

Junctions 9					
ARCADY 9 - Roundabout Module					
Version: 9.5.1.7462					
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Filename: Plas Coch Rd (Lane Balancing)AM.j9

Path: N:\PROJECTS\2020\Development and Infrastructure\Plas Coch Rd - Wrexham

Report generation date: 7/8/2021 4:00:41 PM

»2018, AM

»2018 + 90 Dwellings, AM

»2018 + 410 Apartments, AM

Summary of junction performance

	AM					
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity
	[Lane Simulation] - 2018					
1 - Plas Coch Rd (N)	D1	7.5	65.26		F	% []
2 - Access Rd		2.0	155.57		F	
3 - Plas Coch Rd (S)		4.5	18.84		C	
4 - Retail Park		3.3	35.72		E	
	[Lane Simulation] - 2018 + 90 Dwellings					
1 - Plas Coch Rd (N)	D2	9.7	80.55		F	% []
2 - Access Rd		7.9	359.96		F	
3 - Plas Coch Rd (S)		4.6	18.75		C	
4 - Retail Park		3.3	38.65		E	
	[Lane Simulation] - 2018 + 410 Apartments					
1 - Plas Coch Rd (N)	D3	15.9	122.87		F	% []
2 - Access Rd		235.2	2602.37		F	
3 - Plas Coch Rd (S)		4.7	18.97		C	
4 - Retail Park		4.3	46.02		E	

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. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

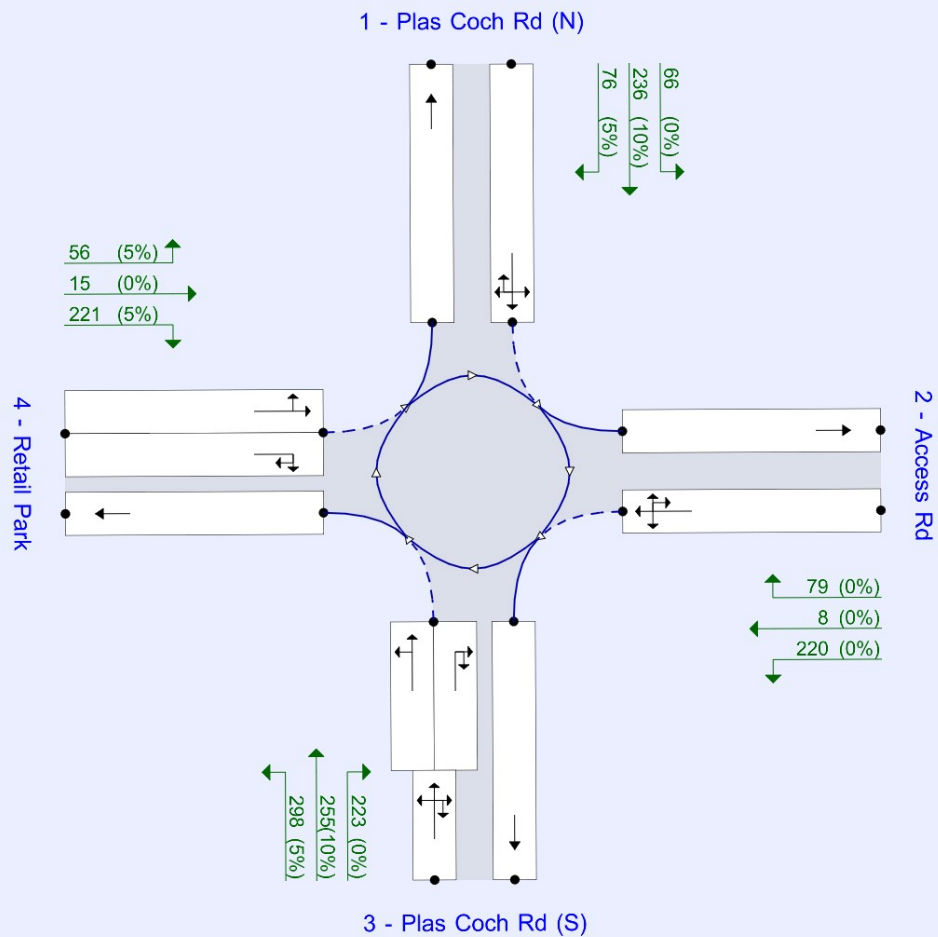
File summary

File Description

Title	Plas Coch Rd / Site Access
Location	Wrexham
Site number	1
Date	1/11/2021
Version	01
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	ADSYSTRAlahogg
Description	

Units

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



Flows show original traffic demand (PCU/hr).
Lane simulation visualisation time: 07:45:00

The junction diagram reflects the last run of Junctions.

Analysis Options

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

Lane Simulation options

Criteria type	Stop criteria (%)	Stop criteria time (s)	Stop criteria number of trials	Random seed	Results refresh speed (s)	Individual vehicle animation number of trials	Average animation capture interval (s)	Use quick response	Do flow sampling	Suppress automatic lane creation	Last run random seed	Last run number of trials	Last run time taken (s)
Delay	1.00	100000	100000	-1	3	1	60	✓			1812654692	307	15.80

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 + 90 Dwellings	AM	ONE HOUR	07:45	09:15	15	✓
D3	2018 + 410 Apartments	AM	ONE HOUR	07:45	09:15	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.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	37.85	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Plas Coch Rd (N)	
2	Access Rd	
3	Plas Coch Rd (S)	
4	Retail Park	

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
1 - Plas Coch Rd (N)	3.80	5.60	13.6	13.6	36.3	39.0	
2 - Access Rd	2.70	3.60	13.1	13.6	36.3	25.5	
3 - Plas Coch Rd (S)	3.40	8.10	26.8	26.8	36.3	17.0	
4 - Retail Park	7.30	7.30	0.0	95.0	36.3	13.5	

Slope / Intercept / Capacity

Arm Intercept Adjustments

Arm	Type	Reason	Percentage intercept adjustment (%)
1 - Plas Coch Rd (N)	Percentage	to match survey	50.00
2 - Access Rd	Percentage		37.00
3 - Plas Coch Rd (S)	Percentage		83.00
4 - Retail Park	Percentage		45.00

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Plas Coch Rd (N)	0.583	726
2 - Access Rd	0.513	383
3 - Plas Coch Rd (S)	0.739	1705
4 - Retail Park	0.825	1091

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

Lane Simulation: Arm options

Arm	Lane capacity source	Traffic considering secondary lanes (%)
1 - Plas Coch Rd (N)	Evenly split	10.00
2 - Access Rd	Evenly split	10.00
3 - Plas Coch Rd (S)	Evenly split	10.00
4 - Retail Park	Evenly split	10.00

Lanes

Arm	Side	Lane level	Lane	Destination arms	Has limited storage	Storage (PCU)	Has bottleneck	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)	Signalised
1 - Plas Coch Rd (N)	Entry	1	1	1, 2, 3, 4		Infinity		0	99999	
	Exit	1	1			Infinity				
2 - Access Rd	Entry	1	1	1, 2, 3, 4		Infinity		0	99999	
	Exit	1	1			Infinity				
3 - Plas Coch Rd (S)	Entry	1	1	1, 4	✓	3.00		0	99999	
			2	2, 3	✓	3.00		0	99999	
	Exit	1	1	(1, 2, 3, 4)		Infinity				
			1			Infinity				
4 - Retail Park	Entry	1	1	1, 2		Infinity		0	99999	
			2	3, 4		Infinity		0	99999	
	Exit	1	1			Infinity				

Entry Lane slope and intercept

Arm	Side	Lane level	Lane	Final slope	Final intercept (PCU/hr)
1 - Plas Coch Rd (N)	Entry	1	1	0.583	726
2 - Access Rd	Entry	1	1	0.513	383
3 - Plas Coch Rd (S)	Entry	1	1	0.369	852
			2	0.369	852
4 - Retail Park	Entry	1	1	0.412	545
			2	0.412	545

Summary of Entry Lane allowed movements

Arm	Lane Level	Lane	Destination arm			
			Plas Coch Rd (N)	Access Rd	Plas Coch Rd (S)	Retail Park
1 - Plas Coch Rd (N)	1	1	✓	✓	✓	✓
2 - Access Rd	1	1	✓	✓	✓	✓
3 - Plas Coch Rd (S)	1	1	✓			✓
		2		✓	✓	
4 - Retail Park	1	1	✓	✓		
		2			✓	✓

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	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 (PCU/hr)	Scaling Factor (%)
1 - Plas Coch Rd (N)		ONE HOUR	✓	362	100.000
2 - Access Rd		ONE HOUR	✓	41	100.000
3 - Plas Coch Rd (S)		ONE HOUR	✓	744	100.000
4 - Retail Park		ONE HOUR	✓	292	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
		1 - Plas Coch Rd (N)	2 - Access Rd	3 - Plas Coch Rd (S)	4 - Retail Park
From	1 - Plas Coch Rd (N)	1	49	236	76
	2 - Access Rd	2	0	31	8
	3 - Plas Coch Rd (S)	255	182	9	298
	4 - Retail Park	56	15	221	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1 - Plas Coch Rd (N)	2 - Access Rd	3 - Plas Coch Rd (S)	4 - Retail Park
From	1 - Plas Coch Rd (N)	0	0	10	5
	2 - Access Rd	0	0	0	0
	3 - Plas Coch Rd (S)	10	0	0	5
	4 - Retail Park	5	0	5	0

Results

Results Summary for whole modelled period

Arm	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Plas Coch Rd (N)	65.26	7.5	F	335	502
2 - Access Rd	155.57	2.0	F	38	56
3 - Plas Coch Rd (S)	18.84	4.5	C	685	1028
4 - Retail Park	35.72	3.3	E	266	399

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Plas Coch Rd (N)	271	68	316	272	271	231	0.0	1.0	14.483	B
2 - Access Rd	32	8	404	32	33	185	0.0	0.2	26.225	D
3 - Plas Coch Rd (S)	554	138	64	555	554	372	0.0	1.3	8.677	A
4 - Retail Park	213	53	334	213	216	283	0.0	0.9	15.087	C

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Plas Coch Rd (N)	330	83	380	330	323	280	1.0	2.2	21.248	C
2 - Access Rd	36	9	487	36	34	223	0.2	0.4	43.647	E
3 - Plas Coch Rd (S)	670	168	81	670	664	443	1.3	2.2	10.943	B
4 - Retail Park	261	65	403	257	259	348	0.9	1.5	18.680	C

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Plas Coch Rd (N)	402	100	469	397	383	345	2.2	6.5	47.926	E
2 - Access Rd	44	11	593	40	40	273	0.4	1.6	101.677	F
3 - Plas Coch Rd (S)	828	207	95	825	815	538	2.2	4.5	17.439	C
4 - Retail Park	319	80	499	315	313	420	1.5	3.3	30.808	D

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Plas Coch Rd (N)	398	100	471	400	394	355	6.5	7.5	65.257	F
2 - Access Rd	45	11	599	45	44	272	1.6	2.0	155.573	F
3 - Plas Coch Rd (S)	828	207	98	826	822	546	4.5	4.4	18.842	C
4 - Retail Park	322	80	507	319	321	417	3.3	3.1	35.724	E

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Plas Coch Rd (N)	329	82	379	331	349	284	7.5	2.3	36.764	E
2 - Access Rd	37	9	488	40	44	222	2.0	0.5	81.903	F
3 - Plas Coch Rd (S)	668	167	80	667	678	447	4.4	2.4	12.144	B
4 - Retail Park	262	65	402	261	272	346	3.1	1.4	21.325	C

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Plas Coch Rd (N)	279	70	321	280	282	235	2.3	1.1	16.140	C
2 - Access Rd	32	8	418	32	32	182	0.5	0.3	29.862	D
3 - Plas Coch Rd (S)	563	141	69	561	563	382	2.4	1.5	8.951	A
4 - Retail Park	220	55	336	220	224	293	1.4	1.1	15.399	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 (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Plas Coch Rd (N)	Entry	1	1	1, 2, 3, 4	271	541	0.501	272	271	0.0	1.0	14.483	B
	Exit	1	1		231			231	231	0.0	0.0	0.000	A
2 - Access Rd	Entry	1	1	1, 2, 3, 4	32	176	0.180	32	33	0.0	0.2	26.225	D
	Exit	1	1		185			185	185	0.0	0.0	0.000	A
3 - Plas Coch Rd (S)	Entry	1	1	1, 4	411	829	0.496	412	412	0.0	0.8	7.856	A
			2	2, 3	143	829	0.172	142	142	0.0	0.2	5.251	A
		2	1	(1, 2, 3, 4)	554			554	558	0.0	0.2	1.520	A
	Exit	1	1		372			372	373	0.0	0.0	0.000	A
4 - Retail Park	Entry	1	1	1, 2	51	407	0.124	51	52	0.0	0.1	10.661	B
			2	3, 4	163	407	0.399	162	163	0.0	0.7	16.516	C
	Exit	1	1		283			283	285	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Plas Coch Rd (N)	Entry	1	1	1, 2, 3, 4	330	504	0.655	330	323	1.0	2.2	21.248	C
	Exit	1	1		280			280	280	0.0	0.0	0.000	A
2 - Access Rd	Entry	1	1	1, 2, 3, 4	36	133	0.269	36	34	0.2	0.4	43.647	E
	Exit	1	1		223			223	221	0.0	0.0	0.000	A
3 - Plas Coch Rd (S)	Entry	1	1	1, 4	499	823	0.606	499	494	0.8	1.3	8.773	A
			2	2, 3	171	823	0.208	171	171	0.2	0.3	5.511	A
		2	1	(1, 2, 3, 4)	670			670	666	0.2	0.6	3.042	A
	Exit	1	1		443			443	437	0.0	0.0	0.000	A
4 - Retail Park	Entry	1	1	1, 2	62	379	0.165	62	64	0.1	0.2	11.253	B
			2	3, 4	198	379	0.523	195	195	0.7	1.3	21.112	C
	Exit	1	1		348			348	342	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Plas Coch Rd (N)	Entry	1	1	1, 2, 3, 4	402	452	0.889	397	383	2.2	6.5	47.926	E
	Exit	1	1		345			345	345	0.0	0.0	0.000	A
2 - Access Rd	Entry	1	1	1, 2, 3, 4	44	80	0.555	40	40	0.4	1.6	101.677	F
	Exit	1	1		273			273	267	0.0	0.0	0.000	A
3 - Plas Coch Rd (S)	Entry	1	1	1, 4	610	818	0.746	610	605	1.3	1.9	10.073	B
			2	2, 3	215	818	0.263	215	210	0.3	0.3	6.106	A
		2	1	(1, 2, 3, 4)	828			825	817	0.6	2.3	8.416	A
	Exit	1	1		538			538	525	0.0	0.0	0.000	A
4 - Retail Park	Entry	1	1	1, 2	77	340	0.227	78	78	0.2	0.3	13.909	B
			2	3, 4	242	340	0.712	238	235	1.3	3.0	36.336	E
	Exit	1	1		420			420	413	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Plas Coch Rd (N)	Entry	1	1	1, 2, 3, 4	398	451	0.883	400	394	6.5	7.5	65.257	F
	Exit	1	1		355			355	349	0.0	0.0	0.000	A
2 - Access Rd	Entry	1	1	1, 2, 3, 4	45	76	0.583	45	44	1.6	2.0	155.573	F
	Exit	1	1		272			272	271	0.0	0.0	0.000	A
3 - Plas Coch Rd (S)	Entry	1	1	1, 4	614	816	0.752	613	611	1.9	1.8	10.274	B
			2	2, 3	213	816	0.261	213	211	0.3	0.4	6.082	A
		2	1	(1, 2, 3, 4)	828			827	822	2.3	2.3	9.708	A
	Exit	1	1		546			546	542	0.0	0.0	0.000	A
4 - Retail Park	Entry	1	1	1, 2	78	336	0.231	78	78	0.3	0.3	14.976	B
			2	3, 4	244	336	0.725	241	243	3.0	2.9	42.472	E
	Exit	1	1		417			417	419	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Plas Coch Rd (N)	Entry	1	1	1, 2, 3, 4	329	505	0.652	331	349	7.5	2.3	36.764	E
	Exit	1	1		284			284	289	0.0	0.0	0.000	A
2 - Access Rd	Entry	1	1	1, 2, 3, 4	37	133	0.276	40	44	2.0	0.5	81.903	F
	Exit	1	1		222			222	224	0.0	0.0	0.000	A
3 - Plas Coch Rd (S)	Entry	1	1	1, 4	498	823	0.605	499	508	1.8	1.3	9.090	A
			2	2, 3	170	823	0.207	169	170	0.4	0.3	5.645	A
		2	1	(1, 2, 3, 4)	668			668	676	2.3	0.7	3.998	A
	Exit	1	1		447			447	474	0.0	0.0	0.000	A
4 - Retail Park	Entry	1	1	1, 2	66	380	0.173	66	68	0.3	0.2	12.279	B
			2	3, 4	196	380	0.517	196	204	2.9	1.2	24.424	C
	Exit	1	1		346			346	356	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Plas Coch Rd (N)	Entry	1	1	1, 2, 3, 4	279	539	0.517	280	282	2.3	1.1	16.140	C
	Exit	1	1		235			235	239	0.0	0.0	0.000	A
2 - Access Rd	Entry	1	1	1, 2, 3, 4	32	168	0.192	32	32	0.5	0.3	29.862	D
	Exit	1	1		182			182	186	0.0	0.0	0.000	A
3 - Plas Coch Rd (S)	Entry	1	1	1, 4	420	827	0.508	418	419	1.3	1.0	8.063	A
			2	2, 3	142	827	0.172	142	144	0.3	0.2	5.272	A
		2	1	(1, 2, 3, 4)	563			562	562	0.7	0.3	1.667	A
	Exit	1	1		382			382	385	0.0	0.0	0.000	A
4 - Retail Park	Entry	1	1	1, 2	52	407	0.127	52	55	0.2	0.2	10.545	B
			2	3, 4	168	407	0.414	168	170	1.2	0.9	16.994	C
	Exit	1	1		293			293	291	0.0	0.0	0.000	A

2018 + 90 Dwellings, 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	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	54.94	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2018 + 90 Dwellings	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 (PCU/hr)	Scaling Factor (%)
1 - Plas Coch Rd (N)		ONE HOUR	✓	366	100.000
2 - Access Rd		ONE HOUR	✓	73	100.000
3 - Plas Coch Rd (S)		ONE HOUR	✓	753	100.000
4 - Retail Park		ONE HOUR	✓	292	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
		1 - Plas Coch Rd (N)	2 - Access Rd	3 - Plas Coch Rd (S)	4 - Retail Park
From	1 - Plas Coch Rd (N)	1	53	236	76
	2 - Access Rd	11	0	54	8
	3 - Plas Coch Rd (S)	255	191	9	298
	4 - Retail Park	56	15	221	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1 - Plas Coch Rd (N)	2 - Access Rd	3 - Plas Coch Rd (S)	4 - Retail Park
From	1 - Plas Coch Rd (N)	0	0	10	5
	2 - Access Rd	0	0	0	0
	3 - Plas Coch Rd (S)	10	0	0	5
	4 - Retail Park	5	0	5	0

Results

Results Summary for whole modelled period

Arm	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Plas Coch Rd (N)	80.55	9.7	F	335	503
2 - Access Rd	359.96	7.9	F	68	103
3 - Plas Coch Rd (S)	18.75	4.6	C	693	1040
4 - Retail Park	38.65	3.3	E	266	399

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Plas Coch Rd (N)	268	67	320	269	271	248	0.0	1.1	15.675	C
2 - Access Rd	53	13	400	54	54	189	0.0	0.4	30.188	D
3 - Plas Coch Rd (S)	568	142	74	568	558	380	0.0	1.4	8.569	A
4 - Retail Park	215	54	354	214	218	288	0.0	1.1	14.994	B

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Plas Coch Rd (N)	323	81	396	325	321	291	1.1	2.2	22.258	C
2 - Access Rd	67	17	485	67	63	236	0.4	1.3	61.257	F
3 - Plas Coch Rd (S)	685	171	85	687	681	467	1.4	2.3	11.729	B
4 - Retail Park	261	65	425	262	259	347	1.1	1.6	20.401	C

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Plas Coch Rd (N)	409	102	471	384	381	363	2.2	7.9	52.062	F
2 - Access Rd	83	21	576	70	68	279	1.3	4.6	182.313	F
3 - Plas Coch Rd (S)	834	209	97	836	824	549	2.3	4.6	17.661	C
4 - Retail Park	318	79	516	319	313	417	1.6	3.3	33.432	D

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Plas Coch Rd (N)	407	102	484	401	400	358	7.9	9.7	80.551	F
2 - Access Rd	81	20	600	68	66	284	4.6	7.9	359.955	F
3 - Plas Coch Rd (S)	825	206	99	827	828	569	4.6	4.0	18.755	C
4 - Retail Park	321	80	515	326	323	411	3.3	3.3	38.645	E

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Plas Coch Rd (N)	329	82	387	340	362	292	9.7	2.6	48.952	E
2 - Access Rd	68	17	494	88	81	234	7.9	4.6	266.179	F
3 - Plas Coch Rd (S)	676	169	96	674	686	485	4.0	2.3	12.241	B
4 - Retail Park	264	66	418	261	270	353	3.3	1.8	23.061	C

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Plas Coch Rd (N)	275	69	323	278	285	246	2.6	1.2	17.540	C
2 - Access Rd	58	14	407	64	73	194	4.6	0.7	72.809	F
3 - Plas Coch Rd (S)	573	143	73	574	576	398	2.3	1.4	8.776	A
4 - Retail Park	217	54	354	215	223	293	1.8	1.1	15.308	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 (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Plas Coch Rd (N)	Entry	1	1	1, 2, 3, 4	268	539	0.497	269	271	0.0	1.1	15.675	C
	Exit	1	1		248			248	241	0.0	0.0	0.000	A
2 - Access Rd	Entry	1	1	1, 2, 3, 4	53	178	0.299	54	54	0.0	0.4	30.188	D
	Exit	1	1		189			189	191	0.0	0.0	0.000	A
3 - Plas Coch Rd (S)	Entry	1	1	1, 4	420	825	0.509	421	411	0.0	0.9	7.824	A
			2	2, 3	148	825	0.180	148	147	0.0	0.2	5.372	A
		2	1	(1, 2, 3, 4)	568			568	562	0.0	0.3	1.418	A
	Exit	1	1		380			380	385	0.0	0.0	0.000	A
4 - Retail Park	Entry	1	1	1, 2	54	399	0.134	53	54	0.0	0.2	11.649	B
			2	3, 4	162	399	0.405	160	164	0.0	0.9	16.105	C
	Exit	1	1		288			288	282	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Plas Coch Rd (N)	Entry	1	1	1, 2, 3, 4	323	495	0.653	325	321	1.1	2.2	22.258	C
	Exit	1	1		291			291	291	0.0	0.0	0.000	A
2 - Access Rd	Entry	1	1	1, 2, 3, 4	67	134	0.503	67	63	0.4	1.3	61.257	F
	Exit	1	1		236			236	234	0.0	0.0	0.000	A
3 - Plas Coch Rd (S)	Entry	1	1	1, 4	502	821	0.612	504	500	0.9	1.2	9.012	A
			2	2, 3	184	821	0.224	183	181	0.2	0.3	5.612	A
		2	1	(1, 2, 3, 4)	685			686	682	0.3	0.8	3.657	A
	Exit	1	1		467			467	456	0.0	0.0	0.000	A
4 - Retail Park	Entry	1	1	1, 2	62	370	0.169	63	63	0.2	0.2	12.344	B
			2	3, 4	199	370	0.537	199	195	0.9	1.4	23.008	C
	Exit	1	1		347			347	342	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Plas Coch Rd (N)	Entry	1	1	1, 2, 3, 4	409	451	0.906	384	381	2.2	7.9	52.062	F
	Exit	1	1		363			363	355	0.0	0.0	0.000	A
2 - Access Rd	Entry	1	1	1, 2, 3, 4	83	88	0.937	70	68	1.3	4.6	182.313	F
	Exit	1	1		279			279	280	0.0	0.0	0.000	A
3 - Plas Coch Rd (S)	Entry	1	1	1, 4	622	817	0.762	621	606	1.2	2.0	10.194	B
			2	2, 3	214	817	0.263	215	218	0.3	0.3	6.335	A
		2	1	(1, 2, 3, 4)	834			837	827	0.8	2.3	8.517	A
	Exit	1	1		549			549	541	0.0	0.0	0.000	A
4 - Retail Park	Entry	1	1	1, 2	78	333	0.236	78	78	0.2	0.3	14.645	B
			2	3, 4	239	333	0.720	241	235	1.4	3.0	39.588	E
	Exit	1	1		417			417	411	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Plas Coch Rd (N)	Entry	1	1	1, 2, 3, 4	407	444	0.917	401	400	7.9	9.7	80.551	F
	Exit	1	1		358			358	351	0.0	0.0	0.000	A
2 - Access Rd	Entry	1	1	1, 2, 3, 4	81	76	1.071	68	66	4.6	7.9	359.955	F
	Exit	1	1		284			284	284	0.0	0.0	0.000	A
3 - Plas Coch Rd (S)	Entry	1	1	1, 4	606	816	0.743	607	608	2.0	1.6	10.293	B
			2	2, 3	220	816	0.270	221	220	0.3	0.4	6.179	A
		2	1	(1, 2, 3, 4)	825			827	827	2.3	1.9	9.629	A
	Exit	1	1		569			569	563	0.0	0.0	0.000	A
4 - Retail Park	Entry	1	1	1, 2	79	333	0.237	80	78	0.3	0.4	15.759	C
			2	3, 4	242	333	0.727	247	245	3.0	3.0	46.016	E
	Exit	1	1		411			411	418	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Plas Coch Rd (N)	Entry	1	1	1, 2, 3, 4	329	500	0.657	340	362	9.7	2.6	48.952	E
	Exit	1	1		292			292	292	0.0	0.0	0.000	A
2 - Access Rd	Entry	1	1	1, 2, 3, 4	68	129	0.525	88	81	7.9	4.6	266.179	F
	Exit	1	1		234			234	241	0.0	0.0	0.000	A
3 - Plas Coch Rd (S)	Entry	1	1	1, 4	496	817	0.607	496	504	1.6	1.3	9.142	A
			2	2, 3	178	817	0.218	178	182	0.4	0.3	5.845	A
		2	1	(1, 2, 3, 4)	676			674	684	1.9	0.7	4.036	A
	Exit	1	1		485			485	507	0.0	0.0	0.000	A
4 - Retail Park	Entry	1	1	1, 2	65	373	0.174	65	65	0.4	0.2	12.347	B
			2	3, 4	200	373	0.535	196	205	3.0	1.6	26.561	D
	Exit	1	1		353			353	359	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Plas Coch Rd (N)	Entry	1	1	1, 2, 3, 4	275	538	0.511	278	285	2.6	1.2	17.540	C
	Exit	1	1		246			246	251	0.0	0.0	0.000	A
2 - Access Rd	Entry	1	1	1, 2, 3, 4	58	174	0.332	64	73	4.6	0.7	72.809	F
	Exit	1	1		194			194	197	0.0	0.0	0.000	A
3 - Plas Coch Rd (S)	Entry	1	1	1, 4	426	826	0.517	426	424	1.3	0.9	7.964	A
			2	2, 3	148	826	0.179	148	152	0.3	0.2	5.350	A
		2	1	(1, 2, 3, 4)	573			574	574	0.7	0.2	1.553	A
	Exit	1	1		398			398	414	0.0	0.0	0.000	A
4 - Retail Park	Entry	1	1	1, 2	51	399	0.128	51	54	0.2	0.2	11.569	B
			2	3, 4	166	399	0.416	164	169	1.6	0.9	16.536	C
	Exit	1	1		293			293	294	0.0	0.0	0.000	A

2018 + 410 Apartments, 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	2 - Access Rd - Lane Simulation	Arm 2: 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	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	495.76	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	2018 + 410 Apartments	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 (PCU/hr)	Scaling Factor (%)
1 - Plas Coch Rd (N)		ONE HOUR	✓	379	100.000
2 - Access Rd		ONE HOUR	✓	307	100.000
3 - Plas Coch Rd (S)		ONE HOUR	✓	785	100.000
4 - Retail Park		ONE HOUR	✓	292	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
		1 - Plas Coch Rd (N)	2 - Access Rd	3 - Plas Coch Rd (S)	4 - Retail Park
From	1 - Plas Coch Rd (N)	1	66	236	76
	2 - Access Rd	79	0	220	8
	3 - Plas Coch Rd (S)	255	223	9	298
	4 - Retail Park	56	15	221	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1 - Plas Coch Rd (N)	2 - Access Rd	3 - Plas Coch Rd (S)	4 - Retail Park
From	1 - Plas Coch Rd (N)	0	0	10	5
	2 - Access Rd	0	0	0	0
	3 - Plas Coch Rd (S)	10	0	0	5
	4 - Retail Park	5	0	5	0

Results

Results Summary for whole modelled period

Arm	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Plas Coch Rd (N)	122.87	15.9	F	346	520
2 - Access Rd	2602.37	235.2	F	282	422
3 - Plas Coch Rd (S)	18.97	4.7	C	719	1079
4 - Retail Park	46.02	4.3	E	269	404

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Plas Coch Rd (N)	289	72	352	288	284	277	0.0	1.4	17.394	C
2 - Access Rd	227	57	413	168	163	228	0.0	17.7	237.310	F
3 - Plas Coch Rd (S)	587	147	105	585	586	476	0.0	1.6	8.832	A
4 - Retail Park	222	56	407	223	216	283	0.0	1.1	16.114	C

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Plas Coch Rd (N)	341	85	416	340	336	312	1.4	2.8	26.207	D
2 - Access Rd	280	70	487	132	143	269	17.7	51.8	1139.189	F
3 - Plas Coch Rd (S)	708	177	108	707	699	511	1.6	2.3	11.335	B
4 - Retail Park	257	64	471	257	256	344	1.1	1.7	21.794	C

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Plas Coch Rd (N)	417	104	510	390	383	370	2.8	10.5	68.325	F
2 - Access Rd	341	85	570	92	104	330	51.8	110.0	2560.263	F
3 - Plas Coch Rd (S)	862	215	105	860	851	557	2.3	4.5	18.013	C
4 - Retail Park	328	82	561	319	310	405	1.7	4.3	39.419	E

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Plas Coch Rd (N)	414	104	513	392	396	364	10.5	15.9	122.872	F
2 - Access Rd	338	84	574	87	87	331	110.0	172.4	2602.368	F
3 - Plas Coch Rd (S)	867	217	106	863	863	555	4.5	4.7	18.974	C
4 - Retail Park	321	80	556	322	320	413	4.3	4.1	46.020	E

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Plas Coch Rd (N)	336	84	421	364	383	310	15.9	5.2	83.780	F
2 - Access Rd	276	69	510	118	104	275	172.4	215.5	1797.141	F
3 - Plas Coch Rd (S)	701	175	107	702	718	522	4.7	2.3	12.351	B
4 - Retail Park	265	66	465	266	274	343	4.1	1.6	27.493	D

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Plas Coch Rd (N)	281	70	352	282	299	281	5.2	1.5	22.806	C
2 - Access Rd	226	57	406	169	154	228	215.5	235.2	898.662	F
3 - Plas Coch Rd (S)	592	148	105	591	594	470	2.3	1.5	9.277	A
4 - Retail Park	223	56	411	222	222	285	1.6	1.1	17.607	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 (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Plas Coch Rd (N)	Entry	1	1	1, 2, 3, 4	289	520	0.556	288	284	0.0	1.4	17.394	C
	Exit	1	1		277			277	274	0.0	0.0	0.000	A
2 - Access Rd	Entry	1	1	1, 2, 3, 4	227	171	1.330	168	163	0.0	17.7	237.310	F
	Exit	1	1		228			228	228	0.0	0.0	0.000	A
3 - Plas Coch Rd (S)	Entry	1	1	1, 4	413	814	0.508	412	412	0.0	1.0	8.057	A
			2	2, 3	173	814	0.212	173	174	0.0	0.3	5.619	A
		2	1	(1, 2, 3, 4)	587			586	591	0.0	0.3	1.523	A
	Exit	1	1		476			476	465	0.0	0.0	0.000	A
4 - Retail Park	Entry	1	1	1, 2	56	378	0.148	55	53	0.0	0.2	11.683	B
			2	3, 4	166	378	0.441	167	163	0.0	0.9	17.576	C
	Exit	1	1		283			283	283	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Plas Coch Rd (N)	Entry	1	1	1, 2, 3, 4	341	484	0.706	340	336	1.4	2.8	26.207	D
	Exit	1	1		312			312	314	0.0	0.0	0.000	A
2 - Access Rd	Entry	1	1	1, 2, 3, 4	280	133	2.104	132	143	17.7	51.8	1139.189	F
	Exit	1	1		269			269	272	0.0	0.0	0.000	A
3 - Plas Coch Rd (S)	Entry	1	1	1, 4	498	813	0.613	500	491	1.0	1.2	8.979	A
			2	2, 3	208	813	0.256	207	208	0.3	0.4	5.972	A
		2	1	(1, 2, 3, 4)	708			707	700	0.3	0.7	3.288	A
	Exit	1	1		511			511	512	0.0	0.0	0.000	A
4 - Retail Park	Entry	1	1	1, 2	60	351	0.172	61	63	0.2	0.2	12.749	B
			2	3, 4	196	351	0.559	196	193	0.9	1.5	24.740	C
	Exit	1	1		344			344	336	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Plas Coch Rd (N)	Entry	1	1	1, 2, 3, 4	417	428	0.972	390	383	2.8	10.5	68.325	F
	Exit	1	1		370			370	365	0.0	0.0	0.000	A
2 - Access Rd	Entry	1	1	1, 2, 3, 4	341	91	3.755	92	104	51.8	110.0	2560.263	F
	Exit	1	1		330			330	328	0.0	0.0	0.000	A
3 - Plas Coch Rd (S)	Entry	1	1	1, 4	606	814	0.745	606	598	1.2	1.9	10.296	B
			2	2, 3	255	814	0.313	254	253	0.4	0.5	6.658	A
		2	1	(1, 2, 3, 4)	862			861	854	0.7	2.2	8.836	A
	Exit	1	1		557			557	554	0.0	0.0	0.000	A
4 - Retail Park	Entry	1	1	1, 2	80	314	0.254	80	77	0.2	0.3	15.354	C
			2	3, 4	248	314	0.789	239	233	1.5	3.9	47.115	E
	Exit	1	1		405			405	401	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Plas Coch Rd (N)	Entry	1	1	1, 2, 3, 4	414	427	0.971	392	396	10.5	15.9	122.872	F
	Exit	1	1		364			364	365	0.0	0.0	0.000	A
2 - Access Rd	Entry	1	1	1, 2, 3, 4	338	89	3.808	87	87	110.0	172.4	2602.368	F
	Exit	1	1		331			331	333	0.0	0.0	0.000	A
3 - Plas Coch Rd (S)	Entry	1	1	1, 4	609	813	0.749	609	606	1.9	1.9	10.344	B
			2	2, 3	254	813	0.313	254	257	0.5	0.5	6.658	A
		2	1	(1, 2, 3, 4)	867			863	863	2.2	2.4	9.779	A
	Exit	1	1		555			555	558	0.0	0.0	0.000	A
4 - Retail Park	Entry	1	1	1, 2	79	316	0.250	79	78	0.3	0.3	16.028	C
			2	3, 4	242	316	0.764	243	241	3.9	3.8	55.880	F
	Exit	1	1		413			413	410	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Plas Coch Rd (N)	Entry	1	1	1, 2, 3, 4	336	481	0.699	364	383	15.9	5.2	83.780	F
	Exit	1	1		310			310	314	0.0	0.0	0.000	A
2 - Access Rd	Entry	1	1	1, 2, 3, 4	276	121	2.279	118	104	172.4	215.5	1797.141	F
	Exit	1	1		275			275	283	0.0	0.0	0.000	A
3 - Plas Coch Rd (S)	Entry	1	1	1, 4	496	813	0.610	496	508	1.9	1.3	9.240	A
			2	2, 3	206	813	0.254	206	210	0.5	0.3	6.005	A
		2	1	(1, 2, 3, 4)	701			702	715	2.4	0.6	4.134	A
	Exit	1	1		522			522	531	0.0	0.0	0.000	A
4 - Retail Park	Entry	1	1	1, 2	63	354	0.179	63	65	0.3	0.2	13.499	B
			2	3, 4	202	354	0.570	202	209	3.8	1.4	32.051	D
	Exit	1	1		343			343	352	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Plas Coch Rd (N)	Entry	1	1	1, 2, 3, 4	281	520	0.540	282	299	5.2	1.5	22.806	C
	Exit	1	1		281			281	278	0.0	0.0	0.000	A
2 - Access Rd	Entry	1	1	1, 2, 3, 4	226	174	1.299	169	154	215.5	235.2	898.662	F
	Exit	1	1		228			228	231	0.0	0.0	0.000	A
3 - Plas Coch Rd (S)	Entry	1	1	1, 4	418	814	0.514	417	419	1.3	1.0	8.126	A
			2	2, 3	174	814	0.214	174	175	0.3	0.2	5.690	A
		2	1	(1, 2, 3, 4)	592			592	592	0.6	0.2	1.924	A
	Exit	1	1		470			470	471	0.0	0.0	0.000	A
4 - Retail Park	Entry	1	1	1, 2	55	376	0.147	55	54	0.2	0.2	12.104	B
			2	3, 4	167	376	0.445	167	168	1.4	0.9	19.412	C
	Exit	1	1		285			285	290	0.0	0.0	0.000	A