	488	692	0.0	0.8	5.727	A
E - Bourne Avenue	185	46	749	870	0.213	184	210	0.0	0.3	5.764	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	961	240	187	1806	0.532	960	932	0.9	1.2	4.669	A
B - North Hyde Road	407	102	828	1243	0.328	407	319	0.4	0.5	4.730	A
C - Millington Road	264	66	1130	899	0.294	264	104	0.3	0.5	6.229	A
D - Daweley Road (S)	586	147	565	1137	0.516	585	829	0.8	1.2	7.148	A
E - Bourne Avenue	221	55	898	796	0.278	221	251	0.3	0.4	6.875	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1177	294	228	1784	0.660	1174	1139	1.2	2.1	6.449	A
B - North Hyde Road	499	125	1012	1157	0.431	498	390	0.5	0.8	5.993	A
C - Millington Road	324	81	1382	759	0.426	322	127	0.5	0.8	9.030	A
D - Daweley Road (S)	718	179	691	1084	0.662	714	1014	1.2	2.1	10.604	B
E - Bourne Avenue	271	68	1097	697	0.389	270	307	0.4	0.7	9.247	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1177	294	229	1784	0.660	1177	1144	2.1	2.1	6.524	A
B - North Hyde Road	499	125	1015	1156	0.432	499	391	0.8	0.8	6.027	A
C - Millington Road	324	81	1386	757	0.427	324	128	0.8	0.8	9.128	A
D - Daweley Road (S)	718	179	692	1083	0.663	718	1017	2.1	2.1	10.831	B
E - Bourne Avenue	271	68	1102	695	0.390	271	308	0.7	0.7	9.340	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	961	240	188	1805	0.532	964	939	2.1	1.3	4.727	A
B - North Hyde Road	407	102	832	1241	0.328	408	320	0.8	0.5	4.762	A
C - Millington Road	264	66	1136	896	0.295	266	105	0.8	0.5	6.297	A
D - Daweley Road (S)	586	147	567	1136	0.516	590	834	2.1	1.2	7.306	A
E - Bourne Avenue	221	55	905	793	0.279	222	253	0.7	0.4	6.955	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	805	201	157	1822	0.442	806	784	1.3	0.9	3.906	A
B - North Hyde Road	341	85	696	1305	0.261	342	268	0.5	0.4	4.115	A
C - Millington Road	221	55	950	999	0.222	222	88	0.5	0.3	5.102	A
D - Daweley Road (S)	491	123	474	1175	0.418	492	697	1.2	0.8	5.817	A
E - Bourne Avenue	185	46	756	867	0.214	186	211	0.4	0.3	5.820	A

2024 Baseline , AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A,B,C,D,E	83.12	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2024 Baseline	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Dawley Road (N)		ONE HOUR	✓	1420	100.000
B - North Hyde Road		ONE HOUR	✓	697	100.000
C - Millington Road		ONE HOUR	✓	103	100.000
D - Daweley Road (S)		ONE HOUR	✓	1029	100.000
E - Bourne Avenue		ONE HOUR	✓	404	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A - Dawley Road (N)	B - North Hyde Road	C - Millington Road	D - Daweley Road (S)	E - Bourne Avenue
From	A - Dawley Road (N)	0	347	227	720	126
	B - North Hyde Road	503	0	6	131	57
	C - Millington Road	66	1	0	28	8
	D - Daweley Road (S)	767	112	115	0	35
	E - Bourne Avenue	200	116	23	65	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - Dawley Road (N)	B - North Hyde Road	C - Millington Road	D - Daweley Road (S)	E - Bourne Avenue
From	A - Dawley Road (N)	10	10	10	10	10
	B - North Hyde Road	10	10	10	10	10
	C - Millington Road	10	10	10	10	10
	D - Daweley Road (S)	10	10	10	10	10
	E - Bourne Avenue	10	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Dawley Road (N)	0.93	30.80	12.5	D	1303	1955
B - North Hyde Road	0.78	18.01	3.7	C	640	959
C - Millington Road	0.20	9.00	0.3	A	95	142
D - Dawley Road (S)	1.11	190.02	65.5	F	944	1416
E - Bourne Avenue	1.01	125.95	15.3	F	371	556

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1069	267	321	1735	0.616	1062	1145	0.0	1.7	5.826	A
B - North Hyde Road	525	131	954	1184	0.443	521	430	0.0	0.9	5.941	A
C - Millington Road	78	19	1198	861	0.090	77	277	0.0	0.1	5.047	A
D - Dawley Road (S)	775	194	569	1135	0.683	766	706	0.0	2.3	10.481	B
E - Bourne Avenue	304	76	1166	663	0.459	301	169	0.0	0.9	10.822	B

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1277	319	383	1702	0.750	1271	1368	1.7	3.2	9.052	A
B - North Hyde Road	627	157	1140	1097	0.571	624	514	0.9	1.4	8.333	A
C - Millington Road	93	23	1434	731	0.127	92	331	0.1	0.2	6.199	A
D - Dawley Road (S)	925	231	682	1088	0.851	912	845	2.3	5.4	21.211	C
E - Bourne Avenue	363	91	1392	551	0.660	359	202	0.9	2.0	20.202	C

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1563	391	431	1677	0.932	1533	1575	3.2	10.8	23.628	C
B - North Hyde Road	767	192	1361	994	0.772	759	604	1.4	3.4	16.312	C
C - Millington Road	113	28	1732	566	0.200	113	388	0.2	0.3	8.731	A
D - Dawley Road (S)	1133	283	828	1026	1.105	1007	1017	5.4	36.9	89.450	F
E - Bourne Avenue	445	111	1594	450	0.988	412	241	2.0	10.2	73.522	F

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1563	391	440	1673	0.935	1556	1595	10.8	12.5	30.801	D
B - North Hyde Road	767	192	1382	984	0.780	766	614	3.4	3.7	18.010	C
C - Millington Road	113	28	1755	553	0.205	113	393	0.3	0.3	8.998	A

D - Dawley Road (S)	1133	283	836	1022	1.108	1019	1032	36.9	65.5	190.021	F
E - Bourne Avenue	445	111	1611	442	1.007	424	244	10.2	15.3	125.945	F

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1277	319	441	1672	0.764	1312	1513	12.5	3.7	11.970	B
B - North Hyde Road	627	157	1199	1070	0.586	635	554	3.7	1.6	9.273	A
C - Millington Road	93	23	1477	707	0.131	93	357	0.3	0.2	6.449	A
D - Dawley Road (S)	925	231	694	1082	0.855	1064	875	65.5	30.6	165.673	F
E - Bourne Avenue	363	91	1547	474	0.767	407	212	15.3	4.3	72.063	F

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1069	267	356	1717	0.623	1077	1249	3.7	1.8	6.256	A
B - North Hyde Road	525	131	982	1171	0.448	527	451	1.6	0.9	6.175	A
C - Millington Road	78	19	1215	852	0.091	78	294	0.2	0.1	5.117	A
D - Dawley Road (S)	775	194	576	1132	0.684	887	717	30.6	2.5	24.131	C
E - Bourne Avenue	304	76	1288	602	0.505	317	175	4.3	1.2	14.460	B

2024 Baseline , PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A,B,C,D,E	26.78	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2024 Baseline	PM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Dawley Road (N)		ONE HOUR	✓	1502	100.000
B - North Hyde Road		ONE HOUR	✓	594	100.000
C - Millington Road		ONE HOUR	✓	397	100.000
D - Daweley Road (S)		ONE HOUR	✓	773	100.000
E - Bourne Avenue		ONE HOUR	✓	275	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A - Dawley Road (N)	B - North Hyde Road	C - Millington Road	D - Daweley Road (S)	E - Bourne Avenue
From	A - Dawley Road (N)	0	383	96	879	144
	B - North Hyde Road	380	0	9	113	92
	C - Millington Road	161	6	0	211	19
	D - Daweley Road (S)	617	63	27	0	66
	E - Bourne Avenue	124	81	17	53	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - Dawley Road (N)	B - North Hyde Road	C - Millington Road	D - Daweley Road (S)	E - Bourne Avenue
From	A - Dawley Road (N)	10	10	10	10	10
	B - North Hyde Road	10	10	10	10	10
	C - Millington Road	10	10	10	10	10
	D - Daweley Road (S)	10	10	10	10	10
	E - Bourne Avenue	10	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Dawley Road (N)	0.94	31.01	13.3	D	1378	2067
B - North Hyde Road	0.65	11.19	2.0	B	545	818
C - Millington Road	0.85	45.37	5.1	E	364	546
D - Daweley Road (S)	0.85	25.03	5.6	D	709	1064
E - Bourne Avenue	0.54	15.49	1.3	C	252	379

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1131	283	185	1807	0.626	1124	958	0.0	1.8	5.736	A
B - North Hyde Road	447	112	910	1205	0.371	445	399	0.0	0.6	5.190	A
C - Millington Road	299	75	1243	837	0.357	296	111	0.0	0.6	7.299	A
D - Dawley Road (S)	582	145	600	1122	0.519	577	939	0.0	1.2	7.211	A
E - Bourne Avenue	207	52	937	777	0.267	205	240	0.0	0.4	6.912	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1350	338	221	1788	0.755	1344	1148	1.8	3.3	8.815	A
B - North Hyde Road	534	133	1088	1121	0.476	533	477	0.6	1.0	6.708	A
C - Millington Road	357	89	1488	701	0.509	355	133	0.6	1.1	11.369	B
D - Dawley Road (S)	695	174	718	1072	0.648	692	1124	1.2	2.0	10.323	B
E - Bourne Avenue	247	62	1123	684	0.361	246	287	0.4	0.6	9.021	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1654	413	269	1763	0.938	1621	1393	3.3	11.5	23.727	C
B - North Hyde Road	654	164	1313	1017	0.643	650	576	1.0	1.9	10.700	B
C - Millington Road	437	109	1802	528	0.829	424	161	1.1	4.3	34.858	D
D - Dawley Road (S)	851	213	871	1008	0.845	838	1356	2.0	5.2	21.866	C
E - Bourne Avenue	303	76	1361	566	0.535	300	348	0.6	1.2	14.773	B

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1654	413	272	1761	0.939	1647	1409	11.5	13.3	31.006	D
B - North Hyde Road	654	164	1333	1007	0.649	654	585	1.9	2.0	11.186	B
C - Millington Road	437	109	1824	516	0.848	434	164	4.3	5.1	45.369	E
D - Dawley Road (S)	851	213	881	1004	0.848	849	1377	5.2	5.6	25.033	D
E - Bourne Avenue	303	76	1378	558	0.543	303	352	1.2	1.3	15.491	C

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1350	338	225	1786	0.756	1389	1173	13.3	3.6	10.907	B
B - North Hyde Road	534	133	1123	1105	0.483	538	491	2.0	1.0	7.024	A
C - Millington Road	357	89	1524	681	0.524	372	137	5.1	1.2	13.436	B
D - Dawley Road (S)	695	174	735	1065	0.652	709	1162	5.6	2.1	11.524	B
E - Bourne Avenue	247	62	1149	671	0.368	250	295	1.3	0.7	9.447	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1131	283	187	1806	0.626	1138	971	3.6	1.9	5.983	A
B - North Hyde Road	447	112	921	1200	0.373	449	404	1.0	0.7	5.285	A
C - Millington Road	299	75	1257	829	0.361	301	113	1.2	0.6	7.543	A
D - Dawley Road (S)	582	145	607	1119	0.520	586	951	2.1	1.2	7.476	A
E - Bourne Avenue	207	52	949	770	0.269	208	243	0.7	0.4	7.051	A

2024 Baseline+Dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A,B,C,D,E	88.94	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2024 Baseline+Dev	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Dawley Road (N)		ONE HOUR	✓	1410	100.000
B - North Hyde Road		ONE HOUR	✓	725	100.000
C - Millington Road		ONE HOUR	✓	103	100.000
D - Daweley Road (S)		ONE HOUR	✓	1029	100.000
E - Bourne Avenue		ONE HOUR	✓	404	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A - Dawley Road (N)	B - North Hyde Road	C - Millington Road	D - Daweley Road (S)	E - Bourne Avenue
From	A - Dawley Road (N)	0	337	227	720	126
	B - North Hyde Road	530	0	6	132	57
	C - Millington Road	66	1	0	28	8
	D - Daweley Road (S)	767	112	115	0	35
	E - Bourne Avenue	200	116	23	65	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - Dawley Road (N)	B - North Hyde Road	C - Millington Road	D - Daweley Road (S)	E - Bourne Avenue
From	A - Dawley Road (N)	10	10	10	10	10
	B - North Hyde Road	10	10	10	10	10
	C - Millington Road	10	10	10	10	10
	D - Daweley Road (S)	10	10	10	10	10
	E - Bourne Avenue	10	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Dawley Road (N)	0.93	28.41	11.5	D	1294	1941
B - North Hyde Road	0.81	20.75	4.4	C	665	998
C - Millington Road	0.21	9.36	0.3	A	95	142
D - Daweley Road (S)	1.12	206.49	71.1	F	944	1416
E - Bourne Avenue	1.03	143.44	17.7	F	371	556

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1062	265	321	1735	0.612	1055	1165	0.0	1.7	5.763	A
B - North Hyde Road	546	136	954	1184	0.461	542	422	0.0	0.9	6.130	A
C - Millington Road	78	19	1219	850	0.091	77	277	0.0	0.1	5.122	A
D - Daweley Road (S)	775	194	589	1126	0.688	765	707	0.0	2.3	10.709	B
E - Bourne Avenue	304	76	1186	653	0.466	300	169	0.0	0.9	11.115	B

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1268	317	383	1703	0.744	1262	1391	1.7	3.1	8.875	A
B - North Hyde Road	652	163	1140	1097	0.594	649	505	0.9	1.6	8.786	A
C - Millington Road	93	23	1459	717	0.129	92	331	0.1	0.2	6.335	A
D - Daweley Road (S)	925	231	706	1077	0.859	912	845	2.3	5.7	22.233	C
E - Bourne Avenue	363	91	1415	539	0.674	358	202	0.9	2.1	21.381	C

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1552	388	427	1679	0.924	1525	1594	3.1	10.1	22.376	C
B - North Hyde Road	798	200	1361	994	0.803	788	591	1.6	4.1	18.376	C
C - Millington Road	113	28	1762	550	0.206	113	387	0.2	0.3	9.058	A

D - Dawley Road (S)	1133	283	857	1014	1.118	997	1018	5.7	39.6	95.550	F
E - Bourne Avenue	445	111	1613	441	1.009	408	241	2.1	11.3	80.721	F

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1552	388	435	1675	0.927	1547	1613	10.1	11.5	28.408	D
B - North Hyde Road	798	200	1381	985	0.810	797	601	4.1	4.4	20.748	C
C - Millington Road	113	28	1786	537	0.211	113	392	0.3	0.3	9.356	A
D - Dawley Road (S)	1133	283	866	1010	1.122	1007	1033	39.6	71.1	206.491	F
E - Bourne Avenue	445	111	1629	433	1.028	419	244	11.3	17.7	143.436	F

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1268	317	443	1671	0.759	1299	1535	11.5	3.6	11.463	B
B - North Hyde Road	652	163	1197	1071	0.609	662	545	4.4	1.8	9.931	A
C - Millington Road	93	23	1503	693	0.134	93	356	0.3	0.2	6.607	A
D - Dawley Road (S)	925	231	720	1071	0.863	1055	876	71.1	38.6	189.446	F
E - Bourne Avenue	363	91	1564	465	0.781	415	211	17.7	4.9	89.700	F

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1062	265	364	1712	0.620	1069	1294	3.6	1.8	6.219	A
B - North Hyde Road	546	136	985	1170	0.467	549	448	1.8	1.0	6.411	A
C - Millington Road	78	19	1237	840	0.092	78	297	0.2	0.1	5.199	A
D - Dawley Road (S)	775	194	597	1123	0.690	919	718	38.6	2.6	34.119	D
E - Bourne Avenue	304	76	1339	577	0.527	319	176	4.9	1.3	16.144	C

2024 Baseline+Dev , PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A,B,C,D,E	30.30	D

Junction Network Options

Driving side	Lighting
--------------	----------

Left	Normal/unknown
------	----------------

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2024 Baseline+Dev	PM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Dawley Road (N)		ONE HOUR	✓	1530	100.000
B - North Hyde Road		ONE HOUR	✓	601	100.000
C - Millington Road		ONE HOUR	✓	399	100.000
D - Dawley Road (S)		ONE HOUR	✓	776	100.000
E - Bourne Avenue		ONE HOUR	✓	275	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A - Dawley Road (N)	B - North Hyde Road	C - Millington Road	D - Dawley Road (S)	E - Bourne Avenue
From	A - Dawley Road (N)	0	411	96	879	144
	B - North Hyde Road	385	0	9	114	93
	C - Millington Road	161	6	0	211	21
	D - Dawley Road (S)	617	66	27	0	66
	E - Bourne Avenue	124	81	17	53	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - Dawley Road (N)	B - North Hyde Road	C - Millington Road	D - Dawley Road (S)	E - Bourne Avenue
From	A - Dawley Road (N)	10	10	10	10	10
	B - North Hyde Road	10	10	10	10	10
	C - Millington Road	10	10	10	10	10
	D - Dawley Road (S)	10	10	10	10	10
	E - Bourne Avenue	10	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
-----	---------	---------------	-----------------	---------	-------------------------	-------------------------------

A - Dawley Road (N)	0.96	38.03	16.8	E	1404	2106
B - North Hyde Road	0.66	11.38	2.0	B	551	827
C - Millington Road	0.86	47.46	5.4	E	366	549
D - Dawley Road (S)	0.85	26.05	5.9	D	712	1068
E - Bourne Avenue	0.55	15.75	1.3	C	252	379

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1152	288	187	1806	0.638	1144	962	0.0	1.9	5.919	A
B - North Hyde Road	452	113	909	1205	0.375	450	422	0.0	0.7	5.226	A
C - Millington Road	300	75	1248	834	0.360	298	111	0.0	0.6	7.358	A
D - Dawley Road (S)	584	146	606	1119	0.522	579	940	0.0	1.2	7.273	A
E - Bourne Avenue	207	52	943	774	0.268	205	242	0.0	0.4	6.949	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1375	344	224	1786	0.770	1369	1152	1.9	3.5	9.340	A
B - North Hyde Road	540	135	1088	1122	0.482	539	505	0.7	1.0	6.778	A
C - Millington Road	359	90	1494	698	0.514	357	133	0.6	1.1	11.528	B
D - Dawley Road (S)	698	174	725	1069	0.653	694	1125	1.2	2.0	10.475	B
E - Bourne Avenue	247	62	1130	681	0.363	246	290	0.4	0.6	9.094	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1685	421	272	1761	0.957	1643	1397	3.5	13.8	27.177	D
B - North Hyde Road	662	165	1308	1019	0.649	658	608	1.0	2.0	10.845	B
C - Millington Road	439	110	1805	526	0.835	426	161	1.1	4.5	35.751	E
D - Dawley Road (S)	854	214	879	1004	0.851	841	1352	2.0	5.4	22.550	C
E - Bourne Avenue	303	76	1369	562	0.539	300	350	0.6	1.2	14.990	B

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1685	421	275	1760	0.957	1673	1414	13.8	16.8	38.033	E
B - North Hyde Road	662	165	1330	1009	0.656	661	618	2.0	2.0	11.381	B
C - Millington Road	439	110	1828	513	0.856	436	163	4.5	5.4	47.465	E
D - Dawley Road (S)	854	214	889	1000	0.854	852	1375	5.4	5.9	26.054	D
E - Bourne Avenue	303	76	1386	554	0.547	303	355	1.2	1.3	15.746	C

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1375	344	228	1784	0.771	1427	1179	16.8	3.9	12.554	B
B - North Hyde Road	540	135	1132	1101	0.491	544	523	2.0	1.1	7.158	A
C - Millington Road	359	90	1538	673	0.533	375	138	5.4	1.3	13.964	B

D - Dawley Road (S)	698	174	744	1061	0.657	712	1170	5.9	2.2	11.792	B
E - Bourne Avenue	247	62	1157	667	0.371	250	299	1.3	0.7	9.543	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1152	288	189	1805	0.638	1159	974	3.9	2.0	6.208	A
B - North Hyde Road	452	113	921	1199	0.377	454	427	1.1	0.7	5.323	A
C - Millington Road	300	75	1263	826	0.364	303	113	1.3	0.6	7.616	A
D - Dawley Road (S)	584	146	613	1116	0.523	588	953	2.2	1.2	7.549	A
E - Bourne Avenue	207	52	956	767	0.270	208	245	0.7	0.4	7.093	A

2029 Baseline , AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A,B,C,D,E	97.63	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2029 Baseline	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Dawley Road (N)		ONE HOUR	✓	1449	100.000
B - North Hyde Road		ONE HOUR	✓	708	100.000
C - Millington Road		ONE HOUR	✓	105	100.000
D - Dawley Road (S)		ONE HOUR	✓	1047	100.000
E - Bourne Avenue		ONE HOUR	✓	413	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
From		A - Dawley Road (N)	B - North Hyde Road	C - Millington Road	D - Daweley Road (S)	E - Bourne Avenue
	A - Dawley Road (N)	0	353	231	736	129
	B - North Hyde Road	511	0	6	133	58
	C - Millington Road	67	1	0	29	8
	D - Daweley Road (S)	781	114	116	0	36
	E - Bourne Avenue	205	118	23	67	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
From		A - Dawley Road (N)	B - North Hyde Road	C - Millington Road	D - Daweley Road (S)	E - Bourne Avenue
	A - Dawley Road (N)	10	10	10	10	10
	B - North Hyde Road	10	10	10	10	10
	C - Millington Road	10	10	10	10	10
	D - Daweley Road (S)	10	10	10	10	10
	E - Bourne Avenue	10	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Dawley Road (N)	0.95	37.60	15.7	E	1330	1994
B - North Hyde Road	0.80	19.94	4.1	C	650	975
C - Millington Road	0.22	9.42	0.3	A	96	145
D - Daweley Road (S)	1.13	221.65	77.5	F	961	1441
E - Bourne Avenue	1.03	149.45	19.0	F	379	568

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1091	273	326	1732	0.630	1084	1165	0.0	1.8	6.037	A
B - North Hyde Road	533	133	973	1175	0.453	529	437	0.0	0.9	6.095	A
C - Millington Road	79	20	1222	848	0.093	79	281	0.0	0.1	5.143	A
D - Daweley Road (S)	788	197	579	1131	0.697	779	721	0.0	2.4	10.958	B
E - Bourne Avenue	311	78	1185	654	0.476	307	173	0.0	1.0	11.305	B

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1303	326	389	1700	0.766	1296	1391	1.8	3.5	9.660	A
B - North Hyde Road	636	159	1163	1087	0.586	634	522	0.9	1.5	8.698	A
C - Millington Road	94	24	1462	716	0.132	94	335	0.1	0.2	6.371	A
D - Dawley Road (S)	941	235	693	1083	0.869	926	863	2.4	6.1	23.369	C
E - Bourne Avenue	371	93	1413	540	0.687	366	206	1.0	2.2	22.149	C

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1595	399	431	1677	0.951	1557	1586	3.5	12.9	27.071	D
B - North Hyde Road	780	195	1380	985	0.791	770	609	1.5	3.8	17.704	C
C - Millington Road	116	29	1761	550	0.210	115	389	0.2	0.3	9.090	A
D - Dawley Road (S)	1153	288	841	1020	1.130	1006	1035	6.1	42.9	101.231	F
E - Bourne Avenue	455	114	1602	446	1.019	415	245	2.2	12.1	83.420	F

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1595	399	439	1673	0.954	1584	1604	12.9	15.7	37.600	E
B - North Hyde Road	780	195	1404	974	0.800	778	620	3.8	4.1	19.937	C
C - Millington Road	116	29	1787	536	0.216	116	395	0.3	0.3	9.416	A
D - Dawley Road (S)	1153	288	850	1016	1.134	1014	1052	42.9	77.5	221.650	F
E - Bourne Avenue	455	114	1616	439	1.035	427	248	12.1	19.0	149.451	F

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1303	326	449	1668	0.781	1349	1530	15.7	4.1	13.990	B
B - North Hyde Road	636	159	1231	1055	0.603	646	567	4.1	1.7	9.900	A
C - Millington Road	94	24	1515	686	0.138	95	362	0.3	0.2	6.701	A
D - Dawley Road (S)	941	235	708	1076	0.874	1061	902	77.5	47.5	213.416	F
E - Bourne Avenue	371	93	1553	471	0.789	426	217	19.0	5.3	97.340	F

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1091	273	378	1705	0.640	1099	1321	4.1	2.0	6.626	A
B - North Hyde Road	533	133	1010	1158	0.460	536	467	1.7	0.9	6.398	A
C - Millington Road	79	20	1241	838	0.094	79	305	0.2	0.1	5.222	A

D - Dawley Road (S)	788	197	586	1128	0.699	967	734	47.5	2.8	50.758	F
E - Bourne Avenue	311	78	1372	560	0.555	326	181	5.3	1.4	17.920	C

2029 Baseline , PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A,B,C,D,E	33.17	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2029 Baseline	PM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Dawley Road (N)		ONE HOUR	✓	1532	100.000
B - North Hyde Road		ONE HOUR	✓	606	100.000
C - Millington Road		ONE HOUR	✓	405	100.000
D - Dawley Road (S)		ONE HOUR	✓	793	100.000
E - Bourne Avenue		ONE HOUR	✓	281	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A - Dawley Road (N)	B - North Hyde Road	C - Millington Road	D - Dawley Road (S)	E - Bourne Avenue
From	A - Dawley Road (N)	0	390	98	897	147
	B - North Hyde Road	387	0	9	116	94
	C - Millington Road	164	6	0	215	20
	D - Dawley Road (S)	632	65	28	0	68
	E - Bourne Avenue	127	83	17	54	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - Dawley Road (N)	B - North Hyde Road	C - Millington Road	D - Daweley Road (S)	E - Bourne Avenue
From	A - Dawley Road (N)	10	10	10	10	10
	B - North Hyde Road	10	10	10	10	10
	C - Millington Road	10	10	10	10	10
	D - Daweley Road (S)	10	10	10	10	10
	E - Bourne Avenue	10	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Dawley Road (N)	0.96	39.00	17.2	E	1406	2109
B - North Hyde Road	0.67	12.00	2.2	B	556	834
C - Millington Road	0.90	60.43	7.0	F	372	557
D - Daweley Road (S)	0.88	29.93	6.8	D	728	1092
E - Bourne Avenue	0.57	16.85	1.4	C	258	387

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1153	288	189	1805	0.639	1146	979	0.0	1.9	5.943	A
B - North Hyde Road	456	114	928	1196	0.381	454	407	0.0	0.7	5.312	A
C - Millington Road	305	76	1268	823	0.371	302	114	0.0	0.6	7.574	A
D - Daweley Road (S)	597	149	612	1117	0.534	592	958	0.0	1.2	7.475	A
E - Bourne Avenue	212	53	958	766	0.276	210	246	0.0	0.4	7.095	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1377	344	226	1785	0.772	1371	1172	1.9	3.6	9.407	A
B - North Hyde Road	545	136	1110	1111	0.490	543	487	0.7	1.0	6.954	A
C - Millington Road	364	91	1518	685	0.532	362	136	0.6	1.2	12.176	B
D - Daweley Road (S)	713	178	732	1066	0.669	709	1147	1.2	2.1	10.985	B
E - Bourne Avenue	253	63	1147	672	0.376	252	294	0.4	0.7	9.394	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1687	422	275	1759	0.959	1644	1419	3.6	14.1	27.611	D
B - North Hyde Road	667	167	1334	1007	0.663	663	586	1.0	2.1	11.373	B

C - Millington Road	446	111	1833	511	0.873	429	164	1.2	5.4	42.138	E
D - Dawley Road (S)	873	218	885	1002	0.872	857	1376	2.1	6.1	25.019	D
E - Bourne Avenue	309	77	1387	553	0.559	307	355	0.7	1.3	15.894	C

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1687	422	278	1758	0.960	1674	1437	14.1	17.2	38.996	E
B - North Hyde Road	667	167	1357	996	0.670	667	595	2.1	2.2	12.000	B
C - Millington Road	446	111	1857	497	0.897	440	166	5.4	7.0	60.432	F
D - Dawley Road (S)	873	218	896	997	0.876	870	1401	6.1	6.8	29.931	D
E - Bourne Avenue	309	77	1406	544	0.569	309	360	1.3	1.4	16.853	C

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1377	344	231	1782	0.773	1431	1205	17.2	3.9	12.813	B
B - North Hyde Road	545	136	1157	1090	0.500	549	505	2.2	1.1	7.383	A
C - Millington Road	364	91	1565	659	0.553	386	141	7.0	1.4	15.655	C
D - Dawley Road (S)	713	178	754	1057	0.675	731	1197	6.8	2.4	12.753	B
E - Bourne Avenue	253	63	1181	656	0.385	255	304	1.4	0.7	9.967	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1153	288	192	1803	0.640	1161	992	3.9	2.0	6.238	A
B - North Hyde Road	456	114	940	1191	0.383	458	412	1.1	0.7	5.419	A
C - Millington Road	305	76	1283	814	0.374	308	115	1.4	0.7	7.864	A
D - Dawley Road (S)	597	149	619	1114	0.536	601	972	2.4	1.3	7.791	A
E - Bourne Avenue	212	53	971	760	0.279	213	249	0.7	0.4	7.256	A

2029 Baseline+Dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A,B,C,D,E	104.35	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2029 Baseline+Dev	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Dawley Road (N)		ONE HOUR	✓	1439	100.000
B - North Hyde Road		ONE HOUR	✓	736	100.000
C - Millington Road		ONE HOUR	✓	105	100.000
D - Daweley Road (S)		ONE HOUR	✓	1048	100.000
E - Bourne Avenue		ONE HOUR	✓	413	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A - Dawley Road (N)	B - North Hyde Road	C - Millington Road	D - Daweley Road (S)	E - Bourne Avenue
From	A - Dawley Road (N)	0	343	231	736	129
	B - North Hyde Road	538	0	6	134	58
	C - Millington Road	67	1	0	29	8
	D - Daweley Road (S)	781	115	116	0	36
	E - Bourne Avenue	205	118	23	67	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - Dawley Road (N)	B - North Hyde Road	C - Millington Road	D - Daweley Road (S)	E - Bourne Avenue
From	A - Dawley Road (N)	10	10	10	10	10
	B - North Hyde Road	10	10	10	10	10
	C - Millington Road	10	10	10	10	10
	D - Daweley Road (S)	10	10	10	10	10
	E - Bourne Avenue	10	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Dawley Road (N)	0.95	34.47	14.2	D	1320	1981
B - North Hyde Road	0.83	23.30	5.0	C	675	1013
C - Millington Road	0.22	9.81	0.3	A	96	145
D - Daweley Road (S)	1.15	241.05	83.9	F	962	1442
E - Bourne Avenue	1.06	169.45	21.8	F	379	568

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1083	271	327	1732	0.625	1076	1185	0.0	1.8	5.974	A
B - North Hyde Road	554	139	973	1175	0.471	550	430	0.0	1.0	6.295	A
C - Millington Road	79	20	1242	837	0.094	79	281	0.0	0.1	5.219	A
D - Dawley Road (S)	789	197	599	1122	0.703	779	722	0.0	2.5	11.231	B
E - Bourne Avenue	311	78	1205	643	0.483	307	173	0.0	1.0	11.640	B

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1294	323	389	1699	0.761	1287	1413	1.8	3.4	9.468	A
B - North Hyde Road	662	165	1163	1087	0.609	659	514	1.0	1.7	9.192	A
C - Millington Road	94	24	1487	702	0.134	94	335	0.1	0.2	6.515	A
D - Dawley Road (S)	942	236	717	1073	0.878	926	864	2.5	6.5	24.673	C
E - Bourne Avenue	371	93	1437	528	0.703	366	206	1.0	2.4	23.586	C

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1584	396	427	1679	0.943	1550	1603	3.4	12.0	25.596	D
B - North Hyde Road	810	203	1380	985	0.822	799	597	1.7	4.5	20.113	C
C - Millington Road	116	29	1791	534	0.217	115	388	0.2	0.3	9.444	A
D - Dawley Road (S)	1154	288	869	1008	1.144	996	1037	6.5	46.0	108.399	F
E - Bourne Avenue	455	114	1620	437	1.040	411	245	2.4	13.4	91.482	F

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1584	396	434	1676	0.945	1575	1621	12.0	14.2	34.469	D
B - North Hyde Road	810	203	1403	975	0.831	809	607	4.5	5.0	23.304	C
C - Millington Road	116	29	1817	519	0.223	116	394	0.3	0.3	9.810	A
D - Dawley Road (S)	1154	288	880	1004	1.149	1002	1053	46.0	83.9	240.652	F
E - Bourne Avenue	455	114	1634	431	1.056	421	248	13.4	21.8	169.452	F

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1294	323	451	1667	0.776	1335	1552	14.2	4.0	13.223	B
B - North Hyde Road	662	165	1227	1057	0.626	674	558	5.0	1.9	10.664	B
C - Millington Road	94	24	1541	672	0.141	95	360	0.3	0.2	6.872	A
D - Dawley Road (S)	942	236	734	1065	0.884	1052	902	83.9	56.6	241.051	F
E - Bourne Avenue	371	93	1570	462	0.803	433	216	21.8	6.3	121.205	F

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1083	271	388	1700	0.637	1092	1370	4.0	2.0	6.594	A
B - North Hyde Road	554	139	1014	1156	0.479	558	465	1.9	1.0	6.653	A
C - Millington Road	79	20	1263	826	0.096	79	309	0.2	0.1	5.307	A
D - Dawley Road (S)	789	197	607	1119	0.705	1004	735	56.6	2.9	74.214	F
E - Bourne Avenue	311	78	1428	533	0.584	330	182	6.3	1.6	21.084	C

2029 Baseline+Dev , PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A,B,C,D,E	36.51	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2029 Baseline+Dev	PM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Dawley Road (N)		ONE HOUR	✓	1556	100.000
B - North Hyde Road		ONE HOUR	✓	614	100.000

C - Millington Road		ONE HOUR	✓	405	100.000
D - Daweley Road (S)		ONE HOUR	✓	793	100.000
E - Bourne Avenue		ONE HOUR	✓	281	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A - Dawley Road (N)	B - North Hyde Road	C - Millington Road	D - Daweley Road (S)	E - Bourne Avenue
From	A - Dawley Road (N)	0	417	98	897	144
	B - North Hyde Road	393	0	9	117	95
	C - Millington Road	164	6	0	215	20
	D - Daweley Road (S)	632	65	28	0	68
	E - Bourne Avenue	127	83	17	54	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - Dawley Road (N)	B - North Hyde Road	C - Millington Road	D - Daweley Road (S)	E - Bourne Avenue
From	A - Dawley Road (N)	10	10	10	10	10
	B - North Hyde Road	10	10	10	10	10
	C - Millington Road	10	10	10	10	10
	D - Daweley Road (S)	10	10	10	10	10
	E - Bourne Avenue	10	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Dawley Road (N)	0.97	46.47	21.2	E	1428	2142
B - North Hyde Road	0.68	12.19	2.2	B	563	845
C - Millington Road	0.90	60.87	7.0	F	372	557
D - Daweley Road (S)	0.88	30.25	6.9	D	728	1092
E - Bourne Avenue	0.57	17.08	1.4	C	258	387

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1171	293	189	1805	0.649	1163	983	0.0	2.0	6.103	A
B - North Hyde Road	462	116	926	1197	0.386	460	427	0.0	0.7	5.347	A

C - Millington Road	305	76	1271	821	0.372	302	114	0.0	0.6	7.603	A
D - Dawley Road (S)	597	149	615	1116	0.535	592	959	0.0	1.2	7.492	A
E - Bourne Avenue	212	53	962	764	0.277	210	244	0.0	0.4	7.123	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1399	350	226	1785	0.784	1392	1178	2.0	3.8	9.885	A
B - North Hyde Road	552	138	1107	1113	0.496	550	511	0.7	1.1	7.021	A
C - Millington Road	364	91	1522	682	0.534	362	136	0.6	1.2	12.260	B
D - Dawley Road (S)	713	178	736	1065	0.670	709	1148	1.2	2.2	11.029	B
E - Bourne Avenue	253	63	1153	670	0.377	252	293	0.4	0.7	9.454	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1713	428	275	1760	0.974	1662	1425	3.8	16.5	30.923	D
B - North Hyde Road	676	169	1324	1011	0.668	672	613	1.1	2.1	11.517	B
C - Millington Road	446	111	1833	511	0.873	429	163	1.2	5.4	42.177	E
D - Dawley Road (S)	873	218	889	1000	0.873	857	1373	2.2	6.2	25.219	D
E - Bourne Avenue	309	77	1394	550	0.563	307	352	0.7	1.4	16.092	C

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1713	428	278	1758	0.975	1695	1444	16.5	21.2	46.473	E
B - North Hyde Road	676	169	1349	1000	0.676	676	623	2.1	2.2	12.188	B
C - Millington Road	446	111	1859	496	0.899	440	166	5.4	7.0	60.869	F
D - Dawley Road (S)	873	218	900	995	0.877	870	1398	6.2	6.9	30.252	D
E - Bourne Avenue	309	77	1413	540	0.573	309	358	1.4	1.4	17.084	C

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1399	350	231	1782	0.785	1467	1211	21.2	4.2	14.974	B
B - North Hyde Road	552	138	1164	1086	0.508	556	534	2.2	1.2	7.534	A
C - Millington Road	364	91	1578	651	0.559	386	142	7.0	1.4	16.136	C
D - Dawley Road (S)	713	178	759	1055	0.676	731	1206	6.9	2.4	12.854	B
E - Bourne Avenue	253	63	1187	653	0.387	256	304	1.4	0.7	10.042	B

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1171	293	192	1803	0.650	1180	997	4.2	2.1	6.441	A
B - North Hyde Road	462	116	939	1191	0.388	464	433	1.2	0.7	5.457	A
C - Millington Road	305	76	1288	812	0.376	308	115	1.4	0.7	7.908	A
D - Dawley Road (S)	597	149	623	1112	0.537	601	973	2.4	1.3	7.813	A
E - Bourne Avenue	212	53	976	757	0.279	213	248	0.7	0.4	7.287	A

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.0.1.4646 []
© Copyright TRL Limited, 2017

For sales and distribution information, program advice and maintenance, contact TRL:
Tel: +44 (0)1344 770758 email: software@trl.co.uk Web: http://www.trlsoftware.co.uk

The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution

Filename: A437-North Hyde Road-Dawley Road-Millington Road-Bourne Avenue.j9
Path: C:\Users\Jenny Baker\Dropbox (Markides Associates)\Markides Associates Team Folder\Projects\16018.01 - Former Nestle Site, Hayes\Technical\Arcady\2024 and 2029 scenarios
Report generation date: 25/01/2017 17:16:21

- »2016 Peak , AM
- »2016 Peak , PM
- »2024 Baseline , AM
- »2024 Baseline , PM
- »2024 Baseline+Dev, AM
- »2024 Baseline+Dev , PM
- »2029 Baseline , AM
- »2029 Baseline , PM
- »2029 Baseline+Dev, AM
- »2029 Baseline+Dev , PM

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
2016 Peak								
A - Dawley Road (N)	2.9	8.41	0.73	A	2.1	6.52	0.66	A
B - North Hyde Road	0.8	6.16	0.41	A	0.8	6.03	0.43	A
C - Millington Road	0.1	5.52	0.10	A	0.8	9.13	0.43	A
D - Dawley Road (S)	2.5	11.45	0.70	B	2.1	10.83	0.66	B
E - Bourne Avenue	1.4	13.40	0.56	B	0.7	9.34	0.39	A
2024 Baseline								
A - Dawley Road (N)	12.5	30.80	0.93	D	13.3	31.01	0.94	D
B - North Hyde Road	3.7	18.01	0.78	C	2.0	11.19	0.65	B
C - Millington Road	0.3	9.00	0.20	A	5.1	45.37	0.85	E
D - Dawley Road (S)	65.5	190.02	1.11	F	5.6	25.03	0.85	D
E - Bourne Avenue	15.3	125.95	1.01	F	1.3	15.49	0.54	C
2024 Baseline+Dev								
A - Dawley Road (N)	11.5	28.41	0.93	D	16.8	38.03	0.96	E
B - North Hyde Road	4.4	20.75	0.81	C	2.0	11.38	0.66	B
C - Millington Road	0.3	9.36	0.21	A	5.4	47.46	0.86	E
D - Dawley Road (S)	71.1	206.49	1.12	F	5.9	26.05	0.85	D
E - Bourne Avenue	17.7	143.44	1.03	F	1.3	15.75	0.55	C
2029 Baseline								

A - Dawley Road (N)	15.7	37.60	0.95	E	17.2	39.00	0.96	E
B - North Hyde Road	4.1	19.94	0.80	C	2.2	12.00	0.67	B
C - Millington Road	0.3	9.42	0.22	A	7.0	60.43	0.90	F
D - Dawley Road (S)	77.5	221.65	1.13	F	6.8	29.93	0.88	D
E - Bourne Avenue	19.0	149.45	1.03	F	1.4	16.85	0.57	C
2029 Baseline+Dev								
A - Dawley Road (N)	14.2	34.47	0.95	D	21.2	46.47	0.97	E
B - North Hyde Road	5.0	23.30	0.83	C	2.2	12.19	0.68	B
C - Millington Road	0.3	9.81	0.22	A	7.0	60.87	0.90	F
D - Dawley Road (S)	83.9	241.05	1.15	F	6.9	30.25	0.88	D
E - Bourne Avenue	21.8	169.45	1.06	F	1.4	17.08	0.57	C

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	Base Model - Roundabout 1
Location	North Hyde Road/Dawley Road
Site number	
Date	23/04/2012
Version	
Status	Draft 1
Identifier	
Client	
Jobnumber	VN50026
Enumerator	rhussain [IE-D00135]
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	-Hour	perHour

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2016 Peak	AM	ONE HOUR	07:45	09:15	15	✓
D2	2016 Peak	PM	ONE HOUR	07:45	09:15	15	✓
D3	2024 Baseline	AM	ONE HOUR	07:45	09:15	15	✓
D4	2024 Baseline	PM	ONE HOUR	07:45	09:15	15	✓
D5	2024 Baseline+Dev	AM	ONE HOUR	07:45	09:15	15	✓
D6	2024 Baseline+Dev	PM	ONE HOUR	07:45	09:15	15	✓
D7	2029 Baseline	AM	ONE HOUR	07:45	09:15	15	✓
D8	2029 Baseline	PM	ONE HOUR	07:45	09:15	15	✓
D9	2029 Baseline+Dev	AM	ONE HOUR	07:45	09:15	15	✓
D10	2029 Baseline+Dev	PM	ONE HOUR	07:45	09:15	15	✓

Analysis Set Details

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

2016 Peak , AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A,B,C,D,E	9.45	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	Dawley Road (N)	
B	North Hyde Road	
C	Millington Road	
D	Daweley Road (S)	
E	Bourne Avenue	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
A - Dawley Road (N)	3.65	9.50	13.0	22.0	75.0	20.0	
B - North Hyde Road	3.50	8.00	16.0	10.0	72.0	40.0	
C - Millington Road	4.00	6.00	8.0	22.0	54.0	36.0	
D - Daweley Road (S)	3.50	5.50	12.0	20.0	76.0	46.0	
E - Bourne Avenue	3.65	4.50	3.0	32.0	56.0	35.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A - Dawley Road (N)	0.526	1904
B - North Hyde Road	0.467	1629
C - Millington Road	0.553	1523
D - Daweley Road (S)	0.422	1375
E - Bourne Avenue	0.497	1242

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2016 Peak	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Dawley Road (N)		ONE HOUR	✓	1132	100.000
B - North Hyde Road		ONE HOUR	✓	413	100.000
C - Millington Road		ONE HOUR	✓	75	100.000
D - Dawley Road (S)		ONE HOUR	✓	728	100.000
E - Bourne Avenue		ONE HOUR	✓	347	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A - Dawley Road (N)	B - North Hyde Road	C - Millington Road	D - Dawley Road (S)	E - Bourne Avenue
From	A - Dawley Road (N)	0	240	171	609	112
	B - North Hyde Road	289	0	5	83	36
	C - Millington Road	47	1	0	20	7
	D - Dawley Road (S)	543	86	67	0	32
	E - Bourne Avenue	178	93	16	60	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - Dawley Road (N)	B - North Hyde Road	C - Millington Road	D - Dawley Road (S)	E - Bourne Avenue
From	A - Dawley Road (N)	10	10	10	10	10
	B - North Hyde Road	10	10	10	10	10
	C - Millington Road	10	10	10	10	10
	D - Dawley Road (S)	10	10	10	10	10
	E - Bourne Avenue	10	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Dawley Road (N)	0.73	8.41	2.9	A	1039	1558
B - North Hyde Road	0.41	6.16	0.8	A	379	568
C - Millington Road	0.10	5.52	0.1	A	69	103
D - Dawley Road (S)	0.70	11.45	2.5	B	668	1002
E - Bourne Avenue	0.56	13.40	1.4	B	318	478

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	852	213	241	1777	0.480	848	791	0.0	1.0	4.246	A
B - North Hyde Road	311	78	775	1268	0.245	310	314	0.0	0.4	4.127	A
C - Millington Road	56	14	891	1031	0.055	56	194	0.0	0.1	4.061	A
D - Dawley Road (S)	548	137	369	1219	0.449	545	578	0.0	0.9	5.837	A
E - Bourne Avenue	261	65	773	858	0.304	259	140	0.0	0.5	6.592	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1018	254	290	1752	0.581	1016	948	1.0	1.5	5.363	A
B - North Hyde Road	371	93	928	1196	0.310	371	377	0.4	0.5	4.794	A
C - Millington Road	67	17	1067	934	0.072	67	232	0.1	0.1	4.570	A
D - Dawley Road (S)	654	164	442	1189	0.551	653	693	0.9	1.3	7.364	A
E - Bourne Avenue	312	78	927	782	0.399	311	168	0.5	0.7	8.391	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1246	312	353	1718	0.725	1241	1158	1.5	2.8	8.210	A
B - North Hyde Road	455	114	1134	1100	0.413	454	460	0.5	0.8	6.116	A
C - Millington Road	83	21	1304	803	0.103	82	284	0.1	0.1	5.496	A
D - Dawley Road (S)	802	200	540	1147	0.699	797	846	1.3	2.5	11.166	B
E - Bourne Avenue	382	96	1132	680	0.562	379	205	0.7	1.4	13.076	B

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1246	312	356	1717	0.726	1246	1164	2.8	2.9	8.406	A
B - North Hyde Road	455	114	1139	1098	0.414	455	462	0.8	0.8	6.158	A
C - Millington Road	83	21	1309	800	0.103	83	285	0.1	0.1	5.518	A
D - Dawley Road (S)	802	200	542	1147	0.699	801	850	2.5	2.5	11.453	B
E - Bourne Avenue	382	96	1137	677	0.564	382	206	1.4	1.4	13.396	B

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1018	254	293	1750	0.581	1023	956	2.9	1.5	5.482	A
B - North Hyde Road	371	93	936	1193	0.311	372	380	0.8	0.5	4.832	A
C - Millington Road	67	17	1074	930	0.073	68	234	0.1	0.1	4.594	A
D - Dawley Road (S)	654	164	444	1188	0.551	659	698	2.5	1.4	7.552	A
E - Bourne Avenue	312	78	934	778	0.401	315	169	1.4	0.7	8.587	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	852	213	244	1776	0.480	854	798	1.5	1.0	4.308	A
B - North Hyde Road	311	78	781	1265	0.246	311	317	0.5	0.4	4.157	A
C - Millington Road	56	14	897	1028	0.055	57	196	0.1	0.1	4.078	A
D - Dawley Road (S)	548	137	371	1218	0.450	550	583	1.4	0.9	5.941	A
E - Bourne Avenue	261	65	780	855	0.306	262	141	0.7	0.5	6.694	A

2016 Peak , PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A,B,C,D,E	8.01	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2016 Peak	PM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Dawley Road (N)		ONE HOUR	✓	1069	100.000
B - North Hyde Road		ONE HOUR	✓	453	100.000
C - Millington Road		ONE HOUR	✓	294	100.000
D - Dawley Road (S)		ONE HOUR	✓	652	100.000
E - Bourne Avenue		ONE HOUR	✓	246	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A - Dawley Road (N)	B - North Hyde Road	C - Millington Road	D - Daweley Road (S)	E - Bourne Avenue
From	A - Dawley Road (N)	0	228	75	639	127
	B - North Hyde Road	280	0	8	88	77
	C - Millington Road	127	3	0	149	15
	D - Daweley Road (S)	521	51	19	0	61
	E - Bourne Avenue	111	73	14	48	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - Dawley Road (N)	B - North Hyde Road	C - Millington Road	D - Daweley Road (S)	E - Bourne Avenue
From	A - Dawley Road (N)	10	10	10	10	10
	B - North Hyde Road	10	10	10	10	10
	C - Millington Road	10	10	10	10	10
	D - Daweley Road (S)	10	10	10	10	10
	E - Bourne Avenue	10	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Dawley Road (N)	0.66	6.52	2.1	A	981	1471
B - North Hyde Road	0.43	6.03	0.8	A	416	624
C - Millington Road	0.43	9.13	0.8	A	270	405
D - Daweley Road (S)	0.66	10.83	2.1	B	598	897
E - Bourne Avenue	0.39	9.34	0.7	A	226	339

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	805	201	156	1822	0.442	801	778	0.0	0.9	3.865	A
B - North Hyde Road	341	85	691	1307	0.261	339	266	0.0	0.4	4.086	A
C - Millington Road	221	55	944	1002	0.221	220	87	0.0	0.3	5.049	A
D - Daweley Road (S)	491	123	471	1176	0.417	488	692	0.0	0.8	5.727	A
E - Bourne Avenue	185	46	749	870	0.213	184	210	0.0	0.3	5.764	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	961	240	187	1806	0.532	960	932	0.9	1.2	4.669	A
B - North Hyde Road	407	102	828	1243	0.328	407	319	0.4	0.5	4.730	A
C - Millington Road	264	66	1130	899	0.294	264	104	0.3	0.5	6.229	A
D - Daweley Road (S)	586	147	565	1137	0.516	585	829	0.8	1.2	7.148	A
E - Bourne Avenue	221	55	898	796	0.278	221	251	0.3	0.4	6.875	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1177	294	228	1784	0.660	1174	1139	1.2	2.1	6.449	A
B - North Hyde Road	499	125	1012	1157	0.431	498	390	0.5	0.8	5.993	A
C - Millington Road	324	81	1382	759	0.426	322	127	0.5	0.8	9.030	A
D - Daweley Road (S)	718	179	691	1084	0.662	714	1014	1.2	2.1	10.604	B
E - Bourne Avenue	271	68	1097	697	0.389	270	307	0.4	0.7	9.247	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1177	294	229	1784	0.660	1177	1144	2.1	2.1	6.524	A
B - North Hyde Road	499	125	1015	1156	0.432	499	391	0.8	0.8	6.027	A
C - Millington Road	324	81	1386	757	0.427	324	128	0.8	0.8	9.128	A
D - Daweley Road (S)	718	179	692	1083	0.663	718	1017	2.1	2.1	10.831	B
E - Bourne Avenue	271	68	1102	695	0.390	271	308	0.7	0.7	9.340	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	961	240	188	1805	0.532	964	939	2.1	1.3	4.727	A
B - North Hyde Road	407	102	832	1241	0.328	408	320	0.8	0.5	4.762	A
C - Millington Road	264	66	1136	896	0.295	266	105	0.8	0.5	6.297	A
D - Daweley Road (S)	586	147	567	1136	0.516	590	834	2.1	1.2	7.306	A
E - Bourne Avenue	221	55	905	793	0.279	222	253	0.7	0.4	6.955	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	805	201	157	1822	0.442	806	784	1.3	0.9	3.906	A
B - North Hyde Road	341	85	696	1305	0.261	342	268	0.5	0.4	4.115	A
C - Millington Road	221	55	950	999	0.222	222	88	0.5	0.3	5.102	A
D - Daweley Road (S)	491	123	474	1175	0.418	492	697	1.2	0.8	5.817	A
E - Bourne Avenue	185	46	756	867	0.214	186	211	0.4	0.3	5.820	A

2024 Baseline , AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A,B,C,D,E	83.12	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2024 Baseline	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Dawley Road (N)		ONE HOUR	✓	1420	100.000
B - North Hyde Road		ONE HOUR	✓	697	100.000
C - Millington Road		ONE HOUR	✓	103	100.000
D - Daweley Road (S)		ONE HOUR	✓	1029	100.000
E - Bourne Avenue		ONE HOUR	✓	404	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A - Dawley Road (N)	B - North Hyde Road	C - Millington Road	D - Daweley Road (S)	E - Bourne Avenue
From	A - Dawley Road (N)	0	347	227	720	126
	B - North Hyde Road	503	0	6	131	57
	C - Millington Road	66	1	0	28	8
	D - Daweley Road (S)	767	112	115	0	35
	E - Bourne Avenue	200	116	23	65	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - Dawley Road (N)	B - North Hyde Road	C - Millington Road	D - Daweley Road (S)	E - Bourne Avenue
From	A - Dawley Road (N)	10	10	10	10	10
	B - North Hyde Road	10	10	10	10	10
	C - Millington Road	10	10	10	10	10
	D - Daweley Road (S)	10	10	10	10	10
	E - Bourne Avenue	10	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Dawley Road (N)	0.93	30.80	12.5	D	1303	1955
B - North Hyde Road	0.78	18.01	3.7	C	640	959
C - Millington Road	0.20	9.00	0.3	A	95	142
D - Dawley Road (S)	1.11	190.02	65.5	F	944	1416
E - Bourne Avenue	1.01	125.95	15.3	F	371	556

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1069	267	321	1735	0.616	1062	1145	0.0	1.7	5.826	A
B - North Hyde Road	525	131	954	1184	0.443	521	430	0.0	0.9	5.941	A
C - Millington Road	78	19	1198	861	0.090	77	277	0.0	0.1	5.047	A
D - Dawley Road (S)	775	194	569	1135	0.683	766	706	0.0	2.3	10.481	B
E - Bourne Avenue	304	76	1166	663	0.459	301	169	0.0	0.9	10.822	B

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1277	319	383	1702	0.750	1271	1368	1.7	3.2	9.052	A
B - North Hyde Road	627	157	1140	1097	0.571	624	514	0.9	1.4	8.333	A
C - Millington Road	93	23	1434	731	0.127	92	331	0.1	0.2	6.199	A
D - Dawley Road (S)	925	231	682	1088	0.851	912	845	2.3	5.4	21.211	C
E - Bourne Avenue	363	91	1392	551	0.660	359	202	0.9	2.0	20.202	C

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1563	391	431	1677	0.932	1533	1575	3.2	10.8	23.628	C
B - North Hyde Road	767	192	1361	994	0.772	759	604	1.4	3.4	16.312	C
C - Millington Road	113	28	1732	566	0.200	113	388	0.2	0.3	8.731	A
D - Dawley Road (S)	1133	283	828	1026	1.105	1007	1017	5.4	36.9	89.450	F
E - Bourne Avenue	445	111	1594	450	0.988	412	241	2.0	10.2	73.522	F

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1563	391	440	1673	0.935	1556	1595	10.8	12.5	30.801	D
B - North Hyde Road	767	192	1382	984	0.780	766	614	3.4	3.7	18.010	C
C - Millington Road	113	28	1755	553	0.205	113	393	0.3	0.3	8.998	A

D - Dawley Road (S)	1133	283	836	1022	1.108	1019	1032	36.9	65.5	190.021	F
E - Bourne Avenue	445	111	1611	442	1.007	424	244	10.2	15.3	125.945	F

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1277	319	441	1672	0.764	1312	1513	12.5	3.7	11.970	B
B - North Hyde Road	627	157	1199	1070	0.586	635	554	3.7	1.6	9.273	A
C - Millington Road	93	23	1477	707	0.131	93	357	0.3	0.2	6.449	A
D - Dawley Road (S)	925	231	694	1082	0.855	1064	875	65.5	30.6	165.673	F
E - Bourne Avenue	363	91	1547	474	0.767	407	212	15.3	4.3	72.063	F

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1069	267	356	1717	0.623	1077	1249	3.7	1.8	6.256	A
B - North Hyde Road	525	131	982	1171	0.448	527	451	1.6	0.9	6.175	A
C - Millington Road	78	19	1215	852	0.091	78	294	0.2	0.1	5.117	A
D - Dawley Road (S)	775	194	576	1132	0.684	887	717	30.6	2.5	24.131	C
E - Bourne Avenue	304	76	1288	602	0.505	317	175	4.3	1.2	14.460	B

2024 Baseline , PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A,B,C,D,E	26.78	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2024 Baseline	PM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Dawley Road (N)		ONE HOUR	✓	1502	100.000
B - North Hyde Road		ONE HOUR	✓	594	100.000
C - Millington Road		ONE HOUR	✓	397	100.000
D - Daweley Road (S)		ONE HOUR	✓	773	100.000
E - Bourne Avenue		ONE HOUR	✓	275	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A - Dawley Road (N)	B - North Hyde Road	C - Millington Road	D - Daweley Road (S)	E - Bourne Avenue
From	A - Dawley Road (N)	0	383	96	879	144
	B - North Hyde Road	380	0	9	113	92
	C - Millington Road	161	6	0	211	19
	D - Daweley Road (S)	617	63	27	0	66
	E - Bourne Avenue	124	81	17	53	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - Dawley Road (N)	B - North Hyde Road	C - Millington Road	D - Daweley Road (S)	E - Bourne Avenue
From	A - Dawley Road (N)	10	10	10	10	10
	B - North Hyde Road	10	10	10	10	10
	C - Millington Road	10	10	10	10	10
	D - Daweley Road (S)	10	10	10	10	10
	E - Bourne Avenue	10	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Dawley Road (N)	0.94	31.01	13.3	D	1378	2067
B - North Hyde Road	0.65	11.19	2.0	B	545	818
C - Millington Road	0.85	45.37	5.1	E	364	546
D - Daweley Road (S)	0.85	25.03	5.6	D	709	1064
E - Bourne Avenue	0.54	15.49	1.3	C	252	379

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1131	283	185	1807	0.626	1124	958	0.0	1.8	5.736	A
B - North Hyde Road	447	112	910	1205	0.371	445	399	0.0	0.6	5.190	A
C - Millington Road	299	75	1243	837	0.357	296	111	0.0	0.6	7.299	A
D - Dawley Road (S)	582	145	600	1122	0.519	577	939	0.0	1.2	7.211	A
E - Bourne Avenue	207	52	937	777	0.267	205	240	0.0	0.4	6.912	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1350	338	221	1788	0.755	1344	1148	1.8	3.3	8.815	A
B - North Hyde Road	534	133	1088	1121	0.476	533	477	0.6	1.0	6.708	A
C - Millington Road	357	89	1488	701	0.509	355	133	0.6	1.1	11.369	B
D - Dawley Road (S)	695	174	718	1072	0.648	692	1124	1.2	2.0	10.323	B
E - Bourne Avenue	247	62	1123	684	0.361	246	287	0.4	0.6	9.021	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1654	413	269	1763	0.938	1621	1393	3.3	11.5	23.727	C
B - North Hyde Road	654	164	1313	1017	0.643	650	576	1.0	1.9	10.700	B
C - Millington Road	437	109	1802	528	0.829	424	161	1.1	4.3	34.858	D
D - Dawley Road (S)	851	213	871	1008	0.845	838	1356	2.0	5.2	21.866	C
E - Bourne Avenue	303	76	1361	566	0.535	300	348	0.6	1.2	14.773	B

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1654	413	272	1761	0.939	1647	1409	11.5	13.3	31.006	D
B - North Hyde Road	654	164	1333	1007	0.649	654	585	1.9	2.0	11.186	B
C - Millington Road	437	109	1824	516	0.848	434	164	4.3	5.1	45.369	E
D - Dawley Road (S)	851	213	881	1004	0.848	849	1377	5.2	5.6	25.033	D
E - Bourne Avenue	303	76	1378	558	0.543	303	352	1.2	1.3	15.491	C

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1350	338	225	1786	0.756	1389	1173	13.3	3.6	10.907	B
B - North Hyde Road	534	133	1123	1105	0.483	538	491	2.0	1.0	7.024	A
C - Millington Road	357	89	1524	681	0.524	372	137	5.1	1.2	13.436	B
D - Dawley Road (S)	695	174	735	1065	0.652	709	1162	5.6	2.1	11.524	B
E - Bourne Avenue	247	62	1149	671	0.368	250	295	1.3	0.7	9.447	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1131	283	187	1806	0.626	1138	971	3.6	1.9	5.983	A
B - North Hyde Road	447	112	921	1200	0.373	449	404	1.0	0.7	5.285	A
C - Millington Road	299	75	1257	829	0.361	301	113	1.2	0.6	7.543	A
D - Dawley Road (S)	582	145	607	1119	0.520	586	951	2.1	1.2	7.476	A
E - Bourne Avenue	207	52	949	770	0.269	208	243	0.7	0.4	7.051	A

2024 Baseline+Dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A,B,C,D,E	88.94	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2024 Baseline+Dev	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Dawley Road (N)		ONE HOUR	✓	1410	100.000
B - North Hyde Road		ONE HOUR	✓	725	100.000
C - Millington Road		ONE HOUR	✓	103	100.000
D - Daweley Road (S)		ONE HOUR	✓	1029	100.000
E - Bourne Avenue		ONE HOUR	✓	404	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A - Dawley Road (N)	B - North Hyde Road	C - Millington Road	D - Daweley Road (S)	E - Bourne Avenue
From	A - Dawley Road (N)	0	337	227	720	126
	B - North Hyde Road	530	0	6	132	57
	C - Millington Road	66	1	0	28	8
	D - Daweley Road (S)	767	112	115	0	35
	E - Bourne Avenue	200	116	23	65	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - Dawley Road (N)	B - North Hyde Road	C - Millington Road	D - Daweley Road (S)	E - Bourne Avenue
From	A - Dawley Road (N)	10	10	10	10	10
	B - North Hyde Road	10	10	10	10	10
	C - Millington Road	10	10	10	10	10
	D - Daweley Road (S)	10	10	10	10	10
	E - Bourne Avenue	10	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Dawley Road (N)	0.93	28.41	11.5	D	1294	1941
B - North Hyde Road	0.81	20.75	4.4	C	665	998
C - Millington Road	0.21	9.36	0.3	A	95	142
D - Daweley Road (S)	1.12	206.49	71.1	F	944	1416
E - Bourne Avenue	1.03	143.44	17.7	F	371	556

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1062	265	321	1735	0.612	1055	1165	0.0	1.7	5.763	A
B - North Hyde Road	546	136	954	1184	0.461	542	422	0.0	0.9	6.130	A
C - Millington Road	78	19	1219	850	0.091	77	277	0.0	0.1	5.122	A
D - Daweley Road (S)	775	194	589	1126	0.688	765	707	0.0	2.3	10.709	B
E - Bourne Avenue	304	76	1186	653	0.466	300	169	0.0	0.9	11.115	B

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1268	317	383	1703	0.744	1262	1391	1.7	3.1	8.875	A
B - North Hyde Road	652	163	1140	1097	0.594	649	505	0.9	1.6	8.786	A
C - Millington Road	93	23	1459	717	0.129	92	331	0.1	0.2	6.335	A
D - Daweley Road (S)	925	231	706	1077	0.859	912	845	2.3	5.7	22.233	C
E - Bourne Avenue	363	91	1415	539	0.674	358	202	0.9	2.1	21.381	C

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1552	388	427	1679	0.924	1525	1594	3.1	10.1	22.376	C
B - North Hyde Road	798	200	1361	994	0.803	788	591	1.6	4.1	18.376	C
C - Millington Road	113	28	1762	550	0.206	113	387	0.2	0.3	9.058	A

D - Dawley Road (S)	1133	283	857	1014	1.118	997	1018	5.7	39.6	95.550	F
E - Bourne Avenue	445	111	1613	441	1.009	408	241	2.1	11.3	80.721	F

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1552	388	435	1675	0.927	1547	1613	10.1	11.5	28.408	D
B - North Hyde Road	798	200	1381	985	0.810	797	601	4.1	4.4	20.748	C
C - Millington Road	113	28	1786	537	0.211	113	392	0.3	0.3	9.356	A
D - Dawley Road (S)	1133	283	866	1010	1.122	1007	1033	39.6	71.1	206.491	F
E - Bourne Avenue	445	111	1629	433	1.028	419	244	11.3	17.7	143.436	F

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1268	317	443	1671	0.759	1299	1535	11.5	3.6	11.463	B
B - North Hyde Road	652	163	1197	1071	0.609	662	545	4.4	1.8	9.931	A
C - Millington Road	93	23	1503	693	0.134	93	356	0.3	0.2	6.607	A
D - Dawley Road (S)	925	231	720	1071	0.863	1055	876	71.1	38.6	189.446	F
E - Bourne Avenue	363	91	1564	465	0.781	415	211	17.7	4.9	89.700	F

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1062	265	364	1712	0.620	1069	1294	3.6	1.8	6.219	A
B - North Hyde Road	546	136	985	1170	0.467	549	448	1.8	1.0	6.411	A
C - Millington Road	78	19	1237	840	0.092	78	297	0.2	0.1	5.199	A
D - Dawley Road (S)	775	194	597	1123	0.690	919	718	38.6	2.6	34.119	D
E - Bourne Avenue	304	76	1339	577	0.527	319	176	4.9	1.3	16.144	C

2024 Baseline+Dev , PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A,B,C,D,E	30.30	D

Junction Network Options

Driving side	Lighting
--------------	----------

Left	Normal/unknown
------	----------------

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2024 Baseline+Dev	PM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Dawley Road (N)		ONE HOUR	✓	1530	100.000
B - North Hyde Road		ONE HOUR	✓	601	100.000
C - Millington Road		ONE HOUR	✓	399	100.000
D - Dawley Road (S)		ONE HOUR	✓	776	100.000
E - Bourne Avenue		ONE HOUR	✓	275	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A - Dawley Road (N)	B - North Hyde Road	C - Millington Road	D - Dawley Road (S)	E - Bourne Avenue
From	A - Dawley Road (N)	0	411	96	879	144
	B - North Hyde Road	385	0	9	114	93
	C - Millington Road	161	6	0	211	21
	D - Dawley Road (S)	617	66	27	0	66
	E - Bourne Avenue	124	81	17	53	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - Dawley Road (N)	B - North Hyde Road	C - Millington Road	D - Dawley Road (S)	E - Bourne Avenue
From	A - Dawley Road (N)	10	10	10	10	10
	B - North Hyde Road	10	10	10	10	10
	C - Millington Road	10	10	10	10	10
	D - Dawley Road (S)	10	10	10	10	10
	E - Bourne Avenue	10	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
-----	---------	---------------	-----------------	---------	-------------------------	-------------------------------

A - Dawley Road (N)	0.96	38.03	16.8	E	1404	2106
B - North Hyde Road	0.66	11.38	2.0	B	551	827
C - Millington Road	0.86	47.46	5.4	E	366	549
D - Dawley Road (S)	0.85	26.05	5.9	D	712	1068
E - Bourne Avenue	0.55	15.75	1.3	C	252	379

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1152	288	187	1806	0.638	1144	962	0.0	1.9	5.919	A
B - North Hyde Road	452	113	909	1205	0.375	450	422	0.0	0.7	5.226	A
C - Millington Road	300	75	1248	834	0.360	298	111	0.0	0.6	7.358	A
D - Dawley Road (S)	584	146	606	1119	0.522	579	940	0.0	1.2	7.273	A
E - Bourne Avenue	207	52	943	774	0.268	205	242	0.0	0.4	6.949	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1375	344	224	1786	0.770	1369	1152	1.9	3.5	9.340	A
B - North Hyde Road	540	135	1088	1122	0.482	539	505	0.7	1.0	6.778	A
C - Millington Road	359	90	1494	698	0.514	357	133	0.6	1.1	11.528	B
D - Dawley Road (S)	698	174	725	1069	0.653	694	1125	1.2	2.0	10.475	B
E - Bourne Avenue	247	62	1130	681	0.363	246	290	0.4	0.6	9.094	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1685	421	272	1761	0.957	1643	1397	3.5	13.8	27.177	D
B - North Hyde Road	662	165	1308	1019	0.649	658	608	1.0	2.0	10.845	B
C - Millington Road	439	110	1805	526	0.835	426	161	1.1	4.5	35.751	E
D - Dawley Road (S)	854	214	879	1004	0.851	841	1352	2.0	5.4	22.550	C
E - Bourne Avenue	303	76	1369	562	0.539	300	350	0.6	1.2	14.990	B

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1685	421	275	1760	0.957	1673	1414	13.8	16.8	38.033	E
B - North Hyde Road	662	165	1330	1009	0.656	661	618	2.0	2.0	11.381	B
C - Millington Road	439	110	1828	513	0.856	436	163	4.5	5.4	47.465	E
D - Dawley Road (S)	854	214	889	1000	0.854	852	1375	5.4	5.9	26.054	D
E - Bourne Avenue	303	76	1386	554	0.547	303	355	1.2	1.3	15.746	C

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1375	344	228	1784	0.771	1427	1179	16.8	3.9	12.554	B
B - North Hyde Road	540	135	1132	1101	0.491	544	523	2.0	1.1	7.158	A
C - Millington Road	359	90	1538	673	0.533	375	138	5.4	1.3	13.964	B

D - Dawley Road (S)	698	174	744	1061	0.657	712	1170	5.9	2.2	11.792	B
E - Bourne Avenue	247	62	1157	667	0.371	250	299	1.3	0.7	9.543	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1152	288	189	1805	0.638	1159	974	3.9	2.0	6.208	A
B - North Hyde Road	452	113	921	1199	0.377	454	427	1.1	0.7	5.323	A
C - Millington Road	300	75	1263	826	0.364	303	113	1.3	0.6	7.616	A
D - Dawley Road (S)	584	146	613	1116	0.523	588	953	2.2	1.2	7.549	A
E - Bourne Avenue	207	52	956	767	0.270	208	245	0.7	0.4	7.093	A

2029 Baseline , AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A,B,C,D,E	97.63	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2029 Baseline	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Dawley Road (N)		ONE HOUR	✓	1449	100.000
B - North Hyde Road		ONE HOUR	✓	708	100.000
C - Millington Road		ONE HOUR	✓	105	100.000
D - Dawley Road (S)		ONE HOUR	✓	1047	100.000
E - Bourne Avenue		ONE HOUR	✓	413	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
From		A - Dawley Road (N)	B - North Hyde Road	C - Millington Road	D - Daweley Road (S)	E - Bourne Avenue
	A - Dawley Road (N)	0	353	231	736	129
	B - North Hyde Road	511	0	6	133	58
	C - Millington Road	67	1	0	29	8
	D - Daweley Road (S)	781	114	116	0	36
	E - Bourne Avenue	205	118	23	67	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
From		A - Dawley Road (N)	B - North Hyde Road	C - Millington Road	D - Daweley Road (S)	E - Bourne Avenue
	A - Dawley Road (N)	10	10	10	10	10
	B - North Hyde Road	10	10	10	10	10
	C - Millington Road	10	10	10	10	10
	D - Daweley Road (S)	10	10	10	10	10
	E - Bourne Avenue	10	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Dawley Road (N)	0.95	37.60	15.7	E	1330	1994
B - North Hyde Road	0.80	19.94	4.1	C	650	975
C - Millington Road	0.22	9.42	0.3	A	96	145
D - Daweley Road (S)	1.13	221.65	77.5	F	961	1441
E - Bourne Avenue	1.03	149.45	19.0	F	379	568

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1091	273	326	1732	0.630	1084	1165	0.0	1.8	6.037	A
B - North Hyde Road	533	133	973	1175	0.453	529	437	0.0	0.9	6.095	A
C - Millington Road	79	20	1222	848	0.093	79	281	0.0	0.1	5.143	A
D - Daweley Road (S)	788	197	579	1131	0.697	779	721	0.0	2.4	10.958	B
E - Bourne Avenue	311	78	1185	654	0.476	307	173	0.0	1.0	11.305	B

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1303	326	389	1700	0.766	1296	1391	1.8	3.5	9.660	A
B - North Hyde Road	636	159	1163	1087	0.586	634	522	0.9	1.5	8.698	A
C - Millington Road	94	24	1462	716	0.132	94	335	0.1	0.2	6.371	A
D - Dawley Road (S)	941	235	693	1083	0.869	926	863	2.4	6.1	23.369	C
E - Bourne Avenue	371	93	1413	540	0.687	366	206	1.0	2.2	22.149	C

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1595	399	431	1677	0.951	1557	1586	3.5	12.9	27.071	D
B - North Hyde Road	780	195	1380	985	0.791	770	609	1.5	3.8	17.704	C
C - Millington Road	116	29	1761	550	0.210	115	389	0.2	0.3	9.090	A
D - Dawley Road (S)	1153	288	841	1020	1.130	1006	1035	6.1	42.9	101.231	F
E - Bourne Avenue	455	114	1602	446	1.019	415	245	2.2	12.1	83.420	F

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1595	399	439	1673	0.954	1584	1604	12.9	15.7	37.600	E
B - North Hyde Road	780	195	1404	974	0.800	778	620	3.8	4.1	19.937	C
C - Millington Road	116	29	1787	536	0.216	116	395	0.3	0.3	9.416	A
D - Dawley Road (S)	1153	288	850	1016	1.134	1014	1052	42.9	77.5	221.650	F
E - Bourne Avenue	455	114	1616	439	1.035	427	248	12.1	19.0	149.451	F

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1303	326	449	1668	0.781	1349	1530	15.7	4.1	13.990	B
B - North Hyde Road	636	159	1231	1055	0.603	646	567	4.1	1.7	9.900	A
C - Millington Road	94	24	1515	686	0.138	95	362	0.3	0.2	6.701	A
D - Dawley Road (S)	941	235	708	1076	0.874	1061	902	77.5	47.5	213.416	F
E - Bourne Avenue	371	93	1553	471	0.789	426	217	19.0	5.3	97.340	F

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1091	273	378	1705	0.640	1099	1321	4.1	2.0	6.626	A
B - North Hyde Road	533	133	1010	1158	0.460	536	467	1.7	0.9	6.398	A
C - Millington Road	79	20	1241	838	0.094	79	305	0.2	0.1	5.222	A

D - Dawley Road (S)	788	197	586	1128	0.699	967	734	47.5	2.8	50.758	F
E - Bourne Avenue	311	78	1372	560	0.555	326	181	5.3	1.4	17.920	C

2029 Baseline , PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A,B,C,D,E	33.17	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2029 Baseline	PM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Dawley Road (N)		ONE HOUR	✓	1532	100.000
B - North Hyde Road		ONE HOUR	✓	606	100.000
C - Millington Road		ONE HOUR	✓	405	100.000
D - Dawley Road (S)		ONE HOUR	✓	793	100.000
E - Bourne Avenue		ONE HOUR	✓	281	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A - Dawley Road (N)	B - North Hyde Road	C - Millington Road	D - Dawley Road (S)	E - Bourne Avenue
From	A - Dawley Road (N)	0	390	98	897	147
	B - North Hyde Road	387	0	9	116	94
	C - Millington Road	164	6	0	215	20
	D - Dawley Road (S)	632	65	28	0	68
	E - Bourne Avenue	127	83	17	54	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - Dawley Road (N)	B - North Hyde Road	C - Millington Road	D - Daweley Road (S)	E - Bourne Avenue
From	A - Dawley Road (N)	10	10	10	10	10
	B - North Hyde Road	10	10	10	10	10
	C - Millington Road	10	10	10	10	10
	D - Daweley Road (S)	10	10	10	10	10
	E - Bourne Avenue	10	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Dawley Road (N)	0.96	39.00	17.2	E	1406	2109
B - North Hyde Road	0.67	12.00	2.2	B	556	834
C - Millington Road	0.90	60.43	7.0	F	372	557
D - Daweley Road (S)	0.88	29.93	6.8	D	728	1092
E - Bourne Avenue	0.57	16.85	1.4	C	258	387

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1153	288	189	1805	0.639	1146	979	0.0	1.9	5.943	A
B - North Hyde Road	456	114	928	1196	0.381	454	407	0.0	0.7	5.312	A
C - Millington Road	305	76	1268	823	0.371	302	114	0.0	0.6	7.574	A
D - Daweley Road (S)	597	149	612	1117	0.534	592	958	0.0	1.2	7.475	A
E - Bourne Avenue	212	53	958	766	0.276	210	246	0.0	0.4	7.095	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1377	344	226	1785	0.772	1371	1172	1.9	3.6	9.407	A
B - North Hyde Road	545	136	1110	1111	0.490	543	487	0.7	1.0	6.954	A
C - Millington Road	364	91	1518	685	0.532	362	136	0.6	1.2	12.176	B
D - Daweley Road (S)	713	178	732	1066	0.669	709	1147	1.2	2.1	10.985	B
E - Bourne Avenue	253	63	1147	672	0.376	252	294	0.4	0.7	9.394	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1687	422	275	1759	0.959	1644	1419	3.6	14.1	27.611	D
B - North Hyde Road	667	167	1334	1007	0.663	663	586	1.0	2.1	11.373	B

C - Millington Road	446	111	1833	511	0.873	429	164	1.2	5.4	42.138	E
D - Dawley Road (S)	873	218	885	1002	0.872	857	1376	2.1	6.1	25.019	D
E - Bourne Avenue	309	77	1387	553	0.559	307	355	0.7	1.3	15.894	C

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1687	422	278	1758	0.960	1674	1437	14.1	17.2	38.996	E
B - North Hyde Road	667	167	1357	996	0.670	667	595	2.1	2.2	12.000	B
C - Millington Road	446	111	1857	497	0.897	440	166	5.4	7.0	60.432	F
D - Dawley Road (S)	873	218	896	997	0.876	870	1401	6.1	6.8	29.931	D
E - Bourne Avenue	309	77	1406	544	0.569	309	360	1.3	1.4	16.853	C

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1377	344	231	1782	0.773	1431	1205	17.2	3.9	12.813	B
B - North Hyde Road	545	136	1157	1090	0.500	549	505	2.2	1.1	7.383	A
C - Millington Road	364	91	1565	659	0.553	386	141	7.0	1.4	15.655	C
D - Dawley Road (S)	713	178	754	1057	0.675	731	1197	6.8	2.4	12.753	B
E - Bourne Avenue	253	63	1181	656	0.385	255	304	1.4	0.7	9.967	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1153	288	192	1803	0.640	1161	992	3.9	2.0	6.238	A
B - North Hyde Road	456	114	940	1191	0.383	458	412	1.1	0.7	5.419	A
C - Millington Road	305	76	1283	814	0.374	308	115	1.4	0.7	7.864	A
D - Dawley Road (S)	597	149	619	1114	0.536	601	972	2.4	1.3	7.791	A
E - Bourne Avenue	212	53	971	760	0.279	213	249	0.7	0.4	7.256	A

2029 Baseline+Dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A,B,C,D,E	104.35	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2029 Baseline+Dev	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Dawley Road (N)		ONE HOUR	✓	1439	100.000
B - North Hyde Road		ONE HOUR	✓	736	100.000
C - Millington Road		ONE HOUR	✓	105	100.000
D - Daweley Road (S)		ONE HOUR	✓	1048	100.000
E - Bourne Avenue		ONE HOUR	✓	413	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A - Dawley Road (N)	B - North Hyde Road	C - Millington Road	D - Daweley Road (S)	E - Bourne Avenue
From	A - Dawley Road (N)	0	343	231	736	129
	B - North Hyde Road	538	0	6	134	58
	C - Millington Road	67	1	0	29	8
	D - Daweley Road (S)	781	115	116	0	36
	E - Bourne Avenue	205	118	23	67	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - Dawley Road (N)	B - North Hyde Road	C - Millington Road	D - Daweley Road (S)	E - Bourne Avenue
From	A - Dawley Road (N)	10	10	10	10	10
	B - North Hyde Road	10	10	10	10	10
	C - Millington Road	10	10	10	10	10
	D - Daweley Road (S)	10	10	10	10	10
	E - Bourne Avenue	10	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Dawley Road (N)	0.95	34.47	14.2	D	1320	1981
B - North Hyde Road	0.83	23.30	5.0	C	675	1013
C - Millington Road	0.22	9.81	0.3	A	96	145
D - Daweley Road (S)	1.15	241.05	83.9	F	962	1442
E - Bourne Avenue	1.06	169.45	21.8	F	379	568

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1083	271	327	1732	0.625	1076	1185	0.0	1.8	5.974	A
B - North Hyde Road	554	139	973	1175	0.471	550	430	0.0	1.0	6.295	A
C - Millington Road	79	20	1242	837	0.094	79	281	0.0	0.1	5.219	A
D - Dawley Road (S)	789	197	599	1122	0.703	779	722	0.0	2.5	11.231	B
E - Bourne Avenue	311	78	1205	643	0.483	307	173	0.0	1.0	11.640	B

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1294	323	389	1699	0.761	1287	1413	1.8	3.4	9.468	A
B - North Hyde Road	662	165	1163	1087	0.609	659	514	1.0	1.7	9.192	A
C - Millington Road	94	24	1487	702	0.134	94	335	0.1	0.2	6.515	A
D - Dawley Road (S)	942	236	717	1073	0.878	926	864	2.5	6.5	24.673	C
E - Bourne Avenue	371	93	1437	528	0.703	366	206	1.0	2.4	23.586	C

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1584	396	427	1679	0.943	1550	1603	3.4	12.0	25.596	D
B - North Hyde Road	810	203	1380	985	0.822	799	597	1.7	4.5	20.113	C
C - Millington Road	116	29	1791	534	0.217	115	388	0.2	0.3	9.444	A
D - Dawley Road (S)	1154	288	869	1008	1.144	996	1037	6.5	46.0	108.399	F
E - Bourne Avenue	455	114	1620	437	1.040	411	245	2.4	13.4	91.482	F

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1584	396	434	1676	0.945	1575	1621	12.0	14.2	34.469	D
B - North Hyde Road	810	203	1403	975	0.831	809	607	4.5	5.0	23.304	C
C - Millington Road	116	29	1817	519	0.223	116	394	0.3	0.3	9.810	A
D - Dawley Road (S)	1154	288	880	1004	1.149	1002	1053	46.0	83.9	240.652	F
E - Bourne Avenue	455	114	1634	431	1.056	421	248	13.4	21.8	169.452	F

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1294	323	451	1667	0.776	1335	1552	14.2	4.0	13.223	B
B - North Hyde Road	662	165	1227	1057	0.626	674	558	5.0	1.9	10.664	B
C - Millington Road	94	24	1541	672	0.141	95	360	0.3	0.2	6.872	A
D - Dawley Road (S)	942	236	734	1065	0.884	1052	902	83.9	56.6	241.051	F
E - Bourne Avenue	371	93	1570	462	0.803	433	216	21.8	6.3	121.205	F

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1083	271	388	1700	0.637	1092	1370	4.0	2.0	6.594	A
B - North Hyde Road	554	139	1014	1156	0.479	558	465	1.9	1.0	6.653	A
C - Millington Road	79	20	1263	826	0.096	79	309	0.2	0.1	5.307	A
D - Dawley Road (S)	789	197	607	1119	0.705	1004	735	56.6	2.9	74.214	F
E - Bourne Avenue	311	78	1428	533	0.584	330	182	6.3	1.6	21.084	C

2029 Baseline+Dev , PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A,B,C,D,E	36.51	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2029 Baseline+Dev	PM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Dawley Road (N)		ONE HOUR	✓	1556	100.000
B - North Hyde Road		ONE HOUR	✓	614	100.000

C - Millington Road		ONE HOUR	✓	405	100.000
D - Daweley Road (S)		ONE HOUR	✓	793	100.000
E - Bourne Avenue		ONE HOUR	✓	281	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A - Dawley Road (N)	B - North Hyde Road	C - Millington Road	D - Daweley Road (S)	E - Bourne Avenue
From	A - Dawley Road (N)	0	417	98	897	144
	B - North Hyde Road	393	0	9	117	95
	C - Millington Road	164	6	0	215	20
	D - Daweley Road (S)	632	65	28	0	68
	E - Bourne Avenue	127	83	17	54	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - Dawley Road (N)	B - North Hyde Road	C - Millington Road	D - Daweley Road (S)	E - Bourne Avenue
From	A - Dawley Road (N)	10	10	10	10	10
	B - North Hyde Road	10	10	10	10	10
	C - Millington Road	10	10	10	10	10
	D - Daweley Road (S)	10	10	10	10	10
	E - Bourne Avenue	10	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Dawley Road (N)	0.97	46.47	21.2	E	1428	2142
B - North Hyde Road	0.68	12.19	2.2	B	563	845
C - Millington Road	0.90	60.87	7.0	F	372	557
D - Daweley Road (S)	0.88	30.25	6.9	D	728	1092
E - Bourne Avenue	0.57	17.08	1.4	C	258	387

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1171	293	189	1805	0.649	1163	983	0.0	2.0	6.103	A
B - North Hyde Road	462	116	926	1197	0.386	460	427	0.0	0.7	5.347	A

C - Millington Road	305	76	1271	821	0.372	302	114	0.0	0.6	7.603	A
D - Daweley Road (S)	597	149	615	1116	0.535	592	959	0.0	1.2	7.492	A
E - Bourne Avenue	212	53	962	764	0.277	210	244	0.0	0.4	7.123	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1399	350	226	1785	0.784	1392	1178	2.0	3.8	9.885	A
B - North Hyde Road	552	138	1107	1113	0.496	550	511	0.7	1.1	7.021	A
C - Millington Road	364	91	1522	682	0.534	362	136	0.6	1.2	12.260	B
D - Daweley Road (S)	713	178	736	1065	0.670	709	1148	1.2	2.2	11.029	B
E - Bourne Avenue	253	63	1153	670	0.377	252	293	0.4	0.7	9.454	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1713	428	275	1760	0.974	1662	1425	3.8	16.5	30.923	D
B - North Hyde Road	676	169	1324	1011	0.668	672	613	1.1	2.1	11.517	B
C - Millington Road	446	111	1833	511	0.873	429	163	1.2	5.4	42.177	E
D - Daweley Road (S)	873	218	889	1000	0.873	857	1373	2.2	6.2	25.219	D
E - Bourne Avenue	309	77	1394	550	0.563	307	352	0.7	1.4	16.092	C

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1713	428	278	1758	0.975	1695	1444	16.5	21.2	46.473	E
B - North Hyde Road	676	169	1349	1000	0.676	676	623	2.1	2.2	12.188	B
C - Millington Road	446	111	1859	496	0.899	440	166	5.4	7.0	60.869	F
D - Daweley Road (S)	873	218	900	995	0.877	870	1398	6.2	6.9	30.252	D
E - Bourne Avenue	309	77	1413	540	0.573	309	358	1.4	1.4	17.084	C

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1399	350	231	1782	0.785	1467	1211	21.2	4.2	14.974	B
B - North Hyde Road	552	138	1164	1086	0.508	556	534	2.2	1.2	7.534	A
C - Millington Road	364	91	1578	651	0.559	386	142	7.0	1.4	16.136	C
D - Daweley Road (S)	713	178	759	1055	0.676	731	1206	6.9	2.4	12.854	B
E - Bourne Avenue	253	63	1187	653	0.387	256	304	1.4	0.7	10.042	B

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1171	293	192	1803	0.650	1180	997	4.2	2.1	6.441	A
B - North Hyde Road	462	116	939	1191	0.388	464	433	1.2	0.7	5.457	A
C - Millington Road	305	76	1288	812	0.376	308	115	1.4	0.7	7.908	A
D - Daweley Road (S)	597	149	623	1112	0.537	601	973	2.4	1.3	7.813	A
E - Bourne Avenue	212	53	976	757	0.279	213	248	0.7	0.4	7.287	A

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.0.1.4646 []
© Copyright TRL Limited, 2017

For sales and distribution information, program advice and maintenance, contact TRL:
Tel: +44 (0)1344 770758 email: software@trl.co.uk Web: http://www.trlsoftware.co.uk

The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution

Filename: A437-North Hyde Road-Dawley Road-Millington Road-Bourne Avenue.j9
Path: C:\Users\Jenny Baker\Dropbox (Markides Associates)\Markides Associates Team Folder\Projects\16018.01 - Former Nestle Site, Hayes\Technical\Arcady\2024 and 2029 scenarios
Report generation date: 25/01/2017 17:16:21

- »2016 Peak , AM
- »2016 Peak , PM
- »2024 Baseline , AM
- »2024 Baseline , PM
- »2024 Baseline+Dev, AM
- »2024 Baseline+Dev , PM
- »2029 Baseline , AM
- »2029 Baseline , PM
- »2029 Baseline+Dev, AM
- »2029 Baseline+Dev , PM

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
2016 Peak								
A - Dawley Road (N)	2.9	8.41	0.73	A	2.1	6.52	0.66	A
B - North Hyde Road	0.8	6.16	0.41	A	0.8	6.03	0.43	A
C - Millington Road	0.1	5.52	0.10	A	0.8	9.13	0.43	A
D - Dawley Road (S)	2.5	11.45	0.70	B	2.1	10.83	0.66	B
E - Bourne Avenue	1.4	13.40	0.56	B	0.7	9.34	0.39	A
2024 Baseline								
A - Dawley Road (N)	12.5	30.80	0.93	D	13.3	31.01	0.94	D
B - North Hyde Road	3.7	18.01	0.78	C	2.0	11.19	0.65	B
C - Millington Road	0.3	9.00	0.20	A	5.1	45.37	0.85	E
D - Dawley Road (S)	65.5	190.02	1.11	F	5.6	25.03	0.85	D
E - Bourne Avenue	15.3	125.95	1.01	F	1.3	15.49	0.54	C
2024 Baseline+Dev								
A - Dawley Road (N)	11.5	28.41	0.93	D	16.8	38.03	0.96	E
B - North Hyde Road	4.4	20.75	0.81	C	2.0	11.38	0.66	B
C - Millington Road	0.3	9.36	0.21	A	5.4	47.46	0.86	E
D - Dawley Road (S)	71.1	206.49	1.12	F	5.9	26.05	0.85	D
E - Bourne Avenue	17.7	143.44	1.03	F	1.3	15.75	0.55	C
2029 Baseline								

A - Dawley Road (N)	15.7	37.60	0.95	E	17.2	39.00	0.96	E
B - North Hyde Road	4.1	19.94	0.80	C	2.2	12.00	0.67	B
C - Millington Road	0.3	9.42	0.22	A	7.0	60.43	0.90	F
D - Dawley Road (S)	77.5	221.65	1.13	F	6.8	29.93	0.88	D
E - Bourne Avenue	19.0	149.45	1.03	F	1.4	16.85	0.57	C
2029 Baseline+Dev								
A - Dawley Road (N)	14.2	34.47	0.95	D	21.2	46.47	0.97	E
B - North Hyde Road	5.0	23.30	0.83	C	2.2	12.19	0.68	B
C - Millington Road	0.3	9.81	0.22	A	7.0	60.87	0.90	F
D - Dawley Road (S)	83.9	241.05	1.15	F	6.9	30.25	0.88	D
E - Bourne Avenue	21.8	169.45	1.06	F	1.4	17.08	0.57	C

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	Base Model - Roundabout 1
Location	North Hyde Road/Dawley Road
Site number	
Date	23/04/2012
Version	
Status	Draft 1
Identifier	
Client	
Jobnumber	VN50026
Enumerator	rhussain [IE-D00135]
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	-Hour	perHour

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2016 Peak	AM	ONE HOUR	07:45	09:15	15	✓
D2	2016 Peak	PM	ONE HOUR	07:45	09:15	15	✓
D3	2024 Baseline	AM	ONE HOUR	07:45	09:15	15	✓
D4	2024 Baseline	PM	ONE HOUR	07:45	09:15	15	✓
D5	2024 Baseline+Dev	AM	ONE HOUR	07:45	09:15	15	✓
D6	2024 Baseline+Dev	PM	ONE HOUR	07:45	09:15	15	✓
D7	2029 Baseline	AM	ONE HOUR	07:45	09:15	15	✓
D8	2029 Baseline	PM	ONE HOUR	07:45	09:15	15	✓
D9	2029 Baseline+Dev	AM	ONE HOUR	07:45	09:15	15	✓
D10	2029 Baseline+Dev	PM	ONE HOUR	07:45	09:15	15	✓

Analysis Set Details

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

2016 Peak , AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A,B,C,D,E	9.45	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	Dawley Road (N)	
B	North Hyde Road	
C	Millington Road	
D	Daweley Road (S)	
E	Bourne Avenue	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
A - Dawley Road (N)	3.65	9.50	13.0	22.0	75.0	20.0	
B - North Hyde Road	3.50	8.00	16.0	10.0	72.0	40.0	
C - Millington Road	4.00	6.00	8.0	22.0	54.0	36.0	
D - Daweley Road (S)	3.50	5.50	12.0	20.0	76.0	46.0	
E - Bourne Avenue	3.65	4.50	3.0	32.0	56.0	35.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A - Dawley Road (N)	0.526	1904
B - North Hyde Road	0.467	1629
C - Millington Road	0.553	1523
D - Daweley Road (S)	0.422	1375
E - Bourne Avenue	0.497	1242

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2016 Peak	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Dawley Road (N)		ONE HOUR	✓	1132	100.000
B - North Hyde Road		ONE HOUR	✓	413	100.000
C - Millington Road		ONE HOUR	✓	75	100.000
D - Daweley Road (S)		ONE HOUR	✓	728	100.000
E - Bourne Avenue		ONE HOUR	✓	347	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A - Dawley Road (N)	B - North Hyde Road	C - Millington Road	D - Daweley Road (S)	E - Bourne Avenue
From	A - Dawley Road (N)	0	240	171	609	112
	B - North Hyde Road	289	0	5	83	36
	C - Millington Road	47	1	0	20	7
	D - Daweley Road (S)	543	86	67	0	32
	E - Bourne Avenue	178	93	16	60	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - Dawley Road (N)	B - North Hyde Road	C - Millington Road	D - Daweley Road (S)	E - Bourne Avenue
From	A - Dawley Road (N)	10	10	10	10	10
	B - North Hyde Road	10	10	10	10	10
	C - Millington Road	10	10	10	10	10
	D - Daweley Road (S)	10	10	10	10	10
	E - Bourne Avenue	10	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Dawley Road (N)	0.73	8.41	2.9	A	1039	1558
B - North Hyde Road	0.41	6.16	0.8	A	379	568
C - Millington Road	0.10	5.52	0.1	A	69	103
D - Daweley Road (S)	0.70	11.45	2.5	B	668	1002
E - Bourne Avenue	0.56	13.40	1.4	B	318	478

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	852	213	241	1777	0.480	848	791	0.0	1.0	4.246	A
B - North Hyde Road	311	78	775	1268	0.245	310	314	0.0	0.4	4.127	A
C - Millington Road	56	14	891	1031	0.055	56	194	0.0	0.1	4.061	A
D - Dawley Road (S)	548	137	369	1219	0.449	545	578	0.0	0.9	5.837	A
E - Bourne Avenue	261	65	773	858	0.304	259	140	0.0	0.5	6.592	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1018	254	290	1752	0.581	1016	948	1.0	1.5	5.363	A
B - North Hyde Road	371	93	928	1196	0.310	371	377	0.4	0.5	4.794	A
C - Millington Road	67	17	1067	934	0.072	67	232	0.1	0.1	4.570	A
D - Dawley Road (S)	654	164	442	1189	0.551	653	693	0.9	1.3	7.364	A
E - Bourne Avenue	312	78	927	782	0.399	311	168	0.5	0.7	8.391	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1246	312	353	1718	0.725	1241	1158	1.5	2.8	8.210	A
B - North Hyde Road	455	114	1134	1100	0.413	454	460	0.5	0.8	6.116	A
C - Millington Road	83	21	1304	803	0.103	82	284	0.1	0.1	5.496	A
D - Dawley Road (S)	802	200	540	1147	0.699	797	846	1.3	2.5	11.166	B
E - Bourne Avenue	382	96	1132	680	0.562	379	205	0.7	1.4	13.076	B

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1246	312	356	1717	0.726	1246	1164	2.8	2.9	8.406	A
B - North Hyde Road	455	114	1139	1098	0.414	455	462	0.8	0.8	6.158	A
C - Millington Road	83	21	1309	800	0.103	83	285	0.1	0.1	5.518	A
D - Dawley Road (S)	802	200	542	1147	0.699	801	850	2.5	2.5	11.453	B
E - Bourne Avenue	382	96	1137	677	0.564	382	206	1.4	1.4	13.396	B

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1018	254	293	1750	0.581	1023	956	2.9	1.5	5.482	A
B - North Hyde Road	371	93	936	1193	0.311	372	380	0.8	0.5	4.832	A
C - Millington Road	67	17	1074	930	0.073	68	234	0.1	0.1	4.594	A
D - Dawley Road (S)	654	164	444	1188	0.551	659	698	2.5	1.4	7.552	A
E - Bourne Avenue	312	78	934	778	0.401	315	169	1.4	0.7	8.587	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	852	213	244	1776	0.480	854	798	1.5	1.0	4.308	A
B - North Hyde Road	311	78	781	1265	0.246	311	317	0.5	0.4	4.157	A
C - Millington Road	56	14	897	1028	0.055	57	196	0.1	0.1	4.078	A
D - Dawley Road (S)	548	137	371	1218	0.450	550	583	1.4	0.9	5.941	A
E - Bourne Avenue	261	65	780	855	0.306	262	141	0.7	0.5	6.694	A

2016 Peak , PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A,B,C,D,E	8.01	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2016 Peak	PM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Dawley Road (N)		ONE HOUR	✓	1069	100.000
B - North Hyde Road		ONE HOUR	✓	453	100.000
C - Millington Road		ONE HOUR	✓	294	100.000
D - Dawley Road (S)		ONE HOUR	✓	652	100.000
E - Bourne Avenue		ONE HOUR	✓	246	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
From		A - Dawley Road (N)	B - North Hyde Road	C - Millington Road	D - Daweley Road (S)	E - Bourne Avenue
	A - Dawley Road (N)	0	228	75	639	127
	B - North Hyde Road	280	0	8	88	77
	C - Millington Road	127	3	0	149	15
	D - Daweley Road (S)	521	51	19	0	61
	E - Bourne Avenue	111	73	14	48	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
From		A - Dawley Road (N)	B - North Hyde Road	C - Millington Road	D - Daweley Road (S)	E - Bourne Avenue
	A - Dawley Road (N)	10	10	10	10	10
	B - North Hyde Road	10	10	10	10	10
	C - Millington Road	10	10	10	10	10
	D - Daweley Road (S)	10	10	10	10	10
	E - Bourne Avenue	10	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Dawley Road (N)	0.66	6.52	2.1	A	981	1471
B - North Hyde Road	0.43	6.03	0.8	A	416	624
C - Millington Road	0.43	9.13	0.8	A	270	405
D - Daweley Road (S)	0.66	10.83	2.1	B	598	897
E - Bourne Avenue	0.39	9.34	0.7	A	226	339

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	805	201	156	1822	0.442	801	778	0.0	0.9	3.865	A
B - North Hyde Road	341	85	691	1307	0.261	339	266	0.0	0.4	4.086	A
C - Millington Road	221	55	944	1002	0.221	220	87	0.0	0.3	5.049	A
D - Daweley Road (S)	491	123	471	1176	0.417	488	692	0.0	0.8	5.727	A
E - Bourne Avenue	185	46	749	870	0.213	184	210	0.0	0.3	5.764	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	961	240	187	1806	0.532	960	932	0.9	1.2	4.669	A
B - North Hyde Road	407	102	828	1243	0.328	407	319	0.4	0.5	4.730	A
C - Millington Road	264	66	1130	899	0.294	264	104	0.3	0.5	6.229	A
D - Dawley Road (S)	586	147	565	1137	0.516	585	829	0.8	1.2	7.148	A
E - Bourne Avenue	221	55	898	796	0.278	221	251	0.3	0.4	6.875	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1177	294	228	1784	0.660	1174	1139	1.2	2.1	6.449	A
B - North Hyde Road	499	125	1012	1157	0.431	498	390	0.5	0.8	5.993	A
C - Millington Road	324	81	1382	759	0.426	322	127	0.5	0.8	9.030	A
D - Dawley Road (S)	718	179	691	1084	0.662	714	1014	1.2	2.1	10.604	B
E - Bourne Avenue	271	68	1097	697	0.389	270	307	0.4	0.7	9.247	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1177	294	229	1784	0.660	1177	1144	2.1	2.1	6.524	A
B - North Hyde Road	499	125	1015	1156	0.432	499	391	0.8	0.8	6.027	A
C - Millington Road	324	81	1386	757	0.427	324	128	0.8	0.8	9.128	A
D - Dawley Road (S)	718	179	692	1083	0.663	718	1017	2.1	2.1	10.831	B
E - Bourne Avenue	271	68	1102	695	0.390	271	308	0.7	0.7	9.340	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	961	240	188	1805	0.532	964	939	2.1	1.3	4.727	A
B - North Hyde Road	407	102	832	1241	0.328	408	320	0.8	0.5	4.762	A
C - Millington Road	264	66	1136	896	0.295	266	105	0.8	0.5	6.297	A
D - Dawley Road (S)	586	147	567	1136	0.516	590	834	2.1	1.2	7.306	A
E - Bourne Avenue	221	55	905	793	0.279	222	253	0.7	0.4	6.955	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	805	201	157	1822	0.442	806	784	1.3	0.9	3.906	A
B - North Hyde Road	341	85	696	1305	0.261	342	268	0.5	0.4	4.115	A
C - Millington Road	221	55	950	999	0.222	222	88	0.5	0.3	5.102	A
D - Dawley Road (S)	491	123	474	1175	0.418	492	697	1.2	0.8	5.817	A
E - Bourne Avenue	185	46	756	867	0.214	186	211	0.4	0.3	5.820	A

2024 Baseline , AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A,B,C,D,E	83.12	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2024 Baseline	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Dawley Road (N)		ONE HOUR	✓	1420	100.000
B - North Hyde Road		ONE HOUR	✓	697	100.000
C - Millington Road		ONE HOUR	✓	103	100.000
D - Dawley Road (S)		ONE HOUR	✓	1029	100.000
E - Bourne Avenue		ONE HOUR	✓	404	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A - Dawley Road (N)	B - North Hyde Road	C - Millington Road	D - Dawley Road (S)	E - Bourne Avenue
From	A - Dawley Road (N)	0	347	227	720	126
	B - North Hyde Road	503	0	6	131	57
	C - Millington Road	66	1	0	28	8
	D - Dawley Road (S)	767	112	115	0	35
	E - Bourne Avenue	200	116	23	65	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - Dawley Road (N)	B - North Hyde Road	C - Millington Road	D - Dawley Road (S)	E - Bourne Avenue
From	A - Dawley Road (N)	10	10	10	10	10
	B - North Hyde Road	10	10	10	10	10
	C - Millington Road	10	10	10	10	10
	D - Dawley Road (S)	10	10	10	10	10
	E - Bourne Avenue	10	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Dawley Road (N)	0.93	30.80	12.5	D	1303	1955
B - North Hyde Road	0.78	18.01	3.7	C	640	959
C - Millington Road	0.20	9.00	0.3	A	95	142
D - Dawley Road (S)	1.11	190.02	65.5	F	944	1416
E - Bourne Avenue	1.01	125.95	15.3	F	371	556

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1069	267	321	1735	0.616	1062	1145	0.0	1.7	5.826	A
B - North Hyde Road	525	131	954	1184	0.443	521	430	0.0	0.9	5.941	A
C - Millington Road	78	19	1198	861	0.090	77	277	0.0	0.1	5.047	A
D - Dawley Road (S)	775	194	569	1135	0.683	766	706	0.0	2.3	10.481	B
E - Bourne Avenue	304	76	1166	663	0.459	301	169	0.0	0.9	10.822	B

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1277	319	383	1702	0.750	1271	1368	1.7	3.2	9.052	A
B - North Hyde Road	627	157	1140	1097	0.571	624	514	0.9	1.4	8.333	A
C - Millington Road	93	23	1434	731	0.127	92	331	0.1	0.2	6.199	A
D - Dawley Road (S)	925	231	682	1088	0.851	912	845	2.3	5.4	21.211	C
E - Bourne Avenue	363	91	1392	551	0.660	359	202	0.9	2.0	20.202	C

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1563	391	431	1677	0.932	1533	1575	3.2	10.8	23.628	C
B - North Hyde Road	767	192	1361	994	0.772	759	604	1.4	3.4	16.312	C
C - Millington Road	113	28	1732	566	0.200	113	388	0.2	0.3	8.731	A
D - Dawley Road (S)	1133	283	828	1026	1.105	1007	1017	5.4	36.9	89.450	F
E - Bourne Avenue	445	111	1594	450	0.988	412	241	2.0	10.2	73.522	F

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1563	391	440	1673	0.935	1556	1595	10.8	12.5	30.801	D
B - North Hyde Road	767	192	1382	984	0.780	766	614	3.4	3.7	18.010	C
C - Millington Road	113	28	1755	553	0.205	113	393	0.3	0.3	8.998	A

D - Dawley Road (S)	1133	283	836	1022	1.108	1019	1032	36.9	65.5	190.021	F
E - Bourne Avenue	445	111	1611	442	1.007	424	244	10.2	15.3	125.945	F

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1277	319	441	1672	0.764	1312	1513	12.5	3.7	11.970	B
B - North Hyde Road	627	157	1199	1070	0.586	635	554	3.7	1.6	9.273	A
C - Millington Road	93	23	1477	707	0.131	93	357	0.3	0.2	6.449	A
D - Dawley Road (S)	925	231	694	1082	0.855	1064	875	65.5	30.6	165.673	F
E - Bourne Avenue	363	91	1547	474	0.767	407	212	15.3	4.3	72.063	F

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1069	267	356	1717	0.623	1077	1249	3.7	1.8	6.256	A
B - North Hyde Road	525	131	982	1171	0.448	527	451	1.6	0.9	6.175	A
C - Millington Road	78	19	1215	852	0.091	78	294	0.2	0.1	5.117	A
D - Dawley Road (S)	775	194	576	1132	0.684	887	717	30.6	2.5	24.131	C
E - Bourne Avenue	304	76	1288	602	0.505	317	175	4.3	1.2	14.460	B

2024 Baseline , PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A,B,C,D,E	26.78	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2024 Baseline	PM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Dawley Road (N)		ONE HOUR	✓	1502	100.000
B - North Hyde Road		ONE HOUR	✓	594	100.000
C - Millington Road		ONE HOUR	✓	397	100.000
D - Daweley Road (S)		ONE HOUR	✓	773	100.000
E - Bourne Avenue		ONE HOUR	✓	275	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A - Dawley Road (N)	B - North Hyde Road	C - Millington Road	D - Daweley Road (S)	E - Bourne Avenue
From	A - Dawley Road (N)	0	383	96	879	144
	B - North Hyde Road	380	0	9	113	92
	C - Millington Road	161	6	0	211	19
	D - Daweley Road (S)	617	63	27	0	66
	E - Bourne Avenue	124	81	17	53	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - Dawley Road (N)	B - North Hyde Road	C - Millington Road	D - Daweley Road (S)	E - Bourne Avenue
From	A - Dawley Road (N)	10	10	10	10	10
	B - North Hyde Road	10	10	10	10	10
	C - Millington Road	10	10	10	10	10
	D - Daweley Road (S)	10	10	10	10	10
	E - Bourne Avenue	10	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Dawley Road (N)	0.94	31.01	13.3	D	1378	2067
B - North Hyde Road	0.65	11.19	2.0	B	545	818
C - Millington Road	0.85	45.37	5.1	E	364	546
D - Daweley Road (S)	0.85	25.03	5.6	D	709	1064
E - Bourne Avenue	0.54	15.49	1.3	C	252	379

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1131	283	185	1807	0.626	1124	958	0.0	1.8	5.736	A
B - North Hyde Road	447	112	910	1205	0.371	445	399	0.0	0.6	5.190	A
C - Millington Road	299	75	1243	837	0.357	296	111	0.0	0.6	7.299	A
D - Daweley Road (S)	582	145	600	1122	0.519	577	939	0.0	1.2	7.211	A
E - Bourne Avenue	207	52	937	777	0.267	205	240	0.0	0.4	6.912	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1350	338	221	1788	0.755	1344	1148	1.8	3.3	8.815	A
B - North Hyde Road	534	133	1088	1121	0.476	533	477	0.6	1.0	6.708	A
C - Millington Road	357	89	1488	701	0.509	355	133	0.6	1.1	11.369	B
D - Daweley Road (S)	695	174	718	1072	0.648	692	1124	1.2	2.0	10.323	B
E - Bourne Avenue	247	62	1123	684	0.361	246	287	0.4	0.6	9.021	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1654	413	269	1763	0.938	1621	1393	3.3	11.5	23.727	C
B - North Hyde Road	654	164	1313	1017	0.643	650	576	1.0	1.9	10.700	B
C - Millington Road	437	109	1802	528	0.829	424	161	1.1	4.3	34.858	D
D - Daweley Road (S)	851	213	871	1008	0.845	838	1356	2.0	5.2	21.866	C
E - Bourne Avenue	303	76	1361	566	0.535	300	348	0.6	1.2	14.773	B

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1654	413	272	1761	0.939	1647	1409	11.5	13.3	31.006	D
B - North Hyde Road	654	164	1333	1007	0.649	654	585	1.9	2.0	11.186	B
C - Millington Road	437	109	1824	516	0.848	434	164	4.3	5.1	45.369	E
D - Daweley Road (S)	851	213	881	1004	0.848	849	1377	5.2	5.6	25.033	D
E - Bourne Avenue	303	76	1378	558	0.543	303	352	1.2	1.3	15.491	C

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1350	338	225	1786	0.756	1389	1173	13.3	3.6	10.907	B
B - North Hyde Road	534	133	1123	1105	0.483	538	491	2.0	1.0	7.024	A
C - Millington Road	357	89	1524	681	0.524	372	137	5.1	1.2	13.436	B
D - Daweley Road (S)	695	174	735	1065	0.652	709	1162	5.6	2.1	11.524	B
E - Bourne Avenue	247	62	1149	671	0.368	250	295	1.3	0.7	9.447	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1131	283	187	1806	0.626	1138	971	3.6	1.9	5.983	A
B - North Hyde Road	447	112	921	1200	0.373	449	404	1.0	0.7	5.285	A
C - Millington Road	299	75	1257	829	0.361	301	113	1.2	0.6	7.543	A
D - Daweley Road (S)	582	145	607	1119	0.520	586	951	2.1	1.2	7.476	A
E - Bourne Avenue	207	52	949	770	0.269	208	243	0.7	0.4	7.051	A

2024 Baseline+Dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A,B,C,D,E	88.94	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2024 Baseline+Dev	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Dawley Road (N)		ONE HOUR	✓	1410	100.000
B - North Hyde Road		ONE HOUR	✓	725	100.000
C - Millington Road		ONE HOUR	✓	103	100.000
D - Daweley Road (S)		ONE HOUR	✓	1029	100.000
E - Bourne Avenue		ONE HOUR	✓	404	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A - Dawley Road (N)	B - North Hyde Road	C - Millington Road	D - Daweley Road (S)	E - Bourne Avenue
From	A - Dawley Road (N)	0	337	227	720	126
	B - North Hyde Road	530	0	6	132	57
	C - Millington Road	66	1	0	28	8
	D - Daweley Road (S)	767	112	115	0	35
	E - Bourne Avenue	200	116	23	65	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - Dawley Road (N)	B - North Hyde Road	C - Millington Road	D - Daweley Road (S)	E - Bourne Avenue
From	A - Dawley Road (N)	10	10	10	10	10
	B - North Hyde Road	10	10	10	10	10
	C - Millington Road	10	10	10	10	10
	D - Daweley Road (S)	10	10	10	10	10
	E - Bourne Avenue	10	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Dawley Road (N)	0.93	28.41	11.5	D	1294	1941
B - North Hyde Road	0.81	20.75	4.4	C	665	998
C - Millington Road	0.21	9.36	0.3	A	95	142
D - Daweley Road (S)	1.12	206.49	71.1	F	944	1416
E - Bourne Avenue	1.03	143.44	17.7	F	371	556

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1062	265	321	1735	0.612	1055	1165	0.0	1.7	5.763	A
B - North Hyde Road	546	136	954	1184	0.461	542	422	0.0	0.9	6.130	A
C - Millington Road	78	19	1219	850	0.091	77	277	0.0	0.1	5.122	A
D - Daweley Road (S)	775	194	589	1126	0.688	765	707	0.0	2.3	10.709	B
E - Bourne Avenue	304	76	1186	653	0.466	300	169	0.0	0.9	11.115	B

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1268	317	383	1703	0.744	1262	1391	1.7	3.1	8.875	A
B - North Hyde Road	652	163	1140	1097	0.594	649	505	0.9	1.6	8.786	A
C - Millington Road	93	23	1459	717	0.129	92	331	0.1	0.2	6.335	A
D - Daweley Road (S)	925	231	706	1077	0.859	912	845	2.3	5.7	22.233	C
E - Bourne Avenue	363	91	1415	539	0.674	358	202	0.9	2.1	21.381	C

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1552	388	427	1679	0.924	1525	1594	3.1	10.1	22.376	C
B - North Hyde Road	798	200	1361	994	0.803	788	591	1.6	4.1	18.376	C
C - Millington Road	113	28	1762	550	0.206	113	387	0.2	0.3	9.058	A

D - Dawley Road (S)	1133	283	857	1014	1.118	997	1018	5.7	39.6	95.550	F
E - Bourne Avenue	445	111	1613	441	1.009	408	241	2.1	11.3	80.721	F

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1552	388	435	1675	0.927	1547	1613	10.1	11.5	28.408	D
B - North Hyde Road	798	200	1381	985	0.810	797	601	4.1	4.4	20.748	C
C - Millington Road	113	28	1786	537	0.211	113	392	0.3	0.3	9.356	A
D - Dawley Road (S)	1133	283	866	1010	1.122	1007	1033	39.6	71.1	206.491	F
E - Bourne Avenue	445	111	1629	433	1.028	419	244	11.3	17.7	143.436	F

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1268	317	443	1671	0.759	1299	1535	11.5	3.6	11.463	B
B - North Hyde Road	652	163	1197	1071	0.609	662	545	4.4	1.8	9.931	A
C - Millington Road	93	23	1503	693	0.134	93	356	0.3	0.2	6.607	A
D - Dawley Road (S)	925	231	720	1071	0.863	1055	876	71.1	38.6	189.446	F
E - Bourne Avenue	363	91	1564	465	0.781	415	211	17.7	4.9	89.700	F

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1062	265	364	1712	0.620	1069	1294	3.6	1.8	6.219	A
B - North Hyde Road	546	136	985	1170	0.467	549	448	1.8	1.0	6.411	A
C - Millington Road	78	19	1237	840	0.092	78	297	0.2	0.1	5.199	A
D - Dawley Road (S)	775	194	597	1123	0.690	919	718	38.6	2.6	34.119	D
E - Bourne Avenue	304	76	1339	577	0.527	319	176	4.9	1.3	16.144	C

2024 Baseline+Dev , PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A,B,C,D,E	30.30	D

Junction Network Options

Driving side	Lighting
--------------	----------

Left	Normal/unknown
------	----------------

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2024 Baseline+Dev	PM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Dawley Road (N)		ONE HOUR	✓	1530	100.000
B - North Hyde Road		ONE HOUR	✓	601	100.000
C - Millington Road		ONE HOUR	✓	399	100.000
D - Dawley Road (S)		ONE HOUR	✓	776	100.000
E - Bourne Avenue		ONE HOUR	✓	275	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A - Dawley Road (N)	B - North Hyde Road	C - Millington Road	D - Dawley Road (S)	E - Bourne Avenue
From	A - Dawley Road (N)	0	411	96	879	144
	B - North Hyde Road	385	0	9	114	93
	C - Millington Road	161	6	0	211	21
	D - Dawley Road (S)	617	66	27	0	66
	E - Bourne Avenue	124	81	17	53	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - Dawley Road (N)	B - North Hyde Road	C - Millington Road	D - Dawley Road (S)	E - Bourne Avenue
From	A - Dawley Road (N)	10	10	10	10	10
	B - North Hyde Road	10	10	10	10	10
	C - Millington Road	10	10	10	10	10
	D - Dawley Road (S)	10	10	10	10	10
	E - Bourne Avenue	10	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
-----	---------	---------------	-----------------	---------	-------------------------	-------------------------------

A - Dawley Road (N)	0.96	38.03	16.8	E	1404	2106
B - North Hyde Road	0.66	11.38	2.0	B	551	827
C - Millington Road	0.86	47.46	5.4	E	366	549
D - Dawley Road (S)	0.85	26.05	5.9	D	712	1068
E - Bourne Avenue	0.55	15.75	1.3	C	252	379

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1152	288	187	1806	0.638	1144	962	0.0	1.9	5.919	A
B - North Hyde Road	452	113	909	1205	0.375	450	422	0.0	0.7	5.226	A
C - Millington Road	300	75	1248	834	0.360	298	111	0.0	0.6	7.358	A
D - Dawley Road (S)	584	146	606	1119	0.522	579	940	0.0	1.2	7.273	A
E - Bourne Avenue	207	52	943	774	0.268	205	242	0.0	0.4	6.949	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1375	344	224	1786	0.770	1369	1152	1.9	3.5	9.340	A
B - North Hyde Road	540	135	1088	1122	0.482	539	505	0.7	1.0	6.778	A
C - Millington Road	359	90	1494	698	0.514	357	133	0.6	1.1	11.528	B
D - Dawley Road (S)	698	174	725	1069	0.653	694	1125	1.2	2.0	10.475	B
E - Bourne Avenue	247	62	1130	681	0.363	246	290	0.4	0.6	9.094	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1685	421	272	1761	0.957	1643	1397	3.5	13.8	27.177	D
B - North Hyde Road	662	165	1308	1019	0.649	658	608	1.0	2.0	10.845	B
C - Millington Road	439	110	1805	526	0.835	426	161	1.1	4.5	35.751	E
D - Dawley Road (S)	854	214	879	1004	0.851	841	1352	2.0	5.4	22.550	C
E - Bourne Avenue	303	76	1369	562	0.539	300	350	0.6	1.2	14.990	B

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1685	421	275	1760	0.957	1673	1414	13.8	16.8	38.033	E
B - North Hyde Road	662	165	1330	1009	0.656	661	618	2.0	2.0	11.381	B
C - Millington Road	439	110	1828	513	0.856	436	163	4.5	5.4	47.465	E
D - Dawley Road (S)	854	214	889	1000	0.854	852	1375	5.4	5.9	26.054	D
E - Bourne Avenue	303	76	1386	554	0.547	303	355	1.2	1.3	15.746	C

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1375	344	228	1784	0.771	1427	1179	16.8	3.9	12.554	B
B - North Hyde Road	540	135	1132	1101	0.491	544	523	2.0	1.1	7.158	A
C - Millington Road	359	90	1538	673	0.533	375	138	5.4	1.3	13.964	B

D - Dawley Road (S)	698	174	744	1061	0.657	712	1170	5.9	2.2	11.792	B
E - Bourne Avenue	247	62	1157	667	0.371	250	299	1.3	0.7	9.543	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1152	288	189	1805	0.638	1159	974	3.9	2.0	6.208	A
B - North Hyde Road	452	113	921	1199	0.377	454	427	1.1	0.7	5.323	A
C - Millington Road	300	75	1263	826	0.364	303	113	1.3	0.6	7.616	A
D - Dawley Road (S)	584	146	613	1116	0.523	588	953	2.2	1.2	7.549	A
E - Bourne Avenue	207	52	956	767	0.270	208	245	0.7	0.4	7.093	A

2029 Baseline , AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A,B,C,D,E	97.63	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2029 Baseline	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Dawley Road (N)		ONE HOUR	✓	1449	100.000
B - North Hyde Road		ONE HOUR	✓	708	100.000
C - Millington Road		ONE HOUR	✓	105	100.000
D - Dawley Road (S)		ONE HOUR	✓	1047	100.000
E - Bourne Avenue		ONE HOUR	✓	413	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
From		A - Dawley Road (N)	B - North Hyde Road	C - Millington Road	D - Daweley Road (S)	E - Bourne Avenue
	A - Dawley Road (N)	0	353	231	736	129
	B - North Hyde Road	511	0	6	133	58
	C - Millington Road	67	1	0	29	8
	D - Daweley Road (S)	781	114	116	0	36
	E - Bourne Avenue	205	118	23	67	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
From		A - Dawley Road (N)	B - North Hyde Road	C - Millington Road	D - Daweley Road (S)	E - Bourne Avenue
	A - Dawley Road (N)	10	10	10	10	10
	B - North Hyde Road	10	10	10	10	10
	C - Millington Road	10	10	10	10	10
	D - Daweley Road (S)	10	10	10	10	10
	E - Bourne Avenue	10	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Dawley Road (N)	0.95	37.60	15.7	E	1330	1994
B - North Hyde Road	0.80	19.94	4.1	C	650	975
C - Millington Road	0.22	9.42	0.3	A	96	145
D - Daweley Road (S)	1.13	221.65	77.5	F	961	1441
E - Bourne Avenue	1.03	149.45	19.0	F	379	568

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1091	273	326	1732	0.630	1084	1165	0.0	1.8	6.037	A
B - North Hyde Road	533	133	973	1175	0.453	529	437	0.0	0.9	6.095	A
C - Millington Road	79	20	1222	848	0.093	79	281	0.0	0.1	5.143	A
D - Daweley Road (S)	788	197	579	1131	0.697	779	721	0.0	2.4	10.958	B
E - Bourne Avenue	311	78	1185	654	0.476	307	173	0.0	1.0	11.305	B

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1303	326	389	1700	0.766	1296	1391	1.8	3.5	9.660	A
B - North Hyde Road	636	159	1163	1087	0.586	634	522	0.9	1.5	8.698	A
C - Millington Road	94	24	1462	716	0.132	94	335	0.1	0.2	6.371	A
D - Dawley Road (S)	941	235	693	1083	0.869	926	863	2.4	6.1	23.369	C
E - Bourne Avenue	371	93	1413	540	0.687	366	206	1.0	2.2	22.149	C

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1595	399	431	1677	0.951	1557	1586	3.5	12.9	27.071	D
B - North Hyde Road	780	195	1380	985	0.791	770	609	1.5	3.8	17.704	C
C - Millington Road	116	29	1761	550	0.210	115	389	0.2	0.3	9.090	A
D - Dawley Road (S)	1153	288	841	1020	1.130	1006	1035	6.1	42.9	101.231	F
E - Bourne Avenue	455	114	1602	446	1.019	415	245	2.2	12.1	83.420	F

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1595	399	439	1673	0.954	1584	1604	12.9	15.7	37.600	E
B - North Hyde Road	780	195	1404	974	0.800	778	620	3.8	4.1	19.937	C
C - Millington Road	116	29	1787	536	0.216	116	395	0.3	0.3	9.416	A
D - Dawley Road (S)	1153	288	850	1016	1.134	1014	1052	42.9	77.5	221.650	F
E - Bourne Avenue	455	114	1616	439	1.035	427	248	12.1	19.0	149.451	F

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1303	326	449	1668	0.781	1349	1530	15.7	4.1	13.990	B
B - North Hyde Road	636	159	1231	1055	0.603	646	567	4.1	1.7	9.900	A
C - Millington Road	94	24	1515	686	0.138	95	362	0.3	0.2	6.701	A
D - Dawley Road (S)	941	235	708	1076	0.874	1061	902	77.5	47.5	213.416	F
E - Bourne Avenue	371	93	1553	471	0.789	426	217	19.0	5.3	97.340	F

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1091	273	378	1705	0.640	1099	1321	4.1	2.0	6.626	A
B - North Hyde Road	533	133	1010	1158	0.460	536	467	1.7	0.9	6.398	A
C - Millington Road	79	20	1241	838	0.094	79	305	0.2	0.1	5.222	A

D - Dawley Road (S)	788	197	586	1128	0.699	967	734	47.5	2.8	50.758	F
E - Bourne Avenue	311	78	1372	560	0.555	326	181	5.3	1.4	17.920	C

2029 Baseline , PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A,B,C,D,E	33.17	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2029 Baseline	PM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Dawley Road (N)		ONE HOUR	✓	1532	100.000
B - North Hyde Road		ONE HOUR	✓	606	100.000
C - Millington Road		ONE HOUR	✓	405	100.000
D - Dawley Road (S)		ONE HOUR	✓	793	100.000
E - Bourne Avenue		ONE HOUR	✓	281	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A - Dawley Road (N)	B - North Hyde Road	C - Millington Road	D - Dawley Road (S)	E - Bourne Avenue
From	A - Dawley Road (N)	0	390	98	897	147
	B - North Hyde Road	387	0	9	116	94
	C - Millington Road	164	6	0	215	20
	D - Dawley Road (S)	632	65	28	0	68
	E - Bourne Avenue	127	83	17	54	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - Dawley Road (N)	B - North Hyde Road	C - Millington Road	D - Daweley Road (S)	E - Bourne Avenue
From	A - Dawley Road (N)	10	10	10	10	10
	B - North Hyde Road	10	10	10	10	10
	C - Millington Road	10	10	10	10	10
	D - Daweley Road (S)	10	10	10	10	10
	E - Bourne Avenue	10	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Dawley Road (N)	0.96	39.00	17.2	E	1406	2109
B - North Hyde Road	0.67	12.00	2.2	B	556	834
C - Millington Road	0.90	60.43	7.0	F	372	557
D - Daweley Road (S)	0.88	29.93	6.8	D	728	1092
E - Bourne Avenue	0.57	16.85	1.4	C	258	387

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1153	288	189	1805	0.639	1146	979	0.0	1.9	5.943	A
B - North Hyde Road	456	114	928	1196	0.381	454	407	0.0	0.7	5.312	A
C - Millington Road	305	76	1268	823	0.371	302	114	0.0	0.6	7.574	A
D - Daweley Road (S)	597	149	612	1117	0.534	592	958	0.0	1.2	7.475	A
E - Bourne Avenue	212	53	958	766	0.276	210	246	0.0	0.4	7.095	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1377	344	226	1785	0.772	1371	1172	1.9	3.6	9.407	A
B - North Hyde Road	545	136	1110	1111	0.490	543	487	0.7	1.0	6.954	A
C - Millington Road	364	91	1518	685	0.532	362	136	0.6	1.2	12.176	B
D - Daweley Road (S)	713	178	732	1066	0.669	709	1147	1.2	2.1	10.985	B
E - Bourne Avenue	253	63	1147	672	0.376	252	294	0.4	0.7	9.394	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1687	422	275	1759	0.959	1644	1419	3.6	14.1	27.611	D
B - North Hyde Road	667	167	1334	1007	0.663	663	586	1.0	2.1	11.373	B

C - Millington Road	446	111	1833	511	0.873	429	164	1.2	5.4	42.138	E
D - Dawley Road (S)	873	218	885	1002	0.872	857	1376	2.1	6.1	25.019	D
E - Bourne Avenue	309	77	1387	553	0.559	307	355	0.7	1.3	15.894	C

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1687	422	278	1758	0.960	1674	1437	14.1	17.2	38.996	E
B - North Hyde Road	667	167	1357	996	0.670	667	595	2.1	2.2	12.000	B
C - Millington Road	446	111	1857	497	0.897	440	166	5.4	7.0	60.432	F
D - Dawley Road (S)	873	218	896	997	0.876	870	1401	6.1	6.8	29.931	D
E - Bourne Avenue	309	77	1406	544	0.569	309	360	1.3	1.4	16.853	C

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1377	344	231	1782	0.773	1431	1205	17.2	3.9	12.813	B
B - North Hyde Road	545	136	1157	1090	0.500	549	505	2.2	1.1	7.383	A
C - Millington Road	364	91	1565	659	0.553	386	141	7.0	1.4	15.655	C
D - Dawley Road (S)	713	178	754	1057	0.675	731	1197	6.8	2.4	12.753	B
E - Bourne Avenue	253	63	1181	656	0.385	255	304	1.4	0.7	9.967	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1153	288	192	1803	0.640	1161	992	3.9	2.0	6.238	A
B - North Hyde Road	456	114	940	1191	0.383	458	412	1.1	0.7	5.419	A
C - Millington Road	305	76	1283	814	0.374	308	115	1.4	0.7	7.864	A
D - Dawley Road (S)	597	149	619	1114	0.536	601	972	2.4	1.3	7.791	A
E - Bourne Avenue	212	53	971	760	0.279	213	249	0.7	0.4	7.256	A

2029 Baseline+Dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A,B,C,D,E	104.35	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2029 Baseline+Dev	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Dawley Road (N)		ONE HOUR	✓	1439	100.000
B - North Hyde Road		ONE HOUR	✓	736	100.000
C - Millington Road		ONE HOUR	✓	105	100.000
D - Daweley Road (S)		ONE HOUR	✓	1048	100.000
E - Bourne Avenue		ONE HOUR	✓	413	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A - Dawley Road (N)	B - North Hyde Road	C - Millington Road	D - Daweley Road (S)	E - Bourne Avenue
From	A - Dawley Road (N)	0	343	231	736	129
	B - North Hyde Road	538	0	6	134	58
	C - Millington Road	67	1	0	29	8
	D - Daweley Road (S)	781	115	116	0	36
	E - Bourne Avenue	205	118	23	67	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - Dawley Road (N)	B - North Hyde Road	C - Millington Road	D - Daweley Road (S)	E - Bourne Avenue
From	A - Dawley Road (N)	10	10	10	10	10
	B - North Hyde Road	10	10	10	10	10
	C - Millington Road	10	10	10	10	10
	D - Daweley Road (S)	10	10	10	10	10
	E - Bourne Avenue	10	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Dawley Road (N)	0.95	34.47	14.2	D	1320	1981
B - North Hyde Road	0.83	23.30	5.0	C	675	1013
C - Millington Road	0.22	9.81	0.3	A	96	145
D - Daweley Road (S)	1.15	241.05	83.9	F	962	1442
E - Bourne Avenue	1.06	169.45	21.8	F	379	568

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1083	271	327	1732	0.625	1076	1185	0.0	1.8	5.974	A
B - North Hyde Road	554	139	973	1175	0.471	550	430	0.0	1.0	6.295	A
C - Millington Road	79	20	1242	837	0.094	79	281	0.0	0.1	5.219	A
D - Dawley Road (S)	789	197	599	1122	0.703	779	722	0.0	2.5	11.231	B
E - Bourne Avenue	311	78	1205	643	0.483	307	173	0.0	1.0	11.640	B

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1294	323	389	1699	0.761	1287	1413	1.8	3.4	9.468	A
B - North Hyde Road	662	165	1163	1087	0.609	659	514	1.0	1.7	9.192	A
C - Millington Road	94	24	1487	702	0.134	94	335	0.1	0.2	6.515	A
D - Dawley Road (S)	942	236	717	1073	0.878	926	864	2.5	6.5	24.673	C
E - Bourne Avenue	371	93	1437	528	0.703	366	206	1.0	2.4	23.586	C

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1584	396	427	1679	0.943	1550	1603	3.4	12.0	25.596	D
B - North Hyde Road	810	203	1380	985	0.822	799	597	1.7	4.5	20.113	C
C - Millington Road	116	29	1791	534	0.217	115	388	0.2	0.3	9.444	A
D - Dawley Road (S)	1154	288	869	1008	1.144	996	1037	6.5	46.0	108.399	F
E - Bourne Avenue	455	114	1620	437	1.040	411	245	2.4	13.4	91.482	F

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1584	396	434	1676	0.945	1575	1621	12.0	14.2	34.469	D
B - North Hyde Road	810	203	1403	975	0.831	809	607	4.5	5.0	23.304	C
C - Millington Road	116	29	1817	519	0.223	116	394	0.3	0.3	9.810	A
D - Dawley Road (S)	1154	288	880	1004	1.149	1002	1053	46.0	83.9	240.652	F
E - Bourne Avenue	455	114	1634	431	1.056	421	248	13.4	21.8	169.452	F

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1294	323	451	1667	0.776	1335	1552	14.2	4.0	13.223	B
B - North Hyde Road	662	165	1227	1057	0.626	674	558	5.0	1.9	10.664	B
C - Millington Road	94	24	1541	672	0.141	95	360	0.3	0.2	6.872	A
D - Dawley Road (S)	942	236	734	1065	0.884	1052	902	83.9	56.6	241.051	F
E - Bourne Avenue	371	93	1570	462	0.803	433	216	21.8	6.3	121.205	F

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1083	271	388	1700	0.637	1092	1370	4.0	2.0	6.594	A
B - North Hyde Road	554	139	1014	1156	0.479	558	465	1.9	1.0	6.653	A
C - Millington Road	79	20	1263	826	0.096	79	309	0.2	0.1	5.307	A
D - Dawley Road (S)	789	197	607	1119	0.705	1004	735	56.6	2.9	74.214	F
E - Bourne Avenue	311	78	1428	533	0.584	330	182	6.3	1.6	21.084	C

2029 Baseline+Dev , PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A,B,C,D,E	36.51	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2029 Baseline+Dev	PM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Dawley Road (N)		ONE HOUR	✓	1556	100.000
B - North Hyde Road		ONE HOUR	✓	614	100.000

C - Millington Road		ONE HOUR	✓	405	100.000
D - Daweley Road (S)		ONE HOUR	✓	793	100.000
E - Bourne Avenue		ONE HOUR	✓	281	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A - Dawley Road (N)	B - North Hyde Road	C - Millington Road	D - Daweley Road (S)	E - Bourne Avenue
From	A - Dawley Road (N)	0	417	98	897	144
	B - North Hyde Road	393	0	9	117	95
	C - Millington Road	164	6	0	215	20
	D - Daweley Road (S)	632	65	28	0	68
	E - Bourne Avenue	127	83	17	54	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - Dawley Road (N)	B - North Hyde Road	C - Millington Road	D - Daweley Road (S)	E - Bourne Avenue
From	A - Dawley Road (N)	10	10	10	10	10
	B - North Hyde Road	10	10	10	10	10
	C - Millington Road	10	10	10	10	10
	D - Daweley Road (S)	10	10	10	10	10
	E - Bourne Avenue	10	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Dawley Road (N)	0.97	46.47	21.2	E	1428	2142
B - North Hyde Road	0.68	12.19	2.2	B	563	845
C - Millington Road	0.90	60.87	7.0	F	372	557
D - Daweley Road (S)	0.88	30.25	6.9	D	728	1092
E - Bourne Avenue	0.57	17.08	1.4	C	258	387

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1171	293	189	1805	0.649	1163	983	0.0	2.0	6.103	A
B - North Hyde Road	462	116	926	1197	0.386	460	427	0.0	0.7	5.347	A

C - Millington Road	305	76	1271	821	0.372	302	114	0.0	0.6	7.603	A
D - Dawley Road (S)	597	149	615	1116	0.535	592	959	0.0	1.2	7.492	A
E - Bourne Avenue	212	53	962	764	0.277	210	244	0.0	0.4	7.123	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1399	350	226	1785	0.784	1392	1178	2.0	3.8	9.885	A
B - North Hyde Road	552	138	1107	1113	0.496	550	511	0.7	1.1	7.021	A
C - Millington Road	364	91	1522	682	0.534	362	136	0.6	1.2	12.260	B
D - Dawley Road (S)	713	178	736	1065	0.670	709	1148	1.2	2.2	11.029	B
E - Bourne Avenue	253	63	1153	670	0.377	252	293	0.4	0.7	9.454	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1713	428	275	1760	0.974	1662	1425	3.8	16.5	30.923	D
B - North Hyde Road	676	169	1324	1011	0.668	672	613	1.1	2.1	11.517	B
C - Millington Road	446	111	1833	511	0.873	429	163	1.2	5.4	42.177	E
D - Dawley Road (S)	873	218	889	1000	0.873	857	1373	2.2	6.2	25.219	D
E - Bourne Avenue	309	77	1394	550	0.563	307	352	0.7	1.4	16.092	C

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1713	428	278	1758	0.975	1695	1444	16.5	21.2	46.473	E
B - North Hyde Road	676	169	1349	1000	0.676	676	623	2.1	2.2	12.188	B
C - Millington Road	446	111	1859	496	0.899	440	166	5.4	7.0	60.869	F
D - Dawley Road (S)	873	218	900	995	0.877	870	1398	6.2	6.9	30.252	D
E - Bourne Avenue	309	77	1413	540	0.573	309	358	1.4	1.4	17.084	C

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1399	350	231	1782	0.785	1467	1211	21.2	4.2	14.974	B
B - North Hyde Road	552	138	1164	1086	0.508	556	534	2.2	1.2	7.534	A
C - Millington Road	364	91	1578	651	0.559	386	142	7.0	1.4	16.136	C
D - Dawley Road (S)	713	178	759	1055	0.676	731	1206	6.9	2.4	12.854	B
E - Bourne Avenue	253	63	1187	653	0.387	256	304	1.4	0.7	10.042	B

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1171	293	192	1803	0.650	1180	997	4.2	2.1	6.441	A
B - North Hyde Road	462	116	939	1191	0.388	464	433	1.2	0.7	5.457	A
C - Millington Road	305	76	1288	812	0.376	308	115	1.4	0.7	7.908	A
D - Dawley Road (S)	597	149	623	1112	0.537	601	973	2.4	1.3	7.813	A
E - Bourne Avenue	212	53	976	757	0.279	213	248	0.7	0.4	7.287	A

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.0.1.4646 []
© Copyright TRL Limited, 2017

For sales and distribution information, program advice and maintenance, contact TRL:
Tel: +44 (0)1344 770758 email: software@trl.co.uk Web: http://www.trlsoftware.co.uk

The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution

Filename: A437-North Hyde Road-Dawley Road-Millington Road-Bourne Avenue.j9
Path: C:\Users\Jenny Baker\Dropbox (Markides Associates)\Markides Associates Team Folder\Projects\16018.01 - Former Nestle Site, Hayes\Technical\Arcady\2024 Cumulative
Report generation date: 25/01/2017 17:48:19

- »2024 Baseline , AM
- »2024 Baseline , PM
- »2024 Baseline+Dev, AM
- »2024 Baseline+Dev , PM

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
2024 Baseline								
A - Dawley Road (N)	13.1	31.94	0.94	D	15.5	35.53	0.95	E
B - North Hyde Road	4.1	19.73	0.80	C	2.1	11.66	0.66	B
C - Millington Road	0.3	9.23	0.21	A	5.5	48.83	0.86	E
D - Daweley Road (S)	69.4	201.47	1.12	F	5.8	25.98	0.85	D
E - Bourne Avenue	17.0	138.12	1.02	F	1.3	15.95	0.55	C
2024 Baseline+Dev								
A - Dawley Road (N)	14.2	34.45	0.95	D	20.4	44.90	0.97	E
B - North Hyde Road	5.2	23.69	0.84	C	2.4	12.71	0.69	B
C - Millington Road	0.3	9.66	0.22	A	6.4	56.81	0.89	F
D - Daweley Road (S)	76.3	222.01	1.13	F	6.3	28.18	0.86	D
E - Bourne Avenue	20.3	161.65	1.05	F	1.4	16.91	0.56	C

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	Base Model - Roundabout 1
Location	North Hyde Road/Dawley Road
Site number	
Date	23/04/2012
Version	
Status	Draft 1
Identifier	

Client	
Jobnumber	VN50026
Enumerator	rhussain [IE-D00135]
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	-Hour	perHour

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2024 Baseline	AM	ONE HOUR	07:45	09:15	15	✓
D4	2024 Baseline	PM	ONE HOUR	07:45	09:15	15	✓
D5	2024 Baseline+Dev	AM	ONE HOUR	07:45	09:15	15	✓
D6	2024 Baseline+Dev	PM	ONE HOUR	07:45	09:15	15	✓

Analysis Set Details

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

2024 Baseline , AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A,B,C,D,E	88.00	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	Dawley Road (N)	
B	North Hyde Road	
C	Millington Road	

D	Daweley Road (S)	
E	Bourne Avenue	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
A - Dawley Road (N)	3.65	9.50	13.0	22.0	75.0	20.0	
B - North Hyde Road	3.50	8.00	16.0	10.0	72.0	40.0	
C - Millington Road	4.00	6.00	8.0	22.0	54.0	36.0	
D - Daweley Road (S)	3.50	5.50	12.0	20.0	76.0	46.0	
E - Bourne Avenue	3.65	4.50	3.0	32.0	56.0	35.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A - Dawley Road (N)	0.526	1904
B - North Hyde Road	0.467	1629
C - Millington Road	0.553	1523
D - Daweley Road (S)	0.422	1375
E - Bourne Avenue	0.497	1242

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2024 Baseline	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Dawley Road (N)		ONE HOUR	✓	1427	100.000
B - North Hyde Road		ONE HOUR	✓	716	100.000
C - Millington Road		ONE HOUR	✓	103	100.000
D - Daweley Road (S)		ONE HOUR	✓	1029	100.000
E - Bourne Avenue		ONE HOUR	✓	404	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A - Dawley Road (N)	B - North Hyde Road	C - Millington Road	D - Daweley Road (S)	E - Bourne Avenue
From	A - Dawley Road (N)	0	354	227	720	126
	B - North Hyde Road	522	0	6	131	57
	C - Millington Road	66	1	0	28	8
	D - Daweley Road (S)	767	112	115	0	35
	E - Bourne Avenue	200	116	23	65	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - Dawley Road (N)	B - North Hyde Road	C - Millington Road	D - Daweley Road (S)	E - Bourne Avenue
From	A - Dawley Road (N)	10	10	10	10	10
	B - North Hyde Road	10	10	10	10	10
	C - Millington Road	10	10	10	10	10
	D - Daweley Road (S)	10	10	10	10	10
	E - Bourne Avenue	10	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Dawley Road (N)	0.94	31.94	13.1	D	1309	1964
B - North Hyde Road	0.80	19.73	4.1	C	657	986
C - Millington Road	0.21	9.23	0.3	A	95	142
D - Daweley Road (S)	1.12	201.47	69.4	F	944	1416
E - Bourne Avenue	1.02	138.12	17.0	F	371	556

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1074	269	321	1735	0.619	1067	1159	0.0	1.8	5.870	A
B - North Hyde Road	539	135	954	1184	0.455	535	435	0.0	0.9	6.067	A
C - Millington Road	78	19	1212	854	0.091	77	277	0.0	0.1	5.098	A
D - Daweley Road (S)	775	194	583	1129	0.686	765	706	0.0	2.3	10.640	B
E - Bourne Avenue	304	76	1180	656	0.464	300	169	0.0	0.9	11.027	B

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1283	321	383	1703	0.753	1277	1384	1.8	3.2	9.176	A
B - North Hyde Road	644	161	1140	1097	0.587	641	520	0.9	1.5	8.634	A
C - Millington Road	93	23	1451	722	0.128	92	331	0.1	0.2	6.290	A
D - Daweley Road (S)	925	231	699	1080	0.856	912	844	2.3	5.6	21.920	C
E - Bourne Avenue	363	91	1408	542	0.670	359	202	0.9	2.1	21.021	C

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1571	393	428	1679	0.936	1539	1589	3.2	11.2	24.241	C
B - North Hyde Road	788	197	1358	995	0.792	779	609	1.5	3.8	17.597	C

C - Millington Road	113	28	1751	556	0.204	113	386	0.2	0.3	8.934	A
D - Daweley Road (S)	1133	283	848	1017	1.114	1000	1016	5.6	38.8	93.686	F
E - Bourne Avenue	445	111	1608	443	1.003	409	241	2.1	11.0	78.573	F

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1571	393	437	1674	0.938	1564	1608	11.2	13.1	31.935	D
B - North Hyde Road	788	197	1380	985	0.800	787	620	3.8	4.1	19.733	C
C - Millington Road	113	28	1775	542	0.209	113	392	0.3	0.3	9.228	A
D - Daweley Road (S)	1133	283	857	1014	1.118	1011	1031	38.8	69.4	201.470	F
E - Bourne Avenue	445	111	1624	435	1.021	421	244	11.0	17.0	138.124	F

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1283	321	442	1671	0.768	1320	1529	13.1	3.8	12.335	B
B - North Hyde Road	644	161	1200	1069	0.602	653	562	4.1	1.7	9.737	A
C - Millington Road	93	23	1497	696	0.133	93	357	0.3	0.2	6.569	A
D - Daweley Road (S)	925	231	713	1074	0.861	1058	877	69.4	36.2	182.259	F
E - Bourne Avenue	363	91	1559	468	0.776	412	212	17.0	4.7	83.957	F

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1074	269	362	1714	0.627	1082	1280	3.8	1.9	6.342	A
B - North Hyde Road	539	135	985	1170	0.461	542	459	1.7	1.0	6.335	A
C - Millington Road	78	19	1230	844	0.092	78	296	0.2	0.1	5.172	A
D - Daweley Road (S)	775	194	591	1126	0.688	909	717	36.2	2.6	30.648	D
E - Bourne Avenue	304	76	1324	584	0.521	318	176	4.7	1.2	15.595	C

2024 Baseline , PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A,B,C,D,E	29.38	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2024 Baseline	PM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Dawley Road (N)		ONE HOUR	✓	1522	100.000
B - North Hyde Road		ONE HOUR	✓	608	100.000
C - Millington Road		ONE HOUR	✓	397	100.000
D - Daweley Road (S)		ONE HOUR	✓	773	100.000
E - Bourne Avenue		ONE HOUR	✓	275	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A - Dawley Road (N)	B - North Hyde Road	C - Millington Road	D - Daweley Road (S)	E - Bourne Avenue
From	A - Dawley Road (N)	0	403	96	879	144
	B - North Hyde Road	394	0	9	113	92
	C - Millington Road	161	6	0	211	19
	D - Daweley Road (S)	617	63	27	0	66
	E - Bourne Avenue	124	81	17	53	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - Dawley Road (N)	B - North Hyde Road	C - Millington Road	D - Daweley Road (S)	E - Bourne Avenue
From	A - Dawley Road (N)	10	10	10	10	10
	B - North Hyde Road	10	10	10	10	10
	C - Millington Road	10	10	10	10	10
	D - Daweley Road (S)	10	10	10	10	10
	E - Bourne Avenue	10	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Dawley Road (N)	0.95	35.53	15.5	E	1397	2095
B - North Hyde Road	0.66	11.66	2.1	B	558	837
C - Millington Road	0.86	48.83	5.5	E	364	546
D - Dawley Road (S)	0.85	25.98	5.8	D	709	1064
E - Bourne Avenue	0.55	15.95	1.3	C	252	379

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1146	286	184	1807	0.634	1138	969	0.0	1.9	5.859	A
B - North Hyde Road	458	114	909	1205	0.380	455	413	0.0	0.7	5.264	A
C - Millington Road	299	75	1253	831	0.360	296	111	0.0	0.6	7.378	A
D - Dawley Road (S)	582	145	610	1118	0.521	577	939	0.0	1.2	7.268	A
E - Bourne Avenue	207	52	948	771	0.268	205	240	0.0	0.4	6.977	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1368	342	221	1788	0.765	1362	1160	1.9	3.4	9.163	A
B - North Hyde Road	547	137	1088	1122	0.487	545	495	0.7	1.0	6.851	A
C - Millington Road	357	89	1500	694	0.514	355	133	0.6	1.1	11.587	B
D - Dawley Road (S)	695	174	731	1067	0.651	692	1124	1.2	2.0	10.463	B
E - Bourne Avenue	247	62	1135	678	0.364	246	287	0.4	0.6	9.149	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1676	419	269	1763	0.951	1637	1407	3.4	13.0	25.984	D
B - North Hyde Road	669	167	1309	1018	0.657	665	597	1.0	2.0	11.095	B
C - Millington Road	437	109	1814	521	0.839	423	161	1.1	4.5	36.551	E
D - Dawley Road (S)	851	213	885	1002	0.850	838	1352	2.0	5.3	22.503	C
E - Bourne Avenue	303	76	1376	559	0.542	300	347	0.6	1.3	15.167	C

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1676	419	272	1761	0.951	1666	1423	13.0	15.5	35.529	E
B - North Hyde Road	669	167	1331	1008	0.664	669	606	2.0	2.1	11.657	B
C - Millington Road	437	109	1837	508	0.860	433	163	4.5	5.5	48.827	E
D - Dawley Road (S)	851	213	895	997	0.853	849	1375	5.3	5.8	25.982	D
E - Bourne Avenue	303	76	1392	550	0.550	303	352	1.3	1.3	15.951	C

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
-----	-----------------------	-------------------------	---------------------------	-------------------	-----	---------------------	---------------------------------	-------------------	-----------------	-----------	-----

A - Dawley Road (N)	1368	342	225	1786	0.766	1415	1187	15.5	3.8	11.946	B
B - North Hyde Road	547	137	1129	1103	0.496	551	512	2.1	1.1	7.226	A
C - Millington Road	357	89	1542	671	0.532	374	138	5.5	1.3	14.023	B
D - Daweley Road (S)	695	174	749	1059	0.656	709	1167	5.8	2.2	11.770	B
E - Bourne Avenue	247	62	1163	664	0.372	250	296	1.3	0.7	9.611	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1146	286	187	1806	0.635	1153	981	3.8	1.9	6.133	A
B - North Hyde Road	458	114	921	1200	0.382	459	419	1.1	0.7	5.363	A
C - Millington Road	299	75	1268	823	0.363	301	113	1.3	0.6	7.635	A
D - Daweley Road (S)	582	145	618	1115	0.522	586	952	2.2	1.2	7.543	A
E - Bourne Avenue	207	52	960	765	0.271	208	243	0.7	0.4	7.120	A

2024 Baseline+Dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A,B,C,D,E	97.17	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2024 Baseline+Dev	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Dawley Road (N)		ONE HOUR	✓	1441	100.000
B - North Hyde Road		ONE HOUR	✓	750	100.000
C - Millington Road		ONE HOUR	✓	103	100.000
D - Daweley Road (S)		ONE HOUR	✓	1029	100.000
E - Bourne Avenue		ONE HOUR	✓	404	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
From		A - Dawley Road (N)	B - North Hyde Road	C - Millington Road	D - Daweley Road (S)	E - Bourne Avenue
	A - Dawley Road (N)	0	368	227	720	126
	B - North Hyde Road	555	0	6	132	57
	C - Millington Road	66	1	0	28	8
	D - Daweley Road (S)	767	112	115	0	35
	E - Bourne Avenue	200	116	23	65	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
From		A - Dawley Road (N)	B - North Hyde Road	C - Millington Road	D - Daweley Road (S)	E - Bourne Avenue
	A - Dawley Road (N)	10	10	10	10	10
	B - North Hyde Road	10	10	10	10	10
	C - Millington Road	10	10	10	10	10
	D - Daweley Road (S)	10	10	10	10	10
	E - Bourne Avenue	10	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Dawley Road (N)	0.95	34.45	14.2	D	1322	1983
B - North Hyde Road	0.84	23.69	5.2	C	688	1032
C - Millington Road	0.22	9.66	0.3	A	95	142
D - Daweley Road (S)	1.13	222.01	76.3	F	944	1416
E - Bourne Avenue	1.05	161.65	20.3	F	371	556

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1085	271	321	1735	0.625	1078	1183	0.0	1.8	5.960	A
B - North Hyde Road	565	141	953	1185	0.477	561	445	0.0	1.0	6.310	A
C - Millington Road	78	19	1237	840	0.092	77	277	0.0	0.1	5.191	A
D - Daweley Road (S)	775	194	608	1119	0.693	765	706	0.0	2.4	10.930	B
E - Bourne Avenue	304	76	1204	644	0.472	300	169	0.0	1.0	11.403	B

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1295	324	383	1703	0.761	1289	1412	1.8	3.4	9.424	A
B - North Hyde Road	674	169	1140	1098	0.614	671	532	1.0	1.7	9.228	A
C - Millington Road	93	23	1480	705	0.131	92	331	0.1	0.2	6.460	A
D - Dawley Road (S)	925	231	728	1068	0.866	911	845	2.4	6.0	23.250	C
E - Bourne Avenue	363	91	1437	528	0.687	358	202	1.0	2.2	22.587	C

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1587	397	423	1682	0.943	1552	1611	3.4	12.0	25.560	D
B - North Hyde Road	826	206	1354	998	0.828	814	621	1.7	4.7	20.365	C
C - Millington Road	113	28	1783	538	0.211	113	384	0.2	0.3	9.307	A
D - Dawley Road (S)	1133	283	882	1003	1.130	988	1014	6.0	42.1	101.317	F
E - Bourne Avenue	445	111	1631	432	1.029	404	240	2.2	12.6	88.086	F

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1587	397	430	1678	0.946	1578	1630	12.0	14.2	34.447	D
B - North Hyde Road	826	206	1376	987	0.837	824	631	4.7	5.2	23.694	C
C - Millington Road	113	28	1810	523	0.217	113	390	0.3	0.3	9.662	A
D - Dawley Road (S)	1133	283	893	999	1.135	996	1031	42.1	76.3	222.008	F
E - Bourne Avenue	445	111	1646	425	1.048	414	243	12.6	20.3	161.650	F

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1295	324	444	1670	0.776	1336	1556	14.2	4.0	13.158	B
B - North Hyde Road	674	169	1204	1068	0.632	687	577	5.2	1.9	10.739	B
C - Millington Road	93	23	1534	676	0.137	93	357	0.3	0.2	6.805	A
D - Dawley Road (S)	925	231	745	1061	0.872	1046	882	76.3	46.2	212.302	F
E - Bourne Avenue	363	91	1579	458	0.794	422	212	20.3	5.6	110.332	F

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1085	271	372	1708	0.635	1093	1336	4.0	2.0	6.518	A
B - North Hyde Road	565	141	990	1167	0.484	568	475	1.9	1.0	6.648	A
C - Millington Road	78	19	1257	829	0.094	78	301	0.2	0.1	5.276	A

D - Dawley Road (S)	775	194	616	1115	0.695	949	719	46.2	2.7	48.283	E
E - Bourne Avenue	304	76	1387	553	0.550	321	177	5.6	1.4	18.227	C

2024 Baseline+Dev , PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A,B,C,D,E	34.90	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2024 Baseline+Dev	PM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Dawley Road (N)		ONE HOUR	✓	1554	100.000
B - North Hyde Road		ONE HOUR	✓	636	100.000
C - Millington Road		ONE HOUR	✓	397	100.000
D - Dawley Road (S)		ONE HOUR	✓	774	100.000
E - Bourne Avenue		ONE HOUR	✓	275	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A - Dawley Road (N)	B - North Hyde Road	C - Millington Road	D - Dawley Road (S)	E - Bourne Avenue
From	A - Dawley Road (N)	0	435	96	879	144
	B - North Hyde Road	420	0	9	114	93
	C - Millington Road	161	6	0	211	19
	D - Dawley Road (S)	617	64	27	0	66
	E - Bourne Avenue	124	81	17	53	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - Dawley Road (N)	B - North Hyde Road	C - Millington Road	D - Daweley Road (S)	E - Bourne Avenue
From	A - Dawley Road (N)	10	10	10	10	10
	B - North Hyde Road	10	10	10	10	10
	C - Millington Road	10	10	10	10	10
	D - Daweley Road (S)	10	10	10	10	10
	E - Bourne Avenue	10	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Dawley Road (N)	0.97	44.90	20.4	E	1426	2139
B - North Hyde Road	0.69	12.71	2.4	B	584	875
C - Millington Road	0.89	56.81	6.4	F	364	546
D - Daweley Road (S)	0.86	28.18	6.3	D	710	1065
E - Bourne Avenue	0.56	16.91	1.4	C	252	379

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1170	292	185	1807	0.648	1162	988	0.0	2.0	6.070	A
B - North Hyde Road	479	120	909	1205	0.397	476	438	0.0	0.7	5.411	A
C - Millington Road	299	75	1274	819	0.365	296	111	0.0	0.6	7.547	A
D - Daweley Road (S)	583	146	630	1109	0.525	578	940	0.0	1.2	7.392	A
E - Bourne Avenue	207	52	968	761	0.272	205	241	0.0	0.4	7.102	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1397	349	222	1787	0.782	1390	1183	2.0	3.8	9.790	A
B - North Hyde Road	572	143	1088	1122	0.510	570	524	0.7	1.1	7.156	A
C - Millington Road	357	89	1525	681	0.524	355	133	0.6	1.2	12.055	B
D - Daweley Road (S)	696	174	755	1057	0.658	692	1124	1.2	2.1	10.767	B
E - Bourne Avenue	247	62	1159	666	0.371	246	288	0.4	0.6	9.406	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1711	428	270	1762	0.971	1662	1433	3.8	16.1	30.248	D
B - North Hyde Road	700	175	1302	1022	0.685	696	629	1.1	2.3	11.968	B

C - Millington Road	437	109	1837	508	0.860	422	160	1.2	5.1	40.330	E
D - Daweley Road (S)	852	213	913	990	0.861	838	1346	2.1	5.7	23.934	C
E - Bourne Avenue	303	76	1403	545	0.555	300	347	0.6	1.3	15.974	C

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1711	428	273	1761	0.972	1694	1451	16.1	20.4	44.904	E
B - North Hyde Road	700	175	1326	1010	0.693	700	640	2.3	2.4	12.711	B
C - Millington Road	437	109	1863	494	0.885	432	163	5.1	6.4	56.814	F
D - Daweley Road (S)	852	213	924	985	0.865	850	1371	5.7	6.3	28.178	D
E - Bourne Avenue	303	76	1421	536	0.565	303	352	1.3	1.4	16.914	C

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1397	349	227	1785	0.783	1462	1214	20.4	4.2	14.483	B
B - North Hyde Road	572	143	1141	1097	0.521	577	547	2.4	1.2	7.680	A
C - Millington Road	357	89	1579	651	0.548	377	139	6.4	1.4	15.456	C
D - Daweley Road (S)	696	174	777	1047	0.664	712	1179	6.3	2.3	12.336	B
E - Bourne Avenue	247	62	1191	651	0.380	250	299	1.4	0.7	9.950	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1170	292	188	1805	0.648	1178	1001	4.2	2.1	6.399	A
B - North Hyde Road	479	120	922	1199	0.399	481	444	1.2	0.7	5.528	A
C - Millington Road	299	75	1290	811	0.369	302	113	1.4	0.7	7.825	A
D - Daweley Road (S)	583	146	638	1106	0.527	587	953	2.3	1.2	7.687	A
E - Bourne Avenue	207	52	981	755	0.274	208	244	0.7	0.4	7.257	A

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.0.1.4646 []
© Copyright TRL Limited, 2017

For sales and distribution information, program advice and maintenance, contact TRL:
Tel: +44 (0)1344 770758 email: software@trl.co.uk Web: http://www.trlsoftware.co.uk

The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution

Filename: A437-North Hyde Road-Dawley Road-Millington Road-Bourne Avenue.j9
Path: C:\Users\Demetris Psyllides\Dropbox (Markides Associates)\Markides Associates Team Folder\Projects\16018.01 - Former Nestle Site, Hayes\Technical\Arcady\2029 Cumulative
Report generation date: 24/01/2017 15:40:42

- »2029 Baseline , AM
- »2029 Baseline , PM
- »2029 Baseline+Dev, AM
- »2029 Baseline+Dev , PM

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
2029 Baseline								
A - Dawley Road (N)	16.4	39.05	0.96	E	20.5	45.10	0.97	E
B - North Hyde Road	4.7	22.01	0.82	C	2.3	12.51	0.68	B
C - Millington Road	0.3	9.66	0.22	A	7.5	65.21	0.91	F
D - Daweley Road (S)	81.6	233.86	1.14	F	7.1	31.20	0.88	D
E - Bourne Avenue	21.0	163.37	1.05	F	1.5	17.39	0.58	C
2029 Baseline+Dev								
A - Dawley Road (N)	18.2	42.71	0.96	E	27.1	56.78	0.99	F
B - North Hyde Road	5.9	26.83	0.86	D	2.6	13.71	0.71	B
C - Millington Road	0.3	10.12	0.23	B	8.9	76.73	0.94	F
D - Daweley Road (S)	89.3	265.37	1.16	F	7.7	33.97	0.89	D
E - Bourne Avenue	24.7	189.98	1.08	F	1.5	18.50	0.59	C

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	Base Model - Roundabout 1
Location	North Hyde Road/Dawley Road
Site number	
Date	23/04/2012
Version	
Status	Draft 1
Identifier	

Client	
Jobnumber	VN50026
Enumerator	rhussain [IE-D00135]
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	-Hour	perHour

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2029 Baseline	AM	ONE HOUR	07:45	09:15	15	✓
D8	2029 Baseline	PM	ONE HOUR	07:45	09:15	15	✓
D9	2029 Baseline+Dev	AM	ONE HOUR	07:45	09:15	15	✓
D10	2029 Baseline+Dev	PM	ONE HOUR	07:45	09:15	15	✓

Analysis Set Details

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

2029 Baseline , AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A,B,C,D,E	103.04	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	Dawley Road (N)	
B	North Hyde Road	
C	Millington Road	

D	Daweley Road (S)	
E	Bourne Avenue	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
A - Dawley Road (N)	3.65	9.50	13.0	22.0	75.0	20.0	
B - North Hyde Road	3.50	8.00	16.0	10.0	72.0	40.0	
C - Millington Road	4.00	6.00	8.0	22.0	54.0	36.0	
D - Daweley Road (S)	3.50	5.50	12.0	20.0	76.0	46.0	
E - Bourne Avenue	3.65	4.50	3.0	32.0	56.0	35.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A - Dawley Road (N)	0.526	1904
B - North Hyde Road	0.467	1629
C - Millington Road	0.553	1523
D - Daweley Road (S)	0.422	1375
E - Bourne Avenue	0.497	1242

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2029 Baseline	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Dawley Road (N)		ONE HOUR	✓	1456	100.000
B - North Hyde Road		ONE HOUR	✓	727	100.000
C - Millington Road		ONE HOUR	✓	105	100.000
D - Daweley Road (S)		ONE HOUR	✓	1047	100.000
E - Bourne Avenue		ONE HOUR	✓	413	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A - Dawley Road (N)	B - North Hyde Road	C - Millington Road	D - Daweley Road (S)	E - Bourne Avenue
From	A - Dawley Road (N)	0	360	231	736	129
	B - North Hyde Road	530	0	6	133	58
	C - Millington Road	67	1	0	29	8
	D - Daweley Road (S)	781	114	116	0	36
	E - Bourne Avenue	205	118	23	67	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - Dawley Road (N)	B - North Hyde Road	C - Millington Road	D - Daweley Road (S)	E - Bourne Avenue
From	A - Dawley Road (N)	10	10	10	10	10
	B - North Hyde Road	10	10	10	10	10
	C - Millington Road	10	10	10	10	10
	D - Daweley Road (S)	10	10	10	10	10
	E - Bourne Avenue	10	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Dawley Road (N)	0.96	39.05	16.4	E	1336	2004
B - North Hyde Road	0.82	22.01	4.7	C	667	1001
C - Millington Road	0.22	9.66	0.3	A	96	145
D - Daweley Road (S)	1.14	233.86	81.6	F	961	1441
E - Bourne Avenue	1.05	163.37	21.0	F	379	568

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1096	274	326	1732	0.633	1089	1179	0.0	1.9	6.084	A
B - North Hyde Road	547	137	973	1176	0.466	544	442	0.0	0.9	6.229	A
C - Millington Road	79	20	1236	841	0.094	79	281	0.0	0.1	5.193	A
D - Daweley Road (S)	788	197	593	1125	0.701	778	721	0.0	2.5	11.134	B
E - Bourne Avenue	311	78	1199	647	0.481	307	173	0.0	1.0	11.530	B

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1309	327	389	1700	0.770	1302	1407	1.9	3.5	9.799	A
B - North Hyde Road	654	163	1163	1087	0.601	651	528	0.9	1.6	9.025	A
C - Millington Road	94	24	1479	706	0.134	94	335	0.1	0.2	6.467	A
D - Daweley Road (S)	941	235	710	1076	0.875	926	863	2.5	6.4	24.200	C
E - Bourne Avenue	371	93	1429	532	0.698	366	206	1.0	2.3	23.110	C

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1603	401	428	1679	0.955	1564	1599	3.5	13.4	27.784	D

B - North Hyde Road	800	200	1377	987	0.811	790	614	1.6	4.3	19.180	C
C - Millington Road	116	29	1779	540	0.214	115	388	0.2	0.3	9.303	A
D - Daweley Road (S)	1153	288	861	1012	1.139	999	1033	6.4	44.9	105.826	F
E - Bourne Avenue	455	114	1615	440	1.034	412	245	2.3	13.0	89.034	F

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1603	401	435	1675	0.957	1591	1616	13.4	16.4	39.049	E
B - North Hyde Road	800	200	1401	975	0.821	799	625	4.3	4.7	22.014	C
C - Millington Road	116	29	1806	525	0.220	116	394	0.3	0.3	9.662	A
D - Daweley Road (S)	1153	288	871	1008	1.144	1006	1051	44.9	81.6	233.859	F
E - Bourne Avenue	455	114	1628	433	1.050	423	248	13.0	21.0	163.365	F

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1309	327	450	1667	0.785	1358	1546	16.4	4.3	14.535	B
B - North Hyde Road	654	163	1233	1054	0.620	665	575	4.7	1.8	10.449	B
C - Millington Road	94	24	1536	675	0.140	95	362	0.3	0.2	6.835	A
D - Daweley Road (S)	941	235	727	1069	0.881	1054	904	81.6	53.3	231.224	F
E - Bourne Avenue	371	93	1564	465	0.798	432	217	21.0	5.9	113.687	F

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1096	274	384	1702	0.644	1105	1354	4.3	2.0	6.727	A
B - North Hyde Road	547	137	1013	1157	0.473	551	476	1.8	1.0	6.572	A
C - Millington Road	79	20	1256	829	0.095	79	308	0.2	0.1	5.283	A
D - Daweley Road (S)	788	197	601	1122	0.703	990	735	53.3	2.9	65.278	F
E - Bourne Avenue	311	78	1409	542	0.573	328	182	5.9	1.5	19.872	C

2029 Baseline , PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A,B,C,D,E	36.65	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2029 Baseline	PM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Dawley Road (N)		ONE HOUR	✓	1552	100.000
B - North Hyde Road		ONE HOUR	✓	620	100.000
C - Millington Road		ONE HOUR	✓	405	100.000
D - Dawley Road (S)		ONE HOUR	✓	793	100.000
E - Bourne Avenue		ONE HOUR	✓	281	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A - Dawley Road (N)	B - North Hyde Road	C - Millington Road	D - Dawley Road (S)	E - Bourne Avenue
From	A - Dawley Road (N)	0	410	98	897	147
	B - North Hyde Road	401	0	9	116	94
	C - Millington Road	164	6	0	215	20
	D - Dawley Road (S)	632	65	28	0	68
	E - Bourne Avenue	127	83	17	54	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - Dawley Road (N)	B - North Hyde Road	C - Millington Road	D - Dawley Road (S)	E - Bourne Avenue
From	A - Dawley Road (N)	10	10	10	10	10
	B - North Hyde Road	10	10	10	10	10
	C - Millington Road	10	10	10	10	10
	D - Dawley Road (S)	10	10	10	10	10
	E - Bourne Avenue	10	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Dawley Road (N)	0.97	45.10	20.5	E	1424	2136
B - North Hyde Road	0.68	12.51	2.3	B	569	853
C - Millington Road	0.91	65.21	7.5	F	372	557
D - Dawley Road (S)	0.88	31.20	7.1	D	728	1092
E - Bourne Avenue	0.58	17.39	1.5	C	258	387

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1168	292	189	1805	0.647	1161	989	0.0	2.0	6.074	A
B - North Hyde Road	467	117	928	1196	0.390	464	422	0.0	0.7	5.386	A
C - Millington Road	305	76	1278	817	0.373	302	114	0.0	0.6	7.656	A
D - Dawley Road (S)	597	149	622	1113	0.537	592	958	0.0	1.3	7.537	A
E - Bourne Avenue	212	53	968	761	0.278	210	246	0.0	0.4	7.161	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1395	349	226	1785	0.782	1388	1185	2.0	3.8	9.801	A
B - North Hyde Road	557	139	1110	1111	0.502	556	505	0.7	1.1	7.107	A
C - Millington Road	364	91	1530	678	0.537	362	136	0.6	1.2	12.427	B
D - Dawley Road (S)	713	178	745	1061	0.672	709	1147	1.3	2.2	11.142	B
E - Bourne Avenue	253	63	1160	666	0.379	252	294	0.4	0.7	9.533	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1709	427	275	1760	0.971	1659	1433	3.8	16.1	30.334	D
B - North Hyde Road	683	171	1329	1009	0.676	678	605	1.1	2.2	11.798	B
C - Millington Road	446	111	1843	505	0.884	428	163	1.2	5.7	44.188	E
D - Dawley Road (S)	873	218	899	996	0.877	856	1372	2.2	6.3	25.802	D
E - Bourne Avenue	309	77	1401	546	0.567	307	355	0.7	1.4	16.337	C

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1709	427	278	1758	0.972	1691	1452	16.1	20.5	45.103	E
B - North Hyde Road	683	171	1353	998	0.684	682	616	2.2	2.3	12.513	B
C - Millington Road	446	111	1869	490	0.909	439	166	5.7	7.5	65.210	F
D - Dawley Road (S)	873	218	911	991	0.881	870	1397	6.3	7.1	31.196	D
E - Bourne Avenue	309	77	1421	536	0.577	309	360	1.4	1.5	17.387	C

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1395	349	232	1782	0.783	1460	1219	20.5	4.2	14.547	B
B - North Hyde Road	557	139	1165	1086	0.513	562	527	2.3	1.2	7.625	A
C - Millington Road	364	91	1585	647	0.562	388	142	7.5	1.5	16.627	C
D - Daweley Road (S)	713	178	769	1051	0.679	732	1204	7.1	2.4	13.083	B
E - Bourne Avenue	253	63	1195	648	0.390	256	305	1.5	0.7	10.158	B

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1168	292	192	1803	0.648	1177	1003	4.2	2.1	6.404	A
B - North Hyde Road	467	117	941	1190	0.392	469	428	1.2	0.7	5.502	A
C - Millington Road	305	76	1294	808	0.377	308	115	1.5	0.7	7.969	A
D - Daweley Road (S)	597	149	630	1109	0.538	601	972	2.4	1.3	7.866	A
E - Bourne Avenue	212	53	982	754	0.281	213	249	0.7	0.4	7.329	A

2029 Baseline+Dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A,B,C,D,E	116.08	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2029 Baseline+Dev	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Dawley Road (N)		ONE HOUR	✓	1471	100.000
B - North Hyde Road		ONE HOUR	✓	761	100.000
C - Millington Road		ONE HOUR	✓	105	100.000
D - Daweley Road (S)		ONE HOUR	✓	1048	100.000
E - Bourne Avenue		ONE HOUR	✓	413	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A - Dawley Road (N)	B - North Hyde Road	C - Millington Road	D - Daweley Road (S)	E - Bourne Avenue
From	A - Dawley Road (N)	0	375	231	736	129
	B - North Hyde Road	563	0	6	134	58
	C - Millington Road	67	1	0	29	8
	D - Daweley Road (S)	781	115	116	0	36
	E - Bourne Avenue	205	118	23	67	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - Dawley Road (N)	B - North Hyde Road	C - Millington Road	D - Daweley Road (S)	E - Bourne Avenue
From	A - Dawley Road (N)	10	10	10	10	10
	B - North Hyde Road	10	10	10	10	10
	C - Millington Road	10	10	10	10	10
	D - Daweley Road (S)	10	10	10	10	10
	E - Bourne Avenue	10	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Dawley Road (N)	0.96	42.71	18.2	E	1350	2025
B - North Hyde Road	0.86	26.83	5.9	D	698	1047
C - Millington Road	0.23	10.12	0.3	B	96	145
D - Daweley Road (S)	1.16	265.37	89.3	F	962	1442
E - Bourne Avenue	1.08	189.98	24.7	F	379	568

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1107	277	327	1732	0.639	1100	1204	0.0	1.9	6.189	A
B - North Hyde Road	573	143	972	1176	0.487	569	454	0.0	1.0	6.482	A
C - Millington Road	79	20	1261	827	0.096	79	280	0.0	0.1	5.290	A
D - Daweley Road (S)	789	197	617	1115	0.708	779	722	0.0	2.6	11.473	B
E - Bourne Avenue	311	78	1224	634	0.490	307	173	0.0	1.0	11.951	B

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1322	331	389	1700	0.778	1315	1434	1.9	3.7	10.120	B
B - North Hyde Road	684	171	1162	1087	0.629	681	542	1.0	1.8	9.673	A
C - Millington Road	94	24	1508	690	0.137	94	335	0.1	0.2	6.648	A
D - Dawley Road (S)	942	236	739	1063	0.886	925	863	2.6	6.8	25.874	D
E - Bourne Avenue	371	93	1458	518	0.717	365	206	1.0	2.5	25.016	D

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1620	405	423	1682	0.963	1576	1620	3.7	14.6	29.522	D
B - North Hyde Road	838	209	1372	989	0.847	824	627	1.8	5.2	22.359	C
C - Millington Road	116	29	1810	523	0.221	115	386	0.2	0.3	9.693	A
D - Dawley Road (S)	1154	288	894	998	1.156	987	1031	6.8	48.6	114.632	F
E - Bourne Avenue	455	114	1637	429	1.060	406	244	2.5	14.8	99.647	F

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1620	405	429	1679	0.965	1605	1637	14.6	18.2	42.711	E
B - North Hyde Road	838	209	1396	978	0.857	835	638	5.2	5.9	26.830	D
C - Millington Road	116	29	1840	507	0.228	116	391	0.3	0.3	10.123	B
D - Dawley Road (S)	1154	288	906	993	1.162	991	1049	48.6	89.3	257.056	F
E - Bourne Avenue	455	114	1650	422	1.077	415	247	14.8	24.7	189.977	F

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1322	331	451	1667	0.793	1377	1571	18.2	4.5	15.917	C
B - North Hyde Road	684	171	1237	1052	0.650	699	591	5.9	2.1	11.666	B
C - Millington Road	94	24	1575	653	0.145	95	361	0.3	0.2	7.101	A
D - Dawley Road (S)	942	236	760	1054	0.893	1042	909	89.3	64.4	265.373	F
E - Bourne Avenue	371	93	1585	455	0.816	438	217	24.7	8.1	147.397	F

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1107	277	398	1695	0.653	1117	1415	4.5	2.1	6.961	A
B - North Hyde Road	573	143	1020	1153	0.497	577	495	2.1	1.1	6.915	A
C - Millington Road	79	20	1284	814	0.097	79	313	0.2	0.1	5.393	A

D - Dawley Road (S)	789	197	626	1111	0.710	1034	737	64.4	3.1	98.183	F
E - Bourne Avenue	311	78	1477	508	0.611	336	183	8.1	1.8	25.827	D

2029 Baseline+Dev , PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A,B,C,D,E	43.65	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2029 Baseline+Dev	PM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Dawley Road (N)		ONE HOUR	✓	1583	100.000
B - North Hyde Road		ONE HOUR	✓	649	100.000
C - Millington Road		ONE HOUR	✓	405	100.000
D - Dawley Road (S)		ONE HOUR	✓	793	100.000
E - Bourne Avenue		ONE HOUR	✓	281	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A - Dawley Road (N)	B - North Hyde Road	C - Millington Road	D - Dawley Road (S)	E - Bourne Avenue
From	A - Dawley Road (N)	0	441	98	897	147
	B - North Hyde Road	428	0	9	117	95
	C - Millington Road	164	6	0	215	20
	D - Dawley Road (S)	632	65	28	0	68
	E - Bourne Avenue	127	83	17	54	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - Dawley Road (N)	B - North Hyde Road	C - Millington Road	D - Daweley Road (S)	E - Bourne Avenue
From	A - Dawley Road (N)	10	10	10	10	10
	B - North Hyde Road	10	10	10	10	10
	C - Millington Road	10	10	10	10	10
	D - Daweley Road (S)	10	10	10	10	10
	E - Bourne Avenue	10	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Dawley Road (N)	0.99	56.78	27.1	F	1453	2179
B - North Hyde Road	0.71	13.71	2.6	B	596	893
C - Millington Road	0.94	76.73	8.9	F	372	557
D - Daweley Road (S)	0.89	33.97	7.7	D	728	1092
E - Bourne Avenue	0.59	18.50	1.5	C	258	387

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1192	298	189	1805	0.660	1183	1009	0.0	2.1	6.292	A
B - North Hyde Road	489	122	928	1197	0.408	486	445	0.0	0.8	5.547	A
C - Millington Road	305	76	1300	805	0.379	302	114	0.0	0.7	7.835	A
D - Daweley Road (S)	597	149	643	1104	0.541	592	959	0.0	1.3	7.662	A
E - Bourne Avenue	212	53	988	751	0.282	210	247	0.0	0.4	7.294	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1423	356	226	1785	0.797	1415	1209	2.1	4.1	10.479	B
B - North Hyde Road	583	146	1109	1112	0.525	582	532	0.8	1.2	7.446	A
C - Millington Road	364	91	1555	664	0.548	362	136	0.7	1.3	12.985	B
D - Daweley Road (S)	713	178	770	1050	0.679	709	1147	1.3	2.2	11.469	B
E - Bourne Avenue	253	63	1184	654	0.386	252	295	0.4	0.7	9.810	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1743	436	274	1760	0.990	1680	1460	4.1	19.8	35.142	E
B - North Hyde Road	715	179	1320	1014	0.705	709	635	1.2	2.5	12.794	B

C - Millington Road	446	111	1866	492	0.906	425	163	1.3	6.5	49.098	E
D - Dawley Road (S)	873	218	927	984	0.887	855	1364	2.2	6.8	27.448	D
E - Bourne Avenue	309	77	1428	533	0.581	306	354	0.7	1.5	17.246	C

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1743	436	278	1758	0.991	1714	1480	19.8	27.1	56.776	F
B - North Hyde Road	715	179	1345	1002	0.713	714	646	2.5	2.6	13.714	B
C - Millington Road	446	111	1894	477	0.935	436	165	6.5	8.9	76.734	F
D - Dawley Road (S)	873	218	939	979	0.892	869	1391	6.8	7.7	33.970	D
E - Bourne Avenue	309	77	1449	522	0.592	309	360	1.5	1.5	18.504	C

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1423	356	232	1782	0.799	1513	1248	27.1	4.7	18.980	C
B - North Hyde Road	583	146	1182	1078	0.541	589	563	2.6	1.3	8.182	A
C - Millington Road	364	91	1627	624	0.583	393	143	8.9	1.6	19.196	C
D - Dawley Road (S)	713	178	799	1038	0.687	734	1221	7.7	2.5	13.829	B
E - Bourne Avenue	253	63	1224	634	0.398	256	309	1.5	0.7	10.558	B

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Dawley Road (N)	1192	298	192	1803	0.661	1202	1024	4.7	2.2	6.689	A
B - North Hyde Road	489	122	942	1190	0.411	491	452	1.3	0.8	5.681	A
C - Millington Road	305	76	1317	795	0.383	309	115	1.6	0.7	8.195	A
D - Dawley Road (S)	597	149	652	1100	0.543	602	974	2.5	1.3	8.021	A
E - Bourne Avenue	212	53	1003	744	0.284	213	250	0.7	0.4	7.476	A