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APPENDIX 15-3

JUNCTION 1 ARCADY ANALYSIS

Junctions 11

ARCADY 11 - Roundabout Module

Version: 11.1.0.2307
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Filename: Import of Kingston Junction 1.1 - WDR Roundabout incl. Active Travel Roundabout.j11
Path: C:\Users\Micheal Geraghty\OneDrive - TOBIN Consulting Engineers\Junctions - Various\11893\Traffic
Report generation date: 09/07/2026 14:36:25

»D1 - 2029 | Base | AM
»D2 - 2029 | Base | PM
»D3 - 2029 | Base + Comm | AM
»D4 - 2029 | Base + Comm | PM
»D5 - 2029 | Base + Comm & Prop | AM
»D6 - 2029 | Base + Comm & Prop | PM
»D7 - 2044 | Base incl. Est. Active Travel Reduction | AM
»D8 - 2044 | Base incl. Est. Active Travel Reduction | PM
»D9 - 2044 | Base + Comm incl. Est. Active Travel Reduction | AM
»D10 - 2044 | Base + Comm incl. Est. Active Travel Reduction | PM
»D11 - 2044 | Base + Comm & Prop incl. Est. Active Travel Reduction | AM
»D12 - 2044 | Base + Comm & Prop incl. Est. Active Travel Reduction | PM
»D13 - 2044 | Base + Comm & Masterplan incl. Est. Active Travel Reduction | AM
»D14 - 2044 | Base + Comm & Masterplan incl. Est. Active Travel Reduction | PM
»D17 - 2044 | Base + Comm & Masterplan & GCRR | AM
»D18 - 2044 | Base + Comm & Masterplan & GCRR | PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	2029 - Base									
Arm 1	D1	0.5	5.34	0.34	A	D2	0.6	5.25	0.38	A
Arm 2		0.5	4.76	0.34	A		0.9	6.31	0.49	A
Arm 3		0.2	4.23	0.15	A		0.1	4.79	0.08	A
Arm 4		1.4	6.46	0.59	A		1.2	5.66	0.54	A
	2029 - Base + Comm									
Arm 1	D3	0.6	6.12	0.38	A	D4	0.8	6.02	0.44	A
Arm 2		0.6	5.09	0.37	A		1.4	8.03	0.58	A
Arm 3		0.3	4.83	0.24	A		0.2	5.92	0.19	A
Arm 4		2.0	8.30	0.67	A		1.5	6.57	0.60	A
	2029 - Base + Comm & Prop									
Arm 1	D5	0.7	6.61	0.41	A	D6	0.9	6.61	0.47	A
Arm 2		0.6	5.35	0.39	A		1.8	9.61	0.64	A
Arm 3		0.5	5.71	0.35	A		0.4	6.62	0.27	A
Arm 4		2.4	9.60	0.71	A		1.7	7.13	0.63	A
	2044 - Base incl. Est. Active Travel Reduction									
Arm 1	D7	0.5	5.44	0.35	A	D8	0.6	5.35	0.39	A
Arm 2		0.5	4.87	0.35	A		1.0	6.49	0.50	A
Arm 3		0.2	4.24	0.15	A		0.1	4.88	0.08	A
Arm 4		1.5	6.59	0.60	A		1.2	5.79	0.55	A
	2044 - Base + Comm incl. Est. Active Travel Reduction									
Arm 1	D9	0.6	6.14	0.39	A	D10	0.8	6.08	0.44	A
Arm 2		0.6	5.18	0.38	A		1.4	8.11	0.58	A
Arm 3		0.3	4.74	0.23	A		0.2	5.91	0.19	A
Arm 4		2.0	8.20	0.67	A		1.5	6.67	0.60	A
	2044 - Base + Comm & Prop incl. Est. Active Travel Reduction									
Arm 1	D11	0.7	6.65	0.41	A	D12	0.9	6.60	0.47	A
Arm 2		0.7	5.41	0.40	A		1.7	9.54	0.64	A
Arm 3		0.5	5.66	0.34	A		0.3	6.59	0.26	A
Arm 4		2.4	9.66	0.71	A		1.7	7.21	0.63	A
	2044 - Base + Comm & Masterplan incl. Est. Active Travel Reduction									
Arm 1	D13	1.1	9.27	0.53	A	D14	1.8	10.77	0.64	B
Arm 2		1.0	7.25	0.51	A		7.0	32.71	0.89	D
Arm 3		1.2	8.36	0.55	A		4.5	31.11	0.83	D
Arm 4		4.8	17.62	0.84	C		3.1	12.05	0.76	B
	2044 - Base + Comm & Masterplan & GCRR									
Arm 1	D17	0.7	6.80	0.42	A	D18	1.0	7.23	0.51	A
Arm 2		0.6	5.66	0.38	A		2.1	11.43	0.68	B
Arm 3		1.1	7.11	0.54	A		1.5	10.39	0.61	B
Arm 4		1.9	8.58	0.65	A		1.3	6.59	0.56	A

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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

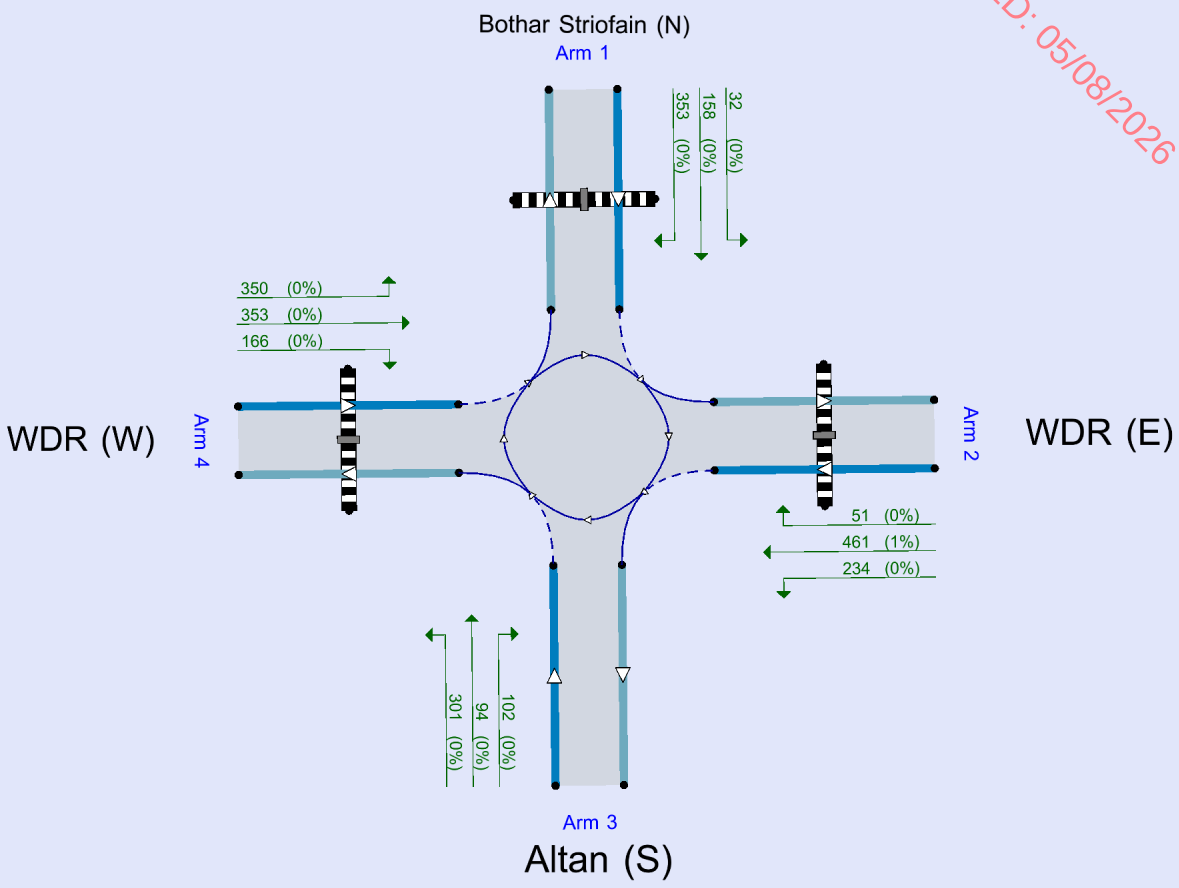
File Description

Title	
Location	
Site number	
Date	31/03/2023
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	TOBIN\Micheal Geraghty
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

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Flows show original traffic demand (PCU/hr) with (HV %)

The junction diagram reflects the last run of Junctions.

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	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2029	Base	AM	ONE HOUR	07:45	09:15	15
D2	2029	Base	PM	ONE HOUR	16:45	18:15	15
D3	2029	Base + Comm	AM	ONE HOUR	07:45	09:15	15
D4	2029	Base + Comm	PM	ONE HOUR	16:45	18:15	15
D5	2029	Base + Comm & Prop	AM	ONE HOUR	07:45	09:15	15
D6	2029	Base + Comm & Prop	PM	ONE HOUR	16:45	18:15	15
D7	2044	Base incl. Est. Active Travel Reduction	AM	ONE HOUR	07:45	09:15	15
D8	2044	Base incl. Est. Active Travel Reduction	PM	ONE HOUR	16:45	18:15	15
D9	2044	Base + Comm incl. Est. Active Travel Reduction	AM	ONE HOUR	07:45	09:15	15
D10	2044	Base + Comm incl. Est. Active Travel Reduction	PM	ONE HOUR	16:45	18:15	15
D11	2044	Base + Comm & Prop incl. Est. Active Travel Reduction	AM	ONE HOUR	07:45	09:15	15
D12	2044	Base + Comm & Prop incl. Est. Active Travel Reduction	PM	ONE HOUR	16:45	18:15	15
D13	2044	Base + Comm & Masterplan incl. Est. Active Travel Reduction	AM	ONE HOUR	07:45	09:15	15
D14	2044	Base + Comm & Masterplan incl. Est. Active Travel Reduction	PM	ONE HOUR	16:45	18:15	15
D17	2044	Base + Comm & Masterplan & GCRR	AM	ONE HOUR	07:45	09:15	15
D18	2044	Base + Comm & Masterplan & GCRR	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

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D1 - 2029 | Base | AM

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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	5.64	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.64	A

Arms

Arms

Arm	Name	Description	No give-way line
1	untitled		
2	untitled		
3	untitled		
4	untitled		

Capacity Options

Arm	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)
1	0	99999
2	0	99999
3	1	99999
4	0	99999

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Entry only	Exit only
1	3.25	4.50	10.0	20.0	42.0	12.5		
2	3.50	4.57	10.0	20.0	42.0	18.0		
3	3.50	4.50	10.0	20.0	42.0	15.0		
4	3.25	5.00	15.0	20.0	42.0	15.0		

Zebra Crossings

Arm	Space between crossing and junction entry (Zebra) (PCU)	Vehicles queueing on exit (Zebra) (PCU)	Central Refuge	Crossing data type	Crossing length (entry side) (m)	Crossing time (entry side) (s)	Crossing length (exit side) (m)	Crossing time (exit side) (s)
1	2.00	2.00	✓	Distance	4.50	3.21	4.50	3.21
2	3.00	3.00	✓	Distance	5.20	3.71	4.10	2.93
4	5.00	3.00	✓	Distance	5.01	3.58	5.00	3.57

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.582	1332
2	0.581	1356
3	0.585	1357
4	0.601	1442

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

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2029	Base	AM	ONE HOUR	07:45	09:15	15

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Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	312	100.000
2		✓	357	100.000
3		✓	138	100.000
4		✓	730	100.000

Demand overview (Pedestrians)

Arm	Average pedestrian flow (Ped/hr)
1	20.00
2	20.00
3	
4	25.00

Origin-Destination Data

Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	67	29	216
	2	29	0	44	284
	3	32	44	0	62
	4	292	381	57	0

Vehicle Mix

Heavy Vehicle %

		To			
		1	2	3	4
From	1	0	0	3	0
	2	0	0	2	2
	3	0	1	0	0
	4	1	0	0	0

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)	Pedestrian Demand (Ped/hr)
07:45-08:00	1	235	235	15.06
	2	269	269	15.06
	3	104	104	
	4	550	550	18.82
08:00-08:15	1	280	280	17.98
	2	321	321	17.98
	3	124	124	
	4	656	656	22.47
08:15-08:30	1	344	344	22.02
	2	393	393	22.02
	3	152	152	
	4	804	804	27.53
08:30-08:45	1	344	344	22.02
	2	393	393	22.02
	3	152	152	
	4	804	804	27.53
08:45-09:00	1	280	280	17.98
	2	321	321	17.98
	3	124	124	
	4	656	656	22.47
09:00-09:15	1	235	235	15.06
	2	269	269	15.06
	3	104	104	
	4	550	550	18.82

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Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.34	5.34	0.5	A
2	0.34	4.76	0.5	A
3	0.15	4.23	0.2	A
4	0.59	6.46	1.4	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	235	361	15.06	1121	0.210	234	0.3	4.064	A
2	269	226	15.06	1225	0.219	268	0.3	3.825	A
3	104	397		1123	0.093	103	0.1	3.540	A
4	550	79	18.82	1392	0.395	547	0.7	4.265	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	280	433	17.98	1079	0.260	280	0.4	4.519	A
2	321	271	17.98	1199	0.268	321	0.4	4.172	A
3	124	475		1074	0.115	124	0.1	3.798	A
4	656	94	22.47	1380	0.475	655	0.9	4.977	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	344	529	22.02	1021	0.337	343	0.5	5.322	A
2	393	332	22.02	1163	0.338	392	0.5	4.753	A
3	152	582		1006	0.151	152	0.2	4.225	A
4	804	115	27.53	1363	0.590	802	1.4	6.412	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	344	531	22.02	1020	0.337	344	0.5	5.337	A
2	393	332	22.02	1163	0.338	393	0.5	4.761	A
3	152	582		1006	0.151	152	0.2	4.229	A
4	804	116	27.53	1363	0.590	804	1.4	6.462	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	280	435	17.98	1077	0.260	281	0.4	4.538	A
2	321	272	17.98	1198	0.268	322	0.4	4.184	A
3	124	476		1074	0.116	124	0.1	3.806	A
4	656	95	22.47	1380	0.476	658	0.9	5.021	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	235	364	15.06	1119	0.210	235	0.3	4.084	A
2	269	228	15.06	1224	0.220	269	0.3	3.840	A
3	104	399		1122	0.093	104	0.1	3.548	A
4	550	79	18.82	1392	0.395	551	0.7	4.304	A

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D2 - 2029 | Base | PM

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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	5.73	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.73	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2029	Base	PM	ONE HOUR	16:45	18:15	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	377	100.000
2		✓	495	100.000
3		✓	62	100.000
4		✓	677	100.000

Demand overview (Pedestrians)

Arm	Average pedestrian flow (Ped/hr)
1	5.00
2	5.00
3	
4	5.00

Origin-Destination Data

Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	31	22	324
	2	48	0	32	415
	3	12	13	0	37
	4	330	324	23	0

Vehicle Mix

Heavy Vehicle %

		To			
		1	2	3	4
From	1	0	0	0	0
	2	0	0	0	1
	3	0	0	0	0
	4	0	0	0	0

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Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)	Pedestrian Demand (Ped/hr)
16:45-17:00	1	284	284	3.76
	2	373	373	3.76
	3	47	47	
	4	510	510	3.76
17:00-17:15	1	339	339	4.49
	2	445	445	4.49
	3	56	56	
	4	609	609	4.49
17:15-17:30	1	415	415	5.51
	2	545	545	5.51
	3	68	68	
	4	745	745	5.51
17:30-17:45	1	415	415	5.51
	2	545	545	5.51
	3	68	68	
	4	745	745	5.51
17:45-18:00	1	339	339	4.49
	2	445	445	4.49
	3	56	56	
	4	609	609	4.49
18:00-18:15	1	284	284	3.76
	2	373	373	3.76
	3	47	47	
	4	510	510	3.76

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.38	5.25	0.6	A
2	0.49	6.31	0.9	A
3	0.08	4.79	0.1	A
4	0.54	5.66	1.2	A

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	284	270	3.76	1174	0.242	283	0.3	4.031	A
2	373	277	3.76	1195	0.312	371	0.5	4.392	A
3	47	590		1005	0.046	46	0.0	3.755	A
4	510	55	3.76	1406	0.363	507	0.6	3.998	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	339	323	4.49	1143	0.296	339	0.4	4.472	A
2	445	331	4.49	1164	0.382	444	0.6	5.042	A
3	56	707		929	0.060	56	0.1	4.121	A
4	609	66	4.49	1396	0.436	608	0.8	4.560	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	415	396	5.51	1101	0.377	414	0.6	5.241	A
2	545	406	5.51	1120	0.486	544	0.9	6.280	A
3	68	865		820	0.083	68	0.1	4.786	A
4	745	80	5.51	1382	0.539	744	1.2	5.628	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	415	396	5.51	1100	0.377	415	0.6	5.254	A
2	545	406	5.51	1120	0.487	545	0.9	6.311	A
3	68	866		819	0.083	68	0.1	4.794	A
4	745	80	5.51	1382	0.539	745	1.2	5.656	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	339	324	4.49	1142	0.297	340	0.4	4.488	A
2	445	332	4.49	1163	0.383	446	0.6	5.073	A
3	56	709		927	0.060	56	0.1	4.132	A
4	609	66	4.49	1396	0.436	610	0.8	4.588	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	284	271	3.76	1173	0.242	284	0.3	4.050	A
2	373	278	3.76	1195	0.312	373	0.5	4.423	A
3	47	593		1003	0.047	47	0.0	3.768	A
4	510	55	3.76	1405	0.363	511	0.6	4.026	A

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D3 - 2029 | Base + Comm | AM

RECEIVED: 05/08/2026

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	6.75	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.75	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2029	Base + Comm	AM	ONE HOUR	07:45	09:15	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	334	100.000
2		✓	383	100.000
3		✓	216	100.000
4		✓	813	100.000

Demand overview (Pedestrians)

Arm	Average pedestrian flow (Ped/hr)
1	20.00
2	20.00
3	
4	25.00

Origin-Destination Data

Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	72	37	225
	2	30	0	55	298
	3	51	69	0	96
	4	308	431	74	0

Vehicle Mix

Heavy Vehicle %

	To				
		1	2	3	4
From	1	0	0	3	0
	2	0	0	2	2
	3	0	1	0	0
	4	1	0	0	0

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Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)	Pedestrian Demand (Ped/hr)
07:45-08:00	1	251	251	15.06
	2	288	288	15.06
	3	163	163	
	4	612	612	18.82
08:00-08:15	1	300	300	17.98
	2	344	344	17.98
	3	194	194	
	4	731	731	22.47
08:15-08:30	1	368	368	22.02
	2	422	422	22.02
	3	238	238	
	4	895	895	27.53
08:30-08:45	1	368	368	22.02
	2	422	422	22.02
	3	238	238	
	4	895	895	27.53
08:45-09:00	1	300	300	17.98
	2	344	344	17.98
	3	194	194	
	4	731	731	22.47
09:00-09:15	1	251	251	15.06
	2	288	288	15.06
	3	163	163	
	4	612	612	18.82

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.38	6.12	0.6	A
2	0.37	5.09	0.6	A
3	0.24	4.83	0.3	A
4	0.67	8.30	2.0	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	251	430	15.06	1080	0.233	250	0.3	4.345	A
2	288	252	15.06	1210	0.238	287	0.3	3.968	A
3	163	414		1111	0.146	162	0.2	3.802	A
4	612	112	18.82	1371	0.447	609	0.8	4.724	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	300	515	17.98	1030	0.292	300	0.4	4.946	A
2	344	302	17.98	1181	0.292	344	0.4	4.378	A
3	194	497		1060	0.183	194	0.2	4.170	A
4	731	135	22.47	1354	0.540	729	1.2	5.770	A

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08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	368	630	22.02	960	0.383	367	0.6	6.085	A
2	422	369	22.02	1142	0.369	421	0.6	5.081	A
3	238	608		986	0.241	237	0.3	4.823	A
4	895	165	27.53	1330	0.673	892	2.0	8.174	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	368	632	22.02	958	0.384	368	0.6	6.115	A
2	422	370	22.02	1141	0.370	422	0.6	5.094	A
3	238	609		985	0.241	238	0.3	4.832	A
4	895	165	27.53	1330	0.673	895	2.0	8.301	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	300	518	17.98	1028	0.292	301	0.4	4.978	A
2	344	303	17.98	1180	0.292	345	0.4	4.393	A
3	194	498		1059	0.183	195	0.2	4.183	A
4	731	135	22.47	1354	0.540	734	1.2	5.861	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	251	433	15.06	1078	0.233	252	0.3	4.373	A
2	288	253	15.06	1209	0.239	289	0.3	3.985	A
3	163	417		1110	0.147	163	0.2	3.813	A
4	612	113	18.82	1370	0.447	614	0.8	4.787	A

D4 - 2029 | Base + Comm | PM

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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	6.85	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.85	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2029	Base + Comm	PM	ONE HOUR	16:45	18:15	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	421	100.000
2		✓	570	100.000
3		✓	133	100.000
4		✓	737	100.000

Demand overview (Pedestrians)

Arm	Average pedestrian flow (Ped/hr)
1	5.00
2	5.00
3	
4	5.00

Origin-Destination Data

Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	32	41	348
	2	50	0	63	457
	3	25	27	0	81
	4	344	349	44	0

Vehicle Mix

Heavy Vehicle %

		To			
		1	2	3	4
From	1	0	0	0	0
	2	0	0	0	1
	3	0	0	0	0
	4	0	0	0	0

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Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)	Pedestrian Demand (Ped/hr)
16:45-17:00	1	317	317	3.76
	2	429	429	3.76
	3	100	100	
	4	555	555	3.76
17:00-17:15	1	378	378	4.49
	2	512	512	4.49
	3	120	120	
	4	663	663	4.49
17:15-17:30	1	464	464	5.51
	2	628	628	5.51
	3	146	146	
	4	811	811	5.51
17:30-17:45	1	464	464	5.51
	2	628	628	5.51
	3	146	146	
	4	811	811	5.51
17:45-18:00	1	378	378	4.49
	2	512	512	4.49
	3	120	120	
	4	663	663	4.49
18:00-18:15	1	317	317	3.76
	2	429	429	3.76
	3	100	100	
	4	555	555	3.76

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.44	6.02	0.8	A
2	0.58	8.03	1.4	A
3	0.19	5.92	0.2	A
4	0.60	6.57	1.5	A

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	317	315	3.76	1148	0.276	315	0.4	4.315	A
2	429	324	3.76	1168	0.368	427	0.6	4.884	A
3	100	640		970	0.103	100	0.1	4.134	A
4	555	76	3.76	1392	0.399	552	0.7	4.275	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	378	377	4.49	1112	0.340	378	0.5	4.904	A
2	512	389	4.49	1130	0.453	511	0.8	5.854	A
3	120	767		884	0.135	119	0.2	4.708	A
4	663	92	4.49	1379	0.480	662	0.9	5.008	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	464	461	5.51	1062	0.436	463	0.8	5.996	A
2	628	476	5.51	1080	0.581	625	1.4	7.948	A
3	146	939		757	0.194	146	0.2	5.893	A
4	811	112	5.51	1360	0.597	809	1.5	6.510	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	464	462	5.51	1061	0.437	464	0.8	6.022	A
2	628	477	5.51	1079	0.582	628	1.4	8.032	A
3	146	941		755	0.194	146	0.2	5.918	A
4	811	112	5.51	1360	0.597	811	1.5	6.565	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	378	379	4.49	1111	0.341	379	0.5	4.932	A
2	512	390	4.49	1129	0.454	515	0.8	5.922	A
3	120	771		881	0.136	120	0.2	4.732	A
4	663	92	4.49	1379	0.481	665	0.9	5.055	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	317	317	3.76	1147	0.276	317	0.4	4.344	A
2	429	327	3.76	1166	0.368	430	0.6	4.935	A
3	100	645		967	0.104	100	0.1	4.153	A
4	555	77	3.76	1391	0.399	556	0.7	4.315	A

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D5 - 2029 | Base + Comm & Prop | AM

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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	7.51	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	7.51	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	2029	Base + Comm & Prop	AM	ONE HOUR	07:45	09:15	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	343	100.000
2		✓	398	100.000
3		✓	316	100.000
4		✓	832	100.000

Demand overview (Pedestrians)

Arm	Average pedestrian flow (Ped/hr)
1	20.00
2	20.00
3	
4	20.00

Origin-Destination Data

Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	72	46	225
	2	30	0	70	298
	3	74	101	0	141
	4	308	431	93	0

Vehicle Mix

Heavy Vehicle %

		To			
		1	**2**	**3**	**4**
From	**1**	0	0	3	0
	2	0	0	2	2
	3	0	1	0	0
	4	1	0	0	0

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Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)	Pedestrian Demand (Ped/hr)
07:45-08:00	**1**	258	258	15.06
	2	300	300	15.06
	3	238	238	
	4	626	626	15.06
08:00-08:15	**1**	308	308	17.98
	2	358	358	17.98
	3	284	284	
	4	748	748	17.98
08:15-08:30	**1**	378	378	22.02
	2	438	438	22.02
	3	348	348	
	4	916	916	22.02
08:30-08:45	**1**	378	378	22.02
	2	438	438	22.02
	3	348	348	
	4	916	916	22.02
08:45-09:00	**1**	308	308	17.98
	2	358	358	17.98
	3	284	284	
	4	748	748	17.98
09:00-09:15	**1**	258	258	15.06
	2	300	300	15.06
	3	238	238	
	4	626	626	15.06

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.41	6.61	0.7	A
2	0.39	5.35	0.6	A
3	0.35	5.71	0.5	A
4	0.71	9.60	2.4	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	258	468	15.06	1058	0.244	257	0.3	4.505	A
2	300	273	15.06	1198	0.250	298	0.3	4.070	A
3	238	414		1110	0.214	237	0.3	4.129	A
4	626	154	15.06	1345	0.466	623	0.9	4.979	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	308	561	17.98	1002	0.308	308	0.4	5.200	A
2	358	327	17.98	1166	0.307	357	0.4	4.530	A
3	284	496		1057	0.269	284	0.4	4.665	A
4	748	184	17.98	1324	0.565	746	1.3	6.239	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	378	685	22.02	926	0.408	377	0.7	6.567	A
2	438	400	22.02	1124	0.390	437	0.6	5.335	A
3	348	608		981	0.355	347	0.5	5.691	A
4	916	225	22.02	1292	0.709	912	2.4	9.393	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	378	688	22.02	924	0.409	378	0.7	6.611	A
2	438	401	22.02	1123	0.390	438	0.6	5.351	A
3	348	609		980	0.355	348	0.5	5.710	A
4	916	226	22.02	1292	0.709	916	2.4	9.605	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	308	565	17.98	1000	0.308	309	0.5	5.242	A
2	358	328	17.98	1165	0.307	359	0.5	4.548	A
3	284	498		1056	0.269	285	0.4	4.685	A
4	748	185	17.98	1323	0.565	752	1.3	6.377	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	258	472	15.06	1056	0.245	259	0.3	4.539	A
2	300	275	15.06	1197	0.250	300	0.3	4.093	A
3	238	417		1109	0.215	238	0.3	4.152	A
4	626	155	15.06	1345	0.466	628	0.9	5.055	A

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D6 - 2029 | Base + Comm & Prop | PM

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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	7.72	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	7.72	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	2029	Base + Comm & Prop	PM	ONE HOUR	16:45	18:15	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	447	100.000
2		✓	607	100.000
3		✓	184	100.000
4		✓	764	100.000

Demand overview (Pedestrians)

Arm	Average pedestrian flow (Ped/hr)
1	5.00
2	5.00
3	
4	5.00

Origin-Destination Data

Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	32	67	348
	2	50	0	100	457
	3	34	38	0	112
	4	344	349	71	0

Vehicle Mix

Heavy Vehicle %

		To			
		1	2	3	4
From	1	0	0	0	0
	2	0	0	0	1
	3	0	0	0	0
	4	0	0	0	0

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Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)	Pedestrian Demand (Ped/hr)
16:45-17:00	1	337	337	3.76
	2	457	457	3.76
	3	139	139	
	4	575	575	3.76
17:00-17:15	1	402	402	4.49
	2	546	546	4.49
	3	165	165	
	4	687	687	4.49
17:15-17:30	1	492	492	5.51
	2	668	668	5.51
	3	203	203	
	4	841	841	5.51
17:30-17:45	1	492	492	5.51
	2	668	668	5.51
	3	203	203	
	4	841	841	5.51
17:45-18:00	1	402	402	4.49
	2	546	546	4.49
	3	165	165	
	4	687	687	4.49
18:00-18:15	1	337	337	3.76
	2	457	457	3.76
	3	139	139	
	4	575	575	3.76

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.47	6.61	0.9	A
2	0.64	9.61	1.8	A
3	0.27	6.62	0.4	A
4	0.63	7.13	1.7	A

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	337	343	3.76	1132	0.297	335	0.4	4.509	A
2	457	364	3.76	1145	0.399	454	0.7	5.234	A
3	139	640		968	0.143	138	0.2	4.330	A
4	575	91	3.76	1383	0.416	572	0.7	4.429	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	402	411	4.49	1092	0.368	401	0.6	5.209	A
2	546	436	4.49	1103	0.495	544	1.0	6.483	A
3	165	767		880	0.188	165	0.2	5.035	A
4	687	109	4.49	1368	0.502	686	1.0	5.267	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	492	503	5.51	1038	0.474	491	0.9	6.570	A
2	668	534	5.51	1046	0.639	665	1.7	9.450	A
3	203	938		749	0.270	202	0.4	6.571	A
4	841	134	5.51	1346	0.625	839	1.6	7.061	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	492	504	5.51	1037	0.475	492	0.9	6.609	A
2	668	535	5.51	1045	0.639	668	1.8	9.613	A
3	203	941		747	0.271	203	0.4	6.617	A
4	841	134	5.51	1346	0.625	841	1.7	7.134	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	402	413	4.49	1090	0.369	403	0.6	5.248	A
2	546	438	4.49	1101	0.495	549	1.0	6.596	A
3	165	772		876	0.189	166	0.2	5.072	A
4	687	110	4.49	1367	0.502	689	1.0	5.329	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	337	346	3.76	1130	0.298	337	0.4	4.544	A
2	457	367	3.76	1143	0.400	458	0.7	5.305	A
3	139	645		965	0.144	139	0.2	4.360	A
4	575	92	3.76	1382	0.416	576	0.7	4.475	A

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D7 - 2044 | Base incl. Est. Active Travel Reduction | AM

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Data Errors and Warnings

Severity	Area	Item	Description
Warning	Pedestrian Crossing	Arm 1 - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	Arm 2 - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	Arm 4 - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?

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	5.75	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.75	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D7	2044	Base incl. Est. Active Travel Reduction	AM	ONE HOUR	07:45	09:15	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	319	100.000
2		✓	369	100.000
3		✓	141	100.000
4		✓	747	100.000

Demand overview (Pedestrians)

Arm	Average pedestrian flow (Ped/hr)
1	0.00
2	0.00
3	
4	0.00

Origin-Destination Data

Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	68	30	221
	2	30	0	45	294
	3	33	45	0	63
	4	298	391	58	0

Vehicle Mix

Heavy Vehicle %

		To			
		1	**2**	**3**	**4**
From	**1**	0	0	3	0
	2	0	0	2	2
	3	0	1	0	0
	4	1	0	0	0

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Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)	Pedestrian Demand (Ped/hr)
07:45-08:00	**1**	240	240	0.00
	2	278	278	0.00
	3	106	106	
	4	562	562	0.00
08:00-08:15	**1**	287	287	0.00
	2	332	332	0.00
	3	127	127	
	4	672	672	0.00
08:15-08:30	**1**	351	351	0.00
	2	406	406	0.00
	3	155	155	
	4	822	822	0.00
08:30-08:45	**1**	351	351	0.00
	2	406	406	0.00
	3	155	155	
	4	822	822	0.00
08:45-09:00	**1**	287	287	0.00
	2	332	332	0.00
	3	127	127	
	4	672	672	0.00
09:00-09:15	**1**	240	240	0.00
	2	278	278	0.00
	3	106	106	
	4	562	562	0.00

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.35	5.44	0.5	A
2	0.35	4.87	0.5	A
3	0.15	4.24	0.2	A
4	0.60	6.59	1.5	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	240	370	0.00	1116	0.215	239	0.3	4.111	A
2	278	232	0.00	1222	0.227	277	0.3	3.874	A
3	106	409		1118	0.095	106	0.1	3.564	A
4	562	81	0.00	1394	0.404	560	0.7	4.321	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	287	443	0.00	1073	0.267	286	0.4	4.585	A
2	332	277	0.00	1195	0.278	331	0.4	4.243	A
3	127	489		1071	0.118	127	0.1	3.823	A
4	672	97	0.00	1384	0.485	670	0.9	5.059	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	351	543	0.00	1016	0.346	351	0.5	5.421	A
2	406	340	0.00	1159	0.351	406	0.5	4.863	A
3	155	599		1007	0.154	155	0.2	4.237	A
4	822	119	0.00	1371	0.600	820	1.5	6.539	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	351	544	0.00	1015	0.346	351	0.5	5.438	A
2	406	340	0.00	1158	0.351	406	0.5	4.873	A
3	155	600		1006	0.154	155	0.2	4.242	A
4	822	119	0.00	1371	0.600	822	1.5	6.591	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	287	445	0.00	1072	0.267	287	0.4	4.604	A
2	332	278	0.00	1194	0.278	332	0.4	4.255	A
3	127	491		1070	0.118	127	0.1	3.828	A
4	672	97	0.00	1384	0.485	674	1.0	5.105	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	240	373	0.00	1115	0.215	241	0.3	4.131	A
2	278	233	0.00	1221	0.228	278	0.3	3.892	A
3	106	411		1117	0.095	106	0.1	3.575	A
4	562	81	0.00	1393	0.404	563	0.7	4.362	A

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D8 - 2044 | Base incl. Est. Active Travel Reduction | PM

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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	5.87	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.87	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D8	2044	Base incl. Est. Active Travel Reduction	PM	ONE HOUR	16:45	18:15	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	385	100.000
2		✓	505	100.000
3		✓	62	100.000
4		✓	689	100.000

Demand overview (Pedestrians)

Arm	Average pedestrian flow (Ped/hr)
1	5.00
2	5.00
3	
4	5.00

Origin-Destination Data

Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	32	22	331
	2	49	0	33	423
	3	12	13	0	37
	4	337	329	23	0

Vehicle Mix

Heavy Vehicle %

		To			
		1	2	3	4
From	1	0	0	0	0
	2	0	0	0	1
	3	0	0	0	0
	4	0	0	0	0

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Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)	Pedestrian Demand (Ped/hr)
16:45-17:00	1	290	290	3.76
	2	380	380	3.76
	3	47	47	
	4	519	519	3.76
17:00-17:15	1	346	346	4.49
	2	454	454	4.49
	3	56	56	
	4	619	619	4.49
17:15-17:30	1	424	424	5.51
	2	556	556	5.51
	3	68	68	
	4	759	759	5.51
17:30-17:45	1	424	424	5.51
	2	556	556	5.51
	3	68	68	
	4	759	759	5.51
17:45-18:00	1	346	346	4.49
	2	454	454	4.49
	3	56	56	
	4	619	619	4.49
18:00-18:15	1	290	290	3.76
	2	380	380	3.76
	3	47	47	
	4	519	519	3.76

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.39	5.35	0.6	A
2	0.50	6.49	1.0	A
3	0.08	4.88	0.1	A
4	0.55	5.79	1.2	A

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	290	274	3.76	1172	0.247	289	0.3	4.068	A
2	380	282	3.76	1192	0.319	378	0.5	4.449	A
3	47	602		997	0.047	46	0.0	3.785	A
4	519	55	3.76	1405	0.369	516	0.6	4.040	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	346	328	4.49	1140	0.303	346	0.4	4.528	A
2	454	338	4.49	1160	0.391	453	0.6	5.131	A
3	56	721		920	0.061	56	0.1	4.166	A
4	619	66	4.49	1395	0.444	619	0.8	4.629	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	424	401	5.51	1097	0.386	423	0.6	5.334	A
2	556	413	5.51	1116	0.498	555	1.0	6.450	A
3	68	882		808	0.084	68	0.1	4.866	A
4	759	81	5.51	1381	0.550	757	1.2	5.758	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	424	402	5.51	1097	0.386	424	0.6	5.349	A
2	556	414	5.51	1116	0.498	556	1.0	6.486	A
3	68	884		807	0.085	68	0.1	4.875	A
4	759	81	5.51	1380	0.550	759	1.2	5.789	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	346	329	4.49	1140	0.304	347	0.4	4.546	A
2	454	339	4.49	1159	0.392	455	0.7	5.165	A
3	56	724		918	0.061	56	0.1	4.176	A
4	619	67	4.49	1395	0.444	621	0.8	4.659	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	290	275	3.76	1171	0.247	290	0.3	4.088	A
2	380	283	3.76	1191	0.319	381	0.5	4.482	A
3	47	606		995	0.047	47	0.0	3.799	A
4	519	56	3.76	1405	0.369	520	0.6	4.070	A

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D9 - 2044 | Base + Comm incl. Est. Active Travel Reduction | AM

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Data Errors and Warnings

Severity	Area	Item	Description
Warning	Pedestrian Crossing	Arm 1 - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	Arm 2 - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	Arm 4 - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	6.72	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.72	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D9	2044	Base + Comm incl. Est. Active Travel Reduction	AM	ONE HOUR	07:45	09:15	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	340	100.000
2		✓	391	100.000
3		✓	210	100.000
4		✓	822	100.000

Demand overview (Pedestrians)

Arm	Average pedestrian flow (Ped/hr)
1	0.00
2	0.00
3	
4	0.00

Origin-Destination Data

Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	73	37	230
	2	30	0	55	306
	3	49	67	0	94
	4	313	436	73	0

Vehicle Mix

Heavy Vehicle %

		To			
		1	**2**	**3**	**4**
From	**1**	0	0	3	0
	2	0	0	2	2
	3	0	1	0	0
	4	1	0	0	0

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Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)	Pedestrian Demand (Ped/hr)
07:45-08:00	**1**	256	256	0.00
	2	294	294	0.00
	3	158	158	
	4	619	619	0.00
08:00-08:15	**1**	306	306	0.00
	2	352	352	0.00
	3	189	189	
	4	739	739	0.00
08:15-08:30	**1**	374	374	0.00
	2	430	430	0.00
	3	231	231	
	4	905	905	0.00
08:30-08:45	**1**	374	374	0.00
	2	430	430	0.00
	3	231	231	
	4	905	905	0.00
08:45-09:00	**1**	306	306	0.00
	2	352	352	0.00
	3	189	189	
	4	739	739	0.00
09:00-09:15	**1**	256	256	0.00
	2	294	294	0.00
	3	158	158	
	4	619	619	0.00

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.39	6.14	0.6	A
2	0.38	5.18	0.6	A
3	0.23	4.74	0.3	A
4	0.67	8.20	2.0	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	256	431	0.00	1080	0.237	255	0.3	4.368	A
2	294	255	0.00	1208	0.244	293	0.3	4.000	A
3	158	424		1109	0.143	157	0.2	3.792	A
4	619	109	0.00	1376	0.450	616	0.8	4.730	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	306	517	0.00	1031	0.297	305	0.4	4.974	A
2	352	305	0.00	1179	0.298	351	0.4	4.427	A
3	189	508		1060	0.178	189	0.2	4.142	A
4	739	131	0.00	1363	0.542	738	1.2	5.761	A

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08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	374	632	0.00	964	0.388	374	0.6	6.111	A
2	430	373	0.00	1139	0.378	430	0.6	5.162	A
3	231	622		994	0.233	231	0.3	4.732	A
4	905	161	0.00	1346	0.673	902	2.0	8.077	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	374	634	0.00	962	0.389	374	0.6	6.140	A
2	430	374	0.00	1139	0.378	430	0.6	5.176	A
3	231	623		993	0.233	231	0.3	4.740	A
4	905	161	0.00	1346	0.673	905	2.0	8.196	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	306	520	0.00	1029	0.297	306	0.4	5.006	A
2	352	307	0.00	1178	0.298	352	0.4	4.445	A
3	189	510		1059	0.178	189	0.2	4.152	A
4	739	131	0.00	1363	0.542	742	1.2	5.852	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	256	435	0.00	1079	0.237	256	0.3	4.396	A
2	294	256	0.00	1207	0.244	295	0.3	4.020	A
3	158	427		1108	0.143	158	0.2	3.803	A
4	619	110	0.00	1376	0.450	620	0.8	4.793	A

D10 - 2044 | Base + Comm incl. Est. Active Travel Reduction | PM

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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	6.93	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.93	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D10	2044	Base + Comm incl. Est. Active Travel Reduction	PM	ONE HOUR	16:45	18:15	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	425	100.000
2		✓	572	100.000
3		✓	126	100.000
4		✓	746	100.000

Demand overview (Pedestrians)

Arm	Average pedestrian flow (Ped/hr)
1	5.00
2	5.00
3	
4	5.00

Origin-Destination Data

Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	32	40	353
	2	51	0	60	461
	3	23	26	0	77
	4	350	353	43	0

Vehicle Mix

Heavy Vehicle %

	To				
		1	2	3	4
From	1	0	0	0	0
	2	0	0	0	1
	3	0	0	0	0
	4	0	0	0	0

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Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)	Pedestrian Demand (Ped/hr)
16:45-17:00	1	320	320	3.76
	2	431	431	3.76
	3	95	95	
	4	562	562	3.76
17:00-17:15	1	382	382	4.49
	2	514	514	4.49
	3	113	113	
	4	671	671	4.49
17:15-17:30	1	468	468	5.51
	2	630	630	5.51
	3	139	139	
	4	821	821	5.51
17:30-17:45	1	468	468	5.51
	2	630	630	5.51
	3	139	139	
	4	821	821	5.51
17:45-18:00	1	382	382	4.49
	2	514	514	4.49
	3	113	113	
	4	671	671	4.49
18:00-18:15	1	320	320	3.76
	2	431	431	3.76
	3	95	95	
	4	562	562	3.76

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.44	6.08	0.8	A
2	0.58	8.11	1.4	A
3	0.19	5.91	0.2	A
4	0.60	6.67	1.5	A

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	320	316	3.76	1147	0.279	318	0.4	4.335	A
2	431	327	3.76	1166	0.369	428	0.6	4.901	A
3	95	648		966	0.098	94	0.1	4.130	A
4	562	75	3.76	1393	0.403	559	0.7	4.305	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	382	379	4.49	1111	0.344	382	0.5	4.935	A
2	514	391	4.49	1129	0.456	513	0.8	5.886	A
3	113	776		878	0.129	113	0.1	4.704	A
4	671	90	4.49	1380	0.486	670	0.9	5.060	A

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17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	468	463	5.51	1061	0.441	467	0.8	6.051	A
2	630	479	5.51	1078	0.584	628	1.4	8.020	A
3	139	950		750	0.185	138	0.2	5.888	A
4	821	110	5.51	1361	0.604	819	1.5	6.618	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	468	465	5.51	1060	0.441	468	0.8	6.080	A
2	630	480	5.51	1077	0.585	630	1.4	8.107	A
3	139	952		747	0.186	139	0.2	5.914	A
4	821	110	5.51	1360	0.604	821	1.5	6.674	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	382	381	4.49	1109	0.344	383	0.5	4.964	A
2	514	393	4.49	1128	0.456	516	0.9	5.958	A
3	113	780		875	0.129	114	0.1	4.730	A
4	671	90	4.49	1380	0.486	673	1.0	5.108	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	320	318	3.76	1146	0.279	321	0.4	4.365	A
2	431	329	3.76	1165	0.370	432	0.6	4.956	A
3	95	653		962	0.099	95	0.1	4.152	A
4	562	75	3.76	1392	0.403	563	0.7	4.347	A

D11 - 2044 | Base + Comm & Prop incl. Est. Active Travel Reduction | AM

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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	7.56	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	7.56	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D11	2044	Base + Comm & Prop incl. Est. Active Travel Reduction	AM	ONE HOUR	07:45	09:15	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	348	100.000
2		✓	404	100.000
3		✓	302	100.000
4		✓	839	100.000

Demand overview (Pedestrians)

Arm	Average pedestrian flow (Ped/hr)
1	10.00
2	10.00
3	
4	30.00

Origin-Destination Data

Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	73	45	230
	2	30	0	68	306
	3	71	96	0	135
	4	313	436	90	0

Vehicle Mix

Heavy Vehicle %

		To			
		1	**2**	**3**	**4**
From	**1**	0	0	3	0
	2	0	0	2	2
	3	0	1	0	0
	4	1	0	0	0

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Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)	Pedestrian Demand (Ped/hr)
07:45-08:00	**1**	262	262	7.53
	2	304	304	7.53
	3	227	227	
	4	632	632	22.59
08:00-08:15	**1**	313	313	8.99
	2	363	363	8.99
	3	271	271	
	4	754	754	26.97
08:15-08:30	**1**	383	383	11.01
	2	445	445	11.01
	3	333	333	
	4	924	924	33.03
08:30-08:45	**1**	383	383	11.01
	2	445	445	11.01
	3	333	333	
	4	924	924	33.03
08:45-09:00	**1**	313	313	8.99
	2	363	363	8.99
	3	271	271	
	4	754	754	26.97
09:00-09:15	**1**	262	262	7.53
	2	304	304	7.53
	3	227	227	
	4	632	632	22.59

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.41	6.65	0.7	A
2	0.40	5.41	0.7	A
3	0.34	5.66	0.5	A
4	0.71	9.66	2.4	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	262	466	7.53	1059	0.247	261	0.3	4.518	A
2	304	273	7.53	1197	0.254	303	0.3	4.093	A
3	227	424		1104	0.206	226	0.3	4.110	A
4	632	148	22.59	1349	0.468	628	0.9	4.990	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	313	558	8.99	1004	0.312	312	0.5	5.221	A
2	363	328	8.99	1166	0.312	363	0.5	4.564	A
3	271	508		1050	0.259	271	0.3	4.635	A
4	754	177	26.97	1328	0.568	753	1.3	6.260	A

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08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	383	682	11.01	928	0.413	382	0.7	6.606	A
2	445	401	11.01	1123	0.396	444	0.7	5.390	A
3	333	622		971	0.342	332	0.5	5.643	A
4	924	216	33.03	1297	0.712	919	2.4	9.446	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	383	685	11.01	926	0.414	383	0.7	6.651	A
2	445	402	11.01	1123	0.396	445	0.7	5.408	A
3	333	623		970	0.343	332	0.5	5.663	A
4	924	217	33.03	1297	0.712	924	2.4	9.663	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	313	562	8.99	1002	0.312	314	0.5	5.263	A
2	363	329	8.99	1165	0.312	364	0.5	4.584	A
3	271	510		1049	0.259	272	0.4	4.656	A
4	754	178	26.97	1327	0.568	759	1.3	6.403	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	262	470	7.53	1057	0.248	262	0.3	4.552	A
2	304	275	7.53	1196	0.254	305	0.3	4.114	A
3	227	427		1103	0.206	228	0.3	4.129	A
4	632	149	22.59	1348	0.469	633	0.9	5.069	A

D12 - 2044 | Base + Comm & Prop incl. Est. Active Travel Reduction | PM

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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	7.73	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	7.73	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D12	2044	Base + Comm & Prop incl. Est. Active Travel Reduction	PM	ONE HOUR	16:45	18:15	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	448	100.000
2		✓	606	100.000
3		✓	172	100.000
4		✓	770	100.000

Demand overview (Pedestrians)

Arm	Average pedestrian flow (Ped/hr)
1	25.00
2	20.00
3	
4	20.00

Origin-Destination Data

Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	32	63	353
	2	51	0	94	461
	3	32	35	0	105
	4	350	353	67	0

Vehicle Mix

Heavy Vehicle %

		To			
		1	2	3	4
From	1	0	0	0	0
	2	0	0	0	1
	3	0	0	0	0
	4	0	0	0	0

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Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)	Pedestrian Demand (Ped/hr)
16:45-17:00	1	337	337	18.82
	2	456	456	15.06
	3	129	129	
	4	580	580	15.06
17:00-17:15	1	403	403	22.47
	2	545	545	17.98
	3	155	155	
	4	692	692	17.98
17:15-17:30	1	493	493	27.53
	2	667	667	22.02
	3	189	189	
	4	848	848	22.02
17:30-17:45	1	493	493	27.53
	2	667	667	22.02
	3	189	189	
	4	848	848	22.02
17:45-18:00	1	403	403	22.47
	2	545	545	17.98
	3	155	155	
	4	692	692	17.98
18:00-18:15	1	337	337	18.82
	2	456	456	15.06
	3	129	129	
	4	580	580	15.06

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.47	6.60	0.9	A
2	0.64	9.54	1.7	A
3	0.26	6.59	0.3	A
4	0.63	7.21	1.7	A

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	337	341	18.82	1133	0.298	336	0.4	4.507	A
2	456	362	15.06	1146	0.398	454	0.7	5.219	A
3	129	648		963	0.134	129	0.2	4.312	A
4	580	88	15.06	1384	0.419	577	0.7	4.446	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	403	408	22.47	1093	0.368	402	0.6	5.204	A
2	545	434	17.98	1104	0.493	544	1.0	6.454	A
3	155	776		873	0.177	154	0.2	5.008	A
4	692	106	17.98	1369	0.505	691	1.0	5.296	A

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17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	493	499	27.53	1039	0.475	492	0.9	6.562	A
2	667	530	22.02	1048	0.637	664	1.7	9.380	A
3	189	949		739	0.256	189	0.3	6.544	A
4	848	129	22.02	1347	0.629	845	1.7	7.138	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	493	501	27.53	1039	0.475	493	0.9	6.601	A
2	667	532	22.02	1047	0.637	667	1.7	9.537	A
3	189	952		736	0.257	189	0.3	6.588	A
4	848	130	22.02	1346	0.630	848	1.7	7.214	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	403	411	22.47	1092	0.369	404	0.6	5.243	A
2	545	436	17.98	1103	0.494	548	1.0	6.566	A
3	155	781		869	0.178	155	0.2	5.045	A
4	692	107	17.98	1369	0.506	695	1.0	5.362	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	337	343	18.82	1131	0.298	338	0.4	4.540	A
2	456	364	15.06	1144	0.399	458	0.7	5.291	A
3	129	653		960	0.135	130	0.2	4.339	A
4	580	89	15.06	1383	0.419	581	0.7	4.492	A

D13 - 2044 | Base + Comm & Masterplan incl. Est. Active Travel Reduction | AM

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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	12.07	B

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	12.07	B

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D13	2044	Base + Comm & Masterplan incl. Est. Active Travel Reduction	AM	ONE HOUR	07:45	09:15	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	397	100.000
2		✓	477	100.000
3		✓	477	100.000
4		✓	933	100.000

Demand overview (Pedestrians)

Arm	Average pedestrian flow (Ped/hr)
1	10.00
2	10.00
3	
4	30.00

Origin-Destination Data

Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	73	94	230
	2	30	0	141	306
	3	112	152	0	213
	4	313	436	184	0

Vehicle Mix

Heavy Vehicle %

		To			
		1	**2**	**3**	**4**
From	**1**	0	0	3	0
	2	0	0	2	2
	3	0	1	0	0
	4	1	0	0	0

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Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)	Pedestrian Demand (Ped/hr)
07:45-08:00	**1**	299	299	7.53
	2	359	359	7.53
	3	359	359	
	4	702	702	22.59
08:00-08:15	**1**	357	357	8.99
	2	429	429	8.99
	3	429	429	
	4	839	839	26.97
08:15-08:30	**1**	437	437	11.01
	2	525	525	11.01
	3	525	525	
	4	1027	1027	33.03
08:30-08:45	**1**	437	437	11.01
	2	525	525	11.01
	3	525	525	
	4	1027	1027	33.03
08:45-09:00	**1**	357	357	8.99
	2	429	429	8.99
	3	429	429	
	4	839	839	26.97
09:00-09:15	**1**	299	299	7.53
	2	359	359	7.53
	3	359	359	
	4	702	702	22.59

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.53	9.27	1.1	A
2	0.51	7.25	1.0	A
3	0.55	8.36	1.2	A
4	0.84	17.62	4.8	C

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	299	578	7.53	994	0.301	297	0.4	5.192	A
2	359	380	7.53	1135	0.316	357	0.5	4.702	A
3	359	424		1102	0.326	357	0.5	4.838	A
4	702	220	22.59	1304	0.539	698	1.2	5.915	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	357	692	8.99	925	0.386	356	0.6	6.361	A
2	429	455	8.99	1091	0.393	428	0.7	5.522	A
3	429	508		1044	0.411	428	0.7	5.850	A
4	839	264	26.97	1273	0.659	836	1.9	8.198	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	437	842	11.01	833	0.525	435	1.1	9.095	A
2	525	556	11.01	1033	0.508	524	1.0	7.175	A
3	525	621		959	0.548	523	1.2	8.252	A
4	1027	322	33.03	1230	0.835	1016	4.6	16.142	C

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	437	849	11.01	828	0.528	437	1.1	9.265	A
2	525	559	11.01	1031	0.509	525	1.0	7.245	A
3	525	623		957	0.549	525	1.2	8.358	A
4	1027	324	33.03	1229	0.836	1026	4.8	17.620	C

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	357	702	8.99	919	0.388	359	0.6	6.495	A
2	429	460	8.99	1089	0.394	430	0.7	5.585	A
3	429	511		1042	0.411	431	0.7	5.926	A
4	839	265	26.97	1272	0.659	850	2.0	8.780	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	299	584	7.53	990	0.302	300	0.4	5.259	A
2	359	384	7.53	1133	0.317	360	0.5	4.748	A
3	359	427		1099	0.327	360	0.5	4.889	A
4	702	222	22.59	1303	0.539	706	1.2	6.080	A

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D14 - 2044 | Base + Comm & Masterplan incl. Est. Active Travel Reduction | PM

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Data Errors and Warnings

Severity	Area	Item	Description
Last Run	Last Run	Arm 3 - Capacity	Pedestrian Crossing causes blocking on previous arm due to traffic queing to leave the junction in 2 timesegment(s).

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	21.16	C

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	21.16	C

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D14	2044	Base + Comm & Masterplan incl. Est. Active Travel Reduction	PM	ONE HOUR	16:45	18:15	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	543	100.000
2		✓	746	100.000
3		✓	497	100.000
4		✓	869	100.000

Demand overview (Pedestrians)

Arm	Average pedestrian flow (Ped/hr)
1	25.00
2	20.00
3	
4	20.00

Origin-Destination Data

Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	32	158	353
	2	51	0	234	461
	3	94	102	0	301
	4	350	353	166	0

Vehicle Mix

Heavy Vehicle %

		To			
		1	2	3	4
From	1	0	0	0	0
	2	0	0	0	1
	3	0	0	0	0
	4	0	0	0	0

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Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)	Pedestrian Demand (Ped/hr)
16:45-17:00	1	409	409	18.82
	2	562	562	15.06
	3	374	374	
	4	654	654	15.06
17:00-17:15	1	488	488	22.47
	2	671	671	17.98
	3	447	447	
	4	781	781	17.98
17:15-17:30	1	598	598	27.53
	2	821	821	22.02
	3	547	547	
	4	957	957	22.02
17:30-17:45	1	598	598	27.53
	2	821	821	22.02
	3	547	547	
	4	957	957	22.02
17:45-18:00	1	488	488	22.47
	2	671	671	17.98
	3	447	447	
	4	781	781	17.98
18:00-18:15	1	409	409	18.82
	2	562	562	15.06
	3	374	374	
	4	654	654	15.06

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.64	10.77	1.8	B
2	0.89	32.71	7.0	D
3	0.83	31.11	4.5	D
4	0.76	12.05	3.1	B

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	409	465	18.82	1061	0.385	406	0.6	5.481	A
2	562	507	15.06	1062	0.529	557	1.1	7.124	A
3	374	647		945	0.396	372	0.6	6.249	A
4	654	185	15.06	1324	0.494	650	1.0	5.318	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	488	557	22.47	1007	0.485	487	0.9	6.911	A
2	671	607	17.98	1003	0.668	667	2.0	10.666	B
3	447	774		836	0.534	445	1.1	9.149	A
4	781	221	17.98	1296	0.603	779	1.5	6.937	A

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17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	598	678	27.53	935	0.640	595	1.7	10.493	B
2	821	741	22.02	925	0.888	804	6.3	26.765	D
3	547	939		670	0.817	536	3.9	25.138	D
4	957	266	22.02	1257	0.761	951	3.0	11.505	B

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	598	683	27.53	931	0.642	598	1.8	10.772	B
2	821	745	22.02	923	0.890	818	7.0	32.715	D
3	547	950		656	0.834	545	4.5	31.111	D
4	957	271	22.02	1254	0.763	956	3.1	12.051	B

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	488	565	22.47	1002	0.487	491	1.0	7.097	A
2	671	613	17.98	1000	0.671	690	2.1	12.370	B
3	447	793		819	0.546	460	1.2	10.368	B
4	781	228	17.98	1291	0.605	787	1.6	7.238	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	409	469	18.82	1058	0.386	410	0.6	5.568	A
2	562	511	15.06	1059	0.530	566	1.2	7.398	A
3	374	655		939	0.399	376	0.7	6.426	A
4	654	187	15.06	1322	0.495	657	1.0	5.427	A

D17 - 2044 | Base + Comm & Masterplan & GCRR | AM

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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	7.33	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	7.33	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D17	2044	Base + Comm & Masterplan & GCRR	AM	ONE HOUR	07:45	09:15	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	352	100.000
2		✓	355	100.000
3		✓	531	100.000
4		✓	724	100.000

Demand overview (Pedestrians)

Arm	Average pedestrian flow (Ped/hr)
1	10.00
2	10.00
3	
4	30.00

Origin-Destination Data

Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	60	104	188
	2	25	0	156	174
	3	125	169	0	237
	4	257	263	204	0

Vehicle Mix

Heavy Vehicle %

		To			
		1	**2**	**3**	**4**
From	**1**	0	0	3	0
	2	0	0	2	2
	3	0	1	0	0
	4	1	0	0	0

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Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)	Pedestrian Demand (Ped/hr)
07:45-08:00	**1**	265	265	7.53
	2	267	267	7.53
	3	400	400	
	4	545	545	22.59
08:00-08:15	**1**	316	316	8.99
	2	319	319	8.99
	3	477	477	
	4	651	651	26.97
08:15-08:30	**1**	388	388	11.01
	2	391	391	11.01
	3	585	585	
	4	797	797	33.03
08:30-08:45	**1**	388	388	11.01
	2	391	391	11.01
	3	585	585	
	4	797	797	33.03
08:45-09:00	**1**	316	316	8.99
	2	319	319	8.99
	3	477	477	
	4	651	651	26.97
09:00-09:15	**1**	265	265	7.53
	2	267	267	7.53
	3	400	400	
	4	545	545	22.59

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.42	6.80	0.7	A
2	0.38	5.66	0.6	A
3	0.54	7.11	1.1	A
4	0.65	8.58	1.9	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	265	476	7.53	1054	0.251	264	0.3	4.588	A
2	267	371	7.53	1140	0.234	266	0.3	4.188	A
3	400	290		1184	0.338	398	0.5	4.578	A
4	545	239	22.59	1294	0.421	542	0.7	4.785	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	316	571	8.99	998	0.317	316	0.5	5.318	A
2	319	445	8.99	1098	0.291	319	0.4	4.706	A
3	477	347		1147	0.416	477	0.7	5.377	A
4	651	286	26.97	1263	0.515	650	1.1	5.876	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	388	698	11.01	923	0.420	387	0.7	6.757	A
2	391	544	11.01	1040	0.376	390	0.6	5.636	A
3	585	425		1093	0.535	583	1.1	7.054	A
4	797	350	33.03	1219	0.654	794	1.8	8.441	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	388	700	11.01	921	0.421	388	0.7	6.800	A
2	391	546	11.01	1039	0.376	391	0.6	5.658	A
3	585	426		1092	0.535	585	1.1	7.111	A
4	797	351	33.03	1218	0.654	797	1.9	8.576	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	316	574	8.99	996	0.318	317	0.5	5.357	A
2	319	448	8.99	1096	0.291	320	0.4	4.730	A
3	477	349		1146	0.416	479	0.7	5.427	A
4	651	288	26.97	1262	0.516	654	1.1	5.974	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	265	480	7.53	1052	0.252	266	0.3	4.623	A
2	267	374	7.53	1139	0.235	268	0.3	4.211	A
3	400	292		1183	0.338	401	0.5	4.621	A
4	545	241	22.59	1293	0.421	546	0.7	4.848	A

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D18 - 2044 | Base + Comm & Masterplan & GCRR | PM

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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	8.92	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	8.92	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D18	2044	Base + Comm & Masterplan & GCRR	PM	ONE HOUR	16:45	18:15	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	463	100.000
2		✓	620	100.000
3		✓	484	100.000
4		✓	635	100.000

Demand overview (Pedestrians)

Arm	Average pedestrian flow (Ped/hr)
1	25.00
2	20.00
3	
4	20.00

Origin-Destination Data

Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	35	114	314
	2	40	0	280	300
	3	59	178	0	247
	4	309	195	131	0

Vehicle Mix

Heavy Vehicle %

		To			
		1	2	3	4
From	1	0	0	0	0
	2	0	0	0	1
	3	0	0	0	0
	4	0	0	0	0

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Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)	Pedestrian Demand (Ped/hr)
16:45-17:00	1	349	349	18.82
	2	467	467	15.06
	3	364	364	
	4	478	478	15.06
17:00-17:15	1	416	416	22.47
	2	557	557	17.98
	3	435	435	
	4	571	571	17.98
17:15-17:30	1	510	510	27.53
	2	683	683	22.02
	3	533	533	
	4	699	699	22.02
17:30-17:45	1	510	510	27.53
	2	683	683	22.02
	3	533	533	
	4	699	699	22.02
17:45-18:00	1	416	416	22.47
	2	557	557	17.98
	3	435	435	
	4	571	571	17.98
18:00-18:15	1	349	349	18.82
	2	467	467	15.06
	3	364	364	
	4	478	478	15.06

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.51	7.23	1.0	A
2	0.68	11.43	2.1	B
3	0.61	10.39	1.5	B
4	0.56	6.59	1.3	A

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	349	378	18.82	1112	0.314	347	0.5	4.693	A
2	467	419	15.06	1113	0.419	464	0.7	5.550	A
3	364	490		1058	0.344	362	0.5	5.156	A
4	478	207	15.06	1313	0.364	476	0.6	4.286	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	416	452	22.47	1068	0.390	416	0.6	5.513	A
2	557	502	17.98	1065	0.524	556	1.1	7.091	A
3	435	587		988	0.440	434	0.8	6.483	A
4	571	248	17.98	1286	0.444	570	0.8	5.023	A

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17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	510	553	27.53	1009	0.505	508	1.0	7.174	A
2	683	614	22.02	1000	0.683	679	2.1	11.134	B
3	533	717		882	0.604	530	1.5	10.155	B
4	699	303	22.02	1246	0.561	697	1.3	6.532	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	510	555	27.53	1007	0.506	510	1.0	7.233	A
2	683	615	22.02	999	0.684	682	2.1	11.428	B
3	533	720		879	0.606	533	1.5	10.394	B
4	699	305	22.02	1245	0.561	699	1.3	6.589	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	416	455	22.47	1066	0.390	418	0.6	5.566	A
2	557	504	17.98	1063	0.524	561	1.1	7.264	A
3	435	591		985	0.442	438	0.8	6.614	A
4	571	251	17.98	1284	0.445	573	0.8	5.071	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	349	380	18.82	1110	0.314	349	0.5	4.739	A
2	467	422	15.06	1111	0.420	468	0.7	5.640	A
3	364	494		1055	0.345	365	0.5	5.227	A
4	478	209	15.06	1312	0.364	479	0.6	4.324	A