

Appendix W

W - JUNCTION CAPACITY
ASSESSMENT OUTPUTS



Highway Modelling Acronyms

D – Development (South West Milton Keynes)

CD – Committed Development (Tattenhoe Park and Kingsmead South)

ST – Sensitivity Test

SP – Shenley Park

TP – Travel Planning Scenario

2026 and 2033 Base scenarios are not used.

Scenarios assessed in TA:

2020 Base = 2020 Base

2033 Base = 2033 Do Nothing

2033 Base + CD + D = 2033 Do Something 1

2033 Base + CD + D with TP = 2033 Do Something 2

2033 Base + CD + D - ST = 2033 Do Something 3

Junctions 9	
ARCADY 9 - Roundabout Module	
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Filename: Buckingham Access 4 Arm 200506_ST.j9

Path: \\uk.wspgroup.com\central data\Projects\700694xx\70069442 - SWMK - 2020\03 WIP\TP Transport Planning\Analysis\Junctions9\2020 Base\Buckingham Access

Report generation date: 06/05/2020 17:51:01

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- »2026 Base + Committed Development + Development, AM
 - »2026 Base + Committed Development + Development, PM
 - »2026 Base + Committed Development + Development with Travel Planning, AM
 - »2026 Base + Committed Development + Development with Travel Planning, PM
 - »2026 Base + Committed Development + Development - Sensitivity Test, AM
 - »2026 Base + Committed Development + Development - Sensitivity Test, PM
 - »2033 Base + Committed Development + Development, AM
 - »2033 Base + Committed Development + Development, PM
 - »2033 Base + Committed Development + Development with Travel Planning, AM
 - »2033 Base + Committed Development + Development with Travel Planning, PM
 - »2033 Base + Committed Development + Development - Sensitivity Test, AM
 - »2033 Base + Committed Development + Development - Sensitivity Test, PM

Summary of junction performance

	AM						PM					
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Network Residual Capacity	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Network Residual Capacity
	2026 Base + Committed Development + Development											
Arm A	D1	0.6	4.05	0.39	A	47 % [Arm C]	D2	1.1	5.65	0.53	A	34 % [Arm D]
Arm B		0.2	4.36	0.14	A			0.2	5.29	0.14	A	
Arm C		1.0	7.37	0.49	A			0.6	6.18	0.39	A	
Arm D		1.1	6.11	0.53	A			2.2	8.95	0.69	A	
	2026 Base + Committed Development + Development with Travel Planning											
Arm A	D3	0.6	3.95	0.38	A	66 % [Arm C]	D4	1.0	5.18	0.50	A	43 % [Arm D]
Arm B		0.2	4.27	0.14	A			0.2	4.96	0.14	A	
Arm C		0.6	6.20	0.39	A			0.4	5.42	0.30	A	
Arm D		1.0	5.79	0.51	A			1.8	7.73	0.64	A	
	2026 Base + Committed Development + Development - Sensitivity Test											
Arm A	D5	0.7	4.20	0.41	A	44 % [Arm C]	D6	1.3	6.16	0.57	A	30 % [Arm D]
Arm B		0.2	4.46	0.14	A			0.2	5.53	0.15	A	
Arm C		1.0	7.65	0.50	A			0.7	6.52	0.40	A	
Arm D		1.4	6.90	0.58	A			2.4	9.58	0.71	A	
	2033 Base + Committed Development + Development											
Arm A	D7	0.7	4.20	0.41	A	44 % [Arm C]	D8	1.3	6.06	0.56	A	28 % [Arm D]
Arm B		0.2	4.46	0.14	A			0.2	5.49	0.15	A	
Arm C		1.0	7.66	0.50	A			0.7	6.45	0.40	A	
Arm D		1.3	6.54	0.56	A			2.5	9.91	0.72	A	
	2033 Base + Committed Development + Development with Travel Planning											
Arm A	D9	0.7	4.10	0.40	A	62 % [Arm C]	D10	1.1	5.51	0.53	A	37 % [Arm D]
Arm B		0.2	4.37	0.14	A			0.2	5.13	0.14	A	
Arm C		0.7	6.41	0.40	A			0.4	5.62	0.31	A	
Arm D		1.2	6.18	0.54	A			2.0	8.43	0.67	A	
	2033 Base + Committed Development + Development - Sensitivity Test											
Arm A	D11	0.7	4.28	0.43	A	41 % [Arm C]	D12	1.5	6.64	0.60	A	25 % [Arm D]
Arm B		0.2	4.54	0.15	A			0.2	5.75	0.15	A	
Arm C		1.0	7.90	0.51	A			0.7	6.82	0.41	A	
Arm D		1.6	7.35	0.61	A			2.8	10.68	0.74	B	

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

File summary

File Description

Title	
Location	
Site number	
Date	31/03/2020
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	CORPIUKWGF001
Description	

Units

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

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2026 Base + Committed Development + Development	AM	ONE HOUR	07:30	09:00	15	✓
D2	2026 Base + Committed Development + Development	PM	ONE HOUR	16:45	18:15	15	✓
D3	2026 Base + Committed Development + Development with Travel Planning	AM	ONE HOUR	07:30	09:00	15	✓
D4	2026 Base + Committed Development + Development with Travel Planning	PM	ONE HOUR	16:45	18:15	15	✓
D5	2026 Base + Committed Development + Development - Sensitivity Test	AM	ONE HOUR	07:30	09:00	15	✓
D6	2026 Base + Committed Development + Development - Sensitivity Test	PM	ONE HOUR	16:45	18:15	15	✓
D7	2033 Base + Committed Development + Development	AM	ONE HOUR	07:30	09:00	15	✓
D8	2033 Base + Committed Development + Development	PM	ONE HOUR	16:45	18:15	15	✓
D9	2033 Base + Committed Development + Development with Travel Planning	AM	ONE HOUR	07:30	09:00	15	✓
D10	2033 Base + Committed Development + Development with Travel Planning	PM	ONE HOUR	16:45	18:15	15	✓
D11	2033 Base + Committed Development + Development - Sensitivity Test	AM	ONE HOUR	07:30	09:00	15	✓
D12	2033 Base + Committed Development + Development - Sensitivity Test	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

2026 Base + Committed Development + Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		A, B, C, D	5.67	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	47	Arm C

Arms

Arms

Arm	Name	Description
A	Buckingham Road (E)	
B	Grid Road Reserve	
C	Site Access	
D	Buckingham Road (W)	

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	3.67	6.34	10.9	12.5	44.0	22.0	
B	3.70	4.49	13.7	40.0	44.0	28.0	
C	3.59	5.18	4.2	20.0	44.0	19.0	
D	3.65	5.10	5.2	24.0	44.0	28.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A	0.604	1563
B	0.575	1365
C	0.575	1354
D	0.568	1357

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	2026 Base + Committed Development + Development	AM	ONE HOUR	07:30	09:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	516	100.000
B		ONE HOUR	✓	123	100.000
C		ONE HOUR	✓	429	100.000
D		ONE HOUR	✓	601	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
	A	B	C	D	
From	A	0	13	49	454
	B	19	0	0	104
	C	98	0	0	331
	D	486	29	86	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
	A	B	C	D	
From	A	0	6	6	1
	B	2	0	0	2
	C	2	0	0	2
	D	2	6	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A	0.39	4.05	0.6	A	473	710
B	0.14	4.36	0.2	A	113	169
C	0.49	7.37	1.0	A	394	591
D	0.53	6.11	1.1	A	551	827

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	388	97	86	1482	0.262	387	452	0.0	0.4	3.282	A
B	93	23	441	1079	0.086	92	31	0.0	0.1	3.647	A
C	323	81	433	1076	0.300	321	101	0.0	0.4	4.758	A
D	452	113	88	1274	0.355	450	666	0.0	0.5	4.357	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	464	116	103	1471	0.315	463	541	0.4	0.5	3.568	A
B	111	28	529	1029	0.107	111	38	0.1	0.1	3.918	A
C	386	96	518	1028	0.375	385	121	0.4	0.6	5.597	A
D	540	135	105	1264	0.427	539	798	0.5	0.7	4.961	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	568	142	126	1457	0.390	567	663	0.5	0.6	4.042	A
B	135	34	647	961	0.141	135	46	0.1	0.2	4.357	A
C	473	118	634	962	0.491	471	148	0.6	1.0	7.321	A
D	662	165	129	1251	0.529	660	977	0.7	1.1	6.078	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	568	142	127	1457	0.390	568	664	0.6	0.6	4.049	A
B	135	34	648	961	0.141	135	46	0.2	0.2	4.361	A
C	473	118	635	961	0.492	473	149	1.0	1.0	7.368	A
D	662	165	129	1251	0.529	662	978	1.1	1.1	6.109	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	464	116	104	1471	0.315	464	544	0.6	0.5	3.577	A
B	111	28	530	1029	0.108	111	38	0.2	0.1	3.923	A
C	386	96	519	1027	0.376	387	122	1.0	0.6	5.639	A
D	540	135	106	1264	0.427	542	801	1.1	0.8	4.992	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	388	97	87	1482	0.262	389	455	0.5	0.4	3.293	A
B	93	23	444	1078	0.086	93	32	0.1	0.1	3.655	A
C	323	81	435	1075	0.301	324	102	0.6	0.4	4.795	A
D	452	113	88	1274	0.355	453	670	0.8	0.6	4.390	A

2026 Base + Committed Development + Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		A, B, C, D	7.13	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	34	Arm D

Traffic Demand

Demand Set 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	2026 Base + Committed Development + Development	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	650	100.000
B		ONE HOUR	✓	103	100.000
C		ONE HOUR	✓	332	100.000
D		ONE HOUR	✓	805	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		A	B	C	D
	A	0	39	97	514
	B	15	0	0	88
	C	66	0	0	266
	D	501	39	265	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A	0.53	5.65	1.1	A	597	895
B	0.14	5.29	0.2	A	95	142
C	0.39	6.18	0.6	A	305	457
D	0.69	8.95	2.2	A	739	1108

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	489	122	228	1418	0.345	487	436	0.0	0.5	3.859	A
B	78	19	656	969	0.080	77	58	0.0	0.1	4.036	A
C	250	62	463	1071	0.233	249	271	0.0	0.3	4.374	A
D	606	152	61	1304	0.465	603	651	0.0	0.9	5.106	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	584	146	273	1390	0.420	584	522	0.5	0.7	4.457	A
B	93	23	786	895	0.103	92	70	0.1	0.1	4.484	A
C	298	75	554	1019	0.293	298	325	0.3	0.4	4.992	A
D	724	181	73	1298	0.558	722	780	0.9	1.2	6.241	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	716	179	333	1353	0.529	714	638	0.7	1.1	5.619	A
B	113	28	962	795	0.143	113	86	0.1	0.2	5.277	A
C	366	91	678	948	0.385	365	397	0.4	0.6	6.159	A
D	886	222	89	1288	0.688	883	954	1.2	2.1	8.800	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	716	179	335	1353	0.529	716	641	1.1	1.1	5.653	A
B	113	28	965	794	0.143	113	86	0.2	0.2	5.291	A
C	366	91	680	948	0.386	366	398	0.6	0.6	6.184	A
D	886	222	89	1288	0.688	886	956	2.1	2.2	8.949	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	584	146	275	1389	0.421	586	526	1.1	0.7	4.489	A
B	93	23	790	893	0.104	93	70	0.2	0.1	4.501	A
C	298	75	556	1017	0.293	299	327	0.6	0.4	5.020	A
D	724	181	73	1297	0.558	727	783	2.2	1.3	6.355	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	489	122	229	1417	0.345	490	439	0.7	0.5	3.887	A
B	78	19	661	967	0.080	78	59	0.1	0.1	4.049	A
C	250	62	466	1069	0.234	250	273	0.4	0.3	4.401	A
D	606	152	61	1304	0.465	608	655	1.3	0.9	5.182	A

2026 Base + Committed Development + Development with Travel Planning, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		A, B, C, D	5.16	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	66	Arm C

Traffic Demand

Demand Set 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	2026 Base + Committed Development + Development with Travel Planning	AM	ONE HOUR	07:30	09:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	507	100.000
B		ONE HOUR	✓	123	100.000
C		ONE HOUR	✓	342	100.000
D		ONE HOUR	✓	583	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
	A	B	C	D	
From	A	0	13	40	454
	B	19	0	0	104
	C	79	0	0	263
	D	486	29	68	0

Vehicle Mix

Heavy Vehicle Percentages

From	To				
		A	B	C	D
	A	0	6	6	1
	B	2	0	0	2
	C	3	0	0	3
	D	2	6	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A	0.38	3.95	0.6	A	465	697
B	0.14	4.27	0.2	A	113	169
C	0.39	6.20	0.6	A	314	471
D	0.51	5.79	1.0	A	535	802

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	381	95	73	1491	0.256	380	438	0.0	0.3	3.235	A
B	93	23	421	1091	0.085	92	31	0.0	0.1	3.604	A
C	257	64	433	1072	0.240	256	81	0.0	0.3	4.406	A
D	439	110	73	1283	0.342	437	615	0.0	0.5	4.244	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	455	114	87	1482	0.307	455	524	0.3	0.4	3.503	A
B	111	28	504	1044	0.106	111	38	0.1	0.1	3.858	A
C	307	77	518	1024	0.300	307	97	0.3	0.4	5.019	A
D	524	131	88	1275	0.411	523	737	0.5	0.7	4.787	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	558	139	107	1470	0.380	557	642	0.4	0.6	3.943	A
B	135	34	618	979	0.138	135	46	0.1	0.2	4.267	A
C	377	94	634	958	0.393	376	119	0.4	0.6	6.175	A
D	642	160	108	1263	0.508	640	902	0.7	1.0	5.767	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	558	139	107	1470	0.380	558	643	0.6	0.6	3.948	A
B	135	34	618	978	0.138	135	46	0.2	0.2	4.271	A
C	377	94	635	957	0.393	377	119	0.6	0.6	6.197	A
D	642	160	108	1263	0.508	642	904	1.0	1.0	5.791	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	455	114	87	1482	0.307	456	526	0.6	0.4	3.514	A
B	111	28	506	1043	0.106	111	38	0.2	0.1	3.862	A
C	307	77	519	1023	0.301	308	97	0.6	0.4	5.044	A
D	524	131	88	1274	0.411	525	739	1.0	0.7	4.812	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	381	95	73	1491	0.256	382	440	0.4	0.3	3.246	A
B	93	23	423	1090	0.085	93	32	0.1	0.1	3.612	A
C	257	64	435	1071	0.240	258	81	0.4	0.3	4.431	A
D	439	110	74	1283	0.342	440	619	0.7	0.5	4.274	A

2026 Base + Committed Development + Development with Travel Planning, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		A, B, C, D	6.31	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	43	Arm D

Traffic Demand

Demand Set 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	2026 Base + Committed Development + Development with Travel Planning	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	627	100.000
B		ONE HOUR	✓	103	100.000
C		ONE HOUR	✓	256	100.000
D		ONE HOUR	✓	754	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
	A	B	C	D	
From	A	0	39	74	514
	B	15	0	0	88
	C	52	0	0	204
	D	501	39	214	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A	0.50	5.18	1.0	A	576	864
B	0.14	4.96	0.2	A	95	142
C	0.30	5.42	0.4	A	235	352
D	0.64	7.73	1.8	A	692	1038

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	472	118	189	1441	0.328	470	425	0.0	0.5	3.701	A
B	78	19	601	1000	0.078	77	58	0.0	0.1	3.899	A
C	193	48	463	1069	0.180	192	216	0.0	0.2	4.098	A
D	568	142	50	1309	0.434	565	605	0.0	0.8	4.816	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	564	141	227	1418	0.398	563	510	0.5	0.7	4.209	A
B	93	23	720	933	0.099	92	70	0.1	0.1	4.285	A
C	230	58	554	1017	0.226	230	258	0.2	0.3	4.570	A
D	678	169	60	1304	0.520	677	724	0.8	1.1	5.730	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	691	173	278	1387	0.498	689	624	0.7	1.0	5.153	A
B	113	28	881	841	0.135	113	86	0.1	0.2	4.947	A
C	282	70	679	947	0.298	281	316	0.3	0.4	5.399	A
D	830	208	74	1296	0.641	828	886	1.1	1.7	7.642	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	691	173	279	1386	0.498	691	625	1.0	1.0	5.175	A
B	113	28	883	840	0.135	113	86	0.2	0.2	4.956	A
C	282	70	680	946	0.298	282	317	0.4	0.4	5.416	A
D	830	208	74	1296	0.641	830	888	1.7	1.8	7.728	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	564	141	228	1417	0.398	565	513	1.0	0.7	4.232	A
B	93	23	723	931	0.099	93	70	0.2	0.1	4.295	A
C	230	58	556	1016	0.226	231	260	0.4	0.3	4.584	A
D	678	169	60	1303	0.520	681	727	1.8	1.1	5.805	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	472	118	191	1440	0.328	473	429	0.7	0.5	3.724	A
B	78	19	605	998	0.078	78	59	0.1	0.1	3.912	A
C	193	48	465	1068	0.181	193	217	0.3	0.2	4.116	A
D	568	142	51	1309	0.434	569	608	1.1	0.8	4.874	A

2026 Base + Committed Development + Development - Sensitivity Test, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		A, B, C, D	6.08	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	44	Arm C

Traffic Demand

Demand Set 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	2026 Base + Committed Development + Development - Sensitivity Test	AM	ONE HOUR	07:30	09:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	545	100.000
B		ONE HOUR	✓	123	100.000
C		ONE HOUR	✓	429	100.000
D		ONE HOUR	✓	663	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
	A	B	C	D	
From	A	0	13	49	483
	B	19	0	0	104
	C	98	0	0	331
	D	548	29	86	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
	A	B	C	D	
From	A	0	6	6	1
	B	2	0	0	2
	C	2	0	0	2
	D	2	6	6	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A	0.41	4.20	0.7	A	500	750
B	0.14	4.46	0.2	A	113	169
C	0.50	7.65	1.0	A	394	591
D	0.58	6.90	1.4	A	609	913

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	410	103	86	1483	0.277	409	498	0.0	0.4	3.347	A
B	93	23	463	1067	0.087	92	31	0.0	0.1	3.693	A
C	323	81	454	1064	0.304	321	101	0.0	0.4	4.838	A
D	499	125	88	1275	0.392	497	688	0.0	0.6	4.610	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	490	122	103	1472	0.333	489	597	0.4	0.5	3.661	A
B	111	28	555	1015	0.109	110	38	0.1	0.1	3.982	A
C	386	96	544	1013	0.381	385	121	0.4	0.6	5.729	A
D	596	149	105	1265	0.471	595	824	0.6	0.9	5.365	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	600	150	126	1457	0.411	599	731	0.5	0.7	4.190	A
B	135	34	679	943	0.144	135	46	0.1	0.2	4.454	A
C	473	118	666	943	0.501	471	148	0.6	1.0	7.596	A
D	730	183	129	1252	0.583	728	1008	0.9	1.4	6.847	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	600	150	127	1457	0.412	600	733	0.7	0.7	4.198	A
B	135	34	680	943	0.144	135	46	0.2	0.2	4.459	A
C	473	118	667	943	0.501	473	149	1.0	1.0	7.652	A
D	730	183	129	1252	0.583	730	1010	1.4	1.4	6.901	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	490	122	104	1471	0.333	490	600	0.7	0.5	3.671	A
B	111	28	556	1014	0.109	111	38	0.2	0.1	3.987	A
C	386	96	545	1012	0.381	387	122	1.0	0.6	5.777	A
D	596	149	106	1265	0.471	598	827	1.4	0.9	5.413	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	410	103	87	1482	0.277	411	502	0.5	0.4	3.360	A
B	93	23	466	1066	0.087	93	32	0.1	0.1	3.699	A
C	323	81	457	1063	0.304	324	102	0.6	0.4	4.877	A
D	499	125	88	1275	0.392	500	692	0.9	0.6	4.653	A

2026 Base + Committed Development + Development - Sensitivity Test, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		A, B, C, D	7.64	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	30	Arm D

Traffic Demand

Demand Set 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	2026 Base + Committed Development + Development - Sensitivity Test	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	698	100.000
B		ONE HOUR	✓	103	100.000
C		ONE HOUR	✓	332	100.000
D		ONE HOUR	✓	829	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
	A	B	C	D	
From	A	0	39	97	563
	B	15	0	0	88
	C	66	0	0	266
	D	525	39	265	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A	0.57	6.16	1.3	A	641	961
B	0.15	5.53	0.2	A	95	142
C	0.40	6.52	0.7	A	305	457
D	0.71	9.58	2.4	A	761	1141

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	526	131	228	1419	0.371	523	454	0.0	0.6	4.011	A
B	78	19	692	949	0.082	77	58	0.0	0.1	4.128	A
C	250	62	499	1050	0.238	249	271	0.0	0.3	4.486	A
D	624	156	61	1305	0.479	621	687	0.0	0.9	5.237	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	628	157	273	1391	0.451	627	544	0.6	0.8	4.705	A
B	93	23	830	871	0.106	92	70	0.1	0.1	4.625	A
C	298	75	597	994	0.300	298	325	0.3	0.4	5.167	A
D	745	186	73	1298	0.574	744	823	0.9	1.3	6.480	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	769	192	333	1354	0.568	767	665	0.8	1.3	6.115	A
B	113	28	1015	765	0.148	113	86	0.1	0.2	5.518	A
C	366	91	731	919	0.398	365	397	0.4	0.7	6.488	A
D	913	228	89	1288	0.709	909	1007	1.3	2.4	9.384	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	769	192	335	1353	0.568	769	667	1.3	1.3	6.162	A
B	113	28	1018	764	0.148	113	86	0.2	0.2	5.535	A
C	366	91	733	918	0.398	366	398	0.7	0.7	6.520	A
D	913	228	89	1288	0.709	913	1009	2.4	2.4	9.576	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	628	157	275	1390	0.452	630	548	1.3	0.8	4.750	A
B	93	23	834	868	0.107	93	70	0.2	0.1	4.645	A
C	298	75	600	993	0.301	299	327	0.7	0.4	5.197	A
D	745	186	73	1297	0.575	750	826	2.4	1.4	6.619	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	526	131	230	1417	0.371	527	458	0.8	0.6	4.046	A
B	78	19	697	946	0.082	78	59	0.1	0.1	4.147	A
C	250	62	502	1048	0.238	250	273	0.4	0.3	4.515	A
D	624	156	61	1304	0.479	626	691	1.4	0.9	5.323	A

2033 Base + Committed Development + Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		A, B, C, D	5.94	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	44	Arm C

Traffic Demand

Demand Set 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	2033 Base + Committed Development + Development	AM	ONE HOUR	07:30	09:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	546	100.000
B		ONE HOUR	✓	123	100.000
C		ONE HOUR	✓	429	100.000
D		ONE HOUR	✓	637	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		A	B	C	D
	A	0	13	49	484
	B	19	0	0	104
	C	98	0	0	331
	D	522	29	86	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		A	B	C	D
	A	0	6	6	1
	B	2	0	0	2
	C	2	0	0	2
	D	2	6	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A	0.41	4.20	0.7	A	501	751
B	0.14	4.46	0.2	A	113	169
C	0.50	7.66	1.0	A	394	591
D	0.56	6.54	1.3	A	584	876

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	411	103	86	1483	0.277	409	479	0.0	0.4	3.350	A
B	93	23	464	1067	0.087	92	31	0.0	0.1	3.695	A
C	323	81	455	1064	0.304	321	101	0.0	0.4	4.840	A
D	479	120	88	1275	0.376	477	689	0.0	0.6	4.499	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	491	123	103	1472	0.333	490	574	0.4	0.5	3.664	A
B	111	28	556	1014	0.109	110	38	0.1	0.1	3.984	A
C	386	96	545	1012	0.381	385	121	0.4	0.6	5.733	A
D	572	143	105	1265	0.453	572	825	0.6	0.8	5.186	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	601	150	126	1457	0.412	600	702	0.5	0.7	4.195	A
B	135	34	680	943	0.144	135	46	0.1	0.2	4.457	A
C	473	118	667	943	0.501	471	148	0.6	1.0	7.606	A
D	701	175	129	1252	0.560	699	1009	0.8	1.3	6.498	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	601	150	127	1457	0.412	601	704	0.7	0.7	4.203	A
B	135	34	681	942	0.144	135	46	0.2	0.2	4.462	A
C	473	118	668	942	0.502	473	149	1.0	1.0	7.662	A
D	701	175	129	1251	0.560	701	1011	1.3	1.3	6.541	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	491	123	104	1472	0.333	491	576	0.7	0.5	3.677	A
B	111	28	557	1013	0.109	111	38	0.2	0.1	3.989	A
C	386	96	546	1012	0.381	387	122	1.0	0.6	5.782	A
D	572	143	106	1265	0.453	574	828	1.3	0.8	5.228	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	411	103	87	1482	0.277	411	482	0.5	0.4	3.362	A
B	93	23	466	1065	0.087	93	32	0.1	0.1	3.701	A
C	323	81	457	1062	0.304	324	102	0.6	0.4	4.881	A
D	479	120	88	1274	0.376	480	693	0.8	0.6	4.539	A

2033 Base + Committed Development + Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		A, B, C, D	7.75	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	28	Arm D

Traffic Demand

Demand Set 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	2033 Base + Committed Development + Development	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	689	100.000
B		ONE HOUR	✓	103	100.000
C		ONE HOUR	✓	332	100.000
D		ONE HOUR	✓	841	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		A	B	C	D
	A	0	39	97	553
	B	15	0	0	88
	C	66	0	0	266
	D	537	39	265	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A	0.56	6.06	1.3	A	632	948
B	0.15	5.49	0.2	A	95	142
C	0.40	6.45	0.7	A	305	457
D	0.72	9.91	2.5	A	771	1157

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	519	130	228	1418	0.366	516	462	0.0	0.6	3.982	A
B	78	19	686	953	0.081	77	58	0.0	0.1	4.108	A
C	250	62	492	1054	0.237	249	271	0.0	0.3	4.464	A
D	633	158	61	1305	0.485	629	680	0.0	0.9	5.302	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	619	155	273	1391	0.445	619	554	0.6	0.8	4.658	A
B	93	23	821	876	0.106	92	70	0.1	0.1	4.597	A
C	298	75	589	999	0.299	298	325	0.3	0.4	5.132	A
D	756	189	73	1298	0.582	754	814	0.9	1.4	6.599	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	759	190	333	1354	0.560	757	677	0.8	1.3	6.012	A
B	113	28	1004	771	0.147	113	86	0.1	0.2	5.470	A
C	366	91	721	924	0.395	365	397	0.4	0.6	6.422	A
D	926	231	89	1288	0.718	921	997	1.4	2.5	9.687	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	759	190	335	1353	0.561	759	680	1.3	1.3	6.057	A
B	113	28	1007	769	0.147	113	86	0.2	0.2	5.486	A
C	366	91	723	923	0.396	366	398	0.6	0.7	6.453	A
D	926	231	89	1288	0.718	925	999	2.5	2.5	9.905	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	619	155	275	1389	0.446	621	558	1.3	0.8	4.696	A
B	93	23	826	873	0.106	93	70	0.2	0.1	4.615	A
C	298	75	592	998	0.299	299	327	0.7	0.4	5.162	A
D	756	189	73	1298	0.582	760	818	2.5	1.4	6.750	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	519	130	230	1417	0.366	520	466	0.8	0.6	4.014	A
B	78	19	690	950	0.082	78	59	0.1	0.1	4.128	A
C	250	62	495	1052	0.238	250	273	0.4	0.3	4.493	A
D	633	158	61	1304	0.485	635	684	1.4	1.0	5.392	A

2033 Base + Committed Development + Development with Travel Planning, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		A, B, C, D	5.40	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	62	Arm C

Traffic Demand

Demand Set 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	2033 Base + Committed Development + Development with Travel Planning	AM	ONE HOUR	07:30	09:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	537	100.000
B		ONE HOUR	✓	123	100.000
C		ONE HOUR	✓	342	100.000
D		ONE HOUR	✓	619	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
	A	B	C	D	
From	A	0	13	40	484
	B	19	0	0	104
	C	79	0	0	263
	D	522	29	68	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		A	B	C	D
	A	0	6	6	1
	B	2	0	0	2
	C	3	0	0	3
	D	2	6	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A	0.40	4.10	0.7	A	493	739
B	0.14	4.37	0.2	A	113	169
C	0.40	6.41	0.7	A	314	471
D	0.54	6.18	1.2	A	568	852

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	404	101	73	1491	0.271	403	464	0.0	0.4	3.302	A
B	93	23	444	1078	0.086	92	31	0.0	0.1	3.651	A
C	257	64	455	1059	0.243	256	81	0.0	0.3	4.475	A
D	466	116	73	1284	0.363	464	638	0.0	0.6	4.380	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	483	121	87	1482	0.326	482	556	0.4	0.5	3.597	A
B	111	28	532	1028	0.108	110	38	0.1	0.1	3.923	A
C	307	77	545	1008	0.305	307	97	0.3	0.4	5.130	A
D	556	139	88	1275	0.436	555	764	0.6	0.8	4.996	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	591	148	107	1470	0.402	590	681	0.5	0.7	4.089	A
B	135	34	651	960	0.141	135	46	0.1	0.2	4.365	A
C	377	94	667	939	0.401	376	119	0.4	0.7	6.380	A
D	681	170	108	1264	0.539	680	935	0.8	1.2	6.145	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	591	148	107	1470	0.402	591	682	0.7	0.7	4.096	A
B	135	34	652	959	0.141	135	46	0.2	0.2	4.369	A
C	377	94	668	938	0.401	377	119	0.7	0.7	6.405	A
D	681	170	108	1264	0.539	681	937	1.2	1.2	6.178	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	483	121	87	1482	0.326	483	559	0.7	0.5	3.609	A
B	111	28	533	1027	0.108	111	38	0.2	0.1	3.929	A
C	307	77	547	1008	0.305	308	97	0.7	0.4	5.156	A
D	556	139	88	1275	0.436	558	767	1.2	0.8	5.029	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	404	101	73	1491	0.271	405	467	0.5	0.4	3.316	A
B	93	23	446	1077	0.086	93	32	0.1	0.1	3.659	A
C	257	64	457	1058	0.243	258	81	0.4	0.3	4.503	A
D	466	116	74	1283	0.363	467	642	0.8	0.6	4.412	A

2033 Base + Committed Development + Development with Travel Planning, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		A, B, C, D	6.78	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	37	Arm D

Traffic Demand

Demand Set 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	2033 Base + Committed Development + Development with Travel Planning	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	666	100.000
B		ONE HOUR	✓	103	100.000
C		ONE HOUR	✓	256	100.000
D		ONE HOUR	✓	790	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
	A	B	C	D	
From	A	0	39	74	553
	B	15	0	0	88
	C	52	0	0	204
	D	537	39	214	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A	0.53	5.51	1.1	A	611	917
B	0.14	5.13	0.2	A	95	142
C	0.31	5.62	0.4	A	235	352
D	0.67	8.43	2.0	A	725	1087

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	502	125	189	1441	0.348	500	452	0.0	0.5	3.815	A
B	78	19	630	984	0.079	77	58	0.0	0.1	3.969	A
C	193	48	492	1053	0.183	192	216	0.0	0.2	4.177	A
D	594	149	50	1309	0.454	591	634	0.0	0.8	4.989	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	599	150	227	1418	0.422	598	542	0.5	0.7	4.387	A
B	93	23	755	913	0.101	92	70	0.1	0.1	4.388	A
C	230	58	589	998	0.231	230	258	0.2	0.3	4.685	A
D	710	177	60	1304	0.544	708	759	0.8	1.2	6.032	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	734	183	278	1387	0.529	732	662	0.7	1.1	5.481	A
B	113	28	924	817	0.139	113	86	0.1	0.2	5.116	A
C	282	70	721	923	0.305	281	316	0.3	0.4	5.605	A
D	869	217	74	1296	0.671	866	929	1.2	2.0	8.311	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	734	183	279	1387	0.529	734	665	1.1	1.1	5.512	A
B	113	28	926	815	0.139	113	86	0.2	0.2	5.127	A
C	282	70	723	922	0.306	282	317	0.4	0.4	5.621	A
D	869	217	74	1296	0.671	869	931	2.0	2.0	8.431	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	599	150	228	1417	0.423	600	545	1.1	0.7	4.416	A
B	93	23	759	911	0.102	93	70	0.2	0.1	4.402	A
C	230	58	591	996	0.231	231	260	0.4	0.3	4.705	A
D	710	177	60	1304	0.545	713	762	2.0	1.2	6.129	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	502	125	191	1440	0.348	502	456	0.7	0.5	3.841	A
B	78	19	635	982	0.079	78	59	0.1	0.1	3.984	A
C	193	48	495	1051	0.183	193	217	0.3	0.2	4.198	A
D	594	149	51	1309	0.454	596	637	1.2	0.8	5.057	A

2033 Base + Committed Development + Development - Sensitivity Test, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		A, B, C, D	6.33	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	41	Arm C

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2033 Base + Committed Development + Development - Sensitivity Test	AM	ONE HOUR	07:30	09:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	575	100.000
B		ONE HOUR	✓	123	100.000
C		ONE HOUR	✓	429	100.000
D		ONE HOUR	✓	699	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
	A	B	C	D	
From	A	0	13	49	513
	B	19	0	0	104
	C	98	0	0	331
	D	584	29	86	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		A	B	C	D
	A	0	6	6	0
	B	2	0	0	2
	C	2	0	0	2
	D	1	6	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A	0.43	4.28	0.7	A	527	791
B	0.15	4.54	0.2	A	113	169
C	0.51	7.90	1.0	A	394	591
D	0.61	7.35	1.6	A	641	962

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	433	108	86	1499	0.289	431	525	0.0	0.4	3.367	A
B	93	23	486	1057	0.088	92	31	0.0	0.1	3.729	A
C	323	81	477	1054	0.307	321	101	0.0	0.4	4.903	A
D	526	132	88	1283	0.410	524	710	0.0	0.7	4.723	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	517	129	103	1488	0.347	516	629	0.4	0.5	3.702	A
B	111	28	582	1002	0.110	110	38	0.1	0.1	4.036	A
C	386	96	571	1001	0.386	385	121	0.4	0.6	5.840	A
D	628	157	105	1273	0.494	627	851	0.7	1.0	5.567	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	633	158	126	1473	0.429	632	770	0.5	0.7	4.274	A
B	135	34	712	928	0.146	135	46	0.1	0.2	4.538	A
C	473	118	699	929	0.509	471	148	0.6	1.0	7.840	A
D	770	192	129	1260	0.611	767	1041	1.0	1.5	7.278	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	633	158	127	1473	0.430	633	772	0.7	0.7	4.283	A
B	135	34	713	928	0.146	135	46	0.2	0.2	4.543	A
C	473	118	700	928	0.509	473	149	1.0	1.0	7.902	A
D	770	192	129	1259	0.611	770	1043	1.5	1.6	7.348	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	517	129	104	1488	0.347	517	633	0.7	0.5	3.713	A
B	111	28	583	1001	0.110	111	38	0.2	0.1	4.044	A
C	386	96	572	1000	0.386	387	122	1.0	0.6	5.894	A
D	628	157	106	1273	0.494	631	854	1.6	1.0	5.627	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	433	108	87	1498	0.289	433	529	0.5	0.4	3.380	A
B	93	23	488	1055	0.088	93	32	0.1	0.1	3.739	A
C	323	81	479	1052	0.307	324	102	0.6	0.4	4.945	A
D	526	132	88	1283	0.410	527	715	1.0	0.7	4.774	A

2033 Base + Committed Development + Development - Sensitivity Test, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		A, B, C, D	8.34	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	25	Arm D

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2033 Base + Committed Development + Development - Sensitivity Test	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	737	100.000
B		ONE HOUR	✓	103	100.000
C		ONE HOUR	✓	332	100.000
D		ONE HOUR	✓	865	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
	A	B	C	D	
From	A	0	39	97	601
	B	15	0	0	88
	C	66	0	0	266
	D	561	39	265	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A	0.60	6.64	1.5	A	676	1015
B	0.15	5.75	0.2	A	95	142
C	0.41	6.82	0.7	A	305	457
D	0.74	10.68	2.8	B	794	1190

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	555	139	227	1419	0.391	552	480	0.0	0.6	4.144	A
B	78	19	722	932	0.083	77	58	0.0	0.1	4.207	A
C	250	62	528	1034	0.242	249	271	0.0	0.3	4.578	A
D	651	163	61	1305	0.499	647	716	0.0	1.0	5.442	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	663	166	273	1391	0.476	662	576	0.6	0.9	4.928	A
B	93	23	864	851	0.109	92	70	0.1	0.1	4.745	A
C	298	75	632	975	0.306	298	324	0.3	0.4	5.317	A
D	777	194	73	1298	0.599	775	858	1.0	1.5	6.865	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	812	203	333	1354	0.599	809	703	0.9	1.5	6.580	A
B	113	28	1057	742	0.153	113	86	0.1	0.2	5.728	A
C	366	91	774	895	0.409	365	396	0.4	0.7	6.781	A
D	952	238	89	1289	0.739	947	1049	1.5	2.7	10.390	B

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	812	203	335	1353	0.600	812	706	1.5	1.5	6.644	A
B	113	28	1060	740	0.153	113	86	0.2	0.2	5.749	A
C	366	91	776	893	0.409	366	398	0.7	0.7	6.819	A
D	952	238	89	1288	0.739	952	1052	2.7	2.8	10.676	B

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	663	166	275	1390	0.477	665	580	1.5	0.9	4.984	A
B	93	23	870	848	0.109	93	70	0.2	0.1	4.769	A
C	298	75	635	973	0.307	299	327	0.7	0.4	5.355	A
D	777	194	73	1298	0.599	782	862	2.8	1.5	7.052	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	555	139	230	1418	0.392	556	485	0.9	0.6	4.184	A
B	78	19	727	929	0.083	78	59	0.1	0.1	4.228	A
C	250	62	531	1032	0.242	250	273	0.4	0.3	4.611	A
D	651	163	61	1304	0.499	653	721	1.5	1.0	5.543	A

Junctions 9	
PICADY 9 - Priority Intersection Module	
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Report generation date: 01/05/2020 16:40:45

-
- »(Default Analysis Set) - 2026 Base + Committed Development + Development , AM
 - »(Default Analysis Set) - 2026 Base + Committed Development + Development, PM
 - »(Default Analysis Set) - 2026 Base + Committed Development + Development with Travel Planning, AM
 - »(Default Analysis Set) - 2026 Base + Committed Development + Development with Travel Planning, PM
 - »(Default Analysis Set) - 2026 Base + Committed Development + Development – Sensitivity Test, AM
 - »(Default Analysis Set) - 2026 Base + Committed Development + Development – Sensitivity Test, PM
 - »(Default Analysis Set) - 2033 Base + Committed Development + Development, AM
 - »(Default Analysis Set) - 2033 Base + Committed Development + Development, PM
 - »(Default Analysis Set) - 2033 Base + Committed Development + Development with Travel Planning, AM
 - »(Default Analysis Set) - 2033 Base + Committed Development + Development with Travel Planning, PM
 - »(Default Analysis Set) - 2033 Base + Committed Development + Development – Sensitivity Test, AM
 - »(Default Analysis Set) - 2033 Base + Committed Development + Development – Sensitivity Test, PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS
	A1 - 2026 Base + Committed Development + Development									
Stream B-C	D1	0.1	5.65	0.07	A	D2	0.1	5.52	0.05	A
Stream B-A		0.4	9.91	0.31	A		0.3	8.68	0.21	A
Stream C-B		0.1	6.12	0.05	A		0.1	6.31	0.08	A
	A1 - 2026 Base + Committed Development + Development with Travel Planning									
Stream B-C	D3	0.1	5.51	0.06	A	D4	0.0	5.41	0.04	A
Stream B-A		0.3	9.20	0.26	A		0.2	8.09	0.17	A
Stream C-B		0.0	6.07	0.04	A		0.0	5.97	0.03	A
	A1 - 2026 Base + Committed Development + Development – Sensitivity Test									
Stream B-C	D5	0.1	5.73	0.07	A	D6	0.1	5.55	0.05	A
Stream B-A		0.5	10.21	0.32	B		0.3	8.82	0.21	A
Stream C-B		0.1	6.19	0.05	A		0.1	6.33	0.08	A
	A1 - 2033 Base + Committed Development + Development									
Stream B-C	D7	0.1	5.73	0.07	A	D8	0.1	5.69	0.05	A
Stream B-A		0.5	10.32	0.32	B		0.3	9.22	0.22	A
Stream C-B		0.1	6.19	0.05	A		0.1	6.72	0.09	A
	A1 - 2033 Base + Committed Development + Development with Travel Planning									
Stream B-C	D9	0.1	5.59	0.06	A	D10	0.0	5.49	0.04	A
Stream B-A		0.4	9.55	0.27	A		0.2	8.37	0.17	A
Stream C-B		0.0	6.14	0.04	A		0.0	6.05	0.03	A
	A1 - 2033 Base + Committed Development + Development – Sensitivity Test									
Stream B-C	D11	0.1	5.81	0.07	A	D12	0.1	5.63	0.05	A
Stream B-A		0.5	10.63	0.32	B		0.3	9.14	0.22	A
Stream C-B		0.1	6.26	0.05	A		0.1	6.43	0.08	A

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

File summary

File Description

Title	(untitled)
Location	
Site number	
Date	08/03/2016
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	rsanthak
Description	

Units

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

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2026 Base + Committed Development + Development	AM	ONE HOUR	07:30	09:00	15
D2	2026 Base + Committed Development + Development	PM	ONE HOUR	16:45	18:15	15
D3	2026 Base + Committed Development + Development with Travel Planning	AM	ONE HOUR	07:30	09:00	15
D4	2026 Base + Committed Development + Development with Travel Planning	PM	ONE HOUR	16:45	18:15	15
D5	2026 Base + Committed Development + Development – Sensitivity Test	AM	ONE HOUR	07:30	09:00	15
D6	2026 Base + Committed Development + Development – Sensitivity Test	PM	ONE HOUR	16:45	18:15	15
D7	2033 Base + Committed Development + Development	AM	ONE HOUR	07:30	09:00	15
D8	2033 Base + Committed Development + Development	PM	ONE HOUR	16:45	18:15	15
D9	2033 Base + Committed Development + Development with Travel Planning	AM	ONE HOUR	07:30	09:00	15
D10	2033 Base + Committed Development + Development with Travel Planning	PM	ONE HOUR	16:45	18:15	15
D11	2033 Base + Committed Development + Development – Sensitivity Test	AM	ONE HOUR	07:30	09:00	15
D12	2033 Base + Committed Development + Development – Sensitivity Test	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Name	Network flow scaling factor (%)
A1	(Default Analysis Set)	100.000

(Default Analysis Set) - 2026 Base + Committed Development + Development , AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way		1.89	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Whaddon Road (North)		Major
B	Development Access		Minor
C	Whaddon Road (South)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Width for right turn (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	7.30		✓	3.50	180.0		-

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

Minor Arm Geometry

Arm	Minor arm type	Lane Width (Left) (m)	Lane Width (Right) (m)	Visibility to left (m)	Visibility to right (m)
B	Two lanes	5.00	5.00	240	180

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	785	0.135	0.341	0.214	0.487
B-C	885	0.128	0.323	-	-
C-B	774	0.283	0.283	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2026 Base + Committed Development + Development	AM	ONE HOUR	07:30	09:00	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	367	100.000
B		✓	190	100.000
C		✓	431	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A	B	C
From	A	0	42	325
	B	148	0	42
	C	403	28	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
From	A	0	6	3
	B	2	0	2
	C	2	6	0

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
07:30-07:45	A	276	286
	B	143	146
	C	324	333
07:45-08:00	A	330	342
	B	171	175
	C	387	398
08:00-08:15	A	404	419
	B	209	214
	C	475	487
08:15-08:30	A	404	419
	B	209	214
	C	475	487
08:30-08:45	A	330	342
	B	171	175
	C	387	398
08:45-09:00	A	276	286
	B	143	146
	C	324	333

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-C	0.07	5.65	0.1	A
B-A	0.31	9.91	0.4	A
C-A				
C-B	0.05	6.12	0.1	A
A-B				
A-C				

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	32	744	0.043	31	0.0	5.051	A
B-A	111	602	0.185	111	0.2	7.308	A
C-A	303			303			
C-B	21	654	0.032	21	0.0	5.680	A
A-B	32			32			
A-C	245			245			

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	38	719	0.053	38	0.1	5.284	A
B-A	133	570	0.233	133	0.3	8.222	A
C-A	362			362			
C-B	25	640	0.039	25	0.0	5.858	A
A-B	38			38			
A-C	292			292			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	46	683	0.068	46	0.1	5.650	A
B-A	163	526	0.310	162	0.4	9.881	A
C-A	444			444			
C-B	31	619	0.050	31	0.1	6.119	A
A-B	46			46			
A-C	358			358			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	46	683	0.068	46	0.1	5.651	A
B-A	163	526	0.310	163	0.4	9.912	A
C-A	444			444			
C-B	31	619	0.050	31	0.1	6.119	A
A-B	46			46			
A-C	358			358			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	38	719	0.053	38	0.1	5.288	A
B-A	133	570	0.233	134	0.3	8.255	A
C-A	362			362			
C-B	25	640	0.039	25	0.0	5.861	A
A-B	38			38			
A-C	292			292			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	32	744	0.043	32	0.0	5.056	A
B-A	111	602	0.185	112	0.2	7.344	A
C-A	303			303			
C-B	21	654	0.032	21	0.0	5.683	A
A-B	32			32			
A-C	245			245			

(Default Analysis Set) - 2026 Base + Committed Development + Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way		1.44	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2026 Base + Committed Development + Development	PM	ONE HOUR	16:45	18:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	448	100.000
B		✓	130	100.000
C		✓	341	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A	B	C
	A	0	59	389
	B	99	0	31
	C	295	46	0

Vehicle Mix

Heavy Vehicle Percentages

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

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
16:45-17:00	A	337	342
	B	98	99
	C	257	260
17:00-17:15	A	403	409
	B	117	119
	C	307	311
17:15-17:30	A	493	500
	B	143	145
	C	375	381
17:30-17:45	A	493	500
	B	143	145
	C	375	381
17:45-18:00	A	403	409
	B	117	119
	C	307	311
18:00-18:15	A	337	342
	B	98	99
	C	257	260

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-C	0.05	5.52	0.1	A
B-A	0.21	8.68	0.3	A
C-A				
C-B	0.08	6.31	0.1	A
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	23	747	0.031	23	0.0	4.975	A
B-A	75	602	0.124	74	0.1	6.804	A
C-A	222			222			
C-B	35	665	0.052	34	0.1	5.704	A
A-B	44			44			
A-C	293			293			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	28	722	0.039	28	0.0	5.188	A
B-A	89	569	0.156	89	0.2	7.490	A
C-A	265			265			
C-B	41	647	0.064	41	0.1	5.944	A
A-B	53			53			
A-C	350			350			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	34	686	0.050	34	0.1	5.518	A
B-A	109	524	0.208	109	0.3	8.668	A
C-A	325			325			
C-B	51	621	0.082	51	0.1	6.307	A
A-B	65			65			
A-C	428			428			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	34	686	0.050	34	0.1	5.519	A
B-A	109	524	0.208	109	0.3	8.681	A
C-A	325			325			
C-B	51	621	0.082	51	0.1	6.307	A
A-B	65			65			
A-C	428			428			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	28	722	0.039	28	0.0	5.191	A
B-A	89	569	0.156	89	0.2	7.506	A
C-A	265			265			
C-B	41	647	0.064	41	0.1	5.946	A
A-B	53			53			
A-C	350			350			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	23	747	0.031	23	0.0	4.977	A
B-A	75	602	0.124	75	0.1	6.824	A
C-A	222			222			
C-B	35	665	0.052	35	0.1	5.708	A
A-B	44			44			
A-C	293			293			

(Default Analysis Set) - 2026 Base + Committed Development + Development with Travel Planning, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way		1.56	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2026 Base + Committed Development + Development with Travel Planning	AM	ONE HOUR	07:30	09:00	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	361	100.000
B		✓	159	100.000
C		✓	427	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		A	B	C
	A	0	36	325
	B	124	0	35
	C	403	24	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
	A	0	6	3
	B	3	0	3
	C	2	6	0

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
07:30-07:45	A	272	282
	B	120	123
	C	321	330
07:45-08:00	A	325	336
	B	143	147
	C	384	394
08:00-08:15	A	397	412
	B	175	180
	C	470	482
08:15-08:30	A	397	412
	B	175	180
	C	470	482
08:30-08:45	A	325	336
	B	143	147
	C	384	394
08:45-09:00	A	272	282
	B	120	123
	C	321	330

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-C	0.06	5.51	0.1	A
B-A	0.26	9.20	0.3	A
C-A				
C-B	0.04	6.07	0.0	A
A-B				
A-C				

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	26	748	0.035	26	0.0	4.984	A
B-A	93	603	0.155	93	0.2	7.049	A
C-A	303			303			
C-B	18	655	0.028	18	0.0	5.655	A
A-B	27			27			
A-C	245			245			

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	31	725	0.043	31	0.0	5.192	A
B-A	111	571	0.195	111	0.2	7.824	A
C-A	362			362			
C-B	22	640	0.034	22	0.0	5.821	A
A-B	32			32			
A-C	292			292			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	39	692	0.056	38	0.1	5.511	A
B-A	137	528	0.259	136	0.3	9.182	A
C-A	444			444			
C-B	26	620	0.043	26	0.0	6.066	A
A-B	40			40			
A-C	358			358			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	39	692	0.056	39	0.1	5.512	A
B-A	137	528	0.259	137	0.3	9.203	A
C-A	444			444			
C-B	26	620	0.043	26	0.0	6.066	A
A-B	40			40			
A-C	358			358			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	31	725	0.043	32	0.0	5.194	A
B-A	111	571	0.195	112	0.2	7.847	A
C-A	362			362			
C-B	22	640	0.034	22	0.0	5.824	A
A-B	32			32			
A-C	292			292			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	26	748	0.035	26	0.0	4.991	A
B-A	93	602	0.155	94	0.2	7.079	A
C-A	303			303			
C-B	18	655	0.028	18	0.0	5.658	A
A-B	27			27			
A-C	245			245			

(Default Analysis Set) - 2026 Base + Committed Development + Development with Travel Planning, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way		1.03	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2026 Base + Committed Development + Development with Travel Planning	PM	ONE HOUR	16:45	18:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	438	100.000
B		✓	108	100.000
C		✓	333	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
	A	B	C	
From	A	0	49	389
	B	82	0	26
	C	316	17	0

Vehicle Mix

Heavy Vehicle Percentages

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

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
16:45-17:00	A	330	335
	B	81	83
	C	251	254
17:00-17:15	A	394	400
	B	97	99
	C	299	304
17:15-17:30	A	482	489
	B	119	121
	C	367	372
17:30-17:45	A	482	489
	B	119	121
	C	367	372
17:45-18:00	A	394	400
	B	97	99
	C	299	304
18:00-18:15	A	330	335
	B	81	83
	C	251	254

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-C	0.04	5.41	0.0	A
B-A	0.17	8.09	0.2	A
C-A				
C-B	0.03	5.97	0.0	A
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	20	751	0.026	19	0.0	4.918	A
B-A	62	610	0.101	61	0.1	6.553	A
C-A	238			238			
C-B	13	665	0.019	13	0.0	5.520	A
A-B	37			37			
A-C	293			293			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	23	728	0.032	23	0.0	5.111	A
B-A	74	579	0.127	74	0.1	7.125	A
C-A	284			284			
C-B	15	647	0.024	15	0.0	5.699	A
A-B	44			44			
A-C	350			350			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	29	694	0.041	29	0.0	5.407	A
B-A	90	535	0.169	90	0.2	8.081	A
C-A	348			348			
C-B	19	622	0.030	19	0.0	5.966	A
A-B	54			54			
A-C	428			428			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	29	694	0.041	29	0.0	5.408	A
B-A	90	535	0.169	90	0.2	8.089	A
C-A	348			348			
C-B	19	622	0.030	19	0.0	5.966	A
A-B	54			54			
A-C	428			428			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	23	727	0.032	23	0.0	5.115	A
B-A	74	579	0.127	74	0.1	7.134	A
C-A	284			284			
C-B	15	647	0.024	15	0.0	5.702	A
A-B	44			44			
A-C	350			350			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	20	751	0.026	20	0.0	4.920	A
B-A	62	610	0.101	62	0.1	6.570	A
C-A	238			238			
C-B	13	665	0.019	13	0.0	5.523	A
A-B	37			37			
A-C	293			293			

(Default Analysis Set) - 2026 Base + Committed Development + Development – Sensitivity Test, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way		1.88	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	2026 Base + Committed Development + Development – Sensitivity Test	AM	ONE HOUR	07:30	09:00	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	388	100.000
B		✓	190	100.000
C		✓	442	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A	B	C
From	A	0	42	346
	B	148	0	42
	C	414	28	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
From	A	0	6	4
	B	2	0	2
	C	2	6	0

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
07:30-07:45	A	292	303
	B	143	146
	C	333	341
07:45-08:00	A	349	362
	B	171	175
	C	397	408
08:00-08:15	A	427	443
	B	209	214
	C	487	499
08:15-08:30	A	427	443
	B	209	214
	C	487	499
08:30-08:45	A	349	362
	B	171	175
	C	397	408
08:45-09:00	A	292	303
	B	143	146
	C	333	341

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-C	0.07	5.73	0.1	A
B-A	0.32	10.21	0.5	B
C-A				
C-B	0.05	6.19	0.1	A
A-B				
A-C				

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	32	739	0.043	31	0.0	5.090	A
B-A	111	595	0.187	111	0.2	7.418	A
C-A	312			312			
C-B	21	650	0.032	21	0.0	5.720	A
A-B	32			32			
A-C	260			260			

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	38	712	0.053	38	0.1	5.336	A
B-A	133	562	0.237	133	0.3	8.390	A
C-A	372			372			
C-B	25	634	0.040	25	0.0	5.909	A
A-B	38			38			
A-C	311			311			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	46	675	0.069	46	0.1	5.724	A
B-A	163	515	0.316	162	0.5	10.178	B
C-A	456			456			
C-B	31	613	0.050	31	0.1	6.187	A
A-B	46			46			
A-C	381			381			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	46	675	0.069	46	0.1	5.726	A
B-A	163	515	0.316	163	0.5	10.213	B
C-A	456			456			
C-B	31	613	0.050	31	0.1	6.187	A
A-B	46			46			
A-C	381			381			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	38	712	0.053	38	0.1	5.342	A
B-A	133	561	0.237	134	0.3	8.425	A
C-A	372			372			
C-B	25	634	0.040	25	0.0	5.912	A
A-B	38			38			
A-C	311			311			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	32	738	0.043	32	0.0	5.097	A
B-A	111	595	0.187	112	0.2	7.459	A
C-A	312			312			
C-B	21	650	0.032	21	0.0	5.723	A
A-B	32			32			
A-C	260			260			

(Default Analysis Set) - 2026 Base + Committed Development + Development – Sensitivity Test, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way		1.42	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	2026 Base + Committed Development + Development – Sensitivity Test	PM	ONE HOUR	16:45	18:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	456	100.000
B		✓	130	100.000
C		✓	355	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A	B	C
	A	0	59	397
	B	99	0	31
	C	309	46	0

Vehicle Mix

Heavy Vehicle Percentages

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

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
16:45-17:00	A	343	348
	B	98	99
	C	267	271
17:00-17:15	A	410	416
	B	117	119
	C	319	324
17:15-17:30	A	502	509
	B	143	145
	C	391	397
17:30-17:45	A	502	509
	B	143	145
	C	391	397
17:45-18:00	A	410	416
	B	117	119
	C	319	324
18:00-18:15	A	343	348
	B	98	99
	C	267	271

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-C	0.05	5.55	0.1	A
B-A	0.21	8.82	0.3	A
C-A				
C-B	0.08	6.33	0.1	A
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	23	745	0.031	23	0.0	4.989	A
B-A	75	598	0.125	74	0.1	6.860	A
C-A	233			233			
C-B	35	664	0.052	34	0.1	5.720	A
A-B	44			44			
A-C	299			299			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	28	719	0.039	28	0.0	5.206	A
B-A	89	564	0.158	89	0.2	7.571	A
C-A	278			278			
C-B	41	645	0.064	41	0.1	5.964	A
A-B	53			53			
A-C	357			357			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	34	683	0.050	34	0.1	5.545	A
B-A	109	517	0.211	109	0.3	8.808	A
C-A	340			340			
C-B	51	619	0.082	51	0.1	6.334	A
A-B	65			65			
A-C	437			437			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	34	683	0.050	34	0.1	5.546	A
B-A	109	517	0.211	109	0.3	8.815	A
C-A	340			340			
C-B	51	619	0.082	51	0.1	6.334	A
A-B	65			65			
A-C	437			437			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	28	719	0.039	28	0.0	5.210	A
B-A	89	564	0.158	89	0.2	7.588	A
C-A	278			278			
C-B	41	645	0.064	41	0.1	5.966	A
A-B	53			53			
A-C	357			357			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	23	745	0.031	23	0.0	4.993	A
B-A	75	598	0.125	75	0.1	6.880	A
C-A	233			233			
C-B	35	664	0.052	35	0.1	5.725	A
A-B	44			44			
A-C	299			299			

(Default Analysis Set) - 2033 Base + Committed Development + Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way		1.87	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D7	2033 Base + Committed Development + Development	AM	ONE HOUR	07:30	09:00	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	389	100.000
B		✓	190	100.000
C		✓	456	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A	B	C
From	A	0	42	347
	B	148	0	42
	C	428	28	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
From	A	0	6	3
	B	2	0	2
	C	2	6	0

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
07:30-07:45	A	293	304
	B	143	146
	C	343	352
07:45-08:00	A	350	363
	B	171	175
	C	410	421
08:00-08:15	A	428	444
	B	209	214
	C	502	515
08:15-08:30	A	428	444
	B	209	214
	C	502	515
08:30-08:45	A	350	363
	B	171	175
	C	410	421
08:45-09:00	A	293	304
	B	143	146
	C	343	352

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-C	0.07	5.73	0.1	A
B-A	0.32	10.32	0.5	B
C-A				
C-B	0.05	6.19	0.1	A
A-B				
A-C				

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	32	738	0.043	31	0.0	5.092	A
B-A	111	592	0.188	111	0.2	7.456	A
C-A	322			322			
C-B	21	650	0.032	21	0.0	5.722	A
A-B	32			32			
A-C	261			261			

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	38	712	0.053	38	0.1	5.339	A
B-A	133	559	0.238	133	0.3	8.447	A
C-A	385			385			
C-B	25	634	0.040	25	0.0	5.910	A
A-B	38			38			
A-C	312			312			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	46	674	0.069	46	0.1	5.730	A
B-A	163	512	0.318	162	0.5	10.282	B
C-A	471			471			
C-B	31	612	0.050	31	0.1	6.189	A
A-B	46			46			
A-C	382			382			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	46	674	0.069	46	0.1	5.732	A
B-A	163	512	0.318	163	0.5	10.317	B
C-A	471			471			
C-B	31	612	0.050	31	0.1	6.189	A
A-B	46			46			
A-C	382			382			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	38	712	0.053	38	0.1	5.343	A
B-A	133	559	0.238	134	0.3	8.484	A
C-A	385			385			
C-B	25	634	0.040	25	0.0	5.911	A
A-B	38			38			
A-C	312			312			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	32	738	0.043	32	0.0	5.100	A
B-A	111	592	0.188	112	0.2	7.494	A
C-A	322			322			
C-B	21	650	0.032	21	0.0	5.724	A
A-B	32			32			
A-C	261			261			

(Default Analysis Set) - 2033 Base + Committed Development + Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way		1.45	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D8	2033 Base + Committed Development + Development	PM	ONE HOUR	16:45	18:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	475	100.000
B		✓	130	100.000
C		✓	362	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A	B	C
	A	0	59	416
	B	99	0	31
	C	316	46	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
	A	0	6	3
	B	2	0	2
	C	2	6	0

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
16:45-17:00	A	358	371
	B	98	100
	C	273	280
17:00-17:15	A	427	443
	B	117	120
	C	325	335
17:15-17:30	A	523	542
	B	143	147
	C	399	410
17:30-17:45	A	523	542
	B	143	147
	C	399	410
17:45-18:00	A	427	443
	B	117	120
	C	325	335
18:00-18:15	A	358	371
	B	98	100
	C	273	280

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-C	0.05	5.69	0.1	A
B-A	0.22	9.22	0.3	A
C-A				
C-B	0.09	6.72	0.1	A
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	23	732	0.032	23	0.0	5.080	A
B-A	75	584	0.128	74	0.1	7.050	A
C-A	238			238			
C-B	35	632	0.055	34	0.1	6.025	A
A-B	44			44			
A-C	313			313			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	28	705	0.040	28	0.0	5.316	A
B-A	89	549	0.162	89	0.2	7.827	A
C-A	284			284			
C-B	41	613	0.067	41	0.1	6.300	A
A-B	53			53			
A-C	374			374			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	34	667	0.051	34	0.1	5.686	A
B-A	109	500	0.218	109	0.3	9.203	A
C-A	348			348			
C-B	51	586	0.086	51	0.1	6.722	A
A-B	65			65			
A-C	458			458			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	34	667	0.051	34	0.1	5.687	A
B-A	109	499	0.218	109	0.3	9.219	A
C-A	348			348			
C-B	51	586	0.086	51	0.1	6.722	A
A-B	65			65			
A-C	458			458			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	28	705	0.040	28	0.0	5.318	A
B-A	89	548	0.162	89	0.2	7.846	A
C-A	284			284			
C-B	41	613	0.067	41	0.1	6.304	A
A-B	53			53			
A-C	374			374			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	23	732	0.032	23	0.0	5.082	A
B-A	75	584	0.128	75	0.1	7.071	A
C-A	238			238			
C-B	35	632	0.055	35	0.1	6.027	A
A-B	44			44			
A-C	313			313			

(Default Analysis Set) - 2033 Base + Committed Development + Development with Travel Planning, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way		1.54	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D9	2033 Base + Committed Development + Development with Travel Planning	AM	ONE HOUR	07:30	09:00	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	383	100.000
B		✓	159	100.000
C		✓	452	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
	A	B	C	
From	A	0	36	347
	B	124	0	35
	C	428	24	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
	A	0	6	3
	B	3	0	3
	C	2	6	0

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
07:30-07:45	A	288	299
	B	120	123
	C	340	349
07:45-08:00	A	344	357
	B	143	147
	C	406	417
08:00-08:15	A	422	437
	B	175	180
	C	498	511
08:15-08:30	A	422	437
	B	175	180
	C	498	511
08:30-08:45	A	344	357
	B	143	147
	C	406	417
08:45-09:00	A	288	299
	B	120	123
	C	340	349

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-C	0.06	5.59	0.1	A
B-A	0.27	9.55	0.4	A
C-A				
C-B	0.04	6.14	0.0	A
A-B				
A-C				

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	26	743	0.035	26	0.0	5.024	A
B-A	93	593	0.157	93	0.2	7.186	A
C-A	322			322			
C-B	18	650	0.028	18	0.0	5.696	A
A-B	27			27			
A-C	261			261			

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	31	718	0.044	31	0.0	5.244	A
B-A	111	560	0.199	111	0.2	8.026	A
C-A	385			385			
C-B	22	634	0.034	22	0.0	5.873	A
A-B	32			32			
A-C	312			312			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	39	683	0.056	38	0.1	5.585	A
B-A	137	513	0.266	136	0.4	9.527	A
C-A	471			471			
C-B	26	613	0.043	26	0.0	6.135	A
A-B	40			40			
A-C	382			382			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	39	683	0.056	39	0.1	5.587	A
B-A	137	513	0.266	137	0.4	9.549	A
C-A	471			471			
C-B	26	613	0.043	26	0.0	6.135	A
A-B	40			40			
A-C	382			382			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	31	718	0.044	32	0.0	5.246	A
B-A	111	559	0.199	112	0.3	8.050	A
C-A	385			385			
C-B	22	634	0.034	22	0.0	5.876	A
A-B	32			32			
A-C	312			312			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	26	742	0.036	26	0.0	5.031	A
B-A	93	593	0.157	94	0.2	7.217	A
C-A	322			322			
C-B	18	650	0.028	18	0.0	5.697	A
A-B	27			27			
A-C	261			261			

(Default Analysis Set) - 2033 Base + Committed Development + Development with Travel Planning, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way		1.01	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)
D10	2033 Base + Committed Development + Development with Travel Planning	PM	ONE HOUR	16:45	18:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	465	100.000
B		✓	108	100.000
C		✓	354	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		A	B	C
	A	0	49	416
	B	82	0	26
	C	337	17	0

Vehicle Mix

Heavy Vehicle Percentages

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

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
16:45-17:00	A	350	355
	B	81	83
	C	267	270
17:00-17:15	A	418	424
	B	97	99
	C	318	323
17:15-17:30	A	512	520
	B	119	121
	C	390	395
17:30-17:45	A	512	520
	B	119	121
	C	390	395
17:45-18:00	A	418	424
	B	97	99
	C	318	323
18:00-18:15	A	350	355
	B	81	83
	C	267	270

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-C	0.04	5.49	0.0	A
B-A	0.17	8.37	0.2	A
C-A				
C-B	0.03	6.05	0.0	A
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	20	745	0.026	19	0.0	4.964	A
B-A	62	600	0.103	61	0.1	6.678	A
C-A	254			254			
C-B	13	659	0.019	13	0.0	5.569	A
A-B	37			37			
A-C	313			313			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	23	719	0.032	23	0.0	5.171	A
B-A	74	566	0.130	74	0.1	7.302	A
C-A	303			303			
C-B	15	640	0.024	15	0.0	5.761	A
A-B	44			44			
A-C	374			374			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	29	684	0.042	29	0.0	5.490	A
B-A	90	520	0.174	90	0.2	8.364	A
C-A	371			371			
C-B	19	614	0.031	19	0.0	6.050	A
A-B	54			54			
A-C	458			458			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	29	684	0.042	29	0.0	5.491	A
B-A	90	520	0.174	90	0.2	8.372	A
C-A	371			371			
C-B	19	614	0.031	19	0.0	6.050	A
A-B	54			54			
A-C	458			458			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	23	719	0.032	23	0.0	5.174	A
B-A	74	566	0.130	74	0.2	7.312	A
C-A	303			303			
C-B	15	640	0.024	15	0.0	5.762	A
A-B	44			44			
A-C	374			374			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	20	744	0.026	20	0.0	4.968	A
B-A	62	600	0.103	62	0.1	6.696	A
C-A	254			254			
C-B	13	659	0.019	13	0.0	5.569	A
A-B	37			37			
A-C	313			313			

(Default Analysis Set) - 2033 Base + Committed Development + Development – Sensitivity Test, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way		1.86	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D11	2033 Base + Committed Development + Development – Sensitivity Test	AM	ONE HOUR	07:30	09:00	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	409	100.000
B		✓	190	100.000
C		✓	467	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A	B	C
From	A	0	42	367
	B	148	0	42
	C	439	28	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
From	A	0	6	4
	B	2	0	2
	C	2	6	0

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
07:30-07:45	A	308	319
	B	143	146
	C	352	361
07:45-08:00	A	368	381
	B	171	175
	C	420	431
08:00-08:15	A	450	467
	B	209	214
	C	514	528
08:15-08:30	A	450	467
	B	209	214
	C	514	528
08:30-08:45	A	368	381
	B	171	175
	C	420	431
08:45-09:00	A	308	319
	B	143	146
	C	352	361

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-C	0.07	5.81	0.1	A
B-A	0.32	10.63	0.5	B
C-A				
C-B	0.05	6.26	0.1	A
A-B				
A-C				

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	32	733	0.043	31	0.0	5.130	A
B-A	111	585	0.190	110	0.2	7.567	A
C-A	331			331			
C-B	21	646	0.033	21	0.0	5.760	A
A-B	32			32			
A-C	276			276			

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	38	706	0.054	38	0.1	5.390	A
B-A	133	550	0.242	133	0.3	8.616	A
C-A	395			395			
C-B	25	629	0.040	25	0.0	5.960	A
A-B	38			38			
A-C	330			330			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	46	666	0.069	46	0.1	5.803	A
B-A	163	502	0.325	162	0.5	10.591	B
C-A	483			483			
C-B	31	606	0.051	31	0.1	6.256	A
A-B	46			46			
A-C	404			404			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	46	666	0.069	46	0.1	5.805	A
B-A	163	502	0.325	163	0.5	10.631	B
C-A	483			483			
C-B	31	606	0.051	31	0.1	6.256	A
A-B	46			46			
A-C	404			404			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	38	705	0.054	38	0.1	5.396	A
B-A	133	550	0.242	134	0.3	8.657	A
C-A	395			395			
C-B	25	629	0.040	25	0.0	5.961	A
A-B	38			38			
A-C	330			330			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	32	733	0.043	32	0.0	5.136	A
B-A	111	585	0.190	112	0.2	7.609	A
C-A	331			331			
C-B	21	646	0.033	21	0.0	5.766	A
A-B	32			32			
A-C	276			276			

(Default Analysis Set) - 2033 Base + Committed Development + Development – Sensitivity Test, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way		1.39	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D12	2033 Base + Committed Development + Development – Sensitivity Test	PM	ONE HOUR	16:45	18:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	482	100.000
B		✓	130	100.000
C		✓	376	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A	B	C
From	A	0	59	423
	B	99	0	31
	C	330	46	0

Vehicle Mix

Heavy Vehicle Percentages

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

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
16:45-17:00	A	363	368
	B	98	99
	C	283	287
17:00-17:15	A	433	440
	B	117	119
	C	338	343
17:15-17:30	A	531	538
	B	143	145
	C	414	420
17:30-17:45	A	531	538
	B	143	145
	C	414	420
17:45-18:00	A	433	440
	B	117	119
	C	338	343
18:00-18:15	A	363	368
	B	98	99
	C	283	287

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-C	0.05	5.63	0.1	A
B-A	0.22	9.14	0.3	A
C-A				
C-B	0.08	6.43	0.1	A
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	23	738	0.032	23	0.0	5.034	A
B-A	75	588	0.127	74	0.1	6.994	A
C-A	248			248			
C-B	35	658	0.053	34	0.1	5.770	A
A-B	44			44			
A-C	318			318			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	28	711	0.039	28	0.0	5.266	A
B-A	89	552	0.161	89	0.2	7.765	A
C-A	297			297			
C-B	41	638	0.065	41	0.1	6.030	A
A-B	53			53			
A-C	380			380			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	34	673	0.051	34	0.1	5.630	A
B-A	109	503	0.217	109	0.3	9.129	A
C-A	363			363			
C-B	51	611	0.083	51	0.1	6.425	A
A-B	65			65			
A-C	466			466			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	34	673	0.051	34	0.1	5.632	A
B-A	109	503	0.217	109	0.3	9.144	A
C-A	363			363			
C-B	51	611	0.083	51	0.1	6.425	A
A-B	65			65			
A-C	466			466			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	28	711	0.039	28	0.0	5.269	A
B-A	89	552	0.161	89	0.2	7.784	A
C-A	297			297			
C-B	41	638	0.065	41	0.1	6.034	A
A-B	53			53			
A-C	380			380			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	23	738	0.032	23	0.0	5.039	A
B-A	75	588	0.127	75	0.1	7.018	A
C-A	248			248			
C-B	35	658	0.053	35	0.1	5.776	A
A-B	44			44			
A-C	318			318			

Junctions 9			
ARCADY 9 - Roundabout Module			
Version: 9.5.0.6896 © Copyright TRL Limited, 2018			
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The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution			

Filename: J1- Sherwood Drive Water Eaton B4034 Roundabout.j9
Path: C:\Users\INAA02374\Desktop\SWMK Additional Tasks\2020.05.07\Base\J1
Report generation date: 07/05/2020 12:32:15

»2020 Base, AM
 »2020 Base, PM
 »2026 Base, AM
 »2026 Base, PM
 »2026 Base + CD + D, AM
 »2026 Base + CD + D, PM
 »2026 Base + CD + D with TP, AM
 »2026 Base + CD + D with TP, PM
 »2026 Base + CD + D - ST, AM
 »2026 Base + CD + D - ST, PM
 »2026 Base + CD + SP (ST), AM
 »2026 Base + CD + SP (ST), PM
 »2033 Base, AM
 »2033 Base, PM
 »2033 Base + CD + D, AM
 »2033 Base + CD + D, PM
 »2033 Base + CD + D with TP, AM
 »2033 Base + CD + D with TP, PM
 »2033 Base + CD + D - ST, AM
 »2033 Base + CD + D - ST, PM
 »2033 Base + CD + SP (ST), AM
 »2033 Base + CD + SP (ST), PM

Summary of junction performance

	AM				PM			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
[Lane Simulation] - 2020 Base								
A - Sherwood Drive	8.7	41.74		E	2.6	13.93		B
B - B4034	2.0	8.14		A	17.7	44.63		E
C - Water Eaton Road	1.3	11.08		B	3.6	30.13		D
D - B4034 Buckingham Road	18.6	55.28		F	2.1	9.16		A

	[Lane Simulation] - 2026 Base							
A - Sherwood Drive	12.9	67.41		F	4.8	20.25		C
B - B4034	2.7	9.43		A	54.9	119.82		F
C - Water Eaton Road	1.6	13.59		B	6.6	48.88		E
D - B4034 Buckingham Road	65.3	165.88		F	2.8	11.62		B
	[Lane Simulation] - 2026 Base + CD + D							
A - Sherwood Drive	16.9	71.01		F	5.3	24.20		C
B - B4034	3.1	10.47		B	122.5	314.27		F
C - Water Eaton Road	2.1	15.07		C	8.5	63.35		F
D - B4034 Buckingham Road	133.2	400.57		F	4.5	16.89		C
	[Lane Simulation] - 2026 Base + CD + D with TP							
A - Sherwood Drive	16.4	73.36		F	4.9	23.13		C
B - B4034	3.0	10.48		B	109.1	274.84		F
C - Water Eaton Road	1.9	14.55		B	8.9	64.52		F
D - B4034 Buckingham Road	117.9	352.54		F	4.3	15.47		C
	[Lane Simulation] - 2026 Base + CD + D - ST							
A - Sherwood Drive	16.6	71.35		F	5.2	25.54		D
B - B4034	3.2	11.24		B	149.7	397.35		F
C - Water Eaton Road	2.0	15.95		C	10.1	69.45		F
D - B4034 Buckingham Road	183.6	550.20		F	5.0	19.27		C
	[Lane Simulation] - 2026 Base + CD + SP (ST)							
A - Sherwood Drive	15.3	72.00		F	4.8	21.87		C
B - B4034	3.2	10.13		B	78.6	176.33		F
C - Water Eaton Road	1.7	14.07		B	7.3	54.49		F
D - B4034 Buckingham Road	101.1	295.55		F	3.3	13.42		B
	[Lane Simulation] - 2033 Base							
A - Sherwood Drive	27.9	120.20		F	7.9	36.44		E
B - B4034	3.0	10.47		B	98.3	239.44		F
C - Water Eaton Road	2.1	15.35		C	11.9	84.03		F
D - B4034 Buckingham Road	109.9	325.16		F	4.4	15.45		C
	[Lane Simulation] - 2033 Base + CD + D							
A - Sherwood Drive	24.4	105.45		F	9.5	38.56		E
B - B4034	3.6	11.64		B	177.7	456.49		F
C - Water Eaton Road	2.6	17.95		C	19.5	123.51		F
D - B4034 Buckingham Road	197.6	589.31		F	6.4	22.94		C
	[Lane Simulation] - 2033 Base + CD + D with TP							
A - Sherwood Drive	24.2	100.20		F	7.5	32.79		D
B - B4034	3.2	11.17		B	158.4	408.21		F
C - Water Eaton Road	2.3	16.79		C	18.7	120.93		F
D - B4034 Buckingham Road	176.4	525.12		F	5.9	22.02		C
	[Lane Simulation] - 2033 Base + CD + D - ST							
A - Sherwood Drive	24.8	101.71		F	10.0	39.56		E
B - B4034	4.5	14.02		B	223.3	570.63		F
C - Water Eaton Road	2.7	19.52		C	16.0	101.19		F
D - B4034 Buckingham Road	252.6	727.82		F	7.7	26.04		D
	[Lane Simulation] - 2033 Base + CD + SP (ST)							
A - Sherwood Drive	24.8	102.56		F	7.1	30.04		D
B - B4034	3.7	10.69		B	119.1	302.05		F
C - Water Eaton Road	2.1	16.00		C	14.4	93.44		F

D - B4034 Buckingham Road	149.7	456.21	F	5.0	18.06	C

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

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Arm and junction delays are averages for all movements, including movements with zero delay.

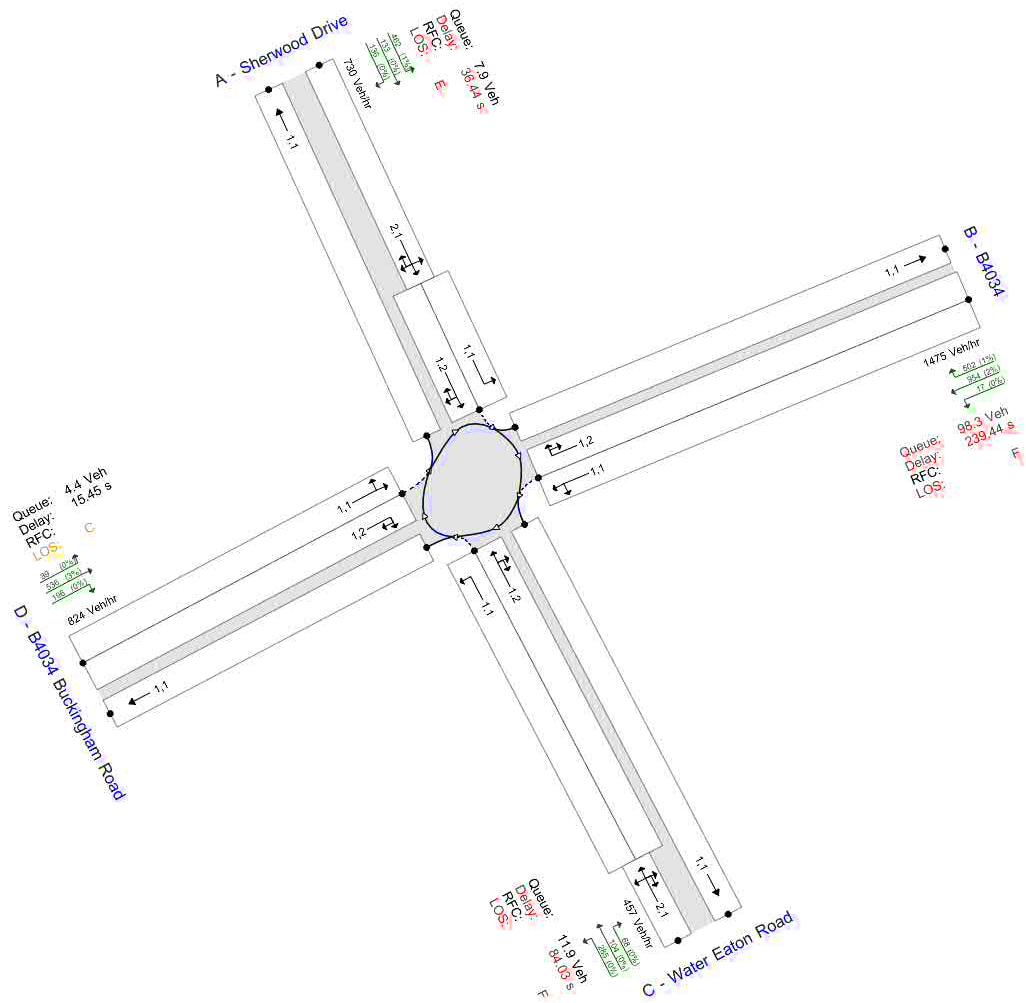
File summary

File Description

Title	Buckingham Road / Sherwood Drive / Water Eaton Road
Location	51°59'35.88"N, 0°44'17.67"W
Site number	1
Date	27/04/2016
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	rsanthak
Description	

Units

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



Flows show original traffic demand (Veh/hr).
Lane simulation visualisation time: 16:45:00

The junction diagram reflects the last run of Junctions.

Analysis Options

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

Lane Simulation options

Criteria type	Stop criteria (%)	Stop criteria time (s)	Stop criteria number of trials	Random seed	Results refresh speed (s)	Individual vehicle animation number of trials	Average animation capture interval (s)	Use quick response	Do flow sampling	Suppress automatic lane creation	Last run random seed	Last run number of trials	Last run time taken (s)
Delay	1.00	100000	100000	-1	3	1	60	✓			1463046479	145	18.95

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	2020 Base	AM	ONE HOUR	07:30	09:00	15	✓
D2	2020 Base	PM	ONE HOUR	16:45	18:15	15	✓
D3	2026 Base	AM	ONE HOUR	07:30	09:00	15	✓
D4	2026 Base	PM	ONE HOUR	16:45	18:15	15	✓
D5	2026 Base + CD + D	AM	ONE HOUR	07:30	09:00	15	✓
D6	2026 Base + CD + D	PM	ONE HOUR	16:45	18:15	15	✓
D7	2026 Base + CD + D with TP	AM	ONE HOUR	07:30	09:00	15	✓
D8	2026 Base + CD + D with TP	PM	ONE HOUR	16:45	18:15	15	✓
D9	2026 Base + CD + D - ST	AM	ONE HOUR	07:30	09:00	15	✓
D10	2026 Base + CD + D - ST	PM	ONE HOUR	16:45	18:15	15	✓
D11	2026 Base + CD + SP (ST)	AM	ONE HOUR	07:30	09:00	15	✓
D12	2026 Base + CD + SP (ST)	PM	ONE HOUR	16:45	18:15	15	✓
D13	2033 Base	AM	ONE HOUR	07:30	09:00	15	✓
D14	2033 Base	PM	ONE HOUR	16:45	18:15	15	✓
D15	2033 Base + CD + D	AM	ONE HOUR	07:30	09:00	15	✓
D16	2033 Base + CD + D	PM	ONE HOUR	16:45	18:15	15	✓
D17	2033 Base + CD + D with TP	AM	ONE HOUR	07:30	09:00	15	✓
D18	2033 Base + CD + D with TP	PM	ONE HOUR	16:45	18:15	15	✓
D19	2033 Base + CD + D - ST	AM	ONE HOUR	07:30	09:00	15	✓
D20	2033 Base + CD + D - ST	PM	ONE HOUR	16:45	18:15	15	✓
D21	2033 Base + CD + SP (ST)	AM	ONE HOUR	07:30	09:00	15	✓
D22	2033 Base + CD + SP (ST)	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

2020 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A1 - [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.
Warning	Geometry	D - B4034 Buckingham Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS

J1	Buckingham Road / Sherwood Drive / Water Eaton Road	Standard Roundabout		A, B, C, D	32.94	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	Sherwood Drive	
B	B4034	
C	Water Eaton Road	
D	B4034 Buckingham Road	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
A - Sherwood Drive	3.70	5.70	25.8	13.3	30.1	56.0	
B - B4034	6.00	6.60	1.0	22.9	30.1	29.0	
C - Water Eaton Road	5.70	6.40	1.5	12.9	30.1	37.0	
D - B4034 Buckingham Road	6.10	6.70	64.9	16.0	30.1	33.0	

Slope / Intercept / Capacity

Arm Intercept Adjustments

Arm	Type	Reason	Direct intercept adjustment (PCU/hr)
A - Sherwood Drive	Direct		350
B - B4034	Direct		300
C - Water Eaton Road	None		
D - B4034 Buckingham Road	Direct		360

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A - Sherwood Drive	0.565	1772
B - B4034	0.701	2197
C - Water Eaton Road	0.646	1720
D - B4034 Buckingham Road	0.708	2339

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

Lane Simulation: Arm options

Arm	Lane capacity source	Traffic considering secondary lanes (%)
A - Sherwood Drive	Evenly split	10.00
B - B4034	Evenly split	10.00
C - Water Eaton Road	Evenly split	10.00
D - B4034 Buckingham Road	Evenly split	10.00

Lanes

Arm	Side	Lane level	Lane	Destination arms	Has limited storage	Storage (PCU)	Has bottleneck	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)	Signalised
A - Sherwood Drive	Entry	1	1	B	✓	4.00		0	99999	
			2	A, C, D	✓	4.00		0	99999	
	Exit	2	1	(A, B, C, D)		Infinity				
B - B4034	Entry	1	1	C, D		Infinity		0	99999	
			2	A, B		Infinity		0	99999	
	Exit	1	1			Infinity				
C - Water Eaton Road	Entry	1	1	D	✓	10.00		0	99999	
			2	A, B, C	✓	10.00		0	99999	
		2	1	(A, B, C, D)		Infinity				
	Exit	1	1			Infinity				
D - B4034 Buckingham Road	Entry	1	1	A, B		Infinity		0	99999	
			2	C, D		Infinity		0	99999	
	Exit	1	1			Infinity				

Entry Lane slope and intercept

Arm	Side	Lane level	Lane	Final slope	Final intercept (PCU/hr)
A - Sherwood Drive	Entry	1	1	0.283	886
			2	0.283	886
B - B4034	Entry	1	1	0.351	1099
			2	0.351	1099
C - Water Eaton Road	Entry	1	1	0.323	860
			2	0.323	860
D - B4034 Buckingham Road	Entry	1	1	0.354	1170
			2	0.354	1170

Summary of Entry Lane allowed movements

Arm	Lane Level	Lane	Destination arm			
			Sherwood Drive	B4034	Water Eaton Road	B4034 Buckingham Road
A - Sherwood Drive	1	1		✓		
		2	✓		✓	✓
	2	1	✓	✓	✓	✓
B - B4034	1	1			✓	✓
		2	✓	✓		
C - Water Eaton Road	1	1				✓
		2	✓	✓	✓	
	2	1	✓	✓	✓	✓
D - B4034 Buckingham Road	1	1	✓	✓		
		2			✓	✓

Traffic Demand

Demand Set 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	2020 Base	AM	ONE HOUR	07:30	09:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Sherwood Drive		ONE HOUR	✓	608	100.000
B - B4034		ONE HOUR	✓	814	100.000
C - Water Eaton Road		ONE HOUR	✓	363	100.000
D - B4034 Buckingham Road		ONE HOUR	✓	1042	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
From		A - Sherwood Drive	B - B4034	C - Water Eaton Road	D - B4034 Buckingham Road
	A - Sherwood Drive	0	440	106	62
	B - B4034	342	0	50	422
	C - Water Eaton Road	101	28	0	234
	D - B4034 Buckingham Road	93	764	183	2

Proportions

	To				
From		A - Sherwood Drive	B - B4034	C - Water Eaton Road	D - B4034 Buckingham Road
	A - Sherwood Drive	0.00	0.72	0.17	0.10
	B - B4034	0.42	0.00	0.06	0.52
	C - Water Eaton Road	0.28	0.08	0.00	0.64
	D - B4034 Buckingham Road	0.09	0.73	0.18	0.00

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		A - Sherwood Drive	B - B4034	C - Water Eaton Road	D - B4034 Buckingham Road
	A - Sherwood Drive	0	1	1	0
	B - B4034	1	0	6	4
	C - Water Eaton Road	1	4	0	1
	D - B4034 Buckingham Road	0	2	1	0

Average PCU Per Veh

	To				
From		A - Sherwood Drive	B - B4034	C - Water Eaton Road	D - B4034 Buckingham Road
	A - Sherwood Drive	1.000	1.011	1.009	1.000
	B - B4034	1.012	1.000	1.060	1.038
	C - Water Eaton Road	1.010	1.036	1.000	1.009
	D - B4034 Buckingham Road	1.000	1.018	1.005	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - Sherwood Drive	07:30-07:45	458	462
	07:45-08:00	547	552
	08:00-08:15	669	676
	08:15-08:30	669	676
	08:30-08:45	547	552
	08:45-09:00	458	462
B - B4034	07:30-07:45	613	630
	07:45-08:00	732	753
	08:00-08:15	896	922
	08:15-08:30	896	922
	08:30-08:45	732	753
	08:45-09:00	613	630
C - Water Eaton Road	07:30-07:45	273	276
	07:45-08:00	326	330
	08:00-08:15	400	404
	08:15-08:30	400	404
	08:30-08:45	326	330
	08:45-09:00	273	276
D - B4034 Buckingham Road	07:30-07:45	784	796
	07:45-08:00	937	950
	08:00-08:15	1147	1163
	08:15-08:30	1147	1163
	08:30-08:45	937	950
	08:45-09:00	784	796

Results

Results Summary for whole modelled period

Arm	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - Sherwood Drive	41.74	8.7	E	559	839
B - B4034	8.14	2.0	A	748	1123
C - Water Eaton Road	11.08	1.3	B	333	500
D - B4034 Buckingham Road	55.28	18.6	F	950	1426

Main Results for each time segment

07:30 - 07:45

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

A - Sherwood Drive	458	114	726	459	463	404	0.0	1.1	9.329	A
B - B4034	618	155	267	616	622	918	0.0	1.1	5.525	A
C - Water Eaton Road	273	68	625	270	274	258	0.0	0.7	7.251	A
D - B4034 Buckingham Road	776	194	355	776	794	541	0.0	1.9	8.510	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	536	134	866	533	543	483	1.1	2.1	13.014	B
B - B4034	734	184	305	731	750	1094	1.1	1.5	6.438	A
C - Water Eaton Road	325	81	741	324	327	295	0.7	0.8	8.360	A
D - B4034 Buckingham Road	904	226	427	921	930	638	1.9	3.0	13.069	B

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	663	166	1058	661	662	586	2.1	6.5	29.137	D
B - B4034	883	221	383	886	918	1337	1.5	1.7	8.137	A
C - Water Eaton Road	401	100	901	399	402	368	0.8	1.2	10.896	B
D - B4034 Buckingham Road	1145	286	515	1129	1117	785	3.0	14.3	34.991	D

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	680	170	1068	669	669	590	6.5	8.7	41.745	E
B - B4034	903	226	383	903	922	1354	1.7	2.0	7.976	A
C - Water Eaton Road	400	100	922	398	404	364	1.2	1.3	11.084	B
D - B4034 Buckingham Road	1135	284	518	1140	1148	802	14.3	18.5	55.278	F

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	551	138	903	550	581	490	8.7	2.4	21.480	C
B - B4034	740	185	320	744	759	1134	2.0	1.1	6.617	A
C - Water Eaton Road	328	82	758	327	332	306	1.3	0.9	8.750	A
D - B4034 Buckingham Road	941	235	429	964	1015	656	18.5	5.1	31.373	D

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	468	117	742	466	472	403	2.4	1.3	10.238	B
B - B4034	611	153	270	612	634	938	1.1	0.9	5.547	A
C - Water Eaton Road	274	68	623	274	279	259	0.9	0.6	7.580	A
D - B4034 Buckingham Road	799	200	352	793	814	545	5.1	2.2	9.586	A

Lane Results

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

Lanes: Main Results for each time segment

07:30 - 07:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entry	1	1	B	329	671	0.491	327	331	0.0	0.9	9.600	A
			2	A, C, D	129	674	0.192	131	132	0.0	0.2	6.792	A
		2	1	(A, B, C, D)	458			459	467	0.0	0.0	0.522	A
	Exit	1	1		404			404	406	0.0	0.0	0.000	A
B - B4034	Entry	1	1	C, D	361	962	0.376	360	365	0.0	0.7	5.992	A
			2	A, B	257	993	0.259	256	257	0.0	0.4	4.879	A
	Exit	1	1		918			918	938	0.0	0.0	0.000	A
C - Water Eaton Road	Entry	1	1	D	173	647	0.268	172	175	0.0	0.5	7.585	A
			2	A, B, C	99	647	0.153	99	99	0.0	0.2	6.657	A
		2	1	(A, B, C, D)	273			273	277	0.0	0.0	0.000	A
	Exit	1	1		258			258	260	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entry	1	1	A, B	640	1026	0.624	640	656	0.0	1.7	9.458	A
			2	C, D	136	1042	0.131	136	138	0.0	0.2	4.047	A
	Exit	1	1		541			541	550	0.0	0.0	0.000	A

07:45 - 08:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service

A - Sherwood Drive	Entr y	1	1	B	391	631	0.619	387	394	0.9	1.6	12.257	B
			2	A, C, D	146	633	0.231	146	149	0.2	0.3	7.382	A
		2	1	(A, B, C, D)	536			537	546	0.0	0.2	2.083	A
	Exit	1	1		483			483	484	0.0	0.0	0.000	A
B - B4034	Entr y	1	1	C, D	420	954	0.441	419	440	0.7	0.8	7.067	A
			2	A, B	314	977	0.321	312	311	0.4	0.7	5.574	A
	Exit	1	1		1094			1094	1106	0.0	0.0	0.000	A
C - Water Eaton Road	Entr y	1	1	D	210	608	0.346	209	209	0.5	0.5	8.843	A
			2	A, B, C	115	604	0.191	115	117	0.2	0.2	7.496	A
		2	1	(A, B, C, D)	325			325	327	0.0	0.0	0.000	A
	Exit	1	1		295			295	302	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entr y	1	1	A, B	745	1000	0.745	762	767	1.7	2.8	14.938	B
			2	C, D	159	1010	0.158	159	163	0.2	0.2	4.307	A
	Exit	1	1		638			638	658	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entr y	1	1	B	480	575	0.834	482	479	1.6	2.4	17.665	C
			2	A, C, D	180	579	0.310	180	183	0.3	0.6	9.399	A
		2	1	(A, B, C, D)	663			660	667	0.2	3.4	13.650	B
	Exit	1	1		586			586	589	0.0	0.0	0.000	A
B - B4034	Entr y	1	1	C, D	512	922	0.555	514	537	0.8	1.1	9.369	A
			2	A, B	371	952	0.390	372	381	0.7	0.6	6.449	A
	Exit	1	1		1337			1337	1330	0.0	0.0	0.000	A
C - Water Eaton Road	Entr y	1	1	D	259	555	0.467	256	258	0.5	0.8	11.928	B
			2	A, B, C	142	551	0.258	143	144	0.2	0.4	9.040	A
		2	1	(A, B, C, D)	401			401	404	0.0	0.0	0.000	A
	Exit	1	1		368			368	373	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entr y	1	1	A, B	940	969	0.971	926	914	2.8	13.9	41.513	E
			2	C, D	205	981	0.209	204	203	0.2	0.4	4.549	A
	Exit	1	1		785			785	807	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entry	1	1	B	487	574	0.847	483	484	2.4	2.9	19.676	C
			2	A, C, D	189	577	0.328	186	185	0.6	0.7	9.723	A
		2	1	(A, B, C, D)	680			676	672	3.4	5.1	24.796	C
	Exit	1	1		590			590	594	0.0	0.0	0.000	A
B - B4034	Entry	1	1	C, D	525	927	0.567	525	541	1.1	1.4	9.149	A
			2	A, B	378	951	0.398	378	381	0.6	0.6	6.349	A
	Exit	1	1		1354			1354	1361	0.0	0.0	0.000	A
C - Water Eaton Road	Entry	1	1	D	260	548	0.473	257	258	0.8	0.9	12.286	B
			2	A, B, C	140	543	0.258	141	146	0.4	0.4	8.927	A
		2	1	(A, B, C, D)	400			400	404	0.0	0.0	0.000	A
	Exit	1	1		364			364	375	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entry	1	1	A, B	939	969	0.969	942	944	13.9	18.3	66.120	F
			2	C, D	197	977	0.201	197	204	0.4	0.2	4.547	A
	Exit	1	1		802			802	813	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entry	1	1	B	399	619	0.644	399	420	2.9	1.5	15.375	C
			2	A, C, D	152	623	0.244	151	161	0.7	0.3	8.340	A
		2	1	(A, B, C, D)	551			551	574	5.1	0.5	8.317	A
	Exit	1	1		490			490	496	0.0	0.0	0.000	A
B - B4034	Entry	1	1	C, D	431	948	0.454	434	445	1.4	0.7	7.278	A
			2	A, B	309	976	0.316	310	314	0.6	0.4	5.708	A
	Exit	1	1		1134			1134	1202	0.0	0.0	0.000	A
C - Water Eaton Road	Entry	1	1	D	209	603	0.346	208	213	0.9	0.6	9.307	A
			2	A, B, C	119	598	0.199	119	119	0.4	0.3	7.739	A
		2	1	(A, B, C, D)	328			328	330	0.0	0.0	0.000	A
	Exit	1	1		306			306	317	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entry	1	1	A, B	773	999	0.773	796	846	18.3	4.8	37.254	E
			2	C, D	168	1010	0.166	168	169	0.2	0.2	4.278	A
	Exit	1	1		656			656	671	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entry	1	1	B	339	665	0.510	338	344	1.5	0.9	10.558	B
			2	A, C, D	128	670	0.191	128	128	0.3	0.3	6.859	A
		2	1	(A, B, C, D)	468			467	470	0.5	0.1	0.745	A
	Exit	1	1		403			403	412	0.0	0.0	0.000	A
B - B4034	Entry	1	1	C, D	354	965	0.366	354	370	0.7	0.6	6.015	A
			2	A, B	257	991	0.259	258	263	0.4	0.3	4.910	A
	Exit	1	1		938			938	968	0.0	0.0	0.000	A
C - Water Eaton Road	Entry	1	1	D	181	651	0.279	181	179	0.6	0.4	7.995	A
			2	A, B, C	92	641	0.144	94	100	0.3	0.2	6.825	A
		2	1	(A, B, C, D)	274			274	278	0.0	0.0	0.000	A
	Exit	1	1		259			259	262	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entry	1	1	A, B	655	1028	0.637	650	672	4.8	1.9	10.790	B
			2	C, D	144	1037	0.139	142	141	0.2	0.2	4.047	A
	Exit	1	1		545			545	557	0.0	0.0	0.000	A

2020 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A1 - [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.
Warning	Geometry	D - B4034 Buckingham Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J1	Buckingham Road / Sherwood Drive / Water Eaton Road	Standard Roundabout		A, B, C, D	27.86	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2020 Base	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Sherwood Drive		ONE HOUR	✓	626	100.000
B - B4034		ONE HOUR	✓	1248	100.000
C - Water Eaton Road		ONE HOUR	✓	394	100.000
D - B4034 Buckingham Road		ONE HOUR	✓	696	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
From		A - Sherwood Drive	B - B4034	C - Water Eaton Road	D - B4034 Buckingham Road
	A - Sherwood Drive	0	400	115	111
	B - B4034	435	1	15	797
	C - Water Eaton Road	90	59	0	245
	D - B4034 Buckingham Road	74	450	169	3

Proportions

	To				
From		A - Sherwood Drive	B - B4034	C - Water Eaton Road	D - B4034 Buckingham Road
	A - Sherwood Drive	0.00	0.64	0.18	0.18
	B - B4034	0.35	0.00	0.01	0.64
	C - Water Eaton Road	0.23	0.15	0.00	0.62
	D - B4034 Buckingham Road	0.11	0.65	0.24	0.00

Vehicle Mix

Heavy Vehicle Percentages

From	To				
		A - Sherwood Drive	B - B4034	C - Water Eaton Road	D - B4034 Buckingham Road
	A - Sherwood Drive	0	1	0	0
	B - B4034	1	0	0	2
	C - Water Eaton Road	0	0	0	0
	D - B4034 Buckingham Road	0	3	0	0

Average PCU Per Veh

From	To				
		A - Sherwood Drive	B - B4034	C - Water Eaton Road	D - B4034 Buckingham Road
	A - Sherwood Drive	1.000	1.005	1.000	1.000
	B - B4034	1.007	1.000	1.000	1.015
	C - Water Eaton Road	1.000	1.000	1.000	1.000
	D - B4034 Buckingham Road	1.000	1.027	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - Sherwood Drive	16:45-17:00	471	473
	17:00-17:15	563	565
	17:15-17:30	689	691
	17:30-17:45	689	691
	17:45-18:00	563	565
	18:00-18:15	471	473
B - B4034	16:45-17:00	940	951
	17:00-17:15	1122	1135
	17:15-17:30	1374	1391
	17:30-17:45	1374	1391
	17:45-18:00	1122	1135
	18:00-18:15	940	951
C - Water Eaton Road	16:45-17:00	297	297
	17:00-17:15	354	354
	17:15-17:30	434	434
	17:30-17:45	434	434
	17:45-18:00	354	354
	18:00-18:15	297	297
D - B4034 Buckingham Road	16:45-17:00	524	533
	17:00-17:15	626	637
	17:15-17:30	766	780
	17:30-17:45	766	780
	17:45-18:00	626	637
	18:00-18:15	524	533

Results

Results Summary for whole modelled period

Arm	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - Sherwood Drive	13.93	2.6	B	575	862
B - B4034	44.63	17.7	E	1145	1718
C - Water Eaton Road	30.13	3.6	D	365	548
D - B4034 Buckingham Road	9.16	2.1	A	644	967

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	471	118	520	471	474	452	0.0	1.0	7.607	A
B - B4034	927	232	310	927	938	681	0.0	2.1	8.043	A
C - Water Eaton Road	302	75	1002	300	300	235	0.0	0.9	9.752	A
D - B4034 Buckingham Road	534	133	438	533	533	864	0.0	0.8	5.710	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	559	140	627	559	561	542	1.0	1.6	9.556	A
B - B4034	1117	279	362	1121	1125	824	2.1	3.8	11.628	B
C - Water Eaton Road	356	89	1211	358	351	272	0.9	1.2	12.421	B
D - B4034 Buckingham Road	634	158	531	637	639	1038	0.8	1.1	6.686	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	691	173	759	691	685	666	1.6	2.5	13.934	B
B - B4034	1383	346	448	1345	1349	1002	3.8	15.2	29.553	D
C - Water Eaton Road	438	109	1457	434	422	336	1.2	3.6	25.115	D
D - B4034 Buckingham Road	778	194	645	780	778	1246	1.1	2.0	9.164	A

17:30 - 17:45

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

	(Veh/hr)									
A - Sherwood Drive	672	168	750	675	682	663	2.5	2.6	13.888	B
B - B4034	1373	343	429	1366	1387	996	15.2	17.7	44.634	E
C - Water Eaton Road	438	110	1471	443	434	325	3.6	3.5	30.133	D
D - B4034 Buckingham Road	760	190	655	758	782	1259	2.0	1.9	9.131	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	576	144	620	576	576	532	2.6	1.5	9.798	A
B - B4034	1115	279	367	1132	1182	829	17.7	4.4	23.280	C
C - Water Eaton Road	353	88	1223	353	363	276	3.5	1.4	16.662	C
D - B4034 Buckingham Road	628	157	521	631	642	1055	1.9	1.1	6.945	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	480	120	523	479	478	464	1.5	1.0	7.764	A
B - B4034	957	239	305	961	963	696	4.4	1.9	8.861	A
C - Water Eaton Road	306	76	1037	303	301	229	1.4	0.9	10.334	B
D - B4034 Buckingham Road	532	133	453	533	541	887	1.1	0.8	5.671	A

Lane Results

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

Lanes: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entry	1	1	B	295	732	0.403	295	302	0.0	0.7	7.989	A
			2	A, C, D	176	736	0.238	176	172	0.0	0.3	6.378	A
		2	1	(A, B, C, D)	471			471	478	0.0	0.0	0.202	A
	Exit	1	1		452			452	451	0.0	0.0	0.000	A
B - B4034	Entry	1	1	C, D	600	976	0.615	602	611	0.0	1.6	9.464	A

			2	A, B	326	982	0.33 2	326	328	0.0	0.6	5.407	A
	Exit	1	1		681			681	696	0.0	0.0	0.000	A
C - Water Eaton Road	Entr y	1	1	D	189	533	0.35 4	187	187	0.0	0.6	10.55 5	B
			2	A, B, C	113	533	0.21 2	113	113	0.0	0.3	8.415	A
		2	1	(A, B, C, D)	302			302	303	0.0	0.0	0.000	A
	Exit	1	1		235			235	225	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entr y	1	1	A, B	401	990	0.40 5	399	405	0.0	0.7	6.216	A
			2	C, D	133	1014	0.13 1	134	128	0.0	0.1	4.144	A
	Exit	1	1		864			864	873	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entr y	1	1	B	354	703	0.50 4	355	359	0.7	1.0	9.683	A
			2	A, C, D	205	706	0.29 0	204	202	0.3	0.5	7.134	A
		2	1	(A, B, C, D)	559			558	563	0.0	0.1	0.793	A
	Exit	1	1		542			542	540	0.0	0.0	0.000	A
B - B4034	Entr y	1	1	C, D	725	955	0.75 9	728	731	1.6	3.2	14.61 0	B
			2	A, B	392	964	0.40 7	392	394	0.6	0.6	6.094	A
	Exit	1	1		824			824	834	0.0	0.0	0.000	A
C - Water Eaton Road	Entr y	1	1	D	217	464	0.46 8	219	216	0.6	0.8	13.70 0	B
			2	A, B, C	138	464	0.29 9	139	135	0.3	0.5	10.38 0	B
		2	1	(A, B, C, D)	356			356	353	0.0	0.0	0.000	A
	Exit	1	1		272			272	268	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entr y	1	1	A, B	476	960	0.49 6	479	485	0.7	1.0	7.432	A
			2	C, D	158	980	0.16 2	159	154	0.1	0.1	4.384	A
	Exit	1	1		1038			1038	1035	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entr y	1	1	B	436	665	0.65 6	438	438	1.0	1.4	12.44 7	B
			2	A, C, D	252	668	0.37 7	253	247	0.5	0.4	8.293	A
		2	1	(A, B, C, D)	691			688	687	0.1	0.6	2.964	A

	Exit	1	1		666			666	668	0.0	0.0	0.000	A
B - B4034	Entr y	1	1	C, D	900	927	0.971	862	862	3.2	14.1	41.285	E
			2	A, B	483	935	0.517	483	487	0.6	1.1	7.910	A
	Exit	1	1		1002			1002	1006	0.0	0.0	0.000	A
C - Water Eaton Road	Entr y	1	1	D	275	384	0.717	272	261	0.8	2.6	28.863	D
			2	A, B, C	161	384	0.421	162	161	0.5	0.8	16.197	C
		2	1	(A, B, C, D)	438			436	431	0.0	0.2	0.914	A
	Exit	1	1		336			336	326	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entr y	1	1	A, B	582	923	0.631	585	588	1.0	1.7	10.638	B
			2	C, D	196	940	0.208	195	190	0.1	0.3	4.706	A
	Exit	1	1		1246			1246	1235	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entr y	1	1	B	431	666	0.647	431	436	1.4	1.5	12.656	B
			2	A, C, D	245	670	0.365	243	245	0.4	0.7	8.429	A
		2	1	(A, B, C, D)	672			675	683	0.6	0.3	2.770	A
	Exit	1	1		663			663	666	0.0	0.0	0.000	A
B - B4034	Entr y	1	1	C, D	888	935	0.949	881	902	14.1	16.5	64.328	F
			2	A, B	485	942	0.515	485	485	1.1	1.1	7.895	A
	Exit	1	1		996			996	1015	0.0	0.0	0.000	A
C - Water Eaton Road	Entr y	1	1	D	272	380	0.716	273	268	2.6	2.6	34.647	D
			2	A, B, C	169	380	0.444	170	166	0.8	0.8	18.541	C
		2	1	(A, B, C, D)	438			441	434	0.2	0.1	1.687	A
	Exit	1	1		325			325	325	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entr y	1	1	A, B	574	913	0.629	572	594	1.7	1.6	10.547	B
			2	C, D	186	936	0.199	186	188	0.3	0.3	4.765	A
	Exit	1	1		1259			1259	1279	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entr y	1	1	B	367	704	0.522	367	368	1.5	1.0	9.908	A

			2	A, C, D	210	708	0.297	209	209	0.7	0.4	7.347	A
		2	1	(A, B, C, D)	576			577	573	0.3	0.1	0.836	A
		Exit	1	1		532		532	539	0.0	0.0	0.000	A
B - B4034	Entr y	1	1	C, D	728	956	0.761	744	791	16.5	3.8	32.198	D
			2	A, B	388	964	0.402	388	391	1.1	0.6	6.473	A
	Exit	1	1		829			829	842	0.0	0.0	0.000	A
C - Water Eaton Road	Entr y	1	1	D	222	461	0.482	221	228	2.6	1.1	18.819	C
			2	A, B, C	131	461	0.284	132	135	0.8	0.3	12.652	B
		2	1	(A, B, C, D)	353			353	355	0.1	0.0	0.236	A
	Exit	1	1		276			276	274	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entr y	1	1	A, B	470	963	0.487	473	487	1.6	0.9	7.804	A
			2	C, D	159	984	0.161	159	155	0.3	0.2	4.322	A
	Exit	1	1		1055			1055	1109	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entr y	1	1	B	306	732	0.418	306	308	1.0	0.7	8.207	A
			2	A, C, D	174	735	0.236	173	171	0.4	0.3	6.314	A
		2	1	(A, B, C, D)	480			480	477	0.1	0.0	0.240	A
	Exit	1	1		464			464	453	0.0	0.0	0.000	A
B - B4034	Entr y	1	1	C, D	620	977	0.634	622	632	3.8	1.5	10.656	B
			2	A, B	337	983	0.343	339	331	0.6	0.4	5.499	A
	Exit	1	1		696			696	706	0.0	0.0	0.000	A
C - Water Eaton Road	Entr y	1	1	D	192	521	0.368	189	189	1.1	0.7	11.169	B
			2	A, B, C	114	521	0.219	114	112	0.3	0.2	8.941	A
		2	1	(A, B, C, D)	306			306	299	0.0	0.0	0.000	A
	Exit	1	1		229			229	229	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entr y	1	1	A, B	400	982	0.407	401	409	0.9	0.6	6.171	A
			2	C, D	133	1008	0.132	133	132	0.2	0.2	4.166	A
	Exit	1	1		887			887	895	0.0	0.0	0.000	A

2026 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A1 - [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.
Warning	Geometry	D - B4034 Buckingham Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J1	Buckingham Road / Sherwood Drive / Water Eaton Road	Standard Roundabout		A, B, C, D	80.94	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
D3	2026 Base	AM	ONE HOUR	07:30	09:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Sherwood Drive		ONE HOUR	✓	659	100.000
B - B4034		ONE HOUR	✓	890	100.000
C - Water Eaton Road		ONE HOUR	✓	393	100.000
D - B4034 Buckingham Road		ONE HOUR	✓	1170	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		A - Sherwood Drive	B - B4034	C - Water Eaton Road	D - B4034 Buckingham Road
From	A - Sherwood Drive	0	475	114	69
	B - B4034	369	0	54	467
	C - Water Eaton Road	109	30	0	253
	D - B4034 Buckingham Road	108	860	200	2

Proportions

	To				
		A - Sherwood Drive	B - B4034	C - Water Eaton Road	D - B4034 Buckingham Road
From	A - Sherwood Drive	0.00	0.72	0.17	0.11
	B - B4034	0.41	0.00	0.06	0.52
	C - Water Eaton Road	0.28	0.08	0.00	0.65
	D - B4034 Buckingham Road	0.09	0.74	0.17	0.00

Vehicle Mix

Heavy Vehicle Percentages

	To				
		A - Sherwood Drive	B - B4034	C - Water Eaton Road	D - B4034 Buckingham Road
From	A - Sherwood Drive	0	1	1	0
	B - B4034	1	0	6	4
	C - Water Eaton Road	1	4	0	1
	D - B4034 Buckingham Road	0	2	1	0

Average PCU Per Veh

	To				
		A - Sherwood Drive	B - B4034	C - Water Eaton Road	D - B4034 Buckingham Road
From	A - Sherwood Drive	1.000	1.011	1.009	1.000
	B - B4034	1.012	1.000	1.060	1.038
	C - Water Eaton Road	1.010	1.036	1.000	1.009
	D - B4034 Buckingham Road	1.000	1.018	1.005	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - Sherwood Drive	07:30-07:45	496	501
	07:45-08:00	593	598
	08:00-08:15	726	733
	08:15-08:30	726	733
	08:30-08:45	593	598
	08:45-09:00	496	501
B - B4034	07:30-07:45	670	689
	07:45-08:00	800	823
	08:00-08:15	980	1008
	08:15-08:30	980	1008
	08:30-08:45	800	823
	08:45-09:00	670	689

C - Water Eaton Road	07:30-07:45	296	299
	07:45-08:00	353	357
	08:00-08:15	432	437
	08:15-08:30	432	437
	08:30-08:45	353	357
	08:45-09:00	296	299
D - B4034 Buckingham Road	07:30-07:45	880	893
	07:45-08:00	1051	1067
	08:00-08:15	1288	1306
	08:15-08:30	1288	1306
	08:30-08:45	1051	1067
	08:45-09:00	880	893

Results

Results Summary for whole modelled period

Arm	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - Sherwood Drive	67.41	12.9	F	603	905
B - B4034	9.43	2.7	A	814	1221
C - Water Eaton Road	13.59	1.6	B	360	540
D - B4034 Buckingham Road	165.88	65.3	F	1075	1613

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	499	125	820	498	497	443	0.0	1.7	11.336	B
B - B4034	670	168	291	671	688	1026	0.0	1.0	5.940	A
C - Water Eaton Road	289	72	686	291	294	276	0.0	0.6	7.709	A
D - B4034 Buckingham Road	875	219	386	876	876	591	0.0	2.5	10.455	B

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	593	148	975	599	597	519	1.7	2.8	17.225	C
B - B4034	788	197	348	787	816	1226	1.0	1.4	6.925	A
C - Water Eaton Road	355	89	806	356	355	329	0.6	0.7	8.889	A

D - B4034 Buckingham Road	1058	265	449	1045	1049	713	2.5	7.7	21.241	C

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	732	183	1104	701	697	631	2.8	12.7	45.787	E
B - B4034	974	243	415	980	1000	1389	1.4	2.3	9.102	A
C - Water Eaton Road	436	109	996	440	436	399	0.7	1.4	12.505	B
D - B4034 Buckingham Road	1288	322	561	1174	1180	876	7.7	37.6	75.344	F

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	716	179	1103	724	725	627	12.7	12.8	67.408	F
B - B4034	977	244	421	975	1007	1406	2.3	2.7	9.435	A
C - Water Eaton Road	432	108	992	431	435	404	1.4	1.6	13.586	B
D - B4034 Buckingham Road	1288	322	550	1179	1189	873	37.6	65.2	162.371	F

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	592	148	1064	609	633	525	12.8	4.2	38.697	E
B - B4034	796	199	356	793	823	1317	2.7	1.5	7.121	A
C - Water Eaton Road	353	88	809	354	361	340	1.6	0.9	9.740	A
D - B4034 Buckingham Road	1056	264	446	1143	1166	718	65.2	41.9	165.880	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	488	122	880	494	515	457	4.2	1.6	16.459	C
B - B4034	681	170	287	679	699	1086	1.5	1.2	5.883	A
C - Water Eaton Road	295	74	691	294	302	276	0.9	0.7	7.910	A
D - B4034 Buckingham Road	887	222	385	952	1024	600	41.9	8.9	64.094	F

Lane Results

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

Lanes: Main Results for each time segment

07:30 - 07:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entry	1	1	B	352	643	0.547	350	355	0.0	1.2	11.285	B
			2	A, C, D	147	647	0.227	147	142	0.0	0.3	7.236	A
		2	1	(A, B, C, D)	499			499	503	0.0	0.2	1.195	A
	Exit	1	1		443			443	440	0.0	0.0	0.000	A
B - B4034	Entry	1	1	C, D	387	957	0.404	389	408	0.0	0.6	6.576	A
			2	A, B	283	986	0.287	282	281	0.0	0.4	5.040	A
	Exit	1	1		1026			1026	1028	0.0	0.0	0.000	A
C - Water Eaton Road	Entry	1	1	D	185	629	0.294	186	190	0.0	0.4	8.030	A
			2	A, B, C	104	622	0.167	104	105	0.0	0.2	7.121	A
		2	1	(A, B, C, D)	289			289	296	0.0	0.0	0.000	A
	Exit	1	1		276			276	281	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entry	1	1	A, B	731	1016	0.719	732	728	0.0	2.3	11.744	B
			2	C, D	144	1027	0.140	144	149	0.0	0.2	4.155	A
	Exit	1	1		591			591	607	0.0	0.0	0.000	A

07:45 - 08:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entry	1	1	B	430	599	0.718	430	431	1.2	1.7	14.728	B
			2	A, C, D	168	602	0.279	169	166	0.3	0.4	8.198	A
		2	1	(A, B, C, D)	593			598	600	0.2	0.7	4.295	A
	Exit	1	1		519			519	526	0.0	0.0	0.000	A
B - B4034	Entry	1	1	C, D	464	939	0.494	464	483	0.6	1.0	7.864	A
			2	A, B	324	965	0.335	323	332	0.4	0.4	5.590	A
	Exit	1	1		1226			1226	1231	0.0	0.0	0.000	A
C - Water Eaton Road	Entry	1	1	D	229	589	0.389	230	228	0.4	0.5	9.584	A
			2	A, B, C	126	587	0.215	126	126	0.2	0.2	7.619	A
		2	1	(A, B, C, D)	355			355	355	0.0	0.0	0.002	A
	Exit	1	1		329			329	333	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entry	1	1	A, B	878	994	0.884	866	868	2.3	7.4	24.737	C
			2	C, D	180	1004	0.179	179	181	0.2	0.3	4.356	A

	Exit	1	1		713			713	727	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entry	1	1	B	506	562	0.901	507	502	1.7	3.0	20.431	C
			2	A, C, D	194	565	0.343	194	195	0.4	0.6	10.240	B
		2	1	(A, B, C, D)	732			700	703	0.7	9.0	27.981	D
	Exit	1	1		631			631	633	0.0	0.0	0.000	A
B - B4034	Entry	1	1	C, D	570	911	0.626	574	594	1.0	1.7	10.773	B
			2	A, B	404	941	0.429	406	407	0.4	0.6	6.730	A
	Exit	1	1		1389			1389	1388	0.0	0.0	0.000	A
C - Water Eaton Road	Entry	1	1	D	282	526	0.537	285	281	0.5	1.1	13.971	B
			2	A, B, C	154	520	0.295	154	155	0.2	0.4	9.791	A
		2	1	(A, B, C, D)	436			436	439	0.0	0.0	0.011	A
	Exit	1	1		399			399	408	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entry	1	1	A, B	1066	953	1.119	952	957	7.4	37.3	90.086	F
			2	C, D	221	964	0.230	221	223	0.3	0.3	4.814	A
	Exit	1	1		876			876	884	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entry	1	1	B	522	563	0.927	524	525	3.0	3.0	21.687	C
			2	A, C, D	199	566	0.352	201	201	0.6	0.5	10.789	B
		2	1	(A, B, C, D)	716			721	725	9.0	9.3	48.764	E
	Exit	1	1		627			627	636	0.0	0.0	0.000	A
B - B4034	Entry	1	1	C, D	576	912	0.631	577	597	1.7	1.8	11.362	B
			2	A, B	401	940	0.427	398	410	0.6	0.9	6.713	A
	Exit	1	1		1406			1406	1420	0.0	0.0	0.000	A
C - Water Eaton Road	Entry	1	1	D	280	529	0.530	279	280	1.1	1.2	15.603	C
			2	A, B, C	152	523	0.290	152	155	0.4	0.4	9.837	A
		2	1	(A, B, C, D)	432			432	435	0.0	0.0	0.022	A
	Exit	1	1		404			404	408	0.0	0.0	0.000	A

D - B4034 Buckingham Road	Entry	1	1	A, B	1066	956	1.116	958	968	37.3	64.8	194.968	F
			2	C, D	221	968	0.229	220	221	0.3	0.4	4.825	A
	Exit	1	1		873			873	891	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entry	1	1	B	434	573	0.758	433	456	3.0	2.0	18.712	C
			2	A, C, D	177	576	0.307	176	177	0.5	0.4	10.006	B
		2	1	(A, B, C, D)	592			611	629	9.3	1.7	22.734	C
	Exit	1	1		525			525	536	0.0	0.0	0.000	A
B - B4034	Entry	1	1	C, D	471	935	0.504	469	490	1.8	1.0	7.986	A
			2	A, B	324	961	0.337	324	333	0.9	0.5	5.887	A
	Exit	1	1		1317			1317	1362	0.0	0.0	0.000	A
C - Water Eaton Road	Entry	1	1	D	231	587	0.394	232	236	1.2	0.6	10.701	B
			2	A, B, C	122	585	0.208	122	126	0.4	0.2	7.937	A
		2	1	(A, B, C, D)	353			353	358	0.0	0.0	0.000	A
	Exit	1	1		340			340	345	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entry	1	1	A, B	876	992	0.883	963	983	64.8	41.7	199.347	F
			2	C, D	180	1003	0.179	180	183	0.4	0.2	4.344	A
	Exit	1	1		718			718	742	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entry	1	1	B	355	626	0.567	359	374	2.0	1.2	14.126	B
			2	A, C, D	136	628	0.216	135	141	0.4	0.3	8.062	A
		2	1	(A, B, C, D)	488			491	511	1.7	0.1	4.096	A
	Exit	1	1		457			457	463	0.0	0.0	0.000	A
B - B4034	Entry	1	1	C, D	400	963	0.416	397	416	1.0	0.9	6.447	A
			2	A, B	281	985	0.285	282	282	0.5	0.3	5.074	A
	Exit	1	1		1086			1086	1170	0.0	0.0	0.000	A
C - Water Eaton Road	Entry	1	1	D	192	626	0.307	191	198	0.6	0.5	8.362	A
			2	A, B, C	103	625	0.164	102	104	0.2	0.2	7.053	A

D - B4034 Buckingham Road		2	1	(A, B, C, D)	295			295	301	0.0	0.0	0.000	A
	Exit	1	1		276			276	284	0.0	0.0	0.000	A
	Entry	1	1	A, B	735	1015	0.724	800	872	41.7	8.7	76.879	F
			2	C, D	152	1025	0.149	153	152	0.2	0.2	4.101	A
	Exit	1	1		600			600	623	0.0	0.0	0.000	A

2026 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A1 - [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.
Warning	Geometry	D - B4034 Buckingham Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J1	Buckingham Road / Sherwood Drive / Water Eaton Road	Standard Roundabout		A, B, C, D	64.04	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

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

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Sherwood Drive		ONE HOUR	✓	684	100.000
B - B4034		ONE HOUR	✓	1379	100.000
C - Water Eaton Road		ONE HOUR	✓	428	100.000
D - B4034 Buckingham Road		ONE HOUR	✓	771	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To				
		A - Sherwood Drive	B - B4034	C - Water Eaton Road	D - B4034 Buckingham Road
	A - Sherwood Drive	0	433	124	127
	B - B4034	471	1	16	891
	C - Water Eaton Road	97	64	0	267
	D - B4034 Buckingham Road	83	501	184	3

Proportions

From	To				
		A - Sherwood Drive	B - B4034	C - Water Eaton Road	D - B4034 Buckingham Road
	A - Sherwood Drive	0.00	0.63	0.18	0.19
	B - B4034	0.34	0.00	0.01	0.65
	C - Water Eaton Road	0.23	0.15	0.00	0.62
	D - B4034 Buckingham Road	0.11	0.65	0.24	0.00

Vehicle Mix

Heavy Vehicle Percentages

From	To				
		A - Sherwood Drive	B - B4034	C - Water Eaton Road	D - B4034 Buckingham Road
	A - Sherwood Drive	0	1	0	0
	B - B4034	1	0	0	2
	C - Water Eaton Road	0	0	0	0
	D - B4034 Buckingham Road	0	3	0	0

Average PCU Per Veh

From	To				
		A - Sherwood Drive	B - B4034	C - Water Eaton Road	D - B4034 Buckingham Road
	A - Sherwood Drive	1.000	1.005	1.000	1.000
	B - B4034	1.007	1.000	1.000	1.015
	C - Water Eaton Road	1.000	1.000	1.000	1.000
	D - B4034 Buckingham Road	1.000	1.027	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - Sherwood Drive	16:45-17:00	515	516
	17:00-17:15	615	617
	17:15-17:30	753	755
	17:30-17:45	753	755
	17:45-18:00	615	617
	18:00-18:15	515	516
B - B4034	16:45-17:00	1039	1051
	17:00-17:15	1240	1255
	17:15-17:30	1519	1537
	17:30-17:45	1519	1537
	17:45-18:00	1240	1255

	18:00-18:15	1039	1051
C - Water Eaton Road	16:45-17:00	322	322
	17:00-17:15	385	385
	17:15-17:30	471	471
	17:30-17:45	471	471
	17:45-18:00	385	385
	18:00-18:15	322	322
D - B4034 Buckingham Road	16:45-17:00	580	590
	17:00-17:15	693	705
	17:15-17:30	848	863
	17:30-17:45	848	863
	17:45-18:00	693	705
	18:00-18:15	580	590

Results

Results Summary for whole modelled period

Arm	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - Sherwood Drive	20.25	4.8	C	630	945
B - B4034	119.82	54.9	F	1268	1902
C - Water Eaton Road	48.88	6.6	E	391	586
D - B4034 Buckingham Road	11.62	2.8	B	712	1068

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	517	129	573	521	513	492	0.0	0.9	8.302	A
B - B4034	1043	261	328	1037	1045	767	0.0	3.2	9.945	A
C - Water Eaton Road	326	81	1118	322	315	247	0.0	1.2	11.283	B
D - B4034 Buckingham Road	588	147	476	589	590	965	0.0	0.8	6.017	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	605	151	686	601	608	589	0.9	2.4	10.122	B
B - B4034	1236	309	382	1242	1236	906	3.2	7.2	18.377	C

C - Water Eaton Road	381	95	1337	376	377	287	1.2	2.0	15.454	C
D - B4034 Buckingham Road	703	176	569	706	704	1144	0.8	1.3	7.629	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	760	190	816	764	752	729	2.4	4.6	20.012	C
B - B4034	1547	387	482	1436	1427	1098	7.2	37.1	60.610	F
C - Water Eaton Road	462	116	1570	462	455	348	2.0	4.1	30.702	D
D - B4034 Buckingham Road	842	210	705	840	856	1327	1.3	2.8	11.368	B

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	760	190	839	756	753	700	4.6	4.8	20.249	C
B - B4034	1492	373	489	1416	1449	1105	37.1	54.6	119.818	F
C - Water Eaton Road	477	119	1540	481	471	365	4.1	6.6	48.877	E
D - B4034 Buckingham Road	851	213	687	852	857	1334	2.8	2.5	11.624	B

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	617	154	693	614	621	593	4.8	2.0	12.461	B
B - B4034	1247	312	400	1321	1370	907	54.6	29.8	107.067	F
C - Water Eaton Road	384	96	1422	389	404	300	6.6	2.0	27.253	D
D - B4034 Buckingham Road	706	177	574	712	716	1236	2.5	1.4	8.082	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	519	130	564	515	523	508	2.0	1.4	8.606	A
B - B4034	1042	261	325	1092	1154	754	29.8	4.3	35.400	E
C - Water Eaton Road	314	78	1173	314	322	245	2.0	1.1	13.652	B
D - B4034 Buckingham Road	583	146	488	584	588	999	1.4	1.0	6.167	A

Lane Results

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

Lanes: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entry	1	1	B	338	717	0.471	341	328	0.0	0.6	8.596	A
			2	A, C, D	180	721	0.249	180	185	0.0	0.3	6.608	A
		2	1	(A, B, C, D)	517			518	516	0.0	0.0	0.425	A
	Exit	1	1		492			492	492	0.0	0.0	0.000	A
B - B4034	Entry	1	1	C, D	683	972	0.702	681	690	0.0	2.5	12.112	B
			2	A, B	360	976	0.369	357	355	0.0	0.8	5.736	A
	Exit	1	1		767			767	755	0.0	0.0	0.000	A
C - Water Eaton Road	Entry	1	1	D	205	495	0.415	203	196	0.0	0.8	12.118	B
			2	A, B, C	120	495	0.243	119	118	0.0	0.4	9.828	A
		2	1	(A, B, C, D)	326			326	320	0.0	0.0	0.007	A
	Exit	1	1		247			247	246	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entry	1	1	A, B	442	976	0.452	442	446	0.0	0.7	6.648	A
			2	C, D	146	1000	0.145	147	144	0.0	0.1	4.093	A
	Exit	1	1		965			965	970	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entry	1	1	B	386	685	0.562	384	383	0.6	1.4	10.164	B
			2	A, C, D	217	689	0.315	216	225	0.3	0.6	7.691	A
		2	1	(A, B, C, D)	605			603	612	0.0	0.5	0.864	A
	Exit	1	1		589			589	591	0.0	0.0	0.000	A
B - B4034	Entry	1	1	C, D	812	951	0.853	819	808	2.5	6.2	24.425	C
			2	A, B	424	958	0.442	423	429	0.8	1.0	6.858	A
	Exit	1	1		906			906	904	0.0	0.0	0.000	A
C - Water Eaton Road	Entry	1	1	D	233	423	0.551	230	229	0.8	1.3	17.272	C
			2	A, B, C	148	423	0.350	147	147	0.4	0.7	12.629	B

		2	1	(A, B, C, D)	381			381	380	0.0	0.0	0.009	A
	Exit	1	1		287			287	288	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entr y	1	1	A, B	539	945	0.570	540	537	0.7	1.2	8.604	A
			2	C, D	164	967	0.170	165	167	0.1	0.1	4.551	A
	Exit	1	1		1144			1144	1141	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entr y	1	1	B	480	648	0.741	480	474	1.4	2.1	14.503	B
			2	A, C, D	281	651	0.432	285	278	0.6	0.6	9.660	A
		2	1	(A, B, C, D)	760			761	755	0.5	1.9	7.235	A
	Exit	1	1		729			729	718	0.0	0.0	0.000	A
B - B4034	Entr y	1	1	C, D	1017	917	1.110	903	904	6.2	35.7	87.437	F
			2	A, B	531	923	0.575	532	523	1.0	1.3	8.612	A
	Exit	1	1		1098			1098	1101	0.0	0.0	0.000	A
C - Water Eaton Road	Entr y	1	1	D	287	348	0.826	289	283	1.3	3.0	35.819	E
			2	A, B, C	173	348	0.498	173	171	0.7	0.8	18.593	C
		2	1	(A, B, C, D)	462			460	462	0.0	0.3	1.143	A
	Exit	1	1		348			348	356	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entr y	1	1	A, B	646	895	0.721	643	650	1.2	2.6	13.428	B
			2	C, D	196	919	0.213	197	205	0.1	0.2	4.948	A
	Exit	1	1		1327			1327	1315	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entr y	1	1	B	481	641	0.750	475	477	2.1	2.3	14.625	B
			2	A, C, D	279	644	0.433	281	276	0.6	0.7	9.988	A
		2	1	(A, B, C, D)	760			760	754	1.9	1.8	7.349	A
	Exit	1	1		700			700	715	0.0	0.0	0.000	A
B - B4034	Entr y	1	1	C, D	984	913	1.078	907	929	35.7	53.3	178.236	F
			2	A, B	509	920	0.553	509	520	1.3	1.4	8.521	A
	Exit	1	1		1105			1105	1112	0.0	0.0	0.000	A

C - Water Eaton Road	Entr y	1	1	D	303	357	0.850	303	294	3.0	4.3	51.096	F
			2	A, B, C	179	357	0.502	178	177	0.8	1.3	22.953	C
		2	1	(A, B, C, D)	477			482	478	0.3	1.1	8.010	A
	Exit	1	1		365			365	357	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entr y	1	1	A, B	642	903	0.711	643	653	2.6	2.2	13.784	B
			2	C, D	209	925	0.226	209	204	0.2	0.3	4.914	A
	Exit	1	1		1334			1334	1346	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entr y	1	1	B	387	683	0.566	386	394	2.3	1.2	11.531	B
			2	A, C, D	229	687	0.333	228	227	0.7	0.5	8.247	A
		2	1	(A, B, C, D)	617			616	616	1.8	0.3	2.207	A
	Exit	1	1		593			593	600	0.0	0.0	0.000	A
B - B4034	Entr y	1	1	C, D	821	942	0.871	894	935	53.3	29.0	159.351	F
			2	A, B	427	954	0.448	428	435	1.4	0.9	7.101	A
	Exit	1	1		907			907	926	0.0	0.0	0.000	A
C - Water Eaton Road	Entr y	1	1	D	237	395	0.600	242	253	4.3	1.3	31.123	D
			2	A, B, C	147	395	0.372	146	151	1.3	0.6	16.195	C
		2	1	(A, B, C, D)	384			384	390	1.1	0.0	2.505	A
	Exit	1	1		300			300	297	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entr y	1	1	A, B	534	945	0.565	540	545	2.2	1.2	9.261	A
			2	C, D	172	966	0.178	172	171	0.3	0.2	4.432	A
	Exit	1	1		1236			1236	1288	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entr y	1	1	B	334	721	0.463	332	333	1.2	0.9	8.997	A
			2	A, C, D	185	724	0.255	183	190	0.5	0.4	6.740	A
		2	1	(A, B, C, D)	519			519	522	0.3	0.1	0.453	A
	Exit	1	1		508			508	501	0.0	0.0	0.000	A
B - B4034	Entr y	1	1	C, D	672	970	0.692	723	791	29.0	3.9	51.176	F

			2	A, B	370	975	0.379	369	363	0.9	0.4	5.907	A
	Exit	1	1		754			754	763	0.0	0.0	0.000	A
C - Water Eaton Road	Entry	1	1	D	196	477	0.411	196	203	1.3	0.8	15.202	C
			2	A, B, C	118	477	0.247	118	119	0.6	0.3	11.008	B
		2	1	(A, B, C, D)	314			314	318	0.0	0.0	0.010	A
	Exit	1	1		245			245	244	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entry	1	1	A, B	441	974	0.453	442	448	1.2	0.9	6.737	A
			2	C, D	142	996	0.142	142	139	0.2	0.2	4.374	A
	Exit	1	1		999			999	1079	0.0	0.0	0.000	A

2026 Base + CD + D, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A1 - [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.
Last Run	Lane Simulation	D - B4034 Buckingham Road - Lane Simulation	Arm D: Queue at end of modelled period is greater than 10 PCU. Delay is likely to have been underestimated.
Warning	Geometry	D - B4034 Buckingham Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J1	Buckingham Road / Sherwood Drive / Water Eaton Road	Standard Roundabout		A, B, C, D	175.32	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2026 Base + CD + D	AM	ONE HOUR	07:30	09:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Sherwood Drive		ONE HOUR	✓	677	100.000
B - B4034		ONE HOUR	✓	923	100.000
C - Water Eaton Road		ONE HOUR	✓	405	100.000
D - B4034 Buckingham Road		ONE HOUR	✓	1287	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		A - Sherwood Drive	B - B4034	C - Water Eaton Road	D - B4034 Buckingham Road
From	A - Sherwood Drive	0	475	114	87
	B - B4034	369	0	54	500
	C - Water Eaton Road	109	30	0	265
	D - B4034 Buckingham Road	132	944	208	2

Proportions

	To				
		A - Sherwood Drive	B - B4034	C - Water Eaton Road	D - B4034 Buckingham Road
From	A - Sherwood Drive	0.00	0.70	0.17	0.13
	B - B4034	0.40	0.00	0.06	0.54
	C - Water Eaton Road	0.27	0.07	0.00	0.66
	D - B4034 Buckingham Road	0.10	0.73	0.16	0.00

Vehicle Mix

Heavy Vehicle Percentages

	To				
		A - Sherwood Drive	B - B4034	C - Water Eaton Road	D - B4034 Buckingham Road
From	A - Sherwood Drive	0	1	1	0
	B - B4034	1	0	6	4
	C - Water Eaton Road	1	4	0	1
	D - B4034 Buckingham Road	0	2	1	0

Average PCU Per Veh

	To				
		A - Sherwood Drive	B - B4034	C - Water Eaton Road	D - B4034 Buckingham Road
From	A - Sherwood Drive	1.000	1.011	1.009	1.000
	B - B4034	1.012	1.000	1.060	1.038
	C - Water Eaton Road	1.010	1.036	1.000	1.009
	D - B4034 Buckingham Road	1.000	1.018	1.005	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - Sherwood Drive	07:30-07:45	509	514
	07:45-08:00	608	614
	08:00-08:15	745	752

	08:15-08:30	745	752
	08:30-08:45	608	614
	08:45-09:00	509	514
B - B4034	07:30-07:45	695	715
	07:45-08:00	830	854
	08:00-08:15	1017	1046
	08:15-08:30	1017	1046
	08:30-08:45	830	854
	08:45-09:00	695	715
C - Water Eaton Road	07:30-07:45	305	308
	07:45-08:00	364	368
	08:00-08:15	445	450
	08:15-08:30	445	450
	08:30-08:45	364	368
	08:45-09:00	305	308
D - B4034 Buckingham Road	07:30-07:45	969	982
	07:45-08:00	1157	1173
	08:00-08:15	1417	1437
	08:15-08:30	1417	1437
	08:30-08:45	1157	1173
	08:45-09:00	969	982

Results

Results Summary for whole modelled period

Arm	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - Sherwood Drive	71.01	16.9	F	619	929
B - B4034	10.47	3.1	B	854	1281
C - Water Eaton Road	15.07	2.1	C	374	562
D - B4034 Buckingham Road	400.57	133.2	F	1186	1779

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	500	125	900	502	507	463	0.0	1.7	11.562	B
B - B4034	706	176	311	701	712	1092	0.0	1.4	6.230	A
C - Water Eaton Road	309	77	726	307	307	286	0.0	0.7	8.138	A
D - B4034 Buckingham Road	975	244	383	980	966	650	0.0	3.9	14.865	B

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	599	150	1058	604	607	556	1.7	3.5	18.956	C
B - B4034	847	212	375	849	860	1287	1.4	1.7	7.242	A
C - Water Eaton Road	365	91	879	368	370	345	0.7	1.0	10.148	B
D - B4034 Buckingham Road	1164	291	473	1142	1129	774	3.9	14.7	36.861	E

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	751	188	1097	739	722	642	3.5	11.1	45.274	E
B - B4034	1021	255	448	1022	1045	1388	1.7	3.1	10.473	B
C - Water Eaton Road	453	113	1058	447	449	412	1.0	2.1	13.879	B
D - B4034 Buckingham Road	1438	360	559	1180	1192	946	14.7	76.5	145.364	F

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	751	188	1105	725	732	649	11.1	16.8	71.007	F
B - B4034	1019	255	438	1020	1050	1392	3.1	2.5	10.235	B
C - Water Eaton Road	455	114	1052	456	455	406	2.1	1.9	15.065	C
D - B4034 Buckingham Road	1413	353	567	1187	1201	941	76.5	132.9	331.168	F

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	613	153	1082	622	657	559	16.8	5.6	45.494	E
B - B4034	835	209	373	837	858	1331	2.5	1.5	7.607	A
C - Water Eaton Road	363	91	868	365	374	342	1.9	0.9	10.560	B
D - B4034 Buckingham Road	1152	288	462	1179	1192	771	132.9	127.7	400.569	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	504	126	1070	507	523	489	5.6	1.8	17.280	C
B - B4034	698	174	309	701	727	1268	1.5	1.1	6.404	A
C - Water Eaton Road	301	75	722	301	306	288	0.9	0.7	8.257	A
D - B4034 Buckingham Road	970	243	390	1169	1180	634	127.7	79.2	282.434	F

Lane Results

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

Lanes: Main Results for each time segment

07:30 - 07:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entry	1	1	B	354	621	0.570	355	356	0.0	1.2	11.663	B
			2	A, C, D	147	623	0.236	147	151	0.0	0.4	7.338	A
		2	1	(A, B, C, D)	500			501	513	0.0	0.1	1.175	A
	Exit	1	1		463			463	458	0.0	0.0	0.000	A
B - B4034	Entry	1	1	C, D	428	947	0.451	423	434	0.0	0.9	7.027	A
			2	A, B	278	978	0.285	278	278	0.0	0.5	5.020	A
	Exit	1	1		1092			1092	1087	0.0	0.0	0.000	A
C - Water Eaton Road	Entry	1	1	D	203	614	0.331	202	201	0.0	0.5	8.602	A
			2	A, B, C	106	609	0.174	105	106	0.0	0.2	7.250	A
		2	1	(A, B, C, D)	309			309	310	0.0	0.0	0.000	A
	Exit	1	1		286			286	288	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entry	1	1	A, B	812	1017	0.797	817	805	0.0	3.7	16.974	C
			2	C, D	163	1024	0.159	163	161	0.0	0.2	4.257	A
	Exit	1	1		650			650	658	0.0	0.0	0.000	A

07:45 - 08:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entry	1	1	B	417	575	0.725	422	425	1.2	1.9	15.663	C
			2	A, C, D	184	579	0.317	182	182	0.4	0.6	8.782	A
		2	1	(A, B, C, D)	599			601	610	0.1	1.1	5.319	A
	Exit	1	1		556			556	552	0.0	0.0	0.000	A
B - B4034	Entry	1	1	C, D	504	929	0.543	506	520	0.9	1.1	8.352	A
			2	A, B	343	953	0.360	343	341	0.5	0.6	5.591	A
	Exit	1	1		1287			1287	1280	0.0	0.0	0.000	A
C - Water Eaton Road	Entry	1	1	D	236	565	0.418	239	241	0.5	0.7	11.014	B
			2	A, B, C	129	559	0.231	129	129	0.2	0.3	8.393	A

		2	1	(A, B, C, D)	365			365	371	0.0	0.0	0.042	A
	Exit	1	1		345			345	343	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entry	1	1	A, B	971	985	0.987	949	938	3.7	14.5	43.251	E
			2	C, D	192	994	0.194	193	191	0.2	0.2	4.460	A
	Exit	1	1		774			774	792	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entry	1	1	B	523	565	0.925	523	509	1.9	3.0	20.628	C
			2	A, C, D	216	568	0.380	215	213	0.6	0.7	10.929	B
		2	1	(A, B, C, D)	751			739	727	1.1	7.4	27.359	D
	Exit	1	1		642			642	644	0.0	0.0	0.000	A
B - B4034	Entry	1	1	C, D	616	903	0.681	616	633	1.1	2.3	12.676	B
			2	A, B	405	929	0.436	406	412	0.6	0.8	7.164	A
	Exit	1	1		1388			1388	1391	0.0	0.0	0.000	A
C - Water Eaton Road	Entry	1	1	D	299	505	0.592	294	295	0.7	1.7	15.859	C
			2	A, B, C	153	502	0.306	153	153	0.3	0.4	9.889	A
		2	1	(A, B, C, D)	453			452	453	0.0	0.0	0.030	A
	Exit	1	1		412			412	415	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entry	1	1	A, B	1204	955	1.263	947	961	14.5	76.1	172.499	F
			2	C, D	234	962	0.243	233	232	0.2	0.3	5.006	A
	Exit	1	1		946			946	958	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entry	1	1	B	516	562	0.918	516	516	3.0	3.3	22.192	C
			2	A, C, D	210	565	0.371	209	215	0.7	0.6	11.260	B
		2	1	(A, B, C, D)	751			725	732	7.4	13.0	51.982	F
	Exit	1	1		649			649	653	0.0	0.0	0.000	A
B - B4034	Entry	1	1	C, D	609	908	0.670	609	634	2.3	1.8	12.370	B
			2	A, B	411	934	0.440	411	417	0.8	0.7	7.082	A
	Exit	1	1		1392			1392	1406	0.0	0.0	0.000	A

C - Water Eaton Road	Entr y	1	1	D	299	509	0.58 9	300	299	1.7	1.4	17.33 7	C
			2	A, B, C	156	506	0.30 8	156	156	0.4	0.4	10.37 5	B
		2	1	(A, B, C, D)	455			455	454	0.0	0.0	0.125	A
	Exit	1	1		406			406	412	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entr y	1	1	A, B	1184	952	1.24 5	957	970	76.1	132. 6	394.7 87	F
			2	C, D	229	961	0.23 8	229	231	0.3	0.3	4.804	A
	Exit	1	1		941			941	967	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entr y	1	1	B	437	568	0.77 0	438	462	3.3	2.1	19.20 5	C
			2	A, C, D	183	571	0.32 1	184	195	0.6	0.6	10.36 4	B
		2	1	(A, B, C, D)	613			620	652	13.0	2.9	29.23 9	D
	Exit	1	1		559			559	561	0.0	0.0	0.000	A
B - B4034	Entr y	1	1	C, D	499	931	0.53 5	499	519	1.8	1.1	8.731	A
			2	A, B	336	953	0.35 2	338	339	0.7	0.4	5.934	A
	Exit	1	1		1331			1331	1371	0.0	0.0	0.000	A
C - Water Eaton Road	Entr y	1	1	D	239	568	0.42 1	241	246	1.4	0.6	11.53 2	B
			2	A, B, C	123	561	0.22 0	124	129	0.4	0.3	8.694	A
		2	1	(A, B, C, D)	363			363	370	0.0	0.0	0.002	A
	Exit	1	1		342			342	351	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entr y	1	1	A, B	962	987	0.97 4	990	1002	132. 6	127. 5	477.8 84	F
			2	C, D	189	999	0.18 9	189	190	0.3	0.2	4.507	A
	Exit	1	1		771			771	799	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entr y	1	1	B	356	574	0.62 1	359	368	2.1	1.2	14.71 9	B
			2	A, C, D	149	575	0.25 8	148	156	0.6	0.3	8.797	A
		2	1	(A, B, C, D)	504			504	519	2.9	0.2	4.549	A
	Exit	1	1		489			489	491	0.0	0.0	0.000	A
B - B4034	Entr y	1	1	C, D	415	950	0.43 8	419	442	1.1	0.7	7.181	A

			2	A, B	282	977	0.289	282	285	0.4	0.4	5.235	A
	Exit	1	1		1268			1268	1290	0.0	0.0	0.000	A
C - Water Eaton Road	Entry	1	1	D	194	616	0.315	194	199	0.6	0.5	8.851	A
			2	A, B, C	108	613	0.176	108	107	0.3	0.2	7.144	A
		2	1	(A, B, C, D)	301			301	305	0.0	0.0	0.000	A
	Exit	1	1		288			288	291	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entry	1	1	A, B	810	1015	0.800	1008	1021	127.5	79.1	357.045	F
			2	C, D	161	1023	0.157	161	159	0.2	0.1	4.106	A
	Exit	1	1		634			634	664	0.0	0.0	0.000	A

2026 Base + CD + D, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A1 - [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.
Last Run	Lane Simulation	B - B4034 - Lane Simulation	Arm B: Queue at end of modelled period is greater than 10 PCU. Delay is likely to have been underestimated.
Warning	Geometry	D - B4034 Buckingham Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J1	Buckingham Road / Sherwood Drive / Water Eaton Road	Standard Roundabout		A, B, C, D	150.89	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
D6	2026 Base + CD + D	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Sherwood Drive		ONE HOUR	✓	710	100.000
B - B4034		ONE HOUR	✓	1482	100.000
C - Water Eaton Road		ONE HOUR	✓	435	100.000
D - B4034 Buckingham Road		ONE HOUR	✓	851	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
From		A - Sherwood Drive	B - B4034	C - Water Eaton Road	D - B4034 Buckingham Road
	A - Sherwood Drive	0	433	124	152
	B - B4034	471	1	16	994
	C - Water Eaton Road	97	64	0	274
	D - B4034 Buckingham Road	101	553	193	3

Proportions

	To				
From		A - Sherwood Drive	B - B4034	C - Water Eaton Road	D - B4034 Buckingham Road
	A - Sherwood Drive	0.00	0.61	0.18	0.21
	B - B4034	0.32	0.00	0.01	0.67
	C - Water Eaton Road	0.22	0.15	0.00	0.63
	D - B4034 Buckingham Road	0.12	0.65	0.23	0.00

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		A - Sherwood Drive	B - B4034	C - Water Eaton Road	D - B4034 Buckingham Road
	A - Sherwood Drive	0	1	0	0
	B - B4034	1	0	0	2
	C - Water Eaton Road	0	0	0	0
	D - B4034 Buckingham Road	0	3	0	0

Average PCU Per Veh

	To				
From		A - Sherwood Drive	B - B4034	C - Water Eaton Road	D - B4034 Buckingham Road
	A - Sherwood Drive	1.000	1.005	1.000	1.000
	B - B4034	1.007	1.000	1.000	1.015
	C - Water Eaton Road	1.000	1.000	1.000	1.000
	D - B4034 Buckingham Road	1.000	1.027	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - Sherwood Drive	16:45-17:00	534	536
	17:00-17:15	638	640
	17:15-17:30	781	784

	17:30-17:45	781	784
	17:45-18:00	638	640
	18:00-18:15	534	536
B - B4034	16:45-17:00	1116	1129
	17:00-17:15	1332	1349
	17:15-17:30	1632	1652
	17:30-17:45	1632	1652
	17:45-18:00	1332	1349
	18:00-18:15	1116	1129
C - Water Eaton Road	16:45-17:00	328	328
	17:00-17:15	391	391
	17:15-17:30	479	479
	17:30-17:45	479	479
	17:45-18:00	391	391
	18:00-18:15	328	328
D - B4034 Buckingham Road	16:45-17:00	641	652
	17:00-17:15	765	778
	17:15-17:30	937	953
	17:30-17:45	937	953
	17:45-18:00	765	778
	18:00-18:15	641	652

Results

Results Summary for whole modelled period

Arm	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - Sherwood Drive	24.20	5.3	C	647	971
B - B4034	314.27	122.5	F	1358	2037
C - Water Eaton Road	63.35	8.5	F	401	601
D - B4034 Buckingham Road	16.89	4.5	C	786	1180

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	536	134	620	534	533	505	0.0	1.4	8.784	A
B - B4034	1113	278	356	1115	1112	798	0.0	4.1	13.470	B
C - Water Eaton Road	332	83	1220	331	324	252	0.0	1.3	12.306	B
D - B4034 Buckingham Road	648	162	476	649	657	1074	0.0	1.3	6.849	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	634	158	738	636	640	606	1.4	1.9	11.262	B
B - B4034	1326	331	421	1314	1299	953	4.1	15.4	32.761	D
C - Water Eaton Road	392	98	1442	390	385	294	1.3	2.4	19.360	C
D - B4034 Buckingham Road	768	192	573	771	779	1260	1.3	1.8	8.680	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	781	195	891	781	769	738	1.9	5.0	20.278	C
B - B4034	1637	409	516	1419	1436	1156	15.4	69.2	116.788	F
C - Water Eaton Road	482	121	1575	468	456	361	2.4	7.3	44.006	E
D - B4034 Buckingham Road	931	233	697	932	935	1345	1.8	4.3	15.030	C

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	773	193	910	775	781	731	5.0	5.3	24.200	C
B - B4034	1633	408	523	1435	1441	1161	69.2	122.1	260.231	F
C - Water Eaton Road	472	118	1588	473	471	370	7.3	8.5	63.352	F
D - B4034 Buckingham Road	948	237	690	950	956	1370	4.3	4.5	16.886	C

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	627	157	738	625	651	607	5.3	2.1	12.942	B
B - B4034	1334	333	425	1360	1376	938	122.1	115.5	314.267	F
C - Water Eaton Road	394	98	1484	399	416	301	8.5	3.2	37.995	E
D - B4034 Buckingham Road	772	193	573	772	792	1310	4.5	2.0	10.101	B

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	532	133	622	532	540	499	2.1	1.3	8.769	A

B - B4034	1103	276	359	1305	1322	795	115.5	68.8	214.24 2	F
C - Water Eaton Road	332	83	1407	333	336	256	3.2	1.6	18.450	C
D - B4034 Buckingham Road	651	163	471	650	657	1269	2.0	1.3	6.822	A

Lane Results

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

Lanes: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entry	1	1	B	327	704	0.465	326	324	0.0	0.9	8.979	A
			2	A, C, D	208	707	0.294	208	209	0.0	0.4	7.232	A
		2	1	(A, B, C, D)	536			535	538	0.0	0.1	0.482	A
	Exit	1	1		505			505	509	0.0	0.0	0.000	A
B - B4034	Entry	1	1	C, D	757	959	0.789	758	754	0.0	3.6	17.026	C
			2	A, B	356	967	0.368	357	358	0.0	0.5	5.922	A
	Exit	1	1		798			798	806	0.0	0.0	0.000	A
C - Water Eaton Road	Entry	1	1	D	212	461	0.461	211	203	0.0	1.0	13.584	B
			2	A, B, C	120	461	0.259	120	121	0.0	0.4	10.159	B
		2	1	(A, B, C, D)	332			332	329	0.0	0.0	0.000	A
	Exit	1	1		252			252	248	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entry	1	1	A, B	500	977	0.512	500	511	0.0	1.1	7.611	A
			2	C, D	148	1000	0.148	149	146	0.0	0.2	4.237	A
	Exit	1	1		1074			1074	1063	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entry	1	1	B	388	671	0.579	389	390	0.9	1.2	11.011	B
			2	A, C, D	245	674	0.364	247	250	0.4	0.5	8.377	A
		2	1	(A, B, C, D)	634			634	642	0.1	0.2	1.281	A
	Exit	1	1		606			606	605	0.0	0.0	0.000	A
B - B4034	Entry	1	1	C, D	901	938	0.960	888	873	3.6	14.6	44.942	E

			2	A, B	425	944	0.450	426	426	0.5	0.8	6.824	A
	Exit	1	1		953			953	959	0.0	0.0	0.000	A
C - Water Eaton Road	Entry	1	1	D	247	389	0.634	244	241	1.0	1.8	22.436	C
			2	A, B, C	145	389	0.372	147	145	0.4	0.6	13.942	B
		2	1	(A, B, C, D)	392			392	389	0.0	0.0	0.073	A
	Exit	1	1		294			294	298	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entry	1	1	A, B	594	946	0.628	597	603	1.1	1.5	9.937	A
			2	C, D	174	966	0.180	174	176	0.2	0.2	4.455	A
	Exit	1	1		1260			1260	1242	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entry	1	1	B	478	627	0.763	478	470	1.2	2.1	14.921	B
			2	A, C, D	303	630	0.482	303	298	0.5	1.0	10.542	B
		2	1	(A, B, C, D)	781			782	774	0.2	2.0	7.001	A
	Exit	1	1		738			738	737	0.0	0.0	0.000	A
B - B4034	Entry	1	1	C, D	1117	905	1.235	899	914	14.6	67.8	167.099	F
			2	A, B	520	913	0.570	520	522	0.8	1.4	9.132	A
	Exit	1	1		1156			1156	1152	0.0	0.0	0.000	A
C - Water Eaton Road	Entry	1	1	D	299	346	0.862	290	281	1.8	4.7	47.089	E
			2	A, B, C	177	346	0.510	177	175	0.6	1.0	21.327	C
		2	1	(A, B, C, D)	482			475	470	0.0	1.6	6.124	A
	Exit	1	1		361			361	359	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entry	1	1	A, B	717	902	0.795	719	722	1.5	4.0	17.996	C
			2	C, D	214	922	0.232	214	213	0.2	0.3	5.075	A
	Exit	1	1		1345			1345	1349	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entry	1	1	B	474	622	0.763	474	478	2.1	2.2	16.161	C
			2	A, C, D	300	624	0.480	301	303	1.0	0.8	10.746	B
		2	1	(A, B, C, D)	773			774	781	2.0	2.2	10.155	B

	Exit	1	1		731			731	741	0.0	0.0	0.000	A
B - B4034	Entr y	1	1	C, D	1118	902	1.240	918	917	67.8	120.9	377.341	F
			2	A, B	515	909	0.567	516	525	1.4	1.3	9.308	A
	Exit	1	1		1161			1161	1176	0.0	0.0	0.000	A
C - Water Eaton Road	Entr y	1	1	D	298	342	0.871	299	295	4.7	4.9	59.437	F
			2	A, B, C	177	342	0.519	174	176	1.0	1.3	24.416	C
		2	1	(A, B, C, D)	472			475	473	1.6	2.3	16.822	C
	Exit	1	1		370			370	365	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entr y	1	1	A, B	726	904	0.804	728	739	4.0	4.2	20.441	C
			2	C, D	222	924	0.240	222	218	0.3	0.3	5.061	A
	Exit	1	1		1370			1370	1367	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entr y	1	1	B	379	670	0.565	378	399	2.2	1.2	11.829	B
			2	A, C, D	247	674	0.367	246	252	0.8	0.7	8.783	A
		2	1	(A, B, C, D)	627			626	646	2.2	0.2	2.392	A
	Exit	1	1		607			607	618	0.0	0.0	0.000	A
B - B4034	Entr y	1	1	C, D	906	935	0.968	933	944	120.9	114.7	459.500	F
			2	A, B	428	944	0.453	427	433	1.3	0.8	7.265	A
	Exit	1	1		938			938	981	0.0	0.0	0.000	A
C - Water Eaton Road	Entr y	1	1	D	250	375	0.668	253	264	4.9	2.2	39.854	E
			2	A, B, C	147	375	0.391	146	152	1.3	0.7	17.351	C
		2	1	(A, B, C, D)	394			397	403	2.3	0.3	7.426	A
	Exit	1	1		301			301	302	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entr y	1	1	A, B	593	944	0.628	593	615	4.2	1.7	11.740	B
			2	C, D	179	966	0.186	178	177	0.3	0.3	4.622	A
	Exit	1	1		1310			1310	1335	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entr y	1	1	B	322	705	0.457	322	329	1.2	0.8	9.050	A

			2	A, C, D	210	707	0.29 7	211	211	0.7	0.3	7.245	A
			2	1 (A, B, C, D)	532			532	537	0.2	0.1	0.438	A
		Exit	1	1	499			499	509	0.0	0.0	0.000	A
B - B4034	Entr y	1	1	C, D	753	959	0.78 5	954	964	114. 7	68.1	341.0 56	F
			2	A, B	350	965	0.36 3	350	358	0.8	0.6	6.100	A
	Exit	1	1		795			795	809	0.0	0.0	0.000	A
C - Water Eaton Road	Entr y	1	1	D	212	400	0.53 0	212	212	2.2	1.2	21.02 4	C
			2	A, B, C	120	400	0.30 0	121	124	0.7	0.4	13.55 4	B
		2	1	(A, B, C, D)	332			332	331	0.3	0.0	0.364	A
	Exit	1	1		256			256	256	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entr y	1	1	A, B	503	979	0.51 4	502	508	1.7	1.1	7.613	A
			2	C, D	148	1002	0.14 7	148	149	0.3	0.1	4.188	A
	Exit	1	1		1269			1269	1280	0.0	0.0	0.000	A

2026 Base + CD + D with TP, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A1 - [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.
Last Run	Lane Simulation	D - B4034 Buckingham Road - Lane Simulation	Arm D: Queue at end of modelled period is greater than 10 PCU. Delay is likely to have been underestimated.
Warning	Geometry	D - B4034 Buckingham Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J1	Buckingham Road / Sherwood Drive / Water Eaton Road	Standard Roundabout		A, B, C, D	156.33	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2026 Base + CD + D with TP	AM	ONE HOUR	07:30	09:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Sherwood Drive		ONE HOUR	✓	674	100.000
B - B4034		ONE HOUR	✓	918	100.000
C - Water Eaton Road		ONE HOUR	✓	403	100.000
D - B4034 Buckingham Road		ONE HOUR	✓	1268	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To				
		A - Sherwood Drive	B - B4034	C - Water Eaton Road	D - B4034 Buckingham Road
	A - Sherwood Drive	0	475	114	84
	B - B4034	369	0	54	494
	C - Water Eaton Road	109	30	0	264
	D - B4034 Buckingham Road	128	930	207	2

Proportions

From	To				
		A - Sherwood Drive	B - B4034	C - Water Eaton Road	D - B4034 Buckingham Road
	A - Sherwood Drive	0.00	0.71	0.17	0.13
	B - B4034	0.40	0.00	0.06	0.54
	C - Water Eaton Road	0.27	0.08	0.00	0.65
	D - B4034 Buckingham Road	0.10	0.73	0.16	0.00

Vehicle Mix

Heavy Vehicle Percentages

From	To				
		A - Sherwood Drive	B - B4034	C - Water Eaton Road	D - B4034 Buckingham Road
	A - Sherwood Drive	0	1	1	0
	B - B4034	1	0	6	4
	C - Water Eaton Road	1	4	0	1
	D - B4034 Buckingham Road	0	2	1	0

Average PCU Per Veh

From	To				
		A - Sherwood Drive	B - B4034	C - Water Eaton Road	D - B4034 Buckingham Road
	A - Sherwood Drive	1.000	1.011	1.009	1.000
	B - B4034	1.012	1.000	1.060	1.038
	C - Water Eaton Road	1.010	1.036	1.000	1.009
	D - B4034 Buckingham Road	1.000	1.018	1.005	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - Sherwood Drive	07:30-07:45	507	512
	07:45-08:00	606	612
	08:00-08:15	742	749
	08:15-08:30	742	749
	08:30-08:45	606	612
	08:45-09:00	507	512
B - B4034	07:30-07:45	691	711
	07:45-08:00	825	849
	08:00-08:15	1011	1039
	08:15-08:30	1011	1039
	08:30-08:45	825	849
	08:45-09:00	691	711
C - Water Eaton Road	07:30-07:45	303	307
	07:45-08:00	362	366
	08:00-08:15	444	448
	08:15-08:30	444	448
	08:30-08:45	362	366
	08:45-09:00	303	307
D - B4034 Buckingham Road	07:30-07:45	954	968
	07:45-08:00	1140	1156
	08:00-08:15	1396	1416
	08:15-08:30	1396	1416
	08:30-08:45	1140	1156
	08:45-09:00	954	968

Results

Results Summary for whole modelled period

Arm	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - Sherwood Drive	73.36	16.4	F	615	922
B - B4034	10.48	3.0	B	841	1261
C - Water Eaton Road	14.55	1.9	B	375	563
D - B4034 Buckingham Road	352.54	117.9	F	1164	1746

Main Results for each time segment

07:30 - 07:45

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

A - Sherwood Drive	510	127	891	503	500	457	0.0	1.9	11.303	B
B - B4034	698	174	315	696	711	1079	0.0	1.2	5.971	A
C - Water Eaton Road	308	77	722	307	310	289	0.0	0.6	8.285	A
D - B4034 Buckingham Road	959	240	388	960	952	641	0.0	3.9	14.135	B

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	602	150	1038	602	603	549	1.9	3.3	19.320	C
B - B4034	824	206	373	820	840	1266	1.2	1.8	7.068	A
C - Water Eaton Road	371	93	855	369	367	339	0.6	1.1	9.632	A
D - B4034 Buckingham Road	1138	285	465	1122	1121	759	3.9	14.3	35.851	E

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	730	183	1106	709	713	660	3.3	13.3	51.094	F
B - B4034	1016	254	439	1019	1038	1377	1.8	3.0	10.155	B
C - Water Eaton Road	457	114	1050	457	448	408	1.1	1.9	14.192	B
D - B4034 Buckingham Road	1388	347	576	1189	1207	930	14.3	64.5	125.356	F

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	751	188	1102	733	735	640	13.3	16.4	73.361	F
B - B4034	1010	253	449	1017	1042	1386	3.0	2.5	10.485	B
C - Water Eaton Road	443	111	1045	445	451	420	1.9	1.8	14.553	B
D - B4034 Buckingham Road	1395	349	560	1182	1202	930	64.5	117.6	286.306	F

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	609	152	1079	618	658	550	16.4	4.8	42.024	E
B - B4034	811	203	367	811	845	1330	2.5	1.6	7.619	A
C - Water Eaton Road	362	90	844	362	368	333	1.8	1.0	10.174	B
D - B4034 Buckingham Road	1140	285	453	1176	1184	754	117.6	110.6	352.544	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	488	122	1061	493	517	487	4.8	1.7	18.079	C
B - B4034	686	172	306	691	716	1248	1.6	0.9	6.117	A
C - Water Eaton Road	309	77	714	309	313	284	1.0	0.6	8.222	A
D - B4034 Buckingham Road	957	239	385	1163	1184	638	110.6	56.8	230.474	F

Lane Results

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

Lanes: Main Results for each time segment

07:30 - 07:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entry	1	1	B	352	621	0.567	348	352	0.0	1.3	11.404	B
			2	A, C, D	155	625	0.248	155	148	0.0	0.3	7.353	A
		2	1	(A, B, C, D)	510			507	506	0.0	0.3	1.070	A
	Exit	1	1		457			457	459	0.0	0.0	0.000	A
B - B4034	Entry	1	1	C, D	417	953	0.438	414	429	0.0	0.8	6.578	A
			2	A, B	281	978	0.287	282	282	0.0	0.4	5.068	A
	Exit	1	1		1079			1079	1074	0.0	0.0	0.000	A
C - Water Eaton Road	Entry	1	1	D	202	617	0.328	201	202	0.0	0.5	8.894	A
			2	A, B, C	106	611	0.174	106	108	0.0	0.1	7.128	A
		2	1	(A, B, C, D)	308			308	312	0.0	0.0	0.000	A
	Exit	1	1		289			289	288	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entry	1	1	A, B	798	1014	0.787	800	792	0.0	3.7	16.152	C
			2	C, D	160	1028	0.156	160	160	0.0	0.2	4.118	A
	Exit	1	1		641			641	651	0.0	0.0	0.000	A

07:45 - 08:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entry	1	1	B	422	582	0.725	422	425	1.3	1.8	15.748	C
			2	A, C, D	182	586	0.311	180	178	0.3	0.5	8.872	A

		2	1	(A, B, C, D)	602			604	606	0.3	1.0	5.559	A
	Exit	1	1		549			549	548	0.0	0.0	0.000	A
B - B4034	Entr y	1	1	C, D	486	933	0.52 2	484	502	0.8	1.2	7.989	A
			2	A, B	338	956	0.35 4	337	338	0.4	0.6	5.735	A
	Exit	1	1		1266			1266	1269	0.0	0.0	0.000	A
C - Water Eaton Road	Entr y	1	1	D	243	572	0.42 4	241	242	0.5	0.8	10.48 5	B
			2	A, B, C	128	569	0.22 5	128	125	0.1	0.3	7.969	A
		2	1	(A, B, C, D)	371			371	369	0.0	0.0	0.000	A
	Exit	1	1		339			339	343	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entr y	1	1	A, B	946	988	0.95 8	929	928	3.7	14.1	42.14 3	E
			2	C, D	192	997	0.19 3	193	193	0.2	0.2	4.522	A
	Exit	1	1		759			759	772	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entr y	1	1	B	503	562	0.89 7	502	506	1.8	3.1	21.17 5	C
			2	A, C, D	207	565	0.36 6	207	208	0.5	0.7	10.86 9	B
		2	1	(A, B, C, D)	730			710	719	1.0	9.5	32.76 3	D
	Exit	1	1		660			660	652	0.0	0.0	0.000	A
B - B4034	Entr y	1	1	C, D	602	907	0.66 3	606	627	1.2	2.1	12.19 3	B
			2	A, B	414	932	0.44 4	413	411	0.6	0.9	7.119	A
	Exit	1	1		1377			1377	1399	0.0	0.0	0.000	A
C - Water Eaton Road	Entr y	1	1	D	295	509	0.58 0	294	289	0.8	1.4	16.24 7	C
			2	A, B, C	162	504	0.32 1	163	159	0.3	0.5	10.10 8	B
		2	1	(A, B, C, D)	457			457	451	0.0	0.0	0.098	A
	Exit	1	1		408			408	412	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entr y	1	1	A, B	1157	948	1.21 9	958	975	14.1	64.1	149.3 62	F
			2	C, D	231	959	0.24 1	231	232	0.2	0.3	5.077	A
	Exit	1	1		930			930	944	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service

A - Sherwood Drive	Entr y	1	1	B	521	565	0.92 2	518	522	3.1	3.4	22.82 2	C
			2	A, C, D	214	567	0.37 7	215	213	0.7	0.7	11.24 8	B
	Exit	1	1	(A, B, C, D)	751			735	736	9.5	12.3	53.89 8	F
			1		640			640	649	0.0	0.0	0.000	A
B - B4034	Entr y	1	1	C, D	605	903	0.66 9	611	633	2.1	1.8	12.82 1	B
			2	A, B	405	930	0.43 6	406	409	0.9	0.8	6.969	A
	Exit	1	1		1386			1386	1409	0.0	0.0	0.000	A
C - Water Eaton Road	Entr y	1	1	D	289	508	0.56 8	291	294	1.4	1.2	16.36 3	C
			2	A, B, C	154	507	0.30 4	154	157	0.5	0.5	11.17 6	B
	Exit	1	1	(A, B, C, D)	443			443	450	0.0	0.0	0.002	A
			1		420			420	418	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entr y	1	1	A, B	1161	956	1.21 7	948	970	64.1	117. 3	342.1 11	F
			2	C, D	234	964	0.24 3	234	232	0.3	0.4	4.760	A
	Exit	1	1		930			930	954	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entr y	1	1	B	439	571	0.76 8	438	467	3.4	2.2	18.61 7	C
			2	A, C, D	179	573	0.31 3	180	191	0.7	0.4	10.34 5	B
	Exit	1	1	(A, B, C, D)	609			618	652	12.3	2.2	26.16 4	D
			1		550			550	552	0.0	0.0	0.000	A
B - B4034	Entr y	1	1	C, D	485	931	0.52 2	484	513	1.8	1.2	8.785	A
			2	A, B	326	961	0.33 9	327	332	0.8	0.4	5.869	A
	Exit	1	1		1330			1330	1372	0.0	0.0	0.000	A
C - Water Eaton Road	Entr y	1	1	D	237	576	0.41 1	236	239	1.2	0.8	11.12 2	B
			2	A, B, C	125	576	0.21 8	126	129	0.5	0.3	8.405	A
	Exit	1	1	(A, B, C, D)	362			362	365	0.0	0.0	0.002	A
			1		333			333	349	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entr y	1	1	A, B	952	995	0.96 0	989	995	117. 3	110. 3	420.9 40	F
			2	C, D	188	1001	0.18 8	187	188	0.4	0.3	4.494	A
	Exit	1	1		754			754	784	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entry	1	1	B	350	576	0.608	350	367	2.2	1.3	14.677	B
			2	A, C, D	141	578	0.244	143	149	0.4	0.3	8.827	A
		2	1	(A, B, C, D)	488			491	512	2.2	0.2	5.241	A
	Exit	1	1		487			487	490	0.0	0.0	0.000	A
B - B4034	Entry	1	1	C, D	408	950	0.429	412	433	1.2	0.7	6.733	A
			2	A, B	278	980	0.283	279	282	0.4	0.3	5.200	A
	Exit	1	1		1248			1248	1292	0.0	0.0	0.000	A
C - Water Eaton Road	Entry	1	1	D	204	620	0.329	203	203	0.8	0.5	8.706	A
			2	A, B, C	105	612	0.172	106	110	0.3	0.1	7.319	A
		2	1	(A, B, C, D)	309			309	311	0.0	0.0	0.000	A
	Exit	1	1		284			284	289	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entry	1	1	A, B	794	1017	0.782	999	1023	110.3	56.6	287.965	F
			2	C, D	163	1028	0.159	163	161	0.3	0.2	4.127	A
	Exit	1	1		638			638	659	0.0	0.0	0.000	A

2026 Base + CD + D with TP, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A1 - [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.
Last Run	Lane Simulation	B - B4034 - Lane Simulation	Arm B: Queue at end of modelled period is greater than 10 PCU. Delay is likely to have been underestimated.
Warning	Geometry	D - B4034 Buckingham Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J1	Buckingham Road / Sherwood Drive / Water Eaton Road	Standard Roundabout		A, B, C, D	134.04	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2026 Base + CD + D with TP	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Sherwood Drive		ONE HOUR	✓	705	100.000
B - B4034		ONE HOUR	✓	1465	100.000
C - Water Eaton Road		ONE HOUR	✓	434	100.000
D - B4034 Buckingham Road		ONE HOUR	✓	837	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
From		A - Sherwood Drive	B - B4034	C - Water Eaton Road	D - B4034 Buckingham Road
	A - Sherwood Drive	0	433	124	148
	B - B4034	471	1	16	977
	C - Water Eaton Road	97	64	0	273
	D - B4034 Buckingham Road	98	544	191	3

Proportions

	To				
From		A - Sherwood Drive	B - B4034	C - Water Eaton Road	D - B4034 Buckingham Road
	A - Sherwood Drive	0.00	0.61	0.18	0.21
	B - B4034	0.32	0.00	0.01	0.67
	C - Water Eaton Road	0.22	0.15	0.00	0.63
	D - B4034 Buckingham Road	0.12	0.65	0.23	0.00

Vehicle Mix

Heavy Vehicle Percentages

From	To				
		A - Sherwood Drive	B - B4034	C - Water Eaton Road	D - B4034 Buckingham Road
	A - Sherwood Drive	0	1	0	0
	B - B4034	1	0	0	2
	C - Water Eaton Road	0	0	0	0
	D - B4034 Buckingham Road	0	3	0	0

Average PCU Per Veh

From	To				
		A - Sherwood Drive	B - B4034	C - Water Eaton Road	D - B4034 Buckingham Road
	A - Sherwood Drive	1.000	1.005	1.000	1.000
	B - B4034	1.007	1.000	1.000	1.015
	C - Water Eaton Road	1.000	1.000	1.000	1.000
	D - B4034 Buckingham Road	1.000	1.027	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - Sherwood Drive	16:45-17:00	531	532
	17:00-17:15	634	636
	17:15-17:30	776	779
	17:30-17:45	776	779
	17:45-18:00	634	636
	18:00-18:15	531	532
B - B4034	16:45-17:00	1103	1116
	17:00-17:15	1317	1333
	17:15-17:30	1613	1633
	17:30-17:45	1613	1633
	17:45-18:00	1317	1333
	18:00-18:15	1103	1116
C - Water Eaton Road	16:45-17:00	327	327
	17:00-17:15	390	390
	17:15-17:30	478	478
	17:30-17:45	478	478
	17:45-18:00	390	390
	18:00-18:15	327	327
D - B4034 Buckingham Road	16:45-17:00	630	641
	17:00-17:15	752	765
	17:15-17:30	921	937
	17:30-17:45	921	937
	17:45-18:00	752	765
	18:00-18:15	630	641

Results

Results Summary for whole modelled period

Arm	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - Sherwood Drive	23.13	4.9	C	643	965
B - B4034	274.84	109.1	F	1348	2021
C - Water Eaton Road	64.52	8.9	F	399	599
D - B4034 Buckingham Road	15.47	4.3	C	769	1154

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	524	131	605	524	529	511	0.0	1.3	8.882	A
B - B4034	1107	277	348	1106	1093	780	0.0	4.2	13.349	B
C - Water Eaton Road	338	84	1205	335	328	249	0.0	1.3	12.453	B
D - B4034 Buckingham Road	630	157	486	630	637	1054	0.0	1.0	6.370	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	633	158	717	633	632	602	1.3	2.0	11.233	B
B - B4034	1331	333	424	1318	1301	926	4.2	14.1	30.925	D
C - Water Eaton Road	389	97	1439	384	390	304	1.3	2.4	19.165	C
D - B4034 Buckingham Road	752	188	567	751	757	1256	1.0	2.0	8.631	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	779	195	879	768	763	731	2.0	4.9	19.364	C
B - B4034	1622	405	514	1422	1437	1134	14.1	62.4	104.539	F
C - Water Eaton Road	472	118	1575	467	456	361	2.4	7.4	46.646	E
D - B4034 Buckingham Road	916	229	697	913	926	1345	2.0	3.8	14.604	B

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	772	193	877	771	776	728	4.9	4.6	23.132	C
B - B4034	1609	402	505	1429	1452	1143	62.4	109.0	230.262	F
C - Water Eaton Road	480	120	1575	474	468	359	7.4	8.9	64.521	F
D - B4034 Buckingham Road	920	230	692	913	933	1357	3.8	4.3	15.473	C

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	623	156	735	620	644	601	4.6	2.1	13.627	B
B - B4034	1314	328	419	1339	1373	937	109.0	100.2	274.845	F
C - Water Eaton Road	389	97	1458	397	419	300	8.9	2.6	35.840	E
D - B4034 Buckingham Road	766	192	569	768	778	1286	4.3	1.9	9.809	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	527	132	607	527	538	496	2.1	1.3	8.931	A
B - B4034	1103	276	353	1274	1313	781	100.2	53.5	177.256	F
C - Water Eaton Road	327	82	1373	327	333	254	2.6	1.7	17.808	C
D - B4034 Buckingham Road	630	158	475	629	646	1225	1.9	1.2	6.696	A

Lane Results

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

Lanes: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entry	1	1	B	324	708	0.458	324	324	0.0	0.8	9.159	A
			2	A, C, D	199	712	0.280	200	204	0.0	0.3	7.148	A
		2	1	(A, B, C, D)	524			523	533	0.0	0.1	0.491	A
	Exit	1	1		511			511	503	0.0	0.0	0.000	A
B - B4034	Entry	1	1	C, D	746	962	0.776	744	738	0.0	3.6	16.936	C

			2	A, B	361	971	0.371	361	355	0.0	0.6	5.871	A
	Exit	1	1		780			780	790	0.0	0.0	0.000	A
C - Water Eaton Road	Entry	1	1	D	213	466	0.457	210	205	0.0	0.9	13.823	B
			2	A, B, C	125	466	0.267	124	123	0.0	0.4	10.161	B
		2	1	(A, B, C, D)	338			338	334	0.0	0.0	0.001	A
	Exit	1	1		249			249	250	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entry	1	1	A, B	482	976	0.494	482	491	0.0	0.9	7.042	A
			2	C, D	148	997	0.148	149	147	0.0	0.1	4.162	A
	Exit	1	1		1054			1054	1044	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entry	1	1	B	387	677	0.572	387	388	0.8	1.1	10.685	B
			2	A, C, D	246	680	0.362	246	243	0.3	0.7	8.305	A
		2	1	(A, B, C, D)	633			633	634	0.1	0.3	1.467	A
	Exit	1	1		602			602	601	0.0	0.0	0.000	A
B - B4034	Entry	1	1	C, D	907	937	0.968	893	875	3.6	13.3	42.310	E
			2	A, B	424	940	0.451	425	426	0.6	0.8	6.721	A
	Exit	1	1		926			926	941	0.0	0.0	0.000	A
C - Water Eaton Road	Entry	1	1	D	247	390	0.634	243	245	0.9	1.8	22.418	C
			2	A, B, C	142	390	0.365	142	145	0.4	0.6	13.458	B
		2	1	(A, B, C, D)	389			389	394	0.0	0.0	0.065	A
	Exit	1	1		304			304	298	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entry	1	1	A, B	573	946	0.607	574	582	0.9	1.7	9.824	A
			2	C, D	178	967	0.184	178	175	0.1	0.3	4.737	A
	Exit	1	1		1256			1256	1239	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entry	1	1	B	469	630	0.744	467	467	1.1	2.1	14.861	B
			2	A, C, D	303	633	0.479	301	296	0.7	0.9	10.595	B
		2	1	(A, B, C, D)	779			772	768	0.3	1.9	6.098	A

	Exit	1	1		731			731	731	0.0	0.0	0.000	A
B - B4034	Entr y	1	1	C, D	1097	906	1.214	902	917	13.3	60.6	149.693	F
			2	A, B	524	913	0.574	520	520	0.8	1.7	9.537	A
	Exit	1	1		1134			1134	1143	0.0	0.0	0.000	A
C - Water Eaton Road	Entr y	1	1	D	293	346	0.847	291	282	1.8	4.6	47.720	E
			2	A, B, C	176	346	0.509	176	174	0.6	1.1	21.876	C
		2	1	(A, B, C, D)	472			469	470	0.0	1.6	8.037	A
	Exit	1	1		361			361	361	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entr y	1	1	A, B	703	901	0.781	701	713	1.7	3.5	17.495	C
			2	C, D	213	922	0.231	212	213	0.3	0.3	5.043	A
	Exit	1	1		1345			1345	1347	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entr y	1	1	B	478	630	0.760	479	484	2.1	2.0	15.870	C
			2	A, C, D	295	633	0.466	291	292	0.9	1.0	10.723	B
		2	1	(A, B, C, D)	772			774	777	1.9	1.5	9.227	A
	Exit	1	1		728			728	740	0.0	0.0	0.000	A
B - B4034	Entr y	1	1	C, D	1090	909	1.199	913	921	60.6	107.6	336.270	F
			2	A, B	519	913	0.568	516	531	1.7	1.4	9.137	A
	Exit	1	1		1143			1143	1166	0.0	0.0	0.000	A
C - Water Eaton Road	Entr y	1	1	D	303	345	0.879	298	295	4.6	5.4	60.955	F
			2	A, B, C	174	345	0.503	176	173	1.1	1.1	24.742	C
		2	1	(A, B, C, D)	480			477	471	1.6	2.4	16.806	C
	Exit	1	1		359			359	360	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entr y	1	1	A, B	707	901	0.785	700	718	3.5	3.9	18.635	C
			2	C, D	214	923	0.231	214	215	0.3	0.3	5.142	A
	Exit	1	1		1357			1357	1363	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entr y	1	1	B	381	670	0.568	379	396	2.0	1.3	11.923	B

			2	A, C, D	242	675	0.358	241	248	1.0	0.6	8.727	A
			2	1	(A, B, C, D)	623		622	639	1.5	0.3	2.999	A
		Exit	1	1		601		601	616	0.0	0.0	0.000	A
B - B4034	Entr y	1	1	C, D	892	938	0.949	917	939	107.6	99.4	403.351	F
			2	A, B	422	947	0.446	422	434	1.4	0.8	7.055	A
	Exit	1	1		937			937	968	0.0	0.0	0.000	A
C - Water Eaton Road	Entr y	1	1	D	245	384	0.638	250	266	5.4	1.8	39.023	E
			2	A, B, C	148	384	0.386	147	153	1.1	0.7	17.335	C
		2	1	(A, B, C, D)	389			393	403	2.4	0.1	5.961	A
	Exit	1	1		300			300	303	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entr y	1	1	A, B	589	947	0.622	590	601	3.9	1.7	11.361	B
			2	C, D	177	967	0.183	177	177	0.3	0.2	4.721	A
	Exit	1	1		1286			1286	1327	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entr y	1	1	B	321	707	0.454	320	333	1.3	0.9	9.190	A
			2	A, C, D	206	711	0.290	206	205	0.6	0.4	7.302	A
		2	1	(A, B, C, D)	527			527	536	0.3	0.1	0.489	A
	Exit	1	1		496			496	508	0.0	0.0	0.000	A
B - B4034	Entr y	1	1	C, D	749	960	0.781	921	952	99.4	53.0	275.272	F
			2	A, B	353	968	0.365	353	361	0.8	0.5	5.931	A
	Exit	1	1		781			781	806	0.0	0.0	0.000	A
C - Water Eaton Road	Entr y	1	1	D	205	411	0.499	205	209	1.8	1.2	20.289	C
			2	A, B, C	122	411	0.296	122	124	0.7	0.5	13.344	B
		2	1	(A, B, C, D)	327			327	330	0.1	0.0	0.206	A
	Exit	1	1		254			254	256	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entr y	1	1	A, B	484	978	0.495	482	497	1.7	1.1	7.440	A
			2	C, D	146	1001	0.146	147	149	0.2	0.1	4.283	A
	Exit	1	1		1225			1225	1260	0.0	0.0	0.000	A

2026 Base + CD + D - ST, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A1 - [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.
Last Run	Lane Simulation	D - B4034 Buckingham Road - Lane Simulation	Arm D: Queue at end of modelled period is greater than 10 PCU. Delay is likely to have been underestimated.
Warning	Geometry	D - B4034 Buckingham Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J1	Buckingham Road / Sherwood Drive / Water Eaton Road	Standard Roundabout		A, B, C, D	238.63	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
D9	2026 Base + CD + D - ST	AM	ONE HOUR	07:30	09:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Sherwood Drive		ONE HOUR	✓	683	100.000
B - B4034		ONE HOUR	✓	942	100.000
C - Water Eaton Road		ONE HOUR	✓	408	100.000
D - B4034 Buckingham Road		ONE HOUR	✓	1349	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		A - Sherwood Drive	B - B4034	C - Water Eaton Road	D - B4034 Buckingham Road
From	A - Sherwood Drive	0	475	114	93
	B - B4034	369	0	54	519
	C - Water Eaton Road	109	30	0	269
	D - B4034 Buckingham Road	144	990	213	2

Proportions

	To				
		A - Sherwood Drive	B - B4034	C - Water Eaton Road	D - B4034 Buckingham Road
From	A - Sherwood Drive	0.00	0.70	0.17	0.14
	B - B4034	0.39	0.00	0.06	0.55
	C - Water Eaton Road	0.27	0.07	0.00	0.66
	D - B4034 Buckingham Road	0.11	0.73	0.16	0.00

Vehicle Mix

Heavy Vehicle Percentages

	To				
		A - Sherwood Drive	B - B4034	C - Water Eaton Road	D - B4034 Buckingham Road
From	A - Sherwood Drive	0	1	1	0
	B - B4034	1	0	6	4
	C - Water Eaton Road	1	4	0	1
	D - B4034 Buckingham Road	0	2	1	0

Average PCU Per Veh

	To				
		A - Sherwood Drive	B - B4034	C - Water Eaton Road	D - B4034 Buckingham Road
From	A - Sherwood Drive	1.000	1.011	1.009	1.000
	B - B4034	1.012	1.000	1.060	1.038
	C - Water Eaton Road	1.010	1.036	1.000	1.009
	D - B4034 Buckingham Road	1.000	1.018	1.005	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - Sherwood Drive	07:30-07:45	514	519
	07:45-08:00	614	620
	08:00-08:15	752	759
	08:15-08:30	752	759
	08:30-08:45	614	620
	08:45-09:00	514	519
B - B4034	07:30-07:45	709	730
	07:45-08:00	847	871
	08:00-08:15	1037	1067
	08:15-08:30	1037	1067
	08:30-08:45	847	871
	08:45-09:00	709	730

C - Water Eaton Road	07:30-07:45	307	311
	07:45-08:00	367	371
	08:00-08:15	449	454
	08:15-08:30	449	454
	08:30-08:45	367	371
	08:45-09:00	307	311
D - B4034 Buckingham Road	07:30-07:45	1016	1030
	07:45-08:00	1213	1230
	08:00-08:15	1485	1506
	08:15-08:30	1485	1506
	08:30-08:45	1213	1230
	08:45-09:00	1016	1030

Results

Results Summary for whole modelled period

Arm	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - Sherwood Drive	71.35	16.6	F	625	938
B - B4034	11.24	3.2	B	861	1292
C - Water Eaton Road	15.95	2.0	C	376	564
D - B4034 Buckingham Road	550.20	183.6	F	1240	1860

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	511	128	932	509	511	469	0.0	2.0	11.635	B
B - B4034	694	174	314	693	719	1127	0.0	1.3	6.222	A
C - Water Eaton Road	313	78	727	313	308	280	0.0	0.8	8.083	A
D - B4034 Buckingham Road	1017	254	388	1013	1008	652	0.0	5.9	17.680	C

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	613	153	1059	616	620	549	2.0	3.5	20.356	C
B - B4034	843	211	381	843	862	1294	1.3	1.8	7.400	A
C - Water Eaton Road	377	94	884	376	373	339	0.8	1.1	9.973	A

D - B4034 Buckingham Road	1225	306	453	1155	1165	807	5.9	24.0	52.757	F

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	752	188	1090	741	724	644	3.5	12.5	48.172	E
B - B4034	1044	261	458	1047	1067	1374	1.8	3.2	11.236	B
C - Water Eaton Road	449	112	1089	453	447	416	1.1	1.8	15.196	C
D - B4034 Buckingham Road	1483	371	558	1176	1214	984	24.0	98.2	194.747	F

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	761	190	1078	737	741	645	12.5	16.5	71.347	F
B - B4034	1029	257	455	1026	1065	1360	3.2	2.9	10.839	B
C - Water Eaton Road	446	112	1069	446	444	413	1.8	2.0	15.950	C
D - B4034 Buckingham Road	1493	373	561	1161	1195	953	98.2	173.4	429.639	F

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	606	152	1077	620	663	545	16.5	5.4	42.794	E
B - B4034	839	210	372	834	869	1325	2.9	2.0	8.027	A
C - Water Eaton Road	368	92	867	369	373	338	2.0	1.0	10.737	B
D - B4034 Buckingham Road	1198	300	448	1174	1193	789	173.4	183.2	550.200	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	508	127	1085	511	529	493	5.4	2.2	17.665	C
B - B4034	718	179	313	716	738	1282	2.0	1.3	6.572	A
C - Water Eaton Road	304	76	749	304	307	280	1.0	0.7	8.390	A
D - B4034 Buckingham Road	1024	256	389	1189	1193	663	183.2	144.1	402.696	F

Lane Results

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

Lanes: Main Results for each time segment

07:30 - 07:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entry	1	1	B	359	610	0.589	356	354	0.0	1.3	11.432	B
			2	A, C, D	151	616	0.245	152	158	0.0	0.4	7.868	A
		2	1	(A, B, C, D)	511			510	518	0.0	0.3	1.290	A
	Exit	1	1		469			469	473	0.0	0.0	0.000	A
B - B4034	Entry	1	1	C, D	417	949	0.439	414	437	0.0	1.0	6.931	A
			2	A, B	278	977	0.284	279	283	0.0	0.4	5.154	A
	Exit	1	1		1127			1127	1121	0.0	0.0	0.000	A
C - Water Eaton Road	Entry	1	1	D	203	614	0.331	204	201	0.0	0.5	8.615	A
			2	A, B, C	110	613	0.179	109	107	0.0	0.2	7.079	A
		2	1	(A, B, C, D)	313			313	311	0.0	0.0	0.000	A
	Exit	1	1		280			280	284	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entry	1	1	A, B	856	1014	0.845	851	850	0.0	5.8	20.148	C
			2	C, D	160	1026	0.156	162	158	0.0	0.1	4.177	A
	Exit	1	1		652			652	669	0.0	0.0	0.000	A

07:45 - 08:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entry	1	1	B	423	576	0.736	427	433	1.3	1.8	16.295	C
			2	A, C, D	192	579	0.331	189	187	0.4	0.7	9.468	A
		2	1	(A, B, C, D)	613			615	623	0.3	1.1	6.069	A
	Exit	1	1		549			549	550	0.0	0.0	0.000	A
B - B4034	Entry	1	1	C, D	514	927	0.554	515	532	1.0	1.3	8.493	A
			2	A, B	329	950	0.347	327	330	0.4	0.5	5.683	A
	Exit	1	1		1294			1294	1312	0.0	0.0	0.000	A
C - Water Eaton Road	Entry	1	1	D	251	560	0.448	250	246	0.5	0.8	10.918	B
			2	A, B, C	126	557	0.226	126	127	0.2	0.3	8.124	A
		2	1	(A, B, C, D)	377			377	374	0.0	0.0	0.001	A
	Exit	1	1		339			339	345	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entry	1	1	A, B	1033	993	1.040	963	972	5.8	23.7	61.825	F
			2	C, D	192	1003	0.192	192	194	0.1	0.3	4.574	A
	Exit	1	1		807			807	813	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entry	1	1	B	520	566	0.919	519	501	1.8	3.2	20.822	C
			2	A, C, D	223	568	0.392	223	223	0.7	0.6	11.381	B
		2	1	(A, B, C, D)	752			743	730	1.1	8.7	30.112	D
	Exit	1	1		644			644	654	0.0	0.0	0.000	A
B - B4034	Entry	1	1	C, D	635	901	0.705	642	656	1.3	2.2	13.940	B
			2	A, B	409	926	0.442	404	411	0.5	1.0	7.031	A
	Exit	1	1		1374			1374	1388	0.0	0.0	0.000	A
C - Water Eaton Road	Entry	1	1	D	297	494	0.600	300	290	0.8	1.5	17.623	C
			2	A, B, C	152	489	0.311	154	156	0.3	0.3	10.441	B
		2	1	(A, B, C, D)	449			449	450	0.0	0.0	0.055	A
	Exit	1	1		416			416	423	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entry	1	1	A, B	1249	951	1.310	941	973	23.7	97.9	231.037	F
			2	C, D	234	965	0.243	235	241	0.3	0.3	4.903	A
	Exit	1	1		984			984	988	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entry	1	1	B	516	568	0.909	514	520	3.2	3.2	22.229	C
			2	A, C, D	223	573	0.389	223	222	0.6	0.7	11.156	B
		2	1	(A, B, C, D)	761			739	742	8.7	12.6	52.440	F
	Exit	1	1		645			645	649	0.0	0.0	0.000	A
B - B4034	Entry	1	1	C, D	625	903	0.692	621	654	2.2	2.3	13.517	B
			2	A, B	404	927	0.436	405	411	1.0	0.7	6.680	A
	Exit	1	1		1360			1360	1394	0.0	0.0	0.000	A
C - Water Eaton Road	Entry	1	1	D	291	503	0.579	289	292	1.5	1.5	18.270	C
			2	A, B, C	156	499	0.312	157	152	0.3	0.4	10.832	B
		2	1	(A, B, C, D)	446			446	444	0.0	0.0	0.214	A
	Exit	1	1		413			413	419	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entry	1	1	A, B	1259	953	1.322	929	960	97.9	173.0	509.495	F
			2	C, D	234	963	0.243	233	235	0.3	0.4	4.959	A

	Exit	1	1		953			953	984	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entry	1	1	B	430	569	0.755	431	464	3.2	2.2	19.247	C
			2	A, C, D	189	572	0.331	189	200	0.7	0.7	10.279	B
		2	1	(A, B, C, D)	606			619	659	12.6	2.5	26.529	D
	Exit	1	1		545			545	555	0.0	0.0	0.000	A
B - B4034	Entry	1	1	C, D	517	932	0.556	513	538	2.3	1.3	9.365	A
			2	A, B	322	958	0.336	321	331	0.7	0.7	5.926	A
	Exit	1	1		1325			1325	1368	0.0	0.0	0.000	A
C - Water Eaton Road	Entry	1	1	D	240	570	0.422	242	245	1.5	0.6	11.803	B
			2	A, B, C	128	565	0.226	127	129	0.4	0.3	8.434	A
		2	1	(A, B, C, D)	368			368	370	0.0	0.0	0.106	A
	Exit	1	1		338			338	354	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entry	1	1	A, B	1015	990	1.022	991	1001	173.0	183.0	652.161	F
			2	C, D	183	1005	0.182	183	193	0.4	0.3	4.525	A
	Exit	1	1		789			789	821	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entry	1	1	B	358	568	0.630	358	370	2.2	1.5	15.020	C
			2	A, C, D	152	572	0.266	153	158	0.7	0.3	8.808	A
		2	1	(A, B, C, D)	508			510	524	2.5	0.4	4.706	A
	Exit	1	1		493			493	495	0.0	0.0	0.000	A
B - B4034	Entry	1	1	C, D	434	956	0.454	432	453	1.3	0.9	7.425	A
			2	A, B	284	979	0.290	284	285	0.7	0.4	5.252	A
	Exit	1	1		1282			1282	1296	0.0	0.0	0.000	A
C - Water Eaton Road	Entry	1	1	D	197	608	0.324	198	200	0.6	0.4	8.925	A
			2	A, B, C	106	601	0.177	105	107	0.3	0.3	7.381	A
		2	1	(A, B, C, D)	304			304	306	0.0	0.0	0.000	A
	Exit	1	1		280			280	290	0.0	0.0	0.000	A

D - B4034 Buckingham Road	Entr y	1	1	A, B	863	1016	0.85 2	1028	1029	183. 0	143. 9	549.1 95	F
			2	C, D	161	1027	0.15 6	161	164	0.3	0.2	4.149	A
	Exit	1	1		663			663	686	0.0	0.0	0.000	A

2026 Base + CD + D - ST, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A1 - [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.
Last Run	Lane Simulation	B - B4034 - Lane Simulation	Arm B: Queue at end of modelled period is greater than 10 PCU. Delay is likely to have been underestimated.
Warning	Geometry	D - B4034 Buckingham Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J1	Buckingham Road / Sherwood Drive / Water Eaton Road	Standard Roundabout		A, B, C, D	189.24	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2026 Base + CD + D - ST	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Sherwood Drive		ONE HOUR	✓	718	100.000
B - B4034		ONE HOUR	✓	1520	100.000
C - Water Eaton Road		ONE HOUR	✓	437	100.000
D - B4034 Buckingham Road		ONE HOUR	✓	875	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
From		A - Sherwood Drive	B - B4034	C - Water Eaton Road	D - B4034 Buckingham Road
	A - Sherwood Drive	0	433	124	161
	B - B4034	471	1	16	1032
	C - Water Eaton Road	97	64	0	276
	D - B4034 Buckingham Road	106	572	194	3

Proportions

	To				
From		A - Sherwood Drive	B - B4034	C - Water Eaton Road	D - B4034 Buckingham Road
	A - Sherwood Drive	0.00	0.60	0.17	0.22
	B - B4034	0.31	0.00	0.01	0.68
	C - Water Eaton Road	0.22	0.15	0.00	0.63
	D - B4034 Buckingham Road	0.12	0.65	0.22	0.00

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		A - Sherwood Drive	B - B4034	C - Water Eaton Road	D - B4034 Buckingham Road
	A - Sherwood Drive	0	1	0	0
	B - B4034	1	0	0	2
	C - Water Eaton Road	0	0	0	0
	D - B4034 Buckingham Road	0	3	0	0

Average PCU Per Veh

	To				
From		A - Sherwood Drive	B - B4034	C - Water Eaton Road	D - B4034 Buckingham Road
	A - Sherwood Drive	1.000	1.005	1.000	1.000
	B - B4034	1.007	1.000	1.000	1.015
	C - Water Eaton Road	1.000	1.000	1.000	1.000
	D - B4034 Buckingham Road	1.000	1.027	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - Sherwood Drive	16:45-17:00	541	542
	17:00-17:15	645	647
	17:15-17:30	790	793
	17:30-17:45	790	793
	17:45-18:00	645	647
	18:00-18:15	541	542
B - B4034	16:45-17:00	1144	1158
	17:00-17:15	1366	1383
	17:15-17:30	1673	1694
	17:30-17:45	1673	1694
	17:45-18:00	1366	1383

	18:00-18:15	1144	1158
C - Water Eaton Road	16:45-17:00	329	329
	17:00-17:15	393	393
	17:15-17:30	482	482
	17:30-17:45	482	482
	17:45-18:00	393	393
	18:00-18:15	329	329
D - B4034 Buckingham Road	16:45-17:00	659	670
	17:00-17:15	787	800
	17:15-17:30	963	980
	17:30-17:45	963	980
	17:45-18:00	787	800
	18:00-18:15	659	670

Results

Results Summary for whole modelled period

Arm	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - Sherwood Drive	25.54	5.2	D	660	990
B - B4034	397.35	149.7	F	1399	2099
C - Water Eaton Road	69.45	10.1	F	402	603
D - B4034 Buckingham Road	19.27	5.0	C	800	1200

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	535	134	632	536	532	511	0.0	1.2	8.529	A
B - B4034	1145	286	362	1141	1136	806	0.0	5.2	15.519	C
C - Water Eaton Road	340	85	1253	338	329	250	0.0	1.2	13.222	B
D - B4034 Buckingham Road	665	166	480	663	673	1110	0.0	1.4	6.951	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	647	162	740	648	647	606	1.2	2.3	11.888	B
B - B4034	1355	339	433	1308	1315	954	5.2	19.7	38.718	E

C - Water Eaton Road	399	100	1444	398	390	297	1.2	2.8	20.747	C
D - B4034 Buckingham Road	782	196	567	779	791	1274	1.4	2.2	8.968	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	779	195	935	778	783	754	2.3	4.9	20.463	C
B - B4034	1677	419	533	1436	1435	1180	19.7	81.4	141.864	F
C - Water Eaton Road	486	121	1596	457	457	373	2.8	8.6	47.003	E
D - B4034 Buckingham Road	978	245	701	989	977	1353	2.2	4.7	17.713	C

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	801	200	920	808	796	737	4.9	5.2	25.537	D
B - B4034	1678	420	539	1421	1436	1189	81.4	147.5	317.428	F
C - Water Eaton Road	482	120	1590	468	478	370	8.6	10.1	69.454	F
D - B4034 Buckingham Road	962	240	689	968	979	1369	4.7	4.9	19.273	C

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	656	164	730	660	666	615	5.2	2.0	13.239	B
B - B4034	1385	346	447	1364	1372	943	147.5	149.3	397.355	F
C - Water Eaton Road	384	96	1504	395	421	306	10.1	2.8	40.289	E
D - B4034 Buckingham Road	764	191	582	763	794	1317	4.9	2.1	10.012	B

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	541	135	623	537	544	508	2.0	1.6	8.919	A
B - B4034	1155	289	364	1304	1320	795	149.3	111.4	274.930	F
C - Water Eaton Road	323	81	1411	326	331	257	2.8	1.5	18.350	C
D - B4034 Buckingham Road	648	162	481	650	670	1255	2.1	1.2	7.082	A

Lane Results

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

Lanes: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entry	1	1	B	322	701	0.459	323	318	0.0	0.8	8.881	A
			2	A, C, D	213	704	0.303	214	214	0.0	0.4	7.145	A
		2	1	(A, B, C, D)	535			535	537	0.0	0.1	0.348	A
	Exit	1	1		511			511	509	0.0	0.0	0.000	A
B - B4034	Entry	1	1	C, D	793	956	0.830	789	782	0.0	4.6	19.847	C
			2	A, B	352	965	0.364	352	354	0.0	0.6	5.884	A
	Exit	1	1		806			806	808	0.0	0.0	0.000	A
C - Water Eaton Road	Entry	1	1	D	210	450	0.466	210	207	0.0	0.8	14.528	B
			2	A, B, C	130	450	0.288	128	122	0.0	0.5	11.005	B
		2	1	(A, B, C, D)	340			340	334	0.0	0.0	0.001	A
	Exit	1	1		250			250	253	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entry	1	1	A, B	517	979	0.528	515	523	0.0	1.2	7.761	A
			2	C, D	148	999	0.148	148	150	0.0	0.2	4.179	A
	Exit	1	1		1110			1110	1101	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entry	1	1	B	389	670	0.580	389	390	0.8	1.4	11.655	B
			2	A, C, D	259	673	0.385	259	257	0.4	0.6	8.383	A
		2	1	(A, B, C, D)	647			648	650	0.1	0.3	1.518	A
	Exit	1	1		606			606	604	0.0	0.0	0.000	A
B - B4034	Entry	1	1	C, D	933	932	1.000	886	893	4.6	18.9	52.942	F
			2	A, B	422	940	0.449	422	422	0.6	0.8	7.011	A
	Exit	1	1		954			954	969	0.0	0.0	0.000	A
C - Water Eaton Road	Entry	1	1	D	252	388	0.650	252	245	0.8	2.0	23.776	C
			2	A, B, C	145	388	0.375	145	146	0.5	0.7	14.642	B
		2	1	(A, B, C, D)	399			398	396	0.0	0.1	0.307	A
	Exit	1	1		297			297	299	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entry	1	1	A, B	608	946	0.643	604	616	1.2	2.0	10.279	B

			2	C, D	174	968	0.180	175	176	0.2	0.3	4.468	A
	Exit	1	1		1274			1274	1271	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entry	1	1	B	471	614	0.766	472	472	1.4	2.0	15.193	C
			2	A, C, D	308	617	0.499	307	310	0.6	1.1	11.316	B
		2	1	(A, B, C, D)	779			779	787	0.3	1.8	6.774	A
	Exit	1	1		754			754	744	0.0	0.0	0.000	A
B - B4034	Entry	1	1	C, D	1143	900	1.270	904	911	18.9	80.0	202.467	F
			2	A, B	535	904	0.592	532	524	0.8	1.4	9.227	A
	Exit	1	1		1180			1180	1180	0.0	0.0	0.000	A
C - Water Eaton Road	Entry	1	1	D	309	339	0.911	288	288	2.0	5.6	48.916	E
			2	A, B, C	167	339	0.494	169	169	0.7	1.2	22.861	C
		2	1	(A, B, C, D)	486			476	474	0.1	1.8	6.856	A
	Exit	1	1		373			373	367	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entry	1	1	A, B	751	900	0.835	762	759	2.0	4.4	21.388	C
			2	C, D	227	920	0.247	227	218	0.3	0.4	5.065	A
	Exit	1	1		1353			1353	1361	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entry	1	1	B	490	617	0.793	489	481	2.0	2.1	16.498	C
			2	A, C, D	318	621	0.513	319	314	1.1	1.1	11.815	B
		2	1	(A, B, C, D)	801			808	796	1.8	2.0	10.887	B
	Exit	1	1		737			737	748	0.0	0.0	0.000	A
B - B4034	Entry	1	1	C, D	1158	896	1.290	901	909	80.0	146.2	456.234	F
			2	A, B	520	904	0.575	520	527	1.4	1.3	9.314	A
	Exit	1	1		1189			1189	1199	0.0	0.0	0.000	A
C - Water Eaton Road	Entry	1	1	D	307	341	0.901	299	302	5.6	5.8	62.819	F
			2	A, B, C	172	341	0.504	169	176	1.2	1.4	24.645	C
		2	1	(A, B, C, D)	482			479	479	1.8	3.0	20.427	C

	Exit	1	1		370			370	365	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entr y	1	1	A, B	741	903	0.82 2	749	763	4.4	4.5	23.35 1	C
			2	C, D	220	925	0.23 8	219	217	0.4	0.4	5.227	A
	Exit	1	1		1369			1369	1377	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entr y	1	1	B	391	673	0.58 2	391	400	2.1	1.3	12.18 9	B
			2	A, C, D	268	676	0.39 6	269	265	1.1	0.5	9.099	A
		2	1	(A, B, C, D)	656			659	660	2.0	0.2	2.374	A
	Exit	1	1		615			615	616	0.0	0.0	0.000	A
B - B4034	Entr y	1	1	C, D	944	928	1.01 7	925	940	146. 2	148. 3	575.3 75	F
			2	A, B	441	935	0.47 2	439	432	1.3	1.0	7.499	A
	Exit	1	1		943			943	986	0.0	0.0	0.000	A
C - Water Eaton Road	Entr y	1	1	D	245	368	0.66 4	252	272	5.8	2.0	42.40 0	E
			2	A, B, C	143	368	0.38 7	143	149	1.4	0.6	18.96 0	C
		2	1	(A, B, C, D)	384			387	403	3.0	0.2	7.735	A
	Exit	1	1		306			306	301	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entr y	1	1	A, B	585	941	0.62 1	585	620	4.5	1.8	11.55 9	B
			2	C, D	178	962	0.18 5	177	174	0.4	0.3	4.704	A
	Exit	1	1		1317			1317	1350	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entr y	1	1	B	327	704	0.46 4	323	330	1.3	1.0	9.169	A
			2	A, C, D	214	707	0.30 3	214	214	0.5	0.5	7.417	A
		2	1	(A, B, C, D)	541			541	543	0.2	0.1	0.458	A
	Exit	1	1		508			508	515	0.0	0.0	0.000	A
B - B4034	Entr y	1	1	C, D	791	958	0.82 8	940	956	148. 3	110. 8	464.6 56	F
			2	A, B	364	963	0.37 8	364	364	1.0	0.6	6.090	A
	Exit	1	1		795			795	821	0.0	0.0	0.000	A
C - Water Eaton Road	Entr y	1	1	D	206	399	0.51 6	208	210	2.0	1.0	21.04 7	C

			2	A, B, C	117	399	0.29 4	118	121	0.6	0.4	13.27 7	B
		2	1	(A, B, C, D)	323			323	326	0.2	0.0	0.290	A
		Exit	1	1		257		257	254	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entr y	1	1	A, B	498	976	0.50 9	499	520	1.8	1.0	7.898	A
			2	C, D	151	998	0.15 1	151	150	0.3	0.2	4.327	A
	Exit	1	1		1255			1255	1275	0.0	0.0	0.000	A

2026 Base + CD + SP (ST), AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A1 - [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.
Last Run	Lane Simulation	D - B4034 Buckingham Road - Lane Simulation	Arm D: Queue at end of modelled period is greater than 10 PCU. Delay is likely to have been underestimated.
Warning	Geometry	D - B4034 Buckingham Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J1	Buckingham Road / Sherwood Drive / Water Eaton Road	Standard Roundabout		A, B, C, D	132.71	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2026 Base + CD + SP (ST)	AM	ONE HOUR	07:30	09:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Sherwood Drive		ONE HOUR	✓	666	100.000

B - B4034		ONE HOUR	✓	909	100.000
C - Water Eaton Road		ONE HOUR	✓	396	100.000
D - B4034 Buckingham Road		ONE HOUR	✓	1232	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To				
		A - Sherwood Drive	B - B4034	C - Water Eaton Road	D - B4034 Buckingham Road
	A - Sherwood Drive	0	475	114	76
	B - B4034	369	0	54	486
	C - Water Eaton Road	109	30	0	257
	D - B4034 Buckingham Road	120	905	204	2

Proportions

From	To				
		A - Sherwood Drive	B - B4034	C - Water Eaton Road	D - B4034 Buckingham Road
	A - Sherwood Drive	0.00	0.71	0.17	0.11
	B - B4034	0.41	0.00	0.06	0.53
	C - Water Eaton Road	0.28	0.08	0.00	0.65
	D - B4034 Buckingham Road	0.10	0.74	0.17	0.00

Vehicle Mix

Heavy Vehicle Percentages

From	To				
		A - Sherwood Drive	B - B4034	C - Water Eaton Road	D - B4034 Buckingham Road
	A - Sherwood Drive	0	1	1	0
	B - B4034	1	0	6	4
	C - Water Eaton Road	1	4	0	1
	D - B4034 Buckingham Road	0	2	1	0

Average PCU Per Veh

From	To				
		A - Sherwood Drive	B - B4034	C - Water Eaton Road	D - B4034 Buckingham Road
	A - Sherwood Drive	1.000	1.011	1.009	1.000
	B - B4034	1.012	1.000	1.060	1.038
	C - Water Eaton Road	1.010	1.036	1.000	1.009
	D - B4034 Buckingham Road	1.000	1.018	1.005	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - Sherwood Drive	07:30-07:45	501	506
	07:45-08:00	598	604
	08:00-08:15	733	740
	08:15-08:30	733	740
	08:30-08:45	598	604
	08:45-09:00	501	506

B - B4034	07:30-07:45	684	704
	07:45-08:00	817	840
	08:00-08:15	1001	1029
	08:15-08:30	1001	1029
	08:30-08:45	817	840
	08:45-09:00	684	704
C - Water Eaton Road	07:30-07:45	298	302
	07:45-08:00	356	360
	08:00-08:15	436	441
	08:15-08:30	436	441
	08:30-08:45	356	360
	08:45-09:00	298	302
D - B4034 Buckingham Road	07:30-07:45	927	941
	07:45-08:00	1107	1123
	08:00-08:15	1356	1376
	08:15-08:30	1356	1376
	08:30-08:45	1107	1123
	08:45-09:00	927	941

Results

Results Summary for whole modelled period

Arm	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - Sherwood Drive	72.00	15.3	F	612	918
B - B4034	10.13	3.2	B	833	1250
C - Water Eaton Road	14.07	1.7	B	364	546
D - B4034 Buckingham Road	295.55	101.1	F	1128	1692

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	507	127	861	505	502	454	0.0	1.8	12.007	B
B - B4034	681	170	300	682	697	1066	0.0	1.0	5.987	A
C - Water Eaton Road	299	75	701	297	302	281	0.0	0.7	7.957	A
D - B4034 Buckingham Road	926	231	383	932	933	615	0.0	3.2	12.740	B

07:45 - 08:00

Arm	Total Demand	Junction	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue	End queue	Delay (s)	Unsignalised level of service

	(Veh/hr)	Arrivals (Veh)					e (Veh)	e (Veh)		
A - Sherwood Drive	614	153	1013	616	606	532	1.8	3.6	18.605	C
B - B4034	820	205	357	823	843	1272	1.0	1.6	7.172	A
C - Water Eaton Road	352	88	845	353	358	336	0.7	0.9	9.434	A
D - B4034 Buckingham Road	1110	278	454	1091	1093	744	3.2	11.1	28.484	D

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	737	184	1098	710	701	646	3.6	13.1	48.713	E
B - B4034	1001	250	429	1000	1025	1379	1.6	2.8	9.554	A
C - Water Eaton Road	442	111	1024	444	441	405	0.9	1.6	13.507	B
D - B4034 Buckingham Road	1353	338	568	1177	1191	900	11.1	56.3	108.065	F

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	726	182	1101	720	729	641	13.1	15.3	72.000	F
B - B4034	1009	252	433	1000	1038	1388	2.8	3.1	10.133	B
C - Water Eaton Road	440	110	1027	438	438	406	1.6	1.7	14.071	B
D - B4034 Buckingham Road	1355	339	561	1181	1196	905	56.3	100.8	250.854	F

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	593	148	1080	611	645	549	15.3	4.7	41.815	E
B - B4034	812	203	354	812	845	1338	3.1	1.6	7.471	A
C - Water Eaton Road	358	90	836	357	363	329	1.7	1.1	10.523	B
D - B4034 Buckingham Road	1093	273	459	1170	1176	734	100.8	87.6	295.549	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	495	124	1024	495	514	468	4.7	2.1	17.545	C
B - B4034	677	169	301	679	702	1217	1.6	1.0	6.095	A
C - Water Eaton Road	294	73	696	295	301	283	1.1	0.5	8.290	A
D - B4034 Buckingham Road	929	232	378	1113	1150	613	87.6	36.0	172.705	F

Lane Results

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

Lanes: Main Results for each time segment

07:30 - 07:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entry	1	1	B	364	632	0.577	362	360	0.0	1.3	11.724	B
			2	A, C, D	143	635	0.225	142	142	0.0	0.3	7.424	A
		2	1	(A, B, C, D)	507			507	509	0.0	0.2	1.483	A
	Exit	1	1		454			454	453	0.0	0.0	0.000	A
B - B4034	Entry	1	1	C, D	402	955	0.421	403	417	0.0	0.7	6.634	A
			2	A, B	279	983	0.284	279	281	0.0	0.3	5.054	A
	Exit	1	1		1066			1066	1070	0.0	0.0	0.000	A
C - Water Eaton Road	Entry	1	1	D	194	621	0.313	194	196	0.0	0.4	8.447	A
			2	A, B, C	104	619	0.168	103	106	0.0	0.2	7.050	A
		2	1	(A, B, C, D)	299			299	305	0.0	0.0	0.000	A
	Exit	1	1		281			281	283	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entry	1	1	A, B	769	1017	0.756	774	775	0.0	3.1	14.510	B
			2	C, D	157	1027	0.153	157	158	0.0	0.2	4.043	A
	Exit	1	1		615			615	629	0.0	0.0	0.000	A

07:45 - 08:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entry	1	1	B	441	589	0.749	441	432	1.3	2.0	15.303	C
			2	A, C, D	175	592	0.295	175	173	0.3	0.4	8.468	A
		2	1	(A, B, C, D)	614			616	609	0.2	1.1	5.214	A
	Exit	1	1		532			532	539	0.0	0.0	0.000	A
B - B4034	Entry	1	1	C, D	491	934	0.525	491	506	0.7	1.2	8.172	A
			2	A, B	330	963	0.342	332	337	0.3	0.4	5.708	A
	Exit	1	1		1272			1272	1265	0.0	0.0	0.000	A
C - Water Eaton Road	Entry	1	1	D	232	576	0.403	231	233	0.4	0.7	10.225	B
			2	A, B, C	120	574	0.210	122	126	0.2	0.2	7.956	A

		2	1	(A, B, C, D)	352			352	359	0.0	0.0	0.000	A
	Exit	1	1		336			336	341	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entr y	1	1	A, B	928	992	0.935	909	909	3.1	10.8	33.284	D
			2	C, D	183	1001	0.183	182	184	0.2	0.2	4.297	A
	Exit	1	1		744			744	755	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entr y	1	1	B	509	565	0.902	506	503	2.0	3.2	20.743	C
			2	A, C, D	204	568	0.360	204	198	0.4	0.6	10.396	B
		2	1	(A, B, C, D)	737			713	707	1.1	9.3	30.702	D
	Exit	1	1		646			646	646	0.0	0.0	0.000	A
B - B4034	Entr y	1	1	C, D	592	911	0.649	590	613	1.2	2.0	11.400	B
			2	A, B	409	936	0.437	409	412	0.4	0.8	6.869	A
	Exit	1	1		1379			1379	1389	0.0	0.0	0.000	A
C - Water Eaton Road	Entr y	1	1	D	285	517	0.552	286	285	0.7	1.3	15.301	C
			2	A, B, C	157	514	0.305	158	156	0.2	0.3	9.923	A
		2	1	(A, B, C, D)	442			442	443	0.0	0.0	0.087	A
	Exit	1	1		405			405	407	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entr y	1	1	A, B	1127	951	1.185	951	964	10.8	56.0	128.705	F
			2	C, D	226	960	0.235	225	227	0.2	0.3	4.809	A
	Exit	1	1		900			900	916	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entr y	1	1	B	511	563	0.908	513	521	3.2	3.2	22.425	C
			2	A, C, D	207	565	0.365	207	208	0.6	0.7	11.349	B
		2	1	(A, B, C, D)	726			718	729	9.3	11.5	52.834	F
	Exit	1	1		641			641	642	0.0	0.0	0.000	A
B - B4034	Entr y	1	1	C, D	600	908	0.661	594	626	2.0	2.2	12.322	B
			2	A, B	409	934	0.437	406	412	0.8	1.0	6.906	A
	Exit	1	1		1388			1388	1412	0.0	0.0	0.000	A

C - Water Eaton Road	Entr y	1	1	D	285	515	0.55 3	283	284	1.3	1.2	16.12 0	C
			2	A, B, C	155	512	0.30 3	155	154	0.3	0.5	10.29 3	B
		2	1	(A, B, C, D)	440			440	439	0.0	0.0	0.005	A
	Exit	1	1		406			406	414	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entr y	1	1	A, B	1130	952	1.18 7	954	966	56.0	100.5	300.5 83	F
			2	C, D	226	962	0.23 5	227	230	0.3	0.3	5.083	A
	Exit	1	1		905			905	933	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entr y	1	1	B	435	569	0.76 4	437	462	3.2	2.1	18.88 5	C
			2	A, C, D	174	574	0.30 3	174	183	0.7	0.5	10.05 5	B
		2	1	(A, B, C, D)	593			609	640	11.5	2.1	25.68 2	D
	Exit	1	1		549			549	555	0.0	0.0	0.000	A
B - B4034	Entr y	1	1	C, D	478	938	0.51 0	478	502	2.2	1.1	8.618	A
			2	A, B	334	963	0.34 7	334	343	1.0	0.5	5.845	A
	Exit	1	1		1338			1338	1368	0.0	0.0	0.000	A
C - Water Eaton Road	Entr y	1	1	D	230	579	0.39 8	231	237	1.2	0.7	11.56 1	B
			2	A, B, C	128	574	0.22 3	126	126	0.5	0.4	8.563	A
		2	1	(A, B, C, D)	358			358	360	0.0	0.0	0.002	A
	Exit	1	1		329			329	345	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entr y	1	1	A, B	915	991	0.92 5	990	991	100.5	87.5	353.5 43	F
			2	C, D	179	1000	0.17 9	180	185	0.3	0.2	4.515	A
	Exit	1	1		734			734	762	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entr y	1	1	B	353	584	0.60 4	352	367	2.1	1.5	14.73 9	B
			2	A, C, D	142	588	0.24 2	143	148	0.5	0.3	8.414	A
		2	1	(A, B, C, D)	495			495	511	2.1	0.4	4.756	A
	Exit	1	1		468			468	476	0.0	0.0	0.000	A
B - B4034	Entr y	1	1	C, D	404	951	0.42 4	405	424	1.1	0.7	6.792	A

			2	A, B	273	979	0.27 9	274	278	0.5	0.4	5.068	A
	Exit	1	1		1217			1217	1267	0.0	0.0	0.000	A
C - Water Eaton Road	Entr y	1	1	D	189	623	0.30 4	191	194	0.7	0.3	8.909	A
			2	A, B, C	104	617	0.16 9	104	107	0.4	0.2	7.152	A
		2	1	(A, B, C, D)	294			294	298	0.0	0.0	0.000	A
	Exit	1	1		283			283	288	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entr y	1	1	A, B	771	1018	0.75 7	955	992	87.5	35.9	211.8 02	F
			2	C, D	157	1026	0.15 3	158	158	0.2	0.2	4.240	A
	Exit	1	1		613			613	636	0.0	0.0	0.000	A

2026 Base + CD + SP (ST), PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A1 - [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.
Last Run	Lane Simulation	B - B4034 - Lane Simulation	Arm B: Queue at end of modelled period is greater than 10 PCU. Delay is likely to have been underestimated.
Warning	Geometry	D - B4034 Buckingham Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J1	Buckingham Road / Sherwood Drive / Water Eaton Road	Standard Roundabout		A, B, C, D	89.89	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2026 Base + CD + SP (ST)	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Sherwood Drive		ONE HOUR	✓	692	100.000
B - B4034		ONE HOUR	✓	1417	100.000
C - Water Eaton Road		ONE HOUR	✓	430	100.000
D - B4034 Buckingham Road		ONE HOUR	✓	795	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
From		A - Sherwood Drive	B - B4034	C - Water Eaton Road	D - B4034 Buckingham Road
	A - Sherwood Drive	0	433	124	135
	B - B4034	471	1	16	929
	C - Water Eaton Road	97	64	0	269
	D - B4034 Buckingham Road	88	519	185	3

Proportions

	To				
From		A - Sherwood Drive	B - B4034	C - Water Eaton Road	D - B4034 Buckingham Road
	A - Sherwood Drive	0.00	0.63	0.18	0.20
	B - B4034	0.33	0.00	0.01	0.66
	C - Water Eaton Road	0.23	0.15	0.00	0.63
	D - B4034 Buckingham Road	0.11	0.65	0.23	0.00

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		A - Sherwood Drive	B - B4034	C - Water Eaton Road	D - B4034 Buckingham Road
	A - Sherwood Drive	0	1	0	0
	B - B4034	1	0	0	2
	C - Water Eaton Road	0	0	0	0
	D - B4034 Buckingham Road	0	3	0	0

Average PCU Per Veh

	To				
From		A - Sherwood Drive	B - B4034	C - Water Eaton Road	D - B4034 Buckingham Road
	A - Sherwood Drive	1.000	1.005	1.000	1.000
	B - B4034	1.007	1.000	1.000	1.015
	C - Water Eaton Road	1.000	1.000	1.000	1.000
	D - B4034 Buckingham Road	1.000	1.027	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - Sherwood Drive	16:45-17:00	521	523
	17:00-17:15	622	624
	17:15-17:30	762	765

	17:30-17:45	762	765
	17:45-18:00	622	624
	18:00-18:15	521	523
B - B4034	16:45-17:00	1067	1080
	17:00-17:15	1274	1289
	17:15-17:30	1560	1579
	17:30-17:45	1560	1579
	17:45-18:00	1274	1289
	18:00-18:15	1067	1080
C - Water Eaton Road	16:45-17:00	324	324
	17:00-17:15	386	386
	17:15-17:30	473	473
	17:30-17:45	473	473
	17:45-18:00	386	386
	18:00-18:15	324	324
D - B4034 Buckingham Road	16:45-17:00	598	609
	17:00-17:15	714	727
	17:15-17:30	875	890
	17:30-17:45	875	890
	17:45-18:00	714	727
	18:00-18:15	598	609

Results

Results Summary for whole modelled period

Arm	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - Sherwood Drive	21.87	4.8	C	633	950
B - B4034	176.33	78.6	F	1302	1953
C - Water Eaton Road	54.49	7.3	F	395	592
D - B4034 Buckingham Road	13.42	3.3	B	730	1095

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	511	128	580	515	522	483	0.0	1.0	8.378	A
B - B4034	1058	265	333	1062	1065	763	0.0	3.2	11.054	B
C - Water Eaton Road	328	82	1152	329	322	243	0.0	0.9	11.733	B
D - B4034 Buckingham Road	597	149	467	597	602	1013	0.0	1.1	6.238	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	619	155	711	619	617	590	1.0	1.9	10.937	B
B - B4034	1272	318	408	1276	1276	923	3.2	8.7	22.100	C
C - Water Eaton Road	386	96	1387	386	387	297	0.9	2.1	17.166	C
D - B4034 Buckingham Road	736	184	567	734	729	1206	1.1	1.7	8.071	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	765	191	837	764	757	721	1.9	4.8	19.335	C
B - B4034	1567	392	492	1425	1438	1109	8.7	44.7	73.828	F
C - Water Eaton Road	473	118	1561	464	452	357	2.1	6.6	39.124	E
D - B4034 Buckingham Road	865	216	698	860	879	1327	1.7	3.2	11.859	B

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	760	190	853	760	765	718	4.8	4.8	21.868	C
B - B4034	1565	391	495	1427	1447	1118	44.7	78.5	164.823	F
C - Water Eaton Road	470	118	1565	468	466	357	6.6	7.3	54.492	F
D - B4034 Buckingham Road	879	220	694	878	895	1340	3.2	3.3	13.423	B

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	621	155	690	622	638	599	4.8	2.1	13.156	B
B - B4034	1286	322	399	1370	1377	912	78.5	58.2	176.328	F
C - Water Eaton Road	386	96	1476	390	406	293	7.3	2.9	33.905	D
D - B4034 Buckingham Road	711	178	580	708	728	1285	3.3	1.6	8.504	A

18:00 - 18:15

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

	(Veh/hr)									
A - Sherwood Drive	521	130	575	523	530	491	2.1	1.2	8.858	A
B - B4034	1065	266	338	1179	1248	759	58.2	15.9	83.749	F
C - Water Eaton Road	326	81	1270	328	331	248	2.9	1.3	16.517	C
D - B4034 Buckingham Road	594	149	471	595	612	1126	1.6	1.0	6.593	A

Lane Results

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

Lanes: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entry	1	1	B	319	716	0.446	322	328	0.0	0.6	8.643	A
			2	A, C, D	192	719	0.268	193	194	0.0	0.4	6.869	A
		2	1	(A, B, C, D)	511			512	526	0.0	0.0	0.396	A
	Exit	1	1		483			483	489	0.0	0.0	0.000	A
B - B4034	Entry	1	1	C, D	713	966	0.738	716	712	0.0	2.7	13.679	B
			2	A, B	345	975	0.353	346	352	0.0	0.5	5.738	A
	Exit	1	1		763			763	773	0.0	0.0	0.000	A
C - Water Eaton Road	Entry	1	1	D	207	483	0.429	208	201	0.0	0.7	12.759	B
			2	A, B, C	121	483	0.250	121	121	0.0	0.3	10.015	B
		2	1	(A, B, C, D)	328			328	326	0.0	0.0	0.001	A
	Exit	1	1		243			243	245	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entry	1	1	A, B	457	983	0.465	457	461	0.0	0.9	6.887	A
			2	C, D	140	1003	0.139	140	142	0.0	0.2	4.165	A
	Exit	1	1		1013			1013	1004	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entry	1	1	B	383	677	0.566	384	384	0.6	1.2	10.805	B
			2	A, C, D	236	682	0.346	235	233	0.4	0.5	7.843	A
		2	1	(A, B, C, D)	619			619	620	0.0	0.3	1.243	A

	Exit	1	1		590			590	595	0.0	0.0	0.000	A
B - B4034	Entr y	1	1	C, D	848	941	0.901	853	846	2.7	7.9	29.819	D
			2	A, B	424	951	0.446	424	430	0.5	0.8	6.733	A
	Exit	1	1		923			923	923	0.0	0.0	0.000	A
C - Water Eaton Road	Entr y	1	1	D	243	407	0.598	243	242	0.7	1.5	19.537	C
			2	A, B, C	143	407	0.352	143	145	0.3	0.5	12.868	B
		2	1	(A, B, C, D)	386			386	391	0.0	0.0	0.117	A
	Exit	1	1		297			297	291	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entr y	1	1	A, B	562	948	0.593	561	560	0.9	1.5	9.178	A
			2	C, D	174	968	0.179	173	169	0.2	0.3	4.470	A
	Exit	1	1		1206			1206	1199	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entr y	1	1	B	479	642	0.746	480	474	1.2	2.0	14.776	B
			2	A, C, D	283	645	0.439	284	283	0.5	0.8	9.745	A
		2	1	(A, B, C, D)	765			762	761	0.3	2.0	6.393	A
	Exit	1	1		721			721	718	0.0	0.0	0.000	A
B - B4034	Entr y	1	1	C, D	1046	912	1.146	905	917	7.9	43.4	106.146	F
			2	A, B	522	921	0.567	520	521	0.8	1.3	8.793	A
	Exit	1	1		1109			1109	1120	0.0	0.0	0.000	A
C - Water Eaton Road	Entr y	1	1	D	290	350	0.828	286	280	1.5	4.3	42.570	E
			2	A, B, C	179	350	0.510	177	172	0.5	1.2	21.441	C
		2	1	(A, B, C, D)	473			469	466	0.0	1.0	4.095	A
	Exit	1	1		357			357	357	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entr y	1	1	A, B	657	900	0.729	652	671	1.5	2.9	14.026	B
			2	C, D	209	922	0.226	208	209	0.3	0.3	4.976	A
	Exit	1	1		1327			1327	1332	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entr y	1	1	B	473	638	0.741	472	478	2.0	2.2	15.364	C

			2	A, C, D	288	641	0.449	288	287	0.8	0.9	10.456	B
			2	1 (A, B, C, D)	760			761	766	2.0	1.7	8.358	A
		Exit	1	1	718			718	724	0.0	0.0	0.000	A
B - B4034	Entr y	1	1	C, D	1048	911	1.149	909	923	43.4	77.2	242.149	F
			2	A, B	517	918	0.563	518	523	1.3	1.3	9.214	A
	Exit	1	1		1118			1118	1140	0.0	0.0	0.000	A
C - Water Eaton Road	Entr y	1	1	D	295	349	0.846	293	292	4.3	4.6	54.002	F
			2	A, B, C	175	349	0.503	175	174	1.2	1.1	22.502	C
		2	1	(A, B, C, D)	470			471	467	1.0	1.5	12.133	B
	Exit	1	1		357			357	357	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entr y	1	1	A, B	671	904	0.742	670	689	2.9	3.0	15.983	C
			2	C, D	208	923	0.225	207	206	0.3	0.3	5.066	A
	Exit	1	1		1340			1340	1352	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entr y	1	1	B	391	685	0.570	391	401	2.2	1.2	11.838	B
			2	A, C, D	231	688	0.335	231	237	0.9	0.6	8.444	A
		2	1	(A, B, C, D)	621			621	633	1.7	0.3	2.652	A
	Exit	1	1		599			599	602	0.0	0.0	0.000	A
B - B4034	Entr y	1	1	C, D	850	945	0.900	934	943	77.2	57.3	261.850	F
			2	A, B	436	952	0.458	435	434	1.3	0.9	6.975	A
	Exit	1	1		912			912	940	0.0	0.0	0.000	A
C - Water Eaton Road	Entr y	1	1	D	242	378	0.641	245	258	4.6	2.0	36.834	E
			2	A, B, C	145	378	0.383	145	148	1.1	0.7	17.128	C
		2	1	(A, B, C, D)	386			387	394	1.5	0.2	5.016	A
	Exit	1	1		293			293	295	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entr y	1	1	A, B	541	943	0.573	540	559	3.0	1.4	9.750	A
			2	C, D	169	963	0.176	169	169	0.3	0.3	4.508	A
	Exit	1	1		1285			1285	1311	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue	End queue	Delay (s)	Unsignalised level of service

					(Veh/h r)					(Veh)	(Veh)		
A - Sherwood Drive	Entr y	1	1	B	326	717	0.45 4	326	332	1.2	0.8	9.291	A
			2	A, C, D	196	720	0.27 2	197	198	0.6	0.3	6.981	A
		2	1	(A, B, C, D)	521			522	527	0.3	0.0	0.459	A
	Exit	1	1		491			491	500	0.0	0.0	0.000	A
B - B4034	Entr y	1	1	C, D	712	966	0.73 7	825	887	57.3	15.4	124.8 57	F
			2	A, B	353	972	0.36 3	354	361	0.9	0.5	5.787	A
	Exit	1	1		759			759	781	0.0	0.0	0.000	A
C - Water Eaton Road	Entr y	1	1	D	208	445	0.46 8	210	211	2.0	0.8	18.72 6	C
			2	A, B, C	118	445	0.26 4	117	120	0.7	0.5	12.33 4	B
		2	1	(A, B, C, D)	326			326	326	0.2	0.0	0.269	A
	Exit	1	1		248			248	251	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entr y	1	1	A, B	453	978	0.46 3	453	468	1.4	0.9	7.346	A
			2	C, D	141	1002	0.14 1	141	143	0.3	0.1	4.199	A
	Exit	1	1		1126			1126	1190	0.0	0.0	0.000	A

2033 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A1 - [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.
Last Run	Lane Simulation	D - B4034 Buckingham Road - Lane Simulation	Arm D: Queue at end of modelled period is greater than 10 PCU. Delay is likely to have been underestimated.
Warning	Geometry	D - B4034 Buckingham Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J1	Buckingham Road / Sherwood Drive / Water Eaton Road	Standard Roundabout		A, B, C, D	152.12	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
D13	2033 Base	AM	ONE HOUR	07:30	09:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Sherwood Drive		ONE HOUR	✓	700	100.000
B - B4034		ONE HOUR	✓	947	100.000
C - Water Eaton Road		ONE HOUR	✓	417	100.000
D - B4034 Buckingham Road		ONE HOUR	✓	1248	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
From		A - Sherwood Drive	B - B4034	C - Water Eaton Road	D - B4034 Buckingham Road
	A - Sherwood Drive	0	505	122	74
	B - B4034	392	0	57	497
	C - Water Eaton Road	116	32	0	269
	D - B4034 Buckingham Road	116	918	212	2

Proportions

	To				
From		A - Sherwood Drive	B - B4034	C - Water Eaton Road	D - B4034 Buckingham Road
	A - Sherwood Drive	0.00	0.72	0.17	0.11
	B - B4034	0.41	0.00	0.06	0.53
	C - Water Eaton Road	0.28	0.08	0.00	0.65
	D - B4034 Buckingham Road	0.09	0.74	0.17	0.00

Vehicle Mix

Heavy Vehicle Percentages

From	To				
		A - Sherwood Drive	B - B4034	C - Water Eaton Road	D - B4034 Buckingham Road
	A - Sherwood Drive	0	1	1	0
	B - B4034	1	0	6	4
	C - Water Eaton Road	1	4	0	1
	D - B4034 Buckingham Road	0	2	1	0

Average PCU Per Veh

From	To				
		A - Sherwood Drive	B - B4034	C - Water Eaton Road	D - B4034 Buckingham Road
	A - Sherwood Drive	1.000	1.011	1.009	1.000
	B - B4034	1.012	1.000	1.060	1.038
	C - Water Eaton Road	1.010	1.036	1.000	1.009
	D - B4034 Buckingham Road	1.000	1.018	1.005	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - Sherwood Drive	07:30-07:45	527	532
	07:45-08:00	630	636
	08:00-08:15	771	779
	08:15-08:30	771	779
	08:30-08:45	630	636
	08:45-09:00	527	532
B - B4034	07:30-07:45	713	733
	07:45-08:00	851	875
	08:00-08:15	1042	1072
	08:15-08:30	1042	1072
	08:30-08:45	851	875
	08:45-09:00	713	733
C - Water Eaton Road	07:30-07:45	314	317
	07:45-08:00	375	379
	08:00-08:15	459	464
	08:15-08:30	459	464
	08:30-08:45	375	379
	08:45-09:00	314	317
D - B4034 Buckingham Road	07:30-07:45	939	953
	07:45-08:00	1122	1138
	08:00-08:15	1374	1394
	08:15-08:30	1374	1394
	08:30-08:45	1122	1138
	08:45-09:00	939	953

Results

Results Summary for whole modelled period

Arm	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - Sherwood Drive	120.20	27.9	F	642	962
B - B4034	10.47	3.0	B	872	1307
C - Water Eaton Road	15.35	2.1	C	381	572
D - B4034 Buckingham Road	325.16	109.9	F	1142	1713

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	539	135	889	536	531	469	0.0	2.1	12.432	B
B - B4034	712	178	318	714	726	1107	0.0	1.1	6.210	A
C - Water Eaton Road	321	80	732	321	319	300	0.0	0.7	8.039	A
D - B4034 Buckingham Road	955	239	407	952	946	647	0.0	4.6	13.937	B

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	630	158	1030	621	628	557	2.1	5.2	22.372	C
B - B4034	852	213	368	853	872	1283	1.1	1.6	7.598	A
C - Water Eaton Road	377	94	871	379	379	350	0.7	1.0	9.902	A
D - B4034 Buckingham Road	1116	279	488	1100	1108	762	4.6	11.0	28.897	D

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	764	191	1117	726	716	645	5.2	18.6	64.553	F
B - B4034	1040	260	440	1040	1058	1403	1.6	2.9	9.660	A
C - Water Eaton Road	448	112	1057	452	457	422	1.0	1.8	14.742	B
D - B4034 Buckingham Road	1381	345	580	1183	1198	929	11.0	61.8	119.570	F

08:15 - 08:30

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

A - Sherwood Drive	763	191	1100	758	746	673	18.6	27.9	120.198	F
B - B4034	1062	265	445	1059	1080	1414	2.9	3.0	10.473	B
C - Water Eaton Road	450	113	1079	449	464	425	1.8	2.1	15.352	C
D - B4034 Buckingham Road	1366	342	595	1178	1192	933	61.8	109.8	272.758	F

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	624	156	1096	666	709	559	27.9	10.6	85.355	F
B - B4034	845	211	373	846	882	1389	3.0	1.7	7.755	A
C - Water Eaton Road	377	94	859	376	388	359	2.1	0.9	10.967	B
D - B4034 Buckingham Road	1123	281	487	1167	1186	749	109.8	100.1	325.160	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	528	132	1045	544	566	490	10.6	2.0	27.113	D
B - B4034	719	180	325	723	740	1265	1.7	1.1	6.160	A
C - Water Eaton Road	315	79	742	315	323	306	0.9	0.8	8.306	A
D - B4034 Buckingham Road	911	228	410	1125	1158	646	100.1	47.0	208.284	F

Lane Results

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

Lanes: Main Results for each time segment

07:30 - 07:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entry	1	1	B	383	625	0.612	382	381	0.0	1.5	12.168	B
			2	A, C, D	155	625	0.247	154	149	0.0	0.3	7.264	A
		2	1	(A, B, C, D)	539			537	538	0.0	0.4	1.616	A
	Exit	1	1		469			469	470	0.0	0.0	0.000	A
B - B4034	Entry	1	1	C, D	421	952	0.442	423	431	0.0	0.7	6.902	A
			2	A, B	291	974	0.299	290	296	0.0	0.4	5.226	A
	Exit	1	1		1107			1107	1102	0.0	0.0	0.000	A
C - Water Eaton Road	Entry	1	1	D	205	611	0.336	205	205	0.0	0.5	8.465	A
			2	A, B, C	116	609	0.190	116	114	0.0	0.2	7.262	A

		2	1	(A, B, C, D)	321			321	322	0.0	0.0	0.000	A
	Exit	1	1		300			300	301	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entr y	1	1	A, B	791	1008	0.785	787	781	0.0	4.4	15.955	C
			2	C, D	164	1018	0.161	164	165	0.0	0.2	4.287	A
	Exit	1	1		647			647	650	0.0	0.0	0.000	A

07:45 - 08:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entr y	1	1	B	452	584	0.774	447	452	1.5	2.5	16.563	C
			2	A, C, D	172	586	0.294	174	175	0.3	0.4	8.826	A
		2	1	(A, B, C, D)	630			624	632	0.4	2.3	7.891	A
	Exit	1	1		557			557	564	0.0	0.0	0.000	A
B - B4034	Entr y	1	1	C, D	498	929	0.537	499	515	0.7	1.0	8.693	A
			2	A, B	354	959	0.369	354	356	0.4	0.5	6.059	A
	Exit	1	1		1283			1283	1293	0.0	0.0	0.000	A
C - Water Eaton Road	Entr y	1	1	D	244	565	0.431	244	243	0.5	0.7	10.787	B
			2	A, B, C	133	562	0.237	134	136	0.2	0.3	8.306	A
		2	1	(A, B, C, D)	377			377	380	0.0	0.0	0.000	A
	Exit	1	1		350			350	356	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entr y	1	1	A, B	922	977	0.944	905	912	4.4	10.8	34.059	D
			2	C, D	194	986	0.197	194	196	0.2	0.2	4.470	A
	Exit	1	1		762			762	774	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entr y	1	1	B	527	560	0.942	526	518	2.5	3.5	22.325	C
			2	A, C, D	199	562	0.355	200	199	0.4	0.6	10.524	B
		2	1	(A, B, C, D)	764			726	721	2.3	14.5	45.351	E
	Exit	1	1		645			645	660	0.0	0.0	0.000	A
B - B4034	Entr y	1	1	C, D	617	905	0.682	617	627	1.0	1.9	11.453	B
			2	A, B	424	933	0.454	423	431	0.5	0.9	7.115	A
	Exit	1	1		1403			1403	1407	0.0	0.0	0.000	A

C - Water Eaton Road	Entry	1	1	D	293	506	0.578	295	296	0.7	1.4	16.765	C
			2	A, B, C	156	501	0.311	157	160	0.3	0.4	10.570	B
		2	1	(A, B, C, D)	448			449	460	0.0	0.0	0.132	A
	Exit	1	1		422			422	425	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entry	1	1	A, B	1140	948	1.202	943	958	10.8	61.4	143.549	F
			2	C, D	242	957	0.252	240	240	0.2	0.4	5.065	A
	Exit	1	1		929			929	937	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entry	1	1	B	543	564	0.962	546	539	3.5	3.5	24.367	C
			2	A, C, D	213	565	0.377	213	207	0.6	0.7	11.337	B
		2	1	(A, B, C, D)	763			756	747	14.5	23.6	99.501	F
	Exit	1	1		673			673	676	0.0	0.0	0.000	A
B - B4034	Entry	1	1	C, D	623	901	0.691	620	639	1.9	2.2	12.487	B
			2	A, B	439	932	0.471	439	441	0.9	0.8	7.634	A
	Exit	1	1		1414			1414	1424	0.0	0.0	0.000	A
C - Water Eaton Road	Entry	1	1	D	293	498	0.589	292	299	1.4	1.6	17.894	C
			2	A, B, C	157	493	0.319	157	165	0.4	0.5	10.632	B
		2	1	(A, B, C, D)	450			450	466	0.0	0.0	0.025	A
	Exit	1	1		425			425	428	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entry	1	1	A, B	1135	941	1.205	946	955	61.4	109.6	328.276	F
			2	C, D	232	951	0.244	232	237	0.4	0.3	5.083	A
	Exit	1	1		933			933	954	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entry	1	1	B	481	565	0.851	483	513	3.5	2.6	21.669	C
			2	A, C, D	185	567	0.326	182	196	0.7	0.6	10.667	B
		2	1	(A, B, C, D)	624			666	705	23.6	7.4	66.969	F
	Exit	1	1		559			559	573	0.0	0.0	0.000	A
B - B4034	Entry	1	1	C, D	494	931	0.531	496	523	2.2	1.0	8.929	A

			2	A, B	351	959	0.366	350	359	0.8	0.6	6.105	A
	Exit	1	1		1389			1389	1430	0.0	0.0	0.000	A
C - Water Eaton Road	Entr y	1	1	D	240	572	0.420	240	251	1.6	0.7	12.239	B
			2	A, B, C	137	569	0.240	136	137	0.5	0.3	8.640	A
		2	1	(A, B, C, D)	377			377	383	0.0	0.0	0.008	A
	Exit	1	1		359			359	371	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entr y	1	1	A, B	933	979	0.953	977	994	109.6	99.9	390.232	F
			2	C, D	190	991	0.192	190	192	0.3	0.2	4.638	A
	Exit	1	1		749			749	791	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entr y	1	1	B	377	579	0.651	382	405	2.6	1.3	16.294	C
			2	A, C, D	161	583	0.275	162	161	0.6	0.4	9.162	A
		2	1	(A, B, C, D)	528			538	560	7.4	0.4	13.162	B
	Exit	1	1		490			490	503	0.0	0.0	0.000	A
B - B4034	Entr y	1	1	C, D	419	945	0.443	421	436	1.0	0.8	6.734	A
			2	A, B	300	974	0.308	302	304	0.6	0.3	5.359	A
	Exit	1	1		1265			1265	1315	0.0	0.0	0.000	A
C - Water Eaton Road	Entr y	1	1	D	208	609	0.341	207	208	0.7	0.6	8.886	A
			2	A, B, C	108	603	0.179	108	115	0.3	0.2	7.243	A
		2	1	(A, B, C, D)	315			315	323	0.0	0.0	0.000	A
	Exit	1	1		306			306	310	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entr y	1	1	A, B	749	1007	0.745	963	995	99.9	46.8	260.008	F
			2	C, D	162	1020	0.159	162	164	0.2	0.2	4.115	A
	Exit	1	1		646			646	660	0.0	0.0	0.000	A

2033 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A1 - [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.
Last Run	Lane Simulation	B - B4034 - Lane Simulation	Arm B: Queue at end of modelled period is greater than 10 PCU. Delay is likely to have been underestimated.

Warning	Geometry	D - B4034 Buckingham Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J1	Buckingham Road / Sherwood Drive / Water Eaton Road	Standard Roundabout		A, B, C, D	123.71	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
D14	2033 Base	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Sherwood Drive		ONE HOUR	✓	730	100.000
B - B4034		ONE HOUR	✓	1475	100.000
C - Water Eaton Road		ONE HOUR	✓	457	100.000
D - B4034 Buckingham Road		ONE HOUR	✓	824	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		A - Sherwood Drive	B - B4034	C - Water Eaton Road	D - B4034 Buckingham Road
From	A - Sherwood Drive	0	462	133	136
	B - B4034	502	1	17	954
	C - Water Eaton Road	104	68	0	285
	D - B4034 Buckingham Road	89	536	196	3

Proportions

	To				
		A - Sherwood Drive	B - B4034	C - Water Eaton Road	D - B4034 Buckingham Road
From	A - Sherwood Drive	0.00	0.63	0.18	0.19
	B - B4034	0.34	0.00	0.01	0.65
	C - Water Eaton Road	0.23	0.15	0.00	0.62
	D - B4034 Buckingham Road	0.11	0.65	0.24	0.00

Vehicle Mix

Heavy Vehicle Percentages

	To				
		A - Sherwood Drive	B - B4034	C - Water Eaton Road	D - B4034 Buckingham Road
From	A - Sherwood Drive	0	1	0	0
	B - B4034	1	0	0	2
	C - Water Eaton Road	0	0	0	0
	D - B4034 Buckingham Road	0	3	0	0

Average PCU Per Veh

	To				
		A - Sherwood Drive	B - B4034	C - Water Eaton Road	D - B4034 Buckingham Road
From	A - Sherwood Drive	1.000	1.005	1.000	1.000
	B - B4034	1.007	1.000	1.000	1.015
	C - Water Eaton Road	1.000	1.000	1.000	1.000
	D - B4034 Buckingham Road	1.000	1.027	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - Sherwood Drive	16:45-17:00	550	551
	17:00-17:15	656	658
	17:15-17:30	804	806
	17:30-17:45	804	806
	17:45-18:00	656	658
	18:00-18:15	550	551
B - B4034	16:45-17:00	1110	1124
	17:00-17:15	1326	1342
	17:15-17:30	1624	1644
	17:30-17:45	1624	1644
	17:45-18:00	1326	1342
	18:00-18:15	1110	1124

C - Water Eaton Road	16:45-17:00	344	344
	17:00-17:15	410	410
	17:15-17:30	503	503
	17:30-17:45	503	503
	17:45-18:00	410	410
	18:00-18:15	344	344
D - B4034 Buckingham Road	16:45-17:00	620	631
	17:00-17:15	741	754
	17:15-17:30	907	923
	17:30-17:45	907	923
	17:45-18:00	741	754
	18:00-18:15	620	631

Results

Results Summary for whole modelled period

Arm	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - Sherwood Drive	36.44	7.9	E	668	1002
B - B4034	239.44	98.3	F	1353	2029
C - Water Eaton Road	84.03	11.9	F	420	629
D - B4034 Buckingham Road	15.45	4.4	C	756	1134

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	549	137	613	556	547	519	0.0	1.0	9.005	A
B - B4034	1108	277	359	1104	1121	810	0.0	3.9	11.794	B
C - Water Eaton Road	337	84	1196	337	338	266	0.0	1.2	12.935	B
D - B4034 Buckingham Road	628	157	503	629	629	1030	0.0	1.2	6.786	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	657	164	718	657	650	624	1.0	2.2	11.741	B
B - B4034	1339	335	416	1314	1316	958	3.9	12.6	25.389	D

C - Water Eaton Road	415	104	1423	412	405	307	1.2	3.0	20.569	C
D - B4034 Buckingham Road	731	183	609	733	749	1226	1.2	1.7	8.210	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	806	201	886	783	784	759	2.2	7.4	24.670	C
B - B4034	1607	402	509	1462	1472	1160	12.6	53.5	90.471	F
C - Water Eaton Road	504	126	1596	476	476	375	3.0	9.9	52.391	F
D - B4034 Buckingham Road	911	228	739	905	914	1333	1.7	3.8	13.858	B

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	805	201	880	819	812	765	7.4	7.9	36.442	E
B - B4034	1636	409	522	1459	1467	1177	53.5	98.2	201.922	F
C - Water Eaton Road	504	126	1598	499	494	383	9.9	11.9	84.029	F
D - B4034 Buckingham Road	910	228	744	901	919	1353	3.8	4.3	15.450	C

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	649	162	731	648	678	626	7.9	2.3	16.840	C
B - B4034	1318	329	421	1381	1397	957	98.2	85.5	239.441	F
C - Water Eaton Road	417	104	1490	430	446	312	11.9	4.5	54.692	F
D - B4034 Buckingham Road	742	185	615	742	771	1306	4.3	1.8	9.695	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	541	135	606	544	551	524	2.3	1.2	9.062	A
B - B4034	1113	278	357	1292	1323	793	85.5	37.1	138.722	F
C - Water Eaton Road	340	85	1379	343	357	269	4.5	1.5	19.811	C
D - B4034 Buckingham Road	617	154	512	618	637	1210	1.8	1.2	6.688	A

Lane Results

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

Lanes: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entry	1	1	B	344	704	0.488	349	344	0.0	0.7	9.260	A
			2	A, C, D	206	709	0.290	207	203	0.0	0.3	7.028	A
		2	1	(A, B, C, D)	549			550	551	0.0	0.1	0.572	A
	Exit	1	1		519			519	529	0.0	0.0	0.000	A
B - B4034	Entry	1	1	C, D	734	957	0.767	731	736	0.0	3.3	14.757	B
			2	A, B	374	966	0.386	372	385	0.0	0.6	6.107	A
	Exit	1	1		810			810	806	0.0	0.0	0.000	A
C - Water Eaton Road	Entry	1	1	D	207	469	0.442	206	209	0.0	0.9	14.086	B
			2	A, B, C	130	469	0.277	131	129	0.0	0.3	11.022	B
		2	1	(A, B, C, D)	337			337	343	0.0	0.0	0.017	A
	Exit	1	1		266			266	261	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entry	1	1	A, B	476	967	0.492	477	477	0.0	1.0	7.579	A
			2	C, D	151	991	0.153	152	151	0.0	0.2	4.328	A
	Exit	1	1		1030			1030	1038	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entry	1	1	B	415	676	0.614	416	411	0.7	1.2	11.238	B
			2	A, C, D	242	680	0.356	241	239	0.3	0.6	7.903	A
		2	1	(A, B, C, D)	657			657	654	0.1	0.4	1.710	A
	Exit	1	1		624			624	628	0.0	0.0	0.000	A
B - B4034	Entry	1	1	C, D	886	940	0.942	863	859	3.3	11.5	34.719	D
			2	A, B	452	946	0.478	451	458	0.6	1.0	7.394	A
	Exit	1	1		958			958	963	0.0	0.0	0.000	A
C - Water Eaton Road	Entry	1	1	D	256	396	0.647	254	251	0.9	2.1	23.723	C
			2	A, B, C	158	396	0.399	158	153	0.3	0.7	14.692	B

		2	1	(A, B, C, D)	415			414	411	0.0	0.1	0.184	A
	Exit	1	1		307			307	310	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entry	1	1	A, B	555	934	0.594	558	569	1.0	1.5	9.398	A
			2	C, D	176	953	0.185	175	179	0.2	0.2	4.511	A
	Exit	1	1		1226			1226	1219	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entry	1	1	B	500	628	0.796	498	492	1.2	2.4	15.879	C
			2	A, C, D	287	631	0.455	285	292	0.6	1.0	10.463	B
		2	1	(A, B, C, D)	806			787	790	0.4	4.0	10.751	B
	Exit	1	1		759			759	761	0.0	0.0	0.000	A
B - B4034	Entry	1	1	C, D	1056	906	1.163	910	918	11.5	51.9	132.224	F
			2	A, B	552	915	0.603	552	554	1.0	1.6	9.987	A
	Exit	1	1		1160			1160	1162	0.0	0.0	0.000	A
C - Water Eaton Road	Entry	1	1	D	301	339	0.887	290	293	2.1	5.9	52.762	F
			2	A, B, C	186	339	0.550	187	184	0.7	1.2	23.215	C
		2	1	(A, B, C, D)	504			487	493	0.1	2.9	9.877	A
	Exit	1	1		375			375	377	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entry	1	1	A, B	686	887	0.774	682	693	1.5	3.4	16.597	C
			2	C, D	225	907	0.249	224	221	0.2	0.4	5.388	A
	Exit	1	1		1333			1333	1346	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entry	1	1	B	518	629	0.823	519	516	2.4	2.5	17.308	C
			2	A, C, D	301	632	0.477	300	295	1.0	1.1	11.425	B
		2	1	(A, B, C, D)	805			819	812	4.0	4.4	21.237	C
	Exit	1	1		765			765	766	0.0	0.0	0.000	A
B - B4034	Entry	1	1	C, D	1082	903	1.199	903	910	51.9	96.8	300.225	F
			2	A, B	554	910	0.609	556	557	1.6	1.3	10.031	B
	Exit	1	1		1177			1177	1195	0.0	0.0	0.000	A

C - Water Eaton Road	Entr y	1	1	D	310	339	0.915	311	308	5.9	5.7	67.683	F
			2	A, B, C	189	339	0.559	188	186	1.2	1.4	26.287	D
	Exit	1	1	(A, B, C, D)	504			499	494	2.9	4.9	31.680	D
			1		383			383	376	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entr y	1	1	A, B	687	882	0.778	678	701	3.4	4.0	18.688	C
			2	C, D	223	905	0.247	223	218	0.4	0.4	5.222	A
	Exit	1	1		1353			1353	1355	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entr y	1	1	B	408	672	0.606	409	430	2.5	1.3	12.825	B
			2	A, C, D	238	675	0.353	239	248	1.1	0.5	9.015	A
		2	1	(A, B, C, D)	649			646	671	4.4	0.5	5.615	A
	Exit	1	1		626			626	638	0.0	0.0	0.000	A
B - B4034	Entr y	1	1	C, D	870	936	0.929	930	938	96.8	84.7	359.591	F
			2	A, B	448	943	0.474	452	459	1.3	0.8	7.824	A
	Exit	1	1		957			957	1003	0.0	0.0	0.000	A
C - Water Eaton Road	Entr y	1	1	D	264	373	0.708	267	281	5.7	3.0	49.805	E
			2	A, B, C	162	373	0.435	163	165	1.4	0.9	20.463	C
		2	1	(A, B, C, D)	417			426	434	4.9	0.6	17.678	C
	Exit	1	1		312			312	317	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entr y	1	1	A, B	558	926	0.603	559	587	4.0	1.5	11.278	B
			2	C, D	183	951	0.193	183	183	0.4	0.3	4.818	A
	Exit	1	1		1306			1306	1333	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entr y	1	1	B	338	710	0.477	341	350	1.3	0.7	9.289	A
			2	A, C, D	203	712	0.285	203	201	0.5	0.5	7.316	A
		2	1	(A, B, C, D)	541			541	548	0.5	0.0	0.530	A
	Exit	1	1		524			524	527	0.0	0.0	0.000	A
B - B4034	Entr y	1	1	C, D	730	959	0.760	908	940	84.7	36.3	216.060	F

			2	A, B	384	966	0.397	383	382	0.8	0.7	6.217	A
	Exit	1	1		793			793	822	0.0	0.0	0.000	A
C - Water Eaton Road	Entr y	1	1	D	212	409	0.518	214	224	3.0	1.1	22.633	C
			2	A, B, C	128	409	0.314	129	133	0.9	0.4	13.763	B
		2	1	(A, B, C, D)	340			340	347	0.6	0.0	0.788	A
	Exit	1	1		269			269	266	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entr y	1	1	A, B	462	966	0.479	464	484	1.5	1.0	7.440	A
			2	C, D	154	987	0.156	154	152	0.3	0.2	4.362	A
	Exit	1	1		1210			1210	1251	0.0	0.0	0.000	A

2033 Base + CD + D, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A1 - [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.
Last Run	Lane Simulation	D - B4034 Buckingham Road - Lane Simulation	Arm D: Queue at end of modelled period is greater than 10 PCU. Delay is likely to have been underestimated.
Warning	Geometry	D - B4034 Buckingham Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J1	Buckingham Road / Sherwood Drive / Water Eaton Road	Standard Roundabout		A, B, C, D	256.88	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
D15	2033 Base + CD + D	AM	ONE HOUR	07:30	09:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Sherwood Drive		ONE HOUR	✓	718	100.000
B - B4034		ONE HOUR	✓	980	100.000
C - Water Eaton Road		ONE HOUR	✓	429	100.000
D - B4034 Buckingham Road		ONE HOUR	✓	1365	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
From		A - Sherwood Drive	B - B4034	C - Water Eaton Road	D - B4034 Buckingham Road
	A - Sherwood Drive	0	505	122	91
	B - B4034	392	0	57	530
	C - Water Eaton Road	116	32	0	281
	D - B4034 Buckingham Road	140	1002	221	2

Proportions

	To				
From		A - Sherwood Drive	B - B4034	C - Water Eaton Road	D - B4034 Buckingham Road
	A - Sherwood Drive	0.00	0.70	0.17	0.13
	B - B4034	0.40	0.00	0.06	0.54
	C - Water Eaton Road	0.27	0.07	0.00	0.66
	D - B4034 Buckingham Road	0.10	0.73	0.16	0.00

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		A - Sherwood Drive	B - B4034	C - Water Eaton Road	D - B4034 Buckingham Road
	A - Sherwood Drive	0	1	1	0
	B - B4034	1	0	6	4
	C - Water Eaton Road	1	4	0	1
	D - B4034 Buckingham Road	0	2	1	0

Average PCU Per Veh

	To				
From		A - Sherwood Drive	B - B4034	C - Water Eaton Road	D - B4034 Buckingham Road
	A - Sherwood Drive	1.000	1.011	1.009	1.000
	B - B4034	1.012	1.000	1.060	1.038
	C - Water Eaton Road	1.010	1.036	1.000	1.009
	D - B4034 Buckingham Road	1.000	1.018	1.005	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - Sherwood Drive	07:30-07:45	540	546
	07:45-08:00	645	651
	08:00-08:15	790	798

	08:15-08:30	790	798
	08:30-08:45	645	651
	08:45-09:00	540	546
B - B4034	07:30-07:45	738	759
	07:45-08:00	881	906
	08:00-08:15	1079	1110
	08:15-08:30	1079	1110
	08:30-08:45	881	906
	08:45-09:00	738	759
C - Water Eaton Road	07:30-07:45	323	327
	07:45-08:00	386	390
	08:00-08:15	472	478
	08:15-08:30	472	478
	08:30-08:45	386	390
	08:45-09:00	323	327
D - B4034 Buckingham Road	07:30-07:45	1028	1042
	07:45-08:00	1227	1245
	08:00-08:15	1503	1524
	08:15-08:30	1503	1524
	08:30-08:45	1227	1245
	08:45-09:00	1028	1042

Results

Results Summary for whole modelled period

Arm	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - Sherwood Drive	105.45	24.4	F	655	983
B - B4034	11.64	3.6	B	900	1350
C - Water Eaton Road	17.95	2.6	C	393	590
D - B4034 Buckingham Road	589.31	197.6	F	1253	1879

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	535	134	931	539	537	491	0.0	2.0	13.868	B
B - B4034	743	186	326	745	758	1144	0.0	1.4	6.384	A
C - Water Eaton Road	318	80	771	320	326	300	0.0	0.8	8.587	A
D - B4034 Buckingham Road	1022	255	409	1014	1016	682	0.0	6.3	17.933	C

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	649	162	1065	642	638	574	2.0	5.3	24.651	C
B - B4034	880	220	395	881	906	1312	1.4	2.1	8.021	A
C - Water Eaton Road	380	95	914	382	386	362	0.8	1.1	10.622	B
D - B4034 Buckingham Road	1221	305	484	1155	1162	813	6.3	26.5	56.578	F

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	779	195	1101	753	743	682	5.3	18.0	65.753	F
B - B4034	1084	271	475	1080	1102	1379	2.1	3.6	11.047	B
C - Water Eaton Road	473	118	1113	471	468	442	1.1	2.6	16.338	C
D - B4034 Buckingham Road	1519	380	599	1184	1211	985	26.5	104.4	208.834	F

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	784	196	1088	763	769	673	18.0	24.4	105.449	F
B - B4034	1076	269	468	1079	1111	1384	3.6	3.4	11.638	B
C - Water Eaton Road	477	119	1117	481	484	430	2.6	2.1	17.950	C
D - B4034 Buckingham Road	1496	374	591	1171	1195	1007	104.4	184.9	464.121	F

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	645	161	1086	681	711	582	24.4	9.3	74.228	F
B - B4034	879	220	403	882	915	1363	3.4	1.8	8.322	A
C - Water Eaton Road	386	97	919	387	395	367	2.1	1.2	11.578	B
D - B4034 Buckingham Road	1230	307	487	1181	1187	819	184.9	197.2	589.311	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	541	135	1069	552	569	509	9.3	2.7	26.617	D
B - B4034	737	184	330	736	757	1290	1.8	1.5	6.532	A
C - Water Eaton Road	324	81	766	322	328	300	1.2	0.8	8.730	A

D - B4034 Buckingham Road	1029	257	407	1171	1184	682	197.2	162.5	430.202	F

Lane Results

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

Lanes: Main Results for each time segment

07:30 - 07:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entry	1	1	B	378	611	0.619	379	379	0.0	1.4	12.962	B
			2	A, C, D	160	615	0.260	160	158	0.0	0.3	7.572	A
		2	1	(A, B, C, D)	535			538	544	0.0	0.3	2.470	A
	Exit	1	1		491			491	490	0.0	0.0	0.000	A
B - B4034	Entry	1	1	C, D	448	945	0.474	448	459	0.0	0.9	7.085	A
			2	A, B	294	974	0.302	296	299	0.0	0.4	5.334	A
	Exit	1	1		1144			1144	1148	0.0	0.0	0.000	A
C - Water Eaton Road	Entry	1	1	D	206	599	0.344	208	213	0.0	0.6	9.178	A
			2	A, B, C	112	596	0.188	113	113	0.0	0.2	7.465	A
		2	1	(A, B, C, D)	318			318	329	0.0	0.0	0.000	A
	Exit	1	1		300			300	303	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entry	1	1	A, B	854	1007	0.848	847	847	0.0	6.1	20.624	C
			2	C, D	168	1018	0.165	167	170	0.0	0.2	4.309	A
	Exit	1	1		682			682	697	0.0	0.0	0.000	A

07:45 - 08:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entry	1	1	B	451	574	0.786	448	447	1.4	2.4	17.373	C
			2	A, C, D	194	577	0.336	194	191	0.3	0.6	9.621	A
		2	1	(A, B, C, D)	649			645	643	0.3	2.3	9.531	A
	Exit	1	1		574			574	578	0.0	0.0	0.000	A
B - B4034	Entry	1	1	C, D	527	922	0.571	528	550	0.9	1.5	9.347	A
			2	A, B	353	949	0.371	353	357	0.4	0.6	6.031	A
	Exit	1	1		1312			1312	1319	0.0	0.0	0.000	A

C - Water Eaton Road	Entr y	1	1	D	250	553	0.45 1	252	253	0.6	0.7	11.68 9	B
			2	A, B, C	131	546	0.23 9	131	133	0.2	0.3	8.573	A
		2	1	(A, B, C, D)	380			380	387	0.0	0.0	0.001	A
	Exit	1	1		362			362	365	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entr y	1	1	A, B	1019	981	1.03 9	953	960	6.1	26.2	66.76 5	F
			2	C, D	202	991	0.20 4	201	202	0.2	0.3	4.600	A
	Exit	1	1		813			813	830	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lan e level	Lan e	Destinati on arms	Total Dema nd (Veh/h r)	Capaci ty (Veh/hr)	RFC	Throughp ut (Veh/hr)	Average throughp ut (PCU/hr)	Start queu e (Veh)	End queu e (Veh)	Delay (s)	Unsignalis ed level of service
A - Sherwood Drive	Entr y	1	1	B	531	563	0.94 4	530	523	2.4	3.4	22.15 2	C
			2	A, C, D	221	567	0.39 1	223	220	0.6	0.6	11.11 9	B
		2	1	(A, B, C, D)	779			753	747	2.3	14.0	46.71 3	E
	Exit	1	1		682			682	686	0.0	0.0	0.000	A
B - B4034	Entr y	1	1	C, D	650	895	0.72 6	647	662	1.5	2.7	13.53 6	B
			2	A, B	434	919	0.47 2	433	440	0.6	0.9	7.391	A
	Exit	1	1		1379			1379	1402	0.0	0.0	0.000	A
C - Water Eaton Road	Entr y	1	1	D	306	487	0.62 8	305	305	0.7	1.9	18.66 9	C
			2	A, B, C	166	483	0.34 5	166	163	0.3	0.6	11.21 1	B
		2	1	(A, B, C, D)	473			473	474	0.0	0.0	0.231	A
	Exit	1	1		442			442	438	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entr y	1	1	A, B	1267	939	1.34 7	932	962	26.2	104. 0	248.9 10	F
			2	C, D	252	947	0.26 6	252	249	0.3	0.3	4.998	A
	Exit	1	1		985			985	997	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lan e level	Lan e	Destinati on arms	Total Dema nd (Veh/h r)	Capaci ty (Veh/hr)	RFC	Throughp ut (Veh/hr)	Average throughp ut (PCU/hr)	Start queu e (Veh)	End queu e (Veh)	Delay (s)	Unsignalis ed level of service
A - Sherwood Drive	Entr y	1	1	B	533	567	0.94 1	534	542	3.4	3.4	23.29 9	C
			2	A, C, D	229	571	0.40 0	229	227	0.6	0.7	11.91 1	B
		2	1	(A, B, C, D)	784			761	770	14.0	20.3	85.57 2	F
	Exit	1	1		673			673	683	0.0	0.0	0.000	A
B - B4034	Entr y	1	1	C, D	650	897	0.72 6	655	674	2.7	2.4	14.50 6	B

			2	A, B	426	921	0.46 2	424	437	0.9	1.0	7.346	A
	Exit	1	1		1384			1384	1414	0.0	0.0	0.000	A
C - Water Eaton Road	Entr y	1	1	D	310	485	0.63 8	314	316	1.9	1.6	20.87 5	C
			2	A, B, C	167	483	0.34 7	167	169	0.6	0.5	11.43 6	B
		2	1	(A, B, C, D)	477			477	483	0.0	0.0	0.361	A
	Exit	1	1		430			430	440	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entr y	1	1	A, B	1257	943	1.33 3	932	950	104. 0	184. 6	553.1 72	F
			2	C, D	239	952	0.25 1	239	245	0.3	0.4	5.126	A
	Exit	1	1		1007			1007	1022	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lan e lev el	Lan e	Destinati on arms	Total Dema nd (Veh/h r)	Capaci ty (Veh/hr)	RFC	Throug hp ut (Veh/hr)	Average throughp ut (PCU/hr)	Start queu e (Veh)	End queu e (Veh)	Delay (s)	Unsignalis ed level of service
A - Sherwood Drive	Entr y	1	1	B	477	567	0.84 0	477	500	3.4	2.6	21.06 4	C
			2	A, C, D	203	571	0.35 6	203	211	0.7	0.6	11.22 5	B
		2	1	(A, B, C, D)	645			680	707	20.3	6.2	56.28 6	F
	Exit	1	1		582			582	586	0.0	0.0	0.000	A
B - B4034	Entr y	1	1	C, D	525	920	0.57 1	528	556	2.4	1.2	9.724	A
			2	A, B	354	946	0.37 4	354	358	1.0	0.6	6.218	A
	Exit	1	1		1363			1363	1396	0.0	0.0	0.000	A
C - Water Eaton Road	Entr y	1	1	D	254	551	0.46 1	254	258	1.6	0.9	12.99 1	B
			2	A, B, C	132	547	0.24 1	133	136	0.5	0.3	8.892	A
		2	1	(A, B, C, D)	386			386	391	0.0	0.0	0.004	A
	Exit	1	1		367			367	375	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entr y	1	1	A, B	1030	980	1.05 2	981	987	184. 6	197. 0	702.5 03	F
			2	C, D	199	990	0.20 2	200	200	0.4	0.2	4.605	A
	Exit	1	1		819			819	850	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lan e lev el	Lan e	Destinati on arms	Total Dema nd (Veh/h r)	Capaci ty (Veh/hr)	RFC	Throug hp ut (Veh/hr)	Average throughp ut (PCU/hr)	Start queu e (Veh)	End queu e (Veh)	Delay (s)	Unsignalis ed level of service
A - Sherwood Drive	Entr y	1	1	B	386	572	0.67 6	388	402	2.6	1.6	16.43 4	C
			2	A, C, D	165	575	0.28 6	164	167	0.6	0.5	9.297	A
		2	1	(A, B, C, D)	541			551	565	6.2	0.7	12.53 6	B

	Exit	1	1		509			509	507	0.0	0.0	0.000	A
B - B4034	Entr y	1	1	C, D	443	946	0.468	441	460	1.2	1.1	7.374	A
			2	A, B	294	972	0.303	295	296	0.6	0.4	5.260	A
	Exit	1	1		1290			1290	1324	0.0	0.0	0.000	A
C - Water Eaton Road	Entr y	1	1	D	211	603	0.351	211	214	0.9	0.6	9.284	A
			2	A, B, C	113	596	0.189	112	115	0.3	0.2	7.694	A
		2	1	(A, B, C, D)	324			324	327	0.0	0.0	0.001	A
	Exit	1	1		300			300	305	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entr y	1	1	A, B	862	1008	0.855	1004	1017	197.0	162.3	609.630	F
			2	C, D	167	1021	0.164	167	166	0.2	0.2	4.294	A
	Exit	1	1		682			682	702	0.0	0.0	0.000	A

2033 Base + CD + D, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A1 - [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.
Last Run	Lane Simulation	B - B4034 - Lane Simulation	Arm B: Queue at end of modelled period is greater than 10 PCU. Delay is likely to have been underestimated.
Warning	Geometry	D - B4034 Buckingham Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J1	Buckingham Road / Sherwood Drive / Water Eaton Road	Standard Roundabout		A, B, C, D	223.64	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
D16	2033 Base + CD + D	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Sherwood Drive		ONE HOUR	✓	756	100.000
B - B4034		ONE HOUR	✓	1577	100.000
C - Water Eaton Road		ONE HOUR	✓	464	100.000
D - B4034 Buckingham Road		ONE HOUR	✓	904	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		A - Sherwood Drive	B - B4034	C - Water Eaton Road	D - B4034 Buckingham Road
From					
	A - Sherwood Drive	0	462	133	162
	B - B4034	502	1	17	1057
	C - Water Eaton Road	104	68	0	292
	D - B4034 Buckingham Road	107	588	205	3

Proportions

	To				
		A - Sherwood Drive	B - B4034	C - Water Eaton Road	D - B4034 Buckingham Road
From					
	A - Sherwood Drive	0.00	0.61	0.18	0.21
	B - B4034	0.32	0.00	0.01	0.67
	C - Water Eaton Road	0.22	0.15	0.00	0.63
	D - B4034 Buckingham Road	0.12	0.65	0.23	0.00

Vehicle Mix

Heavy Vehicle Percentages

	To				
		A - Sherwood Drive	B - B4034	C - Water Eaton Road	D - B4034 Buckingham Road
From					
	A - Sherwood Drive	0	1	0	0
	B - B4034	1	0	0	2
	C - Water Eaton Road	0	0	0	0
	D - B4034 Buckingham Road	0	3	0	0

Average PCU Per Veh

	To				
		A - Sherwood Drive	B - B4034	C - Water Eaton Road	D - B4034 Buckingham Road
From					
	A - Sherwood Drive	1.000	1.005	1.000	1.000
	B - B4034	1.007	1.000	1.000	1.015
	C - Water Eaton Road	1.000	1.000	1.000	1.000
	D - B4034 Buckingham Road	1.000	1.027	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - Sherwood Drive	16:45-17:00	569	571
	17:00-17:15	679	682
	17:15-17:30	832	835
	17:30-17:45	832	835
	17:45-18:00	679	682
	18:00-18:15	569	571
B - B4034	16:45-17:00	1188	1202
	17:00-17:15	1418	1435
	17:15-17:30	1737	1758
	17:30-17:45	1737	1758
	17:45-18:00	1418	1435
	18:00-18:15	1188	1202
C - Water Eaton Road	16:45-17:00	349	349
	17:00-17:15	417	417
	17:15-17:30	511	511
	17:30-17:45	511	511
	17:45-18:00	417	417
	18:00-18:15	349	349
D - B4034 Buckingham Road	16:45-17:00	681	693
	17:00-17:15	813	827
	17:15-17:30	996	1013
	17:30-17:45	996	1013
	17:45-18:00	813	827
	18:00-18:15	681	693

Results

Results Summary for whole modelled period

Arm	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - Sherwood Drive	38.56	9.5	E	693	1039
B - B4034	456.49	177.7	F	1444	2166
C - Water Eaton Road	123.51	19.5	F	427	640
D - B4034 Buckingham Road	22.94	6.4	C	827	1241

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	555	139	650	552	559	535	0.0	1.6	9.095	A
B - B4034	1187	297	375	1179	1175	827	0.0	6.4	17.181	C

C - Water Eaton Road	352	88	1291	354	349	263	0.0	1.5	14.684	B
D - B4034 Buckingham Road	678	169	507	678	685	1138	0.0	1.3	6.889	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	675	169	775	678	677	636	1.6	2.5	13.198	B
B - B4034	1410	352	448	1350	1367	1004	6.4	23.1	43.237	E
C - Water Eaton Road	410	102	1483	407	410	315	1.5	3.4	26.579	D
D - B4034 Buckingham Road	808	202	603	808	819	1287	1.3	2.3	9.791	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	837	209	941	830	815	779	2.5	8.1	29.002	D
B - B4034	1724	431	554	1446	1467	1217	23.1	94.0	162.042	F
C - Water Eaton Road	516	129	1615	485	474	385	3.4	12.8	68.689	F
D - B4034 Buckingham Road	990	247	735	984	997	1364	2.3	6.0	18.915	C

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	838	210	957	830	828	780	8.1	9.5	38.555	E
B - B4034	1733	433	553	1446	1470	1234	94.0	164.9	353.729	F
C - Water Eaton Road	517	129	1609	485	484	391	12.8	19.5	123.508	F
D - B4034 Buckingham Road	1001	250	735	1002	1013	1359	6.0	6.4	22.936	C

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	682	170	784	679	710	643	9.5	2.8	19.759	C
B - B4034	1413	353	447	1377	1392	1017	164.9	177.3	456.495	F
C - Water Eaton Road	412	103	1510	443	467	313	19.5	6.9	84.725	F
D - B4034 Buckingham Road	810	202	614	814	849	1340	6.4	2.1	13.034	B

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	568	142	655	570	578	548	2.8	1.5	10.148	B
B - B4034	1196	299	379	1349	1352	846	177.3	142.6	305.544	F
C - Water Eaton Road	353	88	1456	357	372	272	6.9	1.8	25.876	D
D - B4034 Buckingham Road	681	170	521	682	694	1292	2.1	1.4	7.650	A

Lane Results

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

Lanes: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entry	1	1	B	334	696	0.480	331	341	0.0	1.0	9.352	A
			2	A, C, D	221	699	0.316	221	218	0.0	0.5	7.516	A
		2	1	(A, B, C, D)	555			555	565	0.0	0.1	0.451	A
	Exit	1	1		535			535	527	0.0	0.0	0.000	A
B - B4034	Entry	1	1	C, D	812	954	0.852	804	802	0.0	5.7	22.226	C
			2	A, B	375	961	0.390	375	373	0.0	0.7	6.193	A
	Exit	1	1		827			827	845	0.0	0.0	0.000	A
C - Water Eaton Road	Entry	1	1	D	220	438	0.501	222	220	0.0	1.0	16.346	C
			2	A, B, C	132	438	0.302	132	129	0.0	0.5	11.655	B
		2	1	(A, B, C, D)	352			352	355	0.0	0.0	0.033	A
	Exit	1	1		263			263	262	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entry	1	1	A, B	523	970	0.539	524	529	0.0	1.1	7.663	A
			2	C, D	154	989	0.156	154	156	0.0	0.2	4.316	A
	Exit	1	1		1138			1138	1134	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entry	1	1	B	417	660	0.631	417	413	1.0	1.5	12.325	B
			2	A, C, D	260	663	0.392	260	264	0.5	0.6	8.714	A

		2	1	(A, B, C, D)	675			677	679	0.1	0.4	2.277	A
	Exit	1	1		636			636	640	0.0	0.0	0.000	A
B - B4034	Entr y	1	1	C, D	964	927	1.039	900	914	5.7	22.4	59.962	F
			2	A, B	446	934	0.478	450	453	0.7	0.8	7.301	A
	Exit	1	1		1004			1004	1013	0.0	0.0	0.000	A
C - Water Eaton Road	Entr y	1	1	D	256	375	0.683	253	254	1.0	2.3	29.147	D
			2	A, B, C	155	375	0.413	154	155	0.5	0.8	16.850	C
		2	1	(A, B, C, D)	410			411	416	0.0	0.3	1.922	A
	Exit	1	1		315			315	317	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entr y	1	1	A, B	619	934	0.663	619	632	1.1	2.1	11.320	B
			2	C, D	188	955	0.197	188	187	0.2	0.2	4.699	A
	Exit	1	1		1287			1287	1302	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entr y	1	1	B	504	613	0.824	505	498	1.5	2.4	16.912	C
			2	A, C, D	325	615	0.529	325	317	0.6	1.1	11.383	B
		2	1	(A, B, C, D)	837			830	821	0.4	4.6	14.152	B
	Exit	1	1		779			779	780	0.0	0.0	0.000	A
B - B4034	Entr y	1	1	C, D	1175	890	1.318	892	912	22.4	92.5	233.205	F
			2	A, B	549	899	0.611	554	556	0.8	1.4	10.799	B
	Exit	1	1		1217			1217	1219	0.0	0.0	0.000	A
C - Water Eaton Road	Entr y	1	1	D	311	333	0.934	304	293	2.3	6.7	62.828	F
			2	A, B, C	183	333	0.549	181	181	0.8	1.5	26.165	D
		2	1	(A, B, C, D)	516			493	494	0.3	4.7	18.210	C
	Exit	1	1		385			385	384	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entr y	1	1	A, B	760	887	0.857	755	764	2.1	5.6	23.087	C
			2	C, D	229	908	0.252	229	233	0.2	0.4	5.312	A
	Exit	1	1		1364			1364	1370	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service

A - Sherwood Drive	Entr y	1	1	B	507	607	0.83 5	509	509	2.4	2.5	18.14 5	C
			2	A, C, D	325	611	0.53 1	321	319	1.1	1.3	12.25 4	B
	Exit	1	1	(A, B, C, D)	838			831	830	4.6	5.7	22.63 9	C
			1		780			780	777	0.0	0.0	0.000	A
B - B4034	Entr y	1	1	C, D	1171	893	1.31 2	889	913	92.5	163. 0	515.1 61	F
			2	A, B	561	899	0.62 5	557	557	1.4	1.9	10.26 9	B
	Exit	1	1		1234			1234	1248	0.0	0.0	0.000	A
C - Water Eaton Road	Entr y	1	1	D	313	335	0.93 2	308	308	6.7	7.3	81.42 5	F
			2	A, B, C	182	335	0.54 4	178	176	1.5	1.7	29.22 4	D
	Exit	1	1	(A, B, C, D)	517			495	487	4.7	10.5	60.72 7	F
			1		391			391	387	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entr y	1	1	A, B	770	889	0.86 6	770	783	5.6	6.1	28.23 1	D
			2	C, D	231	908	0.25 4	232	230	0.4	0.3	5.233	A
	Exit	1	1		1359			1359	1382	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entr y	1	1	B	418	656	0.63 7	416	435	2.5	1.5	14.43 0	B
			2	A, C, D	265	660	0.40 1	263	275	1.3	0.8	9.992	A
	Exit	1	1	(A, B, C, D)	682			683	704	5.7	0.5	7.299	A
			1		643			643	663	0.0	0.0	0.000	A
B - B4034	Entr y	1	1	C, D	962	928	1.03 5	926	929	163. 0	176. 4	667.4 41	F
			2	A, B	451	936	0.48 2	451	463	1.9	0.9	7.725	A
	Exit	1	1		1017			1017	1065	0.0	0.0	0.000	A
C - Water Eaton Road	Entr y	1	1	D	271	366	0.73 9	280	298	7.3	3.7	61.25 8	F
			2	A, B, C	162	366	0.44 1	163	169	1.7	1.0	24.47 1	C
	Exit	1	1	(A, B, C, D)	412			432	450	10.5	2.3	39.64 6	E
			1		313			313	325	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entr y	1	1	A, B	627	930	0.67 3	630	661	6.1	1.8	15.48 2	C
			2	C, D	183	951	0.19 2	184	188	0.3	0.2	4.830	A
	Exit	1	1		1340			1340	1364	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entry	1	1	B	345	694	0.497	344	354	1.5	1.0	10.128	B
			2	A, C, D	224	697	0.322	225	224	0.8	0.5	7.897	A
		2	1	(A, B, C, D)	568			569	574	0.5	0.1	0.921	A
	Exit	1	1		548			548	551	0.0	0.0	0.000	A
B - B4034	Entry	1	1	C, D	810	951	0.852	962	963	176.4	142.0	565.618	F
			2	A, B	386	960	0.402	387	389	0.9	0.6	6.290	A
	Exit	1	1		846			846	869	0.0	0.0	0.000	A
C - Water Eaton Road	Entry	1	1	D	220	384	0.574	223	236	3.7	1.3	28.614	D
			2	A, B, C	134	384	0.349	134	136	1.0	0.5	15.212	C
		2	1	(A, B, C, D)	353			354	360	2.3	0.0	3.353	A
	Exit	1	1		272			272	266	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entry	1	1	A, B	528	962	0.548	528	541	1.8	1.3	8.565	A
			2	C, D	153	984	0.156	154	153	0.2	0.2	4.511	A
	Exit	1	1		1292			1292	1310	0.0	0.0	0.000	A

2033 Base + CD + D with TP, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A1 - [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.
Last Run	Lane Simulation	D - B4034 Buckingham Road - Lane Simulation	Arm D: Queue at end of modelled period is greater than 10 PCU. Delay is likely to have been underestimated.
Warning	Geometry	D - B4034 Buckingham Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J1	Buckingham Road / Sherwood Drive / Water Eaton Road	Standard Roundabout		A, B, C, D	229.55	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
D17	2033 Base + CD + D with TP	AM	ONE HOUR	07:30	09:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Sherwood Drive		ONE HOUR	✓	715	100.000
B - B4034		ONE HOUR	✓	974	100.000
C - Water Eaton Road		ONE HOUR	✓	427	100.000
D - B4034 Buckingham Road		ONE HOUR	✓	1346	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
From		A - Sherwood Drive	B - B4034	C - Water Eaton Road	D - B4034 Buckingham Road
	A - Sherwood Drive	0	505	122	89
	B - B4034	392	0	57	525
	C - Water Eaton Road	116	32	0	279
	D - B4034 Buckingham Road	136	988	220	2

Proportions

	To				
From		A - Sherwood Drive	B - B4034	C - Water Eaton Road	D - B4034 Buckingham Road
	A - Sherwood Drive	0.00	0.71	0.17	0.12
	B - B4034	0.40	0.00	0.06	0.54
	C - Water Eaton Road	0.27	0.08	0.00	0.65
	D - B4034 Buckingham Road	0.10	0.73	0.16	0.00

Vehicle Mix

Heavy Vehicle Percentages

From	To				
		A - Sherwood Drive	B - B4034	C - Water Eaton Road	D - B4034 Buckingham Road
	A - Sherwood Drive	0	1	1	0
	B - B4034	1	0	6	4
	C - Water Eaton Road	1	4	0	1
	D - B4034 Buckingham Road	0	2	1	0

Average PCU Per Veh

From	To				
		A - Sherwood Drive	B - B4034	C - Water Eaton Road	D - B4034 Buckingham Road
	A - Sherwood Drive	1.000	1.011	1.009	1.000
	B - B4034	1.012	1.000	1.060	1.038
	C - Water Eaton Road	1.010	1.036	1.000	1.009
	D - B4034 Buckingham Road	1.000	1.018	1.005	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - Sherwood Drive	07:30-07:45	538	544
	07:45-08:00	643	649
	08:00-08:15	787	795
	08:15-08:30	787	795
	08:30-08:45	643	649
	08:45-09:00	538	544
B - B4034	07:30-07:45	734	755
	07:45-08:00	876	901
	08:00-08:15	1073	1104
	08:15-08:30	1073	1104
	08:30-08:45	876	901
	08:45-09:00	734	755
C - Water Eaton Road	07:30-07:45	322	325
	07:45-08:00	384	388
	08:00-08:15	471	476
	08:15-08:30	471	476
	08:30-08:45	384	388
	08:45-09:00	322	325
D - B4034 Buckingham Road	07:30-07:45	1013	1028
	07:45-08:00	1210	1227
	08:00-08:15	1482	1503
	08:15-08:30	1482	1503
	08:30-08:45	1210	1227
	08:45-09:00	1013	1028

Results

Results Summary for whole modelled period

Arm	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - Sherwood Drive	100.20	24.2	F	654	980
B - B4034	11.17	3.2	B	884	1326
C - Water Eaton Road	16.79	2.3	C	396	594
D - B4034 Buckingham Road	525.12	176.4	F	1231	1847

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	528	132	930	527	532	485	0.0	2.0	12.891	B
B - B4034	724	181	326	724	745	1132	0.0	1.2	6.380	A
C - Water Eaton Road	324	81	751	324	326	299	0.0	0.7	8.421	A
D - B4034 Buckingham Road	1017	254	404	1011	1009	671	0.0	5.9	18.105	C

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	641	160	1065	637	635	574	2.0	5.1	24.363	C
B - B4034	870	218	388	875	895	1314	1.2	1.8	8.001	A
C - Water Eaton Road	385	96	905	383	388	357	0.7	1.4	10.469	B
D - B4034 Buckingham Road	1203	301	485	1153	1160	803	5.9	21.3	47.051	E

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	791	198	1104	768	742	673	5.1	16.7	61.373	F
B - B4034	1062	266	471	1067	1097	1401	1.8	3.1	11.172	B
C - Water Eaton Road	482	120	1105	486	476	433	1.4	2.0	16.657	C
D - B4034 Buckingham Road	1472	368	593	1184	1199	997	21.3	93.1	184.131	F

08:15 - 08:30

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

A - Sherwood Drive	787	197	1126	762	763	661	16.7	24.1	100.203	F
B - B4034	1052	263	470	1050	1091	1417	3.1	3.1	11.135	B
C - Water Eaton Road	481	120	1085	480	480	436	2.0	2.3	16.794	C
D - B4034 Buckingham Road	1477	369	586	1200	1216	979	93.1	167.1	413.985	F

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	640	160	1084	682	704	570	24.1	9.8	78.457	F
B - B4034	865	216	402	869	908	1364	3.1	1.7	8.119	A
C - Water Eaton Road	385	96	899	386	395	371	2.3	1.1	11.811	B
D - B4034 Buckingham Road	1219	305	480	1174	1198	805	167.1	176.0	525.122	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	534	134	1085	535	572	509	9.8	2.9	25.265	D
B - B4034	729	182	328	731	763	1291	1.7	1.1	6.544	A
C - Water Eaton Road	321	80	760	323	326	300	1.1	0.6	8.755	A
D - B4034 Buckingham Road	999	250	412	1182	1187	670	176.0	135.5	390.574	F

Lane Results

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

Lanes: Main Results for each time segment

07:30 - 07:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entry	1	1	B	364	609	0.597	365	376	0.0	1.3	12.545	B
			2	A, C, D	163	616	0.265	162	157	0.0	0.4	7.665	A
		2	1	(A, B, C, D)	528			527	539	0.0	0.3	1.767	A
	Exit	1	1		485			485	486	0.0	0.0	0.000	A
B - B4034	Entry	1	1	C, D	435	947	0.460	434	451	0.0	0.8	7.112	A
			2	A, B	289	973	0.297	290	294	0.0	0.4	5.285	A
	Exit	1	1		1132			1132	1141	0.0	0.0	0.000	A
C - Water Eaton Road	Entry	1	1	D	210	606	0.347	210	211	0.0	0.6	9.023	A
			2	A, B, C	114	602	0.189	114	116	0.0	0.2	7.310	A

		2	1	(A, B, C, D)	324			324	329	0.0	0.0	0.000	A
	Exit	1	1		299			299	304	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entr y	1	1	A, B	853	1006	0.848	848	842	0.0	5.6	20.820	C
			2	C, D	164	1018	0.161	163	168	0.0	0.3	4.348	A
	Exit	1	1		671			671	682	0.0	0.0	0.000	A

07:45 - 08:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entr y	1	1	B	455	574	0.793	454	449	1.3	2.4	17.128	C
			2	A, C, D	183	578	0.316	183	185	0.4	0.4	9.410	A
		2	1	(A, B, C, D)	641			637	640	0.3	2.3	9.371	A
	Exit	1	1		574			574	574	0.0	0.0	0.000	A
B - B4034	Entr y	1	1	C, D	519	923	0.562	521	541	0.8	1.1	9.283	A
			2	A, B	351	950	0.370	353	354	0.4	0.6	6.092	A
	Exit	1	1		1314			1314	1323	0.0	0.0	0.000	A
C - Water Eaton Road	Entr y	1	1	D	252	556	0.454	251	252	0.6	1.0	11.629	B
			2	A, B, C	133	553	0.240	132	136	0.2	0.4	8.279	A
		2	1	(A, B, C, D)	385			385	391	0.0	0.0	0.007	A
	Exit	1	1		357			357	362	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entr y	1	1	A, B	998	981	1.017	948	957	5.6	21.0	55.613	F
			2	C, D	205	989	0.207	205	203	0.3	0.3	4.379	A
	Exit	1	1		803			803	820	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entr y	1	1	B	535	562	0.951	535	524	2.4	3.4	21.973	C
			2	A, C, D	233	567	0.411	233	218	0.4	0.7	11.591	B
		2	1	(A, B, C, D)	791			768	747	2.3	12.6	42.389	E
	Exit	1	1		673			673	684	0.0	0.0	0.000	A
B - B4034	Entr y	1	1	C, D	637	896	0.711	642	660	1.1	2.3	13.688	B
			2	A, B	425	920	0.462	425	438	0.6	0.8	7.460	A
	Exit	1	1		1401			1401	1401	0.0	0.0	0.000	A

C - Water Eaton Road	Entr y	1	1	D	314	489	0.64 1	317	309	1.0	1.4	19.23 9	C
			2	A, B, C	168	486	0.34 5	168	167	0.4	0.5	11.34 6	B
		2	1	(A, B, C, D)	482			481	478	0.0	0.1	0.146	A
	Exit	1	1		433			433	431	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entr y	1	1	A, B	1235	943	1.31 2	946	956	21.0	92.9	219.3 01	F
			2	C, D	238	951	0.25 0	238	242	0.3	0.3	4.869	A
	Exit	1	1		997			997	998	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entr y	1	1	B	533	556	0.95 9	536	537	3.4	3.3	23.46 5	C
			2	A, C, D	228	560	0.40 7	225	225	0.7	0.8	11.97 0	B
		2	1	(A, B, C, D)	787			761	763	12.6	20.0	80.04 8	F
	Exit	1	1		661			661	674	0.0	0.0	0.000	A
B - B4034	Entr y	1	1	C, D	632	895	0.70 7	630	661	2.3	2.4	13.74 9	B
			2	A, B	420	921	0.45 6	420	430	0.8	0.8	7.221	A
	Exit	1	1		1417			1417	1428	0.0	0.0	0.000	A
C - Water Eaton Road	Entr y	1	1	D	313	496	0.63 0	315	312	1.4	1.7	19.64 6	C
			2	A, B, C	168	494	0.34 1	166	168	0.5	0.6	10.88 2	B
		2	1	(A, B, C, D)	481			481	481	0.1	0.0	0.226	A
	Exit	1	1		436			436	443	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entr y	1	1	A, B	1233	944	1.30 4	956	967	92.9	166.8	495.1 25	F
			2	C, D	244	954	0.25 5	245	248	0.3	0.3	5.111	A
	Exit	1	1		979			979	1004	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entr y	1	1	B	479	567	0.84 5	480	500	3.3	2.7	21.36 9	C
			2	A, C, D	204	571	0.35 7	202	204	0.8	0.6	11.19 7	B
		2	1	(A, B, C, D)	640			683	700	20.0	6.5	60.34 4	F
	Exit	1	1		570			570	583	0.0	0.0	0.000	A
B - B4034	Entr y	1	1	C, D	519	922	0.56 3	522	552	2.4	1.1	9.520	A

			2	A, B	346	948	0.365	346	356	0.8	0.6	6.015	A
	Exit	1	1		1364			1364	1404	0.0	0.0	0.000	A
C - Water Eaton Road	Entry	1	1	D	250	559	0.448	252	257	1.7	0.8	13.290	B
			2	A, B, C	135	551	0.244	134	138	0.6	0.3	8.993	A
		2	1	(A, B, C, D)	385			385	390	0.0	0.0	0.021	A
	Exit	1	1		371			371	375	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entry	1	1	A, B	1021	981	1.042	975	994	166.8	175.8	628.977	F
			2	C, D	198	991	0.200	199	204	0.3	0.2	4.756	A
	Exit	1	1		805			805	842	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entry	1	1	B	378	568	0.666	376	403	2.7	1.7	16.067	C
			2	A, C, D	158	570	0.278	159	168	0.6	0.5	9.226	A
		2	1	(A, B, C, D)	534			537	567	6.5	0.7	11.519	B
	Exit	1	1		509			509	510	0.0	0.0	0.000	A
B - B4034	Entry	1	1	C, D	432	941	0.458	432	463	1.1	0.7	7.304	A
			2	A, B	298	969	0.307	299	301	0.6	0.4	5.409	A
	Exit	1	1		1291			1291	1326	0.0	0.0	0.000	A
C - Water Eaton Road	Entry	1	1	D	207	604	0.343	210	212	0.8	0.4	9.327	A
			2	A, B, C	114	601	0.189	113	113	0.3	0.2	7.676	A
		2	1	(A, B, C, D)	321			321	324	0.0	0.0	0.000	A
	Exit	1	1		300			300	309	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entry	1	1	A, B	831	1003	0.827	1012	1018	175.8	135.3	534.239	F
			2	C, D	168	1016	0.166	169	169	0.2	0.2	4.330	A
	Exit	1	1		670			670	704	0.0	0.0	0.000	A

2033 Base + CD + D with TP, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A1 - [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.
Last Run	Lane Simulation	B - B4034 - Lane Simulation	Arm B: Queue at end of modelled period is greater than 10 PCU. Delay is likely to have been underestimated.

Warning	Geometry	D - B4034 Buckingham Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J1	Buckingham Road / Sherwood Drive / Water Eaton Road	Standard Roundabout		A, B, C, D	201.00	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D18	2033 Base + CD + D with TP	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Sherwood Drive		ONE HOUR	✓	751	100.000
B - B4034		ONE HOUR	✓	1560	100.000
C - Water Eaton Road		ONE HOUR	✓	463	100.000
D - B4034 Buckingham Road		ONE HOUR	✓	890	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		A - Sherwood Drive	B - B4034	C - Water Eaton Road	D - B4034 Buckingham Road
From	A - Sherwood Drive	0	462	133	157
	B - B4034	502	1	17	1040
	C - Water Eaton Road	104	68	0	291
	D - B4034 Buckingham Road	104	579	203	3

Proportions

	To				
		A - Sherwood Drive	B - B4034	C - Water Eaton Road	D - B4034 Buckingham Road
From	A - Sherwood Drive	0.00	0.61	0.18	0.21
	B - B4034	0.32	0.00	0.01	0.67
	C - Water Eaton Road	0.22	0.15	0.00	0.63
	D - B4034 Buckingham Road	0.12	0.65	0.23	0.00

Vehicle Mix

Heavy Vehicle Percentages

	To				
		A - Sherwood Drive	B - B4034	C - Water Eaton Road	D - B4034 Buckingham Road
From	A - Sherwood Drive	0	1	0	0
	B - B4034	1	0	0	2
	C - Water Eaton Road	0	0	0	0
	D - B4034 Buckingham Road	0	3	0	0

Average PCU Per Veh

	To				
		A - Sherwood Drive	B - B4034	C - Water Eaton Road	D - B4034 Buckingham Road
From	A - Sherwood Drive	1.000	1.005	1.000	1.000
	B - B4034	1.007	1.000	1.000	1.015
	C - Water Eaton Road	1.000	1.000	1.000	1.000
	D - B4034 Buckingham Road	1.000	1.027	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - Sherwood Drive	16:45-17:00	566	567
	17:00-17:15	675	678
	17:15-17:30	827	830
	17:30-17:45	827	830
	17:45-18:00	675	678
	18:00-18:15	566	567
B - B4034	16:45-17:00	1175	1189
	17:00-17:15	1403	1420
	17:15-17:30	1718	1739
	17:30-17:45	1718	1739
	17:45-18:00	1403	1420
	18:00-18:15	1175	1189

C - Water Eaton Road	16:45-17:00	348	348
	17:00-17:15	416	416
	17:15-17:30	509	509
	17:30-17:45	509	509
	17:45-18:00	416	416
	18:00-18:15	348	348
D - B4034 Buckingham Road	16:45-17:00	670	682
	17:00-17:15	800	814
	17:15-17:30	980	997
	17:30-17:45	980	997
	17:45-18:00	800	814
	18:00-18:15	670	682

Results

Results Summary for whole modelled period

Arm	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - Sherwood Drive	32.79	7.5	D	686	1029
B - B4034	408.21	158.4	F	1425	2138
C - Water Eaton Road	120.93	18.7	F	421	632
D - B4034 Buckingham Road	22.02	5.9	C	819	1228

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	555	139	642	555	559	536	0.0	1.5	9.262	A
B - B4034	1166	292	367	1167	1163	829	0.0	5.6	15.639	C
C - Water Eaton Road	350	88	1270	349	349	264	0.0	1.5	14.101	B
D - B4034 Buckingham Road	668	167	510	668	680	1110	0.0	1.5	7.088	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	672	168	765	671	674	627	1.5	2.6	12.970	B
B - B4034	1396	349	445	1347	1355	991	5.6	21.6	41.952	E

C - Water Eaton Road	409	102	1477	414	407	315	1.5	3.0	24.071	C
D - B4034 Buckingham Road	797	199	598	794	807	1293	1.5	2.2	9.795	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	806	201	944	809	804	770	2.6	6.4	26.475	D
B - B4034	1714	428	542	1447	1477	1211	21.6	87.7	148.171	F
C - Water Eaton Road	508	127	1606	483	475	383	3.0	11.7	63.961	F
D - B4034 Buckingham Road	991	248	727	987	985	1361	2.2	5.9	18.118	C

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	824	206	947	824	818	773	6.4	7.5	32.787	D
B - B4034	1710	428	549	1450	1474	1222	87.7	152.2	324.309	F
C - Water Eaton Road	505	126	1607	489	484	392	11.7	18.7	120.933	F
D - B4034 Buckingham Road	986	246	731	989	999	1365	5.9	5.7	22.015	C

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	681	170	771	683	702	641	7.5	2.7	16.749	C
B - B4034	1389	347	449	1380	1400	1005	152.2	157.9	408.207	F
C - Water Eaton Road	410	103	1510	438	466	320	18.7	6.0	79.458	F
D - B4034 Buckingham Road	798	200	613	799	824	1335	5.7	2.2	11.404	B

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	578	144	652	576	573	527	2.7	1.6	9.946	A
B - B4034	1174	293	379	1321	1344	849	157.9	121.1	286.304	F
C - Water Eaton Road	343	86	1430	346	366	270	6.0	1.9	25.736	D
D - B4034 Buckingham Road	674	169	503	676	691	1273	2.2	1.3	7.357	A

Lane Results

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

Lanes: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entry	1	1	B	345	697	0.495	345	347	0.0	1.0	9.658	A
			2	A, C, D	210	701	0.299	210	212	0.0	0.4	7.091	A
		2	1	(A, B, C, D)	555			555	565	0.0	0.1	0.569	A
	Exit	1	1		536			536	535	0.0	0.0	0.000	A
B - B4034	Entry	1	1	C, D	785	957	0.820	785	783	0.0	4.8	20.045	C
			2	A, B	381	963	0.396	381	380	0.0	0.7	6.475	A
	Exit	1	1		829			829	845	0.0	0.0	0.000	A
C - Water Eaton Road	Entry	1	1	D	222	445	0.498	221	220	0.0	1.1	15.759	C
			2	A, B, C	128	445	0.288	128	128	0.0	0.4	11.220	B
		2	1	(A, B, C, D)	350			350	355	0.0	0.0	0.004	A
	Exit	1	1		264			264	264	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entry	1	1	A, B	511	963	0.530	511	524	0.0	1.3	7.922	A
			2	C, D	157	988	0.159	157	157	0.0	0.2	4.349	A
	Exit	1	1		1110			1110	1107	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entry	1	1	B	410	662	0.619	411	410	1.0	1.4	11.886	B
			2	A, C, D	262	666	0.393	261	264	0.4	0.8	8.745	A
		2	1	(A, B, C, D)	672			672	677	0.1	0.5	2.300	A
	Exit	1	1		627			627	636	0.0	0.0	0.000	A
B - B4034	Entry	1	1	C, D	950	930	1.021	901	901	4.8	20.6	58.398	F
			2	A, B	447	935	0.478	446	454	0.7	1.0	7.295	A
	Exit	1	1		991			991	1000	0.0	0.0	0.000	A
C - Water Eaton Road	Entry	1	1	D	260	378	0.688	263	256	1.1	2.2	28.340	D
			2	A, B, C	150	378	0.396	152	151	0.4	0.6	15.518	C
		2	1	(A, B, C, D)	409			409	412	0.0	0.1	0.424	A

	Exit	1	1		315			315	317	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entr y	1	1	A, B	612	935	0.65 5	609	621	1.3	2.0	11.35 3	B
			2	C, D	184	957	0.19 2	185	186	0.2	0.2	4.684	A
	Exit	1	1		1293			1293	1290	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entr y	1	1	B	499	611	0.81 7	500	494	1.4	2.3	16.65 8	C
			2	A, C, D	307	614	0.49 9	309	310	0.8	0.9	11.41 7	B
		2	1	(A, B, C, D)	806			806	809	0.5	3.2	11.78 5	B
	Exit	1	1		770			770	779	0.0	0.0	0.000	A
B - B4034	Entr y	1	1	C, D	1167	897	1.30 4	900	918	20.6	86.1	214.0 00	F
			2	A, B	546	903	0.60 5	546	559	1.0	1.6	10.33 5	B
	Exit	1	1		1211			1211	1209	0.0	0.0	0.000	A
C - Water Eaton Road	Entr y	1	1	D	306	336	0.91 0	302	295	2.2	6.0	59.63 2	F
			2	A, B, C	180	336	0.53 6	181	181	0.6	1.3	24.72 1	C
		2	1	(A, B, C, D)	508			486	493	0.1	4.4	16.08 2	C
	Exit	1	1		383			383	382	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entr y	1	1	A, B	758	891	0.85 1	754	755	2.0	5.6	22.06 3	C
			2	C, D	233	911	0.25 6	233	230	0.2	0.3	5.240	A
	Exit	1	1		1361			1361	1371	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entr y	1	1	B	509	610	0.83 5	507	503	2.3	2.5	17.51 1	C
			2	A, C, D	318	613	0.51 9	316	315	0.9	1.1	11.89 0	B
		2	1	(A, B, C, D)	824			827	820	3.2	3.9	17.44 3	C
	Exit	1	1		773			773	781	0.0	0.0	0.000	A
B - B4034	Entr y	1	1	C, D	1164	892	1.30 4	900	916	86.1	150.8	474.0 06	F
			2	A, B	546	901	0.60 5	549	558	1.6	1.4	10.29 9	B
	Exit	1	1		1222			1222	1232	0.0	0.0	0.000	A
C - Water Eaton Road	Entr y	1	1	D	311	335	0.92 7	307	304	6.0	7.4	81.28 7	F

			2	A, B, C	182	335	0.54 2	182	180	1.3	1.6	31.41 8	D
		2	1	(A, B, C, D)	505			493	491	4.4	9.7	57.78 1	F
		Exit	1	1		392		392	381	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entr y	1	1	A, B	752	889	0.84 5	756	771	5.6	5.4	27.05 8	D
			2	C, D	233	910	0.25 6	233	228	0.3	0.3	5.349	A
	Exit	1	1		1365			1365	1382	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entr y	1	1	B	419	660	0.63 4	419	433	2.5	1.4	13.48 3	B
			2	A, C, D	265	664	0.39 9	264	269	1.1	0.8	9.643	A
		2	1	(A, B, C, D)	681			683	696	3.9	0.5	4.865	A
	Exit	1	1		641			641	660	0.0	0.0	0.000	A
B - B4034	Entr y	1	1	C, D	937	927	1.01 0	927	936	150.8	156.8	602.5 54	F
			2	A, B	452	936	0.48 3	453	464	1.4	1.1	8.095	A
	Exit	1	1		1005			1005	1044	0.0	0.0	0.000	A
C - Water Eaton Road	Entr y	1	1	D	267	367	0.72 7	279	297	7.4	3.3	62.51 6	F
			2	A, B, C	157	367	0.42 9	160	169	1.6	0.7	23.40 0	C
		2	1	(A, B, C, D)	410			424	446	9.7	2.0	33.64 4	D
	Exit	1	1		320			320	324	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entr y	1	1	A, B	612	929	0.65 8	613	638	5.4	1.9	13.40 9	B
			2	C, D	186	952	0.19 6	186	186	0.3	0.3	4.824	A
	Exit	1	1		1335			1335	1364	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entr y	1	1	B	358	694	0.51 7	357	355	1.4	1.0	10.11 1	B
			2	A, C, D	218	698	0.31 3	219	218	0.8	0.4	7.608	A
		2	1	(A, B, C, D)	578			577	570	0.5	0.2	0.835	A
	Exit	1	1		527			527	542	0.0	0.0	0.000	A
B - B4034	Entr y	1	1	C, D	799	952	0.83 9	946	960	156.8	120.4	505.4 16	F
			2	A, B	375	959	0.39 1	375	384	1.1	0.7	6.364	A

	Exit	1	1		849			849	861	0.0	0.0	0.000	A
C - Water Eaton Road	Entr y	1	1	D	217	393	0.55 2	218	232	3.3	1.3	28.64 5	D
			2	A, B, C	128	393	0.32 7	128	134	0.7	0.5	14.89 6	B
		2	1	(A, B, C, D)	343			345	358	2.0	0.0	3.234	A
	Exit	1	1		270			270	273	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entr y	1	1	A, B	515	964	0.53 4	516	531	1.9	1.2	8.259	A
			2	C, D	159	990	0.16 1	160	160	0.3	0.1	4.446	A
	Exit	1	1		1273			1273	1297	0.0	0.0	0.000	A

2033 Base + CD + D - ST, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A1 - [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.
Last Run	Lane Simulation	D - B4034 Buckingham Road - Lane Simulation	Arm D: Queue at end of modelled period is greater than 10 PCU. Delay is likely to have been underestimated.
Warning	Geometry	D - B4034 Buckingham Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J1	Buckingham Road / Sherwood Drive / Water Eaton Road	Standard Roundabout		A, B, C, D	315.94	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
D19	2033 Base + CD + D - ST	AM	ONE HOUR	07:30	09:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Sherwood Drive		ONE HOUR	✓	724	100.000
B - B4034		ONE HOUR	✓	999	100.000
C - Water Eaton Road		ONE HOUR	✓	433	100.000
D - B4034 Buckingham Road		ONE HOUR	✓	1427	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
From		A - Sherwood Drive	B - B4034	C - Water Eaton Road	D - B4034 Buckingham Road
	A - Sherwood Drive	0	505	122	98
	B - B4034	392	0	57	549
	C - Water Eaton Road	116	32	0	285
	D - B4034 Buckingham Road	152	1048	225	2

Proportions

	To				
From		A - Sherwood Drive	B - B4034	C - Water Eaton Road	D - B4034 Buckingham Road
	A - Sherwood Drive	0.00	0.70	0.17	0.14
	B - B4034	0.39	0.00	0.06	0.55
	C - Water Eaton Road	0.27	0.07	0.00	0.66
	D - B4034 Buckingham Road	0.11	0.73	0.16	0.00

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		A - Sherwood Drive	B - B4034	C - Water Eaton Road	D - B4034 Buckingham Road
	A - Sherwood Drive	0	1	1	0
	B - B4034	1	0	6	4
	C - Water Eaton Road	1	4	0	1
	D - B4034 Buckingham Road	0	2	1	0

Average PCU Per Veh

	To				
From		A - Sherwood Drive	B - B4034	C - Water Eaton Road	D - B4034 Buckingham Road
	A - Sherwood Drive	1.000	1.011	1.009	1.000
	B - B4034	1.012	1.000	1.060	1.038
	C - Water Eaton Road	1.010	1.036	1.000	1.009
	D - B4034 Buckingham Road	1.000	1.018	1.005	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - Sherwood Drive	07:30-07:45	545	551
	07:45-08:00	651	657
	08:00-08:15	798	805

	08:15-08:30	798	805
	08:30-08:45	651	657
	08:45-09:00	545	551
B - B4034	07:30-07:45	752	774
	07:45-08:00	898	924
	08:00-08:15	1100	1131
	08:15-08:30	1100	1131
	08:30-08:45	898	924
	08:45-09:00	752	774
C - Water Eaton Road	07:30-07:45	326	329
	07:45-08:00	389	393
	08:00-08:15	476	482
	08:15-08:30	476	482
	08:30-08:45	389	393
	08:45-09:00	326	329
D - B4034 Buckingham Road	07:30-07:45	1074	1090
	07:45-08:00	1283	1301
	08:00-08:15	1571	1594
	08:15-08:30	1571	1594
	08:30-08:45	1283	1301
	08:45-09:00	1074	1090

Results

Results Summary for whole modelled period

Arm	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - Sherwood Drive	101.71	24.8	F	662	993
B - B4034	14.02	4.5	B	922	1383
C - Water Eaton Road	19.52	2.7	C	398	597
D - B4034 Buckingham Road	727.82	252.6	F	1314	1971

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	550	137	993	551	552	498	0.0	2.3	14.483	B
B - B4034	764	191	348	760	771	1196	0.0	1.7	6.790	A
C - Water Eaton Road	328	82	790	329	327	318	0.0	0.7	8.706	A
D - B4034 Buckingham Road	1082	271	414	1077	1063	705	0.0	8.5	23.899	C

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	651	163	1091	650	646	571	2.3	5.0	26.487	D
B - B4034	889	222	401	889	925	1339	1.7	2.0	7.946	A
C - Water Eaton Road	395	99	927	394	389	363	0.7	1.3	11.060	B
D - B4034 Buckingham Road	1279	320	480	1182	1187	842	8.5	34.8	72.033	F

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	784	196	1113	770	752	682	5.0	17.1	67.071	F
B - B4034	1097	274	489	1091	1122	1395	2.0	4.4	12.906	B
C - Water Eaton Road	480	120	1137	479	477	443	1.3	2.7	18.058	C
D - B4034 Buckingham Road	1570	393	601	1195	1207	1015	34.8	128.2	264.506	F

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	797	199	1098	762	773	672	17.1	24.8	101.713	F
B - B4034	1104	276	490	1114	1142	1370	4.4	3.9	14.024	B
C - Water Eaton Road	476	119	1153	476	480	451	2.7	2.5	19.520	C
D - B4034 Buckingham Road	1587	397	590	1179	1204	1039	128.2	226.9	569.329	F

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	652	163	1102	687	720	593	24.8	9.2	72.785	F
B - B4034	915	229	420	914	931	1369	3.9	2.3	8.876	A
C - Water Eaton Road	384	96	955	379	399	379	2.5	1.3	12.546	B
D - B4034 Buckingham Road	1287	322	495	1201	1203	839	226.9	252.2	727.819	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	537	134	1084	540	574	503	9.2	2.9	24.551	C
B - B4034	760	190	332	763	786	1293	2.3	1.3	6.663	A
C - Water Eaton Road	327	82	794	330	334	300	1.3	0.7	9.263	A

D - B4034 Buckingham Road	1079	270	405	1183	1194	719	252.2	225.8	478.232	F

Lane Results

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

Lanes: Main Results for each time segment

07:30 - 07:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entry	1	1	B	380	594	0.639	380	382	0.0	1.6	13.444	B
			2	A, C, D	171	599	0.286	170	170	0.0	0.4	8.208	A
		2	1	(A, B, C, D)	550			551	560	0.0	0.4	2.621	A
	Exit	1	1		498			498	496	0.0	0.0	0.000	A
B - B4034	Entry	1	1	C, D	461	939	0.491	458	472	0.0	1.2	7.708	A
			2	A, B	303	966	0.314	302	299	0.0	0.5	5.379	A
	Exit	1	1		1196			1196	1188	0.0	0.0	0.000	A
C - Water Eaton Road	Entry	1	1	D	216	593	0.364	217	214	0.0	0.5	9.350	A
			2	A, B, C	112	590	0.190	112	114	0.0	0.2	7.485	A
		2	1	(A, B, C, D)	328			328	330	0.0	0.0	0.000	A
	Exit	1	1		318			318	315	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entry	1	1	A, B	905	1005	0.902	899	889	0.0	8.3	27.650	D
			2	C, D	177	1017	0.174	178	174	0.0	0.2	4.318	A
	Exit	1	1		705			705	715	0.0	0.0	0.000	A

07:45 - 08:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entry	1	1	B	460	566	0.813	457	452	1.6	2.4	18.082	C
			2	A, C, D	194	570	0.340	193	194	0.4	0.6	9.506	A
		2	1	(A, B, C, D)	651			654	650	0.4	2.0	10.916	B
	Exit	1	1		571			571	582	0.0	0.0	0.000	A
B - B4034	Entry	1	1	C, D	541	921	0.588	542	566	1.2	1.4	9.203	A
			2	A, B	348	943	0.369	347	358	0.5	0.6	6.010	A
	Exit	1	1		1339			1339	1342	0.0	0.0	0.000	A

C - Water Eaton Road	Entr y	1	1	D	261	549	0.47 7	262	255	0.5	1.0	12.51 6	B
			2	A, B, C	134	544	0.24 5	133	134	0.2	0.3	8.234	A
		2	1	(A, B, C, D)	395			395	391	0.0	0.0	0.004	A
	Exit	1	1		363			363	366	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entr y	1	1	A, B	1071	982	1.09 2	974	980	8.3	34.5	85.03 7	F
			2	C, D	208	992	0.20 9	208	207	0.2	0.2	4.665	A
	Exit	1	1		842			842	856	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entr y	1	1	B	533	560	0.95 3	534	523	2.4	3.3	22.28 0	C
			2	A, C, D	235	565	0.41 6	236	230	0.6	0.8	11.86 6	B
		2	1	(A, B, C, D)	784			769	757	2.0	13.0	47.82 1	E
	Exit	1	1		682			682	682	0.0	0.0	0.000	A
B - B4034	Entr y	1	1	C, D	665	891	0.74 6	657	688	1.4	3.6	16.46 4	C
			2	A, B	432	917	0.47 2	434	434	0.6	0.8	7.363	A
	Exit	1	1		1395			1395	1397	0.0	0.0	0.000	A
C - Water Eaton Road	Entr y	1	1	D	313	480	0.65 2	312	310	1.0	2.0	20.92 3	C
			2	A, B, C	167	476	0.34 9	167	167	0.3	0.5	11.39 2	B
		2	1	(A, B, C, D)	480			480	482	0.0	0.1	0.401	A
	Exit	1	1		443			443	443	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entr y	1	1	A, B	1318	940	1.40 2	942	954	34.5	127.9	314.1 04	F
			2	C, D	252	949	0.26 6	253	252	0.2	0.3	5.119	A
	Exit	1	1		1015			1015	1037	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entr y	1	1	B	532	564	0.94 5	532	539	3.3	3.4	23.01 9	C
			2	A, C, D	231	567	0.40 8	230	234	0.8	0.9	12.23 1	B
		2	1	(A, B, C, D)	797			763	774	13.0	20.5	82.06 3	F
	Exit	1	1		672			672	688	0.0	0.0	0.000	A
B - B4034	Entr y	1	1	C, D	677	891	0.76 0	687	703	3.6	3.1	18.19 2	C

			2	A, B	427	915	0.466	427	439	0.8	0.8	7.557	A
	Exit	1	1		1370			1370	1401	0.0	0.0	0.000	A
C - Water Eaton Road	Entr y	1	1	D	314	473	0.662	313	315	2.0	1.9	22.480	C
			2	A, B, C	163	471	0.345	164	165	0.5	0.6	12.061	B
		2	1	(A, B, C, D)	476			477	479	0.1	0.0	0.641	A
	Exit	1	1		451			451	456	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entr y	1	1	A, B	1327	941	1.407	919	946	127.9	226.5	678.346	F
			2	C, D	260	952	0.273	260	258	0.3	0.3	5.311	A
	Exit	1	1		1039			1039	1054	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entr y	1	1	B	476	563	0.845	476	503	3.4	2.7	20.557	C
			2	A, C, D	209	566	0.369	211	217	0.9	0.6	11.222	B
		2	1	(A, B, C, D)	652			685	716	20.5	5.9	55.270	F
	Exit	1	1		593			593	587	0.0	0.0	0.000	A
B - B4034	Entr y	1	1	C, D	550	914	0.602	548	574	3.1	1.6	10.453	B
			2	A, B	365	941	0.388	366	357	0.8	0.6	6.431	A
	Exit	1	1		1369			1369	1404	0.0	0.0	0.000	A
C - Water Eaton Road	Entr y	1	1	D	254	538	0.472	250	263	1.9	1.0	14.140	B
			2	A, B, C	130	534	0.243	129	136	0.6	0.3	9.205	A
		2	1	(A, B, C, D)	384			384	395	0.0	0.0	0.103	A
	Exit	1	1		379			379	383	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entr y	1	1	A, B	1077	977	1.102	991	995	226.5	251.9	866.305	F
			2	C, D	210	988	0.213	210	208	0.3	0.3	4.674	A
	Exit	1	1		839			839	879	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entr y	1	1	B	378	568	0.665	378	402	2.7	1.7	16.397	C
			2	A, C, D	162	570	0.284	162	172	0.6	0.3	9.349	A
		2	1	(A, B, C, D)	537			540	569	5.9	0.9	10.549	B

	Exit	1	1		503			503	515	0.0	0.0	0.000	A
B - B4034	Entr y	1	1	C, D	466	944	0.49 4	467	487	1.6	0.9	7.566	A
			2	A, B	294	968	0.30 4	295	300	0.6	0.5	5.244	A
	Exit	1	1		1293			1293	1326	0.0	0.0	0.000	A
C - Water Eaton Road	Entr y	1	1	D	217	590	0.36 7	220	217	1.0	0.4	9.901	A
			2	A, B, C	110	588	0.18 7	110	116	0.3	0.2	7.989	A
		2	1	(A, B, C, D)	327			327	331	0.0	0.0	0.030	A
	Exit	1	1		300			300	312	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entr y	1	1	A, B	910	1009	0.90 2	1013	1023	251. 9	225. 7	738.5 37	F
			2	C, D	169	1018	0.16 6	169	170	0.3	0.2	4.194	A
	Exit	1	1		719			719	734	0.0	0.0	0.000	A

2033 Base + CD + D - ST, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A1 - [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.
Last Run	Lane Simulation	B - B4034 - Lane Simulation	Arm B: Queue at end of modelled period is greater than 10 PCU. Delay is likely to have been underestimated.
Warning	Geometry	D - B4034 Buckingham Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J1	Buckingham Road / Sherwood Drive / Water Eaton Road	Standard Roundabout		A, B, C, D	271.73	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
D20	2033 Base + CD + D - ST	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Sherwood Drive		ONE HOUR	✓	764	100.000
B - B4034		ONE HOUR	✓	1615	100.000
C - Water Eaton Road		ONE HOUR	✓	466	100.000
D - B4034 Buckingham Road		ONE HOUR	✓	928	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		A - Sherwood Drive	B - B4034	C - Water Eaton Road	D - B4034 Buckingham Road
From					
	A - Sherwood Drive	0	462	133	170
	B - B4034	502	1	17	1095
	C - Water Eaton Road	104	68	0	294
	D - B4034 Buckingham Road	112	607	206	3

Proportions

	To				
		A - Sherwood Drive	B - B4034	C - Water Eaton Road	D - B4034 Buckingham Road
From					
	A - Sherwood Drive	0.00	0.60	0.17	0.22
	B - B4034	0.31	0.00	0.01	0.68
	C - Water Eaton Road	0.22	0.15	0.00	0.63
	D - B4034 Buckingham Road	0.12	0.65	0.22	0.00

Vehicle Mix

Heavy Vehicle Percentages

	To				
		A - Sherwood Drive	B - B4034	C - Water Eaton Road	D - B4034 Buckingham Road
From					
	A - Sherwood Drive	0	1	0	0
	B - B4034	1	0	0	2
	C - Water Eaton Road	0	0	0	0
	D - B4034 Buckingham Road	0	3	0	0

Average PCU Per Veh

	To				
		A - Sherwood Drive	B - B4034	C - Water Eaton Road	D - B4034 Buckingham Road
From					
	A - Sherwood Drive	1.000	1.005	1.000	1.000
	B - B4034	1.007	1.000	1.000	1.015
	C - Water Eaton Road	1.000	1.000	1.000	1.000
	D - B4034 Buckingham Road	1.000	1.027	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - Sherwood Drive	16:45-17:00	575	577
	17:00-17:15	687	689
	17:15-17:30	841	844
	17:30-17:45	841	844
	17:45-18:00	687	689
	18:00-18:15	575	577
B - B4034	16:45-17:00	1216	1231
	17:00-17:15	1452	1470
	17:15-17:30	1778	1800
	17:30-17:45	1778	1800
	17:45-18:00	1452	1470
	18:00-18:15	1216	1231
C - Water Eaton Road	16:45-17:00	351	351
	17:00-17:15	419	419
	17:15-17:30	513	513
	17:30-17:45	513	513
	17:45-18:00	419	419
	18:00-18:15	351	351
D - B4034 Buckingham Road	16:45-17:00	699	711
	17:00-17:15	835	849
	17:15-17:30	1022	1040
	17:30-17:45	1022	1040
	17:45-18:00	835	849
	18:00-18:15	699	711

Results

Results Summary for whole modelled period

Arm	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - Sherwood Drive	39.56	10.0	E	698	1047
B - B4034	570.63	223.3	F	1480	2220
C - Water Eaton Road	101.19	16.0	F	422	633
D - B4034 Buckingham Road	26.04	7.7	D	853	1280

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	573	143	674	570	569	544	0.0	1.6	9.887	A
B - B4034	1214	303	386	1208	1201	858	0.0	7.6	18.586	C

C - Water Eaton Road	348	87	1325	344	338	270	0.0	1.9	15.330	C
D - B4034 Buckingham Road	706	176	511	707	710	1158	0.0	1.5	7.679	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	683	171	791	680	684	646	1.6	2.7	12.809	B
B - B4034	1464	366	452	1357	1371	1019	7.6	33.7	58.901	F
C - Water Eaton Road	419	105	1498	425	412	311	1.9	3.0	25.984	D
D - B4034 Buckingham Road	838	209	607	830	851	1315	1.5	2.6	10.589	B

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	837	209	969	824	819	781	2.7	8.7	29.914	D
B - B4034	1781	445	552	1444	1455	1242	33.7	118.1	212.232	F
C - Water Eaton Road	501	125	1615	477	475	380	3.0	10.1	56.877	F
D - B4034 Buckingham Road	1022	255	734	1016	1020	1359	2.6	7.6	21.862	C

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	841	210	969	831	838	782	8.7	10.0	39.562	E
B - B4034	1768	442	562	1446	1464	1239	118.1	200.9	441.338	F
C - Water Eaton Road	506	126	1615	486	486	393	10.1	16.0	101.190	F
D - B4034 Buckingham Road	1029	257	737	1015	1039	1364	7.6	7.7	26.042	D

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	678	170	805	683	721	644	10.0	2.9	20.057	C
B - B4034	1446	362	467	1363	1376	1021	200.9	222.8	570.629	F
C - Water Eaton Road	413	103	1501	437	461	329	16.0	5.2	69.930	F
D - B4034 Buckingham Road	835	209	608	841	876	1330	7.7	2.7	14.332	B

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	575	144	656	576	585	530	2.9	1.4	10.123	B
B - B4034	1209	302	386	1323	1339	845	222.8	194.8	348.521	F
C - Water Eaton Road	345	86	1443	349	360	266	5.2	2.1	25.290	D
D - B4034 Buckingham Road	689	172	497	689	713	1295	2.7	1.4	7.820	A

Lane Results

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

Lanes: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entry	1	1	B	346	689	0.502	346	346	0.0	1.0	9.886	A
			2	A, C, D	226	692	0.327	224	223	0.0	0.6	7.760	A
		2	1	(A, B, C, D)	573			572	575	0.0	0.1	0.834	A
	Exit	1	1		544			544	538	0.0	0.0	0.000	A
B - B4034	Entry	1	1	C, D	833	947	0.880	825	822	0.0	6.9	24.145	C
			2	A, B	381	957	0.399	383	380	0.0	0.6	6.333	A
	Exit	1	1		858			858	863	0.0	0.0	0.000	A
C - Water Eaton Road	Entry	1	1	D	220	426	0.515	216	214	0.0	1.4	17.460	C
			2	A, B, C	129	426	0.302	128	125	0.0	0.5	11.529	B
		2	1	(A, B, C, D)	348			348	346	0.0	0.0	0.039	A
	Exit	1	1		270			270	267	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entry	1	1	A, B	543	966	0.562	545	552	0.0	1.3	8.648	A
			2	C, D	163	988	0.165	162	159	0.0	0.2	4.377	A
	Exit	1	1		1158			1158	1151	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entry	1	1	B	413	655	0.630	412	411	1.0	1.5	11.741	B
			2	A, C, D	268	658	0.407	268	273	0.6	0.7	9.131	A

		2	1	(A, B, C, D)	683			681	686	0.1	0.5	2.098	A
	Exit	1	1		646			646	649	0.0	0.0	0.000	A
B - B4034	Entr y	1	1	C, D	1015	927	1.096	907	914	6.9	32.8	82.202	F
			2	A, B	449	934	0.481	450	457	0.6	0.9	7.480	A
	Exit	1	1		1019			1019	1034	0.0	0.0	0.000	A
C - Water Eaton Road	Entr y	1	1	D	264	371	0.711	268	261	1.4	2.3	30.461	D
			2	A, B, C	156	371	0.422	157	151	0.5	0.7	16.409	C
		2	1	(A, B, C, D)	419			420	416	0.0	0.1	0.631	A
	Exit	1	1		311			311	320	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entr y	1	1	A, B	655	931	0.703	647	663	1.3	2.3	12.302	B
			2	C, D	183	954	0.192	183	188	0.2	0.2	4.647	A
	Exit	1	1		1315			1315	1315	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entr y	1	1	B	504	603	0.835	504	495	1.5	2.6	17.316	C
			2	A, C, D	322	606	0.531	321	324	0.7	1.1	12.205	B
		2	1	(A, B, C, D)	837			826	826	0.5	5.0	14.527	B
	Exit	1	1		781			781	778	0.0	0.0	0.000	A
B - B4034	Entr y	1	1	C, D	1226	892	1.376	891	903	32.8	116.4	303.057	F
			2	A, B	554	900	0.616	554	551	0.9	1.7	10.336	B
	Exit	1	1		1242			1242	1238	0.0	0.0	0.000	A
C - Water Eaton Road	Entr y	1	1	D	303	333	0.910	297	293	2.3	5.7	57.711	F
			2	A, B, C	180	333	0.541	181	182	0.7	1.4	25.284	D
		2	1	(A, B, C, D)	501			483	492	0.1	3.0	10.511	B
	Exit	1	1		380			380	385	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entr y	1	1	A, B	790	886	0.891	785	787	2.3	7.2	26.774	D
			2	C, D	231	909	0.255	231	232	0.2	0.4	5.239	A
	Exit	1	1		1359			1359	1368	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service

A - Sherwood Drive	Entr y	1	1	B	509	603	0.84 4	508	510	2.6	2.8	18.82 1	C
			2	A, C, D	325	607	0.53 5	324	328	1.1	1.1	12.54 4	B
	Exit	1	1	(A, B, C, D)	841			833	839	5.0	6.1	23.18 6	C
			1		782			782	791	0.0	0.0	0.000	A
B - B4034	Entr y	1	1	C, D	1212	889	1.36 3	886	902	116. 4	199. 5	637.2 47	F
			2	A, B	556	895	0.62 1	560	561	1.7	1.4	11.01 7	B
	Exit	1	1		1239			1239	1266	0.0	0.0	0.000	A
C - Water Eaton Road	Entr y	1	1	D	311	333	0.93 3	309	305	5.7	6.9	74.78 5	F
			2	A, B, C	177	333	0.53 1	177	181	1.4	1.2	27.26 4	D
	Exit	1	1	(A, B, C, D)	506			487	490	3.0	7.8	43.08 5	E
			1		393			393	388	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entr y	1	1	A, B	792	887	0.89 4	777	805	7.2	7.4	32.17 0	D
			2	C, D	237	907	0.26 1	238	234	0.4	0.3	5.399	A
	Exit	1	1		1364			1364	1382	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entr y	1	1	B	408	650	0.62 8	411	435	2.8	1.4	14.23 6	B
			2	A, C, D	273	655	0.41 6	272	286	1.1	0.8	10.21 6	B
	Exit	1	1	(A, B, C, D)	678			681	714	6.1	0.7	7.634	A
			1		644			644	654	0.0	0.0	0.000	A
B - B4034	Entr y	1	1	C, D	995	922	1.07 8	915	925	199. 5	221. 6	822.5 26	F
			2	A, B	452	928	0.48 6	448	451	1.4	1.2	7.726	A
	Exit	1	1		1021			1021	1082	0.0	0.0	0.000	A
C - Water Eaton Road	Entr y	1	1	D	267	370	0.72 2	277	295	6.9	3.0	57.40 9	F
			2	A, B, C	159	370	0.43 0	160	166	1.2	0.8	21.86 2	C
	Exit	1	1	(A, B, C, D)	413			426	444	7.8	1.4	27.95 8	D
			1		329			329	332	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entr y	1	1	A, B	639	933	0.68 5	645	682	7.4	2.4	17.16 8	C
			2	C, D	196	953	0.20 6	195	194	0.3	0.3	4.873	A
	Exit	1	1		1330			1330	1367	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entry	1	1	B	345	694	0.497	347	354	1.4	0.8	10.268	B
			2	A, C, D	231	698	0.331	229	231	0.8	0.5	7.681	A
		2	1	(A, B, C, D)	575			576	582	0.7	0.1	0.930	A
	Exit	1	1		530			530	542	0.0	0.0	0.000	A
B - B4034	Entry	1	1	C, D	841	948	0.885	954	958	221.6	194.2	713.870	F
			2	A, B	368	959	0.384	369	381	1.2	0.5	6.346	A
	Exit	1	1		845			845	875	0.0	0.0	0.000	A
C - Water Eaton Road	Entry	1	1	D	220	388	0.567	221	230	3.0	1.4	27.060	D
			2	A, B, C	127	388	0.327	128	130	0.8	0.5	14.161	B
		2	1	(A, B, C, D)	345			347	352	1.4	0.2	3.801	A
	Exit	1	1		266			266	272	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entry	1	1	A, B	531	973	0.545	531	552	2.4	1.2	8.858	A
			2	C, D	158	993	0.159	158	161	0.3	0.1	4.365	A
	Exit	1	1		1295			1295	1308	0.0	0.0	0.000	A

2033 Base + CD + SP (ST), AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A1 - [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.
Last Run	Lane Simulation	D - B4034 Buckingham Road - Lane Simulation	Arm D: Queue at end of modelled period is greater than 10 PCU. Delay is likely to have been underestimated.
Warning	Geometry	D - B4034 Buckingham Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J1	Buckingham Road / Sherwood Drive / Water Eaton Road	Standard Roundabout		A, B, C, D	201.68	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
D21	2033 Base + CD + SP (ST)	AM	ONE HOUR	07:30	09:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Sherwood Drive		ONE HOUR	✓	707	100.000
B - B4034		ONE HOUR	✓	966	100.000
C - Water Eaton Road		ONE HOUR	✓	421	100.000
D - B4034 Buckingham Road		ONE HOUR	✓	1310	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
From		A - Sherwood Drive	B - B4034	C - Water Eaton Road	D - B4034 Buckingham Road
	A - Sherwood Drive	0	505	122	81
	B - B4034	392	0	57	516
	C - Water Eaton Road	116	32	0	273
	D - B4034 Buckingham Road	128	963	217	2

Proportions

	To				
From		A - Sherwood Drive	B - B4034	C - Water Eaton Road	D - B4034 Buckingham Road
	A - Sherwood Drive	0.00	0.71	0.17	0.11
	B - B4034	0.41	0.00	0.06	0.53
	C - Water Eaton Road	0.28	0.08	0.00	0.65
	D - B4034 Buckingham Road	0.10	0.74	0.17	0.00

Vehicle Mix

Heavy Vehicle Percentages

From	To				
		A - Sherwood Drive	B - B4034	C - Water Eaton Road	D - B4034 Buckingham Road
	A - Sherwood Drive	0	1	1	0
	B - B4034	1	0	6	4
	C - Water Eaton Road	1	4	0	1
	D - B4034 Buckingham Road	0	2	1	0

Average PCU Per Veh

From	To				
		A - Sherwood Drive	B - B4034	C - Water Eaton Road	D - B4034 Buckingham Road
	A - Sherwood Drive	1.000	1.011	1.009	1.000
	B - B4034	1.012	1.000	1.060	1.038
	C - Water Eaton Road	1.010	1.036	1.000	1.009
	D - B4034 Buckingham Road	1.000	1.018	1.005	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - Sherwood Drive	07:30-07:45	532	537
	07:45-08:00	636	642
	08:00-08:15	778	786
	08:15-08:30	778	786
	08:30-08:45	636	642
	08:45-09:00	532	537
B - B4034	07:30-07:45	727	748
	07:45-08:00	868	893
	08:00-08:15	1063	1093
	08:15-08:30	1063	1093
	08:30-08:45	868	893
	08:45-09:00	727	748
C - Water Eaton Road	07:30-07:45	317	320
	07:45-08:00	378	382
	08:00-08:15	463	468
	08:15-08:30	463	468
	08:30-08:45	378	382
	08:45-09:00	317	320
D - B4034 Buckingham Road	07:30-07:45	986	1001
	07:45-08:00	1178	1195
	08:00-08:15	1442	1463
	08:15-08:30	1442	1463
	08:30-08:45	1178	1195
	08:45-09:00	986	1001

Results

Results Summary for whole modelled period

Arm	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - Sherwood Drive	102.56	24.8	F	644	966
B - B4034	10.69	3.7	B	884	1326
C - Water Eaton Road	16.00	2.1	C	383	575
D - B4034 Buckingham Road	456.21	149.7	F	1200	1800

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	522	130	907	524	527	486	0.0	1.9	13.199	B
B - B4034	724	181	325	727	741	1106	0.0	1.2	6.353	A
C - Water Eaton Road	316	79	746	312	318	305	0.0	1.0	8.509	A
D - B4034 Buckingham Road	981	245	414	979	975	645	0.0	4.5	14.160	B

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	632	158	1048	633	626	574	1.9	4.4	21.736	C
B - B4034	854	213	379	854	885	1301	1.2	1.7	7.754	A
C - Water Eaton Road	377	94	877	377	377	356	1.0	1.0	9.927	A
D - B4034 Buckingham Road	1181	295	488	1134	1137	766	4.5	18.9	42.239	E

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	780	195	1103	740	735	681	4.4	17.6	61.303	F
B - B4034	1071	268	449	1064	1079	1394	1.7	3.7	10.690	B
C - Water Eaton Road	454	114	1092	453	456	421	1.0	2.0	14.762	B
D - B4034 Buckingham Road	1434	358	605	1179	1199	939	18.9	83.0	165.918	F

08:15 - 08:30

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

A - Sherwood Drive	772	193	1105	743	757	671	17.6	24.7	102.564	F
B - B4034	1060	265	459	1060	1100	1389	3.7	3.1	10.604	B
C - Water Eaton Road	459	115	1082	458	466	437	2.0	2.1	15.995	C
D - B4034 Buckingham Road	1447	362	592	1184	1210	948	83.0	147.2	364.877	F

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	635	159	1089	681	709	577	24.7	8.1	73.033	F
B - B4034	865	216	400	862	897	1369	3.1	2.0	8.010	A
C - Water Eaton Road	383	96	893	384	389	370	2.1	1.1	11.554	B
D - B4034 Buckingham Road	1179	295	488	1178	1187	789	147.2	149.5	456.208	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	523	131	1055	526	558	502	8.1	2.4	20.798	C
B - B4034	732	183	314	734	756	1266	2.0	1.2	6.442	A
C - Water Eaton Road	312	78	751	312	319	297	1.1	0.8	8.410	A
D - B4034 Buckingham Road	982	245	409	1148	1181	654	149.5	105.4	335.132	F

Lane Results

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

Lanes: Main Results for each time segment

07:30 - 07:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entry	1	1	B	372	618	0.603	374	377	0.0	1.3	12.471	B
			2	A, C, D	151	622	0.242	149	150	0.0	0.4	7.912	A
		2	1	(A, B, C, D)	522			523	534	0.0	0.2	2.013	A
	Exit	1	1		486			486	482	0.0	0.0	0.000	A
B - B4034	Entry	1	1	C, D	422	947	0.445	423	441	0.0	0.7	6.915	A
			2	A, B	302	970	0.312	304	300	0.0	0.4	5.550	A
	Exit	1	1		1106			1106	1115	0.0	0.0	0.000	A
C - Water Eaton Road	Entry	1	1	D	206	607	0.339	202	206	0.0	0.7	9.113	A
			2	A, B, C	110	601	0.184	110	112	0.0	0.2	7.383	A

D - B4034 Buckingham Road		2	1	(A, B, C, D)	316			316	322	0.0	0.0	0.002	A
	Exit	1	1		305			305	302	0.0	0.0	0.000	A
	Entr y	1	1	A, B	806	1002	0.804	803	808	0.0	4.2	16.201	C
			2	C, D	175	1017	0.172	176	168	0.0	0.2	4.254	A
	Exit	1	1		645			645	662	0.0	0.0	0.000	A

07:45 - 08:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entr y	1	1	B	449	577	0.778	451	446	1.3	2.1	16.260	C
			2	A, C, D	181	580	0.312	182	180	0.4	0.4	9.105	A
		2	1	(A, B, C, D)	632			630	629	0.2	1.9	7.439	A
	Exit	1	1		574			574	569	0.0	0.0	0.000	A
B - B4034	Entr y	1	1	C, D	501	928	0.540	501	529	0.7	1.1	8.899	A
			2	A, B	353	953	0.370	353	356	0.4	0.7	6.099	A
	Exit	1	1		1301			1301	1304	0.0	0.0	0.000	A
C - Water Eaton Road	Entr y	1	1	D	243	566	0.428	242	244	0.7	0.7	10.566	B
			2	A, B, C	134	560	0.240	135	132	0.2	0.3	8.736	A
		2	1	(A, B, C, D)	377			377	376	0.0	0.0	0.000	A
	Exit	1	1		356			356	360	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entr y	1	1	A, B	982	978	1.004	936	940	4.2	18.6	49.806	E
			2	C, D	199	988	0.201	198	198	0.2	0.3	4.507	A
	Exit	1	1		766			766	791	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entr y	1	1	B	525	562	0.934	523	522	2.1	3.4	22.007	C
			2	A, C, D	218	567	0.384	217	213	0.4	0.7	11.025	B
		2	1	(A, B, C, D)	780			743	742	1.9	13.5	42.372	E
	Exit	1	1		681			681	674	0.0	0.0	0.000	A
B - B4034	Entr y	1	1	C, D	626	905	0.691	621	642	1.1	2.6	13.146	B
			2	A, B	445	929	0.479	442	438	0.7	1.0	7.173	A
	Exit	1	1		1394			1394	1410	0.0	0.0	0.000	A

C - Water Eaton Road	Entr y	1	1	D	290	494	0.58 8	290	294	0.7	1.5	17.25 4	C
			2	A, B, C	164	491	0.33 4	163	162	0.3	0.5	10.13 8	B
	Exit	1	1	(A, B, C, D)	454			454	460	0.0	0.0	0.023	A
			1		421			421	428	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entr y	1	1	A, B	1203	936	1.28 5	947	962	18.6	82.6	197.3 05	F
			2	C, D	231	946	0.24 4	232	236	0.3	0.3	5.060	A
	Exit	1	1		939			939	957	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entr y	1	1	B	527	562	0.93 9	526	538	3.4	3.5	23.37 4	C
			2	A, C, D	217	566	0.38 3	217	219	0.7	0.7	12.06 0	B
		2	1	(A, B, C, D)	772			744	757	13.5	20.5	82.46 2	F
	Exit	1	1		671			671	683	0.0	0.0	0.000	A
B - B4034	Entr y	1	1	C, D	630	902	0.69 9	628	658	2.6	2.2	12.72 5	B
			2	A, B	430	925	0.46 5	433	442	1.0	0.9	7.529	A
	Exit	1	1		1389			1389	1421	0.0	0.0	0.000	A
C - Water Eaton Road	Entr y	1	1	D	299	497	0.60 1	298	301	1.5	1.6	18.36 8	C
			2	A, B, C	160	493	0.32 4	160	164	0.5	0.4	11.38 0	B
		2	1	(A, B, C, D)	459			458	466	0.0	0.0	0.062	A
	Exit	1	1		437			437	450	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entr y	1	1	A, B	1205	942	1.27 8	942	961	82.6	147. 0	438.8 29	F
			2	C, D	242	952	0.25 5	242	249	0.3	0.2	5.075	A
	Exit	1	1		948			948	977	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entr y	1	1	B	479	566	0.84 7	481	503	3.5	2.6	21.20 7	C
			2	A, C, D	199	570	0.35 0	200	206	0.7	0.6	11.75 6	B
		2	1	(A, B, C, D)	635			679	705	20.5	4.9	54.81 2	F
	Exit	1	1		577			577	583	0.0	0.0	0.000	A
B - B4034	Entr y	1	1	C, D	511	922	0.55 4	508	538	2.2	1.4	9.340	A

			2	A, B	354	946	0.375	354	360	0.9	0.6	6.082	A
	Exit	1	1		1369			1369	1401	0.0	0.0	0.000	A
C - Water Eaton Road	Entry	1	1	D	248	561	0.443	251	252	1.6	0.7	12.973	B
			2	A, B, C	134	558	0.242	134	137	0.4	0.4	8.848	A
		2	1	(A, B, C, D)	383			383	385	0.0	0.0	0.047	A
	Exit	1	1		370			370	381	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entry	1	1	A, B	979	979	1.000	978	984	147.0	149.2	549.303	F
			2	C, D	200	990	0.203	200	203	0.2	0.3	4.769	A
	Exit	1	1		789			789	817	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entry	1	1	B	375	576	0.650	376	401	2.6	1.4	16.018	C
			2	A, C, D	149	580	0.258	149	157	0.6	0.4	9.028	A
		2	1	(A, B, C, D)	523			524	553	4.9	0.6	7.012	A
	Exit	1	1		502			502	508	0.0	0.0	0.000	A
B - B4034	Entry	1	1	C, D	434	952	0.455	435	454	1.4	0.8	7.140	A
			2	A, B	299	976	0.306	299	302	0.6	0.4	5.422	A
	Exit	1	1		1266			1266	1320	0.0	0.0	0.000	A
C - Water Eaton Road	Entry	1	1	D	201	607	0.331	201	206	0.7	0.5	8.935	A
			2	A, B, C	111	603	0.184	110	113	0.4	0.3	7.448	A
		2	1	(A, B, C, D)	312			312	317	0.0	0.0	0.000	A
	Exit	1	1		297			297	310	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entry	1	1	A, B	817	1005	0.812	984	1012	149.2	105.2	443.110	F
			2	C, D	164	1017	0.162	165	169	0.3	0.1	4.330	A
	Exit	1	1		654			654	676	0.0	0.0	0.000	A

2033 Base + CD + SP (ST), PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A1 - [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.
Last Run	Lane Simulation	B - B4034 - Lane Simulation	Arm B: Queue at end of modelled period is greater than 10 PCU. Delay is likely to have been underestimated.

Warning	Geometry	D - B4034 Buckingham Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J1	Buckingham Road / Sherwood Drive / Water Eaton Road	Standard Roundabout		A, B, C, D	151.02	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
D22	2033 Base + CD + SP (ST)	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Sherwood Drive		ONE HOUR	✓	739	100.000
B - B4034		ONE HOUR	✓	1513	100.000
C - Water Eaton Road		ONE HOUR	✓	459	100.000
D - B4034 Buckingham Road		ONE HOUR	✓	848	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		A - Sherwood Drive	B - B4034	C - Water Eaton Road	D - B4034 Buckingham Road
From	A - Sherwood Drive	0	462	133	144
	B - B4034	502	1	17	992
	C - Water Eaton Road	104	68	0	287
	D - B4034 Buckingham Road	93	554	197	3

Proportions

	To				
		A - Sherwood Drive	B - B4034	C - Water Eaton Road	D - B4034 Buckingham Road
From	A - Sherwood Drive	0.00	0.62	0.18	0.20
	B - B4034	0.33	0.00	0.01	0.66
	C - Water Eaton Road	0.23	0.15	0.00	0.63
	D - B4034 Buckingham Road	0.11	0.65	0.23	0.00

Vehicle Mix

Heavy Vehicle Percentages

	To				
		A - Sherwood Drive	B - B4034	C - Water Eaton Road	D - B4034 Buckingham Road
From	A - Sherwood Drive	0	1	0	0
	B - B4034	1	0	0	2
	C - Water Eaton Road	0	0	0	0
	D - B4034 Buckingham Road	0	3	0	0

Average PCU Per Veh

	To				
		A - Sherwood Drive	B - B4034	C - Water Eaton Road	D - B4034 Buckingham Road
From	A - Sherwood Drive	1.000	1.005	1.000	1.000
	B - B4034	1.007	1.000	1.000	1.015
	C - Water Eaton Road	1.000	1.000	1.000	1.000
	D - B4034 Buckingham Road	1.000	1.027	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - Sherwood Drive	16:45-17:00	556	558
	17:00-17:15	664	666
	17:15-17:30	813	816
	17:30-17:45	813	816
	17:45-18:00	664	666
	18:00-18:15	556	558
B - B4034	16:45-17:00	1139	1153
	17:00-17:15	1360	1376
	17:15-17:30	1665	1686
	17:30-17:45	1665	1686
	17:45-18:00	1360	1376
	18:00-18:15	1139	1153

C - Water Eaton Road	16:45-17:00	345	345
	17:00-17:15	412	412
	17:15-17:30	505	505
	17:30-17:45	505	505
	17:45-18:00	412	412
	18:00-18:15	345	345
D - B4034 Buckingham Road	16:45-17:00	638	650
	17:00-17:15	762	776
	17:15-17:30	934	950
	17:30-17:45	934	950
	17:45-18:00	762	776
	18:00-18:15	638	650

Results

Results Summary for whole modelled period

Arm	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - Sherwood Drive	30.04	7.1	D	677	1015
B - B4034	302.05	119.1	F	1388	2081
C - Water Eaton Road	93.44	14.4	F	422	633
D - B4034 Buckingham Road	18.06	5.0	C	781	1171

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	546	136	614	545	551	521	0.0	1.4	9.232	A
B - B4034	1141	285	351	1142	1136	808	0.0	4.8	14.147	B
C - Water Eaton Road	332	83	1235	333	338	258	0.0	1.0	13.000	B
D - B4034 Buckingham Road	639	160	496	640	653	1072	0.0	0.9	6.759	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	664	166	735	667	660	631	1.4	2.2	12.797	B
B - B4034	1352	338	429	1340	1341	973	4.8	13.9	31.051	D

C - Water Eaton Road	414	104	1458	405	402	311	1.0	3.2	21.726	C
D - B4034 Buckingham Road	760	190	612	754	769	1252	0.9	2.3	8.919	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	805	201	903	810	800	770	2.2	6.6	26.524	D
B - B4034	1682	420	525	1469	1468	1188	13.9	67.2	110.959	F
C - Water Eaton Road	518	130	1620	490	480	375	3.2	10.5	54.472	F
D - B4034 Buckingham Road	941	235	742	931	948	1368	2.3	5.0	14.920	B

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	818	204	901	817	820	759	6.6	7.1	30.036	D
B - B4034	1654	413	526	1452	1465	1192	67.2	118.8	249.169	F
C - Water Eaton Road	503	126	1598	493	493	380	10.5	14.4	93.442	F
D - B4034 Buckingham Road	927	232	733	927	953	1357	5.0	4.2	18.062	C

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	672	168	753	671	690	632	7.1	2.3	15.545	C
B - B4034	1353	338	438	1375	1394	986	118.8	113.7	302.051	F
C - Water Eaton Road	417	104	1493	443	458	321	14.4	4.4	61.509	F
D - B4034 Buckingham Road	772	193	615	770	790	1321	4.2	2.0	10.290	B

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	557	139	627	554	560	534	2.3	1.6	9.597	A
B - B4034	1143	286	362	1336	1349	818	113.7	63.6	195.250	F
C - Water Eaton Road	345	86	1429	346	362	269	4.4	1.8	21.661	C
D - B4034 Buckingham Road	648	162	512	649	651	1263	2.0	1.1	6.743	A

Lane Results

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

Lanes: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entry	1	1	B	345	705	0.489	345	348	0.0	0.9	9.387	A
			2	A, C, D	200	709	0.282	200	203	0.0	0.3	7.336	A
		2	1	(A, B, C, D)	546			545	556	0.0	0.2	0.589	A
	Exit	1	1		521			521	523	0.0	0.0	0.000	A
B - B4034	Entry	1	1	C, D	767	961	0.798	770	759	0.0	4.1	18.111	C
			2	A, B	374	968	0.387	372	377	0.0	0.7	6.126	A
	Exit	1	1		808			808	828	0.0	0.0	0.000	A
C - Water Eaton Road	Entry	1	1	D	208	456	0.456	209	212	0.0	0.7	14.337	B
			2	A, B, C	124	456	0.271	124	125	0.0	0.3	10.727	B
		2	1	(A, B, C, D)	332			332	342	0.0	0.0	0.000	A
	Exit	1	1		258			258	262	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entry	1	1	A, B	489	969	0.504	489	500	0.0	0.8	7.518	A
			2	C, D	150	993	0.151	151	154	0.0	0.1	4.342	A
	Exit	1	1		1072			1072	1066	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entry	1	1	B	416	671	0.621	416	417	0.9	1.3	11.685	B
			2	A, C, D	249	675	0.368	251	243	0.3	0.6	8.907	A
		2	1	(A, B, C, D)	664			665	663	0.2	0.3	2.144	A
	Exit	1	1		631			631	630	0.0	0.0	0.000	A
B - B4034	Entry	1	1	C, D	899	935	0.961	886	887	4.1	13.0	42.848	E
			2	A, B	453	942	0.481	454	454	0.7	0.9	7.244	A
	Exit	1	1		973			973	983	0.0	0.0	0.000	A
C - Water Eaton Road	Entry	1	1	D	255	384	0.664	247	248	0.7	2.3	24.599	C
			2	A, B, C	159	384	0.414	158	154	0.3	0.8	15.065	C
		2	1	(A, B, C, D)	414			414	410	0.0	0.1	0.671	A
	Exit	1	1		311			311	308	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entry	1	1	A, B	581	931	0.625	576	589	0.8	2.1	10.230	B

			2	C, D	178	952	0.187	178	179	0.1	0.2	4.688	A
	Exit	1	1		1252			1252	1250	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entry	1	1	B	503	623	0.808	505	496	1.3	2.2	16.365	C
			2	A, C, D	307	627	0.490	306	304	0.6	1.1	11.041	B
		2	1	(A, B, C, D)	805			810	805	0.3	3.3	12.128	B
	Exit	1	1		770			770	766	0.0	0.0	0.000	A
B - B4034	Entry	1	1	C, D	1126	901	1.249	913	915	13.0	65.8	160.950	F
			2	A, B	555	908	0.612	557	553	0.9	1.4	10.136	B
	Exit	1	1		1188			1188	1190	0.0	0.0	0.000	A
C - Water Eaton Road	Entry	1	1	D	316	331	0.956	305	296	2.3	6.2	56.216	F
			2	A, B, C	184	331	0.555	185	185	0.8	1.1	22.094	C
		2	1	(A, B, C, D)	518			500	497	0.1	3.2	10.110	B
	Exit	1	1		375			375	384	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entry	1	1	A, B	722	887	0.815	712	723	2.1	4.7	17.939	C
			2	C, D	219	906	0.241	220	225	0.2	0.3	5.293	A
	Exit	1	1		1368			1368	1356	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entry	1	1	B	506	624	0.812	508	512	2.2	2.3	17.142	C
			2	A, C, D	307	627	0.490	308	308	1.1	0.9	11.378	B
		2	1	(A, B, C, D)	818			813	820	3.3	3.8	15.046	C
	Exit	1	1		759			759	763	0.0	0.0	0.000	A
B - B4034	Entry	1	1	C, D	1108	901	1.230	906	915	65.8	117.3	367.047	F
			2	A, B	546	907	0.601	547	550	1.4	1.5	9.866	A
	Exit	1	1		1192			1192	1217	0.0	0.0	0.000	A
C - Water Eaton Road	Entry	1	1	D	309	338	0.914	306	307	6.2	6.5	72.620	F
			2	A, B, C	189	338	0.559	187	186	1.1	1.7	27.784	D
		2	1	(A, B, C, D)	503			498	497	3.2	6.2	37.411	E

	Exit	1	1		380			380	383	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entr y	1	1	A, B	711	888	0.801	710	732	4.7	3.9	22.044	C
			2	C, D	216	909	0.238	217	221	0.3	0.3	5.231	A
	Exit	1	1		1357			1357	1368	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entr y	1	1	B	413	666	0.620	412	430	2.3	1.2	13.209	B
			2	A, C, D	259	669	0.387	259	259	0.9	0.7	8.972	A
		2	1	(A, B, C, D)	672			671	684	3.8	0.4	4.073	A
	Exit	1	1		632			632	645	0.0	0.0	0.000	A
B - B4034	Entr y	1	1	C, D	894	931	0.961	921	936	117.3	112.6	449.750	F
			2	A, B	459	938	0.489	453	458	1.5	1.0	7.402	A
	Exit	1	1		986			986	1022	0.0	0.0	0.000	A
C - Water Eaton Road	Entr y	1	1	D	272	372	0.732	282	290	6.5	3.0	55.476	F
			2	A, B, C	160	372	0.429	161	168	1.7	0.7	20.427	C
		2	1	(A, B, C, D)	417			432	440	6.2	0.8	20.967	C
	Exit	1	1		321			321	319	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entr y	1	1	A, B	592	926	0.639	591	611	3.9	1.7	11.991	B
			2	C, D	180	951	0.190	179	179	0.3	0.3	4.698	A
	Exit	1	1		1321			1321	1346	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sherwood Drive	Entr y	1	1	B	350	699	0.500	348	351	1.2	1.0	9.767	A
			2	A, C, D	208	706	0.295	206	209	0.7	0.5	7.342	A
		2	1	(A, B, C, D)	557			558	559	0.4	0.0	0.773	A
	Exit	1	1		534			534	537	0.0	0.0	0.000	A
B - B4034	Entr y	1	1	C, D	761	958	0.797	953	962	112.6	63.0	317.326	F
			2	A, B	382	966	0.395	383	388	1.0	0.6	6.263	A
	Exit	1	1		818			818	835	0.0	0.0	0.000	A
C - Water Eaton Road	Entr y	1	1	D	216	393	0.550	217	228	3.0	1.3	24.851	C

			2	A, B, C	129	393	0.32 8	130	134	0.7	0.5	14.71 3	B
		2	1	(A, B, C, D)	345			345	355	0.8	0.0	1.030	A
		Exit	1	1		269		269	265	0.0	0.0	0.000	A
D - B4034 Buckingham Road	Entr y	1	1	A, B	492	967	0.50 9	492	499	1.7	1.0	7.484	A
			2	C, D	156	987	0.15 8	157	153	0.3	0.1	4.377	A
	Exit	1	1		1263			1263	1287	0.0	0.0	0.000	A

Junctions 9			
ARCADY 9 - Roundabout Module			
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Filename: J2 - Buckingham Rd Shenley Rd Newton Rd.j9

Path: C:\Users\INAA02374\Desktop\SWMK Additional Tasks\2020.05.07\Base\J2

Report generation date: 07/05/2020 09:54:52

»2020 Base, AM
 »2020 Base, PM
 »2026 Base, AM
 »2026 Base, PM
 »2026 Base + CD + D, AM
 »2026 Base + CD + D, PM
 »2026 Base + CD + D with TP, AM
 »2026 Base + CD + D with TP, PM
 »2026 Base + CD + D - ST, AM
 »2026 Base + CD + D - ST, PM
 »2026 Base + CD + SP (ST), AM
 »2026 Base + CD + SP (ST), PM
 »2033 Base, AM
 »2033 Base, PM
 »2033 Base + CD + D, AM
 »2033 Base + CD + D, PM
 »2033 Base + CD + D with TP, AM
 »2033 Base + CD + D with TP, PM
 »2033 Base + CD + D - ST, AM
 »2033 Base + CD + D - ST, PM
 »2033 Base + CD + SP (ST), AM
 »2033 Base + CD + SP (ST), PM

Summary of junction performance

	AM				PM			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
2020 Base								
2E - Buckingham Road/ Shenley Road - A - Shenley Road	0.9	9.13	0.48	A	0.8	8.35	0.44	A
2E - Buckingham Road/ Shenley Road - B - Buckingham Road East	0.7	4.66	0.40	A	0.4	3.71	0.26	A
2E - Buckingham Road/ Shenley Road - C - Buckingham Road West	1.4	7.40	0.59	A	1.2	6.51	0.56	A

2W - Newford Road/ Buckingham Road - A - Buckingham Road East	1.1	5.91	0.53	A	0.8	4.77	0.44	A
2W - Newford Road/ Buckingham Road - B - Newton Road	0.9	6.36	0.48	A	1.1	7.85	0.52	A
2W - Newford Road/ Buckingham Road - C - Buckingham Road West	0.8	5.52	0.44	A	0.7	5.12	0.42	A
2026 Base								
2E - Buckingham Road/ Shenley Road - A - Shenley Road	1.1	10.55	0.54	B	1.8	18.09	0.65	C
2E - Buckingham Road/ Shenley Road - B - Buckingham Road East	0.9	5.43	0.48	A	0.4	4.13	0.31	A
2E - Buckingham Road/ Shenley Road - C - Buckingham Road West	1.8	8.81	0.65	A	3.2	12.13	0.77	B
2W - Newford Road/ Buckingham Road - A - Buckingham Road East	1.4	6.57	0.59	A	1.2	6.35	0.54	A
2W - Newford Road/ Buckingham Road - B - Newton Road	1.7	11.24	0.63	B	0.7	6.31	0.40	A
2W - Newford Road/ Buckingham Road - C - Buckingham Road West	0.9	5.76	0.48	A	3.6	12.86	0.79	B
2026 Base + CD + D								
2E - Buckingham Road/ Shenley Road - A - Shenley Road	1.3	12.09	0.57	B	3.1	32.17	0.77	D
2E - Buckingham Road/ Shenley Road - B - Buckingham Road East	1.4	6.76	0.58	A	0.6	4.59	0.38	A
2E - Buckingham Road/ Shenley Road - C - Buckingham Road West	2.4	10.64	0.71	B	6.7	23.00	0.88	C
2W - Newford Road/ Buckingham Road - A - Buckingham Road East	2.1	8.60	0.69	A	1.5	7.52	0.61	A
2W - Newford Road/ Buckingham Road - B - Newton Road	2.3	15.22	0.70	C	0.7	7.04	0.42	A
2W - Newford Road/ Buckingham Road - C - Buckingham Road West	1.1	6.50	0.53	A	8.1	25.98	0.90	D
2026 Base + CD + D with TP								
2E - Buckingham Road/ Shenley Road - A - Shenley Road	1.3	11.82	0.56	B	2.8	28.60	0.75	D
2E - Buckingham Road/ Shenley Road - B - Buckingham Road East	1.3	6.50	0.56	A	0.6	4.50	0.37	A
2E - Buckingham Road/ Shenley Road - C - Buckingham Road West	2.3	10.31	0.70	B	5.8	20.15	0.86	C
2W - Newford Road/ Buckingham Road - A - Buckingham Road East	2.0	8.19	0.67	A	1.5	7.29	0.60	A
2W - Newford Road/ Buckingham Road - B - Newton Road	2.1	14.40	0.69	B	0.7	6.90	0.42	A
2W - Newford Road/ Buckingham Road - C - Buckingham Road West	1.1	6.37	0.53	A	6.9	22.33	0.88	C
2026 Base + CD + D - ST								
2E - Buckingham Road/ Shenley Road - A - Shenley Road	1.4	12.97	0.59	B	4.1	42.22	0.83	E
2E - Buckingham Road/ Shenley Road - B - Buckingham Road East	1.7	7.76	0.63	A	0.7	4.74	0.40	A
2E - Buckingham Road/ Shenley Road - C - Buckingham Road West	2.7	11.76	0.74	B	9.5	31.22	0.92	D
2W - Newford Road/ Buckingham Road - A - Buckingham Road East	2.7	10.27	0.74	B	1.7	7.93	0.63	A
2W - Newford Road/ Buckingham Road - B - Newton Road	2.7	18.70	0.74	C	0.8	7.28	0.43	A
2W - Newford Road/ Buckingham Road - C - Buckingham Road West	1.3	6.90	0.56	A	12.2	37.57	0.94	E
2026 Base + CD + SP (ST)								
2E - Buckingham Road/ Shenley Road - A - Shenley Road	1.2	11.21	0.55	B	2.1	21.54	0.69	C
2E - Buckingham Road/ Shenley Road - B - Buckingham Road East	1.1	6.07	0.53	A	0.5	4.26	0.33	A
2E - Buckingham Road/ Shenley Road - C - Buckingham Road West	2.1	9.58	0.68	A	4.0	14.69	0.81	B
2W - Newford Road/ Buckingham Road - A - Buckingham Road East	1.8	7.51	0.64	A	1.3	6.66	0.56	A
2W - Newford Road/ Buckingham Road - B - Newton Road	1.9	13.06	0.67	B	0.7	6.52	0.41	A
2W - Newford Road/ Buckingham Road - C - Buckingham Road West	1.0	6.08	0.50	A	4.7	15.78	0.83	C
2033 Base								
2E - Buckingham Road/ Shenley Road - A - Shenley Road	1.4	11.87	0.58	B	2.6	24.33	0.73	C
2E - Buckingham Road/ Shenley Road - B - Buckingham Road East	1.1	5.97	0.52	A	0.5	4.34	0.34	A
2E - Buckingham Road/ Shenley Road - C - Buckingham Road West	2.2	10.18	0.70	B	4.4	15.80	0.82	C
2W - Newford Road/ Buckingham Road - A - Buckingham Road East	1.7	7.40	0.63	A	1.4	7.09	0.58	A
2W - Newford Road/ Buckingham Road - B - Newton Road	2.2	13.83	0.69	B	0.8	6.87	0.43	A
2W - Newford Road/ Buckingham Road - C - Buckingham Road West	1.1	6.30	0.51	A	5.5	18.30	0.85	C
2033 Base + CD + D								
2E - Buckingham Road/ Shenley Road - A - Shenley Road	1.6	13.85	0.62	B	5.2	50.74	0.87	F
2E - Buckingham Road/ Shenley Road - B - Buckingham Road East	1.6	7.60	0.62	A	0.7	4.85	0.41	A
2E - Buckingham Road/ Shenley Road - C - Buckingham Road West	3.0	12.68	0.76	B	10.5	34.22	0.93	D

2W - Newford Road/ Buckingham Road - A - Buckingham Road East	2.7	10.07	0.73	B	1.8	8.51	0.65	A
2W - Newford Road/ Buckingham Road - B - Newton Road	3.2	20.28	0.77	C	0.9	7.72	0.46	A
2W - Newford Road/ Buckingham Road - C - Buckingham Road West	1.3	7.19	0.57	A	16.4	48.75	0.97	E
2033 Base + CD + D with TP								
2E - Buckingham Road/ Shenley Road - A - Shenley Road	1.5	13.50	0.61	B	4.5	44.10	0.84	E
2E - Buckingham Road/ Shenley Road - B - Buckingham Road East	1.5	7.28	0.60	A	0.6	4.75	0.39	A
2E - Buckingham Road/ Shenley Road - C - Buckingham Road West	2.9	12.21	0.75	B	8.9	29.61	0.92	D
2W - Newford Road/ Buckingham Road - A - Buckingham Road East	2.5	9.51	0.72	A	1.8	8.24	0.64	A
2W - Newford Road/ Buckingham Road - B - Newton Road	2.9	18.88	0.75	C	0.8	7.56	0.46	A
2W - Newford Road/ Buckingham Road - C - Buckingham Road West	1.3	7.03	0.56	A	13.0	39.84	0.95	E
2033 Base + CD + D - ST								
2E - Buckingham Road/ Shenley Road - A - Shenley Road	1.7	15.00	0.64	C	6.9	67.12	0.91	F
2E - Buckingham Road/ Shenley Road - B - Buckingham Road East	2.1	8.89	0.68	A	0.7	5.02	0.43	A
2E - Buckingham Road/ Shenley Road - C - Buckingham Road West	3.5	14.26	0.78	B	14.5	44.92	0.96	E
2W - Newford Road/ Buckingham Road - A - Buckingham Road East	3.5	12.42	0.78	B	2.0	8.95	0.67	A
2W - Newford Road/ Buckingham Road - B - Newton Road	4.1	26.71	0.82	D	0.9	8.00	0.47	A
2W - Newford Road/ Buckingham Road - C - Buckingham Road West	1.5	7.68	0.60	A	28.1	75.23	1.01	F
2033 Base + CD + SP (ST)								
2E - Buckingham Road/ Shenley Road - A - Shenley Road	1.5	12.73	0.60	B	3.2	30.58	0.78	D
2E - Buckingham Road/ Shenley Road - B - Buckingham Road East	1.3	6.74	0.57	A	0.6	4.49	0.36	A
2E - Buckingham Road/ Shenley Road - C - Buckingham Road West	2.5	11.21	0.72	B	5.8	20.13	0.86	C
2W - Newford Road/ Buckingham Road - A - Buckingham Road East	2.1	8.62	0.69	A	1.5	7.48	0.60	A
2W - Newford Road/ Buckingham Road - B - Newton Road	2.6	16.67	0.73	C	0.8	7.11	0.44	A
2W - Newford Road/ Buckingham Road - C - Buckingham Road West	1.2	6.69	0.54	A	7.5	24.37	0.89	C

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

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

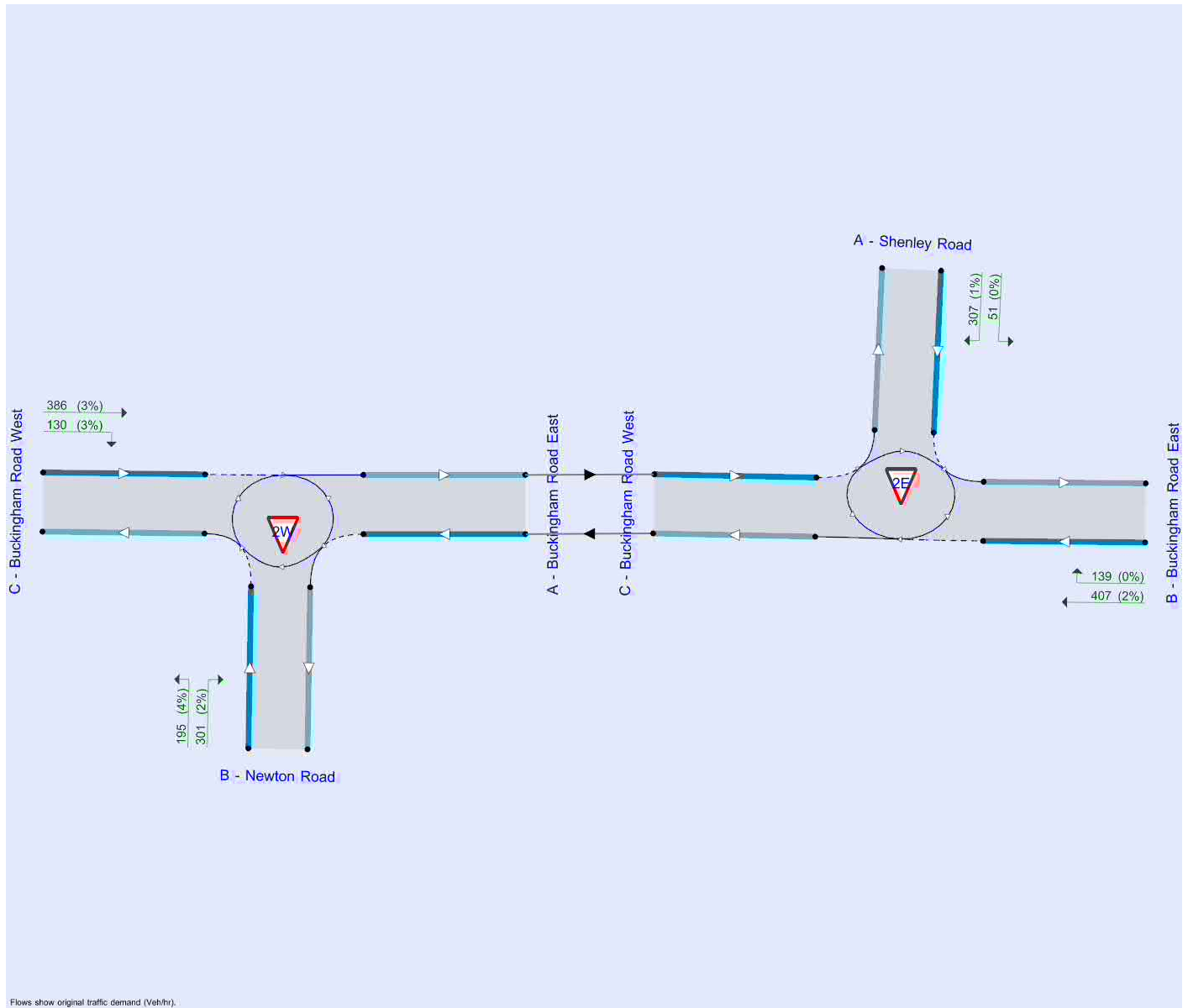
File summary

File Description

Title	Newford Road/ Buckingham Road
Location	51°59'28.63"N, 0°45'16.56"W
Site number	2E
Date	30/03/2020
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	CORPIUKJXK055
Description	

Units

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



Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2020 Base	AM	ONE HOUR	07:30	09:00	15	✓
D2	2020 Base	PM	ONE HOUR	16:45	18:15	15	✓
D3	2026 Base	AM	ONE HOUR	07:30	09:00	15	✓
D4	2026 Base	PM	ONE HOUR	16:45	18:15	15	✓
D5	2026 Base + CD + D	AM	ONE HOUR	07:30	09:00	15	✓

D6	2026 Base + CD + D	PM	ONE HOUR	16:45	18:15	15	✓
D7	2026 Base + CD + D with TP	AM	ONE HOUR	07:30	09:00	15	✓
D8	2026 Base + CD + D with TP	PM	ONE HOUR	16:45	18:15	15	✓
D9	2026 Base + CD + D - ST	AM	ONE HOUR	07:30	09:00	15	✓
D10	2026 Base + CD + D - ST	PM	ONE HOUR	16:45	18:15	15	✓
D11	2026 Base + CD + SP (ST)	AM	ONE HOUR	07:30	09:00	15	✓
D12	2026 Base + CD + SP (ST)	PM	ONE HOUR	16:45	18:15	15	✓
D13	2033 Base	AM	ONE HOUR	07:30	09:00	15	✓
D14	2033 Base	PM	ONE HOUR	16:45	18:15	15	✓
D15	2033 Base + CD + D	AM	ONE HOUR	07:30	09:00	15	✓
D16	2033 Base + CD + D	PM	ONE HOUR	16:45	18:15	15	✓
D17	2033 Base + CD + D with TP	AM	ONE HOUR	07:30	09:00	15	✓
D18	2033 Base + CD + D with TP	PM	ONE HOUR	16:45	18:15	15	✓
D19	2033 Base + CD + D - ST	AM	ONE HOUR	07:30	09:00	15	✓
D20	2033 Base + CD + D - ST	PM	ONE HOUR	16:45	18:15	15	✓
D21	2033 Base + CD + SP (ST)	AM	ONE HOUR	07:30	09:00	15	✓
D22	2033 Base + CD + SP (ST)	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

2020 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Linked Roundabout	2W - Newford Road/ Buckingham Road - A - Buckingham Road East	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.
Warning	Linked Roundabout	2E - Buckingham Road/ Shenley Road - C - Buckingham Road West	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
2E	Buckingham Road/ Shenley Road	Mini-roundabout		A, B, C	6.90	A
2W	Newford Road/ Buckingham Road	Mini-roundabout		A, B, C	5.93	A

Junction Network Options

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

Arms

Arms

Junction	Arm	Name	Description
2E - Buckingham Road/ Shenley Road	A	Shenley Road	
	B	Buckingham Road East	
	C	Buckingham Road West	
2W - Newford Road/ Buckingham Road	A	Buckingham Road East	
	B	Newton Road	
	C	Buckingham Road West	

Mini Roundabout Geometry

Junction	Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
2E - Buckingham Road/ Shenley Road	A - Shenley Road	3.10	3.10	4.60	1.8	5.00	11.00	0.0	
	B - Buckingham Road East	4.80	4.80	6.50	19.5	11.00	16.00	0.0	
	C - Buckingham Road West	5.30	5.30	5.30	0.0	5.30	12.70	0.0	
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	5.80	5.80	7.60	2.3	5.00	12.60	0.0	
	B - Newton Road	4.10	4.10	6.20	1.8	5.00	13.00	0.0	
	C - Buckingham Road West	2.90	2.90	4.80	10.8	14.70	18.90	0.0	

Slope / Intercept / Capacity

Arm Intercept Adjustments

Junction	Arm	Type	Reason	Direct intercept adjustment (PCU/hr)
2E - Buckingham Road/ Shenley Road	A - Shenley Road	None		
	B - Buckingham Road East	None		
	C - Buckingham Road West	None		
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	None		
	B - Newton Road	Direct		250
	C - Buckingham Road West	None		

Roundabout Slope and Intercept used in model

Junction	Arm	Final slope	Final intercept (PCU/hr)
2E - Buckingham Road/ Shenley Road	A - Shenley Road	0.613	945
	B - Buckingham Road East	0.750	1540
	C - Buckingham Road West	0.685	1300
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	0.723	1463
	B - Newton Road	0.658	1258
	C - Buckingham Road West	0.808	1505

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	2020 Base	AM	ONE HOUR	07:30	09:00	15	✓

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

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (Veh/hr)	Flow multiplier (%)	Internal storage space (PCU)
2E - Buckingham Road/ Shenley Road	C - Buckingham Road West	2W	A	Simple (vertical queueing)	Normal	0	100.00	
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	2E	C	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
2E - Buckingham Road/ Shenley Road	A - Shenley Road		ONE HOUR	✓	331	100.000
	B - Buckingham Road East		ONE HOUR	✓	465	100.000
	C - Buckingham Road West	✓				
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	✓				
	B - Newton Road		ONE HOUR	✓	465	100.000
	C - Buckingham Road West		ONE HOUR	✓	460	100.000

Origin-Destination Data

Demand (Veh/hr)

2W - Newford Road/ Buckingham Road

From	To			
		A - Buckingham Road East	B - Newton Road	C - Buckingham Road West
	A - Buckingham Road East	0	422	198
	B - Newton Road	344	1	120
	C - Buckingham Road West	279	181	0

Proportions

From	To			
		A - Buckingham Road East	B - Newton Road	C - Buckingham Road West
	A - Buckingham Road East	0.00	0.68	0.32
	B - Newton Road	0.74	0.00	0.26
	C - Buckingham Road West	0.61	0.39	0.00

Demand (Veh/hr)

2E -
Buckin
gham
Road/
Shenley
Road

From	To			
		A - Shenley Road	B - Buckingham Road East	C - Buckingham Road West
	A - Shenley Road	0	47	284
	B - Buckingham Road East	129	0	336
	C - Buckingham Road West	369	254	0

Proportions

From	To			
		A - Shenley Road	B - Buckingham Road East	C - Buckingham Road West
	A - Shenley Road	0.00	0.14	0.86
	B - Buckingham Road East	0.28	0.00	0.72
	C - Buckingham Road West	0.59	0.41	0.00

Vehicle Mix

Heavy Vehicle Percentages

2W -
Newfor
d Road/
Buckin
gham
Road

From	To			
		A - Buckingham Road East	B - Newton Road	C - Buckingham Road West
	A - Buckingham Road East	0	2	2
	B - Newton Road	3	0	3
	C - Buckingham Road West	2	4	0

Average PCU Per Veh

From	To			
		A - Buckingham Road East	B - Newton Road	C - Buckingham Road West
	A - Buckingham Road East	1.000	1.017	1.015
	B - Newton Road	1.032	1.000	1.033
	C - Buckingham Road West	1.018	1.039	1.000

Heavy Vehicle Percentages

2E -
Buckin
gham
Road/
Shenley
Road

From	To			
		A - Shenley Road	B - Buckingham Road East	C - Buckingham Road West
	A - Shenley Road	0	0	1
	B - Buckingham Road East	0	0	2
	C - Buckingham Road West	1	5	0

Average PCU Per Veh

From	To			
		A - Shenley Road	B - Buckingham Road East	C - Buckingham Road West
	A - Shenley Road	1.000	1.000	1.010
	B - Buckingham Road East	1.000	1.000	1.020
	C - Buckingham Road West	1.010	1.050	1.000

Detailed Demand Data

Demand for each time segment

Junction	Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
2E - Buckingham Road/ Shenley Road	A - Shenley Road	07:30-07:45	249	251
		07:45-08:00	298	300
		08:00-08:15	364	368
		08:15-08:30	364	368
		08:30-08:45	298	300

		08:45-09:00	249	251
	B - Buckingham Road East	07:30-07:45	350	355
		07:45-08:00	418	424
		08:00-08:15	512	519
		08:15-08:30	512	519
		08:30-08:45	418	424
		08:45-09:00	350	355
	C - Buckingham Road West	07:30-07:45	469	481
		07:45-08:00	560	575
		08:00-08:15	686	704
		08:15-08:30	686	704
		08:30-08:45	560	575
		08:45-09:00	469	481
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	07:30-07:45	467	474
		07:45-08:00	557	566
		08:00-08:15	683	694
		08:15-08:30	683	694
		08:30-08:45	557	566
		08:45-09:00	467	474
	B - Newton Road	07:30-07:45	350	361
		07:45-08:00	418	432
		08:00-08:15	512	528
		08:15-08:30	512	528
		08:30-08:45	418	432
		08:45-09:00	350	361
	C - Buckingham Road West	07:30-07:45	346	355
		07:45-08:00	414	424
		08:00-08:15	506	520
		08:15-08:30	506	520
		08:30-08:45	414	424
		08:45-09:00	346	355

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
2E - Buckingham Road/ Shenley Road	A - Shenley Road	0.48	9.13	0.9	A	304	456
	B - Buckingham Road East	0.40	4.66	0.7	A	427	640
	C - Buckingham Road West	0.59	7.40	1.4	A	571	856
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	0.53	5.91	1.1	A	568	852
	B - Newton Road	0.48	6.36	0.9	A	427	640
	C - Buckingham Road West	0.44	5.52	0.8	A	422	633

Main Results for each time segment

07:30 - 07:45

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	249	62	189	816	0.305	247	372	0.0	0.4	6.310	A
	B - Buckingham Road East	350	88	212	1359	0.258	349	224	0.0	0.3	3.558	A
	C - Buckingham Road West	466	117	97	1202	0.388	464	464	0.0	0.6	4.862	A
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	464	116	136	1339	0.347	462	467	0.0	0.5	4.096	A
	B - Newton Road	350	88	147	1123	0.312	348	451	0.0	0.4	4.635	A
	C - Buckingham Road West	346	87	258	1257	0.276	345	237	0.0	0.4	3.942	A

07:45 - 08:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	298	74	227	792	0.376	297	446	0.4	0.6	7.265	A
	B - Buckingham Road East	418	105	255	1327	0.315	418	270	0.3	0.5	3.955	A
	C - Buckingham Road West	559	140	116	1189	0.470	558	556	0.6	0.9	5.693	A
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	556	139	163	1319	0.422	555	559	0.5	0.7	4.711	A
	B - Newton Road	418	105	177	1104	0.379	417	541	0.4	0.6	5.239	A
	C - Buckingham Road West	414	103	310	1215	0.340	413	285	0.4	0.5	4.486	A

08:00 - 08:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	364	91	278	760	0.480	363	546	0.6	0.9	9.053	A
	B - Buckingham Road East	512	128	312	1285	0.398	511	330	0.5	0.7	4.648	A
	C - Buckingham Road West	684	171	142	1172	0.584	682	681	0.9	1.4	7.318	A
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	681	170	200	1292	0.527	679	684	0.7	1.1	5.862	A
	B - Newton Road	512	128	217	1078	0.475	511	662	0.6	0.9	6.329	A
	C - Buckingham Road West	506	127	379	1159	0.437	505	349	0.5	0.8	5.502	A

08:15 - 08:30

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	364	91	279	759	0.480	364	548	0.9	0.9	9.128	A
	B - Buckingham Road East	512	128	313	1284	0.399	512	331	0.7	0.7	4.661	A
	C - Buckingham Road West	685	171	142	1172	0.585	685	683	1.4	1.4	7.400	A
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	682	171	200	1291	0.528	682	686	1.1	1.1	5.908	A
	B - Newton Road	512	128	218	1078	0.475	512	665	0.9	0.9	6.361	A
	C - Buckingham Road West	506	127	380	1158	0.437	506	350	0.8	0.8	5.525	A

08:30 - 08:45

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	298	74	230	790	0.376	299	450	0.9	0.6	7.338	A
	B - Buckingham Road East	418	105	256	1326	0.315	419	272	0.7	0.5	3.970	A
	C - Buckingham Road West	561	140	116	1189	0.472	563	559	1.4	0.9	5.772	A
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	559	140	164	1318	0.424	560	562	1.1	0.7	4.756	A
	B - Newton Road	418	105	179	1103	0.379	419	545	0.9	0.6	5.272	A
	C - Buckingham Road West	414	103	311	1214	0.341	415	287	0.8	0.5	4.510	A

08:45 - 09:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	249	62	192	815	0.306	250	376	0.6	0.4	6.384	A
	B - Buckingham Road East	350	88	214	1358	0.258	351	227	0.5	0.3	3.578	A
	C - Buckingham Road West	470	117	97	1202	0.391	471	468	0.9	0.6	4.933	A
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	467	117	137	1338	0.349	468	470	0.7	0.5	4.143	A
	B - Newton Road	350	88	150	1122	0.312	351	456	0.6	0.5	4.672	A
	C - Buckingham Road West	346	87	260	1255	0.276	347	240	0.5	0.4	3.965	A

2020 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Linked Roundabout	2W - Newford Road/ Buckingham Road - A - Buckingham Road East	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.
Warning	Linked Roundabout	2E - Buckingham Road/ Shenley Road - C - Buckingham Road West	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
2E	Buckingham Road/ Shenley Road	Mini-roundabout		A, B, C	6.27	A
2W	Newford Road/ Buckingham Road	Mini-roundabout		A, B, C	5.86	A

Junction Network Options

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2020 Base	PM	ONE HOUR	16:45	18:15	15	✓

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

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (Veh/hr)	Flow multiplier (%)	Internal storage space (PCU)
2E - Buckingham Road/ Shenley Road	C - Buckingham Road West	2W	A	Simple (vertical queueing)	Normal	0	100.00	
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	2E	C	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
2E - Buckingham Road/ Shenley Road	A - Shenley Road		ONE HOUR	✓	311	100.000

	B - Buckingham Road East		ONE HOUR	✓	311	100.000
	C - Buckingham Road West	✓				
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	✓				
	B - Newton Road		ONE HOUR	✓	460	100.000
	C - Buckingham Road West		ONE HOUR	✓	465	100.000

Origin-Destination Data

Demand (Veh/hr)

2W - Newford Road/ Buckingham Road

From	To			
		A - Buckingham Road East	B - Newton Road	C - Buckingham Road West
	A - Buckingham Road East	0	198	422
	B - Newton Road	279	0	181
	C - Buckingham Road West	344	120	1

Proportions

From	To			
		A - Buckingham Road East	B - Newton Road	C - Buckingham Road West
	A - Buckingham Road East	0.00	0.32	0.68
	B - Newton Road	0.61	0.00	0.39
	C - Buckingham Road West	0.74	0.26	0.00

Demand (Veh/hr)

2E - Buckingham Road/ Shenley Road

From	To			
		A - Shenley Road	B - Buckingham Road East	C - Buckingham Road West
	A - Shenley Road	0	37	274
	B - Buckingham Road East	46	0	265
	C - Buckingham Road West	475	302	0

Proportions

From	To			
		A - Shenley Road	B - Buckingham Road East	C - Buckingham Road West
	A - Shenley Road	0.00	0.12	0.88
	B - Buckingham Road East	0.15	0.00	0.85
	C - Buckingham Road West	0.61	0.39	0.00

Vehicle Mix

Heavy Vehicle Percentages

2W - Newford Road/ Buckingham Road

From	To			
		A - Buckingham Road East	B - Newton Road	C - Buckingham Road West
	A - Buckingham Road East	0	2	2
	B - Newton Road	2	0	4
	C - Buckingham Road West	3	3	0

Average PCU Per Veh

From	To			
		A - Buckingham Road East	B - Newton Road	C - Buckingham Road West
	A - Buckingham Road East	1.000	1.020	1.020
	B - Newton Road	1.020	1.000	1.040
	C - Buckingham Road West	1.030	1.030	1.000

Heavy Vehicle Percentages

Average PCU Per Veh

2E - Buckin
gham
Road/
Shenley
Road

From	To			
		A - Shenley Road	B - Buckingham Road East	C - Buckingham Road West
	A - Shenley Road	0	0	0
	B - Buckingham Road East	0	0	0
	C - Buckingham Road West	0	4	0

From	To			
		A - Shenley Road	B - Buckingham Road East	C - Buckingham Road West
	A - Shenley Road	1.000	1.000	1.000
	B - Buckingham Road East	1.000	1.000	1.000
	C - Buckingham Road West	1.000	1.040	1.000

Detailed Demand Data

Demand for each time segment

Junction	Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
2E - Buckingham Road/ Shenley Road	A - Shenley Road	16:45-17:00	234	234
		17:00-17:15	280	280
		17:15-17:30	342	342
		17:30-17:45	342	342
		17:45-18:00	280	280
		18:00-18:15	234	234
	B - Buckingham Road East	16:45-17:00	234	234
		17:00-17:15	280	280
		17:15-17:30	342	342
		17:30-17:45	342	342
		17:45-18:00	280	280
		18:00-18:15	234	234
	C - Buckingham Road West	16:45-17:00	585	594
		17:00-17:15	699	709
		17:15-17:30	855	869
		17:30-17:45	855	869
		17:45-18:00	699	709
		18:00-18:15	585	594
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	16:45-17:00	467	476
		17:00-17:15	557	569
		17:15-17:30	683	696
		17:30-17:45	683	696
		17:45-18:00	557	569
		18:00-18:15	467	476
	B - Newton Road	16:45-17:00	346	356
		17:00-17:15	414	425
		17:15-17:30	506	521
		17:30-17:45	506	521
		17:45-18:00	414	425
		18:00-18:15	346	356
	C - Buckingham Road West	16:45-17:00	350	361
		17:00-17:15	418	431
		17:15-17:30	512	527

		17:30-17:45	512	527
		17:45-18:00	418	431
		18:00-18:15	350	361

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
2E - Buckingham Road/ Shenley Road	A - Shenley Road	0.44	8.35	0.8	A	285	428
	B - Buckingham Road East	0.26	3.71	0.4	A	285	428
	C - Buckingham Road West	0.56	6.51	1.2	A	577	865
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	0.44	4.77	0.8	A	485	727
	B - Newton Road	0.52	7.85	1.1	A	422	633
	C - Buckingham Road West	0.42	5.12	0.7	A	427	640

Main Results for each time segment

16:45 - 17:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	234	59	182	829	0.282	233	321	0.0	0.4	6.022	A
	B - Buckingham Road East	234	59	205	1386	0.169	233	210	0.0	0.2	3.122	A
	C - Buckingham Road West	471	118	35	1257	0.375	469	404	0.0	0.6	4.556	A
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	396	99	91	1368	0.289	394	467	0.0	0.4	3.691	A
	B - Newton Road	346	87	269	1048	0.330	344	216	0.0	0.5	5.099	A
	C - Buckingham Road West	350	88	209	1294	0.271	349	405	0.0	0.4	3.804	A

17:00 - 17:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	280	70	219	805	0.347	279	386	0.4	0.5	6.833	A
	B - Buckingham Road East	280	70	246	1355	0.206	279	252	0.2	0.3	3.346	A
	C - Buckingham Road West	565	141	41	1252	0.451	564	484	0.6	0.8	5.224	A

2W - Newford Road/ Buckingham Road	A - Buckingham Road East	474	119	109	1355	0.3 50	474	559	0.4	0.5	4.0 84	A
	B - Newton Road	414	103	323	1013	0.4 08	413	259	0.5	0.7	5.9 91	A
	C - Buckingham Road West	418	105	250	1261	0.3 32	418	486	0.4	0.5	4.2 66	A

17:15 - 17:30

Junction	Arm	Total Dema nd (Veh/ hr)	Junct ion Arriva ls (Veh)	Circula ting flow (Veh/hr)	Capa city (Veh/ hr)	RF C	Throug hput (Veh/hr)	Throug hput (exit side) (Veh/hr)	Star t que ue (Veh h)	End que ue (Veh h)	Del ay (s)	Unsignal ised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	342	86	268	774	0.4 42	341	472	0.5	0.8	8.2 97	A
	B - Buckingham Road East	342	86	301	1314	0.2 61	342	309	0.3	0.4	3.7 04	A
	C - Buckingham Road West	691	173	51	1246	0.5 55	689	592	0.8	1.2	6.4 50	A
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	581	145	133	1337	0.4 34	580	684	0.5	0.8	4.7 48	A
	B - Newton Road	506	127	396	966	0.5 24	505	317	0.7	1.1	7.7 84	A
	C - Buckingham Road West	512	128	306	1216	0.4 21	511	594	0.5	0.7	5.1 00	A

17:30 - 17:45

Junction	Arm	Total Dema nd (Veh/ hr)	Junct ion Arriva ls (Veh)	Circula ting flow (Veh/hr)	Capa city (Veh/ hr)	RF C	Throug hput (Veh/hr)	Throug hput (exit side) (Veh/hr)	Star t que ue (Veh h)	End que ue (Veh h)	Del ay (s)	Unsignal ised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	342	86	269	773	0.4 43	342	474	0.8	0.8	8.3 49	A
	B - Buckingham Road East	342	86	302	1313	0.2 61	342	310	0.4	0.4	3.7 07	A
	C - Buckingham Road West	693	173	51	1246	0.5 56	693	593	1.2	1.2	6.5 07	A
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	582	145	133	1337	0.4 35	582	686	0.8	0.8	4.7 67	A
	B - Newton Road	506	127	397	965	0.5 25	506	318	1.1	1.1	7.8 52	A
	C - Buckingham Road West	512	128	307	1215	0.4 21	512	596	0.7	0.7	5.1 17	A

17:45 - 18:00

Junction	Arm	Total Dema nd (Veh/ hr)	Junct ion Arriva ls (Veh)	Circula ting flow (Veh/hr)	Capa city (Veh/ hr)	RF C	Throug hput (Veh/hr)	Throug hput (exit side) (Veh/hr)	Star t que ue (Veh h)	End que ue (Veh h)	Del ay (s)	Unsignal ised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	280	70	221	804	0.3 48	281	389	0.8	0.5	6.8 88	A
	B - Buckingham Road East	280	70	247	1354	0.2 06	280	254	0.4	0.3	3.3 54	A
	C - Buckingham Road West	567	142	41	1252	0.4 53	569	486	1.2	0.8	5.2 81	A
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	476	119	109	1354	0.3 52	477	562	0.8	0.5	4.1 07	A

	B - Newton Road	414	103	326	1011	0.409	415	260	1.1	0.7	6.052	A
	C - Buckingham Road West	418	105	252	1260	0.332	419	489	0.7	0.5	4.288	A

18:00 - 18:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	234	59	185	827	0.283	235	325	0.5	0.4	6.083	A
	B - Buckingham Road East	234	59	207	1384	0.169	234	213	0.3	0.2	3.130	A
	C - Buckingham Road West	475	119	35	1257	0.378	475	406	0.8	0.6	4.615	A
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	399	100	91	1367	0.291	399	470	0.5	0.4	3.718	A
	B - Newton Road	346	87	272	1046	0.331	347	218	0.7	0.5	5.155	A
	C - Buckingham Road West	350	88	211	1293	0.271	351	409	0.5	0.4	3.822	A

2026 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Linked Roundabout	2W - Newford Road/ Buckingham Road - A - Buckingham Road East	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.
Warning	Linked Roundabout	2E - Buckingham Road/ Shenley Road - C - Buckingham Road West	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
2E	Buckingham Road/ Shenley Road	Mini-roundabout		A, B, C	8.04	A
2W	Newford Road/ Buckingham Road	Mini-roundabout		A, B, C	7.67	A

Junction Network Options

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2026 Base	AM	ONE HOUR	07:30	09:00	15	✓

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

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (Veh/hr)	Flow multiplier (%)	Internal storage space (PCU)
2E - Buckingham Road/ Shenley Road	C - Buckingham Road West	2W	A	Simple (vertical queueing)	Normal	0	100.00	
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	2E	C	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
2E - Buckingham Road/ Shenley Road	A - Shenley Road		ONE HOUR	✓	357	100.000
	B - Buckingham Road East		ONE HOUR	✓	546	100.000
	C - Buckingham Road West	✓				
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	✓				
	B - Newton Road		ONE HOUR	✓	497	100.000
	C - Buckingham Road West		ONE HOUR	✓	516	100.000

Origin-Destination Data

Demand (Veh/hr)

2W - Newford Road/ Buckingham Road

From	To			
		A - Buckingham Road East	B - Newton Road	C - Buckingham Road West
	A - Buckingham Road East	0	214	500
	B - Newton Road	301	0	195
	C - Buckingham Road West	386	130	1

Proportions

From	To			
		A - Buckingham Road East	B - Newton Road	C - Buckingham Road West
	A - Buckingham Road East	0.00	0.30	0.70
	B - Newton Road	0.61	0.00	0.39
	C - Buckingham Road West	0.75	0.25	0.00

Demand (Veh/hr)

2E -
Buckin
gham
Road/
Shenley
Road

From	To			
		A - Shenley Road	B - Buckingham Road East	C - Buckingham Road West
	A - Shenley Road	0	51	307
	B - Buckingham Road East	139	0	407
	C - Buckingham Road West	399	288	0

Proportions

From	To			
		A - Shenley Road	B - Buckingham Road East	C - Buckingham Road West
	A - Shenley Road	0.00	0.14	0.86
	B - Buckingham Road East	0.25	0.00	0.75
	C - Buckingham Road West	0.58	0.42	0.00

Vehicle Mix

Heavy Vehicle Percentages

2W -
Newfor
d Road/
Buckin
gham
Road

From	To			
		A - Buckingham Road East	B - Newton Road	C - Buckingham Road West
	A - Buckingham Road East	0	2	2
	B - Newton Road	2	0	4
	C - Buckingham Road West	3	3	0

Average PCU Per Veh

From	To			
		A - Buckingham Road East	B - Newton Road	C - Buckingham Road West
	A - Buckingham Road East	1.000	1.015	1.017
	B - Newton Road	1.018	1.000	1.039
	C - Buckingham Road West	1.033	1.033	1.000

Heavy Vehicle Percentages

2E -
Buckin
gham
Road/
Shenley
Road

From	To			
		A - Shenley Road	B - Buckingham Road East	C - Buckingham Road West
	A - Shenley Road	0	0	1
	B - Buckingham Road East	0	0	2
	C - Buckingham Road West	1	5	0

Average PCU Per Veh

From	To			
		A - Shenley Road	B - Buckingham Road East	C - Buckingham Road West
	A - Shenley Road	1.000	1.000	1.011
	B - Buckingham Road East	1.000	1.000	1.021
	C - Buckingham Road West	1.011	1.047	1.000

Detailed Demand Data

Demand for each time segment

Junction	Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
2E - Buckingham Road/ Shenley Road	A - Shenley Road	07:30-07:45	269	272
		07:45-08:00	321	324
		08:00-08:15	394	397
		08:15-08:30	394	397
		08:30-08:45	321	324

		08:45-09:00	269	272
	B - Buckingham Road East	07:30-07:45	411	418
		07:45-08:00	491	499
		08:00-08:15	602	611
		08:15-08:30	602	611
		08:30-08:45	491	499
		08:45-09:00	411	418
	C - Buckingham Road West	07:30-07:45	517	531
		07:45-08:00	618	634
		08:00-08:15	756	776
		08:15-08:30	756	776
		08:30-08:45	618	634
		08:45-09:00	517	531
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	07:30-07:45	537	546
		07:45-08:00	642	652
		08:00-08:15	786	799
		08:15-08:30	786	799
		08:30-08:45	642	652
		08:45-09:00	537	546
	B - Newton Road	07:30-07:45	374	384
		07:45-08:00	447	458
		08:00-08:15	547	561
		08:15-08:30	547	561
		08:30-08:45	447	458
		08:45-09:00	374	384
	C - Buckingham Road West	07:30-07:45	389	401
		07:45-08:00	464	479
		08:00-08:15	568	587
		08:15-08:30	568	587
		08:30-08:45	464	479
		08:45-09:00	389	401

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
2E - Buckingham Road/ Shenley Road	A - Shenley Road	0.54	10.55	1.1	B	328	492
	B - Buckingham Road East	0.48	5.43	0.9	A	501	752
	C - Buckingham Road West	0.65	8.81	1.8	A	630	945
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	0.59	6.57	1.4	A	654	982
	B - Newton Road	0.63	11.24	1.7	B	456	684
	C - Buckingham Road West	0.48	5.76	0.9	A	474	711

Main Results for each time segment

07:30 - 07:45

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	269	67	215	800	0.336	267	401	0.0	0.5	6.733	A
	B - Buckingham Road East	411	103	229	1345	0.306	410	253	0.0	0.4	3.841	A
	C - Buckingham Road West	514	129	104	1197	0.430	511	534	0.0	0.7	5.230	A
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	534	134	98	1367	0.391	532	514	0.0	0.6	4.296	A
	B - Newton Road	374	94	373	983	0.381	372	256	0.0	0.6	5.866	A
	C - Buckingham Road West	389	97	225	1278	0.304	387	519	0.0	0.4	4.034	A

07:45 - 08:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	321	80	258	772	0.416	321	482	0.5	0.7	7.955	A
	B - Buckingham Road East	491	123	275	1311	0.375	491	304	0.4	0.6	4.386	A
	C - Buckingham Road West	616	154	125	1183	0.521	615	640	0.7	1.1	6.322	A
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	641	160	117	1353	0.473	639	616	0.6	0.9	5.038	A
	B - Newton Road	447	112	449	934	0.478	445	308	0.6	0.9	7.357	A
	C - Buckingham Road West	464	116	270	1242	0.374	464	624	0.4	0.6	4.620	A

08:00 - 08:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	394	98	315	736	0.535	392	589	0.7	1.1	10.408	B
	B - Buckingham Road East	602	150	336	1265	0.475	600	371	0.6	0.9	5.405	A
	C - Buckingham Road West	754	188	153	1165	0.647	751	784	1.1	1.8	8.639	A
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	784	196	144	1334	0.588	781	754	0.9	1.4	6.494	A
	B - Newton Road	547	137	549	869	0.630	544	377	0.9	1.6	10.989	B
	C - Buckingham Road West	568	142	330	1194	0.476	567	763	0.6	0.9	5.727	A

08:15 - 08:30

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	394	98	317	735	0.536	394	592	1.1	1.1	10.548	B
	B - Buckingham Road East	602	150	338	1264	0.476	602	373	0.9	0.9	5.433	A
	C - Buckingham Road West	756	189	153	1164	0.650	756	786	1.8	1.8	8.810	A
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	786	196	144	1333	0.589	786	756	1.4	1.4	6.570	A
	B - Newton Road	547	137	552	867	0.631	547	378	1.6	1.7	11.245	B
	C - Buckingham Road West	568	142	332	1193	0.476	568	767	0.9	0.9	5.762	A

08:30 - 08:45

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	321	80	262	770	0.417	323	487	1.1	0.7	8.081	A
	B - Buckingham Road East	491	123	277	1309	0.375	492	307	0.9	0.6	4.414	A
	C - Buckingham Road West	620	155	126	1183	0.524	623	644	1.8	1.1	6.461	A
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	644	161	118	1353	0.476	646	620	1.4	0.9	5.108	A
	B - Newton Road	447	112	453	931	0.480	450	310	1.7	0.9	7.531	A
	C - Buckingham Road West	464	116	273	1240	0.374	465	630	0.9	0.6	4.655	A

08:45 - 09:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	269	67	218	798	0.337	270	407	0.7	0.5	6.834	A
	B - Buckingham Road East	411	103	232	1343	0.306	412	257	0.6	0.4	3.868	A
	C - Buckingham Road West	518	130	105	1197	0.433	520	539	1.1	0.8	5.329	A
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	539	135	99	1367	0.394	540	518	0.9	0.7	4.359	A
	B - Newton Road	374	94	379	979	0.382	375	259	0.9	0.6	5.974	A
	C - Buckingham Road West	389	97	228	1276	0.305	389	526	0.6	0.4	4.063	A

2026 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout	2W - Newford Road/ Buckingham Road	Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms A and C have 81% of the total flow for the roundabout for one or more time segments]
Warning	Linked Roundabout	2W - Newford Road/ Buckingham Road - A - Buckingham Road East	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.
Warning	Linked Roundabout	2E - Buckingham Road/ Shenley Road - C - Buckingham Road West	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
2E	Buckingham Road/ Shenley Road	Mini-roundabout		A, B, C	11.56	B
2W	Newford Road/ Buckingham Road	Mini-roundabout		A, B, C	9.60	A

Junction Network Options

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

Traffic Demand

Demand Set Details

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

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

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (Veh/hr)	Flow multiplier (%)	Internal storage space (PCU)
2E - Buckingham Road/ Shenley Road	C - Buckingham Road West	2W	A	Simple (vertical queueing)	Normal	0	100.00	
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	2E	C	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
2E - Buckingham Road/ Shenley Road	A - Shenley Road		ONE HOUR	✓	337	100.000
	B - Buckingham Road East		ONE HOUR	✓	354	100.000
	C - Buckingham Road West	✓				
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	✓				
	B - Newton Road		ONE HOUR	✓	342	100.000
	C - Buckingham Road West		ONE HOUR	✓	953	100.000

Origin-Destination Data

Demand (Veh/hr)

2W - Newford Road/ Buckingham Road

From	To			
		A - Buckingham Road East	B - Newton Road	C - Buckingham Road West
	A - Buckingham Road East	0	196	405
	B - Newton Road	183	1	158
	C - Buckingham Road West	695	256	1

Proportions

From	To			
		A - Buckingham Road East	B - Newton Road	C - Buckingham Road West
	A - Buckingham Road East	0.00	0.33	0.67
	B - Newton Road	0.53	0.00	0.46
	C - Buckingham Road West	0.73	0.27	0.00

Demand (Veh/hr)

2E - Buckingham Road/ Shenley Road

From	To			
		A - Shenley Road	B - Buckingham Road East	C - Buckingham Road West
	A - Shenley Road	0	50	287
	B - Buckingham Road East	40	0	314
	C - Buckingham Road West	327	551	0

Proportions

From	To			
		A - Shenley Road	B - Buckingham Road East	C - Buckingham Road West
	A - Shenley Road	0.00	0.15	0.85
	B - Buckingham Road East	0.11	0.00	0.89
	C - Buckingham Road West	0.37	0.63	0.00

Vehicle Mix

Heavy Vehicle Percentages

2W - Newford Road/ Buckingham Road

From	To			
		A - Buckingham Road East	B - Newton Road	C - Buckingham Road West
	A - Buckingham Road East	0	2	2
	B - Newton Road	0	0	3
	C - Buckingham Road West	1	2	0

Average PCU Per Veh

From	To			
		A - Buckingham Road East	B - Newton Road	C - Buckingham Road West
	A - Buckingham Road East	1.000	1.022	1.020
	B - Newton Road	1.000	1.000	1.027
	C - Buckingham Road West	1.008	1.017	1.000

Heavy Vehicle Percentages

2E - Buckingham Road/ Shenley Road

From	To			
		A - Shenley Road	B - Buckingham Road East	C - Buckingham Road West
	A - Shenley Road	0	0	0
	B - Buckingham Road East	0	0	4
	C - Buckingham Road West	0	1	0

Average PCU Per Veh

From	To			
		A - Shenley Road	B - Buckingham Road East	C - Buckingham Road West
	A - Shenley Road	1.000	1.000	1.004
	B - Buckingham Road East	1.000	1.000	1.036
	C - Buckingham Road West	1.003	1.008	1.000

Detailed Demand Data

Demand for each time segment

Junction	Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
2E - Buckingham Road/ Shenley Road	A - Shenley Road	16:45-17:00	253	254
		17:00-17:15	303	303
		17:15-17:30	370	372
		17:30-17:45	370	372
		17:45-18:00	303	303
		18:00-18:15	253	254
	B - Buckingham Road East	16:45-17:00	266	275
		17:00-17:15	318	328
		17:15-17:30	390	402
		17:30-17:45	390	402
		17:45-18:00	318	328
		18:00-18:15	266	275
	C - Buckingham Road West	16:45-17:00	661	665
		17:00-17:15	789	794
		17:15-17:30	967	973
		17:30-17:45	967	973
		17:45-18:00	789	794
		18:00-18:15	661	665
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	16:45-17:00	452	462
		17:00-17:15	540	551

		17:15-17:30	661	675
		17:30-17:45	661	675
		17:45-18:00	540	551
		18:00-18:15	452	462
	B - Newton Road	16:45-17:00	257	261
		17:00-17:15	307	311
		17:15-17:30	376	381
		17:30-17:45	376	381
		17:45-18:00	307	311
		18:00-18:15	257	261
	C - Buckingham Road West	16:45-17:00	717	725
		17:00-17:15	856	865
		17:15-17:30	1049	1060
		17:30-17:45	1049	1060
		17:45-18:00	856	865
		18:00-18:15	717	725

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
2E - Buckingham Road/ Shenley Road	A - Shenley Road	0.65	18.09	1.8	C	309	463
	B - Buckingham Road East	0.31	4.13	0.4	A	325	487
	C - Buckingham Road West	0.77	12.13	3.2	B	805	1207
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	0.54	6.35	1.2	A	551	826
	B - Newton Road	0.40	6.31	0.7	A	314	471
	C - Buckingham Road West	0.79	12.86	3.6	B	874	1311

Main Results for each time segment

16:45 - 17:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	253	63	410	690	0.367	251	273	0.0	0.6	8.169	A
	B - Buckingham Road East	266	67	214	1336	0.200	265	447	0.0	0.2	3.360	A
	C - Buckingham Road West	657	164	30	1271	0.517	653	449	0.0	1.1	5.786	A
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	449	112	194	1294	0.347	447	657	0.0	0.5	4.243	A
	B - Newton Road	257	64	302	1042	0.247	256	339	0.0	0.3	4.572	A

	C - Buckingham Road West	717	179	138	1379	0.520	713	421	0.0	1.1	5.371	A

17:00 - 17:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	303	76	493	638	0.474	301	328	0.6	0.9	10.639	B
	B - Buckingham Road East	318	80	257	1304	0.244	318	537	0.2	0.3	3.649	A
	C - Buckingham Road West	787	197	36	1267	0.621	785	539	1.1	1.6	7.436	A
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	539	135	232	1266	0.425	538	787	0.5	0.7	4.939	A
	B - Newton Road	307	77	363	1002	0.307	307	406	0.3	0.4	5.179	A
	C - Buckingham Road West	856	214	165	1357	0.631	854	505	1.1	1.7	7.122	A

17:15 - 17:30

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	370	93	600	573	0.647	367	399	0.9	1.7	17.230	C
	B - Buckingham Road East	390	97	313	1264	0.308	389	654	0.3	0.4	4.116	A
	C - Buckingham Road West	961	240	44	1261	0.762	955	658	1.6	3.0	11.532	B
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	658	164	283	1229	0.535	656	961	0.7	1.1	6.265	A
	B - Newton Road	376	94	444	949	0.397	376	496	0.4	0.7	6.274	A
	C - Buckingham Road West	1049	262	202	1328	0.790	1041	617	1.7	3.5	12.269	B

17:30 - 17:45

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	370	93	606	569	0.652	370	404	1.7	1.8	18.090	C
	B - Buckingham Road East	390	97	315	1262	0.309	390	661	0.4	0.4	4.128	A
	C - Buckingham Road West	966	242	44	1261	0.766	966	661	3.0	3.2	12.130	B
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	661	165	285	1228	0.538	661	966	1.1	1.2	6.346	A
	B - Newton Road	376	94	447	946	0.398	376	499	0.7	0.7	6.314	A
	C - Buckingham Road West	1049	262	203	1327	0.790	1048	621	3.5	3.6	12.860	B

17:45 - 18:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	303	76	503	632	0.478	306	334	1.8	0.9	11.149	B
	B - Buckingham Road East	318	80	261	1301	0.244	319	548	0.4	0.3	3.663	A
	C - Buckingham Road West	795	199	36	1267	0.628	801	543	3.2	1.7	7.821	A
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	543	136	235	1264	0.430	545	795	1.2	0.8	5.016	A
	B - Newton Road	307	77	368	998	0.308	308	411	0.7	0.4	5.221	A
	C - Buckingham Road West	856	214	166	1356	0.631	864	511	3.6	1.7	7.420	A

18:00 - 18:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	253	63	418	685	0.370	255	278	0.9	0.6	8.399	A
	B - Buckingham Road East	266	67	217	1333	0.200	267	456	0.3	0.3	3.375	A
	C - Buckingham Road West	663	166	30	1271	0.522	666	454	1.7	1.1	5.971	A
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	454	113	195	1292	0.351	454	663	0.8	0.5	4.300	A
	B - Newton Road	257	64	307	1039	0.248	258	343	0.4	0.3	4.611	A
	C - Buckingham Road West	717	179	139	1378	0.520	720	426	1.7	1.1	5.489	A

2026 Base + CD + D, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Linked Roundabout	2W - Newford Road/ Buckingham Road - A - Buckingham Road East	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.
Warning	Linked Roundabout	2E - Buckingham Road/ Shenley Road - C - Buckingham Road West	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
2E	Buckingham Road/ Shenley Road	Mini-roundabout		A, B, C	9.48	A
2W	Newford Road/ Buckingham Road	Mini-roundabout		A, B, C	9.68	A

Junction Network Options

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2026 Base + CD + D	AM	ONE HOUR	07:30	09:00	15	✓

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

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (Veh/hr)	Flow multiplier (%)	Internal storage space (PCU)
2E - Buckingham Road/ Shenley Road	C - Buckingham Road West	2W	A	Simple (vertical queueing)	Normal	0	100.00	
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	2E	C	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
2E - Buckingham Road/ Shenley Road	A - Shenley Road		ONE HOUR	✓	357	100.000
	B - Buckingham Road East		ONE HOUR	✓	663	100.000
	C - Buckingham Road West	✓				
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	✓				
	B - Newton Road		ONE HOUR	✓	497	100.000
	C - Buckingham Road West		ONE HOUR	✓	579	100.000

Origin-Destination Data

Demand (Veh/hr)

2W -
Newford Road/
Buckingham
Road

	To			
		A - Buckingham Road East	B - Newton Road	C - Buckingham Road West
From				
	A - Buckingham Road East	0	214	617
	B - Newton Road	301	0	195
	C - Buckingham Road West	448	130	1

Proportions

	To			
		A - Buckingham Road East	B - Newton Road	C - Buckingham Road West
From				
	A - Buckingham Road East	0.00	0.26	0.74
	B - Newton Road	0.61	0.00	0.39
	C - Buckingham Road West	0.77	0.22	0.00

Demand (Veh/hr)

2E - Buckin
gham Road/
Shenley Road

	To			
		A - Shenley Road	B - Buckingham Road East	C - Buckingham Road West
From				
	A - Shenley Road	0	51	307
	B - Buckingham Road East	139	0	524
	C - Buckingham Road West	399	351	0

Proportions

	To			
		A - Shenley Road	B - Buckingham Road East	C - Buckingham Road West
From				
	A - Shenley Road	0.00	0.14	0.86
	B - Buckingham Road East	0.21	0.00	0.79
	C - Buckingham Road West	0.53	0.47	0.00

Vehicle Mix

Heavy Vehicle Percentages

2W -
Newford Road/
Buckingham
Road

	To			
		A - Buckingham Road East	B - Newton Road	C - Buckingham Road West
From				
	A - Buckingham Road East	0	2	2
	B - Newton Road	2	0	4
	C - Buckingham Road West	3	3	0

Average PCU Per Veh

	To			
		A - Buckingham Road East	B - Newton Road	C - Buckingham Road West
From				
	A - Buckingham Road East	1.000	1.015	1.017
	B - Newton Road	1.018	1.000	1.039
	C - Buckingham Road West	1.035	1.033	1.000

Heavy Vehicle Percentages

Average PCU Per Veh

2E - Buckin
gham
Road/
Shenley
Road

From	To			
		A - Shenley Road	B - Buckingham Road East	C - Buckingham Road West
	A - Shenley Road	0	0	1
	B - Buckingham Road East	0	0	2
	C - Buckingham Road West	1	5	0

From	To			
		A - Shenley Road	B - Buckingham Road East	C - Buckingham Road West
	A - Shenley Road	1.000	1.000	1.011
	B - Buckingham Road East	1.000	1.000	1.021
	C - Buckingham Road West	1.011	1.047	1.000

Detailed Demand Data

Demand for each time segment

Junction	Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
2E - Buckingham Road/ Shenley Road	A - Shenley Road	07:30-07:45	269	272
		07:45-08:00	321	324
		08:00-08:15	394	397
		08:15-08:30	394	397
		08:30-08:45	321	324
		08:45-09:00	269	272
	B - Buckingham Road East	07:30-07:45	499	508
		07:45-08:00	596	606
		08:00-08:15	730	742
		08:15-08:30	730	742
		08:30-08:45	596	606
		08:45-09:00	499	508
	C - Buckingham Road West	07:30-07:45	564	580
		07:45-08:00	674	693
		08:00-08:15	825	848
		08:15-08:30	825	848
		08:30-08:45	674	693
		08:45-09:00	564	580
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	07:30-07:45	625	636
		07:45-08:00	747	759
		08:00-08:15	915	930
		08:15-08:30	915	930
		08:30-08:45	747	759
		08:45-09:00	625	636
	B - Newton Road	07:30-07:45	374	384
		07:45-08:00	447	458
		08:00-08:15	547	561
		08:15-08:30	547	561
		08:30-08:45	447	458
		08:45-09:00	374	384
	C - Buckingham Road West	07:30-07:45	436	451
		07:45-08:00	520	538
		08:00-08:15	637	659

		08:15-08:30	637	659
		08:30-08:45	520	538
		08:45-09:00	436	451

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
2E - Buckingham Road/ Shenley Road	A - Shenley Road	0.57	12.09	1.3	B	328	492
	B - Buckingham Road East	0.58	6.76	1.4	A	609	913
	C - Buckingham Road West	0.71	10.64	2.4	B	687	1031
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	0.69	8.60	2.1	A	762	1143
	B - Newton Road	0.70	15.22	2.3	C	456	684
	C - Buckingham Road West	0.53	6.50	1.1	A	531	797

Main Results for each time segment

07:30 - 07:45

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	269	67	261	770	0.349	267	401	0.0	0.5	7.120	A
	B - Buckingham Road East	499	125	229	1344	0.372	497	299	0.0	0.6	4.238	A
	C - Buckingham Road West	561	140	104	1195	0.469	558	622	0.0	0.9	5.618	A
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	622	155	98	1367	0.455	619	561	0.0	0.8	4.792	A
	B - Newton Road	374	94	460	926	0.404	371	256	0.0	0.7	6.459	A
	C - Buckingham Road West	436	109	225	1276	0.342	434	606	0.0	0.5	4.264	A

07:45 - 08:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	321	80	314	737	0.436	320	482	0.5	0.8	8.625	A
	B - Buckingham Road East	596	149	275	1310	0.455	595	359	0.6	0.8	5.033	A
	C - Buckingham Road West	672	168	125	1181	0.569	671	745	0.9	1.3	7.025	A

2W - Newford Road/ Buckingham Road	A - Buckingham Road East	745	186	117	1352	0.5 51	744	672	0.8	1.2	5.9 00	A
	B - Newton Road	447	112	553	865	0.5 16	445	308	0.7	1.0	8.5 36	A
	C - Buckingham Road West	520	130	270	1240	0.4 20	520	728	0.5	0.7	4.9 90	A

08:00 - 08:15

Junction	Arm	Total Dema nd (Veh/ hr)	Junct ion Arriv als (Veh)	Circula ting flow (Veh/hr)	Capa city (Veh/ hr)	RF C	Throug hput (Veh/hr)	Throug hput (exit side) (Veh/hr)	Star t que ue (Veh h)	End que ue (Veh h)	Del ay (s)	Unsignal ised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	394	98	383	693	0.5 68	392	587	0.8	1.3	11.8 49	B
	B - Buckingham Road East	730	183	336	1264	0.5 78	728	438	0.8	1.3	6.69 1	A
	C - Buckingham Road West	821	205	153	1163	0.7 06	817	911	1.3	2.3	10.2 96	B
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	911	228	144	1333	0.6 84	908	821	1.2	2.1	8.39 5	A
	B - Newton Road	547	137	675	786	0.6 96	542	376	1.0	2.2	14.5 33	B
	C - Buckingham Road West	637	159	329	1193	0.5 34	636	889	0.7	1.1	6.43 5	A

08:15 - 08:30

Junction	Arm	Total Dema nd (Veh/ hr)	Junct ion Arriv als (Veh)	Circula ting flow (Veh/hr)	Capa city (Veh/ hr)	RF C	Throug hput (Veh/hr)	Throug hput (exit side) (Veh/hr)	Star t que ue (Veh h)	End que ue (Veh h)	Del ay (s)	Unsignal ised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	394	98	386	691	0.5 70	393	592	1.3	1.3	12.0 91	B
	B - Buckingham Road East	730	183	338	1263	0.5 78	730	442	1.3	1.4	6.75 7	A
	C - Buckingham Road West	825	206	153	1162	0.7 10	825	915	2.3	2.4	10.6 41	B
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	915	229	144	1333	0.6 86	914	825	2.1	2.1	8.59 7	A
	B - Newton Road	547	137	680	783	0.6 99	547	378	2.2	2.3	15.2 18	C
	C - Buckingham Road West	637	159	332	1191	0.5 35	637	895	1.1	1.1	6.49 6	A

08:30 - 08:45

Junction	Arm	Total Dema nd (Veh/ hr)	Junct ion Arriva ls (Veh)	Circula ting flow (Veh/hr)	Capa city (Veh/ hr)	RF C	Throug hput (Veh/hr)	Throug hput (exit side) (Veh/hr)	Star t que ue (Veh h)	End que ue (Veh h)	Del ay (s)	Unsignal ised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	321	80	319	733	0.4 38	323	488	1.3	0.8	8.8 23	A
	B - Buckingham Road East	596	149	277	1308	0.4 56	598	365	1.4	0.8	5.0 89	A
	C - Buckingham Road West	678	169	126	1181	0.5 74	682	750	2.4	1.4	7.2 72	A
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	750	188	118	1352	0.5 55	754	678	2.1	1.3	6.0 53	A

	B - Newton Road	447	112	561	860	0.519	451	311	2.3	1.1	8.893	A
	C - Buckingham Road West	520	130	274	1237	0.421	522	738	1.1	0.7	5.043	A

08:45 - 09:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	269	67	266	767	0.351	270	407	0.8	0.5	7.254	A
	B - Buckingham Road East	499	125	232	1342	0.372	500	304	0.8	0.6	4.283	A
	C - Buckingham Road West	566	141	105	1194	0.474	568	627	1.4	0.9	5.762	A
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	627	157	99	1366	0.459	629	566	1.3	0.9	4.895	A
	B - Newton Road	374	94	468	921	0.406	376	260	1.1	0.7	6.619	A
	C - Buckingham Road West	436	109	228	1274	0.342	437	616	0.7	0.5	4.304	A

2026 Base + CD + D, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout	2W - Newford Road/ Buckingham Road	Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms A and C have 83% of the total flow for the roundabout for one or more time segments]
Warning	Mini-roundabout	2E - Buckingham Road/ Shenley Road	Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms B and C have 81% of the total flow for the roundabout for one or more time segments]
Warning	Linked Roundabout	2W - Newford Road/ Buckingham Road - A - Buckingham Road East	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.
Warning	Linked Roundabout	2E - Buckingham Road/ Shenley Road - C - Buckingham Road West	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
2E	Buckingham Road/ Shenley Road	Mini-roundabout		A, B, C	20.14	C
2W	Newford Road/ Buckingham Road	Mini-roundabout		A, B, C	16.92	C

Junction Network Options

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2026 Base + CD + D	PM	ONE HOUR	16:45	18:15	15	✓

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

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (Veh/hr)	Flow multiplier (%)	Internal storage space (PCU)
2E - Buckingham Road/ Shenley Road	C - Buckingham Road West	2W	A	Simple (vertical queueing)	Normal	0	100.00	
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	2E	C	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
2E - Buckingham Road/ Shenley Road	A - Shenley Road		ONE HOUR	✓	337	100.000
	B - Buckingham Road East		ONE HOUR	✓	434	100.000
	C - Buckingham Road West	✓				
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	✓				
	B - Newton Road		ONE HOUR	✓	342	100.000
	C - Buckingham Road West		ONE HOUR	✓	1088	100.000

Origin-Destination Data

Demand (Veh/hr)

2W - Newford Road/ Buckingham Road

From	To			
		A - Buckingham Road East	B - Newton Road	C - Buckingham Road West
	A - Buckingham Road East	0	196	485
	B - Newton Road	183	1	158
	C - Buckingham Road West	831	256	1

Proportions

From	To			
		A - Buckingham Road East	B - Newton Road	C - Buckingham Road West
	A - Buckingham Road East	0.00	0.29	0.71
	B - Newton Road	0.53	0.00	0.46
	C - Buckingham Road West	0.76	0.24	0.00

Demand (Veh/hr)

2E -
Buckin
gham
Road/
Shenley
Road

		To		
		A - Shenley Road	B - Buckingham Road East	C - Buckingham Road West
From				
	A - Shenley Road	0	50	287
	B - Buckingham Road East	40	0	394
	C - Buckingham Road West	327	687	0

Proportions

		To		
		A - Shenley Road	B - Buckingham Road East	C - Buckingham Road West
From				
	A - Shenley Road	0.00	0.15	0.85
	B - Buckingham Road East	0.09	0.00	0.91
	C - Buckingham Road West	0.32	0.68	0.00

Vehicle Mix

Heavy Vehicle Percentages

2W -
Newfor
d Road/
Buckin
gham
Road

		To		
		A - Buckingham Road East	B - Newton Road	C - Buckingham Road West
From				
	A - Buckingham Road East	0	2	2
	B - Newton Road	0	0	3
	C - Buckingham Road West	1	2	0

Average PCU Per Veh

		To		
		A - Buckingham Road East	B - Newton Road	C - Buckingham Road West
From				
	A - Buckingham Road East	1.000	1.022	1.022
	B - Newton Road	1.000	1.000	1.027
	C - Buckingham Road West	1.008	1.017	1.000

Heavy Vehicle Percentages

2E -
Buckin
gham
Road/
Shenley
Road

		To		
		A - Shenley Road	B - Buckingham Road East	C - Buckingham Road West
From				
	A - Shenley Road	0	0	0
	B - Buckingham Road East	0	0	4
	C - Buckingham Road West	0	1	0

Average PCU Per Veh

		To		
		A - Shenley Road	B - Buckingham Road East	C - Buckingham Road West
From				
	A - Shenley Road	1.000	1.000	1.004
	B - Buckingham Road East	1.000	1.000	1.035
	C - Buckingham Road West	1.003	1.009	1.000

Detailed Demand Data

Demand for each time segment

Junction	Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
2E - Buckingham Road/ Shenley Road	A - Shenley Road	16:45-17:00	253	254
		17:00-17:15	303	303
		17:15-17:30	370	372
		17:30-17:45	370	372
		17:45-18:00	303	303

	B - Buckingham Road East	18:00-18:15	253	254
		16:45-17:00	327	337
		17:00-17:15	390	403
		17:15-17:30	478	493
		17:30-17:45	478	493
		17:45-18:00	390	403
		18:00-18:15	327	337
	C - Buckingham Road West	16:45-17:00	763	768
		17:00-17:15	911	918
		17:15-17:30	1116	1124
		17:30-17:45	1116	1124
		17:45-18:00	911	918
		18:00-18:15	763	768
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	16:45-17:00	513	524
		17:00-17:15	612	626
		17:15-17:30	750	766
		17:30-17:45	750	766
		17:45-18:00	612	626
		18:00-18:15	513	524
	B - Newton Road	16:45-17:00	257	261
		17:00-17:15	307	311
		17:15-17:30	376	381
		17:30-17:45	376	381
		17:45-18:00	307	311
		18:00-18:15	257	261
	C - Buckingham Road West	16:45-17:00	819	828
		17:00-17:15	978	989
		17:15-17:30	1198	1211
		17:30-17:45	1198	1211
		17:45-18:00	978	989
		18:00-18:15	819	828

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
2E - Buckingham Road/ Shenley Road	A - Shenley Road	0.77	32.17	3.1	D	309	463
	B - Buckingham Road East	0.38	4.59	0.6	A	398	598
	C - Buckingham Road West	0.88	23.00	6.7	C	929	1394
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	0.61	7.52	1.5	A	624	936
	B - Newton Road	0.42	7.04	0.7	A	314	471
	C - Buckingham Road West	0.90	25.98	8.1	D	999	1498

Main Results for each time segment

16:45 - 17:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	253	63	510	628	0.403	251	273	0.0	0.7	9.475	A
	B - Buckingham Road East	327	82	214	1336	0.245	326	547	0.0	0.3	3.557	A
	C - Buckingham Road West	758	189	30	1271	0.597	752	509	0.0	1.5	6.872	A
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	509	127	193	1292	0.394	507	758	0.0	0.6	4.568	A
	B - Newton Road	257	64	362	1002	0.257	256	338	0.0	0.3	4.815	A
	C - Buckingham Road West	819	205	138	1379	0.594	814	480	0.0	1.4	6.303	A

17:00 - 17:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	303	76	612	565	0.536	301	327	0.7	1.1	13.538	B
	B - Buckingham Road East	390	98	256	1305	0.299	390	657	0.3	0.4	3.932	A
	C - Buckingham Road West	908	227	36	1266	0.717	904	610	1.5	2.4	9.817	A
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	610	153	231	1265	0.482	609	908	0.6	0.9	5.482	A
	B - Newton Road	307	77	435	954	0.322	307	406	0.3	0.5	5.560	A
	C - Buckingham Road West	978	245	165	1357	0.721	974	577	1.4	2.5	9.291	A

17:15 - 17:30

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	370	93	736	488	0.759	364	394	1.1	2.8	27.508	D
	B - Buckingham Road East	478	120	310	1266	0.378	477	790	0.4	0.6	4.562	A
	C - Buckingham Road West	1100	275	44	1261	0.873	1087	743	2.4	5.9	19.257	C
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	743	186	280	1230	0.605	741	1101	0.9	1.5	7.331	A
	B - Newton Road	376	94	529	891	0.422	375	492	0.5	0.7	6.965	A
	C - Buckingham Road West	1198	300	202	1328	0.902	1179	703	2.5	7.4	21.721	C

17:30 - 17:45

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	370	93	752	479	0.774	369	402	2.8	3.1	32.172	D
	B - Buckingham Road East	478	120	315	1263	0.379	478	807	0.6	0.6	4.588	A
	C - Buckingham Road West	1114	278	44	1261	0.883	1110	749	5.9	6.7	22.998	C
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	749	187	284	1227	0.610	748	1114	1.5	1.5	7.517	A
	B - Newton Road	376	94	534	888	0.424	376	498	0.7	0.7	7.039	A
	C - Buckingham Road West	1198	300	203	1327	0.903	1195	708	7.4	8.1	25.977	D

17:45 - 18:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	303	76	640	548	0.552	310	340	3.1	1.3	15.557	C
	B - Buckingham Road East	390	98	264	1299	0.300	391	685	0.6	0.4	3.966	A
	C - Buckingham Road West	928	232	36	1266	0.733	944	619	6.7	2.9	11.649	B
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	619	155	238	1260	0.491	621	928	1.5	1.0	5.652	A
	B - Newton Road	307	77	444	948	0.324	308	415	0.7	0.5	5.638	A
	C - Buckingham Road West	978	245	166	1357	0.721	1000	586	8.1	2.7	10.670	B

18:00 - 18:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	253	63	523	620	0.409	256	279	1.3	0.7	9.949	A
	B - Buckingham Road East	327	82	218	1333	0.245	327	561	0.4	0.3	3.582	A
	C - Buckingham Road West	767	192	30	1270	0.604	772	515	2.9	1.6	7.300	A
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	515	129	196	1291	0.399	516	767	1.0	0.7	4.656	A
	B - Newton Road	257	64	369	998	0.258	258	343	0.5	0.4	4.871	A
	C - Buckingham Road West	819	205	139	1378	0.594	824	488	2.7	1.5	6.549	A

2026 Base + CD + D with TP, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Linked Roundabout	2W - Newford Road/ Buckingham Road - A - Buckingham Road East	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.
Warning	Linked Roundabout	2E - Buckingham Road/ Shenley Road - C - Buckingham Road West	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
2E	Buckingham Road/ Shenley Road	Mini-roundabout		A, B, C	9.21	A
2W	Newford Road/ Buckingham Road	Mini-roundabout		A, B, C	9.28	A

Junction Network Options

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2026 Base + CD + D with TP	AM	ONE HOUR	07:30	09:00	15	✓

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

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (Veh/hr)	Flow multiplier (%)	Internal storage space (PCU)
2E - Buckingham Road/ Shenley Road	C - Buckingham Road West	2W	A	Simple (vertical queueing)	Normal	0	100.00	
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	2E	C	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
2E - Buckingham Road/ Shenley Road	A - Shenley Road		ONE HOUR	✓	357	100.000

	B - Buckingham Road East		ONE HOUR	✓	645	100.000
	C - Buckingham Road West	✓				
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	✓				
	B - Newton Road		ONE HOUR	✓	497	100.000
	C - Buckingham Road West		ONE HOUR	✓	569	100.000

Origin-Destination Data

Demand (Veh/hr)

2W - Newford Road/ Buckingham Road

From	To			
		A - Buckingham Road East	B - Newton Road	C - Buckingham Road West
	A - Buckingham Road East	0	214	598
	B - Newton Road	301	0	195
	C - Buckingham Road West	438	130	1

Proportions

From	To			
		A - Buckingham Road East	B - Newton Road	C - Buckingham Road West
	A - Buckingham Road East	0.00	0.26	0.74
	B - Newton Road	0.61	0.00	0.39
	C - Buckingham Road West	0.77	0.23	0.00

Demand (Veh/hr)

2E - Buckingham Road/ Shenley Road

From	To			
		A - Shenley Road	B - Buckingham Road East	C - Buckingham Road West
	A - Shenley Road	0	51	307
	B - Buckingham Road East	139	0	505
	C - Buckingham Road West	399	341	0

Proportions

From	To			
		A - Shenley Road	B - Buckingham Road East	C - Buckingham Road West
	A - Shenley Road	0.00	0.14	0.86
	B - Buckingham Road East	0.22	0.00	0.78
	C - Buckingham Road West	0.54	0.46	0.00

Vehicle Mix

Heavy Vehicle Percentages

2W - Newford Road/ Buckingham Road

From	To			
		A - Buckingham Road East	B - Newton Road	C - Buckingham Road West
	A - Buckingham Road East	0	2	2
	B - Newton Road	2	0	4
	C - Buckingham Road West	3	3	0

Average PCU Per Veh

From	To			
		A - Buckingham Road East	B - Newton Road	C - Buckingham Road West
	A - Buckingham Road East	1.000	1.015	1.017
	B - Newton Road	1.018	1.000	1.039
	C - Buckingham Road West	1.034	1.033	1.000

Heavy Vehicle Percentages

Average PCU Per Veh

2E - Buckin
gham
Road/
Shenley
Road

From	To			
		A - Shenley Road	B - Buckingham Road East	C - Buckingham Road West
	A - Shenley Road	0	0	1
	B - Buckingham Road East	0	0	2
	C - Buckingham Road West	1	5	0

From	To			
		A - Shenley Road	B - Buckingham Road East	C - Buckingham Road West
	A - Shenley Road	1.000	1.000	1.011
	B - Buckingham Road East	1.000	1.000	1.021
	C - Buckingham Road West	1.011	1.047	1.000

Detailed Demand Data

Demand for each time segment

Junction	Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
2E - Buckingham Road/ Shenley Road	A - Shenley Road	07:30-07:45	269	272
		07:45-08:00	321	324
		08:00-08:15	394	397
		08:15-08:30	394	397
		08:30-08:45	321	324
		08:45-09:00	269	272
	B - Buckingham Road East	07:30-07:45	485	493
		07:45-08:00	579	589
		08:00-08:15	710	721
		08:15-08:30	710	721
		08:30-08:45	579	589
		08:45-09:00	485	493
	C - Buckingham Road West	07:30-07:45	557	572
		07:45-08:00	665	683
		08:00-08:15	814	837
		08:15-08:30	814	837
		08:30-08:45	665	683
		08:45-09:00	557	572
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	07:30-07:45	611	622
		07:45-08:00	730	742
		08:00-08:15	894	909
		08:15-08:30	894	909
		08:30-08:45	730	742
		08:45-09:00	611	622
	B - Newton Road	07:30-07:45	374	384
		07:45-08:00	447	458
		08:00-08:15	547	561
		08:15-08:30	547	561
		08:30-08:45	447	458
		08:45-09:00	374	384
	C - Buckingham Road West	07:30-07:45	428	443
		07:45-08:00	512	529
		08:00-08:15	627	648

		08:15-08:30	627	648
		08:30-08:45	512	529
		08:45-09:00	428	443

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
2E - Buckingham Road/ Shenley Road	A - Shenley Road	0.56	11.82	1.3	B	328	492
	B - Buckingham Road East	0.56	6.50	1.3	A	591	887
	C - Buckingham Road West	0.70	10.31	2.3	B	678	1017
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	0.67	8.19	2.0	A	744	1117
	B - Newton Road	0.69	14.40	2.1	B	456	684
	C - Buckingham Road West	0.53	6.37	1.1	A	522	783

Main Results for each time segment

07:30 - 07:45

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	269	67	254	775	0.347	267	401	0.0	0.5	7.058	A
	B - Buckingham Road East	485	121	229	1344	0.361	483	292	0.0	0.6	4.169	A
	C - Buckingham Road West	554	138	104	1195	0.463	550	608	0.0	0.9	5.554	A
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	608	152	98	1367	0.445	605	554	0.0	0.8	4.704	A
	B - Newton Road	374	94	446	935	0.400	371	256	0.0	0.7	6.356	A
	C - Buckingham Road West	428	107	225	1276	0.336	426	592	0.0	0.5	4.230	A

07:45 - 08:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	321	80	305	742	0.433	320	482	0.5	0.8	8.513	A
	B - Buckingham Road East	579	145	275	1310	0.442	579	351	0.6	0.8	4.915	A
	C - Buckingham Road West	664	166	125	1181	0.562	662	728	0.9	1.3	6.905	A

2W - Newford Road/ Buckingham Road	A - Buckingham Road East	728	182	117	1352	0.539	727	664	0.8	1.2	5.744	A
	B - Newton Road	447	112	536	876	0.510	445	308	0.7	1.0	8.322	A
	C - Buckingham Road West	512	128	270	1241	0.412	511	712	0.5	0.7	4.928	A

08:00 - 08:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	394	98	372	700	0.562	392	588	0.8	1.2	11.601	B
	B - Buckingham Road East	710	177	336	1264	0.561	708	428	0.8	1.3	6.444	A
	C - Buckingham Road West	811	203	153	1163	0.697	807	891	1.3	2.2	10.002	B
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	891	223	144	1333	0.668	888	811	1.2	2.0	8.020	A
	B - Newton Road	547	137	655	799	0.685	543	376	1.0	2.1	13.823	B
	C - Buckingham Road West	627	157	329	1193	0.525	625	869	0.7	1.1	6.314	A

08:15 - 08:30

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	394	98	375	698	0.564	393	592	1.2	1.3	11.822	B
	B - Buckingham Road East	710	177	338	1263	0.562	710	431	1.3	1.3	6.501	A
	C - Buckingham Road West	814	204	153	1163	0.700	814	894	2.2	2.3	10.309	B
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	894	223	144	1333	0.671	894	814	2.0	2.0	8.190	A
	B - Newton Road	547	137	659	796	0.687	547	378	2.1	2.1	14.399	B
	C - Buckingham Road West	627	157	332	1192	0.526	627	875	1.1	1.1	6.370	A

08:30 - 08:45

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	321	80	310	739	0.435	323	488	1.3	0.8	8.696	A
	B - Buckingham Road East	579	145	277	1308	0.443	581	356	1.3	0.8	4.964	A
	C - Buckingham Road West	669	167	126	1181	0.566	673	733	2.3	1.3	7.131	A
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	733	183	118	1352	0.542	736	669	2.0	1.2	5.876	A

	B - Newton Road	447	112	543	872	0.512	451	311	2.1	1.1	8.636	A
	C - Buckingham Road West	512	128	273	1238	0.413	513	721	1.1	0.7	4.978	A

08:45 - 09:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	269	67	258	772	0.349	270	407	0.8	0.5	7.182	A
	B - Buckingham Road East	485	121	232	1342	0.362	486	297	0.8	0.6	4.209	A
	C - Buckingham Road West	558	140	105	1195	0.467	560	613	1.3	0.9	5.690	A
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	613	153	99	1366	0.449	614	558	1.2	0.8	4.797	A
	B - Newton Road	374	94	453	930	0.402	376	260	1.1	0.7	6.505	A
	C - Buckingham Road West	428	107	228	1274	0.336	429	601	0.7	0.5	4.264	A

2026 Base + CD + D with TP, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout	2W - Newford Road/ Buckingham Road	Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms A and C have 83% of the total flow for the roundabout for one or more time segments]
Warning	Linked Roundabout	2W - Newford Road/ Buckingham Road - A - Buckingham Road East	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.
Warning	Linked Roundabout	2E - Buckingham Road/ Shenley Road - C - Buckingham Road West	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
2E	Buckingham Road/ Shenley Road	Mini-roundabout		A, B, C	17.92	C
2W	Newford Road/ Buckingham Road	Mini-roundabout		A, B, C	14.92	B

Junction Network Options

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2026 Base + CD + D with TP	PM	ONE HOUR	16:45	18:15	15	✓

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

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (Veh/hr)	Flow multiplier (%)	Internal storage space (PCU)
2E - Buckingham Road/ Shenley Road	C - Buckingham Road West	2W	A	Simple (vertical queueing)	Normal	0	100.00	
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	2E	C	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
2E - Buckingham Road/ Shenley Road	A - Shenley Road		ONE HOUR	✓	337	100.000
	B - Buckingham Road East		ONE HOUR	✓	420	100.000
	C - Buckingham Road West	✓				
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	✓				
	B - Newton Road		ONE HOUR	✓	342	100.000
	C - Buckingham Road West		ONE HOUR	✓	1065	100.000

Origin-Destination Data

Demand (Veh/hr)

2W - Newford Road/ Buckingham Road

From	To			
		A - Buckingham Road East	B - Newton Road	C - Buckingham Road West
	A - Buckingham Road East	0	196	471
	B - Newton Road	183	1	158
	C - Buckingham Road West	808	256	1

Proportions

From	To			
		A - Buckingham Road East	B - Newton Road	C - Buckingham Road West
	A - Buckingham Road East	0.00	0.29	0.71
	B - Newton Road	0.53	0.00	0.46
	C - Buckingham Road West	0.76	0.24	0.00

Demand (Veh/hr)

2E -
Buckin
gham
Road/
Shenley
Road

From	To			
		A - Shenley Road	B - Buckingham Road East	C - Buckingham Road West
	A - Shenley Road	0	50	287
	B - Buckingham Road East	40	0	380
	C - Buckingham Road West	327	664	0

Proportions

From	To			
		A - Shenley Road	B - Buckingham Road East	C - Buckingham Road West
	A - Shenley Road	0.00	0.15	0.85
	B - Buckingham Road East	0.10	0.00	0.90
	C - Buckingham Road West	0.33	0.67	0.00

Vehicle Mix

Heavy Vehicle Percentages

2W -
Newfor
d Road/
Buckin
gham
Road

From	To			
		A - Buckingham Road East	B - Newton Road	C - Buckingham Road West
	A - Buckingham Road East	0	2	2
	B - Newton Road	0	0	3
	C - Buckingham Road West	1	2	0

Average PCU Per Veh

From	To			
		A - Buckingham Road East	B - Newton Road	C - Buckingham Road West
	A - Buckingham Road East	1.000	1.022	1.022
	B - Newton Road	1.000	1.000	1.027
	C - Buckingham Road West	1.008	1.017	1.000

Heavy Vehicle Percentages

2E -
Buckin
gham
Road/
Shenley
Road

From	To			
		A - Shenley Road	B - Buckingham Road East	C - Buckingham Road West
	A - Shenley Road	0	0	0
	B - Buckingham Road East	0	0	4
	C - Buckingham Road West	0	1	0

Average PCU Per Veh

From	To			
		A - Shenley Road	B - Buckingham Road East	C - Buckingham Road West
	A - Shenley Road	1.000	1.000	1.004
	B - Buckingham Road East	1.000	1.000	1.035
	C - Buckingham Road West	1.003	1.009	1.000

Detailed Demand Data

Demand for each time segment

Junction	Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
2E - Buckingham Road/ Shenley Road	A - Shenley Road	16:45-17:00	253	254
		17:00-17:15	303	303
		17:15-17:30	370	372
		17:30-17:45	370	372
		17:45-18:00	303	303

	B - Buckingham Road East	18:00-18:15	253	254
		16:45-17:00	316	327
		17:00-17:15	378	390
		17:15-17:30	463	478
		17:30-17:45	463	478
		17:45-18:00	378	390
		18:00-18:15	316	327
	C - Buckingham Road West	16:45-17:00	746	751
		17:00-17:15	891	897
		17:15-17:30	1091	1098
		17:30-17:45	1091	1098
		17:45-18:00	891	897
		18:00-18:15	746	751
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	16:45-17:00	502	513
		17:00-17:15	600	613
		17:15-17:30	734	750
		17:30-17:45	734	750
		17:45-18:00	600	613
		18:00-18:15	502	513
	B - Newton Road	16:45-17:00	257	261
		17:00-17:15	307	311
		17:15-17:30	376	381
		17:30-17:45	376	381
		17:45-18:00	307	311
		18:00-18:15	257	261
	C - Buckingham Road West	16:45-17:00	802	810
		17:00-17:15	958	968
		17:15-17:30	1173	1185
		17:30-17:45	1173	1185
		17:45-18:00	958	968
		18:00-18:15	802	810

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
2E - Buckingham Road/ Shenley Road	A - Shenley Road	0.75	28.60	2.8	D	309	463
	B - Buckingham Road East	0.37	4.50	0.6	A	386	579
	C - Buckingham Road West	0.86	20.15	5.8	C	908	1362
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	0.60	7.29	1.5	A	611	917
	B - Newton Road	0.42	6.90	0.7	A	314	471
	C - Buckingham Road West	0.88	22.33	6.9	C	977	1466

Main Results for each time segment

16:45 - 17:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	253	63	493	638	0.397	251	273	0.0	0.6	9.227	A
	B - Buckingham Road East	316	79	214	1336	0.237	315	530	0.0	0.3	3.521	A
	C - Buckingham Road West	741	185	30	1271	0.583	735	499	0.0	1.4	6.660	A
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	499	125	193	1293	0.386	496	741	0.0	0.6	4.509	A
	B - Newton Road	257	64	351	1009	0.255	256	338	0.0	0.3	4.771	A
	C - Buckingham Road West	802	200	138	1379	0.582	797	470	0.0	1.4	6.124	A

17:00 - 17:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	303	76	592	577	0.524	301	327	0.6	1.1	12.943	B
	B - Buckingham Road East	378	94	256	1305	0.290	377	637	0.3	0.4	3.879	A
	C - Buckingham Road West	887	222	36	1267	0.701	884	598	1.4	2.3	9.317	A
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	598	149	232	1265	0.473	597	887	0.6	0.9	5.378	A
	B - Newton Road	307	77	423	962	0.320	307	406	0.3	0.5	5.495	A
	C - Buckingham Road West	958	239	165	1357	0.706	954	564	1.4	2.3	8.837	A

17:15 - 17:30

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	370	93	714	502	0.738	365	396	1.1	2.6	25.170	D
	B - Buckingham Road East	463	116	311	1265	0.366	462	768	0.4	0.6	4.477	A
	C - Buckingham Road West	1078	269	44	1261	0.855	1066	729	2.3	5.2	17.466	C
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	729	182	281	1230	0.593	727	1078	0.9	1.4	7.126	A
	B - Newton Road	376	94	514	901	0.418	375	493	0.5	0.7	6.837	A
	C - Buckingham Road West	1173	293	202	1328	0.883	1157	688	2.3	6.4	19.400	C

17:30 - 17:45

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	370	93	728	493	0.751	369	403	2.6	2.8	28.600	D
	B - Buckingham Road East	463	116	315	1262	0.367	463	783	0.6	0.6	4.502	A
	C - Buckingham Road West	1089	272	44	1261	0.864	1087	734	5.2	5.8	20.147	C
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	734	183	284	1227	0.598	733	1089	1.4	1.5	7.287	A
	B - Newton Road	376	94	519	898	0.419	376	498	0.7	0.7	6.902	A
	C - Buckingham Road West	1173	293	203	1327	0.884	1171	693	6.4	6.9	22.332	C

17:45 - 18:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	303	76	615	563	0.537	309	339	2.8	1.2	14.482	B
	B - Buckingham Road East	378	94	263	1300	0.291	379	660	0.6	0.4	3.909	A
	C - Buckingham Road West	904	226	36	1266	0.714	917	606	5.8	2.6	10.659	B
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	606	151	237	1261	0.480	608	904	1.5	0.9	5.527	A
	B - Newton Road	307	77	430	957	0.321	308	414	0.7	0.5	5.560	A
	C - Buckingham Road West	958	239	166	1357	0.706	975	573	6.9	2.5	9.850	A

18:00 - 18:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	253	63	505	631	0.402	255	279	1.2	0.7	9.641	A
	B - Buckingham Road East	316	79	218	1333	0.237	317	543	0.4	0.3	3.542	A
	C - Buckingham Road West	749	187	30	1270	0.590	754	504	2.6	1.5	7.026	A
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	504	126	196	1291	0.391	505	749	0.9	0.6	4.589	A
	B - Newton Road	257	64	358	1005	0.256	258	343	0.5	0.3	4.823	A
	C - Buckingham Road West	802	200	139	1378	0.582	806	477	2.5	1.4	6.340	A

2026 Base + CD + D - ST, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Linked Roundabout	2W - Newford Road/ Buckingham Road - A - Buckingham Road East	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.
Warning	Linked Roundabout	2E - Buckingham Road/ Shenley Road - C - Buckingham Road West	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
2E	Buckingham Road/ Shenley Road	Mini-roundabout		A, B, C	10.44	B
2W	Newford Road/ Buckingham Road	Mini-roundabout		A, B, C	11.33	B

Junction Network Options

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2026 Base + CD + D - ST	AM	ONE HOUR	07:30	09:00	15	✓

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

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (Veh/hr)	Flow multiplier (%)	Internal storage space (PCU)
2E - Buckingham Road/ Shenley Road	C - Buckingham Road West	2W	A	Simple (vertical queueing)	Normal	0	100.00	
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	2E	C	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
2E - Buckingham Road/ Shenley Road	A - Shenley Road		ONE HOUR	✓	357	100.000

	B - Buckingham Road East		ONE HOUR	✓	726	100.000
	C - Buckingham Road West	✓				
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	✓				
	B - Newton Road		ONE HOUR	✓	497	100.000
	C - Buckingham Road West		ONE HOUR	✓	608	100.000

Origin-Destination Data

Demand (Veh/hr)

2W - Newford Road/ Buckingham Road

From	To			
		A - Buckingham Road East	B - Newton Road	C - Buckingham Road West
	A - Buckingham Road East	0	214	679
	B - Newton Road	301	0	195
	C - Buckingham Road West	477	130	1

Proportions

From	To			
		A - Buckingham Road East	B - Newton Road	C - Buckingham Road West
	A - Buckingham Road East	0.00	0.24	0.76
	B - Newton Road	0.61	0.00	0.39
	C - Buckingham Road West	0.79	0.21	0.00

Demand (Veh/hr)

2E - Buckingham Road/ Shenley Road

From	To			
		A - Shenley Road	B - Buckingham Road East	C - Buckingham Road West
	A - Shenley Road	0	51	307
	B - Buckingham Road East	139	0	586
	C - Buckingham Road West	399	380	0

Proportions

From	To			
		A - Shenley Road	B - Buckingham Road East	C - Buckingham Road West
	A - Shenley Road	0.00	0.14	0.86
	B - Buckingham Road East	0.19	0.00	0.81
	C - Buckingham Road West	0.51	0.49	0.00

Vehicle Mix

Heavy Vehicle Percentages

2W - Newford Road/ Buckingham Road

From	To			
		A - Buckingham Road East	B - Newton Road	C - Buckingham Road West
	A - Buckingham Road East	0	2	2
	B - Newton Road	2	0	4
	C - Buckingham Road West	4	3	0

Average PCU Per Veh

From	To			
		A - Buckingham Road East	B - Newton Road	C - Buckingham Road West
	A - Buckingham Road East	1.000	1.015	1.018
	B - Newton Road	1.018	1.000	1.039
	C - Buckingham Road West	1.035	1.033	1.000

Heavy Vehicle Percentages

Average PCU Per Veh

2E - Buckin
gham
Road/
Shenley
Road

From	To			
		A - Shenley Road	B - Buckingham Road East	C - Buckingham Road West
	A - Shenley Road	0	0	1
	B - Buckingham Road East	0	0	2
	C - Buckingham Road West	1	5	0

From	To			
		A - Shenley Road	B - Buckingham Road East	C - Buckingham Road West
	A - Shenley Road	1.000	1.000	1.011
	B - Buckingham Road East	1.000	1.000	1.020
	C - Buckingham Road West	1.011	1.047	1.000

Detailed Demand Data

Demand for each time segment

Junction	Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
2E - Buckingham Road/ Shenley Road	A - Shenley Road	07:30-07:45	269	272
		07:45-08:00	321	324
		08:00-08:15	394	397
		08:15-08:30	394	397
		08:30-08:45	321	324
		08:45-09:00	269	272
	B - Buckingham Road East	07:30-07:45	546	555
		07:45-08:00	652	663
		08:00-08:15	799	812
		08:15-08:30	799	812
		08:30-08:45	652	663
		08:45-09:00	546	555
	C - Buckingham Road West	07:30-07:45	586	603
		07:45-08:00	700	720
		08:00-08:15	857	882
		08:15-08:30	857	882
		08:30-08:45	700	720
		08:45-09:00	586	603
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	07:30-07:45	672	684
		07:45-08:00	803	817
		08:00-08:15	983	1000
		08:15-08:30	983	1000
		08:30-08:45	803	817
		08:45-09:00	672	684
	B - Newton Road	07:30-07:45	374	384
		07:45-08:00	447	458
		08:00-08:15	547	561
		08:15-08:30	547	561
		08:30-08:45	447	458
		08:45-09:00	374	384
	C - Buckingham Road West	07:30-07:45	458	474
		07:45-08:00	546	565
		08:00-08:15	669	693

		08:15-08:30	669	693
		08:30-08:45	546	565
		08:45-09:00	458	474

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
2E - Buckingham Road/ Shenley Road	A - Shenley Road	0.59	12.97	1.4	B	328	492
	B - Buckingham Road East	0.63	7.76	1.7	A	666	999
	C - Buckingham Road West	0.74	11.76	2.7	B	714	1071
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	0.74	10.27	2.7	B	819	1228
	B - Newton Road	0.74	18.70	2.7	C	456	684
	C - Buckingham Road West	0.56	6.90	1.3	A	558	837

Main Results for each time segment

07:30 - 07:45

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	269	67	283	757	0.356	267	401	0.0	0.5	7.317	A
	B - Buckingham Road East	546	137	229	1344	0.407	544	320	0.0	0.7	4.484	A
	C - Buckingham Road West	583	146	104	1194	0.488	579	668	0.0	0.9	5.817	A
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	668	167	98	1366	0.489	665	583	0.0	0.9	5.103	A
	B - Newton Road	374	94	506	896	0.417	371	256	0.0	0.7	6.824	A
	C - Buckingham Road West	458	114	225	1275	0.359	455	652	0.0	0.6	4.380	A

07:45 - 08:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	321	80	340	720	0.446	320	481	0.5	0.8	8.976	A
	B - Buckingham Road East	652	163	275	1310	0.498	651	385	0.7	1.0	5.458	A
	C - Buckingham Road West	698	175	125	1180	0.591	696	801	0.9	1.4	7.404	A

2W - Newford Road/ Buckingham Road	A - Buckingham Road East	801	200	117	1352	0.593	799	698	0.9	1.4	6.487	A
	B - Newton Road	447	112	609	829	0.539	445	308	0.7	1.1	9.329	A
	C - Buckingham Road West	546	137	270	1240	0.441	546	784	0.6	0.8	5.180	A

08:00 - 08:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	394	98	414	674	0.584	391	587	0.8	1.4	12.651	B
	B - Buckingham Road East	799	200	336	1264	0.632	796	469	1.0	1.7	7.648	A
	C - Buckingham Road West	852	213	153	1162	0.733	847	979	1.4	2.6	11.272	B
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	979	245	143	1333	0.735	974	852	1.4	2.7	9.903	A
	B - Newton Road	547	137	742	742	0.737	541	376	1.1	2.6	17.422	C
	C - Buckingham Road West	669	167	328	1193	0.561	667	955	0.8	1.3	6.820	A

08:15 - 08:30

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	394	98	418	671	0.587	393	592	1.4	1.4	12.968	B
	B - Buckingham Road East	799	200	338	1263	0.633	799	474	1.7	1.7	7.758	A
	C - Buckingham Road West	857	214	153	1161	0.738	856	983	2.6	2.7	11.764	B
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	983	246	144	1332	0.738	983	857	2.7	2.7	10.273	B
	B - Newton Road	547	137	749	738	0.741	546	378	2.6	2.7	18.698	C
	C - Buckingham Road West	669	167	331	1191	0.562	669	964	1.3	1.3	6.899	A

08:30 - 08:45

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	321	80	346	716	0.449	324	489	1.4	0.8	9.223	A
	B - Buckingham Road East	652	163	278	1307	0.499	655	392	1.7	1.0	5.544	A
	C - Buckingham Road West	705	176	126	1180	0.598	710	807	2.7	1.5	7.738	A
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	807	202	118	1352	0.597	812	705	2.7	1.5	6.734	A

	B - Newton Road	447	112	619	823	0.543	453	311	2.7	1.2	9.886	A
	C - Buckingham Road West	546	137	275	1236	0.442	548	797	1.3	0.8	5.251	A

08:45 - 09:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	269	67	288	753	0.357	270	407	0.8	0.6	7.469	A
	B - Buckingham Road East	546	137	232	1342	0.407	548	326	1.0	0.7	4.540	A
	C - Buckingham Road West	588	147	105	1194	0.493	590	674	1.5	1.0	5.987	A
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	674	169	99	1366	0.494	676	588	1.5	1.0	5.237	A
	B - Newton Road	374	94	515	890	0.420	376	260	1.2	0.7	7.030	A
	C - Buckingham Road West	458	114	228	1273	0.360	459	663	0.8	0.6	4.427	A

2026 Base + CD + D - ST, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout	2W - Newford Road/ Buckingham Road	Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms A and C have 84% of the total flow for the roundabout for one or more time segments]
Warning	Mini-roundabout	2E - Buckingham Road/ Shenley Road	Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms B and C have 82% of the total flow for the roundabout for one or more time segments]
Warning	Linked Roundabout	2W - Newford Road/ Buckingham Road - A - Buckingham Road East	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.
Warning	Linked Roundabout	2E - Buckingham Road/ Shenley Road - C - Buckingham Road West	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
2E	Buckingham Road/ Shenley Road	Mini-roundabout		A, B, C	26.53	D
2W	Newford Road/ Buckingham Road	Mini-roundabout		A, B, C	23.20	C

Junction Network Options

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2026 Base + CD + D - ST	PM	ONE HOUR	16:45	18:15	15	✓

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

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (Veh/hr)	Flow multiplier (%)	Internal storage space (PCU)
2E - Buckingham Road/ Shenley Road	C - Buckingham Road West	2W	A	Simple (vertical queueing)	Normal	0	100.00	
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	2E	C	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
2E - Buckingham Road/ Shenley Road	A - Shenley Road		ONE HOUR	✓	337	100.000
	B - Buckingham Road East		ONE HOUR	✓	458	100.000
	C - Buckingham Road West	✓				
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	✓				
	B - Newton Road		ONE HOUR	✓	342	100.000
	C - Buckingham Road West		ONE HOUR	✓	1136	100.000

Origin-Destination Data

Demand (Veh/hr)

2W - Newford Road/ Buckingham Road

From	To			
		A - Buckingham Road East	B - Newton Road	C - Buckingham Road West
	A - Buckingham Road East	0	196	509
	B - Newton Road	183	1	158
	C - Buckingham Road West	879	256	1

Proportions

From	To			
		A - Buckingham Road East	B - Newton Road	C - Buckingham Road West
	A - Buckingham Road East	0.00	0.28	0.72
	B - Newton Road	0.53	0.00	0.46
	C - Buckingham Road West	0.77	0.23	0.00

Demand (Veh/hr)

2E -
Buckin
gham
Road/
Shenley
Road

From	To			
		A - Shenley Road	B - Buckingham Road East	C - Buckingham Road West
	A - Shenley Road	0	50	287
	B - Buckingham Road East	40	0	418
	C - Buckingham Road West	327	735	0

Proportions

From	To			
		A - Shenley Road	B - Buckingham Road East	C - Buckingham Road West
	A - Shenley Road	0.00	0.15	0.85
	B - Buckingham Road East	0.09	0.00	0.91
	C - Buckingham Road West	0.31	0.69	0.00

Vehicle Mix

Heavy Vehicle Percentages

2W -
Newfor
d Road/
Buckin
gham
Road

From	To			
		A - Buckingham Road East	B - Newton Road	C - Buckingham Road West
	A - Buckingham Road East	0	2	2
	B - Newton Road	0	0	3
	C - Buckingham Road West	1	2	0

Average PCU Per Veh

From	To			
		A - Buckingham Road East	B - Newton Road	C - Buckingham Road West
	A - Buckingham Road East	1.000	1.022	1.022
	B - Newton Road	1.000	1.000	1.027
	C - Buckingham Road West	1.008	1.017	1.000

Heavy Vehicle Percentages

2E -
Buckin
gham
Road/
Shenley
Road

From	To			
		A - Shenley Road	B - Buckingham Road East	C - Buckingham Road West
	A - Shenley Road	0	0	0
	B - Buckingham Road East	0	0	3
	C - Buckingham Road West	0	1	0

Average PCU Per Veh

From	To			
		A - Shenley Road	B - Buckingham Road East	C - Buckingham Road West
	A - Shenley Road	1.000	1.000	1.004
	B - Buckingham Road East	1.000	1.000	1.035
	C - Buckingham Road West	1.003	1.009	1.000

Detailed Demand Data

Demand for each time segment

Junction	Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
2E - Buckingham Road/ Shenley Road	A - Shenley Road	16:45-17:00	253	254
		17:00-17:15	303	303
		17:15-17:30	370	372
		17:30-17:45	370	372
		17:45-18:00	303	303

	B - Buckingham Road East	18:00-18:15	253	254
		16:45-17:00	345	356
		17:00-17:15	412	425
		17:15-17:30	505	521
		17:30-17:45	505	521
		17:45-18:00	412	425
		18:00-18:15	345	356
	C - Buckingham Road West	16:45-17:00	799	805
		17:00-17:15	955	961
		17:15-17:30	1169	1177
		17:30-17:45	1169	1177
		17:45-18:00	955	961
		18:00-18:15	799	805
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	16:45-17:00	531	543
		17:00-17:15	634	648
		17:15-17:30	776	794
		17:30-17:45	776	794
		17:45-18:00	634	648
		18:00-18:15	531	543
	B - Newton Road	16:45-17:00	257	261
		17:00-17:15	307	311
		17:15-17:30	376	381
		17:30-17:45	376	381
		17:45-18:00	307	311
		18:00-18:15	257	261
	C - Buckingham Road West	16:45-17:00	856	864
		17:00-17:15	1022	1032
		17:15-17:30	1251	1264
		17:30-17:45	1251	1264
		17:45-18:00	1022	1032
		18:00-18:15	856	864

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
2E - Buckingham Road/ Shenley Road	A - Shenley Road	0.83	42.22	4.1	E	309	463
	B - Buckingham Road East	0.40	4.74	0.7	A	421	631
	C - Buckingham Road West	0.92	31.22	9.5	D	973	1460
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	0.63	7.93	1.7	A	646	970
	B - Newton Road	0.43	7.28	0.8	A	314	471
	C - Buckingham Road West	0.94	37.57	12.2	E	1043	1564

Main Results for each time segment

16:45 - 17:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	253	63	545	606	0.418	251	272	0.0	0.7	10.042	B
	B - Buckingham Road East	345	86	213	1336	0.258	344	582	0.0	0.3	3.622	A
	C - Buckingham Road West	794	198	30	1270	0.625	787	527	0.0	1.6	7.356	A
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	527	132	193	1292	0.408	524	794	0.0	0.7	4.672	A
	B - Newton Road	257	64	380	990	0.260	256	338	0.0	0.3	4.893	A
	C - Buckingham Road West	856	214	138	1379	0.620	849	498	0.0	1.6	6.712	A

17:00 - 17:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	303	76	654	539	0.561	300	327	0.7	1.2	14.953	B
	B - Buckingham Road East	412	103	256	1305	0.316	412	699	0.3	0.5	4.026	A
	C - Buckingham Road West	950	238	36	1266	0.750	945	632	1.6	2.9	11.037	B
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	632	158	231	1265	0.499	630	950	0.7	1.0	5.666	A
	B - Newton Road	307	77	456	939	0.327	307	405	0.3	0.5	5.686	A
	C - Buckingham Road West	1022	255	165	1357	0.753	1016	598	1.6	2.9	10.397	B

17:15 - 17:30

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	370	93	779	462	0.802	362	391	1.2	3.4	33.389	D
	B - Buckingham Road East	505	126	308	1267	0.398	504	833	0.5	0.7	4.711	A
	C - Buckingham Road West	1145	286	44	1261	0.908	1126	768	2.9	7.7	23.796	C
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	768	192	278	1231	0.624	766	1145	1.0	1.6	7.693	A
	B - Newton Road	376	94	554	874	0.430	375	489	0.5	0.7	7.199	A
	C - Buckingham Road West	1251	313	202	1328	0.942	1221	728	2.9	10.4	28.078	D

17:30 - 17:45

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	370	93	800	449	0.825	368	400	3.4	4.1	42.225	E
	B - Buckingham Road East	505	126	314	1263	0.399	505	855	0.7	0.7	4.744	A
	C - Buckingham Road West	1163	291	44	1261	0.923	1156	774	7.7	9.5	31.224	D
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	774	194	283	1227	0.631	774	1163	1.6	1.7	7.931	A
	B - Newton Road	376	94	560	871	0.432	376	497	0.7	0.8	7.285	A
	C - Buckingham Road West	1251	313	203	1327	0.943	1244	734	10.4	12.2	37.567	E

17:45 - 18:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	303	76	697	513	0.590	313	346	4.1	1.5	18.810	C
	B - Buckingham Road East	412	103	266	1298	0.318	413	743	0.7	0.5	4.071	A
	C - Buckingham Road West	983	246	36	1266	0.776	1006	643	9.5	3.7	14.912	B
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	643	161	241	1258	0.511	646	983	1.7	1.1	5.905	A
	B - Newton Road	307	77	467	932	0.330	308	419	0.8	0.5	5.780	A
	C - Buckingham Road West	1022	255	166	1357	0.753	1058	610	12.2	3.2	13.359	B

18:00 - 18:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	253	63	562	596	0.425	256	280	1.5	0.8	10.699	B
	B - Buckingham Road East	345	86	218	1333	0.259	346	600	0.5	0.4	3.650	A
	C - Buckingham Road West	804	201	30	1270	0.633	812	534	3.7	1.8	7.984	A
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	534	133	196	1290	0.414	535	804	1.1	0.7	4.779	A
	B - Newton Road	257	64	387	985	0.261	258	344	0.5	0.4	4.955	A
	C - Buckingham Road West	856	214	139	1378	0.621	862	507	3.2	1.7	7.046	A

2026 Base + CD + SP (ST), AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Linked Roundabout	2W - Newford Road/ Buckingham Road - A - Buckingham Road East	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.
Warning	Linked Roundabout	2E - Buckingham Road/ Shenley Road - C - Buckingham Road West	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
2E	Buckingham Road/ Shenley Road	Mini-roundabout		A, B, C	8.65	A
2W	Newford Road/ Buckingham Road	Mini-roundabout		A, B, C	8.60	A

Junction Network Options

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2026 Base + CD + SP (ST)	AM	ONE HOUR	07:30	09:00	15	✓

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

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (Veh/hr)	Flow multiplier (%)	Internal storage space (PCU)
2E - Buckingham Road/ Shenley Road	C - Buckingham Road West	2W	A	Simple (vertical queueing)	Normal	0	100.00	
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	2E	C	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
2E - Buckingham Road/ Shenley Road	A - Shenley Road		ONE HOUR	✓	357	100.000

	B - Buckingham Road East		ONE HOUR	✓	609	100.000
	C - Buckingham Road West	✓				
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	✓				
	B - Newton Road		ONE HOUR	✓	497	100.000
	C - Buckingham Road West		ONE HOUR	✓	545	100.000

Origin-Destination Data

Demand (Veh/hr)

2W - Newford Road/ Buckingham Road

From	To			
		A - Buckingham Road East	B - Newton Road	C - Buckingham Road West
	A - Buckingham Road East	0	214	562
	B - Newton Road	301	0	195
	C - Buckingham Road West	415	130	1

Proportions

From	To			
		A - Buckingham Road East	B - Newton Road	C - Buckingham Road West
	A - Buckingham Road East	0.00	0.28	0.72
	B - Newton Road	0.61	0.00	0.39
	C - Buckingham Road West	0.76	0.24	0.00

Demand (Veh/hr)

2E - Buckingham Road/ Shenley Road

From	To			
		A - Shenley Road	B - Buckingham Road East	C - Buckingham Road West
	A - Shenley Road	0	51	307
	B - Buckingham Road East	139	0	469
	C - Buckingham Road West	399	317	0

Proportions

From	To			
		A - Shenley Road	B - Buckingham Road East	C - Buckingham Road West
	A - Shenley Road	0.00	0.14	0.86
	B - Buckingham Road East	0.23	0.00	0.77
	C - Buckingham Road West	0.56	0.44	0.00

Vehicle Mix

Heavy Vehicle Percentages

2W - Newford Road/ Buckingham Road

From	To			
		A - Buckingham Road East	B - Newton Road	C - Buckingham Road West
	A - Buckingham Road East	0	2	2
	B - Newton Road	2	0	4
	C - Buckingham Road West	3	3	0

Average PCU Per Veh

From	To			
		A - Buckingham Road East	B - Newton Road	C - Buckingham Road West
	A - Buckingham Road East	1.000	1.015	1.017
	B - Newton Road	1.018	1.000	1.039
	C - Buckingham Road West	1.034	1.033	1.000

Heavy Vehicle Percentages

Average PCU Per Veh

2E - Buckin
gham
Road/
Shenley
Road

From	To			
		A - Shenley Road	B - Buckingham Road East	C - Buckingham Road West
	A - Shenley Road	0	0	1
	B - Buckingham Road East	0	0	2
	C - Buckingham Road West	1	5	0

From	To			
		A - Shenley Road	B - Buckingham Road East	C - Buckingham Road West
	A - Shenley Road	1.000	1.000	1.011
	B - Buckingham Road East	1.000	1.000	1.021
	C - Buckingham Road West	1.011	1.047	1.000

Detailed Demand Data

Demand for each time segment

Junction	Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
2E - Buckingham Road/ Shenley Road	A - Shenley Road	07:30-07:45	269	272
		07:45-08:00	321	324
		08:00-08:15	394	397
		08:15-08:30	394	397
		08:30-08:45	321	324
		08:45-09:00	269	272
	B - Buckingham Road East	07:30-07:45	458	466
		07:45-08:00	547	556
		08:00-08:15	670	681
		08:15-08:30	670	681
		08:30-08:45	547	556
		08:45-09:00	458	466
	C - Buckingham Road West	07:30-07:45	539	554
		07:45-08:00	644	661
		08:00-08:15	788	810
		08:15-08:30	788	810
		08:30-08:45	644	661
		08:45-09:00	539	554
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	07:30-07:45	584	594
		07:45-08:00	698	709
		08:00-08:15	854	869
		08:15-08:30	854	869
		08:30-08:45	698	709
		08:45-09:00	584	594
	B - Newton Road	07:30-07:45	374	384
		07:45-08:00	447	458
		08:00-08:15	547	561
		08:15-08:30	547	561
		08:30-08:45	447	458
		08:45-09:00	374	384
	C - Buckingham Road West	07:30-07:45	411	424
		07:45-08:00	490	507
		08:00-08:15	600	620

		08:15-08:30	600	620
		08:30-08:45	490	507
		08:45-09:00	411	424

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
2E - Buckingham Road/ Shenley Road	A - Shenley Road	0.55	11.21	1.2	B	328	492
	B - Buckingham Road East	0.53	6.07	1.1	A	559	838
	C - Buckingham Road West	0.68	9.58	2.1	A	656	985
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	0.64	7.51	1.8	A	712	1067
	B - Newton Road	0.67	13.06	1.9	B	456	684
	C - Buckingham Road West	0.50	6.08	1.0	A	500	751

Main Results for each time segment

07:30 - 07:45

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	269	67	236	786	0.342	267	401	0.0	0.5	6.912	A
	B - Buckingham Road East	458	115	229	1344	0.341	456	274	0.0	0.5	4.044	A
	C - Buckingham Road West	536	134	104	1196	0.448	533	581	0.0	0.8	5.402	A
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	581	145	98	1367	0.425	578	536	0.0	0.7	4.548	A
	B - Newton Road	374	94	420	953	0.393	371	256	0.0	0.6	6.168	A
	C - Buckingham Road West	411	103	225	1277	0.322	409	566	0.0	0.5	4.137	A

07:45 - 08:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	321	80	284	756	0.425	321	482	0.5	0.7	8.253	A
	B - Buckingham Road East	547	137	275	1310	0.418	546	330	0.5	0.7	4.708	A
	C - Buckingham Road West	642	161	125	1182	0.543	641	696	0.8	1.2	6.629	A

2W - Newford Road/ Buckingham Road	A - Buckingham Road East	696	174	117	1353	0.515	695	642	0.7	1.0	5.465	A
	B - Newton Road	447	112	505	897	0.498	445	308	0.6	1.0	7.942	A
	C - Buckingham Road West	490	123	270	1241	0.395	490	680	0.5	0.6	4.785	A

08:00 - 08:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	394	98	347	716	0.550	392	588	0.7	1.2	11.033	B
	B - Buckingham Road East	670	168	336	1265	0.530	669	402	0.7	1.1	6.024	A
	C - Buckingham Road West	785	196	153	1164	0.675	782	852	1.2	2.0	9.341	A
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	852	213	144	1333	0.639	849	785	1.0	1.7	7.391	A
	B - Newton Road	547	137	616	824	0.664	543	376	1.0	1.9	12.642	B
	C - Buckingham Road West	600	150	330	1194	0.503	599	830	0.6	1.0	6.036	A

08:15 - 08:30

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	394	98	349	714	0.551	394	592	1.2	1.2	11.213	B
	B - Buckingham Road East	670	168	338	1264	0.530	670	405	1.1	1.1	6.066	A
	C - Buckingham Road West	788	197	153	1163	0.677	788	854	2.0	2.1	9.577	A
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	854	214	144	1333	0.641	854	788	1.7	1.8	7.514	A
	B - Newton Road	547	137	620	822	0.666	547	378	1.9	1.9	13.065	B
	C - Buckingham Road West	600	150	332	1192	0.504	600	835	1.0	1.0	6.082	A

08:30 - 08:45

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	321	80	288	753	0.427	323	488	1.2	0.8	8.406	A
	B - Buckingham Road East	547	137	277	1309	0.418	549	334	1.1	0.7	4.749	A
	C - Buckingham Road West	647	162	126	1182	0.547	650	700	2.1	1.2	6.812	A
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	700	175	118	1352	0.518	703	647	1.8	1.1	5.570	A

	B - Newton Road	447	112	510	893	0.500	450	311	1.9	1.0	8.191	A
	C - Buckingham Road West	490	123	273	1239	0.396	492	688	1.0	0.7	4.828	A

08:45 - 09:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	269	67	240	784	0.343	270	407	0.8	0.5	7.023	A
	B - Buckingham Road East	458	115	232	1343	0.341	459	279	0.7	0.5	4.078	A
	C - Buckingham Road West	540	135	105	1196	0.452	542	586	1.2	0.8	5.523	A
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	586	146	99	1366	0.429	587	540	1.1	0.8	4.626	A
	B - Newton Road	374	94	426	948	0.394	375	259	1.0	0.7	6.299	A
	C - Buckingham Road West	411	103	228	1275	0.322	411	574	0.7	0.5	4.173	A

2026 Base + CD + SP (ST), PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout	2W - Newford Road/ Buckingham Road	Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms A and C have 82% of the total flow for the roundabout for one or more time segments]
Warning	Linked Roundabout	2W - Newford Road/ Buckingham Road - A - Buckingham Road East	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.
Warning	Linked Roundabout	2E - Buckingham Road/ Shenley Road - C - Buckingham Road West	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
2E	Buckingham Road/ Shenley Road	Mini-roundabout		A, B, C	13.63	B
2W	Newford Road/ Buckingham Road	Mini-roundabout		A, B, C	11.26	B

Junction Network Options

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2026 Base + CD + SP (ST)	PM	ONE HOUR	16:45	18:15	15	✓

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

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (Veh/hr)	Flow multiplier (%)	Internal storage space (PCU)
2E - Buckingham Road/ Shenley Road	C - Buckingham Road West	2W	A	Simple (vertical queueing)	Normal	0	100.00	
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	2E	C	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
2E - Buckingham Road/ Shenley Road	A - Shenley Road		ONE HOUR	✓	337	100.000
	B - Buckingham Road East		ONE HOUR	✓	378	100.000
	C - Buckingham Road West	✓				
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	✓				
	B - Newton Road		ONE HOUR	✓	342	100.000
	C - Buckingham Road West		ONE HOUR	✓	1001	100.000

Origin-Destination Data

Demand (Veh/hr)

2W - Newford Road/ Buckingham Road

From	To			
		A - Buckingham Road East	B - Newton Road	C - Buckingham Road West
	A - Buckingham Road East	0	196	429
	B - Newton Road	183	1	158
	C - Buckingham Road West	743	256	1

Proportions

From	To			
		A - Buckingham Road East	B - Newton Road	C - Buckingham Road West
	A - Buckingham Road East	0.00	0.31	0.69
	B - Newton Road	0.53	0.00	0.46
	C - Buckingham Road West	0.74	0.26	0.00

Demand (Veh/hr)

2E -
Buckin
gham
Road/
Shenley
Road

	To			
		A - Shenley Road	B - Buckingham Road East	C - Buckingham Road West
From				
	A - Shenley Road	0	50	287
	B - Buckingham Road East	40	0	338
	C - Buckingham Road West	327	599	0

Proportions

	To			
		A - Shenley Road	B - Buckingham Road East	C - Buckingham Road West
From				
	A - Shenley Road	0.00	0.15	0.85
	B - Buckingham Road East	0.11	0.00	0.89
	C - Buckingham Road West	0.35	0.65	0.00

Vehicle Mix

Heavy Vehicle Percentages

2W -
Newfor
d Road/
Buckin
gham
Road

	To			
		A - Buckingham Road East	B - Newton Road	C - Buckingham Road West
From				
	A - Buckingham Road East	0	2	2
	B - Newton Road	0	0	3
	C - Buckingham Road West	1	2	0

Average PCU Per Veh

	To			
		A - Buckingham Road East	B - Newton Road	C - Buckingham Road West
From				
	A - Buckingham Road East	1.000	1.022	1.021
	B - Newton Road	1.000	1.000	1.027
	C - Buckingham Road West	1.008	1.017	1.000

Heavy Vehicle Percentages

2E -
Buckin
gham
Road/
Shenley
Road

	To			
		A - Shenley Road	B - Buckingham Road East	C - Buckingham Road West
From				
	A - Shenley Road	0	0	0
	B - Buckingham Road East	0	0	4
	C - Buckingham Road West	0	1	0

Average PCU Per Veh

	To			
		A - Shenley Road	B - Buckingham Road East	C - Buckingham Road West
From				
	A - Shenley Road	1.000	1.000	1.004
	B - Buckingham Road East	1.000	1.000	1.036
	C - Buckingham Road West	1.003	1.009	1.000

Detailed Demand Data

Demand for each time segment

Junction	Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
2E - Buckingham Road/ Shenley Road	A - Shenley Road	16:45-17:00	253	254
		17:00-17:15	303	303
		17:15-17:30	370	372
		17:30-17:45	370	372
		17:45-18:00	303	303

	B - Buckingham Road East	18:00-18:15	253	254
		16:45-17:00	285	294
		17:00-17:15	340	351
		17:15-17:30	416	430
		17:30-17:45	416	430
		17:45-18:00	340	351
		18:00-18:15	285	294
	C - Buckingham Road West	16:45-17:00	697	702
		17:00-17:15	833	838
		17:15-17:30	1020	1026
		17:30-17:45	1020	1026
		17:45-18:00	833	838
		18:00-18:15	697	702
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	16:45-17:00	470	480
		17:00-17:15	562	573
		17:15-17:30	688	702
		17:30-17:45	688	702
		17:45-18:00	562	573
		18:00-18:15	470	480
	B - Newton Road	16:45-17:00	257	261
		17:00-17:15	307	311
		17:15-17:30	376	381
		17:30-17:45	376	381
		17:45-18:00	307	311
		18:00-18:15	257	261
	C - Buckingham Road West	16:45-17:00	753	761
		17:00-17:15	900	909
		17:15-17:30	1102	1113
		17:30-17:45	1102	1113
		17:45-18:00	900	909
		18:00-18:15	753	761

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
2E - Buckingham Road/ Shenley Road	A - Shenley Road	0.69	21.54	2.1	C	309	463
	B - Buckingham Road East	0.33	4.26	0.5	A	347	520
	C - Buckingham Road West	0.81	14.69	4.0	B	849	1274
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	0.56	6.66	1.3	A	573	859
	B - Newton Road	0.41	6.52	0.7	A	314	471
	C - Buckingham Road West	0.83	15.78	4.7	C	918	1377

Main Results for each time segment

16:45 - 17:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	253	63	445	668	0.379	251	273	0.0	0.6	8.593	A
	B - Buckingham Road East	285	71	214	1336	0.213	284	483	0.0	0.3	3.418	A
	C - Buckingham Road West	693	173	30	1271	0.545	688	467	0.0	1.2	6.132	A
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	467	117	193	1293	0.361	465	693	0.0	0.6	4.336	A
	B - Newton Road	257	64	320	1030	0.250	256	338	0.0	0.3	4.643	A
	C - Buckingham Road West	753	188	138	1379	0.546	749	438	0.0	1.2	5.671	A

17:00 - 17:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	303	76	535	612	0.494	301	328	0.6	1.0	11.520	B
	B - Buckingham Road East	340	85	257	1305	0.261	340	580	0.3	0.4	3.730	A
	C - Buckingham Road West	830	208	36	1267	0.655	827	560	1.2	1.9	8.143	A
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	560	140	232	1266	0.443	559	830	0.6	0.8	5.090	A
	B - Newton Road	307	77	385	987	0.311	307	406	0.3	0.4	5.288	A
	C - Buckingham Road West	900	225	165	1357	0.663	897	527	1.2	1.9	7.769	A

17:15 - 17:30

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	370	93	650	542	0.684	366	398	1.0	2.0	20.020	C
	B - Buckingham Road East	416	104	312	1264	0.329	416	704	0.4	0.5	4.240	A
	C - Buckingham Road West	1012	253	44	1261	0.802	1004	684	1.9	3.8	13.592	B
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	684	171	282	1229	0.556	682	1012	0.8	1.2	6.556	A
	B - Newton Road	376	94	469	931	0.404	376	495	0.4	0.7	6.467	A
	C - Buckingham Road West	1102	275	202	1328	0.830	1092	643	1.9	4.5	14.655	B

17:30 - 17:45

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	370	93	659	536	0.691	370	403	2.0	2.1	21.537	C
	B - Buckingham Road East	416	104	315	1262	0.330	416	714	0.5	0.5	4.257	A
	C - Buckingham Road West	1019	255	44	1261	0.808	1018	687	3.8	4.0	14.685	B
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	687	172	285	1228	0.560	687	1019	1.2	1.3	6.661	A
	B - Newton Road	376	94	473	929	0.405	376	499	0.7	0.7	6.516	A
	C - Buckingham Road West	1102	275	203	1327	0.830	1101	647	4.5	4.7	15.776	C

17:45 - 18:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	303	76	549	604	0.501	307	336	2.1	1.0	12.305	B
	B - Buckingham Road East	340	85	262	1301	0.261	340	595	0.5	0.4	3.751	A
	C - Buckingham Road West	841	210	36	1267	0.664	849	566	4.0	2.0	8.771	A
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	566	141	235	1263	0.448	568	841	1.3	0.8	5.188	A
	B - Newton Road	307	77	391	983	0.313	308	412	0.7	0.5	5.340	A
	C - Buckingham Road West	900	225	166	1357	0.663	910	533	4.7	2.0	8.247	A

18:00 - 18:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	253	63	455	662	0.383	255	278	1.0	0.6	8.884	A
	B - Buckingham Road East	285	71	217	1333	0.213	285	493	0.4	0.3	3.436	A
	C - Buckingham Road West	700	175	30	1271	0.551	703	472	2.0	1.2	6.377	A
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	472	118	196	1292	0.365	473	700	0.8	0.6	4.403	A
	B - Newton Road	257	64	326	1027	0.251	258	343	0.5	0.3	4.685	A
	C - Buckingham Road West	753	188	139	1378	0.547	757	445	2.0	1.2	5.822	A

2033 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Linked Roundabout	2W - Newford Road/ Buckingham Road - A - Buckingham Road East	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.
Warning	Linked Roundabout	2E - Buckingham Road/ Shenley Road - C - Buckingham Road West	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
2E	Buckingham Road/ Shenley Road	Mini-roundabout		A, B, C	9.10	A
2W	Newford Road/ Buckingham Road	Mini-roundabout		A, B, C	8.92	A

Junction Network Options

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2033 Base	AM	ONE HOUR	07:30	09:00	15	✓

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

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (Veh/hr)	Flow multiplier (%)	Internal storage space (PCU)
2E - Buckingham Road/ Shenley Road	C - Buckingham Road West	2W	A	Simple (vertical queueing)	Normal	0	100.00	
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	2E	C	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
2E - Buckingham Road/ Shenley Road	A - Shenley Road		ONE HOUR	✓	380	100.000

	B - Buckingham Road East		ONE HOUR	✓	586	100.000
	C - Buckingham Road West	✓				
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	✓				
	B - Newton Road		ONE HOUR	✓	528	100.000
	C - Buckingham Road West		ONE HOUR	✓	550	100.000

Origin-Destination Data

Demand (Veh/hr)

2W - Newford Road/ Buckingham Road

From	To			
		A - Buckingham Road East	B - Newton Road	C - Buckingham Road West
	A - Buckingham Road East	0	227	537
	B - Newton Road	320	0	208
	C - Buckingham Road West	411	138	1

Proportions

From	To			
		A - Buckingham Road East	B - Newton Road	C - Buckingham Road West
	A - Buckingham Road East	0.00	0.30	0.70
	B - Newton Road	0.61	0.00	0.39
	C - Buckingham Road West	0.75	0.25	0.00

Demand (Veh/hr)

2E - Buckingham Road/ Shenley Road

From	To			
		A - Shenley Road	B - Buckingham Road East	C - Buckingham Road West
	A - Shenley Road	0	54	326
	B - Buckingham Road East	148	0	438
	C - Buckingham Road West	423	308	0

Proportions

From	To			
		A - Shenley Road	B - Buckingham Road East	C - Buckingham Road West
	A - Shenley Road	0.00	0.14	0.86
	B - Buckingham Road East	0.25	0.00	0.75
	C - Buckingham Road West	0.58	0.42	0.00

Vehicle Mix

Heavy Vehicle Percentages

2W - Newford Road/ Buckingham Road

From	To			
		A - Buckingham Road East	B - Newton Road	C - Buckingham Road West
	A - Buckingham Road East	0	2	2
	B - Newton Road	2	0	4
	C - Buckingham Road West	3	3	0

Average PCU Per Veh

From	To			
		A - Buckingham Road East	B - Newton Road	C - Buckingham Road West
	A - Buckingham Road East	1.000	1.015	1.017
	B - Newton Road	1.018	1.000	1.039
	C - Buckingham Road West	1.033	1.033	1.000

Heavy Vehicle Percentages

2E - Buckin
gham
Road/
Shenley
Road

From	To			
		A - Shenley Road	B - Buckingham Road East	C - Buckingham Road West
	A - Shenley Road	0	0	1
	B - Buckingham Road East	0	0	2
	C - Buckingham Road West	1	5	0

Average PCU Per Veh

From	To			
		A - Shenley Road	B - Buckingham Road East	C - Buckingham Road West
	A - Shenley Road	1.000	1.000	1.011
	B - Buckingham Road East	1.000	1.000	1.021
	C - Buckingham Road West	1.011	1.047	1.000

Detailed Demand Data

Demand for each time segment

Junction	Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
2E - Buckingham Road/ Shenley Road	A - Shenley Road	07:30-07:45	286	288
		07:45-08:00	341	344
		08:00-08:15	418	422
		08:15-08:30	418	422
		08:30-08:45	341	344
		08:45-09:00	286	288
	B - Buckingham Road East	07:30-07:45	441	448
		07:45-08:00	527	535
		08:00-08:15	645	655
		08:15-08:30	645	655
		08:30-08:45	527	535
		08:45-09:00	441	448
	C - Buckingham Road West	07:30-07:45	551	565
		07:45-08:00	657	675
		08:00-08:15	805	826
		08:15-08:30	805	826
		08:30-08:45	657	675
		08:45-09:00	551	565
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	07:30-07:45	575	584
		07:45-08:00	687	698
		08:00-08:15	841	855
		08:15-08:30	841	855
		08:30-08:45	687	698
		08:45-09:00	575	584
	B - Newton Road	07:30-07:45	397	408
		07:45-08:00	474	487
		08:00-08:15	581	596
		08:15-08:30	581	596
		08:30-08:45	474	487
		08:45-09:00	397	408
	C - Buckingham Road West	07:30-07:45	414	428
		07:45-08:00	495	511
		08:00-08:15	606	626

		08:15-08:30	606	626
		08:30-08:45	495	511
		08:45-09:00	414	428

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
2E - Buckingham Road/ Shenley Road	A - Shenley Road	0.58	11.87	1.4	B	348	523
	B - Buckingham Road East	0.52	5.97	1.1	A	538	807
	C - Buckingham Road West	0.70	10.18	2.2	B	671	1006
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	0.63	7.40	1.7	A	700	1050
	B - Newton Road	0.69	13.83	2.2	B	484	726
	C - Buckingham Road West	0.51	6.30	1.1	A	505	757

Main Results for each time segment

07:30 - 07:45

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	286	71	229	791	0.361	284	426	0.0	0.6	7.068	A
	B - Buckingham Road East	441	110	243	1334	0.331	439	270	0.0	0.5	4.012	A
	C - Buckingham Road West	548	137	111	1193	0.459	544	572	0.0	0.8	5.523	A
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	572	143	104	1363	0.419	569	547	0.0	0.7	4.518	A
	B - Newton Road	397	99	401	965	0.412	394	272	0.0	0.7	6.279	A
	C - Buckingham Road West	414	104	239	1267	0.327	412	556	0.0	0.5	4.204	A

07:45 - 08:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	341	85	276	761	0.448	340	512	0.6	0.8	8.535	A
	B - Buckingham Road East	527	132	292	1298	0.406	526	324	0.5	0.7	4.657	A
	C - Buckingham Road West	656	164	133	1178	0.557	654	685	0.8	1.2	6.856	A

2W - Newford Road/ Buckingham Road	A - Buckingham Road East	685	171	125	1348	0.5 09	684	656	0.7	1.0	5.4 15	A
	B - Newton Road	474	119	482	912	0.5 20	473	327	0.7	1.1	8.1 65	A
	C - Buckingham Road West	495	124	287	1229	0.4 02	494	668	0.5	0.7	4.8 93	A

08:00 - 08:15

Junction	Arm	Total Dema nd (Veh/ hr)	Junct ion Arriv als (Veh)	Circula ting flow (Veh/hr)	Capa city (Veh/ hr)	RF C	Throug hput (Veh/hr)	Throug hput (exit side) (Veh/hr)	Star t que ue (Veh h)	End que ue (Veh h)	Del ay (s)	Unsignal ised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	418	105	336	723	0.5 78	416	624	0.8	1.3	11.6 48	B
	B - Buckingham Road East	645	161	357	1250	0.5 16	644	395	0.7	1.1	5.92 6	A
	C - Buckingham Road West	802	200	163	1158	0.6 92	798	838	1.2	2.2	9.88 7	A
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	838	210	152	1327	0.6 31	835	802	1.0	1.7	7.28 2	A
	B - Newton Road	581	145	588	843	0.6 89	577	400	1.1	2.1	13.3 23	B
	C - Buckingham Road West	606	151	350	1179	0.5 14	604	815	0.7	1.0	6.25 1	A

08:15 - 08:30

Junction	Arm	Total Dema nd (Veh/ hr)	Junct ion Arriv als (Veh)	Circula ting flow (Veh/hr)	Capa city (Veh/ hr)	RF C	Throug hput (Veh/hr)	Throug hput (exit side) (Veh/hr)	Star t que ue (Veh h)	End que ue (Veh h)	Del ay (s)	Unsignal ised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	418	105	339	721	0.5 80	418	629	1.3	1.4	11.8 71	B
	B - Buckingham Road East	645	161	359	1248	0.5 17	645	398	1.1	1.1	5.96 7	A
	C - Buckingham Road West	805	201	163	1158	0.6 95	805	841	2.2	2.2	10.1 81	B
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	841	210	153	1327	0.6 34	841	805	1.7	1.7	7.40 0	A
	B - Newton Road	581	145	592	840	0.6 91	581	402	2.1	2.2	13.8 33	B
	C - Buckingham Road West	606	151	352	1177	0.5 15	606	820	1.0	1.1	6.30 4	A

08:30 - 08:45

Junction	Arm	Total Dema nd (Veh/ hr)	Junct ion Arriva ls (Veh)	Circula ting flow (Veh/hr)	Capa city (Veh/ hr)	RF C	Throug hput (Veh/hr)	Throug hput (exit side) (Veh/hr)	Star t que ue (Veh h)	End que ue (Veh h)	Del ay (s)	Unsignal ised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	341	85	280	758	0.4 50	343	518	1.4	0.8	8.7 20	A
	B - Buckingham Road East	527	132	295	1296	0.4 06	528	329	1.1	0.7	4.6 98	A
	C - Buckingham Road West	661	165	133	1178	0.5 61	665	690	2.2	1.3	7.0 71	A
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	690	172	125	1347	0.5 12	692	661	1.7	1.1	5.5 16	A

	B - Newton Road	474	119	487	908	0.522	479	330	2.2	1.1	8.455	A
	C - Buckingham Road West	495	124	290	1226	0.403	496	676	1.1	0.7	4.941	A

08:45 - 09:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	286	71	233	788	0.363	287	432	0.8	0.6	7.195	A
	B - Buckingham Road East	441	110	246	1332	0.331	442	274	0.7	0.5	4.046	A
	C - Buckingham Road West	552	138	112	1192	0.463	554	576	1.3	0.9	5.656	A
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	576	144	105	1362	0.423	578	552	1.1	0.7	4.598	A
	B - Newton Road	397	99	407	961	0.413	399	276	1.1	0.7	6.424	A
	C - Buckingham Road West	414	104	242	1265	0.328	415	564	0.7	0.5	4.242	A

2033 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout	2W - Newford Road/ Buckingham Road	Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms A and C have 82% of the total flow for the roundabout for one or more time segments]
Warning	Linked Roundabout	2W - Newford Road/ Buckingham Road - A - Buckingham Road East	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.
Warning	Linked Roundabout	2E - Buckingham Road/ Shenley Road - C - Buckingham Road West	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
2E	Buckingham Road/ Shenley Road	Mini-roundabout		A, B, C	14.97	B
2W	Newford Road/ Buckingham Road	Mini-roundabout		A, B, C	12.67	B

Junction Network Options

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2033 Base	PM	ONE HOUR	16:45	18:15	15	✓

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

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (Veh/hr)	Flow multiplier (%)	Internal storage space (PCU)
2E - Buckingham Road/ Shenley Road	C - Buckingham Road West	2W	A	Simple (vertical queueing)	Normal	0	100.00	
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	2E	C	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
2E - Buckingham Road/ Shenley Road	A - Shenley Road		ONE HOUR	✓	359	100.000
	B - Buckingham Road East		ONE HOUR	✓	380	100.000
	C - Buckingham Road West	✓				
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	✓				
	B - Newton Road		ONE HOUR	✓	365	100.000
	C - Buckingham Road West		ONE HOUR	✓	1021	100.000

Origin-Destination Data

Demand (Veh/hr)

2W - Newford Road/ Buckingham Road

From	To			
		A - Buckingham Road East	B - Newton Road	C - Buckingham Road West
	A - Buckingham Road East	0	209	434
	B - Newton Road	195	1	168
	C - Buckingham Road West	746	273	1

Proportions

From	To			
		A - Buckingham Road East	B - Newton Road	C - Buckingham Road West
	A - Buckingham Road East	0.00	0.32	0.68
	B - Newton Road	0.53	0.00	0.46
	C - Buckingham Road West	0.73	0.27	0.00

Demand (Veh/hr)

2E -
Buckin
gham
Road/
Shenley
Road

		To		
		A - Shenley Road	B - Buckingham Road East	C - Buckingham Road West
From				
	A - Shenley Road	0	53	306
	B - Buckingham Road East	43	0	337
	C - Buckingham Road West	349	593	0

Proportions

		To		
		A - Shenley Road	B - Buckingham Road East	C - Buckingham Road West
From				
	A - Shenley Road	0.00	0.15	0.85
	B - Buckingham Road East	0.11	0.00	0.89
	C - Buckingham Road West	0.37	0.63	0.00

Vehicle Mix

Heavy Vehicle Percentages

2W -
Newfor
d Road/
Buckin
gham
Road

		To		
		A - Buckingham Road East	B - Newton Road	C - Buckingham Road West
From				
	A - Buckingham Road East	0	2	2
	B - Newton Road	0	0	3
	C - Buckingham Road West	1	2	0

Average PCU Per Veh

		To		
		A - Buckingham Road East	B - Newton Road	C - Buckingham Road West
From				
	A - Buckingham Road East	1.000	1.022	1.020
	B - Newton Road	1.000	1.000	1.027
	C - Buckingham Road West	1.008	1.017	1.000

Heavy Vehicle Percentages

2E -
Buckin
gham
Road/
Shenley
Road

		To		
		A - Shenley Road	B - Buckingham Road East	C - Buckingham Road West
From				
	A - Shenley Road	0	0	0
	B - Buckingham Road East	0	0	4
	C - Buckingham Road West	0	1	0

Average PCU Per Veh

		To		
		A - Shenley Road	B - Buckingham Road East	C - Buckingham Road West
From				
	A - Shenley Road	1.000	1.000	1.004
	B - Buckingham Road East	1.000	1.000	1.036
	C - Buckingham Road West	1.003	1.008	1.000

Detailed Demand Data

Demand for each time segment

Junction	Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
2E - Buckingham Road/ Shenley Road	A - Shenley Road	16:45-17:00	270	271
		17:00-17:15	323	324
		17:15-17:30	395	396
		17:30-17:45	395	396
		17:45-18:00	323	324

	B - Buckingham Road East	18:00-18:15	270	271
		16:45-17:00	286	295
		17:00-17:15	341	352
		17:15-17:30	418	431
		17:30-17:45	418	431
		17:45-18:00	341	352
		18:00-18:15	286	295
	C - Buckingham Road West	16:45-17:00	708	713
		17:00-17:15	846	852
		17:15-17:30	1036	1043
		17:30-17:45	1036	1043
		17:45-18:00	846	852
		18:00-18:15	708	713
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	16:45-17:00	484	494
		17:00-17:15	578	590
		17:15-17:30	708	722
		17:30-17:45	708	722
		17:45-18:00	578	590
		18:00-18:15	484	494
	B - Newton Road	16:45-17:00	275	278
		17:00-17:15	328	332
		17:15-17:30	402	407
		17:30-17:45	402	407
		17:45-18:00	328	332
		18:00-18:15	275	278
	C - Buckingham Road West	16:45-17:00	768	777
		17:00-17:15	918	927
		17:15-17:30	1124	1136
		17:30-17:45	1124	1136
		17:45-18:00	918	927
		18:00-18:15	768	777

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
2E - Buckingham Road/ Shenley Road	A - Shenley Road	0.73	24.33	2.6	C	329	494
	B - Buckingham Road East	0.34	4.34	0.5	A	348	523
	C - Buckingham Road West	0.82	15.80	4.4	C	863	1294
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	0.58	7.09	1.4	A	589	884
	B - Newton Road	0.43	6.87	0.8	A	335	502
	C - Buckingham Road West	0.85	18.30	5.5	C	937	1405

Main Results for each time segment

16:45 - 17:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	270	68	440	671	0.403	268	291	0.0	0.7	8.870	A
	B - Buckingham Road East	286	71	228	1325	0.216	285	480	0.0	0.3	3.456	A
	C - Buckingham Road West	704	176	32	1270	0.555	699	481	0.0	1.2	6.260	A
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	481	120	206	1284	0.374	478	704	0.0	0.6	4.454	A
	B - Newton Road	275	69	324	1028	0.267	273	361	0.0	0.4	4.761	A
	C - Buckingham Road West	768	192	147	1372	0.560	763	450	0.0	1.3	5.872	A

17:00 - 17:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	323	81	529	616	0.524	321	350	0.7	1.1	12.133	B
	B - Buckingham Road East	341	85	274	1292	0.264	341	577	0.3	0.4	3.785	A
	C - Buckingham Road West	843	211	38	1265	0.667	840	576	1.2	1.9	8.414	A
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	576	144	247	1255	0.459	575	843	0.6	0.8	5.288	A
	B - Newton Road	328	82	389	984	0.333	327	433	0.4	0.5	5.473	A
	C - Buckingham Road West	918	229	176	1348	0.681	914	541	1.3	2.1	8.231	A

17:15 - 17:30

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	395	99	641	547	0.722	390	424	1.1	2.4	22.157	C
	B - Buckingham Road East	418	105	332	1249	0.335	417	699	0.4	0.5	4.324	A
	C - Buckingham Road West	1026	257	47	1259	0.815	1018	703	1.9	4.1	14.428	B
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	703	176	300	1217	0.578	701	1026	0.8	1.3	6.950	A
	B - Newton Road	402	100	474	928	0.433	400	527	0.5	0.8	6.808	A
	C - Buckingham Road West	1124	281	215	1317	0.853	1111	659	2.1	5.2	16.589	C

17:30 - 17:45

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	395	99	651	541	0.730	394	430	2.4	2.6	24.331	C
	B - Buckingham Road East	418	105	336	1247	0.335	418	709	0.5	0.5	4.345	A
	C - Buckingham Road West	1035	259	47	1259	0.822	1034	707	4.1	4.4	15.802	C
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	707	177	303	1214	0.582	707	1035	1.3	1.4	7.092	A
	B - Newton Road	402	100	479	925	0.434	401	532	0.8	0.8	6.871	A
	C - Buckingham Road West	1124	281	216	1316	0.854	1123	664	5.2	5.5	18.300	C

17:45 - 18:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	323	81	545	607	0.532	328	359	2.6	1.2	13.179	B
	B - Buckingham Road East	341	85	280	1288	0.265	342	593	0.5	0.4	3.807	A
	C - Buckingham Road West	856	214	38	1265	0.677	865	583	4.4	2.2	9.185	A
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	583	146	251	1252	0.466	585	856	1.4	0.9	5.414	A
	B - Newton Road	328	82	396	980	0.335	329	441	0.8	0.5	5.538	A
	C - Buckingham Road West	918	229	177	1348	0.681	931	548	5.5	2.2	8.890	A

18:00 - 18:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	270	68	450	665	0.406	272	297	1.2	0.7	9.210	A
	B - Buckingham Road East	286	71	232	1323	0.216	286	490	0.4	0.3	3.476	A
	C - Buckingham Road West	711	178	32	1269	0.560	715	486	2.2	1.3	6.532	A
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	486	121	209	1283	0.379	487	711	0.9	0.6	4.531	A
	B - Newton Road	275	69	330	1024	0.268	275	366	0.5	0.4	4.810	A
	C - Buckingham Road West	768	192	148	1371	0.561	772	457	2.2	1.3	6.050	A

2033 Base + CD + D, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Linked Roundabout	2W - Newford Road/ Buckingham Road - A - Buckingham Road East	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.
Warning	Linked Roundabout	2E - Buckingham Road/ Shenley Road - C - Buckingham Road West	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
2E	Buckingham Road/ Shenley Road	Mini-roundabout		A, B, C	11.02	B
2W	Newford Road/ Buckingham Road	Mini-roundabout		A, B, C	11.86	B

Junction Network Options

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D15	2033 Base + CD + D	AM	ONE HOUR	07:30	09:00	15	✓

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

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (Veh/hr)	Flow multiplier (%)	Internal storage space (PCU)
2E - Buckingham Road/ Shenley Road	C - Buckingham Road West	2W	A	Simple (vertical queueing)	Normal	0	100.00	
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	2E	C	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
2E - Buckingham Road/ Shenley Road	A - Shenley Road		ONE HOUR	✓	380	100.000

	B - Buckingham Road East		ONE HOUR	✓	703	100.000
	C - Buckingham Road West	✓				
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	✓				
	B - Newton Road		ONE HOUR	✓	528	100.000
	C - Buckingham Road West		ONE HOUR	✓	613	100.000

Origin-Destination Data

Demand (Veh/hr)

2W - Newford Road/ Buckingham Road

From	To			
		A - Buckingham Road East	B - Newton Road	C - Buckingham Road West
	A - Buckingham Road East	0	227	654
	B - Newton Road	320	0	208
	C - Buckingham Road West	474	138	1

Proportions

From	To			
		A - Buckingham Road East	B - Newton Road	C - Buckingham Road West
	A - Buckingham Road East	0.00	0.26	0.74
	B - Newton Road	0.61	0.00	0.39
	C - Buckingham Road West	0.77	0.22	0.00

Demand (Veh/hr)

2E - Buckingham Road/ Shenley Road

From	To			
		A - Shenley Road	B - Buckingham Road East	C - Buckingham Road West
	A - Shenley Road	0	54	326
	B - Buckingham Road East	148	0	555
	C - Buckingham Road West	423	371	0

Proportions

From	To			
		A - Shenley Road	B - Buckingham Road East	C - Buckingham Road West
	A - Shenley Road	0.00	0.14	0.86
	B - Buckingham Road East	0.21	0.00	0.79
	C - Buckingham Road West	0.53	0.47	0.00

Vehicle Mix

Heavy Vehicle Percentages

2W - Newford Road/ Buckingham Road

From	To			
		A - Buckingham Road East	B - Newton Road	C - Buckingham Road West
	A - Buckingham Road East	0	2	2
	B - Newton Road	2	0	4
	C - Buckingham Road West	3	3	0

Average PCU Per Veh

From	To			
		A - Buckingham Road East	B - Newton Road	C - Buckingham Road West
	A - Buckingham Road East	1.000	1.015	1.017
	B - Newton Road	1.018	1.000	1.039
	C - Buckingham Road West	1.035	1.033	1.000

Heavy Vehicle Percentages

Average PCU Per Veh

2E - Buckin
gham
Road/
Shenley
Road

From	To			
		A - Shenley Road	B - Buckingham Road East	C - Buckingham Road West
	A - Shenley Road	0	0	1
	B - Buckingham Road East	0	0	2
	C - Buckingham Road West	1	5	0

From	To			
		A - Shenley Road	B - Buckingham Road East	C - Buckingham Road West
	A - Shenley Road	1.000	1.000	1.011
	B - Buckingham Road East	1.000	1.000	1.021
	C - Buckingham Road West	1.011	1.047	1.000

Detailed Demand Data

Demand for each time segment

Junction	Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
2E - Buckingham Road/ Shenley Road	A - Shenley Road	07:30-07:45	286	288
		07:45-08:00	341	344
		08:00-08:15	418	422
		08:15-08:30	418	422
		08:30-08:45	341	344
		08:45-09:00	286	288
	B - Buckingham Road East	07:30-07:45	529	538
		07:45-08:00	632	642
		08:00-08:15	774	787
		08:15-08:30	774	787
		08:30-08:45	632	642
		08:45-09:00	529	538
	C - Buckingham Road West	07:30-07:45	598	614
		07:45-08:00	714	734
		08:00-08:15	874	898
		08:15-08:30	874	898
		08:30-08:45	714	734
		08:45-09:00	598	614
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	07:30-07:45	663	674
		07:45-08:00	792	805
		08:00-08:15	970	986
		08:15-08:30	970	986
		08:30-08:45	792	805
		08:45-09:00	663	674
	B - Newton Road	07:30-07:45	397	408
		07:45-08:00	474	487
		08:00-08:15	581	596
		08:15-08:30	581	596
		08:30-08:45	474	487
		08:45-09:00	397	408
	C - Buckingham Road West	07:30-07:45	461	477
		07:45-08:00	551	570
		08:00-08:15	675	698

		08:15-08:30	675	698
		08:30-08:45	551	570
		08:45-09:00	461	477

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
2E - Buckingham Road/ Shenley Road	A - Shenley Road	0.62	13.85	1.6	B	348	523
	B - Buckingham Road East	0.62	7.60	1.6	A	645	968
	C - Buckingham Road West	0.76	12.68	3.0	B	728	1092
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	0.73	10.07	2.7	B	808	1211
	B - Newton Road	0.77	20.28	3.2	C	484	726
	C - Buckingham Road West	0.57	7.19	1.3	A	562	843

Main Results for each time segment

07:30 - 07:45

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	286	71	276	761	0.375	283	425	0.0	0.6	7.499	A
	B - Buckingham Road East	529	132	243	1334	0.397	527	316	0.0	0.7	4.447	A
	C - Buckingham Road West	594	149	111	1191	0.499	590	659	0.0	1.0	5.957	A
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	659	165	104	1362	0.484	655	594	0.0	0.9	5.068	A
	B - Newton Road	397	99	487	908	0.437	394	272	0.0	0.8	6.962	A
	C - Buckingham Road West	461	115	239	1265	0.365	459	642	0.0	0.6	4.454	A

07:45 - 08:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	341	85	331	726	0.470	340	511	0.6	0.9	9.306	A
	B - Buckingham Road East	632	158	292	1297	0.487	631	380	0.7	0.9	5.394	A
	C - Buckingham Road West	712	178	133	1176	0.605	710	790	1.0	1.5	7.683	A

2W - Newford Road/ Buckingham Road	A - Buckingham Road East	790	198	125	1347	0.5 87	788	712	0.9	1.4	6.4 20	A
	B - Newton Road	474	119	586	844	0.5 62	472	327	0.8	1.3	9.6 38	A
	C - Buckingham Road West	551	138	287	1227	0.4 49	550	772	0.6	0.8	5.3 07	A

08:00 - 08:15

Junction	Arm	Total Dema nd (Veh/ hr)	Junct ion Arriv als (Veh)	Circula ting flow (Veh/hr)	Capa city (Veh/ hr)	RF C	Throug hput (Veh/hr)	Throug hput (exit side) (Veh/hr)	Star t que ue (Veh h)	End que ue (Veh h)	Delat y (s)	Unsignal ised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	418	105	403	680	0.6 14	415	622	0.9	1.5	13.4 49	B
	B - Buckingham Road East	774	194	356	1249	0.6 20	771	462	0.9	1.6	7.49 4	A
	C - Buckingham Road West	868	217	162	1156	0.7 51	863	965	1.5	2.9	12.0 42	B
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	965	241	152	1327	0.7 28	961	868	1.4	2.6	9.71 5	A
	B - Newton Road	581	145	714	760	0.7 64	574	399	1.3	3.0	18.6 64	C
	C - Buckingham Road West	675	169	348	1178	0.5 73	673	940	0.8	1.3	7.09 1	A

08:15 - 08:30

Junction	Arm	Total Dema nd (Veh/ hr)	Junct ion Arriv als (Veh)	Circula ting flow (Veh/hr)	Capa city (Veh/ hr)	RF C	Throug hput (Veh/hr)	Throug hput (exit side) (Veh/hr)	Star t que ue (Veh h)	End que ue (Veh h)	Delat y (s)	Unsignal ised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	418	105	408	677	0.6 17	418	628	1.5	1.6	13.8 53	B
	B - Buckingham Road East	774	194	359	1248	0.6 20	774	467	1.6	1.6	7.59 9	A
	C - Buckingham Road West	874	218	163	1156	0.7 56	873	970	2.9	3.0	12.6 76	B
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	970	242	153	1326	0.7 31	969	874	2.6	2.7	10.0 65	B
	B - Newton Road	581	145	721	756	0.7 68	580	401	3.0	3.2	20.2 83	C
	C - Buckingham Road West	675	169	352	1175	0.5 74	675	949	1.3	1.3	7.18 7	A

08:30 - 08:45

Junction	Arm	Total Dema nd (Veh/ hr)	Junct ion Arriv als (Veh)	Circula ting flow (Veh/hr)	Capa city (Veh/ hr)	RF C	Throug hput (Veh/hr)	Throug hput (exit side) (Veh/hr)	Star t que ue (Veh h)	End que ue (Veh h)	Delat y (s)	Unsignal ised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	341	85	339	721	0.4 73	344	520	1.6	0.9	9.60 7	A
	B - Buckingham Road East	632	158	295	1295	0.4 88	635	387	1.6	1.0	5.47 5	A
	C - Buckingham Road West	720	180	134	1176	0.6 12	725	796	3.0	1.6	8.08 9	A
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	796	199	125	1346	0.5 91	801	720	2.7	1.5	6.65 4	A

	B - Newton Road	474	119	595	838	0.566	482	331	3.2	1.3	10.301	B
	C - Buckingham Road West	551	138	292	1223	0.450	553	785	1.3	0.8	5.391	A

08:45 - 09:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	286	71	281	758	0.377	287	433	0.9	0.6	7.669	A
	B - Buckingham Road East	529	132	246	1331	0.398	531	322	1.0	0.7	4.502	A
	C - Buckingham Road West	600	150	112	1190	0.504	602	665	1.6	1.0	6.145	A
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	665	166	105	1362	0.489	667	600	1.5	1.0	5.199	A
	B - Newton Road	397	99	496	903	0.440	399	276	1.3	0.8	7.182	A
	C - Buckingham Road West	461	115	242	1262	0.365	462	653	0.8	0.6	4.504	A

2033 Base + CD + D, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout	2W - Newford Road/ Buckingham Road	Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms A and C have 83% of the total flow for the roundabout for one or more time segments]
Warning	Mini-roundabout	2E - Buckingham Road/ Shenley Road	Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms B and C have 81% of the total flow for the roundabout for one or more time segments]
Warning	Linked Roundabout	2W - Newford Road/ Buckingham Road - A - Buckingham Road East	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.
Warning	Linked Roundabout	2E - Buckingham Road/ Shenley Road - C - Buckingham Road West	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
2E	Buckingham Road/ Shenley Road	Mini-roundabout		A, B, C	30.05	D
2W	Newford Road/ Buckingham Road	Mini-roundabout		A, B, C	29.04	D

Junction Network Options

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D16	2033 Base + CD + D	PM	ONE HOUR	16:45	18:15	15	✓

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

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (Veh/hr)	Flow multiplier (%)	Internal storage space (PCU)
2E - Buckingham Road/ Shenley Road	C - Buckingham Road West	2W	A	Simple (vertical queueing)	Normal	0	100.00	
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	2E	C	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
2E - Buckingham Road/ Shenley Road	A - Shenley Road		ONE HOUR	✓	359	100.000
	B - Buckingham Road East		ONE HOUR	✓	460	100.000
	C - Buckingham Road West	✓				
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	✓				
	B - Newton Road		ONE HOUR	✓	365	100.000
	C - Buckingham Road West		ONE HOUR	✓	1156	100.000

Origin-Destination Data

Demand (Veh/hr)

2W - Newford Road/ Buckingham Road

From	To			
		A - Buckingham Road East	B - Newton Road	C - Buckingham Road West
	A - Buckingham Road East	0	209	514
	B - Newton Road	195	1	168
	C - Buckingham Road West	882	273	1

Proportions

From	To			
		A - Buckingham Road East	B - Newton Road	C - Buckingham Road West
	A - Buckingham Road East	0.00	0.29	0.71
	B - Newton Road	0.53	0.00	0.46
	C - Buckingham Road West	0.76	0.24	0.00

Demand (Veh/hr)

2E -
Buckin
gham
Road/
Shenley
Road

		To		
		A - Shenley Road	B - Buckingham Road East	C - Buckingham Road West
From				
	A - Shenley Road	0	53	306
	B - Buckingham Road East	43	0	417
	C - Buckingham Road West	349	728	0

Proportions

		To		
		A - Shenley Road	B - Buckingham Road East	C - Buckingham Road West
From				
	A - Shenley Road	0.00	0.15	0.85
	B - Buckingham Road East	0.09	0.00	0.91
	C - Buckingham Road West	0.32	0.68	0.00

Vehicle Mix

Heavy Vehicle Percentages

2W -
Newfor
d Road/
Buckin
gham
Road

		To		
		A - Buckingham Road East	B - Newton Road	C - Buckingham Road West
From				
	A - Buckingham Road East	0	2	2
	B - Newton Road	0	0	3
	C - Buckingham Road West	1	2	0

Average PCU Per Veh

		To		
		A - Buckingham Road East	B - Newton Road	C - Buckingham Road West
From				
	A - Buckingham Road East	1.000	1.022	1.022
	B - Newton Road	1.000	1.000	1.027
	C - Buckingham Road West	1.008	1.017	1.000

Heavy Vehicle Percentages

2E -
Buckin
gham
Road/
Shenley
Road

		To		
		A - Shenley Road	B - Buckingham Road East	C - Buckingham Road West
From				
	A - Shenley Road	0	0	0
	B - Buckingham Road East	0	0	4
	C - Buckingham Road West	0	1	0

Average PCU Per Veh

		To		
		A - Shenley Road	B - Buckingham Road East	C - Buckingham Road West
From				
	A - Shenley Road	1.000	1.000	1.004
	B - Buckingham Road East	1.000	1.000	1.035
	C - Buckingham Road West	1.003	1.009	1.000

Detailed Demand Data

Demand for each time segment

Junction	Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
2E - Buckingham Road/ Shenley Road	A - Shenley Road	16:45-17:00	270	271
		17:00-17:15	323	324
		17:15-17:30	395	396
		17:30-17:45	395	396
		17:45-18:00	323	324

	B - Buckingham Road East	18:00-18:15	270	271
		16:45-17:00	346	357
		17:00-17:15	414	427
		17:15-17:30	506	523
		17:30-17:45	506	523
		17:45-18:00	414	427
		18:00-18:15	346	357
	C - Buckingham Road West	16:45-17:00	811	816
		17:00-17:15	968	975
		17:15-17:30	1185	1194
		17:30-17:45	1185	1194
		17:45-18:00	968	975
		18:00-18:15	811	816
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	16:45-17:00	544	556
		17:00-17:15	650	664
		17:15-17:30	796	814
		17:30-17:45	796	814
		17:45-18:00	650	664
		18:00-18:15	544	556
	B - Newton Road	16:45-17:00	275	278
		17:00-17:15	328	332
		17:15-17:30	402	407
		17:30-17:45	402	407
		17:45-18:00	328	332
		18:00-18:15	275	278
	C - Buckingham Road West	16:45-17:00	871	880
		17:00-17:15	1040	1050
		17:15-17:30	1273	1286
		17:30-17:45	1273	1286
		17:45-18:00	1040	1050
		18:00-18:15	871	880

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
2E - Buckingham Road/ Shenley Road	A - Shenley Road	0.87	50.74	5.2	F	329	494
	B - Buckingham Road East	0.41	4.85	0.7	A	422	633
	C - Buckingham Road West	0.93	34.22	10.5	D	987	1480
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	0.65	8.51	1.8	A	663	994
	B - Newton Road	0.46	7.72	0.9	A	335	502
	C - Buckingham Road West	0.97	48.75	16.4	E	1061	1592

Main Results for each time segment

16:45 - 17:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	270	68	540	610	0.443	267	290	0.0	0.8	10.419	B
	B - Buckingham Road East	346	87	228	1326	0.261	345	579	0.0	0.4	3.664	A
	C - Buckingham Road West	805	201	32	1269	0.634	798	540	0.0	1.7	7.536	A
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	541	135	206	1283	0.421	538	805	0.0	0.7	4.810	A
	B - Newton Road	275	69	383	988	0.278	273	360	0.0	0.4	5.025	A
	C - Buckingham Road West	871	218	147	1372	0.635	864	509	0.0	1.7	6.995	A

17:00 - 17:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	323	81	648	543	0.594	320	348	0.8	1.4	15.969	C
	B - Buckingham Road East	414	103	273	1293	0.320	413	695	0.4	0.5	4.089	A
	C - Buckingham Road West	963	241	38	1265	0.761	958	648	1.7	3.0	11.515	B
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	648	162	247	1254	0.516	646	963	0.7	1.1	5.909	A
	B - Newton Road	328	82	461	937	0.350	327	432	0.4	0.5	5.900	A
	C - Buckingham Road West	1040	260	176	1349	0.771	1034	612	1.7	3.2	11.214	B

17:15 - 17:30

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	395	99	767	470	0.841	384	414	1.4	4.2	37.926	E
	B - Buckingham Road East	506	127	327	1253	0.404	506	824	0.5	0.7	4.810	A
	C - Buckingham Road West	1155	289	47	1259	0.917	1134	786	3.0	8.3	25.242	D
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	786	197	294	1220	0.645	783	1155	1.1	1.8	8.194	A
	B - Newton Road	402	100	558	872	0.460	400	519	0.5	0.8	7.612	A
	C - Buckingham Road West	1273	318	215	1317	0.967	1234	743	3.2	13.0	33.340	D

17:30 - 17:45

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	395	99	789	456	0.866	391	425	4.2	5.2	50.737	F
	B - Buckingham Road East	506	127	333	1249	0.406	506	847	0.7	0.7	4.848	A
	C - Buckingham Road West	1175	294	47	1259	0.933	1166	793	8.3	10.5	34.223	D
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	793	198	300	1215	0.652	793	1175	1.8	1.8	8.507	A
	B - Newton Road	402	100	565	868	0.463	401	528	0.8	0.9	7.722	A
	C - Buckingham Road West	1273	318	216	1317	0.967	1260	750	13.0	16.4	48.746	E

17:45 - 18:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	323	81	699	512	0.631	336	373	5.2	1.8	21.888	C
	B - Buckingham Road East	414	103	286	1283	0.322	414	748	0.7	0.5	4.147	A
	C - Buckingham Road West	1008	252	38	1265	0.797	1033	662	10.5	4.2	16.939	C
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	662	166	260	1244	0.532	665	1008	1.8	1.2	6.241	A
	B - Newton Road	328	82	474	928	0.353	329	451	0.9	0.6	6.025	A
	C - Buckingham Road West	1040	260	177	1348	0.771	1091	626	16.4	3.6	16.484	C

18:00 - 18:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	270	68	559	598	0.452	274	300	1.8	0.8	11.242	B
	B - Buckingham Road East	346	87	234	1322	0.262	347	599	0.5	0.4	3.696	A
	C - Buckingham Road West	816	204	32	1269	0.643	826	548	4.2	1.8	8.288	A
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	548	137	209	1281	0.428	550	816	1.2	0.8	4.935	A
	B - Newton Road	275	69	392	982	0.279	275	367	0.6	0.4	5.096	A
	C - Buckingham Road West	871	218	148	1371	0.635	878	519	3.6	1.8	7.404	A

2033 Base + CD + D with TP, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Linked Roundabout	2W - Newford Road/ Buckingham Road - A - Buckingham Road East	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.
Warning	Linked Roundabout	2E - Buckingham Road/ Shenley Road - C - Buckingham Road West	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
2E	Buckingham Road/ Shenley Road	Mini-roundabout		A, B, C	10.65	B
2W	Newford Road/ Buckingham Road	Mini-roundabout		A, B, C	11.24	B

Junction Network Options

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D17	2033 Base + CD + D with TP	AM	ONE HOUR	07:30	09:00	15	✓

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

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (Veh/hr)	Flow multiplier (%)	Internal storage space (PCU)
2E - Buckingham Road/ Shenley Road	C - Buckingham Road West	2W	A	Simple (vertical queueing)	Normal	0	100.00	
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	2E	C	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
2E - Buckingham Road/ Shenley Road	A - Shenley Road		ONE HOUR	✓	380	100.000

	B - Buckingham Road East		ONE HOUR	✓	684	100.000
	C - Buckingham Road West	✓				
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	✓				
	B - Newton Road		ONE HOUR	✓	528	100.000
	C - Buckingham Road West		ONE HOUR	✓	603	100.000

Origin-Destination Data

Demand (Veh/hr)

2W - Newford Road/ Buckingham Road

From	To			
		A - Buckingham Road East	B - Newton Road	C - Buckingham Road West
	A - Buckingham Road East	0	227	635
	B - Newton Road	320	0	208
	C - Buckingham Road West	464	138	1

Proportions

From	To			
		A - Buckingham Road East	B - Newton Road	C - Buckingham Road West
	A - Buckingham Road East	0.00	0.26	0.74
	B - Newton Road	0.61	0.00	0.39
	C - Buckingham Road West	0.77	0.23	0.00

Demand (Veh/hr)

2E - Buckingham Road/ Shenley Road

From	To			
		A - Shenley Road	B - Buckingham Road East	C - Buckingham Road West
	A - Shenley Road	0	54	326
	B - Buckingham Road East	148	0	536
	C - Buckingham Road West	423	361	0

Proportions

From	To			
		A - Shenley Road	B - Buckingham Road East	C - Buckingham Road West
	A - Shenley Road	0.00	0.14	0.86
	B - Buckingham Road East	0.22	0.00	0.78
	C - Buckingham Road West	0.54	0.46	0.00

Vehicle Mix

Heavy Vehicle Percentages

2W - Newford Road/ Buckingham Road

From	To			
		A - Buckingham Road East	B - Newton Road	C - Buckingham Road West
	A - Buckingham Road East	0	2	2
	B - Newton Road	2	0	4
	C - Buckingham Road West	3	3	0

Average PCU Per Veh

From	To			
		A - Buckingham Road East	B - Newton Road	C - Buckingham Road West
	A - Buckingham Road East	1.000	1.015	1.017
	B - Newton Road	1.018	1.000	1.039
	C - Buckingham Road West	1.034	1.033	1.000

Heavy Vehicle Percentages

Average PCU Per Veh

2E - Buckin
gham
Road/
Shenley
Road

From	To			
		A - Shenley Road	B - Buckingham Road East	C - Buckingham Road West
	A - Shenley Road	0	0	1
	B - Buckingham Road East	0	0	2
	C - Buckingham Road West	1	5	0

From	To			
		A - Shenley Road	B - Buckingham Road East	C - Buckingham Road West
	A - Shenley Road	1.000	1.000	1.011
	B - Buckingham Road East	1.000	1.000	1.021
	C - Buckingham Road West	1.011	1.047	1.000

Detailed Demand Data

Demand for each time segment

Junction	Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
2E - Buckingham Road/ Shenley Road	A - Shenley Road	07:30-07:45	286	288
		07:45-08:00	341	344
		08:00-08:15	418	422
		08:15-08:30	418	422
		08:30-08:45	341	344
		08:45-09:00	286	288
	B - Buckingham Road East	07:30-07:45	515	523
		07:45-08:00	615	625
		08:00-08:15	753	765
		08:15-08:30	753	765
		08:30-08:45	615	625
		08:45-09:00	515	523
	C - Buckingham Road West	07:30-07:45	590	607
		07:45-08:00	705	724
		08:00-08:15	863	887
		08:15-08:30	863	887
		08:30-08:45	705	724
		08:45-09:00	590	607
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	07:30-07:45	649	660
		07:45-08:00	775	788
		08:00-08:15	949	965
		08:15-08:30	949	965
		08:30-08:45	775	788
		08:45-09:00	649	660
	B - Newton Road	07:30-07:45	397	408
		07:45-08:00	474	487
		08:00-08:15	581	596
		08:15-08:30	581	596
		08:30-08:45	474	487
		08:45-09:00	397	408
	C - Buckingham Road West	07:30-07:45	454	469
		07:45-08:00	542	560
		08:00-08:15	664	686

		08:15-08:30	664	686
		08:30-08:45	542	560
		08:45-09:00	454	469

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
2E - Buckingham Road/ Shenley Road	A - Shenley Road	0.61	13.50	1.5	B	348	523
	B - Buckingham Road East	0.60	7.28	1.5	A	628	942
	C - Buckingham Road West	0.75	12.21	2.9	B	719	1078
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	0.72	9.51	2.5	A	790	1185
	B - Newton Road	0.75	18.88	2.9	C	484	726
	C - Buckingham Road West	0.56	7.03	1.3	A	553	830

Main Results for each time segment

07:30 - 07:45

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	286	71	268	766	0.373	283	426	0.0	0.6	7.428	A
	B - Buckingham Road East	515	129	243	1334	0.386	513	309	0.0	0.6	4.371	A
	C - Buckingham Road West	587	147	111	1191	0.493	583	645	0.0	1.0	5.885	A
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	645	161	104	1362	0.473	641	587	0.0	0.9	4.971	A
	B - Newton Road	397	99	473	917	0.433	394	272	0.0	0.8	6.842	A
	C - Buckingham Road West	454	113	239	1265	0.359	452	628	0.0	0.6	4.414	A

07:45 - 08:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	341	85	323	731	0.467	340	511	0.6	0.9	9.179	A
	B - Buckingham Road East	615	154	292	1297	0.474	614	371	0.6	0.9	5.259	A
	C - Buckingham Road West	703	176	133	1176	0.598	701	773	1.0	1.5	7.543	A

2W - Newford Road/ Buckingham Road	A - Buckingham Road East	773	193	125	1347	0.574	771	703	0.9	1.3	6.234	A
	B - Newton Road	474	119	569	855	0.555	472	327	0.8	1.2	9.364	A
	C - Buckingham Road West	542	136	287	1227	0.442	541	755	0.6	0.8	5.239	A

08:00 - 08:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	418	105	393	687	0.609	415	623	0.9	1.5	13.136	B
	B - Buckingham Road East	753	188	356	1249	0.603	751	452	0.9	1.5	7.190	A
	C - Buckingham Road West	858	215	162	1157	0.742	853	945	1.5	2.7	11.656	B
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	945	236	152	1327	0.712	941	858	1.3	2.4	9.225	A
	B - Newton Road	581	145	694	774	0.751	575	399	1.2	2.8	17.558	C
	C - Buckingham Road West	664	166	349	1178	0.563	662	920	0.8	1.3	6.946	A

08:15 - 08:30

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	418	105	397	684	0.611	418	628	1.5	1.5	13.502	B
	B - Buckingham Road East	753	188	359	1248	0.604	753	456	1.5	1.5	7.277	A
	C - Buckingham Road West	863	216	163	1156	0.746	863	949	2.7	2.9	12.213	B
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	949	237	153	1326	0.715	949	863	2.4	2.5	9.514	A
	B - Newton Road	581	145	700	770	0.755	580	401	2.8	2.9	18.878	C
	C - Buckingham Road West	664	166	352	1175	0.565	664	928	1.3	1.3	7.033	A

08:30 - 08:45

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	341	85	329	727	0.469	344	520	1.5	0.9	9.454	A
	B - Buckingham Road East	615	154	295	1295	0.475	617	378	1.5	0.9	5.332	A
	C - Buckingham Road West	710	178	134	1176	0.604	716	779	2.9	1.6	7.907	A
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	779	195	125	1347	0.578	783	710	2.5	1.4	6.436	A

	B - Newton Road	474	119	578	849	0.558	481	331	2.9	1.3	9.940	A
	C - Buckingham Road West	542	136	292	1223	0.443	544	767	1.3	0.8	5.315	A

08:45 - 09:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	286	71	274	762	0.375	287	433	0.9	0.6	7.588	A
	B - Buckingham Road East	515	129	246	1331	0.387	516	314	0.9	0.6	4.421	A
	C - Buckingham Road West	592	148	112	1190	0.498	595	651	1.6	1.0	6.065	A
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	651	163	105	1362	0.478	653	592	1.4	0.9	5.092	A
	B - Newton Road	397	99	482	912	0.436	399	276	1.3	0.8	7.047	A
	C - Buckingham Road West	454	113	242	1263	0.359	455	639	0.8	0.6	4.462	A

2033 Base + CD + D with TP, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout	2W - Newford Road/ Buckingham Road	Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms A and C have 83% of the total flow for the roundabout for one or more time segments]
Warning	Linked Roundabout	2W - Newford Road/ Buckingham Road - A - Buckingham Road East	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.
Warning	Linked Roundabout	2E - Buckingham Road/ Shenley Road - C - Buckingham Road West	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
2E	Buckingham Road/ Shenley Road	Mini-roundabout		A, B, C	26.30	D
2W	Newford Road/ Buckingham Road	Mini-roundabout		A, B, C	24.30	C

Junction Network Options

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D18	2033 Base + CD + D with TP	PM	ONE HOUR	16:45	18:15	15	✓

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

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (Veh/hr)	Flow multiplier (%)	Internal storage space (PCU)
2E - Buckingham Road/ Shenley Road	C - Buckingham Road West	2W	A	Simple (vertical queueing)	Normal	0	100.00	
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	2E	C	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
2E - Buckingham Road/ Shenley Road	A - Shenley Road		ONE HOUR	✓	359	100.000
	B - Buckingham Road East		ONE HOUR	✓	446	100.000
	C - Buckingham Road West	✓				
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	✓				
	B - Newton Road		ONE HOUR	✓	365	100.000
	C - Buckingham Road West		ONE HOUR	✓	1133	100.000

Origin-Destination Data

Demand (Veh/hr)

2W - Newford Road/ Buckingham Road

From	To			
		A - Buckingham Road East	B - Newton Road	C - Buckingham Road West
	A - Buckingham Road East	0	209	500
	B - Newton Road	195	1	168
	C - Buckingham Road West	859	273	1

Proportions

From	To			
		A - Buckingham Road East	B - Newton Road	C - Buckingham Road West
	A - Buckingham Road East	0.00	0.29	0.71
	B - Newton Road	0.53	0.00	0.46
	C - Buckingham Road West	0.76	0.24	0.00

Demand (Veh/hr)

2E -
Buckin
gham
Road/
Shenley
Road

		To		
		A - Shenley Road	B - Buckingham Road East	C - Buckingham Road West
From	A - Shenley Road	0	53	306
	B - Buckingham Road East	43	0	403
	C - Buckingham Road West	349	705	0

Proportions

		To		
		A - Shenley Road	B - Buckingham Road East	C - Buckingham Road West
From	A - Shenley Road	0.00	0.15	0.85
	B - Buckingham Road East	0.10	0.00	0.90
	C - Buckingham Road West	0.33	0.67	0.00

Vehicle Mix

Heavy Vehicle Percentages

2W -
Newfor
d Road/
Buckin
gham
Road

		To		
		A - Buckingham Road East	B - Newton Road	C - Buckingham Road West
From	A - Buckingham Road East	0	2	2
	B - Newton Road	0	0	3
	C - Buckingham Road West	1	2	0

Average PCU Per Veh

		To		
		A - Buckingham Road East	B - Newton Road	C - Buckingham Road West
From	A - Buckingham Road East	1.000	1.022	1.021
	B - Newton Road	1.000	1.000	1.027
	C - Buckingham Road West	1.008	1.017	1.000

Heavy Vehicle Percentages

2E -
Buckin
gham
Road/
Shenley
Road

		To		
		A - Shenley Road	B - Buckingham Road East	C - Buckingham Road West
From	A - Shenley Road	0	0	0
	B - Buckingham Road East	0	0	4
	C - Buckingham Road West	0	1	0

Average PCU Per Veh

		To		
		A - Shenley Road	B - Buckingham Road East	C - Buckingham Road West
From	A - Shenley Road	1.000	1.000	1.004
	B - Buckingham Road East	1.000	1.000	1.035
	C - Buckingham Road West	1.003	1.009	1.000

Detailed Demand Data

Demand for each time segment

Junction	Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
2E - Buckingham Road/ Shenley Road	A - Shenley Road	16:45-17:00	270	271
		17:00-17:15	323	324
		17:15-17:30	395	396
		17:30-17:45	395	396
		17:45-18:00	323	324

	B - Buckingham Road East	18:00-18:15	270	271
		16:45-17:00	336	347
		17:00-17:15	401	414
		17:15-17:30	491	507
		17:30-17:45	491	507
		17:45-18:00	401	414
		18:00-18:15	336	347
	C - Buckingham Road West	16:45-17:00	793	799
		17:00-17:15	947	954
		17:15-17:30	1160	1168
		17:30-17:45	1160	1168
		17:45-18:00	947	954
		18:00-18:15	793	799
		18:00-18:15	793	799
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	16:45-17:00	534	545
		17:00-17:15	638	651
		17:15-17:30	781	798
		17:30-17:45	781	798
		17:45-18:00	638	651
		18:00-18:15	534	545
	B - Newton Road	16:45-17:00	275	278
		17:00-17:15	328	332
		17:15-17:30	402	407
		17:30-17:45	402	407
		17:45-18:00	328	332
		18:00-18:15	275	278
	C - Buckingham Road West	16:45-17:00	853	862
		17:00-17:15	1019	1029
		17:15-17:30	1248	1261
		17:30-17:45	1248	1261
		17:45-18:00	1019	1029
		18:00-18:15	853	862

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
2E - Buckingham Road/ Shenley Road	A - Shenley Road	0.84	44.10	4.5	E	329	494
	B - Buckingham Road East	0.39	4.75	0.6	A	409	614
	C - Buckingham Road West	0.92	29.61	8.9	D	966	1449
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	0.64	8.24	1.8	A	650	975
	B - Newton Road	0.46	7.56	0.8	A	335	502
	C - Buckingham Road West	0.95	39.84	13.0	E	1040	1560

Main Results for each time segment

16:45 - 17:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	270	68	523	620	0.436	267	290	0.0	0.8	10.120	B
	B - Buckingham Road East	336	84	228	1326	0.253	334	562	0.0	0.3	3.626	A
	C - Buckingham Road West	788	197	32	1269	0.621	781	530	0.0	1.6	7.286	A
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	530	133	206	1283	0.413	527	788	0.0	0.7	4.745	A
	B - Newton Road	275	69	373	995	0.276	273	361	0.0	0.4	4.976	A
	C - Buckingham Road West	853	213	147	1372	0.622	847	499	0.0	1.6	6.778	A

17:00 - 17:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	323	81	628	555	0.581	320	349	0.8	1.3	15.168	C
	B - Buckingham Road East	401	100	273	1293	0.310	401	675	0.3	0.4	4.032	A
	C - Buckingham Road West	943	236	38	1265	0.745	938	635	1.6	2.8	10.852	B
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	635	159	247	1254	0.506	634	943	0.7	1.0	5.792	A
	B - Newton Road	328	82	448	945	0.347	327	432	0.4	0.5	5.823	A
	C - Buckingham Road West	1019	255	176	1348	0.756	1013	599	1.6	3.0	10.573	B

17:15 - 17:30

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	395	99	748	481	0.821	385	417	1.3	3.8	34.466	D
	B - Buckingham Road East	491	123	328	1252	0.392	490	805	0.4	0.6	4.718	A
	C - Buckingham Road West	1135	284	47	1259	0.902	1117	772	2.8	7.3	22.891	C
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	772	193	296	1219	0.633	769	1135	1.0	1.7	7.961	A
	B - Newton Road	402	100	544	882	0.455	400	521	0.5	0.8	7.462	A
	C - Buckingham Road West	1248	312	215	1317	0.947	1216	729	3.0	10.9	29.226	D

17:30 - 17:45

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	395	99	768	469	0.842	392	427	3.8	4.5	44.102	E
	B - Buckingham Road East	491	123	334	1248	0.393	491	826	0.6	0.6	4.754	A
	C - Buckingham Road West	1154	288	47	1259	0.916	1147	778	7.3	8.9	29.615	D
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	778	195	302	1215	0.641	778	1154	1.7	1.8	8.238	A
	B - Newton Road	402	100	550	877	0.458	401	530	0.8	0.8	7.563	A
	C - Buckingham Road West	1248	312	216	1317	0.948	1239	736	10.9	13.0	39.844	E

17:45 - 18:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	323	81	668	530	0.608	334	369	4.5	1.6	19.316	C
	B - Buckingham Road East	401	100	285	1284	0.312	402	718	0.6	0.5	4.084	A
	C - Buckingham Road West	977	244	38	1265	0.773	999	648	8.9	3.6	14.463	B
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	648	162	257	1246	0.520	651	977	1.8	1.1	6.066	A
	B - Newton Road	328	82	460	937	0.350	329	448	0.8	0.5	5.929	A
	C - Buckingham Road West	1019	255	177	1348	0.756	1058	612	13.0	3.3	13.906	B

18:00 - 18:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	270	68	539	610	0.443	273	299	1.6	0.8	10.802	B
	B - Buckingham Road East	336	84	233	1322	0.254	336	580	0.5	0.3	3.655	A
	C - Buckingham Road West	798	200	32	1269	0.629	806	537	3.6	1.7	7.891	A
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	537	134	209	1281	0.419	539	798	1.1	0.7	4.856	A
	B - Newton Road	275	69	381	990	0.277	275	367	0.5	0.4	5.043	A
	C - Buckingham Road West	853	213	148	1371	0.622	860	508	3.3	1.7	7.126	A

2033 Base + CD + D - ST, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Linked Roundabout	2W - Newford Road/ Buckingham Road - A - Buckingham Road East	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.
Warning	Linked Roundabout	2E - Buckingham Road/ Shenley Road - C - Buckingham Road West	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
2E	Buckingham Road/ Shenley Road	Mini-roundabout		A, B, C	12.32	B
2W	Newford Road/ Buckingham Road	Mini-roundabout		A, B, C	14.54	B

Junction Network Options

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D19	2033 Base + CD + D - ST	AM	ONE HOUR	07:30	09:00	15	✓

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

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (Veh/hr)	Flow multiplier (%)	Internal storage space (PCU)
2E - Buckingham Road/ Shenley Road	C - Buckingham Road West	2W	A	Simple (vertical queueing)	Normal	0	100.00	
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	2E	C	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
2E - Buckingham Road/ Shenley Road	A - Shenley Road		ONE HOUR	✓	380	100.000

	B - Buckingham Road East		ONE HOUR	✓	765	100.000
	C - Buckingham Road West	✓				
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	✓				
	B - Newton Road		ONE HOUR	✓	528	100.000
	C - Buckingham Road West		ONE HOUR	✓	642	100.000

Origin-Destination Data

Demand (Veh/hr)

2W - Newford Road/ Buckingham Road

From	To			
		A - Buckingham Road East	B - Newton Road	C - Buckingham Road West
	A - Buckingham Road East	0	227	716
	B - Newton Road	320	0	208
	C - Buckingham Road West	503	138	1

Proportions

From	To			
		A - Buckingham Road East	B - Newton Road	C - Buckingham Road West
	A - Buckingham Road East	0.00	0.24	0.76
	B - Newton Road	0.61	0.00	0.39
	C - Buckingham Road West	0.78	0.21	0.00

Demand (Veh/hr)

2E - Buckingham Road/ Shenley Road

From	To			
		A - Shenley Road	B - Buckingham Road East	C - Buckingham Road West
	A - Shenley Road	0	54	326
	B - Buckingham Road East	148	0	617
	C - Buckingham Road West	423	400	0

Proportions

From	To			
		A - Shenley Road	B - Buckingham Road East	C - Buckingham Road West
	A - Shenley Road	0.00	0.14	0.86
	B - Buckingham Road East	0.19	0.00	0.81
	C - Buckingham Road West	0.51	0.49	0.00

Vehicle Mix

Heavy Vehicle Percentages

2W - Newford Road/ Buckingham Road

From	To			
		A - Buckingham Road East	B - Newton Road	C - Buckingham Road West
	A - Buckingham Road East	0	2	2
	B - Newton Road	2	0	4
	C - Buckingham Road West	4	3	0

Average PCU Per Veh

From	To			
		A - Buckingham Road East	B - Newton Road	C - Buckingham Road West
	A - Buckingham Road East	1.000	1.015	1.018
	B - Newton Road	1.018	1.000	1.039
	C - Buckingham Road West	1.035	1.033	1.000

Heavy Vehicle Percentages

Average PCU Per Veh

2E - Buckin
gham
Road/
Shenley
Road

From	To			
		A - Shenley Road	B - Buckingham Road East	C - Buckingham Road West
	A - Shenley Road	0	0	1
	B - Buckingham Road East	0	0	2
	C - Buckingham Road West	1	5	0

From	To			
		A - Shenley Road	B - Buckingham Road East	C - Buckingham Road West
	A - Shenley Road	1.000	1.000	1.011
	B - Buckingham Road East	1.000	1.000	1.020
	C - Buckingham Road West	1.011	1.047	1.000

Detailed Demand Data

Demand for each time segment

Junction	Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
2E - Buckingham Road/ Shenley Road	A - Shenley Road	07:30-07:45	286	288
		07:45-08:00	341	344
		08:00-08:15	418	422
		08:15-08:30	418	422
		08:30-08:45	341	344
		08:45-09:00	286	288
	B - Buckingham Road East	07:30-07:45	576	586
		07:45-08:00	688	699
		08:00-08:15	843	857
		08:15-08:30	843	857
		08:30-08:45	688	699
		08:45-09:00	576	586
	C - Buckingham Road West	07:30-07:45	620	637
		07:45-08:00	740	761
		08:00-08:15	906	932
		08:15-08:30	906	932
		08:30-08:45	740	761
		08:45-09:00	620	637
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	07:30-07:45	710	722
		07:45-08:00	848	862
		08:00-08:15	1038	1056
		08:15-08:30	1038	1056
		08:30-08:45	848	862
		08:45-09:00	710	722
	B - Newton Road	07:30-07:45	397	408
		07:45-08:00	474	487
		08:00-08:15	581	596
		08:15-08:30	581	596
		08:30-08:45	474	487
		08:45-09:00	397	408
	C - Buckingham Road West	07:30-07:45	483	500
		07:45-08:00	577	597
		08:00-08:15	707	731

		08:15-08:30	707	731
		08:30-08:45	577	597
		08:45-09:00	483	500

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
2E - Buckingham Road/ Shenley Road	A - Shenley Road	0.64	15.00	1.7	C	348	523
	B - Buckingham Road East	0.68	8.89	2.1	A	702	1053
	C - Buckingham Road West	0.78	14.26	3.5	B	754	1132
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	0.78	12.42	3.5	B	865	1297
	B - Newton Road	0.82	26.71	4.1	D	484	726
	C - Buckingham Road West	0.60	7.68	1.5	A	589	883

Main Results for each time segment

07:30 - 07:45

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	286	71	297	748	0.382	283	425	0.0	0.6	7.715	A
	B - Buckingham Road East	576	144	243	1333	0.432	573	337	0.0	0.8	4.718	A
	C - Buckingham Road West	616	154	111	1190	0.517	611	706	0.0	1.1	6.179	A
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	706	176	104	1362	0.518	701	616	0.0	1.1	5.416	A
	B - Newton Road	397	99	533	878	0.452	394	272	0.0	0.8	7.386	A
	C - Buckingham Road West	483	121	239	1264	0.382	481	688	0.0	0.6	4.580	A

07:45 - 08:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	341	85	357	709	0.481	340	511	0.6	0.9	9.715	A
	B - Buckingham Road East	688	172	292	1297	0.531	687	405	0.8	1.1	5.884	A
	C - Buckingham Road West	738	184	133	1175	0.628	735	846	1.1	1.6	8.135	A

2W - Newford Road/ Buckingham Road	A - Buckingham Road East	846	211	125	1347	0.628	843	738	1.1	1.7	7.117	A
	B - Newton Road	474	119	641	808	0.587	472	327	0.8	1.4	10.648	B
	C - Buckingham Road West	577	144	286	1227	0.470	576	827	0.6	0.9	5.522	A

08:00 - 08:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	418	105	433	661	0.632	415	621	0.9	1.7	14.458	B
	B - Buckingham Road East	843	211	356	1249	0.675	839	492	1.1	2.0	8.706	A
	C - Buckingham Road West	898	225	162	1156	0.777	892	1033	1.6	3.3	13.320	B
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	1033	258	152	1326	0.779	1026	898	1.7	3.3	11.738	B
	B - Newton Road	581	145	780	717	0.810	571	398	1.4	3.8	23.333	C
	C - Buckingham Road West	707	177	347	1179	0.599	704	1005	0.9	1.5	7.547	A

08:15 - 08:30

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	418	105	439	657	0.636	418	628	1.7	1.7	15.005	C
	B - Buckingham Road East	843	211	358	1247	0.676	843	499	2.0	2.1	8.888	A
	C - Buckingham Road West	905	226	163	1155	0.784	904	1038	3.3	3.5	14.262	B
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	1038	260	153	1326	0.783	1038	905	3.3	3.5	12.424	B
	B - Newton Road	581	145	789	712	0.816	580	401	3.8	4.1	26.711	D
	C - Buckingham Road West	707	177	352	1175	0.601	706	1017	1.5	1.5	7.682	A

08:30 - 08:45

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	341	85	366	703	0.485	344	522	1.7	1.0	10.102	B
	B - Buckingham Road East	688	172	295	1294	0.532	692	415	2.1	1.2	6.008	A
	C - Buckingham Road West	748	187	134	1175	0.637	755	853	3.5	1.8	8.699	A
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	853	213	125	1346	0.634	860	748	3.5	1.8	7.510	A

	B - Newton Road	474	119	654	799	0.593	485	331	4.1	1.5	11.790	B
	C - Buckingham Road West	577	144	294	1221	0.473	579	845	1.5	0.9	5.632	A

08:45 - 09:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	286	71	303	744	0.384	287	433	1.0	0.6	7.911	A
	B - Buckingham Road East	576	144	246	1331	0.433	578	344	1.2	0.8	4.791	A
	C - Buckingham Road West	622	155	112	1189	0.523	625	712	1.8	1.1	6.405	A
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	712	178	105	1361	0.523	715	622	1.8	1.1	5.595	A
	B - Newton Road	397	99	544	871	0.456	400	276	1.5	0.9	7.673	A
	C - Buckingham Road West	483	121	243	1261	0.383	484	701	0.9	0.6	4.638	A

2033 Base + CD + D - ST, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout	2W - Newford Road/ Buckingham Road	Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms A and C have 84% of the total flow for the roundabout for one or more time segments]
Warning	Mini-roundabout	2E - Buckingham Road/ Shenley Road	Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms B and C have 81% of the total flow for the roundabout for one or more time segments]
Warning	Linked Roundabout	2W - Newford Road/ Buckingham Road - A - Buckingham Road East	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.
Warning	Linked Roundabout	2E - Buckingham Road/ Shenley Road - C - Buckingham Road West	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
2E	Buckingham Road/ Shenley Road	Mini-roundabout		A, B, C	38.92	E
2W	Newford Road/ Buckingham Road	Mini-roundabout		A, B, C	43.14	E

Junction Network Options

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D20	2033 Base + CD + D - ST	PM	ONE HOUR	16:45	18:15	15	✓

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

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (Veh/hr)	Flow multiplier (%)	Internal storage space (PCU)
2E - Buckingham Road/ Shenley Road	C - Buckingham Road West	2W	A	Simple (vertical queueing)	Normal	0	100.00	
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	2E	C	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
2E - Buckingham Road/ Shenley Road	A - Shenley Road		ONE HOUR	✓	359	100.000
	B - Buckingham Road East		ONE HOUR	✓	484	100.000
	C - Buckingham Road West	✓				
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	✓				
	B - Newton Road		ONE HOUR	✓	365	100.000
	C - Buckingham Road West		ONE HOUR	✓	1205	100.000

Origin-Destination Data

Demand (Veh/hr)

2W - Newford Road/ Buckingham Road

From	To			
		A - Buckingham Road East	B - Newton Road	C - Buckingham Road West
	A - Buckingham Road East	0	209	538
	B - Newton Road	195	1	168
	C - Buckingham Road West	930	273	1

Proportions

From	To			
		A - Buckingham Road East	B - Newton Road	C - Buckingham Road West
	A - Buckingham Road East	0.00	0.28	0.72
	B - Newton Road	0.53	0.00	0.46
	C - Buckingham Road West	0.77	0.23	0.00

Demand (Veh/hr)

2E -
Buckin
gham
Road/
Shenley
Road

		To		
		A - Shenley Road	B - Buckingham Road East	C - Buckingham Road West
From				
	A - Shenley Road	0	53	306
	B - Buckingham Road East	43	0	441
	C - Buckingham Road West	349	776	0

Proportions

		To		
		A - Shenley Road	B - Buckingham Road East	C - Buckingham Road West
From				
	A - Shenley Road	0.00	0.15	0.85
	B - Buckingham Road East	0.09	0.00	0.91
	C - Buckingham Road West	0.31	0.69	0.00

Vehicle Mix

Heavy Vehicle Percentages

2W -
Newfor
d Road/
Buckin
gham
Road

		To		
		A - Buckingham Road East	B - Newton Road	C - Buckingham Road West
From				
	A - Buckingham Road East	0	2	2
	B - Newton Road	0	0	3
	C - Buckingham Road West	1	2	0

Average PCU Per Veh

		To		
		A - Buckingham Road East	B - Newton Road	C - Buckingham Road West
From				
	A - Buckingham Road East	1.000	1.022	1.022
	B - Newton Road	1.000	1.000	1.027
	C - Buckingham Road West	1.008	1.017	1.000

Heavy Vehicle Percentages

2E -
Buckin
gham
Road/
Shenley
Road

		To		
		A - Shenley Road	B - Buckingham Road East	C - Buckingham Road West
From				
	A - Shenley Road	0	0	0
	B - Buckingham Road East	0	0	3
	C - Buckingham Road West	0	1	0

Average PCU Per Veh

		To		
		A - Shenley Road	B - Buckingham Road East	C - Buckingham Road West
From				
	A - Shenley Road	1.000	1.000	1.004
	B - Buckingham Road East	1.000	1.000	1.035
	C - Buckingham Road West	1.003	1.009	1.000

Detailed Demand Data

Demand for each time segment

Junction	Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
2E - Buckingham Road/ Shenley Road	A - Shenley Road	16:45-17:00	270	271
		17:00-17:15	323	324
		17:15-17:30	395	396
		17:30-17:45	395	396
		17:45-18:00	323	324

	B - Buckingham Road East	18:00-18:15	270	271
		16:45-17:00	364	376
		17:00-17:15	435	449
		17:15-17:30	533	550
		17:30-17:45	533	550
		17:45-18:00	435	449
		18:00-18:15	364	376
	C - Buckingham Road West	16:45-17:00	847	853
		17:00-17:15	1011	1018
		17:15-17:30	1239	1247
		17:30-17:45	1239	1247
		17:45-18:00	1011	1018
		18:00-18:15	847	853
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	16:45-17:00	563	575
		17:00-17:15	672	687
		17:15-17:30	823	841
		17:30-17:45	823	841
		17:45-18:00	672	687
		18:00-18:15	563	575
	B - Newton Road	16:45-17:00	275	278
		17:00-17:15	328	332
		17:15-17:30	402	407
		17:30-17:45	402	407
		17:45-18:00	328	332
		18:00-18:15	275	278
	C - Buckingham Road West	16:45-17:00	907	916
		17:00-17:15	1083	1094
		17:15-17:30	1326	1340
		17:30-17:45	1326	1340
		17:45-18:00	1083	1094
		18:00-18:15	907	916

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
2E - Buckingham Road/ Shenley Road	A - Shenley Road	0.91	67.12	6.9	F	329	494
	B - Buckingham Road East	0.43	5.02	0.7	A	444	666
	C - Buckingham Road West	0.96	44.92	14.5	E	1031	1547
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	0.67	8.95	2.0	A	685	1027
	B - Newton Road	0.47	8.00	0.9	A	335	502
	C - Buckingham Road West	1.01	75.23	28.1	F	1105	1658

Main Results for each time segment

16:45 - 17:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	270	68	575	588	0.459	267	290	0.0	0.8	11.099	B
	B - Buckingham Road East	364	91	227	1326	0.275	363	614	0.0	0.4	3.733	A
	C - Buckingham Road West	840	210	32	1269	0.662	833	558	0.0	1.9	8.113	A
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	558	140	206	1283	0.435	555	840	0.0	0.8	4.927	A
	B - Newton Road	275	69	401	976	0.281	273	360	0.0	0.4	5.108	A
	C - Buckingham Road West	907	227	147	1372	0.661	899	527	0.0	1.9	7.500	A

17:00 - 17:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	323	81	689	518	0.623	320	348	0.8	1.6	17.912	C
	B - Buckingham Road East	435	109	272	1293	0.336	435	736	0.4	0.5	4.189	A
	C - Buckingham Road West	1005	251	38	1265	0.795	998	669	1.9	3.6	13.164	B
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	669	167	246	1254	0.533	667	1005	0.8	1.1	6.122	A
	B - Newton Road	328	82	482	923	0.355	327	432	0.4	0.5	6.040	A
	C - Buckingham Road West	1083	271	176	1349	0.803	1075	633	1.9	3.8	12.813	B

17:15 - 17:30

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	395	99	802	448	0.882	381	407	1.6	5.2	46.040	E
	B - Buckingham Road East	533	133	324	1255	0.425	532	858	0.5	0.7	4.971	A
	C - Buckingham Road West	1190	297	47	1259	0.945	1162	810	3.6	10.6	30.569	D
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	810	202	289	1223	0.662	807	1190	1.1	1.9	8.585	A
	B - Newton Road	402	100	582	856	0.469	400	514	0.5	0.9	7.879	A
	C - Buckingham Road West	1326	332	215	1317	1.007	1264	767	3.8	19.4	44.098	E

17:30 - 17:45

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	395	99	826	433	0.912	388	418	5.2	6.9	67.117	F
	B - Buckingham Road East	533	133	331	1251	0.426	533	883	0.7	0.7	5.015	A
	C - Buckingham Road West	1212	303	47	1259	0.963	1196	817	10.6	14.5	44.915	E
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	817	204	296	1218	0.671	817	1212	1.9	2.0	8.949	A
	B - Newton Road	402	100	590	851	0.472	401	523	0.9	0.9	8.005	A
	C - Buckingham Road West	1326	332	216	1317	1.007	1292	775	19.4	28.1	75.232	F

17:45 - 18:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	323	81	770	468	0.690	340	384	6.9	2.4	31.353	D
	B - Buckingham Road East	435	109	290	1280	0.340	436	820	0.7	0.5	4.267	A
	C - Buckingham Road West	1085	271	38	1265	0.858	1115	688	14.5	6.8	27.162	D
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	688	172	269	1237	0.556	690	1085	2.0	1.3	6.619	A
	B - Newton Road	328	82	499	911	0.360	329	461	0.9	0.6	6.194	A
	C - Buckingham Road West	1083	271	177	1348	0.803	1177	651	28.1	4.5	29.659	D

18:00 - 18:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	270	68	603	571	0.474	276	303	2.4	0.9	12.463	B
	B - Buckingham Road East	364	91	235	1320	0.276	365	644	0.5	0.4	3.771	A
	C - Buckingham Road West	855	214	32	1269	0.674	874	568	6.8	2.1	9.519	A
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	568	142	210	1280	0.444	570	855	1.3	0.8	5.084	A
	B - Newton Road	275	69	411	969	0.283	275	368	0.6	0.4	5.191	A
	C - Buckingham Road West	907	227	148	1371	0.661	917	539	4.5	2.0	8.092	A

2033 Base + CD + SP (ST), AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Linked Roundabout	2W - Newford Road/ Buckingham Road - A - Buckingham Road East	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.
Warning	Linked Roundabout	2E - Buckingham Road/ Shenley Road - C - Buckingham Road West	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
2E	Buckingham Road/ Shenley Road	Mini-roundabout		A, B, C	9.91	A
2W	Newford Road/ Buckingham Road	Mini-roundabout		A, B, C	10.24	B

Junction Network Options

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D21	2033 Base + CD + SP (ST)	AM	ONE HOUR	07:30	09:00	15	✓

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

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (Veh/hr)	Flow multiplier (%)	Internal storage space (PCU)
2E - Buckingham Road/ Shenley Road	C - Buckingham Road West	2W	A	Simple (vertical queueing)	Normal	0	100.00	
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	2E	C	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
2E - Buckingham Road/ Shenley Road	A - Shenley Road		ONE HOUR	✓	380	100.000

	B - Buckingham Road East		ONE HOUR	✓	648	100.000
	C - Buckingham Road West	✓				
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	✓				
	B - Newton Road		ONE HOUR	✓	528	100.000
	C - Buckingham Road West		ONE HOUR	✓	579	100.000

Origin-Destination Data

Demand (Veh/hr)

2W - Newford Road/ Buckingham Road

From	To			
		A - Buckingham Road East	B - Newton Road	C - Buckingham Road West
	A - Buckingham Road East	0	227	599
	B - Newton Road	320	0	208
	C - Buckingham Road West	440	138	1

Proportions

From	To			
		A - Buckingham Road East	B - Newton Road	C - Buckingham Road West
	A - Buckingham Road East	0.00	0.27	0.73
	B - Newton Road	0.61	0.00	0.39
	C - Buckingham Road West	0.76	0.24	0.00

Demand (Veh/hr)

2E - Buckingham Road/ Shenley Road

From	To			
		A - Shenley Road	B - Buckingham Road East	C - Buckingham Road West
	A - Shenley Road	0	54	326
	B - Buckingham Road East	148	0	500
	C - Buckingham Road West	423	337	0

Proportions

From	To			
		A - Shenley Road	B - Buckingham Road East	C - Buckingham Road West
	A - Shenley Road	0.00	0.14	0.86
	B - Buckingham Road East	0.23	0.00	0.77
	C - Buckingham Road West	0.56	0.44	0.00

Vehicle Mix

Heavy Vehicle Percentages

2W - Newford Road/ Buckingham Road

From	To			
		A - Buckingham Road East	B - Newton Road	C - Buckingham Road West
	A - Buckingham Road East	0	2	2
	B - Newton Road	2	0	4
	C - Buckingham Road West	3	3	0

Average PCU Per Veh

From	To			
		A - Buckingham Road East	B - Newton Road	C - Buckingham Road West
	A - Buckingham Road East	1.000	1.015	1.017
	B - Newton Road	1.018	1.000	1.039
	C - Buckingham Road West	1.034	1.033	1.000

Heavy Vehicle Percentages

2E - Buckin
gham
Road/
Shenley
Road

From	To			
		A - Shenley Road	B - Buckingham Road East	C - Buckingham Road West
	A - Shenley Road	0	0	1
	B - Buckingham Road East	0	0	2
	C - Buckingham Road West	1	5	0

Average PCU Per Veh

From	To			
		A - Shenley Road	B - Buckingham Road East	C - Buckingham Road West
	A - Shenley Road	1.000	1.000	1.011
	B - Buckingham Road East	1.000	1.000	1.021
	C - Buckingham Road West	1.011	1.047	1.000

Detailed Demand Data

Demand for each time segment

Junction	Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
2E - Buckingham Road/ Shenley Road	A - Shenley Road	07:30-07:45	286	288
		07:45-08:00	341	344
		08:00-08:15	418	422
		08:15-08:30	418	422
		08:30-08:45	341	344
		08:45-09:00	286	288
	B - Buckingham Road East	07:30-07:45	488	496
		07:45-08:00	583	592
		08:00-08:15	714	725
		08:15-08:30	714	725
		08:30-08:45	583	592
		08:45-09:00	488	496
	C - Buckingham Road West	07:30-07:45	572	588
		07:45-08:00	684	702
		08:00-08:15	837	860
		08:15-08:30	837	860
		08:30-08:45	684	702
		08:45-09:00	572	588
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	07:30-07:45	622	632
		07:45-08:00	743	755
		08:00-08:15	910	925
		08:15-08:30	910	925
		08:30-08:45	743	755
		08:45-09:00	622	632
	B - Newton Road	07:30-07:45	397	408
		07:45-08:00	474	487
		08:00-08:15	581	596
		08:15-08:30	581	596
		08:30-08:45	474	487
		08:45-09:00	397	408
	C - Buckingham Road West	07:30-07:45	436	451
		07:45-08:00	521	538
		08:00-08:15	638	659

		08:15-08:30	638	659
		08:30-08:45	521	538
		08:45-09:00	436	451

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
2E - Buckingham Road/ Shenley Road	A - Shenley Road	0.60	12.73	1.5	B	348	523
	B - Buckingham Road East	0.57	6.74	1.3	A	595	892
	C - Buckingham Road West	0.72	11.21	2.5	B	697	1046
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	0.69	8.62	2.1	A	757	1136
	B - Newton Road	0.73	16.67	2.6	C	484	726
	C - Buckingham Road West	0.54	6.69	1.2	A	531	797

Main Results for each time segment

07:30 - 07:45

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	286	71	251	777	0.368	284	426	0.0	0.6	7.261	A
	B - Buckingham Road East	488	122	243	1334	0.366	486	291	0.0	0.6	4.234	A
	C - Buckingham Road West	569	142	111	1192	0.478	565	618	0.0	0.9	5.716	A
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	618	155	104	1362	0.454	615	569	0.0	0.8	4.795	A
	B - Newton Road	397	99	447	935	0.425	394	272	0.0	0.7	6.624	A
	C - Buckingham Road West	436	109	239	1266	0.344	434	602	0.0	0.5	4.317	A

07:45 - 08:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	341	85	302	745	0.458	340	511	0.6	0.8	8.877	A
	B - Buckingham Road East	583	146	292	1298	0.449	582	350	0.6	0.8	5.024	A
	C - Buckingham Road West	682	170	133	1177	0.579	680	741	0.9	1.4	7.218	A

2W - Newford Road/ Buckingham Road	A - Buckingham Road East	741	185	125	1347	0.550	740	682	0.8	1.2	5.908	A
	B - Newton Road	474	119	537	876	0.542	473	327	0.7	1.2	8.890	A
	C - Buckingham Road West	521	130	287	1228	0.424	520	723	0.5	0.7	5.076	A

08:00 - 08:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	418	105	367	703	0.595	416	623	0.8	1.4	12.423	B
	B - Buckingham Road East	714	178	357	1249	0.571	712	426	0.8	1.3	6.671	A
	C - Buckingham Road West	833	208	162	1157	0.719	828	906	1.4	2.5	10.791	B
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	906	226	152	1327	0.683	902	833	1.2	2.1	8.413	A
	B - Newton Road	581	145	656	799	0.727	576	399	1.2	2.5	15.757	C
	C - Buckingham Road West	638	159	349	1178	0.541	636	882	0.7	1.2	6.615	A

08:15 - 08:30

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	418	105	371	701	0.597	418	629	1.4	1.5	12.727	B
	B - Buckingham Road East	714	178	359	1248	0.572	714	430	1.3	1.3	6.739	A
	C - Buckingham Road West	837	209	163	1157	0.723	837	909	2.5	2.5	11.209	B
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	909	227	153	1326	0.686	909	837	2.1	2.1	8.617	A
	B - Newton Road	581	145	661	795	0.730	581	401	2.5	2.6	16.670	C
	C - Buckingham Road West	638	159	352	1176	0.542	638	889	1.2	1.2	6.687	A

08:30 - 08:45

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	341	85	307	741	0.460	344	519	1.5	0.9	9.106	A
	B - Buckingham Road East	583	146	295	1295	0.450	585	356	1.3	0.8	5.081	A
	C - Buckingham Road West	688	172	133	1177	0.585	693	746	2.5	1.4	7.504	A
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	746	187	125	1347	0.554	750	688	2.1	1.3	6.063	A

	B - Newton Road	474	119	545	871	0.545	480	330	2.6	1.2	9.329	A
	C - Buckingham Road West	521	130	291	1224	0.425	522	733	1.2	0.7	5.139	A

08:45 - 09:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	286	71	255	774	0.369	287	432	0.9	0.6	7.409	A
	B - Buckingham Road East	488	122	246	1332	0.367	489	296	0.8	0.6	4.278	A
	C - Buckingham Road West	574	144	112	1191	0.482	576	624	1.4	0.9	5.871	A
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	624	156	105	1362	0.458	625	574	1.3	0.9	4.899	A
	B - Newton Road	397	99	454	930	0.427	399	276	1.2	0.8	6.804	A
	C - Buckingham Road West	436	109	242	1263	0.345	437	611	0.7	0.5	4.359	A

2033 Base + CD + SP (ST), PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout	2W - Newford Road/ Buckingham Road	Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms A and C have 82% of the total flow for the roundabout for one or more time segments]
Warning	Linked Roundabout	2W - Newford Road/ Buckingham Road - A - Buckingham Road East	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.
Warning	Linked Roundabout	2E - Buckingham Road/ Shenley Road - C - Buckingham Road West	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
2E	Buckingham Road/ Shenley Road	Mini-roundabout		A, B, C	18.57	C
2W	Newford Road/ Buckingham Road	Mini-roundabout		A, B, C	15.98	C

Junction Network Options

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D22	2033 Base + CD + SP (ST)	PM	ONE HOUR	16:45	18:15	15	✓

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

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (Veh/hr)	Flow multiplier (%)	Internal storage space (PCU)
2E - Buckingham Road/ Shenley Road	C - Buckingham Road West	2W	A	Simple (vertical queueing)	Normal	0	100.00	
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	2E	C	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
2E - Buckingham Road/ Shenley Road	A - Shenley Road		ONE HOUR	✓	359	100.000
	B - Buckingham Road East		ONE HOUR	✓	404	100.000
	C - Buckingham Road West	✓				
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	✓				
	B - Newton Road		ONE HOUR	✓	365	100.000
	C - Buckingham Road West		ONE HOUR	✓	1069	100.000

Origin-Destination Data

Demand (Veh/hr)

2W - Newford Road/ Buckingham Road

From	To			
		A - Buckingham Road East	B - Newton Road	C - Buckingham Road West
	A - Buckingham Road East	0	209	458
	B - Newton Road	195	1	168
	C - Buckingham Road West	794	273	1

Proportions

From	To			
		A - Buckingham Road East	B - Newton Road	C - Buckingham Road West
	A - Buckingham Road East	0.00	0.31	0.69
	B - Newton Road	0.53	0.00	0.46
	C - Buckingham Road West	0.74	0.26	0.00

Demand (Veh/hr)

2E -
Buckin
gham
Road/
Shenley
Road

From	To			
		A - Shenley Road	B - Buckingham Road East	C - Buckingham Road West
	A - Shenley Road	0	53	306
	B - Buckingham Road East	43	0	361
	C - Buckingham Road West	349	641	0

Proportions

From	To			
		A - Shenley Road	B - Buckingham Road East	C - Buckingham Road West
	A - Shenley Road	0.00	0.15	0.85
	B - Buckingham Road East	0.11	0.00	0.89
	C - Buckingham Road West	0.35	0.65	0.00

Vehicle Mix

Heavy Vehicle Percentages

2W -
Newfor
d Road/
Buckin
gham
Road

From	To			
		A - Buckingham Road East	B - Newton Road	C - Buckingham Road West
	A - Buckingham Road East	0	2	2
	B - Newton Road	0	0	3
	C - Buckingham Road West	1	2	0

Average PCU Per Veh

From	To			
		A - Buckingham Road East	B - Newton Road	C - Buckingham Road West
	A - Buckingham Road East	1.000	1.022	1.021
	B - Newton Road	1.000	1.000	1.027
	C - Buckingham Road West	1.008	1.017	1.000

Heavy Vehicle Percentages

2E -
Buckin
gham
Road/
Shenley
Road

From	To			
		A - Shenley Road	B - Buckingham Road East	C - Buckingham Road West
	A - Shenley Road	0	0	0
	B - Buckingham Road East	0	0	4
	C - Buckingham Road West	0	1	0

Average PCU Per Veh

From	To			
		A - Shenley Road	B - Buckingham Road East	C - Buckingham Road West
	A - Shenley Road	1.000	1.000	1.004
	B - Buckingham Road East	1.000	1.000	1.036
	C - Buckingham Road West	1.003	1.009	1.000

Detailed Demand Data

Demand for each time segment

Junction	Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
2E - Buckingham Road/ Shenley Road	A - Shenley Road	16:45-17:00	270	271
		17:00-17:15	323	324
		17:15-17:30	395	396
		17:30-17:45	395	396
		17:45-18:00	323	324

	B - Buckingham Road East	18:00-18:15	270	271
		16:45-17:00	304	314
		17:00-17:15	363	375
		17:15-17:30	445	459
		17:30-17:45	445	459
		17:45-18:00	363	375
		18:00-18:15	304	314
	C - Buckingham Road West	16:45-17:00	745	750
		17:00-17:15	889	895
		17:15-17:30	1089	1096
		17:30-17:45	1089	1096
		17:45-18:00	889	895
		18:00-18:15	745	750
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	16:45-17:00	502	513
		17:00-17:15	600	612
		17:15-17:30	734	750
		17:30-17:45	734	750
		17:45-18:00	600	612
		18:00-18:15	502	513
	B - Newton Road	16:45-17:00	275	278
		17:00-17:15	328	332
		17:15-17:30	402	407
		17:30-17:45	402	407
		17:45-18:00	328	332
		18:00-18:15	275	278
	C - Buckingham Road West	16:45-17:00	805	813
		17:00-17:15	961	971
		17:15-17:30	1177	1189
		17:30-17:45	1177	1189
		17:45-18:00	961	971
		18:00-18:15	805	813

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
2E - Buckingham Road/ Shenley Road	A - Shenley Road	0.78	30.58	3.2	D	329	494
	B - Buckingham Road East	0.36	4.49	0.6	A	371	556
	C - Buckingham Road West	0.86	20.13	5.8	C	907	1360
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	0.60	7.48	1.5	A	611	917
	B - Newton Road	0.44	7.11	0.8	A	335	502
	C - Buckingham Road West	0.89	24.37	7.5	C	981	1471

Main Results for each time segment

16:45 - 17:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	270	68	476	649	0.416	267	291	0.0	0.7	9.366	A
	B - Buckingham Road East	304	76	228	1326	0.229	303	515	0.0	0.3	3.517	A
	C - Buckingham Road West	740	185	32	1269	0.583	734	499	0.0	1.4	6.661	A
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	499	125	206	1284	0.388	496	740	0.0	0.6	4.554	A
	B - Newton Road	275	69	342	1016	0.270	273	361	0.0	0.4	4.836	A
	C - Buckingham Road West	805	201	147	1372	0.587	799	468	0.0	1.4	6.229	A

17:00 - 17:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	323	81	572	590	0.547	321	349	0.7	1.2	13.278	B
	B - Buckingham Road East	363	91	273	1292	0.281	363	619	0.3	0.4	3.870	A
	C - Buckingham Road West	886	221	38	1265	0.700	882	598	1.4	2.3	9.319	A
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	598	149	247	1255	0.476	597	886	0.6	0.9	5.461	A
	B - Newton Road	328	82	411	970	0.338	327	433	0.4	0.5	5.595	A
	C - Buckingham Road West	961	240	176	1348	0.713	957	562	1.4	2.4	9.100	A

17:15 - 17:30

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	395	99	689	518	0.763	388	422	1.2	2.9	26.518	D
	B - Buckingham Road East	445	111	331	1250	0.356	444	746	0.4	0.5	4.459	A
	C - Buckingham Road West	1075	269	47	1259	0.854	1064	728	2.3	5.2	17.414	C
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	728	182	299	1217	0.598	726	1075	0.9	1.5	7.292	A
	B - Newton Road	402	100	500	911	0.441	400	525	0.5	0.8	7.035	A
	C - Buckingham Road West	1177	294	215	1317	0.894	1159	685	2.4	6.9	20.735	C

17:30 - 17:45

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	395	99	703	509	0.776	394	429	2.9	3.2	30.584	D
	B - Buckingham Road East	445	111	336	1247	0.357	445	761	0.5	0.6	4.486	A
	C - Buckingham Road West	1087	272	47	1259	0.863	1085	733	5.2	5.8	20.128	C
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	733	183	303	1214	0.604	733	1087	1.5	1.5	7.476	A
	B - Newton Road	402	100	505	908	0.442	401	531	0.8	0.8	7.109	A
	C - Buckingham Road West	1177	294	216	1316	0.894	1174	690	6.9	7.5	24.366	C

17:45 - 18:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	323	81	594	576	0.560	330	362	3.2	1.3	15.045	C
	B - Buckingham Road East	363	91	281	1287	0.282	364	643	0.6	0.4	3.904	A
	C - Buckingham Road West	905	226	38	1265	0.715	917	606	5.8	2.6	10.704	B
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	606	152	253	1250	0.485	609	905	1.5	1.0	5.628	A
	B - Newton Road	328	82	419	965	0.340	329	443	0.8	0.5	5.671	A
	C - Buckingham Road West	961	240	177	1348	0.713	981	571	7.5	2.6	10.299	B

18:00 - 18:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RF C	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
2E - Buckingham Road/ Shenley Road	A - Shenley Road	270	68	488	642	0.421	272	297	1.3	0.7	9.812	A
	B - Buckingham Road East	304	76	232	1322	0.230	304	528	0.4	0.3	3.536	A
	C - Buckingham Road West	748	187	32	1269	0.590	753	504	2.6	1.5	7.034	A
2W - Newford Road/ Buckingham Road	A - Buckingham Road East	504	126	209	1282	0.393	506	748	1.0	0.7	4.644	A
	B - Newton Road	275	69	348	1012	0.271	275	366	0.5	0.4	4.893	A
	C - Buckingham Road West	805	201	148	1371	0.587	809	475	2.6	1.4	6.459	A

Junctions 9							
PICADY 9 - Priority Intersection Module							
Version: 9.5.0.6896							
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Filename: J3 - Bletchley Road Stoke Road Drayton Road Whaddon Road.j9

Path: C:\Users\NVN01911\Desktop\SWMK

Report generation date: 5/13/2020 4:07:58 PM

- »2020 Base, AM
- »2020 Base, PM
- »2026 Base, AM
- »2026 Base, PM
- »2026 Base + CD + D, AM
- »2026 Base + CD + D, PM
- »2026 Base + CD + D with TP, AM
- »2026 Base + CD + D with TP, PM
- »2026 Base + CD + D - ST, AM
- »2026 Base + CD + D - ST, PM
- »2026 Base + CD + SP (ST), AM
- »2026 Base + CD + SP (ST), PM
- »2033 Base, AM
- »2033 Base, PM
- »2033 Base + CD + D, AM
- »2033 Base + CD + D, PM
- »2033 Base + CD + D with TP, AM
- »2033 Base + CD + D with TP, PM
- »2033 Base + CD + D - ST, AM
- »2033 Base + CD + D - ST, PM
- »2033 Base + CD + SP (ST), AM
- »2033 Base + CD + SP (ST), PM

Summary of junction performance

	AM				PM			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
2020 Base								
Stream B-ACD	11.1	98.57	0.96	F	5.4	54.18	0.87	F
Stream A-D	0.1	7.00	0.06	A	0.1	7.11	0.11	A
Stream D-AB	0.8	14.87	0.44	B	0.7	14.06	0.41	B
Stream D-BC	0.6	14.50	0.37	B	0.5	13.12	0.35	B
Stream C-B	0.1	6.95	0.05	A	0.0	6.81	0.03	A
2026 Base								
Stream B-ACD	25.1	190.64	1.07	F	12.0	106.32	0.98	F
Stream A-D	0.1	7.07	0.06	A	0.1	7.22	0.12	A
Stream D-AB	1.1	18.53	0.52	C	0.9	16.39	0.48	C
Stream D-BC	0.8	17.66	0.44	C	0.7	15.01	0.40	C
Stream C-B	0.1	7.04	0.05	A	0.0	6.89	0.03	A
2026 Base + CD + D								

2020 Base + CD + D								
Stream B-ACD	29.0	216.00	1.09	F	20.8	163.37	1.04	F
Stream A-D	0.1	7.11	0.06	A	0.1	7.25	0.12	A
Stream D-AB	1.5	23.41	0.60	C	1.1	18.54	0.52	C
Stream D-BC	1.1	22.15	0.52	C	0.8	17.04	0.45	C
Stream C-B	0.1	7.04	0.05	A	0.0	6.89	0.03	A
2026 Base + CD + D with TP								
Stream B-ACD	28.3	211.46	1.09	F	19.0	152.45	1.03	F
Stream A-D	0.1	7.10	0.06	A	0.1	7.25	0.12	A
Stream D-AB	1.4	22.42	0.59	C	1.0	18.11	0.51	C
Stream D-BC	1.0	21.25	0.51	C	0.8	16.64	0.44	C
Stream C-B	0.1	7.04	0.05	A	0.0	6.89	0.03	A
2026 Base + CD + D - ST								
Stream B-ACD	31.8	233.45	1.11	F	25.4	192.02	1.07	F
Stream A-D	0.1	7.12	0.06	A	0.1	7.26	0.12	A
Stream D-AB	1.8	27.21	0.65	D	1.1	19.33	0.54	C
Stream D-BC	1.3	25.58	0.57	D	0.9	17.76	0.47	C
Stream C-B	0.1	7.04	0.05	A	0.0	6.89	0.03	A
2026 Base + CD + SP (ST)								
Stream B-ACD	27.7	206.73	1.08	F	15.1	126.89	1.00	F
Stream A-D	0.1	7.08	0.06	A	0.1	7.22	0.12	A
Stream D-AB	1.2	20.68	0.56	C	0.9	16.97	0.49	C
Stream D-BC	0.9	19.55	0.48	C	0.7	15.51	0.42	C
Stream C-B	0.1	7.04	0.05	A	0.0	6.89	0.03	A
2033 Base								
Stream B-ACD	41.5	308.75	1.16	F	23.1	179.77	1.06	F
Stream A-D	0.1	7.14	0.07	A	0.1	7.31	0.13	A
Stream D-AB	1.4	22.43	0.59	C	1.1	19.03	0.53	C
Stream D-BC	1.0	21.15	0.50	C	0.8	17.17	0.45	C
Stream C-B	0.1	7.12	0.06	A	0.0	6.96	0.03	A
2033 Base + CD + D								
Stream B-ACD	46.4	355.87	1.18	F	36.2	260.46	1.13	F
Stream A-D	0.1	7.17	0.07	A	0.1	7.35	0.13	A
Stream D-AB	2.0	30.71	0.68	D	1.4	22.25	0.58	C
Stream D-BC	1.4	28.91	0.60	D	1.0	20.20	0.51	C
Stream C-B	0.1	7.12	0.06	A	0.0	6.96	0.03	A
2033 Base + CD + D with TP								
Stream B-ACD	45.5	347.52	1.18	F	33.8	245.87	1.12	F
Stream A-D	0.1	7.17	0.07	A	0.1	7.34	0.13	A
Stream D-AB	1.9	28.94	0.67	D	1.3	21.60	0.57	C
Stream D-BC	1.3	27.23	0.58	D	1.0	19.58	0.50	C
Stream C-B	0.1	7.12	0.06	A	0.0	6.96	0.03	A
2033 Base + CD + D - ST								
Stream B-ACD	49.7	387.76	1.20	F	42.1	313.74	1.16	F
Stream A-D	0.1	7.18	0.07	A	0.1	7.36	0.13	A
Stream D-AB	2.6	38.13	0.74	E	1.5	23.52	0.60	C
Stream D-BC	1.8	36.08	0.66	E	1.1	21.35	0.52	C
Stream C-B	0.1	7.12	0.06	A	0.0	6.96	0.03	A
2033 Base + CD + SP (ST)								
Stream B-ACD	44.6	338.76	1.17	F	28.1	210.29	1.09	F
Stream A-D	0.1	7.15	0.07	A	0.1	7.32	0.13	A
Stream D-AB	1.7	25.88	0.63	D	1.2	19.86	0.55	C
Stream D-BC	1.2	24.25	0.54	C	0.9	17.90	0.47	C
Stream C-B	0.1	7.12	0.06	A	0.0	6.96	0.03	A

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

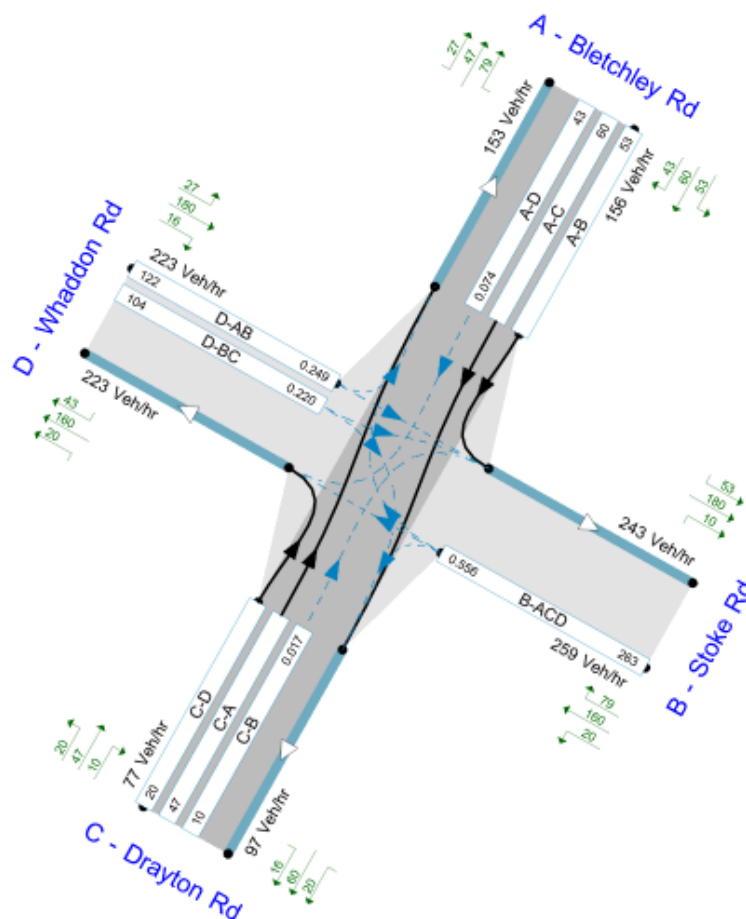
File summary

File Description

Title	Bletchley Road/ Stoke Road/ Drayton Road/ Whaddon Road
Location	51°58'28.41"N, 0°45'57.62"W
Site number	3
Date	12/4/2015
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	fsuarez
Description	

Units

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



Flows show modelled flow through junction (Veh/hr).
Streams (upstream end) show Total Demand (Veh/hr). Streams (downstream end) show RFC (s).
Time Segment: 16:45-17:00

The junction diagram reflects the last run of Junctions.

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2020 Base	AM	ONE HOUR	07:30	09:00	15	✓
D2	2020 Base	PM	ONE HOUR	16:45	18:15	15	✓
D3	2026 Base	AM	ONE HOUR	07:30	09:00	15	✓
D4	2026 Base	PM	ONE HOUR	16:45	18:15	15	✓
D5	2026 Base + CD + D	AM	ONE HOUR	07:30	09:00	15	✓
D6	2026 Base + CD + D	PM	ONE HOUR	16:45	18:15	15	✓
D7	2026 Base + CD + D with TP	AM	ONE HOUR	07:30	09:00	15	✓
D8	2026 Base + CD + D with TP	PM	ONE HOUR	16:45	18:15	15	✓
D9	2026 Base + CD + D - ST	AM	ONE HOUR	07:30	09:00	15	✓
D10	2026 Base + CD + D - ST	PM	ONE HOUR	16:45	18:15	15	✓
D11	2026 Base + CD + SP (ST)	AM	ONE HOUR	07:30	09:00	15	✓
D12	2026 Base + CD + SP (ST)	PM	ONE HOUR	16:45	18:15	15	✓
D13	2033 Base	AM	ONE HOUR	07:30	09:00	15	✓
D14	2033 Base	PM	ONE HOUR	16:45	18:15	15	✓
D15	2033 Base + CD + D	AM	ONE HOUR	07:30	09:00	15	✓
D16	2033 Base + CD + D	PM	ONE HOUR	16:45	18:15	15	✓
D17	2033 Base + CD + D with TP	AM	ONE HOUR	07:30	09:00	15	✓
D18	2033 Base + CD + D with TP	PM	ONE HOUR	16:45	18:15	15	✓
D19	2033 Base + CD + D - ST	AM	ONE HOUR	07:30	09:00	15	✓
D20	2033 Base + CD + D - ST	PM	ONE HOUR	16:45	18:15	15	✓
D21	2033 Base + CD + SP (ST)	AM	ONE HOUR	07:30	09:00	15	✓
D22	2033 Base + CD + SP (ST)	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

2020 Base, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J3	Bletchley Road/ Stoke Road/ Drayton Road/ Whaddon Road	Crossroads	Two-way		40.57	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Bletchley Rd		Major
B	Stoke Rd		Minor
C	Drayton Rd		Major
D	Whaddon Rd		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A - Bletchley Rd	6.40			56.8		-
C - Drayton Rd	6.40			49.2		-

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B - Stoke Rd	One lane	3.62								18	34
D - Whaddon Rd	One lane plus flare		10.00	7.30	4.60	2.90	2.90	✓	1.00	40	46

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
J3	A-D	607	-	-	-	-	-	-	0.231	0.330	0.231	-	-	-
J3	B-A	531	0.095	0.240	0.240	-	-	-	0.151	0.343	-	0.240	0.240	0.120
J3	B-C	685	0.103	0.281	-	-	-	-	-	-	-	-	-	-
J3	B-D, nearside lane	531	0.095	0.240	0.240	-	-	-	0.151	0.343	0.151	-	-	-
J3	B-D, offside lane	531	0.095	0.240	0.240	-	-	-	0.151	0.343	0.151	-	-	-
J3	C-B	602	0.229	0.229	0.328	-	-	-	-	-	-	-	-	-
J3	D-A	696	-	-	-	-	-	-	0.285	-	0.105	-	-	-
J3	D-B, nearside lane	547	0.156	0.156	0.353	-	-	-	0.247	0.247	0.098	-	-	-
J3	D-B, offside lane	547	0.156	0.156	0.353	-	-	-	0.247	0.247	0.098	-	-	-
J3	D-C	547	-	0.156	0.353	0.124	0.247	0.247	0.247	0.247	0.098	-	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2020 Base	AM	ONE HOUR	07:30	09:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Bletchley Rd		ONE HOUR	✓	213	100.000
B - Stoke Rd		ONE HOUR	✓	387	100.000
C - Drayton Rd		ONE HOUR	✓	152	100.000
D - Whaddon Rd		ONE HOUR	✓	304	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
From		A - Bletchley Rd	B - Stoke Rd	C - Drayton Rd	D - Whaddon Rd
	A - Bletchley Rd	0	116	69	28
	B - Stoke Rd	97	0	26	264
	C - Drayton Rd	98	24	0	30
	D - Whaddon Rd	49	227	28	0

Proportions

	To				
From		A - Bletchley Rd	B - Stoke Rd	C - Drayton Rd	D - Whaddon Rd
	A - Bletchley Rd	0.00	0.54	0.32	0.13
	B - Stoke Rd	0.25	0.00	0.07	0.68
	C - Drayton Rd	0.64	0.16	0.00	0.20
	D - Whaddon Rd	0.16	0.75	0.09	0.00

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		A - Bletchley Rd	B - Stoke Rd	C - Drayton Rd	D - Whaddon Rd
	A - Bletchley Rd	0	2	1	4
	B - Stoke Rd	2	0	0	2
	C - Drayton Rd	1	0	0	3
	D - Whaddon Rd	0	3	11	0

Average PCU Per Veh

	To				
From		A - Bletchley Rd	B - Stoke Rd	C - Drayton Rd	D - Whaddon Rd
	A - Bletchley Rd	1.000	1.022	1.014	1.036
	B - Stoke Rd	1.021	1.000	1.000	1.015
	C - Drayton Rd	1.010	1.000	1.000	1.033
	D - Whaddon Rd	1.000	1.026	1.107	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - Bletchley Rd	07:30-07:45	160	164
	07:45-08:00	191	196
	08:00-08:15	235	240
	08:15-08:30	235	240
	08:30-08:45	191	196
	08:45-09:00	160	164
B - Stoke Rd	07:30-07:45	291	296
	07:45-08:00	348	353
	08:00-08:15	426	433
	08:15-08:30	426	433
	08:30-08:45	348	353
	08:45-09:00	291	296
C - Drayton Rd	07:30-07:45	114	116
	07:45-08:00	137	138
	08:00-08:15	167	170
	08:15-08:30	167	170
	08:30-08:45	137	138
	08:45-09:00	114	116
D - Whaddon Rd	07:30-07:45	229	236
	07:45-08:00	273	281
	08:00-08:15	335	345
	08:15-08:30	335	345
	08:30-08:45	273	281
	08:45-09:00	229	236

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.96	98.57	11.1	F	355	533
A-B					106	160
A-C					63	95
A-D	0.06	7.00	0.1	A	26	39
D-AB	0.44	14.87	0.8	B	157	235
D-BC	0.37	14.50	0.6	B	122	183
C-D					28	41
C-A					90	135
C-B	0.05	6.95	0.1	A	22	33

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	291	73	471	0.619	285	0.0	1.5	18.812	C
A-B	87	22			87				
A-C	52	13			52				
A-D	21	5	558	0.038	21	0.0	0.0	6.699	A
D-AB	127	32	487	0.260	125	0.0	0.3	9.908	A
D-BC	102	26	452	0.226	101	0.0	0.3	10.226	B
C-D	23	6			23				
C-A	74	18			74				
C-B	18	5	563	0.032	18	0.0	0.0	6.606	A

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	348	87	459	0.758	343	1.5	2.8	29.767	D
A-B	104	26			104				
A-C	62	16			62				
A-D	25	6	553	0.046	25	0.0	0.0	6.822	A
D-AB	153	38	466	0.328	152	0.3	0.5	11.459	B
D-BC	120	30	431	0.279	120	0.3	0.4	11.567	B
C-D	27	7			27				
C-A	88	22			88				
C-B	22	5	555	0.039	22	0.0	0.0	6.748	A

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	426	107	442	0.964	403	2.8	8.5	68.394	F
A-B	128	32			128				
A-C	76	19			76				
A-D	31	8	545	0.057	31	0.0	0.1	6.995	A
D-AB	190	47	433	0.439	189	0.5	0.8	14.680	B
D-BC	145	36	395	0.367	144	0.4	0.6	14.307	B
C-D	33	8			33				
C-A	108	27			108				
C-B	26	7	544	0.049	26	0.0	0.1	6.950	A

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	426	107	442	0.965	416	8.5	11.1	98.569	F
A-B	128	32			128				
A-C	76	19			76				
A-D	31	8	545	0.057	31	0.1	0.1	6.995	A
D-AB	190	48	432	0.440	190	0.8	0.8	14.872	B
D-BC	145	36	393	0.368	145	0.6	0.6	14.502	B
C-D	33	8			33				
C-A	108	27			108				
C-B	26	7	544	0.049	26	0.1	0.1	6.950	A

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	348	87	459	0.759	378	11.1	3.6	52.907	F
A-B	104	28			104				
A-C	62	16			62				
A-D	25	6	553	0.046	25	0.1	0.0	6.823	A
D-AB	153	38	465	0.329	154	0.8	0.5	11.626	B
D-BC	120	30	428	0.281	121	0.6	0.4	11.754	B
C-D	27	7			27				
C-A	88	22			88				
C-B	22	5	555	0.039	22	0.1	0.0	6.749	A

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	291	73	471	0.619	299	3.6	1.7	21.802	C
A-B	87	22			87				
A-C	52	13			52				
A-D	21	5	558	0.038	21	0.0	0.0	6.703	A
D-AB	127	32	487	0.261	128	0.5	0.4	10.046	B
D-BC	102	25	450	0.226	102	0.4	0.3	10.353	B
C-D	23	6			23				
C-A	74	18			74				
C-B	18	5	563	0.032	18	0.0	0.0	6.610	A

2020 Base, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J3	Bletchley Road/ Stoke Road/ Drayton Road/ Whaddon Road	Crossroads	Two-way		24.57	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2020 Base	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Bletchley Rd		ONE HOUR	✓	207	100.000
B - Stoke Rd		ONE HOUR	✓	350	100.000
C - Drayton Rd		ONE HOUR	✓	102	100.000
D - Whaddon Rd		ONE HOUR	✓	300	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
From		A - Bletchley Rd	B - Stoke Rd	C - Drayton Rd	D - Whaddon Rd
	A - Bletchley Rd	0	70	80	57
	B - Stoke Rd	107	0	27	216
	C - Drayton Rd	62	13	0	27
	D - Whaddon Rd	36	242	22	0

Proportions

	To				
From		A - Bletchley Rd	B - Stoke Rd	C - Drayton Rd	D - Whaddon Rd
	A - Bletchley Rd	0.00	0.34	0.39	0.28
	B - Stoke Rd	0.31	0.00	0.08	0.62
	C - Drayton Rd	0.61	0.13	0.00	0.26
	D - Whaddon Rd	0.12	0.81	0.07	0.00

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		A - Bletchley Rd	B - Stoke Rd	C - Drayton Rd	D - Whaddon Rd
	A - Bletchley Rd	0	3	0	2
	B - Stoke Rd	1	0	0	2
	C - Drayton Rd	2	0	0	0
	D - Whaddon Rd	0	2	0	0

Average PCU Per Veh

	To				
From		A - Bletchley Rd	B - Stoke Rd	C - Drayton Rd	D - Whaddon Rd
	A - Bletchley Rd	1.000	1.029	1.000	1.018
	B - Stoke Rd	1.009	1.000	1.000	1.019
	C - Drayton Rd	1.016	1.000	1.000	1.000
	D - Whaddon Rd	1.000	1.017	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - Bletchley Rd	16:45-17:00	156	158
	17:00-17:15	186	189
	17:15-17:30	228	231
	17:30-17:45	228	231
	17:45-18:00	186	189
	18:00-18:15	156	158
B - Stoke Rd	16:45-17:00	263	267
	17:00-17:15	315	319
	17:15-17:30	385	391
	17:30-17:45	385	391
	17:45-18:00	315	319
	18:00-18:15	263	267
C - Drayton Rd	16:45-17:00	77	78
	17:00-17:15	92	93
	17:15-17:30	112	113
	17:30-17:45	112	113
	17:45-18:00	92	93
	18:00-18:15	77	78
D - Whaddon Rd	16:45-17:00	226	229
	17:00-17:15	270	273
	17:15-17:30	330	335
	17:30-17:45	330	335
	17:45-18:00	270	273
	18:00-18:15	226	229

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.87	54.18	5.4	F	321	482
A-B					64	96
A-C					73	110
A-D	0.11	7.11	0.1	A	52	78
D-AB	0.41	14.06	0.7	B	150	224
D-BC	0.35	13.12	0.5	B	126	189
C-D					25	37
C-A					57	85
C-B	0.03	6.81	0.0	A	12	18

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	283	88	474	0.558	259	0.0	1.2	16.410	C
A-B	53	13			53				
A-C	60	15			60				
A-D	43	11	578	0.074	43	0.0	0.1	6.724	A
D-AB	122	30	488	0.249	120	0.0	0.3	9.768	A
D-BC	104	28	475	0.220	103	0.0	0.3	9.662	A
C-D	20	5			20				
C-A	47	12			47				
C-B	10	2	562	0.017	10	0.0	0.0	6.519	A

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	315	79	461	0.682	311	1.2	2.0	23.487	C
A-B	63	16			63				
A-C	72	18			72				
A-D	51	13	574	0.089	51	0.1	0.1	6.886	A
D-AB	146	37	468	0.312	146	0.3	0.4	11.159	B
D-BC	124	31	456	0.271	123	0.3	0.4	10.799	B
C-D	24	6			24				
C-A	56	14			56				
C-B	12	3	554	0.021	12	0.0	0.0	6.638	A

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	385	96	445	0.887	374	2.0	4.8	45.038	E
A-B	77	19			77				
A-C	88	22			88				
A-D	63	16	569	0.110	63	0.1	0.1	7.107	A
D-AB	181	45	438	0.414	180	0.4	0.7	13.921	B
D-BC	149	37	425	0.352	149	0.4	0.5	13.013	B
C-D	30	7			30				
C-A	68	17			68				
C-B	14	4	543	0.026	14	0.0	0.0	6.808	A

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	385	96	445	0.887	383	4.8	5.4	54.181	F
A-B	77	19			77				
A-C	88	22			88				
A-D	63	16	569	0.110	63	0.1	0.1	7.110	A
D-AB	181	45	437	0.414	181	0.7	0.7	14.057	B
D-BC	149	37	424	0.352	149	0.5	0.5	13.121	B
C-D	30	7			30				
C-A	68	17			68				
C-B	14	4	543	0.026	14	0.0	0.0	6.808	A

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	315	79	461	0.682	327	5.4	2.3	28.814	D
A-B	63	16			63				
A-C	72	18			72				
A-D	51	13	574	0.089	51	0.1	0.1	6.891	A
D-AB	146	37	467	0.313	147	0.7	0.5	11.288	B
D-BC	123	31	455	0.271	124	0.5	0.4	10.904	B
C-D	24	6			24				
C-A	56	14			56				
C-B	12	3	554	0.021	12	0.0	0.0	6.642	A

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	263	66	473	0.557	268	2.3	1.3	17.830	C
A-B	53	13			53				
A-C	60	15			60				
A-D	43	11	578	0.074	43	0.1	0.1	6.734	A
D-AB	122	30	467	0.250	122	0.5	0.3	9.888	A
D-BC	104	26	474	0.220	105	0.4	0.3	9.763	A
C-D	20	5			20				
C-A	47	12			47				
C-B	10	2	562	0.017	10	0.0	0.0	6.524	A

2026 Base, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J3	Bletchley Road/ Stoke Road/ Drayton Road/ Whaddon Road	Crossroads	Two-way		74.88	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	2026 Base	AM	ONE HOUR	07:30	09:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Bletchley Rd		ONE HOUR	✓	230	100.000
B - Stoke Rd		ONE HOUR	✓	421	100.000
C - Drayton Rd		ONE HOUR	✓	165	100.000
D - Whaddon Rd		ONE HOUR	✓	340	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
From		A - Bletchley Rd	B - Stoke Rd	C - Drayton Rd	D - Whaddon Rd
	A - Bletchley Rd	0	125	75	30
	B - Stoke Rd	105	0	28	288
	C - Drayton Rd	106	26	0	33
	D - Whaddon Rd	53	255	32	0

Proportions

	To				
From		A - Bletchley Rd	B - Stoke Rd	C - Drayton Rd	D - Whaddon Rd
	A - Bletchley Rd	0.00	0.54	0.32	0.13
	B - Stoke Rd	0.25	0.00	0.07	0.68
	C - Drayton Rd	0.64	0.16	0.00	0.20
	D - Whaddon Rd	0.16	0.75	0.09	0.00

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		A - Bletchley Rd	B - Stoke Rd	C - Drayton Rd	D - Whaddon Rd
	A - Bletchley Rd	0	2	1	4
	B - Stoke Rd	2	0	0	2
	C - Drayton Rd	1	0	0	3
	D - Whaddon Rd	0	3	11	0

Average PCU Per Veh

	To				
From		A - Bletchley Rd	B - Stoke Rd	C - Drayton Rd	D - Whaddon Rd
	A - Bletchley Rd	1.000	1.017	1.014	1.036
	B - Stoke Rd	1.021	1.000	1.000	1.015
	C - Drayton Rd	1.010	1.000	1.000	1.033
	D - Whaddon Rd	1.000	1.028	1.107	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - Bletchley Rd	07:30-07:45	173	176
	07:45-08:00	207	211
	08:00-08:15	253	258
	08:15-08:30	253	258
	08:30-08:45	207	211
	08:45-09:00	173	176
B - Stoke Rd	07:30-07:45	317	322
	07:45-08:00	379	384
	08:00-08:15	464	471
	08:15-08:30	464	471
	08:30-08:45	379	384
	08:45-09:00	317	322
C - Drayton Rd	07:30-07:45	124	126
	07:45-08:00	148	150
	08:00-08:15	181	184
	08:15-08:30	181	184
	08:30-08:45	148	150
	08:45-09:00	124	126
D - Whaddon Rd	07:30-07:45	256	263
	07:45-08:00	305	315
	08:00-08:15	374	385
	08:15-08:30	374	385
	08:30-08:45	305	315
	08:45-09:00	256	263

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	1.07	190.64	25.1	F	386	580
A-B					115	172
A-C					68	103
A-D	0.06	7.07	0.1	A	28	42
D-AB	0.52	18.53	1.1	C	176	263
D-BC	0.44	17.66	0.8	C	136	204
C-D					30	45
C-A					97	146
C-B	0.05	7.04	0.1	A	24	36

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	317	79	466	0.681	309	0.0	2.0	22.041	C
A-B	94	24			94				
A-C	56	14			56				
A-D	23	6	556	0.041	23	0.0	0.0	6.747	A
D-AB	142	35	475	0.298	140	0.0	0.4	10.687	B
D-BC	114	29	442	0.258	113	0.0	0.3	10.888	B
C-D	25	6			25				
C-A	80	20			80				
C-B	20	5	560	0.035	19	0.0	0.0	6.661	A

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	379	95	452	0.837	370	2.0	4.1	40.018	E
A-B	113	28			113				
A-C	67	17			67				
A-D	27	7	550	0.049	27	0.0	0.1	6.882	A
D-AB	171	43	450	0.380	170	0.4	0.6	12.847	B
D-BC	134	34	416	0.323	134	0.3	0.5	12.737	B
C-D	30	7			30				
C-A	95	24			95				
C-B	23	6	551	0.042	23	0.0	0.0	6.817	A

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	464	116	433	1.070	416	4.1	15.9	108.242	F
A-B	138	34			138				
A-C	82	21			82				
A-D	33	8	542	0.061	33	0.1	0.1	7.073	A
D-AB	213	53	409	0.521	212	0.6	1.0	18.025	C
D-BC	161	40	369	0.436	160	0.5	0.7	17.128	C
C-D	36	9			36				
C-A	117	29			117				
C-B	29	7	540	0.053	28	0.0	0.1	7.040	A

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	464	116	433	1.070	427	15.9	25.1	190.639	F
A-B	138	34			138				
A-C	82	21			82				
A-D	33	8	542	0.061	33	0.1	0.1	7.073	A
D-AB	214	53	408	0.525	214	1.0	1.1	18.534	C
D-BC	160	40	364	0.441	160	0.7	0.8	17.656	C
C-D	36	9			36				
C-A	117	29			117				
C-B	29	7	540	0.053	29	0.1	0.1	7.040	A

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	379	95	452	0.838	434	25.1	11.1	157.721	F
A-B	113	28			113				
A-C	67	17			67				
A-D	27	7	550	0.049	27	0.1	0.1	6.888	A
D-AB	172	43	448	0.384	174	1.1	0.6	13.215	B
D-BC	134	33	409	0.327	135	0.8	0.5	13.198	B
C-D	30	7			30				
C-A	95	24			95				
C-B	23	6	551	0.042	23	0.1	0.0	6.818	A

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	317	79	465	0.682	352	11.1	2.3	39.299	E
A-B	94	24			94				
A-C	56	14			56				
A-D	23	6	556	0.041	23	0.1	0.0	6.754	A
D-AB	142	35	474	0.300	143	0.6	0.4	10.901	B
D-BC	114	28	439	0.280	114	0.5	0.4	11.128	B
C-D	25	6			25				
C-A	80	20			80				
C-B	20	5	560	0.035	20	0.0	0.0	6.668	A

2026 Base, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J3	Bletchley Road/ Stoke Road/ Drayton Road/ Whaddon Road	Crossroads	Two-way		44.59	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

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

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Bletchley Rd		ONE HOUR	✓	224	100.000
B - Stoke Rd		ONE HOUR	✓	387	100.000
C - Drayton Rd		ONE HOUR	✓	112	100.000
D - Whaddon Rd		ONE HOUR	✓	329	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
From		A - Bletchley Rd	B - Stoke Rd	C - Drayton Rd	D - Whaddon Rd
	A - Bletchley Rd	0	76	87	62
	B - Stoke Rd	116	0	29	242
	C - Drayton Rd	67	14	0	31
	D - Whaddon Rd	39	266	24	0

Proportions

	To				
From		A - Bletchley Rd	B - Stoke Rd	C - Drayton Rd	D - Whaddon Rd
	A - Bletchley Rd	0.00	0.34	0.39	0.28
	B - Stoke Rd	0.30	0.00	0.08	0.63
	C - Drayton Rd	0.60	0.13	0.00	0.27
	D - Whaddon Rd	0.12	0.81	0.07	0.00

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		A - Bletchley Rd	B - Stoke Rd	C - Drayton Rd	D - Whaddon Rd
	A - Bletchley Rd	0	3	0	2
	B - Stoke Rd	1	0	0	2
	C - Drayton Rd	2	0	0	0
	D - Whaddon Rd	0	2	0	0

Average PCU Per Veh

	To				
From		A - Bletchley Rd	B - Stoke Rd	C - Drayton Rd	D - Whaddon Rd
	A - Bletchley Rd	1.000	1.029	1.000	1.018
	B - Stoke Rd	1.009	1.000	1.000	1.019
	C - Drayton Rd	1.016	1.000	1.000	1.000
	D - Whaddon Rd	1.000	1.017	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - Bletchley Rd	16:45-17:00	169	171
	17:00-17:15	201	204
	17:15-17:30	247	250
	17:30-17:45	247	250
	17:45-18:00	201	204
	18:00-18:15	169	171
B - Stoke Rd	16:45-17:00	291	295
	17:00-17:15	348	353
	17:15-17:30	426	432
	17:30-17:45	426	432
	17:45-18:00	348	353
	18:00-18:15	291	295
C - Drayton Rd	16:45-17:00	84	85
	17:00-17:15	101	102
	17:15-17:30	123	124
	17:30-17:45	123	124
	17:45-18:00	101	102
	18:00-18:15	84	85
D - Whaddon Rd	16:45-17:00	248	251
	17:00-17:15	296	300
	17:15-17:30	362	367
	17:30-17:45	362	367
	17:45-18:00	296	300
	18:00-18:15	248	251

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.98	106.32	12.0	F	355	533
A-B					70	104
A-C					79	119
A-D	0.12	7.22	0.1	A	57	85
D-AB	0.48	16.39	0.9	C	165	247
D-BC	0.40	15.01	0.7	C	137	206
C-D					28	42
C-A					62	92
C-B	0.03	6.89	0.0	A	13	19

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	291	73	468	0.622	285	0.0	1.6	19.046	C
A-B	57	14			57				
A-C	65	16			65				
A-D	46	12	576	0.081	46	0.0	0.1	6.788	A
D-AB	134	33	479	0.279	132	0.0	0.4	10.343	B
D-BC	114	29	467	0.245	113	0.0	0.3	10.139	B
C-D	23	6			23				
C-A	51	13			51				
C-B	11	3	559	0.019	11	0.0	0.0	6.568	A

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	348	87	455	0.764	343	1.6	2.9	30.540	D
A-B	68	17			68				
A-C	78	19			78				
A-D	55	14	572	0.097	55	0.1	0.1	6.967	A
D-AB	161	40	456	0.353	160	0.4	0.5	12.155	B
D-BC	135	34	444	0.304	135	0.3	0.4	11.609	B
C-D	28	7			28				
C-A	60	15			60				
C-B	13	3	550	0.023	13	0.0	0.0	6.699	A

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	426	106	437	0.975	401	2.9	9.0	72.013	F
A-B	83	21			83				
A-C	95	24			95				
A-D	68	17	567	0.120	68	0.1	0.1	7.214	A
D-AB	199	50	420	0.475	198	0.5	0.9	16.120	C
D-BC	163	41	405	0.403	162	0.4	0.7	14.786	B
C-D	34	8			34				
C-A	74	18			74				
C-B	15	4	538	0.029	15	0.0	0.0	6.887	A

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	426	106	437	0.975	414	9.0	12.0	106.320	F
A-B	83	21			83				
A-C	95	24			95				
A-D	68	17	567	0.120	68	0.1	0.1	7.217	A
D-AB	200	50	419	0.476	200	0.9	0.9	16.390	C
D-BC	163	41	402	0.405	163	0.7	0.7	15.014	C
C-D	34	8			34				
C-A	74	18			74				
C-B	15	4	538	0.029	15	0.0	0.0	6.887	A

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	348	87	455	0.765	381	12.0	3.8	58.258	F
A-B	68	17			68				
A-C	78	19			78				
A-D	55	14	572	0.097	56	0.1	0.1	6.970	A
D-AB	161	40	455	0.354	162	0.9	0.6	12.378	B
D-BC	135	34	442	0.305	136	0.7	0.4	11.807	B
C-D	28	7			28				
C-A	60	15			60				
C-B	13	3	550	0.023	13	0.0	0.0	6.700	A

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	291	73	468	0.622	299	3.8	1.7	22.282	C
A-B	57	14			57				
A-C	65	16			65				
A-D	46	12	576	0.081	47	0.1	0.1	6.798	A
D-AB	134	33	477	0.280	134	0.6	0.4	10.512	B
D-BC	114	29	465	0.245	115	0.4	0.3	10.278	B
C-D	23	6			23				
C-A	51	13			51				
C-B	11	3	558	0.019	11	0.0	0.0	6.570	A

2026 Base + CD + D, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J3	Bletchley Road/ Stoke Road/ Drayton Road/ Whaddon Road	Crossroads	Two-way		83.79	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2026 Base + CD + D	AM	ONE HOUR	07:30	09:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Bletchley Rd		ONE HOUR	✓	230	100.000
B - Stoke Rd		ONE HOUR	✓	427	100.000
C - Drayton Rd		ONE HOUR	✓	174	100.000
D - Whaddon Rd		ONE HOUR	✓	370	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
From		A - Bletchley Rd	B - Stoke Rd	C - Drayton Rd	D - Whaddon Rd
	A - Bletchley Rd	0	125	75	30
	B - Stoke Rd	105	0	28	294
	C - Drayton Rd	106	26	0	42
	D - Whaddon Rd	53	275	42	0

Proportions

	To				
From		A - Bletchley Rd	B - Stoke Rd	C - Drayton Rd	D - Whaddon Rd
	A - Bletchley Rd	0.00	0.54	0.32	0.13
	B - Stoke Rd	0.25	0.00	0.07	0.69
	C - Drayton Rd	0.61	0.15	0.00	0.24
	D - Whaddon Rd	0.14	0.74	0.11	0.00

Vehicle Mix

Heavy Vehicle Percentages

From	To				
		A - Bletchley Rd	B - Stoke Rd	C - Drayton Rd	D - Whaddon Rd
A - Bletchley Rd		0	2	1	4
B - Stoke Rd		2	0	0	2
C - Drayton Rd		1	0	0	3
D - Whaddon Rd		0	3	11	0

Average PCU Per Veh

From	To				
		A - Bletchley Rd	B - Stoke Rd	C - Drayton Rd	D - Whaddon Rd
A - Bletchley Rd		1.000	1.017	1.014	1.036
B - Stoke Rd		1.021	1.000	1.000	1.015
C - Drayton Rd		1.010	1.000	1.000	1.033
D - Whaddon Rd		1.000	1.026	1.107	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - Bletchley Rd	07:30-07:45	173	176
	07:45-08:00	207	211
	08:00-08:15	253	258
	08:15-08:30	253	258
	08:30-08:45	207	211
	08:45-09:00	173	176
B - Stoke Rd	07:30-07:45	321	326
	07:45-08:00	384	389
	08:00-08:15	470	477
	08:15-08:30	470	477
	08:30-08:45	384	389
	08:45-09:00	321	326
C - Drayton Rd	07:30-07:45	131	133
	07:45-08:00	156	159
	08:00-08:15	191	194
	08:15-08:30	191	194
	08:30-08:45	156	159
	08:45-09:00	131	133
D - Whaddon Rd	07:30-07:45	279	287
	07:45-08:00	333	343
	08:00-08:15	407	420
	08:15-08:30	407	420
	08:30-08:45	333	343
	08:45-09:00	279	287

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	1.09	216.00	29.0	F	391	587
A-B					115	172
A-C					68	103
A-D	0.06	7.11	0.1	A	28	42
D-AB	0.60	23.41	1.5	C	189	284
D-BC	0.52	22.15	1.1	C	150	225
C-D					39	58
C-A					97	146
C-B	0.05	7.04	0.1	A	24	36

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	321	80	463	0.693	313	0.0	2.1	22.816	C
A-B	94	24			94				
A-C	56	14			56				
A-D	23	6	554	0.041	23	0.0	0.0	6.767	A
D-AB	152	38	464	0.327	150	0.0	0.5	11.382	B
D-BC	127	32	434	0.292	125	0.0	0.4	11.594	B
C-D	32	8			32				
C-A	80	20			80				
C-B	20	5	560	0.035	19	0.0	0.0	6.661	A

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	384	96	450	0.853	374	2.1	4.5	42.785	E
A-B	113	28			113				
A-C	67	17			67				
A-D	27	7	548	0.050	27	0.0	0.1	6.907	A
D-AB	184	46	435	0.423	183	0.5	0.7	14.231	B
D-BC	149	37	403	0.368	148	0.4	0.6	14.056	B
C-D	38	9			38				
C-A	95	24			95				
C-B	23	6	551	0.042	23	0.0	0.0	6.817	A

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	470	117	430	1.092	416	4.5	17.9	118.781	F
A-B	138	34			138				
A-C	82	21			82				
A-D	33	8	540	0.062	33	0.1	0.1	7.106	A
D-AB	231	58	388	0.595	228	0.7	1.4	22.170	C
D-BC	177	44	345	0.512	175	0.6	1.0	20.943	C
C-D	46	12			46				
C-A	117	29			117				
C-B	29	7	540	0.053	28	0.0	0.1	7.040	A

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	470	117	430	1.093	425	17.9	29.0	215.999	F
A-B	138	34			138				
A-C	82	21			82				
A-D	33	8	540	0.062	33	0.1	0.1	7.106	A
D-AB	232	58	385	0.602	231	1.4	1.5	23.405	C
D-BC	176	44	338	0.520	176	1.0	1.1	22.148	C
C-D	46	12			46				
C-A	117	29			117				
C-B	29	7	540	0.053	29	0.1	0.1	7.040	A

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	384	98	449	0.854	434	29.0	16.4	193.547	F
A-B	113	28			113				
A-C	87	17			87				
A-D	27	7	548	0.050	27	0.1	0.1	6.912	A
D-AB	185	46	431	0.429	188	1.5	0.8	14.945	B
D-BC	147	37	393	0.375	149	1.1	0.6	14.893	B
C-D	38	9			38				
C-A	95	24			95				
C-B	23	6	551	0.042	23	0.1	0.0	6.821	A

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	321	80	463	0.694	377	16.4	2.5	57.970	F
A-B	94	24			94				
A-C	56	14			56				
A-D	23	6	554	0.041	23	0.1	0.0	6.771	A
D-AB	152	38	462	0.329	153	0.8	0.5	11.701	B
D-BC	126	32	428	0.295	127	0.6	0.4	11.983	B
C-D	32	8			32				
C-A	80	20			80				
C-B	20	5	560	0.035	20	0.0	0.0	6.665	A

2026 Base + CD + D, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J3	Bletchley Road/ Stoke Road/ Drayton Road/ Whaddon Road	Crossroads	Two-way		67.03	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
D6	2026 Base + CD + D	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Bletchley Rd		ONE HOUR	✓	224	100.000
B - Stoke Rd		ONE HOUR	✓	412	100.000
C - Drayton Rd		ONE HOUR	✓	122	100.000
D - Whaddon Rd		ONE HOUR	✓	349	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
From		A - Bletchley Rd	B - Stoke Rd	C - Drayton Rd	D - Whaddon Rd
	A - Bletchley Rd	0	76	87	62
	B - Stoke Rd	116	0	29	267
	C - Drayton Rd	67	14	0	41
	D - Whaddon Rd	39	277	33	0

Proportions

	To				
From		A - Bletchley Rd	B - Stoke Rd	C - Drayton Rd	D - Whaddon Rd
	A - Bletchley Rd	0.00	0.34	0.39	0.28
	B - Stoke Rd	0.28	0.00	0.07	0.65
	C - Drayton Rd	0.55	0.12	0.00	0.33
	D - Whaddon Rd	0.11	0.79	0.09	0.00

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		A - Bletchley Rd	B - Stoke Rd	C - Drayton Rd	D - Whaddon Rd
	A - Bletchley Rd	0	3	0	2
	B - Stoke Rd	1	0	0	2
	C - Drayton Rd	2	0	0	0
	D - Whaddon Rd	0	2	0	0

Average PCU Per Veh

	To				
From		A - Bletchley Rd	B - Stoke Rd	C - Drayton Rd	D - Whaddon Rd
	A - Bletchley Rd	1.000	1.029	1.000	1.018
	B - Stoke Rd	1.009	1.000	1.000	1.019
	C - Drayton Rd	1.016	1.000	1.000	1.000
	D - Whaddon Rd	1.000	1.017	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - Bletchley Rd	16:45-17:00	189	171
	17:00-17:15	201	204
	17:15-17:30	247	250
	17:30-17:45	247	250
	17:45-18:00	201	204
	18:00-18:15	189	171
B - Stoke Rd	16:45-17:00	310	315
	17:00-17:15	371	378
	17:15-17:30	454	481
	17:30-17:45	454	481
	17:45-18:00	371	378
	18:00-18:15	310	315
C - Drayton Rd	16:45-17:00	92	92
	17:00-17:15	109	110
	17:15-17:30	134	135
	17:30-17:45	134	135
	17:45-18:00	109	110
	18:00-18:15	92	92
D - Whaddon Rd	16:45-17:00	283	288
	17:00-17:15	314	318
	17:15-17:30	385	390
	17:30-17:45	385	390
	17:45-18:00	314	318
	18:00-18:15	283	288

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	1.04	163.37	20.8	F	378	568
A-B					70	104
A-C					79	119
A-D	0.12	7.25	0.1	A	57	85
D-AB	0.52	18.54	1.1	C	173	260
D-BC	0.45	17.04	0.8	C	147	221
C-D					37	56
C-A					62	92
C-B	0.03	6.89	0.0	A	13	19

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	310	78	467	0.685	303	0.0	1.8	21.103	C
A-B	57	14			57				
A-C	65	16			65				
A-D	46	12	574	0.081	46	0.0	0.1	6.810	A
D-AB	140	35	472	0.296	138	0.0	0.4	10.739	B
D-BC	123	31	461	0.267	122	0.0	0.4	10.568	B
C-D	31	8			31				
C-A	51	13			51				
C-B	11	3	559	0.019	11	0.0	0.0	6.568	A

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	371	93	454	0.817	363	1.8	3.7	36.926	E
A-B	68	17			68				
A-C	78	19			78				
A-D	55	14	570	0.097	55	0.1	0.1	6.994	A
D-AB	169	42	446	0.378	168	0.4	0.6	12.896	B
D-BC	145	36	435	0.333	145	0.4	0.5	12.358	B
C-D	37	9			37				
C-A	60	15			60				
C-B	13	3	550	0.023	13	0.0	0.0	6.699	A

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	454	114	435	1.043	414	3.7	13.7	96.772	F
A-B	83	21			83				
A-C	95	24			95				
A-D	68	17	564	0.120	68	0.1	0.1	7.250	A
D-AB	210	53	406	0.518	209	0.6	1.0	18.047	C
D-BC	174	44	389	0.448	173	0.5	0.8	16.592	C
C-D	45	11			45				
C-A	74	18			74				
C-B	15	4	538	0.029	15	0.0	0.0	6.887	A

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	454	114	435	1.044	426	13.7	20.8	163.366	F
A-B	83	21			83				
A-C	95	24			95				
A-D	68	17	564	0.120	68	0.1	0.1	7.253	A
D-AB	211	53	405	0.521	211	1.0	1.1	18.536	C
D-BC	174	43	385	0.452	174	0.8	0.8	17.041	C
C-D	45	11			45				
C-A	74	18			74				
C-B	15	4	538	0.029	15	0.0	0.0	6.887	A

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	371	93	453	0.818	428	20.8	6.4	120.450	F
A-B	68	17			68				
A-C	78	19			78				
A-D	55	14	570	0.097	56	0.1	0.1	6.997	A
D-AB	169	42	444	0.381	171	1.1	0.6	13.249	B
D-BC	145	36	430	0.337	146	0.8	0.5	12.731	B
C-D	37	9			37				
C-A	60	15			60				
C-B	13	3	550	0.023	13	0.0	0.0	6.700	A

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	310	78	467	0.665	327	6.4	2.1	28.442	D
A-B	57	14			57				
A-C	65	16			65				
A-D	46	12	574	0.081	47	0.1	0.1	6.823	A
D-AB	140	35	470	0.297	141	0.6	0.4	10.950	B
D-BC	123	31	459	0.268	124	0.5	0.4	10.762	B
C-D	31	8			31				
C-A	51	13			51				
C-B	11	3	558	0.019	11	0.0	0.0	6.570	A

2026 Base + CD + D with TP, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J3	Bletchley Road/ Stoke Road/ Drayton Road/ Whaddon Road	Crossroads	Two-way		82.13	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2026 Base + CD + D with TP	AM	ONE HOUR	07:30	09:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Bletchley Rd		ONE HOUR	✓	230	100.000
B - Stoke Rd		ONE HOUR	✓	426	100.000
C - Drayton Rd		ONE HOUR	✓	173	100.000
D - Whaddon Rd		ONE HOUR	✓	385	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
From		A - Bletchley Rd	B - Stoke Rd	C - Drayton Rd	D - Whaddon Rd
	A - Bletchley Rd	0	125	75	30
	B - Stoke Rd	105	0	28	293
	C - Drayton Rd	106	26	0	41
	D - Whaddon Rd	53	272	40	0

Proportions

	To				
From		A - Bletchley Rd	B - Stoke Rd	C - Drayton Rd	D - Whaddon Rd
	A - Bletchley Rd	0.00	0.54	0.32	0.13
	B - Stoke Rd	0.25	0.00	0.07	0.69
	C - Drayton Rd	0.61	0.15	0.00	0.24
	D - Whaddon Rd	0.14	0.74	0.11	0.00

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		A - Bletchley Rd	B - Stoke Rd	C - Drayton Rd	D - Whaddon Rd
	A - Bletchley Rd	0	2	1	4
	B - Stoke Rd	2	0	0	2
	C - Drayton Rd	1	0	0	3
	D - Whaddon Rd	0	3	11	0

Average PCU Per Veh

	To				
From		A - Bletchley Rd	B - Stoke Rd	C - Drayton Rd	D - Whaddon Rd
	A - Bletchley Rd	1.000	1.017	1.014	1.036
	B - Stoke Rd	1.021	1.000	1.000	1.015
	C - Drayton Rd	1.010	1.000	1.000	1.033
	D - Whaddon Rd	1.000	1.026	1.107	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - Bletchley Rd	07:30-07:45	173	176
	07:45-08:00	207	211
	08:00-08:15	253	258
	08:15-08:30	253	258
	08:30-08:45	207	211
	08:45-09:00	173	176
B - Stoke Rd	07:30-07:45	320	325
	07:45-08:00	383	389
	08:00-08:15	469	476
	08:15-08:30	469	476
	08:30-08:45	383	389
	08:45-09:00	320	325
C - Drayton Rd	07:30-07:45	130	132
	07:45-08:00	155	157
	08:00-08:15	190	193
	08:15-08:30	190	193
	08:30-08:45	155	157
	08:45-09:00	130	132
D - Whaddon Rd	07:30-07:45	275	283
	07:45-08:00	328	339
	08:00-08:15	402	415
	08:15-08:30	402	415
	08:30-08:45	328	339
	08:45-09:00	275	283

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	1.09	211.46	28.3	F	391	586
A-B					115	172
A-C					68	103
A-D	0.06	7.10	0.1	A	28	42
D-AB	0.59	22.42	1.4	C	187	280
D-BC	0.51	21.25	1.0	C	148	222
C-D					37	56
C-A					97	146
C-B	0.05	7.04	0.1	A	24	36

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	320	80	464	0.691	312	0.0	2.1	22.678	C
A-B	94	24			94				
A-C	56	14			56				
A-D	23	6	555	0.041	23	0.0	0.0	6.764	A
D-AB	150	38	466	0.322	148	0.0	0.5	11.262	B
D-BC	125	31	435	0.286	123	0.0	0.4	11.476	B
C-D	31	8			31				
C-A	80	20			80				
C-B	20	5	560	0.035	19	0.0	0.0	6.661	A

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	383	96	450	0.850	373	2.1	4.4	42.281	E
A-B	113	28			113				
A-C	67	17			67				
A-D	27	7	549	0.050	27	0.0	0.1	6.903	A
D-AB	182	45	437	0.416	181	0.5	0.7	13.983	B
D-BC	146	37	405	0.361	146	0.4	0.6	13.826	B
C-D	37	9			37				
C-A	95	24			95				
C-B	23	6	551	0.042	23	0.0	0.0	6.817	A

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	469	117	431	1.088	416	4.4	17.6	116.898	F
A-B	138	34			138				
A-C	82	21			82				
A-D	33	8	540	0.062	33	0.1	0.1	7.101	A
D-AB	228	57	391	0.582	225	0.7	1.3	21.362	C
D-BC	174	44	349	0.499	173	0.6	1.0	20.204	C
C-D	45	11			45				
C-A	117	29			117				
C-B	29	7	540	0.053	28	0.0	0.1	7.040	A

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	469	117	430	1.089	425	17.6	28.3	211.465	F
A-B	138	34			138				
A-C	82	21			82				
A-D	33	8	540	0.062	33	0.1	0.1	7.101	A
D-AB	229	57	388	0.589	228	1.3	1.4	22.424	C
D-BC	173	43	342	0.506	173	1.0	1.0	21.250	C
C-D	45	11			45				
C-A	117	29			117				
C-B	29	7	540	0.053	29	0.1	0.1	7.040	A

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	383	96	449	0.851	434	28.3	15.5	187.047	F
A-B	113	28			113				
A-C	67	17			67				
A-D	27	7	549	0.050	27	0.1	0.1	6.905	A
D-AB	183	46	434	0.421	185	1.4	0.7	14.621	B
D-BC	145	36	395	0.367	147	1.0	0.6	14.583	B
C-D	37	9			37				
C-A	95	24			95				
C-B	23	6	551	0.042	23	0.1	0.0	6.821	A

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	320	80	463	0.692	372	15.5	2.5	53.970	F
A-B	94	24			94				
A-C	56	14			56				
A-D	23	6	555	0.041	23	0.1	0.0	6.768	A
D-AB	151	38	464	0.324	152	0.7	0.5	11.559	B
D-BC	124	31	430	0.289	125	0.6	0.4	11.838	B
C-D	31	8			31				
C-A	80	20			80				
C-B	20	5	560	0.035	20	0.0	0.0	6.668	A

2026 Base + CD + D with TP, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J3	Bletchley Road/ Stoke Road/ Drayton Road/ Whaddon Road	Crossroads	Two-way		62.72	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2026 Base + CD + D with TP	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Bletchley Rd		ONE HOUR	✓	224	100.000
B - Stoke Rd		ONE HOUR	✓	408	100.000
C - Drayton Rd		ONE HOUR	✓	120	100.000
D - Whaddon Rd		ONE HOUR	✓	346	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
From		A - Bletchley Rd	B - Stoke Rd	C - Drayton Rd	D - Whaddon Rd
	A - Bletchley Rd	0	76	87	62
	B - Stoke Rd	116	0	29	283
	C - Drayton Rd	67	14	0	39
	D - Whaddon Rd	39	275	31	0

Proportions

	To				
From		A - Bletchley Rd	B - Stoke Rd	C - Drayton Rd	D - Whaddon Rd
	A - Bletchley Rd	0.00	0.34	0.39	0.28
	B - Stoke Rd	0.28	0.00	0.07	0.64
	C - Drayton Rd	0.56	0.12	0.00	0.32
	D - Whaddon Rd	0.11	0.80	0.09	0.00

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		A - Bletchley Rd	B - Stoke Rd	C - Drayton Rd	D - Whaddon Rd
	A - Bletchley Rd	0	3	0	2
	B - Stoke Rd	1	0	0	2
	C - Drayton Rd	2	0	0	0
	D - Whaddon Rd	0	2	0	0

Average PCU Per Veh

	To				
From		A - Bletchley Rd	B - Stoke Rd	C - Drayton Rd	D - Whaddon Rd
	A - Bletchley Rd	1.000	1.029	1.000	1.018
	B - Stoke Rd	1.009	1.000	1.000	1.019
	C - Drayton Rd	1.016	1.000	1.000	1.000
	D - Whaddon Rd	1.000	1.017	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - Bletchley Rd	16:45-17:00	169	171
	17:00-17:15	201	204
	17:15-17:30	247	250
	17:30-17:45	247	250
	17:45-18:00	201	204
	18:00-18:15	169	171
B - Stoke Rd	16:45-17:00	307	312
	17:00-17:15	367	372
	17:15-17:30	449	456
	17:30-17:45	449	456
	17:45-18:00	367	372
	18:00-18:15	307	312
C - Drayton Rd	16:45-17:00	90	91
	17:00-17:15	108	109
	17:15-17:30	132	133
	17:30-17:45	132	133
	17:45-18:00	108	109
	18:00-18:15	90	91
D - Whaddon Rd	16:45-17:00	260	264
	17:00-17:15	311	315
	17:15-17:30	381	386
	17:30-17:45	381	386
	17:45-18:00	311	315
	18:00-18:15	260	264

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	1.03	152.45	19.0	F	375	562
A-B					70	104
A-C					79	119
A-D	0.12	7.25	0.1	A	57	85
D-AB	0.51	18.11	1.0	C	172	257
D-BC	0.44	16.64	0.8	C	146	218
C-D					36	53
C-A					62	92
C-B	0.03	6.89	0.0	A	13	19

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	307	77	467	0.657	300	0.0	1.8	20.732	C
A-B	57	14			57				
A-C	65	16			65				
A-D	46	12	575	0.081	46	0.0	0.1	6.806	A
D-AB	139	35	473	0.293	137	0.0	0.4	10.667	B
D-BC	122	30	462	0.263	120	0.0	0.4	10.491	B
C-D	29	7			29				
C-A	51	13			51				
C-B	11	3	559	0.019	11	0.0	0.0	6.568	A

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	367	92	454	0.808	360	1.8	3.5	35.723	E
A-B	68	17			68				
A-C	78	19			78				
A-D	55	14	570	0.097	55	0.1	0.1	6.989	A
D-AB	167	42	448	0.374	167	0.4	0.6	12.758	B
D-BC	143	36	437	0.328	143	0.4	0.5	12.219	B
C-D	35	9			35				
C-A	60	15			60				
C-B	13	3	550	0.023	13	0.0	0.0	6.699	A

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	449	112	436	1.032	412	3.5	12.8	92.172	F
A-B	83	21			83				
A-C	95	24			95				
A-D	68	17	565	0.120	68	0.1	0.1	7.244	A
D-AB	208	52	409	0.510	207	0.6	1.0	17.670	C
D-BC	172	43	392	0.440	171	0.5	0.8	16.240	C
C-D	43	11			43				
C-A	74	18			74				
C-B	15	4	538	0.029	15	0.0	0.0	6.887	A

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	449	112	435	1.032	425	12.8	19.0	152.448	F
A-B	83	21			83				
A-C	95	24			95				
A-D	68	17	565	0.120	68	0.1	0.1	7.247	A
D-AB	209	52	407	0.513	209	1.0	1.0	18.111	C
D-BC	172	43	388	0.443	172	0.8	0.8	16.642	C
C-D	43	11			43				
C-A	74	18			74				
C-B	15	4	538	0.029	15	0.0	0.0	6.887	A

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	367	92	454	0.809	420	19.0	5.7	106.482	F
A-B	68	17			68				
A-C	78	19			78				
A-D	55	14	570	0.097	56	0.1	0.1	6.995	A
D-AB	168	42	446	0.376	169	1.0	0.6	13.083	B
D-BC	143	36	432	0.331	144	0.8	0.5	12.553	B
C-D	35	9			35				
C-A	60	15			60				
C-B	13	3	550	0.023	13	0.0	0.0	6.700	A

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	307	77	467	0.658	322	5.7	2.1	26.848	D
A-B	57	14			57				
A-C	65	16			65				
A-D	46	12	575	0.081	47	0.1	0.1	6.816	A
D-AB	139	35	472	0.294	140	0.6	0.4	10.887	B
D-BC	122	30	460	0.264	122	0.5	0.4	10.670	B
C-D	29	7			29				
C-A	51	13			51				
C-B	11	3	558	0.019	11	0.0	0.0	6.573	A

2026 Base + CD + D - ST, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J3	Bletchley Road/ Stoke Road/ Drayton Road/ Whaddon Road	Crossroads	Two-way		90.53	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2026 Base + CD + D - ST	AM	ONE HOUR	07:30	09:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Bletchley Rd		ONE HOUR	✓	230	100.000
B - Stoke Rd		ONE HOUR	✓	431	100.000
C - Drayton Rd		ONE HOUR	✓	177	100.000
D - Whaddon Rd		ONE HOUR	✓	388	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
From		A - Bletchley Rd	B - Stoke Rd	C - Drayton Rd	D - Whaddon Rd
	A - Bletchley Rd	0	125	75	30
	B - Stoke Rd	105	0	28	298
	C - Drayton Rd	106	26	0	45
	D - Whaddon Rd	53	287	45	0

Proportions

	To				
From		A - Bletchley Rd	B - Stoke Rd	C - Drayton Rd	D - Whaddon Rd
	A - Bletchley Rd	0.00	0.54	0.32	0.13
	B - Stoke Rd	0.24	0.00	0.07	0.69
	C - Drayton Rd	0.60	0.15	0.00	0.25
	D - Whaddon Rd	0.14	0.74	0.12	0.00

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		A - Bletchley Rd	B - Stoke Rd	C - Drayton Rd	D - Whaddon Rd
	A - Bletchley Rd	0	2	1	4
	B - Stoke Rd	2	0	0	2
	C - Drayton Rd	1	0	0	3
	D - Whaddon Rd	0	3	11	0

Average PCU Per Veh

	To				
From		A - Bletchley Rd	B - Stoke Rd	C - Drayton Rd	D - Whaddon Rd
	A - Bletchley Rd	1.000	1.017	1.014	1.036
	B - Stoke Rd	1.021	1.000	1.000	1.015
	C - Drayton Rd	1.010	1.000	1.000	1.033
	D - Whaddon Rd	1.000	1.028	1.107	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - Bletchley Rd	07:30-07:45	173	176
	07:45-08:00	207	211
	08:00-08:15	253	258
	08:15-08:30	253	258
	08:30-08:45	207	211
	08:45-09:00	173	176
B - Stoke Rd	07:30-07:45	324	329
	07:45-08:00	387	393
	08:00-08:15	474	482
	08:15-08:30	474	482
	08:30-08:45	387	393
	08:45-09:00	324	329
C - Drayton Rd	07:30-07:45	133	135
	07:45-08:00	159	161
	08:00-08:15	194	197
	08:15-08:30	194	197
	08:30-08:45	159	161
	08:45-09:00	133	135
D - Whaddon Rd	07:30-07:45	290	300
	07:45-08:00	347	358
	08:00-08:15	425	438
	08:15-08:30	425	438
	08:30-08:45	347	358
	08:45-09:00	290	300

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	1.11	233.45	31.8	F	395	593
A-B					115	172
A-C					68	103
A-D	0.06	7.12	0.1	A	28	42
D-AB	0.65	27.21	1.8	D	197	295
D-BC	0.57	25.58	1.3	D	157	236
C-D					41	62
C-A					97	146
C-B	0.05	7.04	0.1	A	24	36

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	324	81	463	0.701	316	0.0	2.2	23.347	C
A-B	94	24			94				
A-C	56	14			56				
A-D	23	6	554	0.041	23	0.0	0.0	6.773	A
D-AB	158	39	459	0.343	155	0.0	0.5	11.787	B
D-BC	133	33	430	0.309	131	0.0	0.4	11.956	B
C-D	34	8			34				
C-A	80	20			80				
C-B	20	5	560	0.035	19	0.0	0.0	6.661	A

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	387	97	448	0.864	377	2.2	4.7	44.743	E
A-B	113	28			113				
A-C	67	17			67				
A-D	27	7	548	0.050	27	0.0	0.1	6.915	A
D-AB	191	48	428	0.447	190	0.5	0.8	15.088	C
D-BC	155	39	397	0.392	155	0.4	0.6	14.805	B
C-D	40	10			40				
C-A	95	24			95				
C-B	23	6	551	0.042	23	0.0	0.0	6.817	A

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	474	119	429	1.106	416	4.7	19.3	126.027	F
A-B	138	34			138				
A-C	82	21			82				
A-D	33	8	539	0.062	33	0.1	0.1	7.115	A
D-AB	240	60	376	0.638	237	0.8	1.6	25.178	D
D-BC	184	46	332	0.555	182	0.6	1.2	23.640	C
C-D	49	12			49				
C-A	117	29			117				
C-B	29	7	540	0.053	28	0.0	0.1	7.040	A

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	474	119	428	1.108	424	19.3	31.8	233.451	F
A-B	138	34			138				
A-C	82	21			82				
A-D	33	8	539	0.062	33	0.1	0.1	7.116	A
D-AB	241	60	372	0.648	241	1.6	1.8	27.213	D
D-BC	183	46	323	0.567	183	1.2	1.3	25.582	D
C-D	49	12			49				
C-A	117	29			117				
C-B	29	7	540	0.053	29	0.1	0.1	7.040	A

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	387	97	448	0.865	434	31.8	20.1	218.888	F
A-B	113	28			113				
A-C	87	17			87				
A-D	27	7	548	0.050	27	0.1	0.1	6.919	A
D-AB	193	48	423	0.456	196	1.8	0.9	16.126	C
D-BC	154	39	384	0.401	156	1.3	0.7	15.953	C
C-D	40	10			40				
C-A	95	24			95				
C-B	23	6	551	0.042	23	0.1	0.0	6.818	A

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	324	81	482	0.702	394	20.1	2.7	76.310	F
A-B	94	24			94				
A-C	56	14			56				
A-D	23	6	554	0.041	23	0.1	0.0	6.777	A
D-AB	158	40	456	0.347	159	0.9	0.5	12.185	B
D-BC	132	33	423	0.312	133	0.7	0.5	12.454	B
C-D	34	8			34				
C-A	80	20			80				
C-B	20	5	560	0.035	20	0.0	0.0	6.665	A

2026 Base + CD + D - ST, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J3	Bletchley Road/ Stoke Road/ Drayton Road/ Whaddon Road	Crossroads	Two-way		78.58	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2026 Base + CD + D - ST	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Bletchley Rd		ONE HOUR	✓	224	100.000
B - Stoke Rd		ONE HOUR	✓	423	100.000
C - Drayton Rd		ONE HOUR	✓	124	100.000
D - Whaddon Rd		ONE HOUR	✓	355	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
From		A - Bletchley Rd	B - Stoke Rd	C - Drayton Rd	D - Whaddon Rd
	A - Bletchley Rd	0	76	87	62
	B - Stoke Rd	116	0	29	278
	C - Drayton Rd	67	14	0	43
	D - Whaddon Rd	39	282	34	0

Proportions

	To				
From		A - Bletchley Rd	B - Stoke Rd	C - Drayton Rd	D - Whaddon Rd
	A - Bletchley Rd	0.00	0.34	0.39	0.28
	B - Stoke Rd	0.27	0.00	0.07	0.66
	C - Drayton Rd	0.54	0.11	0.00	0.34
	D - Whaddon Rd	0.11	0.79	0.10	0.00

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		A - Bletchley Rd	B - Stoke Rd	C - Drayton Rd	D - Whaddon Rd
	A - Bletchley Rd	0	3	0	2
	B - Stoke Rd	1	0	0	2
	C - Drayton Rd	2	0	0	0
	D - Whaddon Rd	0	2	0	0

Average PCU Per Veh

	To				
From		A - Bletchley Rd	B - Stoke Rd	C - Drayton Rd	D - Whaddon Rd
	A - Bletchley Rd	1.000	1.029	1.000	1.018
	B - Stoke Rd	1.009	1.000	1.000	1.019
	C - Drayton Rd	1.016	1.000	1.000	1.000
	D - Whaddon Rd	1.000	1.017	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - Bletchley Rd	16:45-17:00	169	171
	17:00-17:15	201	204
	17:15-17:30	247	250
	17:30-17:45	247	250
	17:45-18:00	201	204
	18:00-18:15	169	171
B - Stoke Rd	16:45-17:00	318	323
	17:00-17:15	380	388
	17:15-17:30	466	473
	17:30-17:45	466	473
	17:45-18:00	380	388
	18:00-18:15	318	323
C - Drayton Rd	16:45-17:00	93	94
	17:00-17:15	111	112
	17:15-17:30	136	137
	17:30-17:45	136	137
	17:45-18:00	111	112
	18:00-18:15	93	94
D - Whaddon Rd	16:45-17:00	268	271
	17:00-17:15	320	324
	17:15-17:30	391	396
	17:30-17:45	391	396
	17:45-18:00	320	324
	18:00-18:15	268	271

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	1.07	192.02	25.4	F	388	582
A-B					70	104
A-C					79	119
A-D	0.12	7.26	0.1	A	57	85
D-AB	0.54	19.33	1.1	C	176	264
D-BC	0.47	17.76	0.9	C	150	225
C-D					39	59
C-A					62	92
C-B	0.03	6.89	0.0	A	13	19

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	318	80	467	0.682	311	0.0	2.0	22.049	C
A-B	57	14			57				
A-C	65	16			65				
A-D	46	12	574	0.081	46	0.0	0.1	6.814	A
D-AB	142	35	470	0.302	140	0.0	0.4	10.872	B
D-BC	126	31	460	0.273	124	0.0	0.4	10.689	B
C-D	32	8			32				
C-A	51	13			51				
C-B	11	3	559	0.019	11	0.0	0.0	6.568	A

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	380	95	453	0.839	372	2.0	4.1	40.131	E
A-B	68	17			68				
A-C	78	19			78				
A-D	55	14	570	0.097	55	0.1	0.1	6.999	A
D-AB	172	43	444	0.387	171	0.4	0.6	13.150	B
D-BC	148	37	433	0.342	147	0.4	0.5	12.583	B
C-D	38	10			38				
C-A	60	15			60				
C-B	13	3	550	0.023	13	0.0	0.0	6.699	A

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	466	116	435	1.071	418	4.1	16.1	108.732	F
A-B	83	21			83				
A-C	95	24			95				
A-D	68	17	564	0.120	68	0.1	0.1	7.257	A
D-AB	214	54	402	0.532	212	0.6	1.1	18.741	C
D-BC	177	44	384	0.462	176	0.5	0.8	17.198	C
C-D	47	12			47				
C-A	74	18			74				
C-B	15	4	538	0.029	15	0.0	0.0	6.887	A

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	466	116	435	1.072	428	16.1	25.4	192.024	F
A-B	83	21			83				
A-C	95	24			95				
A-D	68	17	564	0.120	68	0.1	0.1	7.260	A
D-AB	215	54	400	0.536	214	1.1	1.1	19.333	C
D-BC	177	44	379	0.466	177	0.8	0.9	17.756	C
C-D	47	12			47				
C-A	74	18			74				
C-B	15	4	538	0.029	15	0.0	0.0	6.887	A

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	380	95	453	0.839	436	25.4	11.5	159.968	F
A-B	68	17			68				
A-C	78	19			78				
A-D	55	14	570	0.097	56	0.1	0.1	7.003	A
D-AB	172	43	441	0.390	174	1.1	0.7	13.561	B
D-BC	147	37	426	0.346	149	0.9	0.5	13.044	B
C-D	38	10			38				
C-A	60	15			60				
C-B	13	3	550	0.023	13	0.0	0.0	6.700	A

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	318	80	466	0.683	355	11.5	2.4	40.299	E
A-B	57	14			57				
A-C	65	16			65				
A-D	46	12	574	0.081	47	0.1	0.1	6.827	A
D-AB	142	36	468	0.304	143	0.7	0.4	11.105	B
D-BC	125	31	456	0.275	126	0.5	0.4	10.928	B
C-D	32	8			32				
C-A	51	13			51				
C-B	11	3	558	0.019	11	0.0	0.0	6.573	A

2026 Base + CD + SP (ST), AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J3	Bletchley Road/ Stoke Road/ Drayton Road/ Whaddon Road	Crossroads	Two-way		80.74	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2026 Base + CD + SP (ST)	AM	ONE HOUR	07:30	09:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Bletchley Rd		ONE HOUR	✓	230	100.000
B - Stoke Rd		ONE HOUR	✓	425	100.000
C - Drayton Rd		ONE HOUR	✓	167	100.000
D - Whaddon Rd		ONE HOUR	✓	356	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
From		A - Bletchley Rd	B - Stoke Rd	C - Drayton Rd	D - Whaddon Rd
	A - Bletchley Rd	0	125	75	30
	B - Stoke Rd	105	0	28	292
	C - Drayton Rd	106	26	0	36
	D - Whaddon Rd	53	267	36	0

Proportions

	To				
From		A - Bletchley Rd	B - Stoke Rd	C - Drayton Rd	D - Whaddon Rd
	A - Bletchley Rd	0.00	0.54	0.32	0.13
	B - Stoke Rd	0.25	0.00	0.07	0.69
	C - Drayton Rd	0.63	0.15	0.00	0.21
	D - Whaddon Rd	0.15	0.75	0.10	0.00

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		A - Bletchley Rd	B - Stoke Rd	C - Drayton Rd	D - Whaddon Rd
	A - Bletchley Rd	0	2	1	4
	B - Stoke Rd	2	0	0	2
	C - Drayton Rd	1	0	0	3
	D - Whaddon Rd	0	3	11	0

Average PCU Per Veh

	To				
From		A - Bletchley Rd	B - Stoke Rd	C - Drayton Rd	D - Whaddon Rd
	A - Bletchley Rd	1.000	1.017	1.014	1.036
	B - Stoke Rd	1.021	1.000	1.000	1.015
	C - Drayton Rd	1.010	1.000	1.000	1.033
	D - Whaddon Rd	1.000	1.026	1.107	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - Bletchley Rd	07:30-07:45	173	176
	07:45-08:00	207	211
	08:00-08:15	253	258
	08:15-08:30	253	258
	08:30-08:45	207	211
	08:45-09:00	173	176
B - Stoke Rd	07:30-07:45	320	325
	07:45-08:00	382	388
	08:00-08:15	468	475
	08:15-08:30	468	475
	08:30-08:45	382	388
	08:45-09:00	320	325
C - Drayton Rd	07:30-07:45	126	128
	07:45-08:00	151	153
	08:00-08:15	184	187
	08:15-08:30	184	187
	08:30-08:45	151	153
	08:45-09:00	126	128
D - Whaddon Rd	07:30-07:45	268	276
	07:45-08:00	320	329
	08:00-08:15	391	403
	08:15-08:30	391	403
	08:30-08:45	320	329
	08:45-09:00	268	276

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	1.08	206.73	27.7	F	390	585
A-B					115	172
A-C					68	103
A-D	0.06	7.08	0.1	A	28	42
D-AB	0.56	20.68	1.2	C	183	274
D-BC	0.48	19.55	0.9	C	143	215
C-D					33	49
C-A					97	146
C-B	0.05	7.04	0.1	A	24	36

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	320	80	465	0.689	312	0.0	2.0	22.540	C
A-B	94	24			94				
A-C	56	14			56				
A-D	23	6	556	0.041	23	0.0	0.0	6.753	A
D-AB	147	37	470	0.313	145	0.0	0.4	11.034	B
D-BC	120	30	439	0.274	119	0.0	0.4	11.207	B
C-D	27	7			27				
C-A	80	20			80				
C-B	20	5	560	0.035	19	0.0	0.0	6.661	A

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	382	96	451	0.848	373	2.0	4.3	41.789	E
A-B	113	28			113				
A-C	67	17			67				
A-D	27	7	550	0.049	27	0.0	0.1	6.889	A
D-AB	178	45	443	0.402	177	0.4	0.7	13.519	B
D-BC	141	35	410	0.345	141	0.4	0.5	13.328	B
C-D	32	8			32				
C-A	95	24			95				
C-B	23	6	551	0.042	23	0.0	0.0	6.817	A

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	468	117	432	1.084	417	4.3	17.2	114.932	F
A-B	138	34			138				
A-C	82	21			82				
A-D	33	8	541	0.061	33	0.1	0.1	7.083	A
D-AB	222	56	399	0.558	220	0.7	1.2	19.891	C
D-BC	169	42	358	0.472	168	0.5	0.9	18.770	C
C-D	39	10			39				
C-A	117	29			117				
C-B	29	7	540	0.053	28	0.0	0.1	7.040	A

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	468	117	432	1.085	426	17.2	27.7	206.730	F
A-B	138	34			138				
A-C	82	21			82				
A-D	33	8	541	0.061	33	0.1	0.1	7.083	A
D-AB	223	56	397	0.563	223	1.2	1.2	20.676	C
D-BC	168	42	352	0.478	168	0.9	0.9	19.546	C
C-D	39	10			39				
C-A	117	29			117				
C-B	29	7	540	0.053	29	0.1	0.1	7.040	A

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	382	96	450	0.849	435	27.7	14.5	180.494	F
A-B	113	28			113				
A-C	67	17			67				
A-D	27	7	550	0.049	27	0.1	0.1	6.894	A
D-AB	179	45	440	0.407	181	1.2	0.7	14.026	B
D-BC	141	35	402	0.350	142	0.9	0.6	13.944	B
C-D	32	8			32				
C-A	95	24			95				
C-B	23	6	551	0.042	23	0.1	0.0	6.818	A

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	320	80	464	0.690	368	14.5	2.5	50.322	F
A-B	94	24			94				
A-C	56	14			56				
A-D	23	6	556	0.041	23	0.1	0.0	6.757	A
D-AB	148	37	468	0.315	149	0.7	0.5	11.298	B
D-BC	120	30	434	0.277	121	0.6	0.4	11.516	B
C-D	27	7			27				
C-A	80	20			80				
C-B	20	5	560	0.035	20	0.0	0.0	6.665	A

2026 Base + CD + SP (ST), PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J3	Bletchley Road/ Stoke Road/ Drayton Road/ Whaddon Road	Crossroads	Two-way		52.77	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2026 Base + CD + SP (ST)	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Bletchley Rd		ONE HOUR	✓	224	100.000
B - Stoke Rd		ONE HOUR	✓	398	100.000
C - Drayton Rd		ONE HOUR	✓	114	100.000
D - Whaddon Rd		ONE HOUR	✓	335	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
From		A - Bletchley Rd	B - Stoke Rd	C - Drayton Rd	D - Whaddon Rd
	A - Bletchley Rd	0	76	87	62
	B - Stoke Rd	116	0	29	253
	C - Drayton Rd	67	14	0	33
	D - Whaddon Rd	39	271	26	0

Proportions

	To				
From		A - Bletchley Rd	B - Stoke Rd	C - Drayton Rd	D - Whaddon Rd
	A - Bletchley Rd	0.00	0.34	0.39	0.28
	B - Stoke Rd	0.29	0.00	0.07	0.64
	C - Drayton Rd	0.59	0.12	0.00	0.29
	D - Whaddon Rd	0.12	0.81	0.08	0.00

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		A - Bletchley Rd	B - Stoke Rd	C - Drayton Rd	D - Whaddon Rd
	A - Bletchley Rd	0	3	0	2
	B - Stoke Rd	1	0	0	2
	C - Drayton Rd	2	0	0	0
	D - Whaddon Rd	0	2	0	0

Average PCU Per Veh

	To				
From		A - Bletchley Rd	B - Stoke Rd	C - Drayton Rd	D - Whaddon Rd
	A - Bletchley Rd	1.000	1.029	1.000	1.018
	B - Stoke Rd	1.009	1.000	1.000	1.019
	C - Drayton Rd	1.016	1.000	1.000	1.000
	D - Whaddon Rd	1.000	1.017	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - Bletchley Rd	16:45-17:00	169	171
	17:00-17:15	201	204
	17:15-17:30	247	250
	17:30-17:45	247	250
	17:45-18:00	201	204
	18:00-18:15	169	171
B - Stoke Rd	16:45-17:00	299	304
	17:00-17:15	357	363
	17:15-17:30	438	444
	17:30-17:45	438	444
	17:45-18:00	357	363
	18:00-18:15	299	304
C - Drayton Rd	16:45-17:00	86	86
	17:00-17:15	102	103
	17:15-17:30	125	126
	17:30-17:45	125	126
	17:45-18:00	102	103
	18:00-18:15	86	86
D - Whaddon Rd	16:45-17:00	252	256
	17:00-17:15	301	305
	17:15-17:30	369	374
	17:30-17:45	369	374
	17:45-18:00	301	305
	18:00-18:15	252	256

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	1.00	126.89	15.1	F	365	547
A-B					70	104
A-C					79	119
A-D	0.12	7.22	0.1	A	57	85
D-AB	0.49	16.97	0.9	C	168	251
D-BC	0.42	15.51	0.7	C	140	210
C-D					30	45
C-A					62	92
C-B	0.03	6.89	0.0	A	13	19

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	299	75	468	0.639	293	0.0	1.7	19.833	C
A-B	57	14			57				
A-C	65	16			65				
A-D	46	12	576	0.081	46	0.0	0.1	6.792	A
D-AB	136	34	477	0.285	134	0.0	0.4	10.465	B
D-BC	117	29	465	0.251	115	0.0	0.3	10.248	B
C-D	25	6			25				
C-A	51	13			51				
C-B	11	3	559	0.019	11	0.0	0.0	6.568	A

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	357	89	455	0.786	351	1.7	3.2	32.892	D
A-B	68	17			68				
A-C	78	19			78				
A-D	55	14	572	0.097	55	0.1	0.1	6.972	A
D-AB	164	41	453	0.361	163	0.4	0.6	12.371	B
D-BC	138	34	442	0.312	137	0.3	0.4	11.816	B
C-D	29	7			29				
C-A	60	15			60				
C-B	13	3	550	0.023	13	0.0	0.0	6.699	A

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	438	109	437	1.003	407	3.2	10.7	81.196	F
A-B	83	21			83				
A-C	95	24			95				
A-D	68	17	566	0.120	68	0.1	0.1	7.221	A
D-AB	203	51	416	0.488	201	0.6	0.9	16.644	C
D-BC	166	42	401	0.415	165	0.4	0.7	15.236	C
C-D	36	9			36				
C-A	74	18			74				
C-B	15	4	538	0.029	15	0.0	0.0	6.887	A

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	438	109	436	1.003	420	10.7	15.1	126.891	F
A-B	83	21			83				
A-C	95	24			95				
A-D	68	17	566	0.120	68	0.1	0.1	7.224	A
D-AB	203	51	415	0.490	203	0.9	0.9	16.965	C
D-BC	166	41	398	0.417	166	0.7	0.7	15.512	C
C-D	36	9			36				
C-A	74	18			74				
C-B	15	4	538	0.029	15	0.0	0.0	6.887	A

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	357	89	455	0.788	400	15.1	4.5	77.199	F
A-B	68	17			68				
A-C	78	19			78				
A-D	55	14	572	0.097	58	0.1	0.1	8.975	A
D-AB	164	41	452	0.363	165	0.9	0.6	12.626	B
D-BC	138	34	439	0.314	139	0.7	0.5	12.035	B
C-D	29	7			29				
C-A	60	15			60				
C-B	13	3	550	0.023	13	0.0	0.0	6.703	A

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	299	75	488	0.640	310	4.5	1.9	24.090	C
A-B	57	14			57				
A-C	65	16			65				
A-D	46	12	576	0.081	47	0.1	0.1	8.803	A
D-AB	136	34	475	0.286	137	0.6	0.4	10.642	B
D-BC	117	29	464	0.251	117	0.5	0.3	10.399	B
C-D	25	6			25				
C-A	51	13			51				
C-B	11	3	558	0.019	11	0.0	0.0	6.573	A

2033 Base, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J3	Bletchley Road/ Stoke Road/ Drayton Road/ Whaddon Road	Crossroads	Two-way		118.77	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
D13	2033 Base	AM	ONE HOUR	07:30	09:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Bletchley Rd		ONE HOUR	✓	244	100.000
B - Stoke Rd		ONE HOUR	✓	448	100.000
C - Drayton Rd		ONE HOUR	✓	175	100.000
D - Whaddon Rd		ONE HOUR	✓	382	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
From		A - Bletchley Rd	B - Stoke Rd	C - Drayton Rd	D - Whaddon Rd
	A - Bletchley Rd	0	133	79	32
	B - Stoke Rd	111	0	30	307
	C - Drayton Rd	112	28	0	35
	D - Whaddon Rd	56	272	34	0

Proportions

	To				
From		A - Bletchley Rd	B - Stoke Rd	C - Drayton Rd	D - Whaddon Rd
	A - Bletchley Rd	0.00	0.54	0.32	0.13
	B - Stoke Rd	0.25	0.00	0.07	0.68
	C - Drayton Rd	0.64	0.16	0.00	0.20
	D - Whaddon Rd	0.16	0.75	0.09	0.00

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		A - Bletchley Rd	B - Stoke Rd	C - Drayton Rd	D - Whaddon Rd
	A - Bletchley Rd	0	2	1	4
	B - Stoke Rd	2	0	0	2
	C - Drayton Rd	1	0	0	3
	D - Whaddon Rd	0	3	11	0

Average PCU Per Veh

	To				
From		A - Bletchley Rd	B - Stoke Rd	C - Drayton Rd	D - Whaddon Rd
	A - Bletchley Rd	1.000	1.017	1.014	1.036
	B - Stoke Rd	1.021	1.000	1.000	1.015
	C - Drayton Rd	1.010	1.000	1.000	1.033
	D - Whaddon Rd	1.000	1.028	1.107	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - Bletchley Rd	07:30-07:45	184	187
	07:45-08:00	220	224
	08:00-08:15	269	274
	08:15-08:30	269	274
	08:30-08:45	220	224
	08:45-09:00	184	187
B - Stoke Rd	07:30-07:45	337	342
	07:45-08:00	402	409
	08:00-08:15	493	500
	08:15-08:30	493	500
	08:30-08:45	402	409
	08:45-09:00	337	342
C - Drayton Rd	07:30-07:45	132	133
	07:45-08:00	157	159
	08:00-08:15	193	195
	08:15-08:30	193	195
	08:30-08:45	157	159
	08:45-09:00	132	133
D - Whaddon Rd	07:30-07:45	273	281
	07:45-08:00	326	336
	08:00-08:15	399	411
	08:15-08:30	399	411
	08:30-08:45	326	336
	08:45-09:00	273	281

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	1.16	308.75	41.5	F	411	616
A-B					122	183
A-C					73	109
A-D	0.07	7.14	0.1	A	29	44
D-AB	0.59	22.43	1.4	C	188	283
D-BC	0.50	21.15	1.0	C	144	216
C-D					32	48
C-A					103	155
C-B	0.06	7.12	0.1	A	25	38

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	337	84	461	0.731	327	0.0	2.4	25.306	D
A-B	100	25			100				
A-C	60	15			60				
A-D	24	6	554	0.044	24	0.0	0.0	6.789	A
D-AB	152	38	467	0.324	150	0.0	0.5	11.267	B
D-BC	121	30	434	0.279	120	0.0	0.4	11.387	B
C-D	26	7			26				
C-A	85	21			85				
C-B	21	5	557	0.037	21	0.0	0.0	6.709	A

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	402	101	447	0.900	389	2.4	5.8	52.257	F
A-B	120	30			120				
A-C	71	18			71				
A-D	29	7	548	0.053	29	0.0	0.1	6.934	A
D-AB	183	46	439	0.418	182	0.5	0.7	13.984	B
D-BC	142	36	404	0.353	142	0.4	0.5	13.697	B
C-D	32	8			32				
C-A	101	25			101				
C-B	25	6	548	0.045	25	0.0	0.0	6.877	A

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	493	123	427	1.154	418	5.8	24.4	152.001	F
A-B	146	37			146				
A-C	87	22			87				
A-D	35	9	539	0.066	35	0.1	0.1	7.141	A
D-AB	229	57	393	0.583	226	0.7	1.3	21.334	C
D-BC	170	43	347	0.490	168	0.5	0.9	19.982	C
C-D	39	10			39				
C-A	124	31			124				
C-B	30	8	536	0.057	30	0.0	0.1	7.119	A

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	493	123	427	1.155	424	24.4	41.5	294.302	F
A-B	146	37			146				
A-C	87	22			87				
A-D	35	9	539	0.066	35	0.1	0.1	7.141	A
D-AB	230	57	390	0.590	230	1.3	1.4	22.425	C
D-BC	169	42	339	0.499	169	0.9	1.0	21.152	C
C-D	39	10			39				
C-A	124	31			124				
C-B	30	8	536	0.057	30	0.1	0.1	7.119	A

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	402	101	446	0.901	436	41.5	33.1	308.750	F
A-B	120	30			120				
A-C	71	18			71				
A-D	29	7	548	0.053	29	0.1	0.1	6.936	A
D-AB	184	46	435	0.424	187	1.4	0.8	14.661	B
D-BC	141	35	391	0.361	143	1.0	0.6	14.583	B
C-D	32	8			32				
C-A	101	25			101				
C-B	25	6	548	0.045	25	0.1	0.0	6.879	A

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	337	84	461	0.731	447	33.1	5.6	166.814	F
A-B	100	25			100				
A-C	60	15			60				
A-D	24	6	554	0.044	24	0.1	0.0	6.796	A
D-AB	152	38	465	0.327	153	0.8	0.5	11.593	B
D-BC	121	30	425	0.284	121	0.6	0.4	11.881	B
C-D	28	7			28				
C-A	85	21			85				
C-B	21	5	557	0.037	21	0.0	0.0	6.716	A

2033 Base, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J3	Bletchley Road/ Stoke Road/ Drayton Road/ Whaddon Road	Crossroads	Two-way		72.45	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
D14	2033 Base	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Bletchley Rd		ONE HOUR	✓	239	100.000
B - Stoke Rd		ONE HOUR	✓	414	100.000
C - Drayton Rd		ONE HOUR	✓	119	100.000
D - Whaddon Rd		ONE HOUR	✓	352	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
From		A - Bletchley Rd	B - Stoke Rd	C - Drayton Rd	D - Whaddon Rd
	A - Bletchley Rd	0	81	92	68
	B - Stoke Rd	123	0	31	259
	C - Drayton Rd	72	15	0	33
	D - Whaddon Rd	42	284	26	0

Proportions

	To				
From		A - Bletchley Rd	B - Stoke Rd	C - Drayton Rd	D - Whaddon Rd
	A - Bletchley Rd	0.00	0.34	0.39	0.28
	B - Stoke Rd	0.30	0.00	0.08	0.63
	C - Drayton Rd	0.60	0.13	0.00	0.28
	D - Whaddon Rd	0.12	0.81	0.07	0.00

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		A - Bletchley Rd	B - Stoke Rd	C - Drayton Rd	D - Whaddon Rd
	A - Bletchley Rd	0	3	0	2
	B - Stoke Rd	1	0	0	2
	C - Drayton Rd	2	0	0	0
	D - Whaddon Rd	0	2	0	0

Average PCU Per Veh

	To				
From		A - Bletchley Rd	B - Stoke Rd	C - Drayton Rd	D - Whaddon Rd
	A - Bletchley Rd	1.000	1.029	1.000	1.018
	B - Stoke Rd	1.009	1.000	1.000	1.019
	C - Drayton Rd	1.016	1.000	1.000	1.000
	D - Whaddon Rd	1.000	1.017	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - Bletchley Rd	16:45-17:00	180	182
	17:00-17:15	215	218
	17:15-17:30	283	287
	17:30-17:45	283	287
	17:45-18:00	215	218
	18:00-18:15	180	182
B - Stoke Rd	16:45-17:00	311	318
	17:00-17:15	372	377
	17:15-17:30	455	482
	17:30-17:45	455	482
	17:45-18:00	372	377
	18:00-18:15	311	318
C - Drayton Rd	16:45-17:00	90	91
	17:00-17:15	107	108
	17:15-17:30	132	133
	17:30-17:45	132	133
	17:45-18:00	107	108
	18:00-18:15	90	91
D - Whaddon Rd	16:45-17:00	285	288
	17:00-17:15	318	320
	17:15-17:30	387	392
	17:30-17:45	387	392
	17:45-18:00	318	320
	18:00-18:15	285	288

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	1.08	179.77	23.1	F	380	569
A-B					74	111
A-C					85	127
A-D	0.13	7.31	0.1	A	60	91
D-AB	0.53	19.03	1.1	C	177	265
D-BC	0.45	17.17	0.8	C	146	219
C-D					30	45
C-A					66	98
C-B	0.03	6.96	0.0	A	14	21

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	311	78	464	0.671	304	0.0	1.9	21.575	C
A-B	61	15			61				
A-C	70	17			70				
A-D	50	12	575	0.086	49	0.0	0.1	6.846	A
D-AB	143	36	471	0.304	141	0.0	0.4	10.855	B
D-BC	122	30	460	0.265	120	0.0	0.4	10.562	B
C-D	25	6			25				
C-A	54	13			54				
C-B	11	3	556	0.020	11	0.0	0.0	6.612	A

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	372	93	450	0.827	364	1.9	3.9	38.575	E
A-B	73	18			73				
A-C	83	21			83				
A-D	59	15	570	0.104	59	0.1	0.1	7.039	A
D-AB	172	43	446	0.387	172	0.4	0.6	13.104	B

A-D	29	7	545	0.053	29	0.0	0.1	6.967	A
D-AB	204	51	415	0.491	202	0.6	0.9	16.788	C
D-BC	163	41	383	0.426	162	0.5	0.7	16.251	C
C-D	42	11			42				
C-A	101	25			101				
C-B	25	6	548	0.045	25	0.0	0.0	6.877	A

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	504	126	422	1.193	416	6.9	28.8	175.705	F
A-B	146	37			146				
A-C	87	22			87				
A-D	35	9	536	0.066	35	0.1	0.1	7.184	A
D-AB	257	64	357	0.719	252	0.9	2.3	32.512	D
D-BC	193	48	304	0.634	189	0.7	1.6	30.502	D
C-D	52	13			52				
C-A	124	31			124				
C-B	30	8	536	0.057	30	0.0	0.1	7.119	A

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	504	126	421	1.195	420	28.8	49.7	348.728	F
A-B	146	37			146				
A-C	87	22			87				
A-D	35	9	536	0.066	35	0.1	0.1	7.184	A
D-AB	259	65	350	0.740	258	2.3	2.6	38.132	E
D-BC	190	48	288	0.662	190	1.6	1.8	36.080	E
C-D	52	13			52				
C-A	124	31			124				
C-B	30	8	536	0.057	30	0.1	0.1	7.119	A

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	411	103	442	0.930	433	49.7	44.1	387.755	F
A-B	120	30			120				
A-C	71	18			71				
A-D	29	7	545	0.053	29	0.1	0.1	6.972	A
D-AB	206	52	407	0.508	213	2.6	1.1	19.081	C
D-BC	161	40	360	0.445	164	1.8	0.8	18.717	C
C-D	42	11			42				
C-A	101	25			101				
C-B	25	6	548	0.045	25	0.1	0.0	6.879	A

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	344	86	458	0.752	447	44.1	18.3	257.191	F
A-B	100	25			100				
A-C	60	15			60				
A-D	24	6	552	0.044	24	0.1	0.0	6.820	A
D-AB	169	42	446	0.379	171	1.1	0.6	13.180	B
D-BC	138	35	406	0.340	140	0.8	0.5	13.563	B
C-D	35	9			35				
C-A	85	21			85				
C-B	21	5	557	0.037	21	0.0	0.0	6.713	A

2033 Base + CD + D - ST, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J3	Bletchley Road/ Stoke Road/ Drayton Road/ Whaddon Road	Crossroads	Two-way		125.55	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
D20	2033 Base + CD + D - ST	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Bletchley Rd		ONE HOUR	✓	239	100.000
B - Stoke Rd		ONE HOUR	✓	450	100.000
C - Drayton Rd		ONE HOUR	✓	131	100.000
D - Whaddon Rd		ONE HOUR	✓	378	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
From		A - Bletchley Rd	B - Stoke Rd	C - Drayton Rd	D - Whaddon Rd
	A - Bletchley Rd	0	81	92	66
	B - Stoke Rd	123	0	31	295
	C - Drayton Rd	72	15	0	45
	D - Whaddon Rd	42	300	36	0

Proportions

	To				
From		A - Bletchley Rd	B - Stoke Rd	C - Drayton Rd	D - Whaddon Rd
	A - Bletchley Rd	0.00	0.34	0.39	0.28
	B - Stoke Rd	0.27	0.00	0.07	0.66
	C - Drayton Rd	0.54	0.11	0.00	0.34
	D - Whaddon Rd	0.11	0.80	0.09	0.00

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		A - Bletchley Rd	B - Stoke Rd	C - Drayton Rd	D - Whaddon Rd
	A - Bletchley Rd	0	3	0	2
	B - Stoke Rd	1	0	0	2
	C - Drayton Rd	2	0	0	0
	D - Whaddon Rd	0	2	0	0

Average PCU Per Veh

	To				
From		A - Bletchley Rd	B - Stoke Rd	C - Drayton Rd	D - Whaddon Rd
	A - Bletchley Rd	1.000	1.029	1.000	1.018
	B - Stoke Rd	1.009	1.000	1.000	1.019
	C - Drayton Rd	1.016	1.000	1.000	1.000
	D - Whaddon Rd	1.000	1.017	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - Bletchley Rd	16:45-17:00	180	182
	17:00-17:15	215	218
	17:15-17:30	263	267
	17:30-17:45	263	267
	17:45-18:00	215	218
	18:00-18:15	180	182
B - Stoke Rd	16:45-17:00	339	344
	17:00-17:15	404	410
	17:15-17:30	495	503
	17:30-17:45	495	503
	17:45-18:00	404	410
	18:00-18:15	339	344
C - Drayton Rd	16:45-17:00	99	100
	17:00-17:15	118	119
	17:15-17:30	145	146
	17:30-17:45	145	146
	17:45-18:00	118	119
	18:00-18:15	99	100
D - Whaddon Rd	16:45-17:00	284	288
	17:00-17:15	340	344
	17:15-17:30	416	422
	17:30-17:45	416	422
	17:45-18:00	340	344
	18:00-18:15	284	288

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	1.18	313.74	42.1	F	413	619
A-B					74	111
A-C					85	127
A-D	0.13	7.36	0.1	A	60	91
D-AB	0.60	23.52	1.5	C	189	283
D-BC	0.52	21.35	1.1	C	158	237
C-D					41	62
C-A					66	98
C-B	0.03	6.96	0.0	A	14	21

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	339	85	462	0.732	329	0.0	2.5	25.367	D
A-B	61	15			61				
A-C	70	17			70				
A-D	50	12	573	0.086	49	0.0	0.1	6.872	A
D-AB	152	38	462	0.328	150	0.0	0.5	11.457	B
D-BC	133	33	452	0.294	131	0.0	0.4	11.170	B
C-D	34	8			34				
C-A	54	13			54				
C-B	11	3	556	0.020	11	0.0	0.0	6.612	A

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	404	101	448	0.902	391	2.5	5.9	52.603	F
A-B	73	18			73				
A-C	83	21			83				
A-D	59	15	568	0.104	59	0.1	0.1	7.073	A
D-AB	183	46	433	0.424	182	0.5	0.7	14.317	B
D-BC	156	39	421	0.371	156	0.4	0.6	13.532	B
C-D	40	10			40				
C-A	64	16			64				
C-B	13	3	546	0.025	13	0.0	0.0	6.753	A

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	495	124	428	1.157	420	5.9	24.8	153.255	F
A-B	89	22			89				
A-C	102	25			102				
A-D	72	18	562	0.129	72	0.1	0.1	7.354	A
D-AB	229	57	386	0.594	227	0.7	1.4	22.251	C
D-BC	187	47	362	0.516	185	0.6	1.0	20.140	C
C-D	49	12			49				
C-A	79	20			79				
C-B	17	4	534	0.031	16	0.0	0.0	6.957	A

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	495	124	428	1.158	426	24.8	42.1	297.459	F
A-B	89	22			89				
A-C	102	25			102				
A-D	72	18	562	0.129	72	0.1	0.1	7.357	A
D-AB	230	58	382	0.602	230	1.4	1.5	23.524	C
D-BC	186	46	354	0.525	185	1.0	1.1	21.346	C
C-D	49	12			49				
C-A	79	20			79				
C-B	17	4	534	0.031	17	0.0	0.0	6.958	A

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	404	101	447	0.904	437	42.1	34.0	313.740	F
A-B	73	18			73				
A-C	83	21			83				
A-D	59	15	568	0.104	59	0.1	0.1	7.077	A
D-AB	185	46	429	0.431	187	1.5	0.8	15.062	C
D-BC	155	39	408	0.380	157	1.1	0.6	14.402	B
C-D	40	10			40				
C-A	64	16			64				
C-B	13	3	546	0.025	14	0.0	0.0	6.758	A

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	339	85	462	0.733	449	34.0	6.4	172.647	F
A-B	61	15			61				
A-C	70	17			70				
A-D	50	12	573	0.086	50	0.1	0.1	6.883	A
D-AB	152	38	459	0.331	153	0.8	0.5	11.805	B
D-BC	132	33	443	0.299	133	0.6	0.4	11.649	B
C-D	34	8			34				
C-A	54	13			54				
C-B	11	3	555	0.020	11	0.0	0.0	6.614	A

2033 Base + CD + SP (ST), AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J3	Bletchley Road/ Stoke Road/ Drayton Road/ Whaddon Road	Crossroads	Two-way		129.68	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
D21	2033 Base + CD + SP (ST)	AM	ONE HOUR	07:30	09:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Bletchley Rd		ONE HOUR	✓	244	100.000
B - Stoke Rd		ONE HOUR	✓	452	100.000
C - Drayton Rd		ONE HOUR	✓	178	100.000
D - Whaddon Rd		ONE HOUR	✓	378	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
From		A - Bletchley Rd	B - Stoke Rd	C - Drayton Rd	D - Whaddon Rd
	A - Bletchley Rd	0	133	79	32
	B - Stoke Rd	111	0	30	311
	C - Drayton Rd	112	28	0	38
	D - Whaddon Rd	56	284	38	0

Proportions

	To				
From		A - Bletchley Rd	B - Stoke Rd	C - Drayton Rd	D - Whaddon Rd
	A - Bletchley Rd	0.00	0.54	0.32	0.13
	B - Stoke Rd	0.25	0.00	0.07	0.69
	C - Drayton Rd	0.63	0.15	0.00	0.21
	D - Whaddon Rd	0.15	0.75	0.10	0.00

Vehicle Mix

Heavy Vehicle Percentages

From	To				
		A - Bletchley Rd	B - Stoke Rd	C - Drayton Rd	D - Whaddon Rd
A - Bletchley Rd		0	2	1	4
B - Stoke Rd		2	0	0	2
C - Drayton Rd		1	0	0	3
D - Whaddon Rd		0	3	11	0

Average PCU Per Veh

From	To				
		A - Bletchley Rd	B - Stoke Rd	C - Drayton Rd	D - Whaddon Rd
A - Bletchley Rd		1.000	1.017	1.014	1.036
B - Stoke Rd		1.021	1.000	1.000	1.015
C - Drayton Rd		1.010	1.000	1.000	1.033
D - Whaddon Rd		1.000	1.026	1.107	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - Bletchley Rd	07:30-07:45	184	187
	07:45-08:00	220	224
	08:00-08:15	269	274
	08:15-08:30	269	274
	08:30-08:45	220	224
	08:45-09:00	184	187
B - Stoke Rd	07:30-07:45	340	345
	07:45-08:00	406	412
	08:00-08:15	497	505
	08:15-08:30	497	505
	08:30-08:45	406	412
	08:45-09:00	340	345
C - Drayton Rd	07:30-07:45	134	136
	07:45-08:00	160	162
	08:00-08:15	196	198
	08:15-08:30	196	198
	08:30-08:45	160	162
	08:45-09:00	134	136
D - Whaddon Rd	07:30-07:45	285	293
	07:45-08:00	340	350
	08:00-08:15	416	429
	08:15-08:30	416	429
	08:30-08:45	340	350
	08:45-09:00	285	293

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	1.17	338.76	44.6	F	415	622
A-B					122	183
A-C					73	109
A-D	0.07	7.15	0.1	A	29	44
D-AB	0.63	25.88	1.7	D	196	294
D-BC	0.54	24.25	1.2	C	151	227
C-D					35	52
C-A					103	155
C-B	0.06	7.12	0.1	A	25	38

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	340	85	460	0.739	330	0.0	2.5	25.946	D
A-B	100	25			100				
A-C	60	15			60				
A-D	24	6	554	0.044	24	0.0	0.0	6.795	A
D-AB	157	39	462	0.340	155	0.0	0.5	11.665	B
D-BC	127	32	431	0.296	126	0.0	0.4	11.743	B
C-D	28	7			28				
C-A	85	21			85				
C-B	21	5	557	0.037	21	0.0	0.0	6.709	A

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	406	102	446	0.911	391	2.5	6.2	54.848	F
A-B	120	30			120				
A-C	71	18			71				
A-D	29	7	547	0.053	29	0.0	0.1	6.941	A
D-AB	190	48	431	0.441	189	0.5	0.8	14.807	B
D-BC	149	37	398	0.376	149	0.4	0.6	14.419	B
C-D	34	8			34				
C-A	101	25			101				
C-B	25	6	548	0.045	25	0.0	0.0	6.877	A

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	497	124	425	1.169	418	6.2	28.1	160.899	F
A-B	146	37			146				
A-C	87	22			87				
A-D	35	9	539	0.066	35	0.1	0.1	7.150	A
D-AB	238	60	382	0.625	235	0.8	1.6	24.080	C
D-BC	178	44	334	0.532	176	0.6	1.1	22.450	C
C-D	42	10			42				
C-A	124	31			124				
C-B	30	8	536	0.057	30	0.0	0.1	7.119	A

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	497	124	425	1.171	423	28.1	44.6	314.856	F
A-B	146	37			146				
A-C	87	22			87				
A-D	35	9	539	0.066	35	0.1	0.1	7.151	A
D-AB	240	60	378	0.635	239	1.6	1.7	25.876	D
D-BC	177	44	324	0.545	176	1.1	1.2	24.246	C
C-D	42	10			42				
C-A	124	31			124				
C-B	30	8	536	0.057	30	0.1	0.1	7.119	A

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	406	102	445	0.913	435	44.6	37.4	338.756	F
A-B	120	30			120				
A-C	71	18			71				
A-D	29	7	547	0.053	29	0.1	0.1	6.946	A
D-AB	192	48	426	0.450	195	1.7	0.8	15.782	C
D-BC	148	37	383	0.387	150	1.2	0.6	15.611	C
C-D	34	8			34				
C-A	101	25			101				
C-B	25	6	548	0.045	25	0.1	0.0	6.881	A

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	340	85	460	0.740	448	37.4	10.4	200.737	F
A-B	100	25			100				
A-C	60	15			60				
A-D	24	6	554	0.044	24	0.1	0.0	6.802	A
D-AB	158	40	459	0.345	159	0.8	0.5	12.070	B
D-BC	127	32	420	0.302	127	0.6	0.4	12.362	B
C-D	28	7			28				
C-A	85	21			85				
C-B	21	5	557	0.037	21	0.0	0.0	6.716	A

2033 Base + CD + SP (ST), PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J3	Bletchley Road/ Stoke Road/ Drayton Road/ Whaddon Road	Crossroads	Two-way		84.83	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
D22	2033 Base + CD + SP (ST)	PM	ONE HOUR	18:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Bletchley Rd		ONE HOUR	✓	239	100.000
B - Stoke Rd		ONE HOUR	✓	424	100.000
C - Drayton Rd		ONE HOUR	✓	121	100.000
D - Whaddon Rd		ONE HOUR	✓	358	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
From		A - Bletchley Rd	B - Stoke Rd	C - Drayton Rd	D - Whaddon Rd
	A - Bletchley Rd	0	81	92	66
	B - Stoke Rd	123	0	31	270
	C - Drayton Rd	72	15	0	35
	D - Whaddon Rd	42	289	27	0

Proportions

	To				
From		A - Bletchley Rd	B - Stoke Rd	C - Drayton Rd	D - Whaddon Rd
	A - Bletchley Rd	0.00	0.34	0.39	0.28
	B - Stoke Rd	0.29	0.00	0.07	0.64
	C - Drayton Rd	0.59	0.12	0.00	0.29
	D - Whaddon Rd	0.12	0.81	0.08	0.00

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		A - Bletchley Rd	B - Stoke Rd	C - Drayton Rd	D - Whaddon Rd
	A - Bletchley Rd	0	3	0	2
	B - Stoke Rd	1	0	0	2
	C - Drayton Rd	2	0	0	0
	D - Whaddon Rd	0	2	0	0

Average PCU Per Veh

	To				
From		A - Bletchley Rd	B - Stoke Rd	C - Drayton Rd	D - Whaddon Rd
	A - Bletchley Rd	1.000	1.029	1.000	1.018
	B - Stoke Rd	1.009	1.000	1.000	1.019
	C - Drayton Rd	1.016	1.000	1.000	1.000
	D - Whaddon Rd	1.000	1.017	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - Bletchley Rd	16:45-17:00	180	182
	17:00-17:15	215	218
	17:15-17:30	263	267
	17:30-17:45	263	267
	17:45-18:00	215	218
	18:00-18:15	180	182
B - Stoke Rd	16:45-17:00	319	324
	17:00-17:15	381	387
	17:15-17:30	467	474
	17:30-17:45	467	474
	17:45-18:00	381	387
	18:00-18:15	319	324
C - Drayton Rd	16:45-17:00	91	92
	17:00-17:15	109	110
	17:15-17:30	134	135
	17:30-17:45	134	135
	17:45-18:00	109	110
	18:00-18:15	91	92
D - Whaddon Rd	16:45-17:00	269	273
	17:00-17:15	322	326
	17:15-17:30	394	399
	17:30-17:45	394	399
	17:45-18:00	322	326
	18:00-18:15	269	273

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	1.09	210.29	28.1	F	389	584
A-B					74	111
A-C					85	127
A-D	0.13	7.32	0.1	A	60	91
D-AB	0.55	19.86	1.2	C	180	269
D-BC	0.47	17.90	0.9	C	149	223
C-D					32	48
C-A					66	98
C-B	0.03	6.96	0.0	A	14	21

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	319	80	464	0.689	311	0.0	2.0	22.562	C
A-B	61	15			61				
A-C	70	17			70				
A-D	50	12	574	0.086	49	0.0	0.1	6.850	A
D-AB	145	36	469	0.310	143	0.0	0.4	10.994	B
D-BC	124	31	458	0.271	123	0.0	0.4	10.682	B
C-D	26	7			26				
C-A	54	13			54				
C-B	11	3	556	0.020	11	0.0	0.0	6.612	A

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	381	95	450	0.849	372	2.0	4.4	42.006	E
A-B	73	18			73				
A-C	83	21			83				
A-D	59	15	570	0.104	59	0.1	0.1	7.045	A
D-AB	175	44	443	0.395	174	0.4	0.6	13.365	B
D-BC	147	37	431	0.340	146	0.4	0.5	12.596	B
C-D	31	8			31				
C-A	64	16			64				
C-B	13	3	546	0.025	13	0.0	0.0	6.753	A

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	467	117	430	1.087	415	4.4	17.4	116.382	F
A-B	89	22			89				
A-C	102	25			102				
A-D	72	18	564	0.128	72	0.1	0.1	7.317	A
D-AB	218	54	401	0.543	216	0.6	1.1	19.230	C
D-BC	176	44	381	0.462	175	0.5	0.8	17.344	C
C-D	38	10			38				
C-A	79	20			79				
C-B	17	4	534	0.031	16	0.0	0.0	6.957	A

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	467	117	429	1.088	424	17.4	28.1	210.292	F
A-B	89	22			89				
A-C	102	25			102				
A-D	72	18	564	0.128	72	0.1	0.1	7.320	A
D-AB	218	55	399	0.547	218	1.1	1.2	19.864	C
D-BC	176	44	376	0.467	176	0.8	0.9	17.901	C
C-D	38	10			38				
C-A	79	20			79				
C-B	17	4	534	0.031	17	0.0	0.0	6.958	A

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	381	95	449	0.849	434	28.1	15.1	184.703	F
A-B	73	18			73				
A-C	83	21			83				
A-D	59	15	570	0.104	59	0.1	0.1	7.051	A
D-AB	178	44	441	0.399	178	1.2	0.7	13.792	B
D-BC	146	38	425	0.344	147	0.9	0.5	13.043	B
C-D	31	8			31				
C-A	64	16			64				
C-B	13	3	546	0.025	14	0.0	0.0	6.755	A

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	319	80	483	0.690	370	15.1	2.5	52.168	F
A-B	61	15			61				
A-C	70	17			70				
A-D	50	12	574	0.086	50	0.1	0.1	6.883	A
D-AB	145	38	468	0.311	146	0.7	0.5	11.238	B
D-BC	124	31	455	0.273	125	0.5	0.4	10.928	B
C-D	28	7			28				
C-A	54	13			54				
C-B	11	3	556	0.020	11	0.0	0.0	6.617	A

Junctions 9
PICADY 9 - Priority Intersection Module
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Report generation date: 07/05/2020 10:32:54

- »2020 Base, AM
- »2020 Base, PM
- »2026 Base, AM
- »2026 Base, PM
- »2026 Base + CD + D, AM
- »2026 Base + CD + D, PM
- »2026 Base + CD + D with TP, AM
- »2026 Base + CD + D with TP, PM
- »2026 Base + CD + D - ST, AM
- »2026 Base + CD + D - ST, PM
- »2026 Base + CD + SP (ST), AM
- »2026 Base + CD + SP (ST), PM
- »2033 Base, AM
- »2033 Base, PM
- »2033 Base + CD + D, AM
- »2033 Base + CD + D, PM
- »2033 Base + CD + D with TP, AM
- »2033 Base + CD + D with TP, PM
- »2033 Base + CD + D - ST, AM
- »2033 Base + CD + D - ST, PM
- »2033 Base + CD + SP (ST), AM
- »2033 Base + CD + SP (ST), PM

	AM				PM			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
	2020 Base							
Stream B-C	0.1	6.97	0.10	A	0.1	6.59	0.05	A
Stream B-A	0.1	9.43	0.05	A	0.0	8.38	0.02	A
Stream C-AB	0.2	5.66	0.10	A	0.2	5.38	0.11	A
	2026 Base							

Stream B-C	0.1	7.16	0.11	A	0.1	6.71	0.06	A
Stream B-A	0.1	9.85	0.06	A	0.0	8.75	0.03	A
Stream C-AB	0.2	5.61	0.12	A	0.3	5.35	0.13	A
2026 Base + CD + D								
Stream B-C	0.1	7.29	0.11	A	0.1	6.88	0.06	A
Stream B-A	0.1	10.30	0.06	B	0.0	9.20	0.03	A
Stream C-AB	0.3	5.49	0.12	A	0.3	5.30	0.13	A
2026 Base + CD + D with TP								
Stream B-C	0.1	7.27	0.11	A	0.1	6.85	0.06	A
Stream B-A	0.1	10.23	0.06	B	0.0	9.12	0.03	A
Stream C-AB	0.3	5.51	0.12	A	0.3	5.31	0.13	A
2026 Base + CD + D - ST								
Stream B-C	0.1	7.42	0.11	A	0.1	6.79	0.06	A
Stream B-A	0.1	9.92	0.06	A	0.0	9.36	0.03	A
Stream C-AB	0.3	5.47	0.13	A	0.3	5.31	0.13	A
2026 Base + CD + SP (ST)								
Stream B-C	0.1	7.29	0.11	A	0.1	6.62	0.06	A
Stream B-A	0.1	9.48	0.05	A	0.0	8.89	0.03	A
Stream C-AB	0.2	5.59	0.12	A	0.3	5.36	0.13	A
2033 Base								
Stream B-C	0.1	7.32	0.12	A	0.1	6.81	0.06	A
Stream B-A	0.1	10.20	0.06	B	0.0	9.03	0.03	A
Stream C-AB	0.3	5.60	0.13	A	0.3	5.34	0.14	A
2033 Base + CD + D								
Stream B-C	0.1	7.45	0.12	A	0.1	6.99	0.06	A
Stream B-A	0.1	10.69	0.06	B	0.0	9.51	0.03	A
Stream C-AB	0.3	5.47	0.13	A	0.3	5.28	0.15	A
2033 Base + CD + D with TP								
Stream B-C	0.1	7.43	0.12	A	0.1	6.96	0.06	A
Stream B-A	0.1	10.62	0.06	B	0.0	9.42	0.03	A
Stream C-AB	0.3	5.50	0.13	A	0.3	5.29	0.14	A
2033 Base + CD + D - ST								
Stream B-C	0.1	7.59	0.12	A	0.1	6.90	0.06	A
Stream B-A	0.1	10.30	0.06	B	0.0	9.68	0.03	A
Stream C-AB	0.3	5.46	0.14	A	0.3	5.29	0.15	A
2033 Base + CD + SP (ST)								
Stream B-C	0.1	7.46	0.12	A	0.1	6.72	0.06	A
Stream B-A	0.1	9.83	0.06	A	0.0	9.17	0.03	A
Stream C-AB	0.3	5.58	0.13	A	0.3	5.34	0.14	A

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

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

File summary

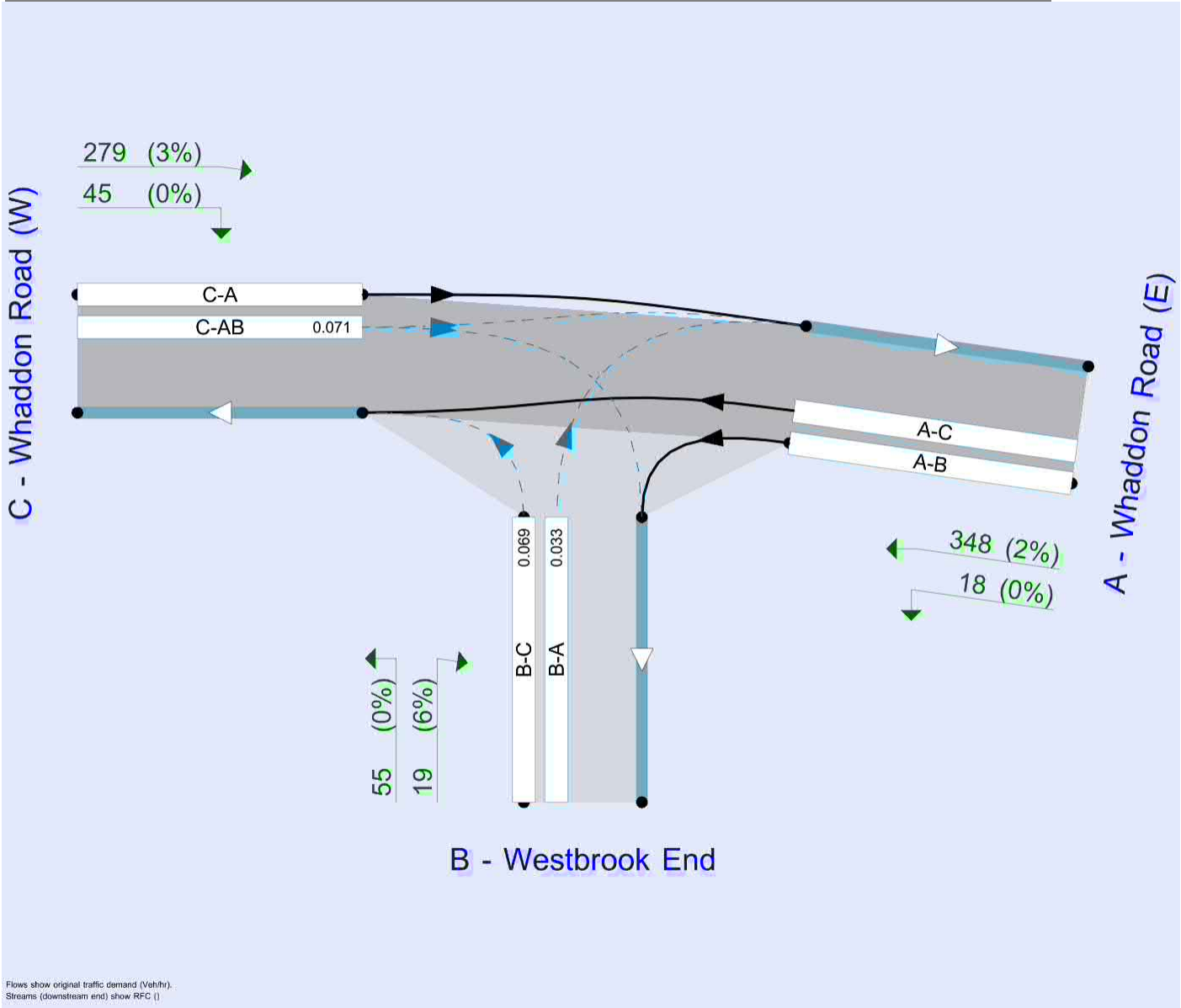
File Description

Title	Whaddon Road/ Westbrook End
Location	51°58'34.02"N, 0°46'21.76"W

Site number	4
Date	09/04/2020
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	CORPINVN01911
Description	

Units

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



The junction diagram reflects the last run of Junctions.

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2020 Base	AM	ONE HOUR	07:30	09:00	15	✓
D2	2020 Base	PM	ONE HOUR	16:45	18:15	15	✓
D3	2026 Base	AM	ONE HOUR	07:30	09:00	15	✓
D4	2026 Base	PM	ONE HOUR	16:45	18:15	15	✓
D5	2026 Base + CD + D	AM	ONE HOUR	07:30	09:00	15	✓
D6	2026 Base + CD + D	PM	ONE HOUR	16:45	18:15	15	✓
D7	2026 Base + CD + D with TP	AM	ONE HOUR	07:30	09:00	15	✓
D8	2026 Base + CD + D with TP	PM	ONE HOUR	16:45	18:15	15	✓
D9	2026 Base + CD + D - ST	AM	ONE HOUR	07:30	09:00	15	✓
D10	2026 Base + CD + D - ST	PM	ONE HOUR	16:45	18:15	15	✓
D11	2026 Base + CD + SP (ST)	AM	ONE HOUR	07:30	09:00	15	✓
D12	2026 Base + CD + SP (ST)	PM	ONE HOUR	16:45	18:15	15	✓
D13	2033 Base	AM	ONE HOUR	07:30	09:00	15	✓
D14	2033 Base	PM	ONE HOUR	16:45	18:15	15	✓
D15	2033 Base + CD + D	AM	ONE HOUR	07:30	09:00	15	✓
D16	2033 Base + CD + D	PM	ONE HOUR	16:45	18:15	15	✓
D17	2033 Base + CD + D with TP	AM	ONE HOUR	07:30	09:00	15	✓
D18	2033 Base + CD + D with TP	PM	ONE HOUR	16:45	18:15	15	✓
D19	2033 Base + CD + D - ST	AM	ONE HOUR	07:30	09:00	15	✓
D20	2033 Base + CD + D - ST	PM	ONE HOUR	16:45	18:15	15	✓
D21	2033 Base + CD + SP (ST)	AM	ONE HOUR	07:30	09:00	15	✓
D22	2033 Base + CD + SP (ST)	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

2020 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - Westbrook End - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Major arm width	C - Whaddon Road (W) - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J4	Whaddon Road/ Westbrook End	T-Junction	Two-way		1.27	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Whaddon Road (E)		Major
B	Westbrook End		Minor
C	Whaddon Road (W)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Whaddon Road (W)	5.80			71.9	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B - Westbrook End	One lane plus flare	9.70	3.90	3.10	2.50	2.40	✓	1.00	24	44

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
J4	B-A	593	0.109	0.275	0.173	0.393
J4	B-C	676	0.105	0.264	-	-
J4	C-B	616	0.241	0.241	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2020 Base	AM	ONE HOUR	07:30	09:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Whaddon Road (E)		ONE HOUR	✓	335	100.000
B - Westbrook End		ONE HOUR	✓	69	100.000
C - Whaddon Road (W)		ONE HOUR	✓	288	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Whaddon Road (E)	B - Westbrook End	C - Whaddon Road (W)
From	A - Whaddon Road (E)	0	17	318
	B - Westbrook End	18	0	51
	C - Whaddon Road (W)	246	42	0

Proportions

		To		
		A - Whaddon Road (E)	B - Westbrook End	C - Whaddon Road (W)
From	A - Whaddon Road (E)	0.00	0.05	0.95
	B - Westbrook End	0.26	0.00	0.74
	C - Whaddon Road (W)	0.85	0.15	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Whaddon Road (E)	B - Westbrook End	C - Whaddon Road (W)
From	A - Whaddon Road (E)	0	0	2
	B - Westbrook End	6	0	0
	C - Whaddon Road (W)	3	0	0

Average PCU Per Veh

		To		
		A - Whaddon Road (E)	B - Westbrook End	C - Whaddon Road (W)
From	A - Whaddon Road (E)	1.000	1.000	1.020
	B - Westbrook End	1.060	1.000	1.000
	C - Whaddon Road (W)	1.030	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - Whaddon Road (E)	07:30-07:45	252	257
	07:45-08:00	301	307
	08:00-08:15	369	376
	08:15-08:30	369	376
	08:30-08:45	301	307
	08:45-09:00	252	257
B - Westbrook End	07:30-07:45	52	53

	07:45-08:00	62	63
	08:00-08:15	76	77
	08:15-08:30	76	77
	08:30-08:45	62	63
	08:45-09:00	52	53
C - Whaddon Road (W)	07:30-07:45	217	222
	07:45-08:00	259	266
	08:00-08:15	317	325
	08:15-08:30	317	325
	08:30-08:45	259	266
	08:45-09:00	217	222

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.10	6.97	0.1	A	47	70
B-A	0.05	9.43	0.1	A	17	25
C-AB	0.10	5.66	0.2	A	58	87
C-A					206	309
A-B					16	23
A-C					292	438

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	38	10	606	0.063	38	0.0	0.1	6.338	A
B-A	14	3	452	0.030	13	0.0	0.0	8.213	A
C-AB	43	11	680	0.064	43	0.0	0.1	5.647	A
C-A	173	43			173				
A-B	13	3			13				
A-C	239	60			239				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	46	11	592	0.077	46	0.1	0.1	6.591	A
B-A	16	4	431	0.038	16	0.0	0.0	8.687	A
C-AB	56	14	694	0.080	55	0.1	0.1	5.633	A
C-A	203	51			203				
A-B	15	4			15				
A-C	286	71			286				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	56	14	573	0.098	56	0.1	0.1	6.969	A
B-A	20	5	401	0.049	20	0.0	0.1	9.431	A
C-AB	75	19	715	0.105	74	0.1	0.2	5.622	A
C-A	242	61			242				
A-B	19	5			19				
A-C	350	88			350				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	56	14	573	0.098	56	0.1	0.1	6.969	A
B-A	20	5	401	0.049	20	0.1	0.1	9.434	A
C-AB	75	19	715	0.105	75	0.2	0.2	5.629	A
C-A	242	61			242				
A-B	19	5			19				
A-C	350	88			350				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	46	11	592	0.077	46	0.1	0.1	6.597	A
B-A	16	4	430	0.038	16	0.1	0.0	8.691	A
C-AB	56	14	694	0.080	56	0.2	0.1	5.650	A
C-A	203	51			203				
A-B	15	4			15				
A-C	286	71			286				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	38	10	606	0.063	38	0.1	0.1	6.348	A
B-A	14	3	451	0.030	14	0.0	0.0	8.223	A
C-AB	44	11	680	0.064	44	0.1	0.1	5.662	A
C-A	173	43			173				
A-B	13	3			13				
A-C	239	60			239				

2020 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - Westbrook End - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Warning	Major arm width	C - Whaddon Road (W) - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J4	Whaddon Road/ Westbrook End	T-Junction	Two-way		1.02	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2020 Base	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Whaddon Road (E)		ONE HOUR	✓	264	100.000
B - Westbrook End		ONE HOUR	✓	38	100.000
C - Whaddon Road (W)		ONE HOUR	✓	341	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
		A - Whaddon Road (E)	B - Westbrook End	C - Whaddon Road (W)
	A - Whaddon Road (E)	0	30	234
	B - Westbrook End	10	0	28
	C - Whaddon Road (W)	296	45	0

Proportions

From	To			
		A - Whaddon Road (E)	B - Westbrook End	C - Whaddon Road (W)
	A - Whaddon Road (E)	0.00	0.11	0.89
	B - Westbrook End	0.26	0.00	0.74
	C - Whaddon Road (W)	0.87	0.13	0.00

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		A - Whaddon Road (E)	B - Westbrook End	C - Whaddon Road (W)
	A - Whaddon Road (E)	0	3	1
	B - Westbrook End	0	0	4
	C - Whaddon Road (W)	1	0	0

Average PCU Per Veh

From	To			
		A - Whaddon Road (E)	B - Westbrook End	C - Whaddon Road (W)
	A - Whaddon Road (E)	1.000	1.030	1.010
	B - Westbrook End	1.000	1.000	1.040
	C - Whaddon Road (W)	1.010	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - Whaddon Road (E)	16:45-17:00	199	201
	17:00-17:15	237	240
	17:15-17:30	291	294
	17:30-17:45	291	294
	17:45-18:00	237	240
	18:00-18:15	199	201
B - Westbrook End	16:45-17:00	29	29
	17:00-17:15	34	35
	17:15-17:30	42	43
	17:30-17:45	42	43
	17:45-18:00	34	35
	18:00-18:15	29	29
C - Whaddon Road (W)	16:45-17:00	257	259
	17:00-17:15	307	309
	17:15-17:30	375	379
	17:30-17:45	375	379
	17:45-18:00	307	309
	18:00-18:15	257	259

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.05	6.59	0.1	A	26	39
B-A	0.02	8.38	0.0	A	9	14
C-AB	0.11	5.38	0.2	A	66	99
C-A					247	370
A-B					28	41
A-C					215	322

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	21	5	600	0.035	21	0.0	0.0	6.211	A
B-A	8	2	489	0.015	7	0.0	0.0	7.474	A
C-AB	49	12	719	0.068	49	0.0	0.1	5.368	A
C-A	208	52			208				
A-B	23	6			23				
A-C	176	44			176				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	25	6	591	0.043	25	0.0	0.0	6.365	A
B-A	9	2	469	0.019	9	0.0	0.0	7.829	A
C-AB	63	16	741	0.085	63	0.1	0.2	5.314	A
C-A	243	61			243				
A-B	27	7			27				
A-C	210	53			210				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	31	8	577	0.053	31	0.0	0.1	6.589	A
B-A	11	3	441	0.025	11	0.0	0.0	8.375	A
C-AB	86	22	771	0.112	86	0.2	0.2	5.254	A
C-A	289	72			289				
A-B	33	8			33				
A-C	258	64			258				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	31	8	577	0.053	31	0.1	0.1	6.589	A
B-A	11	3	441	0.025	11	0.0	0.0	8.376	A
C-AB	86	22	771	0.112	86	0.2	0.2	5.259	A
C-A	289	72			289				
A-B	33	8			33				
A-C	258	64			258				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	25	6	591	0.043	25	0.1	0.0	6.367	A
B-A	9	2	469	0.019	9	0.0	0.0	7.832	A

C-AB	63	16	741	0.086	64	0.2	0.2	5.325	A
C-A	243	61			243				
A-B	27	7			27				
A-C	210	53			210				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	21	5	600	0.035	21	0.0	0.0	6.214	A
B-A	8	2	489	0.015	8	0.0	0.0	7.478	A
C-AB	49	12	719	0.069	49	0.2	0.1	5.379	A
C-A	207	52			207				
A-B	23	6			23				
A-C	176	44			176				

2026 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - Westbrook End - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Major arm width	C - Whaddon Road (W) - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J4	Whaddon Road/ Westbrook End	T-Junction	Two-way		1.29	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2026 Base	AM	ONE HOUR	07:30	09:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Whaddon Road (E)		ONE HOUR	✓	366	100.000
B - Westbrook End		ONE HOUR	✓	75	100.000
C - Whaddon Road (W)		ONE HOUR	✓	324	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
		A - Whaddon Road (E)	B - Westbrook End	C - Whaddon Road (W)
	A - Whaddon Road (E)	0	18	348
	B - Westbrook End	19	0	55
	C - Whaddon Road (W)	279	45	0

Proportions

From	To			
		A - Whaddon Road (E)	B - Westbrook End	C - Whaddon Road (W)
	A - Whaddon Road (E)	0.00	0.05	0.95
	B - Westbrook End	0.26	0.00	0.74
	C - Whaddon Road (W)	0.86	0.14	0.00

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		A - Whaddon Road (E)	B - Westbrook End	C - Whaddon Road (W)
	A - Whaddon Road (E)	0	0	2
	B - Westbrook End	6	0	0
	C - Whaddon Road (W)	3	0	0

Average PCU Per Veh

From	To			
		A - Whaddon Road (E)	B - Westbrook End	C - Whaddon Road (W)
	A - Whaddon Road (E)	1.000	1.000	1.016
	B - Westbrook End	1.056	1.000	1.000
	C - Whaddon Road (W)	1.033	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - Whaddon Road (E)	07:30-07:45	276	280
	07:45-08:00	329	334
	08:00-08:15	403	409
	08:15-08:30	403	409
	08:30-08:45	329	334
	08:45-09:00	276	280
B - Westbrook End	07:30-07:45	56	57
	07:45-08:00	67	68
	08:00-08:15	82	83
	08:15-08:30	82	83
	08:30-08:45	67	68

	08:45-09:00	56	57
C - Whaddon Road (W)	07:30-07:45	244	251
	07:45-08:00	292	300
	08:00-08:15	357	367
	08:15-08:30	357	367
	08:30-08:45	292	300
	08:45-09:00	244	251

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.11	7.16	0.1	A	51	76
B-A	0.06	9.85	0.1	A	18	27
C-AB	0.12	5.61	0.2	A	66	99
C-A					231	347
A-B					17	25
A-C					319	479

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	41	10	600	0.069	41	0.0	0.1	6.444	A
B-A	15	4	443	0.033	14	0.0	0.0	8.407	A
C-AB	49	12	692	0.071	49	0.0	0.1	5.591	A
C-A	195	49			195				
A-B	14	3			14				
A-C	262	65			262				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	50	12	584	0.085	49	0.1	0.1	6.729	A
B-A	17	4	419	0.042	17	0.0	0.0	8.961	A
C-AB	63	16	709	0.089	63	0.1	0.2	5.573	A
C-A	228	57			228				
A-B	17	4			17				
A-C	313	78			313				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service

B-C	61	15	563	0.108	61	0.1	0.1	7.158	A
B-A	21	5	387	0.055	21	0.0	0.1	9.845	A
C-AB	86	22	733	0.118	86	0.2	0.2	5.561	A
C-A	271	68			271				
A-B	20	5			20				
A-C	383	96			383				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	61	15	563	0.108	61	0.1	0.1	7.161	A
B-A	21	5	387	0.055	21	0.1	0.1	9.849	A
C-AB	86	22	733	0.118	86	0.2	0.2	5.571	A
C-A	271	68			271				
A-B	20	5			20				
A-C	383	96			383				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	50	12	584	0.085	50	0.1	0.1	6.735	A
B-A	17	4	419	0.042	18	0.1	0.0	8.966	A
C-AB	63	16	709	0.089	64	0.2	0.2	5.590	A
C-A	228	57			228				
A-B	17	4			17				
A-C	313	78			313				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	41	10	599	0.069	42	0.1	0.1	6.452	A
B-A	15	4	442	0.033	15	0.0	0.0	8.418	A
C-AB	49	12	692	0.071	49	0.2	0.1	5.610	A
C-A	195	49			195				
A-B	14	3			14				
A-C	262	65			262				

2026 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - Westbrook End - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Major arm width	C - Whaddon Road (W) - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J4	Whaddon Road/ Westbrook End	T-Junction	Two-way		1.04	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

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

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Whaddon Road (E)		ONE HOUR	✓	297	100.000
B - Westbrook End		ONE HOUR	✓	41	100.000
C - Whaddon Road (W)		ONE HOUR	✓	374	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Whaddon Road (E)	B - Westbrook End	C - Whaddon Road (W)
	From			
	A - Whaddon Road (E)	0	32	264
	B - Westbrook End	11	0	30
	C - Whaddon Road (W)	325	49	0

Proportions

	To			
		A - Whaddon Road (E)	B - Westbrook End	C - Whaddon Road (W)
	From			
	A - Whaddon Road (E)	0.00	0.11	0.89
	B - Westbrook End	0.26	0.00	0.74
	C - Whaddon Road (W)	0.87	0.13	0.00

Vehicle Mix

Heavy Vehicle Percentages

	To			
From		A - Whaddon Road (E)	B - Westbrook End	C - Whaddon Road (W)
	A - Whaddon Road (E)	0	3	1
	B - Westbrook End	0	0	4
	C - Whaddon Road (W)	1	0	0

Average PCU Per Veh

	To			
From		A - Whaddon Road (E)	B - Westbrook End	C - Whaddon Road (W)
	A - Whaddon Road (E)	1.000	1.033	1.013
	B - Westbrook End	1.000	1.000	1.036
	C - Whaddon Road (W)	1.014	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - Whaddon Road (E)	16:45-17:00	223	227
	17:00-17:15	267	271
	17:15-17:30	327	332
	17:30-17:45	327	332
	17:45-18:00	267	271
	18:00-18:15	223	227
B - Westbrook End	16:45-17:00	31	32
	17:00-17:15	37	38
	17:15-17:30	45	46
	17:30-17:45	45	46
	17:45-18:00	37	38
	18:00-18:15	31	32
C - Whaddon Road (W)	16:45-17:00	282	285
	17:00-17:15	336	340
	17:15-17:30	412	417
	17:30-17:45	412	417
	17:45-18:00	336	340
	18:00-18:15	282	285

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.06	6.71	0.1	A	28	42
B-A	0.03	8.75	0.0	A	10	15
C-AB	0.13	5.35	0.3	A	75	113
C-A					268	402
A-B					30	45
A-C					243	364

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	23	6	596	0.038	23	0.0	0.0	6.272	A
B-A	8	2	477	0.017	8	0.0	0.0	7.673	A
C-AB	55	14	729	0.076	55	0.0	0.1	5.340	A
C-A	226	57			226				
A-B	24	6			24				
A-C	199	50			199				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	27	7	585	0.047	27	0.0	0.0	6.449	A
B-A	10	2	455	0.021	10	0.0	0.0	8.091	A
C-AB	72	18	752	0.096	72	0.1	0.2	5.290	A
C-A	265	66			265				
A-B	29	7			29				
A-C	238	59			238				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	33	8	570	0.059	33	0.0	0.1	6.708	A
B-A	12	3	423	0.028	12	0.0	0.0	8.746	A
C-AB	99	25	786	0.126	99	0.2	0.3	5.236	A
C-A	313	78			313				
A-B	36	9			36				
A-C	291	73			291				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	33	8	570	0.059	33	0.1	0.1	6.708	A
B-A	12	3	423	0.028	12	0.0	0.0	8.748	A
C-AB	99	25	786	0.126	99	0.3	0.3	5.243	A
C-A	313	78			313				
A-B	36	9			36				
A-C	291	73			291				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	27	7	585	0.047	27	0.1	0.0	6.451	A
B-A	10	2	454	0.021	10	0.0	0.0	8.096	A

C-AB	72	18	753	0.096	72	0.3	0.2	5.302	A
C-A	264	66			264				
A-B	29	7			29				
A-C	238	59			238				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	23	6	596	0.038	23	0.0	0.0	6.276	A
B-A	8	2	477	0.017	8	0.0	0.0	7.680	A
C-AB	55	14	729	0.076	56	0.2	0.1	5.354	A
C-A	226	57			226				
A-B	24	6			24				
A-C	199	50			199				

2026 Base + CD + D, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - Westbrook End - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Major arm width	C - Whaddon Road (W) - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J4	Whaddon Road/ Westbrook End	T-Junction	Two-way		1.22	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2026 Base + CD + D	AM	ONE HOUR	07:30	09:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Whaddon Road (E)		ONE HOUR	✓	394	100.000
B - Westbrook End		ONE HOUR	✓	75	100.000
C - Whaddon Road (W)		ONE HOUR	✓	366	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
		A - Whaddon Road (E)	B - Westbrook End	C - Whaddon Road (W)
	A - Whaddon Road (E)	0	18	376
	B - Westbrook End	19	0	55
	C - Whaddon Road (W)	321	45	0

Proportions

From	To			
		A - Whaddon Road (E)	B - Westbrook End	C - Whaddon Road (W)
	A - Whaddon Road (E)	0.00	0.05	0.95
	B - Westbrook End	0.26	0.00	0.74
	C - Whaddon Road (W)	0.88	0.12	0.00

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		A - Whaddon Road (E)	B - Westbrook End	C - Whaddon Road (W)
	A - Whaddon Road (E)	0	0	2
	B - Westbrook End	6	0	0
	C - Whaddon Road (W)	3	0	0

Average PCU Per Veh

From	To			
		A - Whaddon Road (E)	B - Westbrook End	C - Whaddon Road (W)
	A - Whaddon Road (E)	1.000	1.000	1.016
	B - Westbrook End	1.056	1.000	1.000
	C - Whaddon Road (W)	1.033	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - Whaddon Road (E)	07:30-07:45	297	301
	07:45-08:00	355	360
	08:00-08:15	434	441
	08:15-08:30	434	441
	08:30-08:45	355	360
	08:45-09:00	297	301
B - Westbrook End	07:30-07:45	56	57
	07:45-08:00	67	68
	08:00-08:15	82	83
	08:15-08:30	82	83
	08:30-08:45	67	68

	08:45-09:00	56	57
C - Whaddon Road (W)	07:30-07:45	276	284
	07:45-08:00	329	339
	08:00-08:15	403	415
	08:15-08:30	403	415
	08:30-08:45	329	339
	08:45-09:00	276	284

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.11	7.29	0.1	A	51	76
B-A	0.06	10.30	0.1	B	18	27
C-AB	0.12	5.49	0.3	A	71	107
C-A					265	397
A-B					17	25
A-C					345	518

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	41	10	594	0.070	41	0.0	0.1	6.512	A
B-A	15	4	432	0.034	14	0.0	0.0	8.629	A
C-AB	52	13	709	0.073	51	0.0	0.1	5.469	A
C-A	224	56			224				
A-B	14	3			14				
A-C	283	71			283				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	50	12	577	0.086	49	0.1	0.1	6.818	A
B-A	17	4	406	0.043	17	0.0	0.0	9.263	A
C-AB	68	17	730	0.093	67	0.1	0.2	5.431	A
C-A	262	65			262				
A-B	17	4			17				
A-C	338	85			338				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service

B-C	61	15	555	0.109	61	0.1	0.1	7.283	A
B-A	21	5	371	0.058	21	0.0	0.1	10.301	B
C-AB	94	23	760	0.123	93	0.2	0.3	5.401	A
C-A	310	77			310				
A-B	20	5			20				
A-C	414	104			414				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	61	15	555	0.109	61	0.1	0.1	7.286	A
B-A	21	5	371	0.058	21	0.1	0.1	10.304	B
C-AB	94	23	760	0.124	94	0.3	0.3	5.412	A
C-A	309	77			309				
A-B	20	5			20				
A-C	414	104			414				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	50	12	577	0.086	50	0.1	0.1	6.824	A
B-A	17	4	406	0.043	18	0.1	0.0	9.271	A
C-AB	68	17	730	0.093	68	0.3	0.2	5.454	A
C-A	261	65			261				
A-B	17	4			17				
A-C	338	85			338				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	41	10	594	0.070	42	0.1	0.1	6.523	A
B-A	15	4	431	0.034	15	0.0	0.0	8.641	A
C-AB	52	13	710	0.073	52	0.2	0.1	5.489	A
C-A	224	56			224				
A-B	14	3			14				
A-C	283	71			283				

2026 Base + CD + D, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - Westbrook End - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Major arm width	C - Whaddon Road (W) - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J4	Whaddon Road/ Westbrook End	T-Junction	Two-way		0.97	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2026 Base + CD + D	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Whaddon Road (E)		ONE HOUR	✓	343	100.000
B - Westbrook End		ONE HOUR	✓	41	100.000
C - Whaddon Road (W)		ONE HOUR	✓	406	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Whaddon Road (E)	B - Westbrook End	C - Whaddon Road (W)
	From			
	A - Whaddon Road (E)	0	32	311
	B - Westbrook End	11	0	30
	C - Whaddon Road (W)	357	49	0

Proportions

	To			
		A - Whaddon Road (E)	B - Westbrook End	C - Whaddon Road (W)
	From			
	A - Whaddon Road (E)	0.00	0.09	0.91
	B - Westbrook End	0.26	0.00	0.74
	C - Whaddon Road (W)	0.88	0.12	0.00

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		A - Whaddon Road (E)	B - Westbrook End	C - Whaddon Road (W)
	A - Whaddon Road (E)	0	3	1
	B - Westbrook End	0	0	4
	C - Whaddon Road (W)	1	0	0

Average PCU Per Veh

From	To			
		A - Whaddon Road (E)	B - Westbrook End	C - Whaddon Road (W)
	A - Whaddon Road (E)	1.000	1.033	1.013
	B - Westbrook End	1.000	1.000	1.036
	C - Whaddon Road (W)	1.014	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - Whaddon Road (E)	16:45-17:00	258	262
	17:00-17:15	309	313
	17:15-17:30	378	384
	17:30-17:45	378	384
	17:45-18:00	309	313
	18:00-18:15	258	262
B - Westbrook End	16:45-17:00	31	32
	17:00-17:15	37	38
	17:15-17:30	45	46
	17:30-17:45	45	46
	17:45-18:00	37	38
	18:00-18:15	31	32
C - Whaddon Road (W)	16:45-17:00	305	309
	17:00-17:15	365	369
	17:15-17:30	447	452
	17:30-17:45	447	452
	17:45-18:00	365	369
	18:00-18:15	305	309

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.06	6.88	0.1	A	28	42
B-A	0.03	9.20	0.0	A	10	15
C-AB	0.13	5.30	0.3	A	80	120
C-A					292	439
A-B					30	45
A-C					285	428

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	23	6	587	0.039	23	0.0	0.0	6.373	A
B-A	8	2	463	0.018	8	0.0	0.0	7.906	A
C-AB	58	14	738	0.078	57	0.0	0.1	5.289	A
C-A	248	62			248				
A-B	24	6			24				
A-C	234	58			234				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	27	7	574	0.047	27	0.0	0.0	6.577	A
B-A	10	2	438	0.022	10	0.0	0.0	8.405	A
C-AB	76	19	764	0.099	76	0.1	0.2	5.233	A
C-A	289	72			289				
A-B	29	7			29				
A-C	279	70			279				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	33	8	557	0.060	33	0.0	0.1	6.879	A
B-A	12	3	403	0.030	12	0.0	0.0	9.202	A
C-AB	106	26	801	0.132	105	0.2	0.3	5.179	A
C-A	341	85			341				
A-B	36	9			36				
A-C	342	86			342				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	33	8	557	0.060	33	0.1	0.1	6.879	A
B-A	12	3	403	0.030	12	0.0	0.0	9.204	A
C-AB	106	26	801	0.132	106	0.3	0.3	5.189	A
C-A	341	85			341				
A-B	36	9			36				
A-C	342	86			342				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	27	7	574	0.047	27	0.1	0.1	6.579	A
B-A	10	2	438	0.022	10	0.0	0.0	8.411	A

C-AB	76	19	764	0.099	76	0.3	0.2	5.246	A
C-A	289	72			289				
A-B	29	7			29				
A-C	279	70			279				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	23	6	587	0.039	23	0.1	0.0	6.377	A
B-A	8	2	463	0.018	8	0.0	0.0	7.914	A
C-AB	58	14	738	0.079	58	0.2	0.1	5.304	A
C-A	247	62			247				
A-B	24	6			24				
A-C	234	58			234				

2026 Base + CD + D with TP, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - Westbrook End - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Major arm width	C - Whaddon Road (W) - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J4	Whaddon Road/ Westbrook End	T-Junction	Two-way		1.23	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2026 Base + CD + D with TP	AM	ONE HOUR	07:30	09:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Whaddon Road (E)		ONE HOUR	✓	390	100.000
B - Westbrook End		ONE HOUR	✓	75	100.000
C - Whaddon Road (W)		ONE HOUR	✓	360	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
		A - Whaddon Road (E)	B - Westbrook End	C - Whaddon Road (W)
	A - Whaddon Road (E)	0	18	372
	B - Westbrook End	19	0	55
	C - Whaddon Road (W)	314	45	0

Proportions

From	To			
		A - Whaddon Road (E)	B - Westbrook End	C - Whaddon Road (W)
	A - Whaddon Road (E)	0.00	0.05	0.95
	B - Westbrook End	0.26	0.00	0.74
	C - Whaddon Road (W)	0.87	0.13	0.00

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		A - Whaddon Road (E)	B - Westbrook End	C - Whaddon Road (W)
	A - Whaddon Road (E)	0	0	2
	B - Westbrook End	6	0	0
	C - Whaddon Road (W)	3	0	0

Average PCU Per Veh

From	To			
		A - Whaddon Road (E)	B - Westbrook End	C - Whaddon Road (W)
	A - Whaddon Road (E)	1.000	1.000	1.016
	B - Westbrook End	1.056	1.000	1.000
	C - Whaddon Road (W)	1.033	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - Whaddon Road (E)	07:30-07:45	294	298
	07:45-08:00	351	356
	08:00-08:15	430	436
	08:15-08:30	430	436
	08:30-08:45	351	356
	08:45-09:00	294	298
B - Westbrook End	07:30-07:45	56	57
	07:45-08:00	67	68
	08:00-08:15	82	83
	08:15-08:30	82	83
	08:30-08:45	67	68

	08:45-09:00	56	57
C - Whaddon Road (W)	07:30-07:45	271	278
	07:45-08:00	323	332
	08:00-08:15	396	407
	08:15-08:30	396	407
	08:30-08:45	323	332
	08:45-09:00	271	278

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.11	7.27	0.1	A	51	76
B-A	0.06	10.23	0.1	B	18	27
C-AB	0.12	5.51	0.3	A	70	106
C-A					260	389
A-B					17	25
A-C					341	512

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	41	10	595	0.070	41	0.0	0.1	6.502	A
B-A	15	4	433	0.034	14	0.0	0.0	8.594	A
C-AB	51	13	707	0.073	51	0.0	0.1	5.488	A
C-A	219	55			219				
A-B	14	3			14				
A-C	280	70			280				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	50	12	578	0.086	49	0.1	0.1	6.805	A
B-A	17	4	408	0.043	17	0.0	0.0	9.215	A
C-AB	67	17	727	0.092	67	0.1	0.2	5.455	A
C-A	256	64			256				
A-B	17	4			17				
A-C	334	84			334				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service

B-C	61	15	556	0.109	61	0.1	0.1	7.264	A
B-A	21	5	373	0.057	21	0.0	0.1	10.227	B
C-AB	93	23	756	0.122	92	0.2	0.3	5.428	A
C-A	303	76			303				
A-B	20	5			20				
A-C	409	102			409				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	61	15	556	0.109	61	0.1	0.1	7.267	A
B-A	21	5	373	0.057	21	0.1	0.1	10.231	B
C-AB	93	23	756	0.123	93	0.3	0.3	5.436	A
C-A	303	76			303				
A-B	20	5			20				
A-C	409	102			409				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	50	12	578	0.086	50	0.1	0.1	6.808	A
B-A	17	4	408	0.043	18	0.1	0.0	9.224	A
C-AB	67	17	727	0.092	67	0.3	0.2	5.475	A
C-A	256	64			256				
A-B	17	4			17				
A-C	334	84			334				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	41	10	595	0.070	42	0.1	0.1	6.512	A
B-A	15	4	433	0.034	15	0.0	0.0	8.605	A
C-AB	52	13	707	0.073	52	0.2	0.1	5.506	A
C-A	219	55			219				
A-B	14	3			14				
A-C	280	70			280				

2026 Base + CD + D with TP, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - Westbrook End - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Major arm width	C - Whaddon Road (W) - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J4	Whaddon Road/ Westbrook End	T-Junction	Two-way		0.98	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2026 Base + CD + D with TP	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Whaddon Road (E)		ONE HOUR	✓	335	100.000
B - Westbrook End		ONE HOUR	✓	41	100.000
C - Whaddon Road (W)		ONE HOUR	✓	400	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Whaddon Road (E)	B - Westbrook End	C - Whaddon Road (W)
	From			
	A - Whaddon Road (E)	0	32	303
	B - Westbrook End	11	0	30
	C - Whaddon Road (W)	351	49	0

Proportions

	To			
		A - Whaddon Road (E)	B - Westbrook End	C - Whaddon Road (W)
	From			
	A - Whaddon Road (E)	0.00	0.10	0.90
	B - Westbrook End	0.26	0.00	0.74
	C - Whaddon Road (W)	0.88	0.12	0.00

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		A - Whaddon Road (E)	B - Westbrook End	C - Whaddon Road (W)
	A - Whaddon Road (E)	0	3	1
	B - Westbrook End	0	0	4
	C - Whaddon Road (W)	1	0	0

Average PCU Per Veh

From	To			
		A - Whaddon Road (E)	B - Westbrook End	C - Whaddon Road (W)
	A - Whaddon Road (E)	1.000	1.033	1.013
	B - Westbrook End	1.000	1.000	1.036
	C - Whaddon Road (W)	1.014	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - Whaddon Road (E)	16:45-17:00	252	256
	17:00-17:15	301	306
	17:15-17:30	369	375
	17:30-17:45	369	375
	17:45-18:00	301	306
	18:00-18:15	252	256
B - Westbrook End	16:45-17:00	31	32
	17:00-17:15	37	38
	17:15-17:30	45	46
	17:30-17:45	45	46
	17:45-18:00	37	38
	18:00-18:15	31	32
C - Whaddon Road (W)	16:45-17:00	301	305
	17:00-17:15	360	364
	17:15-17:30	441	446
	17:30-17:45	441	446
	17:45-18:00	360	364
	18:00-18:15	301	305

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.06	6.85	0.1	A	28	42
B-A	0.03	9.12	0.0	A	10	15
C-AB	0.13	5.31	0.3	A	79	119
C-A					288	432
A-B					30	45
A-C					278	417

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	23	6	589	0.039	23	0.0	0.0	6.356	A
B-A	8	2	466	0.017	8	0.0	0.0	7.865	A
C-AB	57	14	736	0.078	57	0.0	0.1	5.298	A
C-A	244	61			244				
A-B	24	6			24				
A-C	228	57			228				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	27	7	576	0.047	27	0.0	0.0	6.555	A
B-A	10	2	441	0.022	10	0.0	0.0	8.349	A
C-AB	75	19	762	0.099	75	0.1	0.2	5.242	A
C-A	285	71			285				
A-B	29	7			29				
A-C	272	68			272				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	33	8	559	0.060	33	0.0	0.1	6.849	A
B-A	12	3	407	0.029	12	0.0	0.0	9.120	A
C-AB	105	26	798	0.131	104	0.2	0.3	5.191	A
C-A	336	84			336				
A-B	36	9			36				
A-C	333	83			333				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	33	8	559	0.060	33	0.1	0.1	6.849	A
B-A	12	3	407	0.029	12	0.0	0.0	9.122	A
C-AB	105	26	798	0.131	105	0.3	0.3	5.199	A
C-A	336	84			336				
A-B	36	9			36				
A-C	333	83			333				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	27	7	576	0.047	27	0.1	0.0	6.556	A
B-A	10	2	441	0.022	10	0.0	0.0	8.355	A

C-AB	75	19	762	0.099	76	0.3	0.2	5.256	A
C-A	284	71			284				
A-B	29	7			29				
A-C	272	68			272				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	23	6	589	0.039	23	0.0	0.0	6.362	A
B-A	8	2	466	0.018	8	0.0	0.0	7.873	A
C-AB	57	14	736	0.078	58	0.2	0.1	5.312	A
C-A	244	61			244				
A-B	24	6			24				
A-C	228	57			228				

2026 Base + CD + D - ST, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - Westbrook End - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Major arm width	C - Whaddon Road (W) - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J4	Whaddon Road/ Westbrook End	T-Junction	Two-way		1.20	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2026 Base + CD + D - ST	AM	ONE HOUR	07:30	09:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Whaddon Road (E)		ONE HOUR	✓	405	100.000
B - Westbrook End		ONE HOUR	✓	75	100.000
C - Whaddon Road (W)		ONE HOUR	✓	387	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
		A - Whaddon Road (E)	B - Westbrook End	C - Whaddon Road (W)
	A - Whaddon Road (E)	0	18	387
	B - Westbrook End	19	0	55
	C - Whaddon Road (W)	341	45	0

Proportions

From	To			
		A - Whaddon Road (E)	B - Westbrook End	C - Whaddon Road (W)
	A - Whaddon Road (E)	0.00	0.05	0.95
	B - Westbrook End	0.26	0.00	0.74
	C - Whaddon Road (W)	0.88	0.12	0.00

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		A - Whaddon Road (E)	B - Westbrook End	C - Whaddon Road (W)
	A - Whaddon Road (E)	0	0	2
	B - Westbrook End	0	0	1
	C - Whaddon Road (W)	2	1	0

Average PCU Per Veh

From	To			
		A - Whaddon Road (E)	B - Westbrook End	C - Whaddon Road (W)
	A - Whaddon Road (E)	1.000	1.000	1.021
	B - Westbrook End	1.000	1.000	1.010
	C - Whaddon Road (W)	1.017	1.014	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - Whaddon Road (E)	07:30-07:45	305	311
	07:45-08:00	364	371
	08:00-08:15	446	455
	08:15-08:30	446	455
	08:30-08:45	364	371
	08:45-09:00	305	311
B - Westbrook End	07:30-07:45	56	57
	07:45-08:00	67	67
	08:00-08:15	82	83
	08:15-08:30	82	83
	08:30-08:45	67	67

	08:45-09:00	56	57
C - Whaddon Road (W)	07:30-07:45	291	296
	07:45-08:00	347	353
	08:00-08:15	426	433
	08:15-08:30	426	433
	08:30-08:45	347	353
	08:45-09:00	291	296

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.11	7.42	0.1	A	51	76
B-A	0.06	9.92	0.1	A	18	27
C-AB	0.13	5.47	0.3	A	74	111
C-A					281	421
A-B					17	25
A-C					355	532

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	41	10	585	0.071	41	0.0	0.1	6.612	A
B-A	15	4	451	0.032	15	0.0	0.0	8.252	A
C-AB	53	13	713	0.075	53	0.0	0.1	5.456	A
C-A	238	59			238				
A-B	14	3			14				
A-C	291	73			291				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	50	12	569	0.087	49	0.1	0.1	6.931	A
B-A	17	4	423	0.041	17	0.0	0.0	8.883	A
C-AB	70	18	736	0.095	70	0.1	0.2	5.412	A
C-A	277	69			277				
A-B	17	4			17				
A-C	348	87			348				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service

B-C	61	15	546	0.111	61	0.1	0.1	7.417	A
B-A	21	5	384	0.056	21	0.0	0.1	9.919	A
C-AB	98	25	769	0.128	98	0.2	0.3	5.368	A
C-A	327	82			327				
A-B	20	5			20				
A-C	426	106			426				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	61	15	546	0.111	61	0.1	0.1	7.421	A
B-A	21	5	384	0.056	21	0.1	0.1	9.924	A
C-AB	98	25	769	0.128	98	0.3	0.3	5.376	A
C-A	327	82			327				
A-B	20	5			20				
A-C	426	106			426				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	50	12	569	0.087	50	0.1	0.1	6.934	A
B-A	17	4	423	0.041	18	0.1	0.0	8.889	A
C-AB	70	18	736	0.096	71	0.3	0.2	5.422	A
C-A	277	69			277				
A-B	17	4			17				
A-C	348	87			348				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	41	10	585	0.071	42	0.1	0.1	6.622	A
B-A	15	4	450	0.033	15	0.0	0.0	8.263	A
C-AB	54	13	713	0.075	54	0.2	0.1	5.469	A
C-A	237	59			237				
A-B	14	3			14				
A-C	291	73			291				

2026 Base + CD + D - ST, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - Westbrook End - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Major arm width	C - Whaddon Road (W) - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J4	Whaddon Road/ Westbrook End	T-Junction	Two-way		0.95	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2026 Base + CD + D - ST	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Whaddon Road (E)		ONE HOUR	✓	358	100.000
B - Westbrook End		ONE HOUR	✓	41	100.000
C - Whaddon Road (W)		ONE HOUR	✓	413	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Whaddon Road (E)	B - Westbrook End	C - Whaddon Road (W)
	A - Whaddon Road (E)	0	32	325
	B - Westbrook End	11	0	30
	C - Whaddon Road (W)	364	49	0

Proportions

	To			
		A - Whaddon Road (E)	B - Westbrook End	C - Whaddon Road (W)
	A - Whaddon Road (E)	0.00	0.09	0.91
	B - Westbrook End	0.26	0.00	0.74
	C - Whaddon Road (W)	0.88	0.12	0.00

Vehicle Mix

Heavy Vehicle Percentages

	To			
From		A - Whaddon Road (E)	B - Westbrook End	C - Whaddon Road (W)
	A - Whaddon Road (E)	0	0	1
	B - Westbrook End	0	0	2
	C - Whaddon Road (W)	3	0	0

Average PCU Per Veh

	To			
From		A - Whaddon Road (E)	B - Westbrook End	C - Whaddon Road (W)
	A - Whaddon Road (E)	1.000	1.000	1.009
	B - Westbrook End	1.000	1.000	1.016
	C - Whaddon Road (W)	1.029	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - Whaddon Road (E)	16:45-17:00	269	272
	17:00-17:15	322	324
	17:15-17:30	394	397
	17:30-17:45	394	397
	17:45-18:00	322	324
	18:00-18:15	269	272
B - Westbrook End	16:45-17:00	31	31
	17:00-17:15	37	37
	17:15-17:30	45	46
	17:30-17:45	45	46
	17:45-18:00	37	37
	18:00-18:15	31	31
C - Whaddon Road (W)	16:45-17:00	311	319
	17:00-17:15	371	381
	17:15-17:30	455	466
	17:30-17:45	455	466
	17:45-18:00	371	381
	18:00-18:15	311	319

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.06	6.79	0.1	A	28	42
B-A	0.03	9.36	0.0	A	10	15
C-AB	0.13	5.31	0.3	A	81	122
C-A					298	447
A-B					30	45
A-C					298	448

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	23	6	596	0.038	23	0.0	0.0	6.276	A
B-A	8	2	459	0.018	8	0.0	0.0	7.984	A
C-AB	58	15	738	0.079	58	0.0	0.1	5.289	A
C-A	253	63			253				
A-B	24	6			24				
A-C	245	61			245				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	27	7	582	0.047	27	0.0	0.0	6.483	A
B-A	10	2	433	0.022	10	0.0	0.0	8.510	A
C-AB	77	19	765	0.101	77	0.1	0.2	5.231	A
C-A	295	74			295				
A-B	29	7			29				
A-C	292	73			292				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	33	8	564	0.059	33	0.0	0.1	6.789	A
B-A	12	3	397	0.030	12	0.0	0.0	9.356	A
C-AB	108	27	802	0.134	107	0.2	0.3	5.180	A
C-A	347	87			347				
A-B	36	9			36				
A-C	358	90			358				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	33	8	564	0.059	33	0.1	0.1	6.789	A
B-A	12	3	397	0.030	12	0.0	0.0	9.358	A
C-AB	108	27	802	0.134	108	0.3	0.3	5.193	A
C-A	347	87			347				
A-B	36	9			36				
A-C	358	90			358				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	27	7	582	0.047	27	0.1	0.0	6.487	A
B-A	10	2	433	0.022	10	0.0	0.0	8.516	A

C-AB	77	19	765	0.101	77	0.3	0.2	5.251	A
C-A	294	74			294				
A-B	29	7			29				
A-C	292	73			292				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	23	6	596	0.038	23	0.0	0.0	6.280	A
B-A	8	2	459	0.018	8	0.0	0.0	7.992	A
C-AB	59	15	739	0.079	59	0.2	0.2	5.306	A
C-A	252	63			252				
A-B	24	6			24				
A-C	245	61			245				

2026 Base + CD + SP (ST), AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - Westbrook End - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Major arm width	C - Whaddon Road (W) - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J4	Whaddon Road/ Westbrook End	T-Junction	Two-way		1.26	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2026 Base + CD + SP (ST)	AM	ONE HOUR	07:30	09:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Whaddon Road (E)		ONE HOUR	✓	377	100.000
B - Westbrook End		ONE HOUR	✓	75	100.000
C - Whaddon Road (W)		ONE HOUR	✓	345	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
		A - Whaddon Road (E)	B - Westbrook End	C - Whaddon Road (W)
	A - Whaddon Road (E)	0	18	358
	B - Westbrook End	19	0	55
	C - Whaddon Road (W)	299	45	0

Proportions

From	To			
		A - Whaddon Road (E)	B - Westbrook End	C - Whaddon Road (W)
	A - Whaddon Road (E)	0.00	0.05	0.95
	B - Westbrook End	0.26	0.00	0.74
	C - Whaddon Road (W)	0.87	0.13	0.00

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		A - Whaddon Road (E)	B - Westbrook End	C - Whaddon Road (W)
	A - Whaddon Road (E)	0	0	2
	B - Westbrook End	0	0	1
	C - Whaddon Road (W)	2	1	0

Average PCU Per Veh

From	To			
		A - Whaddon Road (E)	B - Westbrook End	C - Whaddon Road (W)
	A - Whaddon Road (E)	1.000	1.000	1.021
	B - Westbrook End	1.000	1.000	1.010
	C - Whaddon Road (W)	1.017	1.014	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - Whaddon Road (E)	07:30-07:45	284	289
	07:45-08:00	339	345
	08:00-08:15	415	423
	08:15-08:30	415	423
	08:30-08:45	339	345
	08:45-09:00	284	289
B - Westbrook End	07:30-07:45	56	57
	07:45-08:00	67	67
	08:00-08:15	82	83
	08:15-08:30	82	83
	08:30-08:45	67	67

	08:45-09:00	56	57
C - Whaddon Road (W)	07:30-07:45	259	264
	07:45-08:00	310	315
	08:00-08:15	379	386
	08:15-08:30	379	386
	08:30-08:45	310	315
	08:45-09:00	259	264

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.11	7.29	0.1	A	51	76
B-A	0.05	9.48	0.1	A	18	27
C-AB	0.12	5.59	0.2	A	69	103
C-A					247	371
A-B					17	25
A-C					329	493

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	41	10	591	0.070	41	0.0	0.1	6.542	A
B-A	15	4	462	0.032	15	0.0	0.0	8.040	A
C-AB	51	13	695	0.073	50	0.0	0.1	5.581	A
C-A	209	52			209				
A-B	14	3			14				
A-C	270	67			270				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	50	12	576	0.086	49	0.1	0.1	6.839	A
B-A	17	4	437	0.040	17	0.0	0.0	8.590	A
C-AB	66	16	714	0.092	65	0.1	0.2	5.551	A
C-A	244	61			244				
A-B	17	4			17				
A-C	322	81			322				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service

B-C	61	15	554	0.109	61	0.1	0.1	7.289	A
B-A	21	5	401	0.053	21	0.0	0.1	9.476	A
C-AB	90	23	742	0.122	90	0.2	0.2	5.526	A
C-A	289	72			289				
A-B	20	5			20				
A-C	395	99			395				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	61	15	554	0.109	61	0.1	0.1	7.292	A
B-A	21	5	401	0.053	21	0.1	0.1	9.480	A
C-AB	90	23	742	0.122	90	0.2	0.2	5.533	A
C-A	289	72			289				
A-B	20	5			20				
A-C	395	99			395				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	50	12	576	0.086	50	0.1	0.1	6.843	A
B-A	17	4	436	0.040	18	0.1	0.0	8.595	A
C-AB	66	16	714	0.092	66	0.2	0.2	5.562	A
C-A	244	61			244				
A-B	17	4			17				
A-C	322	81			322				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	41	10	591	0.070	42	0.1	0.1	6.552	A
B-A	15	4	462	0.032	15	0.0	0.0	8.050	A
C-AB	51	13	695	0.073	51	0.2	0.1	5.593	A
C-A	209	52			209				
A-B	14	3			14				
A-C	270	67			270				

2026 Base + CD + SP (ST), PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - Westbrook End - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Major arm width	C - Whaddon Road (W) - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J4	Whaddon Road/ Westbrook End	T-Junction	Two-way		1.01	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
D12	2026 Base + CD + SP (ST)	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Whaddon Road (E)		ONE HOUR	✓	311	100.000
B - Westbrook End		ONE HOUR	✓	41	100.000
C - Whaddon Road (W)		ONE HOUR	✓	382	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Whaddon Road (E)	B - Westbrook End	C - Whaddon Road (W)
From	A - Whaddon Road (E)	0	32	279
	B - Westbrook End	11	0	30
	C - Whaddon Road (W)	333	49	0

Proportions

	To			
		A - Whaddon Road (E)	B - Westbrook End	C - Whaddon Road (W)
From	A - Whaddon Road (E)	0.00	0.10	0.90
	B - Westbrook End	0.26	0.00	0.74
	C - Whaddon Road (W)	0.87	0.13	0.00

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		A - Whaddon Road (E)	B - Westbrook End	C - Whaddon Road (W)
	A - Whaddon Road (E)	0	0	1
	B - Westbrook End	0	0	2
	C - Whaddon Road (W)	3	0	0

Average PCU Per Veh

From	To			
		A - Whaddon Road (E)	B - Westbrook End	C - Whaddon Road (W)
	A - Whaddon Road (E)	1.000	1.000	1.009
	B - Westbrook End	1.000	1.000	1.016
	C - Whaddon Road (W)	1.029	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - Whaddon Road (E)	16:45-17:00	234	236
	17:00-17:15	280	282
	17:15-17:30	343	346
	17:30-17:45	343	346
	17:45-18:00	280	282
	18:00-18:15	234	236
B - Westbrook End	16:45-17:00	31	31
	17:00-17:15	37	37
	17:15-17:30	45	46
	17:30-17:45	45	46
	17:45-18:00	37	37
	18:00-18:15	31	31
C - Whaddon Road (W)	16:45-17:00	287	295
	17:00-17:15	343	352
	17:15-17:30	420	431
	17:30-17:45	420	431
	17:45-18:00	343	352
	18:00-18:15	287	295

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.06	6.62	0.1	A	28	42
B-A	0.03	8.89	0.0	A	10	15
C-AB	0.13	5.36	0.3	A	77	115
C-A					274	411
A-B					30	45
A-C					256	384

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	23	6	605	0.038	23	0.0	0.0	6.176	A
B-A	8	2	473	0.017	8	0.0	0.0	7.744	A
C-AB	56	14	729	0.077	55	0.0	0.1	5.339	A
C-A	232	58			232				
A-B	24	6			24				
A-C	210	52			210				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	27	7	593	0.046	27	0.0	0.0	6.356	A
B-A	10	2	449	0.022	10	0.0	0.0	8.188	A
C-AB	73	18	754	0.097	73	0.1	0.2	5.286	A
C-A	270	68			270				
A-B	29	7			29				
A-C	251	63			251				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	33	8	577	0.058	33	0.0	0.1	6.620	A
B-A	12	3	417	0.029	12	0.0	0.0	8.885	A
C-AB	101	25	788	0.128	100	0.2	0.3	5.238	A
C-A	320	80			320				
A-B	36	9			36				
A-C	307	77			307				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	33	8	577	0.058	33	0.1	0.1	6.620	A
B-A	12	3	417	0.029	12	0.0	0.0	8.887	A
C-AB	101	25	788	0.128	101	0.3	0.3	5.246	A
C-A	319	80			319				
A-B	36	9			36				
A-C	307	77			307				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	27	7	593	0.046	27	0.1	0.0	6.360	A
B-A	10	2	449	0.022	10	0.0	0.0	8.191	A

C-AB	73	18	754	0.097	73	0.3	0.2	5.304	A
C-A	270	68			270				
A-B	29	7			29				
A-C	251	63			251				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	23	6	605	0.038	23	0.0	0.0	6.182	A
B-A	8	2	473	0.017	8	0.0	0.0	7.750	A
C-AB	56	14	730	0.077	56	0.2	0.1	5.356	A
C-A	231	58			231				
A-B	24	6			24				
A-C	210	52			210				

2033 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - Westbrook End - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Major arm width	C - Whaddon Road (W) - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J4	Whaddon Road/ Westbrook End	T-Junction	Two-way		1.32	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2033 Base	AM	ONE HOUR	07:30	09:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Whaddon Road (E)		ONE HOUR	✓	389	100.000
B - Westbrook End		ONE HOUR	✓	79	100.000
C - Whaddon Road (W)		ONE HOUR	✓	346	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
		A - Whaddon Road (E)	B - Westbrook End	C - Whaddon Road (W)
	A - Whaddon Road (E)	0	19	370
	B - Westbrook End	21	0	58
	C - Whaddon Road (W)	298	48	0

Proportions

From	To			
		A - Whaddon Road (E)	B - Westbrook End	C - Whaddon Road (W)
	A - Whaddon Road (E)	0.00	0.05	0.95
	B - Westbrook End	0.26	0.00	0.74
	C - Whaddon Road (W)	0.86	0.14	0.00

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		A - Whaddon Road (E)	B - Westbrook End	C - Whaddon Road (W)
	A - Whaddon Road (E)	0	0	2
	B - Westbrook End	6	0	0
	C - Whaddon Road (W)	3	0	0

Average PCU Per Veh

From	To			
		A - Whaddon Road (E)	B - Westbrook End	C - Whaddon Road (W)
	A - Whaddon Road (E)	1.000	1.000	1.016
	B - Westbrook End	1.056	1.000	1.000
	C - Whaddon Road (W)	1.033	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - Whaddon Road (E)	07:30-07:45	293	297
	07:45-08:00	350	355
	08:00-08:15	429	435
	08:15-08:30	429	435
	08:30-08:45	350	355
	08:45-09:00	293	297
B - Westbrook End	07:30-07:45	60	60
	07:45-08:00	71	72
	08:00-08:15	87	88
	08:15-08:30	87	88
	08:30-08:45	71	72

	08:45-09:00	60	60
C - Whaddon Road (W)	07:30-07:45	261	268
	07:45-08:00	311	320
	08:00-08:15	381	392
	08:15-08:30	381	392
	08:30-08:45	311	320
	08:45-09:00	261	268

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.12	7.32	0.1	A	54	81
B-A	0.06	10.20	0.1	B	19	28
C-AB	0.13	5.60	0.3	A	73	109
C-A					245	367
A-B					18	27
A-C					339	509

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	44	11	595	0.074	44	0.0	0.1	6.532	A
B-A	16	4	435	0.036	15	0.0	0.0	8.581	A
C-AB	53	13	698	0.077	53	0.0	0.1	5.577	A
C-A	207	52			207				
A-B	15	4			15				
A-C	278	70			278				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	53	13	578	0.091	53	0.1	0.1	6.845	A
B-A	19	5	410	0.045	19	0.0	0.0	9.196	A
C-AB	69	17	717	0.097	69	0.1	0.2	5.560	A
C-A	242	60			242				
A-B	18	4			18				
A-C	332	83			332				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service

B-C	64	16	556	0.116	64	0.1	0.1	7.320	A
B-A	23	6	376	0.061	23	0.0	0.1	10.201	B
C-AB	95	24	743	0.128	95	0.2	0.3	5.556	A
C-A	286	71			286				
A-B	21	5			21				
A-C	407	102			407				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	64	16	556	0.116	64	0.1	0.1	7.323	A
B-A	23	6	375	0.061	23	0.1	0.1	10.205	B
C-AB	95	24	743	0.128	95	0.3	0.3	5.567	A
C-A	286	71			286				
A-B	21	5			21				
A-C	407	102			407				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	53	13	578	0.091	53	0.1	0.1	6.848	A
B-A	19	5	410	0.045	19	0.1	0.0	9.204	A
C-AB	70	17	717	0.097	70	0.3	0.2	5.579	A
C-A	242	60			242				
A-B	18	4			18				
A-C	332	83			332				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	44	11	595	0.074	44	0.1	0.1	6.543	A
B-A	16	4	435	0.036	16	0.0	0.0	8.594	A
C-AB	54	13	698	0.077	54	0.2	0.1	5.597	A
C-A	207	52			207				
A-B	15	4			15				
A-C	278	70			278				

2033 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - Westbrook End - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Major arm width	C - Whaddon Road (W) - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J4	Whaddon Road/ Westbrook End	T-Junction	Two-way		1.06	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2033 Base	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Whaddon Road (E)		ONE HOUR	✓	318	100.000
B - Westbrook End		ONE HOUR	✓	44	100.000
C - Whaddon Road (W)		ONE HOUR	✓	400	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Whaddon Road (E)	B - Westbrook End	C - Whaddon Road (W)
	From			
	A - Whaddon Road (E)	0	35	283
	B - Westbrook End	12	0	32
	C - Whaddon Road (W)	348	52	0

Proportions

	To			
		A - Whaddon Road (E)	B - Westbrook End	C - Whaddon Road (W)
	From			
	A - Whaddon Road (E)	0.00	0.11	0.89
	B - Westbrook End	0.26	0.00	0.74
	C - Whaddon Road (W)	0.87	0.13	0.00

Vehicle Mix

Heavy Vehicle Percentages

	To			
From		A - Whaddon Road (E)	B - Westbrook End	C - Whaddon Road (W)
	A - Whaddon Road (E)	0	3	1
	B - Westbrook End	0	0	4
	C - Whaddon Road (W)	1	0	0

Average PCU Per Veh

	To			
From		A - Whaddon Road (E)	B - Westbrook End	C - Whaddon Road (W)
	A - Whaddon Road (E)	1.000	1.033	1.013
	B - Westbrook End	1.000	1.000	1.036
	C - Whaddon Road (W)	1.014	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - Whaddon Road (E)	16:45-17:00	239	243
	17:00-17:15	286	290
	17:15-17:30	350	355
	17:30-17:45	350	355
	17:45-18:00	286	290
	18:00-18:15	239	243
B - Westbrook End	16:45-17:00	33	34
	17:00-17:15	39	40
	17:15-17:30	48	50
	17:30-17:45	48	50
	17:45-18:00	39	40
	18:00-18:15	33	34
C - Whaddon Road (W)	16:45-17:00	301	304
	17:00-17:15	359	364
	17:15-17:30	440	445
	17:30-17:45	440	445
	17:45-18:00	359	364
	18:00-18:15	301	304

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.06	6.81	0.1	A	30	44
B-A	0.03	9.03	0.0	A	11	16
C-AB	0.14	5.34	0.3	A	84	125
C-A					283	425
A-B					32	48
A-C					260	390

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	24	6	592	0.041	24	0.0	0.0	6.334	A
B-A	9	2	469	0.019	9	0.0	0.0	7.816	A
C-AB	61	15	737	0.082	60	0.0	0.1	5.319	A
C-A	240	60			240				
A-B	26	7			26				
A-C	213	53			213				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	29	7	580	0.050	29	0.0	0.1	6.528	A
B-A	10	3	445	0.023	10	0.0	0.0	8.283	A
C-AB	79	20	763	0.104	79	0.1	0.2	5.271	A
C-A	280	70			280				
A-B	31	8			31				
A-C	255	64			255				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	36	9	564	0.063	36	0.1	0.1	6.812	A
B-A	13	3	412	0.031	13	0.0	0.0	9.024	A
C-AB	110	28	799	0.138	110	0.2	0.3	5.228	A
C-A	330	82			330				
A-B	38	10			38				
A-C	312	78			312				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	36	9	564	0.063	36	0.1	0.1	6.813	A
B-A	13	3	412	0.031	13	0.0	0.0	9.026	A
C-AB	110	28	799	0.138	110	0.3	0.3	5.234	A
C-A	330	82			330				
A-B	38	10			38				
A-C	312	78			312				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	29	7	580	0.050	29	0.1	0.1	6.529	A
B-A	10	3	445	0.023	10	0.0	0.0	8.288	A

C-AB	80	20	763	0.104	80	0.3	0.2	5.283	A
C-A	280	70			280				
A-B	31	8			31				
A-C	255	64			255				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	24	6	592	0.041	24	0.1	0.0	6.338	A
B-A	9	2	469	0.019	9	0.0	0.0	7.822	A
C-AB	61	15	737	0.083	61	0.2	0.2	5.335	A
C-A	240	60			240				
A-B	26	7			26				
A-C	213	53			213				

2033 Base + CD + D, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - Westbrook End - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Major arm width	C - Whaddon Road (W) - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J4	Whaddon Road/ Westbrook End	T-Junction	Two-way		1.26	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D15	2033 Base + CD + D	AM	ONE HOUR	07:30	09:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Whaddon Road (E)		ONE HOUR	✓	418	100.000
B - Westbrook End		ONE HOUR	✓	79	100.000
C - Whaddon Road (W)		ONE HOUR	✓	388	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
		A - Whaddon Road (E)	B - Westbrook End	C - Whaddon Road (W)
	A - Whaddon Road (E)	0	19	398
	B - Westbrook End	21	0	58
	C - Whaddon Road (W)	340	48	0

Proportions

From	To			
		A - Whaddon Road (E)	B - Westbrook End	C - Whaddon Road (W)
	A - Whaddon Road (E)	0.00	0.05	0.95
	B - Westbrook End	0.26	0.00	0.74
	C - Whaddon Road (W)	0.88	0.12	0.00

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		A - Whaddon Road (E)	B - Westbrook End	C - Whaddon Road (W)
	A - Whaddon Road (E)	0	0	2
	B - Westbrook End	6	0	0
	C - Whaddon Road (W)	3	0	0

Average PCU Per Veh

From	To			
		A - Whaddon Road (E)	B - Westbrook End	C - Whaddon Road (W)
	A - Whaddon Road (E)	1.000	1.000	1.016
	B - Westbrook End	1.056	1.000	1.000
	C - Whaddon Road (W)	1.033	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - Whaddon Road (E)	07:30-07:45	314	319
	07:45-08:00	375	381
	08:00-08:15	460	467
	08:15-08:30	460	467
	08:30-08:45	375	381
	08:45-09:00	314	319
B - Westbrook End	07:30-07:45	60	60
	07:45-08:00	71	72
	08:00-08:15	87	88
	08:15-08:30	87	88
	08:30-08:45	71	72

	08:45-09:00	60	60
C - Whaddon Road (W)	07:30-07:45	292	301
	07:45-08:00	349	359
	08:00-08:15	427	440
	08:15-08:30	427	440
	08:30-08:45	349	359
	08:45-09:00	292	301

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.12	7.45	0.1	A	54	81
B-A	0.06	10.69	0.1	B	19	28
C-AB	0.13	5.47	0.3	A	78	117
C-A					278	417
A-B					18	27
A-C					365	548

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	44	11	589	0.075	44	0.0	0.1	6.602	A
B-A	16	4	424	0.037	15	0.0	0.0	8.812	A
C-AB	56	14	716	0.079	56	0.0	0.1	5.456	A
C-A	236	59			236				
A-B	15	4			15				
A-C	300	75			300				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	53	13	571	0.092	53	0.1	0.1	6.937	A
B-A	19	5	397	0.047	19	0.0	0.0	9.517	A
C-AB	74	19	738	0.101	74	0.1	0.2	5.421	A
C-A	275	69			275				
A-B	18	4			18				
A-C	358	89			358				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service

B-C	64	16	547	0.118	64	0.1	0.1	7.451	A
B-A	23	6	359	0.063	23	0.0	0.1	10.687	B
C-AB	104	26	770	0.135	103	0.2	0.3	5.401	A
C-A	324	81			324				
A-B	21	5			21				
A-C	438	110			438				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	64	16	547	0.118	64	0.1	0.1	7.455	A
B-A	23	6	359	0.063	23	0.1	0.1	10.694	B
C-AB	104	26	770	0.135	104	0.3	0.3	5.413	A
C-A	323	81			323				
A-B	21	5			21				
A-C	438	110			438				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	53	13	571	0.092	53	0.1	0.1	6.941	A
B-A	19	5	397	0.047	19	0.1	0.0	9.528	A
C-AB	74	19	738	0.101	75	0.3	0.2	5.446	A
C-A	275	69			275				
A-B	18	4			18				
A-C	358	89			358				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	44	11	589	0.075	44	0.1	0.1	6.610	A
B-A	16	4	424	0.037	16	0.0	0.0	8.825	A
C-AB	57	14	716	0.079	57	0.2	0.1	5.475	A
C-A	235	59			235				
A-B	15	4			15				
A-C	300	75			300				

2033 Base + CD + D, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - Westbrook End - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Major arm width	C - Whaddon Road (W) - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J4	Whaddon Road/ Westbrook End	T-Junction	Two-way		1.01	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
D16	2033 Base + CD + D	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Whaddon Road (E)		ONE HOUR	✓	364	100.000
B - Westbrook End		ONE HOUR	✓	44	100.000
C - Whaddon Road (W)		ONE HOUR	✓	431	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Whaddon Road (E)	B - Westbrook End	C - Whaddon Road (W)
From	A - Whaddon Road (E)	0	35	330
	B - Westbrook End	12	0	32
	C - Whaddon Road (W)	379	52	0

Proportions

	To			
		A - Whaddon Road (E)	B - Westbrook End	C - Whaddon Road (W)
From	A - Whaddon Road (E)	0.00	0.09	0.91
	B - Westbrook End	0.26	0.00	0.74
	C - Whaddon Road (W)	0.88	0.12	0.00

Vehicle Mix

Heavy Vehicle Percentages

	To			
From		A - Whaddon Road (E)	B - Westbrook End	C - Whaddon Road (W)
	A - Whaddon Road (E)	0	3	1
	B - Westbrook End	0	0	4
	C - Whaddon Road (W)	1	0	0

Average PCU Per Veh

	To			
From		A - Whaddon Road (E)	B - Westbrook End	C - Whaddon Road (W)
	A - Whaddon Road (E)	1.000	1.033	1.013
	B - Westbrook End	1.000	1.000	1.036
	C - Whaddon Road (W)	1.014	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - Whaddon Road (E)	16:45-17:00	274	278
	17:00-17:15	328	332
	17:15-17:30	401	407
	17:30-17:45	401	407
	17:45-18:00	328	332
	18:00-18:15	274	278
B - Westbrook End	16:45-17:00	33	34
	17:00-17:15	39	40
	17:15-17:30	48	50
	17:30-17:45	48	50
	17:45-18:00	39	40
	18:00-18:15	33	34
C - Whaddon Road (W)	16:45-17:00	325	328
	17:00-17:15	388	392
	17:15-17:30	475	480
	17:30-17:45	475	480
	17:45-18:00	388	392
	18:00-18:15	325	328

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.06	6.99	0.1	A	30	44
B-A	0.03	9.51	0.0	A	11	16
C-AB	0.15	5.28	0.3	A	88	133
C-A					307	461
A-B					32	48
A-C					303	454

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	24	6	583	0.042	24	0.0	0.0	6.437	A
B-A	9	2	455	0.019	9	0.0	0.0	8.059	A
C-AB	63	16	746	0.085	63	0.0	0.2	5.269	A
C-A	261	65			261				
A-B	26	7			26				
A-C	248	62			248				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	29	7	570	0.051	29	0.0	0.1	6.659	A
B-A	10	3	428	0.024	10	0.0	0.0	8.613	A
C-AB	84	21	774	0.108	84	0.2	0.2	5.216	A
C-A	304	76			304				
A-B	31	8			31				
A-C	296	74			296				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	36	9	551	0.065	36	0.1	0.1	6.989	A
B-A	13	3	391	0.032	13	0.0	0.0	9.509	A
C-AB	118	29	814	0.145	118	0.2	0.3	5.176	A
C-A	357	89			357				
A-B	38	10			38				
A-C	363	91			363				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	36	9	551	0.065	36	0.1	0.1	6.989	A
B-A	13	3	391	0.032	13	0.0	0.0	9.512	A
C-AB	118	30	814	0.145	118	0.3	0.3	5.182	A
C-A	357	89			357				
A-B	38	10			38				
A-C	363	91			363				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	29	7	570	0.051	29	0.1	0.1	6.660	A
B-A	10	3	428	0.024	10	0.0	0.0	8.618	A

C-AB	84	21	774	0.108	84	0.3	0.2	5.231	A
C-A	304	76			304				
A-B	31	8			31				
A-C	296	74			296				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	24	6	583	0.042	24	0.1	0.0	6.441	A
B-A	9	2	455	0.019	9	0.0	0.0	8.066	A
C-AB	64	16	746	0.085	64	0.2	0.2	5.284	A
C-A	261	65			261				
A-B	26	7			26				
A-C	248	62			248				

2033 Base + CD + D with TP, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - Westbrook End - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Major arm width	C - Whaddon Road (W) - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J4	Whaddon Road/ Westbrook End	T-Junction	Two-way		1.27	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D17	2033 Base + CD + D with TP	AM	ONE HOUR	07:30	09:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Whaddon Road (E)		ONE HOUR	✓	413	100.000
B - Westbrook End		ONE HOUR	✓	79	100.000
C - Whaddon Road (W)		ONE HOUR	✓	381	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
		A - Whaddon Road (E)	B - Westbrook End	C - Whaddon Road (W)
	A - Whaddon Road (E)	0	19	394
	B - Westbrook End	21	0	58
	C - Whaddon Road (W)	333	48	0

Proportions

From	To			
		A - Whaddon Road (E)	B - Westbrook End	C - Whaddon Road (W)
	A - Whaddon Road (E)	0.00	0.05	0.95
	B - Westbrook End	0.26	0.00	0.74
	C - Whaddon Road (W)	0.87	0.13	0.00

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		A - Whaddon Road (E)	B - Westbrook End	C - Whaddon Road (W)
	A - Whaddon Road (E)	0	0	2
	B - Westbrook End	6	0	0
	C - Whaddon Road (W)	3	0	0

Average PCU Per Veh

From	To			
		A - Whaddon Road (E)	B - Westbrook End	C - Whaddon Road (W)
	A - Whaddon Road (E)	1.000	1.000	1.016
	B - Westbrook End	1.056	1.000	1.000
	C - Whaddon Road (W)	1.033	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - Whaddon Road (E)	07:30-07:45	311	316
	07:45-08:00	372	377
	08:00-08:15	455	462
	08:15-08:30	455	462
	08:30-08:45	372	377
	08:45-09:00	311	316
B - Westbrook End	07:30-07:45	60	60
	07:45-08:00	71	72
	08:00-08:15	87	88
	08:15-08:30	87	88
	08:30-08:45	71	72

	08:45-09:00	60	60
C - Whaddon Road (W)	07:30-07:45	287	295
	07:45-08:00	343	353
	08:00-08:15	420	432
	08:15-08:30	420	432
	08:30-08:45	343	353
	08:45-09:00	287	295

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.12	7.43	0.1	A	54	81
B-A	0.06	10.62	0.1	B	19	28
C-AB	0.13	5.50	0.3	A	77	116
C-A					273	409
A-B					18	27
A-C					361	542

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	44	11	590	0.075	44	0.0	0.1	6.591	A
B-A	16	4	425	0.037	15	0.0	0.0	8.776	A
C-AB	56	14	713	0.079	55	0.0	0.1	5.475	A
C-A	231	58			231				
A-B	15	4			15				
A-C	297	74			297				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	53	13	573	0.092	53	0.1	0.1	6.923	A
B-A	19	5	399	0.047	19	0.0	0.0	9.466	A
C-AB	73	18	734	0.100	73	0.1	0.2	5.445	A
C-A	270	67			270				
A-B	18	4			18				
A-C	354	89			354				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service

B-C	64	16	549	0.117	64	0.1	0.1	7.431	A
B-A	23	6	362	0.063	23	0.0	0.1	10.608	B
C-AB	102	26	765	0.134	102	0.2	0.3	5.425	A
C-A	318	79			318				
A-B	21	5			21				
A-C	434	108			434				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	64	16	549	0.117	64	0.1	0.1	7.435	A
B-A	23	6	362	0.063	23	0.1	0.1	10.615	B
C-AB	102	26	766	0.134	102	0.3	0.3	5.437	A
C-A	318	79			318				
A-B	21	5			21				
A-C	434	108			434				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	53	13	572	0.092	53	0.1	0.1	6.927	A
B-A	19	5	399	0.047	19	0.1	0.0	9.475	A
C-AB	74	18	735	0.100	74	0.3	0.2	5.467	A
C-A	269	67			269				
A-B	18	4			18				
A-C	354	89			354				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	44	11	590	0.075	44	0.1	0.1	6.602	A
B-A	16	4	425	0.037	16	0.0	0.0	8.790	A
C-AB	56	14	713	0.079	56	0.2	0.1	5.496	A
C-A	231	58			231				
A-B	15	4			15				
A-C	297	74			297				

2033 Base + CD + D with TP, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - Westbrook End - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Major arm width	C - Whaddon Road (W) - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J4	Whaddon Road/ Westbrook End	T-Junction	Two-way		1.02	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D18	2033 Base + CD + D with TP	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Whaddon Road (E)		ONE HOUR	✓	356	100.000
B - Westbrook End		ONE HOUR	✓	44	100.000
C - Whaddon Road (W)		ONE HOUR	✓	426	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Whaddon Road (E)	B - Westbrook End	C - Whaddon Road (W)
	From			
	A - Whaddon Road (E)	0	35	322
	B - Westbrook End	12	0	32
	C - Whaddon Road (W)	374	52	0

Proportions

	To			
		A - Whaddon Road (E)	B - Westbrook End	C - Whaddon Road (W)
	From			
	A - Whaddon Road (E)	0.00	0.10	0.90
	B - Westbrook End	0.26	0.00	0.74
	C - Whaddon Road (W)	0.88	0.12	0.00

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		A - Whaddon Road (E)	B - Westbrook End	C - Whaddon Road (W)
	A - Whaddon Road (E)	0	3	1
	B - Westbrook End	0	0	4
	C - Whaddon Road (W)	1	0	0

Average PCU Per Veh

From	To			
		A - Whaddon Road (E)	B - Westbrook End	C - Whaddon Road (W)
	A - Whaddon Road (E)	1.000	1.033	1.013
	B - Westbrook End	1.000	1.000	1.036
	C - Whaddon Road (W)	1.014	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - Whaddon Road (E)	16:45-17:00	268	272
	17:00-17:15	320	325
	17:15-17:30	392	398
	17:30-17:45	392	398
	17:45-18:00	320	325
	18:00-18:15	268	272
B - Westbrook End	16:45-17:00	33	34
	17:00-17:15	39	40
	17:15-17:30	48	50
	17:30-17:45	48	50
	17:45-18:00	39	40
	18:00-18:15	33	34
C - Whaddon Road (W)	16:45-17:00	320	324
	17:00-17:15	383	387
	17:15-17:30	469	474
	17:30-17:45	469	474
	17:45-18:00	383	387
	18:00-18:15	320	324

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.06	6.96	0.1	A	30	44
B-A	0.03	9.42	0.0	A	11	16
C-AB	0.14	5.29	0.3	A	88	131
C-A					303	455
A-B					32	48
A-C					295	443

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	24	6	585	0.042	24	0.0	0.0	6.419	A
B-A	9	2	458	0.019	9	0.0	0.0	8.016	A
C-AB	63	16	744	0.084	62	0.0	0.2	5.278	A
C-A	258	64			258				
A-B	26	7			26				
A-C	242	61			242				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	29	7	571	0.051	29	0.0	0.1	6.636	A
B-A	10	3	431	0.024	10	0.0	0.0	8.554	A
C-AB	83	21	772	0.108	83	0.2	0.2	5.227	A
C-A	300	75			300				
A-B	31	8			31				
A-C	289	72			289				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	36	9	553	0.064	36	0.1	0.1	6.958	A
B-A	13	3	395	0.032	13	0.0	0.0	9.422	A
C-AB	117	29	811	0.144	116	0.2	0.3	5.185	A
C-A	352	88			352				
A-B	38	10			38				
A-C	354	89			354				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	36	9	553	0.064	36	0.1	0.1	6.958	A
B-A	13	3	395	0.032	13	0.0	0.0	9.424	A
C-AB	117	29	811	0.144	117	0.3	0.3	5.193	A
C-A	352	88			352				
A-B	38	10			38				
A-C	354	89			354				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	29	7	571	0.051	29	0.1	0.1	6.637	A
B-A	10	3	431	0.024	10	0.0	0.0	8.561	A

C-AB	83	21	772	0.108	84	0.3	0.2	5.240	A
C-A	299	75			299				
A-B	31	8			31				
A-C	289	72			289				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	24	6	585	0.042	24	0.1	0.0	6.423	A
B-A	9	2	457	0.019	9	0.0	0.0	8.025	A
C-AB	63	16	745	0.085	63	0.2	0.2	5.295	A
C-A	257	64			257				
A-B	26	7			26				
A-C	242	61			242				

2033 Base + CD + D - ST, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - Westbrook End - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Major arm width	C - Whaddon Road (W) - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J4	Whaddon Road/ Westbrook End	T-Junction	Two-way		1.24	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D19	2033 Base + CD + D - ST	AM	ONE HOUR	07:30	09:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Whaddon Road (E)		ONE HOUR	✓	428	100.000
B - Westbrook End		ONE HOUR	✓	79	100.000
C - Whaddon Road (W)		ONE HOUR	✓	408	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
		A - Whaddon Road (E)	B - Westbrook End	C - Whaddon Road (W)
	A - Whaddon Road (E)	0	19	409
	B - Westbrook End	21	0	58
	C - Whaddon Road (W)	360	48	0

Proportions

From	To			
		A - Whaddon Road (E)	B - Westbrook End	C - Whaddon Road (W)
	A - Whaddon Road (E)	0.00	0.05	0.95
	B - Westbrook End	0.26	0.00	0.74
	C - Whaddon Road (W)	0.88	0.12	0.00

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		A - Whaddon Road (E)	B - Westbrook End	C - Whaddon Road (W)
	A - Whaddon Road (E)	0	0	2
	B - Westbrook End	0	0	1
	C - Whaddon Road (W)	2	1	0

Average PCU Per Veh

From	To			
		A - Whaddon Road (E)	B - Westbrook End	C - Whaddon Road (W)
	A - Whaddon Road (E)	1.000	1.000	1.021
	B - Westbrook End	1.000	1.000	1.010
	C - Whaddon Road (W)	1.017	1.014	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - Whaddon Road (E)	07:30-07:45	323	329
	07:45-08:00	385	393
	08:00-08:15	472	481
	08:15-08:30	472	481
	08:30-08:45	385	393
	08:45-09:00	323	329
B - Westbrook End	07:30-07:45	60	60
	07:45-08:00	71	72
	08:00-08:15	87	88
	08:15-08:30	87	88
	08:30-08:45	71	72

	08:45-09:00	60	60
C - Whaddon Road (W)	07:30-07:45	307	313
	07:45-08:00	367	373
	08:00-08:15	450	457
	08:15-08:30	450	457
	08:30-08:45	367	373
	08:45-09:00	307	313

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.12	7.59	0.1	A	54	81
B-A	0.06	10.30	0.1	B	19	28
C-AB	0.14	5.46	0.3	A	81	122
C-A					293	440
A-B					18	27
A-C					375	563

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	44	11	581	0.076	44	0.0	0.1	6.701	A
B-A	16	4	442	0.035	15	0.0	0.0	8.428	A
C-AB	58	15	719	0.081	58	0.0	0.2	5.443	A
C-A	249	62			249				
A-B	15	4			15				
A-C	308	77			308				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	53	13	563	0.093	53	0.1	0.1	7.053	A
B-A	19	5	413	0.045	19	0.0	0.0	9.127	A
C-AB	77	19	744	0.104	77	0.1	0.2	5.403	A
C-A	290	73			290				
A-B	18	4			18				
A-C	368	92			368				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service

B-C	64	16	538	0.120	64	0.1	0.1	7.591	A
B-A	23	6	372	0.061	23	0.0	0.1	10.297	B
C-AB	109	27	779	0.139	108	0.2	0.3	5.372	A
C-A	341	85			341				
A-B	21	5			21				
A-C	450	113			450				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	64	16	538	0.120	64	0.1	0.1	7.594	A
B-A	23	6	372	0.061	23	0.1	0.1	10.304	B
C-AB	109	27	779	0.140	109	0.3	0.3	5.379	A
C-A	341	85			341				
A-B	21	5			21				
A-C	450	113			450				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	53	13	563	0.093	53	0.1	0.1	7.057	A
B-A	19	5	413	0.045	19	0.1	0.0	9.137	A
C-AB	77	19	744	0.104	78	0.3	0.2	5.414	A
C-A	290	72			290				
A-B	18	4			18				
A-C	368	92			368				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	44	11	580	0.076	44	0.1	0.1	6.712	A
B-A	16	4	442	0.035	16	0.0	0.0	8.440	A
C-AB	59	15	719	0.081	59	0.2	0.2	5.457	A
C-A	249	62			249				
A-B	15	4			15				
A-C	308	77			308				

2033 Base + CD + D - ST, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - Westbrook End - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Major arm width	C - Whaddon Road (W) - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J4	Whaddon Road/ Westbrook End	T-Junction	Two-way		0.99	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D20	2033 Base + CD + D - ST	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Whaddon Road (E)		ONE HOUR	✓	379	100.000
B - Westbrook End		ONE HOUR	✓	44	100.000
C - Whaddon Road (W)		ONE HOUR	✓	439	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Whaddon Road (E)	B - Westbrook End	C - Whaddon Road (W)
From	A - Whaddon Road (E)	0	35	344
	B - Westbrook End	12	0	32
	C - Whaddon Road (W)	387	52	0

Proportions

	To			
		A - Whaddon Road (E)	B - Westbrook End	C - Whaddon Road (W)
From	A - Whaddon Road (E)	0.00	0.09	0.91
	B - Westbrook End	0.26	0.00	0.74
	C - Whaddon Road (W)	0.88	0.12	0.00

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		A - Whaddon Road (E)	B - Westbrook End	C - Whaddon Road (W)
	A - Whaddon Road (E)	0	0	1
	B - Westbrook End	0	0	2
	C - Whaddon Road (W)	3	0	0

Average PCU Per Veh

From	To			
		A - Whaddon Road (E)	B - Westbrook End	C - Whaddon Road (W)
	A - Whaddon Road (E)	1.000	1.000	1.009
	B - Westbrook End	1.000	1.000	1.016
	C - Whaddon Road (W)	1.029	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - Whaddon Road (E)	16:45-17:00	285	288
	17:00-17:15	341	343
	17:15-17:30	417	421
	17:30-17:45	417	421
	17:45-18:00	341	343
	18:00-18:15	285	288
B - Westbrook End	16:45-17:00	33	33
	17:00-17:15	39	40
	17:15-17:30	48	49
	17:30-17:45	48	49
	17:45-18:00	39	40
	18:00-18:15	33	33
C - Whaddon Road (W)	16:45-17:00	330	339
	17:00-17:15	394	404
	17:15-17:30	483	495
	17:30-17:45	483	495
	17:45-18:00	394	404
	18:00-18:15	330	339

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.06	6.90	0.1	A	30	44
B-A	0.03	9.68	0.0	A	11	16
C-AB	0.15	5.29	0.3	A	90	135
C-A					313	469
A-B					32	48
A-C					316	474

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	24	6	592	0.041	24	0.0	0.0	6.338	A
B-A	9	2	451	0.019	9	0.0	0.0	8.140	A
C-AB	64	16	747	0.086	63	0.0	0.2	5.269	A
C-A	266	67			266				
A-B	26	7			26				
A-C	259	65			259				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	29	7	578	0.050	29	0.0	0.1	6.563	A
B-A	10	3	423	0.025	10	0.0	0.0	8.724	A
C-AB	85	21	775	0.110	85	0.2	0.2	5.218	A
C-A	309	77			309				
A-B	31	8			31				
A-C	309	77			309				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	36	9	557	0.064	36	0.1	0.1	6.897	A
B-A	13	3	385	0.033	13	0.0	0.0	9.675	A
C-AB	120	30	815	0.148	120	0.2	0.3	5.177	A
C-A	363	91			363				
A-B	38	10			38				
A-C	379	95			379				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	36	9	557	0.064	36	0.1	0.1	6.897	A
B-A	13	3	385	0.033	13	0.0	0.0	9.678	A
C-AB	120	30	815	0.148	120	0.3	0.3	5.190	A
C-A	363	91			363				
A-B	38	10			38				
A-C	379	95			379				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	29	7	577	0.050	29	0.1	0.1	6.564	A
B-A	10	3	423	0.025	10	0.0	0.0	8.731	A

C-AB	85	21	775	0.110	86	0.3	0.2	5.239	A
C-A	309	77			309				
A-B	31	8			31				
A-C	309	77			309				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	24	6	592	0.041	24	0.1	0.0	6.345	A
B-A	9	2	451	0.019	9	0.0	0.0	8.147	A
C-AB	64	16	747	0.086	65	0.2	0.2	5.288	A
C-A	266	66			266				
A-B	26	7			26				
A-C	259	65			259				

2033 Base + CD + SP (ST), AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - Westbrook End - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Major arm width	C - Whaddon Road (W) - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J4	Whaddon Road/ Westbrook End	T-Junction	Two-way		1.29	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
D21	2033 Base + CD + SP (ST)	AM	ONE HOUR	07:30	09:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Whaddon Road (E)		ONE HOUR	✓	400	100.000
B - Westbrook End		ONE HOUR	✓	79	100.000
C - Whaddon Road (W)		ONE HOUR	✓	366	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
		A - Whaddon Road (E)	B - Westbrook End	C - Whaddon Road (W)
	A - Whaddon Road (E)	0	19	381
	B - Westbrook End	21	0	58
	C - Whaddon Road (W)	318	48	0

Proportions

From	To			
		A - Whaddon Road (E)	B - Westbrook End	C - Whaddon Road (W)
	A - Whaddon Road (E)	0.00	0.05	0.95
	B - Westbrook End	0.26	0.00	0.74
	C - Whaddon Road (W)	0.87	0.13	0.00

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		A - Whaddon Road (E)	B - Westbrook End	C - Whaddon Road (W)
	A - Whaddon Road (E)	0	0	2
	B - Westbrook End	0	0	1
	C - Whaddon Road (W)	2	1	0

Average PCU Per Veh

From	To			
		A - Whaddon Road (E)	B - Westbrook End	C - Whaddon Road (W)
	A - Whaddon Road (E)	1.000	1.000	1.021
	B - Westbrook End	1.000	1.000	1.010
	C - Whaddon Road (W)	1.017	1.014	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - Whaddon Road (E)	07:30-07:45	301	307
	07:45-08:00	360	367
	08:00-08:15	440	449
	08:15-08:30	440	449
	08:30-08:45	360	367
	08:45-09:00	301	307
B - Westbrook End	07:30-07:45	60	60
	07:45-08:00	71	72
	08:00-08:15	87	88
	08:15-08:30	87	88
	08:30-08:45	71	72

	08:45-09:00	60	60
C - Whaddon Road (W)	07:30-07:45	276	280
	07:45-08:00	329	335
	08:00-08:15	403	410
	08:15-08:30	403	410
	08:30-08:45	329	335
	08:45-09:00	276	280

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.12	7.46	0.1	A	54	81
B-A	0.06	9.83	0.1	A	19	28
C-AB	0.13	5.58	0.3	A	76	114
C-A					260	391
A-B					18	27
A-C					349	524

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	44	11	586	0.075	44	0.0	0.1	6.629	A
B-A	16	4	454	0.034	15	0.0	0.0	8.205	A
C-AB	55	14	701	0.079	55	0.0	0.1	5.566	A
C-A	221	55			221				
A-B	15	4			15				
A-C	287	72			287				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	53	13	570	0.092	53	0.1	0.1	6.958	A
B-A	19	5	427	0.043	19	0.0	0.0	8.817	A
C-AB	72	18	722	0.100	72	0.1	0.2	5.541	A
C-A	257	64			257				
A-B	18	4			18				
A-C	342	86			342				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service

B-C	64	16	547	0.118	64	0.1	0.1	7.456	A
B-A	23	6	389	0.058	23	0.0	0.1	9.822	A
C-AB	100	25	752	0.133	99	0.2	0.3	5.522	A
C-A	304	76			304				
A-B	21	5			21				
A-C	419	105			419				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	64	16	547	0.118	64	0.1	0.1	7.459	A
B-A	23	6	389	0.058	23	0.1	0.1	9.827	A
C-AB	100	25	752	0.133	100	0.3	0.3	5.528	A
C-A	303	76			303				
A-B	21	5			21				
A-C	419	105			419				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	53	13	570	0.092	53	0.1	0.1	6.964	A
B-A	19	5	427	0.044	19	0.1	0.0	8.825	A
C-AB	72	18	722	0.100	72	0.3	0.2	5.551	A
C-A	257	64			257				
A-B	18	4			18				
A-C	342	86			342				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	44	11	586	0.075	44	0.1	0.1	6.640	A
B-A	16	4	454	0.034	16	0.0	0.0	8.216	A
C-AB	55	14	701	0.079	56	0.2	0.1	5.581	A
C-A	220	55			220				
A-B	15	4			15				
A-C	287	72			287				

2033 Base + CD + SP (ST), PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - Westbrook End - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Major arm width	C - Whaddon Road (W) - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J4	Whaddon Road/ Westbrook End	T-Junction	Two-way		1.04	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
D22	2033 Base + CD + SP (ST)	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Whaddon Road (E)		ONE HOUR	✓	332	100.000
B - Westbrook End		ONE HOUR	✓	44	100.000
C - Whaddon Road (W)		ONE HOUR	✓	407	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Whaddon Road (E)	B - Westbrook End	C - Whaddon Road (W)
From	A - Whaddon Road (E)	0	35	298
	B - Westbrook End	12	0	32
	C - Whaddon Road (W)	355	52	0

Proportions

	To			
		A - Whaddon Road (E)	B - Westbrook End	C - Whaddon Road (W)
From	A - Whaddon Road (E)	0.00	0.10	0.90
	B - Westbrook End	0.26	0.00	0.74
	C - Whaddon Road (W)	0.87	0.13	0.00

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Whaddon Road (E)	B - Westbrook End	C - Whaddon Road (W)
From	A - Whaddon Road (E)	0	0	1
	B - Westbrook End	0	0	2
	C - Whaddon Road (W)	3	0	0

Average PCU Per Veh

	To			
		A - Whaddon Road (E)	B - Westbrook End	C - Whaddon Road (W)
From	A - Whaddon Road (E)	1.000	1.000	1.009
	B - Westbrook End	1.000	1.000	1.016
	C - Whaddon Road (W)	1.029	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - Whaddon Road (E)	16:45-17:00	250	252
	17:00-17:15	299	301
	17:15-17:30	366	369
	17:30-17:45	366	369
	17:45-18:00	299	301
	18:00-18:15	250	252
B - Westbrook End	16:45-17:00	33	33
	17:00-17:15	39	40
	17:15-17:30	48	49
	17:30-17:45	48	49
	17:45-18:00	39	40
	18:00-18:15	33	33
C - Whaddon Road (W)	16:45-17:00	307	314
	17:00-17:15	366	375
	17:15-17:30	448	460
	17:30-17:45	448	460
	17:45-18:00	366	375
	18:00-18:15	307	314

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.06	6.72	0.1	A	30	44
B-A	0.03	9.17	0.0	A	11	16
C-AB	0.14	5.34	0.3	A	85	127
C-A					289	433
A-B					32	48
A-C					273	410

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	24	6	601	0.040	24	0.0	0.0	6.237	A
B-A	9	2	465	0.019	9	0.0	0.0	7.891	A
C-AB	61	15	738	0.083	61	0.0	0.2	5.318	A
C-A	245	61			245				
A-B	26	7			26				
A-C	224	56			224				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	29	7	589	0.049	29	0.0	0.1	6.433	A
B-A	10	3	440	0.024	10	0.0	0.0	8.385	A
C-AB	81	20	764	0.106	80	0.2	0.2	5.270	A
C-A	286	71			286				
A-B	31	8			31				
A-C	268	67			268				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	36	9	571	0.062	36	0.1	0.1	6.722	A
B-A	13	3	405	0.031	13	0.0	0.0	9.172	A
C-AB	112	28	800	0.140	112	0.2	0.3	5.230	A
C-A	336	84			336				
A-B	38	10			38				
A-C	328	82			328				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	36	9	571	0.062	36	0.1	0.1	6.723	A
B-A	13	3	405	0.031	13	0.0	0.0	9.174	A
C-AB	112	28	801	0.140	112	0.3	0.3	5.241	A
C-A	336	84			336				
A-B	38	10			38				
A-C	328	82			328				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	29	7	589	0.049	29	0.1	0.1	6.437	A
B-A	10	3	440	0.024	10	0.0	0.0	8.391	A

C-AB	81	20	764	0.106	81	0.3	0.2	5.288	A
C-A	285	71			285				
A-B	31	8			31				
A-C	268	67			268				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	24	6	601	0.040	24	0.1	0.0	6.241	A
B-A	9	2	465	0.019	9	0.0	0.0	7.899	A
C-AB	62	15	738	0.084	62	0.2	0.2	5.338	A
C-A	245	61			245				
A-B	26	7			26				
A-C	224	56			224				