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APPENDIX S

Junctions 9										
ARCADY 9 - Roundabout Module										
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Filename: 9. B5101 Berse Rd_ Rhyd Broughton Lane.j9

Path: Z:\Job Library\2021\210187 - Ruthin Road, Wrexham\Traffic Data\ARCADY - Jan 2024 Update\9. B5101 Berse Rd_ Rhyd Broughton Lane_Junctions 9 Report

Report generation date: 06/02/2024 10:41:05

- »2028 Base Re-dist, AM
- »2028 Base Re-dist, PM
- »2028 Assess Re-dist , AM
- »2028 Assess Re-dist , PM
- »2022 Survey, AM
- »2022 Survey, PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	2028 Base Re-dist									
Arm 1	D3	2.4	7.10	0.71	A	D4	1.3	4.94	0.57	A
Arm 2		2.7	7.70	0.73	A		1.9	6.97	0.65	A
Arm 3		0.6	5.00	0.37	A		0.6	4.78	0.38	A
	2028 Assess Re-dist									
Arm 1	D5	2.7	7.63	0.73	A	D6	1.4	5.05	0.58	A
Arm 2		2.8	8.00	0.74	A		1.9	7.20	0.66	A
Arm 3		0.6	5.18	0.39	A		0.6	4.85	0.38	A
	2022 Survey									
Arm 1	D7	1.8	5.70	0.64	A	D8	1.0	4.23	0.50	A
Arm 2		1.9	5.97	0.66	A		1.3	5.40	0.57	A
Arm 3		0.5	4.47	0.32	A		0.5	4.20	0.32	A

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

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

File summary

File Description

Title	B5101 Berse Road/ Ryd Broughton Lane
Location	B5101 Berse Road/ Ryd Broughton Lane
Site number	
Date	29/11/2022
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	SCP\abbie.moore
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

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2028 Base Re-dist	AM	ONE HOUR	07:45	09:15	15
D4	2028 Base Re-dist	PM	ONE HOUR	16:15	17:45	15
D5	2028 Assess Re-dist	AM	ONE HOUR	07:45	09:15	15
D6	2028 Assess Re-dist	PM	ONE HOUR	16:15	17:45	15
D7	2022 Survey	AM	ONE HOUR	07:45	09:15	15
D8	2022 Survey	PM	ONE HOUR	16:15	17:45	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2028 Base Re-dist, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	B5101 Berse Road/ Ryd Broughton Lane	Standard Roundabout		1, 2, 3	7.06	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Berse Road (N)	
2	Rhyd Broughton Lane	
3	B5101 Berse Road (W)	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1	3.70	7.10	12.8	41.5	38.5	13.0	
2	4.80	6.80	10.8	20.9	38.5	11.0	
3	3.50	5.60	21.2	25.5	38.5	18.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.695	1819
2	0.718	1960
3	0.646	1624

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2028 Base Re-dist	AM	ONE HOUR	07:45	09:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	1128	100.000
2		✓	1149	100.000
3		✓	381	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		1	2	3
From	1	0	840	288
	2	682	0	467
	3	288	93	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1	2	3
From	1	0	0	0
	2	0	0	0
	3	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.71	7.10	2.4	A
2	0.73	7.70	2.7	A
3	0.37	5.00	0.6	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	849	70	1771	0.480	846	0.9	3.878	A
2	865	216	1805	0.479	861	0.9	3.803	A
3	287	511	1294	0.222	286	0.3	3.567	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1014	84	1761	0.576	1012	1.3	4.795	A
2	1033	258	1774	0.582	1031	1.4	4.833	A
3	343	612	1229	0.279	342	0.4	4.057	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1242	102	1748	0.710	1238	2.4	6.993	A
2	1265	316	1733	0.730	1260	2.6	7.535	A
3	419	748	1141	0.368	419	0.6	4.978	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1242	102	1748	0.710	1242	2.4	7.103	A
2	1265	317	1732	0.730	1265	2.7	7.699	A
3	419	751	1139	0.368	419	0.6	5.000	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1014	84	1761	0.576	1018	1.4	4.873	A
2	1033	260	1773	0.583	1038	1.4	4.929	A
3	343	616	1226	0.279	343	0.4	4.081	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	849	70	1771	0.480	851	0.9	3.923	A
2	865	217	1804	0.480	867	0.9	3.850	A
3	287	515	1292	0.222	287	0.3	3.586	A

2028 Base Re-dist, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	B5101 Berse Road/ Ryd Broughton Lane	Standard Roundabout		1, 2, 3	5.73	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2028 Base Re-dist	PM	ONE HOUR	16:15	17:45	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	880	100.000
2		✓	878	100.000
3		✓	420	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		1	2	3
From	1	0	277	603
	2	575	0	303
	3	261	159	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1	2	3
From	1	0	0	0
	2	0	0	0
	3	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.57	4.94	1.3	A
2	0.65	6.97	1.9	A
3	0.38	4.78	0.6	A

Main Results for each time segment

16:15 - 16:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	663	119	1737	0.382	660	0.6	3.337	A
2	661	452	1635	0.404	658	0.7	3.674	A
3	316	431	1346	0.235	315	0.3	3.487	A

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	791	143	1720	0.460	790	0.8	3.866	A
2	789	541	1571	0.502	788	1.0	4.590	A
3	378	516	1291	0.292	377	0.4	3.938	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	969	175	1698	0.571	967	1.3	4.911	A
2	967	663	1484	0.651	963	1.8	6.871	A
3	462	631	1217	0.380	462	0.6	4.762	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	969	175	1698	0.571	969	1.3	4.938	A
2	967	664	1483	0.652	967	1.9	6.968	A
3	462	633	1215	0.380	462	0.6	4.780	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	791	143	1720	0.460	793	0.9	3.892	A
2	789	543	1570	0.503	793	1.0	4.654	A
3	378	519	1289	0.293	378	0.4	3.956	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	663	120	1736	0.382	663	0.6	3.360	A
2	661	455	1633	0.405	662	0.7	3.714	A
3	316	434	1344	0.235	317	0.3	3.507	A

2028 Assess Re-dist , AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	B5101 Berse Road/ Ryd Broughton Lane	Standard Roundabout		1, 2, 3	7.42	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	2028 Assess Re-dist	AM	ONE HOUR	07:45	09:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	1160	100.000
2		✓	1149	100.000
3		✓	404	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		1	2	3
From	1	0	849	311
	2	682	0	467
	3	311	93	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1	2	3
From	1	0	0	0
	2	0	0	0
	3	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.73	7.63	2.7	A
2	0.74	8.00	2.8	A
3	0.39	5.18	0.6	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	873	70	1771	0.493	869	1.0	3.977	A
2	865	233	1792	0.483	861	0.9	3.851	A
3	304	511	1294	0.235	303	0.3	3.627	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1043	84	1761	0.592	1041	1.4	4.983	A
2	1033	279	1759	0.587	1031	1.4	4.930	A
3	363	612	1229	0.296	363	0.4	4.154	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1277	102	1748	0.730	1272	2.6	7.485	A
2	1265	341	1715	0.738	1260	2.7	7.821	A
3	445	748	1141	0.390	444	0.6	5.156	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1277	102	1748	0.731	1277	2.7	7.631	A
2	1265	342	1714	0.738	1265	2.8	8.002	A
3	445	751	1139	0.390	445	0.6	5.183	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1043	84	1761	0.592	1048	1.5	5.079	A
2	1033	281	1758	0.588	1038	1.4	5.036	A
3	363	616	1226	0.296	364	0.4	4.179	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	873	70	1771	0.493	875	1.0	4.028	A
2	865	235	1791	0.483	867	0.9	3.903	A
3	304	515	1292	0.235	305	0.3	3.647	A

2028 Assess Re-dist , PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	B5101 Berse Road/ Ryd Broughton Lane	Standard Roundabout		1, 2, 3	5.88	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	2028 Assess Re-dist	PM	ONE HOUR	16:15	17:45	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	895	100.000
2		✓	893	100.000
3		✓	420	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		1	2	3
From	1	0	292	603
	2	590	0	303
	3	261	159	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1	2	3
From	1	0	0	0
	2	0	0	0
	3	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.58	5.05	1.4	A
2	0.66	7.20	1.9	A
3	0.38	4.85	0.6	A

Main Results for each time segment

16:15 - 16:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	674	119	1737	0.388	671	0.6	3.369	A
2	672	452	1635	0.411	670	0.7	3.718	A
3	316	442	1339	0.236	315	0.3	3.512	A

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	805	143	1720	0.468	804	0.9	3.923	A
2	803	541	1571	0.511	801	1.0	4.669	A
3	378	529	1282	0.294	377	0.4	3.976	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	985	175	1698	0.580	983	1.4	5.023	A
2	983	663	1484	0.663	980	1.9	7.089	A
3	462	647	1206	0.383	462	0.6	4.830	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	985	175	1698	0.580	985	1.4	5.052	A
2	983	664	1483	0.663	983	1.9	7.198	A
3	462	650	1205	0.384	462	0.6	4.849	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	805	143	1720	0.468	807	0.9	3.949	A
2	803	543	1570	0.511	806	1.1	4.739	A
3	378	533	1280	0.295	378	0.4	3.995	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	674	120	1736	0.388	675	0.6	3.394	A
2	672	455	1633	0.412	674	0.7	3.759	A
3	316	445	1337	0.237	317	0.3	3.532	A

2022 Survey, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	B5101 Berse Road/ Ryd Broughton Lane	Standard Roundabout		1, 2, 3	5.64	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D7	2022 Survey	AM	ONE HOUR	07:45	09:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	1019	100.000
2		✓	1042	100.000
3		✓	352	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		1	2	3
From	1	0	754	265
	2	606	0	436
	3	265	87	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1	2	3
From	1	0	0	0
	2	0	0	0
	3	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.64	5.70	1.8	A
2	0.66	5.97	1.9	A
3	0.32	4.47	0.5	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	767	65	1774	0.432	764	0.8	3.554	A
2	784	199	1817	0.432	781	0.8	3.466	A
3	265	454	1331	0.199	264	0.2	3.372	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	916	78	1765	0.519	915	1.1	4.227	A
2	937	238	1789	0.524	935	1.1	4.210	A
3	316	544	1273	0.249	316	0.3	3.763	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1122	96	1753	0.640	1119	1.7	5.655	A
2	1147	291	1751	0.655	1144	1.9	5.904	A
3	388	665	1194	0.324	387	0.5	4.456	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1122	96	1753	0.640	1122	1.8	5.704	A
2	1147	292	1750	0.655	1147	1.9	5.967	A
3	388	667	1193	0.325	388	0.5	4.467	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	916	78	1765	0.519	919	1.1	4.268	A
2	937	239	1788	0.524	940	1.1	4.258	A
3	316	547	1271	0.249	317	0.3	3.777	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	767	66	1774	0.432	768	0.8	3.587	A
2	784	200	1816	0.432	786	0.8	3.500	A
3	265	457	1329	0.199	265	0.3	3.387	A

2022 Survey, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	B5101 Berse Road/ Ryd Broughton Lane	Standard Roundabout		1, 2, 3	4.71	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D8	2022 Survey	PM	ONE HOUR	16:15	17:45	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	778	100.000
2		✓	793	100.000
3		✓	366	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		1	2	3
From	1	0	246	532
	2	511	0	282
	3	219	147	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1	2	3
From	1	0	0	0
	2	0	0	0
	3	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.50	4.23	1.0	A
2	0.57	5.40	1.3	A
3	0.32	4.20	0.5	A

Main Results for each time segment

16:15 - 16:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	586	110	1743	0.336	584	0.5	3.100	A
2	597	399	1673	0.357	595	0.6	3.331	A
3	276	383	1377	0.200	275	0.2	3.263	A

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	699	132	1728	0.405	699	0.7	3.497	A
2	713	478	1617	0.441	712	0.8	3.975	A
3	329	459	1328	0.248	329	0.3	3.603	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	857	162	1707	0.502	855	1.0	4.220	A
2	873	585	1540	0.567	871	1.3	5.367	A
3	403	561	1262	0.319	402	0.5	4.187	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	857	162	1707	0.502	857	1.0	4.232	A
2	873	586	1539	0.567	873	1.3	5.404	A
3	403	563	1261	0.320	403	0.5	4.196	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	699	132	1727	0.405	701	0.7	3.509	A
2	713	479	1616	0.441	715	0.8	4.005	A
3	329	461	1327	0.248	330	0.3	3.614	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	586	111	1742	0.336	586	0.5	3.115	A
2	597	401	1672	0.357	598	0.6	3.354	A
3	276	385	1375	0.200	276	0.3	3.277	A