Junctions 10

ARCADY 10 - Roundabout Module

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For sales and distribution information, program advice and maintenance, contact TRL Software:
+44 (0)1344 379777 software@trl.co.uk trlsoftware.com

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Filename: J2) Site Access_Coldhams Ln RBT_Existing (Lane Sim).j10
Path: N:\Projects\WIE17469\100\5_Technical\Transport\6) Junction Models\J2
Report generation date: 05/12/2023 18:33:05

»2022 Observed, AM
»2022 Observed, PM
»2030 Base, AM
»2030 Base, PM
»2030 Base + Prop Dev, AM
»2030 Base + Prop Dev, PM

Summary of junction performance

	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
	[Lane Simulation] - 2022 Observed					
1 - Coldhams Lane (E)	1.6	9.36	0.56	2.4	11.06	0.63
2 - Beehive Site Access	0.6	5.80	0.24	0.7	6.44	0.34
3 - Coldhams Lane (W)	1.0	4.70	0.39	1.1	5.23	0.44
4 - Cambridge Retail Park	0.5	8.88	0.22	0.8	12.20	0.37
	[Lane Simulation] - 2030 Base					
1 - Coldhams Lane (E)	1.6	9.54	0.57	3.1	12.64	0.69
2 - Beehive Site Access	0.6	5.80	0.25	0.9	6.46	0.35
3 - Coldhams Lane (W)	1.4	4.80	0.42	1.3	5.57	0.46
4 - Cambridge Retail Park	0.6	9.53	0.24	0.9	11.85	0.42
	[Lane Simulation] - 2030 Base + Prop Dev					
1 - Coldhams Lane (E)	1.2	7.44	0.48	1.4	7.29	0.46
2 - Beehive Site Access	0.0	5.55	0.00	0.1	5.65	0.01
3 - Coldhams Lane (W)	0.9	4.33	0.35	0.8	4.20	0.31
4 - Cambridge Retail Park	0.4	8.21	0.17	0.6	7.86	0.22

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.

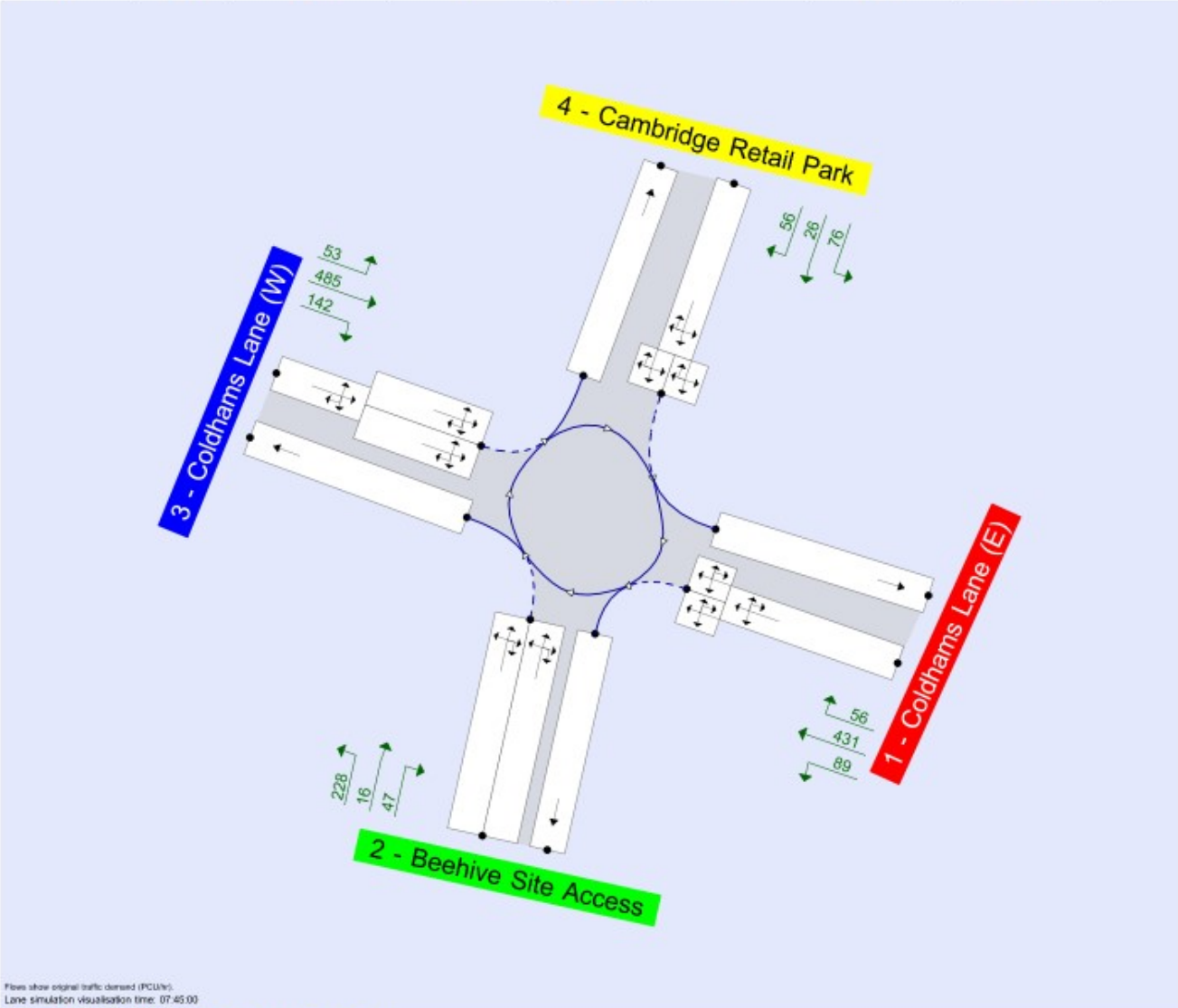
File summary

File Description

Title	Beehive Site Access / Coldhams Lane - Existing Roundabout
Location	Cambridge
Site number	
Date	11/05/2023
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	WATERLOO\CSMS4
Description	

Units

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



The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)	Use iterations with HCM roundabouts	Max number of iterations for roundabouts
5.75						0.85	36.00	20.00		500

Lane Simulation options

Criteria type	Stop criteria (%)	Stop criteria time (s)	Stop criteria number of trials	Calculate RFCs	Relaxation factor for capacity/RFC runs	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
Delay	1.00	100000	100000	Calculate for all arms	3.00	-1	3	1	60	✓			884459125	52

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	2022 Observed	AM	ONE HOUR	07:45	09:15	15	✓
D2	2022 Observed	PM	ONE HOUR	16:45	18:15	15	✓
D3	2030 Base	AM	ONE HOUR	07:45	09:15	15	✓
D4	2030 Base	PM	ONE HOUR	16:45	18:15	15	✓
D5	2030 Base + Prop Dev	AM	ONE HOUR	07:45	09:15	15	✓
D6	2030 Base + Prop Dev	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

2022 Observed, AM

Data Errors and Warnings

Severity	Area	Item	Description
Info	Lane Simulation	A1 - [Lane Simulation]	This analysis set uses Lane Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	6.87	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.87	A

Arms

Arms

Arm	Name	Description	No give-way line
1	Coldhams Lane (E)		
2	Beehive Site Access		
3	Coldhams Lane (W)		
4	Cambridge Retail Park		

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Entry only	Exit only
1 - Coldhams Lane (E)	3.02	5.70	10.3	29.4	33.0	44.7		
2 - Beehive Site Access	6.00	6.60	1.0	22.7	33.0	44.2		
3 - Coldhams Lane (W)	4.70	7.65	22.1	14.9	33.0	25.2		
4 - Cambridge Retail Park	3.51	6.89	3.1	15.5	33.0	32.0		

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Coldhams Lane (E)	0.564	1310
2 - Beehive Site Access	0.661	1798
3 - Coldhams Lane (W)	0.726	2050
4 - Cambridge Retail Park	0.559	1264

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

Lane Simulation: Arm options

Arm	Lane capacity source	Traffic considering secondary lanes (%)
1 - Coldhams Lane (E)	Evenly split	10.00
2 - Beehive Site Access	Evenly split	10.00
3 - Coldhams Lane (W)	Evenly split	10.00
4 - Cambridge Retail Park	Evenly split	10.00

Lanes

Arm	Side	Lane level	Lane	Destination arms	Has limited storage	Storage (PCU)	Has bottleneck	Has obstruction	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)	Signalised
1 - Coldhams Lane (E)	Entry	1	1	1, 2, 3, 4	✓	1.00			0	99999	
			2	1, 2, 3, 4	✓	1.00			0	99999	
		2	1	(1, 2, 3, 4)		Infinity					
	Exit	1	1			Infinity					
2 - Beehive Site Access	Entry	1	1	1, 2, 3, 4		Infinity			0	99999	
			2	1, 2, 3, 4		Infinity			0	99999	
	Exit	1	1			Infinity					
3 - Coldhams Lane (W)	Entry	1	1	1, 2, 3, 4	✓	3.00			0	99999	
			2	1, 2, 3, 4	✓	3.00			0	99999	
		2	1	(1, 2, 3, 4)		Infinity					
	Exit	1	1			Infinity					
4 - Cambridge Retail Park	Entry	1	1	1, 2, 3, 4	✓	1.00			0	99999	
			2	1, 2, 3, 4	✓	1.00			0	99999	
		2	1	(1, 2, 3, 4)		Infinity					
	Exit	1	1			Infinity					

Entry Lane slope and intercept

Arm	Side	Lane level	Lane	Final slope	Final intercept (PCU/hr)
1 - Coldhams Lane (E)	Entry	1	1	0.282	655
			2	0.282	655
2 - Beehive Site Access	Entry	1	1	0.331	899
			2	0.331	899
3 - Coldhams Lane (W)	Entry	1	1	0.363	1025
			2	0.363	1025
4 - Cambridge Retail Park	Entry	1	1	0.280	632
			2	0.280	632

Summary of Entry Lane allowed movements

Arm	Lane Level	Lane	Destination arm			
			Coldhams Lane (E)	Beehive Site Access	Coldhams Lane (W)	Cambridge Retail Park
1 - Coldhams Lane (E)	1	1	✓	✓	✓	✓
		2	✓	✓	✓	✓
	2	1	✓	✓	✓	✓
2 - Beehive Site Access	1	1	✓	✓	✓	✓
		2	✓	✓	✓	✓
3 - Coldhams Lane (W)	1	1	✓	✓	✓	✓
		2	✓	✓	✓	✓
	2	1	✓	✓	✓	✓
4 - Cambridge Retail Park	1	1	✓	✓	✓	✓
		2	✓	✓	✓	✓
	2	1	✓	✓	✓	✓

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2022 Observed	AM	ONE HOUR	07:45	09:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Coldhams Lane (E)		ONE HOUR	✓	579	100.000
2 - Beehive Site Access		ONE HOUR	✓	291	100.000
3 - Coldhams Lane (W)		ONE HOUR	✓	687	100.000
4 - Cambridge Retail Park		ONE HOUR	✓	160	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Coldhams Lane (E)	2 - Beehive Site Access	3 - Coldhams Lane (W)	4 - Cambridge Retail Park
From	1 - Coldhams Lane (E)	3	89	431	56
	2 - Beehive Site Access	47	0	228	16
	3 - Coldhams Lane (W)	485	142	7	53
	4 - Cambridge Retail Park	76	26	56	2

Vehicle Mix

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

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To			
		1 - Coldhams Lane (E)	2 - Beehive Site Access	3 - Coldhams Lane (W)	4 - Cambridge Retail Park
From	1 - Coldhams Lane (E)	0	0	2	3
	2 - Beehive Site Access	3	0	1	0
	3 - Coldhams Lane (W)	3	2	0	4
	4 - Cambridge Retail Park	0	0	4	4

Cyclist %

		To		
		1 - Coldhams Lane (E)	2 - Beehive Site Access	3 - Coldha Lane (
From	1 - Coldhams Lane (E)	0	0	0
	2 - Beehive Site Access	0	0	0
	3 - Coldhams Lane (W)	0	0	0
	4 - Cambridge Retail Park	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Coldhams Lane (E)	0.56	9.36	1.6	A	538	807
2 - Beehive Site Access	0.24	5.80	0.6	A	269	404
3 - Coldhams Lane (W)	0.39	4.70	1.0	A	624	935
4 - Cambridge Retail Park	0.22	8.88	0.5	A	146	220

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Coldhams Lane (E)	435	109	174	1176	0.370	430	431	454	0.0	1.0	6.916	A
2 - Beehive Site Access	219	55	413	1541	0.142	218	215	191	0.0	0.3	5.054	A
3 - Coldhams Lane (W)	511	128	85	1989	0.257	508	515	546	0.0	0.6	4.127	A
4 - Cambridge Retail Park	121	30	506	964	0.125	121	115	87	0.0	0.2	7.133	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Coldhams Lane (E)	532	133	202	1134	0.469	533	521	552	1.0	0.8	7.717	A
2 - Beehive Site Access	268	67	518	1486	0.180	270	268	218	0.3	0.3	5.156	A
3 - Coldhams Lane (W)	616	154	113	1956	0.315	617	625	674	0.6	0.8	4.335	A
4 - Cambridge Retail Park	139	35	615	894	0.156	139	139	115	0.2	0.3	8.488	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Coldhams Lane (E)	654	164	258	1182	0.554	658	642	657	0.8	1.5	9.235	A
2 - Beehive Site Access	322	81	632	1402	0.230	321	316	285	0.3	0.6	5.805	A
3 - Coldhams Lane (W)	736	184	137	2005	0.367	736	741	817	0.8	1.0	4.698	A
4 - Cambridge Retail Park	182	45	732	821	0.221	183	179	141	0.3	0.5	8.702	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Coldhams Lane (E)	661	165	257	1175	0.563	668	659	670	1.5	1.6	9.365	A
2 - Beehive Site Access	331	83	627	1388	0.239	332	324	297	0.6	0.6	5.757	A
3 - Coldhams Lane (W)	754	188	146	1948	0.387	756	753	813	1.0	0.8	4.661	A
4 - Cambridge Retail Park	174	44	752	828	0.211	175	179	150	0.5	0.4	8.883	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Coldhams Lane (E)	507	127	217	1221	0.415	508	514	535	1.6	1.1	7.679	A
2 - Beehive Site Access	254	64	491	1493	0.170	256	260	234	0.6	0.2	5.197	A
3 - Coldhams Lane (W)	607	152	111	1973	0.307	612	620	636	0.8	0.7	4.465	A
4 - Cambridge Retail Park	144	36	607	899	0.160	145	144	115	0.4	0.4	8.060	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Coldhams Lane (E)	437	109	174	1193	0.366	434	441	455	1.1	1.0	7.255	A
2 - Beehive Site Access	220	55	413	1520	0.145	222	225	195	0.2	0.3	5.048	A
3 - Coldhams Lane (W)	518	130	85	1997	0.260	518	520	549	0.7	0.7	4.041	A
4 - Cambridge Retail Park	119	30	511	964	0.123	118	122	92	0.4	0.2	7.384	A

Lane Results

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

Lanes: Main Results for each time segment

07:45 - 08:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Coldhams Lane (E)	Entry	1	1	1, 2, 3, 4	219	606	0.362	217	215	0.0	0.4	5.914	A
			2	1, 2, 3, 4	215	606	0.354	213	216	0.0	0.5	6.017	A
		2	1	(1, 2, 3, 4)	435			434	435	0.0	0.1	0.944	A
	Exit	1	1		454			454	456	0.0	0.0	0.000	A
2 - Beehive Site Access	Entry	1	1	1, 2, 3, 4	110	763	0.144	110	107	0.0	0.2	5.038	A
			2	1, 2, 3, 4	110	763	0.144	108	108	0.0	0.2	5.070	A
	Exit	1	1		191			191	190	0.0	0.0	0.000	A
3 - Coldhams Lane (W)	Entry	1	1	1, 2, 3, 4	252	994	0.253	252	252	0.0	0.2	4.165	A
			2	1, 2, 3, 4	259	994	0.260	257	262	0.0	0.4	4.087	A
		2	1	(1, 2, 3, 4)	511			511	517	0.0	0.0	0.001	A
	Exit	1	1		546			546	537	0.0	0.0	0.000	A
4 - Cambridge Retail Park	Entry	1	1	1, 2, 3, 4	59	491	0.120	59	56	0.0	0.1	7.276	A
			2	1, 2, 3, 4	62	491	0.126	62	58	0.0	0.1	6.823	A
		2	1	(1, 2, 3, 4)	121			121	115	0.0	0.0	0.089	A
	Exit	1	1		87			87	93	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Coldhams Lane (E)	Entry	1	1	1, 2, 3, 4	270	598	0.452	270	262	0.4	0.4	6.058	A
			2	1, 2, 3, 4	264	598	0.441	263	259	0.5	0.3	6.376	A
		2	1	(1, 2, 3, 4)	532			534	521	0.1	0.1	1.508	A
	Exit	1	1		552			552	558	0.0	0.0	0.000	A
2 - Beehive Site Access	Entry	1	1	1, 2, 3, 4	131	728	0.180	131	135	0.2	0.2	5.046	A
			2	1, 2, 3, 4	137	728	0.188	138	133	0.2	0.1	5.269	A
	Exit	1	1		218			218	222	0.0	0.0	0.000	A
3 - Coldhams Lane (W)	Entry	1	1	1, 2, 3, 4	297	984	0.302	298	312	0.2	0.4	4.319	A
			2	1, 2, 3, 4	318	984	0.324	319	313	0.4	0.3	4.341	A
		2	1	(1, 2, 3, 4)	616			616	625	0.0	0.0	0.005	A
	Exit	1	1		674			674	657	0.0	0.0	0.000	A
4 - Cambridge Retail Park	Entry	1	1	1, 2, 3, 4	66	460	0.144	66	68	0.1	0.2	8.263	A
			2	1, 2, 3, 4	73	460	0.158	73	71	0.1	0.2	8.264	A
		2	1	(1, 2, 3, 4)	139			139	139	0.0	0.0	0.227	A
	Exit	1	1		115			115	115	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Coldhams Lane (E)	Entry	1	1	1, 2, 3, 4	331	582	0.569	332	319	0.4	0.5	6.335	A
			2	1, 2, 3, 4	326	582	0.560	327	323	0.3	0.5	6.247	A
		2	1	(1, 2, 3, 4)	654			657	643	0.1	0.5	2.945	A
	Exit	1	1		657			657	661	0.0	0.0	0.000	A
2 - Beehive Site Access	Entry	1	1	1, 2, 3, 4	162	690	0.234	162	155	0.2	0.3	5.866	A
			2	1, 2, 3, 4	160	690	0.232	160	161	0.1	0.3	5.746	A
	Exit	1	1		285			285	281	0.0	0.0	0.000	A
3 - Coldhams Lane (W)	Entry	1	1	1, 2, 3, 4	365	975	0.374	366	372	0.4	0.4	4.706	A
			2	1, 2, 3, 4	371	975	0.381	370	369	0.3	0.6	4.651	A
		2	1	(1, 2, 3, 4)	736			736	741	0.0	0.0	0.020	A
	Exit	1	1		817			817	796	0.0	0.0	0.000	A
4 - Cambridge Retail Park	Entry	1	1	1, 2, 3, 4	94	427	0.220	95	91	0.2	0.2	8.454	A
			2	1, 2, 3, 4	88	427	0.206	89	88	0.2	0.3	8.250	A
		2	1	(1, 2, 3, 4)	182			182	180	0.0	0.0	0.347	A
	Exit	1	1		141			141	139	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Coldhams Lane (E)	Entry	1	1	1, 2, 3, 4	339	583	0.581	340	333	0.5	0.5	6.131	A
			2	1, 2, 3, 4	327	583	0.561	328	326	0.5	0.6	6.430	A
		2	1	(1, 2, 3, 4)	661			666	660	0.5	0.5	3.081	A
	Exit	1	1		670			670	668	0.0	0.0	0.000	A
2 - Beehive Site Access	Entry	1	1	1, 2, 3, 4	163	692	0.236	164	159	0.3	0.3	5.954	A
			2	1, 2, 3, 4	168	692	0.243	168	164	0.3	0.2	5.566	A
	Exit	1	1		297			297	293	0.0	0.0	0.000	A
3 - Coldhams Lane (W)	Entry	1	1	1, 2, 3, 4	371	972	0.382	372	373	0.4	0.4	4.699	A
			2	1, 2, 3, 4	382	972	0.394	383	380	0.6	0.4	4.584	A
		2	1	(1, 2, 3, 4)	754			754	752	0.0	0.0	0.019	A
	Exit	1	1		813			813	810	0.0	0.0	0.000	A
4 - Cambridge Retail Park	Entry	1	1	1, 2, 3, 4	89	422	0.211	90	91	0.2	0.2	8.476	A
			2	1, 2, 3, 4	85	422	0.202	85	88	0.3	0.2	8.568	A
		2	1	(1, 2, 3, 4)	174			174	178	0.0	0.0	0.360	A
	Exit	1	1		150			150	144	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Coldhams Lane (E)	Entry	1	1	1, 2, 3, 4	249	594	0.419	249	255	0.5	0.4	6.129	A
			2	1, 2, 3, 4	257	594	0.434	259	259	0.6	0.4	6.231	A
		2	1	(1, 2, 3, 4)	507			506	513	0.5	0.3	1.503	A
	Exit	1	1		535			535	544	0.0	0.0	0.000	A
2 - Beehive Site Access	Entry	1	1	1, 2, 3, 4	130	737	0.176	129	132	0.3	0.1	5.160	A
			2	1, 2, 3, 4	125	737	0.169	127	128	0.2	0.1	5.235	A
	Exit	1	1		234			234	234	0.0	0.0	0.000	A
3 - Coldhams Lane (W)	Entry	1	1	1, 2, 3, 4	303	985	0.308	306	310	0.4	0.4	4.477	A
			2	1, 2, 3, 4	303	985	0.308	305	309	0.4	0.3	4.435	A
		2	1	(1, 2, 3, 4)	607			607	619	0.0	0.0	0.008	A
	Exit	1	1		636			636	646	0.0	0.0	0.000	A
4 - Cambridge Retail Park	Entry	1	1	1, 2, 3, 4	71	462	0.154	72	71	0.2	0.2	8.030	A
			2	1, 2, 3, 4	72	462	0.157	73	73	0.2	0.2	7.651	A
		2	1	(1, 2, 3, 4)	144			144	144	0.0	0.0	0.222	A
	Exit	1	1		115			115	113	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Coldhams Lane (E)	Entry	1	1	1, 2, 3, 4	218	606	0.359	217	220	0.4	0.4	6.256	A
			2	1, 2, 3, 4	219	606	0.361	218	221	0.4	0.4	6.094	A
		2	1	(1, 2, 3, 4)	437			436	441	0.3	0.2	1.085	A
	Exit	1	1		455			455	463	0.0	0.0	0.000	A
2 - Beehive Site Access	Entry	1	1	1, 2, 3, 4	119	763	0.156	118	117	0.1	0.2	5.074	A
			2	1, 2, 3, 4	102	763	0.133	104	108	0.1	0.1	5.019	A
	Exit	1	1		195			195	194	0.0	0.0	0.000	A
3 - Coldhams Lane (W)	Entry	1	1	1, 2, 3, 4	261	994	0.262	261	262	0.4	0.3	4.103	A
			2	1, 2, 3, 4	258	994	0.259	257	258	0.3	0.4	3.974	A
		2	1	(1, 2, 3, 4)	518			518	520	0.0	0.0	0.002	A
	Exit	1	1		549			549	556	0.0	0.0	0.000	A
4 - Cambridge Retail Park	Entry	1	1	1, 2, 3, 4	57	489	0.116	57	60	0.2	0.1	6.914	A
			2	1, 2, 3, 4	62	489	0.127	61	61	0.2	0.1	7.655	A
		2	1	(1, 2, 3, 4)	119			119	121	0.0	0.0	0.095	A
	Exit	1	1		92			92	95	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

07:45 - 08:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsig le se
1 - Coldhams Lane (E)	Entry	1	1	1	2	0.40	164	153	0.011	2	1	0.0	0.0	5.362	
				2	36	9	655	605	0.059	35	34	0.0	0.1	6.092	
				3	164	41	655	607	0.270	162	160	0.0	0.3	5.895	
				4	18	5	655	605	0.031	18	20	0.0	0.0	5.788	
			2	1	0.92	0.23	176	162	0.006	0.92	1	0.0	0.0	10.620	
				2	32	8	642	594	0.053	32	31	0.0	0.0	6.007	
				3	160	40	655	606	0.264	159	162	0.0	0.4	5.956	
				4	22	6	655	607	0.037	21	22	0.0	0.1	6.254	
		2	1	1	3	0.63	-	-	-	3	2	0.0	0.0	0.292	
				2	67	17	-	-	-	67	65	0.0	0.0	0.888	
				3	324	81	-	-	-	324	324	0.0	0.1	0.982	
				4	41	10	-	-	-	41	43	0.0	0.0	0.781	
2 - Beehive Site Access	Entry	1	1	1	17	4	899	762	0.023	17	17	0.0	0.1	5.255	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				3	86	21	899	764	0.112	87	85	0.0	0.1	4.926	
				4	6	2	622	531	0.012	6	5	0.0	0.0	6.121	
			2	1	14	3	865	732	0.019	13	17	0.0	0.0	5.271	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				3	92	23	899	764	0.121	91	85	0.0	0.2	5.077	
				4	4	0.98	692	587	0.007	4	6	0.0	0.0	4.439	
3 - Coldhams Lane (W)	Entry	1	1	1	177	44	1025	994	0.178	177	179	0.0	0.1	4.210	
				2	54	13	1025	993	0.054	54	53	0.0	0.1	4.014	
				3	3	0.75	512	494	0.006	3	3	0.0	0.0	5.031	
				4	18	5	1025	991	0.019	18	17	0.0	0.0	4.037	
			2	1	187	47	1025	994	0.188	186	186	0.0	0.2	4.124	
				2	52	13	1025	994	0.052	51	53	0.0	0.1	4.060	
				3	2	0.52	532	519	0.004	2	3	0.0	0.0	3.554	
				4	18	5	1025	993	0.019	17	20	0.0	0.1	3.898	
		2	1	1	363	91	-	-	-	363	367	0.0	0.0	0.001	
				2	105	26	-	-	-	105	107	0.0	0.0	0.002	
				3	5	1	-	-	-	5	5	0.0	0.0	0.000	
				4	37	9	-	-	-	37	38	0.0	0.0	0.001	
4 - Cambridge Retail Park	Entry	1	1	1	28	7	632	487	0.058	28	27	0.0	0.0	6.791	
				2	9	2	559	431	0.021	9	8	0.0	0.0	7.737	
				3	20	5	632	489	0.042	21	20	0.0	0.0	7.835	
				4	1	0.29	109	78	0.015	1	0.85	0.0	0.0	5.444	
			2	1	30	7	632	487	0.061	29	28	0.0	0.1	6.850	
				2	11	3	571	441	0.024	11	10	0.0	0.0	7.531	
				3	21	5	632	485	0.042	21	20	0.0	0.0	6.436	
				4	1	0.29	109	87	0.013	1	0.77	0.0	0.0	6.324	
		2	1	1	58	14	-	-	-	58	55	0.0	0.0	0.070	
				2	20	5	-	-	-	20	19	0.0	0.0	0.110	
				3	41	10	-	-	-	41	40	0.0	0.0	0.108	
				4	2	0.58	-	-	-	2	2	0.0	0.0	0.000	

08:00 - 08:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsig lev ser
1 - Coldhams Lane (E)	Entry	1	1	1	0.92	0.23	126	116	0.008	0.92	1	0.0	0.0	7.234	
				2	41	10	655	600	0.069	42	40	0.1	0.0	6.292	
				3	204	51	655	599	0.341	203	195	0.3	0.3	6.005	
				4	24	6	655	597	0.040	24	25	0.0	0.0	6.021	
			2	1	1	0.29	164	151	0.008	1	1	0.0	0.0	7.466	
				2	35	9	655	597	0.059	35	36	0.0	0.1	6.557	
				3	202	51	655	599	0.338	203	198	0.4	0.2	6.354	
				4	25	6	655	599	0.042	24	24	0.1	0.0	6.220	
		2	1	1	2	0.52	-	-	-	2	2	0.0	0.0	0.665	
				2	76	19	-	-	-	77	77	0.0	0.0	1.706	
				3	405	101	-	-	-	407	393	0.1	0.1	1.464	
				4	49	12	-	-	-	49	49	0.0	0.0	1.582	
2 - Beehive Site Access	Entry	1	1	1	22	5	899	730	0.030	23	23	0.1	0.0	5.169	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				3	100	25	899	725	0.138	100	104	0.1	0.2	5.052	
				4	9	2	761	621	0.014	9	8	0.0	0.0	4.615	
			2	1	21	5	899	732	0.029	22	21	0.0	0.0	5.635	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				3	108	27	899	727	0.149	109	103	0.2	0.1	5.230	
				4	7	2	761	624	0.012	8	8	0.0	0.0	4.843	
3 - Coldhams Lane (W)	Entry	1	1	1	223	56	1025	984	0.227	223	224	0.1	0.3	4.259	
				2	54	14	1025	984	0.055	54	62	0.1	0.1	4.398	
				3	2	0.52	453	435	0.005	2	2	0.0	0.0	3.740	
				4	18	4	1025	986	0.018	18	23	0.0	0.0	4.761	
			2	1	218	54	1025	985	0.221	219	222	0.2	0.2	4.353	
				2	67	17	1025	984	0.068	66	62	0.1	0.1	4.335	
				3	3	0.87	611	590	0.006	3	3	0.0	0.0	4.475	
				4	30	8	1025	986	0.031	30	25	0.1	0.1	4.240	
		2	1	1	442	110	-	-	-	442	447	0.0	0.0	0.005	
				2	121	30	-	-	-	121	124	0.0	0.0	0.005	
				3	6	1	-	-	-	6	6	0.0	0.0	0.000	
				4	48	12	-	-	-	48	48	0.0	0.0	0.006	
4 - Cambridge Retail Park	Entry	1	1	1	30	8	632	458	0.066	30	31	0.0	0.1	7.972	
				2	9	2	608	445	0.021	9	11	0.0	0.0	8.188	
				3	26	6	632	456	0.057	26	25	0.0	0.1	8.772	
				4	0.92	0.23	97	71	0.013	0.92	0.85	0.0	0.0	5.687	
			2	1	34	8	632	460	0.073	33	33	0.1	0.1	8.233	
				2	12	3	608	439	0.026	12	11	0.0	0.0	8.728	
				3	27	7	632	456	0.060	27	26	0.0	0.0	8.095	
				4	0.46	0.12	97	72	0.006	0.46	0.62	0.0	0.0	8.502	
		2	1	1	64	16	-	-	-	64	65	0.0	0.0	0.255	
				2	21	5	-	-	-	21	22	0.0	0.0	0.213	
				3	53	13	-	-	-	53	51	0.0	0.0	0.194	
				4	1	0.35	-	-	-	1	1	0.0	0.0	0.316	

08:15 - 08:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsig le se
1 - Coldhams Lane (E)	Entry	1	1	1	1	0.35	189	171	0.008	1	1	0.0	0.0	5.898	
				2	50	13	655	584	0.086	51	49	0.0	0.1	6.640	
				3	248	62	655	582	0.426	248	234	0.3	0.4	6.267	
				4	32	8	655	582	0.054	32	34	0.0	0.0	6.368	
			2	1	2	0.40	164	146	0.011	2	1	0.0	0.0	5.864	
				2	49	12	655	582	0.084	50	49	0.1	0.1	6.276	
				3	249	62	655	582	0.428	249	243	0.2	0.4	6.303	
				4	27	7	655	583	0.046	27	30	0.0	0.0	5.742	
		2	1	1	3	0.75	-	-	-	3	3	0.0	0.0	3.087	
				2	98	25	-	-	-	99	99	0.0	0.1	2.992	
				3	495	124	-	-	-	497	478	0.1	0.4	2.929	
				4	58	15	-	-	-	58	63	0.0	0.0	2.979	
2 - Beehive Site Access	Entry	1	1	1	28	7	899	693	0.041	29	25	0.0	0.0	5.968	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				3	126	32	899	691	0.183	125	123	0.2	0.2	5.851	
				4	7	2	744	578	0.013	8	7	0.0	0.0	5.771	
			2	1	25	6	899	697	0.036	26	25	0.0	0.0	6.284	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				3	123	31	899	692	0.178	122	126	0.1	0.3	5.648	
				4	12	3	847	656	0.018	12	9	0.0	0.0	5.646	
3 - Coldhams Lane (W)	Entry	1	1	1	250	62	1025	975	0.256	250	262	0.3	0.3	4.652	
				2	82	20	1025	976	0.084	82	77	0.1	0.1	4.901	
				3	5	1	788	750	0.007	5	5	0.0	0.0	5.283	
				4	28	7	1025	974	0.029	28	28	0.0	0.0	4.568	
			2	1	260	65	1025	976	0.267	259	260	0.2	0.5	4.659	
				2	74	18	1025	976	0.076	74	76	0.1	0.1	4.588	
				3	5	1	690	658	0.007	5	4	0.0	0.0	4.276	
				4	33	8	1025	976	0.034	33	30	0.1	0.0	4.799	
		2	1	1	510	127	-	-	-	510	523	0.0	0.0	0.015	
				2	156	39	-	-	-	156	153	0.0	0.0	0.038	
				3	10	2	-	-	-	10	9	0.0	0.0	0.000	
				4	61	15	-	-	-	61	57	0.0	0.0	0.015	
4 - Cambridge Retail Park	Entry	1	1	1	50	13	632	422	0.119	49	46	0.1	0.1	8.747	
				2	14	4	608	410	0.035	15	16	0.0	0.0	8.489	
				3	29	7	632	427	0.068	30	29	0.1	0.0	8.028	
				4	0.69	0.17	122	84	0.008	0.69	0.92	0.0	0.0	6.234	
			2	1	41	10	632	425	0.097	42	41	0.1	0.2	8.221	
				2	13	3	608	408	0.032	13	14	0.0	0.0	7.391	
				3	33	8	632	423	0.079	33	32	0.0	0.1	8.644	
				4	0.46	0.12	109	73	0.006	0.46	0.85	0.0	0.0	10.026	
		2	1	1	91	23	-	-	-	91	87	0.0	0.0	0.318	
				2	27	7	-	-	-	27	30	0.0	0.0	0.203	
				3	63	16	-	-	-	62	61	0.0	0.0	0.475	
				4	1	0.29	-	-	-	1	2	0.0	0.0	0.002	

08:30 - 08:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsig le se
1 - Coldhams Lane (E)	Entry	1	1	1	0.46	0.12	227	201	0.002	0.46	2	0.0	0.0	4.492	
				2	55	14	655	583	0.095	56	55	0.1	0.1	5.875	
				3	248	62	655	584	0.424	249	245	0.4	0.4	6.153	
				4	35	9	655	583	0.060	35	32	0.0	0.1	6.491	
			2	1	1	0.35	176	157	0.009	1	1	0.0	0.0	7.607	
				2	52	13	655	585	0.089	51	51	0.1	0.1	6.382	
				3	244	61	655	583	0.418	245	242	0.4	0.4	6.457	
				4	30	8	655	585	0.051	30	32	0.0	0.1	6.266	
		2	1	1	2	0.46	-	-	-	2	3	0.0	0.0	2.379	
				2	107	27	-	-	-	107	105	0.1	0.1	3.141	
				3	489	122	-	-	-	491	486	0.4	0.3	3.060	
				4	64	16	-	-	-	65	65	0.0	0.0	3.171	
2 - Beehive Site Access	Entry	1	1	1	29	7	899	693	0.042	29	25	0.0	0.1	5.948	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				3	125	31	899	690	0.181	125	126	0.2	0.3	5.991	
				4	9	2	795	614	0.015	10	8	0.0	0.0	5.413	
			2	1	26	7	882	682	0.039	26	24	0.0	0.0	4.946	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				3	129	32	899	692	0.187	129	131	0.3	0.2	5.699	
				4	12	3	778	602	0.020	12	10	0.0	0.0	5.285	
3 - Coldhams Lane (W)	Entry	1	1	1	259	65	1025	971	0.266	261	263	0.3	0.2	4.707	
				2	75	19	1025	973	0.077	74	76	0.1	0.1	4.574	
				3	3	0.87	552	520	0.007	3	3	0.0	0.0	4.006	
				4	34	9	1025	975	0.035	34	31	0.0	0.1	5.016	
			2	1	267	67	1025	972	0.274	267	266	0.5	0.2	4.640	
				2	84	21	1025	973	0.086	84	82	0.1	0.1	4.413	
				3	5	1	670	637	0.007	5	4	0.0	0.0	4.047	
				4	27	7	1025	975	0.028	27	28	0.0	0.1	4.634	
		2	1	1	525	131	-	-	-	525	527	0.0	0.0	0.019	
				2	159	40	-	-	-	159	158	0.0	0.0	0.017	
				3	8	2	-	-	-	8	7	0.0	0.0	0.084	
				4	62	15	-	-	-	62	60	0.0	0.0	0.018	
4 - Cambridge Retail Park	Entry	1	1	1	43	11	632	421	0.103	43	45	0.1	0.1	8.496	
				2	15	4	632	424	0.036	15	14	0.0	0.0	8.423	
				3	29	7	620	414	0.071	30	30	0.0	0.1	8.498	
				4	1	0.35	134	88	0.016	1	1	0.0	0.0	7.644	
			2	1	41	10	632	425	0.096	41	42	0.2	0.0	8.495	
				2	17	4	632	423	0.040	16	15	0.0	0.1	7.896	
				3	27	7	632	424	0.064	27	30	0.1	0.1	8.930	
				4	0.92	0.23	134	88	0.010	0.92	1	0.0	0.0	10.791	
		2	1	1	84	21	-	-	-	84	86	0.0	0.0	0.412	
				2	32	8	-	-	-	32	30	0.0	0.0	0.418	
				3	56	14	-	-	-	56	60	0.0	0.0	0.248	
				4	2	0.58	-	-	-	2	2	0.0	0.0	0.456	

08:45 - 09:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsig lev ser
1 - Coldhams Lane (E)	Entry	1	1	1	1	0.29	214	194	0.006	1	1	0.0	0.0	4.742	
				2	41	10	655	596	0.069	40	40	0.1	0.1	5.783	
				3	187	47	655	594	0.314	188	191	0.4	0.3	6.121	
				4	20	5	655	595	0.034	20	23	0.1	0.1	6.919	
			2	1	0.92	0.23	189	170	0.005	0.69	1	0.0	0.0	7.337	
				2	37	9	655	594	0.063	37	39	0.1	0.1	5.890	
				3	189	47	655	594	0.318	190	192	0.4	0.3	6.235	
				4	31	8	642	581	0.054	31	27	0.1	0.1	6.662	
		2	1	1	2	0.52	-	-	-	2	3	0.0	0.0	1.389	
				2	78	20	-	-	-	78	79	0.1	0.1	1.674	
				3	376	94	-	-	-	375	382	0.3	0.2	1.459	
				4	51	13	-	-	-	51	49	0.0	0.0	1.565	
2 - Beehive Site Access	Entry	1	1	1	22	6	899	734	0.030	23	22	0.1	0.0	5.039	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				3	101	25	899	738	0.137	100	104	0.3	0.1	5.167	
				4	6	2	657	536	0.012	6	7	0.0	0.0	5.432	
			2	1	21	5	899	737	0.028	20	20	0.0	0.0	4.734	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				3	98	24	899	741	0.132	100	100	0.2	0.0	5.299	
				4	6	2	744	607	0.010	6	7	0.0	0.0	5.740	
3 - Coldhams Lane (W)	Entry	1	1	1	213	53	1025	985	0.216	214	216	0.2	0.3	4.467	
				2	65	16	1025	984	0.066	66	67	0.1	0.0	4.499	
				3	4	0.92	631	602	0.006	4	3	0.0	0.0	3.304	
				4	22	6	1025	985	0.023	22	24	0.1	0.0	4.675	
			2	1	206	52	1025	985	0.209	208	216	0.2	0.2	4.447	
				2	66	17	1025	984	0.068	67	66	0.1	0.0	4.345	
				3	3	0.87	591	566	0.006	3	3	0.0	0.0	3.998	
				4	27	7	1025	983	0.028	27	24	0.1	0.1	4.643	
		2	1	1	418	105	-	-	-	419	433	0.0	0.0	0.009	
				2	131	33	-	-	-	131	132	0.0	0.0	0.004	
				3	7	2	-	-	-	7	7	0.0	0.0	0.027	
				4	50	12	-	-	-	50	48	0.0	0.0	0.011	
4 - Cambridge Retail Park	Entry	1	1	1	33	8	632	458	0.072	33	32	0.1	0.0	8.122	
				2	11	3	596	428	0.025	11	11	0.0	0.0	7.871	
				3	26	7	632	457	0.058	26	28	0.1	0.1	8.000	
				4	1	0.35	97	71	0.019	1	0.62	0.0	0.0	7.363	
			2	1	35	9	632	457	0.077	35	35	0.0	0.1	7.867	
				2	12	3	608	431	0.028	12	12	0.1	0.0	6.374	
				3	23	6	632	460	0.051	24	25	0.1	0.0	8.053	
				4	2	0.40	134	100	0.016	1	1	0.0	0.0	5.370	
		2	1	1	68	17	-	-	-	68	67	0.0	0.0	0.238	
				2	23	6	-	-	-	23	22	0.0	0.0	0.153	
				3	50	12	-	-	-	50	53	0.0	0.0	0.239	
				4	3	0.75	-	-	-	3	2	0.0	0.0	0.000	

09:00 - 09:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsig lev ser
1 - Coldhams Lane (E)	Entry	1	1	1	2	0.46	189	174	0.011	2	1	0.0	0.0	4.681	
				2	35	9	655	607	0.057	34	33	0.1	0.1	5.880	
				3	163	41	655	606	0.269	162	165	0.3	0.2	6.313	
				4	18	5	655	606	0.030	18	20	0.1	0.1	6.538	
			2	1	1	0.29	176	162	0.007	1	1	0.0	0.0	8.203	
				2	36	9	655	606	0.059	35	35	0.1	0.1	5.882	
				3	165	41	655	606	0.272	164	165	0.3	0.3	6.141	
				4	17	4	630	585	0.029	18	20	0.1	0.0	5.951	
		2	1	1	3	0.69	-	-	-	3	2	0.0	0.0	1.148	
				2	70	17	-	-	-	70	69	0.1	0.0	1.259	
				3	329	82	-	-	-	327	331	0.2	0.2	1.066	
				4	36	9	-	-	-	36	39	0.0	0.0	0.929	
2 - Beehive Site Access	Entry	1	1	1	15	4	899	761	0.020	15	17	0.0	0.1	5.166	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				3	96	24	899	764	0.126	96	93	0.1	0.1	5.095	
				4	7	2	726	615	0.012	7	7	0.0	0.0	4.581	
			2	1	16	4	899	760	0.021	16	18	0.0	0.0	5.116	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				3	79	20	899	761	0.104	81	84	0.0	0.0	4.993	
				4	7	2	709	595	0.012	7	6	0.0	0.0	5.112	
3 - Coldhams Lane (W)	Entry	1	1	1	180	45	1025	994	0.182	181	185	0.3	0.1	4.125	
				2	55	14	1025	994	0.055	54	53	0.0	0.1	3.933	
				3	3	0.81	453	438	0.007	3	2	0.0	0.0	4.570	
				4	22	6	1025	991	0.023	23	21	0.0	0.0	4.288	
			2	1	183	46	1025	994	0.184	182	184	0.2	0.3	3.996	
				2	52	13	1025	994	0.052	52	51	0.0	0.1	3.994	
				3	3	0.87	552	532	0.007	3	3	0.0	0.0	4.126	
				4	19	5	1005	973	0.020	19	20	0.1	0.1	3.687	
		2	1	1	363	91	-	-	-	363	369	0.0	0.0	0.003	
				2	107	27	-	-	-	107	105	0.0	0.0	0.000	
				3	7	2	-	-	-	7	5	0.0	0.0	0.000	
				4	42	10	-	-	-	42	41	0.0	0.0	0.000	
4 - Cambridge Retail Park	Entry	1	1	1	28	7	632	486	0.058	28	27	0.0	0.1	6.753	
				2	8	2	547	422	0.019	9	10	0.0	0.0	8.297	
				3	20	5	632	489	0.041	20	22	0.1	0.1	6.495	
				4	0.46	0.12	109	84	0.005	0.46	0.69	0.0	0.0	5.462	
			2	1	29	7	632	490	0.059	29	29	0.1	0.0	7.729	
				2	12	3	583	451	0.026	11	11	0.0	0.0	7.337	
				3	21	5	632	483	0.043	20	20	0.0	0.0	7.664	
				4	0.69	0.17	97	72	0.010	0.69	0.92	0.0	0.0	9.414	
		2	1	1	57	14	-	-	-	57	56	0.0	0.0	0.113	
				2	20	5	-	-	-	20	21	0.0	0.0	0.072	
				3	41	10	-	-	-	41	42	0.0	0.0	0.086	
				4	1	0.29	-	-	-	1	1	0.0	0.0	0.000	

2022 Observed, PM

Data Errors and Warnings

Severity	Area	Item	Description
Info	Lane Simulation	A1 - [Lane Simulation]	This analysis set uses Lane Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	8.13	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	8.13	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2022 Observed	PM	ONE HOUR	16:45	18:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Coldhams Lane (E)		ONE HOUR	✓	615	100.000
2 - Beehive Site Access		ONE HOUR	✓	424	100.000
3 - Coldhams Lane (W)		ONE HOUR	✓	723	100.000
4 - Cambridge Retail Park		ONE HOUR	✓	252	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Coldhams Lane (E)	2 - Beehive Site Access	3 - Coldhams Lane (W)	4 - Cambridge Retail Park
From	1 - Coldhams Lane (E)	0	150	401	64
	2 - Beehive Site Access	155	0	228	41
	3 - Coldhams Lane (W)	443	217	0	63
	4 - Cambridge Retail Park	102	68	81	1

Vehicle Mix

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

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To			
		1 - Coldhams Lane (E)	2 - Beehive Site Access	3 - Coldhams Lane (W)	4 - Cambridge Retail Park
From	1 - Coldhams Lane (E)	0	0	0	0
	2 - Beehive Site Access	0	0	1	0
	3 - Coldhams Lane (W)	1	0	0	0
	4 - Cambridge Retail Park	0	0	2	2

Cyclist %

		To		
		1 - Coldhams Lane (E)	2 - Beehive Site Access	3 - Coldha Lane (
From	1 - Coldhams Lane (E)	0	0	0
	2 - Beehive Site Access	0	0	0
	3 - Coldhams Lane (W)	0	0	0
	4 - Cambridge Retail Park	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Coldhams Lane (E)	0.63	11.06	2.4	B	560	841
2 - Beehive Site Access	0.34	6.44	0.7	A	389	584
3 - Coldhams Lane (W)	0.44	5.23	1.1	A	665	998
4 - Cambridge Retail Park	0.37	12.20	0.8	B	231	347

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Coldhams Lane (E)	462	115	289	1156	0.399	463	458	538	0.0	0.8	7.380	A
2 - Beehive Site Access	309	77	413	1533	0.201	309	312	339	0.0	0.4	4.969	A
3 - Coldhams Lane (W)	567	142	197	1886	0.301	568	547	525	0.0	0.5	4.374	A
4 - Cambridge Retail Park	189	47	639	942	0.201	188	189	127	0.0	0.4	8.208	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Coldhams Lane (E)	555	139	334	1104	0.503	564	552	615	0.8	1.2	8.440	A
2 - Beehive Site Access	373	93	509	1461	0.255	374	381	389	0.4	0.5	5.579	A
3 - Coldhams Lane (W)	660	165	226	1845	0.357	662	663	656	0.5	0.8	4.753	A
4 - Cambridge Retail Park	221	55	727	904	0.245	222	216	161	0.4	0.5	9.252	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Coldhams Lane (E)	645	161	399	1062	0.608	640	661	789	1.2	2.1	10.321	B
2 - Beehive Site Access	467	117	587	1378	0.339	467	462	452	0.5	0.7	6.149	A
3 - Coldhams Lane (W)	798	199	292	1833	0.435	800	799	762	0.8	1.1	5.117	A
4 - Cambridge Retail Park	283	71	908	757	0.374	281	276	184	0.5	0.8	10.894	B

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Coldhams Lane (E)	674	169	403	1073	0.629	675	684	773	2.1	2.4	11.059	B
2 - Beehive Site Access	473	118	615	1404	0.337	475	474	463	0.7	0.7	6.441	A
3 - Coldhams Lane (W)	780	195	303	1854	0.421	783	788	788	1.1	1.1	5.228	A
4 - Cambridge Retail Park	273	68	901	745	0.366	276	287	185	0.8	0.6	12.201	B

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Coldhams Lane (E)	553	138	337	1142	0.484	556	563	635	2.4	1.0	8.619	A
2 - Beehive Site Access	403	101	499	1494	0.269	405	386	394	0.7	0.6	5.650	A
3 - Coldhams Lane (W)	648	162	248	1877	0.345	650	657	655	1.1	0.7	4.545	A
4 - Cambridge Retail Park	225	56	744	869	0.259	227	224	154	0.6	0.5	9.649	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Coldhams Lane (E)	473	118	277	1162	0.407	470	471	527	1.0	0.9	7.409	A
2 - Beehive Site Access	312	78	420	1517	0.206	311	319	328	0.6	0.5	4.995	A
3 - Coldhams Lane (W)	540	135	193	1930	0.280	539	539	538	0.7	0.8	4.259	A
4 - Cambridge Retail Park	197	49	609	949	0.207	195	189	123	0.5	0.5	8.525	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 (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Coldhams Lane (E)	Entry	1	1	1, 2, 3, 4	237	574	0.413	236	230	0.0	0.3	6.264	A
			2	1, 2, 3, 4	226	574	0.395	227	228	0.0	0.4	6.217	A
		2	1	(1, 2, 3, 4)	462			463	461	0.0	0.1	1.139	A
	Exit	1	1		538			538	523	0.0	0.0	0.000	A
2 - Beehive Site Access	Entry	1	1	1, 2, 3, 4	157	763	0.205	158	158	0.0	0.2	4.816	A
			2	1, 2, 3, 4	152	763	0.199	151	155	0.0	0.2	5.124	A
	Exit	1	1		339			339	329	0.0	0.0	0.000	A
3 - Coldhams Lane (W)	Entry	1	1	1, 2, 3, 4	286	953	0.300	288	273	0.0	0.2	4.442	A
			2	1, 2, 3, 4	281	953	0.295	281	274	0.0	0.4	4.300	A
		2	1	(1, 2, 3, 4)	567			567	549	0.0	0.0	0.003	A
	Exit	1	1		525			525	529	0.0	0.0	0.000	A
4 - Cambridge Retail Park	Entry	1	1	1, 2, 3, 4	98	454	0.217	98	95	0.0	0.2	7.862	A
			2	1, 2, 3, 4	91	454	0.200	90	93	0.0	0.2	7.890	A
		2	1	(1, 2, 3, 4)	189			189	190	0.0	0.0	0.332	A
	Exit	1	1		127			127	125	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Coldhams Lane (E)	Entry	1	1	1, 2, 3, 4	282	561	0.503	284	276	0.3	0.5	6.467	A
			2	1, 2, 3, 4	277	561	0.493	280	276	0.4	0.4	6.450	A
		2	1	(1, 2, 3, 4)	555			559	553	0.1	0.3	1.984	A
	Exit	1	1		615			615	623	0.0	0.0	0.000	A
2 - Beehive Site Access	Entry	1	1	1, 2, 3, 4	190	731	0.260	191	190	0.2	0.3	5.610	A
			2	1, 2, 3, 4	183	731	0.250	183	191	0.2	0.3	5.548	A
	Exit	1	1		389			389	395	0.0	0.0	0.000	A
3 - Coldhams Lane (W)	Entry	1	1	1, 2, 3, 4	332	943	0.352	333	334	0.2	0.3	4.749	A
			2	1, 2, 3, 4	328	943	0.348	329	329	0.4	0.5	4.717	A
		2	1	(1, 2, 3, 4)	660			660	664	0.0	0.0	0.020	A
	Exit	1	1		656			656	641	0.0	0.0	0.000	A
4 - Cambridge Retail Park	Entry	1	1	1, 2, 3, 4	111	429	0.259	111	108	0.2	0.3	8.356	A
			2	1, 2, 3, 4	110	429	0.257	111	108	0.2	0.2	8.756	A
		2	1	(1, 2, 3, 4)	221			222	217	0.0	0.0	0.696	A
	Exit	1	1		161			161	152	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Coldhams Lane (E)	Entry	1	1	1, 2, 3, 4	322	542	0.594	322	328	0.5	0.7	6.616	A
			2	1, 2, 3, 4	321	542	0.591	319	333	0.4	0.7	6.618	A
		2	1	(1, 2, 3, 4)	645			643	663	0.3	0.8	3.710	A
	Exit	1	1		789			789	776	0.0	0.0	0.000	A
2 - Beehive Site Access	Entry	1	1	1, 2, 3, 4	234	705	0.331	233	229	0.3	0.3	6.278	A
			2	1, 2, 3, 4	233	705	0.330	234	233	0.3	0.3	6.023	A
	Exit	1	1		452			452	469	0.0	0.0	0.000	A
3 - Coldhams Lane (W)	Entry	1	1	1, 2, 3, 4	396	919	0.431	396	400	0.3	0.6	5.083	A
			2	1, 2, 3, 4	402	919	0.437	404	399	0.5	0.5	5.091	A
		2	1	(1, 2, 3, 4)	798			798	800	0.0	0.0	0.030	A
	Exit	1	1		762			762	771	0.0	0.0	0.000	A
4 - Cambridge Retail Park	Entry	1	1	1, 2, 3, 4	137	378	0.362	137	135	0.3	0.3	9.772	A
			2	1, 2, 3, 4	145	378	0.382	144	141	0.2	0.4	9.020	A
		2	1	(1, 2, 3, 4)	283			282	277	0.0	0.2	1.501	A
	Exit	1	1		184			184	182	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Coldhams Lane (E)	Entry	1	1	1, 2, 3, 4	340	541	0.628	341	346	0.7	0.6	6.609	A
			2	1, 2, 3, 4	334	541	0.617	334	338	0.7	0.7	6.714	A
		2	1	(1, 2, 3, 4)	674			674	684	0.8	1.1	4.388	A
	Exit	1	1		773			773	774	0.0	0.0	0.000	A
2 - Beehive Site Access	Entry	1	1	1, 2, 3, 4	239	696	0.343	239	237	0.3	0.4	6.371	A
			2	1, 2, 3, 4	234	696	0.337	237	237	0.3	0.3	6.510	A
	Exit	1	1		463			463	478	0.0	0.0	0.000	A
3 - Coldhams Lane (W)	Entry	1	1	1, 2, 3, 4	396	915	0.433	397	397	0.6	0.5	5.192	A
			2	1, 2, 3, 4	383	915	0.419	386	391	0.5	0.5	5.189	A
		2	1	(1, 2, 3, 4)	780			779	788	0.0	0.0	0.037	A
	Exit	1	1		788			788	791	0.0	0.0	0.000	A
4 - Cambridge Retail Park	Entry	1	1	1, 2, 3, 4	135	380	0.354	135	142	0.3	0.3	10.229	B
			2	1, 2, 3, 4	141	380	0.369	141	145	0.4	0.3	9.724	A
		2	1	(1, 2, 3, 4)	273			275	287	0.2	0.0	2.235	A
	Exit	1	1		185			185	191	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Coldhams Lane (E)	Entry	1	1	1, 2, 3, 4	271	560	0.484	272	280	0.6	0.5	6.374	A
			2	1, 2, 3, 4	283	560	0.504	284	283	0.7	0.3	6.369	A
		2	1	(1, 2, 3, 4)	553			554	561	1.1	0.2	2.245	A
	Exit	1	1		635			635	637	0.0	0.0	0.000	A
2 - Beehive Site Access	Entry	1	1	1, 2, 3, 4	205	734	0.279	207	192	0.4	0.3	5.756	A
			2	1, 2, 3, 4	198	734	0.270	198	194	0.3	0.3	5.544	A
	Exit	1	1		394			394	390	0.0	0.0	0.000	A
3 - Coldhams Lane (W)	Entry	1	1	1, 2, 3, 4	319	935	0.342	320	327	0.5	0.4	4.567	A
			2	1, 2, 3, 4	329	935	0.352	330	331	0.5	0.3	4.512	A
		2	1	(1, 2, 3, 4)	648			648	656	0.0	0.0	0.007	A
	Exit	1	1		655			655	650	0.0	0.0	0.000	A
4 - Cambridge Retail Park	Entry	1	1	1, 2, 3, 4	117	424	0.276	117	115	0.3	0.3	8.488	A
			2	1, 2, 3, 4	109	424	0.256	110	110	0.3	0.2	9.081	A
		2	1	(1, 2, 3, 4)	225			226	224	0.0	0.0	0.871	A
	Exit	1	1		154			154	154	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Coldhams Lane (E)	Entry	1	1	1, 2, 3, 4	241	577	0.417	240	237	0.5	0.4	6.171	A
			2	1, 2, 3, 4	231	577	0.400	231	233	0.3	0.3	6.162	A
		2	1	(1, 2, 3, 4)	473			472	470	0.2	0.2	1.253	A
	Exit	1	1		527			527	531	0.0	0.0	0.000	A
2 - Beehive Site Access	Entry	1	1	1, 2, 3, 4	154	760	0.202	154	157	0.3	0.3	4.894	A
			2	1, 2, 3, 4	159	760	0.208	158	162	0.3	0.2	5.092	A
	Exit	1	1		328			328	318	0.0	0.0	0.000	A
3 - Coldhams Lane (W)	Entry	1	1	1, 2, 3, 4	265	955	0.277	263	265	0.4	0.4	4.320	A
			2	1, 2, 3, 4	276	955	0.289	275	274	0.3	0.4	4.186	A
		2	1	(1, 2, 3, 4)	540			540	540	0.0	0.0	0.008	A
	Exit	1	1		538			538	541	0.0	0.0	0.000	A
4 - Cambridge Retail Park	Entry	1	1	1, 2, 3, 4	100	462	0.217	100	96	0.3	0.3	7.981	A
			2	1, 2, 3, 4	97	462	0.209	95	94	0.2	0.2	8.212	A
		2	1	(1, 2, 3, 4)	197			197	189	0.0	0.0	0.426	A
	Exit	1	1		123			123	129	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsig lev se
1 - Coldhams Lane (E)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	62	16	655	574	0.108	61	57	0.0	0.1	6.450	
				3	150	37	655	573	0.261	150	148	0.0	0.2	6.291	
				4	26	6	655	576	0.044	26	24	0.0	0.0	5.659	
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	52	13	655	575	0.090	52	55	0.0	0.1	6.238	
				3	150	37	655	573	0.261	150	151	0.0	0.2	6.265	
				4	25	6	655	576	0.043	25	22	0.0	0.0	5.838	
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	114	28	-	-	-	114	113	0.0	0.0	1.198	
				3	298	74	-	-	-	299	300	0.0	0.0	1.128	
				4	50	13	-	-	-	50	47	0.0	0.0	1.070	
2 - Beehive Site Access	Entry	1	1	1	59	15	899	763	0.077	58	56	0.0	0.1	4.829	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				3	86	21	899	764	0.112	88	87	0.0	0.1	4.803	
				4	13	3	862	733	0.017	13	15	0.0	0.0	4.837	
			2	1	62	16	899	761	0.081	61	58	0.0	0.1	4.978	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				3	77	19	899	762	0.101	77	83	0.0	0.1	5.320	
				4	13	3	843	717	0.018	14	13	0.0	0.0	4.543	
3 - Coldhams Lane (W)	Entry	1	1	1	172	43	1025	953	0.180	173	164	0.0	0.1	4.590	
				2	91	23	1025	953	0.095	92	85	0.0	0.0	4.186	
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				4	23	6	1025	952	0.024	24	24	0.0	0.0	4.348	
			2	1	170	42	1025	953	0.178	170	169	0.0	0.2	4.306	
				2	86	22	1025	953	0.090	86	81	0.0	0.1	4.369	
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				4	26	6	1025	954	0.027	25	24	0.0	0.0	4.029	
		2	1	1	341	85	-	-	-	341	334	0.0	0.0	0.002	
				2	177	44	-	-	-	177	166	0.0	0.0	0.004	
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				4	49	12	-	-	-	49	49	0.0	0.0	0.004	
4 - Cambridge Retail Park	Entry	1	1	1	42	10	632	451	0.092	42	39	0.0	0.0	7.531	
				2	25	6	632	457	0.054	25	26	0.0	0.1	7.940	
				3	31	8	632	456	0.068	31	29	0.0	0.1	8.266	
				4	0.75	0.19	132	97	0.008	0.75	1	0.0	0.0	7.017	
			2	1	35	9	632	457	0.076	35	38	0.0	0.1	7.691	
				2	25	6	632	461	0.053	25	25	0.0	0.1	7.650	
				3	31	8	632	458	0.068	31	30	0.0	0.1	8.341	
				4	0.25	0.06	79	57	0.004	0.25	0.50	0.0	0.0	8.214	
		2	1	1	77	19	-	-	-	77	77	0.0	0.0	0.297	
				2	49	12	-	-	-	49	51	0.0	0.0	0.229	
				3	62	16	-	-	-	62	60	0.0	0.0	0.472	
				4	1	0.25	-	-	-	1	2	0.0	0.0	0.199	

17:00 - 17:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsig le se
1 - Coldhams Lane (E)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	67	17	655	557	0.120	66	66	0.1	0.2	6.354	
				3	187	47	655	560	0.334	189	182	0.2	0.3	6.474	
				4	29	7	655	554	0.052	30	29	0.0	0.0	6.685	
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	61	15	655	559	0.109	61	67	0.1	0.2	6.697	
				3	188	47	655	559	0.336	191	183	0.2	0.2	6.408	
				4	28	7	655	555	0.050	28	26	0.0	0.0	6.106	
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	127	32	-	-	-	128	133	0.0	0.1	1.943	
				3	373	93	-	-	-	375	365	0.0	0.1	1.986	
				4	55	14	-	-	-	56	55	0.0	0.0	2.074	
2 - Beehive Site Access	Entry	1	1	1	65	16	899	730	0.088	65	69	0.1	0.1	5.743	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				3	106	26	899	727	0.145	106	103	0.1	0.1	5.542	
				4	20	5	899	731	0.027	20	19	0.0	0.0	5.494	
			2	1	64	16	899	728	0.087	64	67	0.1	0.1	5.716	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				3	99	25	899	729	0.136	99	105	0.1	0.2	5.490	
				4	20	5	880	715	0.028	21	19	0.0	0.0	5.267	
3 - Coldhams Lane (W)	Entry	1	1	1	201	50	1025	942	0.213	201	201	0.1	0.3	4.708	
				2	97	24	1025	943	0.103	98	103	0.0	0.0	4.838	
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				4	34	9	1025	943	0.036	34	30	0.0	0.0	4.721	
			2	1	197	49	1025	942	0.209	198	199	0.2	0.3	4.751	
				2	102	26	1025	943	0.108	103	100	0.1	0.1	4.634	
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				4	29	7	1025	941	0.031	29	29	0.0	0.1	4.770	
		2	1	1	397	99	-	-	-	397	401	0.0	0.0	0.021	
				2	199	50	-	-	-	199	204	0.0	0.0	0.013	
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				4	63	16	-	-	-	63	59	0.0	0.0	0.031	
4 - Cambridge Retail Park	Entry	1	1	1	43	11	632	428	0.099	43	42	0.0	0.0	8.559	
				2	30	8	632	420	0.071	31	30	0.1	0.0	8.304	
				3	38	10	632	428	0.089	37	36	0.1	0.2	8.137	
				4	0.50	0.13	40	25	0.020	0.50	0.25	0.0	0.0	11.852	
			2	1	46	11	632	425	0.107	45	45	0.1	0.1	8.696	
				2	30	8	632	422	0.072	31	29	0.1	0.0	8.058	
				3	34	9	632	423	0.081	35	34	0.1	0.1	9.539	
				4	0.25	0.06	40	27	0.009	0.25	0.33	0.0	0.0	1.797	
		2	1	1	88	22	-	-	-	88	87	0.0	0.0	0.651	
				2	60	15	-	-	-	60	59	0.0	0.0	0.754	
				3	73	18	-	-	-	73	70	0.0	0.0	0.703	
				4	0.75	0.19	-	-	-	0.75	0.58	0.0	0.0	0.710	

17:15 - 17:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsig le se
1 - Coldhams Lane (E)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	73	18	655	542	0.135	73	78	0.2	0.1	6.686	
				3	216	54	655	542	0.399	216	217	0.3	0.5	6.521	
				4	33	8	641	534	0.062	33	33	0.0	0.1	7.066	
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	73	18	655	543	0.135	73	80	0.2	0.1	6.528	
				3	212	53	655	541	0.391	210	218	0.2	0.5	6.647	
				4	36	9	655	545	0.066	36	35	0.0	0.0	6.641	
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	148	37	-	-	-	146	158	0.1	0.2	3.852	
				3	430	107	-	-	-	428	437	0.1	0.5	3.641	
				4	68	17	-	-	-	69	68	0.0	0.1	3.821	
2 - Beehive Site Access	Entry	1	1	1	86	22	899	704	0.122	86	84	0.1	0.1	6.110	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				3	122	30	899	707	0.172	122	122	0.1	0.2	6.396	
				4	26	6	899	704	0.036	26	23	0.0	0.1	6.261	
			2	1	92	23	899	705	0.131	92	86	0.1	0.2	5.814	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				3	123	31	899	705	0.174	124	127	0.2	0.2	6.115	
				4	18	5	899	704	0.026	19	20	0.0	0.0	6.354	
3 - Coldhams Lane (W)	Entry	1	1	1	251	63	1025	920	0.273	250	248	0.3	0.4	5.177	
				2	114	28	1025	919	0.124	114	118	0.0	0.2	4.922	
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				4	32	8	1025	918	0.034	32	34	0.0	0.1	4.971	
			2	1	246	61	1025	920	0.267	247	241	0.3	0.3	5.263	
				2	118	30	1025	918	0.129	119	122	0.1	0.1	4.833	
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				4	38	10	1025	920	0.041	38	36	0.1	0.0	4.822	
		2	1	1	496	124	-	-	-	496	490	0.0	0.0	0.034	
				2	232	58	-	-	-	232	241	0.0	0.0	0.025	
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				4	70	17	-	-	-	70	70	0.0	0.0	0.020	
4 - Cambridge Retail Park	Entry	1	1	1	57	14	632	378	0.151	57	56	0.0	0.1	9.308	
				2	35	9	632	382	0.090	35	35	0.0	0.1	9.525	
				3	45	11	632	375	0.120	44	43	0.2	0.1	10.604	
				4	0.50	0.13	145	89	0.006	1	1	0.0	0.0	9.137	
			2	1	59	15	632	383	0.153	57	61	0.1	0.2	8.884	
				2	38	10	632	375	0.102	39	36	0.0	0.1	9.105	
				3	47	12	632	379	0.125	47	43	0.1	0.1	9.090	
				4	0.50	0.13	66	40	0.013	0.50	0.42	0.0	0.0	14.519	
		2	1	1	116	29	-	-	-	116	117	0.0	0.0	1.260	
				2	73	18	-	-	-	73	72	0.0	0.0	1.813	
				3	93	23	-	-	-	92	86	0.0	0.1	1.518	
				4	1	0.31	-	-	-	1	1	0.0	0.0	4.341	

17:30 - 17:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsig le se
1 - Coldhams Lane (E)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	80	20	655	536	0.149	82	82	0.1	0.1	6.772	
				3	222	55	655	541	0.410	221	224	0.5	0.5	6.587	
				4	38	10	655	542	0.071	38	40	0.1	0.0	6.398	
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	75	19	655	540	0.138	75	80	0.1	0.1	6.555	
				3	224	56	655	541	0.414	224	221	0.5	0.5	6.747	
				4	36	9	655	539	0.066	35	37	0.0	0.1	6.881	
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	155	39	-	-	-	155	161	0.2	0.4	4.318	
				3	444	111	-	-	-	446	445	0.5	0.7	4.397	
				4	75	19	-	-	-	74	77	0.1	0.1	4.483	
2 - Beehive Site Access	Entry	1	1	1	90	23	899	694	0.130	90	90	0.1	0.1	6.126	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				3	125	31	899	695	0.179	125	125	0.2	0.2	6.741	
				4	24	6	899	692	0.034	23	22	0.1	0.1	5.312	
			2	1	89	22	899	693	0.128	90	90	0.2	0.2	6.537	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				3	122	31	899	696	0.175	123	123	0.2	0.2	6.579	
				4	23	6	899	692	0.034	24	23	0.0	0.0	6.045	
3 - Coldhams Lane (W)	Entry	1	1	1	241	60	1025	914	0.263	244	241	0.4	0.2	5.298	
				2	123	31	1025	915	0.134	122	122	0.2	0.2	5.027	
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				4	33	8	1025	913	0.036	32	34	0.1	0.1	5.050	
			2	1	237	59	1025	915	0.259	239	240	0.3	0.4	5.237	
				2	116	29	1025	914	0.127	117	119	0.1	0.1	5.214	
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				4	30	8	1025	906	0.033	31	33	0.0	0.0	4.742	
		2	1	1	478	119	-	-	-	478	481	0.0	0.0	0.033	
				2	239	60	-	-	-	239	241	0.0	0.0	0.046	
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				4	63	16	-	-	-	63	67	0.0	0.0	0.027	
4 - Cambridge Retail Park	Entry	1	1	1	57	14	632	379	0.149	57	56	0.1	0.2	10.112	
				2	32	8	632	381	0.084	33	38	0.1	0.0	10.280	
				3	45	11	632	381	0.118	44	47	0.1	0.1	10.311	
				4	1	0.31	119	71	0.018	1	0.83	0.0	0.0	11.417	
			2	1	54	13	632	378	0.142	54	57	0.2	0.1	9.362	
				2	35	9	632	380	0.093	35	38	0.1	0.1	10.017	
				3	51	13	632	382	0.132	51	50	0.1	0.1	9.869	
				4	1	0.25	119	67	0.015	1	0.75	0.0	0.0	12.934	
		2	1	1	110	27	-	-	-	110	113	0.0	0.0	2.231	
				2	67	17	-	-	-	67	75	0.0	0.0	2.026	
				3	94	24	-	-	-	95	97	0.1	0.0	2.351	
				4	2	0.56	-	-	-	2	2	0.0	0.0	5.655	

17:45 - 18:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsig le se
1 - Coldhams Lane (E)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	65	16	655	560	0.116	65	68	0.1	0.1	6.379	
				3	181	45	655	560	0.323	182	187	0.5	0.3	6.373	
				4	25	6	655	557	0.045	25	25	0.0	0.1	6.363	
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	64	16	655	558	0.114	65	67	0.1	0.1	6.646	
				3	187	47	655	560	0.333	187	186	0.5	0.2	6.301	
				4	33	8	655	560	0.058	32	31	0.1	0.1	6.176	
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	128	32	-	-	-	128	135	0.4	0.0	2.291	
				3	367	92	-	-	-	368	371	0.7	0.2	2.235	
				4	58	15	-	-	-	58	55	0.1	0.0	2.203	
2 - Beehive Site Access	Entry	1	1	1	78	20	899	737	0.106	78	69	0.1	0.2	5.731	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				3	110	27	899	736	0.149	111	105	0.2	0.1	5.884	
				4	17	4	899	736	0.023	18	19	0.1	0.0	5.242	
			2	1	73	18	899	736	0.100	74	75	0.2	0.1	5.749	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				3	104	26	899	738	0.141	104	100	0.2	0.2	5.439	
				4	21	5	862	700	0.030	21	19	0.0	0.0	5.277	
3 - Coldhams Lane (W)	Entry	1	1	1	193	48	1025	935	0.206	194	200	0.2	0.2	4.438	
				2	97	24	1025	936	0.104	96	96	0.2	0.2	4.797	
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				4	29	7	1025	937	0.031	30	31	0.1	0.0	4.680	
			2	1	201	50	1025	935	0.215	203	201	0.4	0.1	4.546	
				2	100	25	1025	935	0.107	100	100	0.1	0.1	4.446	
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				4	28	7	1025	936	0.029	27	29	0.0	0.0	4.508	
		2	1	1	395	99	-	-	-	395	400	0.0	0.0	0.006	
				2	197	49	-	-	-	197	196	0.0	0.0	0.008	
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				4	56	14	-	-	-	56	60	0.0	0.0	0.005	
4 - Cambridge Retail Park	Entry	1	1	1	44	11	632	421	0.105	45	47	0.2	0.1	8.311	
				2	35	9	632	425	0.082	36	31	0.0	0.1	9.090	
				3	37	9	632	421	0.087	36	36	0.1	0.1	8.255	
				4	1	0.25	79	52	0.019	1	0.50	0.0	0.0	4.218	
			2	1	42	10	632	422	0.098	42	46	0.1	0.1	8.524	
				2	32	8	632	425	0.075	32	28	0.1	0.1	9.525	
				3	35	9	632	422	0.082	36	35	0.1	0.0	9.335	
				4	0.50	0.13	92	60	0.008	0.50	0.67	0.0	0.0	15.966	
		2	1	1	86	21	-	-	-	86	92	0.0	0.0	0.924	
				2	67	17	-	-	-	67	59	0.0	0.0	0.827	
				3	71	18	-	-	-	72	71	0.0	0.0	0.803	
				4	2	0.38	-	-	-	2	1	0.0	0.0	3.141	

18:00 - 18:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsig le se
1 - Coldhams Lane (E)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	56	14	655	580	0.097	56	54	0.1	0.1	6.050	
				3	161	40	655	577	0.279	160	160	0.3	0.3	6.262	
				4	23	6	655	579	0.040	24	24	0.1	0.0	5.828	
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	58	15	655	579	0.100	59	56	0.1	0.0	6.329	
				3	149	37	655	578	0.258	148	151	0.2	0.1	6.061	
				4	24	6	655	582	0.042	24	27	0.1	0.1	6.379	
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	114	29	-	-	-	114	109	0.0	0.0	1.277	
				3	311	78	-	-	-	310	310	0.2	0.1	1.253	
				4	48	12	-	-	-	48	50	0.0	0.1	1.202	
2 - Beehive Site Access	Entry	1	1	1	57	14	899	761	0.075	57	60	0.2	0.1	4.861	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				3	82	20	899	759	0.108	82	82	0.1	0.1	4.823	
				4	15	4	899	759	0.020	15	15	0.0	0.0	5.398	
			2	1	57	14	899	759	0.075	57	60	0.1	0.1	5.174	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				3	84	21	899	759	0.111	84	88	0.2	0.1	5.117	
				4	17	4	899	757	0.023	17	15	0.0	0.0	4.624	
3 - Coldhams Lane (W)	Entry	1	1	1	165	41	1025	955	0.172	163	165	0.2	0.2	4.448	
				2	78	19	1025	955	0.081	78	78	0.2	0.1	3.973	
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				4	22	6	1025	954	0.023	22	23	0.0	0.0	4.581	
			2	1	170	43	1025	954	0.178	169	169	0.1	0.4	4.280	
				2	86	21	1025	953	0.090	86	81	0.1	0.1	4.107	
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				4	20	5	1025	953	0.020	21	24	0.0	0.0	3.783	
		2	1	1	335	84	-	-	-	335	335	0.0	0.0	0.003	
				2	164	41	-	-	-	164	158	0.0	0.0	0.017	
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				4	42	10	-	-	-	42	47	0.0	0.0	0.007	
4 - Cambridge Retail Park	Entry	1	1	1	40	10	632	462	0.087	41	37	0.1	0.1	7.766	
				2	26	7	632	461	0.057	26	25	0.1	0.1	8.499	
				3	33	8	632	462	0.071	33	33	0.1	0.1	7.757	
				4	0.75	0.19	66	47	0.016	0.75	0.50	0.0	0.0	12.594	
			2	1	41	10	632	462	0.088	41	40	0.1	0.0	7.835	
				2	24	6	632	463	0.051	24	25	0.1	0.0	8.451	
				3	32	8	632	462	0.069	31	28	0.0	0.1	8.561	
				4	0.50	0.13	79	57	0.009	0.50	0.50	0.0	0.0	7.811	
		2	1	1	81	20	-	-	-	81	78	0.0	0.0	0.402	
				2	50	12	-	-	-	50	49	0.0	0.0	0.403	
				3	65	16	-	-	-	65	61	0.0	0.0	0.482	
				4	1	0.31	-	-	-	1	1	0.0	0.0	0.000	

2030 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Info	Lane Simulation	A1 - [Lane Simulation]	This analysis set uses Lane Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	6.99	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.99	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2030 Base	AM	ONE HOUR	07:45	09:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Coldhams Lane (E)		ONE HOUR	✓	614	100.000
2 - Beehive Site Access		ONE HOUR	✓	309	100.000
3 - Coldhams Lane (W)		ONE HOUR	✓	728	100.000
4 - Cambridge Retail Park		ONE HOUR	✓	171	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Coldhams Lane (E)	2 - Beehive Site Access	3 - Coldhams Lane (W)	4 - Cambridge Retail Park
From	1 - Coldhams Lane (E)	3	94	457	60
	2 - Beehive Site Access	50	0	242	17
	3 - Coldhams Lane (W)	515	150	7	56
	4 - Cambridge Retail Park	81	28	60	2

Vehicle Mix

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

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80