

Junctions 9
ARCADY 9 - Roundabout Module
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Filename: Peak Lane Rowan Way Longfield Avenue Roundabout - Lan Sim.j9

Path: W:\Projects\040-049\048 Persimmon Charles Church\048.0013 Oakcroft Lane, Stubbington\Modelling\209 Units - Revised App\3. Longfield Ave Peak Lane Rowan Way Roundabout

Report generation date: 23/10/2020 13:15:23

- »2018, AM
- »2018, PM
- »2025, AM
- »2025, PM
- »2025 + CD, AM
- »2025 + CD, PM
- »2025 + CD + PD, AM
- »2025 + CD + PD, PM
- »2025 + CD + Newlands Farm + PD, AM
- »2025 + CD + Newlands Farm + PD, PM
- »2025 with Bypass, AM
- »2025 with Bypass, PM
- »2025 with Bypass + CD, AM
- »2025 with Bypass + CD, PM
- »2025 with Bypass + CD + PD, AM
- »2025 with Bypass + CD + PD, PM
- »2025 with Bypass + CD + Newlands Farm + PD, AM
- »2025 with Bypass + CD + Newlands Farm + PD, PM

Summary of junction performance

	AM				PM			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
[Lane Simulation] - 2018								
2 - Longfield Avenue	1.5	12.03		B	2.5	19.70		C
3 - Peak Lane S	195.3	819.37		F	1.3	10.57		B
4 - Rowan Way	2.9	23.63		C	5.6	32.19		D
1 - Peak Lane North	5.9	45.64		E	103.9	646.34		F
[Lane Simulation] - 2025								
2 - Longfield Avenue	2.2	14.74		B	3.6	25.86		D
3 - Peak Lane S	318.3	1237.96		F	1.5	12.02		B
4 - Rowan Way	4.0	28.93		D	15.8	72.53		F
1 - Peak Lane North	10.0	64.21		F	193.6	1116.77		F
[Lane Simulation] - 2025 + CD								
2 - Longfield Avenue	2.1	14.50		B	3.6	25.13		D
3 - Peak Lane S	313.0	1208.70		F	1.5	12.15		B
4 - Rowan Way	4.1	28.90		D	15.9	73.00		F
1 - Peak Lane North	10.4	69.07		F	197.1	1131.71		F
[Lane Simulation] - 2025 + CD + PD								
2 - Longfield Avenue	2.1	14.74		B	4.1	28.35		D
3 - Peak Lane S	406.4	1469.03		F	1.6	12.76		B
4 - Rowan Way	3.6	27.64		D	16.5	78.14		F
1 - Peak Lane North	11.3	74.14		F	231.6	1302.92		F
[Lane Simulation] - 2025 + CD + Newlands Farm + PD								
2 - Longfield Avenue	11.4	60.02		F	12.8	68.78		F
3 - Peak Lane S	440.1	1557.41		F	1.9	15.72		C
4 - Rowan Way	9.7	65.15		F	105.5	503.60		F
1 - Peak Lane North	22.8	133.10		F	309.3	1605.64		F
[Lane Simulation] - 2025 with Bypass								
2 - Longfield Avenue	1.2	10.53		B	1.4	11.29		B

3 - Peak Lane S	15.4	71.53	F	1.6	13.67	B
4 - Rowan Way	1.5	15.02	C	1.2	10.74	B
1 - Peak Lane North	2.0	15.98	C	1.2	12.16	B
[Lane Simulation] - 2025 with Bypass + CD						
2 - Longfield Avenue	1.2	10.81	B	1.6	14.38	B
3 - Peak Lane S	15.8	73.58	F	1.6	13.81	B
4 - Rowan Way	1.5	14.42	B	1.0	10.47	B
1 - Peak Lane North	1.9	15.74	C	3.9	22.69	C
[Lane Simulation] - 2025 with Bypass + CD + PD						
2 - Longfield Avenue	1.1	10.91	B	1.6	14.97	B
3 - Peak Lane S	26.9	114.57	F	1.7	14.49	B
4 - Rowan Way	1.5	15.44	C	1.2	10.97	B
1 - Peak Lane North	1.9	17.04	C	5.5	32.62	D
[Lane Simulation] - 2025 with Bypass + CD + Newlands Farm + PD						
2 - Longfield Avenue	1.1	11.94	B	2.2	20.09	C
3 - Peak Lane S	117.5	546.55	F	3.4	23.94	C
4 - Rowan Way	2.0	15.92	C	2.0	14.13	B
1 - Peak Lane North	2.5	18.91	C	11.0	64.59	F

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

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

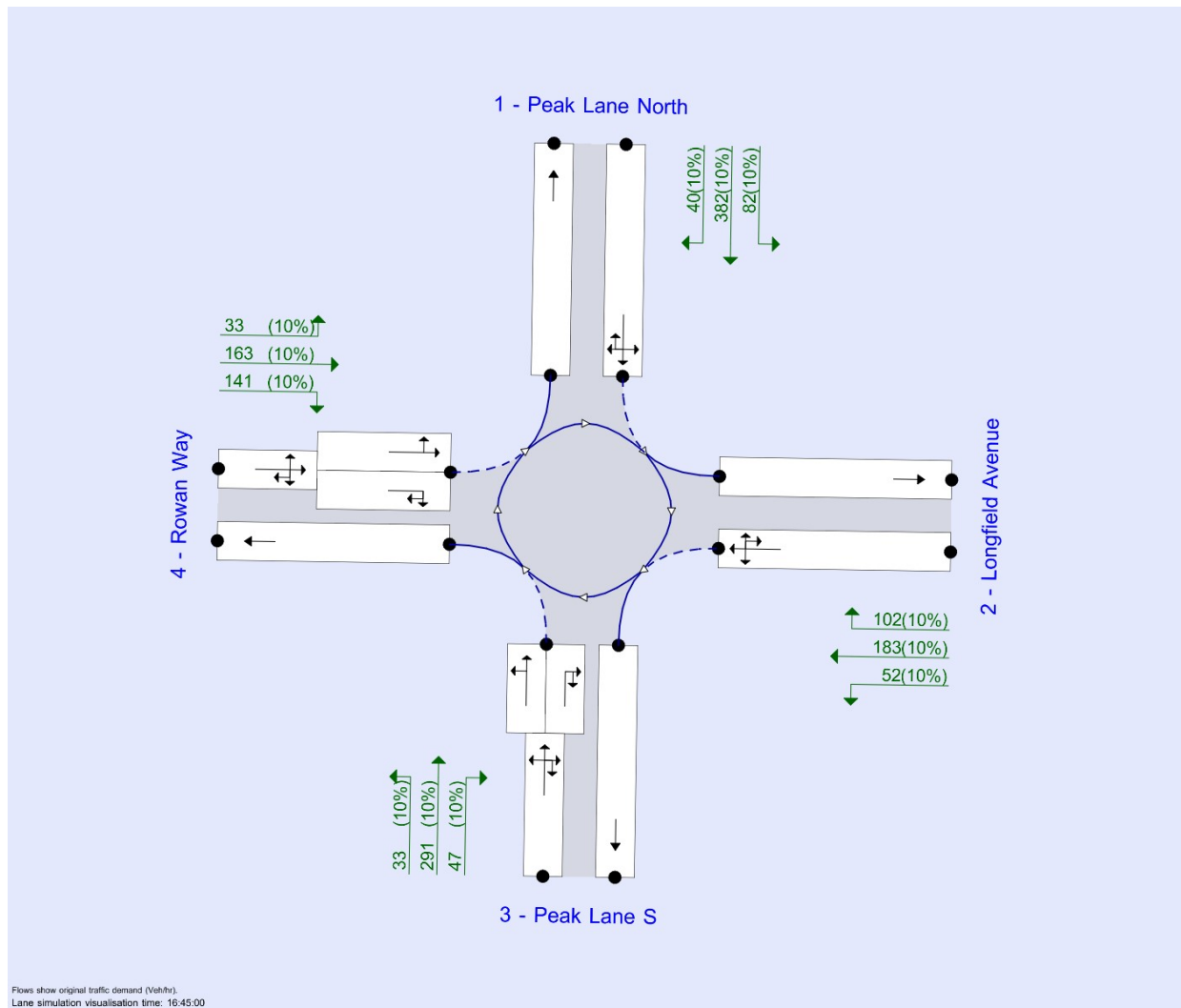
File summary

File Description

Title	Longfield Av RB 2018
Location	Stubbington
Site number	048.0013
Date	19/12/2018
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	PC-PBASH-MODEL\Cad PC
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	mph	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

Lane Simulation options

Stop criteria (%)	Stop criteria time (s)	Stop criteria number of trials	Random seed	Results refresh speed (s)	Individual vehicle animation number of trials	Use crossings quick response	Last run random seed	Last run number of trials	Last run time taken (s)
1.00	100000	100000	-1	3	1	✓	1441111595	307	32.86

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	2018	AM	ONE HOUR	07:45	09:15	15	✓
D2	2018	PM	ONE HOUR	16:45	18:15	15	✓
D3	2025	AM	ONE HOUR	07:45	09:15	15	✓
D4	2025	PM	ONE HOUR	16:45	18:15	15	✓
D5	2025 + CD	AM	ONE HOUR	07:45	09:15	15	✓
D6	2025 + CD	PM	ONE HOUR	16:45	18:15	15	✓
D7	2025 + CD + PD	AM	ONE HOUR	07:45	09:15	15	✓
D8	2025 + CD + PD	PM	ONE HOUR	16:45	18:15	15	✓
D9	2025 + CD + Newlands Farm + PD	AM	ONE HOUR	07:45	09:15	15	✓
D10	2025 + CD + Newlands Farm + PD	PM	ONE HOUR	16:45	18:15	15	✓
D11	2025 with Bypass	AM	ONE HOUR	07:45	09:15	15	✓
D12	2025 with Bypass	PM	ONE HOUR	16:45	18:15	15	✓
D13	2025 with Bypass + CD	AM	ONE HOUR	07:45	09:15	15	✓
D14	2025 with Bypass + CD	PM	ONE HOUR	16:45	18:15	15	✓
D15	2025 with Bypass + CD + PD	AM	ONE HOUR	07:45	09:15	15	✓

D16	2025 with Bypass + CD + PD	PM	ONE HOUR	16:45	18:15	15	✓
D17	2025 with Bypass + CD + Newlands Farm + PD	AM	ONE HOUR	07:45	09:15	15	✓
D18	2025 with Bypass + CD + Newlands Farm + PD	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

2018, 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	3 - Peak Lane S - Lane Simulation	Arm 3: Queue at end of modelled period is greater than 10 PCU. Delay is likely to have been underestimated.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1-1	Longfield Av RB	Standard Roundabout	2, 3, 4, 1	385.19	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
2	Longfield Avenue	
3	Peak Lane S	
4	Rowan Way	
1	Peak Lane North	

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
2 - Longfield Avenue	3.65	4.35	0.0	10.0	28.0	38.0	
3 - Peak Lane S	3.65	6.00	13.5	20.0	28.0	22.0	
4 - Rowan Way	3.50	5.88	15.0	15.0	28.0	21.0	
1 - Peak Lane North	3.50	3.70	0.0	6.0	28.0	30.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
2 - Longfield Avenue	0.497	1022
3 - Peak Lane S	0.649	1607
4 - Rowan Way	0.636	1562
1 - Peak Lane North	0.468	940

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

Lane Simulation: Arm options

Arm	Lane capacity source	Traffic Considering Secondary Lanes (%)
2 - Longfield Avenue	Evenly split	10.00
3 - Peak Lane S	Evenly split	10.00
4 - Rowan Way	Evenly split	10.00
1 - Peak Lane North	Evenly split	10.00

Lanes

Arm	Lane level	Lane	Destination arms	Has limited storage	Storage (PCU)	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)
2 - Longfield Avenue	1 [Give-way line]	1	1, 2, 3, 4		Infinity	0	99999
3 - Peak Lane S	1 [Give-way line]	1	1, 4	✓	2.00	0	99999
		2	2, 3	✓	2.00	0	99999
	2	1	(2, 3, 4, 1)		Infinity		
1 - Peak Lane North	1 [Give-way]	1	1, 2	✓	3.00	0	99999

4 - Rowan Way	line]	2	3, 4	✓	3.00	0	99999
	2	1	(2, 3, 4, 1)		Infinity		
1 - Peak Lane North	1 [Give-way line]	1	1, 2, 3, 4		Infinity	0	99999

Entry Lane slope and intercept

Arm	Lane level	Lane	Final slope	Final intercept (PCU/hr)
2 - Longfield Avenue	1 [Give-way line]	1	0.497	1022
		2	0.325	803
3 - Peak Lane S	1 [Give-way line]	1	0.325	803
		2	0.318	781
4 - Rowan Way	1 [Give-way line]	1	0.318	781
		2	0.468	940
1 - Peak Lane North	1 [Give-way line]	1	0.468	940

Lane Movements

Arm	Lane Level	Lane	Destination arm			
			Longfield Avenue	Peak Lane S	Rowan Way	Peak Lane North
2 - Longfield Avenue	1 [Give-way line]	1	✓	✓	✓	✓
3 - Peak Lane S	1 [Give-way line]	1			✓	✓
		2	✓	✓		
	2	1	✓	✓	✓	✓
4 - Rowan Way	1 [Give-way line]	1	✓			✓
		2		✓	✓	
	2	1	✓	✓	✓	✓
1 - Peak Lane North	1 [Give-way line]	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	2018	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
2 - Longfield Avenue		ONE HOUR	✓	374	100.000
3 - Peak Lane S		ONE HOUR	✓	981	100.000
4 - Rowan Way		ONE HOUR	✓	375	100.000
1 - Peak Lane North		ONE HOUR	✓	434	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		2 - Longfield Avenue	3 - Peak Lane S	4 - Rowan Way	1 - Peak Lane North
From	2 - Longfield Avenue	0	65	230	79
	3 - Peak Lane S	288	0	181	512
	4 - Rowan Way	254	88	0	33
	1 - Peak Lane North	144	253	37	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		2 - Longfield Avenue	3 - Peak Lane S	4 - Rowan Way	1 - Peak Lane North
From	2 - Longfield Avenue	10	10	10	10
	3 - Peak Lane S	10	10	10	10
	4 - Rowan Way	10	10	10	10
	1 - Peak Lane North	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
2 - Longfield Avenue	12.03	1.5	B	346	519
3 - Peak Lane S	819.37	195.3	F	897	1346
4 - Rowan Way	23.63	2.9	C	345	518
1 - Peak Lane North	45.64	5.9	E	400	600

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	287	72	288	288	520	0.0	0.5	7.089	A
3 - Peak Lane S	732	183	268	723	308	0.0	7.8	29.257	D
4 - Rowan Way	286	72	648	286	343	0.0	0.9	10.906	B
1 - Peak Lane North	334	84	473	334	461	0.0	1.1	11.455	B

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	333	83	340	333	599	0.5	0.9	8.481	A
3 - Peak Lane S	885	221	308	806	364	7.8	29.8	91.671	F
4 - Rowan Way	341	85	731	335	383	0.9	1.7	15.680	C
1 - Peak Lane North	390	97	549	389	517	1.1	2.1	16.931	C

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	417	104	414	416	666	0.9	1.4	11.234	B
3 - Peak Lane S	1081	270	382	784	448	29.8	102.2	306.655	F
4 - Rowan Way	414	103	728	411	439	1.7	2.8	22.096	C
1 - Peak Lane North	478	119	609	471	530	2.1	5.8	36.454	E

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	416	104	424	416	677	1.4	1.5	12.025	B
3 - Peak Lane S	1068	267	384	790	457	102.2	175.5	639.528	F
4 - Rowan Way	417	104	733	421	441	2.8	2.5	23.627	C
1 - Peak Lane North	479	120	619	482	535	5.8	5.9	45.638	E

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	343	86	340	340	591	1.5	1.0	9.010	A
3 - Peak Lane S	880	220	314	803	367	175.5	195.7	819.369	F
4 - Rowan Way	334	83	726	334	391	2.5	1.5	16.438	C
1 - Peak Lane North	392	98	536	396	524	5.9	2.0	23.706	C

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	282	71	286	282	541	1.0	0.6	7.332	A
3 - Peak Lane S	740	185	263	839	305	195.7	175.2	685.302	F
4 - Rowan Way	279	70	743	282	358	1.5	1.1	13.685	B
1 - Peak Lane North	326	81	502	325	523	2.0	1.1	13.962	B

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 (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	287	789	0.364	288	0.0	0.5	7.089	A
	Exit	1	1		520			520	0.0	0.0	0.000	A
3 - Peak Lane S	Entry	1	1	1, 4	511	641	0.797	511	0.0	1.3	8.742	A
			2	2, 3	212	642	0.330	211	0.0	0.5	7.044	A
	Exit	1	1	(2, 3, 4, 1)	732			723	0.0	6.1	21.004	C
4 - Rowan Way	Entry	1	1	1, 2	220	505	0.436	220	0.0	0.6	10.203	B
			2	3, 4	66	504	0.131	66	0.0	0.1	7.707	A
	Exit	1	1	(2, 3, 4, 1)	286			286	0.0	0.2	1.258	A
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	334	633	0.528	334	0.0	1.1	11.455	B
	Exit	1	1		461			461	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)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	333	764	0.435	333	0.5	0.9	8.481	A
	Exit	1	1		599			599	0.0	0.0	0.000	A
3 - Peak Lane S	Entry	1	1	1, 4	563	631	0.892	563	1.3	1.6	9.756	A
			2	2, 3	244	627	0.389	243	0.5	0.5	7.703	A
	Exit	1	1	(2, 3, 4, 1)	885			807	6.1	27.7	82.482	F
4 - Rowan Way	Entry	1	1	1, 2	259	476	0.543	256	0.6	1.1	13.133	B
			2	3, 4	80	474	0.168	80	0.1	0.2	9.303	A
	Exit	1	1	(2, 3, 4, 1)	341			338	0.2	0.4	3.418	A
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	390	594	0.657	389	1.1	2.1	16.931	C
	Exit	1	1		517			517	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)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	417	722	0.576	416	0.9	1.4	11.234	B
	Exit	1	1		666			666	0.0	0.0	0.000	A
3 - Peak Lane S	Entry	1	1	1, 4	552	607	0.909	551	1.6	1.6	10.181	B
			2	2, 3	232	603	0.386	233	0.5	0.5	8.280	A
	Exit	1	1	(2, 3, 4, 1)	1081			784	27.7	100.0	296.976	F
4 - Rowan Way	Entry	1	1	1, 2	317	479	0.663	316	1.1	1.4	15.097	C
			2	3, 4	95	480	0.196	95	0.2	0.2	9.550	A
	Exit	1	1	(2, 3, 4, 1)	414			412	0.4	1.2	8.273	A
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	478	570	0.840	471	2.1	5.8	36.454	E
	Exit	1	1		530			530	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)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	416	720	0.579	416	1.4	1.5	12.025	B
	Exit	1	1		677			677	0.0	0.0	0.000	A
3 - Peak Lane S	Entry	1	1	1, 4	554	606	0.915	555	1.6	1.5	10.324	B
			2	2, 3	235	606	0.388	235	0.5	0.5	8.144	A
	Exit	1	1	(2, 3, 4, 1)	1068			789	100.0	173.4	630.018	F
4 - Rowan Way	Entry	1	1	1, 2	319	476	0.671	320	1.4	1.3	15.274	C
			2	3, 4	101	477	0.212	101	0.2	0.3	9.724	A
	Exit	1	1	(2, 3, 4, 1)	417			420	1.2	0.9	9.672	A
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	479	566	0.847	482	5.8	5.9	45.638	E
	Exit	1	1		535			535	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)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	343	755	0.453	340	1.5	1.0	9.010	A
	Exit	1	1		591			591	0.0	0.0	0.000	A

3 - Peak Lane S	Entry	1	1	1, 4	569	629	0.906	570	1.5	1.6	10.016	B
			2	2, 3	233	625	0.373	233	0.5	0.5	7.934	A
	Exit	2	1	(2, 3, 4, 1)	880			802	173.4	193.5	810.773	F
	Exit	1	1		367			367	0.0	0.0	0.000	A
4 - Rowan Way	Entry	1	1	1, 2	254	480	0.529	255	1.3	0.8	13.460	B
			2	3, 4	80	480	0.168	79	0.3	0.3	9.073	A
	Exit	2	1	(2, 3, 4, 1)	334			334	0.9	0.4	4.051	A
	Exit	1	1		391			391	0.0	0.0	0.000	A
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	392	603	0.650	396	5.9	2.0	23.706	C
	Exit	1	1		524			524	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	282	781	0.361	282	1.0	0.6	7.332	A
	Exit	1	1		541			541	0.0	0.0	0.000	A
3 - Peak Lane S	Entry	1	1	1, 4	594	643	0.923	594	1.6	1.6	9.761	A
			2	2, 3	245	644	0.380	245	0.5	0.6	7.713	A
	Exit	2	1	(2, 3, 4, 1)	740			839	193.5	173.1	679.274	F
	Exit	1	1		305			305	0.0	0.0	0.000	A
4 - Rowan Way	Entry	1	1	1, 2	213	472	0.450	214	0.8	0.7	12.253	B
			2	3, 4	67	474	0.140	67	0.3	0.1	8.840	A
	Exit	2	1	(2, 3, 4, 1)	279			279	0.4	0.2	2.272	A
	Exit	1	1		358			358	0.0	0.0	0.000	A
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	326	619	0.526	325	2.0	1.1	13.962	B
	Exit	1	1		523			523	0.0	0.0	0.000	A

2018, 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	1 - Peak Lane North - Lane Simulation	Arm 1: Queue at end of modelled period is greater than 10 PCU. Delay is likely to have been underestimated.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1-1	Longfield Av RB	Standard Roundabout	2, 3, 4, 1	224.39	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
D2	2018	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 (%)
2 - Longfield Avenue		ONE HOUR	✓	400	100.000
3 - Peak Lane S		ONE HOUR	✓	340	100.000
4 - Rowan Way		ONE HOUR	✓	597	100.000
1 - Peak Lane North		ONE HOUR	✓	635	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		2 - Longfield Avenue	3 - Peak Lane S	4 - Rowan Way	1 - Peak Lane North
From	2 - Longfield Avenue	0	114	191	95
	3 - Peak Lane S	89	0	39	212
	4 - Rowan Way	379	189	0	29
	1 - Peak Lane North	166	445	24	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		2 - Longfield Avenue	3 - Peak Lane S	4 - Rowan Way	1 - Peak Lane North
From	2 - Longfield Avenue	10	10	10	10
	3 - Peak Lane S	10	10	10	10
	4 - Rowan Way	10	10	10	10
	1 - Peak Lane North	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
2 - Longfield Avenue	19.70	2.5	C	366	549
3 - Peak Lane S	10.57	1.3	B	311	467
4 - Rowan Way	32.19	5.6	D	548	822
1 - Peak Lane North	646.34	103.9	F	585	877

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)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	300	75	496	299	475	0.0	0.8	8.898	A
3 - Peak Lane S	253	63	230	255	565	0.0	0.5	7.643	A
4 - Rowan Way	450	113	298	450	187	0.0	1.5	10.940	B
1 - Peak Lane North	480	120	498	473	250	0.0	3.9	21.734	C

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	361	90	569	361	563	0.8	1.3	12.462	B
3 - Peak Lane S	307	77	280	308	650	0.5	0.7	8.807	A
4 - Rowan Way	545	136	358	543	230	1.5	2.4	15.284	C
1 - Peak Lane North	575	144	597	535	303	3.9	13.0	59.587	F

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	445	111	590	444	645	1.3	2.5	19.135	C
3 - Peak Lane S	367	92	338	366	697	0.7	1.1	9.891	A
4 - Rowan Way	652	163	429	655	274	2.4	5.5	28.682	D
1 - Peak Lane North	702	175	721	515	364	13.0	57.8	247.427	F

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	435	109	594	432	659	2.5	2.5	19.702	C
3 - Peak Lane S	380	95	328	379	697	1.1	1.2	10.572	B
4 - Rowan Way	653	163	441	662	266	5.5	5.4	32.192	D
1 - Peak Lane North	696	174	732	521	372	57.8	101.6	543.802	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	355	89	600	359	568	2.5	1.3	14.249	B
3 - Peak Lane S	306	77	278	308	681	1.2	0.6	8.699	A
4 - Rowan Way	541	135	359	536	227	5.4	2.6	17.766	C
1 - Peak Lane North	573	143	589	579	306	101.6	103.9	646.338	F

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	298	75	601	299	512	1.3	0.9	11.598	B
3 - Peak Lane S	254	64	239	255	661	0.6	0.5	7.597	A
4 - Rowan Way	446	112	295	447	199	2.6	1.4	11.965	B
1 - Peak Lane North	481	120	490	623	252	103.9	69.9	470.989	F

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)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	300	681	0.440	299	0.0	0.8	8.898	A
	Exit	1	1		475			475	0.0	0.0	0.000	A
3 - Peak Lane S	Entry	1	1	1, 4	185	650	0.284	185	0.0	0.3	6.649	A
			2	2, 3	69	654	0.106	70	0.0	0.1	5.744	A
	Exit	1	1	(2, 3, 4, 1)	253			254	0.0	0.1	1.233	A
			1	1		565			565	0.0	0.0	0.000
4 - Rowan Way	Entry	1	1	1, 2	306	614	0.499	307	0.0	0.9	9.589	A
			2	3, 4	144	612	0.235	143	0.0	0.3	7.382	A
	Exit	1	1	(2, 3, 4, 1)	450			450	0.0	0.3	2.043	A
			1	1		187			187	0.0	0.0	0.000
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	480	621	0.774	473	0.0	3.9	21.734	C
	Exit	1	1		250			250	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)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	361	643	0.561	361	0.8	1.3	12.462	B
	Exit	1	1		563			563	0.0	0.0	0.000	A
3 - Peak Lane S	Entry	1	1	1, 4	225	637	0.354	226	0.3	0.4	7.244	A
			2	2, 3	82	633	0.129	82	0.1	0.1	6.376	A
	Exit	1	1	(2, 3, 4, 1)	307			307	0.1	0.1	1.792	A
			1	1		650			650	0.0	0.0	0.000
4 - Rowan Way	Entry	1	1	1, 2	371	597	0.621	369	0.9	1.2	11.300	B
			2	3, 4	173	595	0.291	173	0.3	0.5	8.354	A
	Exit	1	1	(2, 3, 4, 1)	545			544	0.3	0.8	4.902	A
			1	1		230			230	0.0	0.0	0.000
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	575	573	1.003	535	3.9	13.0	59.587	F
	Exit	1	1		303			303	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)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	445	637	0.700	444	1.3	2.5	19.135	C
	Exit	1	1		645			645	0.0	0.0	0.000	A
3 - Peak Lane S	Entry	1	1	1, 4	270	618	0.436	269	0.4	0.6	7.695	A
			2	2, 3	97	625	0.155	97	0.1	0.2	6.387	A
	Exit	1	1	(2, 3, 4, 1)	367			366	0.1	0.3	2.537	A
			1	1		697			697	0.0	0.0	0.000
4 - Rowan Way	Entry	1	1	1, 2	444	575	0.772	444	1.2	1.7	13.584	B
			2	3, 4	213	572	0.373	212	0.5	0.6	9.534	A
	Exit	1	1	(2, 3, 4, 1)	652			657	0.8	3.1	16.362	C
			1	1		274			274	0.0	0.0	0.000
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	702	517	1.352	515	13.0	57.8	247.427	F
	Exit	1	1		364			364	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)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	435	634	0.686	432	2.5	2.5	19.702	C
	Exit	1	1		659			659	0.0	0.0	0.000	A
3 - Peak Lane S	Entry	1	1	1, 4	278	628	0.444	277	0.6	0.7	7.904	A
			2	2, 3	101	621	0.163	102	0.2	0.2	6.523	A
	Exit	1	1	(2, 3, 4, 1)	380			380	0.3	0.4	3.037	A
			1	1		697			697	0.0	0.0	0.000
4 - Rowan Way	Entry	1	1	1, 2	451	571	0.789	452	1.7	1.7	13.842	B
			2	3, 4	210	571	0.367	210	0.6	0.6	9.562	A
	Exit	1	1	(2, 3, 4, 1)	653			660	3.1	3.2	19.694	C
			1	1		266			266	0.0	0.0	0.000
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	696	513	1.358	521	57.8	101.6	543.802	F
	Exit	1	1		372			372	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)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	355	634	0.559	359	2.5	1.3	14.249	B
	Exit	1	1		568			568	0.0	0.0	0.000	A

3 - Peak Lane S	Entry	1	1	1, 4	229	639	0.358	229	0.7	0.4	7.238	A
		2	2	2, 3	79	628	0.125	79	0.2	0.1	6.186	A
	Exit	1	1	(2, 3, 4, 1)	306			307	0.4	0.1	1.734	A
4 - Rowan Way	Entry	1	1	1, 2	366	593	0.618	365	1.7	1.2	11.876	B
		2	2	3, 4	171	599	0.286	171	0.6	0.4	8.493	A
	Exit	1	1	(2, 3, 4, 1)	541			537	3.2	1.0	7.023	A
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	573	579	0.990	579	101.6	103.9	646.338	F
	Exit	1	1		306			306	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)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	298	629	0.475	299	1.3	0.9	11.598	B
	Exit	1	1		512			512	0.0	0.0	0.000	A
3 - Peak Lane S	Entry	1	1	1, 4	190	654	0.290	190	0.4	0.3	6.799	A
			2	2, 3	65	659	0.098	65	0.1	0.1	5.980	A
	Exit	1	1	(2, 3, 4, 1)	254			254	0.1	0.1	1.014	A
4 - Rowan Way	Entry	1	1	1, 2	303	614	0.494	304	1.2	0.8	10.103	B
			2	2	3, 4	144	612	0.235	143	0.4	0.3	7.705
	Exit	1	1	(2, 3, 4, 1)	446			447	1.0	0.3	2.673	A
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	481	624	0.774	623	103.9	69.9	470.989	F
	Exit	1	1		252			252	0.0	0.0	0.000	A

2025, 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	3 - Peak Lane S - Lane Simulation	Arm 3: Queue at end of modelled period is greater than 10 PCU. Delay is likely to have been underestimated.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1-1	Longfield Av RB	Standard Roundabout	2, 3, 4, 1	587.14	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	2025	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
2 - Longfield Avenue		ONE HOUR	✓	413	100.000
3 - Peak Lane S		ONE HOUR	✓	1084	100.000
4 - Rowan Way		ONE HOUR	✓	414	100.000
1 - Peak Lane North		ONE HOUR	✓	460	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		2 - Longfield Avenue	3 - Peak Lane S	4 - Rowan Way	1 - Peak Lane North
From	2 - Longfield Avenue	0	72	254	87
	3 - Peak Lane S	318	0	200	566
	4 - Rowan Way	281	97	0	36
	1 - Peak Lane North	159	260	41	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		2 - Longfield Avenue	3 - Peak Lane S	4 - Rowan Way	1 - Peak Lane North
From	2 - Longfield Avenue	10	10	10	10
	3 - Peak Lane S	10	10	10	10
	4 - Rowan Way	10	10	10	10
	1 - Peak Lane North	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
2 - Longfield Avenue	14.74	2.2	B	380	569
3 - Peak Lane S	1237.96	318.3	F	1002	1503
4 - Rowan Way	28.93	4.0	D	382	573
1 - Peak Lane North	64.21	10.0	F	424	636

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	304	76	296	304	561	0.0	0.6	7.362	A
3 - Peak Lane S	821	205	281	786	318	0.0	16.0	49.007	E
4 - Rowan Way	310	78	705	310	362	0.0	1.3	12.520	B
1 - Peak Lane North	346	86	513	343	502	0.0	1.4	12.353	B

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	372	93	359	370	626	0.6	1.1	9.934	A
3 - Peak Lane S	976	244	343	799	386	16.0	60.0	176.700	F
4 - Rowan Way	374	94	730	374	412	1.3	2.0	18.393	C
1 - Peak Lane North	414	104	577	408	527	1.4	2.9	21.517	C

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	452	113	438	452	711	1.1	1.9	14.737	B
3 - Peak Lane S	1209	302	417	766	473	60.0	163.8	521.204	F
4 - Rowan Way	461	115	719	461	464	2.0	3.9	28.932	D
1 - Peak Lane North	506	126	643	506	537	2.9	7.6	46.244	E

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	463	116	439	457	703	1.9	2.2	14.717	B
3 - Peak Lane S	1203	301	423	767	472	163.8	270.9	1007.815	F
4 - Rowan Way	457	114	722	456	468	3.9	3.7	28.386	D
1 - Peak Lane North	512	128	639	503	540	7.6	10.0	64.208	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	373	93	357	375	642	2.2	1.0	10.660	B
3 - Peak Lane S	973	243	351	794	381	270.9	316.9	1237.957	F
4 - Rowan Way	373	93	734	373	411	3.7	1.9	20.411	C
1 - Peak Lane North	414	103	581	418	526	10.0	3.3	38.495	E

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	313	78	303	311	577	1.0	0.8	7.800	A
3 - Peak Lane S	827	207	288	829	326	316.9	318.0	871.225	F
4 - Rowan Way	314	78	739	313	377	1.9	1.3	14.553	B
1 - Peak Lane North	352	88	531	349	522	3.3	1.6	16.244	C

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 (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	304	781	0.389	304	0.0	0.6	7.362	A
	Exit	1	1		561			561	0.0	0.0	0.000	A
3 - Peak Lane S	Entry	1	1	1, 4	556	641	0.867	557	0.0	1.4	9.168	A
			2	2, 3	231	638	0.361	229	0.0	0.6	7.386	A
	Exit	1	1	(2, 3, 4, 1)	821			786	0.0	14.0	40.308	E
			1	1		318			318	0.0	0.0	0.000
4 - Rowan Way	Entry	1	1	1, 2	236	484	0.488	236	0.0	0.9	11.175	B
			2	3, 4	74	484	0.154	74	0.0	0.2	8.061	A
	Exit	1	1	(2, 3, 4, 1)	310			311	0.0	0.2	2.048	A
			1	1		362			362	0.0	0.0	0.000
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	346	613	0.564	343	0.0	1.4	12.353	B
	Exit	1	1		502			502	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)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	372	751	0.495	370	0.6	1.1	9.934	A
	Exit	1	1		626			626	0.0	0.0	0.000	A
3 - Peak Lane S	Entry	1	1	1, 4	564	619	0.911	564	1.4	1.6	10.012	B
			2	2, 3	234	616	0.378	235	0.6	0.5	7.900	A
	Exit	1	1	(2, 3, 4, 1)	976			797	14.0	58.0	167.266	F
			1	1		386			386	0.0	0.0	0.000
4 - Rowan Way	Entry	1	1	1, 2	288	476	0.605	287	0.9	1.1	14.053	B
			2	3, 4	86	478	0.180	87	0.2	0.2	9.407	A
	Exit	1	1	(2, 3, 4, 1)	374			374	0.2	0.7	5.395	A
			1	1		412			412	0.0	0.0	0.000
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	414	584	0.711	408	1.4	2.9	21.517	C
	Exit	1	1		527			527	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)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	452	713	0.634	452	1.1	1.9	14.737	B
	Exit	1	1		711			711	0.0	0.0	0.000	A
3 - Peak Lane S	Entry	1	1	1, 4	543	595	0.913	543	1.6	1.6	10.377	B
			2	2, 3	222	594	0.373	223	0.5	0.5	8.172	A
	Exit	1	1	(2, 3, 4, 1)	1209			765	58.0	161.6	511.311	F
			1	1		473			473	0.0	0.0	0.000
4 - Rowan Way	Entry	1	1	1, 2	353	482	0.735	355	1.1	1.5	16.272	C
			2	3, 4	107	488	0.221	106	0.2	0.4	9.903	A
	Exit	1	1	(2, 3, 4, 1)	461			461	0.7	2.0	14.108	B
			1	1		464			464	0.0	0.0	0.000
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	506	555	0.913	506	2.9	7.6	46.244	E
	Exit	1	1		537			537	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)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	463	710	0.653	457	1.9	2.2	14.717	B
	Exit	1	1		703			703	0.0	0.0	0.000	A
3 - Peak Lane S	Entry	1	1	1, 4	546	593	0.922	546	1.6	1.6	10.570	B
			2	2, 3	220	594	0.370	220	0.5	0.5	8.462	A
	Exit	1	1	(2, 3, 4, 1)	1203			766	161.6	268.8	998.227	F
			1	1		472			472	0.0	0.0	0.000
4 - Rowan Way	Entry	1	1	1, 2	348	478	0.727	348	1.5	1.6	16.088	C
			2	3, 4	109	477	0.228	108	0.4	0.3	10.375	B
	Exit	1	1	(2, 3, 4, 1)	457			457	2.0	1.8	13.649	B
			1	1		468			468	0.0	0.0	0.000
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	512	556	0.919	503	7.6	10.0	64.208	F
	Exit	1	1		540			540	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)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	373	754	0.495	375	2.2	1.0	10.660	B
	Exit	1	1		642			642	0.0	0.0	0.000	A

3 - Peak Lane S	Entry	1	1	1, 4	555	618	0.897	554	1.6	1.6	10.238	B
		2	2	2, 3	239	614	0.388	240	0.5	0.5	8.198	A
	Exit	1	1	(2, 3, 4, 1)	973			793	268.8	314.8	1230.124	F
4 - Rowan Way	Entry	1	1	1, 2	287	476	0.602	287	1.6	1.1	14.594	B
		2	2	3, 4	86	477	0.180	86	0.3	0.2	9.305	A
	Exit	1	1	(2, 3, 4, 1)	373			373	1.8	0.6	7.095	A
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	414	584	0.708	418	10.0	3.3	38.495	E
	Exit	1	1		526			526	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	313	780	0.401	311	1.0	0.8	7.800	A
	Exit	1	1		577			577	0.0	0.0	0.000	A
3 - Peak Lane S	Entry	1	1	1, 4	584	637	0.916	584	1.6	1.6	9.828	A
			2	2, 3	245	635	0.385	245	0.5	0.5	7.748	A
	Exit	1	1	(2, 3, 4, 1)	827			829	314.8	315.8	869.452	F
4 - Rowan Way	Entry	1	1	1, 2	240	478	0.502	239	1.1	0.9	12.676	B
			2	2	3, 4	74	478	0.155	74	0.2	0.2	8.996
	Exit	1	1	(2, 3, 4, 1)	314			314	0.6	0.3	2.801	A
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	352	609	0.578	349	3.3	1.6	16.244	C
	Exit	1	1		522			522	0.0	0.0	0.000	A

2025, 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	1 - Peak Lane North - Lane Simulation	Arm 1: Queue at end of modelled period is greater than 10 PCU. Delay is likely to have been underestimated.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1-1	Longfield Av RB	Standard Roundabout	2, 3, 4, 1	388.92	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	2025	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 (%)
2 - Longfield Avenue		ONE HOUR	✓	442	100.000
3 - Peak Lane S		ONE HOUR	✓	375	100.000
4 - Rowan Way		ONE HOUR	✓	660	100.000
1 - Peak Lane North		ONE HOUR	✓	702	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		2 - Longfield Avenue	3 - Peak Lane S	4 - Rowan Way	1 - Peak Lane North
From	2 - Longfield Avenue	0	126	211	105
	3 - Peak Lane S	98	0	43	234
	4 - Rowan Way	419	209	0	32
	1 - Peak Lane North	183	492	27	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		2 - Longfield Avenue	3 - Peak Lane S	4 - Rowan Way	1 - Peak Lane North
From	2 - Longfield Avenue	10	10	10	10
	3 - Peak Lane S	10	10	10	10
	4 - Rowan Way	10	10	10	10
	1 - Peak Lane North	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
2 - Longfield Avenue	25.86	3.6	D	405	607
3 - Peak Lane S	12.02	1.5	B	346	518
4 - Rowan Way	72.53	15.8	F	603	904
1 - Peak Lane North	1116.77	193.6	F	643	965

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)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	334	84	542	333	526	0.0	1.1	10.277	B
3 - Peak Lane S	285	71	259	286	616	0.0	0.6	8.064	A
4 - Rowan Way	496	124	331	494	213	0.0	1.9	12.317	B
1 - Peak Lane North	532	133	545	523	280	0.0	6.6	32.577	D

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	399	100	593	400	606	1.1	1.8	15.366	C
3 - Peak Lane S	336	84	307	335	686	0.6	0.9	9.114	A
4 - Rowan Way	593	148	391	590	252	1.9	3.5	19.877	C
1 - Peak Lane North	633	158	650	549	331	6.6	28.6	123.718	F

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	486	122	586	488	679	1.8	3.3	24.941	C
3 - Peak Lane S	415	104	364	417	710	0.9	1.4	11.871	B
4 - Rowan Way	719	180	484	695	296	3.5	12.2	46.412	E
1 - Peak Lane North	769	192	771	493	408	28.6	95.4	453.295	F

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	483	121	582	483	688	3.3	3.5	25.862	D
3 - Peak Lane S	413	103	362	412	703	1.4	1.4	12.023	B
4 - Rowan Way	718	180	479	710	295	12.2	15.7	72.525	F
1 - Peak Lane North	773	193	784	486	405	95.4	166.1	941.552	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	399	100	597	397	612	3.5	1.8	17.522	C
3 - Peak Lane S	332	83	304	333	691	1.4	0.8	9.594	A
4 - Rowan Way	597	149	390	612	248	15.7	4.5	41.146	E
1 - Peak Lane North	624	156	667	542	335	166.1	193.3	1116.772	F

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	325	81	601	326	545	1.8	1.0	12.653	B
3 - Peak Lane S	291	73	255	293	672	0.8	0.6	8.390	A
4 - Rowan Way	492	123	336	496	211	4.5	1.7	15.213	C
1 - Peak Lane North	525	131	549	597	283	193.3	180.8	824.914	F

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)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	334	661	0.505	333	0.0	1.1	10.277	B
	Exit	1	1		526			526	0.0	0.0	0.000	A
3 - Peak Lane S	Entry	1	1	1, 4	211	645	0.328	212	0.0	0.4	6.876	A
			2	2, 3	74	647	0.114	74	0.0	0.1	5.902	A
	Exit	2	1	(2, 3, 4, 1)	285			285	0.0	0.1	1.442	A
		1	1		616			616	0.0	0.0	0.000	A
4 - Rowan Way	Entry	1	1	1, 2	338	605	0.559	339	0.0	1.0	10.179	B
			2	3, 4	156	605	0.258	156	0.0	0.4	7.808	A
	Exit	2	1	(2, 3, 4, 1)	496			494	0.0	0.5	2.875	A
		1	1		213			213	0.0	0.0	0.000	A
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	532	600	0.886	523	0.0	6.6	32.577	D
	Exit	1	1		280			280	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)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	399	635	0.630	400	1.1	1.8	15.366	C
	Exit	1	1		606			606	0.0	0.0	0.000	A
3 - Peak Lane S	Entry	1	1	1, 4	246	627	0.391	246	0.4	0.5	7.401	A
			2	2, 3	89	634	0.141	89	0.1	0.1	6.257	A
	Exit	2	1	(2, 3, 4, 1)	336			335	0.1	0.3	2.004	A
		1	1		686			686	0.0	0.0	0.000	A
4 - Rowan Way	Entry	1	1	1, 2	402	587	0.685	401	1.0	1.4	12.428	B
			2	3, 4	188	584	0.322	189	0.4	0.4	8.825	A
	Exit	2	1	(2, 3, 4, 1)	593			590	0.5	1.7	8.564	A
		1	1		252			252	0.0	0.0	0.000	A
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	633	550	1.149	549	6.6	28.6	123.718	F
	Exit	1	1		331			331	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)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	486	638	0.761	488	1.8	3.3	24.941	C
	Exit	1	1		679			679	0.0	0.0	0.000	A
3 - Peak Lane S	Entry	1	1	1, 4	306	613	0.500	307	0.5	0.7	8.196	A
			2	2, 3	110	614	0.179	110	0.1	0.2	6.581	A
	Exit	2	1	(2, 3, 4, 1)	415			416	0.3	0.5	4.103	A
		1	1		710			710	0.0	0.0	0.000	A
4 - Rowan Way	Entry	1	1	1, 2	478	557	0.860	477	1.4	2.1	14.892	B
			2	3, 4	219	558	0.392	219	0.4	0.6	10.264	B
	Exit	2	1	(2, 3, 4, 1)	719			697	1.7	9.4	32.910	D
		1	1		296			296	0.0	0.0	0.000	A
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	769	495	1.561	493	28.6	95.4	453.295	F
	Exit	1	1		408			408	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)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	483	638	0.758	483	3.3	3.5	25.862	D
	Exit	1	1		688			688	0.0	0.0	0.000	A
3 - Peak Lane S	Entry	1	1	1, 4	303	611	0.496	303	0.7	0.7	8.162	A
			2	2, 3	108	612	0.176	109	0.2	0.2	6.789	A
	Exit	2	1	(2, 3, 4, 1)	413			411	0.5	0.5	4.220	A
		1	1		703			703	0.0	0.0	0.000	A
4 - Rowan Way	Entry	1	1	1, 2	485	557	0.870	486	2.1	2.2	15.859	C
			2	3, 4	225	559	0.402	224	0.6	0.7	10.659	B
	Exit	2	1	(2, 3, 4, 1)	718			710	9.4	12.9	58.316	F
		1	1		295			295	0.0	0.0	0.000	A
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	773	488	1.584	486	95.4	166.1	941.552	F
	Exit	1	1		405			405	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)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	399	634	0.629	397	3.5	1.8	17.522	C
	Exit	1	1		612			612	0.0	0.0	0.000	A

3 - Peak Lane S	Entry	1	1	1, 4	249	632	0.394	250	0.7	0.5	7.574	A
		2	2	2, 3	84	632	0.133	84	0.2	0.2	6.336	A
	Exit	1	1	(2, 3, 4, 1)	332			333	0.5	0.2	2.349	A
		1	1		691			691	0.0	0.0	0.000	A
4 - Rowan Way	Entry	1	1	1, 2	417	585	0.712	419	2.2	1.5	13.834	B
		2	2	3, 4	193	586	0.329	193	0.7	0.5	9.799	A
	Exit	1	1	(2, 3, 4, 1)	597			610	12.9	2.5	28.767	D
		1	1		248			248	0.0	0.0	0.000	A
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	624	544	1.151	542	166.1	193.3	1116.772	F
	Exit	1	1		335			335	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)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	325	633	0.514	326	1.8	1.0	12.653	B
	Exit	1	1		545			545	0.0	0.0	0.000	A
3 - Peak Lane S	Entry	1	1	1, 4	216	644	0.336	217	0.5	0.4	7.105	A
			2	2, 3	76	647	0.117	75	0.2	0.1	6.087	A
	Exit	1	1	(2, 3, 4, 1)	291			292	0.2	0.1	1.553	A
		1	1		672			672	0.0	0.0	0.000	A
4 - Rowan Way	Entry	1	1	1, 2	338	600	0.564	340	1.5	0.9	11.118	B
			2	3, 4	155	602	0.258	156	0.5	0.3	8.039	A
	Exit	1	1	(2, 3, 4, 1)	492			494	2.5	0.5	5.141	A
		1	1		211			211	0.0	0.0	0.000	A
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	525	598	0.881	597	193.3	180.8	824.914	F
	Exit	1	1		283			283	0.0	0.0	0.000	A

2025 + CD, 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	3 - Peak Lane S - Lane Simulation	Arm 3: Queue at end of modelled period is greater than 10 PCU. Delay is likely to have been underestimated.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1-1	Longfield Av RB	Standard Roundabout	2, 3, 4, 1	573.03	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
D5	2025 + CD	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
2 - Longfield Avenue		ONE HOUR	✓	413	100.000
3 - Peak Lane S		ONE HOUR	✓	1084	100.000
4 - Rowan Way		ONE HOUR	✓	414	100.000
1 - Peak Lane North		ONE HOUR	✓	460	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		2 - Longfield Avenue	3 - Peak Lane S	4 - Rowan Way	1 - Peak Lane North
From	2 - Longfield Avenue	0	72	254	87
	3 - Peak Lane S	318	0	200	566
	4 - Rowan Way	281	97	0	36
	1 - Peak Lane North	159	260	41	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		2 - Longfield Avenue	3 - Peak Lane S	4 - Rowan Way	1 - Peak Lane North
From	2 - Longfield Avenue	10	10	10	10
	3 - Peak Lane S	10	10	10	10
	4 - Rowan Way	10	10	10	10
	1 - Peak Lane North	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
2 - Longfield Avenue	14.50	2.1	B	379	569
3 - Peak Lane S	1208.70	313.0	F	992	1488
4 - Rowan Way	28.90	4.1	D	378	567
1 - Peak Lane North	69.07	10.4	F	422	633

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	313	78	295	313	556	0.0	0.7	7.415	A
3 - Peak Lane S	819	205	288	788	320	0.0	15.7	49.187	E
4 - Rowan Way	309	77	706	306	369	0.0	1.3	12.552	B
1 - Peak Lane North	340	85	510	341	502	0.0	1.3	12.025	B

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	373	93	364	372	628	0.7	1.0	9.775	A
3 - Peak Lane S	972	243	345	809	390	15.7	58.3	171.416	F
4 - Rowan Way	370	93	738	368	416	1.3	2.0	18.485	C
1 - Peak Lane North	417	104	577	415	529	1.3	2.7	20.927	C

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	456	114	429	456	696	1.0	2.0	14.441	B
3 - Peak Lane S	1182	295	419	759	466	58.3	160.9	512.530	F
4 - Rowan Way	451	113	719	456	459	2.0	3.3	27.392	D
1 - Peak Lane North	506	126	638	488	537	2.7	8.3	45.940	E

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	453	113	437	455	711	2.0	1.7	14.498	B
3 - Peak Lane S	1190	298	423	771	469	160.9	265.8	989.290	F
4 - Rowan Way	459	115	725	455	469	3.3	4.0	28.903	D
1 - Peak Lane North	512	128	640	507	540	8.3	10.3	69.067	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	370	93	365	371	630	1.7	1.0	10.599	B
3 - Peak Lane S	971	243	343	798	392	265.8	311.3	1208.704	F
4 - Rowan Way	374	94	727	369	414	4.0	2.0	19.381	C
1 - Peak Lane North	417	104	571	424	526	10.3	3.3	40.216	E

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	311	78	297	310	564	1.0	0.8	8.221	A
3 - Peak Lane S	821	205	286	817	321	311.3	312.8	860.352	F
4 - Rowan Way	308	77	726	309	376	2.0	1.2	14.752	B
1 - Peak Lane North	339	85	521	340	514	3.3	1.3	16.669	C

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 (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	313	782	0.401	313	0.0	0.7	7.415	A
	Exit	1	1		556			556	0.0	0.0	0.000	A
3 - Peak Lane S	Entry	1	1	1, 4	558	638	0.875	557	0.0	1.5	9.160	A
			2	2, 3	232	639	0.362	231	0.0	0.5	7.312	A
	Exit	1	1	(2, 3, 4, 1)	819			789	0.0	13.7	40.528	E
			1	1		320			320	0.0	0.0	0.000
4 - Rowan Way	Entry	1	1	1, 2	237	486	0.488	235	0.0	0.9	11.253	B
			2	3, 4	71	483	0.146	71	0.0	0.2	7.917	A
	Exit	1	1	(2, 3, 4, 1)	309			308	0.0	0.2	2.058	A
			1	1		369			369	0.0	0.0	0.000
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	340	613	0.554	341	0.0	1.3	12.025	B
	Exit	1	1		502			502	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)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	373	746	0.499	372	0.7	1.0	9.775	A
	Exit	1	1		628			628	0.0	0.0	0.000	A
3 - Peak Lane S	Entry	1	1	1, 4	569	620	0.917	569	1.5	1.6	9.955	A
			2	2, 3	240	616	0.390	240	0.5	0.5	7.898	A
	Exit	1	1	(2, 3, 4, 1)	972			809	13.7	56.2	161.972	F
			1	1		390			390	0.0	0.0	0.000
4 - Rowan Way	Entry	1	1	1, 2	280	474	0.591	279	0.9	1.2	14.210	B
			2	3, 4	89	475	0.188	89	0.2	0.2	9.111	A
	Exit	1	1	(2, 3, 4, 1)	370			369	0.2	0.6	5.458	A
			1	1		416			416	0.0	0.0	0.000
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	417	584	0.713	415	1.3	2.7	20.927	C
	Exit	1	1		529			529	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)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	456	717	0.637	456	1.0	2.0	14.441	B
	Exit	1	1		696			696	0.0	0.0	0.000	A
3 - Peak Lane S	Entry	1	1	1, 4	536	594	0.904	537	1.6	1.6	10.464	B
			2	2, 3	222	596	0.372	223	0.5	0.5	8.299	A
	Exit	1	1	(2, 3, 4, 1)	1182			758	56.2	158.8	502.665	F
			1	1		466			466	0.0	0.0	0.000
4 - Rowan Way	Entry	1	1	1, 2	345	481	0.718	347	1.2	1.5	15.832	C
			2	3, 4	109	482	0.225	109	0.2	0.3	9.925	A
	Exit	1	1	(2, 3, 4, 1)	451			454	0.6	1.6	12.899	B
			1	1		459			459	0.0	0.0	0.000
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	506	559	0.907	488	2.7	8.3	45.940	E
	Exit	1	1		537			537	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)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	453	713	0.635	455	2.0	1.7	14.498	B
	Exit	1	1		711			711	0.0	0.0	0.000	A
3 - Peak Lane S	Entry	1	1	1, 4	547	594	0.921	546	1.6	1.6	10.493	B
			2	2, 3	224	597	0.375	224	0.5	0.5	8.377	A
	Exit	1	1	(2, 3, 4, 1)	1190			770	158.8	263.7	979.717	F
			1	1		469			469	0.0	0.0	0.000
4 - Rowan Way	Entry	1	1	1, 2	351	481	0.731	351	1.5	1.6	16.150	C
			2	3, 4	104	480	0.216	105	0.3	0.2	9.920	A
	Exit	1	1	(2, 3, 4, 1)	459			455	1.6	2.2	14.216	B
			1	1		469			469	0.0	0.0	0.000
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	512	555	0.923	507	8.3	10.3	69.067	F
	Exit	1	1		540			540	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)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	370	748	0.495	371	1.7	1.0	10.599	B
	Exit	1	1		630			630	0.0	0.0	0.000	A

3 - Peak Lane S	Entry	1	1	1, 4	563	620	0.908	564	1.6	1.6	10.238	B
		2	1	2, 3	234	619	0.378	234	0.5	0.6	8.029	A
	Exit	1	1	(2, 3, 4, 1)	971			797	263.7	309.1	1201.032	F
4 - Rowan Way	Entry	1	1	1, 2	283	481	0.589	281	1.6	1.1	14.058	B
		2	1	3, 4	88	482	0.183	88	0.2	0.2	9.336	A
	Exit	1	1	(2, 3, 4, 1)	374			372	2.2	0.6	6.515	A
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	417	587	0.711	424	10.3	3.3	40.216	E
	Exit	1	1		526			526	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	311	781	0.398	310	1.0	0.8	8.221	A
	Exit	1	1		564			564	0.0	0.0	0.000	A
3 - Peak Lane S	Entry	1	1	1, 4	577	636	0.906	577	1.6	1.5	9.813	A
		2	1	2, 3	240	636	0.378	239	0.6	0.6	7.791	A
	Exit	1	1	(2, 3, 4, 1)	821			817	309.1	310.7	859.111	F
4 - Rowan Way	Entry	1	1	1, 2	235	480	0.488	235	1.1	0.7	12.939	B
		2	1	3, 4	73	478	0.153	74	0.2	0.2	9.024	A
	Exit	1	1	(2, 3, 4, 1)	308			308	0.6	0.3	2.815	A
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	339	610	0.556	340	3.3	1.3	16.669	C
	Exit	1	1		514			514	0.0	0.0	0.000	A

2025 + CD, 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	1 - Peak Lane North - Lane Simulation	Arm 1: Queue at end of modelled period is greater than 10 PCU. Delay is likely to have been underestimated.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1-1	Longfield Av RB	Standard Roundabout	2, 3, 4, 1	393.42	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	2025 + CD	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 (%)
2 - Longfield Avenue		ONE HOUR	✓	442	100.000
3 - Peak Lane S		ONE HOUR	✓	375	100.000
4 - Rowan Way		ONE HOUR	✓	660	100.000
1 - Peak Lane North		ONE HOUR	✓	702	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		2 - Longfield Avenue	3 - Peak Lane S	4 - Rowan Way	1 - Peak Lane North
From	2 - Longfield Avenue	0	126	211	105
	3 - Peak Lane S	98	0	43	234
	4 - Rowan Way	419	209	0	32
	1 - Peak Lane North	183	492	27	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		2 - Longfield Avenue	3 - Peak Lane S	4 - Rowan Way	1 - Peak Lane North
From	2 - Longfield Avenue	10	10	10	10
	3 - Peak Lane S	10	10	10	10
	4 - Rowan Way	10	10	10	10
	1 - Peak Lane North	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
2 - Longfield Avenue	25.13	3.6	D	405	608
3 - Peak Lane S	12.15	1.5	B	347	520
4 - Rowan Way	73.00	15.9	F	604	906
1 - Peak Lane North	1131.71	197.1	F	645	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)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	328	82	537	329	523	0.0	1.0	10.003	B
3 - Peak Lane S	283	71	257	282	609	0.0	0.7	7.810	A
4 - Rowan Way	496	124	327	498	211	0.0	1.7	12.322	B
1 - Peak Lane North	527	132	547	514	278	0.0	6.5	31.871	D

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	399	100	583	402	609	1.0	1.5	14.898	B
3 - Peak Lane S	338	85	308	339	677	0.7	0.9	9.702	A
4 - Rowan Way	597	149	396	595	251	1.7	3.3	19.813	C
1 - Peak Lane North	628	157	653	539	338	6.5	28.8	121.463	F

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	482	121	584	482	687	1.5	3.4	24.710	C
3 - Peak Lane S	422	106	359	423	707	0.9	1.4	11.716	B
4 - Rowan Way	731	183	489	702	294	3.3	12.5	47.451	E
1 - Peak Lane North	780	195	777	495	414	28.8	96.7	455.252	F

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	487	122	588	484	688	3.4	3.6	25.127	D
3 - Peak Lane S	415	104	366	416	706	1.4	1.3	12.151	B
4 - Rowan Way	728	182	485	711	298	12.5	15.8	73.002	F
1 - Peak Lane North	772	193	785	491	411	96.7	167.9	953.378	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	402	101	586	403	613	3.6	1.6	17.644	C
3 - Peak Lane S	339	85	309	338	680	1.3	0.9	9.584	A
4 - Rowan Way	587	147	398	600	249	15.8	5.0	44.582	E
1 - Peak Lane North	633	158	662	536	335	167.9	196.6	1131.706	F

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	332	83	598	333	538	1.6	1.2	12.919	B
3 - Peak Lane S	283	71	260	284	671	0.9	0.6	8.162	A
4 - Rowan Way	487	122	327	489	217	5.0	1.9	15.106	C
1 - Peak Lane North	525	131	538	598	278	196.6	182.4	833.948	F

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)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	328	663	0.496	329	0.0	1.0	10.003	B
	Exit	1	1		523			523	0.0	0.0	0.000	A
3 - Peak Lane S	Entry	1	1	1, 4	209	651	0.321	208	0.0	0.5	6.826	A
			2	2, 3	73	648	0.113	73	0.0	0.1	5.889	A
	Exit	2	1	(2, 3, 4, 1)	283			282	0.0	0.1	1.229	A
		1	1		609			609	0.0	0.0	0.000	A
4 - Rowan Way	Entry	1	1	1, 2	339	606	0.561	340	0.0	1.0	10.140	B
			2	3, 4	157	608	0.258	158	0.0	0.2	7.590	A
	Exit	2	1	(2, 3, 4, 1)	496			496	0.0	0.5	2.954	A
		1	1		211			211	0.0	0.0	0.000	A
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	527	602	0.878	514	0.0	6.5	31.871	D
	Exit	1	1		278			278	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)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	399	640	0.624	402	1.0	1.5	14.898	B
	Exit	1	1		609			609	0.0	0.0	0.000	A
3 - Peak Lane S	Entry	1	1	1, 4	252	626	0.402	252	0.5	0.6	7.592	A
			2	2, 3	87	627	0.139	87	0.1	0.2	6.292	A
	Exit	2	1	(2, 3, 4, 1)	338			339	0.1	0.2	2.441	A
		1	1		677			677	0.0	0.0	0.000	A
4 - Rowan Way	Entry	1	1	1, 2	410	585	0.700	409	1.0	1.4	12.367	B
			2	3, 4	187	585	0.319	186	0.2	0.5	8.717	A
	Exit	2	1	(2, 3, 4, 1)	597			596	0.5	1.5	8.572	A
		1	1		251			251	0.0	0.0	0.000	A
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	628	550	1.141	539	6.5	28.8	121.463	F
	Exit	1	1		338			338	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)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	482	640	0.754	482	1.5	3.4	24.710	C
	Exit	1	1		687			687	0.0	0.0	0.000	A
3 - Peak Lane S	Entry	1	1	1, 4	313	614	0.509	313	0.6	0.7	8.143	A
			2	2, 3	111	613	0.182	111	0.2	0.2	6.685	A
	Exit	2	1	(2, 3, 4, 1)	422			424	0.2	0.5	3.942	A
		1	1		707			707	0.0	0.0	0.000	A
4 - Rowan Way	Entry	1	1	1, 2	481	554	0.866	480	1.4	2.1	15.037	C
			2	3, 4	222	554	0.403	222	0.5	0.7	10.378	B
	Exit	2	1	(2, 3, 4, 1)	731			704	1.5	9.7	33.792	D
		1	1		294			294	0.0	0.0	0.000	A
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	780	491	1.587	495	28.8	96.7	455.252	F
	Exit	1	1		414			414	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)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	487	642	0.759	484	3.4	3.6	25.127	D
	Exit	1	1		688			688	0.0	0.0	0.000	A
3 - Peak Lane S	Entry	1	1	1, 4	307	610	0.504	308	0.7	0.7	8.252	A
			2	2, 3	108	615	0.177	108	0.2	0.2	6.721	A
	Exit	2	1	(2, 3, 4, 1)	415			416	0.5	0.5	4.296	A
		1	1		706			706	0.0	0.0	0.000	A
4 - Rowan Way	Entry	1	1	1, 2	484	555	0.871	483	2.1	2.1	15.822	C
			2	3, 4	227	558	0.408	228	0.7	0.6	10.866	B
	Exit	2	1	(2, 3, 4, 1)	728			711	9.7	13.1	58.760	F
		1	1		298			298	0.0	0.0	0.000	A
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	772	491	1.583	491	96.7	167.9	953.378	F
	Exit	1	1		411			411	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)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	402	636	0.632	403	3.6	1.6	17.644	C
	Exit	1	1		613			613	0.0	0.0	0.000	A

3 - Peak Lane S	Entry	1	1	1, 4	248	630	0.394	248	0.7	0.5	7.540	A
		2	2	2, 3	90	625	0.145	90	0.2	0.2	6.457	A
	Exit	1	1	(2, 3, 4, 1)	339			339	0.5	0.2	2.347	A
		1	1		680			680	0.0	0.0	0.000	A
4 - Rowan Way	Entry	1	1	1, 2	413	583	0.709	413	2.1	1.5	13.979	B
		2	2	3, 4	187	585	0.319	188	0.6	0.5	9.803	A
	Exit	1	1	(2, 3, 4, 1)	587			600	13.1	3.0	32.108	D
		1	1		249			249	0.0	0.0	0.000	A
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	633	544	1.161	536	167.9	196.6	1131.706	F
	Exit	1	1		335			335	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)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	332	631	0.526	333	1.6	1.2	12.919	B
	Exit	1	1		538			538	0.0	0.0	0.000	A
3 - Peak Lane S	Entry	1	1	1, 4	211	643	0.329	210	0.5	0.4	6.879	A
			2	2, 3	73	640	0.114	73	0.2	0.1	6.118	A
	Exit	1	1	(2, 3, 4, 1)	283			285	0.2	0.1	1.483	A
		1	1		671			671	0.0	0.0	0.000	A
4 - Rowan Way	Entry	1	1	1, 2	333	606	0.551	333	1.5	1.0	10.826	B
			2	3, 4	156	607	0.258	156	0.5	0.4	8.206	A
	Exit	1	1	(2, 3, 4, 1)	487			489	3.0	0.5	5.205	A
		1	1		217			217	0.0	0.0	0.000	A
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	525	604	0.871	598	196.6	182.4	833.948	F
	Exit	1	1		278			278	0.0	0.0	0.000	A

2025 + CD + PD, 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	3 - Peak Lane S - Lane Simulation	Arm 3: Queue at end of modelled period is greater than 10 PCU. Delay is likely to have been underestimated.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1-1	Longfield Av RB	Standard Roundabout	2, 3, 4, 1	708.57	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	2025 + CD + PD	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
2 - Longfield Avenue		ONE HOUR	✓	414	100.000
3 - Peak Lane S		ONE HOUR	✓	1146	100.000
4 - Rowan Way		ONE HOUR	✓	420	100.000
1 - Peak Lane North		ONE HOUR	✓	469	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		2 - Longfield Avenue	3 - Peak Lane S	4 - Rowan Way	1 - Peak Lane North
From	2 - Longfield Avenue	0	73	254	87
	3 - Peak Lane S	323	0	221	602
	4 - Rowan Way	281	103	0	36
	1 - Peak Lane North	159	269	41	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		2 - Longfield Avenue	3 - Peak Lane S	4 - Rowan Way	1 - Peak Lane North
From	2 - Longfield Avenue	10	10	10	10
	3 - Peak Lane S	10	10	10	10
	4 - Rowan Way	10	10	10	10
	1 - Peak Lane North	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
2 - Longfield Avenue	14.74	2.1	B	381	572
3 - Peak Lane S	1469.03	406.4	F	1052	1578
4 - Rowan Way	27.64	3.6	D	385	578
1 - Peak Lane North	74.14	11.3	F	431	647

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	309	77	304	310	554	0.0	0.6	7.596	A
3 - Peak Lane S	870	217	288	799	326	0.0	23.3	64.480	F
4 - Rowan Way	313	78	712	312	376	0.0	1.3	12.734	B
1 - Peak Lane North	352	88	509	349	515	0.0	1.5	13.173	B

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	379	95	374	376	618	0.6	1.1	10.041	B
3 - Peak Lane S	1027	257	349	796	401	23.3	82.0	245.677	F
4 - Rowan Way	378	95	720	378	425	1.3	1.9	17.755	C
1 - Peak Lane North	425	106	570	422	528	1.5	2.9	22.305	C

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	457	114	442	457	698	1.1	1.9	14.639	B
3 - Peak Lane S	1265	316	421	765	478	82.0	207.1	685.606	F
4 - Rowan Way	464	116	713	464	473	1.9	3.5	26.039	D
1 - Peak Lane North	520	130	639	501	537	2.9	8.8	48.557	E

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	457	114	453	453	702	1.9	2.0	14.737	B
3 - Peak Lane S	1263	316	422	766	485	207.1	331.6	1250.517	F
4 - Rowan Way	466	116	715	469	473	3.5	3.4	27.639	D
1 - Peak Lane North	519	130	647	508	538	8.8	11.2	74.144	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	374	94	374	376	615	2.0	1.0	10.742	B
3 - Peak Lane S	1023	256	347	782	404	331.6	393.1	1469.027	F
4 - Rowan Way	375	94	712	373	417	3.4	2.0	18.783	C
1 - Peak Lane North	417	104	561	429	524	11.2	3.6	46.243	E

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	310	78	311	310	558	1.0	0.6	7.867	A
3 - Peak Lane S	859	215	287	806	334	393.1	406.8	899.960	F
4 - Rowan Way	314	78	719	314	374	2.0	1.3	14.474	B
1 - Peak Lane North	356	89	515	354	518	3.6	1.7	17.062	C

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 (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	309	780	0.396	310	0.0	0.6	7.596	A
	Exit	1	1		554			554	0.0	0.0	0.000	A
3 - Peak Lane S	Entry	1	1	1, 4	574	637	0.900	574	0.0	1.5	9.314	A
			2	2, 3	225	639	0.353	225	0.0	0.4	7.369	A
	Exit	1	1	(2, 3, 4, 1)	870			799	0.0	21.3	55.655	F
4 - Rowan Way	Entry	1	1	1, 2	238	483	0.492	237	0.0	0.9	11.523	B
			2	3, 4	75	482	0.156	75	0.0	0.2	8.173	A
	Exit	1	1	(2, 3, 4, 1)	313			313	0.0	0.2	1.989	A
					376			376	0.0	0.0	0.000	A
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	352	616	0.570	349	0.0	1.5	13.173	B
	Exit	1	1		515			515	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)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	379	745	0.509	376	0.6	1.1	10.041	B
	Exit	1	1		618			618	0.0	0.0	0.000	A
3 - Peak Lane S	Entry	1	1	1, 4	569	616	0.925	569	1.5	1.5	10.027	B
			2	2, 3	226	619	0.366	227	0.4	0.5	7.845	A
	Exit	1	1	(2, 3, 4, 1)	1027			795	21.3	80.0	236.159	F
4 - Rowan Way	Entry	1	1	1, 2	284	483	0.589	284	0.9	1.1	13.786	B
			2	3, 4	94	480	0.195	94	0.2	0.3	9.528	A
	Exit	1	1	(2, 3, 4, 1)	378			378	0.2	0.6	4.993	A
					425			425	0.0	0.0	0.000	A
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	425	588	0.723	422	1.5	2.9	22.305	C
	Exit	1	1		528			528	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)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	457	709	0.644	457	1.1	1.9	14.639	B
	Exit	1	1		698			698	0.0	0.0	0.000	A
3 - Peak Lane S	Entry	1	1	1, 4	550	594	0.926	550	1.5	1.6	10.494	B
			2	2, 3	215	597	0.360	215	0.5	0.5	8.274	A
	Exit	1	1	(2, 3, 4, 1)	1265			765	80.0	205.0	675.676	F
4 - Rowan Way	Entry	1	1	1, 2	350	483	0.724	350	1.1	1.5	15.564	C
			2	3, 4	115	483	0.238	114	0.3	0.4	10.137	B
	Exit	1	1	(2, 3, 4, 1)	464			464	0.6	1.6	11.798	B
					473			473	0.0	0.0	0.000	A
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	520	555	0.936	501	2.9	8.8	48.557	E
	Exit	1	1		537			537	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)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	457	706	0.648	453	1.9	2.0	14.737	B
	Exit	1	1		702			702	0.0	0.0	0.000	A
3 - Peak Lane S	Entry	1	1	1, 4	548	592	0.926	548	1.6	1.6	10.563	B
			2	2, 3	218	591	0.369	218	0.5	0.5	8.320	A
	Exit	1	1	(2, 3, 4, 1)	1263			766	205.0	329.5	1241.077	F
4 - Rowan Way	Entry	1	1	1, 2	353	482	0.731	353	1.5	1.5	15.830	C
			2	3, 4	116	481	0.240	116	0.4	0.3	10.060	B
	Exit	1	1	(2, 3, 4, 1)	466			468	1.6	1.6	13.244	B
					473			473	0.0	0.0	0.000	A
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	519	552	0.940	508	8.8	11.2	74.144	F
	Exit	1	1		538			538	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)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	374	744	0.504	376	2.0	1.0	10.742	B
	Exit	1	1		615			615	0.0	0.0	0.000	A

3 - Peak Lane S	Entry	1	1	1, 4	562	620	0.907	561	1.6	1.6	10.331	B
		2	2	2, 3	220	617	0.356	221	0.5	0.5	7.895	A
	Exit	1	1	(2, 3, 4, 1)	1023			781	329.5	391.0	1462.406	F
4 - Rowan Way	Entry	1	1	1, 2	282	483	0.586	281	1.5	1.2	14.105	B
		2	2	3, 4	92	483	0.191	92	0.3	0.3	9.605	A
	Exit	1	1	(2, 3, 4, 1)	375			375	1.6	0.6	5.830	A
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	417	592	0.704	429	11.2	3.6	46.243	E
	Exit	1	1		524			524	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	310	774	0.401	310	1.0	0.6	7.867	A
	Exit	1	1		558			558	0.0	0.0	0.000	A
3 - Peak Lane S	Entry	1	1	1, 4	578	634	0.912	578	1.6	1.6	9.873	A
			2	2, 3	228	636	0.358	228	0.5	0.4	7.615	A
	Exit	1	1	(2, 3, 4, 1)	859			806	391.0	404.8	899.960	F
4 - Rowan Way	Entry	1	1	1, 2	237	482	0.493	237	1.2	0.8	12.501	B
			2	2	3, 4	77	479	0.160	77	0.3	0.2	8.966
	Exit	1	1	(2, 3, 4, 1)	314			314	0.6	0.3	2.869	A
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	356	615	0.578	354	3.6	1.7	17.062	C
	Exit	1	1		518			518	0.0	0.0	0.000	A

2025 + CD + PD, 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	1 - Peak Lane North - Lane Simulation	Arm 1: Queue at end of modelled period is greater than 10 PCU. Delay is likely to have been underestimated.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1-1	Longfield Av RB	Standard Roundabout	2, 3, 4, 1	453.84	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	2025 + CD + PD	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 (%)
2 - Longfield Avenue		ONE HOUR	✓	446	100.000
3 - Peak Lane S		ONE HOUR	✓	397	100.000
4 - Rowan Way		ONE HOUR	✓	677	100.000
1 - Peak Lane North		ONE HOUR	✓	732	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		2 - Longfield Avenue	3 - Peak Lane S	4 - Rowan Way	1 - Peak Lane North
From	2 - Longfield Avenue	0	130	211	105
	3 - Peak Lane S	100	0	50	247
	4 - Rowan Way	419	226	0	32
	1 - Peak Lane North	183	522	27	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		2 - Longfield Avenue	3 - Peak Lane S	4 - Rowan Way	1 - Peak Lane North
From	2 - Longfield Avenue	10	10	10	10
	3 - Peak Lane S	10	10	10	10
	4 - Rowan Way	10	10	10	10
	1 - Peak Lane North	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
2 - Longfield Avenue	28.35	4.1	D	410	615
3 - Peak Lane S	12.76	1.6	B	364	546
4 - Rowan Way	78.14	16.5	F	621	931
1 - Peak Lane North	1302.92	231.6	F	668	1003

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)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	337	84	572	337	527	0.0	1.0	10.405	B
3 - Peak Lane S	299	75	258	299	652	0.0	0.6	8.245	A
4 - Rowan Way	511	128	339	509	218	0.0	2.0	12.574	B
1 - Peak Lane North	550	137	561	538	287	0.0	8.0	37.185	E

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	408	102	607	404	601	1.0	2.1	16.402	C
3 - Peak Lane S	358	90	307	360	704	0.6	1.0	9.954	A
4 - Rowan Way	607	152	411	605	256	2.0	3.8	20.680	C
1 - Peak Lane North	649	162	666	541	350	8.0	36.6	153.725	F

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	493	123	601	492	680	2.1	4.1	28.354	D
3 - Peak Lane S	436	109	365	435	727	1.0	1.5	12.376	B
4 - Rowan Way	742	185	496	723	305	3.8	13.7	52.061	F
1 - Peak Lane North	802	201	800	482	419	36.6	112.9	553.649	F

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	489	122	606	488	694	4.1	3.6	27.280	D
3 - Peak Lane S	434	109	365	435	729	1.5	1.4	12.761	B
4 - Rowan Way	743	186	496	744	304	13.7	16.4	78.139	F
1 - Peak Lane North	809	202	818	482	422	112.9	195.7	1123.162	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	402	100	607	401	610	3.6	1.9	18.273	C
3 - Peak Lane S	353	88	302	355	705	1.4	0.9	10.077	B
4 - Rowan Way	603	151	403	625	254	16.4	4.6	45.935	E
1 - Peak Lane North	659	165	686	532	343	195.7	231.8	1302.920	F

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	335	84	612	335	536	1.9	1.2	13.281	B
3 - Peak Lane S	302	75	258	302	689	0.9	0.7	8.351	A
4 - Rowan Way	516	129	345	514	215	4.6	2.2	16.116	C
1 - Peak Lane North	546	137	568	581	291	231.8	225.8	880.206	F

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)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	337	647	0.520	337	0.0	1.0	10.405	B
	Exit	1	1		527			527	0.0	0.0	0.000	A
3 - Peak Lane S	Entry	1	1	1, 4	225	644	0.349	225	0.0	0.4	6.955	A
			2	2, 3	75	641	0.118	75	0.0	0.1	5.995	A
	Exit	1	1	(2, 3, 4, 1)	299			300	0.0	0.1	1.533	A
			1	1		652			652	0.0	0.0	0.000
4 - Rowan Way	Entry	1	1	1, 2	343	601	0.571	341	0.0	1.1	10.224	B
			2	3, 4	167	602	0.277	167	0.0	0.3	7.798	A
	Exit	1	1	(2, 3, 4, 1)	511			510	0.0	0.6	3.133	A
			1	1		218			218	0.0	0.0	0.000
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	550	593	0.928	538	0.0	8.0	37.185	E
	Exit	1	1		287			287	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)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	408	628	0.650	404	1.0	2.1	16.402	C
	Exit	1	1		601			601	0.0	0.0	0.000	A
3 - Peak Lane S	Entry	1	1	1, 4	270	631	0.429	272	0.4	0.6	7.639	A
			2	2, 3	88	631	0.140	88	0.1	0.2	6.365	A
	Exit	1	1	(2, 3, 4, 1)	358			359	0.1	0.3	2.631	A
			1	1		704			704	0.0	0.0	0.000
4 - Rowan Way	Entry	1	1	1, 2	406	580	0.700	405	1.1	1.5	12.427	B
			2	3, 4	200	578	0.348	200	0.3	0.5	9.097	A
	Exit	1	1	(2, 3, 4, 1)	607			606	0.6	1.8	9.328	A
			1	1		256			256	0.0	0.0	0.000
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	649	542	1.198	541	8.0	36.6	153.725	F
	Exit	1	1		350			350	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)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	493	630	0.782	492	2.1	4.1	28.354	D
	Exit	1	1		680			680	0.0	0.0	0.000	A
3 - Peak Lane S	Entry	1	1	1, 4	325	612	0.532	326	0.6	0.7	8.242	A
			2	2, 3	111	615	0.180	110	0.2	0.3	6.738	A
	Exit	1	1	(2, 3, 4, 1)	436			436	0.3	0.5	4.506	A
			1	1		727			727	0.0	0.0	0.000
4 - Rowan Way	Entry	1	1	1, 2	484	555	0.872	483	1.5	2.1	15.369	C
			2	3, 4	239	551	0.432	239	0.5	0.7	10.954	B
	Exit	1	1	(2, 3, 4, 1)	742			723	1.8	10.9	38.098	E
			1	1		305			305	0.0	0.0	0.000
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	802	481	1.665	482	36.6	112.9	553.649	F
	Exit	1	1		419			419	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)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	489	629	0.777	488	4.1	3.6	27.280	D
	Exit	1	1		694			694	0.0	0.0	0.000	A
3 - Peak Lane S	Entry	1	1	1, 4	323	613	0.528	324	0.7	0.7	8.389	A
			2	2, 3	111	605	0.184	111	0.3	0.2	6.849	A
	Exit	1	1	(2, 3, 4, 1)	434			435	0.5	0.5	4.762	A
			1	1		729			729	0.0	0.0	0.000
4 - Rowan Way	Entry	1	1	1, 2	497	554	0.895	498	2.1	2.0	15.668	C
			2	3, 4	246	554	0.443	246	0.7	0.8	11.261	B
	Exit	1	1	(2, 3, 4, 1)	743			743	10.9	13.6	63.911	F
			1	1		304			304	0.0	0.0	0.000
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	809	472	1.712	482	112.9	195.7	1123.162	F
	Exit	1	1		422			422	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)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	402	627	0.640	401	3.6	1.9	18.273	C
	Exit	1	1		610			610	0.0	0.0	0.000	A

3 - Peak Lane S	Entry	1	1	1, 4	265	631	0.420	266	0.7	0.5	7.691	A
		2	2	2, 3	89	629	0.141	89	0.2	0.2	6.442	A
	Exit	1	1	(2, 3, 4, 1)	353			354	0.5	0.2	2.709	A
		1	1		705			705	0.0	0.0	0.000	A
4 - Rowan Way	Entry	1	1	1, 2	411	582	0.706	414	2.0	1.4	14.018	B
		2	2	3, 4	212	582	0.364	211	0.8	0.6	10.092	B
	Exit	1	1	(2, 3, 4, 1)	603			623	13.6	2.7	33.441	D
		1	1		254			254	0.0	0.0	0.000	A
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	659	532	1.231	532	195.7	231.8	1302.920	F
	Exit	1	1		343			343	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)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	335	623	0.537	335	1.9	1.2	13.281	B
	Exit	1	1		536			536	0.0	0.0	0.000	A
3 - Peak Lane S	Entry	1	1	1, 4	225	645	0.349	225	0.5	0.5	7.015	A
			2	2, 3	77	649	0.118	77	0.2	0.1	5.977	A
	Exit	1	1	(2, 3, 4, 1)	302			302	0.2	0.1	1.609	A
		1	1		689			689	0.0	0.0	0.000	A
4 - Rowan Way	Entry	1	1	1, 2	341	601	0.567	339	1.4	1.1	11.108	B
			2	3, 4	174	597	0.292	175	0.6	0.3	8.474	A
	Exit	1	1	(2, 3, 4, 1)	516			515	2.7	0.7	5.964	A
		1	1		215			215	0.0	0.0	0.000	A
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	546	587	0.929	581	231.8	225.8	880.206	F
	Exit	1	1		291			291	0.0	0.0	0.000	A

2025 + CD + Newlands Farm + PD, 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	3 - Peak Lane S - Lane Simulation	Arm 3: Queue at end of modelled period is greater than 10 PCU. Delay is likely to have been underestimated.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1-1	Longfield Av RB	Standard Roundabout	2, 3, 4, 1	709.33	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
D9	2025 + CD + Newlands Farm + PD	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
2 - Longfield Avenue		ONE HOUR	✓	598	100.000
3 - Peak Lane S		ONE HOUR	✓	1165	100.000
4 - Rowan Way		ONE HOUR	✓	487	100.000
1 - Peak Lane North		ONE HOUR	✓	482	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		2 - Longfield Avenue	3 - Peak Lane S	4 - Rowan Way	1 - Peak Lane North
From	2 - Longfield Avenue	0	225	264	109
	3 - Peak Lane S	342	0	221	602
	4 - Rowan Way	348	103	0	36
	1 - Peak Lane North	172	269	41	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		2 - Longfield Avenue	3 - Peak Lane S	4 - Rowan Way	1 - Peak Lane North
From	2 - Longfield Avenue	10	10	10	10
	3 - Peak Lane S	10	10	10	10
	4 - Rowan Way	10	10	10	10
	1 - Peak Lane North	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
2 - Longfield Avenue	60.02	11.4	F	553	829
3 - Peak Lane S	1557.41	440.1	F	1065	1597
4 - Rowan Way	65.15	9.7	F	447	670
1 - Peak Lane North	133.10	22.8	F	445	667

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	452	113	314	447	609	0.0	1.8	10.259	B
3 - Peak Lane S	860	215	307	773	454	0.0	25.7	68.583	F
4 - Rowan Way	363	91	711	363	368	0.0	1.9	15.994	C
1 - Peak Lane North	367	92	556	368	519	0.0	1.9	15.587	C

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	552	138	370	552	692	1.8	2.9	17.567	C
3 - Peak Lane S	1031	258	376	793	546	25.7	88.3	265.974	F
4 - Rowan Way	435	109	739	433	430	1.9	3.4	26.256	D
1 - Peak Lane North	435	109	632	430	540	1.9	3.8	26.496	D

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	658	165	433	635	785	2.9	9.6	38.227	E
3 - Peak Lane S	1282	321	434	762	634	88.3	219.1	732.241	F
4 - Rowan Way	537	134	732	529	463	3.4	9.0	52.702	F
1 - Peak Lane North	530	132	717	501	545	3.8	13.9	72.546	F

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	657	164	439	660	784	9.6	11.3	60.017	F
3 - Peak Lane S	1293	323	451	749	648	219.1	353.0	1345.133	F
4 - Rowan Way	540	135	728	542	473	9.0	9.7	65.150	F
1 - Peak Lane North	547	137	723	500	547	13.9	22.7	133.104	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	545	136	394	554	720	11.3	3.4	34.410	D
3 - Peak Lane S	1052	263	384	783	563	353.0	421.2	1557.413	F
4 - Rowan Way	435	109	734	442	433	9.7	3.8	40.555	E
1 - Peak Lane North	434	109	641	472	535	22.7	9.6	109.620	F

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	452	113	313	453	640	3.4	1.6	13.489	B
3 - Peak Lane S	870	218	312	824	454	421.2	439.6	899.869	F
4 - Rowan Way	372	93	751	372	385	3.8	2.0	20.622	C
1 - Peak Lane North	355	89	592	361	531	9.6	2.0	31.556	D

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 (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	452	772	0.585	447	0.0	1.8	10.259	B
	Exit	1	1		609			609	0.0	0.0	0.000	A
3 - Peak Lane S	Entry	1	1	1, 4	554	629	0.880	553	0.0	1.6	9.460	A
			2	2, 3	220	631	0.348	220	0.0	0.5	7.446	A
	Exit	1	1	(2, 3, 4, 1)	860			774	0.0	23.5	59.676	F
			1	1		454			454	0.0	0.0	0.000
4 - Rowan Way	Entry	1	1	1, 2	285	485	0.590	286	0.0	1.1	12.709	B
			2	3, 4	76	484	0.157	77	0.0	0.2	8.318	A
	Exit	1	1	(2, 3, 4, 1)	363			361	0.0	0.6	4.149	A
			1	1		368			368	0.0	0.0	0.000
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	367	596	0.616	368	0.0	1.9	15.587	C
	Exit	1	1		519			519	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)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	552	747	0.740	552	1.8	2.9	17.567	C
	Exit	1	1		692			692	0.0	0.0	0.000	A
3 - Peak Lane S	Entry	1	1	1, 4	560	608	0.922	560	1.6	1.6	10.137	B
			2	2, 3	232	612	0.380	233	0.5	0.5	8.148	A
	Exit	1	1	(2, 3, 4, 1)	1031			792	23.5	86.2	256.251	F
			1	1		546			546	0.0	0.0	0.000
4 - Rowan Way	Entry	1	1	1, 2	341	478	0.715	341	1.1	1.5	15.762	C
			2	3, 4	91	477	0.190	92	0.2	0.2	9.837	A
	Exit	1	1	(2, 3, 4, 1)	435			432	0.6	1.7	11.710	B
			1	1		430			430	0.0	0.0	0.000
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	435	560	0.777	430	1.9	3.8	26.496	D
	Exit	1	1		540			540	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)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	658	714	0.923	635	2.9	9.6	38.227	E
	Exit	1	1		785			785	0.0	0.0	0.000	A
3 - Peak Lane S	Entry	1	1	1, 4	533	589	0.905	534	1.6	1.6	10.652	B
			2	2, 3	227	589	0.385	228	0.5	0.4	8.377	A
	Exit	1	1	(2, 3, 4, 1)	1282			760	86.2	217.1	722.215	F
			1	1		634			634	0.0	0.0	0.000
4 - Rowan Way	Entry	1	1	1, 2	420	476	0.884	419	1.5	2.2	18.239	C
			2	3, 4	110	480	0.229	110	0.2	0.3	10.303	B
	Exit	1	1	(2, 3, 4, 1)	537			530	1.7	6.5	36.064	E
			1	1		463			463	0.0	0.0	0.000
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	530	518	1.022	501	3.8	13.9	72.546	F
	Exit	1	1		545			545	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)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	657	708	0.929	660	9.6	11.3	60.017	F
	Exit	1	1		784			784	0.0	0.0	0.000	A
3 - Peak Lane S	Entry	1	1	1, 4	528	583	0.906	530	1.6	1.5	10.691	B
			2	2, 3	221	583	0.379	220	0.4	0.6	8.517	A
	Exit	1	1	(2, 3, 4, 1)	1293			749	217.1	350.9	1335.658	F
			1	1		648			648	0.0	0.0	0.000
4 - Rowan Way	Entry	1	1	1, 2	428	480	0.892	428	2.2	2.2	18.127	C
			2	3, 4	115	482	0.239	115	0.3	0.4	10.546	B
	Exit	1	1	(2, 3, 4, 1)	540			544	6.5	7.1	48.634	E
			1	1		473			473	0.0	0.0	0.000
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	547	515	1.063	500	13.9	22.7	133.104	F
	Exit	1	1		547			547	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)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	545	733	0.745	554	11.3	3.4	34.410	D
	Exit	1	1		720			720	0.0	0.0	0.000	A

3 - Peak Lane S	Entry	1	1	1, 4	550	606	0.910	550	1.5	1.6	10.468	B
		2	1	2, 3	231	602	0.383	234	0.6	0.5	8.282	A
	Exit	1	1	(2, 3, 4, 1)	1052			782	350.9	419.1	1551.176	F
4 - Rowan Way	Entry	1	1	1, 2	347	475	0.730	347	2.2	1.5	16.704	C
		2	1	3, 4	94	468	0.201	94	0.4	0.2	10.071	B
	Exit	1	1	(2, 3, 4, 1)	435			441	7.1	2.1	25.399	D
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	434	554	0.782	472	22.7	9.6	109.620	F
	Exit	1	1		535			535	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	452	771	0.586	453	3.4	1.6	13.489	B
	Exit	1	1		640			640	0.0	0.0	0.000	A
3 - Peak Lane S	Entry	1	1	1, 4	578	630	0.916	577	1.6	1.6	10.083	B
		2	1	2, 3	246	628	0.390	246	0.5	0.5	7.919	A
	Exit	1	1	(2, 3, 4, 1)	870			823	419.1	437.6	899.869	F
4 - Rowan Way	Entry	1	1	1, 2	293	475	0.618	293	1.5	1.3	14.620	B
		2	1	3, 4	79	474	0.167	79	0.2	0.2	8.904	A
	Exit	1	1	(2, 3, 4, 1)	372			373	2.1	0.5	7.272	A
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	355	580	0.612	361	9.6	2.0	31.556	D
	Exit	1	1		531			531	0.0	0.0	0.000	A

2025 + CD + Newlands Farm + PD, 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	4 - Rowan Way - Lane Simulation	Arm 4: Queue at end of modelled period is greater than 10 PCU. Delay is likely to have been underestimated.
Last Run	Lane Simulation	1 - Peak Lane North - Lane Simulation	Arm 1: Queue at end of modelled period is greater than 10 PCU. Delay is likely to have been underestimated.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1-1	Longfield Av RB	Standard Roundabout	2, 3, 4, 1	652.93	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	2025 + CD + Newlands Farm + PD	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 (%)
2 - Longfield Avenue		ONE HOUR	✓	555	100.000
3 - Peak Lane S		ONE HOUR	✓	410	100.000
4 - Rowan Way		ONE HOUR	✓	821	100.000
1 - Peak Lane North		ONE HOUR	✓	747	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		2 - Longfield Avenue	3 - Peak Lane S	4 - Rowan Way	1 - Peak Lane North
From	2 - Longfield Avenue	0	140	298	117
	3 - Peak Lane S	113	0	50	247
	4 - Rowan Way	563	226	0	32
	1 - Peak Lane North	198	522	27	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		2 - Longfield Avenue	3 - Peak Lane S	4 - Rowan Way	1 - Peak Lane North
From	2 - Longfield Avenue	10	10	10	10
	3 - Peak Lane S	10	10	10	10
	4 - Rowan Way	10	10	10	10
	1 - Peak Lane North	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
2 - Longfield Avenue	68.78	12.8	F	508	762
3 - Peak Lane S	15.72	1.9	C	381	571
4 - Rowan Way	503.60	105.5	F	754	1131
1 - Peak Lane North	1605.64	309.3	F	684	1026

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)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	416	104	545	415	648	0.0	1.7	13.532	B
3 - Peak Lane S	313	78	330	313	630	0.0	0.8	8.913	A
4 - Rowan Way	619	155	363	622	280	0.0	4.3	21.898	C
1 - Peak Lane North	570	142	682	511	303	0.0	15.5	60.091	F

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	498	125	560	502	711	1.7	3.5	24.625	C
3 - Peak Lane S	368	92	393	371	668	0.8	1.0	10.654	B
4 - Rowan Way	745	186	432	704	332	4.3	15.7	55.221	F
1 - Peak Lane North	659	165	778	493	359	15.5	55.6	264.856	F

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	610	152	549	603	745	3.5	9.5	48.521	E
3 - Peak Lane S	454	114	467	455	685	1.0	1.8	15.298	C
4 - Rowan Way	911	228	526	717	397	15.7	59.9	190.614	F
1 - Peak Lane North	821	205	816	478	426	55.6	144.0	777.742	F

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	618	154	542	605	746	9.5	12.8	68.784	F
3 - Peak Lane S	463	116	469	466	677	1.8	1.8	15.718	C
4 - Rowan Way	893	223	536	720	399	59.9	105.5	419.692	F
1 - Peak Lane North	830	207	819	469	437	144.0	232.5	1443.061	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	498	125	548	510	752	12.8	4.3	42.076	E
3 - Peak Lane S	376	94	400	377	658	1.8	1.3	11.926	B
4 - Rowan Way	742	185	437	769	339	105.5	102.8	503.596	F
1 - Peak Lane North	670	167	841	459	365	232.5	285.4	1605.638	F

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	411	103	545	413	740	4.3	1.9	18.690	C
3 - Peak Lane S	312	78	325	313	633	1.3	0.7	9.239	A
4 - Rowan Way	617	154	365	772	273	102.8	64.9	356.785	F
1 - Peak Lane North	558	140	828	457	308	285.4	309.7	898.995	F

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)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	416	659	0.630	415	0.0	1.7	13.532	B
	Exit	1	1		648			648	0.0	0.0	0.000	A
3 - Peak Lane S	Entry	1	1	1, 4	227	623	0.363	227	0.0	0.5	7.360	A
			2	2, 3	86	615	0.140	86	0.0	0.2	6.235	A
	Exit	1	1	(2, 3, 4, 1)	313			313	0.0	0.2	1.855	A
			1	1		630			630	0.0	0.0	0.000
4 - Rowan Way	Entry	1	1	1, 2	447	594	0.753	448	0.0	1.6	12.325	B
			2	3, 4	172	592	0.290	173	0.0	0.4	8.223	A
	Exit	1	1	(2, 3, 4, 1)	619			620	0.0	2.3	10.675	B
			1	1		280			280	0.0	0.0	0.000
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	570	535	1.065	511	0.0	15.5	60.091	F
	Exit	1	1		303			303	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)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	498	652	0.764	502	1.7	3.5	24.625	C
	Exit	1	1		711			711	0.0	0.0	0.000	A
3 - Peak Lane S	Entry	1	1	1, 4	270	602	0.447	270	0.5	0.6	7.938	A
			2	2, 3	100	601	0.166	101	0.2	0.2	6.673	A
	Exit	1	1	(2, 3, 4, 1)	368			370	0.2	0.2	3.061	A
			1	1		668			668	0.0	0.0	0.000
4 - Rowan Way	Entry	1	1	1, 2	511	571	0.896	511	1.6	2.3	15.275	C
			2	3, 4	194	575	0.338	193	0.4	0.5	9.500	A
	Exit	1	1	(2, 3, 4, 1)	745			705	2.3	12.8	41.442	E
			1	1		332			332	0.0	0.0	0.000
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	659	491	1.337	493	15.5	55.6	264.856	F
	Exit	1	1		359			359	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)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	610	655	0.928	603	3.5	9.5	48.521	E
	Exit	1	1		745			745	0.0	0.0	0.000	A
3 - Peak Lane S	Entry	1	1	1, 4	328	577	0.569	329	0.6	0.8	9.104	A
			2	2, 3	127	578	0.220	126	0.2	0.3	7.405	A
	Exit	1	1	(2, 3, 4, 1)	454			456	0.2	0.7	6.646	A
			1	1		685			685	0.0	0.0	0.000
4 - Rowan Way	Entry	1	1	1, 2	517	542	0.955	518	2.3	2.5	17.046	C
			2	3, 4	198	545	0.363	198	0.5	0.6	10.804	B
	Exit	1	1	(2, 3, 4, 1)	911			715	12.8	56.8	175.077	F
			1	1		397			397	0.0	0.0	0.000
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	821	473	1.739	478	55.6	144.0	777.742	F
	Exit	1	1		426			426	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)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	618	663	0.931	605	9.5	12.8	68.784	F
	Exit	1	1		746			746	0.0	0.0	0.000	A
3 - Peak Lane S	Entry	1	1	1, 4	337	580	0.580	337	0.8	0.8	9.143	A
			2	2, 3	129	577	0.223	129	0.3	0.3	7.537	A
	Exit	1	1	(2, 3, 4, 1)	463			465	0.7	0.7	7.033	A
			1	1		677			677	0.0	0.0	0.000
4 - Rowan Way	Entry	1	1	1, 2	524	539	0.973	523	2.5	2.6	17.736	C
			2	3, 4	196	542	0.362	197	0.6	0.6	11.040	B
	Exit	1	1	(2, 3, 4, 1)	893			720	56.8	102.3	404.123	F
			1	1		399			399	0.0	0.0	0.000
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	830	471	1.764	469	144.0	232.5	1443.061	F
	Exit	1	1		437			437	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)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	498	660	0.754	510	12.8	4.3	42.076	E
	Exit	1	1		752			752	0.0	0.0	0.000	A

3 - Peak Lane S	Entry	1	1	1, 4	272	602	0.453	273	0.8	0.6	8.401	A
		2	1	2, 3	103	599	0.172	103	0.3	0.2	6.956	A
	Exit	1	1	(2, 3, 4, 1)	376			376	0.7	0.4	3.923	A
4 - Rowan Way	Entry	1	1	1, 2	554	571	0.971	554	2.6	2.6	16.866	C
		2	1	3, 4	214	574	0.373	215	0.6	0.6	10.510	B
	Exit	1	1	(2, 3, 4, 1)	742			769	102.3	99.6	488.897	F
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	670	461	1.451	459	232.5	285.4	1605.638	F
	Exit	1	1		365			365	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)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	411	655	0.627	413	4.3	1.9	18.690	C
	Exit	1	1		740			740	0.0	0.0	0.000	A
3 - Peak Lane S	Entry	1	1	1, 4	226	627	0.361	227	0.6	0.5	7.412	A
			2	2, 3	86	621	0.138	87	0.2	0.1	6.535	A
	Exit	1	1	(2, 3, 4, 1)	312			312	0.4	0.1	2.080	A
4 - Rowan Way	Entry	1	1	1, 2	560	594	0.943	560	2.6	2.4	16.086	C
			2	3, 4	210	594	0.353	212	0.6	0.5	9.703	A
	Exit	1	1	(2, 3, 4, 1)	617			770	99.6	62.0	342.956	F
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	558	465	1.194	457	285.4	309.7	898.995	F
	Exit	1	1		308			308	0.0	0.0	0.000	A

2025 with Bypass, 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.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1-1	Longfield Av RB	Standard Roundabout	2, 3, 4, 1	36.92	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
D11	2025 with Bypass	AM	ONE HOUR	07:45	09:15	15	✓

Default vehicle mix	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 (%)
2 - Longfield Avenue		ONE HOUR	✓	324	100.000
3 - Peak Lane S		ONE HOUR	✓	661	100.000
4 - Rowan Way		ONE HOUR	✓	313	100.000
1 - Peak Lane North		ONE HOUR	✓	352	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		2 - Longfield Avenue	3 - Peak Lane S	4 - Rowan Way	1 - Peak Lane North
From	2 - Longfield Avenue	0	31	206	87
	3 - Peak Lane S	175	0	15	471
	4 - Rowan Way	149	124	0	40
	1 - Peak Lane North	66	237	49	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		2 - Longfield Avenue	3 - Peak Lane S	4 - Rowan Way	1 - Peak Lane North
From	2 - Longfield Avenue	10	10	10	10
	3 - Peak Lane S	10	10	10	10
	4 - Rowan Way	10	10	10	10
	1 - Peak Lane North	10	10	10	10

Results

Results Summary for whole modelled period

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

2 - Longfield Avenue	10.53	1.2	B	299	448
3 - Peak Lane S	71.53	15.4	F	606	908
4 - Rowan Way	15.02	1.5	C	285	428
1 - Peak Lane North	15.98	2.0	C	327	490

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	237	59	309	238	292	0.0	0.4	6.732	A
3 - Peak Lane S	494	124	253	491	294	0.0	1.9	12.362	B
4 - Rowan Way	232	58	542	232	202	0.0	0.6	8.492	A
1 - Peak Lane North	268	67	333	268	441	0.0	0.6	8.084	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	301	75	373	302	353	0.4	0.6	7.865	A
3 - Peak Lane S	594	148	317	595	358	1.9	3.4	20.692	C
4 - Rowan Way	282	71	661	283	251	0.6	0.9	10.895	B
1 - Peak Lane North	325	81	403	323	541	0.6	1.1	10.103	B

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	364	91	448	363	422	0.6	1.1	10.530	B
3 - Peak Lane S	734	183	382	705	429	3.4	13.1	47.842	E
4 - Rowan Way	344	86	788	342	299	0.9	1.4	13.800	B
1 - Peak Lane North	387	97	484	386	647	1.1	1.8	15.177	C

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	358	89	446	356	426	1.1	1.1	10.518	B
3 - Peak Lane S	727	182	380	718	422	13.1	15.3	71.534	F
4 - Rowan Way	338	85	799	343	299	1.4	1.2	15.015	C
1 - Peak Lane North	389	97	484	388	658	1.8	1.6	15.981	C

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	288	72	372	288	353	1.1	0.7	8.544	A
3 - Peak Lane S	591	148	304	608	356	15.3	4.2	42.860	E
4 - Rowan Way	281	70	667	283	245	1.2	0.9	11.927	B
1 - Peak Lane North	317	79	407	318	543	1.6	0.9	11.442	B

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	243	61	314	244	293	0.7	0.4	7.049	A
3 - Peak Lane S	492	123	258	492	300	4.2	2.0	15.393	C
4 - Rowan Way	233	58	550	234	201	0.9	0.5	9.243	A
1 - Peak Lane North	275	69	334	274	451	0.9	0.8	9.230	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

								Start	End		

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	queue (Veh)	queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	237	778	0.305	238	0.0	0.4	6.732	A
	Exit	1	1		292			292	0.0	0.0	0.000	A
3 - Peak Lane S	Entry	1	1	1, 4	362	646	0.560	362	0.0	0.9	7.804	A
			2	2, 3	130	647	0.201	130	0.0	0.2	6.290	A
	Exit	1	1	(2, 3, 4, 1)	494			492	0.0	0.9	4.949	A
					294			294	0.0	0.0	0.000	A
4 - Rowan Way	Entry	1	1	1, 2	139	540	0.257	139	0.0	0.3	8.519	A
			2	3, 4	93	542	0.172	93	0.0	0.2	7.623	A
	Exit	1	1	(2, 3, 4, 1)	232			232	0.0	0.0	0.329	A
					202			202	0.0	0.0	0.000	A
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	268	696	0.384	268	0.0	0.6	8.084	A
	Exit	1	1		441			441	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)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	301	747	0.404	302	0.4	0.6	7.865	A
	Exit	1	1		353			353	0.0	0.0	0.000	A
3 - Peak Lane S	Entry	1	1	1, 4	438	628	0.697	437	0.9	1.1	8.831	A
			2	2, 3	157	630	0.250	158	0.2	0.3	6.946	A
	Exit	1	1	(2, 3, 4, 1)	594			595	0.9	2.0	12.353	B
					358			358	0.0	0.0	0.000	A
4 - Rowan Way	Entry	1	1	1, 2	170	499	0.341	170	0.3	0.5	10.528	B
			2	3, 4	112	500	0.225	113	0.2	0.3	8.959	A
	Exit	1	1	(2, 3, 4, 1)	282			282	0.0	0.1	0.987	A
					251			251	0.0	0.0	0.000	A
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	325	669	0.485	323	0.6	1.1	10.103	B
	Exit	1	1		541			541	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)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	364	705	0.517	363	0.6	1.1	10.530	B
	Exit	1	1		422			422	0.0	0.0	0.000	A
3 - Peak Lane S	Entry	1	1	1, 4	521	605	0.862	521	1.1	1.4	9.900	A
			2	2, 3	185	601	0.307	184	0.3	0.5	7.726	A
	Exit	1	1	(2, 3, 4, 1)	734			706	2.0	11.2	38.474	E
					429			429	0.0	0.0	0.000	A
4 - Rowan Way	Entry	1	1	1, 2	209	459	0.455	208	0.5	0.7	12.134	B
			2	3, 4	135	457	0.294	134	0.3	0.4	10.523	B
	Exit	1	1	(2, 3, 4, 1)	344			343	0.1	0.3	2.276	A
					299			299	0.0	0.0	0.000	A
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	387	627	0.619	386	1.1	1.8	15.177	C
	Exit	1	1		647			647	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)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	358	707	0.506	356	1.1	1.1	10.518	B
	Exit	1	1		426			426	0.0	0.0	0.000	A
3 - Peak Lane S	Entry	1	1	1, 4	530	606	0.876	531	1.4	1.5	10.138	B
			2	2, 3	187	612	0.306	187	0.5	0.3	7.801	A
	Exit	1	1	(2, 3, 4, 1)	727			717	11.2	13.4	62.010	F
					422			422	0.0	0.0	0.000	A
4 - Rowan Way	Entry	1	1	1, 2	209	454	0.459	211	0.7	0.6	13.147	B
			2	3, 4	131	456	0.287	132	0.4	0.4	11.049	B
	Exit	1	1	(2, 3, 4, 1)	338			340	0.3	0.2	2.694	A
					299			299	0.0	0.0	0.000	A
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	389	631	0.617	388	1.8	1.6	15.981	C
	Exit	1	1		658			658	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)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	288	747	0.386	288	1.1	0.7	8.544	A
	Exit	1	1		353			353	0.0	0.0	0.000	A
		1	1	1, 4	446	635	0.703	448	1.5	1.1	9.334	A

3 - Peak Lane S	Entry		2	2, 3	160	632	0.253	160	0.3	0.3	7.227	A
		2	1	(2, 3, 4, 1)	591			606	13.4	2.8	34.175	D
	Exit	1	1		356			356	0.0	0.0	0.000	A
4 - Rowan Way	Entry	1	1	1, 2	170	496	0.344	170	0.6	0.5	11.265	B
			2	3, 4	112	503	0.224	113	0.4	0.3	9.426	A
		2	1	(2, 3, 4, 1)	281			283	0.2	0.1	1.415	A
	Exit	1	1		245			245	0.0	0.0	0.000	A
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	317	665	0.476	318	1.6	0.9	11.442	B
	Exit	1	1		543			543	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	243	775	0.313	244	0.7	0.4	7.049	A
	Exit	1	1		293			293	0.0	0.0	0.000	A
3 - Peak Lane S	Entry	1	1	1, 4	363	648	0.560	364	1.1	0.8	8.197	A
			2	2, 3	128	647	0.198	128	0.3	0.2	6.581	A
		2	1	(2, 3, 4, 1)	492			491	2.8	1.0	7.650	A
	Exit	1	1		300			300	0.0	0.0	0.000	A
4 - Rowan Way	Entry	1	1	1, 2	140	538	0.261	141	0.5	0.3	9.044	A
			2	3, 4	93	535	0.174	93	0.3	0.2	8.309	A
		2	1	(2, 3, 4, 1)	233			233	0.1	0.0	0.498	A
	Exit	1	1		201			201	0.0	0.0	0.000	A
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	275	699	0.393	274	0.9	0.8	9.230	A
	Exit	1	1		451			451	0.0	0.0	0.000	A

2025 with Bypass, 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.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1-1	Longfield Av RB	Standard Roundabout	2, 3, 4, 1	12.00	B

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	2025 with Bypass	PM	ONE HOUR	16:45	18:15	15	✓

Default vehicle mix	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 (%)
2 - Longfield Avenue		ONE HOUR	✓	333	100.000
3 - Peak Lane S		ONE HOUR	✓	357	100.000
4 - Rowan Way		ONE HOUR	✓	337	100.000
1 - Peak Lane North		ONE HOUR	✓	352	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		2 - Longfield Avenue	3 - Peak Lane S	4 - Rowan Way	1 - Peak Lane North
From	2 - Longfield Avenue	0	48	183	102
	3 - Peak Lane S	45	0	33	279
	4 - Rowan Way	163	141	0	33
	1 - Peak Lane North	66	237	49	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		2 - Longfield Avenue	3 - Peak Lane S	4 - Rowan Way	1 - Peak Lane North
From	2 - Longfield Avenue	10	10	10	10
	3 - Peak Lane S	10	10	10	10
	4 - Rowan Way	10	10	10	10
	1 - Peak Lane North	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
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2 - Longfield Avenue	11.29	1.4	B	306	459
3 - Peak Lane S	13.67	1.6	B	331	497
4 - Rowan Way	10.74	1.2	B	312	468
1 - Peak Lane North	12.16	1.2	B	322	483

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)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	248	62	320	248	204	0.0	0.5	7.009	A
3 - Peak Lane S	271	68	246	273	321	0.0	0.6	8.290	A
4 - Rowan Way	256	64	322	255	198	0.0	0.6	7.498	A
1 - Peak Lane North	262	65	263	260	313	0.0	0.6	7.576	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	306	77	398	303	251	0.5	0.8	8.053	A
3 - Peak Lane S	320	80	306	318	395	0.6	0.9	10.377	B
4 - Rowan Way	312	78	380	316	243	0.6	0.6	8.720	A
1 - Peak Lane North	320	80	325	324	371	0.6	0.6	9.224	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	365	91	468	368	304	0.8	1.1	11.156	B
3 - Peak Lane S	390	98	366	388	470	0.9	1.5	12.543	B
4 - Rowan Way	376	94	470	376	284	0.6	1.1	10.166	B
1 - Peak Lane North	384	96	389	384	458	0.6	1.1	12.000	B

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	362	90	463	358	300	1.1	1.4	11.294	B
3 - Peak Lane S	395	99	354	392	467	1.5	1.5	13.674	B
4 - Rowan Way	367	92	459	366	287	1.1	1.1	10.744	B
1 - Peak Lane North	380	95	386	377	439	1.1	1.2	12.158	B

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	305	76	389	301	251	1.4	1.0	9.030	A
3 - Peak Lane S	335	84	304	333	386	1.5	1.0	10.802	B
4 - Rowan Way	299	75	390	300	247	1.1	0.7	9.059	A
1 - Peak Lane North	322	81	315	324	375	1.2	0.9	9.792	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	251	63	316	248	214	1.0	0.6	6.988	A
3 - Peak Lane S	275	69	247	274	317	1.0	0.6	8.759	A
4 - Rowan Way	264	66	320	263	201	0.7	0.5	8.083	A
1 - Peak Lane North	265	66	268	261	315	0.9	0.8	7.969	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

Start	End

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	queue (Veh)	queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	248	769	0.321	248	0.0	0.5	7.009	A
	Exit	1	1		204			204	0.0	0.0	0.000	A
3 - Peak Lane S	Entry	1	1	1, 4	239	647	0.368	239	0.0	0.4	6.988	A
			2	2, 3	33	644	0.051	33	0.0	0.0	5.975	A
	Exit	1	1	(2, 3, 4, 1)	271			272	0.0	0.1	1.431	A
			1	1		321			321	0.0	0.0	0.000
4 - Rowan Way	Entry	1	1	1, 2	146	603	0.243	147	0.0	0.3	7.278	A
			2	3, 4	109	599	0.182	108	0.0	0.3	7.157	A
	Exit	1	1	(2, 3, 4, 1)	256			256	0.0	0.0	0.271	A
			1	1		198			198	0.0	0.0	0.000
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	262	730	0.358	260	0.0	0.6	7.576	A
	Exit	1	1		313			313	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)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	306	731	0.419	303	0.5	0.8	8.053	A
	Exit	1	1		251			251	0.0	0.0	0.000	A
3 - Peak Lane S	Entry	1	1	1, 4	278	633	0.440	276	0.4	0.7	7.776	A
			2	2, 3	42	635	0.066	41	0.0	0.1	5.742	A
	Exit	1	1	(2, 3, 4, 1)	320			319	0.1	0.2	2.870	A
			1	1		395			395	0.0	0.0	0.000
4 - Rowan Way	Entry	1	1	1, 2	183	593	0.308	183	0.3	0.4	8.316	A
			2	3, 4	130	585	0.222	132	0.3	0.2	8.112	A
	Exit	1	1	(2, 3, 4, 1)	312			313	0.0	0.0	0.490	A
			1	1		243			243	0.0	0.0	0.000
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	320	701	0.456	324	0.6	0.6	9.224	A
	Exit	1	1		371			371	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)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	365	694	0.525	368	0.8	1.1	11.156	B
	Exit	1	1		304			304	0.0	0.0	0.000	A
3 - Peak Lane S	Entry	1	1	1, 4	335	610	0.550	337	0.7	0.7	8.325	A
			2	2, 3	52	608	0.086	51	0.1	0.1	6.361	A
	Exit	1	1	(2, 3, 4, 1)	390			387	0.2	0.6	4.458	A
			1	1		470			470	0.0	0.0	0.000
4 - Rowan Way	Entry	1	1	1, 2	219	564	0.391	221	0.4	0.6	9.428	A
			2	3, 4	156	561	0.280	156	0.2	0.4	8.429	A
	Exit	1	1	(2, 3, 4, 1)	376			376	0.0	0.1	1.157	A
			1	1		284			284	0.0	0.0	0.000
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	384	680	0.564	384	0.6	1.1	12.000	B
	Exit	1	1		458			458	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)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	362	706	0.512	358	1.1	1.4	11.294	B
	Exit	1	1		300			300	0.0	0.0	0.000	A
3 - Peak Lane S	Entry	1	1	1, 4	339	615	0.551	336	0.7	0.8	8.487	A
			2	2, 3	56	623	0.090	56	0.1	0.1	6.282	A
	Exit	1	1	(2, 3, 4, 1)	395			395	0.6	0.5	5.488	A
			1	1		467			467	0.0	0.0	0.000
4 - Rowan Way	Entry	1	1	1, 2	215	558	0.384	215	0.6	0.6	9.948	A
			2	3, 4	150	564	0.266	151	0.4	0.3	8.477	A
	Exit	1	1	(2, 3, 4, 1)	367			365	0.1	0.2	1.397	A
			1	1		287			287	0.0	0.0	0.000
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	380	685	0.555	377	1.1	1.2	12.158	B
	Exit	1	1		439			439	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)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	305	741	0.411	301	1.4	1.0	9.030	A
	Exit	1	1		251			251	0.0	0.0	0.000	A
		1	1	1, 4	290	630	0.461	289	0.8	0.6	7.889	A

3 - Peak Lane S	Entry	2	1	2, 3	43	621	0.069	44	0.1	0.1	6.426	A
		2	1	(2, 3, 4, 1)	335			333	0.5	0.3	3.089	A
	Exit	1	1		386			386	0.0	0.0	0.000	A
4 - Rowan Way	Entry	1	1	1, 2	174	588	0.296	175	0.6	0.3	8.514	A
			2	3, 4	125	587	0.215	125	0.3	0.3	8.305	A
		2	1	(2, 3, 4, 1)	299			299	0.2	0.0	0.645	A
	Exit	1	1		247			247	0.0	0.0	0.000	A
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	322	703	0.458	324	1.2	0.9	9.792	A
	Exit	1	1		375			375	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)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	251	769	0.327	248	1.0	0.6	6.988	A
	Exit	1	1		214			214	0.0	0.0	0.000	A
3 - Peak Lane S	Entry	1	1	1, 4	242	650	0.372	240	0.6	0.4	7.068	A
			2	2, 3	34	639	0.053	33	0.1	0.1	5.997	A
		2	1	(2, 3, 4, 1)	275			275	0.3	0.1	1.860	A
	Exit	1	1		317			317	0.0	0.0	0.000	A
4 - Rowan Way	Entry	1	1	1, 2	158	609	0.258	158	0.3	0.3	7.774	A
			2	3, 4	106	599	0.177	105	0.3	0.2	7.607	A
		2	1	(2, 3, 4, 1)	264			264	0.0	0.0	0.380	A
	Exit	1	1		201			201	0.0	0.0	0.000	A
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	265	728	0.365	261	0.9	0.8	7.969	A
	Exit	1	1		315			315	0.0	0.0	0.000	A

2025 with Bypass + CD, 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.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1-1	Longfield Av RB	Standard Roundabout	2, 3, 4, 1	37.70	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
D13	2025 with Bypass + CD	AM	ONE HOUR	07:45	09:15	15	✓

Default vehicle mix	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 (%)
2 - Longfield Avenue		ONE HOUR	✓	324	100.000
3 - Peak Lane S		ONE HOUR	✓	661	100.000
4 - Rowan Way		ONE HOUR	✓	313	100.000
1 - Peak Lane North		ONE HOUR	✓	352	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		2 - Longfield Avenue	3 - Peak Lane S	4 - Rowan Way	1 - Peak Lane North
From	2 - Longfield Avenue	0	31	206	87
	3 - Peak Lane S	175	0	15	471
	4 - Rowan Way	149	124	0	40
	1 - Peak Lane North	66	237	49	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		2 - Longfield Avenue	3 - Peak Lane S	4 - Rowan Way	1 - Peak Lane North
From	2 - Longfield Avenue	10	10	10	10
	3 - Peak Lane S	10	10	10	10
	4 - Rowan Way	10	10	10	10
	1 - Peak Lane North	10	10	10	10

Results

Results Summary for whole modelled period

			Average Demand	Total Junction

Arm	Max delay (s)	Max Queue (Veh)	Max LOS	(Veh/hr)	Arrivals (Veh)
2 - Longfield Avenue	10.81	1.2	B	298	446
3 - Peak Lane S	73.58	15.8	F	608	912
4 - Rowan Way	14.42	1.5	B	286	428
1 - Peak Lane North	15.74	1.9	C	324	486

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	245	61	310	245	293	0.0	0.4	6.675	A
3 - Peak Lane S	498	124	258	497	297	0.0	1.8	12.475	B
4 - Rowan Way	234	59	552	234	203	0.0	0.6	8.463	A
1 - Peak Lane North	269	67	335	268	451	0.0	0.6	8.216	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	291	73	366	291	348	0.4	0.7	8.198	A
3 - Peak Lane S	602	150	306	596	351	1.8	3.8	20.142	C
4 - Rowan Way	279	70	662	279	240	0.6	0.9	10.587	B
1 - Peak Lane North	316	79	399	315	543	0.6	1.0	10.530	B

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	357	89	451	357	425	0.7	1.1	10.753	B
3 - Peak Lane S	731	183	376	708	432	3.8	12.2	47.105	E
4 - Rowan Way	346	86	786	347	298	0.9	1.3	13.498	B
1 - Peak Lane North	386	97	491	386	642	1.0	1.7	15.250	C

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	355	89	457	354	429	1.1	1.1	10.808	B
3 - Peak Lane S	729	182	377	722	434	12.2	15.7	73.577	F
4 - Rowan Way	341	85	800	341	299	1.3	1.4	14.424	B
1 - Peak Lane North	396	99	490	396	651	1.7	1.8	15.742	C

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	292	73	365	292	352	1.1	0.7	8.568	A
3 - Peak Lane S	593	148	310	605	347	15.7	4.9	43.007	E
4 - Rowan Way	278	69	672	278	243	1.4	0.9	11.890	B
1 - Peak Lane North	312	78	403	314	547	1.8	0.8	11.231	B

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	246	61	309	246	291	0.7	0.5	7.200	A
3 - Peak Lane S	495	124	260	497	296	4.9	1.9	15.430	C
4 - Rowan Way	236	59	552	235	205	0.9	0.6	9.471	A
1 - Peak Lane North	266	66	336	265	452	0.8	0.6	8.976	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	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	245	61	310	245	293	0.0	0.4	6.675	A
3 - Peak Lane S	498	124	258	497	297	0.0	1.8	12.475	B
4 - Rowan Way	234	59	552	234	203	0.0	0.6	8.463	A
1 - Peak Lane North	269	67	335	268	451	0.0	0.6	8.216	A

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	245	773	0.317	245	0.0	0.4	6.675	A
	Exit	1	1		293			293	0.0	0.0	0.000	A
3 - Peak Lane S	Entry	1	1	1, 4	366	646	0.567	365	0.0	0.8	7.819	A
			2	2, 3	131	646	0.203	131	0.0	0.2	6.261	A
	Exit	1	1	(2, 3, 4, 1)	498			497	0.0	0.8	5.055	A
			1	1		297			297	0.0	0.0	0.000
4 - Rowan Way	Entry	1	1	1, 2	141	534	0.264	141	0.0	0.4	8.286	A
			2	3, 4	93	531	0.174	93	0.0	0.2	7.693	A
	Exit	1	1	(2, 3, 4, 1)	234			234	0.0	0.1	0.406	A
			1	1		203			203	0.0	0.0	0.000
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	269	700	0.384	268	0.0	0.6	8.216	A
	Exit	1	1		451			451	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)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	291	745	0.390	291	0.4	0.7	8.198	A
	Exit	1	1		348			348	0.0	0.0	0.000	A
3 - Peak Lane S	Entry	1	1	1, 4	440	632	0.698	440	0.8	1.1	8.765	A
			2	2, 3	156	633	0.247	156	0.2	0.4	6.888	A
	Exit	1	1	(2, 3, 4, 1)	602			596	0.8	2.4	11.859	B
			1	1		351			351	0.0	0.0	0.000
4 - Rowan Way	Entry	1	1	1, 2	168	499	0.336	168	0.4	0.5	10.135	B
			2	3, 4	111	496	0.223	111	0.2	0.3	9.064	A
	Exit	1	1	(2, 3, 4, 1)	279			279	0.1	0.1	0.868	A
			1	1		240			240	0.0	0.0	0.000
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	316	668	0.473	315	0.6	1.0	10.530	B
	Exit	1	1		543			543	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)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	357	704	0.508	357	0.7	1.1	10.753	B
	Exit	1	1		425			425	0.0	0.0	0.000	A
3 - Peak Lane S	Entry	1	1	1, 4	520	608	0.856	520	1.1	1.4	9.785	A
			2	2, 3	187	608	0.308	187	0.4	0.4	7.514	A
	Exit	1	1	(2, 3, 4, 1)	731			708	2.4	10.4	37.881	E
			1	1		432			432	0.0	0.0	0.000
4 - Rowan Way	Entry	1	1	1, 2	210	460	0.456	211	0.5	0.7	12.217	B
			2	3, 4	137	460	0.297	137	0.3	0.4	10.239	B
	Exit	1	1	(2, 3, 4, 1)	346			346	0.1	0.2	2.052	A
			1	1		298			298	0.0	0.0	0.000
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	386	625	0.619	386	1.0	1.7	15.250	C
	Exit	1	1		642			642	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)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	355	699	0.507	354	1.1	1.1	10.808	B
	Exit	1	1		429			429	0.0	0.0	0.000	A
3 - Peak Lane S	Entry	1	1	1, 4	531	610	0.870	530	1.4	1.5	10.125	B
			2	2, 3	191	609	0.314	192	0.4	0.4	7.673	A
	Exit	1	1	(2, 3, 4, 1)	729			722	10.4	13.8	64.126	F
			1	1		434			434	0.0	0.0	0.000
4 - Rowan Way	Entry	1	1	1, 2	209	456	0.457	208	0.7	0.8	12.630	B
			2	3, 4	133	455	0.293	133	0.4	0.4	11.015	B
	Exit	1	1	(2, 3, 4, 1)	341			342	0.2	0.2	2.427	A
			1	1		299			299	0.0	0.0	0.000
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	396	625	0.634	396	1.7	1.8	15.742	C
	Exit	1	1		651			651	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)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	292	748	0.391	292	1.1	0.7	8.568	A
	Exit	1	1		352			352	0.0	0.0	0.000	A
			1	1, 4	446	629	0.709	446	1.5	1.1	9.345	A

3 - Peak Lane S	Entry	1	2	2, 3	159	626	0.255	159	0.4	0.3	7.208	A
		2	1	(2, 3, 4, 1)	593			605	13.8	3.4	34.283	D
	Exit	1	1		347			347	0.0	0.0	0.000	A
4 - Rowan Way	Entry	1	1	1, 2	169	497	0.341	169	0.8	0.5	11.254	B
			2	3, 4	109	496	0.220	109	0.4	0.3	9.567	A
		2	1	(2, 3, 4, 1)	278			278	0.2	0.1	1.325	A
	Exit	1	1		243			243	0.0	0.0	0.000	A
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	312	666	0.469	314	1.8	0.8	11.231	B
	Exit	1	1		547			547	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	246	772	0.318	246	0.7	0.5	7.200	A
	Exit	1	1		291			291	0.0	0.0	0.000	A
3 - Peak Lane S	Entry	1	1	1, 4	366	647	0.566	366	1.1	0.9	8.222	A
			2	2, 3	131	647	0.203	131	0.3	0.2	6.462	A
		2	1	(2, 3, 4, 1)	495			497	3.4	0.8	7.702	A
	Exit	1	1		296			296	0.0	0.0	0.000	A
4 - Rowan Way	Entry	1	1	1, 2	141	533	0.264	141	0.5	0.4	9.307	A
			2	3, 4	95	537	0.177	94	0.3	0.2	8.399	A
		2	1	(2, 3, 4, 1)	236			236	0.1	0.0	0.532	A
	Exit	1	1		205			205	0.0	0.0	0.000	A
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	266	697	0.381	265	0.8	0.6	8.976	A
	Exit	1	1		452			452	0.0	0.0	0.000	A

2025 with Bypass + CD, 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.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1-1	Longfield Av RB	Standard Roundabout	2, 3, 4, 1	15.98	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
D14	2025 with Bypass + CD	PM	ONE HOUR	16:45	18:15	15	✓

Default vehicle mix	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 (%)
2 - Longfield Avenue		ONE HOUR	✓	333	100.000
3 - Peak Lane S		ONE HOUR	✓	357	100.000
4 - Rowan Way		ONE HOUR	✓	337	100.000
1 - Peak Lane North		ONE HOUR	✓	473	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		2 - Longfield Avenue	3 - Peak Lane S	4 - Rowan Way	1 - Peak Lane North
From	2 - Longfield Avenue	0	48	183	102
	3 - Peak Lane S	45	0	33	279
	4 - Rowan Way	163	141	0	33
	1 - Peak Lane North	82	351	40	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		2 - Longfield Avenue	3 - Peak Lane S	4 - Rowan Way	1 - Peak Lane North
From	2 - Longfield Avenue	10	10	10	10
	3 - Peak Lane S	10	10	10	10
	4 - Rowan Way	10	10	10	10
	1 - Peak Lane North	10	10	10	10

Results

Results Summary for whole modelled period

			Average Demand	Total Junction

Arm	Max delay (s)	Max Queue (Veh)	Max LOS	(Veh/hr)	Arrivals (Veh)
2 - Longfield Avenue	14.38	1.6	B	305	457
3 - Peak Lane S	13.81	1.6	B	328	493
4 - Rowan Way	10.47	1.0	B	309	463
1 - Peak Lane North	22.69	3.9	C	434	651

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)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	252	63	402	254	218	0.0	0.5	7.450	A
3 - Peak Lane S	271	68	249	271	407	0.0	0.7	8.491	A
4 - Rowan Way	254	64	325	257	195	0.0	0.4	7.510	A
1 - Peak Lane North	356	89	264	356	318	0.0	1.0	9.617	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	294	74	481	295	261	0.5	0.8	9.373	A
3 - Peak Lane S	324	81	288	324	488	0.7	1.0	10.504	B
4 - Rowan Way	300	75	386	302	226	0.4	0.7	8.580	A
1 - Peak Lane North	429	107	313	429	375	1.0	1.6	13.094	B

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	364	91	577	362	321	0.8	1.6	12.785	B
3 - Peak Lane S	395	99	356	394	583	1.0	1.5	13.221	B
4 - Rowan Way	369	92	466	372	284	0.7	0.8	10.468	B
1 - Peak Lane North	519	130	385	513	453	1.6	3.8	21.602	C

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	370	93	583	369	320	1.6	1.6	14.375	B
3 - Peak Lane S	393	98	358	390	594	1.5	1.6	13.813	B
4 - Rowan Way	372	93	464	373	285	0.8	0.9	10.391	B
1 - Peak Lane North	521	130	387	516	450	3.8	3.7	22.692	C

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	300	75	477	299	256	1.6	0.8	10.114	B
3 - Peak Lane S	322	80	290	322	486	1.6	0.8	10.312	B
4 - Rowan Way	299	75	385	298	227	0.9	0.8	8.988	A
1 - Peak Lane North	426	107	307	425	375	3.7	1.7	15.324	C

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	252	63	398	253	217	0.8	0.4	7.759	A
3 - Peak Lane S	265	66	245	265	406	0.8	0.9	9.013	A
4 - Rowan Way	257	64	318	257	192	0.8	0.6	8.008	A
1 - Peak Lane North	353	88	263	352	312	1.7	1.1	10.170	B

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	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	252	63	402	254	218	0.0	0.5	7.450	A
3 - Peak Lane S	271	68	249	271	407	0.0	0.7	8.491	A
4 - Rowan Way	254	64	325	257	195	0.0	0.4	7.510	A
1 - Peak Lane North	356	89	264	356	318	0.0	1.0	9.617	A

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	252	732	0.343	254	0.0	0.5	7.450	A
	Exit	1	1		218			218	0.0	0.0	0.000	A
3 - Peak Lane S	Entry	1	1	1, 4	238	649	0.367	238	0.0	0.5	7.010	A
			2	2, 3	33	645	0.051	33	0.0	0.1	5.686	A
	Exit	1	1	(2, 3, 4, 1)	271			271	0.0	0.1	1.645	A
			1		407			407	0.0	0.0	0.000	A
4 - Rowan Way	Entry	1	1	1, 2	149	609	0.244	150	0.0	0.3	7.415	A
			2	3, 4	105	609	0.173	107	0.0	0.1	6.911	A
	Exit	1	1	(2, 3, 4, 1)	254			255	0.0	0.0	0.304	A
			1		195			195	0.0	0.0	0.000	A
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	356	731	0.487	356	0.0	1.0	9.617	A
	Exit	1	1		318			318	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)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	294	691	0.426	295	0.5	0.8	9.373	A
	Exit	1	1		261			261	0.0	0.0	0.000	A
3 - Peak Lane S	Entry	1	1	1, 4	284	632	0.450	284	0.5	0.6	7.798	A
			2	2, 3	40	634	0.063	39	0.1	0.1	5.982	A
	Exit	1	1	(2, 3, 4, 1)	324			324	0.1	0.3	2.914	A
			1		488			488	0.0	0.0	0.000	A
4 - Rowan Way	Entry	1	1	1, 2	174	589	0.295	174	0.3	0.4	8.309	A
			2	3, 4	127	587	0.217	128	0.1	0.2	7.691	A
	Exit	1	1	(2, 3, 4, 1)	300			301	0.0	0.1	0.526	A
			1		226			226	0.0	0.0	0.000	A
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	429	713	0.601	429	1.0	1.6	13.094	B
	Exit	1	1		375			375	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)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	364	644	0.564	362	0.8	1.6	12.785	B
	Exit	1	1		321			321	0.0	0.0	0.000	A
3 - Peak Lane S	Entry	1	1	1, 4	343	614	0.559	344	0.6	0.8	8.515	A
			2	2, 3	49	618	0.080	50	0.1	0.1	6.192	A
	Exit	1	1	(2, 3, 4, 1)	395			392	0.3	0.6	5.006	A
			1		583			583	0.0	0.0	0.000	A
4 - Rowan Way	Entry	1	1	1, 2	218	561	0.389	220	0.4	0.5	9.695	A
			2	3, 4	152	567	0.268	152	0.2	0.3	8.404	A
	Exit	1	1	(2, 3, 4, 1)	369			370	0.1	0.0	1.313	A
			1		284			284	0.0	0.0	0.000	A
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	519	680	0.764	513	1.6	3.8	21.602	C
	Exit	1	1		453			453	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)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	370	640	0.577	369	1.6	1.6	14.375	B
	Exit	1	1		320			320	0.0	0.0	0.000	A
3 - Peak Lane S	Entry	1	1	1, 4	343	615	0.558	342	0.8	0.9	8.573	A
			2	2, 3	49	608	0.080	49	0.1	0.1	6.328	A
	Exit	1	1	(2, 3, 4, 1)	393			392	0.6	0.6	5.537	A
			1		594			594	0.0	0.0	0.000	A
4 - Rowan Way	Entry	1	1	1, 2	215	565	0.382	215	0.5	0.5	9.635	A
			2	3, 4	158	560	0.282	158	0.3	0.3	8.564	A
	Exit	1	1	(2, 3, 4, 1)	372			373	0.0	0.1	1.208	A
			1		285			285	0.0	0.0	0.000	A
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	521	674	0.774	516	3.8	3.7	22.692	C
	Exit	1	1		450			450	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)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	300	693	0.432	299	1.6	0.8	10.114	B
	Exit	1	1		256			256	0.0	0.0	0.000	A
			1	1, 4	283	635	0.447	283	0.9	0.6	7.678	A

3 - Peak Lane S	Entry	1	2	2, 3	39	639	0.061	39	0.1	0.1	6.165	A
		2	1	(2, 3, 4, 1)	322			322	0.6	0.2	2.846	A
	Exit	1	1		486			486	0.0	0.0	0.000	A
4 - Rowan Way	Entry	1	1	1, 2	174	581	0.300	173	0.5	0.4	8.726	A
			2	3, 4	124	588	0.212	124	0.3	0.3	7.595	A
		2	1	(2, 3, 4, 1)	299			298	0.1	0.1	0.724	A
	Exit	1	1		227			227	0.0	0.0	0.000	A
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	426	713	0.598	425	3.7	1.7	15.324	C
	Exit	1	1		375			375	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)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	252	733	0.344	253	0.8	0.4	7.759	A
	Exit	1	1		217			217	0.0	0.0	0.000	A
3 - Peak Lane S	Entry	1	1	1, 4	234	649	0.361	233	0.6	0.6	7.272	A
			2	2, 3	31	646	0.048	31	0.1	0.0	5.544	A
		2	1	(2, 3, 4, 1)	265			265	0.2	0.2	1.954	A
	Exit	1	1		406			406	0.0	0.0	0.000	A
4 - Rowan Way	Entry	1	1	1, 2	149	608	0.245	149	0.4	0.3	7.906	A
			2	3, 4	108	604	0.179	108	0.3	0.2	7.216	A
		2	1	(2, 3, 4, 1)	257			257	0.1	0.0	0.402	A
	Exit	1	1		192			192	0.0	0.0	0.000	A
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	353	735	0.481	352	1.7	1.1	10.170	B
	Exit	1	1		312			312	0.0	0.0	0.000	A

2025 with Bypass + CD + PD, 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.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1-1	Longfield Av RB	Standard Roundabout	2, 3, 4, 1	55.80	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	2025 with Bypass + CD + PD	AM	ONE HOUR	07:45	09:15	15	✓

Default vehicle mix	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 (%)
2 - Longfield Avenue		ONE HOUR	✓	325	100.000
3 - Peak Lane S		ONE HOUR	✓	701	100.000
4 - Rowan Way		ONE HOUR	✓	313	100.000
1 - Peak Lane North		ONE HOUR	✓	362	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		2 - Longfield Avenue	3 - Peak Lane S	4 - Rowan Way	1 - Peak Lane North
From	2 - Longfield Avenue	0	32	206	87
	3 - Peak Lane S	179	0	15	507
	4 - Rowan Way	149	124	0	40
	1 - Peak Lane North	66	247	49	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		2 - Longfield Avenue	3 - Peak Lane S	4 - Rowan Way	1 - Peak Lane North
From	2 - Longfield Avenue	10	10	10	10
	3 - Peak Lane S	10	10	10	10
	4 - Rowan Way	10	10	10	10
	1 - Peak Lane North	10	10	10	10

Results

Results Summary for whole modelled period

			Average Demand	Total Junction

Arm	Max delay (s)	Max Queue (Veh)	Max LOS	(Veh/hr)	Arrivals (Veh)
2 - Longfield Avenue	10.91	1.1	B	299	449
3 - Peak Lane S	114.57	26.9	F	644	966
4 - Rowan Way	15.44	1.5	C	286	429
1 - Peak Lane North	17.04	1.9	C	331	497

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	244	61	316	244	295	0.0	0.5	6.831	A
3 - Peak Lane S	527	132	256	533	304	0.0	2.1	14.440	B
4 - Rowan Way	235	59	587	234	202	0.0	0.7	8.832	A
1 - Peak Lane North	273	68	337	274	484	0.0	0.6	8.264	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	296	74	380	296	353	0.5	0.6	8.149	A
3 - Peak Lane S	623	156	311	622	365	2.1	4.8	24.819	C
4 - Rowan Way	282	71	687	282	247	0.7	0.9	10.688	B
1 - Peak Lane North	329	82	404	329	564	0.6	1.1	10.820	B

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	361	90	457	362	421	0.6	1.1	10.611	B
3 - Peak Lane S	780	195	380	746	439	4.8	18.6	66.110	F
4 - Rowan Way	340	85	829	338	297	0.9	1.4	14.118	B
1 - Peak Lane North	397	99	481	397	687	1.1	1.7	15.978	C

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	356	89	463	355	428	1.1	1.1	10.909	B
3 - Peak Lane S	774	193	374	744	443	18.6	26.8	114.565	F
4 - Rowan Way	346	86	825	347	294	1.4	1.5	15.435	C
1 - Peak Lane North	395	99	493	397	678	1.7	1.9	17.035	C

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	292	73	379	292	364	1.1	0.6	8.403	A
3 - Peak Lane S	629	157	309	675	362	26.8	10.6	86.878	F
4 - Rowan Way	280	70	738	282	246	1.5	0.9	12.746	B
1 - Peak Lane North	325	81	418	326	603	1.9	1.0	12.293	B

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	246	61	315	246	297	0.6	0.5	7.261	A
3 - Peak Lane S	530	132	257	539	303	10.6	2.5	26.394	D
4 - Rowan Way	235	59	592	235	204	0.9	0.6	9.897	A
1 - Peak Lane North	268	67	343	269	484	1.0	0.7	9.203	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	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	244	61	316	244	295	0.0	0.5	6.831	A
3 - Peak Lane S	527	132	256	533	304	0.0	2.1	14.440	B
4 - Rowan Way	235	59	587	234	202	0.0	0.7	8.832	A
1 - Peak Lane North	273	68	337	274	484	0.0	0.6	8.264	A

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	244	771	0.317	244	0.0	0.5	6.831	A
	Exit	1	1		295			295	0.0	0.0	0.000	A
3 - Peak Lane S	Entry	1	1	1, 4	400	647	0.619	401	0.0	0.9	8.070	A
			2	2, 3	131	652	0.201	132	0.0	0.2	6.418	A
	Exit	1	1	(2, 3, 4, 1)	527			531	0.0	0.9	6.779	A
			1	1		304			304	0.0	0.0	0.000
4 - Rowan Way	Entry	1	1	1, 2	144	524	0.276	144	0.0	0.4	8.738	A
			2	3, 4	91	525	0.173	90	0.0	0.3	7.766	A
	Exit	1	1	(2, 3, 4, 1)	235			235	0.0	0.0	0.473	A
			1	1		202			202	0.0	0.0	0.000
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	273	696	0.393	274	0.0	0.6	8.264	A
	Exit	1	1		484			484	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)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	296	739	0.401	296	0.5	0.6	8.149	A
	Exit	1	1		353			353	0.0	0.0	0.000	A
3 - Peak Lane S	Entry	1	1	1, 4	465	631	0.737	464	0.9	1.2	9.091	A
			2	2, 3	159	630	0.252	158	0.2	0.4	7.053	A
	Exit	1	1	(2, 3, 4, 1)	623			624	0.9	3.3	16.240	C
			1	1		365			365	0.0	0.0	0.000
4 - Rowan Way	Entry	1	1	1, 2	171	493	0.348	171	0.4	0.5	10.154	B
			2	3, 4	111	493	0.226	111	0.3	0.3	9.144	A
	Exit	1	1	(2, 3, 4, 1)	282			283	0.0	0.1	0.929	A
			1	1		247			247	0.0	0.0	0.000
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	329	666	0.492	329	0.6	1.1	10.820	B
	Exit	1	1		564			564	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)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	361	705	0.511	362	0.6	1.1	10.611	B
	Exit	1	1		421			421	0.0	0.0	0.000	A
3 - Peak Lane S	Entry	1	1	1, 4	558	608	0.919	558	1.2	1.6	10.004	B
			2	2, 3	188	608	0.310	188	0.4	0.4	7.624	A
	Exit	1	1	(2, 3, 4, 1)	780			747	3.3	16.6	56.677	F
			1	1		439			439	0.0	0.0	0.000
4 - Rowan Way	Entry	1	1	1, 2	207	446	0.464	206	0.5	0.8	12.451	B
			2	3, 4	133	447	0.298	132	0.3	0.4	10.784	B
	Exit	1	1	(2, 3, 4, 1)	340			340	0.1	0.3	2.309	A
			1	1		297			297	0.0	0.0	0.000
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	397	629	0.631	397	1.1	1.7	15.978	C
	Exit	1	1		687			687	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)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	356	699	0.509	355	1.1	1.1	10.909	B
	Exit	1	1		428			428	0.0	0.0	0.000	A
3 - Peak Lane S	Entry	1	1	1, 4	554	608	0.911	554	1.6	1.6	10.229	B
			2	2, 3	190	605	0.315	190	0.4	0.4	7.869	A
	Exit	1	1	(2, 3, 4, 1)	774			744	16.6	24.8	104.916	F
			1	1		443			443	0.0	0.0	0.000
4 - Rowan Way	Entry	1	1	1, 2	207	446	0.465	208	0.8	0.8	13.142	B
			2	3, 4	139	443	0.314	139	0.4	0.4	11.308	B
	Exit	1	1	(2, 3, 4, 1)	346			346	0.3	0.3	3.013	A
			1	1		294			294	0.0	0.0	0.000
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	395	623	0.634	397	1.7	1.9	17.035	C
	Exit	1	1		678			678	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)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	292	738	0.396	292	1.1	0.6	8.403	A
	Exit	1	1		364			364	0.0	0.0	0.000	A
			1	1, 4	502	630	0.796	503	1.6	1.2	9.715	A

3 - Peak Lane S	Entry	1	2	2, 3	172	632	0.273	171	0.4	0.4	7.441	A
		2	1	(2, 3, 4, 1)	629			674	24.8	8.9	77.869	F
	Exit	1	1		362			362	0.0	0.0	0.000	A
4 - Rowan Way	Entry	1	1	1, 2	168	477	0.351	169	0.8	0.5	11.834	B
			2	3, 4	113	475	0.237	113	0.4	0.3	10.242	B
		2	1	(2, 3, 4, 1)	280			280	0.3	0.1	1.590	A
	Exit	1	1		246			246	0.0	0.0	0.000	A
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	325	660	0.493	326	1.9	1.0	12.293	B
	Exit	1	1		603			603	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	246	774	0.317	246	0.6	0.5	7.261	A
	Exit	1	1		297			297	0.0	0.0	0.000	A
3 - Peak Lane S	Entry	1	1	1, 4	402	647	0.621	402	1.2	0.9	8.573	A
			2	2, 3	137	644	0.212	137	0.4	0.2	6.780	A
		2	1	(2, 3, 4, 1)	530			538	8.9	1.4	18.299	C
	Exit	1	1		303			303	0.0	0.0	0.000	A
4 - Rowan Way	Entry	1	1	1, 2	140	523	0.268	140	0.5	0.4	9.521	A
			2	3, 4	95	521	0.182	95	0.3	0.2	8.841	A
		2	1	(2, 3, 4, 1)	235			235	0.1	0.0	0.657	A
	Exit	1	1		204			204	0.0	0.0	0.000	A
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	268	698	0.385	269	1.0	0.7	9.203	A
	Exit	1	1		484			484	0.0	0.0	0.000	A

2025 with Bypass + CD + PD, 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.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1-1	Longfield Av RB	Standard Roundabout	2, 3, 4, 1	19.73	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
D16	2025 with Bypass + CD + PD	PM	ONE HOUR	16:45	18:15	15	✓

Default vehicle mix	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 (%)
2 - Longfield Avenue		ONE HOUR	✓	337	100.000
3 - Peak Lane S		ONE HOUR	✓	371	100.000
4 - Rowan Way		ONE HOUR	✓	337	100.000
1 - Peak Lane North		ONE HOUR	✓	504	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		2 - Longfield Avenue	3 - Peak Lane S	4 - Rowan Way	1 - Peak Lane North
From	2 - Longfield Avenue	0	52	183	102
	3 - Peak Lane S	47	0	33	291
	4 - Rowan Way	163	141	0	33
	1 - Peak Lane North	82	382	40	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		2 - Longfield Avenue	3 - Peak Lane S	4 - Rowan Way	1 - Peak Lane North
From	2 - Longfield Avenue	10	10	10	10
	3 - Peak Lane S	10	10	10	10
	4 - Rowan Way	10	10	10	10
	1 - Peak Lane North	10	10	10	10

Results

Results Summary for whole modelled period

			Average Demand	Total Junction

Arm	Max delay (s)	Max Queue (Veh)	Max LOS	(Veh/hr)	Arrivals (Veh)
2 - Longfield Avenue	14.97	1.6	B	309	464
3 - Peak Lane S	14.49	1.7	B	340	511
4 - Rowan Way	10.97	1.2	B	311	466
1 - Peak Lane North	32.62	5.5	D	464	696

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)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	260	65	424	259	222	0.0	0.6	7.436	A
3 - Peak Lane S	280	70	250	282	433	0.0	0.7	8.526	A
4 - Rowan Way	254	63	335	252	197	0.0	0.6	7.434	A
1 - Peak Lane North	381	95	265	381	322	0.0	1.2	10.065	B

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	302	75	507	299	267	0.6	0.9	9.581	A
3 - Peak Lane S	333	83	285	333	521	0.7	0.9	10.439	B
4 - Rowan Way	303	76	395	301	223	0.6	0.8	8.731	A
1 - Peak Lane North	458	114	318	456	379	1.2	2.1	14.717	B

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	367	92	616	368	324	0.9	1.5	14.283	B
3 - Peak Lane S	412	103	354	412	629	0.9	1.7	14.244	B
4 - Rowan Way	377	94	487	374	279	0.8	1.2	10.515	B
1 - Peak Lane North	552	138	390	550	472	2.1	4.6	27.701	D

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	374	93	620	375	320	1.5	1.5	14.969	B
3 - Peak Lane S	407	102	361	409	634	1.7	1.5	14.495	B
4 - Rowan Way	372	93	484	373	287	1.2	1.0	10.969	B
1 - Peak Lane North	557	139	388	552	468	4.6	5.4	32.620	D

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	303	76	510	303	258	1.5	0.8	10.917	B
3 - Peak Lane S	327	82	291	326	521	1.5	1.0	10.759	B
4 - Rowan Way	301	75	388	301	229	1.0	0.7	8.794	A
1 - Peak Lane North	455	114	312	456	377	5.4	1.8	18.162	C

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	252	63	428	252	222	0.8	0.5	8.257	A
3 - Peak Lane S	282	71	245	282	436	1.0	0.8	9.062	A
4 - Rowan Way	257	64	332	256	195	0.7	0.6	7.684	A
1 - Peak Lane North	381	95	269	382	319	1.8	1.1	10.745	B

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	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	260	65	424	259	222	0.0	0.6	7.436	A
3 - Peak Lane S	280	70	250	282	433	0.0	0.7	8.526	A
4 - Rowan Way	254	63	335	252	197	0.0	0.6	7.434	A
1 - Peak Lane North	381	95	265	381	322	0.0	1.2	10.065	B

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	260	717	0.363	259	0.0	0.6	7.436	A
	Exit	1	1		222			222	0.0	0.0	0.000	A
3 - Peak Lane S	Entry	1	1	1, 4	245	650	0.376	245	0.0	0.5	6.956	A
			2	2, 3	36	651	0.056	36	0.0	0.1	5.516	A
	Exit	1	1	(2, 3, 4, 1)	280			281	0.0	0.1	1.750	A
			1		433			433	0.0	0.0	0.000	A
4 - Rowan Way	Entry	1	1	1, 2	149	604	0.246	147	0.0	0.4	7.320	A
			2	3, 4	105	604	0.174	105	0.0	0.2	6.966	A
	Exit	1	1	(2, 3, 4, 1)	254			253	0.0	0.0	0.257	A
			1		197			197	0.0	0.0	0.000	A
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	381	730	0.522	381	0.0	1.2	10.065	B
	Exit	1	1		322			322	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)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	302	680	0.444	299	0.6	0.9	9.581	A
	Exit	1	1		267			267	0.0	0.0	0.000	A
3 - Peak Lane S	Entry	1	1	1, 4	289	637	0.452	289	0.5	0.6	7.711	A
			2	2, 3	44	631	0.071	44	0.1	0.1	5.945	A
	Exit	1	1	(2, 3, 4, 1)	333			333	0.1	0.2	2.952	A
			1		521			521	0.0	0.0	0.000	A
4 - Rowan Way	Entry	1	1	1, 2	172	582	0.295	172	0.4	0.4	8.465	A
			2	3, 4	130	584	0.224	129	0.2	0.3	7.666	A
	Exit	1	1	(2, 3, 4, 1)	303			302	0.0	0.1	0.599	A
			1		223			223	0.0	0.0	0.000	A
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	458	706	0.649	456	1.2	2.1	14.717	B
	Exit	1	1		379			379	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)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	367	619	0.593	368	0.9	1.5	14.283	B
	Exit	1	1		324			324	0.0	0.0	0.000	A
3 - Peak Lane S	Entry	1	1	1, 4	358	614	0.584	359	0.6	0.8	8.552	A
			2	2, 3	53	611	0.086	53	0.1	0.1	6.209	A
	Exit	1	1	(2, 3, 4, 1)	412			411	0.2	0.8	5.994	A
			1		629			629	0.0	0.0	0.000	A
4 - Rowan Way	Entry	1	1	1, 2	221	552	0.400	220	0.4	0.6	9.736	A
			2	3, 4	155	554	0.281	154	0.3	0.4	8.558	A
	Exit	1	1	(2, 3, 4, 1)	377			376	0.1	0.1	1.268	A
			1		279			279	0.0	0.0	0.000	A
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	552	671	0.822	550	2.1	4.6	27.701	D
	Exit	1	1		472			472	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)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	374	622	0.600	375	1.5	1.5	14.969	B
	Exit	1	1		320			320	0.0	0.0	0.000	A
3 - Peak Lane S	Entry	1	1	1, 4	359	613	0.585	360	0.8	0.8	8.631	A
			2	2, 3	49	617	0.080	50	0.1	0.1	6.330	A
	Exit	1	1	(2, 3, 4, 1)	407			409	0.8	0.6	6.146	A
			1		634			634	0.0	0.0	0.000	A
4 - Rowan Way	Entry	1	1	1, 2	216	559	0.387	216	0.6	0.6	10.075	B
			2	3, 4	156	559	0.279	157	0.4	0.3	8.562	A
	Exit	1	1	(2, 3, 4, 1)	372			372	0.1	0.1	1.523	A
			1		287			287	0.0	0.0	0.000	A
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	557	672	0.829	552	4.6	5.4	32.620	D
	Exit	1	1		468			468	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)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	303	676	0.449	303	1.5	0.8	10.917	B
	Exit	1	1		258			258	0.0	0.0	0.000	A
			1	1, 4	285	636	0.448	285	0.8	0.7	7.867	A

3 - Peak Lane S	Entry	1	2	2, 3	41	633	0.065	41	0.1	0.1	6.067	A
		2	1	(2, 3, 4, 1)	327			326	0.6	0.3	3.139	A
	Exit	1	1		521			521	0.0	0.0	0.000	A
4 - Rowan Way	Entry	1	1	1, 2	173	582	0.297	173	0.6	0.4	8.560	A
			2	3, 4	128	584	0.219	128	0.3	0.3	7.805	A
		2	1	(2, 3, 4, 1)	301			301	0.1	0.0	0.559	A
	Exit	1	1		229			229	0.0	0.0	0.000	A
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	455	708	0.643	456	5.4	1.8	18.162	C
	Exit	1	1		377			377	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)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	252	716	0.351	252	0.8	0.5	8.257	A
	Exit	1	1		222			222	0.0	0.0	0.000	A
3 - Peak Lane S	Entry	1	1	1, 4	244	652	0.374	244	0.7	0.5	7.196	A
			2	2, 3	38	653	0.058	38	0.1	0.1	5.973	A
		2	1	(2, 3, 4, 1)	282			281	0.3	0.2	2.033	A
	Exit	1	1		436			436	0.0	0.0	0.000	A
4 - Rowan Way	Entry	1	1	1, 2	149	604	0.247	148	0.4	0.4	7.683	A
			2	3, 4	108	607	0.179	108	0.3	0.2	7.055	A
		2	1	(2, 3, 4, 1)	257			257	0.0	0.0	0.269	A
	Exit	1	1		195			195	0.0	0.0	0.000	A
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	381	730	0.522	382	1.8	1.1	10.745	B
	Exit	1	1		319			319	0.0	0.0	0.000	A

2025 with Bypass + CD + Newlands Farm + PD, 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	3 - Peak Lane S - Lane Simulation	Arm 3: Queue at end of modelled period is greater than 10 PCU. Delay is likely to have been underestimated.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1-1	Longfield Av RB	Standard Roundabout	2, 3, 4, 1	251.26	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	2025 with Bypass + CD + Newlands Farm + PD	AM	ONE HOUR	07:45	09:15	15	✓

Default vehicle mix	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 (%)
2 - Longfield Avenue		ONE HOUR	✓	325	100.000
3 - Peak Lane S		ONE HOUR	✓	845	100.000
4 - Rowan Way		ONE HOUR	✓	367	100.000
1 - Peak Lane North		ONE HOUR	✓	372	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		2 - Longfield Avenue	3 - Peak Lane S	4 - Rowan Way	1 - Peak Lane North
From	2 - Longfield Avenue	0	32	206	87
	3 - Peak Lane S	179	0	142	524
	4 - Rowan Way	177	150	0	40
	1 - Peak Lane North	69	254	49	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		2 - Longfield Avenue	3 - Peak Lane S	4 - Rowan Way	1 - Peak Lane North
From	2 - Longfield Avenue	10	10	10	10
	3 - Peak Lane S	10	10	10	10
	4 - Rowan Way	10	10	10	10
	1 - Peak Lane North	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
2 - Longfield Avenue	11.94	1.1	B	300	450
3 - Peak Lane S	546.55	117.5	F	777	1165
4 - Rowan Way	15.92	2.0	C	335	502
1 - Peak Lane North	18.91	2.5	C	341	511

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	245	61	337	244	324	0.0	0.7	6.969	A
3 - Peak Lane S	626	156	258	618	323	0.0	4.9	23.118	C
4 - Rowan Way	279	70	579	278	297	0.0	0.8	9.436	A
1 - Peak Lane North	281	70	379	281	478	0.0	0.7	8.684	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	296	74	416	293	373	0.7	0.9	8.537	A
3 - Peak Lane S	758	189	307	737	402	4.9	16.1	61.275	F
4 - Rowan Way	335	84	692	333	352	0.8	1.3	11.599	B
1 - Peak Lane North	340	85	450	340	575	0.7	1.1	12.283	B

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	357	89	493	358	427	0.9	1.0	11.083	B
3 - Peak Lane S	936	234	375	733	476	16.1	65.1	204.778	F
4 - Rowan Way	404	101	709	400	400	1.3	2.0	14.853	B
1 - Peak Lane North	403	101	518	401	590	1.1	2.5	18.911	C

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	360	90	491	363	433	1.0	0.9	11.941	B
3 - Peak Lane S	929	232	380	752	474	65.1	113.9	444.418	F
4 - Rowan Way	398	99	725	397	408	2.0	1.6	15.918	C
1 - Peak Lane North	403	101	521	403	601	2.5	2.0	18.812	C

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	291	73	409	292	384	0.9	0.7	8.909	A
3 - Peak Lane S	773	193	308	763	393	113.9	117.6	546.550	F
4 - Rowan Way	328	82	713	332	358	1.6	0.9	12.380	B
1 - Peak Lane North	338	85	455	338	590	2.0	1.2	13.439	B

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	249	62	332	248	340	0.7	0.5	7.136	A
3 - Peak Lane S	645	161	260	790	320	117.6	83.1	425.622	F
4 - Rowan Way	266	67	724	267	326	0.9	0.8	11.238	B
1 - Peak Lane North	278	69	396	276	596	1.2	0.9	9.788	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 (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	245	760	0.323	244	0.0	0.7	6.969	A
	Exit	1	1		324			324	0.0	0.0	0.000	A
3 - Peak Lane S	Entry	1	1	1, 4	486	641	0.757	485	0.0	1.2	8.861	A
			2	2, 3	132	648	0.204	133	0.0	0.2	6.409	A
	Exit	1	1	(2, 3, 4, 1)	626			618	0.0	3.4	14.771	B
					323			323	0.0	0.0	0.000	A
4 - Rowan Way	Entry	1	1	1, 2	169	524	0.323	168	0.0	0.5	9.222	A
			2	3, 4	109	517	0.210	110	0.0	0.3	8.017	A
	Exit	1	1	(2, 3, 4, 1)	279			278	0.0	0.1	0.696	A
					297			297	0.0	0.0	0.000	A
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	281	679	0.416	281	0.0	0.7	8.684	A
	Exit	1	1		478			478	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)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	296	717	0.414	293	0.7	0.9	8.537	A
	Exit	1	1		373			373	0.0	0.0	0.000	A
3 - Peak Lane S	Entry	1	1	1, 4	585	633	0.924	584	1.2	1.6	9.865	A
			2	2, 3	153	629	0.242	152	0.2	0.3	7.195	A
	Exit	1	1	(2, 3, 4, 1)	758			738	3.4	14.2	51.949	F
					402			402	0.0	0.0	0.000	A
4 - Rowan Way	Entry	1	1	1, 2	197	496	0.396	197	0.5	0.7	10.844	B
			2	3, 4	139	495	0.281	136	0.3	0.5	9.699	A
	Exit	1	1	(2, 3, 4, 1)	335			335	0.1	0.2	1.215	A
					352			352	0.0	0.0	0.000	A
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	340	644	0.528	340	0.7	1.1	12.283	B
	Exit	1	1		575			575	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)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	357	687	0.520	358	0.9	1.0	11.083	B
	Exit	1	1		427			427	0.0	0.0	0.000	A
3 - Peak Lane S	Entry	1	1	1, 4	574	605	0.947	573	1.6	1.7	10.444	B
			2	2, 3	162	605	0.267	160	0.3	0.4	7.613	A
	Exit	1	1	(2, 3, 4, 1)	936			735	14.2	63.0	194.883	F
					476			476	0.0	0.0	0.000	A
4 - Rowan Way	Entry	1	1	1, 2	237	484	0.489	235	0.7	0.9	12.485	B
			2	3, 4	164	483	0.338	164	0.5	0.5	10.707	B
	Exit	1	1	(2, 3, 4, 1)	404			401	0.2	0.5	3.074	A
					400			400	0.0	0.0	0.000	A
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	403	611	0.660	401	1.1	2.5	18.911	C
	Exit	1	1		590			590	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)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	360	684	0.527	363	1.0	0.9	11.941	B
	Exit	1	1		433			433	0.0	0.0	0.000	A
3 - Peak Lane S	Entry	1	1	1, 4	590	607	0.970	589	1.7	1.7	10.617	B
			2	2, 3	163	606	0.269	164	0.4	0.3	7.386	A
	Exit	1	1	(2, 3, 4, 1)	929			753	63.0	111.9	434.670	F
					474			474	0.0	0.0	0.000	A
4 - Rowan Way	Entry	1	1	1, 2	238	482	0.494	237	0.9	0.8	12.682	B
			2	3, 4	159	481	0.331	161	0.5	0.4	10.942	B
	Exit	1	1	(2, 3, 4, 1)	398			397	0.5	0.3	3.964	A
					408			408	0.0	0.0	0.000	A
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	403	611	0.660	403	2.5	2.0	18.812	C

1 - Peak Lane North	Exit	1	1		601			601	0.0	0.0	0.000	A
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08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	291	725	0.401	292	0.9	0.7	8.909	A
	Exit	1	1		384			384	0.0	0.0	0.000	A
3 - Peak Lane S	Entry	1	1	1, 4	605	629	0.961	605	1.7	1.7	10.218	B
			2	2, 3	158	630	0.252	158	0.3	0.3	7.160	A
	Exit	1	1	(2, 3, 4, 1)	773			762	111.9	115.5	537.134	F
4 - Rowan Way	Entry	1	1	1, 2	198	479	0.414	199	0.8	0.5	11.513	B
			2	3, 4	132	483	0.272	132	0.4	0.3	9.831	A
	Exit	1	1		358			358	0.0	0.0	0.000	A
					328			329	0.3	0.0	1.555	A
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	338	644	0.525	338	2.0	1.2	13.439	B
	Exit	1	1		590			590	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	249	761	0.328	248	0.7	0.5	7.136	A
	Exit	1	1		340			340	0.0	0.0	0.000	A
3 - Peak Lane S	Entry	1	1	1, 4	627	642	0.977	628	1.7	1.7	9.871	A
			2	2, 3	163	653	0.250	162	0.3	0.3	7.188	A
	Exit	1	1	(2, 3, 4, 1)	645			790	115.5	81.1	416.518	F
4 - Rowan Way	Entry	1	1	1, 2	157	484	0.323	159	0.5	0.4	10.540	B
			2	3, 4	109	477	0.228	108	0.3	0.3	9.718	A
	Exit	1	1		326			326	0.0	0.0	0.000	A
					266			266	0.0	0.1	1.038	A
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	278	672	0.414	276	1.2	0.9	9.788	A
	Exit	1	1		596			596	0.0	0.0	0.000	A

2025 with Bypass + CD + Newlands Farm + PD, 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.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1-1	Longfield Av RB	Standard Roundabout	2, 3, 4, 1	32.55	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
D18	2025 with Bypass + CD + Newlands Farm + PD	PM	ONE HOUR	16:45	18:15	15	✓

Default vehicle mix	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 (%)
2 - Longfield Avenue		ONE HOUR	✓	337	100.000
3 - Peak Lane S		ONE HOUR	✓	456	100.000
4 - Rowan Way		ONE HOUR	✓	452	100.000
1 - Peak Lane North		ONE HOUR	✓	513	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		2 - Longfield Avenue	3 - Peak Lane S	4 - Rowan Way	1 - Peak Lane North
From	2 - Longfield Avenue	0	52	183	102
	3 - Peak Lane S	47	0	100	309
	4 - Rowan Way	172	247	0	33
	1 - Peak Lane North	83	390	40	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		2 - Longfield Avenue	3 - Peak Lane S	4 - Rowan Way	1 - Peak Lane North
From	2 - Longfield Avenue	10	10	10	10
	3 - Peak Lane S	10	10	10	10
	4 - Rowan Way	10	10	10	10
	1 - Peak Lane North	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
2 - Longfield Avenue	20.09	2.2	C	309	463
3 - Peak Lane S	23.94	3.4	C	420	630
4 - Rowan Way	14.13	2.0	B	414	620
1 - Peak Lane North	64.59	11.0	F	470	706

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)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	253	63	505	252	222	0.0	0.7	8.330	A
3 - Peak Lane S	342	86	243	343	514	0.0	0.9	9.886	A
4 - Rowan Way	332	83	344	333	242	0.0	0.7	8.159	A
1 - Peak Lane North	386	96	344	383	332	0.0	1.5	11.235	B

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	299	75	607	299	270	0.7	1.0	11.336	B
3 - Peak Lane S	410	102	289	409	616	0.9	1.6	13.617	B
4 - Rowan Way	405	101	412	406	287	0.7	1.3	10.525	B
1 - Peak Lane North	461	115	417	460	401	1.5	2.6	19.017	C

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	372	93	738	372	334	1.0	2.1	18.083	C
3 - Peak Lane S	506	127	361	510	750	1.6	3.1	21.672	C
4 - Rowan Way	500	125	511	501	360	1.3	1.9	13.893	B
1 - Peak Lane North	564	141	520	553	492	2.6	8.2	41.464	E

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	371	93	739	373	333	2.1	1.8	20.088	C
3 - Peak Lane S	504	126	357	505	756	3.1	3.3	23.936	C
4 - Rowan Way	495	124	505	496	357	1.9	1.9	14.130	B
1 - Peak Lane North	568	142	513	559	487	8.2	11.0	64.587	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	307	77	612	307	278	1.8	1.0	13.015	B
3 - Peak Lane S	416	104	295	414	623	3.3	1.7	14.857	B
4 - Rowan Way	411	103	413	412	296	1.9	1.1	10.815	B
1 - Peak Lane North	459	115	426	464	400	11.0	3.1	36.208	E

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	252	63	509	253	228	1.0	0.6	9.250	A
3 - Peak Lane S	339	85	245	339	518	1.7	1.0	10.786	B
4 - Rowan Way	338	85	340	339	243	1.1	0.7	8.796	A
1 - Peak Lane North	387	97	349	387	329	3.1	1.3	13.753	B

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)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	253	677	0.373	252	0.0	0.7	8.330	A
	Exit	1	1		222			222	0.0	0.0	0.000	A
3 - Peak Lane S	Entry	1	1	1, 4	307	653	0.470	307	0.0	0.6	7.321	A
			2	2, 3	36	655	0.055	35	0.0	0.1	6.010	A
	Exit	1	1	(2, 3, 4, 1)	342			343	0.0	0.2	2.697	A
			1		514			514	0.0	0.0	0.000	A
4 - Rowan Way	Entry	1	1	1, 2	150	597	0.252	150	0.0	0.3	7.435	A
			2	3, 4	182	603	0.303	183	0.0	0.4	7.855	A
	Exit	1	1	(2, 3, 4, 1)	332			332	0.0	0.0	0.491	A
			1		242			242	0.0	0.0	0.000	A
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	386	694	0.556	383	0.0	1.5	11.235	B
	Exit	1	1		332			332	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)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	299	626	0.477	299	0.7	1.0	11.336	B
	Exit	1	1		270			270	0.0	0.0	0.000	A
3 - Peak Lane S	Entry	1	1	1, 4	366	638	0.573	367	0.6	0.8	8.256	A
			2	2, 3	43	631	0.068	42	0.1	0.1	6.193	A
	Exit	1	1	(2, 3, 4, 1)	410			409	0.2	0.7	5.557	A
			1		616			616	0.0	0.0	0.000	A
4 - Rowan Way	Entry	1	1	1, 2	186	575	0.322	186	0.3	0.5	8.720	A
			2	3, 4	219	577	0.380	220	0.4	0.6	9.343	A
	Exit	1	1	(2, 3, 4, 1)	405			405	0.0	0.2	1.459	A
			1		287			287	0.0	0.0	0.000	A
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	461	657	0.701	460	1.5	2.6	19.017	C
	Exit	1	1		401			401	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)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	372	562	0.661	372	1.0	2.1	18.083	C
	Exit	1	1		334			334	0.0	0.0	0.000	A
3 - Peak Lane S	Entry	1	1	1, 4	455	614	0.742	456	0.8	1.1	9.152	A
			2	2, 3	54	614	0.087	54	0.1	0.1	6.284	A
	Exit	1	1	(2, 3, 4, 1)	506			509	0.7	1.9	12.821	B
			1		750			750	0.0	0.0	0.000	A
4 - Rowan Way	Entry	1	1	1, 2	226	550	0.412	225	0.5	0.7	10.009	B
			2	3, 4	276	549	0.502	275	0.6	0.8	10.981	B
	Exit	1	1	(2, 3, 4, 1)	500			502	0.2	0.4	3.339	A
			1		360			360	0.0	0.0	0.000	A
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	564	612	0.919	553	2.6	8.2	41.464	E
	Exit	1	1		492			492	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)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	371	559	0.662	373	2.1	1.8	20.088	C
	Exit	1	1		333			333	0.0	0.0	0.000	A
3 - Peak Lane S	Entry	1	1	1, 4	452	613	0.739	452	1.1	1.2	9.286	A
			2	2, 3	52	615	0.085	53	0.1	0.1	6.462	A
	Exit	1	1	(2, 3, 4, 1)	504			505	1.9	2.0	14.935	B
			1		756			756	0.0	0.0	0.000	A
4 - Rowan Way	Entry	1	1	1, 2	226	550	0.410	225	0.7	0.7	10.147	B
			2	3, 4	270	549	0.492	270	0.8	0.8	11.026	B
	Exit	1	1	(2, 3, 4, 1)	495			496	0.4	0.4	3.513	A
			1		357			357	0.0	0.0	0.000	A
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	568	614	0.925	559	8.2	11.0	64.587	F
	Exit	1	1		487			487	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)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	307	628	0.488	307	1.8	1.0	13.015	B
	Exit	1	1		278			278	0.0	0.0	0.000	A

3 - Peak Lane S	Entry	1	1	1, 4	371	637	0.583	370	1.2	0.9	8.409	A
			2	2, 3	43	634	0.069	44	0.1	0.0	5.975	A
	Exit	1	1	(2, 3, 4, 1)	416			414	2.0	0.8	6.716	A
4 - Rowan Way	Entry	1	1	1, 2	186	581	0.320	186	0.7	0.4	8.831	A
			2	3, 4	225	578	0.389	226	0.8	0.5	9.519	A
	Exit	1	1	(2, 3, 4, 1)	411			411	0.4	0.2	1.617	A
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	459	656	0.701	464	11.0	3.1	36.208	E
	Exit	1	1		400			400	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)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
2 - Longfield Avenue	Entry	1	1	1, 2, 3, 4	252	677	0.373	253	1.0	0.6	9.250	A
	Exit	1	1		228			228	0.0	0.0	0.000	A
3 - Peak Lane S	Entry	1	1	1, 4	304	648	0.469	303	0.9	0.6	7.642	A
			2	2, 3	35	664	0.053	35	0.0	0.0	5.613	A
	Exit	1	1	(2, 3, 4, 1)	339			339	0.8	0.3	3.380	A
4 - Rowan Way	Entry	1	1	1, 2	155	599	0.258	155	0.4	0.3	7.841	A
			2	3, 4	183	601	0.305	184	0.5	0.4	8.253	A
	Exit	1	1	(2, 3, 4, 1)	338			338	0.2	0.1	0.748	A
1 - Peak Lane North	Entry	1	1	1, 2, 3, 4	387	691	0.560	387	3.1	1.3	13.753	B
	Exit	1	1		329			329	0.0	0.0	0.000	A