

2021 Assessment Flows, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	7.41	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	2021 Assessment Flows	PM	ONE HOUR	17:00	18:30	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				
3		✓	770	100.000
4		✓	435	100.000
5		✓	54	100.000

Origin-Destination Data

Demand (PCU/hr)

	To					
From		1	2	3	4	5
	1	0	35	1088	0	5
	2	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3	521	222	0	0	27
	4	181	16	238	0	0
	5	8	8	38	0	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
	1	2	3	4	5
From	1	0	0	0	0
	2	Exit-only	Exit-only	Exit-only	Exit-only
	3	0	0	0	0
	4	0	0	0	0
	5	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.80	11.25	3.8	E
2				
3	0.44	3.35	0.8	A
4	0.39	4.90	0.6	A
5	0.08	5.18	0.1	A

Main Results for each time segment

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	849	392	1669	0.509	845	1.0	4.348	A
2		1026						
3	580	4	1923	0.301	578	0.4	2.673	B
4	327	582	1359	0.241	326	0.3	3.483	A
5	41	884	957	0.042	40	0.0	3.926	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	1014	469	1623	0.625	1012	1.6	5.862	A
2		1228						
3	692	4	1922	0.360	692	0.6	2.923	B
4	391	696	1298	0.301	391	0.4	3.969	A
5	49	1058	872	0.056	48	0.1	4.373	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	1242	574	1561	0.796	1234	3.7	10.741	B
2		1499						
3	848	5	1922	0.441	847	0.8	3.346	A
4	479	852	1214	0.394	478	0.6	4.887	A
5	59	1295	755	0.079	59	0.1	5.177	A

17:45 - 18:00

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	1242	575	1560	0.796	1242	3.8	11.248	B
2		1507						
3	848	6	1922	0.441	848	0.8	3.351	A
4	479	853	1214	0.395	479	0.6	4.902	A
5	59	1297	754	0.079	59	0.1	5.184	A

18:00 - 18:15

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	470	1622	0.625	1022	1.7	6.079	A
2		1239						
3	692	5	1922	0.360	693	0.6	2.932	A
4	391	698	1297	0.302	392	0.4	3.983	A
5	49	1061	870	0.056	49	0.1	4.383	A

18:15 - 18:30

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	849	393	1668	0.509	852	1.0	4.424	A
2		1033						
3	580	4	1923	0.301	580	0.4	2.684	A
4	327	584	1358	0.241	328	0.3	3.498	A
5	41	888	955	0.043	41	0.0	3.935	A

2031 Assessment Flows, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	12.39	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)
D11	2031 Assessment Flows	AM	ONE HOUR	08:00	09:30	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		✓	889	100.000
2				
3		✓	1141	100.000
4		✓	779	100.000
5		✓	56	100.000

Origin-Destination Data

Demand (PCU/hr)

	To					
From		1	2	3	4	5
	1	0	21	863	0	5
	2	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3	813	301	0	0	27
	4	239	39	501	0	0
	5	21	7	28	0	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
	1	2	3	4	5
From	1	0	0	0	0
	2	Exit-only	Exit-only	Exit-only	Exit-only
	3	0	0	0	0
	4	0	0	0	0
	5	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.74	10.21	2.7	E
2				
3	0.65	5.41	1.9	A
4	0.86	25.15	5.7	E
5	0.17	11.80	0.2	E

Main Results for each time segment

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	669	656	1512	0.443	666	0.8	4.239	A
2		1046						
3	859	4	1923	0.447	856	0.8	3.364	B
4	586	860	1210	0.485	583	0.9	5.704	A
5	42	1418	694	0.061	42	0.1	5.517	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	799	785	1436	0.557	797	1.2	5.624	A
2		1252						
3	1026	4	1922	0.534	1024	1.1	4.003	A
4	700	1029	1120	0.625	698	1.6	8.473	A
5	50	1698	556	0.090	50	0.1	7.111	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	979	953	1336	0.733	973	2.6	9.776	A
2		1523						
3	1256	5	1922	0.654	1253	1.9	5.362	A
4	858	1259	997	0.861	843	5.2	21.683	C
5	62	2067	374	0.165	61	0.2	11.484	B

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	979	963	1330	0.736	978	2.7	10.215	B
2		1537						
3	1256	6	1922	0.654	1256	1.9	5.409	A
4	858	1262	995	0.862	856	5.7	25.151	B
5	62	2082	367	0.168	62	0.2	11.798	B

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	799	799	1427	0.560	805	1.3	5.836	A
2		1272						
3	1026	5	1922	0.534	1029	1.2	4.040	A
4	700	1033	1117	0.627	716	1.7	9.305	A
5	50	1720	545	0.092	51	0.1	7.286	A

09:15 - 09:30

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	669	662	1509	0.444	671	0.8	4.308	A
2		1056						
3	859	4	1923	0.447	860	0.8	3.394	A
4	586	864	1208	0.486	590	1.0	5.850	A
5	42	1430	688	0.061	42	0.1	5.572	A

2031 Assessment Flows, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	11.77	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)
D12	2031 Assessment Flows	PM	ONE HOUR	17:00	18:30	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		✓	1235	100.000
2				
3		✓	839	100.000
4		✓	474	100.000
5		✓	60	100.000

Origin-Destination Data

Demand (PCU/hr)

	To					
From		1	2	3	4	5
	1	0	38	1191	0	6
	2	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3	571	238	0	0	30
	4	199	17	258	0	0
	5	9	9	42	0	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
	1	2	3	4	5
From	1	0	0	0	0
	2	Exit-only	Exit-only	Exit-only	Exit-only
	3	0	0	0	0
	4	0	0	0	0
	5	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.88	20.00	7.2	C
2				
3	0.48	3.61	0.9	A
4	0.45	5.53	0.8	A
5	0.09	5.71	0.1	A

Main Results for each time segment

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	930	423	1650	0.563	925	1.3	4.926	A
2		1121						
3	632	4	1922	0.329	630	0.5	2.782	B
4	357	634	1331	0.268	355	0.4	3.686	B
5	45	963	919	0.049	45	0.1	4.119	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	1110	506	1601	0.694	1107	2.2	7.226	A
2		1342						
3	754	5	1922	0.392	754	0.6	3.080	B
4	426	759	1264	0.337	426	0.5	4.290	A
5	54	1152	825	0.065	54	0.1	4.667	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	1360	620	1534	0.897	1342	6.7	17.355	C
2		1630						
3	924	7	1921	0.481	923	0.9	3.603	A
4	522	929	1173	0.445	521	0.8	5.508	A
5	66	1410	698	0.095	66	0.1	5.694	A

17:45 - 18:00

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	1360	621	1533	0.667	1358	7.2	19.996	B
2		1646						
3	924	7	1921	0.481	924	0.9	3.609	A
4	522	930	1172	0.445	522	0.8	5.533	A
5	66	1413	697	0.095	66	0.1	5.706	A

18:00 - 18:15

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	1110	508	1600	0.694	1130	2.3	7.955	A
2		1365						
3	754	5	1922	0.392	755	0.6	3.088	A
4	426	761	1263	0.337	427	0.5	4.314	A
5	54	1156	823	0.066	54	0.1	4.679	A

18:15 - 18:30

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	930	425	1649	0.564	934	1.3	5.062	A
2		1131						
3	632	5	1922	0.329	632	0.5	2.793	A
4	357	637	1329	0.268	357	0.4	3.705	A
5	45	967	916	0.049	45	0.1	4.134	A

14. A27 / A280 Patching Northern Roundabout

Existing design (Drawing No: ITB9105-GA-028 Rev. -)

Key features of the mitigation are:

- Widening of the A280(SB)

Table 20 shows the ratio of flow to capacity (RFC) and average delay (in seconds) results by approach arm for the Reference Case, Final Scenario, Final Scenario with mitigation and Arundel Bypass and Ford Railway Bridge Sensitivity Test for the AM and PM peaks (as also shown in Appendix E).

The 'severe' impact on the A280(SB) in the PM Peak is removed by the mitigation for the 'with mitigation' scenario.

In the 'Arundel Bypass' sensitivity scenario the 'severe' impact returns as a marginal delay impact due to the Arundel Bypass attracting traffic to the A27.

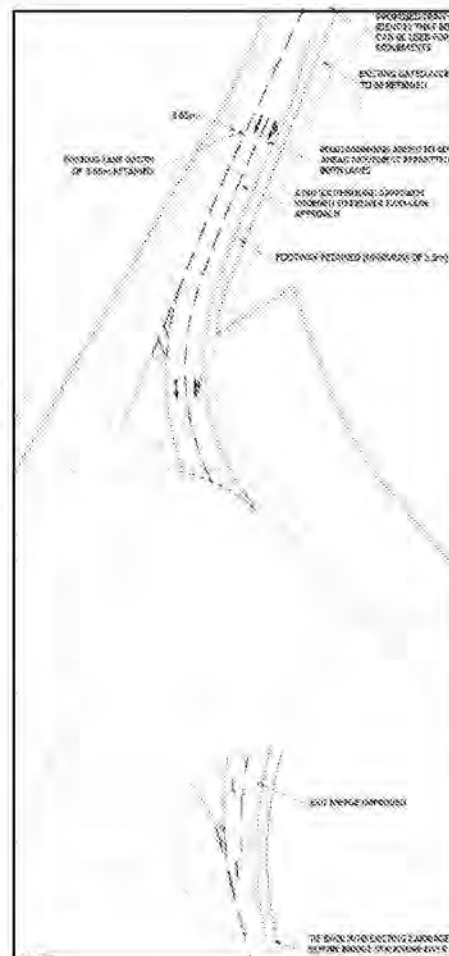


Table 20. A27 / A280 Patching Northern Roundabout

APPROACH ARM	REF EBB		2031 FINAL SCENARIO		WITH MITIGATION		ARUNDEL BYPASS	
	RFC (%)	DELAY (s)	RFC (%)	DELAY (s)	RFC (%)	DELAY (s)	RFC (%)	DELAY (s)
AM PEAK								
A280 (SB)	76	18	85	22	65	17	76	21
A280 (NB)	66	3	66	3	63	3	59	3
A27 (EB)	61	8	71	9	70	9	80	10
PM PEAK								
A280 (SB)	109	222	116	244	100	56	113	257
A280 (NB)	47	3	50	3	51	3	50	3
A27 (EB)	50	5	60	6	61	6	76	8

Notes: an increase in RFC of 5% or more to an RFC of 85% or more is highlighted in orange
an increase in RFC of 10% or more to an RFC of 95% or more is highlighted red
an increase in average delay of one minute or more to an average delay of two minutes or more is highlighted red



REV	DATE	BY	DESCRIPTION	CHK	APD



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PROJECT: LAND EAST OF ANGMERING

CLIENT: RYDON HOMES / GLEESON DEVELOPMENTS LTD

SCALE @ A3: 1:500	CHECKED: TW	APPROVED: TW
FILE REF: ITB9105	DRAWN: MC	DATE: 31.08.16

DRAWING No: ITB9105-GA-028

PROJECT No:	ITB9105	REV:
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SCALE BAR @ 1:500

A horizontal scale bar with tick marks at 0, 5, 10, 25, and 50. The bar is divided into segments: 0 to 5, 5 to 10, 10 to 25, and 25 to 50. The segments from 0 to 10 and 10 to 25 are black, while the segments from 25 to 50 and the final segment to 50 are white.

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.5.0.6896
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The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution

Filename: A27 North Roundabout + IMPS - July 19.j9

Path: Z:\projects\2020 Arundel Road, Angmering\Arcady\July 19

Report generation date: 30/07/2019 15:50:32

*2021 Base Flows, AM
*2021 Base Flows, PM
*2031 Base Flows, AM
*2031 Base Flows, PM
*2021 Assessment Flows, AM
*2021 Assessment Flows, PM
*2031 Assessment Flows, AM
*2031 Assessment Flows, PM

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
2021 Base Flows								
Arm 1	1.0	3.95	0.49	A	1.6	4.62	0.61	A
Arm 3	1.4	4.55	0.59	A	0.8	3.29	0.43	A
Arm 4	2.7	12.71	0.73	B	0.6	4.78	0.39	A
Arm 5	0.1	8.83	0.12	A	0.1	5.09	0.08	A
2031 Base Flows								
Arm 1	1.3	4.65	0.56	A	2.1	5.73	0.68	A
Arm 3	1.8	5.20	0.64	A	0.9	3.55	0.47	A
Arm 4	5.1	22.44	0.85	C	0.8	5.39	0.44	A
Arm 5	0.2	11.25	0.16	B	0.1	5.60	0.09	A
2021 Assessment Flows								
Arm 1	1.0	4.04	0.50	A	1.6	4.73	0.62	A
Arm 3	1.5	4.70	0.60	A	0.8	3.35	0.44	A
Arm 4	2.9	13.59	0.75	B	0.6	4.90	0.39	A
Arm 5	0.1	9.17	0.13	A	0.1	5.18	0.08	A
2031 Assessment Flows								
Arm 1	1.3	4.78	0.57	A	2.2	5.89	0.69	A
Arm 3	1.9	5.41	0.65	A	0.9	3.61	0.48	A
Arm 4	5.7	25.15	0.88	C	0.8	5.54	0.45	A
Arm 5	0.2	11.80	0.17	B	0.1	5.71	0.09	A

There are warnings associated with one or more model runs - use 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	A27 North Roundabout + Mitigation
Location	Angmering
Site number	
Date	22/05/2018
Version	
Status	
Identifier	
Client	
Jobnumber	
Enumerator	Croft Transport Solutions
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)
D1	2021 Base Flows	AM	ONE HOUR	08:00	09:30	15
D2	2021 Base Flows	PM	ONE HOUR	17:00	18:30	15
D5	2031 Base Flows	AM	ONE HOUR	08:00	09:30	15
D6	2031 Base Flows	PM	ONE HOUR	17:00	18:30	15
D7	2021 Assessment Flows	AM	ONE HOUR	08:00	09:30	15
D8	2021 Assessment Flows	PM	ONE HOUR	17:00	18:30	15
D11	2031 Assessment Flows	AM	ONE HOUR	08:00	09:30	15
D12	2031 Assessment Flows	PM	ONE HOUR	17:00	18:30	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2021 Base Flows, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 1 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	6.67	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	A280 Long Furlong	
2	A27 On Slip	
3	A280 South	
4	A27 Off-Slip	
5	Arundel Road	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1	3.65	8.40	62.0	45.0	60.0	20.0	
2							✓
3	3.65	8.10	14.0	37.0	60.0	12.0	
4	3.65	6.60	30.0	15.0	60.0	44.0	
5	3.65	6.30	6.5	25.0	60.0	45.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.695	2402
2		
3	0.618	1925
4	0.535	1670
5	0.493	1393

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)
D1	2021 Base Flows	AM	ONE HOUR	08:00	09:30	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		✓	811	100.000
2				
3		✓	1027	100.000
4		✓	709	100.000
5		✓	51	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
From		1	2	3	4	5
	1	0	19	788	0	4
	2	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3	746	257	0	0	24
	4	218	36	455	0	0
	5	19	6	26	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
From		1	2	3	4	5
	1	0	0	0	0	0
	2	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3	0	0	0	0	0
	4	0	0	0	0	0
	5	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.49	3.95	1.0	A
2				
3	0.59	4.55	1.4	A
4	0.73	12.71	2.7	B
5	0.12	8.83	0.1	A

Main Results for each time segment

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	611	584	1996	0.306	609	0.4	2.592	A
2		955						
3	773	3	1923	0.402	771	0.7	3.117	A
4	534	774	1256	0.425	531	0.7	4.943	A
5	38	1283	761	0.050	38	0.1	4.985	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	729	700	1916	0.381	728	0.6	3.031	A
2		1143						
3	923	4	1923	0.480	922	0.9	3.594	A
4	637	926	1175	0.543	636	1.2	6.655	A
5	46	1536	636	0.072	46	0.1	6.104	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	893	854	1808	0.494	892	1.0	3.927	A
2		1396						
3	1131	4	1922	0.588	1129	1.4	4.525	A
4	781	1133	1064	0.734	775	2.6	12.209	B
5	56	1877	468	0.120	56	0.1	8.738	B

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	893	859	1805	0.495	893	1.0	3.946	A
2		1401						
3	1131	4	1922	0.588	1131	1.4	4.547	A
4	781	1135	1063	0.734	780	2.7	12.707	B
5	56	1885	464	0.121	56	0.1	8.826	B

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	729	706	1911	0.381	730	0.6	3.051	A
2		1150						
3	923	4	1923	0.480	925	0.9	3.617	B
4	637	929	1173	0.543	643	1.2	6.866	B
5	46	1547	631	0.073	46	0.1	6.165	A

09:15 - 09:30

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	611	589	1993	0.306	611	0.4	2.609	A
2		960						
3	773	3	1923	0.402	774	0.7	3.135	B
4	534	777	1254	0.426	536	0.7	5.021	A
5	38	1292	756	0.051	38	0.1	5.017	A

2021 Base Flows, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 1 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	4.24	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2021 Base Flows	PM	ONE HOUR	17:00	18:30	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				
3		✓	753	100.000
4		✓	428	100.000
5		✓	54	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
From		1	2	3	4	5
	1	0	35	1088	0	5
	2	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3	521	205	0	0	27
	4	181	16	231	0	0
	5	8	8	38	0	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
	1	2	3	4	5
From	1	0	0	0	0
	2	Exit-only	Exit-only	Exit-only	Exit-only
	3	0	0	0	0
	4	0	0	0	0
	5	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.61	4.62	1.6	A
2				
3	0.43	3.29	0.8	A
4	0.39	4.78	0.6	A
5	0.08	5.09	0.1	A

Main Results for each time segment

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	849	374	2142	0.396	847	0.7	2.772	A
2		1022						
3	567	4	1923	0.295	565	0.4	2.648	A
4	322	569	1366	0.236	321	0.3	3.443	A
5	41	866	966	0.042	40	0.0	3.889	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	1014	447	2091	0.485	1013	0.9	3.336	A
2		1223						
3	677	4	1922	0.352	676	0.5	2.887	A
4	385	681	1306	0.295	384	0.4	3.905	A
5	49	1037	882	0.055	48	0.1	4.318	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	1242	548	2021	0.614	1239	1.6	4.590	A
2		1497						
3	829	5	1922	0.431	828	0.8	3.287	A
4	471	834	1224	0.385	470	0.6	4.771	A
5	59	1269	768	0.077	59	0.1	5.083	A

17:45 - 18:00

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	1242	548	2021	0.615	1242	1.6	4.622	A
2		1500						
3	829	6	1922	0.431	829	0.8	3.294	A
4	471	835	1224	0.385	471	0.6	4.784	A
5	59	1271	767	0.078	59	0.1	5.089	A

18:00 - 18:15

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	448	2090	0.485	1017	0.9	3.360	A
2		1227						
3	677	5	1922	0.352	678	0.5	2.896	A
4	385	682	1305	0.295	386	0.4	3.919	A
5	49	1039	881	0.055	49	0.1	4.326	A

18:15 - 18:30

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	849	375	2141	0.397	850	0.7	2.791	A
2		1027						
3	567	4	1923	0.295	567	0.4	2.658	A
4	322	571	1365	0.236	323	0.3	3.458	A
5	41	870	964	0.042	41	0.0	3.898	A

2031 Base Flows, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 1 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	9.86	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	2031 Base Flows	AM	ONE HOUR	08:00	09:30	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		✓	889	100.000
2				
3		✓	1117	100.000
4		✓	775	100.000
5		✓	56	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
From		1	2	3	4	5
	1	0	21	863	0	5
	2	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3	813	277	0	0	27
	4	239	39	497	0	0
	5	21	7	28	0	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
	1	2	3	4	5
From	1	0	0	0	0
	2	Exit-only	Exit-only	Exit-only	Exit-only
	3	0	0	0	0
	4	0	0	0	0
	5	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.56	4.65	1.3	A
2				
3	0.64	5.20	1.8	A
4	0.85	22.44	5.1	C
5	0.16	11.25	0.2	B

Main Results for each time segment

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	669	635	1961	0.341	667	0.5	2.778	A
2		1044						
3	841	4	1923	0.437	838	0.8	3.308	B
4	583	842	1220	0.478	580	0.9	5.594	A
5	42	1397	704	0.060	42	0.1	5.434	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	799	760	1874	0.427	798	0.7	3.344	A
2		1250						
3	1004	4	1922	0.522	1003	1.1	3.909	A
4	697	1007	1131	0.616	694	1.6	8.184	A
5	50	1673	569	0.089	50	0.1	6.942	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	979	924	1760	0.556	977	1.2	4.586	A
2		1523						
3	1230	5	1922	0.640	1227	1.8	5.164	A
4	853	1233	1011	0.844	841	4.7	19.840	C
5	62	2038	389	0.159	61	0.2	10.986	B

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	979	933	1754	0.558	979	1.3	4.646	A
2		1533						
3	1230	6	1922	0.640	1230	1.8	5.202	A
4	853	1235	1009	0.845	852	5.1	22.442	B
5	62	2052	382	0.162	62	0.2	11.246	B

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	799	773	1865	0.429	801	0.8	3.392	A
2		1263						
3	1004	5	1922	0.522	1007	1.1	3.944	A
4	697	1011	1129	0.617	710	1.6	8.864	A
5	50	1693	559	0.090	51	0.1	7.093	A

09:15 - 09:30

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	669	641	1956	0.342	670	0.5	2.800	A
2		1052						
3	841	4	1923	0.437	842	0.8	3.334	A
4	583	846	1218	0.479	586	0.9	5.730	A
5	42	1408	699	0.060	42	0.1	5.482	A

2031 Base Flows, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 1 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	4.97	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	2031 Base Flows	PM	ONE HOUR	17:00	18:30	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		✓	1235	100.000
2				
3		✓	823	100.000
4		✓	467	100.000
5		✓	60	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
From		1	2	3	4	5
	1	0	38	1191	0	6
	2	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3	571	222	0	0	30
	4	199	17	251	0	0
	5	9	9	42	0	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
	1	2	3	4	5
From	1	0	0	0	0
	2	Exit-only	Exit-only	Exit-only	Exit-only
	3	0	0	0	0
	4	0	0	0	0
	5	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.68	5.73	2.1	A
2				
3	0.47	3.55	0.9	A
4	0.44	5.39	0.8	A
5	0.09	5.60	0.1	A

Main Results for each time segment

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	930	406	2120	0.439	927	0.8	3.010	A
2		1118						
3	620	5	1922	0.322	618	0.5	2.757	A
4	352	622	1337	0.263	350	0.4	3.642	A
5	45	945	927	0.049	45	0.1	4.080	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	1110	486	2064	0.538	1109	1.2	3.761	A
2		1338						
3	740	5	1922	0.385	739	0.6	3.043	A
4	420	745	1272	0.330	419	0.5	4.220	A
5	54	1132	835	0.065	54	0.1	4.607	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	1360	595	1989	0.684	1356	2.1	5.655	A
2		1636						
3	906	7	1921	0.472	905	0.9	3.541	A
4	514	912	1182	0.435	513	0.8	5.369	A
5	66	1385	710	0.093	66	0.1	5.584	A

17:45 - 18:00

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	1360	596	1988	0.684	1360	2.1	5.728	A
2		1640						
3	906	7	1921	0.472	906	0.9	3.547	A
4	514	913	1182	0.435	514	0.8	5.391	A
5	66	1387	709	0.093	66	0.1	5.595	A

18:00 - 18:15

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	1110	487	2063	0.538	1114	1.2	3.807	A
2		1344						
3	740	5	1922	0.385	741	0.6	3.053	A
4	420	746	1271	0.330	421	0.5	4.240	A
5	54	1135	834	0.065	54	0.1	4.619	A

18:15 - 18:30

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	930	408	2118	0.439	931	0.8	3.036	A
2		1124						
3	620	5	1922	0.322	620	0.5	2.766	A
4	352	625	1336	0.263	352	0.4	3.663	A
5	45	950	925	0.049	45	0.1	4.092	A

2021 Assessment Flows, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 1 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	7.00	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	2021 Assessment Flows	AM	ONE HOUR	08:00	09:30	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		✓	811	100.000
2				
3		✓	1051	100.000
4		✓	713	100.000
5		✓	51	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
From		1	2	3	4	5
	1	0	19	788	0	4
	2	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3	746	281	0	0	24
	4	218	36	459	0	0
	5	19	6	26	0	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
	1	2	3	4	5
From	1	0	0	0	0
	2	Exit-only	Exit-only	Exit-only	Exit-only
	3	0	0	0	0
	4	0	0	0	0
	5	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.50	4.04	1.0	A
2				
3	0.60	4.70	1.5	A
4	0.75	13.59	2.9	B
5	0.13	9.17	0.1	A

Main Results for each time segment

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	611	605	1981	0.308	609	0.4	2.620	A
2		958						
3	791	3	1923	0.411	788	0.7	3.164	B
4	537	791	1247	0.431	534	0.7	5.028	B
5	38	1304	750	0.051	38	0.1	5.057	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	729	725	1898	0.384	728	0.6	3.076	A
2		1146						
3	945	4	1923	0.491	944	1.0	3.674	B
4	641	947	1163	0.551	639	1.2	6.841	A
5	46	1561	624	0.074	46	0.1	6.234	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	893	884	1787	0.500	891	1.0	4.012	A
2		1400						
3	1157	4	1922	0.602	1155	1.5	4.678	A
4	785	1159	1050	0.748	779	2.8	12.974	B
5	56	1907	453	0.124	56	0.1	9.063	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	893	889	1784	0.501	893	1.0	4.040	A
2		1406						
3	1157	4	1922	0.602	1157	1.5	4.704	A
4	785	1162	1049	0.749	785	2.9	13.587	B
5	56	1915	449	0.125	56	0.1	9.166	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	729	732	1893	0.385	731	0.6	3.099	A
2		1154						
3	945	4	1923	0.491	947	1.0	3.695	A
4	641	951	1162	0.552	648	1.3	7.090	A
5	46	1573	618	0.074	46	0.1	6.301	A

09:15 - 09:30

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	611	610	1978	0.309	611	0.4	2.637	A
2		963						
3	791	3	1923	0.411	792	0.7	3.185	A
4	537	795	1245	0.431	539	0.8	5.113	A
5	38	1313	746	0.051	39	0.1	5.093	A

2021 Assessment Flows, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 1 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	4.33	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	2021 Assessment Flows	PM	ONE HOUR	17:00	18:30	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				
3		✓	770	100.000
4		✓	435	100.000
5		✓	54	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
From		1	2	3	4	5
	1	0	35	1088	0	5
	2	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3	521	222	0	0	27
	4	181	16	238	0	0
	5	8	8	38	0	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
	1	2	3	4	5
From	1	0	0	0	0
	2	Exit-only	Exit-only	Exit-only	Exit-only
	3	0	0	0	0
	4	0	0	0	0
	5	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.62	4.73	1.6	A
2				
3	0.44	3.35	0.8	A
4	0.39	4.90	0.6	A
5	0.08	5.18	0.1	A

Main Results for each time segment

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	849	392	2130	0.399	847	0.7	2.800	A
2		1027						
3	580	4	1923	0.301	578	0.4	2.673	B
4	327	582	1359	0.241	326	0.3	3.481	B
5	41	884	957	0.042	40	0.0	3.927	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	1014	469	2076	0.488	1013	0.9	3.383	A
2		1229						
3	692	4	1922	0.360	692	0.6	2.923	B
4	391	696	1298	0.301	391	0.4	3.967	A
5	49	1058	872	0.056	48	0.1	4.374	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	1242	574	2003	0.620	1239	1.6	4.698	A
2		1504						
3	848	5	1922	0.441	847	0.8	3.346	A
4	479	852	1214	0.394	478	0.6	4.884	A
5	59	1295	755	0.079	59	0.1	5.178	A

17:45 - 18:00

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	1242	575	2002	0.620	1242	1.6	4.733	A
2		1507						
3	848	6	1922	0.441	848	0.8	3.351	A
4	479	853	1214	0.395	479	0.6	4.899	A
5	59	1297	754	0.079	59	0.1	5.185	B

18:00 - 18:15

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	470	2075	0.489	1017	1.0	3.411	A
2		1234						
3	692	5	1922	0.360	693	0.6	2.930	A
4	391	698	1297	0.302	392	0.4	3.981	A
5	49	1061	870	0.056	49	0.1	4.382	A

18:15 - 18:30

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	849	393	2128	0.399	850	0.7	2.821	A
2		1032						
3	580	4	1923	0.301	580	0.4	2.684	A
4	327	584	1358	0.241	328	0.3	3.499	A
5	41	888	955	0.043	41	0.0	3.936	A

2031 Assessment Flows, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 1 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	10.71	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)
D11	2031 Assessment Flows	AM	ONE HOUR	08:00	09:30	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		✓	889	100.000
2				
3		✓	1141	100.000
4		✓	779	100.000
5		✓	56	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
From		1	2	3	4	5
	1	0	21	863	0	5
	2	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3	813	301	0	0	27
	4	239	39	501	0	0
	5	21	7	28	0	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
	1	2	3	4	5
From	1	0	0	0	0
	2	Exit-only	Exit-only	Exit-only	Exit-only
	3	0	0	0	0
	4	0	0	0	0
	5	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.57	4.78	1.3	A
2				
3	0.65	5.41	1.9	A
4	0.86	25.15	5.7	C
5	0.17	11.80	0.2	B

Main Results for each time segment

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	669	656	1946	0.344	667	0.5	2.810	A
2		1047						
3	859	4	1923	0.447	856	0.8	3.364	B
4	586	860	1210	0.485	583	0.9	5.705	B
5	42	1418	694	0.061	42	0.1	5.516	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	799	785	1856	0.431	798	0.8	3.399	A
2		1253						
3	1026	4	1922	0.534	1024	1.1	4.004	B
4	700	1029	1120	0.625	698	1.6	8.467	A
5	50	1698	556	0.090	50	0.1	7.110	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	979	953	1739	0.563	977	1.3	4.707	A
2		1527						
3	1256	5	1922	0.654	1253	1.9	5.362	A
4	858	1259	997	0.861	843	5.3	21.686	C
5	62	2067	374	0.165	61	0.2	11.483	B

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	979	963	1732	0.565	979	1.3	4.776	A
2		1537						
3	1256	6	1922	0.654	1256	1.9	5.409	A
4	858	1262	995	0.862	856	5.7	25.152	B
5	62	2082	367	0.168	62	0.2	11.796	B

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	799	799	1846	0.433	801	0.8	3.453	A
2		1268						
3	1026	5	1922	0.534	1029	1.2	4.040	A
4	700	1033	1117	0.627	716	1.7	9.306	A
5	50	1720	545	0.092	51	0.1	7.288	A

09:15 - 09:30

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	669	662	1942	0.345	670	0.5	2.835	A
2		1055						
3	859	4	1923	0.447	860	0.8	3.392	A
4	586	864	1208	0.486	590	1.0	5.852	A
5	42	1430	688	0.061	42	0.1	5.574	A

2031 Assessment Flows, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 1 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	5.09	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D12	2031 Assessment Flows	PM	ONE HOUR	17:00	18:30	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		✓	1235	100.000
2				
3		✓	839	100.000
4		✓	474	100.000
5		✓	60	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
	1	2	3	4	5
From	1	0	38	1191	0
	2	Exit-only	Exit-only	Exit-only	Exit-only
	3	571	238	0	0
	4	199	17	258	0
	5	9	9	42	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
	1	2	3	4	5
From	1	0	0	0	0
	2	Exit-only	Exit-only	Exit-only	Exit-only
	3	0	0	0	0
	4	0	0	0	0
	5	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.69	5.89	2.2	A
2				
3	0.48	3.61	0.9	A
4	0.45	5.54	0.8	A
5	0.09	5.71	0.1	A

Main Results for each time segment

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	930	423	2108	0.441	927	0.8	3.040	A
2		1123						
3	632	5	1922	0.329	630	0.5	2.782	A
4	357	634	1331	0.268	355	0.4	3.688	A
5	45	963	919	0.049	45	0.1	4.119	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	1110	506	2050	0.542	1109	1.2	3.818	A
2		1344						
3	754	5	1922	0.392	754	0.6	3.080	A
4	426	759	1264	0.337	426	0.5	4.293	A
5	54	1152	825	0.065	54	0.1	4.667	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	1360	620	1971	0.690	1356	2.2	5.813	A
2		1644						
3	924	7	1921	0.481	923	0.9	3.603	A
4	522	929	1173	0.445	521	0.8	5.511	A
5	66	1410	698	0.095	66	0.1	5.694	A

17:45 - 18:00

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	1360	621	1970	0.690	1360	2.2	5.893	A
2		1648						
3	924	7	1921	0.481	924	0.9	3.609	A
4	522	930	1172	0.445	522	0.8	5.536	A
5	66	1413	697	0.095	66	0.1	5.706	A

18:00 - 18:15

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	1110	508	2049	0.542	1114	1.2	3.868	A
2		1350						
3	754	5	1922	0.392	755	0.6	3.091	A
4	426	761	1263	0.337	427	0.5	4.316	A
5	54	1156	823	0.066	54	0.1	4.679	A

18:15 - 18:30

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	930	425	2106	0.441	931	0.8	3.067	A
2		1129						
3	632	5	1922	0.329	632	0.5	2.793	A
4	357	637	1329	0.268	357	0.4	3.709	A
5	45	967	916	0.049	45	0.1	4.132	A

APPENDIX 12

PICADY Output for A27/Arundel Road

(Left in/Left out)

Junctions 9			
PICADY 9 - Priority Intersection Module			
Version: 9.5.0.6896			
© Copyright TRL Limited, 2018			
T441071344375717 Software@trl.co.uk www.trlsoftware.co.uk			
The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution			

Filename: A27 - Arundel Road - HE Base and Ass - July 19.j9
Path: Z:\projects\2020 Arundel Road, Angmering\Picady\July 19
Report generation date: 30/07/2019 14:59:32

»2021 Base Flows, AM
 »2021 Base Flows, PM
 »2031 Base Flows, AM
 »2031 Base Flows, PM
 »2021 Assessment Flows, AM
 »2021 Assessment Flows, PM
 »2031 Assessment Flows, AM
 »2031 Assessment Flows, PM

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
2021 Base Flows								
Stream B-AC	1.3	25.28	0.58	B	0.3	14.32	0.24	B
Stream C-B	0.0	0.00	0.00	A	0.0	0.00	0.00	A
2031 Base Flows								
Stream B-AC	2.4	43.73	0.72	B	0.4	18.23	0.31	C
Stream C-B	0.0	0.00	0.00	A	0.0	0.00	0.00	A
2021 Assessment Flows								
Stream B-AC	1.5	28.13	0.61	B	0.4	15.03	0.27	C
Stream C-B	0.0	0.00	0.00	A	0.0	0.00	0.00	A
2031 Assessment Flows								
Stream B-AC	3.0	52.42	0.77	B	0.5	19.41	0.34	C
Stream C-B	0.0	0.00	0.00	A	0.0	0.00	0.00	A

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

File summary

File Description

Title	(untitled)
Location	
Site number	
Date	06/07/2018
Version	
Status	(new file)
Identifier	
Client	
Job number	
Enumerator	Cadworkstation4\Kyle
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)
D1	2021 Base Flows	AM	ONE HOUR	08:00	09:30	15
D2	2021 Base Flows	PM	ONE HOUR	17:00	18:30	15
D5	2031 Base Flows	AM	ONE HOUR	08:00	09:30	15
D6	2031 Base Flows	PM	ONE HOUR	17:00	18:30	15
D7	2021 Assessment Flows	AM	ONE HOUR	08:00	09:30	15
D8	2021 Assessment Flows	PM	ONE HOUR	17:00	18:30	15
D11	2031 Assessment Flows	AM	ONE HOUR	08:00	09:30	15
D12	2031 Assessment Flows	PM	ONE HOUR	17:00	18:30	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2021 Base Flows, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

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

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	A27 (E)		Major
B	Arundel Road		Minor
C	A27 (W)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	7.85			0.0		-

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	4.50	0	100

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	605	0.101	0.256	0.161	0.366
1	B-C	790	0.111	0.281	-	-
1	C-B	574	0.204	0.204	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2021 Base Flows	AM	ONE HOUR	08:00	09:30	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 (%)
A		✓	1514	100.000
B		✓	175	100.000
C		✓	1367	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	73	1441
	B	0	0	175
	C	1367	0	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	A	B	C	
From	A	0	0	0
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-A	0.58	25.28	1.3	F
C-A				
C-B	0.00	0.00	0.0	A
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	132	479	0.275	130	0.4	10.292	B
C-A	1029			1029			
C-B	0	341	0.000	0	0.0	0.000	A
A-B	55			55			
A-C	1085			1085			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	157	418	0.376	156	0.6	13.711	B
C-A	1229			1229			
C-B	0	296	0.000	0	0.0	0.000	A
AB	66			66			
AC	1295			1295			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	193	335	0.576	190	1.3	24.439	C
C-A	1505			1505			
C-B	0	233	0.000	0	0.0	0.000	A
AB	80			80			
AC	1587			1587			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	193	335	0.576	193	1.3	25.279	C
C-A	1505			1505			
C-B	0	233	0.000	0	0.0	0.000	A
AB	80			80			
AC	1587			1587			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	157	418	0.376	160	0.6	14.096	B
C-A	1229			1229			
C-B	0	296	0.000	0	0.0	0.000	A
AB	66			66			
AC	1295			1295			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	132	479	0.275	133	0.4	10.436	B
C-A	1029			1029			
C-B	0	341	0.000	0	0.0	0.000	A
AB	55			55			
AC	1085			1085			

2021 Base Flows, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.36	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2021 Base Flows	PM	ONE HOUR	17:00	18:30	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 (%)
A		✓	1551	100.000
B		✓	74	100.000
C		✓	1323	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
From		A	B	C
	A	0	125	1426
	B	0	0	74
	C	1323	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
From		A	B	C
	A	0	0	0
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.24	14.32	0.3	B
C-A				
C-B	0.00	0.00	0.0	A
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	56	477	0.117	55	0.1	8.516	A
C-A	996			996			
C-B	0	335	0.000	0	0.0	0.000	A
A-B	94			94			
A-C	1074			1074			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	67	417	0.160	66	0.2	10.267	B
C-A	1189			1189			
C-B	0	289	0.000	0	0.0	0.000	A
A-B	112			112			
A-C	1282			1282			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	81	333	0.245	81	0.3	14.264	B
C-A	1457			1457			
C-B	0	225	0.000	0	0.0	0.000	A
A-B	138			138			
A-C	1570			1570			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	81	333	0.245	81	0.3	14.320	B
C-A	1457			1457			
C-B	0	225	0.000	0	0.0	0.000	A
A-B	138			138			
A-C	1570			1570			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	67	417	0.160	67	0.2	10.311	B
C-A	1189			1189			
C-B	0	289	0.000	0	0.0	0.000	A
AB	112			112			
AC	1282			1282			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	56	477	0.117	56	0.1	8.546	A
C-A	996			996			
C-B	0	335	0.000	0	0.0	0.000	A
AB	94			94			
AC	1074			1074			

2031 Base Flows, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		2.49	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	2031 Base Flows	AM	ONE HOUR	08:00	09:30	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 (%)
A		✓	1660	100.000
B		✓	191	100.000
C		✓	1501	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
From		A	B	C	
	A	0	79	1581	
	B	0	0	191	
	C	1501	0	0	

Vehicle Mix

Heavy Vehicle Percentages

		To			
From		A	B	C	
	A	0	0	0	
	B	0	0	0	
	C	0	0	0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.72	45.79	2.4	E
C-A				
C-B	0.00	0.00	0.0	A
AB				
AC				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	144	448	0.321	142	0.5	11.679	B
C-A	1130			1130			
C-B	0	318	0.000	0	0.0	0.000	A
AB	59			59			
AC	1190			1190			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	172	382	0.449	170	0.8	16.898	C
C-A	1349			1349			
C-B	0	269	0.000	0	0.0	0.000	A
AB	71			71			
AC	1421			1421			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	210	290	0.724	204	2.3	33.448	E
C-A	1653			1653			
C-B	0	200	0.000	0	0.0	0.000	A
AB	87			87			
AC	1741			1741			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	210	290	0.724	210	2.4	43.785	E
C-A	1653			1653			
C-B	0	200	0.000	0	0.0	0.000	A
AB	87			87			
AC	1741			1741			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	172	382	0.449	178	0.8	18.143	C
C-A	1349			1349			
C-B	0	269	0.000	0	0.0	0.000	A
AB	71			71			
AC	1421			1421			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	144	448	0.321	145	0.5	11.929	B
C-A	1130			1130			
C-B	0	318	0.000	0	0.0	0.000	A
AB	59			59			
AC	1190			1190			

2031 Base Flows, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.46	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	2031 Base Flows	PM	ONE HOUR	17:00	18:30	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 (%)
A		✓	1708	100.000
B		✓	81	100.000
C		✓	1456	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
From		A	B	C
	A	0	138	1570
	B	0	0	81
	C	1456	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
From		A	B	C
	A	0	0	0
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.31	18.23	0.4	C
C-A				
C-B	0.00	0.00	0.0	A
AB				
AC				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	61	446	0.137	60	0.2	9.325	A
C-A	1096			1096			
C-B	0	311	0.000	0	0.0	0.000	A
AB	104			104			
AC	1182			1182			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	73	379	0.192	73	0.2	11.735	B
C-A	1309			1309			
C-B	0	260	0.000	0	0.0	0.000	A
AB	124			124			
AC	1411			1411			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	89	287	0.311	88	0.4	18.087	C
C-A	1603			1603			
C-B	0	189	0.000	0	0.0	0.000	A
AB	152			152			
AC	1729			1729			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	89	287	0.311	89	0.4	18.229	C
C-A	1603			1603			
C-B	0	189	0.000	0	0.0	0.000	A
AB	152			152			
AC	1729			1729			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	73	379	0.192	74	0.2	11.820	B
C-A	1309			1309			
C-B	0	260	0.000	0	0.0	0.000	A
AB	124			124			
AC	1411			1411			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	61	446	0.137	61	0.2	9.372	A
C-A	1096			1096			
C-B	0	311	0.000	0	0.0	0.000	A
AB	104			104			
AC	1182			1182			

2021 Assessment Flows, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.67	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	2021 Assessment Flows	AM	ONE HOUR	08:00	09:30	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 (%)
A		✓	1539	100.000
B		✓	184	100.000
C		✓	1371	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
From		A	B	C	
	A	0	89	1450	
	B	0	0	184	
	C	1371	0	0	

Vehicle Mix

Heavy Vehicle Percentages

		To			
From		A	B	C	
	A	0	0	0	
	B	0	0	0	
	C	0	0	0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.61	28.13	1.5	C
C-A				
C-B	0.00	0.00	0.0	A
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	139	475	0.291	137	0.4	10.605	B
C-A	1032			1032			
C-B	0	337	0.000	0	0.0	0.000	A
A-B	67			67			
A-C	1092			1092			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	165	414	0.399	164	0.6	14.354	B
C-A	1233			1233			
C-B	0	291	0.000	0	0.0	0.000	A
A-B	80			80			
A-C	1304			1304			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	203	330	0.614	199	1.5	26.921	C
C-A	1509			1509			
C-B	0	227	0.000	0	0.0	0.000	A
A-B	98			98			
A-C	1596			1596			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	203	330	0.614	202	1.5	28.135	C
C-A	1509			1509			
C-B	0	227	0.000	0	0.0	0.000	A
A-B	98			98			
A-C	1596			1596			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	165	414	0.399	169	0.7	14.660	B
C-A	1233			1233			
C-B	0	291	0.000	0	0.0	0.000	A
A-B	80			80			
A-C	1304			1304			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	139	475	0.291	140	0.4	10.755	B
C-A	1032			1032			
C-B	0	337	0.000	0	0.0	0.000	A
A-B	67			67			
A-C	1092			1092			

2021 Assessment Flows, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.40	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	2021 Assessment Flows	PM	ONE HOUR	17:00	18:30	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 (%)
A		✓	1585	100.000
B		✓	80	100.000
C		✓	1330	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
From		A	B	C
	A	0	153	1432
	B	0	0	80
	C	1330	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
From		A	B	C
	A	0	0	0
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.27	15.03	0.4	C
C-A				
C-B	0.00	0.00	0.0	A
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	60	474	0.127	60	0.1	8.680	A
C-A	1001			1001			
C-B	0	330	0.000	0	0.0	0.000	A
A-B	115			115			
A-C	1078			1078			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	72	412	0.174	72	0.2	10.558	B
C-A	1196			1196			
C-B	0	283	0.000	0	0.0	0.000	A
A-B	138			138			
A-C	1287			1287			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	88	328	0.269	87	0.4	14.963	B
C-A	1464			1464			
C-B	0	217	0.000	0	0.0	0.000	A
A-B	168			168			
A-C	1577			1577			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	88	328	0.269	88	0.4	15.032	C
C-A	1464			1464			
C-B	0	217	0.000	0	0.0	0.000	A
A-B	168			168			
A-C	1577			1577			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	72	412	0.174	73	0.2	10.612	B
C-A	1196			1196			
C-B	0	283	0.000	0	0.0	0.000	A
A-B	138			138			
A-C	1287			1287			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	60	474	0.127	60	0.1	8.717	A
C-A	1001			1001			
C-B	0	330	0.000	0	0.0	0.000	A
A-B	115			115			
A-C	1078			1078			

2031 Assessment Flows, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		3.09	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D11	2031 Assessment Flows	AM	ONE HOUR	08:00	09:30	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 (%)
A		✓	1685	100.000
B		✓	200	100.000
C		✓	1505	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
From		A	B	C	
	A	0	95	1590	
	B	0	0	200	
	C	1505	0	0	

Vehicle Mix

Heavy Vehicle Percentages

		To			
From		A	B	C	
	A	0	0	0	
	B	0	0	0	
	C	0	0	0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.77	52.42	3.0	F
C-A				
C-B	0.00	0.00	0.0	A
AB				
AC				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	151	445	0.338	149	0.5	12.060	B
C-A	1133			1133			
C-B	0	315	0.000	0	0.0	0.000	A
AB	72			72			
AC	1197			1197			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	180	378	0.475	178	0.9	17.872	C
C-A	1353			1353			
C-B	0	264	0.000	0	0.0	0.000	A
AB	85			85			
AC	1429			1429			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	220	286	0.771	213	2.8	45.408	E
C-A	1657			1657			
C-B	0	195	0.000	0	0.0	0.000	A
AB	105			105			
AC	1751			1751			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	220	286	0.771	219	3.0	52.418	F
C-A	1657			1657			
C-B	0	195	0.000	0	0.0	0.000	A
AB	105			105			
AC	1751			1751			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	180	378	0.475	188	0.9	19.679	B
C-A	1353			1353			
C-B	0	264	0.000	0	0.0	0.000	A
A-B	85			85			
A-C	1429			1429			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	151	445	0.338	152	0.5	12.358	B
C-A	1133			1133			
C-B	0	315	0.000	0	0.0	0.000	A
A-B	72			72			
A-C	1197			1197			

2031 Assessment Flows, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.51	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D12	2031 Assessment Flows	PM	ONE HOUR	17:00	18:30	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 (%)
A		✓	1742	100.000
B		✓	87	100.000
C		✓	1463	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
From		A	B	C
	A	0	166	1576
	B	0	0	87
	C	1463	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
From		A	B	C
	A	0	0	0
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.34	19.41	0.5	C
C-A				
C-B	0.00	0.00	0.0	A
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	65	442	0.148	65	0.2	9.532	A
C-A	1101			1101			
C-B	0	306	0.000	0	0.0	0.000	A
A-B	125			125			
A-C	1186			1186			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	78	375	0.209	78	0.3	12.127	B
C-A	1315			1315			
C-B	0	254	0.000	0	0.0	0.000	A
A-B	149			149			
A-C	1417			1417			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	96	281	0.341	96	0.5	19.226	C
C-A	1611			1611			
C-B	0	182	0.000	0	0.0	0.000	A
A-B	183			183			
A-C	1735			1735			

17:45 - 18:00

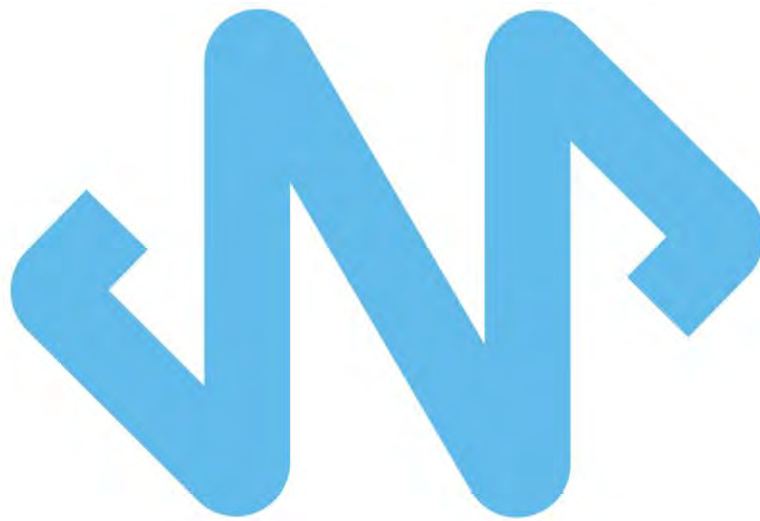
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	96	281	0.341	96	0.5	19.414	C
C-A	1611			1611			
C-B	0	182	0.000	0	0.0	0.000	A
A-B	183			183			
A-C	1735			1735			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	78	375	0.209	79	0.3	12.236	B
C-A	1315			1315			
C-B	0	254	0.000	0	0.0	0.000	A
A-B	149			149			
A-C	1417			1417			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	65	442	0.148	66	0.2	9.587	A
C-A	1101			1101			
C-B	0	306	0.000	0	0.0	0.000	A
A-B	125			125			
A-C	1186			1186			



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