

Appendix F Junction Assessments

Prepared for
West of England Councils

April 2016



1 The Square
Temple Quay
Bristol BS1 6DG
United Kingdom

Contents

Portishead Assessments

- R1 Wyndham Way - Quays Avenue - Serbert Way roundabout**
- R2 Wyndham Way - Sheepway - The Portbury Hundred -Portbury Common roundabout**
- R3-1 Wyndham Way - Town Centre mini roundabout without left turn**
- R3-2 Wyndham Way - Town Centre T-junction without right turn**
- R6 Station Rd_Harbour Rd T-Junction**

Pill Assessments

- R4 Pill_A369 St Georges Hill T-Junction**
- R7 Lodway - Heywood Rd T-Junction**

Junctions 8
ARCADY 8 - Roundabout Module
Version: 8.0.4.487 [15039,24/03/2014] © Copyright TRL Limited, 2015
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Filename: R1 - Wyndham Way - Quays Avenue - Serbert Way roundabout.arc8

Path: \\CWLFP01\Proj\Consulting\Transport Planning\PROJECTS\467470 (HS) MetroWest Phase 1 TA\Initial Junction Options Modelling\working

Report generation date: 07/12/2015 15:11:11

-
- » (Default Analysis Set) - 2015 Base, AM
 - » (Default Analysis Set) - 2015 Base, PM
 - » (Default Analysis Set) - 2019 Opening Year, AM
 - » (Default Analysis Set) - 2019 Opening Year, PM
 - » (Default Analysis Set) - 2019 Opening Year + Scheme, AM
 - » (Default Analysis Set) - 2019 Opening Year + Scheme, PM
 - » (Default Analysis Set) - 2029, AM
 - » (Default Analysis Set) - 2029, PM
 - » (Default Analysis Set) - 2029 + Scheme, AM
 - » (Default Analysis Set) - 2029 + Scheme, PM

Summary of junction performance

	AM							PM					
	Queue (PCU)	95% Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Queue (PCU)	95% Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)
	A1 - 2015 Base												
Arm 1	0.79	1.00	4.06	0.44	A	3.97	A	0.87	1.00	4.48	0.47	A	5.79
Arm 2	0.94	~1	3.20	0.49	A			1.83	2.00	4.75	0.65	A	
Arm 3	0.87	1.00	4.88	0.47	A			1.07	?	6.14	0.52	A	
Arm 4	0.27	~1	4.86	0.21	A			1.42	1.00	9.90	0.59	A	
	A1 - 2019 Opening Year												
Arm 1	0.84	1.00	4.21	0.46	A	4.13	A	0.97	1.00	4.79	0.49	A	6.43
Arm 2	1.01	?	3.31	0.50	A			2.10	3.00	5.23	0.68	A	
Arm 3	0.94	1.00	5.10	0.49	A			1.23	?	6.76	0.55	A	
Arm 4	0.28	~1	5.02	0.22	A			1.70	2.00	11.42	0.63	B	
	A1 - 2019 Opening Year + Scheme												
Arm 1	0.87	1.00	4.28	0.47	A	4.24	A	1.05	?	5.00	0.51	A	6.59
Arm 2	1.05	?	3.38	0.51	A			2.18	3.00	5.38	0.69	A	
Arm 3	1.00	200.00	5.32	0.50	A			1.26	?	6.89	0.56	A	
Arm 4	0.29	~1	5.16	0.23	A			1.74	2.00	11.68	0.64	B	
	A1 - 2029												
Arm 1	1.04	?	4.79	0.51	A	4.70	A	1.29	1.00	5.78	0.56	A	9.00
Arm 2	1.22	1.00	3.70	0.55	A			3.08	5.00	6.99	0.76	A	
Arm 3	1.20	?	5.97	0.55	A			1.81	1.00	9.06	0.65	A	
Arm 4	0.34	~1	5.56	0.25	A			3.01	9.00	18.62	0.76	C	
	A1 - 2029 + Scheme												
Arm 1	1.11	?	4.94	0.53	A	4.94	A	1.48	1.00	6.27	0.60	A	9.48
Arm 2	1.31	1.00	3.85	0.57	A			3.30	5.00	7.43	0.77	A	
Arm 3	1.34	1.00	6.45	0.57	A			1.89	1.00	9.39	0.66	A	
Arm 4	0.36	~1	5.85	0.26	A			3.17	10.00	19.69	0.77	C	

Values shown are the maximum values over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages.

"D1 - 2015 Base, AM" model duration: 08:00 - 09:30

"D2 - 2015 Base, PM" model duration: 17:00 - 18:30

"D3 - 2019 Opening Year, AM" model duration: 08:00 - 09:30

"D4 - 2019 Opening Year, PM" model duration: 17:00 - 18:30

"D5 - 2019 Opening Year + Scheme, AM" model duration: 08:00 - 09:30

"D6 - 2019 Opening Year + Scheme, PM" model duration: 17:00 - 18:30

"D7 - 2029, AM" model duration: 08:00 - 09:30

"D8 - 2029, PM" model duration: 17:00 - 18:30

"D9 - 2029 + Scheme, AM" model duration: 08:00 - 09:30

"D10 - 2029 + Scheme, PM" model duration: 17:00 - 18:30

Run using Junctions 8.0.4.487 at 07/12/2015 15:11:06

File summary

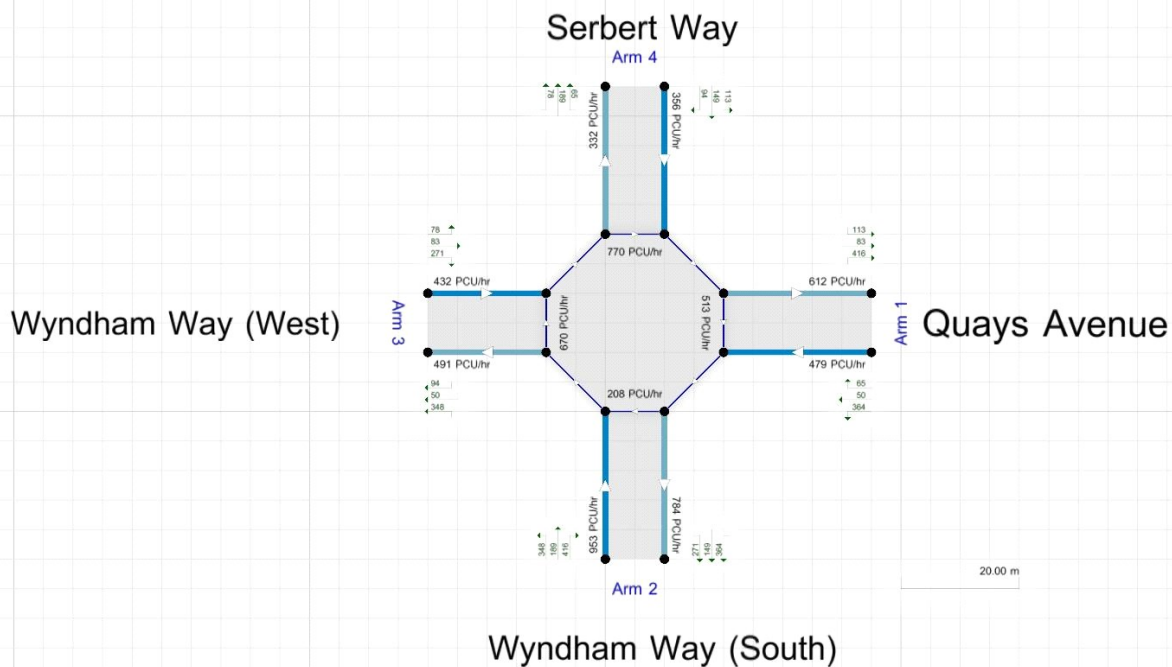
Title	(untitled)
Location	
Site Number	
Date	24/11/2015
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DT018866
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75	✓		N/A	0.85	36.00	20.00

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



Showing modelled flow through junction (PCU/hr).
Time Segment: 17:00-17:15
Showing Analysis Set "A1"; Demand Set "D1 - 2015 Base, AM"

The junction diagram reflects the last run of ARCADY.

(Default Analysis Set) - 2015 Base, 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.
Warning	Geometry	Arm 3 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relations
2015 Base, AM	2015 Base	AM		ONE HOUR	08:00	09:30	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	2015 Base AM	Roundabout	1,2,3,4				3.97	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	Quays Avenue	
2	2	Wyndham Way	
3	3	Wyndham Way	
4	4	Serbert Way	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1	0.00	99999.00		0.00
2	0.00	99999.00		0.00
3	0.00	99999.00		0.00
4	0.00	99999.00		0.00

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	3.50	8.20	38.00	33.00	50.00	47.00	
2	7.30	8.20	26.00	25.00	50.00	42.00	
3	3.50	6.75	48.00	24.00	50.00	37.00	
4	5.20	6.21	1.00	21.00	50.00	56.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.654	1998.121
2		(calculated)	(calculated)	0.728	2379.113
3		(calculated)	(calculated)	0.630	1839.704
4		(calculated)	(calculated)	0.546	1503.076

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	639.00	100.000
2	ONE HOUR	✓	968.00	100.000
3	ONE HOUR	✓	589.00	100.000
4	ONE HOUR	✓	179.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
08:00-08:15	1	481.07	481.07		
08:00-08:15	2	728.76	728.76		
08:00-08:15	3	443.43	443.43		
08:00-08:15	4	134.76	134.76		
08:15-08:30	1	574.45	574.45		
08:15-08:30	2	870.21	870.21		
08:15-08:30	3	529.50	529.50		
08:15-08:30	4	160.92	160.92		
08:30-08:45	1	703.55	703.55		
08:30-08:45	2	1065.79	1065.79		
08:30-08:45	3	648.50	648.50		
08:30-08:45	4	197.08	197.08		
08:45-09:00	1	703.55	703.55		
08:45-09:00	2	1065.79	1065.79		
08:45-09:00	3	648.50	648.50		
08:45-09:00	4	197.08	197.08		
09:00-09:15	1	574.45	574.45		
09:00-09:15	2	870.21	870.21		
09:00-09:15	3	529.50	529.50		
09:00-09:15	4	160.92	160.92		
09:15-09:30	1	481.07	481.07		
09:15-09:30	2	728.76	728.76		
09:15-09:30	3	443.43	443.43		
09:15-09:30	4	134.76	134.76		

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	444.000	124.000	71.000
	2	423.000	0.000	386.000	159.000
	3	75.000	443.000	0.000	71.000
	4	56.000	84.000	39.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.69	0.19	0.11
	2	0.44	0.00	0.40	0.16
	3	0.13	0.75	0.00	0.12
	4	0.31	0.47	0.22	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1	0.44	4.06	0.79	1.00	A	586.36	879.54	50.80	3.47	0.56	50.80	3.47
2	0.49	3.20	0.94	~1	A	888.25	1332.38	61.57	2.77	0.68	61.57	2.77
3	0.47	4.88	0.87	1.00	A	540.48	810.72	54.93	4.07	0.61	54.93	4.07
4	0.21	4.86	0.27	~1	A	164.25	246.38	17.46	4.25	0.19	17.46	4.25

Main Results for each time segment

Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	481.07	120.27	479.53	415.87	424.52	0.00	1720.66	1265.78	0.280	0.00	0.39	2.896	A
2	728.76	182.19	726.85	728.47	175.58	0.00	2251.30	2010.97	0.324	0.00	0.48	2.358	A
3	443.43	110.86	441.81	412.14	490.29	0.00	1530.65	988.91	0.290	0.00	0.41	3.302	A
4	134.76	33.69	134.21	225.93	706.17	0.00	1117.46	548.31	0.121	0.00	0.14	3.659	A

Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	574.45	143.61	573.90	497.62	508.24	0.00	1665.95	1265.77	0.345	0.39	0.52	3.294	A
2	870.21	217.55	869.56	871.98	210.15	0.00	2226.13	2010.97	0.391	0.48	0.64	2.652	A
3	529.50	132.37	528.88	493.14	586.58	0.00	1469.95	988.91	0.360	0.41	0.56	3.823	A
4	160.92	40.23	160.74	270.35	845.12	0.00	1041.59	548.31	0.154	0.14	0.18	4.085	A

Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	703.55	175.89	702.50	609.18	622.02	0.00	1591.58	1265.77	0.442	0.52	0.79	4.044	A
2	1065.79	266.45	1064.58	1067.27	257.25	0.00	2191.85	2010.97	0.486	0.64	0.94	3.191	A
3	648.50	162.13	647.26	603.70	718.12	0.00	1387.03	988.91	0.468	0.56	0.87	4.858	A
4	197.08	49.27	196.75	330.94	1034.44	0.00	938.21	548.31	0.210	0.18	0.26	4.853	A

Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	703.55	175.89	703.54	609.96	623.16	0.00	1590.84	1265.77	0.442	0.79	0.79	4.057	A
2	1065.79	266.45	1065.77	1069.06	257.63	0.00	2191.57	2010.97	0.486	0.94	0.94	3.197	A
3	648.50	162.13	648.48	604.45	718.96	0.00	1386.51	988.91	0.468	0.87	0.87	4.877	A
4	197.08	49.27	197.08	331.40	1036.04	0.00	937.34	548.31	0.210	0.26	0.27	4.862	A

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	574.45	143.61	575.49	498.81	509.97	0.00	1664.82	1265.77	0.345	0.79	0.53	3.309	A
2	870.21	217.55	871.41	874.71	210.75	0.00	2225.70	2010.97	0.391	0.94	0.65	2.662	A
3	529.50	132.37	530.73	494.29	587.87	0.00	1469.14	988.91	0.360	0.87	0.57	3.842	A
4	160.92	40.23	161.24	271.05	847.54	0.00	1040.27	548.31	0.155	0.27	0.18	4.096	A

Main results: (09:15-09:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	481.07	120.27	481.63	417.51	426.71	0.00	1719.23	1265.78	0.280	0.53	0.39	2.909	A
2	728.76	182.19	729.42	731.97	176.38	0.00	2250.72	2010.97	0.324	0.65	0.48	2.367	A
3	443.43	110.86	444.06	413.73	492.07	0.00	1529.53	988.91	0.290	0.57	0.41	3.317	A
4	134.76	33.69	134.94	226.85	709.27	0.00	1115.77	548.31	0.121	0.18	0.14	3.673	A

Queueing Delay Results for each time segment

Queueing Delay results: (08:00-08:15)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	5.68	0.38	2.896	A	A
2	7.03	0.47	2.358	A	A
3	5.96	0.40	3.302	A	A
4	2.01	0.13	3.659	A	A

Queueing Delay results: (08:15-08:30)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	7.72	0.51	3.294	A	A
2	9.44	0.63	2.652	A	A
3	8.23	0.55	3.823	A	A
4	2.68	0.18	4.085	A	A

Queueing Delay results: (08:30-08:45)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	11.53	0.77	4.044	A	A
2	13.82	0.92	3.191	A	A
3	12.69	0.85	4.858	A	A
4	3.88	0.26	4.853	A	A

Queueing Delay results: (08:45-09:00)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	11.82	0.79	4.057	A	A
2	14.13	0.94	3.197	A	A
3	13.09	0.87	4.877	A	A
4	3.97	0.26	4.862	A	A

Queueing Delay results: (09:00-09:15)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	8.10	0.54	3.309	A	A
2	9.84	0.66	2.662	A	A
3	8.70	0.58	3.842	A	A
4	2.81	0.19	4.096	A	A

Queueing Delay results: (09:15-09:30)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	5.94	0.40	2.909	A	A
2	7.31	0.49	2.367	A	A
3	6.26	0.42	3.317	A	A
4	2.10	0.14	3.673	A	A

Queue Variation Results for each time segment

Queue Variation results: (08:00-08:15)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.39	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	0.48	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	0.41	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	0.14	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A

Queue Variation results: (08:15-08:30)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.52	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	0.64	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	0.56	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	0.18	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A

Queue Variation results: (08:30-08:45)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.79	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	0.94	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	0.87	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	0.26	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A

Queue Variation results: (08:45-09:00)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.79	0.00	0.00	0.00	1.00			N/A	N/A
2	0.94	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	0.87	0.00	0.00	0.00	1.00			N/A	N/A
4	0.27	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A

Queue Variation results: (09:00-09:15)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.53	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	0.65	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	0.57	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	0.18	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A

Queue Variation results: (09:15-09:30)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.39	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	0.48	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	0.41	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	0.14	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A

(Default Analysis Set) - 2015 Base, 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.
Warning	Geometry	Arm 3 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relations
2015 Base, PM	2015 Base	PM		ONE HOUR	17:00	18:30	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	2015 Base AM	Roundabout	1,2,3,4				5.79	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	Quays Avenue	
2	2	Wyndham Way	
3	3	Wyndham Way	
4	4	Serbert Way	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1	0.00	99999.00		0.00
2	0.00	99999.00		0.00
3	0.00	99999.00		0.00
4	0.00	99999.00		0.00

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	3.50	8.20	38.00	33.00	50.00	47.00	
2	7.30	8.20	26.00	25.00	50.00	42.00	
3	3.50	6.75	48.00	24.00	50.00	37.00	
4	5.20	6.21	1.00	21.00	50.00	56.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.654	1998.121
2		(calculated)	(calculated)	0.728	2379.113
3		(calculated)	(calculated)	0.630	1839.704
4		(calculated)	(calculated)	0.546	1503.076

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	638.00	100.000
2	ONE HOUR	✓	1270.00	100.000
3	ONE HOUR	✓	576.00	100.000
4	ONE HOUR	✓	475.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
17:00-17:15	1	480.32	480.32		
17:00-17:15	2	956.12	956.12		
17:00-17:15	3	433.64	433.64		
17:00-17:15	4	357.60	357.60		
17:15-17:30	1	573.55	573.55		
17:15-17:30	2	1141.70	1141.70		
17:15-17:30	3	517.81	517.81		
17:15-17:30	4	427.02	427.02		
17:30-17:45	1	702.45	702.45		
17:30-17:45	2	1398.30	1398.30		
17:30-17:45	3	634.19	634.19		
17:30-17:45	4	522.98	522.98		
17:45-18:00	1	702.45	702.45		
17:45-18:00	2	1398.30	1398.30		
17:45-18:00	3	634.19	634.19		
17:45-18:00	4	522.98	522.98		
18:00-18:15	1	573.55	573.55		
18:00-18:15	2	1141.70	1141.70		
18:00-18:15	3	517.81	517.81		
18:00-18:15	4	427.02	427.02		
18:15-18:30	1	480.32	480.32		
18:15-18:30	2	956.12	956.12		
18:15-18:30	3	433.64	433.64		
18:15-18:30	4	357.60	357.60		

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	485.000	66.000	87.000
	2	554.000	0.000	464.000	252.000
	3	111.000	361.000	0.000	104.000
	4	151.000	199.000	125.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.76	0.10	0.14
	2	0.44	0.00	0.37	0.20
	3	0.19	0.63	0.00	0.18
	4	0.32	0.42	0.26	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1	0.47	4.48	0.87	1.00	A	585.44	878.16	54.73	3.74	0.61	54.73	3.74
2	0.65	4.75	1.83	2.00	A	1165.37	1748.06	108.73	3.73	1.21	108.74	3.73
3	0.52	6.14	1.07	?	A	528.55	792.82	63.82	4.83	0.71	63.82	4.83
4	0.59	9.90	1.42	1.00	A	435.87	653.80	78.31	7.19	0.87	78.32	7.19

Main Results for each time segment

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	480.32	120.08	478.70	612.06	513.27	0.00	1662.66	1351.33	0.289	0.00	0.40	3.036	A
2	956.12	239.03	953.13	783.58	208.39	0.00	2227.41	2025.99	0.429	0.00	0.75	2.820	A
3	433.64	108.41	431.89	491.34	670.18	0.00	1417.26	913.05	0.306	0.00	0.44	3.647	A
4	357.60	89.40	355.65	332.38	769.68	0.00	1082.78	611.92	0.330	0.00	0.49	4.938	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	573.55	143.39	572.94	732.54	614.65	0.00	1596.40	1351.34	0.359	0.40	0.56	3.515	A
2	1141.70	285.43	1140.40	938.07	249.51	0.00	2197.48	2026.00	0.520	0.75	1.07	3.400	A
3	517.81	129.45	517.05	588.03	801.88	0.00	1334.24	913.05	0.388	0.44	0.63	4.402	A
4	427.02	106.75	426.03	397.77	921.16	0.00	1000.07	611.92	0.427	0.49	0.74	6.261	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	702.45	175.61	701.22	895.96	751.30	0.00	1507.09	1351.33	0.466	0.56	0.87	4.461	A
2	1398.30	349.57	1395.32	1147.43	305.09	0.00	2157.02	2025.99	0.648	1.07	1.82	4.707	A
3	634.19	158.55	632.44	719.26	981.16	0.00	1221.23	913.05	0.519	0.63	1.07	6.095	A
4	522.98	130.75	520.34	486.68	1126.92	0.00	887.71	611.92	0.589	0.74	1.40	9.729	A

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	702.45	175.61	702.43	898.37	754.12	0.00	1505.24	1351.33	0.467	0.87	0.87	4.483	A
2	1398.30	349.57	1398.24	1150.49	306.06	0.00	2156.32	2025.99	0.648	1.82	1.83	4.748	A
3	634.19	158.55	634.15	721.12	983.17	0.00	1219.96	913.05	0.520	1.07	1.07	6.145	A
4	522.98	130.75	522.90	487.73	1129.59	0.00	886.25	611.92	0.590	1.40	1.42	9.901	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	573.55	143.39	574.77	736.04	618.70	0.00	1593.75	1351.34	0.360	0.87	0.57	3.536	A
2	1141.70	285.43	1144.66	942.56	250.91	0.00	2196.47	2026.00	0.520	1.83	1.09	3.434	A
3	517.81	129.45	519.55	590.74	804.83	0.00	1332.38	913.05	0.389	1.07	0.64	4.439	A
4	427.02	106.75	429.67	399.31	925.07	0.00	997.93	611.92	0.428	1.42	0.76	6.363	A

Main results: (18:15-18:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	480.32	120.08	480.95	615.39	516.90	0.00	1660.28	1351.33	0.289	0.57	0.41	3.055	A
2	956.12	239.03	957.46	788.13	209.72	0.00	2226.45	2025.99	0.429	1.09	0.76	2.841	A
3	433.64	108.41	434.43	493.94	673.23	0.00	1415.33	913.05	0.306	0.64	0.44	3.672	A
4	357.60	89.40	358.64	334.01	773.65	0.00	1080.61	611.92	0.331	0.76	0.50	4.994	A

Queueing Delay Results for each time segment

Queueing Delay results: (17:00-17:15)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	5.94	0.40	3.036	A	A
2	10.97	0.73	2.820	A	A
3	6.42	0.43	3.647	A	A
4	7.11	0.47	4.938	A	A

Queueing Delay results: (17:15-17:30)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	8.21	0.55	3.515	A	A
2	15.75	1.05	3.400	A	A
3	9.23	0.62	4.402	A	A
4	10.72	0.71	6.261	A	A

Queueing Delay results: (17:30-17:45)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	12.65	0.84	4.461	A	A
2	26.27	1.75	4.707	A	A
3	15.43	1.03	6.095	A	A
4	19.85	1.32	9.729	A	A

Queueing Delay results: (17:45-18:00)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	13.03	0.87	4.483	A	A
2	27.38	1.83	4.748	A	A
3	16.07	1.07	6.145	A	A
4	21.17	1.41	9.901	A	A

Queueing Delay results: (18:00-18:15)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	8.66	0.58	3.536	A	A
2	16.80	1.12	3.434	A	A
3	9.87	0.66	4.439	A	A
4	11.79	0.79	6.363	A	A

Queueing Delay results: (18:15-18:30)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	6.23	0.42	3.055	A	A
2	11.56	0.77	2.841	A	A
3	6.79	0.45	3.672	A	A
4	7.67	0.51	4.994	A	A

Queue Variation Results for each time segment

Queue Variation results: (17:00-17:15)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.40	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	0.75	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	0.44	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	0.49	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A

Queue Variation results: (17:15-17:30)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.56	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	1.07	0.00	0.00	2.00	2.00			N/A	N/A
3	0.63	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	0.74	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A

Queue Variation results: (17:30-17:45)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.87	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	1.82	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	1.07	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	1.40	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A

Queue Variation results: (17:45-18:00)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.87	0.00	0.00	0.00	1.00			N/A	N/A
2	1.83	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	1.07	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	1.42	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A

Queue Variation results: (18:00-18:15)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.57	-1	-1	-1	-1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	1.09	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	0.64	-1	-1	-1	-1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	0.76	0.00	0.00	0.00	1.00			N/A	N/A

Queue Variation results: (18:15-18:30)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.41	-1	-1	-1	-1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	0.76	0.00	0.00	0.00	1.00			N/A	N/A
3	0.44	-1	-1	-1	-1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	0.50	-1	-1	-1	-1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A

(Default Analysis Set) - 2019 Opening Year, 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.
Warning	Geometry	Arm 3 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relat
2019 Opening Year, AM	2019 Opening Year	AM		ONE HOUR	08:00	09:30	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	2015 Base AM	Roundabout	1,2,3,4				4.13	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	Quays Avenue	
2	2	Wyndham Way	
3	3	Wyndham Way	
4	4	Serbert Way	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1	0.00	99999.00		0.00
2	0.00	99999.00		0.00
3	0.00	99999.00		0.00
4	0.00	99999.00		0.00

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	3.50	8.20	38.00	33.00	50.00	47.00	
2	7.30	8.20	26.00	25.00	50.00	42.00	
3	3.50	6.75	48.00	24.00	50.00	37.00	
4	5.20	6.21	1.00	21.00	50.00	56.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.654	1998.121
2		(calculated)	(calculated)	0.728	2379.113
3		(calculated)	(calculated)	0.630	1839.704
4		(calculated)	(calculated)	0.546	1503.076

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	658.00	100.000
2	ONE HOUR	✓	998.00	100.000
3	ONE HOUR	✓	606.00	100.000
4	ONE HOUR	✓	185.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
08:00-08:15	1	495.38	495.38		
08:00-08:15	2	751.35	751.35		
08:00-08:15	3	456.23	456.23		
08:00-08:15	4	139.28	139.28		
08:15-08:30	1	591.53	591.53		
08:15-08:30	2	897.18	897.18		
08:15-08:30	3	544.78	544.78		
08:15-08:30	4	166.31	166.31		
08:30-08:45	1	724.47	724.47		
08:30-08:45	2	1098.82	1098.82		
08:30-08:45	3	667.22	667.22		
08:30-08:45	4	203.69	203.69		
08:45-09:00	1	724.47	724.47		
08:45-09:00	2	1098.82	1098.82		
08:45-09:00	3	667.22	667.22		
08:45-09:00	4	203.69	203.69		
09:00-09:15	1	591.53	591.53		
09:00-09:15	2	897.18	897.18		
09:00-09:15	3	544.78	544.78		
09:00-09:15	4	166.31	166.31		
09:15-09:30	1	495.38	495.38		
09:15-09:30	2	751.35	751.35		
09:15-09:30	3	456.23	456.23		
09:15-09:30	4	139.28	139.28		

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	457.000	128.000	73.000
	2	436.000	0.000	398.000	164.000
	3	77.000	456.000	0.000	73.000
	4	58.000	87.000	40.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.69	0.19	0.11
	2	0.44	0.00	0.40	0.16
	3	0.13	0.75	0.00	0.12
	4	0.31	0.47	0.22	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1	0.46	4.21	0.84	1.00	A	603.79	905.69	53.85	3.57	0.60	53.86	3.57
2	0.50	3.31	1.01	?	A	915.78	1373.67	65.21	2.85	0.72	65.22	2.85
3	0.49	5.10	0.94	1.00	A	556.08	834.11	58.47	4.21	0.65	58.47	4.21
4	0.22	5.02	0.28	~1	A	169.76	254.64	18.50	4.36	0.21	18.50	4.36

Main Results for each time segment

Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	495.38	123.84	493.76	428.61	437.24	0.00	1712.35	1265.78	0.289	0.00	0.41	2.950	A
2	751.35	187.84	749.35	750.17	180.82	0.00	2247.49	2011.36	0.334	0.00	0.50	2.400	A
3	456.23	114.06	454.52	424.88	505.29	0.00	1521.20	988.95	0.300	0.00	0.43	3.369	A
4	139.28	34.82	138.70	232.67	727.14	0.00	1106.01	548.28	0.126	0.00	0.14	3.720	A

Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	591.53	147.88	590.94	512.87	523.47	0.00	1655.99	1265.78	0.357	0.41	0.55	3.378	A
2	897.18	224.30	896.49	897.98	216.43	0.00	2221.56	2011.36	0.404	0.50	0.67	2.715	A
3	544.78	136.20	544.12	508.39	604.53	0.00	1458.64	988.95	0.373	0.43	0.59	3.934	A
4	166.31	41.58	166.12	278.42	870.22	0.00	1027.88	548.28	0.162	0.14	0.19	4.176	A

Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	724.47	181.12	723.32	627.82	640.62	0.00	1579.43	1265.77	0.459	0.55	0.84	4.200	A
2	1098.82	274.70	1097.50	1099.02	264.92	0.00	2186.27	2011.36	0.503	0.67	1.00	3.301	A
3	667.22	166.80	665.85	622.35	740.07	0.00	1373.20	988.95	0.486	0.59	0.93	5.081	A
4	203.69	50.92	203.33	340.81	1065.11	0.00	921.46	548.28	0.221	0.19	0.28	5.011	A

Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	724.47	181.12	724.45	628.67	641.87	0.00	1578.60	1265.77	0.459	0.84	0.84	4.214	A
2	1098.82	274.70	1098.80	1100.99	265.34	0.00	2185.96	2011.36	0.503	1.00	1.01	3.310	A
3	667.22	166.80	667.20	623.17	740.98	0.00	1372.63	988.95	0.486	0.93	0.94	5.102	A
4	203.69	50.92	203.68	341.31	1066.86	0.00	920.50	548.28	0.221	0.28	0.28	5.021	A

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	591.53	147.88	592.67	514.17	525.37	0.00	1654.75	1265.78	0.357	0.84	0.56	3.395	A
2	897.18	224.30	898.49	900.96	217.08	0.00	2221.09	2011.36	0.404	1.01	0.68	2.726	A
3	544.78	136.20	546.14	509.64	605.92	0.00	1457.76	988.95	0.374	0.94	0.60	3.954	A
4	166.31	41.58	166.67	279.19	872.88	0.00	1026.43	548.28	0.162	0.28	0.19	4.190	A

Main results: (09:15-09:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	495.38	123.84	495.98	430.34	439.56	0.00	1710.83	1265.78	0.290	0.56	0.41	2.964	A
2	751.35	187.84	752.05	753.87	181.66	0.00	2246.87	2011.36	0.334	0.68	0.50	2.410	A
3	456.23	114.06	456.91	426.56	507.16	0.00	1520.01	988.95	0.300	0.60	0.43	3.390	A
4	139.28	34.82	139.48	233.65	730.42	0.00	1104.22	548.28	0.126	0.19	0.15	3.734	A

Queueing Delay Results for each time segment

Queueing Delay results: (08:00-08:15)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	5.96	0.40	2.950	A	A
2	7.37	0.49	2.400	A	A
3	6.25	0.42	3.369	A	A
4	2.11	0.14	3.720	A	A

Queueing Delay results: (08:15-08:30)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	8.15	0.54	3.378	A	A
2	9.96	0.66	2.715	A	A
3	8.71	0.58	3.934	A	A
4	2.83	0.19	4.176	A	A

Queueing Delay results: (08:30-08:45)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	12.30	0.82	4.200	A	A
2	14.73	0.98	3.301	A	A
3	13.63	0.91	5.081	A	A
4	4.14	0.28	5.011	A	A

Queueing Delay results: (08:45-09:00)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	12.64	0.84	4.214	A	A
2	15.08	1.01	3.310	A	A
3	14.08	0.94	5.102	A	A
4	4.24	0.28	5.021	A	A

Queueing Delay results: (09:00-09:15)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	8.56	0.57	3.395	A	A
2	10.40	0.69	2.726	A	A
3	9.22	0.61	3.954	A	A
4	2.97	0.20	4.190	A	A

Queueing Delay results: (09:15-09:30)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	6.24	0.42	2.964	A	A
2	7.67	0.51	2.410	A	A
3	6.58	0.44	3.390	A	A
4	2.21	0.15	3.734	A	A

Queue Variation Results for each time segment

Queue Variation results: (08:00-08:15)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.41	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	0.50	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	0.43	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	0.14	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A

Queue Variation results: (08:15-08:30)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.55	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	0.67	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	0.59	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	0.19	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A

Queue Variation results: (08:30-08:45)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.84	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	1.00	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	0.93	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	0.28	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A

Queue Variation results: (08:45-09:00)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.84	0.00	0.00	0.00	1.00			N/A	N/A
2	1.01	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	0.94	0.00	0.00	0.00	1.00			N/A	N/A
4	0.28	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A

Queue Variation results: (09:00-09:15)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.56	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	0.68	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	0.60	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	0.19	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A

Queue Variation results: (09:15-09:30)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.41	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	0.50	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	0.43	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	0.15	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A

(Default Analysis Set) - 2019 Opening Year, 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.
Warning	Geometry	Arm 3 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relat
2019 Opening Year, PM	2019 Opening Year	PM		ONE HOUR	17:00	18:30	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	2015 Base AM	Roundabout	1,2,3,4				6.43	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	Quays Avenue	
2	2	Wyndham Way	
3	3	Wyndham Way	
4	4	Serbert Way	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1	0.00	99999.00		0.00
2	0.00	99999.00		0.00
3	0.00	99999.00		0.00
4	0.00	99999.00		0.00

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	3.50	8.20	38.00	33.00	50.00	47.00	
2	7.30	8.20	26.00	25.00	50.00	42.00	
3	3.50	6.75	48.00	24.00	50.00	37.00	
4	5.20	6.21	1.00	21.00	50.00	56.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.654	1998.121
2		(calculated)	(calculated)	0.728	2379.113
3		(calculated)	(calculated)	0.630	1839.704
4		(calculated)	(calculated)	0.546	1503.076

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	666.00	100.000
2	ONE HOUR	✓	1325.00	100.000
3	ONE HOUR	✓	600.00	100.000
4	ONE HOUR	✓	495.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
17:00-17:15	1	501.40	501.40		
17:00-17:15	2	997.53	997.53		
17:00-17:15	3	451.71	451.71		
17:00-17:15	4	372.66	372.66		
17:15-17:30	1	598.72	598.72		
17:15-17:30	2	1191.15	1191.15		
17:15-17:30	3	539.39	539.39		
17:15-17:30	4	444.99	444.99		
17:30-17:45	1	733.28	733.28		
17:30-17:45	2	1458.85	1458.85		
17:30-17:45	3	660.61	660.61		
17:30-17:45	4	545.01	545.01		
17:45-18:00	1	733.28	733.28		
17:45-18:00	2	1458.85	1458.85		
17:45-18:00	3	660.61	660.61		
17:45-18:00	4	545.01	545.01		
18:00-18:15	1	598.72	598.72		
18:00-18:15	2	1191.15	1191.15		
18:00-18:15	3	539.39	539.39		
18:00-18:15	4	444.99	444.99		
18:15-18:30	1	501.40	501.40		
18:15-18:30	2	997.53	997.53		
18:15-18:30	3	451.71	451.71		
18:15-18:30	4	372.66	372.66		

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	506.000	69.000	91.000
	2	578.000	0.000	484.000	263.000
	3	116.000	376.000	0.000	108.000
	4	157.000	208.000	130.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.76	0.10	0.14
	2	0.44	0.00	0.37	0.20
	3	0.19	0.63	0.00	0.18
	4	0.32	0.42	0.26	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1	0.49	4.79	0.97	1.00	A	611.13	916.70	60.06	3.93	0.67	60.06	3.93
2	0.68	5.23	2.10	3.00	A	1215.84	1823.76	121.71	4.00	1.35	121.72	4.00
3	0.55	6.76	1.23	?	A	550.57	825.86	71.27	5.18	0.79	71.27	5.18
4	0.63	11.42	1.70	2.00	B	454.22	681.33	90.11	7.94	1.00	90.12	7.94

Main Results for each time segment

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	501.40	125.35	499.66	638.22	534.89	0.00	1648.53	1351.25	0.304	0.00	0.43	3.130	A
2	997.53	249.38	994.29	817.20	217.35	0.00	2220.89	2025.85	0.449	0.00	0.81	2.928	A
3	451.71	112.93	449.82	512.27	699.36	0.00	1398.86	912.79	0.323	0.00	0.47	3.785	A
4	372.66	93.17	370.53	346.60	802.58	0.00	1064.82	611.79	0.350	0.00	0.53	5.170	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	598.72	149.68	598.03	763.85	640.53	0.00	1579.48	1351.26	0.379	0.43	0.61	3.666	A
2	1191.15	297.79	1189.66	978.33	260.24	0.00	2189.67	2025.85	0.544	0.81	1.18	3.595	A
3	539.39	134.85	538.52	613.08	836.81	0.00	1312.22	912.79	0.411	0.47	0.69	4.648	A
4	444.99	111.25	443.84	414.78	960.54	0.00	978.56	611.79	0.455	0.53	0.82	6.717	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	733.28	183.32	731.85	933.92	782.51	0.00	1486.69	1351.25	0.493	0.61	0.96	4.761	A
2	1458.85	364.71	1455.26	1196.29	318.07	0.00	2147.58	2025.85	0.679	1.18	2.08	5.173	A
3	660.61	165.15	658.51	749.65	1023.67	0.00	1194.43	912.79	0.553	0.69	1.22	6.690	A
4	545.01	136.25	541.63	507.38	1174.80	0.00	861.56	611.79	0.633	0.82	1.67	11.136	B

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	733.28	183.32	733.25	936.88	786.01	0.00	1484.40	1351.25	0.494	0.96	0.97	4.792	A
2	1458.85	364.71	1458.77	1200.00	319.25	0.00	2146.71	2025.85	0.680	2.08	2.10	5.231	A
3	660.61	165.15	660.56	751.93	1026.10	0.00	1192.90	912.79	0.554	1.22	1.23	6.762	A
4	545.01	136.25	544.87	508.64	1178.02	0.00	859.81	611.79	0.634	1.67	1.70	11.419	B

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	598.72	149.68	600.14	768.08	645.51	0.00	1576.23	1351.26	0.380	0.97	0.62	3.692	A
2	1191.15	297.79	1194.73	983.71	261.94	0.00	2188.43	2025.85	0.544	2.10	1.20	3.634	A
3	539.39	134.85	541.48	616.35	840.32	0.00	1310.01	912.79	0.412	1.23	0.71	4.698	A
4	444.99	111.25	448.40	416.61	965.19	0.00	976.02	611.79	0.456	1.70	0.85	6.865	A

Main results: (18:15-18:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	501.40	125.35	502.10	641.91	538.93	0.00	1645.89	1351.25	0.305	0.62	0.44	3.151	A
2	997.53	249.38	999.06	822.22	218.82	0.00	2219.83	2025.85	0.449	1.20	0.82	2.952	A
3	451.71	112.93	452.61	515.15	702.73	0.00	1396.74	912.79	0.323	0.71	0.48	3.818	A
4	372.66	93.17	373.88	348.38	806.96	0.00	1062.43	611.79	0.351	0.85	0.55	5.237	A

Queueing Delay Results for each time segment

Queueing Delay results: (17:00-17:15)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	6.39	0.43	3.130	A	A
2	11.87	0.79	2.928	A	A
3	6.93	0.46	3.785	A	A
4	7.75	0.52	5.170	A	A

Queueing Delay results: (17:15-17:30)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	8.93	0.60	3.666	A	A
2	17.33	1.16	3.595	A	A
3	10.14	0.68	4.648	A	A
4	11.95	0.80	6.717	A	A

Queueing Delay results: (17:30-17:45)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	14.05	0.94	4.761	A	A
2	29.95	2.00	5.173	A	A
3	17.55	1.17	6.690	A	A
4	23.42	1.56	11.136	B	B

Queueing Delay results: (17:45-18:00)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	14.52	0.97	4.792	A	A
2	31.41	2.09	5.231	A	A
3	18.38	1.23	6.762	A	A
4	25.31	1.69	11.419	B	B

Queueing Delay results: (18:00-18:15)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	9.46	0.63	3.692	A	A
2	18.60	1.24	3.634	A	A
3	10.90	0.73	4.698	A	A
4	13.29	0.89	6.865	A	A

Queueing Delay results: (18:15-18:30)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	6.72	0.45	3.151	A	A
2	12.56	0.84	2.952	A	A
3	7.36	0.49	3.818	A	A
4	8.40	0.56	5.237	A	A

Queue Variation Results for each time segment

Queue Variation results: (17:00-17:15)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.43	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	0.81	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	0.47	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	0.53	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A

Queue Variation results: (17:15-17:30)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.61	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	1.18	0.00	0.00	2.00	3.00			N/A	N/A
3	0.69	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	0.82	0.00	0.00	1.00	1.00			N/A	N/A

Queue Variation results: (17:30-17:45)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.96	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	2.08	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	1.22	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	1.67	0.00	0.00	0.00	2.00			N/A	N/A

Queue Variation results: (17:45-18:00)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.97	0.00	0.00	0.00	1.00			N/A	N/A
2	2.10	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	1.23	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	1.70	0.00	0.00	0.00	2.00			N/A	N/A

Queue Variation results: (18:00-18:15)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.62	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	1.20	0.00	0.00	1.00	2.00			N/A	N/A
3	0.71	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	0.85	0.00	0.00	1.00	1.00			N/A	N/A

Queue Variation results: (18:15-18:30)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.44	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	0.82	0.00	0.00	1.00	1.00			N/A	N/A
3	0.48	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	0.55	0.00	0.00	0.00	1.00			N/A	N/A

(Default Analysis Set) - 2019 Opening Year + Scheme, 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.
Warning	Geometry	Arm 3 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Rela
2019 Opening Year + Scheme, AM	2019 Opening Year + Scheme	AM		ONE HOUR	08:00	09:30	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	2015 Base AM	Roundabout	1,2,3,4				4.24	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	Quays Avenue	
2	2	Wyndham Way	
3	3	Wyndham Way	
4	4	Serbert Way	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1	0.00	99999.00		0.00
2	0.00	99999.00		0.00
3	0.00	99999.00		0.00
4	0.00	99999.00		0.00

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	3.50	8.20	38.00	33.00	50.00	47.00	
2	7.30	8.20	26.00	25.00	50.00	42.00	
3	3.50	6.75	48.00	24.00	50.00	37.00	
4	5.20	6.21	1.00	21.00	50.00	56.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.654	1998.121
2		(calculated)	(calculated)	0.728	2379.113
3		(calculated)	(calculated)	0.630	1839.704
4		(calculated)	(calculated)	0.546	1503.076

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	670.00	100.000
2	ONE HOUR	✓	1017.00	100.000
3	ONE HOUR	✓	620.00	100.000
4	ONE HOUR	✓	185.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
08:00-08:15	1	504.41	504.41		
08:00-08:15	2	765.65	765.65		
08:00-08:15	3	466.77	466.77		
08:00-08:15	4	139.28	139.28		
08:15-08:30	1	602.32	602.32		
08:15-08:30	2	914.26	914.26		
08:15-08:30	3	557.37	557.37		
08:15-08:30	4	166.31	166.31		
08:30-08:45	1	737.68	737.68		
08:30-08:45	2	1119.74	1119.74		
08:30-08:45	3	682.63	682.63		
08:30-08:45	4	203.69	203.69		
08:45-09:00	1	737.68	737.68		
08:45-09:00	2	1119.74	1119.74		
08:45-09:00	3	682.63	682.63		
08:45-09:00	4	203.69	203.69		
09:00-09:15	1	602.32	602.32		
09:00-09:15	2	914.26	914.26		
09:00-09:15	3	557.37	557.37		
09:00-09:15	4	166.31	166.31		
09:15-09:30	1	504.41	504.41		
09:15-09:30	2	765.65	765.65		
09:15-09:30	3	466.77	466.77		
09:15-09:30	4	139.28	139.28		

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	467.000	130.000	73.000
	2	455.000	0.000	398.000	164.000
	3	91.000	456.000	0.000	73.000
	4	58.000	87.000	40.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.70	0.19	0.11
	2	0.45	0.00	0.39	0.16
	3	0.15	0.74	0.00	0.12
	4	0.31	0.47	0.22	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1	0.47	4.28	0.87	1.00	A	614.80	922.21	55.49	3.61	0.62	55.49	3.61
2	0.51	3.38	1.05	?	A	933.22	1399.83	67.53	2.89	0.75	67.53	2.89
3	0.50	5.32	1.00	200.00	A	568.92	853.38	61.70	4.34	0.69	61.71	4.34
4	0.23	5.16	0.29	~1	A	169.76	254.64	18.91	4.46	0.21	18.91	4.46

Main Results for each time segment

Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	504.41	126.10	502.75	453.36	437.21	0.00	1712.37	1284.91	0.295	0.00	0.42	2.972	A
2	765.65	191.41	763.59	757.64	182.31	0.00	2246.40	2010.78	0.341	0.00	0.51	2.425	A
3	466.77	116.69	464.99	426.37	519.54	0.00	1512.21	979.99	0.309	0.00	0.44	3.431	A
4	139.28	34.82	138.70	232.66	751.87	0.00	1092.51	539.71	0.127	0.00	0.15	3.772	A

Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	602.32	150.58	601.71	542.49	523.45	0.00	1656.01	1284.91	0.364	0.42	0.57	3.413	A
2	914.26	228.57	913.54	906.93	218.22	0.00	2220.26	2010.78	0.412	0.51	0.70	2.753	A
3	557.37	139.34	556.66	510.17	621.59	0.00	1447.89	979.99	0.385	0.44	0.62	4.035	A
4	166.31	41.58	166.11	278.42	899.83	0.00	1011.72	539.71	0.164	0.15	0.20	4.256	A

Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	737.68	184.42	736.48	664.06	640.53	0.00	1579.48	1284.90	0.467	0.57	0.87	4.264	A
2	1119.74	279.93	1118.35	1109.91	267.10	0.00	2184.68	2010.78	0.513	0.70	1.04	3.371	A
3	682.63	170.66	681.13	624.52	760.93	0.00	1360.05	979.99	0.502	0.62	1.00	5.290	A
4	203.69	50.92	203.31	340.79	1101.28	0.00	901.71	539.71	0.226	0.20	0.29	5.152	A

Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	737.68	184.42	737.67	665.00	641.87	0.00	1578.61	1284.90	0.467	0.87	0.87	4.280	A
2	1119.74	279.93	1119.72	1112.00	267.54	0.00	2184.36	2010.78	0.513	1.04	1.05	3.380	A
3	682.63	170.66	682.61	625.37	761.89	0.00	1359.44	979.99	0.502	1.00	1.00	5.318	A
4	203.69	50.92	203.68	341.31	1103.19	0.00	900.67	539.71	0.226	0.29	0.29	5.164	A

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	602.32	150.58	603.51	543.93	525.45	0.00	1654.70	1284.91	0.364	0.87	0.58	3.427	A
2	914.26	228.57	915.64	910.07	218.89	0.00	2219.77	2010.78	0.412	1.05	0.70	2.764	A
3	557.37	139.34	558.85	511.47	623.06	0.00	1446.96	979.99	0.385	1.00	0.63	4.061	A
4	166.31	41.58	166.68	279.21	902.70	0.00	1010.15	539.71	0.165	0.29	0.20	4.269	A

Main results: (09:15-09:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	504.41	126.10	505.03	455.22	439.59	0.00	1710.82	1284.91	0.295	0.58	0.42	2.986	A
2	765.65	191.41	766.39	761.45	183.18	0.00	2245.77	2010.78	0.341	0.70	0.52	2.436	A
3	466.77	116.69	467.49	428.07	521.49	0.00	1510.98	979.99	0.309	0.63	0.45	3.451	A
4	139.28	34.82	139.48	233.66	755.33	0.00	1090.62	539.71	0.128	0.20	0.15	3.784	A

Queueing Delay Results for each time segment

Queueing Delay results: (08:00-08:15)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	6.11	0.41	2.972	A	A
2	7.59	0.51	2.425	A	A
3	6.51	0.43	3.431	A	A
4	2.14	0.14	3.772	A	A

Queueing Delay results: (08:15-08:30)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	8.38	0.56	3.413	A	A
2	10.29	0.69	2.753	A	A
3	9.14	0.61	4.035	A	A
4	2.89	0.19	4.256	A	A

Queueing Delay results: (08:30-08:45)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	12.71	0.85	4.264	A	A
2	15.31	1.02	3.371	A	A
3	14.49	0.97	5.290	A	A
4	4.25	0.28	5.152	A	A

Queueing Delay results: (08:45-09:00)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	13.07	0.87	4.280	A	A
2	15.69	1.05	3.380	A	A
3	15.00	1.00	5.318	A	A
4	4.36	0.29	5.164	A	A

Queueing Delay results: (09:00-09:15)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	8.81	0.59	3.427	A	A
2	10.75	0.72	2.764	A	A
3	9.70	0.65	4.061	A	A
4	3.03	0.20	4.269	A	A

Queueing Delay results: (09:15-09:30)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	6.40	0.43	2.986	A	A
2	7.90	0.53	2.436	A	A
3	6.86	0.46	3.451	A	A
4	2.24	0.15	3.784	A	A

Queue Variation Results for each time segment

Queue Variation results: (08:00-08:15)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.42	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	0.51	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	0.44	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	0.15	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A

Queue Variation results: (08:15-08:30)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.57	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	0.70	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	0.62	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	0.20	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A

Queue Variation results: (08:30-08:45)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.87	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	1.04	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	1.00	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	0.29	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A

Queue Variation results: (08:45-09:00)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.87	0.00	0.00	0.00	1.00			N/A	N/A
2	1.05	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	1.00	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	0.29	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A

Queue Variation results: (09:00-09:15)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.58	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	0.70	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	0.63	0.00	0.00	0.00	>199			N/A	N/A
4	0.20	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A

Queue Variation results: (09:15-09:30)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.42	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	0.52	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	0.45	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	0.15	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A

(Default Analysis Set) - 2019 Opening Year + Scheme, 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.
Warning	Geometry	Arm 3 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Rela
2019 Opening Year + Scheme, PM	2019 Opening Year + Scheme	PM		ONE HOUR	17:00	18:30	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	2015 Base AM	Roundabout	1,2,3,4				6.59	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	Quays Avenue	
2	2	Wyndham Way	
3	3	Wyndham Way	
4	4	Serbert Way	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1	0.00	99999.00		0.00
2	0.00	99999.00		0.00
3	0.00	99999.00		0.00
4	0.00	99999.00		0.00

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	3.50	8.20	38.00	33.00	50.00	47.00	
2	7.30	8.20	26.00	25.00	50.00	42.00	
3	3.50	6.75	48.00	24.00	50.00	37.00	
4	5.20	6.21	1.00	21.00	50.00	56.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.654	1998.121
2		(calculated)	(calculated)	0.728	2379.113
3		(calculated)	(calculated)	0.630	1839.704
4		(calculated)	(calculated)	0.546	1503.076

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	694.00	100.000
2	ONE HOUR	✓	1334.00	100.000
3	ONE HOUR	✓	603.00	100.000
4	ONE HOUR	✓	495.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
17:00-17:15	1	522.48	522.48		
17:00-17:15	2	1004.31	1004.31		
17:00-17:15	3	453.97	453.97		
17:00-17:15	4	372.66	372.66		
17:15-17:30	1	623.89	623.89		
17:15-17:30	2	1199.24	1199.24		
17:15-17:30	3	542.08	542.08		
17:15-17:30	4	444.99	444.99		
17:30-17:45	1	764.11	764.11		
17:30-17:45	2	1468.76	1468.76		
17:30-17:45	3	663.92	663.92		
17:30-17:45	4	545.01	545.01		
17:45-18:00	1	764.11	764.11		
17:45-18:00	2	1468.76	1468.76		
17:45-18:00	3	663.92	663.92		
17:45-18:00	4	545.01	545.01		
18:00-18:15	1	623.89	623.89		
18:00-18:15	2	1199.24	1199.24		
18:00-18:15	3	542.08	542.08		
18:00-18:15	4	444.99	444.99		
18:15-18:30	1	522.48	522.48		
18:15-18:30	2	1004.31	1004.31		
18:15-18:30	3	453.97	453.97		
18:15-18:30	4	372.66	372.66		

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	522.000	81.000	91.000
	2	587.000	0.000	484.000	263.000
	3	119.000	376.000	0.000	108.000
	4	157.000	208.000	130.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.75	0.12	0.13
	2	0.44	0.00	0.36	0.20
	3	0.20	0.62	0.00	0.18
	4	0.32	0.42	0.26	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1	0.51	5.00	1.05	?	A	636.83	955.24	64.57	4.06	0.72	64.57	4.06
2	0.69	5.38	2.18	3.00	A	1224.10	1836.15	125.10	4.09	1.39	125.11	4.09
3	0.56	6.89	1.26	?	A	553.32	829.99	72.56	5.25	0.81	72.57	5.25
4	0.64	11.68	1.74	2.00	B	454.22	681.33	91.56	8.06	1.02	91.57	8.06

Main Results for each time segment

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	522.48	130.62	520.63	647.20	534.87	0.00	1648.54	1353.58	0.317	0.00	0.46	3.186	A
2	1004.31	251.08	1001.01	829.17	226.34	0.00	2214.35	2018.88	0.454	0.00	0.83	2.960	A
3	453.97	113.49	452.05	521.26	706.09	0.00	1394.62	916.95	0.326	0.00	0.48	3.811	A
4	372.66	93.17	370.51	346.58	811.56	0.00	1059.92	606.94	0.352	0.00	0.54	5.207	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	623.89	155.97	623.14	774.59	640.51	0.00	1579.50	1353.59	0.395	0.46	0.65	3.760	A
2	1199.24	299.81	1197.70	992.66	271.00	0.00	2181.84	2018.88	0.550	0.83	1.21	3.651	A
3	542.08	135.52	541.19	623.84	844.86	0.00	1307.15	916.95	0.415	0.48	0.70	4.693	A
4	444.99	111.25	443.82	414.77	971.29	0.00	972.69	606.95	0.457	0.54	0.83	6.791	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	764.11	191.03	762.52	946.98	782.40	0.00	1486.76	1353.58	0.514	0.65	1.05	4.959	A
2	1468.76	367.19	1464.98	1213.72	331.20	0.00	2138.02	2018.88	0.687	1.21	2.15	5.319	A
3	663.92	165.98	661.74	762.74	1033.44	0.00	1188.27	916.95	0.559	0.70	1.25	6.808	A
4	545.01	136.25	541.52	507.33	1187.86	0.00	854.43	606.94	0.638	0.83	1.70	11.379	B

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	764.11	191.03	764.07	950.09	786.00	0.00	1484.41	1353.58	0.515	1.05	1.05	4.997	A
2	1468.76	367.19	1468.67	1217.61	332.46	0.00	2137.10	2018.88	0.687	2.15	2.18	5.383	A
3	663.92	165.98	663.86	765.14	1036.00	0.00	1186.66	916.95	0.559	1.25	1.26	6.885	A
4	545.01	136.25	544.86	508.64	1191.22	0.00	852.60	606.94	0.639	1.70	1.74	11.684	B

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	623.89	155.97	625.47	779.02	645.62	0.00	1576.15	1353.59	0.396	1.05	0.66	3.792	A
2	1199.24	299.81	1203.01	998.29	272.81	0.00	2180.52	2018.88	0.550	2.18	1.23	3.695	A
3	542.08	135.52	544.25	627.27	848.55	0.00	1304.82	916.95	0.415	1.26	0.72	4.746	A
4	444.99	111.25	448.51	416.67	976.13	0.00	970.05	606.95	0.459	1.74	0.86	6.947	A

Main results: (18:15-18:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	522.48	130.62	523.25	650.99	538.96	0.00	1645.87	1353.58	0.317	0.66	0.47	3.210	A
2	1004.31	251.08	1005.89	834.33	227.88	0.00	2213.23	2018.88	0.454	1.23	0.84	2.985	A
3	453.97	113.49	454.89	524.22	709.55	0.00	1392.44	916.95	0.326	0.72	0.49	3.843	A
4	372.66	93.17	373.90	348.40	816.04	0.00	1057.47	606.94	0.352	0.86	0.55	5.275	A

Queueing Delay Results for each time segment

Queueing Delay results: (17:00-17:15)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	6.77	0.45	3.186	A	A
2	12.08	0.81	2.960	A	A
3	7.02	0.47	3.811	A	A
4	7.80	0.52	5.207	A	A

Queueing Delay results: (17:15-17:30)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	9.54	0.64	3.760	A	A
2	17.71	1.18	3.651	A	A
3	10.29	0.69	4.693	A	A
4	12.07	0.80	6.791	A	A

Queueing Delay results: (17:30-17:45)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	15.23	1.02	4.959	A	A
2	30.95	2.06	5.319	A	A
3	17.93	1.20	6.808	A	A
4	23.89	1.59	11.379	B	B

Queueing Delay results: (17:45-18:00)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	15.76	1.05	4.997	A	A
2	32.52	2.17	5.383	A	A
3	18.80	1.25	6.885	A	A
4	25.88	1.73	11.684	B	B

Queueing Delay results: (18:00-18:15)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	10.13	0.68	3.792	A	A
2	19.05	1.27	3.695	A	A
3	11.08	0.74	4.746	A	A
4	13.45	0.90	6.947	A	A

Queueing Delay results: (18:15-18:30)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	7.14	0.48	3.210	A	A
2	12.79	0.85	2.985	A	A
3	7.45	0.50	3.843	A	A
4	8.47	0.56	5.275	A	A

Queue Variation Results for each time segment

Queue Variation results: (17:00-17:15)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.46	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	0.83	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	0.48	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	0.54	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A

Queue Variation results: (17:15-17:30)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.65	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	1.21	0.00	0.00	2.00	3.00			N/A	N/A
3	0.70	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	0.83	0.00	0.00	1.00	1.00			N/A	N/A

Queue Variation results: (17:30-17:45)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	1.05	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	2.15	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	1.25	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	1.70	0.00	0.00	0.00	2.00			N/A	N/A

Queue Variation results: (17:45-18:00)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	1.05	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	2.18	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	1.26	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	1.74	0.00	0.00	0.00	2.00			N/A	N/A

Queue Variation results: (18:00-18:15)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.66	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	1.23	0.00	0.00	1.00	2.00			N/A	N/A
3	0.72	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	0.86	0.00	0.00	1.00	1.00			N/A	N/A

Queue Variation results: (18:15-18:30)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.47	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	0.84	0.00	0.00	1.00	1.00			N/A	N/A
3	0.49	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	0.55	0.00	0.00	0.00	1.00			N/A	N/A

(Default Analysis Set) - 2029, 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.
Warning	Geometry	Arm 3 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set(s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relations
2029, AM	2029	AM		ONE HOUR	08:00	09:30	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	2015 Base AM	Roundabout	1,2,3,4				4.70	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	Quays Avenue	
2	2	Wyndham Way	
3	3	Wyndham Way	
4	4	Serbert Way	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1	0.00	99999.00		0.00
2	0.00	99999.00		0.00
3	0.00	99999.00		0.00
4	0.00	99999.00		0.00

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	3.50	8.20	38.00	33.00	50.00	47.00	
2	7.30	8.20	26.00	25.00	50.00	42.00	
3	3.50	6.75	48.00	24.00	50.00	37.00	
4	5.20	6.21	1.00	21.00	50.00	56.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.654	1998.121
2		(calculated)	(calculated)	0.728	2379.113
3		(calculated)	(calculated)	0.630	1839.704
4		(calculated)	(calculated)	0.546	1503.076

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	717.00	100.000
2	ONE HOUR	✓	1086.00	100.000
3	ONE HOUR	✓	661.00	100.000
4	ONE HOUR	✓	201.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
08:00-08:15	1	539.80	539.80		
08:00-08:15	2	817.60	817.60		
08:00-08:15	3	497.64	497.64		
08:00-08:15	4	151.32	151.32		
08:15-08:30	1	644.57	644.57		
08:15-08:30	2	976.29	976.29		
08:15-08:30	3	594.23	594.23		
08:15-08:30	4	180.69	180.69		
08:30-08:45	1	789.43	789.43		
08:30-08:45	2	1195.71	1195.71		
08:30-08:45	3	727.77	727.77		
08:30-08:45	4	221.31	221.31		
08:45-09:00	1	789.43	789.43		
08:45-09:00	2	1195.71	1195.71		
08:45-09:00	3	727.77	727.77		
08:45-09:00	4	221.31	221.31		
09:00-09:15	1	644.57	644.57		
09:00-09:15	2	976.29	976.29		
09:00-09:15	3	594.23	594.23		
09:00-09:15	4	180.69	180.69		
09:15-09:30	1	539.80	539.80		
09:15-09:30	2	817.60	817.60		
09:15-09:30	3	497.64	497.64		
09:15-09:30	4	151.32	151.32		

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	498.000	139.000	80.000
	2	475.000	0.000	433.000	178.000
	3	84.000	497.000	0.000	80.000
	4	63.000	94.000	44.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.69	0.19	0.11
	2	0.44	0.00	0.40	0.16
	3	0.13	0.75	0.00	0.12
	4	0.31	0.47	0.22	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1	0.51	4.79	1.04	?	A	657.93	986.90	64.62	3.93	0.72	64.62	3.93
2	0.55	3.70	1.22	1.00	A	996.53	1494.80	77.25	3.10	0.86	77.26	3.10
3	0.55	5.97	1.20	?	A	606.55	909.82	71.63	4.72	0.80	71.63	4.72
4	0.25	5.56	0.34	~1	A	184.44	276.66	21.75	4.72	0.24	21.75	4.72

Main Results for each time segment

Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	539.80	134.95	537.92	466.81	476.12	0.00	1686.94	1266.17	0.320	0.00	0.47	3.127	A
2	817.60	204.40	815.30	816.75	197.28	0.00	2235.50	2010.20	0.366	0.00	0.57	2.530	A
3	497.64	124.41	495.65	462.34	550.25	0.00	1492.85	988.74	0.333	0.00	0.50	3.602	A
4	151.32	37.83	150.67	253.64	792.26	0.00	1070.45	548.40	0.141	0.00	0.16	3.911	A

Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	644.57	161.14	643.83	558.61	570.05	0.00	1625.55	1266.17	0.397	0.47	0.65	3.666	A
2	976.29	244.07	975.43	977.72	236.15	0.00	2207.20	2010.20	0.442	0.57	0.79	2.921	A
3	594.23	148.56	593.37	553.23	658.35	0.00	1424.71	988.74	0.417	0.50	0.71	4.326	A
4	180.69	45.17	180.46	303.53	948.20	0.00	985.30	548.40	0.183	0.16	0.22	4.472	A

Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	789.43	197.36	787.89	683.70	697.39	0.00	1542.32	1266.17	0.512	0.65	1.04	4.762	A
2	1195.71	298.93	1193.99	1196.29	289.00	0.00	2168.74	2010.20	0.551	0.79	1.22	3.687	A
3	727.77	181.94	725.86	677.14	805.84	0.00	1331.74	988.74	0.546	0.71	1.19	5.922	A
4	221.31	55.33	220.84	371.46	1160.25	0.00	869.51	548.40	0.255	0.22	0.34	5.546	A

Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	789.43	197.36	789.41	684.82	699.11	0.00	1541.19	1266.17	0.512	1.04	1.04	4.788	A
2	1195.71	298.93	1195.69	1198.96	289.56	0.00	2168.33	2010.20	0.551	1.22	1.22	3.700	A
3	727.77	181.94	727.74	678.21	807.03	0.00	1330.99	988.74	0.547	1.19	1.20	5.967	A
4	221.31	55.33	221.30	372.13	1162.63	0.00	868.21	548.40	0.255	0.34	0.34	5.564	A

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	644.57	161.14	646.09	560.29	572.59	0.00	1623.88	1266.17	0.397	1.04	0.66	3.686	A
2	976.29	244.07	977.99	981.69	237.00	0.00	2206.59	2010.20	0.442	1.22	0.80	2.935	A
3	594.23	148.56	596.13	554.85	660.15	0.00	1423.58	988.74	0.417	1.20	0.72	4.361	A
4	180.69	45.17	181.15	304.53	951.74	0.00	983.37	548.40	0.184	0.34	0.23	4.491	A

Main results: (09:15-09:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	539.80	134.95	540.55	468.84	478.89	0.00	1685.13	1266.17	0.320	0.66	0.47	3.149	A
2	817.60	204.40	818.47	821.15	198.28	0.00	2234.77	2010.20	0.366	0.80	0.58	2.544	A
3	497.64	124.41	498.51	464.31	552.45	0.00	1491.47	988.74	0.334	0.72	0.50	3.630	A
4	151.32	37.83	151.57	254.80	796.16	0.00	1068.32	548.40	0.142	0.23	0.17	3.929	A

Queueing Delay Results for each time segment

Queueing Delay results: (08:00-08:15)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	6.87	0.46	3.127	A	A
2	8.45	0.56	2.530	A	A
3	7.28	0.49	3.602	A	A
4	2.40	0.16	3.911	A	A

Queueing Delay results: (08:15-08:30)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	9.61	0.64	3.666	A	A
2	11.63	0.78	2.921	A	A
3	10.41	0.69	4.326	A	A
4	3.29	0.22	4.472	A	A

Queueing Delay results: (08:30-08:45)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	15.12	1.01	4.762	A	A
2	17.82	1.19	3.687	A	A
3	17.20	1.15	5.922	A	A
4	4.96	0.33	5.546	A	A

Queueing Delay results: (08:45-09:00)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	15.62	1.04	4.788	A	A
2	18.32	1.22	3.700	A	A
3	17.91	1.19	5.967	A	A
4	5.10	0.34	5.564	A	A

Queueing Delay results: (09:00-09:15)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	10.17	0.68	3.686	A	A
2	12.21	0.81	2.935	A	A
3	11.13	0.74	4.361	A	A
4	3.47	0.23	4.491	A	A

Queueing Delay results: (09:15-09:30)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	7.23	0.48	3.149	A	A
2	8.82	0.59	2.544	A	A
3	7.70	0.51	3.630	A	A
4	2.53	0.17	3.929	A	A

Queue Variation Results for each time segment

Queue Variation results: (08:00-08:15)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.47	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	0.57	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	0.50	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	0.16	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A

Queue Variation results: (08:15-08:30)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.65	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	0.79	0.00	0.00	0.00	1.00			N/A	N/A
3	0.71	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	0.22	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A

Queue Variation results: (08:30-08:45)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	1.04	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	1.22	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	1.19	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	0.34	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A

Queue Variation results: (08:45-09:00)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	1.04	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	1.22	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	1.20	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	0.34	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A

Queue Variation results: (09:00-09:15)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.66	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	0.80	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	0.72	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	0.23	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A

Queue Variation results: (09:15-09:30)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.47	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	0.58	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	0.50	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	0.17	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A

(Default Analysis Set) - 2029, 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.
Warning	Geometry	Arm 3 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relations
2029, PM	2029	PM		ONE HOUR	17:00	18:30	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	2015 Base AM	Roundabout	1,2,3,4				9.00	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	Quays Avenue	
2	2	Wyndham Way	
3	3	Wyndham Way	
4	4	Serbert Way	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1	0.00	99999.00		0.00
2	0.00	99999.00		0.00
3	0.00	99999.00		0.00
4	0.00	99999.00		0.00

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	3.50	8.20	38.00	33.00	50.00	47.00	
2	7.30	8.20	26.00	25.00	50.00	42.00	
3	3.50	6.75	48.00	24.00	50.00	37.00	
4	5.20	6.21	1.00	21.00	50.00	56.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.654	1998.121
2		(calculated)	(calculated)	0.728	2379.113
3		(calculated)	(calculated)	0.630	1839.704
4		(calculated)	(calculated)	0.546	1503.076

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	734.00	100.000
2	ONE HOUR	✓	1461.00	100.000
3	ONE HOUR	✓	663.00	100.000
4	ONE HOUR	✓	547.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
17:00-17:15	1	552.59	552.59		
17:00-17:15	2	1099.92	1099.92		
17:00-17:15	3	499.14	499.14		
17:00-17:15	4	411.81	411.81		
17:15-17:30	1	659.85	659.85		
17:15-17:30	2	1313.41	1313.41		
17:15-17:30	3	596.02	596.02		
17:15-17:30	4	491.74	491.74		
17:30-17:45	1	808.15	808.15		
17:30-17:45	2	1608.59	1608.59		
17:30-17:45	3	729.98	729.98		
17:30-17:45	4	602.26	602.26		
17:45-18:00	1	808.15	808.15		
17:45-18:00	2	1608.59	1608.59		
17:45-18:00	3	729.98	729.98		
17:45-18:00	4	602.26	602.26		
18:00-18:15	1	659.85	659.85		
18:00-18:15	2	1313.41	1313.41		
18:00-18:15	3	596.02	596.02		
18:00-18:15	4	491.74	491.74		
18:15-18:30	1	552.59	552.59		
18:15-18:30	2	1099.92	1099.92		
18:15-18:30	3	499.14	499.14		
18:15-18:30	4	411.81	411.81		

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	558.000	76.000	100.000
	2	637.000	0.000	534.000	290.000
	3	128.000	415.000	0.000	120.000
	4	174.000	229.000	144.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.76	0.10	0.14
	2	0.44	0.00	0.37	0.20
	3	0.19	0.63	0.00	0.18
	4	0.32	0.42	0.26	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1	0.56	5.78	1.29	1.00	A	673.53	1010.30	75.94	4.51	0.84	75.95	4.51
2	0.76	6.99	3.08	5.00	A	1340.64	2010.96	164.65	4.91	1.83	164.67	4.91
3	0.65	9.06	1.81	1.00	A	608.38	912.57	96.86	6.37	1.08	96.86	6.37
4	0.76	18.62	3.01	9.00	C	501.94	752.91	138.01	11.00	1.53	138.02	11.00

Main Results for each time segment

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	552.59	138.15	550.52	703.90	589.97	0.00	1612.53	1351.60	0.343	0.00	0.52	3.384	A
2	1099.92	274.98	1095.96	900.78	239.71	0.00	2204.62	2025.87	0.499	0.00	0.99	3.235	A
3	499.14	124.79	496.82	565.29	770.39	0.00	1354.09	913.38	0.369	0.00	0.58	4.189	A
4	411.81	102.95	409.13	382.47	884.74	0.00	1019.95	612.27	0.404	0.00	0.67	5.868	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	659.85	164.96	658.94	842.42	706.41	0.00	1536.43	1351.61	0.429	0.52	0.75	4.098	A
2	1313.41	328.35	1311.30	1078.36	286.99	0.00	2170.20	2025.87	0.605	0.99	1.52	4.181	A
3	596.02	149.01	594.78	676.50	921.79	0.00	1258.65	913.37	0.474	0.58	0.89	5.413	A
4	491.74	122.94	489.96	457.71	1058.86	0.00	924.87	612.27	0.532	0.67	1.11	8.242	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	808.15	202.04	806.06	1028.30	860.58	0.00	1435.66	1351.58	0.563	0.75	1.27	5.698	A
2	1608.59	402.15	1602.55	1316.66	349.97	0.00	2124.35	2025.87	0.757	1.52	3.03	6.820	A
3	729.98	182.49	726.42	825.89	1126.63	0.00	1129.53	913.38	0.646	0.89	1.78	8.852	A
4	602.26	150.56	595.22	559.39	1293.66	0.00	796.66	612.27	0.756	1.11	2.87	17.298	C

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	808.15	202.04	808.09	1033.57	867.15	0.00	1431.37	1351.58	0.565	1.27	1.29	5.775	A
2	1608.59	402.15	1608.38	1323.07	352.17	0.00	2122.75	2025.87	0.758	3.03	3.08	6.992	A
3	729.98	182.49	729.85	829.94	1130.61	0.00	1127.02	913.38	0.648	1.78	1.81	9.057	A
4	602.26	150.56	601.72	561.45	1299.01	0.00	793.74	612.27	0.759	2.87	3.01	18.623	C

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	659.85	164.96	661.94	849.83	715.66	0.00	1530.38	1351.61	0.431	1.29	0.76	4.156	A
2	1313.41	328.35	1319.50	1087.49	290.11	0.00	2167.93	2025.87	0.606	3.08	1.55	4.272	A
3	596.02	149.01	599.61	682.21	927.40	0.00	1255.12	913.37	0.475	1.81	0.91	5.520	A
4	491.74	122.94	499.11	460.62	1066.39	0.00	920.76	612.27	0.534	3.01	1.17	8.682	A

Main results: (18:15-18:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	552.59	138.15	553.55	708.75	595.37	0.00	1609.00	1351.60	0.343	0.76	0.53	3.415	A
2	1099.92	274.98	1102.12	907.27	241.65	0.00	2203.21	2025.87	0.499	1.55	1.00	3.275	A
3	499.14	124.79	500.44	569.06	774.71	0.00	1351.37	913.38	0.369	0.91	0.59	4.238	A
4	411.81	102.95	413.73	384.76	890.39	0.00	1016.87	612.27	0.405	1.17	0.69	5.989	A

Queueing Delay Results for each time segment

Queueing Delay results: (17:00-17:15)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	7.60	0.51	3.384	A	A
2	14.43	0.96	3.235	A	A
3	8.45	0.56	4.189	A	A
4	9.67	0.64	5.868	A	A

Queueing Delay results: (17:15-17:30)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	10.96	0.73	4.098	A	A
2	22.07	1.47	4.181	A	A
3	12.96	0.86	5.413	A	A
4	16.01	1.07	8.242	A	A

Queueing Delay results: (17:30-17:45)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	18.37	1.22	5.698	A	A
2	42.67	2.84	6.820	A	A
3	25.17	1.68	8.852	A	A
4	38.52	2.57	17.298	C	B

Queueing Delay results: (17:45-18:00)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	19.20	1.28	5.775	A	A
2	45.87	3.06	6.992	A	A
3	26.98	1.80	9.057	A	A
4	44.36	2.96	18.623	C	B

Queueing Delay results: (18:00-18:15)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	11.77	0.78	4.156	A	A
2	24.19	1.61	4.272	A	A
3	14.23	0.95	5.520	A	A
4	18.78	1.25	8.682	A	A

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	8.04	0.54	3.415	A	A
2	15.42	1.03	3.275	A	A
3	9.07	0.60	4.238	A	A
4	10.67	0.71	5.989	A	A

Queue Variation Results for each time segment

Queue Variation results: (17:00-17:15)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.52	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	0.99	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	0.58	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	0.67	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A

Queue Variation results: (17:15-17:30)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.75	0.00	0.00	0.00	1.00			N/A	N/A
2	1.52	0.00	0.00	3.00	5.00			N/A	N/A
3	0.89	0.00	0.00	1.00	1.00			N/A	N/A
4	1.11	0.00	0.00	2.00	3.00			N/A	N/A

Queue Variation results: (17:30-17:45)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	1.27	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	3.03	0.00	0.00	0.00	4.00			N/A	N/A
3	1.78	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	2.87	0.00	0.00	2.00	9.00			N/A	N/A

Queue Variation results: (17:45-18:00)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	1.29	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	3.08	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	1.81	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	3.01	0.00	0.00	1.00	7.00			N/A	N/A

Queue Variation results: (18:00-18:15)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.76	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	1.55	0.00	0.00	3.00	4.00			N/A	N/A
3	0.91	0.00	0.00	1.00	1.00			N/A	N/A
4	1.17	0.00	0.00	2.00	3.00			N/A	N/A

Queue Variation results: (18:15-18:30)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.53	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	1.00	0.00	0.00	1.00	2.00			N/A	N/A
3	0.59	0.00	0.00	0.00	1.00			N/A	N/A
4	0.69	0.00	0.00	1.00	1.00			N/A	N/A

(Default Analysis Set) - 2029 + Scheme, 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.
Warning	Geometry	Arm 3 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set(s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Rela
2029 + Scheme, AM	2029 + Scheme	AM		ONE HOUR	08:00	09:30	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	2015 Base AM	Roundabout	1,2,3,4				4.94	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	Quays Avenue	
2	2	Wyndham Way	
3	3	Wyndham Way	
4	4	Serbert Way	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1	0.00	99999.00		0.00
2	0.00	99999.00		0.00
3	0.00	99999.00		0.00
4	0.00	99999.00		0.00

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	3.50	8.20	38.00	33.00	50.00	47.00	
2	7.30	8.20	26.00	25.00	50.00	42.00	
3	3.50	6.75	48.00	24.00	50.00	37.00	
4	5.20	6.21	1.00	21.00	50.00	56.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.654	1998.121
2		(calculated)	(calculated)	0.728	2379.113
3		(calculated)	(calculated)	0.630	1839.704
4		(calculated)	(calculated)	0.546	1503.076

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	738.00	100.000
2	ONE HOUR	✓	1116.00	100.000
3	ONE HOUR	✓	683.00	100.000
4	ONE HOUR	✓	201.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
08:00-08:15	1	555.61	555.61		
08:00-08:15	2	840.18	840.18		
08:00-08:15	3	514.20	514.20		
08:00-08:15	4	151.32	151.32		
08:15-08:30	1	663.45	663.45		
08:15-08:30	2	1003.26	1003.26		
08:15-08:30	3	614.00	614.00		
08:15-08:30	4	180.69	180.69		
08:30-08:45	1	812.55	812.55		
08:30-08:45	2	1228.74	1228.74		
08:30-08:45	3	752.00	752.00		
08:30-08:45	4	221.31	221.31		
08:45-09:00	1	812.55	812.55		
08:45-09:00	2	1228.74	1228.74		
08:45-09:00	3	752.00	752.00		
08:45-09:00	4	221.31	221.31		
09:00-09:15	1	663.45	663.45		
09:00-09:15	2	1003.26	1003.26		
09:00-09:15	3	614.00	614.00		
09:00-09:15	4	180.69	180.69		
09:15-09:30	1	555.61	555.61		
09:15-09:30	2	840.18	840.18		
09:15-09:30	3	514.20	514.20		
09:15-09:30	4	151.32	151.32		

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	514.000	144.000	80.000
	2	505.000	0.000	433.000	178.000
	3	106.000	497.000	0.000	80.000
	4	63.000	94.000	44.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.70	0.20	0.11
	2	0.45	0.00	0.39	0.16
	3	0.16	0.73	0.00	0.12
	4	0.31	0.47	0.22	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1	0.53	4.94	1.11	?	A	677.20	1015.80	68.08	4.02	0.76	68.08	4.02
2	0.57	3.85	1.31	1.00	A	1024.06	1536.09	81.75	3.19	0.91	81.75	3.19
3	0.57	6.45	1.34	1.00	A	626.73	940.10	78.33	5.00	0.87	78.33	5.00
4	0.26	5.85	0.36	~1	A	184.44	276.66	22.59	4.90	0.25	22.59	4.90

Main Results for each time segment

Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	555.61	138.90	553.65	505.80	476.06	0.00	1686.98	1293.09	0.329	0.00	0.49	3.171	A
2	840.18	210.05	837.78	828.69	201.02	0.00	2232.78	2007.99	0.376	0.00	0.60	2.576	A
3	514.20	128.55	512.08	466.06	572.74	0.00	1478.67	976.71	0.348	0.00	0.53	3.717	A
4	151.32	37.83	150.65	253.62	831.20	0.00	1049.19	536.04	0.144	0.00	0.17	4.004	A

Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	663.45	165.86	662.66	605.27	569.99	0.00	1625.59	1293.09	0.408	0.49	0.68	3.734	A
2	1003.26	250.82	1002.34	992.02	240.63	0.00	2203.94	2007.99	0.455	0.60	0.83	2.995	A
3	614.00	153.50	613.05	557.70	685.27	0.00	1407.74	976.71	0.436	0.53	0.77	4.524	A
4	180.69	45.17	180.44	303.51	994.82	0.00	959.85	536.04	0.188	0.17	0.23	4.618	A

Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	812.55	203.14	810.89	740.74	697.18	0.00	1542.46	1293.09	0.527	0.68	1.10	4.910	A
2	1228.74	307.18	1226.86	1213.61	294.46	0.00	2164.76	2007.99	0.568	0.83	1.30	3.830	A
3	752.00	188.00	749.77	682.57	838.75	0.00	1311.00	976.71	0.574	0.77	1.32	6.388	A
4	221.31	55.33	220.80	371.40	1217.11	0.00	838.46	536.04	0.264	0.23	0.36	5.823	A

Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	812.55	203.14	812.52	742.07	699.11	0.00	1541.20	1293.09	0.527	1.10	1.11	4.940	A
2	1228.74	307.18	1228.71	1216.57	295.06	0.00	2164.32	2007.99	0.568	1.30	1.31	3.847	A
3	752.00	188.00	751.95	683.72	840.06	0.00	1310.17	976.71	0.574	1.32	1.34	6.448	A
4	221.31	55.33	221.30	372.13	1219.88	0.00	836.95	536.04	0.264	0.36	0.36	5.846	A

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	663.45	165.86	665.10	607.25	572.80	0.00	1623.75	1293.09	0.409	1.11	0.70	3.763	A
2	1003.26	250.82	1005.12	996.37	241.54	0.00	2203.29	2007.99	0.455	1.31	0.84	3.008	A
3	614.00	153.50	616.22	559.42	687.24	0.00	1406.50	976.71	0.437	1.34	0.78	4.569	A
4	180.69	45.17	181.19	304.59	998.87	0.00	957.63	536.04	0.189	0.36	0.23	4.639	A

Main results: (09:15-09:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	555.61	138.90	556.41	508.08	478.95	0.00	1685.09	1293.09	0.330	0.70	0.49	3.193	A
2	840.18	210.05	841.12	833.29	202.06	0.00	2232.02	2007.99	0.376	0.84	0.61	2.589	A
3	514.20	128.55	515.18	468.10	575.09	0.00	1477.20	976.71	0.348	0.78	0.54	3.744	A
4	151.32	37.83	151.58	254.82	835.45	0.00	1046.87	536.04	0.145	0.23	0.17	4.023	A

Queueing Delay Results for each time segment

Queueing Delay results: (08:00-08:15)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	7.17	0.48	3.171	A	A
2	8.83	0.59	2.576	A	A
3	7.75	0.52	3.717	A	A
4	2.46	0.16	4.004	A	A

Queueing Delay results: (08:15-08:30)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	10.07	0.67	3.734	A	A
2	12.24	0.82	2.995	A	A
3	11.23	0.75	4.524	A	A
4	3.40	0.23	4.618	A	A

Queueing Delay results: (08:30-08:45)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	16.02	1.07	4.910	A	A
2	18.99	1.27	3.830	A	A
3	19.08	1.27	6.388	A	A
4	5.20	0.35	5.823	A	A

Queueing Delay results: (08:45-09:00)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	16.58	1.11	4.940	A	A
2	19.56	1.30	3.847	A	A
3	19.97	1.33	6.448	A	A
4	5.35	0.36	5.846	A	A

Queueing Delay results: (09:00-09:15)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	10.68	0.71	3.763	A	A
2	12.88	0.86	3.008	A	A
3	12.07	0.80	4.569	A	A
4	3.59	0.24	4.639	A	A

Queueing Delay results: (09:15-09:30)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	7.55	0.50	3.193	A	A
2	9.24	0.62	2.589	A	A
3	8.23	0.55	3.744	A	A
4	2.59	0.17	4.023	A	A

Queue Variation Results for each time segment

Queue Variation results: (08:00-08:15)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.49	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	0.60	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	0.53	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	0.17	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A

Queue Variation results: (08:15-08:30)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.68	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	0.83	0.00	0.00	1.00	1.00			N/A	N/A
3	0.77	0.00	0.00	0.00	1.00			N/A	N/A
4	0.23	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A

Queue Variation results: (08:30-08:45)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	1.10	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	1.30	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	1.32	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	0.36	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A

Queue Variation results: (08:45-09:00)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	1.11	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	1.31	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	1.34	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	0.36	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A

Queue Variation results: (09:00-09:15)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.70	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	0.84	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	0.78	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	0.23	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A

Queue Variation results: (09:15-09:30)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.49	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	0.61	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	0.54	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	0.17	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A

(Default Analysis Set) - 2029 + Scheme, 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.
Warning	Geometry	Arm 3 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2029 + Scheme, PM	2029 + Scheme	PM		ONE HOUR	17:00	18:30	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	2015 Base AM	Roundabout	1,2,3,4				9.48	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	Quays Avenue	
2	2	Wyndham Way	
3	3	Wyndham Way	
4	4	Serbert Way	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1	0.00	99999.00		0.00
2	0.00	99999.00		0.00
3	0.00	99999.00		0.00
4	0.00	99999.00		0.00

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	3.50	8.20	38.00	33.00	50.00	47.00	
2	7.30	8.20	26.00	25.00	50.00	42.00	
3	3.50	6.75	48.00	24.00	50.00	37.00	
4	5.20	6.21	1.00	21.00	50.00	56.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.654	1998.121
2		(calculated)	(calculated)	0.728	2379.113
3		(calculated)	(calculated)	0.630	1839.704
4		(calculated)	(calculated)	0.546	1503.076

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	779.00	100.000
2	ONE HOUR	✓	1475.00	100.000
3	ONE HOUR	✓	667.00	100.000
4	ONE HOUR	✓	547.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
17:00-17:15	1	586.47	586.47		
17:00-17:15	2	1110.46	1110.46		
17:00-17:15	3	502.15	502.15		
17:00-17:15	4	411.81	411.81		
17:15-17:30	1	700.31	700.31		
17:15-17:30	2	1325.99	1325.99		
17:15-17:30	3	599.62	599.62		
17:15-17:30	4	491.74	491.74		
17:30-17:45	1	857.69	857.69		
17:30-17:45	2	1624.01	1624.01		
17:30-17:45	3	734.38	734.38		
17:30-17:45	4	602.26	602.26		
17:45-18:00	1	857.69	857.69		
17:45-18:00	2	1624.01	1624.01		
17:45-18:00	3	734.38	734.38		
17:45-18:00	4	602.26	602.26		
18:00-18:15	1	700.31	700.31		
18:00-18:15	2	1325.99	1325.99		
18:00-18:15	3	599.62	599.62		
18:00-18:15	4	491.74	491.74		
18:15-18:30	1	586.47	586.47		
18:15-18:30	2	1110.46	1110.46		
18:15-18:30	3	502.15	502.15		
18:15-18:30	4	411.81	411.81		

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	584.000	95.000	100.000
	2	651.000	0.000	534.000	290.000
	3	132.000	415.000	0.000	120.000
	4	174.000	229.000	144.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.75	0.12	0.13
	2	0.44	0.00	0.36	0.20
	3	0.20	0.62	0.00	0.18
	4	0.32	0.42	0.26	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1	0.60	6.27	1.48	1.00	A	714.82	1072.24	85.56	4.79	0.95	85.57	4.79
2	0.77	7.43	3.30	5.00	A	1353.49	2030.23	173.38	5.12	1.93	173.39	5.12
3	0.66	9.39	1.89	1.00	A	612.05	918.08	99.90	6.53	1.11	99.91	6.53
4	0.77	19.69	3.17	10.00	C	501.94	752.91	143.10	11.40	1.59	143.12	11.41

Main Results for each time segment

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	586.47	146.62	584.20	717.36	589.93	0.00	1612.55	1354.47	0.364	0.00	0.57	3.493	A
2	1110.46	277.61	1106.39	920.20	253.93	0.00	2194.26	2016.28	0.506	0.00	1.02	3.297	A
3	502.15	125.54	499.79	579.49	780.83	0.00	1347.51	919.27	0.373	0.00	0.59	4.234	A
4	411.81	102.95	409.10	382.44	898.19	0.00	1012.61	605.47	0.407	0.00	0.68	5.939	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	700.31	175.08	699.26	858.50	706.35	0.00	1536.47	1354.47	0.456	0.57	0.83	4.294	A
2	1325.99	331.50	1323.76	1101.59	304.01	0.00	2157.81	2016.28	0.615	1.02	1.57	4.305	A
3	599.62	149.90	598.34	693.49	934.28	0.00	1250.78	919.27	0.479	0.59	0.91	5.506	A
4	491.74	122.94	489.91	457.68	1074.94	0.00	916.09	605.47	0.537	0.68	1.14	8.410	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	857.69	214.42	855.18	1047.61	860.13	0.00	1435.96	1354.45	0.597	0.83	1.46	6.171	A
2	1624.01	406.00	1617.36	1344.68	370.63	0.00	2109.31	2016.28	0.770	1.57	3.24	7.220	A
3	734.38	183.60	730.62	846.40	1141.60	0.00	1120.09	919.28	0.656	0.91	1.85	9.156	A
4	602.26	150.56	594.73	559.22	1313.01	0.00	786.09	605.47	0.766	1.14	3.02	18.142	C

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	857.69	214.42	857.61	1053.34	867.09	0.00	1431.41	1354.45	0.599	1.46	1.48	6.271	A
2	1624.01	406.00	1623.76	1351.64	373.06	0.00	2107.54	2016.28	0.771	3.24	3.30	7.432	A
3	734.38	183.60	734.24	850.82	1145.99	0.00	1117.33	919.28	0.657	1.85	1.89	9.389	A
4	602.26	150.56	601.63	561.43	1318.79	0.00	782.94	605.47	0.769	3.02	3.17	19.695	C

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	700.31	175.08	702.82	866.56	716.16	0.00	1530.05	1354.47	0.458	1.48	0.85	4.366	A
2	1325.99	331.50	1332.71	1111.51	307.47	0.00	2155.29	2016.28	0.615	3.30	1.62	4.411	A
3	599.62	149.90	603.42	699.73	940.44	0.00	1246.89	919.27	0.481	1.89	0.94	5.628	A
4	491.74	122.94	499.66	460.81	1083.06	0.00	911.66	605.47	0.539	3.17	1.19	8.898	A

Main results: (18:15-18:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	586.47	146.62	587.57	722.41	595.44	0.00	1608.95	1354.47	0.365	0.85	0.58	3.530	A
2	1110.46	277.61	1112.80	927.00	256.02	0.00	2192.75	2016.28	0.506	1.62	1.03	3.339	A
3	502.15	125.54	503.50	583.46	785.35	0.00	1344.66	919.27	0.373	0.94	0.60	4.286	A
4	411.81	102.95	413.80	384.80	904.05	0.00	1009.41	605.47	0.408	1.19	0.70	6.063	A

Queueing Delay Results for each time segment

Queueing Delay results: (17:00-17:15)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	8.31	0.55	3.493	A	A
2	14.83	0.99	3.297	A	A
3	8.59	0.57	4.234	A	A
4	9.79	0.65	5.939	A	A

Queueing Delay results: (17:15-17:30)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	12.16	0.81	4.294	A	A
2	22.91	1.53	4.305	A	A
3	13.26	0.88	5.506	A	A
4	16.31	1.09	8.410	A	A

Queueing Delay results: (17:30-17:45)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	21.01	1.40	6.171	A	A
2	45.41	3.03	7.220	A	A
3	26.13	1.74	9.156	A	A
4	40.20	2.68	18.142	C	B

Queueing Delay results: (17:45-18:00)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	22.08	1.47	6.271	A	A
2	49.11	3.27	7.432	A	A
3	28.09	1.87	9.389	A	A
4	46.72	3.11	19.695	C	B

Queueing Delay results: (18:00-18:15)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	13.15	0.88	4.366	A	A
2	25.24	1.68	4.411	A	A
3	14.60	0.97	5.628	A	A
4	19.28	1.29	8.898	A	A

Queueing Delay results: (18:15-18:30)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	8.83	0.59	3.530	A	A
2	15.88	1.06	3.339	A	A
3	9.23	0.62	4.286	A	A
4	10.81	0.72	6.063	A	A

Queue Variation Results for each time segment

Queue Variation results: (17:00-17:15)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.57	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	1.02	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	0.59	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	0.68	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A

Queue Variation results: (17:15-17:30)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.83	0.00	0.00	1.00	1.00			N/A	N/A
2	1.57	0.00	0.00	3.00	5.00			N/A	N/A
3	0.91	0.00	0.00	1.00	1.00			N/A	N/A
4	1.14	0.00	0.00	2.00	3.00			N/A	N/A

Queue Variation results: (17:30-17:45)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	1.46	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	3.24	0.00	0.00	0.00	5.00			N/A	N/A
3	1.85	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	3.02	0.00	0.00	3.00	10.00			N/A	N/A

Queue Variation results: (17:45-18:00)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	1.48	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	3.30	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	1.89	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	3.17	0.00	0.00	1.00	8.00			N/A	N/A

Queue Variation results: (18:00-18:15)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.85	0.00	0.00	0.00	1.00			N/A	N/A
2	1.62	0.00	0.00	3.00	4.00			N/A	N/A
3	0.94	0.00	0.00	1.00	1.00			N/A	N/A
4	1.19	0.00	0.00	2.00	3.00			N/A	N/A

Queue Variation results: (18:15-18:30)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.58	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	1.03	0.00	0.00	2.00	3.00			N/A	N/A
3	0.60	0.00	0.00	0.00	1.00			N/A	N/A
4	0.70	0.00	0.00	1.00	1.00			N/A	N/A



Junctions 8
ARCADY 8 - Roundabout Module
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Filename: R2 - Wyndham Way - Sheepway - The Portbury Hundred -Portbury Common roundabout.arc8

Path: \\CWLFP01\Proj\Consulting\Transport Planning\PROJECTS\467470 (HS) MetroWest Phase 1 TA\Initial Junction Options Modelling\working

Report generation date: 07/12/2015 15:15:15

-
- » (Default Analysis Set) - 2015 Base, AM
 - » (Default Analysis Set) - 2015 Base, PM
 - » (Default Analysis Set) - 2019 Opening Year, AM
 - » (Default Analysis Set) - 2019 Opening Year, PM
 - » (Default Analysis Set) - 2019 Opening Year + Scheme, AM
 - » (Default Analysis Set) - 2019 Opening Year + Scheme, PM
 - » (Default Analysis Set) - 2029, AM
 - » (Default Analysis Set) - 2029, PM
 - » (Default Analysis Set) - 2029 + Scheme, AM
 - » (Default Analysis Set) - 2029 + Scheme, PM

Summary of junction performance

	AM							PM					
	Queue (PCU)	95 % Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Queue (PCU)	95 % Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)
	A1 - 2015 Base												
Arm 1	0.78	2.00	9.99	0.44	A	6.29	A	0.28	~1	6.03	0.22	A	5.36
Arm 2	1.08	?	3.30	0.52	A			1.70	2.00	4.20	0.63	A	
Arm 3	1.61	1.00	6.83	0.62	A			1.41	1.00	7.76	0.59	A	
Arm 4	2.54	3.00	8.04	0.72	A			1.55	1.00	5.37	0.61	A	
	A1 - 2019 Opening Year												
Arm 1	0.88	2.00	11.00	0.47	B	6.85	A	0.31	~1	6.45	0.24	A	5.94
Arm 2	1.15	1.00	3.42	0.54	A			1.93	3.00	4.57	0.66	A	
Arm 3	1.80	2.00	7.43	0.65	A			1.70	1.00	8.98	0.63	A	
Arm 4	2.90	5.00	8.93	0.75	A			1.76	2.00	5.87	0.64	A	
	A1 - 2019 Opening Year + Scheme												
Arm 1	0.40	~1	6.95	0.29	A	6.17	A	0.94	2.00	11.48	0.49	B	7.08
Arm 2	2.03	3.00	4.80	0.67	A			1.16	1.00	3.45	0.54	A	
Arm 3	1.74	1.00	9.15	0.64	A			1.89	2.00	7.69	0.66	A	
Arm 4	1.84	2.00	6.04	0.65	A			3.01	6.00	9.20	0.75	A	
	A1 - 2029												
Arm 1	1.38	3.00	16.03	0.59	C	9.68	A	0.41	~1	7.75	0.29	A	8.22
Arm 2	1.43	1.00	3.89	0.59	A			2.70	4.00	5.81	0.73	A	
Arm 3	2.63	5.00	10.06	0.73	B			3.01	8.00	14.62	0.76	B	
Arm 4	4.79	15.00	13.77	0.83	B			2.50	3.00	7.61	0.72	A	
	A1 - 2029 + Scheme												
Arm 1	1.57	4.00	17.68	0.62	C	10.42	B	0.43	~1	7.98	0.30	A	8.62
Arm 2	1.45	1.00	3.95	0.59	A			2.82	4.00	6.05	0.74	A	
Arm 3	2.91	6.00	10.91	0.75	B			3.16	9.00	15.30	0.77	C	
Arm 4	5.20	17.00	14.79	0.85	B			2.73	4.00	8.12	0.74	A	

Values shown are the maximum values over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages.

"D1 - 2015 Base, AM" model duration: 08:00 - 09:30

"D2 - 2015 Base, PM" model duration: 17:00 - 18:30

"D3 - 2019 Opening Year, AM" model duration: 08:00 - 09:30

"D4 - 2019 Opening Year, PM" model duration: 17:00 - 18:30

"D5 - 2019 Opening Year + Scheme, AM" model duration: 08:00 - 09:30

"D6 - 2019 Opening Year + Scheme, PM" model duration: 17:00 - 18:30

"D7 - 2029, AM" model duration: 08:00 - 09:30

"D8 - 2029, PM" model duration: 17:00 - 18:30

"D9 - 2029 + Scheme, AM" model duration: 08:00 - 09:30

"D10 - 2029 + Scheme, PM" model duration: 17:00 - 18:30

Run using Junctions 8.0.4.487 at 07/12/2015 15:15:10

File summary

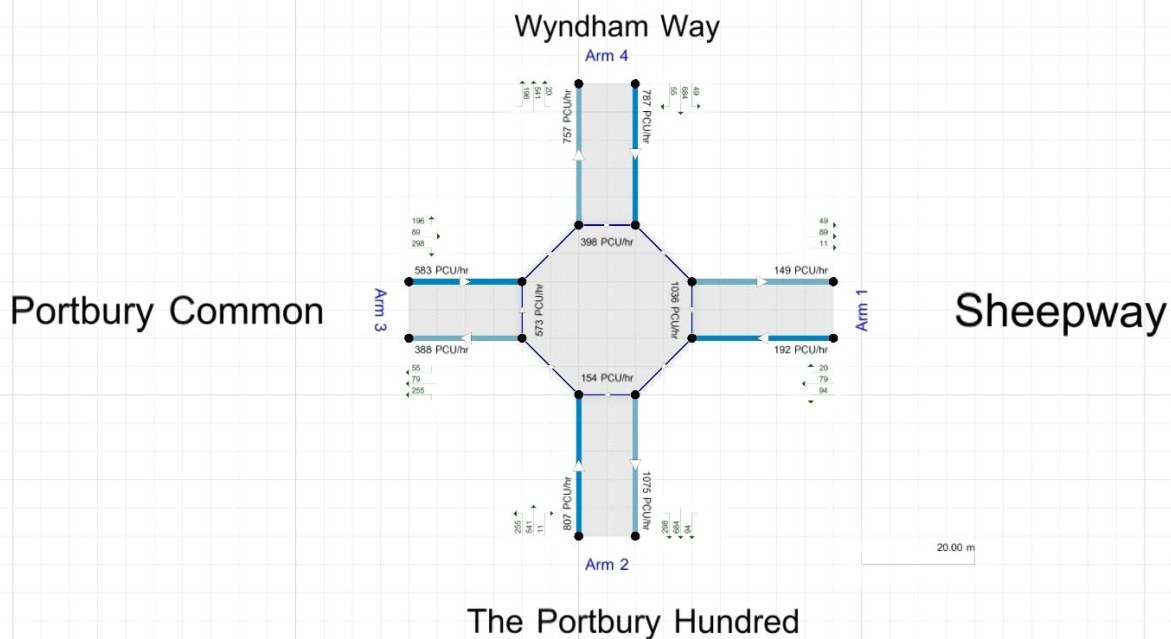
Title	(untitled)
Location	
Site Number	
Date	24/11/2015
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DT018866
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75	✓		N/A	0.85	36.00	20.00

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



Showing modelled flow through junction (PCU/hr).
Time Segment: (08:00-08:15)
Showing Analysis Set "A1"; Demand Set "D1 - 2015 Base, AM"

The junction diagram reflects the last run of ARCADY.

(Default Analysis Set) - 2015 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 3 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relations
2015 Base, AM	2015 Base	AM		ONE HOUR	08:00	09:30	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	2015 Base AM	Roundabout	1,2,3,4				6.29	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	Quays Avenue	
2	2	Wyndham Way	
3	3	Wyndham Way	
4	4	Serbert Way	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1	0.00	99999.00		0.00
2	0.00	99999.00		0.00
3	0.00	99999.00		0.00
4	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	3.70	7.80	7.20	19.00	50.00	43.00	
2	5.20	8.30	44.00	54.00	50.00	26.00	
3	3.60	7.80	34.00	23.00	50.00	44.00	
4	3.70	7.70	32.00	38.00	50.00	36.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.555	1486.837
2		(calculated)	(calculated)	0.763	2446.710
3		(calculated)	(calculated)	0.638	1918.341
4		(calculated)	(calculated)	0.664	1991.470

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	257.00	100.000
2	ONE HOUR	✓	1075.00	100.000
3	ONE HOUR	✓	777.00	100.000
4	ONE HOUR	✓	1050.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
08:00-08:15	1	193.48	193.48		
08:00-08:15	2	809.32	809.32		
08:00-08:15	3	584.97	584.97		
08:00-08:15	4	790.50	790.50		
08:15-08:30	1	231.04	231.04		
08:15-08:30	2	966.40	966.40		
08:15-08:30	3	698.51	698.51		
08:15-08:30	4	943.93	943.93		
08:30-08:45	1	282.96	282.96		
08:30-08:45	2	1183.60	1183.60		
08:30-08:45	3	855.49	855.49		
08:30-08:45	4	1156.07	1156.07		
08:45-09:00	1	282.96	282.96		
08:45-09:00	2	1183.60	1183.60		
08:45-09:00	3	855.49	855.49		
08:45-09:00	4	1156.07	1156.07		
09:00-09:15	1	231.04	231.04		
09:00-09:15	2	966.40	966.40		
09:00-09:15	3	698.51	698.51		
09:00-09:15	4	943.93	943.93		
09:15-09:30	1	193.48	193.48		
09:15-09:30	2	809.32	809.32		
09:15-09:30	3	584.97	584.97		
09:15-09:30	4	790.50	790.50		

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	125.000	105.000	27.000
	2	15.000	0.000	339.000	721.000
	3	119.000	397.000	0.000	261.000
	4	65.000	912.000	73.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.49	0.41	0.11
	2	0.01	0.00	0.32	0.67
	3	0.15	0.51	0.00	0.34
	4	0.06	0.87	0.07	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1	0.44	9.99	0.78	2.00	A	235.83	353.74	42.91	7.28	0.48	42.92	7.28
2	0.52	3.30	1.08	?	A	986.44	1479.66	69.60	2.82	0.77	69.60	2.82
3	0.62	6.83	1.61	1.00	A	712.99	1069.48	91.81	5.15	1.02	91.82	5.15
4	0.72	8.04	2.54	3.00	A	963.50	1445.25	137.51	5.71	1.53	137.52	5.71

Main Results for each time segment

Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	193.48	48.37	192.41	149.21	1036.07	0.00	912.31	411.52	0.212	0.00	0.27	4.993	A
2	809.32	202.33	807.20	1074.93	153.55	0.00	2329.60	2202.72	0.347	0.00	0.53	2.362	A
3	584.97	146.24	582.57	387.89	572.86	0.00	1552.99	928.95	0.377	0.00	0.60	3.700	A
4	790.50	197.62	787.14	757.29	398.14	0.00	1726.95	1561.19	0.458	0.00	0.84	3.816	A

Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	231.04	57.76	230.50	178.60	1240.17	0.00	799.14	411.52	0.289	0.27	0.40	6.326	A
2	966.40	241.60	965.65	1286.77	183.89	0.00	2306.46	2202.72	0.419	0.53	0.72	2.683	A
3	698.51	174.63	697.37	464.19	685.35	0.00	1481.24	928.95	0.472	0.60	0.88	4.586	A
4	943.93	235.98	942.18	906.13	476.59	0.00	1674.83	1561.19	0.564	0.84	1.28	4.901	A

Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	282.96	70.74	281.52	218.35	1515.56	0.00	646.43	411.52	0.438	0.40	0.76	9.826	A
2	1183.60	295.90	1182.16	1572.46	224.63	0.00	2275.39	2202.72	0.520	0.72	1.08	3.288	A
3	855.49	213.87	852.67	567.84	838.95	0.00	1383.29	928.95	0.618	0.88	1.59	6.748	A
4	1156.07	289.02	1151.17	1108.87	582.75	0.00	1604.30	1561.19	0.721	1.28	2.50	7.860	A

Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	282.96	70.74	282.91	219.08	1521.42	0.00	643.18	411.52	0.440	0.76	0.78	9.989	A
2	1183.60	295.90	1183.58	1578.66	225.67	0.00	2274.59	2202.72	0.520	1.08	1.08	3.298	A
3	855.49	213.87	855.43	569.19	840.06	0.00	1382.58	928.95	0.619	1.59	1.61	6.826	A
4	1156.07	289.02	1155.90	1110.89	584.60	0.00	1603.07	1561.19	0.721	2.50	2.54	8.042	A

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	231.04	57.76	232.49	179.65	1248.46	0.00	794.54	411.52	0.291	0.78	0.41	6.420	A
2	966.40	241.60	967.82	1295.57	185.38	0.00	2305.32	2202.72	0.419	1.08	0.73	2.696	A
3	698.51	174.63	701.33	466.16	687.05	0.00	1480.16	928.95	0.472	1.61	0.90	4.638	A
4	943.93	235.98	948.86	909.12	479.25	0.00	1673.07	1561.19	0.564	2.54	1.31	5.003	A

Main results: (09:15-09:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	193.48	48.37	194.05	150.12	1042.76	0.00	908.61	411.52	0.213	0.41	0.27	5.041	A
2	809.32	202.33	810.08	1082.06	154.75	0.00	2328.68	2202.72	0.348	0.73	0.53	2.371	A
3	584.97	146.24	586.14	389.82	575.01	0.00	1551.62	928.95	0.377	0.90	0.61	3.732	A
4	790.50	197.62	792.33	760.59	400.55	0.00	1725.35	1561.19	0.458	1.31	0.85	3.867	A

Queueing Delay Results for each time segment

Queueing Delay results: (08:00-08:15)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	3.90	0.26	4.993	A	A
2	7.81	0.52	2.362	A	A
3	8.77	0.58	3.700	A	A
4	12.20	0.81	3.816	A	A

Queueing Delay results: (08:15-08:30)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	5.89	0.39	6.326	A	A
2	10.60	0.71	2.683	A	A
3	12.93	0.86	4.586	A	A
4	18.56	1.24	4.901	A	A

Queueing Delay results: (08:30-08:45)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	10.95	0.73	9.826	A	A
2	15.79	1.05	3.288	A	A
3	22.81	1.52	6.748	A	A
4	35.30	2.35	7.860	A	A

Queueing Delay results: (08:45-09:00)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	11.58	0.77	9.989	A	A
2	16.18	1.08	3.298	A	A
3	24.01	1.60	6.826	A	A
4	37.93	2.53	8.042	A	A

Queueing Delay results: (09:00-09:15)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	6.42	0.43	6.420	A	A
2	11.08	0.74	2.696	A	A
3	13.96	0.93	4.638	A	A
4	20.42	1.36	5.003	A	A

Queueing Delay results: (09:15-09:30)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	4.18	0.28	5.041	A	A
2	8.13	0.54	2.371	A	A
3	9.33	0.62	3.732	A	A
4	13.10	0.87	3.867	A	A

Queue Variation Results for each time segment

Queue Variation results: (08:00-08:15)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.27	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	0.53	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	0.60	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	0.84	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A

Queue Variation results: (08:15-08:30)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.40	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	0.72	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	0.88	0.00	0.00	1.00	1.00			N/A	N/A
4	1.28	0.00	0.00	2.00	3.00			N/A	N/A

Queue Variation results: (08:30-08:45)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.76	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	1.08	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	1.59	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	2.50	0.00	0.00	0.00	3.00			N/A	N/A

Queue Variation results: (08:45-09:00)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.78	0.00	0.00	0.00	2.00			N/A	N/A
2	1.08	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	1.61	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	2.54	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A

Queue Variation results: (09:00-09:15)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.41	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	0.73	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	0.90	0.00	0.00	1.00	1.00			N/A	N/A
4	1.31	0.00	0.00	2.00	3.00			N/A	N/A

Queue Variation results: (09:15-09:30)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.27	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	0.53	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	0.61	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	0.85	0.00	0.00	1.00	2.00			N/A	N/A

(Default Analysis Set) - 2015 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 3 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relations
2015 Base, PM	2015 Base	PM		ONE HOUR	17:00	18:30	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	2015 Base AM	Roundabout	1,2,3,4				5.36	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	Quays Avenue	
2	2	Wyndham Way	
3	3	Wyndham Way	
4	4	Serbert Way	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1	0.00	99999.00		0.00
2	0.00	99999.00		0.00
3	0.00	99999.00		0.00
4	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	3.70	7.80	7.20	19.00	50.00	43.00	
2	5.20	8.30	44.00	54.00	50.00	26.00	
3	3.60	7.80	34.00	23.00	50.00	44.00	
4	3.70	7.70	32.00	38.00	50.00	36.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.555	1486.837
2		(calculated)	(calculated)	0.763	2446.710
3		(calculated)	(calculated)	0.638	1918.341
4		(calculated)	(calculated)	0.664	1991.470

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	153.00	100.000
2	ONE HOUR	✓	1334.00	100.000
3	ONE HOUR	✓	602.00	100.000
4	ONE HOUR	✓	950.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
17:00-17:15	1	115.19	115.19		
17:00-17:15	2	1004.31	1004.31		
17:00-17:15	3	453.22	453.22		
17:00-17:15	4	715.21	715.21		
17:15-17:30	1	137.54	137.54		
17:15-17:30	2	1199.24	1199.24		
17:15-17:30	3	541.19	541.19		
17:15-17:30	4	854.03	854.03		
17:30-17:45	1	168.46	168.46		
17:30-17:45	2	1468.76	1468.76		
17:30-17:45	3	662.81	662.81		
17:30-17:45	4	1045.97	1045.97		
17:45-18:00	1	168.46	168.46		
17:45-18:00	2	1468.76	1468.76		
17:45-18:00	3	662.81	662.81		
17:45-18:00	4	1045.97	1045.97		
18:00-18:15	1	137.54	137.54		
18:00-18:15	2	1199.24	1199.24		
18:00-18:15	3	541.19	541.19		
18:00-18:15	4	854.03	854.03		
18:15-18:30	1	115.19	115.19		
18:15-18:30	2	1004.31	1004.31		
18:15-18:30	3	453.22	453.22		
18:15-18:30	4	715.21	715.21		

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	22.000	48.000	83.000
	2	39.000	0.000	289.000	1006.000
	3	59.000	278.000	0.000	265.000
	4	46.000	891.000	13.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.14	0.31	0.54
	2	0.03	0.00	0.22	0.75
	3	0.10	0.46	0.00	0.44
	4	0.05	0.94	0.01	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1	0.22	6.03	0.28	~1	A	140.40	210.59	17.66	5.03	0.20	17.66	5.03
2	0.63	4.20	1.70	2.00	A	1224.10	1836.15	103.58	3.38	1.15	103.59	3.38
3	0.59	7.76	1.41	1.00	A	552.41	828.61	78.13	5.66	0.87	78.13	5.66
4	0.61	5.37	1.55	1.00	A	871.74	1307.60	93.18	4.28	1.04	93.18	4.28

Main Results for each time segment

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	115.19	28.80	114.67	108.01	886.49	0.00	995.26	416.44	0.116	0.00	0.13	4.085	A
2	1004.31	251.08	1001.37	893.22	107.93	0.00	2364.39	2157.12	0.425	0.00	0.73	2.636	A
3	453.22	113.30	451.27	262.66	846.63	0.00	1378.38	696.56	0.329	0.00	0.49	3.875	A
4	715.21	178.80	712.60	1016.01	281.90	0.00	1804.18	1690.51	0.396	0.00	0.65	3.289	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	137.54	34.39	137.35	129.27	1061.09	0.00	898.44	416.44	0.153	0.13	0.18	4.728	A
2	1199.24	299.81	1198.03	1069.17	129.27	0.00	2348.12	2157.12	0.511	0.73	1.04	3.127	A
3	541.19	135.30	540.20	314.30	1013.00	0.00	1272.28	696.56	0.425	0.49	0.73	4.912	A
4	854.03	213.51	852.93	1215.77	337.43	0.00	1767.29	1690.51	0.483	0.65	0.93	3.932	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	168.46	42.11	168.06	158.09	1297.87	0.00	767.14	416.44	0.220	0.18	0.28	6.005	A
2	1468.76	367.19	1466.14	1307.75	158.17	0.00	2326.07	2157.12	0.631	1.04	1.69	4.174	A
3	662.81	165.70	660.16	384.63	1239.68	0.00	1127.71	696.56	0.588	0.73	1.40	7.657	A
4	1045.97	261.49	1043.54	1487.42	412.42	0.00	1717.47	1690.51	0.609	0.93	1.53	5.322	A

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	168.46	42.11	168.45	158.54	1301.33	0.00	765.23	416.44	0.220	0.28	0.28	6.031	A
2	1468.76	367.19	1468.72	1311.23	158.54	0.00	2325.79	2157.12	0.632	1.69	1.70	4.200	A
3	662.81	165.70	662.75	385.34	1241.91	0.00	1126.29	696.56	0.589	1.40	1.41	7.764	A
4	1045.97	261.49	1045.92	1490.72	413.94	0.00	1716.45	1690.51	0.609	1.53	1.55	5.368	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	137.54	34.39	137.94	129.91	1066.12	0.00	895.65	416.44	0.154	0.28	0.18	4.753	A
2	1199.24	299.81	1201.84	1074.23	129.82	0.00	2347.70	2157.12	0.511	1.70	1.05	3.148	A
3	541.19	135.30	543.85	315.36	1016.30	0.00	1270.17	696.56	0.426	1.41	0.75	4.975	A
4	854.03	213.51	856.44	1220.57	339.58	0.00	1765.86	1690.51	0.484	1.55	0.94	3.970	A

Main results: (18:15-18:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	115.19	28.80	115.39	108.60	891.42	0.00	992.53	416.44	0.116	0.18	0.13	4.106	A
2	1004.31	251.08	1005.54	898.21	108.60	0.00	2363.88	2157.12	0.425	1.05	0.74	2.652	A
3	453.22	113.30	454.24	263.85	850.30	0.00	1376.05	696.56	0.329	0.75	0.49	3.909	A
4	715.21	178.80	716.34	1020.85	283.68	0.00	1803.00	1690.51	0.397	0.94	0.66	3.318	A

Queueing Delay Results for each time segment

Queueing Delay results: (17:00-17:15)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	1.91	0.13	4.085	A	A
2	10.79	0.72	2.636	A	A
3	7.12	0.47	3.875	A	A
4	9.56	0.64	3.289	A	A

Queueing Delay results: (17:15-17:30)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	2.65	0.18	4.728	A	A
2	15.24	1.02	3.127	A	A
3	10.72	0.71	4.912	A	A
4	13.60	0.91	3.932	A	A

Queueing Delay results: (17:30-17:45)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	4.09	0.27	6.005	A	A
2	24.58	1.64	4.174	A	A
3	19.99	1.33	7.657	A	A
4	22.20	1.48	5.322	A	A

Queueing Delay results: (17:45-18:00)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	4.20	0.28	6.031	A	A
2	25.48	1.70	4.200	A	A
3	21.12	1.41	7.764	A	A
4	23.14	1.54	5.368	A	A

Queueing Delay results: (18:00-18:15)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	2.80	0.19	4.753	A	A
2	16.15	1.08	3.148	A	A
3	11.60	0.77	4.975	A	A
4	14.56	0.97	3.970	A	A

Queueing Delay results: (18:15-18:30)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	2.01	0.13	4.106	A	A
2	11.33	0.76	2.652	A	A
3	7.57	0.50	3.909	A	A
4	10.12	0.67	3.318	A	A

Queue Variation Results for each time segment

Queue Variation results: (17:00-17:15)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.13	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	0.73	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	0.49	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	0.65	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A

Queue Variation results: (17:15-17:30)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.18	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	1.04	0.00	0.00	1.00	2.00			N/A	N/A
3	0.73	0.00	0.00	0.00	1.00			N/A	N/A
4	0.93	0.00	0.00	1.00	1.00			N/A	N/A

Queue Variation results: (17:30-17:45)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.28	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	1.69	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	1.40	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	1.53	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A

Queue Variation results: (17:45-18:00)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.28	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	1.70	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	1.41	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	1.55	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A

Queue Variation results: (18:00-18:15)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.18	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	1.05	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	0.75	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	0.94	0.00	0.00	0.00	1.00			N/A	N/A

Queue Variation results: (18:15-18:30)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.13	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	0.74	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	0.49	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	0.66	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A

(Default Analysis Set) - 2019 Opening Year, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 3 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relat
2019 Opening Year, AM	2019 Opening Year	AM		ONE HOUR	08:00	09:30	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	2015 Base AM	Roundabout	1,2,3,4				6.85	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	Quays Avenue	
2	2	Wyndham Way	
3	3	Wyndham Way	
4	4	Serbert Way	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1	0.00	99999.00		0.00
2	0.00	99999.00		0.00
3	0.00	99999.00		0.00
4	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	3.70	7.80	7.20	19.00	50.00	43.00	
2	5.20	8.30	44.00	54.00	50.00	26.00	
3	3.60	7.80	34.00	23.00	50.00	44.00	
4	3.70	7.70	32.00	38.00	50.00	36.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.555	1486.837
2		(calculated)	(calculated)	0.763	2446.710
3		(calculated)	(calculated)	0.638	1918.341
4		(calculated)	(calculated)	0.664	1991.470

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	265.00	100.000
2	ONE HOUR	✓	1107.00	100.000
3	ONE HOUR	✓	801.00	100.000
4	ONE HOUR	✓	1080.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
08:00-08:15	1	199.51	199.51		
08:00-08:15	2	833.41	833.41		
08:00-08:15	3	603.03	603.03		
08:00-08:15	4	813.08	813.08		
08:15-08:30	1	238.23	238.23		
08:15-08:30	2	995.17	995.17		
08:15-08:30	3	720.08	720.08		
08:15-08:30	4	970.90	970.90		
08:30-08:45	1	291.77	291.77		
08:30-08:45	2	1218.83	1218.83		
08:30-08:45	3	881.92	881.92		
08:30-08:45	4	1189.10	1189.10		
08:45-09:00	1	291.77	291.77		
08:45-09:00	2	1218.83	1218.83		
08:45-09:00	3	881.92	881.92		
08:45-09:00	4	1189.10	1189.10		
09:00-09:15	1	238.23	238.23		
09:00-09:15	2	995.17	995.17		
09:00-09:15	3	720.08	720.08		
09:00-09:15	4	970.90	970.90		
09:15-09:30	1	199.51	199.51		
09:15-09:30	2	833.41	833.41		
09:15-09:30	3	603.03	603.03		
09:15-09:30	4	813.08	813.08		

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	129.000	108.000	28.000
	2	15.000	0.000	349.000	743.000
	3	123.000	409.000	0.000	269.000
	4	67.000	939.000	74.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.49	0.41	0.11
	2	0.01	0.00	0.32	0.67
	3	0.15	0.51	0.00	0.34
	4	0.06	0.87	0.07	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1	0.47	11.00	0.88	2.00	B	243.17	364.75	47.35	7.79	0.53	47.36	7.79
2	0.54	3.42	1.15	1.00	A	1015.80	1523.70	73.71	2.90	0.82	73.72	2.90
3	0.65	7.43	1.80	2.00	A	735.01	1102.52	100.49	5.47	1.12	100.50	5.47
4	0.75	8.93	2.90	5.00	A	991.03	1486.54	152.01	6.14	1.69	152.02	6.14

Main Results for each time segment

Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	199.51	49.88	198.37	153.69	1065.91	0.00	895.77	411.57	0.223	0.00	0.28	5.153	A
2	833.41	208.35	831.18	1107.01	157.27	0.00	2326.76	2203.98	0.358	0.00	0.56	2.404	A
3	603.03	150.76	600.48	398.36	590.10	0.00	1541.99	928.12	0.391	0.00	0.64	3.815	A
4	813.08	203.27	809.52	780.50	410.09	0.00	1719.02	1562.08	0.473	0.00	0.89	3.944	A

Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	238.23	59.56	237.62	183.96	1275.87	0.00	779.34	411.57	0.306	0.28	0.44	6.639	A
2	995.17	248.79	994.37	1325.15	188.34	0.00	2303.06	2203.98	0.432	0.56	0.76	2.749	A
3	720.08	180.02	718.82	476.72	705.98	0.00	1468.09	928.12	0.490	0.64	0.95	4.797	A
4	970.90	242.72	968.94	933.91	490.89	0.00	1665.33	1562.08	0.583	0.89	1.38	5.155	A

Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	291.77	72.94	290.06	224.82	1558.49	0.00	622.62	411.57	0.469	0.44	0.86	10.769	B
2	1218.83	304.71	1217.26	1618.61	229.94	0.00	2271.34	2203.98	0.537	0.76	1.15	3.411	A
3	881.92	220.48	878.62	583.05	864.15	0.00	1367.21	928.12	0.645	0.95	1.78	7.318	A
4	1189.10	297.28	1183.26	1142.72	600.05	0.00	1592.81	1562.08	0.747	1.38	2.84	8.667	A

Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	291.77	72.94	291.70	225.68	1565.39	0.00	618.80	411.57	0.472	0.86	0.88	11.001	B
2	1218.83	304.71	1218.81	1625.93	231.16	0.00	2270.40	2203.98	0.537	1.15	1.15	3.422	A
3	881.92	220.48	881.83	584.59	865.38	0.00	1366.43	928.12	0.645	1.78	1.80	7.426	A
4	1189.10	297.28	1188.87	1145.01	602.20	0.00	1591.38	1562.08	0.747	2.84	2.90	8.931	A

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	238.23	59.56	239.95	185.18	1285.57	0.00	773.96	411.57	0.308	0.88	0.45	6.764	A
2	995.17	248.79	996.72	1335.45	190.07	0.00	2301.74	2203.98	0.432	1.15	0.77	2.761	A
3	720.08	180.02	723.38	478.95	707.84	0.00	1466.90	928.12	0.491	1.80	0.97	4.862	A
4	970.90	242.72	976.80	937.27	493.95	0.00	1663.30	1562.08	0.584	2.90	1.42	5.289	A

Main results: (09:15-09:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	199.51	49.88	200.14	154.67	1073.15	0.00	891.75	411.57	0.224	0.45	0.29	5.211	A
2	833.41	208.35	834.23	1114.73	158.57	0.00	2325.77	2203.98	0.358	0.77	0.56	2.416	A
3	603.03	150.76	604.34	400.42	592.37	0.00	1540.55	928.12	0.391	0.97	0.65	3.850	A
4	813.08	203.27	815.14	784.02	412.69	0.00	1717.29	1562.08	0.473	1.42	0.91	3.999	A

Queueing Delay Results for each time segment

Queueing Delay results: (08:00-08:15)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	4.15	0.28	5.153	A	A
2	8.19	0.55	2.404	A	A
3	9.31	0.62	3.815	A	A
4	12.95	0.86	3.944	A	A

Queueing Delay results: (08:15-08:30)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	6.36	0.42	6.639	A	A
2	11.17	0.74	2.749	A	A
3	13.91	0.93	4.797	A	A
4	20.02	1.33	5.155	A	A

Queueing Delay results: (08:30-08:45)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	12.30	0.82	10.769	B	B
2	16.84	1.12	3.411	A	A
3	25.36	1.69	7.318	A	A
4	39.71	2.65	8.667	A	A

Queueing Delay results: (08:45-09:00)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	13.11	0.87	11.001	B	B
2	17.28	1.15	3.422	A	A
3	26.86	1.79	7.426	A	A
4	43.13	2.88	8.931	A	A

Queueing Delay results: (09:00-09:15)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	6.98	0.47	6.764	A	A
2	11.70	0.78	2.761	A	A
3	15.11	1.01	4.862	A	A
4	22.23	1.48	5.289	A	A

Queueing Delay results: (09:15-09:30)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	4.46	0.30	5.211	A	A
2	8.53	0.57	2.416	A	A
3	9.94	0.66	3.850	A	A
4	13.96	0.93	3.999	A	A

Queue Variation Results for each time segment

Queue Variation results: (08:00-08:15)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.28	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	0.56	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	0.64	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	0.89	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A

Queue Variation results: (08:15-08:30)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.44	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	0.76	0.00	0.00	0.00	1.00			N/A	N/A
3	0.95	0.00	0.00	1.00	2.00			N/A	N/A
4	1.38	0.00	0.00	2.00	4.00			N/A	N/A

Queue Variation results: (08:30-08:45)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.86	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	1.15	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	1.78	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	2.84	0.00	0.00	0.00	5.00			N/A	N/A

Queue Variation results: (08:45-09:00)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.88	0.00	0.00	0.00	2.00			N/A	N/A
2	1.15	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	1.80	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	2.90	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A

Queue Variation results: (09:00-09:15)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.45	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	0.77	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	0.97	0.00	0.00	1.00	1.00			N/A	N/A
4	1.42	0.00	0.00	2.00	4.00			N/A	N/A

Queue Variation results: (09:15-09:30)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.29	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	0.56	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	0.65	0.00	0.00	0.00	1.00			N/A	N/A
4	0.91	0.00	0.00	1.00	2.00			N/A	N/A

(Default Analysis Set) - 2019 Opening Year, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 3 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relat
2019 Opening Year, PM	2019 Opening Year	PM		ONE HOUR	17:00	18:30	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	2015 Base AM	Roundabout	1,2,3,4				5.94	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	Quays Avenue	
2	2	Wyndham Way	
3	3	Wyndham Way	
4	4	Serbert Way	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1	0.00	99999.00		0.00
2	0.00	99999.00		0.00
3	0.00	99999.00		0.00
4	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	3.70	7.80	7.20	19.00	50.00	43.00	
2	5.20	8.30	44.00	54.00	50.00	26.00	
3	3.60	7.80	34.00	23.00	50.00	44.00	
4	3.70	7.70	32.00	38.00	50.00	36.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.555	1486.837
2		(calculated)	(calculated)	0.763	2446.710
3		(calculated)	(calculated)	0.638	1918.341
4		(calculated)	(calculated)	0.664	1991.470

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	160.00	100.000
2	ONE HOUR	✓	1391.00	100.000
3	ONE HOUR	✓	628.00	100.000
4	ONE HOUR	✓	991.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
17:00-17:15	1	120.46	120.46		
17:00-17:15	2	1047.22	1047.22		
17:00-17:15	3	472.79	472.79		
17:00-17:15	4	746.08	746.08		
17:15-17:30	1	143.84	143.84		
17:15-17:30	2	1250.48	1250.48		
17:15-17:30	3	564.56	564.56		
17:15-17:30	4	890.89	890.89		
17:30-17:45	1	176.16	176.16		
17:30-17:45	2	1531.52	1531.52		
17:30-17:45	3	691.44	691.44		
17:30-17:45	4	1091.11	1091.11		
17:45-18:00	1	176.16	176.16		
17:45-18:00	2	1531.52	1531.52		
17:45-18:00	3	691.44	691.44		
17:45-18:00	4	1091.11	1091.11		
18:00-18:15	1	143.84	143.84		
18:00-18:15	2	1250.48	1250.48		
18:00-18:15	3	564.56	564.56		
18:00-18:15	4	890.89	890.89		
18:15-18:30	1	120.46	120.46		
18:15-18:30	2	1047.22	1047.22		
18:15-18:30	3	472.79	472.79		
18:15-18:30	4	746.08	746.08		

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

	To				
From		1	2	3	4
	1	0.000	23.000	50.000	87.000
	2	41.000	0.000	301.000	1049.000
	3	62.000	290.000	0.000	276.000
	4	48.000	929.000	14.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

	To				
From		1	2	3	4
	1	0.00	0.14	0.31	0.54
	2	0.03	0.00	0.22	0.75
	3	0.10	0.46	0.00	0.44
	4	0.05	0.94	0.01	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

	To				
From		1	2	3	4
	1	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To				
From		1	2	3	4
	1	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1	0.24	6.45	0.31	~1	A	146.82	220.23	19.43	5.29	0.22	19.43	5.29
2	0.66	4.57	1.93	3.00	A	1276.41	1914.61	114.85	3.60	1.28	114.85	3.60
3	0.63	8.98	1.70	1.00	A	576.26	864.40	90.29	6.27	1.00	90.30	6.27
4	0.64	5.87	1.76	2.00	A	909.36	1364.04	103.76	4.56	1.15	103.77	4.56

Main Results for each time segment

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	120.46	30.11	119.89	113.24	924.60	0.00	974.13	416.83	0.124	0.00	0.14	4.211	A
2	1047.22	261.80	1044.05	931.33	113.16	0.00	2360.40	2156.29	0.444	0.00	0.79	2.728	A
3	472.79	118.20	470.66	273.89	883.32	0.00	1354.99	696.16	0.349	0.00	0.53	4.061	A
4	746.08	186.52	743.25	1059.39	294.58	0.00	1795.75	1690.00	0.415	0.00	0.71	3.412	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	143.84	35.96	143.61	135.53	1106.72	0.00	873.14	416.83	0.165	0.14	0.20	4.933	A
2	1250.48	312.62	1249.11	1114.79	135.54	0.00	2343.34	2156.29	0.534	0.79	1.14	3.285	A
3	564.56	141.14	563.40	327.74	1056.90	0.00	1244.28	696.16	0.454	0.53	0.82	5.279	A
4	890.89	222.72	889.64	1267.70	352.61	0.00	1757.20	1690.00	0.507	0.71	1.02	4.143	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	176.16	44.04	175.70	165.68	1353.22	0.00	736.45	416.82	0.239	0.20	0.31	6.414	A
2	1531.52	382.88	1528.41	1363.10	165.82	0.00	2320.24	2156.29	0.660	1.14	1.91	4.528	A
3	691.44	172.86	688.03	401.01	1293.21	0.00	1093.57	696.16	0.632	0.82	1.68	8.803	A
4	1091.11	272.78	1088.20	1550.54	430.70	0.00	1705.32	1690.00	0.640	1.02	1.75	5.805	A

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	176.16	44.04	176.15	166.24	1357.44	0.00	734.11	416.82	0.240	0.31	0.31	6.451	A
2	1531.52	382.88	1531.46	1367.35	166.24	0.00	2319.92	2156.29	0.660	1.91	1.93	4.565	A
3	691.44	172.86	691.33	401.86	1295.85	0.00	1091.89	696.16	0.633	1.68	1.70	8.982	A
4	1091.11	272.78	1091.04	1554.55	432.64	0.00	1704.03	1690.00	0.640	1.75	1.76	5.870	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	143.84	35.96	144.29	136.32	1112.78	0.00	869.78	416.83	0.165	0.31	0.20	4.966	A
2	1250.48	312.62	1253.58	1120.90	136.18	0.00	2342.85	2156.29	0.534	1.93	1.15	3.316	A
3	564.56	141.14	568.00	328.98	1060.78	0.00	1241.81	696.16	0.455	1.70	0.84	5.368	A
4	890.89	222.72	893.78	1273.46	355.32	0.00	1755.40	1690.00	0.508	1.76	1.04	4.191	A

Main results: (18:15-18:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	120.46	30.11	120.68	113.90	930.06	0.00	971.10	416.83	0.124	0.20	0.14	4.235	A
2	1047.22	261.80	1048.62	936.85	113.89	0.00	2359.84	2156.29	0.444	1.15	0.80	2.747	A
3	472.79	118.20	474.00	275.19	887.33	0.00	1352.43	696.16	0.350	0.84	0.54	4.105	A
4	746.08	186.52	747.37	1064.74	296.59	0.00	1794.42	1690.00	0.416	1.04	0.72	3.444	A

Queueing Delay Results for each time segment

Queueing Delay results: (17:00-17:15)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	2.06	0.14	4.211	A	A
2	11.63	0.78	2.728	A	A
3	7.77	0.52	4.061	A	A
4	10.33	0.69	3.412	A	A

Queueing Delay results: (17:15-17:30)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	2.88	0.19	4.933	A	A
2	16.67	1.11	3.285	A	A
3	11.99	0.80	5.279	A	A
4	14.92	0.99	4.143	A	A

Queueing Delay results: (17:30-17:45)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	4.55	0.30	6.414	A	A
2	27.69	1.85	4.528	A	A
3	23.75	1.58	8.803	A	A
4	25.13	1.68	5.805	A	A

Queueing Delay results: (17:45-18:00)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	4.70	0.31	6.451	A	A
2	28.84	1.92	4.565	A	A
3	25.38	1.69	8.982	A	A
4	26.35	1.76	5.870	A	A

Queueing Delay results: (18:00-18:15)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	3.06	0.20	4.966	A	A
2	17.76	1.18	3.316	A	A
3	13.10	0.87	5.368	A	A
4	16.07	1.07	4.191	A	A

Queueing Delay results: (18:15-18:30)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	2.17	0.14	4.235	A	A
2	12.25	0.82	2.747	A	A
3	8.31	0.55	4.105	A	A
4	10.97	0.73	3.444	A	A

Queue Variation Results for each time segment

Queue Variation results: (17:00-17:15)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.14	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	0.79	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	0.53	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	0.71	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A

Queue Variation results: (17:15-17:30)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.20	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	1.14	0.00	0.00	2.00	3.00			N/A	N/A
3	0.82	0.00	0.00	1.00	1.00			N/A	N/A
4	1.02	0.00	0.00	1.00	2.00			N/A	N/A

Queue Variation results: (17:30-17:45)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.31	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	1.91	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	1.68	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	1.75	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A

Queue Variation results: (17:45-18:00)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.31	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	1.93	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	1.70	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	1.76	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A

Queue Variation results: (18:00-18:15)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.20	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	1.15	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	0.84	0.00	0.00	1.00	1.00			N/A	N/A
4	1.04	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A

Queue Variation results: (18:15-18:30)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.14	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	0.80	0.00	0.00	1.00	1.00			N/A	N/A
3	0.54	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	0.72	0.00	0.00	0.00	1.00			N/A	N/A

(Default Analysis Set) - 2019 Opening Year + Scheme, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 3 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set(s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Rela
2019 Opening Year + Scheme, AM	2019 Opening Year + Scheme	AM		ONE HOUR	08:00	09:30	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	2015 Base AM	Roundabout	1,2,3,4				6.17	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	Quays Avenue	
2	2	Wyndham Way	
3	3	Wyndham Way	
4	4	Serbert Way	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1	0.00	99999.00		0.00
2	0.00	99999.00		0.00
3	0.00	99999.00		0.00
4	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	3.70	7.80	7.20	19.00	50.00	43.00	
2	5.20	8.30	44.00	54.00	50.00	26.00	
3	3.60	7.80	34.00	23.00	50.00	44.00	
4	3.70	7.70	32.00	38.00	50.00	36.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.555	1486.837
2		(calculated)	(calculated)	0.763	2446.710
3		(calculated)	(calculated)	0.638	1918.341
4		(calculated)	(calculated)	0.664	1991.470

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	191.00	100.000
2	ONE HOUR	✓	1396.00	100.000
3	ONE HOUR	✓	631.00	100.000
4	ONE HOUR	✓	1007.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
08:00-08:15	1	143.79	143.79		
08:00-08:15	2	1050.98	1050.98		
08:00-08:15	3	475.05	475.05		
08:00-08:15	4	758.12	758.12		
08:15-08:30	1	171.71	171.71		
08:15-08:30	2	1254.98	1254.98		
08:15-08:30	3	567.26	567.26		
08:15-08:30	4	905.27	905.27		
08:30-08:45	1	210.29	210.29		
08:30-08:45	2	1537.02	1537.02		
08:30-08:45	3	694.74	694.74		
08:30-08:45	4	1108.73	1108.73		
08:45-09:00	1	210.29	210.29		
08:45-09:00	2	1537.02	1537.02		
08:45-09:00	3	694.74	694.74		
08:45-09:00	4	1108.73	1108.73		
09:00-09:15	1	171.71	171.71		
09:00-09:15	2	1254.98	1254.98		
09:00-09:15	3	567.26	567.26		
09:00-09:15	4	905.27	905.27		
09:15-09:30	1	143.79	143.79		
09:15-09:30	2	1050.98	1050.98		
09:15-09:30	3	475.05	475.05		
09:15-09:30	4	758.12	758.12		

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	23.000	80.000	88.000
	2	41.000	0.000	301.000	1054.000
	3	62.000	290.000	0.000	279.000
	4	54.000	930.000	23.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.12	0.42	0.46
	2	0.03	0.00	0.22	0.76
	3	0.10	0.46	0.00	0.44
	4	0.05	0.92	0.02	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1	0.29	6.95	0.40	~1	A	175.26	262.90	24.52	5.60	0.27	24.52	5.60
2	0.67	4.80	2.03	3.00	A	1280.99	1921.49	119.62	3.74	1.33	119.63	3.74
3	0.64	9.15	1.74	1.00	A	579.02	868.52	91.91	6.35	1.02	91.92	6.35
4	0.65	6.04	1.84	2.00	A	924.04	1386.06	107.68	4.66	1.20	107.69	4.66

Main Results for each time segment

Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	143.79	35.95	143.10	117.74	932.06	0.00	969.99	419.77	0.148	0.00	0.17	4.350	A
2	1050.98	262.75	1047.73	932.04	143.12	0.00	2337.55	2135.84	0.450	0.00	0.81	2.784	A
3	475.05	118.76	472.90	303.10	887.76	0.00	1352.16	726.53	0.351	0.00	0.54	4.084	A
4	758.12	189.53	755.22	1066.08	294.58	0.00	1795.76	1680.53	0.422	0.00	0.73	3.449	A

Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	171.71	42.93	171.42	140.91	1115.65	0.00	868.19	419.77	0.198	0.17	0.24	5.164	A
2	1254.98	313.74	1253.53	1115.65	171.42	0.00	2315.97	2135.84	0.542	0.81	1.17	3.384	A
3	567.26	141.81	566.07	362.73	1062.23	0.00	1240.88	726.53	0.457	0.54	0.83	5.324	A
4	905.27	226.32	903.96	1275.70	352.60	0.00	1757.21	1680.53	0.515	0.73	1.05	4.213	A

Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	210.29	52.57	209.67	172.25	1364.03	0.00	730.46	419.77	0.288	0.24	0.40	6.903	A
2	1537.02	384.26	1533.65	1364.02	209.68	0.00	2286.79	2135.84	0.672	1.17	2.02	4.759	A
3	694.74	173.69	691.22	443.75	1299.57	0.00	1089.51	726.53	0.638	0.83	1.71	8.960	A
4	1108.73	277.18	1105.64	1560.16	430.64	0.00	1705.36	1680.53	0.650	1.05	1.82	5.971	A

Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	210.29	52.57	210.28	172.84	1368.44	0.00	728.01	419.77	0.289	0.40	0.40	6.952	A
2	1537.02	384.26	1536.96	1368.44	210.28	0.00	2286.33	2135.84	0.672	2.02	2.03	4.804	A
3	694.74	173.69	694.63	444.79	1302.45	0.00	1087.68	726.53	0.639	1.71	1.74	9.152	A
4	1108.73	277.18	1108.65	1564.44	432.64	0.00	1704.04	1680.53	0.651	1.82	1.84	6.044	A

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	171.71	42.93	172.32	141.75	1121.97	0.00	864.68	419.77	0.199	0.40	0.25	5.203	A
2	1254.98	313.74	1258.34	1121.98	172.32	0.00	2315.28	2135.84	0.542	2.03	1.19	3.418	A
3	567.26	141.81	570.81	364.24	1066.42	0.00	1238.21	726.53	0.458	1.74	0.85	5.421	A
4	905.27	226.32	908.35	1281.84	355.38	0.00	1755.36	1680.53	0.516	1.84	1.08	4.265	A

Main results: (09:15-09:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	143.79	35.95	144.09	118.43	937.64	0.00	966.90	419.77	0.149	0.25	0.18	4.378	A
2	1050.98	262.75	1052.47	937.65	144.09	0.00	2336.82	2135.84	0.450	1.19	0.82	2.805	A
3	475.05	118.76	476.28	304.63	891.93	0.00	1349.50	726.53	0.352	0.85	0.55	4.128	A
4	758.12	189.53	759.48	1071.60	296.60	0.00	1794.41	1680.53	0.422	1.08	0.74	3.484	A

Queueing Delay Results for each time segment

Queueing Delay results: (08:00-08:15)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	2.53	0.17	4.350	A	A
2	11.91	0.79	2.784	A	A
3	7.85	0.52	4.084	A	A
4	10.61	0.71	3.449	A	A

Queueing Delay results: (08:15-08:30)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	3.60	0.24	5.164	A	A
2	17.21	1.15	3.384	A	A
3	12.15	0.81	5.324	A	A
4	15.40	1.03	4.213	A	A

Queueing Delay results: (08:30-08:45)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	5.83	0.39	6.903	A	A
2	29.12	1.94	4.759	A	A
3	24.25	1.62	8.960	A	A
4	26.22	1.75	5.971	A	A

Queueing Delay results: (08:45-09:00)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	6.04	0.40	6.952	A	A
2	30.42	2.03	4.804	A	A
3	25.97	1.73	9.152	A	A
4	27.55	1.84	6.044	A	A

Queueing Delay results: (09:00-09:15)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	3.84	0.26	5.203	A	A
2	18.39	1.23	3.418	A	A
3	13.29	0.89	5.421	A	A
4	16.63	1.11	4.265	A	A

Queueing Delay results: (09:15-09:30)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	2.69	0.18	4.378	A	A
2	12.56	0.84	2.805	A	A
3	8.40	0.56	4.128	A	A
4	11.28	0.75	3.484	A	A

Queue Variation Results for each time segment

Queue Variation results: (08:00-08:15)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.17	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	0.81	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	0.54	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	0.73	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A

Queue Variation results: (08:15-08:30)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.24	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	1.17	0.00	0.00	2.00	3.00			N/A	N/A
3	0.83	0.00	0.00	1.00	1.00			N/A	N/A
4	1.05	0.00	0.00	1.00	2.00			N/A	N/A

Queue Variation results: (08:30-08:45)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.40	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	2.02	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	1.71	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	1.82	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A

Queue Variation results: (08:45-09:00)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.40	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	2.03	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	1.74	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	1.84	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A

Queue Variation results: (09:00-09:15)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.25	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	1.19	0.00	0.00	1.00	2.00			N/A	N/A
3	0.85	0.00	0.00	1.00	1.00			N/A	N/A
4	1.08	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A

Queue Variation results: (09:15-09:30)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.18	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	0.82	0.00	0.00	1.00	1.00			N/A	N/A
3	0.55	0.00	0.00	0.00	1.00			N/A	N/A
4	0.74	0.00	0.00	1.00	1.00			N/A	N/A

(Default Analysis Set) - 2019 Opening Year + Scheme, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 3 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Rela
2019 Opening Year + Scheme, PM	2019 Opening Year + Scheme	PM		ONE HOUR	17:00	18:30	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	2015 Base AM	Roundabout	1,2,3,4				7.08	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	Quays Avenue	
2	2	Wyndham Way	
3	3	Wyndham Way	
4	4	Serbert Way	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1	0.00	99999.00		0.00
2	0.00	99999.00		0.00
3	0.00	99999.00		0.00
4	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	3.70	7.80	7.20	19.00	50.00	43.00	
2	5.20	8.30	44.00	54.00	50.00	26.00	
3	3.60	7.80	34.00	23.00	50.00	44.00	
4	3.70	7.70	32.00	38.00	50.00	36.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.555	1486.837
2		(calculated)	(calculated)	0.763	2446.710
3		(calculated)	(calculated)	0.638	1918.341
4		(calculated)	(calculated)	0.664	1991.470

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	272.00	100.000
2	ONE HOUR	✓	1107.00	100.000
3	ONE HOUR	✓	812.00	100.000
4	ONE HOUR	✓	1091.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
17:00-17:15	1	204.78	204.78		
17:00-17:15	2	833.41	833.41		
17:00-17:15	3	611.32	611.32		
17:00-17:15	4	821.36	821.36		
17:15-17:30	1	244.52	244.52		
17:15-17:30	2	995.17	995.17		
17:15-17:30	3	729.97	729.97		
17:15-17:30	4	980.79	980.79		
17:30-17:45	1	299.48	299.48		
17:30-17:45	2	1218.83	1218.83		
17:30-17:45	3	894.03	894.03		
17:30-17:45	4	1201.21	1201.21		
17:45-18:00	1	299.48	299.48		
17:45-18:00	2	1218.83	1218.83		
17:45-18:00	3	894.03	894.03		
17:45-18:00	4	1201.21	1201.21		
18:00-18:15	1	244.52	244.52		
18:00-18:15	2	995.17	995.17		
18:00-18:15	3	729.97	729.97		
18:00-18:15	4	980.79	980.79		
18:15-18:30	1	204.78	204.78		
18:15-18:30	2	833.41	833.41		
18:15-18:30	3	611.32	611.32		
18:15-18:30	4	821.36	821.36		

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	129.000	108.000	35.000
	2	15.000	0.000	349.000	743.000
	3	123.000	409.000	0.000	280.000
	4	68.000	946.000	77.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.47	0.40	0.13
	2	0.01	0.00	0.32	0.67
	3	0.15	0.50	0.00	0.34
	4	0.06	0.87	0.07	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1	0.49	11.48	0.94	2.00	B	249.59	374.39	50.08	8.03	0.56	50.08	8.03
2	0.54	3.45	1.16	1.00	A	1015.80	1523.70	74.17	2.92	0.82	74.17	2.92
3	0.66	7.69	1.89	2.00	A	745.11	1117.66	104.47	5.61	1.16	104.47	5.61
4	0.75	9.20	3.01	6.00	A	1001.12	1501.68	156.75	6.26	1.74	156.77	6.26

Main Results for each time segment

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	204.78	51.19	203.59	154.43	1073.36	0.00	891.64	412.63	0.230	0.00	0.30	5.224	A
2	833.41	208.35	831.18	1112.21	164.75	0.00	2321.06	2196.80	0.359	0.00	0.56	2.413	A
3	611.32	152.83	608.70	400.59	595.33	0.00	1538.66	925.13	0.397	0.00	0.65	3.860	A
4	821.36	205.34	817.73	793.96	410.06	0.00	1719.03	1569.00	0.478	0.00	0.91	3.978	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	244.52	61.13	243.88	184.85	1284.78	0.00	774.40	412.63	0.316	0.30	0.46	6.777	A
2	995.17	248.79	994.36	1331.36	197.29	0.00	2296.23	2196.80	0.433	0.56	0.76	2.764	A
3	729.97	182.49	728.65	479.40	712.25	0.00	1464.09	925.13	0.499	0.65	0.98	4.886	A
4	980.79	245.20	978.76	950.04	490.87	0.00	1665.35	1569.00	0.589	0.91	1.41	5.227	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	299.48	74.87	297.62	225.87	1569.12	0.00	616.73	412.63	0.486	0.46	0.92	11.216	B
2	1218.83	304.71	1217.24	1625.93	240.81	0.00	2263.05	2196.80	0.539	0.76	1.16	3.438	A
3	894.03	223.51	890.51	586.27	871.78	0.00	1362.34	925.13	0.656	0.98	1.86	7.576	A
4	1201.21	300.30	1195.06	1162.36	599.93	0.00	1592.89	1569.00	0.754	1.41	2.95	8.912	A

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	299.48	74.87	299.40	226.78	1576.37	0.00	612.71	412.63	0.489	0.92	0.94	11.483	B
2	1218.83	304.71	1218.81	1633.61	242.16	0.00	2262.01	2196.80	0.539	1.16	1.16	3.450	A
3	894.03	223.51	893.93	587.89	873.08	0.00	1361.51	925.13	0.657	1.86	1.89	7.692	A
4	1201.21	300.30	1200.96	1164.82	602.19	0.00	1591.38	1569.00	0.755	2.95	3.01	9.204	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	244.52	61.13	246.40	186.13	1294.96	0.00	768.76	412.63	0.318	0.94	0.47	6.918	A
2	995.17	248.79	996.74	1342.16	199.20	0.00	2294.78	2196.80	0.434	1.16	0.77	2.778	A
3	729.97	182.49	733.50	481.74	714.21	0.00	1462.84	925.13	0.499	1.89	1.01	4.960	A
4	980.79	245.20	987.02	953.63	494.07	0.00	1663.22	1569.00	0.590	3.01	1.46	5.373	A

Main results: (18:15-18:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	204.78	51.19	205.45	155.44	1080.77	0.00	887.53	412.63	0.231	0.47	0.30	5.284	A
2	833.41	208.35	834.24	1120.09	166.13	0.00	2320.00	2196.80	0.359	0.77	0.56	2.425	A
3	611.32	152.83	612.68	402.70	597.67	0.00	1537.17	925.13	0.398	1.01	0.66	3.899	A
4	821.36	205.34	823.49	797.63	412.72	0.00	1717.27	1569.00	0.478	1.46	0.92	4.037	A

Queueing Delay Results for each time segment

Queueing Delay results: (17:00-17:15)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	4.31	0.29	5.224	A	A
2	8.22	0.55	2.413	A	A
3	9.55	0.64	3.860	A	A
4	13.19	0.88	3.978	A	A

Queueing Delay results: (17:15-17:30)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	6.66	0.44	6.777	A	A
2	11.23	0.75	2.764	A	A
3	14.36	0.96	4.886	A	A
4	20.50	1.37	5.227	A	A

Queueing Delay results: (17:30-17:45)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	13.11	0.87	11.216	B	B
2	16.97	1.13	3.438	A	A
3	26.54	1.77	7.576	A	A
4	41.14	2.74	8.912	A	A

Queueing Delay results: (17:45-18:00)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	14.02	0.93	11.483	B	B
2	17.42	1.16	3.450	A	A
3	28.19	1.88	7.692	A	A
4	44.84	2.99	9.204	A	A

Queueing Delay results: (18:00-18:15)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	7.34	0.49	6.918	A	A
2	11.77	0.78	2.778	A	A
3	15.63	1.04	4.960	A	A
4	22.83	1.52	5.373	A	A

Queueing Delay results: (18:15-18:30)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	4.65	0.31	5.284	A	A
2	8.57	0.57	2.425	A	A
3	10.21	0.68	3.899	A	A
4	14.24	0.95	4.037	A	A

Queue Variation Results for each time segment

Queue Variation results: (17:00-17:15)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.30	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	0.56	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	0.65	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	0.91	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A

Queue Variation results: (17:15-17:30)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.46	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	0.76	0.00	0.00	0.00	1.00			N/A	N/A
3	0.98	0.00	0.00	1.00	2.00			N/A	N/A
4	1.41	0.00	0.00	3.00	4.00			N/A	N/A

Queue Variation results: (17:30-17:45)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.92	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	1.16	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	1.86	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	2.95	0.00	0.00	0.00	6.00			N/A	N/A

Queue Variation results: (17:45-18:00)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.94	0.00	0.00	0.00	2.00			N/A	N/A
2	1.16	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	1.89	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	3.01	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A

Queue Variation results: (18:00-18:15)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.47	-1	-1	-1	-1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	0.77	-1	-1	-1	-1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	1.01	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	1.46	0.00	0.00	3.00	4.00			N/A	N/A

Queue Variation results: (18:15-18:30)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.30	-1	-1	-1	-1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	0.56	-1	-1	-1	-1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	0.66	0.00	0.00	0.00	1.00			N/A	N/A
4	0.92	0.00	0.00	1.00	2.00			N/A	N/A

(Default Analysis Set) - 2029, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 3 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relations
2029, AM	2029	AM		ONE HOUR	08:00	09:30	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	2015 Base AM	Roundabout	1,2,3,4				9.68	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	Quays Avenue	
2	2	Wyndham Way	
3	3	Wyndham Way	
4	4	Serbert Way	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1	0.00	99999.00		0.00
2	0.00	99999.00		0.00
3	0.00	99999.00		0.00
4	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	3.70	7.80	7.20	19.00	50.00	43.00	
2	5.20	8.30	44.00	54.00	50.00	26.00	
3	3.60	7.80	34.00	23.00	50.00	44.00	
4	3.70	7.70	32.00	38.00	50.00	36.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.555	1486.837
2		(calculated)	(calculated)	0.763	2446.710
3		(calculated)	(calculated)	0.638	1918.341
4		(calculated)	(calculated)	0.664	1991.470

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	288.00	100.000
2	ONE HOUR	✓	1206.00	100.000
3	ONE HOUR	✓	872.00	100.000
4	ONE HOUR	✓	1178.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
08:00-08:15	1	216.82	216.82		
08:00-08:15	2	907.94	907.94		
08:00-08:15	3	656.49	656.49		
08:00-08:15	4	886.86	886.86		
08:15-08:30	1	258.91	258.91		
08:15-08:30	2	1084.17	1084.17		
08:15-08:30	3	783.91	783.91		
08:15-08:30	4	1059.00	1059.00		
08:30-08:45	1	317.09	317.09		
08:30-08:45	2	1327.83	1327.83		
08:30-08:45	3	960.09	960.09		
08:30-08:45	4	1297.00	1297.00		
08:45-09:00	1	317.09	317.09		
08:45-09:00	2	1327.83	1327.83		
08:45-09:00	3	960.09	960.09		
08:45-09:00	4	1297.00	1297.00		
09:00-09:15	1	258.91	258.91		
09:00-09:15	2	1084.17	1084.17		
09:00-09:15	3	783.91	783.91		
09:00-09:15	4	1059.00	1059.00		
09:15-09:30	1	216.82	216.82		
09:15-09:30	2	907.94	907.94		
09:15-09:30	3	656.49	656.49		
09:15-09:30	4	886.86	886.86		

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	140.000	118.000	30.000
	2	17.000	0.000	380.000	809.000
	3	134.000	445.000	0.000	293.000
	4	73.000	1023.000	82.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.49	0.41	0.10
	2	0.01	0.00	0.32	0.67
	3	0.15	0.51	0.00	0.34
	4	0.06	0.87	0.07	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1	0.59	16.03	1.38	3.00	C	264.27	396.41	66.52	10.07	0.74	66.52	10.07
2	0.59	3.89	1.43	1.00	A	1106.65	1659.97	88.41	3.20	0.98	88.41	3.20
3	0.73	10.06	2.63	5.00	B	800.16	1200.24	135.03	6.75	1.50	135.04	6.75
4	0.83	13.77	4.79	15.00	B	1080.95	1621.43	220.98	8.18	2.46	221.00	8.18

Main Results for each time segment

Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	216.82	54.21	215.45	167.86	1161.28	0.00	842.88	411.97	0.257	0.00	0.34	5.724	A
2	907.94	226.99	905.37	1204.58	172.15	0.00	2315.41	2202.37	0.392	0.00	0.64	2.549	A
3	656.49	164.12	653.43	434.98	642.54	0.00	1508.55	928.95	0.435	0.00	0.76	4.195	A
4	886.86	221.72	882.51	849.34	446.63	0.00	1694.73	1561.05	0.523	0.00	1.09	4.410	A

Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	258.91	64.73	258.04	200.91	1389.85	0.00	716.14	411.97	0.362	0.34	0.56	7.843	A
2	1084.17	271.04	1083.16	1441.77	206.12	0.00	2289.50	2202.37	0.474	0.64	0.89	2.981	A
3	783.91	195.98	782.16	520.54	768.75	0.00	1428.06	928.95	0.549	0.76	1.20	5.559	A
4	1059.00	264.75	1056.14	1016.29	534.62	0.00	1636.28	1561.05	0.647	1.09	1.80	6.174	A

Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	317.09	79.27	314.04	245.06	1693.31	0.00	547.86	411.97	0.579	0.56	1.32	15.202	C
2	1327.83	331.96	1325.74	1756.46	250.89	0.00	2255.36	2202.37	0.589	0.89	1.42	3.864	A
3	960.09	240.02	954.58	635.91	940.72	0.00	1318.38	928.95	0.728	1.20	2.58	9.751	A
4	1297.00	324.25	1285.86	1242.78	652.52	0.00	1557.95	1561.05	0.833	1.80	4.59	12.738	B

Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	317.09	79.27	316.86	246.54	1705.70	0.00	540.99	411.97	0.586	1.32	1.38	16.029	C
2	1327.83	331.96	1327.79	1769.50	253.06	0.00	2253.70	2202.37	0.589	1.42	1.43	3.887	A
3	960.09	240.02	959.87	638.43	942.42	0.00	1317.29	928.95	0.729	2.58	2.63	10.056	B
4	1297.00	324.25	1296.18	1246.23	656.06	0.00	1555.59	1561.05	0.834	4.59	4.79	13.768	B

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	258.91	64.73	262.08	202.98	1407.19	0.00	706.52	411.97	0.366	1.38	0.59	8.157	A
2	1084.17	271.04	1086.25	1460.06	209.21	0.00	2287.15	2202.37	0.474	1.43	0.91	3.004	A
3	783.91	195.98	789.49	524.17	771.28	0.00	1426.44	928.95	0.550	2.63	1.24	5.699	A
4	1059.00	264.75	1070.64	1021.24	539.53	0.00	1633.02	1561.05	0.648	4.79	1.88	6.530	A

Main results: (09:15-09:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	216.82	54.21	217.76	169.13	1170.74	0.00	837.64	411.97	0.259	0.59	0.35	5.817	A
2	907.94	226.99	908.97	1214.65	173.85	0.00	2314.11	2202.37	0.392	0.91	0.65	2.565	A
3	656.49	164.12	658.32	437.58	645.25	0.00	1506.82	928.95	0.436	1.24	0.78	4.251	A
4	886.86	221.72	889.94	853.64	449.93	0.00	1692.54	1561.05	0.524	1.88	1.11	4.502	A

Queueing Delay Results for each time segment

Queueing Delay results: (08:00-08:15)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	4.99	0.33	5.724	A	A
2	9.44	0.63	2.549	A	A
3	11.12	0.74	4.195	A	A
4	15.73	1.05	4.410	A	A

Queueing Delay results: (08:15-08:30)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	8.10	0.54	7.843	A	A
2	13.17	0.88	2.981	A	A
3	17.43	1.16	5.559	A	A
4	25.88	1.73	6.174	A	A

Queueing Delay results: (08:30-08:45)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	18.37	1.22	15.202	C	B
2	20.67	1.38	3.864	A	A
3	35.95	2.40	9.751	A	A
4	61.28	4.09	12.738	B	B

Queueing Delay results: (08:45-09:00)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	20.39	1.36	16.029	C	B
2	21.34	1.42	3.887	A	A
3	39.18	2.61	10.056	B	B
4	70.68	4.71	13.768	B	B

Queueing Delay results: (09:00-09:15)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	9.24	0.62	8.157	A	A
2	13.90	0.93	3.004	A	A
3	19.38	1.29	5.699	A	A
4	30.20	2.01	6.530	A	A

Queueing Delay results: (09:15-09:30)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	5.44	0.36	5.817	A	A
2	9.89	0.66	2.565	A	A
3	11.99	0.80	4.251	A	A
4	17.22	1.15	4.502	A	A

Queue Variation Results for each time segment

Queue Variation results: (08:00-08:15)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.34	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	0.64	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	0.76	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	1.09	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A

Queue Variation results: (08:15-08:30)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.56	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	0.89	0.00	0.00	1.00	1.00			N/A	N/A
3	1.20	0.00	0.00	2.00	3.00			N/A	N/A
4	1.80	0.00	0.00	3.00	6.00			N/A	N/A

Queue Variation results: (08:30-08:45)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	1.32	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	1.42	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	2.58	0.00	0.00	0.00	5.00			N/A	N/A
4	4.59	0.00	0.00	5.00	15.00			N/A	N/A

Queue Variation results: (08:45-09:00)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	1.38	0.00	0.00	0.00	3.00			N/A	N/A
2	1.43	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	2.63	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	4.79	0.00	0.00	0.00	9.00			N/A	N/A

Queue Variation results: (09:00-09:15)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.59	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	0.91	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	1.24	0.00	0.00	2.00	3.00			N/A	N/A
4	1.88	0.00	0.00	4.00	6.00			N/A	N/A

Queue Variation results: (09:15-09:30)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.35	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	0.65	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	0.78	0.00	0.00	1.00	2.00			N/A	N/A
4	1.11	0.00	0.00	1.00	3.00			N/A	N/A

(Default Analysis Set) - 2029, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 3 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relations
2029, PM	2029	PM		ONE HOUR	17:00	18:30	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	2015 Base AM	Roundabout	1,2,3,4				8.22	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	Quays Avenue	
2	2	Wyndham Way	
3	3	Wyndham Way	
4	4	Serbert Way	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1	0.00	99999.00		0.00
2	0.00	99999.00		0.00
3	0.00	99999.00		0.00
4	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	3.70	7.80	7.20	19.00	50.00	43.00	
2	5.20	8.30	44.00	54.00	50.00	26.00	
3	3.60	7.80	34.00	23.00	50.00	44.00	
4	3.70	7.70	32.00	38.00	50.00	36.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.555	1486.837
2		(calculated)	(calculated)	0.763	2446.710
3		(calculated)	(calculated)	0.638	1918.341
4		(calculated)	(calculated)	0.664	1991.470

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	175.00	100.000
2	ONE HOUR	✓	1534.00	100.000
3	ONE HOUR	✓	693.00	100.000
4	ONE HOUR	✓	1092.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
17:00-17:15	1	131.75	131.75		
17:00-17:15	2	1154.88	1154.88		
17:00-17:15	3	521.73	521.73		
17:00-17:15	4	822.11	822.11		
17:15-17:30	1	157.32	157.32		
17:15-17:30	2	1379.03	1379.03		
17:15-17:30	3	622.99	622.99		
17:15-17:30	4	981.69	981.69		
17:30-17:45	1	192.68	192.68		
17:30-17:45	2	1688.97	1688.97		
17:30-17:45	3	763.01	763.01		
17:30-17:45	4	1202.31	1202.31		
17:45-18:00	1	192.68	192.68		
17:45-18:00	2	1688.97	1688.97		
17:45-18:00	3	763.01	763.01		
17:45-18:00	4	1202.31	1202.31		
18:00-18:15	1	157.32	157.32		
18:00-18:15	2	1379.03	1379.03		
18:00-18:15	3	622.99	622.99		
18:00-18:15	4	981.69	981.69		
18:15-18:30	1	131.75	131.75		
18:15-18:30	2	1154.88	1154.88		
18:15-18:30	3	521.73	521.73		
18:15-18:30	4	822.11	822.11		

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

	To				
From		1	2	3	4
	1	0.000	25.000	55.000	95.000
	2	45.000	0.000	332.000	1157.000
	3	68.000	320.000	0.000	305.000
	4	53.000	1024.000	15.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

	To				
From		1	2	3	4
	1	0.00	0.14	0.31	0.54
	2	0.03	0.00	0.22	0.75
	3	0.10	0.46	0.00	0.44
	4	0.05	0.94	0.01	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

	To				
From		1	2	3	4
	1	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To				
From		1	2	3	4
	1	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1	0.29	7.75	0.41	~1	A	160.58	240.87	24.33	6.06	0.27	24.33	6.06
2	0.73	5.81	2.70	4.00	A	1407.63	2111.44	150.63	4.28	1.67	150.64	4.28
3	0.76	14.62	3.01	8.00	B	635.91	953.86	138.57	8.72	1.54	138.58	8.72
4	0.72	7.61	2.50	3.00	A	1002.04	1503.06	137.41	5.49	1.53	137.43	5.49

Main Results for each time segment

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	131.75	32.94	131.09	124.43	1018.64	0.00	921.98	416.66	0.143	0.00	0.17	4.548	A
2	1154.88	288.72	1151.04	1026.12	123.61	0.00	2352.44	2156.61	0.491	0.00	0.96	2.986	A
3	521.73	130.43	519.06	301.56	973.09	0.00	1297.74	696.34	0.402	0.00	0.67	4.607	A
4	822.11	205.53	818.69	1167.77	324.38	0.00	1775.96	1690.42	0.463	0.00	0.86	3.746	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	157.32	39.33	157.03	148.92	1219.24	0.00	810.75	416.66	0.194	0.17	0.24	5.504	A
2	1379.03	344.76	1377.15	1228.21	148.06	0.00	2333.79	2156.61	0.591	0.96	1.43	3.754	A
3	622.99	155.75	621.22	360.87	1164.34	0.00	1175.76	696.34	0.530	0.67	1.11	6.471	A
4	981.69	245.42	979.95	1397.35	388.21	0.00	1733.55	1690.42	0.566	0.86	1.29	4.767	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	192.68	48.17	192.01	181.69	1488.52	0.00	661.42	416.66	0.291	0.24	0.41	7.658	A
2	1688.97	422.24	1684.03	1499.50	181.03	0.00	2308.64	2156.62	0.732	1.43	2.66	5.718	A
3	763.01	190.75	755.83	441.27	1423.79	0.00	1010.29	696.34	0.755	1.11	2.91	13.775	B
4	1202.31	300.58	1197.64	1707.04	472.58	0.00	1677.50	1690.42	0.717	1.29	2.46	7.430	A

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	192.68	48.17	192.66	182.71	1495.92	0.00	657.32	416.66	0.293	0.41	0.41	7.747	A
2	1688.97	422.24	1688.84	1506.93	181.65	0.00	2308.17	2156.62	0.732	2.66	2.70	5.808	A
3	763.01	190.75	762.58	442.57	1427.91	0.00	1007.66	696.34	0.757	2.91	3.01	14.624	B
4	1202.31	300.58	1202.14	1713.99	476.50	0.00	1674.89	1690.42	0.718	2.46	2.50	7.607	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	157.32	39.33	157.99	150.33	1229.63	0.00	804.98	416.66	0.195	0.41	0.24	5.569	A
2	1379.03	344.76	1383.98	1238.65	148.97	0.00	2333.09	2156.61	0.591	2.70	1.46	3.814	A
3	622.99	155.75	630.44	362.73	1170.21	0.00	1172.02	696.34	0.532	3.01	1.15	6.734	A
4	981.69	245.42	986.39	1407.08	393.57	0.00	1729.99	1690.42	0.567	2.50	1.33	4.872	A

Main results: (18:15-18:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	131.75	32.94	132.05	125.30	1025.74	0.00	918.04	416.66	0.144	0.24	0.17	4.581	A
2	1154.88	288.72	1156.83	1033.29	124.51	0.00	2351.75	2156.61	0.491	1.46	0.97	3.019	A
3	521.73	130.43	523.61	303.19	978.15	0.00	1294.51	696.34	0.403	1.15	0.68	4.682	A
4	822.11	205.53	823.95	1174.66	327.10	0.00	1774.15	1690.42	0.463	1.33	0.87	3.794	A

Queueing Delay Results for each time segment

Queueing Delay results: (17:00-17:15)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	2.43	0.16	4.548	A	A
2	14.01	0.93	2.986	A	A
3	9.69	0.65	4.607	A	A
4	12.46	0.83	3.746	A	A

Queueing Delay results: (17:15-17:30)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	3.51	0.23	5.504	A	A
2	20.89	1.39	3.754	A	A
3	16.05	1.07	6.471	A	A
4	18.78	1.25	4.767	A	A

Queueing Delay results: (17:30-17:45)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	5.90	0.39	7.658	A	A
2	37.97	2.53	5.718	A	A
3	39.43	2.63	13.775	B	B
4	34.81	2.32	7.430	A	A

Queueing Delay results: (17:45-18:00)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	6.15	0.41	7.747	A	A
2	40.24	2.68	5.808	A	A
3	44.57	2.97	14.624	B	B
4	37.31	2.49	7.607	A	A

Queueing Delay results: (18:00-18:15)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	3.77	0.25	5.569	A	A
2	22.62	1.51	3.814	A	A
3	18.32	1.22	6.734	A	A
4	20.67	1.38	4.872	A	A

Queueing Delay results: (18:15-18:30)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	2.58	0.17	4.581	A	A
2	14.88	0.99	3.019	A	A
3	10.51	0.70	4.682	A	A
4	13.38	0.89	3.794	A	A

Queue Variation Results for each time segment

Queue Variation results: (17:00-17:15)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.17	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	0.96	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	0.67	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	0.86	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A

Queue Variation results: (17:15-17:30)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.24	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	1.43	0.00	0.00	3.00	4.00			N/A	N/A
3	1.11	0.00	0.00	2.00	3.00			N/A	N/A
4	1.29	0.00	0.00	2.00	3.00			N/A	N/A

Queue Variation results: (17:30-17:45)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.41	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	2.66	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	2.91	0.00	0.00	1.00	8.00			N/A	N/A
4	2.46	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A

Queue Variation results: (17:45-18:00)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.41	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	2.70	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	3.01	0.00	0.00	0.00	6.00			N/A	N/A
4	2.50	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A

Queue Variation results: (18:00-18:15)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.24	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	1.46	0.00	0.00	2.00	3.00			N/A	N/A
3	1.15	0.00	0.00	2.00	3.00			N/A	N/A
4	1.33	0.00	0.00	2.00	3.00			N/A	N/A

Queue Variation results: (18:15-18:30)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.17	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	0.97	0.00	0.00	1.00	2.00			N/A	N/A
3	0.68	0.00	0.00	1.00	1.00			N/A	N/A
4	0.87	0.00	0.00	1.00	2.00			N/A	N/A

(Default Analysis Set) - 2029 + Scheme, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 3 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Rela
2029 + Scheme, AM	2029 + Scheme	AM		ONE HOUR	08:00	09:30	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	2015 Base AM	Roundabout	1,2,3,4				10.42	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	Quays Avenue	
2	2	Wyndham Way	
3	3	Wyndham Way	
4	4	Serbert Way	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1	0.00	99999.00		0.00
2	0.00	99999.00		0.00
3	0.00	99999.00		0.00
4	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	3.70	7.80	7.20	19.00	50.00	43.00	
2	5.20	8.30	44.00	54.00	50.00	26.00	
3	3.60	7.80	34.00	23.00	50.00	44.00	
4	3.70	7.70	32.00	38.00	50.00	36.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.555	1486.837
2		(calculated)	(calculated)	0.763	2446.710
3		(calculated)	(calculated)	0.638	1918.341
4		(calculated)	(calculated)	0.664	1991.470

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	299.00	100.000
2	ONE HOUR	✓	1207.00	100.000
3	ONE HOUR	✓	890.00	100.000
4	ONE HOUR	✓	1195.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
08:00-08:15	1	225.10	225.10		
08:00-08:15	2	908.69	908.69		
08:00-08:15	3	670.04	670.04		
08:00-08:15	4	899.66	899.66		
08:15-08:30	1	268.79	268.79		
08:15-08:30	2	1085.07	1085.07		
08:15-08:30	3	800.09	800.09		
08:15-08:30	4	1074.28	1074.28		
08:30-08:45	1	329.21	329.21		
08:30-08:45	2	1328.93	1328.93		
08:30-08:45	3	979.91	979.91		
08:30-08:45	4	1315.72	1315.72		
08:45-09:00	1	329.21	329.21		
08:45-09:00	2	1328.93	1328.93		
08:45-09:00	3	979.91	979.91		
08:45-09:00	4	1315.72	1315.72		
09:00-09:15	1	268.79	268.79		
09:00-09:15	2	1085.07	1085.07		
09:00-09:15	3	800.09	800.09		
09:00-09:15	4	1074.28	1074.28		
09:15-09:30	1	225.10	225.10		
09:15-09:30	2	908.69	908.69		
09:15-09:30	3	670.04	670.04		
09:15-09:30	4	899.66	899.66		

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

	To				
From		1	2	3	4
	1	0.000	140.000	118.000	41.000
	2	17.000	0.000	380.000	810.000
	3	134.000	445.000	0.000	311.000
	4	75.000	1034.000	86.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

	To				
From		1	2	3	4
	1	0.00	0.47	0.39	0.14
	2	0.01	0.00	0.31	0.67
	3	0.15	0.50	0.00	0.35
	4	0.06	0.87	0.07	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

	To				
From		1	2	3	4
	1	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To				
From		1	2	3	4
	1	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1	0.62	17.68	1.57	4.00	C	274.37	411.55	73.65	10.74	0.82	73.66	10.74
2	0.59	3.95	1.45	1.00	A	1107.56	1661.35	89.47	3.23	0.99	89.47	3.23
3	0.75	10.91	2.91	6.00	B	816.68	1225.02	145.63	7.13	1.62	145.64	7.13
4	0.85	14.79	5.20	17.00	B	1096.55	1644.83	234.69	8.56	2.61	234.72	8.56

Main Results for each time segment

Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	225.10	56.28	223.64	169.35	1172.42	0.00	836.71	413.87	0.269	0.00	0.36	5.857	A
2	908.69	227.17	906.11	1212.71	183.35	0.00	2306.87	2192.59	0.394	0.00	0.65	2.566	A
3	670.04	167.51	666.85	437.95	651.50	0.00	1502.83	924.03	0.446	0.00	0.80	4.290	A
4	899.66	224.91	895.18	871.76	446.59	0.00	1694.77	1571.57	0.531	0.00	1.12	4.477	A

Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	268.79	67.20	267.84	202.68	1403.13	0.00	708.77	413.87	0.379	0.36	0.60	8.146	A
2	1085.07	271.27	1084.04	1451.45	219.53	0.00	2279.28	2192.59	0.476	0.65	0.90	3.009	A
3	800.09	200.02	798.20	524.09	779.48	0.00	1421.21	924.03	0.563	0.80	1.27	5.761	A
4	1074.28	268.57	1071.26	1043.14	534.55	0.00	1636.33	1571.57	0.657	1.12	1.87	6.336	A

Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	329.21	82.30	325.63	247.08	1708.42	0.00	539.48	413.87	0.610	0.60	1.50	16.566	C
2	1328.93	332.23	1326.79	1767.09	266.96	0.00	2243.10	2192.59	0.592	0.90	1.44	3.919	A
3	979.91	244.98	973.63	640.02	953.73	0.00	1310.08	924.03	0.748	1.27	2.84	10.508	B
4	1315.72	328.93	1303.41	1275.27	652.10	0.00	1558.23	1571.57	0.844	1.87	4.95	13.518	B

Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	329.21	82.30	328.90	248.72	1722.01	0.00	531.95	413.87	0.619	1.50	1.57	17.676	C
2	1328.93	332.23	1328.89	1781.39	269.51	0.00	2241.15	2192.59	0.593	1.44	1.45	3.946	A
3	979.91	244.98	979.63	642.79	955.62	0.00	1308.88	924.03	0.749	2.84	2.91	10.910	B
4	1315.72	328.93	1314.71	1279.22	656.03	0.00	1555.62	1571.57	0.846	4.95	5.20	14.791	B

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	268.79	67.20	272.55	204.97	1422.25	0.00	698.17	413.87	0.385	1.57	0.64	8.531	A
2	1085.07	271.27	1087.20	1471.62	223.18	0.00	2276.49	2192.59	0.477	1.45	0.92	3.031	A
3	800.09	200.02	806.48	528.09	782.29	0.00	1419.42	924.03	0.564	2.91	1.31	5.932	A
4	1074.28	268.57	1087.24	1048.79	539.98	0.00	1632.72	1571.57	0.658	5.20	1.96	6.752	A

Main results: (09:15-09:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	225.10	56.28	226.15	170.66	1182.27	0.00	831.24	413.87	0.271	0.64	0.37	5.961	A
2	908.69	227.17	909.74	1223.18	185.24	0.00	2305.43	2192.59	0.394	0.92	0.65	2.582	A
3	670.04	167.51	672.03	440.64	654.34	0.00	1501.02	924.03	0.446	1.31	0.81	4.352	A
4	899.66	224.91	902.93	876.36	450.01	0.00	1692.49	1571.57	0.532	1.96	1.15	4.579	A

Queueing Delay Results for each time segment

Queueing Delay results: (08:00-08:15)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	5.29	0.35	5.857	A	A
2	9.51	0.63	2.566	A	A
3	11.59	0.77	4.290	A	A
4	16.19	1.08	4.477	A	A

Queueing Delay results: (08:15-08:30)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	8.72	0.58	8.146	A	A
2	13.30	0.89	3.009	A	A
3	18.40	1.23	5.761	A	A
4	26.89	1.79	6.336	A	A

Queueing Delay results: (08:30-08:45)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	20.61	1.37	16.566	C	B
2	20.97	1.40	3.919	A	A
3	39.27	2.62	10.508	B	B
4	65.55	4.37	13.518	B	B

Queueing Delay results: (08:45-09:00)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	23.19	1.55	17.676	C	B
2	21.67	1.44	3.946	A	A
3	43.21	2.88	10.910	B	B
4	76.57	5.10	14.791	B	B

Queueing Delay results: (09:00-09:15)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	10.06	0.67	8.531	A	A
2	14.05	0.94	3.031	A	A
3	20.62	1.37	5.932	A	A
4	31.72	2.11	6.752	A	A

Queueing Delay results: (09:15-09:30)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	5.79	0.39	5.961	A	A
2	9.96	0.66	2.582	A	A
3	12.54	0.84	4.352	A	A
4	17.77	1.18	4.579	A	A

Queue Variation Results for each time segment

Queue Variation results: (08:00-08:15)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.36	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	0.65	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	0.80	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	1.12	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A

Queue Variation results: (08:15-08:30)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.60	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	0.90	0.00	0.00	1.00	1.00			N/A	N/A
3	1.27	0.00	0.00	2.00	3.00			N/A	N/A
4	1.87	0.00	0.00	4.00	6.00			N/A	N/A

Queue Variation results: (08:30-08:45)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	1.50	0.00	0.00	0.00	2.00			N/A	N/A
2	1.44	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	2.84	0.00	0.00	0.00	6.00			N/A	N/A
4	4.95	0.00	0.00	6.00	17.00			N/A	N/A

Queue Variation results: (08:45-09:00)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	1.57	0.00	0.00	0.00	4.00			N/A	N/A
2	1.45	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	2.91	0.00	0.00	0.00	3.00			N/A	N/A
4	5.20	0.00	0.00	1.00	12.00			N/A	N/A

Queue Variation results: (09:00-09:15)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.64	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	0.92	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	1.31	0.00	0.00	2.00	3.00			N/A	N/A
4	1.96	0.00	0.00	4.00	6.00			N/A	N/A

Queue Variation results: (09:15-09:30)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.37	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	0.65	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	0.81	0.00	0.00	1.00	2.00			N/A	N/A
4	1.15	0.00	0.00	1.00	3.00			N/A	N/A

(Default Analysis Set) - 2029 + Scheme, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 3 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Rela
2029 + Scheme, PM	2029 + Scheme	PM		ONE HOUR	17:00	18:30	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	2015 Base AM	Roundabout	1,2,3,4				8.62	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	Quays Avenue	
2	2	Wyndham Way	
3	3	Wyndham Way	
4	4	Serbert Way	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1	0.00	99999.00		0.00
2	0.00	99999.00		0.00
3	0.00	99999.00		0.00
4	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	3.70	7.80	7.20	19.00	50.00	43.00	
2	5.20	8.30	44.00	54.00	50.00	26.00	
3	3.60	7.80	34.00	23.00	50.00	44.00	
4	3.70	7.70	32.00	38.00	50.00	36.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.555	1486.837
2		(calculated)	(calculated)	0.763	2446.710
3		(calculated)	(calculated)	0.638	1918.341
4		(calculated)	(calculated)	0.664	1991.470

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	178.00	100.000
2	ONE HOUR	✓	1542.00	100.000
3	ONE HOUR	✓	696.00	100.000
4	ONE HOUR	✓	1119.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
17:00-17:15	1	134.01	134.01		
17:00-17:15	2	1160.90	1160.90		
17:00-17:15	3	523.99	523.99		
17:00-17:15	4	842.44	842.44		
17:15-17:30	1	160.02	160.02		
17:15-17:30	2	1386.23	1386.23		
17:15-17:30	3	625.69	625.69		
17:15-17:30	4	1005.96	1005.96		
17:30-17:45	1	195.98	195.98		
17:30-17:45	2	1697.77	1697.77		
17:30-17:45	3	766.31	766.31		
17:30-17:45	4	1232.04	1232.04		
17:45-18:00	1	195.98	195.98		
17:45-18:00	2	1697.77	1697.77		
17:45-18:00	3	766.31	766.31		
17:45-18:00	4	1232.04	1232.04		
18:00-18:15	1	160.02	160.02		
18:00-18:15	2	1386.23	1386.23		
18:00-18:15	3	625.69	625.69		
18:00-18:15	4	1005.96	1005.96		
18:15-18:30	1	134.01	134.01		
18:15-18:30	2	1160.90	1160.90		
18:15-18:30	3	523.99	523.99		
18:15-18:30	4	842.44	842.44		

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

	To				
From		1	2	3	4
	1	0.000	25.000	55.000	98.000
	2	45.000	0.000	332.000	1165.000
	3	68.000	320.000	0.000	308.000
	4	63.000	1025.000	31.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

	To				
From		1	2	3	4
	1	0.00	0.14	0.31	0.55
	2	0.03	0.00	0.22	0.76
	3	0.10	0.46	0.00	0.44
	4	0.06	0.92	0.03	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

	To				
From		1	2	3	4
	1	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To				
From		1	2	3	4
	1	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1	0.30	7.98	0.43	~1	A	163.34	245.00	25.29	6.19	0.28	25.29	6.19
2	0.74	6.05	2.82	4.00	A	1414.97	2122.45	155.82	4.41	1.73	155.84	4.41
3	0.77	15.30	3.16	9.00	C	638.66	957.99	143.33	8.98	1.59	143.34	8.98
4	0.74	8.12	2.73	4.00	A	1026.81	1540.22	147.24	5.74	1.64	147.25	5.74

Main Results for each time segment

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	134.01	33.50	133.33	131.92	1031.30	0.00	914.96	423.43	0.146	0.00	0.17	4.602	A
2	1160.90	290.22	1156.99	1026.79	137.84	0.00	2341.58	2133.41	0.496	0.00	0.98	3.029	A
3	523.99	131.00	521.28	313.54	981.29	0.00	1292.50	701.99	0.405	0.00	0.68	4.652	A
4	842.44	210.61	838.86	1178.21	324.36	0.00	1775.97	1690.11	0.474	0.00	0.90	3.827	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	160.02	40.00	159.71	157.88	1234.38	0.00	802.35	423.43	0.199	0.17	0.25	5.599	A
2	1386.23	346.56	1384.26	1229.00	165.10	0.00	2320.79	2133.41	0.597	0.98	1.47	3.836	A
3	625.69	156.42	623.86	375.20	1174.15	0.00	1169.50	701.99	0.535	0.68	1.13	6.575	A
4	1005.96	251.49	1004.08	1409.83	388.18	0.00	1733.57	1690.11	0.580	0.90	1.37	4.922	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	195.98	49.00	195.27	192.59	1506.55	0.00	651.43	423.43	0.301	0.25	0.43	7.867	A
2	1697.77	424.44	1692.51	1499.98	201.83	0.00	2292.78	2133.41	0.740	1.47	2.78	5.945	A
3	766.31	191.58	758.69	458.73	1435.61	0.00	1002.75	701.99	0.764	1.13	3.04	14.326	B
4	1232.04	308.01	1226.79	1721.96	472.34	0.00	1677.66	1690.11	0.734	1.37	2.68	7.893	A

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	195.98	49.00	195.96	193.72	1514.58	0.00	646.97	423.43	0.303	0.43	0.43	7.982	A
2	1697.77	424.44	1697.63	1507.97	202.56	0.00	2292.22	2133.41	0.741	2.78	2.82	6.050	A
3	766.31	191.58	765.82	460.18	1440.01	0.00	999.95	701.99	0.766	3.04	3.16	15.298	C
4	1232.04	308.01	1231.83	1729.37	476.47	0.00	1674.92	1690.11	0.736	2.68	2.73	8.115	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	160.02	40.00	160.73	159.45	1245.64	0.00	796.10	423.43	0.201	0.43	0.25	5.671	A
2	1386.23	346.56	1391.50	1240.20	166.17	0.00	2319.97	2133.41	0.598	2.82	1.50	3.900	A
3	625.69	156.42	633.62	377.28	1180.40	0.00	1165.52	701.99	0.537	3.16	1.18	6.867	A
4	1005.96	251.49	1011.26	1420.18	393.83	0.00	1729.82	1690.11	0.582	2.73	1.41	5.047	A

Main results: (18:15-18:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	134.01	33.50	134.33	132.86	1038.69	0.00	910.86	423.43	0.147	0.25	0.17	4.637	A
2	1160.90	290.22	1162.94	1034.17	138.85	0.00	2340.81	2133.41	0.496	1.50	0.99	3.063	A
3	523.99	131.00	525.93	315.29	986.51	0.00	1289.18	701.99	0.406	1.18	0.69	4.730	A
4	842.44	210.61	844.43	1185.31	327.13	0.00	1774.13	1690.11	0.475	1.41	0.91	3.881	A

Queueing Delay Results for each time segment

Queueing Delay results: (17:00-17:15)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	2.50	0.17	4.602	A	A
2	14.28	0.95	3.029	A	A
3	9.82	0.65	4.652	A	A
4	13.03	0.87	3.827	A	A

Queueing Delay results: (17:15-17:30)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	3.63	0.24	5.599	A	A
2	21.43	1.43	3.836	A	A
3	16.37	1.09	6.575	A	A
4	19.84	1.32	4.922	A	A

Queueing Delay results: (17:30-17:45)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	6.17	0.41	7.867	A	A
2	39.58	2.64	5.945	A	A
3	41.02	2.73	14.326	B	B
4	37.70	2.51	7.893	A	A

Queueing Delay results: (17:45-18:00)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	6.44	0.43	7.982	A	A
2	42.08	2.81	6.050	A	A
3	46.69	3.11	15.298	C	B
4	40.68	2.71	8.115	A	A

Queueing Delay results: (18:00-18:15)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	3.91	0.26	5.671	A	A
2	23.27	1.55	3.900	A	A
3	18.77	1.25	6.867	A	A
4	21.96	1.46	5.047	A	A

Queueing Delay results: (18:15-18:30)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	2.66	0.18	4.637	A	A
2	15.19	1.01	3.063	A	A
3	10.66	0.71	4.730	A	A
4	14.02	0.93	3.881	A	A

Queue Variation Results for each time segment

Queue Variation results: (17:00-17:15)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.17	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	0.98	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	0.68	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	0.90	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A

Queue Variation results: (17:15-17:30)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.25	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	1.47	0.00	0.00	3.00	4.00			N/A	N/A
3	1.13	0.00	0.00	2.00	3.00			N/A	N/A
4	1.37	0.00	0.00	2.00	4.00			N/A	N/A

Queue Variation results: (17:30-17:45)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.43	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	2.78	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	3.04	0.00	0.00	2.00	9.00			N/A	N/A
4	2.68	0.00	0.00	0.00	4.00			N/A	N/A

Queue Variation results: (17:45-18:00)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.43	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	2.82	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	3.16	0.00	0.00	0.00	6.00			N/A	N/A
4	2.73	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A

Queue Variation results: (18:00-18:15)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.25	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	1.50	0.00	0.00	2.00	3.00			N/A	N/A
3	1.18	0.00	0.00	2.00	3.00			N/A	N/A
4	1.41	0.00	0.00	2.00	3.00			N/A	N/A

Queue Variation results: (18:15-18:30)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.17	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	0.99	0.00	0.00	1.00	2.00			N/A	N/A
3	0.69	0.00	0.00	1.00	1.00			N/A	N/A
4	0.91	0.00	0.00	1.00	2.00			N/A	N/A



Junctions 8
ARCADY 8 - Roundabout Module
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Filename: R3-1- Wyndham Way - Town Centre mini roundabout without left turn.arc8
Path: \\CWLFP01\Proj\Consulting\Transport Planning\PROJECTS\467470 (HS) MetroWest Phase 1 TA\Initial Junction Options Modelling\working
Report generation date: 03/02/2016 13:47:05

« (Default Analysis Set) - 2015 Base, AM

- » Junction Network
- » Arms
- » Traffic Flows
- » Entry Flows
- » Turning Proportions
- » Vehicle Mix
- » Results

Summary of junction performance

	AM							PM					
	Queue (PCU)	95 % Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Queue (PCU)	95 % Queue (PCU)	Delay (s)	RFC	LOS	Juncti Dela (s)
	A1 - 2015 Base												
Arm 1	0.23	~1	3.77	0.19	A	47.40	E	0.56	1.00	4.73	0.36	A	820.2
Arm 2	14.84	55.00	86.51	0.98	F			257.08	200.00	1507.01	1.64	F	
Arm 3	0.47	1.00	4.75	0.32	A			0.37	~1	4.22	0.27	A	
	A1 - 2019 Opening Year												
Arm 1	0.24	~1	3.82	0.20	A	61.90	F	0.61	1.00	4.90	0.38	A	996.5
Arm 2	20.98	64.00	114.09	1.02	F			312.06	?	1832.29	1.74	F	
Arm 3	0.50	1.00	4.84	0.33	A			0.40	~1	4.28	0.28	A	
	A1 - 2019 Opening Year + Scheme												
Arm 1	0.24	~1	3.85	0.20	A	72.76	F	0.61	1.00	4.90	0.38	A	1032.
Arm 2	25.78	69.00	134.09	1.04	F			322.50	?	1889.57	1.76	F	
Arm 3	0.51	1.00	4.93	0.34	A			0.40	~1	4.28	0.28	A	
	A1 - 2029												
Arm 1	0.28	~1	3.99	0.22	A	124.13	F	0.74	1.00	5.39	0.43	A	1469.
Arm 2	49.34	93.00	232.81	1.13	F			457.19	?	2703.48	2.01	F	
Arm 3	0.57	1.00	5.07	0.36	A			0.45	1.00	4.42	0.31	A	
	A1 - 2029 + Scheme												
Arm 1	0.28	~1	4.04	0.22	A	162.83	F	0.74	1.00	5.39	0.43	A	1528.
Arm 2	60.95	105.00	304.48	1.16	F			473.43	?	2795.33	2.04	F	
Arm 3	0.60	1.00	5.21	0.38	A			0.45	1.00	4.42	0.31	A	

Values shown are the maximum values over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages.

"D1 - 2015 Base, AM" model duration: 08:00 - 09:30

"D2 - 2015 Base, PM" model duration: 17:00 - 18:30

"D3 - 2019 Opening Year, AM" model duration: 08:00 - 09:30

"D4 - 2019 Opening Year, PM" model duration: 17:00 - 18:30

"D5 - 2019 Opening Year + Scheme, AM" model duration: 08:00 - 09:30

"D6 - 2019 Opening Year + Scheme, PM" model duration: 17:00 - 18:30

"D7 - 2029, AM" model duration: 08:00 - 09:30

"D8 - 2029, PM" model duration: 17:00 - 18:30

"D9 - 2029 + Scheme, AM" model duration: 08:00 - 09:30

"D10 - 2029 + Scheme, PM" model duration: 17:00 - 18:30

Run using Junctions 8.0.4.487 at 03/02/2016 13:47:05

File summary

Title	(untitled)
Location	
Site Number	
Date	25/11/2015
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DT018866
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75	✓		N/A	0.85	36.00	20.00

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

(Default Analysis Set) - 2015 Base, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relations
2015 Base, AM	2015 Base	AM		ONE HOUR	08:00	09:30	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	Mini-roundabout	1,2,3	47.40	E

Junction Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

Arm	Arm	Name	Description
1	1	(untitled)	
2	2	(untitled)	
3	3	(untitled)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1	0.00	99999.00		0.00
2	0.00	99999.00		0.00
3	0.00	99999.00		0.00

Mini Roundabout Geometry

Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
1	2.80	2.80	4.20	2.80	7.60	20.00	0.00	
2	3.10	3.10	3.60	3.10	13.25	2.00	0.00	
3	6.00	6.00	6.50	6.00	12.90	14.00	0.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	1.098	1381.910
2		(calculated)	(calculated)	0.526	770.431
3		(calculated)	(calculated)	0.702	1314.429

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	202.00	100.000
2	ONE HOUR	✓	582.00	100.000
3	ONE HOUR	✓	327.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
From		1	2	3
	1	0.000	0.000	202.000
	2	261.000	0.000	321.000
	3	158.000	169.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

	To		
	1	2	3
From	1	0.00	0.00
	2	0.45	0.00
	3	0.48	0.52

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

	To		
	1	2	3
From	1	1.000	1.000
	2	1.000	1.000
	3	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To		
	1	2	3
From	1	0.0	0.0
	2	0.0	0.0
	3	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1	0.19	3.77	0.23	~1	A	185.36	278.04	16.35	3.53	0.18	16.35	3.53
2	0.98	86.51	14.84	55.00	F	534.05	801.08	505.53	37.86	5.62	505.67	37.87
3	0.32	4.75	0.47	1.00	A	300.06	450.09	32.28	4.30	0.36	32.28	4.30

Main Results for each time segment

Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	152.08	38.02	151.52	311.95	126.69	0.00	1242.82	707.34	0.122	0.00	0.14	3.297	A
2	438.16	109.54	431.50	126.69	151.52	0.00	690.80	398.68	0.634	0.00	1.66	13.561	B
3	246.18	61.55	245.13	389.52	193.51	0.00	1178.50	1188.84	0.209	0.00	0.26	3.853	A

Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	181.59	45.40	181.45	373.90	151.77	0.00	1215.28	707.34	0.149	0.14	0.17	3.481	A
2	523.21	130.80	517.36	151.77	181.45	0.00	675.07	398.68	0.775	1.66	3.13	22.010	C
3	293.97	73.49	293.65	466.80	232.01	0.00	1151.45	1188.84	0.255	0.26	0.34	4.196	A

Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	222.41	55.60	222.18	446.72	185.81	0.00	1177.91	707.34	0.189	0.17	0.23	3.766	A
2	640.79	160.20	608.77	185.81	222.18	0.00	653.66	398.68	0.980	3.13	11.13	57.196	F
3	360.03	90.01	359.52	557.94	273.00	0.00	1122.65	1188.84	0.321	0.34	0.47	4.714	A

Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	222.41	55.60	222.40	454.66	186.06	0.00	1177.63	707.34	0.189	0.23	0.23	3.767	A
2	640.79	160.20	625.95	186.06	222.40	0.00	653.54	398.68	0.980	11.13	14.84	86.513	F
3	360.03	90.01	360.02	567.65	280.71	0.00	1117.24	1188.84	0.322	0.47	0.47	4.753	A

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	181.59	45.40	181.82	396.54	152.18	0.00	1214.83	707.34	0.149	0.23	0.18	3.484	A
2	523.21	130.80	566.99	152.18	181.82	0.00	674.88	398.68	0.775	14.84	3.90	41.384	E
3	293.97	73.49	294.45	494.54	254.27	0.00	1135.82	1188.84	0.259	0.47	0.35	4.282	A

Main results: (09:15-09:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	152.08	38.02	152.22	319.35	127.41	0.00	1242.03	707.34	0.122	0.18	0.14	3.305	A
2	438.16	109.54	446.51	127.41	152.22	0.00	690.43	398.68	0.635	3.90	1.81	15.226	C
3	246.18	61.55	246.52	398.50	200.24	0.00	1173.77	1188.84	0.210	0.35	0.27	3.885	A

Queueing Delay Results for each time segment

Queueing Delay results: (08:00-08:15)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	2.04	0.14	3.297	A	A
2	22.76	1.52	13.561	B	B
3	3.85	0.26	3.853	A	A

Queueing Delay results: (08:15-08:30)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	2.59	0.17	3.481	A	A
2	41.88	2.79	22.010	C	C
3	5.03	0.34	4.196	A	A

Queueing Delay results: (08:30-08:45)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	3.42	0.23	3.766	A	A
2	120.07	8.00	57.196	F	E
3	6.88	0.46	4.714	A	A

Queueing Delay results: (08:45-09:00)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	3.48	0.23	3.767	A	A
2	196.81	13.12	86.513	F	F
3	7.07	0.47	4.753	A	A

Queueing Delay results: (09:00-09:15)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	2.69	0.18	3.484	A	A
2	94.26	6.28	41.384	E	D
3	5.37	0.36	4.282	A	A

Queueing Delay results: (09:15-09:30)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	2.13	0.14	3.305	A	A
2	29.75	1.98	15.226	C	B
3	4.07	0.27	3.885	A	A

Queue Variation Results for each time segment

Queue Variation results: (08:00-08:15)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.14	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	1.66	0.00	1.00	2.00	2.00			N/A	N/A
3	0.26	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A

Queue Variation results: (08:15-08:30)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.17	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	3.13	0.00	1.00	7.00	10.00			N/A	N/A
3	0.34	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A

Queue Variation results: (08:30-08:45)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.23	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	11.13	0.00	5.00	27.00	37.00			N/A	N/A
3	0.47	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A

Queue Variation results: (08:45-09:00)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.23	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	14.84	0.00	5.00	39.00	55.00			N/A	N/A
3	0.47	0.00	0.00	0.00	1.00			N/A	N/A

Queue Variation results: (09:00-09:15)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.18	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	3.90	0.00	0.00	8.00	14.00			N/A	N/A
3	0.35	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A

Queue Variation results: (09:15-09:30)

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.14	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	1.81	0.00	0.00	1.00	5.00			N/A	N/A
3	0.27	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A

Junctions 8
PICADY 8 - Priority Intersection Module
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Filename: R3-2 - Wyndham Way - Town Centre T-junction without right turn.arc8

Path: \\CWLFP01\Proj\Consulting\Transport Planning\PROJECTS\467470 (HS) MetroWest Phase 1 TA\Initial Junction Options Modelling\working

Report generation date: 03/02/2016 13:48:17

« (Default Analysis Set) - 2015, AM

» Junction Network

» Arms

» Traffic Flows

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» Vehicle Mix

» Results

Summary of junction performance

	AM							PM					J
	Queue (PCU)	95 % Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Queue (PCU)	95 % Queue (PCU)	Delay (s)	RFC	LOS	J
	A1 - 2015												
Stream B-AC	0.88	1.00	10.84	0.47	B	12.75	B	1.55	2.00	14.63	0.61	B	
Stream C-AB	1.43	2.00	14.49	0.58	B			2.16	6.00	17.33	0.69	C	
Stream C-A	-	-	-	-	-			-	-	-	-	-	
Stream A-B	-	-	-	-	-			-	-	-	-	-	
Stream A-C	-	-	-	-	-			-	-	-	-	-	
	A1 - 2019 Opening Year												
Stream B-AC	0.94	200.00	11.21	0.49	B	13.34	B	1.75	3.00	15.87	0.64	C	
Stream C-AB	1.57	3.00	15.26	0.61	C			2.57	8.00	19.77	0.74	C	
Stream C-A	-	-	-	-	-			-	-	-	-	-	
Stream A-B	-	-	-	-	-			-	-	-	-	-	
Stream A-C	-	-	-	-	-			-	-	-	-	-	
	A1 - 2019 Opening Year + Scheme												
Stream B-AC	0.96	1.00	11.39	0.49	B	14.18	B	1.91	4.00	16.84	0.66	C	
Stream C-AB	1.80	4.00	16.56	0.64	C			1.90	4.00	15.77	0.65	C	
Stream C-A	-	-	-	-	-			-	-	-	-	-	
Stream A-B	-	-	-	-	-			-	-	-	-	-	
Stream A-C	-	-	-	-	-			-	-	-	-	-	
	A1 - 2029												
Stream B-AC	1.14	1.00	12.52	0.54	B	15.67	C	2.42	7.00	20.09	0.72	C	
Stream C-AB	2.12	6.00	18.39	0.68	C			4.07	14.00	31.96	0.86	D	
Stream C-A	-	-	-	-	-			-	-	-	-	-	
Stream A-B	-	-	-	-	-			-	-	-	-	-	
Stream A-C	-	-	-	-	-			-	-	-	-	-	
	A1 - 2029 + Scheme												
Stream B-AC	1.19	1.00	12.85	0.55	B	18.06	C	2.84	9.00	22.68	0.75	C	
Stream C-AB	2.71	8.00	22.20	0.75	C			4.30	15.00	34.30	0.88	D	
Stream C-A	-	-	-	-	-			-	-	-	-	-	
Stream A-B	-	-	-	-	-			-	-	-	-	-	
Stream A-C	-	-	-	-	-			-	-	-	-	-	

Values shown are the maximum values over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages.

"D1 - 2015, AM" model duration: 08:00 - 09:30

"D2 - 2015, PM" model duration: 17:00 - 18:30

"D3 - 2019 Opening Year, AM" model duration: 08:00 - 09:30

"D4 - 2019 Opening Year, PM" model duration: 17:00 - 18:30

"D5 - 2019 Opening Year + Scheme, AM" model duration: 08:00 - 09:30

"D6 - 2019 Opening Year + Scheme, PM" model duration: 17:00 - 18:30

"D7 - 2029, AM" model duration: 08:00 - 09:30

"D8 - 2029, PM" model duration: 17:00 - 18:30

"D9 - 2029 + Scheme, AM" model duration: 08:00 - 09:30

"D10 - 2029 + Scheme, PM" model duration: 17:00 - 18:30

Run using Junctions 8.0.4.487 at 03/02/2016 13:48:17

File summary

Title	(untitled)
Location	
Site Number	
Date	30/11/2015
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DT018866
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75	✓		N/A	0.85	36.00	20.00

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

(Default Analysis Set) - 2015, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relations
2015, AM	2015	AM		ONE HOUR	08:00	09:30	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	Town Centre	T-Junction	Two-way	A,B,C		12.75	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	High Street		Major
B	B	Wyndham Way		Minor
C	C	B3124		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.60	✓	1.85		2.20	54.00	✓	2.00

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)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	3.50										25	60

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	563.265	0.096	0.243	0.153	0.346
1	B-C	694.833	0.104	0.262	-	-
1	C-B	605.235	0.228	0.228	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	327.00	100.000
B	ONE HOUR	✓	269.00	100.000
C	ONE HOUR	✓	582.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

	To			
		A	B	C
From	A	0.000	158.000	169.000
	B	0.000	0.000	269.000
	C	321.000	261.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

	To			
		A	B	C
From	A	0.00	0.48	0.52
	B	0.00	0.00	1.00
	C	0.55	0.45	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

	To			
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To			
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-AC	0.47	10.84	0.88	1.00	B	246.84	370.26	57.55	9.33	0.64	57.56	9.33
C-AB	0.58	14.49	1.43	2.00	B	270.71	406.06	85.94	12.70	0.95	85.96	12.70
C-A	-	-	-	-	-	263.35	395.02	-	-	-	-	-
A-B	-	-	-	-	-	144.98	217.48	-	-	-	-	-
A-C	-	-	-	-	-	155.08	232.62	-	-	-	-	-

Main Results for each time segment

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	202.52	50.63	200.73	0.00	649.14	0.312	0.00	0.45	7.997	A
C-AB	207.57	51.89	205.27	0.00	570.16	0.364	0.00	0.58	9.809	A
C-A	230.59	57.65	230.59	0.00	-	-	-	-	-	-
A-B	118.95	29.74	118.95	0.00	-	-	-	-	-	-
A-C	127.23	31.81	127.23	0.00	-	-	-	-	-	-

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	241.83	60.46	241.23	0.00	640.27	0.378	0.45	0.60	9.008	A
C-AB	258.56	64.64	257.55	0.00	575.43	0.449	0.58	0.83	11.296	B
C-A	264.65	66.16	264.65	0.00	-	-	-	-	-	-
A-B	142.04	35.51	142.04	0.00	-	-	-	-	-	-
A-C	151.93	37.98	151.93	0.00	-	-	-	-	-	-

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	296.17	74.04	295.07	0.00	628.00	0.472	0.60	0.87	10.776	B
C-AB	345.99	86.50	343.72	0.00	594.47	0.582	0.83	1.40	14.249	B
C-A	294.80	73.70	294.80	0.00	-	-	-	-	-	-
A-B	173.96	43.49	173.96	0.00	-	-	-	-	-	-
A-C	186.07	46.52	186.07	0.00	-	-	-	-	-	-

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	296.17	74.04	296.14	0.00	628.00	0.472	0.87	0.88	10.844	B
C-AB	345.99	86.50	345.86	0.00	594.47	0.582	1.40	1.43	14.491	B
C-A	294.80	73.70	294.80	0.00	-	-	-	-	-	-
A-B	173.96	43.49	173.96	0.00	-	-	-	-	-	-
A-C	186.07	46.52	186.07	0.00	-	-	-	-	-	-

Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	241.83	60.46	242.89	0.00	640.27	0.378	0.88	0.62	9.083	A
C-AB	258.56	64.64	260.77	0.00	575.43	0.449	1.43	0.88	11.531	B
C-A	264.65	66.16	264.65	0.00	-	-	-	-	-	-
A-B	142.04	35.51	142.04	0.00	-	-	-	-	-	-
A-C	151.93	37.98	151.93	0.00	-	-	-	-	-	-

Main results: (09:15-09:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	202.52	50.63	203.15	0.00	649.14	0.312	0.62	0.46	8.083	A
C-AB	207.57	51.89	208.68	0.00	570.16	0.364	0.88	0.60	9.992	A
C-A	230.59	57.65	230.59	0.00	-	-	-	-	-	-
A-B	118.95	29.74	118.95	0.00	-	-	-	-	-	-
A-C	127.23	31.81	127.23	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (08:00-08:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	6.43	0.43	7.997	A	A
C-AB	8.49	0.57	9.809	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:15-08:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	8.69	0.58	9.008	A	A
C-AB	12.39	0.83	11.296	B	B
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:30-08:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	12.56	0.84	10.776	B	B
C-AB	20.68	1.38	14.249	B	B
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:45-09:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	13.19	0.88	10.844	B	B
C-AB	21.91	1.46	14.491	B	B
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (09:00-09:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	9.59	0.64	9.083	A	A
C-AB	13.39	0.89	11.531	B	B
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (09:15-09:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	7.10	0.47	8.083	A	A
C-AB	9.08	0.61	9.992	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queue Variation Results for each time segment

Queue Variation results: (08:00-08:15)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-AC	0.45	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-AB	0.58	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (08:15-08:30)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-AC	0.60	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-AB	0.83	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (08:30-08:45)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-AC	0.87	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-AB	1.40	0.00	0.00	0.00	2.00			N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (08:45-09:00)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-AC	0.88	0.00	0.00	0.00	1.00			N/A	N/A
C-AB	1.43	0.00	0.00	0.00	2.00			N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (09:00-09:15)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-AC	0.62	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-AB	0.88	0.00	0.00	1.00	1.00			N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (09:15-09:30)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-AC	0.46	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-AB	0.60	0.00	0.00	0.00	1.00			N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Junctions 8
PICADY 8 - Priority Intersection Module
Version: 8.0.4.487 [15039,24/03/2014] © Copyright TRL Limited, 2015
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Filename: R6 - Station Rd_Harbour Rd T-Junction.arc8

Path: \\CWLFP01\Proj\Consulting\Transport Planning\PROJECTS\467470 (HS) MetroWest Phase 1 TA\Initial Junction Options Modelling\working

Report generation date: 07/12/2015 15:23:44

-
- » (Default Analysis Set) - 2015, AM
 - » (Default Analysis Set) - 2015, PM
 - » (Default Analysis Set) - 2019 Opening Year, AM
 - » (Default Analysis Set) - 2019 Opening Year, PM
 - » (Default Analysis Set) - 2019 Opening Year + Scheme, AM
 - » (Default Analysis Set) - 2019 Opening Year + Scheme, PM
 - » (Default Analysis Set) - 2029, AM
 - » (Default Analysis Set) - 2029, PM
 - » (Default Analysis Set) - 2029 + Scheme, AM
 - » (Default Analysis Set) - 2029 + Scheme, PM

Summary of junction performance

	AM							PM						Ju D
	Queue (PCU)	95 % Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Queue (PCU)	95 % Queue (PCU)	Delay (s)	RFC	LOS		
	A1 - 2015													
Stream B-C	0.18	~1	7.81	0.15	A	10.84	B	0.18	~1	6.77	0.16	A		
Stream B-A	0.66	1.00	13.52	0.40	B			0.24	~1	11.03	0.20	B		
Stream C-A	-	-	-	-	-			-	-	-	-	-		
Stream C-B	0.19	~1	8.21	0.16	A			0.45	1.00	10.29	0.31	B		
Stream A-B	-	-	-	-	-			-	-	-	-	-		
Stream A-C	-	-	-	-	-			-	-	-	-	-		
	A1 - 2019 Opening Year													
Stream B-C	0.19	~1	7.99	0.16	A	11.13	B	0.20	~1	6.91	0.16	A		
Stream B-A	0.70	1.00	13.93	0.41	B			0.26	~1	11.29	0.21	B		
Stream C-A	-	-	-	-	-			-	-	-	-	-		
Stream C-B	0.19	~1	8.28	0.16	A			0.45	1.00	10.47	0.31	B		
Stream A-B	-	-	-	-	-			-	-	-	-	-		
Stream A-C	-	-	-	-	-			-	-	-	-	-		
	A1 - 2019 Opening Year + Scheme													
Stream B-C	0.21	~1	8.06	0.17	A	10.78	B	0.20	~1	6.96	0.17	A		
Stream B-A	0.67	1.00	13.30	0.40	B			0.26	~1	11.53	0.21	B		
Stream C-A	-	-	-	-	-			-	-	-	-	-		
Stream C-B	0.20	~1	8.38	0.17	A			0.49	1.00	10.74	0.33	B		
Stream A-B	-	-	-	-	-			-	-	-	-	-		
Stream A-C	-	-	-	-	-			-	-	-	-	-		
	A1 - 2029													
Stream B-C	0.22	~1	8.63	0.18	A	12.18	B	0.24	~1	9.48	0.20	A	1	
Stream B-A	0.84	2.00	15.40	0.46	C			1.00	2.00	18.46	0.51	C		
Stream C-A	-	-	-	-	-			-	-	-	-	-		
Stream C-B	0.20	~1	8.51	0.17	A			0.48	1.00	10.97	0.32	B		
Stream A-B	-	-	-	-	-			-	-	-	-	-		
Stream A-C	-	-	-	-	-			-	-	-	-	-		
	A1 - 2029 + Scheme													
Stream B-C	0.26	~1	8.84	0.21	A	11.93	B	0.24	~1	7.40	0.19	A	1	
Stream B-A	0.82	2.00	14.99	0.45	B			0.31	~1	12.47	0.24	B		
Stream C-A	-	-	-	-	-			-	-	-	-	-		
Stream C-B	0.21	~1	8.67	0.17	A			0.53	1.00	11.42	0.35	B		
Stream A-B	-	-	-	-	-			-	-	-	-	-		
Stream A-C	-	-	-	-	-			-	-	-	-	-		

Values shown are the maximum values over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages.

"D1 - 2015, AM" model duration: 08:00 - 09:30

"D2 - 2015, PM" model duration: 17:00 - 18:30

"D3 - 2019 Opening Year, AM" model duration: 08:00 - 09:30

"D4 - 2019 Opening Year, PM" model duration: 17:00 - 18:30

"D5 - 2019 Opening Year + Scheme, AM" model duration: 08:00 - 09:30

"D6 - 2019 Opening Year + Scheme, PM" model duration: 17:00 - 18:30

"D7 - 2029, AM" model duration: 08:00 - 09:30

"D8 - 2029, PM" model duration: 17:00 - 18:30

"D9 - 2029 + Scheme, AM" model duration: 08:00 - 09:30

"D10 - 2029 + Scheme, PM" model duration: 17:00 - 18:30

Run using Junctions 8.0.4.487 at 07/12/2015 15:23:39

File summary

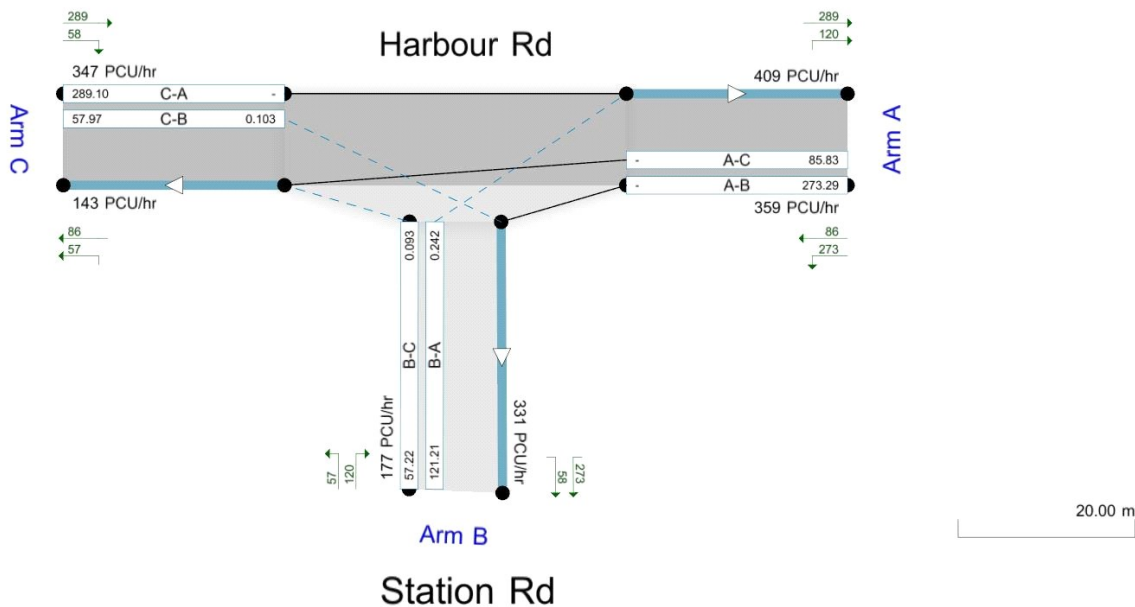
Title	(untitled)
Location	
Site Number	
Date	25/11/2015
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DT018866
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75	✓		N/A	0.85	36.00	20.00

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



Showing modelled flow through junction (PCU/hr)
Streams (upstreams) show Total Demand (PCU/hr). Streams (downstreams) show RFC ()
Time Segment: (08:00-08:15)
Showing Analysis Set "A1", Demand Set "D1 - 2015, AM"

The junction diagram reflects the last run of ARCADY.

(Default Analysis Set) - 2015, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relations
2015, AM	2015	AM		ONE HOUR	08:00	09:30	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C		10.84	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	(untitled)		Major
B	B	(untitled)		Minor
C	C	(untitled)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.80	✓	2.60	✓	2.70	75.00		

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)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane plus flare				10.00	5.70	3.80	3.50	3.40		1.00	30	105

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	622.420	0.103	0.261	0.164	0.373
1	B-C	718.633	0.106	0.269	-	-
1	C-B	650.993	0.243	0.243	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	477.00	100.000
B	ONE HOUR	✓	237.00	100.000
C	ONE HOUR	✓	461.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	Direct Demand Entry Flow in PCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
08:00-08:15	A	359.11	359.11		
08:00-08:15	B	178.43	178.43		
08:00-08:15	C	347.06	347.06		
08:15-08:30	A	428.81	428.81		
08:15-08:30	B	213.06	213.06		
08:15-08:30	C	414.43	414.43		
08:30-08:45	A	525.19	525.19		
08:30-08:45	B	260.94	260.94		
08:30-08:45	C	507.57	507.57		
08:45-09:00	A	525.19	525.19		
08:45-09:00	B	260.94	260.94		
08:45-09:00	C	507.57	507.57		
09:00-09:15	A	428.81	428.81		
09:00-09:15	B	213.06	213.06		
09:00-09:15	C	414.43	414.43		
09:15-09:30	A	359.11	359.11		
09:15-09:30	B	178.43	178.43		
09:15-09:30	C	347.06	347.06		

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

	To			
		A	B	C
From	A	0.000	363.000	114.000
	B	161.000	0.000	76.000
	C	384.000	77.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

	To			
		A	B	C
From	A	0.00	0.76	0.24
	B	0.68	0.00	0.32
	C	0.83	0.17	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

	To			
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To			
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-C	0.15	7.81	0.18	~1	A	69.74	104.61	12.31	7.06	0.14	12.31	7.06
B-A	0.40	13.52	0.66	1.00	B	147.74	221.60	41.75	11.30	0.46	41.76	11.31
C-A	-	-	-	-	-	352.37	528.55	-	-	-	-	-
C-B	0.16	8.21	0.19	~1	A	70.66	105.98	13.46	7.62	0.15	13.46	7.62
A-B	-	-	-	-	-	333.10	499.64	-	-	-	-	-
A-C	-	-	-	-	-	104.61	156.91	-	-	-	-	-

Main Results for each time segment

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	57.22	14.30	56.81	0.00	618.55	0.093	0.00	0.10	6.404	A
B-A	121.21	30.30	119.95	0.00	501.64	0.242	0.00	0.31	9.401	A
C-A	289.10	72.27	289.10	0.00	-	-	-	-	-	-
C-B	57.97	14.49	57.52	0.00	563.57	0.103	0.00	0.11	7.108	A
A-B	273.29	68.32	273.29	0.00	-	-	-	-	-	-
A-C	85.83	21.46	85.83	0.00	-	-	-	-	-	-

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	68.32	17.08	68.21	0.00	591.14	0.116	0.10	0.13	6.882	A
B-A	144.74	36.18	144.28	0.00	477.47	0.303	0.31	0.43	10.789	B
C-A	345.21	86.30	345.21	0.00	-	-	-	-	-	-
C-B	69.22	17.31	69.10	0.00	546.60	0.127	0.11	0.14	7.537	A
A-B	326.33	81.58	326.33	0.00	-	-	-	-	-	-
A-C	102.48	25.62	102.48	0.00	-	-	-	-	-	-

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	83.68	20.92	83.48	0.00	545.22	0.153	0.13	0.18	7.793	A
B-A	177.26	44.32	176.38	0.00	443.56	0.400	0.43	0.65	13.428	B
C-A	422.79	105.70	422.79	0.00	-	-	-	-	-	-
C-B	84.78	21.19	84.59	0.00	523.14	0.162	0.14	0.19	8.205	A
A-B	399.67	99.92	399.67	0.00	-	-	-	-	-	-
A-C	125.52	31.38	125.52	0.00	-	-	-	-	-	-

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	83.68	20.92	83.67	0.00	544.33	0.154	0.18	0.18	7.814	A
B-A	177.26	44.32	177.23	0.00	443.48	0.400	0.65	0.66	13.516	B
C-A	422.79	105.70	422.79	0.00	-	-	-	-	-	-
C-B	84.78	21.19	84.77	0.00	523.14	0.162	0.19	0.19	8.212	A
A-B	399.67	99.92	399.67	0.00	-	-	-	-	-	-
A-C	125.52	31.38	125.52	0.00	-	-	-	-	-	-

Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	68.32	17.08	68.52	0.00	590.08	0.116	0.18	0.13	6.906	A
B-A	144.74	36.18	145.60	0.00	477.37	0.303	0.66	0.44	10.880	B
C-A	345.21	86.30	345.21	0.00	-	-	-	-	-	-
C-B	69.22	17.31	69.41	0.00	546.60	0.127	0.19	0.15	7.549	A
A-B	326.33	81.58	326.33	0.00	-	-	-	-	-	-
A-C	102.48	25.62	102.48	0.00	-	-	-	-	-	-

Main results: (09:15-09:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	57.22	14.30	57.33	0.00	617.42	0.093	0.13	0.10	6.430	A
B-A	121.21	30.30	121.69	0.00	501.45	0.242	0.44	0.32	9.493	A
C-A	289.10	72.27	289.10	0.00	-	-	-	-	-	-
C-B	57.97	14.49	58.09	0.00	563.57	0.103	0.15	0.12	7.125	A
A-B	273.29	68.32	273.29	0.00	-	-	-	-	-	-
A-C	85.83	21.46	85.83	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (08:00-08:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	1.47	0.10	6.404	A	A
B-A	4.50	0.30	9.401	A	A
C-A	-	-	-	-	-
C-B	1.65	0.11	7.108	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:15-08:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	1.90	0.13	6.882	A	A
B-A	6.21	0.41	10.789	B	B
C-A	-	-	-	-	-
C-B	2.11	0.14	7.537	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:30-08:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	2.63	0.18	7.793	A	A
B-A	9.31	0.62	13.428	B	B
C-A	-	-	-	-	-
C-B	2.80	0.19	8.205	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:45-09:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	2.70	0.18	7.814	A	A
B-A	9.82	0.65	13.516	B	B
C-A	-	-	-	-	-
C-B	2.88	0.19	8.212	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (09:00-09:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	2.03	0.14	6.906	A	A
B-A	6.91	0.46	10.880	B	B
C-A	-	-	-	-	-
C-B	2.25	0.15	7.549	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (09:15-09:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	1.58	0.11	6.430	A	A
B-A	5.00	0.33	9.493	A	A
C-A	-	-	-	-	-
C-B	1.77	0.12	7.125	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queue Variation Results for each time segment

Queue Variation results: (08:00-08:15)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.10	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.31	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.11	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (08:15-08:30)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.13	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.43	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.14	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (08:30-08:45)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.18	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.65	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.19	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (08:45-09:00)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.18	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.66	0.00	0.00	0.00	1.00			N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.19	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (09:00-09:15)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.13	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.44	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.15	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (09:15-09:30)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.10	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.32	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.12	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

(Default Analysis Set) - 2015, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relations
2015, PM	2015	PM		ONE HOUR	17:00	18:30	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C		9.43	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	(untitled)		Major
B	B	(untitled)		Minor
C	C	(untitled)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.80	✓	2.60	✓	2.70	75.00		

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)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane plus flare				10.00	5.70	3.80	3.50	3.40		1.00	30	105

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	614.434	0.102	0.258	0.162	0.369
1	B-C	764.336	0.113	0.286	-	-
1	C-B	650.993	0.243	0.243	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	536.00	100.000
B	ONE HOUR	✓	161.00	100.000
C	ONE HOUR	✓	484.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
17:00-17:15	A	403.53	403.53		
17:00-17:15	B	121.21	121.21		
17:00-17:15	C	364.38	364.38		
17:15-17:30	A	481.85	481.85		
17:15-17:30	B	144.74	144.74		
17:15-17:30	C	435.11	435.11		
17:30-17:45	A	590.15	590.15		
17:30-17:45	B	177.26	177.26		
17:30-17:45	C	532.89	532.89		
17:45-18:00	A	590.15	590.15		
17:45-18:00	B	177.26	177.26		
17:45-18:00	C	532.89	532.89		
18:00-18:15	A	481.85	481.85		
18:00-18:15	B	144.74	144.74		
18:00-18:15	C	435.11	435.11		
18:15-18:30	A	403.53	403.53		
18:15-18:30	B	121.21	121.21		
18:15-18:30	C	364.38	364.38		

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

	To			
		A	B	C
	A	0.000	379.000	157.000
	B	72.000	0.000	89.000
From	C	341.000	143.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

	To			
		A	B	C
	A	0.00	0.71	0.29
	B	0.45	0.00	0.55
From	C	0.70	0.30	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

	To			
		A	B	C
	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
From	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To			
		A	B	C
	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
From	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-C	0.16	6.77	0.18	~1	A	81.67	122.50	12.87	6.30	0.14	12.87	6.30
B-A	0.20	11.03	0.24	~1	B	66.07	99.10	16.07	9.73	0.18	16.07	9.73
C-A	-	-	-	-	-	312.91	469.36	-	-	-	-	-
C-B	0.31	10.29	0.45	1.00	B	131.22	196.83	29.86	9.10	0.33	29.86	9.10
A-B	-	-	-	-	-	347.78	521.67	-	-	-	-	-
A-C	-	-	-	-	-	144.07	216.10	-	-	-	-	-

Main Results for each time segment

Main results: (17:00-17:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	67.00	16.75	66.57	0.00	677.23	0.099	0.00	0.11	5.891	A
B-A	54.21	13.55	53.69	0.00	472.89	0.115	0.00	0.13	8.577	A
C-A	256.72	64.18	256.72	0.00	-	-	-	-	-	-
C-B	107.66	26.91	106.70	0.00	552.75	0.195	0.00	0.24	8.054	A
A-B	285.33	71.33	285.33	0.00	-	-	-	-	-	-
A-C	118.20	29.55	118.20	0.00	-	-	-	-	-	-

Main results: (17:15-17:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	80.01	20.00	79.90	0.00	658.14	0.122	0.11	0.14	6.223	A
B-A	64.73	16.18	64.57	0.00	444.79	0.146	0.13	0.17	9.464	A
C-A	306.55	76.64	306.55	0.00	-	-	-	-	-	-
C-B	128.55	32.14	128.26	0.00	533.69	0.241	0.24	0.31	8.873	A
A-B	340.71	85.18	340.71	0.00	-	-	-	-	-	-
A-C	141.14	35.28	141.14	0.00	-	-	-	-	-	-

Main results: (17:30-17:45)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	97.99	24.50	97.81	0.00	630.04	0.156	0.14	0.18	6.762	A
B-A	79.27	19.82	78.99	0.00	405.90	0.195	0.17	0.24	11.001	B
C-A	375.45	93.86	375.45	0.00	-	-	-	-	-	-
C-B	157.45	39.36	156.93	0.00	507.32	0.310	0.31	0.44	10.258	B
A-B	417.29	104.32	417.29	0.00	-	-	-	-	-	-
A-C	172.86	43.22	172.86	0.00	-	-	-	-	-	-

Main results: (17:45-18:00)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	97.99	24.50	97.99	0.00	629.79	0.156	0.18	0.18	6.768	A
B-A	79.27	19.82	79.27	0.00	405.74	0.195	0.24	0.24	11.026	B
C-A	375.45	93.86	375.45	0.00	-	-	-	-	-	-
C-B	157.45	39.36	157.43	0.00	507.32	0.310	0.44	0.45	10.288	B
A-B	417.29	104.32	417.29	0.00	-	-	-	-	-	-
A-C	172.86	43.22	172.86	0.00	-	-	-	-	-	-

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	80.01	20.00	80.18	0.00	657.77	0.122	0.18	0.14	6.234	A
B-A	64.73	16.18	65.00	0.00	444.57	0.146	0.24	0.17	9.491	A
C-A	306.55	76.64	306.55	0.00	-	-	-	-	-	-
C-B	128.55	32.14	129.05	0.00	533.69	0.241	0.45	0.32	8.907	A
A-B	340.71	85.18	340.71	0.00	-	-	-	-	-	-
A-C	141.14	35.28	141.14	0.00	-	-	-	-	-	-

Main results: (18:15-18:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	67.00	16.75	67.12	0.00	676.73	0.099	0.14	0.11	5.905	A
B-A	54.21	13.55	54.37	0.00	472.53	0.115	0.17	0.13	8.613	A
C-A	256.72	64.18	256.72	0.00	-	-	-	-	-	-
C-B	107.66	26.91	107.97	0.00	552.75	0.195	0.32	0.24	8.100	A
A-B	285.33	71.33	285.33	0.00	-	-	-	-	-	-
A-C	118.20	29.55	118.20	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (17:00-17:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	1.59	0.11	5.891	A	A
B-A	1.85	0.12	8.577	A	A
C-A	-	-	-	-	-
C-B	3.45	0.23	8.054	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:15-17:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	2.02	0.13	6.223	A	A
B-A	2.46	0.16	9.464	A	A
C-A	-	-	-	-	-
C-B	4.57	0.30	8.873	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:30-17:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	2.68	0.18	6.762	A	A
B-A	3.47	0.23	11.001	B	B
C-A	-	-	-	-	-
C-B	6.42	0.43	10.258	B	B
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:45-18:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	2.75	0.18	6.768	A	A
B-A	3.60	0.24	11.026	B	B
C-A	-	-	-	-	-
C-B	6.68	0.45	10.288	B	B
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (18:00-18:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	2.14	0.14	6.234	A	A
B-A	2.67	0.18	9.491	A	A
C-A	-	-	-	-	-
C-B	4.97	0.33	8.907	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (18:15-18:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	1.69	0.11	5.905	A	A
B-A	2.02	0.13	8.613	A	A
C-A	-	-	-	-	-
C-B	3.77	0.25	8.100	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queue Variation Results for each time segment

Queue Variation results: (17:00-17:15)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.11	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.13	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.24	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (17:15-17:30)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.14	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.17	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.31	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (17:30-17:45)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.18	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.24	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.44	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (17:45-18:00)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.18	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.24	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.45	0.00	0.00	0.00	1.00			N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (18:00-18:15)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.14	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.17	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.32	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (18:15-18:30)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.11	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.13	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.24	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

(Default Analysis Set) - 2019 Opening Year, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relat
2019 Opening Year, AM	2019 Opening Year	AM		ONE HOUR	08:00	09:30	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C		11.13	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	(untitled)		Major
B	B	(untitled)		Minor
C	C	(untitled)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.80	✓	2.60	✓	2.70	75.00		

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)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane plus flare				10.00	5.70	3.80	3.50	3.40		1.00	30	105

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	622.485	0.103	0.261	0.164	0.373
1	B-C	718.436	0.106	0.269	-	-
1	C-B	650.993	0.243	0.243	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	491.00	100.000
B	ONE HOUR	✓	244.00	100.000
C	ONE HOUR	✓	461.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
08:00-08:15	A	369.65	369.65		
08:00-08:15	B	183.70	183.70		
08:00-08:15	C	347.06	347.06		
08:15-08:30	A	441.40	441.40		
08:15-08:30	B	219.35	219.35		
08:15-08:30	C	414.43	414.43		
08:30-08:45	A	540.60	540.60		
08:30-08:45	B	268.65	268.65		
08:30-08:45	C	507.57	507.57		
08:45-09:00	A	540.60	540.60		
08:45-09:00	B	268.65	268.65		
08:45-09:00	C	507.57	507.57		
09:00-09:15	A	441.40	441.40		
09:00-09:15	B	219.35	219.35		
09:00-09:15	C	414.43	414.43		
09:15-09:30	A	369.65	369.65		
09:15-09:30	B	183.70	183.70		
09:15-09:30	C	347.06	347.06		

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

	To			
		A	B	C
	A	0.000	374.000	117.000
	B	166.000	0.000	78.000
From	C	384.000	77.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

	To			
		A	B	C
	A	0.00	0.76	0.24
	B	0.68	0.00	0.32
From	C	0.83	0.17	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

	To			
		A	B	C
	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
From	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To			
		A	B	C
	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
From	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-C	0.16	7.99	0.19	~1	A	71.57	107.36	12.84	7.17	0.14	12.84	7.17
B-A	0.41	13.93	0.70	1.00	B	152.32	228.49	44.02	11.56	0.49	44.02	11.56
C-A	-	-	-	-	-	352.37	528.55	-	-	-	-	-
C-B	0.16	8.28	0.19	~1	A	70.66	105.98	13.55	7.67	0.15	13.55	7.67
A-B	-	-	-	-	-	343.19	514.78	-	-	-	-	-
A-C	-	-	-	-	-	107.36	161.04	-	-	-	-	-

Main Results for each time segment

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	58.72	14.68	58.30	0.00	614.85	0.096	0.00	0.10	6.465	A
B-A	124.97	31.24	123.66	0.00	500.16	0.250	0.00	0.33	9.529	A
C-A	289.10	72.27	289.10	0.00	-	-	-	-	-	-
C-B	57.97	14.49	57.51	0.00	561.00	0.103	0.00	0.11	7.144	A
A-B	281.57	70.39	281.57	0.00	-	-	-	-	-	-
A-C	88.08	22.02	88.08	0.00	-	-	-	-	-	-

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	70.12	17.53	70.00	0.00	586.06	0.120	0.10	0.13	6.973	A
B-A	149.23	37.31	148.75	0.00	475.63	0.314	0.33	0.45	10.996	B
C-A	345.21	86.30	345.21	0.00	-	-	-	-	-	-
C-B	69.22	17.31	69.10	0.00	543.53	0.127	0.11	0.14	7.585	A
A-B	336.22	84.05	336.22	0.00	-	-	-	-	-	-
A-C	105.18	26.30	105.18	0.00	-	-	-	-	-	-

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	85.88	21.47	85.67	0.00	537.40	0.160	0.13	0.19	7.966	A
B-A	182.77	45.69	181.81	0.00	441.15	0.414	0.45	0.69	13.828	B
C-A	422.79	105.70	422.79	0.00	-	-	-	-	-	-
C-B	84.78	21.19	84.58	0.00	519.38	0.163	0.14	0.19	8.276	A
A-B	411.78	102.95	411.78	0.00	-	-	-	-	-	-
A-C	128.82	32.20	128.82	0.00	-	-	-	-	-	-

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	85.88	21.47	85.87	0.00	536.41	0.160	0.19	0.19	7.990	A
B-A	182.77	45.69	182.74	0.00	441.06	0.414	0.69	0.70	13.931	B
C-A	422.79	105.70	422.79	0.00	-	-	-	-	-	-
C-B	84.78	21.19	84.77	0.00	519.38	0.163	0.19	0.19	8.283	A
A-B	411.78	102.95	411.78	0.00	-	-	-	-	-	-
A-C	128.82	32.20	128.82	0.00	-	-	-	-	-	-

Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	70.12	17.53	70.33	0.00	584.89	0.120	0.19	0.14	7.000	A
B-A	149.23	37.31	150.16	0.00	475.52	0.314	0.70	0.47	11.095	B
C-A	345.21	86.30	345.21	0.00	-	-	-	-	-	-
C-B	69.22	17.31	69.41	0.00	543.53	0.127	0.19	0.15	7.597	A
A-B	336.22	84.05	336.22	0.00	-	-	-	-	-	-
A-C	105.18	26.30	105.18	0.00	-	-	-	-	-	-

Main results: (09:15-09:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	58.72	14.68	58.85	0.00	613.63	0.096	0.14	0.11	6.492	A
B-A	124.97	31.24	125.48	0.00	499.97	0.250	0.47	0.34	9.627	A
C-A	289.10	72.27	289.10	0.00	-	-	-	-	-	-
C-B	57.97	14.49	58.09	0.00	561.00	0.103	0.15	0.12	7.162	A
A-B	281.57	70.39	281.57	0.00	-	-	-	-	-	-
A-C	88.08	22.02	88.08	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (08:00-08:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	1.52	0.10	6.465	A	A
B-A	4.70	0.31	9.529	A	A
C-A	-	-	-	-	-
C-B	1.66	0.11	7.144	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:15-08:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	1.98	0.13	6.973	A	A
B-A	6.51	0.43	10.996	B	B
C-A	-	-	-	-	-
C-B	2.12	0.14	7.585	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:30-08:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	2.75	0.18	7.966	A	A
B-A	9.86	0.66	13.828	B	B
C-A	-	-	-	-	-
C-B	2.82	0.19	8.276	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:45-09:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	2.84	0.19	7.990	A	A
B-A	10.43	0.70	13.931	B	B
C-A	-	-	-	-	-
C-B	2.90	0.19	8.283	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (09:00-09:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	2.11	0.14	7.000	A	A
B-A	7.27	0.48	11.095	B	B
C-A	-	-	-	-	-
C-B	2.26	0.15	7.597	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (09:15-09:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	1.63	0.11	6.492	A	A
B-A	5.24	0.35	9.627	A	A
C-A	-	-	-	-	-
C-B	1.78	0.12	7.162	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queue Variation Results for each time segment

Queue Variation results: (08:00-08:15)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.10	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.33	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.11	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (08:15-08:30)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.13	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.45	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.14	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (08:30-08:45)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.19	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.69	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.19	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (08:45-09:00)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.19	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.70	0.00	0.00	0.00	1.00			N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.19	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (09:00-09:15)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.14	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.47	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.15	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (09:15-09:30)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.11	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.34	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.12	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

(Default Analysis Set) - 2019 Opening Year, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relat
2019 Opening Year, PM	2019 Opening Year	PM		ONE HOUR	17:00	18:30	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C		9.60	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	(untitled)		Major
B	B	(untitled)		Minor
C	C	(untitled)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.80	✓	2.60	✓	2.70	75.00		

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)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane plus flare				10.00	5.70	3.80	3.50	3.40		1.00	30	105

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	614.307	0.102	0.258	0.162	0.369
1	B-C	764.489	0.113	0.286	-	-
1	C-B	650.993	0.243	0.243	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	559.00	100.000
B	ONE HOUR	✓	168.00	100.000
C	ONE HOUR	✓	484.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
17:00-17:15	A	420.84	420.84		
17:00-17:15	B	126.48	126.48		
17:00-17:15	C	364.38	364.38		
17:15-17:30	A	502.53	502.53		
17:15-17:30	B	151.03	151.03		
17:15-17:30	C	435.11	435.11		
17:30-17:45	A	615.47	615.47		
17:30-17:45	B	184.97	184.97		
17:30-17:45	C	532.89	532.89		
17:45-18:00	A	615.47	615.47		
17:45-18:00	B	184.97	184.97		
17:45-18:00	C	532.89	532.89		
18:00-18:15	A	502.53	502.53		
18:00-18:15	B	151.03	151.03		
18:00-18:15	C	435.11	435.11		
18:15-18:30	A	420.84	420.84		
18:15-18:30	B	126.48	126.48		
18:15-18:30	C	364.38	364.38		

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

	To			
		A	B	C
	A	0.000	395.000	164.000
	B	75.000	0.000	93.000
From	C	341.000	143.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

	To			
		A	B	C
	A	0.00	0.71	0.29
	B	0.45	0.00	0.55
From	C	0.70	0.30	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

	To			
		A	B	C
	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
From	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To			
		A	B	C
	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
From	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-C	0.16	6.91	0.20	~1	A	85.34	128.01	13.66	6.40	0.15	13.66	6.40
B-A	0.21	11.29	0.26	~1	B	68.82	103.23	17.04	9.90	0.19	17.04	9.90
C-A	-	-	-	-	-	312.91	469.36	-	-	-	-	-
C-B	0.31	10.47	0.45	1.00	B	131.22	196.83	30.28	9.23	0.34	30.28	9.23
A-B	-	-	-	-	-	362.46	543.69	-	-	-	-	-
A-C	-	-	-	-	-	150.49	225.73	-	-	-	-	-

Main Results for each time segment

Main results: (17:00-17:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	70.02	17.50	69.55	0.00	673.47	0.104	0.00	0.12	5.957	A
B-A	56.46	14.12	55.92	0.00	470.12	0.120	0.00	0.14	8.680	A
C-A	256.72	64.18	256.72	0.00	-	-	-	-	-	-
C-B	107.66	26.91	106.69	0.00	548.54	0.196	0.00	0.24	8.130	A
A-B	297.38	74.34	297.38	0.00	-	-	-	-	-	-
A-C	123.47	30.87	123.47	0.00	-	-	-	-	-	-

Main results: (17:15-17:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	83.61	20.90	83.48	0.00	653.42	0.128	0.12	0.15	6.314	A
B-A	67.42	16.86	67.25	0.00	441.45	0.153	0.14	0.18	9.616	A
C-A	306.55	76.64	306.55	0.00	-	-	-	-	-	-
C-B	128.55	32.14	128.25	0.00	528.65	0.243	0.24	0.32	8.991	A
A-B	355.10	88.77	355.10	0.00	-	-	-	-	-	-
A-C	147.43	36.86	147.43	0.00	-	-	-	-	-	-

Main results: (17:30-17:45)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	102.39	25.60	102.20	0.00	623.74	0.164	0.15	0.19	6.903	A
B-A	82.58	20.64	82.27	0.00	401.71	0.206	0.18	0.25	11.256	B
C-A	375.45	93.86	375.45	0.00	-	-	-	-	-	-
C-B	157.45	39.36	156.91	0.00	501.16	0.314	0.32	0.45	10.440	B
A-B	434.90	108.73	434.90	0.00	-	-	-	-	-	-
A-C	180.57	45.14	180.57	0.00	-	-	-	-	-	-

Main results: (17:45-18:00)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	102.39	25.60	102.39	0.00	623.47	0.164	0.19	0.20	6.907	A
B-A	82.58	20.64	82.57	0.00	401.54	0.206	0.25	0.26	11.285	B
C-A	375.45	93.86	375.45	0.00	-	-	-	-	-	-
C-B	157.45	39.36	157.43	0.00	501.16	0.314	0.45	0.45	10.473	B
A-B	434.90	108.73	434.90	0.00	-	-	-	-	-	-
A-C	180.57	45.14	180.57	0.00	-	-	-	-	-	-

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	83.61	20.90	83.80	0.00	653.03	0.128	0.20	0.15	6.328	A
B-A	67.42	16.86	67.72	0.00	441.22	0.153	0.26	0.18	9.645	A
C-A	306.55	76.64	306.55	0.00	-	-	-	-	-	-
C-B	128.55	32.14	129.07	0.00	528.65	0.243	0.45	0.33	9.022	A
A-B	355.10	88.77	355.10	0.00	-	-	-	-	-	-
A-C	147.43	36.86	147.43	0.00	-	-	-	-	-	-

Main results: (18:15-18:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	70.02	17.50	70.14	0.00	672.95	0.104	0.15	0.12	5.974	A
B-A	56.46	14.12	56.64	0.00	469.76	0.120	0.18	0.14	8.719	A
III										
C-B	107.66	26.91	107.97	0.00	548.54	0.196	0.33	0.25	8.176	A
A-B	297.38	74.34	297.38	0.00	-	-	-	-	-	-
A-C	123.47	30.87	123.47	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (17:00-17:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	1.68	0.11	5.957	A	A
B-A	1.95	0.13	8.680	A	A
C-A	-	-	-	-	-
C-B	3.48	0.23	8.130	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:15-17:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	2.14	0.14	6.314	A	A
B-A	2.60	0.17	9.616	A	A
C-A	-	-	-	-	-
C-B	4.63	0.31	8.991	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:30-17:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	2.85	0.19	6.903	A	A
B-A	3.70	0.25	11.256	B	B
C-A	-	-	-	-	-
C-B	6.53	0.44	10.440	B	B
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:45-18:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	2.93	0.20	6.907	A	A
B-A	3.84	0.26	11.285	B	B
C-A	-	-	-	-	-
C-B	6.79	0.45	10.473	B	B
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (18:00-18:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	2.27	0.15	6.328	A	A
B-A	2.83	0.19	9.645	A	A
C-A	-	-	-	-	-
C-B	5.04	0.34	9.022	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (18:15-18:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	1.79	0.12	5.974	A	A
B-A	2.13	0.14	8.719	A	A
C-A	-	-	-	-	-
C-B	3.80	0.25	8.176	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queue Variation Results for each time segment

Queue Variation results: (17:00-17:15)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.12	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.14	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.24	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (17:15-17:30)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.15	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.18	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.32	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (17:30-17:45)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.19	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.25	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.45	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (17:45-18:00)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.20	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.26	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.45	0.00	0.00	0.00	1.00			N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (18:00-18:15)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.15	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.18	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.33	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (18:15-18:30)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.12	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.14	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.25	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

(Default Analysis Set) - 2019 Opening Year + Scheme, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Rela
2019 Opening Year + Scheme, AM	2019 Opening Year + Scheme	AM		ONE HOUR	08:00	09:30	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C		10.78	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	(untitled)		Major
B	B	(untitled)		Minor
C	C	(untitled)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.80	✓	2.60	✓	2.70	75.00		

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)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane plus flare				10.00	5.70	3.80	3.50	3.40		1.00	30	105

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	649.276	0.108	0.273	0.172	0.390
1	B-C	722.171	0.107	0.270	-	-
1	C-B	650.993	0.243	0.243	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	505.00	100.000
B	ONE HOUR	✓	251.00	100.000
C	ONE HOUR	✓	471.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
08:00-08:15	A	380.19	380.19		
08:00-08:15	B	188.97	188.97		
08:00-08:15	C	354.59	354.59		
08:15-08:30	A	453.98	453.98		
08:15-08:30	B	225.64	225.64		
08:15-08:30	C	423.42	423.42		
08:30-08:45	A	556.02	556.02		
08:30-08:45	B	276.36	276.36		
08:30-08:45	C	518.58	518.58		
08:45-09:00	A	556.02	556.02		
08:45-09:00	B	276.36	276.36		
08:45-09:00	C	518.58	518.58		
09:00-09:15	A	453.98	453.98		
09:00-09:15	B	225.64	225.64		
09:00-09:15	C	423.42	423.42		
09:15-09:30	A	380.19	380.19		
09:15-09:30	B	188.97	188.97		
09:15-09:30	C	354.59	354.59		

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

	To			
		A	B	C
	A	0.000	374.000	131.000
	B	166.000	0.000	85.000
From	C	393.000	78.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

	To			
		A	B	C
	A	0.00	0.74	0.26
	B	0.66	0.00	0.34
From	C	0.83	0.17	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

	To			
		A	B	C
	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
From	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To			
		A	B	C
	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
From	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-C	0.17	8.06	0.21	~1	A	78.00	117.00	14.08	7.22	0.16	14.08	7.22
B-A	0.40	13.30	0.67	1.00	B	152.32	228.49	42.10	11.06	0.47	42.11	11.06
C-A	-	-	-	-	-	360.62	540.94	-	-	-	-	-
C-B	0.17	8.38	0.20	~1	A	71.57	107.36	13.85	7.74	0.15	13.85	7.74
A-B	-	-	-	-	-	343.19	514.78	-	-	-	-	-
A-C	-	-	-	-	-	120.21	180.31	-	-	-	-	-

Main Results for each time segment

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	63.99	16.00	63.53	0.00	617.54	0.104	0.00	0.11	6.492	A
B-A	124.97	31.24	123.72	0.00	517.22	0.242	0.00	0.31	9.120	A
C-A	295.87	73.97	295.87	0.00	-	-	-	-	-	-
C-B	58.72	14.68	58.26	0.00	558.44	0.105	0.00	0.12	7.191	A
A-B	281.57	70.39	281.57	0.00	-	-	-	-	-	-
A-C	98.62	24.66	98.62	0.00	-	-	-	-	-	-

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	76.41	19.10	76.28	0.00	589.10	0.130	0.11	0.15	7.018	A
B-A	149.23	37.31	148.77	0.00	490.69	0.304	0.31	0.43	10.513	B
C-A	353.30	88.32	353.30	0.00	-	-	-	-	-	-
C-B	70.12	17.53	70.00	0.00	540.47	0.130	0.12	0.15	7.649	A
A-B	336.22	84.05	336.22	0.00	-	-	-	-	-	-
A-C	117.77	29.44	117.77	0.00	-	-	-	-	-	-

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	93.59	23.40	93.35	0.00	541.28	0.173	0.15	0.21	8.033	A
B-A	182.77	45.69	181.85	0.00	453.30	0.403	0.43	0.66	13.215	B
C-A	432.70	108.18	432.70	0.00	-	-	-	-	-	-
C-B	85.88	21.47	85.68	0.00	515.63	0.167	0.15	0.20	8.370	A
A-B	411.78	102.95	411.78	0.00	-	-	-	-	-	-
A-C	144.23	36.06	144.23	0.00	-	-	-	-	-	-

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	93.59	23.40	93.58	0.00	540.40	0.173	0.21	0.21	8.056	A
B-A	182.77	45.69	182.74	0.00	453.23	0.403	0.66	0.67	13.304	B
C-A	432.70	108.18	432.70	0.00	-	-	-	-	-	-
C-B	85.88	21.47	85.88	0.00	515.63	0.167	0.20	0.20	8.376	A
A-B	411.78	102.95	411.78	0.00	-	-	-	-	-	-
A-C	144.23	36.06	144.23	0.00	-	-	-	-	-	-

Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	76.41	19.10	76.64	0.00	588.05	0.130	0.21	0.15	7.041	A
B-A	149.23	37.31	150.12	0.00	490.64	0.304	0.67	0.44	10.601	B
C-A	353.30	88.32	353.30	0.00	-	-	-	-	-	-
C-B	70.12	17.53	70.31	0.00	540.47	0.130	0.20	0.15	7.662	A
A-B	336.22	84.05	336.22	0.00	-	-	-	-	-	-
A-C	117.77	29.44	117.77	0.00	-	-	-	-	-	-

Main results: (09:15-09:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	63.99	16.00	64.13	0.00	616.45	0.104	0.15	0.12	6.518	A
B-A	124.97	31.24	125.46	0.00	517.08	0.242	0.44	0.32	9.203	A
C-A	295.87	73.97	295.87	0.00	-	-	-	-	-	-
C-B	58.72	14.68	58.85	0.00	558.44	0.105	0.15	0.12	7.209	A
A-B	281.57	70.39	281.57	0.00	-	-	-	-	-	-
A-C	98.62	24.66	98.62	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (08:00-08:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	1.67	0.11	6.492	A	A
B-A	4.51	0.30	9.120	A	A
C-A	-	-	-	-	-
C-B	1.69	0.11	7.191	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:15-08:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	2.17	0.14	7.018	A	A
B-A	6.24	0.42	10.513	B	B
C-A	-	-	-	-	-
C-B	2.17	0.14	7.649	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:30-08:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	3.02	0.20	8.033	A	A
B-A	9.45	0.63	13.215	B	B
C-A	-	-	-	-	-
C-B	2.89	0.19	8.370	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:45-09:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	3.12	0.21	8.056	A	A
B-A	9.97	0.66	13.304	B	B
C-A	-	-	-	-	-
C-B	2.98	0.20	8.376	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (09:00-09:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	2.32	0.15	7.041	A	A
B-A	6.94	0.46	10.601	B	B
C-A	-	-	-	-	-
C-B	2.31	0.15	7.662	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (09:15-09:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	1.79	0.12	6.518	A	A
B-A	5.00	0.33	9.203	A	A
C-A	-	-	-	-	-
C-B	1.82	0.12	7.209	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queue Variation Results for each time segment

Queue Variation results: (08:00-08:15)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.11	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.31	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.12	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (08:15-08:30)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.15	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.43	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.15	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (08:30-08:45)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.21	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.66	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.20	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (08:45-09:00)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.21	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.67	0.00	0.00	0.00	1.00			N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.20	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (09:00-09:15)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.15	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.44	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.15	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (09:15-09:30)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.12	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.32	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.12	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

(Default Analysis Set) - 2019 Opening Year + Scheme, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Rela
2019 Opening Year + Scheme, PM	2019 Opening Year + Scheme	PM		ONE HOUR	17:00	18:30	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C		9.81	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	(untitled)		Major
B	B	(untitled)		Minor
C	C	(untitled)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.80	✓	2.60	✓	2.70	75.00		

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)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane plus flare				10.00	5.70	3.80	3.50	3.40		1.00	30	105

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	613.877	0.102	0.258	0.162	0.368
1	B-C	765.009	0.113	0.286	-	-
1	C-B	650.993	0.243	0.243	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	566.00	100.000
B	ONE HOUR	✓	169.00	100.000
C	ONE HOUR	✓	501.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
17:00-17:15	A	426.11	426.11		
17:00-17:15	B	127.23	127.23		
17:00-17:15	C	377.18	377.18		
17:15-17:30	A	508.82	508.82		
17:15-17:30	B	151.93	151.93		
17:15-17:30	C	450.39	450.39		
17:30-17:45	A	623.18	623.18		
17:30-17:45	B	186.07	186.07		
17:30-17:45	C	551.61	551.61		
17:45-18:00	A	623.18	623.18		
17:45-18:00	B	186.07	186.07		
17:45-18:00	C	551.61	551.61		
18:00-18:15	A	508.82	508.82		
18:00-18:15	B	151.93	151.93		
18:00-18:15	C	450.39	450.39		
18:15-18:30	A	426.11	426.11		
18:15-18:30	B	127.23	127.23		
18:15-18:30	C	377.18	377.18		

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

	To			
		A	B	C
	A	0.000	395.000	171.000
	B	75.000	0.000	94.000
From	C	352.000	149.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

	To			
		A	B	C
	A	0.00	0.70	0.30
	B	0.44	0.00	0.56
From	C	0.70	0.30	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

	To			
		A	B	C
	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
From	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To			
		A	B	C
	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
From	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-C	0.17	6.96	0.20	~1	A	86.26	129.38	13.88	6.44	0.15	13.88	6.44
B-A	0.21	11.53	0.26	~1	B	68.82	103.23	17.33	10.07	0.19	17.33	10.07
C-A	-	-	-	-	-	323.00	484.50	-	-	-	-	-
C-B	0.33	10.74	0.49	1.00	B	136.73	205.09	32.16	9.41	0.36	32.16	9.41
A-B	-	-	-	-	-	362.46	543.69	-	-	-	-	-
A-C	-	-	-	-	-	156.91	235.37	-	-	-	-	-

Main Results for each time segment

Main results: (17:00-17:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	70.77	17.69	70.30	0.00	672.22	0.105	0.00	0.12	5.977	A
B-A	56.46	14.12	55.92	0.00	465.41	0.121	0.00	0.14	8.780	A
C-A	265.00	66.25	265.00	0.00	-	-	-	-	-	-
C-B	112.18	28.04	111.16	0.00	547.26	0.205	0.00	0.25	8.236	A
A-B	297.38	74.34	297.38	0.00	-	-	-	-	-	-
A-C	128.74	32.18	128.74	0.00	-	-	-	-	-	-

Main results: (17:15-17:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	84.50	21.13	84.38	0.00	651.71	0.130	0.12	0.15	6.343	A
B-A	67.42	16.86	67.25	0.00	435.88	0.155	0.14	0.18	9.760	A
C-A	316.44	79.11	316.44	0.00	-	-	-	-	-	-
C-B	133.95	33.49	133.62	0.00	527.12	0.254	0.25	0.34	9.141	A
A-B	355.10	88.77	355.10	0.00	-	-	-	-	-	-
A-C	153.73	38.43	153.73	0.00	-	-	-	-	-	-

Main results: (17:30-17:45)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	103.50	25.87	103.29	0.00	621.23	0.167	0.15	0.20	6.945	A
B-A	82.58	20.64	82.26	0.00	394.95	0.209	0.18	0.26	11.501	B
C-A	387.56	96.89	387.56	0.00	-	-	-	-	-	-
C-B	164.05	41.01	163.47	0.00	499.28	0.329	0.34	0.48	10.699	B
A-B	434.90	108.73	434.90	0.00	-	-	-	-	-	-
A-C	188.27	47.07	188.27	0.00	-	-	-	-	-	-

Main results: (17:45-18:00)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	103.50	25.87	103.49	0.00	620.94	0.167	0.20	0.20	6.956	A
B-A	82.58	20.64	82.57	0.00	394.77	0.209	0.26	0.26	11.530	B
C-A	387.56	96.89	387.56	0.00	-	-	-	-	-	-
C-B	164.05	41.01	164.04	0.00	499.28	0.329	0.48	0.49	10.738	B
A-B	434.90	108.73	434.90	0.00	-	-	-	-	-	-
A-C	188.27	47.07	188.27	0.00	-	-	-	-	-	-

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	84.50	21.13	84.70	0.00	651.30	0.130	0.20	0.15	6.355	A
B-A	67.42	16.86	67.73	0.00	435.62	0.155	0.26	0.19	9.793	A
C-A	316.44	79.11	316.44	0.00	-	-	-	-	-	-
C-B	133.95	33.49	134.51	0.00	527.12	0.254	0.49	0.35	9.183	A
A-B	355.10	88.77	355.10	0.00	-	-	-	-	-	-
A-C	153.73	38.43	153.73	0.00	-	-	-	-	-	-

Main results: (18:15-18:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	70.77	17.69	70.89	0.00	671.68	0.105	0.15	0.12	5.995	A
B-A	56.46	14.12	56.65	0.00	465.02	0.121	0.19	0.14	8.819	A
C-A	265.00	66.25	265.00	0.00	-	-	-	-	-	-
C-B	112.18	28.04	112.51	0.00	547.26	0.205	0.35	0.26	8.287	A
A-B	297.38	74.34	297.38	0.00	-	-	-	-	-	-
A-C	128.74	32.18	128.74	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (17:00-17:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	1.70	0.11	5.977	A	A
B-A	1.97	0.13	8.780	A	A
C-A	-	-	-	-	-
C-B	3.67	0.24	8.236	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:15-17:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	2.17	0.14	6.343	A	A
B-A	2.64	0.18	9.760	A	A
C-A	-	-	-	-	-
C-B	4.90	0.33	9.141	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:30-17:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	2.90	0.19	6.945	A	A
B-A	3.77	0.25	11.501	B	B
C-A	-	-	-	-	-
C-B	6.96	0.46	10.699	B	B
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:45-18:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	2.98	0.20	6.956	A	A
B-A	3.92	0.26	11.530	B	B
C-A	-	-	-	-	-
C-B	7.25	0.48	10.738	B	B
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (18:00-18:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	2.30	0.15	6.355	A	A
B-A	2.87	0.19	9.793	A	A
C-A	-	-	-	-	-
C-B	5.35	0.36	9.183	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (18:15-18:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	1.81	0.12	5.995	A	A
B-A	2.15	0.14	8.819	A	A
C-A	-	-	-	-	-
C-B	4.02	0.27	8.287	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queue Variation Results for each time segment

Queue Variation results: (17:00-17:15)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.12	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.14	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.25	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (17:15-17:30)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.15	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.18	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.34	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (17:30-17:45)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.20	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.26	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.48	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (17:45-18:00)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.20	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.26	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.49	0.00	0.00	0.00	1.00			N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (18:00-18:15)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.15	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.19	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.35	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (18:15-18:30)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.12	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.14	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.26	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

(Default Analysis Set) - 2029, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relations
2029, AM	2029	AM		ONE HOUR	08:00	09:30	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C		12.18	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	(untitled)		Major
B	B	(untitled)		Minor
C	C	(untitled)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.80	✓	2.60	✓	2.70	75.00		

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)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane plus flare				10.00	5.70	3.80	3.50	3.40		1.00	30	105

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	622.493	0.103	0.261	0.164	0.373
1	B-C	718.412	0.106	0.269	-	-
1	C-B	650.993	0.243	0.243	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	535.00	100.000
B	ONE HOUR	✓	266.00	100.000
C	ONE HOUR	✓	461.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
08:00-08:15	A	402.78	402.78		
08:00-08:15	B	200.26	200.26		
08:00-08:15	C	347.06	347.06		
08:15-08:30	A	480.95	480.95		
08:15-08:30	B	239.13	239.13		
08:15-08:30	C	414.43	414.43		
08:30-08:45	A	589.05	589.05		
08:30-08:45	B	292.87	292.87		
08:30-08:45	C	507.57	507.57		
08:45-09:00	A	589.05	589.05		
08:45-09:00	B	292.87	292.87		
08:45-09:00	C	507.57	507.57		
09:00-09:15	A	480.95	480.95		
09:00-09:15	B	239.13	239.13		
09:00-09:15	C	414.43	414.43		
09:15-09:30	A	402.78	402.78		
09:15-09:30	B	200.26	200.26		
09:15-09:30	C	347.06	347.06		

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

	To			
		A	B	C
	A	0.000	407.000	128.000
	B	181.000	0.000	85.000
From	C	384.000	77.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

	To			
		A	B	C
	A	0.00	0.76	0.24
	B	0.68	0.00	0.32
From	C	0.83	0.17	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

	To			
		A	B	C
	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
From	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To			
		A	B	C
	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
From	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-C	0.18	8.63	0.22	~1	A	78.00	117.00	14.77	7.58	0.16	14.77	7.58
B-A	0.46	15.40	0.84	2.00	C	166.09	249.13	51.64	12.44	0.57	51.65	12.44
C-A	-	-	-	-	-	352.37	528.55	-	-	-	-	-
C-B	0.17	8.51	0.20	~1	A	70.66	105.98	13.86	7.84	0.15	13.86	7.84
A-B	-	-	-	-	-	373.47	560.21	-	-	-	-	-
A-C	-	-	-	-	-	117.46	176.18	-	-	-	-	-

Main Results for each time segment

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	63.99	16.00	63.52	0.00	603.43	0.106	0.00	0.12	6.662	A
B-A	136.27	34.07	134.77	0.00	495.11	0.275	0.00	0.37	9.951	A
C-A	289.10	72.27	289.10	0.00	-	-	-	-	-	-
C-B	57.97	14.49	57.51	0.00	552.94	0.105	0.00	0.12	7.260	A
A-B	306.41	76.60	306.41	0.00	-	-	-	-	-	-
A-C	96.37	24.09	96.37	0.00	-	-	-	-	-	-

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	76.41	19.10	76.27	0.00	570.01	0.134	0.12	0.15	7.289	A
B-A	162.72	40.68	162.13	0.00	469.36	0.347	0.37	0.52	11.690	B
C-A	345.21	86.30	345.21	0.00	-	-	-	-	-	-
C-B	69.22	17.31	69.10	0.00	533.91	0.130	0.12	0.15	7.743	A
A-B	365.88	91.47	365.88	0.00	-	-	-	-	-	-
A-C	115.07	28.77	115.07	0.00	-	-	-	-	-	-

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	93.59	23.40	93.32	0.00	511.98	0.183	0.15	0.22	8.594	A
B-A	199.28	49.82	198.06	0.00	432.90	0.460	0.52	0.83	15.247	C
C-A	422.79	105.70	422.79	0.00	-	-	-	-	-	-
C-B	84.78	21.19	84.58	0.00	507.59	0.167	0.15	0.20	8.505	A
A-B	448.12	112.03	448.12	0.00	-	-	-	-	-	-
A-C	140.93	35.23	140.93	0.00	-	-	-	-	-	-

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	93.59	23.40	93.58	0.00	510.57	0.183	0.22	0.22	8.633	A
B-A	199.28	49.82	199.24	0.00	432.78	0.460	0.83	0.84	15.405	C
C-A	422.79	105.70	422.79	0.00	-	-	-	-	-	-
C-B	84.78	21.19	84.77	0.00	507.59	0.167	0.20	0.20	8.514	A
A-B	448.12	112.03	448.12	0.00	-	-	-	-	-	-
A-C	140.93	35.23	140.93	0.00	-	-	-	-	-	-

Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	76.41	19.10	76.68	0.00	568.43	0.134	0.22	0.16	7.326	A
B-A	162.72	40.68	163.91	0.00	469.23	0.347	0.84	0.54	11.838	B
C-A	345.21	86.30	345.21	0.00	-	-	-	-	-	-
C-B	69.22	17.31	69.42	0.00	533.91	0.130	0.20	0.15	7.755	A
A-B	365.88	91.47	365.88	0.00	-	-	-	-	-	-
A-C	115.07	28.77	115.07	0.00	-	-	-	-	-	-

Main results: (09:15-09:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	63.99	16.00	64.14	0.00	601.94	0.106	0.16	0.12	6.695	A
B-A	136.27	34.07	136.89	0.00	494.90	0.275	0.54	0.39	10.072	B
C-A	289.10	72.27	289.10	0.00	-	-	-	-	-	-
C-B	57.97	14.49	58.10	0.00	552.94	0.105	0.15	0.12	7.276	A
A-B	306.41	76.60	306.41	0.00	-	-	-	-	-	-
A-C	96.37	24.09	96.37	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (08:00-08:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	1.71	0.11	6.662	A	A
B-A	5.34	0.36	9.951	A	A
C-A	-	-	-	-	-
C-B	1.68	0.11	7.260	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:15-08:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	2.25	0.15	7.289	A	A
B-A	7.52	0.50	11.690	B	B
C-A	-	-	-	-	-
C-B	2.16	0.14	7.743	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:30-08:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	3.22	0.22	8.594	A	A
B-A	11.76	0.78	15.247	C	B
C-A	-	-	-	-	-
C-B	2.90	0.19	8.505	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:45-09:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	3.33	0.22	8.633	A	A
B-A	12.53	0.84	15.405	C	B
C-A	-	-	-	-	-
C-B	2.98	0.20	8.514	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (09:00-09:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	2.41	0.16	7.326	A	A
B-A	8.50	0.57	11.838	B	B
C-A	-	-	-	-	-
C-B	2.31	0.15	7.755	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (09:15-09:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	1.84	0.12	6.695	A	A
B-A	5.99	0.40	10.072	B	B
C-A	-	-	-	-	-
C-B	1.81	0.12	7.276	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queue Variation Results for each time segment

Queue Variation results: (08:00-08:15)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.12	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.37	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.12	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (08:15-08:30)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.15	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.52	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.15	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (08:30-08:45)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.22	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.83	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.20	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (08:45-09:00)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.22	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.84	0.00	0.00	0.00	2.00			N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.20	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (09:00-09:15)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.16	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.54	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.15	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (09:15-09:30)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.12	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.39	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.12	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

(Default Analysis Set) - 2029, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relations
2029, PM	2029	PM		ONE HOUR	17:00	18:30	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C		13.97	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	(untitled)		Major
B	B	(untitled)		Minor
C	C	(untitled)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.80	✓	2.60	✓	2.70	75.00		

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)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane plus flare				10.00	5.70	3.80	3.50	3.40		1.00	30	105

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	622.493	0.103	0.261	0.164	0.373
1	B-C	718.412	0.106	0.269	-	-
1	C-B	650.993	0.243	0.243	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	617.00	100.000
B	ONE HOUR	✓	266.00	100.000
C	ONE HOUR	✓	484.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
17:00-17:15	A	464.51	464.51		
17:00-17:15	B	200.26	200.26		
17:00-17:15	C	364.38	364.38		
17:15-17:30	A	554.67	554.67		
17:15-17:30	B	239.13	239.13		
17:15-17:30	C	435.11	435.11		
17:30-17:45	A	679.33	679.33		
17:30-17:45	B	292.87	292.87		
17:30-17:45	C	532.89	532.89		
17:45-18:00	A	679.33	679.33		
17:45-18:00	B	292.87	292.87		
17:45-18:00	C	532.89	532.89		
18:00-18:15	A	554.67	554.67		
18:00-18:15	B	239.13	239.13		
18:00-18:15	C	435.11	435.11		
18:15-18:30	A	464.51	464.51		
18:15-18:30	B	200.26	200.26		
18:15-18:30	C	364.38	364.38		

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

From	To			
		A	B	C
	A	0.000	436.000	181.000
	B	181.000	0.000	85.000
	C	341.000	143.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

From	To			
		A	B	C
	A	0.00	0.71	0.29
	B	0.68	0.00	0.32
	C	0.70	0.30	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

From	To			
		A	B	C
	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

From	To			
		A	B	C
	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-C	0.20	9.48	0.24	~1	A	78.00	117.00	15.72	8.06	0.17	15.72	8.06
B-A	0.51	18.46	1.00	2.00	C	166.09	249.13	58.84	14.17	0.65	58.85	14.17
C-A	-	-	-	-	-	312.91	469.36	-	-	-	-	-
C-B	0.32	10.97	0.48	1.00	B	131.22	196.83	31.38	9.57	0.35	31.39	9.57
A-B	-	-	-	-	-	400.08	600.12	-	-	-	-	-
A-C	-	-	-	-	-	166.09	249.13	-	-	-	-	-

Main Results for each time segment

Main results: (17:00-17:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	63.99	16.00	63.51	0.00	587.20	0.109	0.00	0.12	6.869	A
B-A	136.27	34.07	134.66	0.00	469.12	0.290	0.00	0.40	10.713	B
C-A	256.72	64.18	256.72	0.00	-	-	-	-	-	-
C-B	107.66	26.91	106.67	0.00	537.91	0.200	0.00	0.25	8.329	A
A-B	328.24	82.06	328.24	0.00	-	-	-	-	-	-
A-C	136.27	34.07	136.27	0.00	-	-	-	-	-	-

Main results: (17:15-17:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	76.41	19.10	76.26	0.00	547.65	0.140	0.12	0.16	7.635	A
B-A	162.72	40.68	162.01	0.00	438.05	0.371	0.40	0.58	13.007	B
C-A	306.55	76.64	306.55	0.00	-	-	-	-	-	-
C-B	128.55	32.14	128.23	0.00	515.96	0.249	0.25	0.33	9.277	A
A-B	391.96	97.99	391.96	0.00	-	-	-	-	-	-
A-C	162.72	40.68	162.72	0.00	-	-	-	-	-	-

Main results: (17:30-17:45)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	93.59	23.40	93.26	0.00	475.70	0.197	0.16	0.24	9.406	A
B-A	199.28	49.82	197.66	0.00	394.27	0.505	0.58	0.98	18.158	C
C-A	375.45	93.86	375.45	0.00	-	-	-	-	-	-
C-B	157.45	39.36	156.87	0.00	485.61	0.324	0.33	0.47	10.930	B
A-B	480.04	120.01	480.04	0.00	-	-	-	-	-	-
A-C	199.28	49.82	199.28	0.00	-	-	-	-	-	-

Main results: (17:45-18:00)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	93.59	23.40	93.58	0.00	475.70	0.198	0.24	0.24	9.476	A
B-A	199.28	49.82	199.21	0.00	394.00	0.500	0.98	1.00	18.401	C
C-A	375.45	93.86	375.45	0.00	-	-	-	-	-	-
C-B	157.45	39.36	157.43	0.00	485.61	0.324	0.47	0.48	10.969	B
A-B	480.04	120.01	480.04	0.00	-	-	-	-	-	-
A-C	199.28	49.82	199.28	0.00	-	-	-	-	-	-

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	76.41	19.10	76.73	0.00	545.32	0.140	0.24	0.16	7.689	A
B-A	162.72	40.68	164.31	0.00	437.71	0.372	1.00	0.60	13.241	B
C-A	306.55	76.64	306.55	0.00	-	-	-	-	-	-
C-B	128.55	32.14	129.11	0.00	515.96	0.249	0.48	0.34	9.320	A
A-B	391.96	97.99	391.96	0.00	-	-	-	-	-	-
A-C	162.72	40.68	162.72	0.00	-	-	-	-	-	-

Main results: (18:15-18:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	63.99	16.00	64.16	0.00	585.36	0.109	0.16	0.12	6.911	A
B-A	136.27	34.07	137.02	0.00	468.64	0.291	0.60	0.42	10.879	B
C-A	256.72	64.18	256.72	0.00	-	-	-	-	-	-
C-B	107.66	26.91	107.99	0.00	537.91	0.200	0.34	0.25	8.381	A
A-B	328.24	82.06	328.24	0.00	-	-	-	-	-	-
A-C	136.27	34.07	136.27	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (17:00-17:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	1.76	0.12	6.869	A	A
B-A	5.73	0.38	10.713	B	B
C-A	-	-	-	-	-
C-B	3.56	0.24	8.329	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:15-17:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	2.35	0.16	7.635	A	A
B-A	8.32	0.55	13.007	B	B
C-A	-	-	-	-	-
C-B	4.77	0.32	9.277	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:30-17:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	3.52	0.23	9.406	A	A
B-A	13.80	0.92	18.158	C	B
C-A	-	-	-	-	-
C-B	6.82	0.45	10.930	B	B
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:45-18:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	3.65	0.24	9.476	A	A
B-A	14.93	1.00	18.461	C	B
C-A	-	-	-	-	-
C-B	7.11	0.47	10.969	B	B
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (18:00-18:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	2.54	0.17	7.689	A	A
B-A	9.56	0.64	13.241	B	B
C-A	-	-	-	-	-
C-B	5.21	0.35	9.320	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (18:15-18:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	1.90	0.13	6.911	A	A
B-A	6.50	0.43	10.879	B	B
C-A	-	-	-	-	-
C-B	3.90	0.26	8.381	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queue Variation Results for each time segment

Queue Variation results: (17:00-17:15)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.12	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.40	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.25	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (17:15-17:30)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.16	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.58	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.33	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (17:30-17:45)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.24	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.98	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.47	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (17:45-18:00)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.24	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	1.00	0.00	0.00	0.00	2.00			N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.48	0.00	0.00	0.00	1.00			N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (18:00-18:15)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.16	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.60	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.34	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (18:15-18:30)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.12	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.42	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.25	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

(Default Analysis Set) - 2029 + Scheme, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Rela
2029 + Scheme, AM	2029 + Scheme	AM		ONE HOUR	08:00	09:30	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C		11.93	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	(untitled)		Major
B	B	(untitled)		Minor
C	C	(untitled)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.80	✓	2.60	✓	2.70	75.00		

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)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane plus flare				10.00	5.70	3.80	3.50	3.40		1.00	30	105

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	647.987	0.108	0.272	0.171	0.389
1	B-C	723.732	0.107	0.271	-	-
1	C-B	650.993	0.243	0.243	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	556.00	100.000
B	ONE HOUR	✓	277.00	100.000
C	ONE HOUR	✓	478.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
08:00-08:15	A	418.59	418.59		
08:00-08:15	B	208.54	208.54		
08:00-08:15	C	359.86	359.86		
08:15-08:30	A	499.83	499.83		
08:15-08:30	B	249.02	249.02		
08:15-08:30	C	429.71	429.71		
08:30-08:45	A	612.17	612.17		
08:30-08:45	B	304.98	304.98		
08:30-08:45	C	526.29	526.29		
08:45-09:00	A	612.17	612.17		
08:45-09:00	B	304.98	304.98		
08:45-09:00	C	526.29	526.29		
09:00-09:15	A	499.83	499.83		
09:00-09:15	B	249.02	249.02		
09:00-09:15	C	429.71	429.71		
09:15-09:30	A	418.59	418.59		
09:15-09:30	B	208.54	208.54		
09:15-09:30	C	359.86	359.86		

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

	To			
		A	B	C
	A	0.000	407.000	149.000
	B	181.000	0.000	96.000
From	C	399.000	79.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

	To			
		A	B	C
	A	0.00	0.73	0.27
	B	0.65	0.00	0.35
From	C	0.83	0.17	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

	To			
		A	B	C
	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
From	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To			
		A	B	C
	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
From	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-C	0.21	8.84	0.26	~1	A	88.09	132.14	16.98	7.71	0.19	16.98	7.71
B-A	0.45	14.99	0.82	2.00	B	166.09	249.13	50.08	12.06	0.56	50.09	12.06
C-A	-	-	-	-	-	366.13	549.19	-	-	-	-	-
C-B	0.17	8.67	0.21	~1	A	72.49	108.74	14.43	7.96	0.16	14.43	7.96
A-B	-	-	-	-	-	373.47	560.21	-	-	-	-	-
A-C	-	-	-	-	-	136.73	205.09	-	-	-	-	-

Main Results for each time segment

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	72.27	18.07	71.74	0.00	605.92	0.119	0.00	0.13	6.732	A
B-A	136.27	34.07	134.82	0.00	508.25	0.268	0.00	0.36	9.605	A
C-A	300.39	75.10	300.39	0.00	-	-	-	-	-	-
C-B	59.48	14.87	58.99	0.00	549.09	0.108	0.00	0.12	7.340	A
A-B	306.41	76.60	306.41	0.00	-	-	-	-	-	-
A-C	112.18	28.04	112.18	0.00	-	-	-	-	-	-

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	86.30	21.58	86.14	0.00	572.35	0.151	0.13	0.18	7.402	A
B-A	162.72	40.68	162.14	0.00	479.87	0.339	0.36	0.50	11.310	B
C-A	358.69	89.67	358.69	0.00	-	-	-	-	-	-
C-B	71.02	17.75	70.89	0.00	529.31	0.134	0.12	0.15	7.850	A
A-B	365.88	91.47	365.88	0.00	-	-	-	-	-	-
A-C	133.95	33.49	133.95	0.00	-	-	-	-	-	-

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	105.70	26.42	105.38	0.00	514.12	0.206	0.18	0.26	8.800	A
B-A	199.28	49.82	198.07	0.00	439.45	0.453	0.50	0.81	14.839	B
C-A	439.31	109.83	439.31	0.00	-	-	-	-	-	-
C-B	86.98	21.75	86.77	0.00	501.96	0.173	0.15	0.21	8.666	A
A-B	448.12	112.03	448.12	0.00	-	-	-	-	-	-
A-C	164.05	41.01	164.05	0.00	-	-	-	-	-	-

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	105.70	26.42	105.69	0.00	512.81	0.206	0.26	0.26	8.842	A
B-A	199.28	49.82	199.24	0.00	439.36	0.454	0.81	0.82	14.985	B
C-A	439.31	109.83	439.31	0.00	-	-	-	-	-	-
C-B	86.98	21.75	86.98	0.00	501.96	0.173	0.21	0.21	8.674	A
A-B	448.12	112.03	448.12	0.00	-	-	-	-	-	-
A-C	164.05	41.01	164.05	0.00	-	-	-	-	-	-

Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	86.30	21.58	86.61	0.00	570.88	0.151	0.26	0.18	7.440	A
B-A	162.72	40.68	163.90	0.00	479.80	0.339	0.82	0.52	11.439	B
C-A	358.69	89.67	358.69	0.00	-	-	-	-	-	-
C-B	71.02	17.75	71.23	0.00	529.31	0.134	0.21	0.16	7.862	A
A-B	365.88	91.47	365.88	0.00	-	-	-	-	-	-
A-C	133.95	33.49	133.95	0.00	-	-	-	-	-	-

Main results: (09:15-09:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	72.27	18.07	72.45	0.00	604.56	0.120	0.18	0.14	6.769	A
B-A	136.27	34.07	136.87	0.00	508.10	0.268	0.52	0.37	9.714	A
C-A	300.39	75.10	300.39	0.00	-	-	-	-	-	-
C-B	59.48	14.87	59.61	0.00	549.09	0.108	0.16	0.12	7.358	A
A-B	306.41	76.60	306.41	0.00	-	-	-	-	-	-
A-C	112.18	28.04	112.18	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (08:00-08:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	1.95	0.13	6.732	A	A
B-A	5.16	0.34	9.605	A	A
C-A	-	-	-	-	-
C-B	1.74	0.12	7.340	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:15-08:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	2.58	0.17	7.402	A	A
B-A	7.29	0.49	11.310	B	B
C-A	-	-	-	-	-
C-B	2.25	0.15	7.850	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:30-08:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	3.72	0.25	8.800	A	A
B-A	11.46	0.76	14.839	B	B
C-A	-	-	-	-	-
C-B	3.03	0.20	8.666	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:45-09:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	3.86	0.26	8.842	A	A
B-A	12.20	0.81	14.985	B	B
C-A	-	-	-	-	-
C-B	3.12	0.21	8.674	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (09:00-09:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	2.77	0.18	7.440	A	A
B-A	8.20	0.55	11.439	B	B
C-A	-	-	-	-	-
C-B	2.41	0.16	7.862	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (09:15-09:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	2.10	0.14	6.769	A	A
B-A	5.77	0.38	9.714	A	A
C-A	-	-	-	-	-
C-B	1.88	0.13	7.358	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queue Variation Results for each time segment

Queue Variation results: (08:00-08:15)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.13	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.36	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.12	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (08:15-08:30)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.18	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.50	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.15	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (08:30-08:45)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.26	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.81	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.21	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (08:45-09:00)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.26	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.82	0.00	0.00	0.00	2.00			N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.21	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (09:00-09:15)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.18	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.52	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.16	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (09:15-09:30)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.14	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.37	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.12	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

(Default Analysis Set) - 2029 + Scheme, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Rela
2029 + Scheme, PM	2029 + Scheme	PM		ONE HOUR	17:00	18:30	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C		10.44	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	(untitled)		Major
B	B	(untitled)		Minor
C	C	(untitled)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.80	✓	2.60	✓	2.70	75.00		

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)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane plus flare				10.00	5.70	3.80	3.50	3.40		1.00	30	105

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	613.504	0.102	0.258	0.162	0.368
1	B-C	765.461	0.113	0.286	-	-
1	C-B	650.993	0.243	0.243	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	629.00	100.000
B	ONE HOUR	✓	188.00	100.000
C	ONE HOUR	✓	511.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
17:00-17:15	A	473.54	473.54		
17:00-17:15	B	141.54	141.54		
17:00-17:15	C	384.71	384.71		
17:15-17:30	A	565.46	565.46		
17:15-17:30	B	169.01	169.01		
17:15-17:30	C	459.38	459.38		
17:30-17:45	A	692.54	692.54		
17:30-17:45	B	206.99	206.99		
17:30-17:45	C	562.62	562.62		
17:45-18:00	A	692.54	692.54		
17:45-18:00	B	206.99	206.99		
17:45-18:00	C	562.62	562.62		
18:00-18:15	A	565.46	565.46		
18:00-18:15	B	169.01	169.01		
18:00-18:15	C	459.38	459.38		
18:15-18:30	A	473.54	473.54		
18:15-18:30	B	141.54	141.54		
18:15-18:30	C	384.71	384.71		

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

	To			
		A	B	C
	A	0.000	436.000	193.000
	B	83.000	0.000	105.000
From	C	359.000	152.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

	To			
		A	B	C
	A	0.00	0.69	0.31
	B	0.44	0.00	0.56
From	C	0.70	0.30	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

	To			
		A	B	C
	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
From	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To			
		A	B	C
	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
From	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-C	0.19	7.40	0.24	~1	A	96.35	144.52	16.26	6.75	0.18	16.26	6.75
B-A	0.24	12.47	0.31	~1	B	76.16	114.24	20.35	10.69	0.23	20.35	10.69
C-A	-	-	-	-	-	329.42	494.14	-	-	-	-	-
C-B	0.35	11.42	0.53	1.00	B	139.48	209.22	34.42	9.87	0.38	34.42	9.87
A-B	-	-	-	-	-	400.08	600.12	-	-	-	-	-
A-C	-	-	-	-	-	177.10	265.65	-	-	-	-	-

Main Results for each time segment

Main results: (17:00-17:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	79.05	19.76	78.51	0.00	661.41	0.120	0.00	0.13	6.171	A
B-A	62.49	15.62	61.86	0.00	455.74	0.137	0.00	0.16	9.125	A
C-A	270.27	67.57	270.27	0.00	-	-	-	-	-	-
C-B	114.43	28.61	113.36	0.00	535.71	0.214	0.00	0.27	8.503	A
A-B	328.24	82.06	328.24	0.00	-	-	-	-	-	-
A-C	145.30	36.33	145.30	0.00	-	-	-	-	-	-

Main results: (17:15-17:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	94.39	23.60	94.24	0.00	637.97	0.148	0.13	0.17	6.619	A
B-A	74.62	18.65	74.40	0.00	424.21	0.176	0.16	0.21	10.285	B
C-A	322.73	80.68	322.73	0.00	-	-	-	-	-	-
C-B	136.64	34.16	136.29	0.00	513.33	0.266	0.27	0.36	9.540	A
A-B	391.96	97.99	391.96	0.00	-	-	-	-	-	-
A-C	173.50	43.38	173.50	0.00	-	-	-	-	-	-

Main results: (17:30-17:45)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	115.61	28.90	115.36	0.00	602.44	0.192	0.17	0.24	7.388	A
B-A	91.38	22.85	90.98	0.00	380.31	0.240	0.21	0.31	12.425	B
C-A	395.27	98.82	395.27	0.00	-	-	-	-	-	-
C-B	167.36	41.84	166.70	0.00	482.39	0.347	0.36	0.52	11.379	B
A-B	480.04	120.01	480.04	0.00	-	-	-	-	-	-
A-C	212.50	53.12	212.50	0.00	-	-	-	-	-	-

Main results: (17:45-18:00)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	115.61	28.90	115.60	0.00	602.05	0.192	0.24	0.24	7.399	A
B-A	91.38	22.85	91.37	0.00	380.10	0.240	0.31	0.31	12.468	B
C-A	395.27	98.82	395.27	0.00	-	-	-	-	-	-
C-B	167.36	41.84	167.34	0.00	482.39	0.347	0.52	0.53	11.424	B
A-B	480.04	120.01	480.04	0.00	-	-	-	-	-	-
A-C	212.50	53.12	212.50	0.00	-	-	-	-	-	-

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	94.39	23.60	94.64	0.00	637.45	0.148	0.24	0.18	6.636	A
B-A	74.62	18.65	75.00	0.00	423.91	0.176	0.31	0.22	10.330	B
C-A	322.73	80.68	322.73	0.00	-	-	-	-	-	-
C-B	136.64	34.16	137.28	0.00	513.33	0.266	0.53	0.37	9.590	A
A-B	391.96	97.99	391.96	0.00	-	-	-	-	-	-
A-C	173.50	43.38	173.50	0.00	-	-	-	-	-	-

Main results: (18:15-18:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	79.05	19.76	79.20	0.00	660.78	0.120	0.18	0.14	6.193	A
B-A	62.49	15.62	62.71	0.00	455.32	0.137	0.22	0.16	9.174	A
C-A	270.27	67.57	270.27	0.00	-	-	-	-	-	-
C-B	114.43	28.61	114.81	0.00	535.71	0.214	0.37	0.27	8.562	A
A-B	328.24	82.06	328.24	0.00	-	-	-	-	-	-
A-C	145.30	36.33	145.30	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (17:00-17:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	1.96	0.13	6.171	A	A
B-A	2.26	0.15	9.125	A	A
C-A	-	-	-	-	-
C-B	3.86	0.26	8.503	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:15-17:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	2.53	0.17	6.619	A	A
B-A	3.07	0.20	10.285	B	B
C-A	-	-	-	-	-
C-B	5.21	0.35	9.540	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:30-17:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	3.44	0.23	7.388	A	A
B-A	4.49	0.30	12.425	B	B
C-A	-	-	-	-	-
C-B	7.52	0.50	11.379	B	B
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:45-18:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	3.54	0.24	7.399	A	A
B-A	4.69	0.31	12.468	B	B
C-A	-	-	-	-	-
C-B	7.87	0.52	11.424	B	B
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (18:00-18:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	2.69	0.18	6.636	A	A
B-A	3.36	0.22	10.330	B	B
C-A	-	-	-	-	-
C-B	5.71	0.38	9.590	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (18:15-18:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	2.10	0.14	6.193	A	A
B-A	2.48	0.17	9.174	A	A
C-A	-	-	-	-	-
C-B	4.24	0.28	8.562	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queue Variation Results for each time segment

Queue Variation results: (17:00-17:15)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.13	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.16	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.27	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (17:15-17:30)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.17	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.21	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.36	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (17:30-17:45)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.24	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.31	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.52	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (17:45-18:00)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.24	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.31	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.53	0.00	0.00	0.00	1.00			N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (18:00-18:15)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.18	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.22	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.37	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (18:15-18:30)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.14	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.16	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.27	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-



Junctions 8
PICADY 8 - Priority Intersection Module
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Filename: R4 - Pill_A369 St Georges Hill T-Junction.arc8

Path: \\CWLFP01\Proj\Consulting\Transport Planning\PROJECTS\467470 (HS) MetroWest Phase 1 TA\Initial Junction Options Modelling\working

Report generation date: 08/12/2015 14:53:46

-
- » (Default Analysis Set) - 2015, AM
 - » (Default Analysis Set) - 2015, PM
 - » (Default Analysis Set) - 2019, AM
 - » (Default Analysis Set) - 2019, PM
 - » (Default Analysis Set) - 2019 + Scheme, AM
 - » (Default Analysis Set) - 2019 + Scheme, PM
 - » (Default Analysis Set) - 2029, AM
 - » (Default Analysis Set) - 2029, PM
 - » (Default Analysis Set) - 2029 + Scheme, AM
 - » (Default Analysis Set) - 2029 + Scheme, PM

Summary of junction performance

	AM							PM						Ju D
	Queue (PCU)	95 % Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Queue (PCU)	95 % Queue (PCU)	Delay (s)	RFC	LOS		
	A1 - 2015													
Stream B-C	0.01	~1	10.19	0.01	B	20.91	C	0.02	~1	8.93	0.02	A	1	
Stream B-A	1.05	3.00	23.70	0.52	C			0.33	~1	12.52	0.25	B		
Stream C-A	-	-	-	-	-			-	-	-	-	-		
Stream C-B	0.06	~1	7.10	0.06	A			0.01	~1	6.95	0.01	A		
Stream A-B	-	-	-	-	-			-	-	-	-	-		
Stream A-C	-	-	-	-	-			-	-	-	-	-		
	A1 - 2019													
Stream B-C	0.01	~1	10.60	0.01	B	23.10	C	0.02	~1	9.14	0.02	A	1	
Stream B-A	1.20	3.00	26.33	0.55	D			0.37	~1	13.27	0.27	B		
Stream C-A	-	-	-	-	-			-	-	-	-	-		
Stream C-B	0.06	~1	7.22	0.06	A			0.02	~1	7.10	0.01	A		
Stream A-B	-	-	-	-	-			-	-	-	-	-		
Stream A-C	-	-	-	-	-			-	-	-	-	-		
	A1 - 2019 + Scheme													
Stream B-C	0.01	~1	10.60	0.01	B	23.10	C	0.02	~1	9.14	0.02	A	1	
Stream B-A	1.20	3.00	26.33	0.55	D			0.37	~1	13.27	0.27	B		
Stream C-A	-	-	-	-	-			-	-	-	-	-		
Stream C-B	0.06	~1	7.22	0.06	A			0.02	~1	7.10	0.01	A		
Stream A-B	-	-	-	-	-			-	-	-	-	-		
Stream A-C	-	-	-	-	-			-	-	-	-	-		
	A1 - 2029													
Stream B-C	0.02	~1	13.03	0.02	B	34.78	D	0.03	~1	9.74	0.03	A	1	
Stream B-A	1.96	6.00	40.19	0.68	E			0.48	1.00	15.62	0.33	C		
Stream C-A	-	-	-	-	-			-	-	-	-	-		
Stream C-B	0.07	~1	7.59	0.07	A			0.02	~1	7.53	0.02	A		
Stream A-B	-	-	-	-	-			-	-	-	-	-		
Stream A-C	-	-	-	-	-			-	-	-	-	-		
	A1 - 2029 + Scheme													
Stream B-C	0.02	~1	13.03	0.02	B	34.78	D	0.03	~1	9.74	0.03	A	1	
Stream B-A	1.96	6.00	40.19	0.68	E			0.48	1.00	15.62	0.33	C		
Stream C-A	-	-	-	-	-			-	-	-	-	-		
Stream C-B	0.07	~1	7.59	0.07	A			0.02	~1	7.53	0.02	A		
Stream A-B	-	-	-	-	-			-	-	-	-	-		
Stream A-C	-	-	-	-	-			-	-	-	-	-		

Values shown are the maximum values over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages.

"D1 - 2015, AM" model duration: 08:00 - 09:30

"D2 - 2015, PM" model duration: 17:00 - 18:30

"D3 - 2019, AM" model duration: 08:00 - 09:30

"D4 - 2019, PM" model duration: 17:00 - 18:30

"D5 - 2019 + Scheme, AM" model duration: 08:00 - 09:30

"D6 - 2019 + Scheme, PM" model duration: 17:00 - 18:30

"D7 - 2029, AM" model duration: 08:00 - 09:30

"D8 - 2029, PM" model duration: 17:00 - 18:30

"D9 - 2029 + Scheme, AM" model duration: 08:00 - 09:30

"D10 - 2029 + Scheme, PM" model duration: 17:00 - 18:30

Run using Junctions 8.0.4.487 at 08/12/2015 14:53:41

File summary

Title	(untitled)
Location	
Site Number	
Date	25/11/2015
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DT018866
Description	

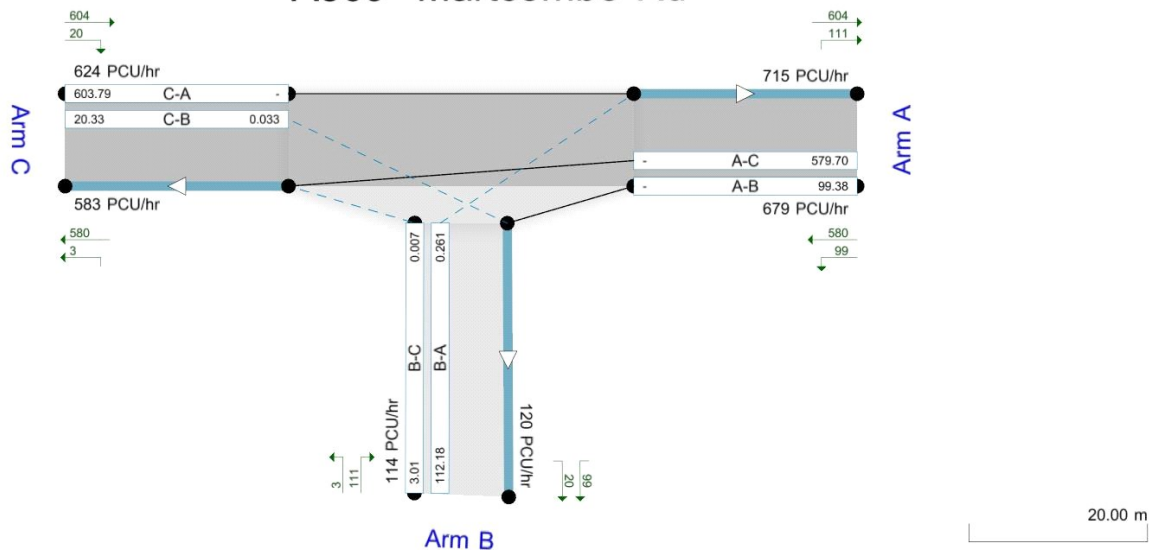
Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75	✓		N/A	0.85	36.00	20.00

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

A369 Martcombe Rd



Showing modelled flow through junction (PCU/hr)
Streams (upstreams) show Total Demand (PCU/hr). Streams (downstreams) show RFC (i)
Time Segment: (08:00-08:15)
Showing Analysis Set "A1", Demand Set "D1 - 2015, AM"

The junction diagram reflects the last run of ARCADY.

(Default Analysis Set) - 2015, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relations
2015, AM	2015	AM		ONE HOUR	08:00	09:30	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C		20.91	C

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	(untitled)		Major
B	B	(untitled)		Minor
C	C	(untitled)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	10.30	✓	2.40	✓	3.00	250.00		

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)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane plus flare				10.00	8.00	6.10	5.20	5.00	✓	3.00	51	86

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	677.304	0.095	0.241	0.151	0.344
1	B-C	602.460	0.075	0.190	-	-
1	C-B	781.320	0.246	0.246	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	902.00	100.000
B	ONE HOUR	✓	153.00	100.000
C	ONE HOUR	✓	829.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
08:00-08:15	A	679.07	679.07		
08:00-08:15	B	115.19	115.19		
08:00-08:15	C	624.11	624.11		
08:15-08:30	A	810.88	810.88		
08:15-08:30	B	137.54	137.54		
08:15-08:30	C	745.25	745.25		
08:30-08:45	A	993.12	993.12		
08:30-08:45	B	168.46	168.46		
08:30-08:45	C	912.75	912.75		
08:45-09:00	A	993.12	993.12		
08:45-09:00	B	168.46	168.46		
08:45-09:00	C	912.75	912.75		
09:00-09:15	A	810.88	810.88		
09:00-09:15	B	137.54	137.54		
09:00-09:15	C	745.25	745.25		
09:15-09:30	A	679.07	679.07		
09:15-09:30	B	115.19	115.19		
09:15-09:30	C	624.11	624.11		

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

	To			
		A	B	C
From	A	0.000	132.000	770.000
	B	149.000	0.000	4.000
	C	802.000	27.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

	To			
		A	B	C
From	A	0.00	0.15	0.85
	B	0.97	0.00	0.03
	C	0.97	0.03	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

	To			
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To			
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-C	0.01	10.19	0.01	~1	B	3.67	5.51	0.83	8.99	0.01	0.83	8.99
B-A	0.52	23.70	1.05	3.00	C	136.73	205.09	56.79	16.61	0.63	56.80	16.62
C-A	-	-	-	-	-	735.93	1103.89	-	-	-	-	-
C-B	0.06	7.10	0.06	~1	A	24.78	37.16	4.06	6.55	0.05	4.06	6.55
A-B	-	-	-	-	-	121.13	181.69	-	-	-	-	-
A-C	-	-	-	-	-	706.57	1059.85	-	-	-	-	-

Main Results for each time segment

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	3.01	0.75	2.98	0.00	452.83	0.007	0.00	0.01	8.002	A
B-A	112.18	28.04	110.79	0.00	430.00	0.261	0.00	0.35	11.231	B
C-A	603.79	150.95	603.79	0.00	-	-	-	-	-	-
C-B	20.33	5.08	20.19	0.00	614.21	0.033	0.00	0.03	6.058	A
A-B	99.38	24.84	99.38	0.00	-	-	-	-	-	-
A-C	579.70	144.92	579.70	0.00	-	-	-	-	-	-

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	3.60	0.90	3.59	0.00	418.96	0.009	0.01	0.01	8.666	A
B-A	133.95	33.49	133.23	0.00	381.96	0.351	0.35	0.53	14.429	B
C-A	720.98	180.25	720.98	0.00	-	-	-	-	-	-
C-B	24.27	6.07	24.24	0.00	581.77	0.042	0.03	0.04	6.456	A
A-B	118.67	29.67	118.67	0.00	-	-	-	-	-	-
A-C	692.21	173.05	692.21	0.00	-	-	-	-	-	-

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	4.40	1.10	4.39	0.00	359.19	0.012	0.01	0.01	10.146	B
B-A	164.05	41.01	162.04	0.00	315.58	0.520	0.53	1.03	23.136	C
C-A	883.02	220.75	883.02	0.00	-	-	-	-	-	-
C-B	29.73	7.43	29.67	0.00	536.92	0.055	0.04	0.06	7.097	A
A-B	145.33	36.33	145.33	0.00	-	-	-	-	-	-
A-C	847.79	211.95	847.79	0.00	-	-	-	-	-	-

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	4.40	1.10	4.40	0.00	357.60	0.012	0.01	0.01	10.192	B
B-A	164.05	41.01	163.95	0.00	315.57	0.520	1.03	1.05	23.701	C
C-A	883.02	220.75	883.02	0.00	-	-	-	-	-	-
C-B	29.73	7.43	29.73	0.00	536.92	0.055	0.06	0.06	7.097	A
A-B	145.33	36.33	145.33	0.00	-	-	-	-	-	-
A-C	847.79	211.95	847.79	0.00	-	-	-	-	-	-

Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	3.60	0.90	3.61	0.00	417.84	0.009	0.01	0.01	8.690	A
B-A	133.95	33.49	135.95	0.00	381.94	0.351	1.05	0.55	14.748	B
C-A	720.98	180.25	720.98	0.00	-	-	-	-	-	-
C-B	24.27	6.07	24.33	0.00	581.77	0.042	0.06	0.04	6.458	A
A-B	118.67	29.67	118.67	0.00	-	-	-	-	-	-
A-C	692.21	173.05	692.21	0.00	-	-	-	-	-	-

Main results: (09:15-09:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	3.01	0.75	3.02	0.00	452.14	0.007	0.01	0.01	8.017	A
B-A	112.18	28.04	112.95	0.00	429.95	0.261	0.55	0.36	11.383	B
C-A	603.79	150.95	603.79	0.00	-	-	-	-	-	-
C-B	20.33	5.08	20.36	0.00	614.21	0.033	0.04	0.03	6.061	A
A-B	99.38	24.84	99.38	0.00	-	-	-	-	-	-
A-C	579.70	144.92	579.70	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (08:00-08:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.10	0.01	8.002	A	A
B-A	4.94	0.33	11.231	B	B
C-A	-	-	-	-	-
C-B	0.50	0.03	6.058	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:15-08:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.13	0.01	8.666	A	A
B-A	7.56	0.50	14.429	B	B
C-A	-	-	-	-	-
C-B	0.64	0.04	6.456	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:30-08:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.18	0.01	10.146	B	B
B-A	14.21	0.95	23.136	C	C
C-A	-	-	-	-	-
C-B	0.85	0.06	7.097	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:45-09:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.19	0.01	10.192	B	B
B-A	15.67	1.04	23.701	C	C
C-A	-	-	-	-	-
C-B	0.87	0.06	7.097	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (09:00-09:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.14	0.01	8.690	A	A
B-A	8.81	0.59	14.748	B	B
C-A	-	-	-	-	-
C-B	0.67	0.04	6.458	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (09:15-09:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.10	0.01	8.017	A	A
B-A	5.61	0.37	11.383	B	B
C-A	-	-	-	-	-
C-B	0.53	0.04	6.061	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queue Variation Results for each time segment

Queue Variation results: (08:00-08:15)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.01	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.35	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.03	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (08:15-08:30)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.01	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.53	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.04	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (08:30-08:45)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.01	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	1.03	?	?	?	?	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.06	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (08:45-09:00)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.01	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	1.05	0.00	0.00	0.00	3.00			N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.06	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (09:00-09:15)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.01	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.55	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.04	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (09:15-09:30)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.01	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.36	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.03	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

(Default Analysis Set) - 2015, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relations
2015, PM	2015	PM		ONE HOUR	17:00	18:30	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C		11.86	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	(untitled)		Major
B	B	(untitled)		Minor
C	C	(untitled)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	10.30	✓	2.40	✓	3.00	250.00		

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)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane plus flare				10.00	8.00	6.10	5.20	5.00	✓	3.00	51	86

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	671.424	0.094	0.239	0.150	0.341
1	B-C	609.510	0.076	0.192	-	-
1	C-B	781.320	0.246	0.246	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	945.00	100.000
B	ONE HOUR	✓	96.00	100.000
C	ONE HOUR	✓	458.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
17:00-17:15	A	711.45	711.45		
17:00-17:15	B	72.27	72.27		
17:00-17:15	C	344.81	344.81		
17:15-17:30	A	849.54	849.54		
17:15-17:30	B	86.30	86.30		
17:15-17:30	C	411.73	411.73		
17:30-17:45	A	1040.46	1040.46		
17:30-17:45	B	105.70	105.70		
17:30-17:45	C	504.27	504.27		
17:45-18:00	A	1040.46	1040.46		
17:45-18:00	B	105.70	105.70		
17:45-18:00	C	504.27	504.27		
18:00-18:15	A	849.54	849.54		
18:00-18:15	B	86.30	86.30		
18:00-18:15	C	411.73	411.73		
18:15-18:30	A	711.45	711.45		
18:15-18:30	B	72.27	72.27		
18:15-18:30	C	344.81	344.81		

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

	To			
		A	B	C
	A	0.000	241.000	704.000
	B	88.000	0.000	8.000
From	C	451.000	7.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

	To			
		A	B	C
	A	0.00	0.26	0.74
	B	0.92	0.00	0.08
From	C	0.98	0.02	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

	To			
		A	B	C
	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
From	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To			
		A	B	C
	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
From	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-C	0.02	8.93	0.02	~1	A	7.34	11.01	1.51	8.24	0.02	1.51	8.24
B-A	0.25	12.52	0.33	~1	B	80.75	121.13	21.26	10.53	0.24	21.26	10.53
C-A	-	-	-	-	-	413.85	620.77	-	-	-	-	-
C-B	0.01	6.95	0.01	~1	A	6.42	9.64	1.04	6.45	0.01	1.04	6.45
A-B	-	-	-	-	-	221.15	331.72	-	-	-	-	-
A-C	-	-	-	-	-	646.00	969.00	-	-	-	-	-

Main Results for each time segment

Main results: (17:00-17:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	6.02	1.51	5.97	0.00	476.74	0.013	0.00	0.01	7.646	A
B-A	66.25	16.56	65.61	0.00	475.16	0.139	0.00	0.16	8.777	A
C-A	339.54	84.88	339.54	0.00	-	-	-	-	-	-
C-B	5.27	1.32	5.24	0.00	606.24	0.009	0.00	0.01	5.989	A
A-B	181.44	45.36	181.44	0.00	-	-	-	-	-	-
A-C	530.01	132.50	530.01	0.00	-	-	-	-	-	-

Main results: (17:15-17:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	7.19	1.80	7.18	0.00	449.95	0.016	0.01	0.02	8.130	A
B-A	79.11	19.78	78.88	0.00	437.06	0.181	0.16	0.22	10.045	B
C-A	405.44	101.36	405.44	0.00	-	-	-	-	-	-
C-B	6.29	1.57	6.28	0.00	572.26	0.011	0.01	0.01	6.360	A
A-B	216.65	54.16	216.65	0.00	-	-	-	-	-	-
A-C	632.88	158.22	632.88	0.00	-	-	-	-	-	-

Main results: (17:30-17:45)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	8.81	2.20	8.79	0.00	412.13	0.021	0.02	0.02	8.925	A
B-A	96.89	24.22	96.44	0.00	384.39	0.252	0.22	0.33	12.482	B
C-A	496.56	124.14	496.56	0.00	-	-	-	-	-	-
C-B	7.71	1.93	7.69	0.00	525.27	0.015	0.01	0.01	6.954	A
A-B	265.35	66.34	265.35	0.00	-	-	-	-	-	-
A-C	775.12	193.78	775.12	0.00	-	-	-	-	-	-

Main results: (17:45-18:00)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	8.81	2.20	8.81	0.00	411.97	0.021	0.02	0.02	8.928	A
B-A	96.89	24.22	96.88	0.00	384.39	0.252	0.33	0.33	12.520	B
C-A	496.56	124.14	496.56	0.00	-	-	-	-	-	-
C-B	7.71	1.93	7.71	0.00	525.27	0.015	0.01	0.01	6.954	A
A-B	265.35	66.34	265.35	0.00	-	-	-	-	-	-
A-C	775.12	193.78	775.12	0.00	-	-	-	-	-	-

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	7.19	1.80	7.21	0.00	449.74	0.016	0.02	0.02	8.136	A
B-A	79.11	19.78	79.55	0.00	437.07	0.181	0.33	0.22	10.083	B
C-A	405.44	101.36	405.44	0.00	-	-	-	-	-	-
C-B	6.29	1.57	6.31	0.00	572.26	0.011	0.01	0.01	6.362	A
A-B	216.65	54.16	216.65	0.00	-	-	-	-	-	-
A-C	632.88	158.22	632.88	0.00	-	-	-	-	-	-

Main results: (18:15-18:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	6.02	1.51	6.04	0.00	476.48	0.013	0.02	0.01	7.651	A
B-A	66.25	16.56	66.49	0.00	475.16	0.139	0.22	0.16	8.814	A
C-A	339.54	84.88	339.54	0.00	-	-	-	-	-	-
C-B	5.27	1.32	5.28	0.00	606.24	0.009	0.01	0.01	5.992	A
A-B	181.44	45.36	181.44	0.00	-	-	-	-	-	-
A-C	530.01	132.50	530.01	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (17:00-17:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.18	0.01	7.646	A	A
B-A	2.31	0.15	8.777	A	A
C-A	-	-	-	-	-
C-B	0.13	0.01	5.989	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:15-17:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.24	0.02	8.130	A	A
B-A	3.18	0.21	10.045	B	B
C-A	-	-	-	-	-
C-B	0.16	0.01	6.360	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:30-17:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.32	0.02	8.925	A	A
B-A	4.77	0.32	12.482	B	B
C-A	-	-	-	-	-
C-B	0.22	0.01	6.954	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:45-18:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.33	0.02	8.928	A	A
B-A	4.99	0.33	12.520	B	B
C-A	-	-	-	-	-
C-B	0.22	0.01	6.954	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (18:00-18:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.25	0.02	8.136	A	A
B-A	3.48	0.23	10.083	B	B
C-A	-	-	-	-	-
C-B	0.17	0.01	6.362	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (18:15-18:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.20	0.01	7.651	A	A
B-A	2.53	0.17	8.814	A	A
C-A	-	-	-	-	-
C-B	0.13	0.01	5.992	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queue Variation Results for each time segment

Queue Variation results: (17:00-17:15)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.01	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.16	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.01	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (17:15-17:30)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.02	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.22	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.01	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (17:30-17:45)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.02	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.33	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.01	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (17:45-18:00)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.02	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.33	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.01	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (18:00-18:15)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.02	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.22	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.01	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (18:15-18:30)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.01	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.16	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.01	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

(Default Analysis Set) - 2019, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relations
2019, AM	2019	AM		ONE HOUR	08:00	09:30	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C		23.10	C

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	(untitled)		Major
B	B	(untitled)		Minor
C	C	(untitled)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	10.30	✓	2.40	✓	3.00	250.00		

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)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane plus flare				10.00	8.00	6.10	5.20	5.00	✓	3.00	51	86

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	677.342	0.095	0.241	0.151	0.344
1	B-C	602.415	0.075	0.190	-	-
1	C-B	781.320	0.246	0.246	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	929.00	100.000
B	ONE HOUR	✓	157.00	100.000
C	ONE HOUR	✓	854.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
08:00-08:15	A	699.40	699.40		
08:00-08:15	B	118.20	118.20		
08:00-08:15	C	642.94	642.94		
08:15-08:30	A	835.15	835.15		
08:15-08:30	B	141.14	141.14		
08:15-08:30	C	767.73	767.73		
08:30-08:45	A	1022.85	1022.85		
08:30-08:45	B	172.86	172.86		
08:30-08:45	C	940.27	940.27		
08:45-09:00	A	1022.85	1022.85		
08:45-09:00	B	172.86	172.86		
08:45-09:00	C	940.27	940.27		
09:00-09:15	A	835.15	835.15		
09:00-09:15	B	141.14	141.14		
09:00-09:15	C	767.73	767.73		
09:15-09:30	A	699.40	699.40		
09:15-09:30	B	118.20	118.20		
09:15-09:30	C	642.94	642.94		

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

	To			
		A	B	C
	A	0.000	136.000	793.000
	B	153.000	0.000	4.000
From	C	826.000	28.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

	To			
		A	B	C
	A	0.00	0.15	0.85
	B	0.97	0.00	0.03
From	C	0.97	0.03	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

	To			
		A	B	C
	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
From	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To			
		A	B	C
	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
From	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-C	0.01	10.60	0.01	~1	B	3.67	5.51	0.85	9.21	0.01	0.85	9.21
B-A	0.55	26.33	1.20	3.00	D	140.40	210.59	62.62	17.84	0.70	62.63	17.84
C-A	-	-	-	-	-	757.95	1136.93	-	-	-	-	-
C-B	0.06	7.22	0.06	~1	A	25.69	38.54	4.27	6.64	0.05	4.27	6.64
A-B	-	-	-	-	-	124.80	187.19	-	-	-	-	-
A-C	-	-	-	-	-	727.67	1091.51	-	-	-	-	-

Main Results for each time segment

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	3.01	0.75	2.98	0.00	447.98	0.007	0.00	0.01	8.090	A
B-A	115.19	28.80	113.71	0.00	422.58	0.273	0.00	0.37	11.603	B
C-A	621.86	155.46	621.86	0.00	-	-	-	-	-	-
C-B	21.08	5.27	20.94	0.00	609.20	0.035	0.00	0.04	6.118	A
A-B	102.39	25.60	102.39	0.00	-	-	-	-	-	-
A-C	597.01	149.25	597.01	0.00	-	-	-	-	-	-

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	3.60	0.90	3.59	0.00	412.39	0.009	0.01	0.01	8.805	A
B-A	137.54	34.39	136.74	0.00	373.09	0.369	0.37	0.57	15.178	C
C-A	742.56	185.64	742.56	0.00	-	-	-	-	-	-
C-B	25.17	6.29	25.13	0.00	575.80	0.044	0.04	0.05	6.537	A
A-B	122.26	30.57	122.26	0.00	-	-	-	-	-	-
A-C	712.89	178.22	712.89	0.00	-	-	-	-	-	-

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	4.40	1.10	4.39	0.00	346.13	0.013	0.01	0.01	10.534	B
B-A	168.46	42.11	166.07	0.00	304.71	0.553	0.57	1.17	25.545	D
C-A	909.44	227.36	909.44	0.00	-	-	-	-	-	-
C-B	30.83	7.71	30.76	0.00	529.60	0.058	0.05	0.06	7.216	A
A-B	149.74	37.43	149.74	0.00	-	-	-	-	-	-
A-C	873.11	218.28	873.11	0.00	-	-	-	-	-	-

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	4.40	1.10	4.40	0.00	343.90	0.013	0.01	0.01	10.603	B
B-A	168.46	42.11	168.32	0.00	304.69	0.553	1.17	1.20	26.328	D
C-A	909.44	227.36	909.44	0.00	-	-	-	-	-	-
C-B	30.83	7.71	30.83	0.00	529.60	0.058	0.06	0.06	7.216	A
A-B	149.74	37.43	149.74	0.00	-	-	-	-	-	-
A-C	873.11	218.28	873.11	0.00	-	-	-	-	-	-

Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	3.60	0.90	3.61	0.00	410.99	0.009	0.01	0.01	8.836	A
B-A	137.54	34.39	139.94	0.00	373.06	0.369	1.20	0.60	15.595	C
C-A	742.56	185.64	742.56	0.00	-	-	-	-	-	-
C-B	25.17	6.29	25.23	0.00	575.80	0.044	0.06	0.05	6.538	A
A-B	122.26	30.57	122.26	0.00	-	-	-	-	-	-
A-C	712.89	178.22	712.89	0.00	-	-	-	-	-	-

Main results: (09:15-09:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	3.01	0.75	3.02	0.00	447.22	0.007	0.01	0.01	8.105	A
B-A	115.19	28.80	116.06	0.00	422.53	0.273	0.60	0.38	11.781	B
C-A	621.86	155.46	621.86	0.00	-	-	-	-	-	-
C-B	21.08	5.27	21.12	0.00	609.20	0.035	0.05	0.04	6.123	A
A-B	102.39	25.60	102.39	0.00	-	-	-	-	-	-
A-C	597.01	149.25	597.01	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (08:00-08:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.10	0.01	8.090	A	A
B-A	5.23	0.35	11.603	B	B
C-A	-	-	-	-	-
C-B	0.52	0.03	6.118	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:15-08:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.13	0.01	8.805	A	A
B-A	8.13	0.54	15.178	C	B
C-A	-	-	-	-	-
C-B	0.67	0.04	6.537	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:30-08:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.19	0.01	10.534	B	B
B-A	15.92	1.06	25.545	D	C
C-A	-	-	-	-	-
C-B	0.90	0.06	7.216	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:45-09:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.19	0.01	10.603	B	B
B-A	17.78	1.19	26.328	D	C
C-A	-	-	-	-	-
C-B	0.92	0.06	7.216	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (09:00-09:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.14	0.01	8.836	A	A
B-A	9.59	0.64	15.595	C	B
C-A	-	-	-	-	-
C-B	0.71	0.05	6.538	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (09:15-09:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.10	0.01	8.105	A	A
B-A	5.97	0.40	11.781	B	B
C-A	-	-	-	-	-
C-B	0.55	0.04	6.123	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queue Variation Results for each time segment

Queue Variation results: (08:00-08:15)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.01	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.37	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.04	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (08:15-08:30)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.01	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.57	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.05	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (08:30-08:45)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.01	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	1.17	0.00	0.00	0.00	2.00			N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.06	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (08:45-09:00)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.01	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	1.20	0.00	0.00	0.00	3.00			N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.06	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (09:00-09:15)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.01	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.60	0.00	0.00	0.00	1.00			N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.05	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (09:15-09:30)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.01	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.38	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.04	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

(Default Analysis Set) - 2019, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relations
2019, PM	2019	PM		ONE HOUR	17:00	18:30	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C		12.56	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	(untitled)		Major
B	B	(untitled)		Minor
C	C	(untitled)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	10.30	✓	2.40	✓	3.00	250.00		

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)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane plus flare				10.00	8.00	6.10	5.20	5.00	✓	3.00	51	86

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	671.809	0.094	0.239	0.150	0.341
1	B-C	609.049	0.076	0.192	-	-
1	C-B	781.320	0.246	0.246	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	985.00	100.000
B	ONE HOUR	✓	100.00	100.000
C	ONE HOUR	✓	477.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
17:00-17:15	A	741.56	741.56		
17:00-17:15	B	75.29	75.29		
17:00-17:15	C	359.11	359.11		
17:15-17:30	A	885.49	885.49		
17:15-17:30	B	89.90	89.90		
17:15-17:30	C	428.81	428.81		
17:30-17:45	A	1084.51	1084.51		
17:30-17:45	B	110.10	110.10		
17:30-17:45	C	525.19	525.19		
17:45-18:00	A	1084.51	1084.51		
17:45-18:00	B	110.10	110.10		
17:45-18:00	C	525.19	525.19		
18:00-18:15	A	885.49	885.49		
18:00-18:15	B	89.90	89.90		
18:00-18:15	C	428.81	428.81		
18:15-18:30	A	741.56	741.56		
18:15-18:30	B	75.29	75.29		
18:15-18:30	C	359.11	359.11		

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

	To			
		A	B	C
From	A	0.000	251.000	734.000
	B	92.000	0.000	8.000
	C	470.000	7.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

	To			
		A	B	C
From	A	0.00	0.25	0.75
	B	0.92	0.00	0.08
	C	0.99	0.01	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

	To			
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To			
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-C	0.02	9.14	0.02	~1	A	7.34	11.01	1.54	8.40	0.02	1.54	8.40
B-A	0.27	13.27	0.37	~1	B	84.42	126.63	23.22	11.00	0.26	23.22	11.00
C-A	-	-	-	-	-	431.28	646.92	-	-	-	-	-
C-B	0.01	7.10	0.02	~1	A	6.42	9.64	1.05	6.56	0.01	1.05	6.56
A-B	-	-	-	-	-	230.32	345.48	-	-	-	-	-
A-C	-	-	-	-	-	673.53	1010.30	-	-	-	-	-

Main Results for each time segment

Main results: (17:00-17:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	6.02	1.51	5.97	0.00	470.56	0.013	0.00	0.01	7.747	A
B-A	69.26	17.32	68.57	0.00	467.18	0.148	0.00	0.17	9.016	A
C-A	353.84	88.46	353.84	0.00	-	-	-	-	-	-
C-B	5.27	1.32	5.23	0.00	598.83	0.009	0.00	0.01	6.064	A
A-B	188.97	47.24	188.97	0.00	-	-	-	-	-	-
A-C	552.59	138.15	552.59	0.00	-	-	-	-	-	-

Main results: (17:15-17:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	7.19	1.80	7.18	0.00	442.52	0.016	0.01	0.02	8.269	A
B-A	82.71	20.68	82.45	0.00	427.46	0.193	0.17	0.24	10.427	B
C-A	422.52	105.63	422.52	0.00	-	-	-	-	-	-
C-B	6.29	1.57	6.28	0.00	563.41	0.011	0.01	0.01	6.461	A
A-B	225.64	56.41	225.64	0.00	-	-	-	-	-	-
A-C	659.85	164.96	659.85	0.00	-	-	-	-	-	-

Main results: (17:30-17:45)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	8.81	2.20	8.79	0.00	402.75	0.022	0.02	0.02	9.138	A
B-A	101.29	25.32	100.78	0.00	372.54	0.272	0.24	0.37	13.221	B
C-A	517.48	129.37	517.48	0.00	-	-	-	-	-	-
C-B	7.71	1.93	7.69	0.00	514.43	0.015	0.01	0.02	7.103	A
A-B	276.36	69.09	276.36	0.00	-	-	-	-	-	-
A-C	808.15	202.04	808.15	0.00	-	-	-	-	-	-

Main results: (17:45-18:00)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	8.81	2.20	8.81	0.00	402.56	0.022	0.02	0.02	9.142	A
B-A	101.29	25.32	101.28	0.00	372.55	0.272	0.37	0.37	13.268	B
C-A	517.48	129.37	517.48	0.00	-	-	-	-	-	-
C-B	7.71	1.93	7.71	0.00	514.43	0.015	0.02	0.02	7.103	A
A-B	276.36	69.09	276.36	0.00	-	-	-	-	-	-
A-C	808.15	202.04	808.15	0.00	-	-	-	-	-	-

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	7.19	1.80	7.21	0.00	442.27	0.016	0.02	0.02	8.274	A
B-A	82.71	20.68	83.21	0.00	427.47	0.193	0.37	0.24	10.473	B
C-A	422.52	105.63	422.52	0.00	-	-	-	-	-	-
C-B	6.29	1.57	6.31	0.00	563.41	0.011	0.02	0.01	6.461	A
A-B	225.64	56.41	225.64	0.00	-	-	-	-	-	-
A-C	659.85	164.96	659.85	0.00	-	-	-	-	-	-

Main results: (18:15-18:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	6.02	1.51	6.04	0.00	470.28	0.013	0.02	0.01	7.754	A
B-A	69.26	17.32	69.53	0.00	467.19	0.148	0.24	0.18	9.060	A
C-A	353.84	88.46	353.84	0.00	-	-	-	-	-	-
C-B	5.27	1.32	5.28	0.00	598.83	0.009	0.01	0.01	6.064	A
A-B	188.97	47.24	188.97	0.00	-	-	-	-	-	-
A-C	552.59	138.15	552.59	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (17:00-17:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.19	0.01	7.747	A	A
B-A	2.48	0.17	9.016	A	A
C-A	-	-	-	-	-
C-B	0.13	0.01	6.064	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:15-17:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.24	0.02	8.269	A	A
B-A	3.44	0.23	10.427	B	B
C-A	-	-	-	-	-
C-B	0.17	0.01	6.461	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:30-17:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.32	0.02	9.138	A	A
B-A	5.27	0.35	13.221	B	B
C-A	-	-	-	-	-
C-B	0.22	0.01	7.103	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:45-18:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.33	0.02	9.142	A	A
B-A	5.53	0.37	13.268	B	B
C-A	-	-	-	-	-
C-B	0.23	0.02	7.103	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (18:00-18:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.26	0.02	8.274	A	A
B-A	3.79	0.25	10.473	B	B
C-A	-	-	-	-	-
C-B	0.17	0.01	6.461	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (18:15-18:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.20	0.01	7.754	A	A
B-A	2.72	0.18	9.060	A	A
C-A	-	-	-	-	-
C-B	0.14	0.01	6.064	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queue Variation Results for each time segment

Queue Variation results: (17:00-17:15)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.01	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.17	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.01	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (17:15-17:30)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.02	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.24	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.01	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (17:30-17:45)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.02	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.37	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.02	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (17:45-18:00)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.02	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.37	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.02	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (18:00-18:15)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.02	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.24	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.01	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (18:15-18:30)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.01	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.18	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.01	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

(Default Analysis Set) - 2019 + Scheme, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Rela
2019 + Scheme, AM	2019 + Scheme	AM		ONE HOUR	08:00	09:30	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C		23.10	C

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	(untitled)		Major
B	B	(untitled)		Minor
C	C	(untitled)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	10.30	✓	2.40	✓	3.00	250.00		

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)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane plus flare				10.00	8.00	6.10	5.20	5.00	✓	3.00	51	86

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	677.342	0.095	0.241	0.151	0.344
1	B-C	602.415	0.075	0.190	-	-
1	C-B	781.320	0.246	0.246	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	929.00	100.000
B	ONE HOUR	✓	157.00	100.000
C	ONE HOUR	✓	854.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
08:00-08:15	A	699.40	699.40		
08:00-08:15	B	118.20	118.20		
08:00-08:15	C	642.94	642.94		
08:15-08:30	A	835.15	835.15		
08:15-08:30	B	141.14	141.14		
08:15-08:30	C	767.73	767.73		
08:30-08:45	A	1022.85	1022.85		
08:30-08:45	B	172.86	172.86		
08:30-08:45	C	940.27	940.27		
08:45-09:00	A	1022.85	1022.85		
08:45-09:00	B	172.86	172.86		
08:45-09:00	C	940.27	940.27		
09:00-09:15	A	835.15	835.15		
09:00-09:15	B	141.14	141.14		
09:00-09:15	C	767.73	767.73		
09:15-09:30	A	699.40	699.40		
09:15-09:30	B	118.20	118.20		
09:15-09:30	C	642.94	642.94		

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

	To			
		A	B	C
	A	0.000	136.000	793.000
	B	153.000	0.000	4.000
From	C	826.000	28.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

	To			
		A	B	C
	A	0.00	0.15	0.85
	B	0.97	0.00	0.03
From	C	0.97	0.03	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

	To			
		A	B	C
	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
From	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To			
		A	B	C
	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
From	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-C	0.01	10.60	0.01	~1	B	3.67	5.51	0.85	9.21	0.01	0.85	9.21
B-A	0.55	26.33	1.20	3.00	D	140.40	210.59	62.62	17.84	0.70	62.63	17.84
C-A	-	-	-	-	-	757.95	1136.93	-	-	-	-	-
C-B	0.06	7.22	0.06	~1	A	25.69	38.54	4.27	6.64	0.05	4.27	6.64
A-B	-	-	-	-	-	124.80	187.19	-	-	-	-	-
A-C	-	-	-	-	-	727.67	1091.51	-	-	-	-	-

Main Results for each time segment

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	3.01	0.75	2.98	0.00	447.98	0.007	0.00	0.01	8.090	A
B-A	115.19	28.80	113.71	0.00	422.58	0.273	0.00	0.37	11.603	B
C-A	621.86	155.46	621.86	0.00	-	-	-	-	-	-
C-B	21.08	5.27	20.94	0.00	609.20	0.035	0.00	0.04	6.118	A
A-B	102.39	25.60	102.39	0.00	-	-	-	-	-	-
A-C	597.01	149.25	597.01	0.00	-	-	-	-	-	-

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	3.60	0.90	3.59	0.00	412.39	0.009	0.01	0.01	8.805	A
B-A	137.54	34.39	136.74	0.00	373.09	0.369	0.37	0.57	15.178	C
C-A	742.56	185.64	742.56	0.00	-	-	-	-	-	-
C-B	25.17	6.29	25.13	0.00	575.80	0.044	0.04	0.05	6.537	A
A-B	122.26	30.57	122.26	0.00	-	-	-	-	-	-
A-C	712.89	178.22	712.89	0.00	-	-	-	-	-	-

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	4.40	1.10	4.39	0.00	346.13	0.013	0.01	0.01	10.534	B
B-A	168.46	42.11	166.07	0.00	304.71	0.553	0.57	1.17	25.545	D
C-A	909.44	227.36	909.44	0.00	-	-	-	-	-	-
C-B	30.83	7.71	30.76	0.00	529.60	0.058	0.05	0.06	7.216	A
A-B	149.74	37.43	149.74	0.00	-	-	-	-	-	-
A-C	873.11	218.28	873.11	0.00	-	-	-	-	-	-

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	4.40	1.10	4.40	0.00	343.90	0.013	0.01	0.01	10.603	B
B-A	168.46	42.11	168.32	0.00	304.69	0.553	1.17	1.20	26.328	D
C-A	909.44	227.36	909.44	0.00	-	-	-	-	-	-
C-B	30.83	7.71	30.83	0.00	529.60	0.058	0.06	0.06	7.216	A
A-B	149.74	37.43	149.74	0.00	-	-	-	-	-	-
A-C	873.11	218.28	873.11	0.00	-	-	-	-	-	-

Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	3.60	0.90	3.61	0.00	410.99	0.009	0.01	0.01	8.836	A
B-A	137.54	34.39	139.94	0.00	373.06	0.369	1.20	0.60	15.595	C
C-A	742.56	185.64	742.56	0.00	-	-	-	-	-	-
C-B	25.17	6.29	25.23	0.00	575.80	0.044	0.06	0.05	6.538	A
A-B	122.26	30.57	122.26	0.00	-	-	-	-	-	-
A-C	712.89	178.22	712.89	0.00	-	-	-	-	-	-

Main results: (09:15-09:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	3.01	0.75	3.02	0.00	447.22	0.007	0.01	0.01	8.105	A
B-A	115.19	28.80	116.06	0.00	422.53	0.273	0.60	0.38	11.781	B
C-A	621.86	155.46	621.86	0.00	-	-	-	-	-	-
C-B	21.08	5.27	21.12	0.00	609.20	0.035	0.05	0.04	6.123	A
A-B	102.39	25.60	102.39	0.00	-	-	-	-	-	-
A-C	597.01	149.25	597.01	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (08:00-08:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.10	0.01	8.090	A	A
B-A	5.23	0.35	11.603	B	B
C-A	-	-	-	-	-
C-B	0.52	0.03	6.118	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:15-08:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.13	0.01	8.805	A	A
B-A	8.13	0.54	15.178	C	B
C-A	-	-	-	-	-
C-B	0.67	0.04	6.537	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:30-08:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.19	0.01	10.534	B	B
B-A	15.92	1.06	25.545	D	C
C-A	-	-	-	-	-
C-B	0.90	0.06	7.216	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:45-09:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.19	0.01	10.603	B	B
B-A	17.78	1.19	26.328	D	C
C-A	-	-	-	-	-
C-B	0.92	0.06	7.216	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (09:00-09:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.14	0.01	8.836	A	A
B-A	9.59	0.64	15.595	C	B
C-A	-	-	-	-	-
C-B	0.71	0.05	6.538	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (09:15-09:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.10	0.01	8.105	A	A
B-A	5.97	0.40	11.781	B	B
C-A	-	-	-	-	-
C-B	0.55	0.04	6.123	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queue Variation Results for each time segment

Queue Variation results: (08:00-08:15)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.01	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.37	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.04	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (08:15-08:30)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.01	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.57	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.05	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (08:30-08:45)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.01	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	1.17	0.00	0.00	0.00	2.00			N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.06	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (08:45-09:00)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.01	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	1.20	0.00	0.00	0.00	3.00			N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.06	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (09:00-09:15)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.01	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.60	0.00	0.00	0.00	1.00			N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.05	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (09:15-09:30)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.01	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.38	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.04	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

(Default Analysis Set) - 2019 + Scheme, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Rela
2019 + Scheme, PM	2019 + Scheme	PM		ONE HOUR	17:00	18:30	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C		12.56	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	(untitled)		Major
B	B	(untitled)		Minor
C	C	(untitled)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	10.30	✓	2.40	✓	3.00	250.00		

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)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane plus flare				10.00	8.00	6.10	5.20	5.00	✓	3.00	51	86

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	671.809	0.094	0.239	0.150	0.341
1	B-C	609.049	0.076	0.192	-	-
1	C-B	781.320	0.246	0.246	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	985.00	100.000
B	ONE HOUR	✓	100.00	100.000
C	ONE HOUR	✓	477.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
17:00-17:15	A	741.56	741.56		
17:00-17:15	B	75.29	75.29		
17:00-17:15	C	359.11	359.11		
17:15-17:30	A	885.49	885.49		
17:15-17:30	B	89.90	89.90		
17:15-17:30	C	428.81	428.81		
17:30-17:45	A	1084.51	1084.51		
17:30-17:45	B	110.10	110.10		
17:30-17:45	C	525.19	525.19		
17:45-18:00	A	1084.51	1084.51		
17:45-18:00	B	110.10	110.10		
17:45-18:00	C	525.19	525.19		
18:00-18:15	A	885.49	885.49		
18:00-18:15	B	89.90	89.90		
18:00-18:15	C	428.81	428.81		
18:15-18:30	A	741.56	741.56		
18:15-18:30	B	75.29	75.29		
18:15-18:30	C	359.11	359.11		

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

	To			
		A	B	C
From	A	0.000	251.000	734.000
	B	92.000	0.000	8.000
	C	470.000	7.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

	To			
		A	B	C
From	A	0.00	0.25	0.75
	B	0.92	0.00	0.08
	C	0.99	0.01	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

	To			
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To			
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-C	0.02	9.14	0.02	~1	A	7.34	11.01	1.54	8.40	0.02	1.54	8.40
B-A	0.27	13.27	0.37	~1	B	84.42	126.63	23.22	11.00	0.26	23.22	11.00
C-A	-	-	-	-	-	431.28	646.92	-	-	-	-	-
C-B	0.01	7.10	0.02	~1	A	6.42	9.64	1.05	6.56	0.01	1.05	6.56
A-B	-	-	-	-	-	230.32	345.48	-	-	-	-	-
A-C	-	-	-	-	-	673.53	1010.30	-	-	-	-	-

Main Results for each time segment

Main results: (17:00-17:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	6.02	1.51	5.97	0.00	470.56	0.013	0.00	0.01	7.747	A
B-A	69.26	17.32	68.57	0.00	467.18	0.148	0.00	0.17	9.016	A
C-A	353.84	88.46	353.84	0.00	-	-	-	-	-	-
C-B	5.27	1.32	5.23	0.00	598.83	0.009	0.00	0.01	6.064	A
A-B	188.97	47.24	188.97	0.00	-	-	-	-	-	-
A-C	552.59	138.15	552.59	0.00	-	-	-	-	-	-

Main results: (17:15-17:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	7.19	1.80	7.18	0.00	442.52	0.016	0.01	0.02	8.269	A
B-A	82.71	20.68	82.45	0.00	427.46	0.193	0.17	0.24	10.427	B
C-A	422.52	105.63	422.52	0.00	-	-	-	-	-	-
C-B	6.29	1.57	6.28	0.00	563.41	0.011	0.01	0.01	6.461	A
A-B	225.64	56.41	225.64	0.00	-	-	-	-	-	-
A-C	659.85	164.96	659.85	0.00	-	-	-	-	-	-

Main results: (17:30-17:45)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	8.81	2.20	8.79	0.00	402.75	0.022	0.02	0.02	9.138	A
B-A	101.29	25.32	100.78	0.00	372.54	0.272	0.24	0.37	13.221	B
C-A	517.48	129.37	517.48	0.00	-	-	-	-	-	-
C-B	7.71	1.93	7.69	0.00	514.43	0.015	0.01	0.02	7.103	A
A-B	276.36	69.09	276.36	0.00	-	-	-	-	-	-
A-C	808.15	202.04	808.15	0.00	-	-	-	-	-	-

Main results: (17:45-18:00)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	8.81	2.20	8.81	0.00	402.56	0.022	0.02	0.02	9.142	A
B-A	101.29	25.32	101.28	0.00	372.55	0.272	0.37	0.37	13.268	B
C-A	517.48	129.37	517.48	0.00	-	-	-	-	-	-
C-B	7.71	1.93	7.71	0.00	514.43	0.015	0.02	0.02	7.103	A
A-B	276.36	69.09	276.36	0.00	-	-	-	-	-	-
A-C	808.15	202.04	808.15	0.00	-	-	-	-	-	-

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	7.19	1.80	7.21	0.00	442.27	0.016	0.02	0.02	8.274	A
B-A	82.71	20.68	83.21	0.00	427.47	0.193	0.37	0.24	10.473	B
C-A	422.52	105.63	422.52	0.00	-	-	-	-	-	-
C-B	6.29	1.57	6.31	0.00	563.41	0.011	0.02	0.01	6.461	A
A-B	225.64	56.41	225.64	0.00	-	-	-	-	-	-
A-C	659.85	164.96	659.85	0.00	-	-	-	-	-	-

Main results: (18:15-18:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	6.02	1.51	6.04	0.00	470.28	0.013	0.02	0.01	7.754	A
B-A	69.26	17.32	69.53	0.00	467.19	0.148	0.24	0.18	9.060	A
C-A	353.84	88.46	353.84	0.00	-	-	-	-	-	-
C-B	5.27	1.32	5.28	0.00	598.83	0.009	0.01	0.01	6.064	A
A-B	188.97	47.24	188.97	0.00	-	-	-	-	-	-
A-C	552.59	138.15	552.59	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (17:00-17:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.19	0.01	7.747	A	A
B-A	2.48	0.17	9.016	A	A
C-A	-	-	-	-	-
C-B	0.13	0.01	6.064	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:15-17:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.24	0.02	8.269	A	A
B-A	3.44	0.23	10.427	B	B
C-A	-	-	-	-	-
C-B	0.17	0.01	6.461	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:30-17:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.32	0.02	9.138	A	A
B-A	5.27	0.35	13.221	B	B
C-A	-	-	-	-	-
C-B	0.22	0.01	7.103	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:45-18:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.33	0.02	9.142	A	A
B-A	5.53	0.37	13.268	B	B
C-A	-	-	-	-	-
C-B	0.23	0.02	7.103	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (18:00-18:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.26	0.02	8.274	A	A
B-A	3.79	0.25	10.473	B	B
C-A	-	-	-	-	-
C-B	0.17	0.01	6.461	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (18:15-18:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.20	0.01	7.754	A	A
B-A	2.72	0.18	9.060	A	A
C-A	-	-	-	-	-
C-B	0.14	0.01	6.064	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queue Variation Results for each time segment

Queue Variation results: (17:00-17:15)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.01	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.17	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.01	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (17:15-17:30)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.02	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.24	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.01	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (17:30-17:45)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.02	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.37	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.02	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (17:45-18:00)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.02	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.37	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.02	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (18:00-18:15)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.02	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.24	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.01	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (18:15-18:30)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.01	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.18	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.01	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

(Default Analysis Set) - 2029, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relations
2029, AM	2029	AM		ONE HOUR	08:00	09:30	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C		34.78	D

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	(untitled)		Major
B	B	(untitled)		Minor
C	C	(untitled)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	10.30	✓	2.40	✓	3.00	250.00		

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)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane plus flare				10.00	8.00	6.10	5.20	5.00	✓	3.00	51	86

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	677.460	0.095	0.241	0.151	0.344
1	B-C	602.273	0.075	0.190	-	-
1	C-B	781.320	0.246	0.246	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	1011.00	100.000
B	ONE HOUR	✓	171.00	100.000
C	ONE HOUR	✓	929.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
08:00-08:15	A	761.13	761.13		
08:00-08:15	B	128.74	128.74		
08:00-08:15	C	699.40	699.40		
08:15-08:30	A	908.87	908.87		
08:15-08:30	B	153.73	153.73		
08:15-08:30	C	835.15	835.15		
08:30-08:45	A	1113.13	1113.13		
08:30-08:45	B	188.27	188.27		
08:30-08:45	C	1022.85	1022.85		
08:45-09:00	A	1113.13	1113.13		
08:45-09:00	B	188.27	188.27		
08:45-09:00	C	1022.85	1022.85		
09:00-09:15	A	908.87	908.87		
09:00-09:15	B	153.73	153.73		
09:00-09:15	C	835.15	835.15		
09:15-09:30	A	761.13	761.13		
09:15-09:30	B	128.74	128.74		
09:15-09:30	C	699.40	699.40		

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

	To			
		A	B	C
	A	0.000	148.000	863.000
	B	167.000	0.000	4.000
From	C	899.000	30.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

	To			
		A	B	C
	A	0.00	0.15	0.85
	B	0.98	0.00	0.02
From	C	0.97	0.03	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

	To			
		A	B	C
	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
From	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To			
		A	B	C
	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
From	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-C	0.02	13.03	0.02	~1	B	3.67	5.51	0.95	10.32	0.01	0.95	10.32
B-A	0.68	40.19	1.96	6.00	E	153.24	229.86	90.13	23.53	1.00	90.15	23.53
C-A	-	-	-	-	-	824.94	1237.41	-	-	-	-	-
C-B	0.07	7.59	0.07	~1	A	27.53	41.29	4.76	6.91	0.05	4.76	6.91
A-B	-	-	-	-	-	135.81	203.71	-	-	-	-	-
A-C	-	-	-	-	-	791.90	1187.86	-	-	-	-	-

Main Results for each time segment

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	3.01	0.75	2.98	0.00	432.41	0.007	0.00	0.01	8.383	A
B-A	125.73	31.43	123.93	0.00	400.28	0.314	0.00	0.45	12.947	B
C-A	676.81	169.20	676.81	0.00	-	-	-	-	-	-
C-B	22.59	5.65	22.43	0.00	594.01	0.038	0.00	0.04	6.296	A
A-B	111.42	27.86	111.42	0.00	-	-	-	-	-	-
A-C	649.71	162.43	649.71	0.00	-	-	-	-	-	-

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	3.60	0.90	3.59	0.00	390.02	0.009	0.01	0.01	9.315	A
B-A	150.13	37.53	148.96	0.00	346.42	0.433	0.45	0.74	18.122	C
C-A	808.18	202.05	808.18	0.00	-	-	-	-	-	-
C-B	26.97	6.74	26.92	0.00	557.65	0.048	0.04	0.05	6.782	A
A-B	133.05	33.26	133.05	0.00	-	-	-	-	-	-
A-C	775.82	193.95	775.82	0.00	-	-	-	-	-	-

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	4.40	1.10	4.38	0.00	288.54	0.015	0.01	0.02	12.669	B
B-A	183.87	45.97	179.41	0.00	272.02	0.676	0.74	1.86	37.216	E
C-A	989.82	247.45	989.82	0.00	-	-	-	-	-	-
C-B	33.03	8.26	32.96	0.00	507.39	0.065	0.05	0.07	7.588	A
A-B	162.95	40.74	162.95	0.00	-	-	-	-	-	-
A-C	950.18	237.55	950.18	0.00	-	-	-	-	-	-

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	4.40	1.10	4.40	0.00	280.72	0.016	0.02	0.02	13.027	B
B-A	183.87	45.97	183.46	0.00	272.01	0.676	1.86	1.96	40.187	E
C-A	989.82	247.45	989.82	0.00	-	-	-	-	-	-
C-B	33.03	8.26	33.03	0.00	507.39	0.065	0.07	0.07	7.588	A
A-B	162.95	40.74	162.95	0.00	-	-	-	-	-	-
A-C	950.18	237.55	950.18	0.00	-	-	-	-	-	-

Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	3.60	0.90	3.62	0.00	386.72	0.009	0.02	0.01	9.398	A
B-A	150.13	37.53	154.79	0.00	346.40	0.433	1.96	0.79	19.211	C
C-A	808.18	202.05	808.18	0.00	-	-	-	-	-	-
C-B	26.97	6.74	27.04	0.00	557.65	0.048	0.07	0.05	6.787	A
A-B	133.05	33.26	133.05	0.00	-	-	-	-	-	-
A-C	775.82	193.95	775.82	0.00	-	-	-	-	-	-

Main results: (09:15-09:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	3.01	0.75	3.02	0.00	431.29	0.007	0.01	0.01	8.405	A
B-A	125.73	31.43	127.02	0.00	400.22	0.314	0.79	0.47	13.237	B
C-A	676.81	169.20	676.81	0.00	-	-	-	-	-	-
C-B	22.59	5.65	22.63	0.00	594.01	0.038	0.05	0.04	6.302	A
A-B	111.42	27.86	111.42	0.00	-	-	-	-	-	-
A-C	649.71	162.43	649.71	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (08:00-08:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.10	0.01	8.383	A	A
B-A	6.33	0.42	12.947	B	B
C-A	-	-	-	-	-
C-B	0.57	0.04	6.296	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:15-08:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.13	0.01	9.315	A	A
B-A	10.44	0.70	18.122	C	B
C-A	-	-	-	-	-
C-B	0.74	0.05	6.782	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:30-08:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.22	0.01	12.669	B	B
B-A	24.15	1.61	37.216	E	D
C-A	-	-	-	-	-
C-B	1.01	0.07	7.588	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:45-09:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.23	0.02	13.027	B	B
B-A	28.75	1.92	40.187	E	D
C-A	-	-	-	-	-
C-B	1.04	0.07	7.588	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (09:00-09:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.15	0.01	9.398	A	A
B-A	13.09	0.87	19.211	C	B
C-A	-	-	-	-	-
C-B	0.79	0.05	6.787	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (09:15-09:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.11	0.01	8.405	A	A
B-A	7.38	0.49	13.237	B	B
C-A	-	-	-	-	-
C-B	0.61	0.04	6.302	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queue Variation Results for each time segment

Queue Variation results: (08:00-08:15)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.01	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.45	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.04	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (08:15-08:30)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.01	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.74	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.05	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (08:30-08:45)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.02	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	1.86	0.00	0.00	2.00	6.00			N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.07	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (08:45-09:00)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.02	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	1.96	0.00	0.00	2.00	6.00			N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.07	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (09:00-09:15)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.01	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.79	0.00	0.00	1.00	2.00			N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.05	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (09:15-09:30)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.01	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.47	0.00	0.00	0.00	1.00			N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.04	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

(Default Analysis Set) - 2029, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relations
2029, PM	2029	PM		ONE HOUR	17:00	18:30	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C		14.63	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	(untitled)		Major
B	B	(untitled)		Minor
C	C	(untitled)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	10.30	✓	2.40	✓	3.00	250.00		

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)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane plus flare				10.00	8.00	6.10	5.20	5.00	✓	3.00	51	86

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	671.599	0.094	0.239	0.150	0.341
1	B-C	609.301	0.076	0.192	-	-
1	C-B	781.320	0.246	0.246	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	1086.00	100.000
B	ONE HOUR	✓	110.00	100.000
C	ONE HOUR	✓	527.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
17:00-17:15	A	817.60	817.60		
17:00-17:15	B	82.81	82.81		
17:00-17:15	C	396.75	396.75		
17:15-17:30	A	976.29	976.29		
17:15-17:30	B	98.89	98.89		
17:15-17:30	C	473.76	473.76		
17:30-17:45	A	1195.71	1195.71		
17:30-17:45	B	121.11	121.11		
17:30-17:45	C	580.24	580.24		
17:45-18:00	A	1195.71	1195.71		
17:45-18:00	B	121.11	121.11		
17:45-18:00	C	580.24	580.24		
18:00-18:15	A	976.29	976.29		
18:00-18:15	B	98.89	98.89		
18:00-18:15	C	473.76	473.76		
18:15-18:30	A	817.60	817.60		
18:15-18:30	B	82.81	82.81		
18:15-18:30	C	396.75	396.75		

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

	To			
		A	B	C
From	A	0.000	277.000	809.000
	B	101.000	0.000	9.000
	C	519.000	8.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

	To			
		A	B	C
From	A	0.00	0.26	0.74
	B	0.92	0.00	0.08
	C	0.98	0.02	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

	To			
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To			
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-C	0.03	9.74	0.03	~1	A	8.26	12.39	1.82	8.82	0.02	1.82	8.82
B-A	0.33	15.62	0.48	1.00	C	92.68	139.02	28.77	12.42	0.32	28.78	12.42
C-A	-	-	-	-	-	476.24	714.37	-	-	-	-	-
C-B	0.02	7.53	0.02	~1	A	7.34	11.01	1.26	6.87	0.01	1.26	6.87
A-B	-	-	-	-	-	254.18	381.27	-	-	-	-	-
A-C	-	-	-	-	-	742.35	1113.53	-	-	-	-	-

Main Results for each time segment

Main results: (17:00-17:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	6.78	1.69	6.72	0.00	456.21	0.015	0.00	0.01	8.008	A
B-A	76.04	19.01	75.23	0.00	445.93	0.171	0.00	0.20	9.690	A
C-A	390.73	97.68	390.73	0.00	-	-	-	-	-	-
C-B	6.02	1.51	5.98	0.00	580.12	0.010	0.00	0.01	6.270	A
A-B	208.54	52.14	208.54	0.00	-	-	-	-	-	-
A-C	609.06	152.26	609.06	0.00	-	-	-	-	-	-

Main results: (17:15-17:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	8.09	2.02	8.07	0.00	424.90	0.019	0.01	0.02	8.636	A
B-A	90.80	22.70	90.46	0.00	402.12	0.226	0.20	0.29	11.538	B
C-A	466.57	116.64	466.57	0.00	-	-	-	-	-	-
C-B	7.19	1.80	7.18	0.00	541.06	0.013	0.01	0.01	6.742	A
A-B	249.02	62.25	249.02	0.00	-	-	-	-	-	-
A-C	727.27	181.82	727.27	0.00	-	-	-	-	-	-

Main results: (17:30-17:45)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	9.91	2.48	9.88	0.00	379.69	0.026	0.02	0.03	9.734	A
B-A	111.20	27.80	110.47	0.00	341.55	0.326	0.29	0.47	15.528	C
C-A	571.43	142.86	571.43	0.00	-	-	-	-	-	-
C-B	8.81	2.20	8.79	0.00	487.07	0.018	0.01	0.02	7.526	A
A-B	304.98	76.25	304.98	0.00	-	-	-	-	-	-
A-C	890.73	222.68	890.73	0.00	-	-	-	-	-	-

Main results: (17:45-18:00)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	9.91	2.48	9.91	0.00	379.40	0.026	0.03	0.03	9.742	A
B-A	111.20	27.80	111.18	0.00	341.56	0.326	0.47	0.48	15.625	C
C-A	571.43	142.86	571.43	0.00	-	-	-	-	-	-
C-B	8.81	2.20	8.81	0.00	487.07	0.018	0.02	0.02	7.526	A
A-B	304.98	76.25	304.98	0.00	-	-	-	-	-	-
A-C	890.73	222.68	890.73	0.00	-	-	-	-	-	-

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	8.09	2.02	8.12	0.00	424.53	0.019	0.03	0.02	8.645	A
B-A	90.80	22.70	91.52	0.00	402.14	0.226	0.48	0.30	11.617	B
C-A	466.57	116.64	466.57	0.00	-	-	-	-	-	-
C-B	7.19	1.80	7.21	0.00	541.06	0.013	0.02	0.01	6.745	A
A-B	249.02	62.25	249.02	0.00	-	-	-	-	-	-
A-C	727.27	181.82	727.27	0.00	-	-	-	-	-	-

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	6.78	1.69	6.79	0.00	455.85	0.015	0.02	0.02	8.016	A
B-A	76.04	19.01	76.39	0.00	445.93	0.171	0.30	0.21	9.752	A
C-A	390.73	97.68	390.73	0.00	-	-	-	-	-	-
C-B	6.02	1.51	6.03	0.00	580.12	0.010	0.01	0.01	6.272	A
A-B	208.54	52.14	208.54	0.00	-	-	-	-	-	-
A-C	609.06	152.26	609.06	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (17:00-17:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.22	0.01	8.008	A	A
B-A	2.91	0.19	9.690	A	A
C-A	-	-	-	-	-
C-B	0.15	0.01	6.270	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:15-17:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.28	0.02	8.636	A	A
B-A	4.16	0.28	11.538	B	B
C-A	-	-	-	-	-
C-B	0.20	0.01	6.742	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:30-17:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.39	0.03	9.734	A	A
B-A	6.72	0.45	15.528	C	B
C-A	-	-	-	-	-
C-B	0.27	0.02	7.526	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:45-18:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.40	0.03	9.742	A	A
B-A	7.12	0.47	15.625	C	B
C-A	-	-	-	-	-
C-B	0.27	0.02	7.526	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (18:00-18:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.30	0.02	8.645	A	A
B-A	4.64	0.31	11.617	B	B
C-A	-	-	-	-	-
C-B	0.21	0.01	6.745	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (18:15-18:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.23	0.02	8.016	A	A
B-A	3.23	0.22	9.752	A	A
C-A	-	-	-	-	-
C-B	0.16	0.01	6.272	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queue Variation Results for each time segment

Queue Variation results: (17:00-17:15)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.01	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.20	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.01	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (17:15-17:30)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.02	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.29	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.01	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (17:30-17:45)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.03	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.47	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.02	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (17:45-18:00)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.03	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.48	0.00	0.00	0.00	1.00			N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.02	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (18:00-18:15)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.02	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.30	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.01	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (18:15-18:30)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.02	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.21	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.01	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

(Default Analysis Set) - 2029 + Scheme, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Rela
2029 + Scheme, AM	2029 + Scheme	AM		ONE HOUR	08:00	09:30	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C		34.78	D

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	(untitled)		Major
B	B	(untitled)		Minor
C	C	(untitled)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	10.30	✓	2.40	✓	3.00	250.00		

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)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane plus flare				10.00	8.00	6.10	5.20	5.00	✓	3.00	51	86

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	677.460	0.095	0.241	0.151	0.344
1	B-C	602.273	0.075	0.190	-	-
1	C-B	781.320	0.246	0.246	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	1011.00	100.000
B	ONE HOUR	✓	171.00	100.000
C	ONE HOUR	✓	929.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
08:00-08:15	A	761.13	761.13		
08:00-08:15	B	128.74	128.74		
08:00-08:15	C	699.40	699.40		
08:15-08:30	A	908.87	908.87		
08:15-08:30	B	153.73	153.73		
08:15-08:30	C	835.15	835.15		
08:30-08:45	A	1113.13	1113.13		
08:30-08:45	B	188.27	188.27		
08:30-08:45	C	1022.85	1022.85		
08:45-09:00	A	1113.13	1113.13		
08:45-09:00	B	188.27	188.27		
08:45-09:00	C	1022.85	1022.85		
09:00-09:15	A	908.87	908.87		
09:00-09:15	B	153.73	153.73		
09:00-09:15	C	835.15	835.15		
09:15-09:30	A	761.13	761.13		
09:15-09:30	B	128.74	128.74		
09:15-09:30	C	699.40	699.40		

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

	To			
		A	B	C
	A	0.000	148.000	863.000
	B	167.000	0.000	4.000
From	C	899.000	30.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

	To			
		A	B	C
	A	0.00	0.15	0.85
	B	0.98	0.00	0.02
From	C	0.97	0.03	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

	To			
		A	B	C
	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
From	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To			
		A	B	C
	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
From	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-C	0.02	13.03	0.02	~1	B	3.67	5.51	0.95	10.32	0.01	0.95	10.32
B-A	0.68	40.19	1.96	6.00	E	153.24	229.86	90.13	23.53	1.00	90.15	23.53
C-A	-	-	-	-	-	824.94	1237.41	-	-	-	-	-
C-B	0.07	7.59	0.07	~1	A	27.53	41.29	4.76	6.91	0.05	4.76	6.91
A-B	-	-	-	-	-	135.81	203.71	-	-	-	-	-
A-C	-	-	-	-	-	791.90	1187.86	-	-	-	-	-

Main Results for each time segment

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	3.01	0.75	2.98	0.00	432.41	0.007	0.00	0.01	8.383	A
B-A	125.73	31.43	123.93	0.00	400.28	0.314	0.00	0.45	12.947	B
C-A	676.81	169.20	676.81	0.00	-	-	-	-	-	-
C-B	22.59	5.65	22.43	0.00	594.01	0.038	0.00	0.04	6.296	A
A-B	111.42	27.86	111.42	0.00	-	-	-	-	-	-
A-C	649.71	162.43	649.71	0.00	-	-	-	-	-	-

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	3.60	0.90	3.59	0.00	390.02	0.009	0.01	0.01	9.315	A
B-A	150.13	37.53	148.96	0.00	346.42	0.433	0.45	0.74	18.122	C
C-A	808.18	202.05	808.18	0.00	-	-	-	-	-	-
C-B	26.97	6.74	26.92	0.00	557.65	0.048	0.04	0.05	6.782	A
A-B	133.05	33.26	133.05	0.00	-	-	-	-	-	-
A-C	775.82	193.95	775.82	0.00	-	-	-	-	-	-

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	4.40	1.10	4.38	0.00	288.54	0.015	0.01	0.02	12.669	B
B-A	183.87	45.97	179.41	0.00	272.02	0.676	0.74	1.86	37.216	E
C-A	989.82	247.45	989.82	0.00	-	-	-	-	-	-
C-B	33.03	8.26	32.96	0.00	507.39	0.065	0.05	0.07	7.588	A
A-B	162.95	40.74	162.95	0.00	-	-	-	-	-	-
A-C	950.18	237.55	950.18	0.00	-	-	-	-	-	-

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	4.40	1.10	4.40	0.00	280.72	0.016	0.02	0.02	13.027	B
B-A	183.87	45.97	183.46	0.00	272.01	0.676	1.86	1.96	40.187	E
C-A	989.82	247.45	989.82	0.00	-	-	-	-	-	-
C-B	33.03	8.26	33.03	0.00	507.39	0.065	0.07	0.07	7.588	A
A-B	162.95	40.74	162.95	0.00	-	-	-	-	-	-
A-C	950.18	237.55	950.18	0.00	-	-	-	-	-	-

Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	3.60	0.90	3.62	0.00	386.72	0.009	0.02	0.01	9.398	A
B-A	150.13	37.53	154.79	0.00	346.40	0.433	1.96	0.79	19.211	C
C-A	808.18	202.05	808.18	0.00	-	-	-	-	-	-
C-B	26.97	6.74	27.04	0.00	557.65	0.048	0.07	0.05	6.787	A
A-B	133.05	33.26	133.05	0.00	-	-	-	-	-	-
A-C	775.82	193.95	775.82	0.00	-	-	-	-	-	-

Main results: (09:15-09:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	3.01	0.75	3.02	0.00	431.29	0.007	0.01	0.01	8.405	A
B-A	125.73	31.43	127.02	0.00	400.22	0.314	0.79	0.47	13.237	B
C-A	676.81	169.20	676.81	0.00	-	-	-	-	-	-
C-B	22.59	5.65	22.63	0.00	594.01	0.038	0.05	0.04	6.302	A
A-B	111.42	27.86	111.42	0.00	-	-	-	-	-	-
A-C	649.71	162.43	649.71	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (08:00-08:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.10	0.01	8.383	A	A
B-A	6.33	0.42	12.947	B	B
C-A	-	-	-	-	-
C-B	0.57	0.04	6.296	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:15-08:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.13	0.01	9.315	A	A
B-A	10.44	0.70	18.122	C	B
C-A	-	-	-	-	-
C-B	0.74	0.05	6.782	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:30-08:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.22	0.01	12.669	B	B
B-A	24.15	1.61	37.216	E	D
C-A	-	-	-	-	-
C-B	1.01	0.07	7.588	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:45-09:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.23	0.02	13.027	B	B
B-A	28.75	1.92	40.187	E	D
C-A	-	-	-	-	-
C-B	1.04	0.07	7.588	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (09:00-09:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.15	0.01	9.398	A	A
B-A	13.09	0.87	19.211	C	B
C-A	-	-	-	-	-
C-B	0.79	0.05	6.787	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (09:15-09:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.11	0.01	8.405	A	A
B-A	7.38	0.49	13.237	B	B
C-A	-	-	-	-	-
C-B	0.61	0.04	6.302	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queue Variation Results for each time segment

Queue Variation results: (08:00-08:15)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.01	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.45	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.04	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (08:15-08:30)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.01	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.74	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.05	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (08:30-08:45)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.02	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	1.86	0.00	0.00	2.00	6.00			N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.07	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (08:45-09:00)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.02	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	1.96	0.00	0.00	2.00	6.00			N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.07	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (09:00-09:15)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.01	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.79	0.00	0.00	1.00	2.00			N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.05	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (09:15-09:30)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.01	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.47	0.00	0.00	0.00	1.00			N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.04	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

(Default Analysis Set) - 2029 + Scheme, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Rela
2029 + Scheme, PM	2029 + Scheme	PM		ONE HOUR	17:00	18:30	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C		14.63	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	(untitled)		Major
B	B	(untitled)		Minor
C	C	(untitled)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	10.30	✓	2.40	✓	3.00	250.00		

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)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane plus flare				10.00	8.00	6.10	5.20	5.00	✓	3.00	51	86

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	671.599	0.094	0.239	0.150	0.341
1	B-C	609.301	0.076	0.192	-	-
1	C-B	781.320	0.246	0.246	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	1086.00	100.000
B	ONE HOUR	✓	110.00	100.000
C	ONE HOUR	✓	527.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
17:00-17:15	A	817.60	817.60		
17:00-17:15	B	82.81	82.81		
17:00-17:15	C	396.75	396.75		
17:15-17:30	A	976.29	976.29		
17:15-17:30	B	98.89	98.89		
17:15-17:30	C	473.76	473.76		
17:30-17:45	A	1195.71	1195.71		
17:30-17:45	B	121.11	121.11		
17:30-17:45	C	580.24	580.24		
17:45-18:00	A	1195.71	1195.71		
17:45-18:00	B	121.11	121.11		
17:45-18:00	C	580.24	580.24		
18:00-18:15	A	976.29	976.29		
18:00-18:15	B	98.89	98.89		
18:00-18:15	C	473.76	473.76		
18:15-18:30	A	817.60	817.60		
18:15-18:30	B	82.81	82.81		
18:15-18:30	C	396.75	396.75		

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

	To			
		A	B	C
From	A	0.000	277.000	809.000
	B	101.000	0.000	9.000
	C	519.000	8.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

	To			
		A	B	C
From	A	0.00	0.26	0.74
	B	0.92	0.00	0.08
	C	0.98	0.02	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

	To			
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To			
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-C	0.03	9.74	0.03	~1	A	8.26	12.39	1.82	8.82	0.02	1.82	8.82
B-A	0.33	15.62	0.48	1.00	C	92.68	139.02	28.77	12.42	0.32	28.78	12.42
C-A	-	-	-	-	-	476.24	714.37	-	-	-	-	-
C-B	0.02	7.53	0.02	~1	A	7.34	11.01	1.26	6.87	0.01	1.26	6.87
A-B	-	-	-	-	-	254.18	381.27	-	-	-	-	-
A-C	-	-	-	-	-	742.35	1113.53	-	-	-	-	-

Main Results for each time segment

Main results: (17:00-17:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	6.78	1.69	6.72	0.00	456.21	0.015	0.00	0.01	8.008	A
B-A	76.04	19.01	75.23	0.00	445.93	0.171	0.00	0.20	9.690	A
C-A	390.73	97.68	390.73	0.00	-	-	-	-	-	-
C-B	6.02	1.51	5.98	0.00	580.12	0.010	0.00	0.01	6.270	A
A-B	208.54	52.14	208.54	0.00	-	-	-	-	-	-
A-C	609.06	152.26	609.06	0.00	-	-	-	-	-	-

Main results: (17:15-17:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	8.09	2.02	8.07	0.00	424.90	0.019	0.01	0.02	8.636	A
B-A	90.80	22.70	90.46	0.00	402.12	0.226	0.20	0.29	11.538	B
C-A	466.57	116.64	466.57	0.00	-	-	-	-	-	-
C-B	7.19	1.80	7.18	0.00	541.06	0.013	0.01	0.01	6.742	A
A-B	249.02	62.25	249.02	0.00	-	-	-	-	-	-
A-C	727.27	181.82	727.27	0.00	-	-	-	-	-	-

Main results: (17:30-17:45)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	9.91	2.48	9.88	0.00	379.69	0.026	0.02	0.03	9.734	A
B-A	111.20	27.80	110.47	0.00	341.55	0.326	0.29	0.47	15.528	C
C-A	571.43	142.86	571.43	0.00	-	-	-	-	-	-
C-B	8.81	2.20	8.79	0.00	487.07	0.018	0.01	0.02	7.526	A
A-B	304.98	76.25	304.98	0.00	-	-	-	-	-	-
A-C	890.73	222.68	890.73	0.00	-	-	-	-	-	-

Main results: (17:45-18:00)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	9.91	2.48	9.91	0.00	379.40	0.026	0.03	0.03	9.742	A
B-A	111.20	27.80	111.18	0.00	341.56	0.326	0.47	0.48	15.625	C
C-A	571.43	142.86	571.43	0.00	-	-	-	-	-	-
C-B	8.81	2.20	8.81	0.00	487.07	0.018	0.02	0.02	7.526	A
A-B	304.98	76.25	304.98	0.00	-	-	-	-	-	-
A-C	890.73	222.68	890.73	0.00	-	-	-	-	-	-

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	8.09	2.02	8.12	0.00	424.53	0.019	0.03	0.02	8.645	A
B-A	90.80	22.70	91.52	0.00	402.14	0.226	0.48	0.30	11.617	B
C-A	466.57	116.64	466.57	0.00	-	-	-	-	-	-
C-B	7.19	1.80	7.21	0.00	541.06	0.013	0.02	0.01	6.745	A
A-B	249.02	62.25	249.02	0.00	-	-	-	-	-	-
A-C	727.27	181.82	727.27	0.00	-	-	-	-	-	-

Main results: (18:15-18:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	6.78	1.69	6.79	0.00	455.85	0.015	0.02	0.02	8.016	A
B-A	76.04	19.01	76.39	0.00	445.93	0.171	0.30	0.21	9.752	A
C-A	390.73	97.68	390.73	0.00	-	-	-	-	-	-
C-B	6.02	1.51	6.03	0.00	580.12	0.010	0.01	0.01	6.272	A
A-B	208.54	52.14	208.54	0.00	-	-	-	-	-	-
A-C	609.06	152.26	609.06	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (17:00-17:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.22	0.01	8.008	A	A
B-A	2.91	0.19	9.690	A	A
C-A	-	-	-	-	-
C-B	0.15	0.01	6.270	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:15-17:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.28	0.02	8.636	A	A
B-A	4.16	0.28	11.538	B	B
C-A	-	-	-	-	-
C-B	0.20	0.01	6.742	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:30-17:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.39	0.03	9.734	A	A
B-A	6.72	0.45	15.528	C	B
C-A	-	-	-	-	-
C-B	0.27	0.02	7.526	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:45-18:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.40	0.03	9.742	A	A
B-A	7.12	0.47	15.625	C	B
C-A	-	-	-	-	-
C-B	0.27	0.02	7.526	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (18:00-18:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.30	0.02	8.645	A	A
B-A	4.64	0.31	11.617	B	B
C-A	-	-	-	-	-
C-B	0.21	0.01	6.745	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (18:15-18:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.23	0.02	8.016	A	A
B-A	3.23	0.22	9.752	A	A
C-A	-	-	-	-	-
C-B	0.16	0.01	6.272	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queue Variation Results for each time segment

Queue Variation results: (17:00-17:15)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.01	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.20	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.01	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (17:15-17:30)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.02	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.29	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.01	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (17:30-17:45)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.03	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.47	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.02	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (17:45-18:00)

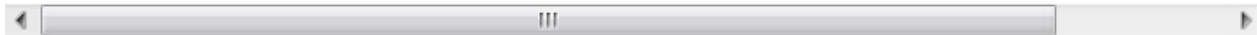
Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.03	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.48	0.00	0.00	0.00	1.00			N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.02	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (18:00-18:15)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.02	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.30	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.01	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (18:15-18:30)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.02	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.21	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.01	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-



Junctions 8
PICADY 8 - Priority Intersection Module
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Filename: R7 Station Rd.arc8

Path: C:\Users\dt018866\Dropbox\UK\CH2M HILL\Bristol\MetroWest Phase 1\Modelling

Report generation date: 08/12/2015 15:13:21

-
- » (Default Analysis Set) - 2015, AM
 - » (Default Analysis Set) - 2015, PM
 - » (Default Analysis Set) - 2019, AM
 - » (Default Analysis Set) - 2019, PM
 - » (Default Analysis Set) - 2019 + Scheme, AM
 - » (Default Analysis Set) - 2019 + Scheme, PM
 - » (Default Analysis Set) - 2029, AM
 - » (Default Analysis Set) - 2029, PM
 - » (Default Analysis Set) - 2029 + Scheme, AM
 - » (Default Analysis Set) - 2029 + Scheme, PM

Summary of junction performance

	AM							PM						Ju D
	Queue (PCU)	95 % Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Queue (PCU)	95 % Queue (PCU)	Delay (s)	RFC	LOS		
	A1 - 2015													
Stream B-C	0.05	~1	5.99	0.04	A	7.58	A	0.03	~1	5.67	0.03	A		
Stream B-A	0.14	~1	8.45	0.13	A			0.11	~1	7.99	0.10	A		
Stream C-A	-	-	-	-	-			-	-	-	-	-		
Stream C-B	0.04	~1	7.06	0.04	A			0.04	~1	6.89	0.04	A		
Stream A-B	-	-	-	-	-			-	-	-	-	-		
Stream A-C	-	-	-	-	-			-	-	-	-	-		
	A1 - 2019													
Stream B-C	0.05	~1	6.03	0.05	A	7.66	A	0.03	~1	5.70	0.03	A		
Stream B-A	0.15	~1	8.57	0.13	A			0.12	~1	8.11	0.11	A		
Stream C-A	-	-	-	-	-			-	-	-	-	-		
Stream C-B	0.04	~1	7.10	0.04	A			0.04	~1	6.93	0.04	A		
Stream A-B	-	-	-	-	-			-	-	-	-	-		
Stream A-C	-	-	-	-	-			-	-	-	-	-		
	A1 - 2019 + Scheme													
Stream B-C	0.05	~1	6.07	0.05	A	7.71	A	0.04	~1	5.77	0.04	A		
Stream B-A	0.16	~1	8.68	0.14	A			0.14	~1	8.25	0.12	A		
Stream C-A	-	-	-	-	-			-	-	-	-	-		
Stream C-B	0.05	~1	7.21	0.05	A			0.04	~1	6.96	0.04	A		
Stream A-B	-	-	-	-	-			-	-	-	-	-		
Stream A-C	-	-	-	-	-			-	-	-	-	-		
	A1 - 2029													
Stream B-C	0.05	~1	6.14	0.05	A	7.90	A	0.04	~1	5.78	0.03	A		
Stream B-A	0.17	~1	8.90	0.15	A			0.14	~1	8.41	0.12	A		
Stream C-A	-	-	-	-	-			-	-	-	-	-		
Stream C-B	0.04	~1	7.20	0.04	A			0.04	~1	7.02	0.04	A		
Stream A-B	-	-	-	-	-			-	-	-	-	-		
Stream A-C	-	-	-	-	-			-	-	-	-	-		
	A1 - 2029 + Scheme													
Stream B-C	0.06	~1	6.15	0.06	A	7.88	A	0.05	~1	5.90	0.05	A		
Stream B-A	0.18	~1	8.96	0.16	A			0.16	~1	8.65	0.14	A		
Stream C-A	-	-	-	-	-			-	-	-	-	-		
Stream C-B	0.06	~1	7.29	0.06	A			0.05	~1	7.08	0.05	A		
Stream A-B	-	-	-	-	-			-	-	-	-	-		
Stream A-C	-	-	-	-	-			-	-	-	-	-		

Values shown are the maximum values over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages.

"D1 - 2015, AM" model duration: 08:00 - 09:30
 "D2 - 2015, PM" model duration: 17:00 - 18:30
 "D3 - 2019, AM" model duration: 08:00 - 09:30
 "D4 - 2019, PM" model duration: 17:00 - 18:30
 "D5 - 2019 + Scheme, AM" model duration: 08:00 - 09:30
 "D6 - 2019 + Scheme, PM" model duration: 17:00 - 18:30
 "D7 - 2029, AM" model duration: 08:00 - 09:30
 "D8 - 2029, PM" model duration: 17:00 - 18:30
 "D9 - 2029 + Scheme, AM" model duration: 08:00 - 09:30
 "D10 - 2029 + Scheme, PM" model duration: 17:00 - 18:30

Run using Junctions 8.0.4.487 at 08/12/2015 15:13:16

File summary

Title	(untitled)
Location	
Site Number	
Date	08/12/2015
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DT018866
Description	

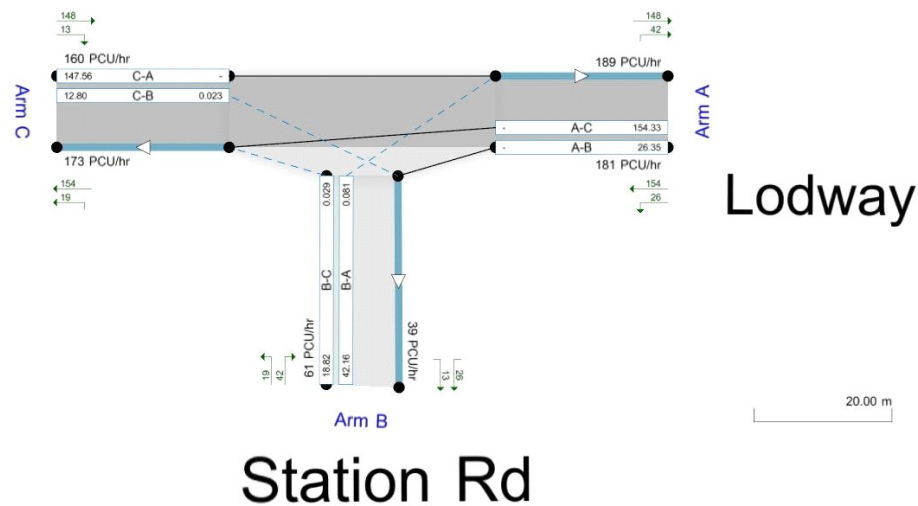
Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75	✓		N/A	0.85	36.00	20.00

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

Heywood Rd



Showing modelled flow through junction (PCU/hr)
Streams (upstreams) show Total Demand (PCU/hr). Streams (downstreams) show RFC (s)
Time Segment: (08:00-08:15)
Showing Analysis Set "A1", Demand Set "D1 - 2015, AM"

The junction diagram reflects the last run of ARCADY.

(Default Analysis Set) - 2015, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relations
2015, AM	2015	AM		ONE HOUR	08:00	09:30	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C		7.58	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	(untitled)		Major
B	B	(untitled)		Minor
C	C	(untitled)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.00		0.00		2.20	25.00		

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)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	Two lanes		2.35	2.95								40	225

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	598.784	0.109	0.276	0.173	0.394
1	B-C	715.760	0.110	0.277	-	-
1	C-B	588.441	0.228	0.228	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	240.00	100.000
B	ONE HOUR	✓	81.00	100.000
C	ONE HOUR	✓	213.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
08:00-08:15	A	180.68	180.68		
08:00-08:15	B	60.98	60.98		
08:00-08:15	C	160.36	160.36		
08:15-08:30	A	215.76	215.76		
08:15-08:30	B	72.82	72.82		
08:15-08:30	C	191.48	191.48		
08:30-08:45	A	264.24	264.24		
08:30-08:45	B	89.18	89.18		
08:30-08:45	C	234.52	234.52		
08:45-09:00	A	264.24	264.24		
08:45-09:00	B	89.18	89.18		
08:45-09:00	C	234.52	234.52		
09:00-09:15	A	215.76	215.76		
09:00-09:15	B	72.82	72.82		
09:00-09:15	C	191.48	191.48		
09:15-09:30	A	180.68	180.68		
09:15-09:30	B	60.98	60.98		
09:15-09:30	C	160.36	160.36		

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

	To			
		A	B	C
From	A	0.000	35.000	205.000
	B	56.000	0.000	25.000
	C	196.000	17.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

	To			
		A	B	C
From	A	0.00	0.15	0.85
	B	0.69	0.00	0.31
	C	0.92	0.08	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

	To			
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To			
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-C	0.04	5.99	0.05	~1	A	22.94	34.41	3.32	5.79	0.04	3.32	5.79
B-A	0.13	8.45	0.14	~1	A	51.39	77.08	10.18	7.92	0.11	10.18	7.92
C-A	-	-	-	-	-	179.85	269.78	-	-	-	-	-
C-B	0.04	7.06	0.04	~1	A	15.60	23.40	2.67	6.86	0.03	2.67	6.86
A-B	-	-	-	-	-	32.12	48.17	-	-	-	-	-
A-C	-	-	-	-	-	188.11	282.17	-	-	-	-	-

Main Results for each time segment

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	18.82	4.71	18.70	0.00	656.56	0.029	0.00	0.03	5.644	A
B-A	42.16	10.54	41.81	0.00	522.74	0.081	0.00	0.09	7.481	A
C-A	147.56	36.89	147.56	0.00	-	-	-	-	-	-
C-B	12.80	3.20	12.70	0.00	547.25	0.023	0.00	0.02	6.735	A
A-B	26.35	6.59	26.35	0.00	-	-	-	-	-	-
A-C	154.33	38.58	154.33	0.00	-	-	-	-	-	-

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	22.47	5.62	22.45	0.00	644.70	0.035	0.03	0.04	5.785	A
B-A	50.34	12.59	50.25	0.00	507.94	0.099	0.09	0.11	7.863	A
C-A	176.20	44.05	176.20	0.00	-	-	-	-	-	-
C-B	15.28	3.82	15.26	0.00	539.25	0.028	0.02	0.03	6.869	A
A-B	31.46	7.87	31.46	0.00	-	-	-	-	-	-
A-C	184.29	46.07	184.29	0.00	-	-	-	-	-	-

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	27.53	6.88	27.49	0.00	628.28	0.044	0.04	0.05	5.991	A
B-A	61.66	15.41	61.52	0.00	487.52	0.126	0.11	0.14	8.448	A
C-A	215.80	53.95	215.80	0.00	-	-	-	-	-	-
C-B	18.72	4.68	18.69	0.00	528.20	0.035	0.03	0.04	7.065	A
A-B	38.54	9.63	38.54	0.00	-	-	-	-	-	-
A-C	225.71	56.43	225.71	0.00	-	-	-	-	-	-

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	27.53	6.88	27.52	0.00	628.23	0.044	0.05	0.05	5.992	A
B-A	61.66	15.41	61.65	0.00	487.51	0.126	0.14	0.14	8.453	A
C-A	215.80	53.95	215.80	0.00	-	-	-	-	-	-
C-B	18.72	4.68	18.72	0.00	528.20	0.035	0.04	0.04	7.065	A
A-B	38.54	9.63	38.54	0.00	-	-	-	-	-	-
A-C	225.71	56.43	225.71	0.00	-	-	-	-	-	-

Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	22.47	5.62	22.51	0.00	644.63	0.035	0.05	0.04	5.788	A
B-A	50.34	12.59	50.47	0.00	507.92	0.099	0.14	0.11	7.873	A
C-A	176.20	44.05	176.20	0.00	-	-	-	-	-	-
C-B	15.28	3.82	15.31	0.00	539.25	0.028	0.04	0.03	6.873	A
A-B	31.46	7.87	31.46	0.00	-	-	-	-	-	-
A-C	184.29	46.07	184.29	0.00	-	-	-	-	-	-

Main results: (09:15-09:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	18.82	4.71	18.85	0.00	656.41	0.029	0.04	0.03	5.648	A
B-A	42.16	10.54	42.25	0.00	522.69	0.081	0.11	0.09	7.493	A
C-A	147.56	36.89	147.56	0.00	-	-	-	-	-	-
C-B	12.80	3.20	12.82	0.00	547.25	0.023	0.03	0.02	6.735	A
A-B	26.35	6.59	26.35	0.00	-	-	-	-	-	-
A-C	154.33	38.58	154.33	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (08:00-08:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.43	0.03	5.644	A	A
B-A	1.26	0.08	7.481	A	A
C-A	-	-	-	-	-
C-B	0.35	0.02	6.735	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:15-08:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.53	0.04	5.785	A	A
B-A	1.60	0.11	7.863	A	A
C-A	-	-	-	-	-
C-B	0.43	0.03	6.869	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:30-08:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.67	0.04	5.991	A	A
B-A	2.10	0.14	8.448	A	A
C-A	-	-	-	-	-
C-B	0.54	0.04	7.065	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:45-09:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.68	0.05	5.992	A	A
B-A	2.16	0.14	8.453	A	A
C-A	-	-	-	-	-
C-B	0.55	0.04	7.065	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (09:00-09:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.56	0.04	5.788	A	A
B-A	1.71	0.11	7.873	A	A
C-A	-	-	-	-	-
C-B	0.45	0.03	6.873	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (09:15-09:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.45	0.03	5.648	A	A
B-A	1.36	0.09	7.493	A	A
C-A	-	-	-	-	-
C-B	0.37	0.02	6.735	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queue Variation Results for each time segment

Queue Variation results: (08:00-08:15)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.03	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.09	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.02	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (08:15-08:30)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.04	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.11	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.03	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (08:30-08:45)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.05	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.14	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.04	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (08:45-09:00)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.05	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.14	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.04	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (09:00-09:15)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.04	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.11	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.03	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (09:15-09:30)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.03	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.09	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.02	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

(Default Analysis Set) - 2015, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relations
2015, PM	2015	PM		ONE HOUR	17:00	18:30	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C		7.26	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	(untitled)		Major
B	B	(untitled)		Minor
C	C	(untitled)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.00		0.00		2.20	25.00		

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)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	Two lanes		2.35	2.95								40	225

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	598.784	0.109	0.276	0.173	0.394
1	B-C	715.760	0.110	0.277	-	-
1	C-B	588.441	0.228	0.228	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	183.00	100.000
B	ONE HOUR	✓	63.00	100.000
C	ONE HOUR	✓	255.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
17:00-17:15	A	137.77	137.77		
17:00-17:15	B	47.43	47.43		
17:00-17:15	C	191.98	191.98		
17:15-17:30	A	164.51	164.51		
17:15-17:30	B	56.64	56.64		
17:15-17:30	C	229.24	229.24		
17:30-17:45	A	201.49	201.49		
17:30-17:45	B	69.36	69.36		
17:30-17:45	C	280.76	280.76		
17:45-18:00	A	201.49	201.49		
17:45-18:00	B	69.36	69.36		
17:45-18:00	C	280.76	280.76		
18:00-18:15	A	164.51	164.51		
18:00-18:15	B	56.64	56.64		
18:00-18:15	C	229.24	229.24		
18:15-18:30	A	137.77	137.77		
18:15-18:30	B	47.43	47.43		
18:15-18:30	C	191.98	191.98		

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

	To			
		A	B	C
From	A	0.000	60.000	123.000
	B	46.000	0.000	17.000
	C	237.000	18.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

	To			
		A	B	C
From	A	0.00	0.33	0.67
	B	0.73	0.00	0.27
	C	0.93	0.07	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

	To			
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To			
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-C	0.03	5.67	0.03	~1	A	15.60	23.40	2.16	5.53	0.02	2.16	5.53
B-A	0.10	7.99	0.11	~1	A	42.21	63.32	7.99	7.57	0.09	7.99	7.57
C-A	-	-	-	-	-	217.48	326.21	-	-	-	-	-
C-B	0.04	6.89	0.04	~1	A	16.52	24.78	2.77	6.71	0.03	2.77	6.71
A-B	-	-	-	-	-	55.06	82.59	-	-	-	-	-
A-C	-	-	-	-	-	112.87	169.30	-	-	-	-	-

Main Results for each time segment

Main results: (17:00-17:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	12.80	3.20	12.72	0.00	673.98	0.019	0.00	0.02	5.444	A
B-A	34.63	8.66	34.36	0.00	532.05	0.065	0.00	0.07	7.230	A
C-A	178.43	44.61	178.43	0.00	-	-	-	-	-	-
C-B	13.55	3.39	13.45	0.00	557.03	0.024	0.00	0.02	6.623	A
A-B	45.17	11.29	45.17	0.00	-	-	-	-	-	-
A-C	92.60	23.15	92.60	0.00	-	-	-	-	-	-

Main results: (17:15-17:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	15.28	3.82	15.27	0.00	665.56	0.023	0.02	0.02	5.535	A
B-A	41.35	10.34	41.29	0.00	519.06	0.080	0.07	0.09	7.535	A
C-A	213.06	53.26	213.06	0.00	-	-	-	-	-	-
C-B	16.18	4.05	16.16	0.00	550.93	0.029	0.02	0.03	6.731	A
A-B	53.94	13.48	53.94	0.00	-	-	-	-	-	-
A-C	110.57	27.64	110.57	0.00	-	-	-	-	-	-

Main results: (17:30-17:45)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	18.72	4.68	18.69	0.00	653.89	0.029	0.02	0.03	5.667	A
B-A	50.65	12.66	50.54	0.00	501.14	0.101	0.09	0.11	7.987	A
C-A	260.94	65.24	260.94	0.00	-	-	-	-	-	-
C-B	19.82	4.95	19.79	0.00	542.50	0.037	0.03	0.04	6.886	A
A-B	66.06	16.52	66.06	0.00	-	-	-	-	-	-
A-C	135.43	33.86	135.43	0.00	-	-	-	-	-	-

Main results: (17:45-18:00)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	18.72	4.68	18.72	0.00	653.85	0.029	0.03	0.03	5.667	A
B-A	50.65	12.66	50.64	0.00	501.13	0.101	0.11	0.11	7.991	A
C-A	260.94	65.24	260.94	0.00	-	-	-	-	-	-
C-B	19.82	4.95	19.82	0.00	542.50	0.037	0.04	0.04	6.886	A
A-B	66.06	16.52	66.06	0.00	-	-	-	-	-	-
A-C	135.43	33.86	135.43	0.00	-	-	-	-	-	-

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	15.28	3.82	15.31	0.00	665.50	0.023	0.03	0.02	5.536	A
B-A	41.35	10.34	41.45	0.00	519.04	0.080	0.11	0.09	7.538	A
C-A	213.06	53.26	213.06	0.00	-	-	-	-	-	-
C-B	16.18	4.05	16.21	0.00	550.93	0.029	0.04	0.03	6.732	A
A-B	53.94	13.48	53.94	0.00	-	-	-	-	-	-
A-C	110.57	27.64	110.57	0.00	-	-	-	-	-	-

Main results: (18:15-18:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	12.80	3.20	12.82	0.00	673.86	0.019	0.02	0.02	5.447	A
B-A	34.63	8.66	34.70	0.00	532.00	0.065	0.09	0.07	7.241	A
C-A	178.43	44.61	178.43	0.00	-	-	-	-	-	-
C-B	13.55	3.39	13.57	0.00	557.03	0.024	0.03	0.03	6.623	A
A-B	45.17	11.29	45.17	0.00	-	-	-	-	-	-
A-C	92.60	23.15	92.60	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (17:00-17:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.28	0.02	5.444	A	A
B-A	1.00	0.07	7.230	A	A
C-A	-	-	-	-	-
C-B	0.36	0.02	6.623	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:15-17:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.34	0.02	5.535	A	A
B-A	1.26	0.08	7.535	A	A
C-A	-	-	-	-	-
C-B	0.44	0.03	6.731	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:30-17:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.43	0.03	5.667	A	A
B-A	1.63	0.11	7.987	A	A
C-A	-	-	-	-	-
C-B	0.55	0.04	6.886	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:45-18:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.44	0.03	5.667	A	A
B-A	1.68	0.11	7.991	A	A
C-A	-	-	-	-	-
C-B	0.57	0.04	6.886	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (18:00-18:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.36	0.02	5.536	A	A
B-A	1.34	0.09	7.538	A	A
C-A	-	-	-	-	-
C-B	0.47	0.03	6.732	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (18:15-18:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.30	0.02	5.447	A	A
B-A	1.08	0.07	7.241	A	A
C-A	-	-	-	-	-
C-B	0.38	0.03	6.623	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queue Variation Results for each time segment

Queue Variation results: (17:00-17:15)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.02	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.07	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.02	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (17:15-17:30)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.02	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.09	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.03	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (17:30-17:45)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.03	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.11	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.04	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (17:45-18:00)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.03	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.11	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.04	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (18:00-18:15)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.02	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.09	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.03	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (18:15-18:30)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.02	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.07	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.03	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

(Default Analysis Set) - 2019, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relations
2019, AM	2019	AM		ONE HOUR	08:00	09:30	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C		7.66	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	(untitled)		Major
B	B	(untitled)		Minor
C	C	(untitled)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.00		0.00		2.20	25.00		

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)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	Two lanes		2.35	2.95								40	225

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	598.784	0.109	0.276	0.173	0.394
1	B-C	715.760	0.110	0.277	-	-
1	C-B	588.441	0.228	0.228	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	247.00	100.000
B	ONE HOUR	✓	84.00	100.000
C	ONE HOUR	✓	220.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
08:00-08:15	A	185.95	185.95		
08:00-08:15	B	63.24	63.24		
08:00-08:15	C	165.63	165.63		
08:15-08:30	A	222.05	222.05		
08:15-08:30	B	75.51	75.51		
08:15-08:30	C	197.78	197.78		
08:30-08:45	A	271.95	271.95		
08:30-08:45	B	92.49	92.49		
08:30-08:45	C	242.22	242.22		
08:45-09:00	A	271.95	271.95		
08:45-09:00	B	92.49	92.49		
08:45-09:00	C	242.22	242.22		
09:00-09:15	A	222.05	222.05		
09:00-09:15	B	75.51	75.51		
09:00-09:15	C	197.78	197.78		
09:15-09:30	A	185.95	185.95		
09:15-09:30	B	63.24	63.24		
09:15-09:30	C	165.63	165.63		

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

	To			
		A	B	C
From	A	0.000	36.000	211.000
	B	58.000	0.000	26.000
	C	202.000	18.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

	To			
		A	B	C
From	A	0.00	0.15	0.85
	B	0.69	0.00	0.31
	C	0.92	0.08	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

	To			
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To			
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-C	0.05	6.03	0.05	~1	A	23.86	35.79	3.47	5.82	0.04	3.47	5.82
B-A	0.13	8.57	0.15	~1	A	53.22	79.83	10.66	8.01	0.12	10.66	8.01
C-A	-	-	-	-	-	185.36	278.04	-	-	-	-	-
C-B	0.04	7.10	0.04	~1	A	16.52	24.78	2.85	6.89	0.03	2.85	6.89
A-B	-	-	-	-	-	33.03	49.55	-	-	-	-	-
A-C	-	-	-	-	-	193.62	290.43	-	-	-	-	-

Main Results for each time segment

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	19.57	4.89	19.45	0.00	654.70	0.030	0.00	0.03	5.667	A
B-A	43.67	10.92	43.30	0.00	520.33	0.084	0.00	0.09	7.542	A
C-A	152.08	38.02	152.08	0.00	-	-	-	-	-	-
C-B	13.55	3.39	13.45	0.00	546.04	0.025	0.00	0.03	6.759	A
A-B	27.10	6.78	27.10	0.00	-	-	-	-	-	-
A-C	158.85	39.71	158.85	0.00	-	-	-	-	-	-

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	23.37	5.84	23.35	0.00	642.46	0.036	0.03	0.04	5.814	A
B-A	52.14	13.04	52.05	0.00	505.06	0.103	0.09	0.11	7.945	A
C-A	181.59	45.40	181.59	0.00	-	-	-	-	-	-
C-B	16.18	4.05	16.16	0.00	537.82	0.030	0.03	0.03	6.900	A
A-B	32.36	8.09	32.36	0.00	-	-	-	-	-	-
A-C	189.68	47.42	189.68	0.00	-	-	-	-	-	-

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	28.63	7.16	28.59	0.00	625.49	0.046	0.04	0.05	6.030	A
B-A	63.86	15.96	63.71	0.00	484.00	0.132	0.11	0.15	8.563	A
C-A	222.41	55.60	222.41	0.00	-	-	-	-	-	-
C-B	19.82	4.95	19.79	0.00	526.44	0.038	0.03	0.04	7.105	A
A-B	39.64	9.91	39.64	0.00	-	-	-	-	-	-
A-C	232.32	58.08	232.32	0.00	-	-	-	-	-	-

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	28.63	7.16	28.63	0.00	625.44	0.046	0.05	0.05	6.031	A
B-A	63.86	15.96	63.86	0.00	483.98	0.132	0.15	0.15	8.568	A
C-A	222.41	55.60	222.41	0.00	-	-	-	-	-	-
C-B	19.82	4.95	19.82	0.00	526.44	0.038	0.04	0.04	7.105	A
A-B	39.64	9.91	39.64	0.00	-	-	-	-	-	-
A-C	232.32	58.08	232.32	0.00	-	-	-	-	-	-

Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	23.37	5.84	23.41	0.00	642.38	0.036	0.05	0.04	5.815	A
B-A	52.14	13.04	52.28	0.00	505.04	0.103	0.15	0.12	7.955	A
C-A	181.59	45.40	181.59	0.00	-	-	-	-	-	-
C-B	16.18	4.05	16.21	0.00	537.82	0.030	0.04	0.03	6.901	A
A-B	32.36	8.09	32.36	0.00	-	-	-	-	-	-
A-C	189.68	47.42	189.68	0.00	-	-	-	-	-	-

Main results: (09:15-09:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	19.57	4.89	19.60	0.00	654.55	0.030	0.04	0.03	5.669	A
B-A	43.67	10.92	43.76	0.00	520.28	0.084	0.12	0.09	7.555	A
C-A	152.08	38.02	152.08	0.00	-	-	-	-	-	-
C-B	13.55	3.39	13.57	0.00	546.04	0.025	0.03	0.03	6.763	A
A-B	27.10	6.78	27.10	0.00	-	-	-	-	-	-
A-C	158.85	39.71	158.85	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (08:00-08:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.45	0.03	5.667	A	A
B-A	1.32	0.09	7.542	A	A
C-A	-	-	-	-	-
C-B	0.37	0.02	6.759	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:15-08:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.55	0.04	5.814	A	A
B-A	1.67	0.11	7.945	A	A
C-A	-	-	-	-	-
C-B	0.45	0.03	6.900	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:30-08:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.70	0.05	6.030	A	A
B-A	2.20	0.15	8.563	A	A
C-A	-	-	-	-	-
C-B	0.57	0.04	7.105	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:45-09:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.72	0.05	6.031	A	A
B-A	2.26	0.15	8.568	A	A
C-A	-	-	-	-	-
C-B	0.58	0.04	7.105	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (09:00-09:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.58	0.04	5.815	A	A
B-A	1.79	0.12	7.955	A	A
C-A	-	-	-	-	-
C-B	0.48	0.03	6.901	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (09:15-09:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.47	0.03	5.669	A	A
B-A	1.42	0.09	7.555	A	A
C-A	-	-	-	-	-
C-B	0.39	0.03	6.763	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queue Variation Results for each time segment

Queue Variation results: (08:00-08:15)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.03	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.09	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.03	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (08:15-08:30)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.04	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.11	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.03	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (08:30-08:45)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.05	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.15	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.04	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (08:45-09:00)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.05	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.15	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.04	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (09:00-09:15)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.04	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.12	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.03	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (09:15-09:30)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.03	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.09	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.03	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

(Default Analysis Set) - 2019, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relations
2019, PM	2019	PM		ONE HOUR	17:00	18:30	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C		7.33	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	(untitled)		Major
B	B	(untitled)		Minor
C	C	(untitled)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.00		0.00		2.20	25.00		

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)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	Two lanes		2.35	2.95								40	225

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	598.784	0.109	0.276	0.173	0.394
1	B-C	715.760	0.110	0.277	-	-
1	C-B	588.441	0.228	0.228	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	191.00	100.000
B	ONE HOUR	✓	66.00	100.000
C	ONE HOUR	✓	266.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
17:00-17:15	A	143.79	143.79		
17:00-17:15	B	49.69	49.69		
17:00-17:15	C	200.26	200.26		
17:15-17:30	A	171.71	171.71		
17:15-17:30	B	59.33	59.33		
17:15-17:30	C	239.13	239.13		
17:30-17:45	A	210.29	210.29		
17:30-17:45	B	72.67	72.67		
17:30-17:45	C	292.87	292.87		
17:45-18:00	A	210.29	210.29		
17:45-18:00	B	72.67	72.67		
17:45-18:00	C	292.87	292.87		
18:00-18:15	A	171.71	171.71		
18:00-18:15	B	59.33	59.33		
18:00-18:15	C	239.13	239.13		
18:15-18:30	A	143.79	143.79		
18:15-18:30	B	49.69	49.69		
18:15-18:30	C	200.26	200.26		

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

	To			
		A	B	C
From	A	0.000	63.000	128.000
	B	48.000	0.000	18.000
	C	247.000	19.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

	To			
		A	B	C
From	A	0.00	0.33	0.67
	B	0.73	0.00	0.27
	C	0.93	0.07	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

	To			
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To			
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-C	0.03	5.70	0.03	~1	A	16.52	24.78	2.29	5.56	0.03	2.29	5.56
B-A	0.11	8.11	0.12	~1	A	44.05	66.07	8.43	7.66	0.09	8.43	7.66
C-A	-	-	-	-	-	226.65	339.98	-	-	-	-	-
C-B	0.04	6.93	0.04	~1	A	17.43	26.15	2.94	6.75	0.03	2.94	6.75
A-B	-	-	-	-	-	57.81	86.71	-	-	-	-	-
A-C	-	-	-	-	-	117.46	176.18	-	-	-	-	-

Main Results for each time segment

Main results: (17:00-17:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	13.55	3.39	13.47	0.00	672.16	0.020	0.00	0.02	5.465	A
B-A	36.14	9.03	35.85	0.00	529.17	0.068	0.00	0.07	7.295	A
C-A	185.95	46.49	185.95	0.00	-	-	-	-	-	-
C-B	14.30	3.58	14.20	0.00	555.66	0.026	0.00	0.03	6.649	A
A-B	47.43	11.86	47.43	0.00	-	-	-	-	-	-
A-C	96.37	24.09	96.37	0.00	-	-	-	-	-	-

Main results: (17:15-17:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	16.18	4.05	16.16	0.00	663.36	0.024	0.02	0.02	5.562	A
B-A	43.15	10.79	43.08	0.00	515.61	0.084	0.07	0.09	7.618	A
C-A	222.05	55.51	222.05	0.00	-	-	-	-	-	-
C-B	17.08	4.27	17.06	0.00	549.29	0.031	0.03	0.03	6.763	A
A-B	56.64	14.16	56.64	0.00	-	-	-	-	-	-
A-C	115.07	28.77	115.07	0.00	-	-	-	-	-	-

Main results: (17:30-17:45)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	19.82	4.95	19.79	0.00	651.16	0.030	0.02	0.03	5.701	A
B-A	52.85	13.21	52.74	0.00	496.92	0.106	0.09	0.12	8.103	A
C-A	271.95	67.99	271.95	0.00	-	-	-	-	-	-
C-B	20.92	5.23	20.89	0.00	540.50	0.039	0.03	0.04	6.927	A
A-B	69.36	17.34	69.36	0.00	-	-	-	-	-	-
A-C	140.93	35.23	140.93	0.00	-	-	-	-	-	-

Main results: (17:45-18:00)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	19.82	4.95	19.82	0.00	651.12	0.030	0.03	0.03	5.701	A
B-A	52.85	13.21	52.85	0.00	496.91	0.106	0.12	0.12	8.106	A
C-A	271.95	67.99	271.95	0.00	-	-	-	-	-	-
C-B	20.92	5.23	20.92	0.00	540.50	0.039	0.04	0.04	6.927	A
A-B	69.36	17.34	69.36	0.00	-	-	-	-	-	-
A-C	140.93	35.23	140.93	0.00	-	-	-	-	-	-

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	16.18	4.05	16.21	0.00	663.30	0.024	0.03	0.03	5.562	A
B-A	43.15	10.79	43.26	0.00	515.59	0.084	0.12	0.09	7.625	A
C-A	222.05	55.51	222.05	0.00	-	-	-	-	-	-
C-B	17.08	4.27	17.11	0.00	549.29	0.031	0.04	0.03	6.764	A
A-B	56.64	14.16	56.64	0.00	-	-	-	-	-	-
A-C	115.07	28.77	115.07	0.00	-	-	-	-	-	-

Main results: (18:15-18:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	13.55	3.39	13.57	0.00	672.04	0.020	0.03	0.02	5.468	A
B-A	36.14	9.03	36.21	0.00	529.11	0.068	0.09	0.07	7.306	A
C-A	185.95	46.49	185.95	0.00	-	-	-	-	-	-
C-B	14.30	3.58	14.33	0.00	555.66	0.026	0.03	0.03	6.652	A
A-B	47.43	11.86	47.43	0.00	-	-	-	-	-	-
A-C	96.37	24.09	96.37	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (17:00-17:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-A	1.05	0.07	7.295	A	A
C-A	-	-	-	-	-
C-B	0.38	0.03	6.649	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:15-17:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.37	0.02	5.562	A	A
B-A	1.33	0.09	7.618	A	A
C-A	-	-	-	-	-
C-B	0.47	0.03	6.763	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:30-17:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.46	0.03	5.701	A	A
B-A	1.73	0.12	8.103	A	A
C-A	-	-	-	-	-
C-B	0.59	0.04	6.927	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:45-18:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.47	0.03	5.701	A	A
B-A	1.77	0.12	8.106	A	A
C-A	-	-	-	-	-
C-B	0.60	0.04	6.927	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (18:00-18:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.38	0.03	5.562	A	A
B-A	1.41	0.09	7.625	A	A
C-A	-	-	-	-	-
C-B	0.49	0.03	6.764	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (18:15-18:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.32	0.02	5.468	A	A
B-A	1.13	0.08	7.306	A	A
C-A	-	-	-	-	-
C-B	0.41	0.03	6.652	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queue Variation Results for each time segment

Queue Variation results: (17:00-17:15)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.02	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.07	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.03	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (17:15-17:30)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.02	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.09	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.03	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (17:30-17:45)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.03	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.12	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.04	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (17:45-18:00)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.03	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.12	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.04	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (18:00-18:15)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.03	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.09	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.03	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (18:15-18:30)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.02	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.07	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.03	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

(Default Analysis Set) - 2019 + Scheme, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Rela
2019 + Scheme, AM	2019 + Scheme	AM		ONE HOUR	08:00	09:30	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C		7.71	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	(untitled)		Major
B	B	(untitled)		Minor
C	C	(untitled)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.00		0.00		2.20	25.00		

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)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	Two lanes		2.35	2.95								40	225

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	598.784	0.109	0.276	0.173	0.394
1	B-C	715.760	0.110	0.277	-	-
1	C-B	588.441	0.228	0.228	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	254.00	100.000
B	ONE HOUR	✓	88.00	100.000
C	ONE HOUR	✓	225.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
08:00-08:15	A	191.22	191.22		
08:00-08:15	B	66.25	66.25		
08:00-08:15	C	169.39	169.39		
08:15-08:30	A	228.34	228.34		
08:15-08:30	B	79.11	79.11		
08:15-08:30	C	202.27	202.27		
08:30-08:45	A	279.66	279.66		
08:30-08:45	B	96.89	96.89		
08:30-08:45	C	247.73	247.73		
08:45-09:00	A	279.66	279.66		
08:45-09:00	B	96.89	96.89		
08:45-09:00	C	247.73	247.73		
09:00-09:15	A	228.34	228.34		
09:00-09:15	B	79.11	79.11		
09:00-09:15	C	202.27	202.27		
09:15-09:30	A	191.22	191.22		
09:15-09:30	B	66.25	66.25		
09:15-09:30	C	169.39	169.39		

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

	To			
		A	B	C
From	A	0.000	43.000	211.000
	B	60.000	0.000	28.000
	C	202.000	23.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

	To			
		A	B	C
From	A	0.00	0.17	0.83
	B	0.68	0.00	0.32
	C	0.90	0.10	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

	To			
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To			
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-C	0.05	6.07	0.05	~1	A	25.69	38.54	3.76	5.85	0.04	3.76	5.85
B-A	0.14	8.68	0.16	~1	A	55.06	82.59	11.14	8.09	0.12	11.14	8.09
C-A	-	-	-	-	-	185.36	278.04	-	-	-	-	-
C-B	0.05	7.21	0.05	~1	A	21.11	31.66	3.68	6.97	0.04	3.68	6.97
A-B	-	-	-	-	-	39.46	59.19	-	-	-	-	-
A-C	-	-	-	-	-	193.62	290.43	-	-	-	-	-

Main Results for each time segment

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	21.08	5.27	20.95	0.00	653.60	0.032	0.00	0.03	5.688	A
B-A	45.17	11.29	44.79	0.00	518.27	0.087	0.00	0.09	7.596	A
C-A	152.08	38.02	152.08	0.00	-	-	-	-	-	-
C-B	17.32	4.33	17.19	0.00	544.84	0.032	0.00	0.03	6.820	A
A-B	32.37	8.09	32.37	0.00	-	-	-	-	-	-
A-C	158.85	39.71	158.85	0.00	-	-	-	-	-	-

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	25.17	6.29	25.14	0.00	641.11	0.039	0.03	0.04	5.844	A
B-A	53.94	13.48	53.84	0.00	502.59	0.107	0.09	0.12	8.020	A
C-A	181.59	45.40	181.59	0.00	-	-	-	-	-	-
C-B	20.68	5.17	20.65	0.00	536.38	0.039	0.03	0.04	6.979	A
A-B	38.66	9.66	38.66	0.00	-	-	-	-	-	-
A-C	189.68	47.42	189.68	0.00	-	-	-	-	-	-

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	30.83	7.71	30.78	0.00	623.79	0.049	0.04	0.05	6.070	A
B-A	66.06	16.52	65.91	0.00	480.97	0.137	0.12	0.16	8.671	A
C-A	222.41	55.60	222.41	0.00	-	-	-	-	-	-
C-B	25.32	6.33	25.28	0.00	524.68	0.048	0.04	0.05	7.208	A
A-B	47.34	11.84	47.34	0.00	-	-	-	-	-	-
A-C	232.32	58.08	232.32	0.00	-	-	-	-	-	-

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	30.83	7.71	30.83	0.00	623.74	0.049	0.05	0.05	6.071	A
B-A	66.06	16.52	66.06	0.00	480.96	0.137	0.16	0.16	8.676	A
C-A	222.41	55.60	222.41	0.00	-	-	-	-	-	-
C-B	25.32	6.33	25.32	0.00	524.68	0.048	0.05	0.05	7.208	A
A-B	47.34	11.84	47.34	0.00	-	-	-	-	-	-
A-C	232.32	58.08	232.32	0.00	-	-	-	-	-	-

Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	25.17	6.29	25.21	0.00	641.03	0.039	0.05	0.04	5.845	A
B-A	53.94	13.48	54.09	0.00	502.56	0.107	0.16	0.12	8.029	A
C-A	181.59	45.40	181.59	0.00	-	-	-	-	-	-
C-B	20.68	5.17	20.72	0.00	536.38	0.039	0.05	0.04	6.983	A
A-B	38.66	9.66	38.66	0.00	-	-	-	-	-	-
A-C	189.68	47.42	189.68	0.00	-	-	-	-	-	-

Main results: (09:15-09:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	21.08	5.27	21.11	0.00	653.44	0.032	0.04	0.03	5.692	A
B-A	45.17	11.29	45.27	0.00	518.21	0.087	0.12	0.10	7.612	A
C-A	152.08	38.02	152.08	0.00	-	-	-	-	-	-
C-B	17.32	4.33	17.34	0.00	544.84	0.032	0.04	0.03	6.826	A
A-B	32.37	8.09	32.37	0.00	-	-	-	-	-	-
A-C	158.85	39.71	158.85	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (08:00-08:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.48	0.03	5.688	A	A
B-A	1.37	0.09	7.596	A	A
C-A	-	-	-	-	-
C-B	0.47	0.03	6.820	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:15-08:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.60	0.04	5.844	A	A
B-A	1.75	0.12	8.020	A	A
C-A	-	-	-	-	-
C-B	0.59	0.04	6.979	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:30-08:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.76	0.05	6.070	A	A
B-A	2.30	0.15	8.671	A	A
C-A	-	-	-	-	-
C-B	0.74	0.05	7.208	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:45-09:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.78	0.05	6.071	A	A
B-A	2.37	0.16	8.676	A	A
C-A	-	-	-	-	-
C-B	0.76	0.05	7.208	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (09:00-09:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.63	0.04	5.845	A	A
B-A	1.87	0.12	8.029	A	A
C-A	-	-	-	-	-
C-B	0.62	0.04	6.983	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (09:15-09:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.51	0.03	5.692	A	A
B-A	1.48	0.10	7.612	A	A
C-A	-	-	-	-	-
C-B	0.51	0.03	6.826	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queue Variation Results for each time segment

Queue Variation results: (08:00-08:15)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.03	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.09	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.03	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (08:15-08:30)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.04	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.12	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.04	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (08:30-08:45)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.05	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.16	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.05	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (08:45-09:00)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.05	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.16	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.05	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (09:00-09:15)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.04	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.12	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.04	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (09:15-09:30)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.03	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.10	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.03	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

(Default Analysis Set) - 2019 + Scheme, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Rela
2019 + Scheme, PM	2019 + Scheme	PM		ONE HOUR	17:00	18:30	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C		7.39	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	(untitled)		Major
B	B	(untitled)		Minor
C	C	(untitled)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.00		0.00		2.20	25.00		

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)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	Two lanes		2.35	2.95								40	225

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	598.784	0.109	0.276	0.173	0.394
1	B-C	715.760	0.110	0.277	-	-
1	C-B	588.441	0.228	0.228	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	193.00	100.000
B	ONE HOUR	✓	77.00	100.000
C	ONE HOUR	✓	268.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
17:00-17:15	A	145.30	145.30		
17:00-17:15	B	57.97	57.97		
17:00-17:15	C	201.76	201.76		
17:15-17:30	A	173.50	173.50		
17:15-17:30	B	69.22	69.22		
17:15-17:30	C	240.93	240.93		
17:30-17:45	A	212.50	212.50		
17:30-17:45	B	84.78	84.78		
17:30-17:45	C	295.07	295.07		
17:45-18:00	A	212.50	212.50		
17:45-18:00	B	84.78	84.78		
17:45-18:00	C	295.07	295.07		
18:00-18:15	A	173.50	173.50		
18:00-18:15	B	69.22	69.22		
18:00-18:15	C	240.93	240.93		
18:15-18:30	A	145.30	145.30		
18:15-18:30	B	57.97	57.97		
18:15-18:30	C	201.76	201.76		

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

	To			
		A	B	C
From	A	0.000	65.000	128.000
	B	54.000	0.000	23.000
	C	247.000	21.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

	To			
		A	B	C
From	A	0.00	0.34	0.66
	B	0.70	0.00	0.30
	C	0.92	0.08	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

	To			
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To			
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-C	0.04	5.77	0.04	~1	A	21.11	31.66	2.96	5.62	0.03	2.96	5.62
B-A	0.12	8.25	0.14	~1	A	49.55	74.33	9.62	7.77	0.11	9.62	7.77
C-A	-	-	-	-	-	226.65	339.98	-	-	-	-	-
C-B	0.04	6.96	0.04	~1	A	19.27	28.90	3.26	6.78	0.04	3.26	6.78
A-B	-	-	-	-	-	59.65	89.47	-	-	-	-	-
A-C	-	-	-	-	-	117.46	176.18	-	-	-	-	-

Main Results for each time segment

Main results: (17:00-17:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	17.32	4.33	17.21	0.00	670.52	0.026	0.00	0.03	5.510	A
B-A	40.65	10.16	40.32	0.00	528.41	0.077	0.00	0.08	7.371	A
C-A	185.95	46.49	185.95	0.00	-	-	-	-	-	-
C-B	15.81	3.95	15.69	0.00	555.31	0.028	0.00	0.03	6.669	A
A-B	48.94	12.23	48.94	0.00	-	-	-	-	-	-
A-C	96.37	24.09	96.37	0.00	-	-	-	-	-	-

Main results: (17:15-17:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	20.68	5.17	20.65	0.00	661.36	0.031	0.03	0.03	5.618	A
B-A	48.54	12.14	48.46	0.00	514.70	0.094	0.08	0.10	7.720	A
C-A	222.05	55.51	222.05	0.00	-	-	-	-	-	-
C-B	18.88	4.72	18.85	0.00	548.88	0.034	0.03	0.04	6.791	A
A-B	58.43	14.61	58.43	0.00	-	-	-	-	-	-
A-C	115.07	28.77	115.07	0.00	-	-	-	-	-	-

Main results: (17:30-17:45)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	25.32	6.33	25.29	0.00	648.64	0.039	0.03	0.04	5.774	A
B-A	59.46	14.86	59.33	0.00	495.81	0.120	0.10	0.13	8.245	A
C-A	271.95	67.99	271.95	0.00	-	-	-	-	-	-
C-B	23.12	5.78	23.09	0.00	539.99	0.043	0.04	0.04	6.964	A
A-B	71.57	17.89	71.57	0.00	-	-	-	-	-	-
A-C	140.93	35.23	140.93	0.00	-	-	-	-	-	-

Main results: (17:45-18:00)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	25.32	6.33	25.32	0.00	648.59	0.039	0.04	0.04	5.775	A
B-A	59.46	14.86	59.45	0.00	495.79	0.120	0.13	0.14	8.250	A
C-A	271.95	67.99	271.95	0.00	-	-	-	-	-	-
C-B	23.12	5.78	23.12	0.00	539.99	0.043	0.04	0.04	6.964	A
A-B	71.57	17.89	71.57	0.00	-	-	-	-	-	-
A-C	140.93	35.23	140.93	0.00	-	-	-	-	-	-

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	20.68	5.17	20.71	0.00	661.29	0.031	0.04	0.03	5.621	A
B-A	48.54	12.14	48.67	0.00	514.68	0.094	0.14	0.11	7.726	A
C-A	222.05	55.51	222.05	0.00	-	-	-	-	-	-
C-B	18.88	4.72	18.91	0.00	548.88	0.034	0.04	0.04	6.795	A
A-B	58.43	14.61	58.43	0.00	-	-	-	-	-	-
A-C	115.07	28.77	115.07	0.00	-	-	-	-	-	-

Main results: (18:15-18:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	17.32	4.33	17.34	0.00	670.38	0.026	0.03	0.03	5.514	A
B-A	40.65	10.16	40.74	0.00	528.35	0.077	0.11	0.08	7.386	A
C-A	185.95	46.49	185.95	0.00	-	-	-	-	-	-
C-B	15.81	3.95	15.84	0.00	555.31	0.028	0.04	0.03	6.675	A
A-B	48.94	12.23	48.94	0.00	-	-	-	-	-	-
A-C	96.37	24.09	96.37	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (17:00-17:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.38	0.03	5.510	A	A
B-A	1.20	0.08	7.371	A	A
C-A	-	-	-	-	-
C-B	0.42	0.03	6.669	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:15-17:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.47	0.03	5.618	A	A
B-A	1.52	0.10	7.720	A	A
C-A	-	-	-	-	-
C-B	0.52	0.03	6.791	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:30-17:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.60	0.04	5.774	A	A
B-A	1.98	0.13	8.245	A	A
C-A	-	-	-	-	-
C-B	0.65	0.04	6.964	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:45-18:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.61	0.04	5.775	A	A
B-A	2.03	0.14	8.250	A	A
C-A	-	-	-	-	-
C-B	0.67	0.04	6.964	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (18:00-18:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.50	0.03	5.621	A	A
B-A	1.61	0.11	7.726	A	A
C-A	-	-	-	-	-
C-B	0.55	0.04	6.795	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (18:15-18:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.41	0.03	5.514	A	A
B-A	1.29	0.09	7.386	A	A
C-A	-	-	-	-	-
C-B	0.45	0.03	6.675	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queue Variation Results for each time segment

Queue Variation results: (17:00-17:15)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.03	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.08	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.03	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (17:15-17:30)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.03	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.10	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.04	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (17:30-17:45)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.04	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.13	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.04	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (17:45-18:00)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.04	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.14	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.04	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (18:00-18:15)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.03	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.11	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.04	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (18:15-18:30)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.03	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.08	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.03	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

(Default Analysis Set) - 2029, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relations
2029, AM	2029	AM		ONE HOUR	08:00	09:30	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C		7.90	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	(untitled)		Major
B	B	(untitled)		Minor
C	C	(untitled)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.00		0.00		2.20	25.00		

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)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	Two lanes		2.35	2.95								40	225

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	598.784	0.109	0.276	0.173	0.394
1	B-C	715.760	0.110	0.277	-	-
1	C-B	588.441	0.228	0.228	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	269.00	100.000
B	ONE HOUR	✓	91.00	100.000
C	ONE HOUR	✓	239.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
08:00-08:15	A	202.52	202.52		
08:00-08:15	B	68.51	68.51		
08:00-08:15	C	179.93	179.93		
08:15-08:30	A	241.83	241.83		
08:15-08:30	B	81.81	81.81		
08:15-08:30	C	214.86	214.86		
08:30-08:45	A	296.17	296.17		
08:30-08:45	B	100.19	100.19		
08:30-08:45	C	263.14	263.14		
08:45-09:00	A	296.17	296.17		
08:45-09:00	B	100.19	100.19		
08:45-09:00	C	263.14	263.14		
09:00-09:15	A	241.83	241.83		
09:00-09:15	B	81.81	81.81		
09:00-09:15	C	214.86	214.86		
09:15-09:30	A	202.52	202.52		
09:15-09:30	B	68.51	68.51		
09:15-09:30	C	179.93	179.93		

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

	To			
		A	B	C
From	A	0.000	39.000	230.000
	B	63.000	0.000	28.000
	C	220.000	19.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

	To			
		A	B	C
From	A	0.00	0.14	0.86
	B	0.69	0.00	0.31
	C	0.92	0.08	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

	To			
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To			
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-C	0.05	6.14	0.05	~1	A	25.69	38.54	3.79	5.91	0.04	3.79	5.91
B-A	0.15	8.90	0.17	~1	A	57.81	86.71	11.93	8.26	0.13	11.93	8.26
C-A	-	-	-	-	-	201.88	302.81	-	-	-	-	-
C-B	0.04	7.20	0.04	~1	A	17.43	26.15	3.04	6.97	0.03	3.04	6.97
A-B	-	-	-	-	-	35.79	53.68	-	-	-	-	-
A-C	-	-	-	-	-	211.05	316.58	-	-	-	-	-

Main Results for each time segment

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	21.08	5.27	20.95	0.00	649.17	0.032	0.00	0.03	5.728	A
B-A	47.43	11.86	47.03	0.00	513.49	0.092	0.00	0.10	7.711	A
C-A	165.63	41.41	165.63	0.00	-	-	-	-	-	-
C-B	14.30	3.58	14.20	0.00	542.27	0.026	0.00	0.03	6.815	A
A-B	29.36	7.34	29.36	0.00	-	-	-	-	-	-
A-C	173.16	43.29	173.16	0.00	-	-	-	-	-	-

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	25.17	6.29	25.14	0.00	635.79	0.040	0.03	0.04	5.895	A
B-A	56.64	14.16	56.53	0.00	496.90	0.114	0.10	0.13	8.173	A
C-A	197.78	49.44	197.78	0.00	-	-	-	-	-	-
C-B	17.08	4.27	17.06	0.00	533.31	0.032	0.03	0.03	6.972	A
A-B	35.06	8.77	35.06	0.00	-	-	-	-	-	-
A-C	206.77	51.69	206.77	0.00	-	-	-	-	-	-

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	30.83	7.71	30.78	0.00	617.21	0.050	0.04	0.05	6.138	A
B-A	69.36	17.34	69.20	0.00	474.00	0.146	0.13	0.17	8.889	A
C-A	242.22	60.56	242.22	0.00	-	-	-	-	-	-
C-B	20.92	5.23	20.88	0.00	520.92	0.040	0.03	0.04	7.199	A
A-B	42.94	10.73	42.94	0.00	-	-	-	-	-	-
A-C	253.23	63.31	253.23	0.00	-	-	-	-	-	-

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	30.83	7.71	30.83	0.00	617.15	0.050	0.05	0.05	6.139	A
B-A	69.36	17.34	69.36	0.00	473.98	0.146	0.17	0.17	8.896	A
C-A	242.22	60.56	242.22	0.00	-	-	-	-	-	-
C-B	20.92	5.23	20.92	0.00	520.92	0.040	0.04	0.04	7.199	A
A-B	42.94	10.73	42.94	0.00	-	-	-	-	-	-
A-C	253.23	63.31	253.23	0.00	-	-	-	-	-	-

Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	25.17	6.29	25.21	0.00	635.70	0.040	0.05	0.04	5.899	A
B-A	56.64	14.16	56.80	0.00	496.87	0.114	0.17	0.13	8.184	A
C-A	197.78	49.44	197.78	0.00	-	-	-	-	-	-
C-B	17.08	4.27	17.11	0.00	533.31	0.032	0.04	0.03	6.976	A
A-B	35.06	8.77	35.06	0.00	-	-	-	-	-	-
A-C	206.77	51.69	206.77	0.00	-	-	-	-	-	-

Main results: (09:15-09:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	21.08	5.27	21.11	0.00	649.00	0.032	0.04	0.03	5.733	A
B-A	47.43	11.86	47.54	0.00	513.44	0.092	0.13	0.10	7.730	A
C-A	165.63	41.41	165.63	0.00	-	-	-	-	-	-
C-B	14.30	3.58	14.33	0.00	542.27	0.026	0.03	0.03	6.818	A
A-B	29.36	7.34	29.36	0.00	-	-	-	-	-	-
A-C	173.16	43.29	173.16	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (08:00-08:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.49	0.03	5.728	A	A
B-A	1.46	0.10	7.711	A	A
C-A	-	-	-	-	-
C-B	0.39	0.03	6.815	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:15-08:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.60	0.04	5.895	A	A
B-A	1.87	0.12	8.173	A	A
C-A	-	-	-	-	-
C-B	0.48	0.03	6.972	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:30-08:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.77	0.05	6.138	A	A
B-A	2.48	0.17	8.889	A	A
C-A	-	-	-	-	-
C-B	0.61	0.04	7.199	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:45-09:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.78	0.05	6.139	A	A
B-A	2.55	0.17	8.896	A	A
C-A	-	-	-	-	-
C-B	0.62	0.04	7.199	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (09:00-09:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.63	0.04	5.899	A	A
B-A	2.00	0.13	8.184	A	A
C-A	-	-	-	-	-
C-B	0.51	0.03	6.976	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (09:15-09:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.52	0.03	5.733	A	A
B-A	1.58	0.11	7.730	A	A
C-A	-	-	-	-	-
C-B	0.42	0.03	6.818	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queue Variation Results for each time segment

Queue Variation results: (08:00-08:15)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.03	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.10	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.03	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (08:15-08:30)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.04	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.13	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.03	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (08:30-08:45)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.05	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.17	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.04	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (08:45-09:00)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.05	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.17	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.04	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (09:00-09:15)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.04	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.13	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.03	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (09:15-09:30)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.03	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.10	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.03	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

(Default Analysis Set) - 2029, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relations
2029, PM	2029	PM		ONE HOUR	17:00	18:30	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C		7.54	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	(untitled)		Major
B	B	(untitled)		Minor
C	C	(untitled)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.00		0.00		2.20	25.00		

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)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	Two lanes		2.35	2.95								40	225

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	598.784	0.109	0.276	0.173	0.394
1	B-C	715.760	0.110	0.277	-	-
1	C-B	588.441	0.228	0.228	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	210.00	100.000
B	ONE HOUR	✓	73.00	100.000
C	ONE HOUR	✓	294.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
17:00-17:15	A	158.10	158.10		
17:00-17:15	B	54.96	54.96		
17:00-17:15	C	221.34	221.34		
17:15-17:30	A	188.79	188.79		
17:15-17:30	B	65.63	65.63		
17:15-17:30	C	264.30	264.30		
17:30-17:45	A	231.21	231.21		
17:30-17:45	B	80.37	80.37		
17:30-17:45	C	323.70	323.70		
17:45-18:00	A	231.21	231.21		
17:45-18:00	B	80.37	80.37		
17:45-18:00	C	323.70	323.70		
18:00-18:15	A	188.79	188.79		
18:00-18:15	B	65.63	65.63		
18:00-18:15	C	264.30	264.30		
18:15-18:30	A	158.10	158.10		
18:15-18:30	B	54.96	54.96		
18:15-18:30	C	221.34	221.34		

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

	To			
		A	B	C
From	A	0.000	69.000	141.000
	B	53.000	0.000	20.000
	C	273.000	21.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

	To			
		A	B	C
From	A	0.00	0.33	0.67
	B	0.73	0.00	0.27
	C	0.93	0.07	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

	To			
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To			
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-C	0.03	5.78	0.04	~1	A	18.35	27.53	2.58	5.62	0.03	2.58	5.62
B-A	0.12	8.41	0.14	~1	A	48.63	72.95	9.59	7.89	0.11	9.59	7.89
C-A	-	-	-	-	-	250.51	375.76	-	-	-	-	-
C-B	0.04	7.02	0.04	~1	A	19.27	28.90	3.29	6.82	0.04	3.29	6.82
A-B	-	-	-	-	-	63.32	94.97	-	-	-	-	-
A-C	-	-	-	-	-	129.38	194.08	-	-	-	-	-

Main Results for each time segment

Main results: (17:00-17:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	15.06	3.76	14.97	0.00	667.62	0.023	0.00	0.02	5.516	A
B-A	39.90	9.98	39.57	0.00	521.99	0.076	0.00	0.08	7.457	A
C-A	205.53	51.38	205.53	0.00	-	-	-	-	-	-
C-B	15.81	3.95	15.69	0.00	552.40	0.029	0.00	0.03	6.705	A
A-B	51.95	12.99	51.95	0.00	-	-	-	-	-	-
A-C	106.15	26.54	106.15	0.00	-	-	-	-	-	-

Main results: (17:15-17:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	17.98	4.49	17.96	0.00	657.86	0.027	0.02	0.03	5.625	A
B-A	47.65	11.91	47.56	0.00	507.03	0.094	0.08	0.10	7.834	A
C-A	245.42	61.36	245.42	0.00	-	-	-	-	-	-
C-B	18.88	4.72	18.85	0.00	545.40	0.035	0.03	0.04	6.836	A
A-B	62.03	15.51	62.03	0.00	-	-	-	-	-	-
A-C	126.76	31.69	126.76	0.00	-	-	-	-	-	-

Main results: (17:30-17:45)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	22.02	5.51	21.99	0.00	644.31	0.034	0.03	0.04	5.784	A
B-A	58.35	14.59	58.23	0.00	486.42	0.120	0.10	0.13	8.404	A
C-A	300.58	75.14	300.58	0.00	-	-	-	-	-	-
C-B	23.12	5.78	23.08	0.00	535.73	0.043	0.04	0.04	7.022	A
A-B	75.97	18.99	75.97	0.00	-	-	-	-	-	-
A-C	155.24	38.81	155.24	0.00	-	-	-	-	-	-

Main results: (17:45-18:00)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	22.02	5.51	22.02	0.00	644.26	0.034	0.04	0.04	5.784	A
B-A	58.35	14.59	58.35	0.00	486.40	0.120	0.13	0.14	8.409	A
C-A	300.58	75.14	300.58	0.00	-	-	-	-	-	-
C-B	23.12	5.78	23.12	0.00	535.73	0.043	0.04	0.04	7.022	A
A-B	75.97	18.99	75.97	0.00	-	-	-	-	-	-
A-C	155.24	38.81	155.24	0.00	-	-	-	-	-	-

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	17.98	4.49	18.01	0.00	657.79	0.027	0.04	0.03	5.626	A
B-A	47.65	11.91	47.77	0.00	507.01	0.094	0.14	0.10	7.840	A
C-A	245.42	61.36	245.42	0.00	-	-	-	-	-	-
C-B	18.88	4.72	18.91	0.00	545.40	0.035	0.04	0.04	6.837	A
A-C	126.76	31.69	126.76	0.00	-	-	-	-	-	-

Main results: (18:15-18:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	15.06	3.76	15.08	0.00	667.48	0.023	0.03	0.02	5.519	A
B-A	39.90	9.98	39.99	0.00	521.93	0.076	0.10	0.08	7.473	A
C-A	205.53	51.38	205.53	0.00	-	-	-	-	-	-
C-B	15.81	3.95	15.84	0.00	552.40	0.029	0.04	0.03	6.711	A
A-B	51.95	12.99	51.95	0.00	-	-	-	-	-	-
A-C	106.15	26.54	106.15	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (17:00-17:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.34	0.02	5.516	A	A
B-A	1.19	0.08	7.457	A	A
C-A	-	-	-	-	-
C-B	0.43	0.03	6.705	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:15-17:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.41	0.03	5.625	A	A
B-A	1.51	0.10	7.834	A	A
C-A	-	-	-	-	-
C-B	0.52	0.03	6.836	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:30-17:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.52	0.03	5.784	A	A
B-A	1.98	0.13	8.404	A	A
C-A	-	-	-	-	-
C-B	0.66	0.04	7.022	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:45-18:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.53	0.04	5.784	A	A
B-A	2.03	0.14	8.409	A	A
C-A	-	-	-	-	-
C-B	0.67	0.04	7.022	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (18:00-18:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.43	0.03	5.626	A	A
B-A	1.61	0.11	7.840	A	A
C-A	-	-	-	-	-
C-B	0.55	0.04	6.837	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (18:15-18:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.35	0.02	5.519	A	A
B-A	1.28	0.09	7.473	A	A
C-A	-	-	-	-	-
C-B	0.45	0.03	6.711	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queue Variation Results for each time segment

Queue Variation results: (17:00-17:15)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.02	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.08	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.03	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (17:15-17:30)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.03	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.10	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.04	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (17:30-17:45)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.04	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.13	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.04	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (17:45-18:00)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.04	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.14	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.04	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (18:00-18:15)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.03	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.10	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.04	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (18:15-18:30)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.02	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.08	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.03	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

(Default Analysis Set) - 2029 + Scheme, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Rela
2029 + Scheme, AM	2029 + Scheme	AM		ONE HOUR	08:00	09:30	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C		7.88	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	(untitled)		Major
B	B	(untitled)		Minor
C	C	(untitled)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.00		0.00		2.20	25.00		

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)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	Two lanes		2.35	2.95								40	225

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	598.784	0.109	0.276	0.173	0.394
1	B-C	715.760	0.110	0.277	-	-
1	C-B	588.441	0.228	0.228	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	254.00	100.000
B	ONE HOUR	✓	99.00	100.000
C	ONE HOUR	✓	248.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
08:00-08:15	A	191.22	191.22		
08:00-08:15	B	74.53	74.53		
08:00-08:15	C	186.71	186.71		
08:15-08:30	A	228.34	228.34		
08:15-08:30	B	89.00	89.00		
08:15-08:30	C	222.95	222.95		
08:30-08:45	A	279.66	279.66		
08:30-08:45	B	109.00	109.00		
08:30-08:45	C	273.05	273.05		
08:45-09:00	A	279.66	279.66		
08:45-09:00	B	109.00	109.00		
08:45-09:00	C	273.05	273.05		
09:00-09:15	A	228.34	228.34		
09:00-09:15	B	89.00	89.00		
09:00-09:15	C	222.95	222.95		
09:15-09:30	A	191.22	191.22		
09:15-09:30	B	74.53	74.53		
09:15-09:30	C	186.71	186.71		

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

	To			
		A	B	C
	A	0.000	43.000	211.000
	B	67.000	0.000	32.000
From	C	220.000	28.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

	To			
		A	B	C
From	A	0.00	0.17	0.83
	B	0.68	0.00	0.32
	C	0.89	0.11	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

	To			
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To			
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-C	0.06	6.15	0.06	~1	A	29.36	44.05	4.34	5.91	0.05	4.34	5.91
B-A	0.16	8.96	0.18	~1	A	61.48	92.22	12.77	8.31	0.14	12.77	8.31
C-A	-	-	-	-	-	201.88	302.81	-	-	-	-	-
C-B	0.06	7.29	0.06	~1	A	25.69	38.54	4.52	7.04	0.05	4.52	7.04
A-B	-	-	-	-	-	39.46	59.19	-	-	-	-	-
A-C	-	-	-	-	-	193.62	290.43	-	-	-	-	-

Main Results for each time segment

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	24.09	6.02	23.94	0.00	651.78	0.037	0.00	0.04	5.732	A
B-A	50.44	12.61	50.01	0.00	514.44	0.098	0.00	0.11	7.744	A
C-A	165.63	41.41	165.63	0.00	-	-	-	-	-	-
C-B	21.08	5.27	20.92	0.00	544.84	0.039	0.00	0.04	6.869	A
A-B	32.37	8.09	32.37	0.00	-	-	-	-	-	-
A-C	158.85	39.71	158.85	0.00	-	-	-	-	-	-

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	28.77	7.19	28.73	0.00	638.85	0.045	0.04	0.05	5.900	A
B-A	60.23	15.06	60.12	0.00	498.00	0.121	0.11	0.14	8.219	A
C-A	197.78	49.44	197.78	0.00	-	-	-	-	-	-
C-B	25.17	6.29	25.14	0.00	536.38	0.047	0.04	0.05	7.041	A
A-B	38.66	9.66	38.66	0.00	-	-	-	-	-	-
A-C	189.68	47.42	189.68	0.00	-	-	-	-	-	-

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	35.23	8.81	35.18	0.00	620.89	0.057	0.05	0.06	6.146	A
B-A	73.77	18.44	73.59	0.00	475.36	0.155	0.14	0.18	8.957	A
C-A	242.22	60.56	242.22	0.00	-	-	-	-	-	-
C-B	30.83	7.71	30.78	0.00	524.68	0.059	0.05	0.06	7.288	A
A-B	47.34	11.84	47.34	0.00	-	-	-	-	-	-
A-C	232.32	58.08	232.32	0.00	-	-	-	-	-	-

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	35.23	8.81	35.23	0.00	620.82	0.057	0.06	0.06	6.146	A
B-A	73.77	18.44	73.76	0.00	475.33	0.155	0.18	0.18	8.964	A
C-A	242.22	60.56	242.22	0.00	-	-	-	-	-	-
C-B	30.83	7.71	30.83	0.00	524.68	0.059	0.06	0.06	7.288	A
A-B	47.34	11.84	47.34	0.00	-	-	-	-	-	-
A-C	232.32	58.08	232.32	0.00	-	-	-	-	-	-

Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	28.77	7.19	28.82	0.00	638.75	0.045	0.06	0.05	5.904	A
B-A	60.23	15.06	60.41	0.00	497.97	0.121	0.18	0.14	8.230	A
C-A	197.78	49.44	197.78	0.00	-	-	-	-	-	-
C-B	25.17	6.29	25.22	0.00	536.38	0.047	0.06	0.05	7.042	A
A-B	38.66	9.66	38.66	0.00	-	-	-	-	-	-
A-C	189.68	47.42	189.68	0.00	-	-	-	-	-	-

Main results: (09:15-09:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	24.09	6.02	24.13	0.00	651.59	0.037	0.05	0.04	5.739	A
B-A	50.44	12.61	50.56	0.00	514.36	0.098	0.14	0.11	7.763	A
C-A	165.63	41.41	165.63	0.00	-	-	-	-	-	-
C-B	21.08	5.27	21.12	0.00	544.84	0.039	0.05	0.04	6.873	A
A-B	32.37	8.09	32.37	0.00	-	-	-	-	-	-
A-C	158.85	39.71	158.85	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (08:00-08:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.56	0.04	5.732	A	A
B-A	1.56	0.10	7.744	A	A
C-A	-	-	-	-	-
C-B	0.58	0.04	6.869	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:15-08:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.69	0.05	5.900	A	A
B-A	2.00	0.13	8.219	A	A
C-A	-	-	-	-	-
C-B	0.72	0.05	7.041	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:30-08:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.88	0.06	6.146	A	A
B-A	2.65	0.18	8.957	A	A
C-A	-	-	-	-	-
C-B	0.91	0.06	7.288	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:45-09:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.90	0.06	6.146	A	A
B-A	2.73	0.18	8.964	A	A
C-A	-	-	-	-	-
C-B	0.93	0.06	7.288	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (09:00-09:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.73	0.05	5.904	A	A
B-A	2.14	0.14	8.230	A	A
C-A	-	-	-	-	-
C-B	0.76	0.05	7.042	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (09:15-09:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.59	0.04	5.739	A	A
B-A	1.68	0.11	7.763	A	A
C-A	-	-	-	-	-
C-B	0.62	0.04	6.873	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queue Variation Results for each time segment

Queue Variation results: (08:00-08:15)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.04	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.11	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.04	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (08:15-08:30)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.05	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.14	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.05	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (08:30-08:45)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.06	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.18	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.06	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (08:45-09:00)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.06	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.18	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.06	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (09:00-09:15)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.05	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.14	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.05	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (09:15-09:30)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.04	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.11	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.04	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

(Default Analysis Set) - 2029 + Scheme, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Rela
2029 + Scheme, PM	2029 + Scheme	PM		ONE HOUR	17:00	18:30	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C		7.66	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	(untitled)		Major
B	B	(untitled)		Minor
C	C	(untitled)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.00		0.00		2.20	25.00		

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)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	Two lanes		2.35	2.95								40	225

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	598.784	0.109	0.276	0.173	0.394
1	B-C	715.760	0.110	0.277	-	-
1	C-B	588.441	0.228	0.228	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	214.00	100.000
B	ONE HOUR	✓	89.00	100.000
C	ONE HOUR	✓	297.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
17:00-17:15	A	161.11	161.11		
17:00-17:15	B	67.00	67.00		
17:00-17:15	C	223.60	223.60		
17:15-17:30	A	192.38	192.38		
17:15-17:30	B	80.01	80.01		
17:15-17:30	C	267.00	267.00		
17:30-17:45	A	235.62	235.62		
17:30-17:45	B	97.99	97.99		
17:30-17:45	C	327.00	327.00		
17:45-18:00	A	235.62	235.62		
17:45-18:00	B	97.99	97.99		
17:45-18:00	C	327.00	327.00		
18:00-18:15	A	192.38	192.38		
18:00-18:15	B	80.01	80.01		
18:00-18:15	C	267.00	267.00		
18:15-18:30	A	161.11	161.11		
18:15-18:30	B	67.00	67.00		
18:15-18:30	C	223.60	223.60		

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

	To			
		A	B	C
From	A	0.000	73.000	141.000
	B	62.000	0.000	27.000
	C	273.000	24.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

	To			
		A	B	C
From	A	0.00	0.34	0.66
	B	0.70	0.00	0.30
	C	0.92	0.08	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

	To			
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To			
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-C	0.05	5.90	0.05	~1	A	24.78	37.16	3.54	5.71	0.04	3.54	5.71
B-A	0.14	8.65	0.16	~1	A	56.89	85.34	11.47	8.07	0.13	11.48	8.07
C-A	-	-	-	-	-	250.51	375.76	-	-	-	-	-
C-B	0.05	7.08	0.05	~1	A	22.02	33.03	3.78	6.87	0.04	3.78	6.87
A-B	-	-	-	-	-	66.99	100.48	-	-	-	-	-
A-C	-	-	-	-	-	129.38	194.08	-	-	-	-	-

Main Results for each time segment

Main results: (17:00-17:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	20.33	5.08	20.20	0.00	665.05	0.031	0.00	0.03	5.583	A
B-A	46.68	11.67	46.29	0.00	520.77	0.090	0.00	0.10	7.580	A
C-A	205.53	51.38	205.53	0.00	-	-	-	-	-	-
C-B	18.07	4.52	17.93	0.00	551.71	0.033	0.00	0.03	6.742	A
A-B	54.96	13.74	54.96	0.00	-	-	-	-	-	-
A-C	106.15	26.54	106.15	0.00	-	-	-	-	-	-

Main results: (17:15-17:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	24.27	6.07	24.24	0.00	654.72	0.037	0.03	0.04	5.709	A
B-A	55.74	13.93	55.64	0.00	505.57	0.110	0.10	0.12	7.999	A
C-A	245.42	61.36	245.42	0.00	-	-	-	-	-	-
C-B	21.58	5.39	21.55	0.00	544.58	0.040	0.03	0.04	6.882	A
A-B	65.63	16.41	65.63	0.00	-	-	-	-	-	-
A-C	126.76	31.69	126.76	0.00	-	-	-	-	-	-

Main results: (17:30-17:45)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	29.73	7.43	29.69	0.00	640.34	0.046	0.04	0.05	5.895	A
B-A	68.26	17.07	68.11	0.00	484.63	0.141	0.12	0.16	8.643	A
C-A	300.58	75.14	300.58	0.00	-	-	-	-	-	-
C-B	26.42	6.61	26.38	0.00	534.72	0.049	0.04	0.05	7.081	A
A-B	80.37	20.09	80.37	0.00	-	-	-	-	-	-
A-C	155.24	38.81	155.24	0.00	-	-	-	-	-	-

Main results: (17:45-18:00)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	29.73	7.43	29.73	0.00	640.29	0.046	0.05	0.05	5.895	A
B-A	68.26	17.07	68.26	0.00	484.61	0.141	0.16	0.16	8.646	A
C-A	300.58	75.14	300.58	0.00	-	-	-	-	-	-
C-B	26.42	6.61	26.42	0.00	534.72	0.049	0.05	0.05	7.081	A
A-B	80.37	20.09	80.37	0.00	-	-	-	-	-	-
A-C	155.24	38.81	155.24	0.00	-	-	-	-	-	-

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	24.27	6.07	24.31	0.00	654.63	0.037	0.05	0.04	5.713	A
B-A	55.74	13.93	55.89	0.00	505.55	0.110	0.16	0.13	8.008	A
C-A	245.42	61.36	245.42	0.00	-	-	-	-	-	-
C-B	21.58	5.39	21.62	0.00	544.58	0.040	0.05	0.04	6.886	A
A-B	65.63	16.41	65.63	0.00	-	-	-	-	-	-
A-C	126.76	31.69	126.76	0.00	-	-	-	-	-	-

Main results: (18:15-18:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	20.33	5.08	20.36	0.00	664.88	0.031	0.04	0.03	5.587	A
B-A	46.68	11.67	46.78	0.00	520.70	0.090	0.13	0.10	7.599	A
C-A	205.53	51.38	205.53	0.00	-	-	-	-	-	-
C-B	18.07	4.52	18.10	0.00	551.71	0.033	0.04	0.03	6.746	A
A-B	54.96	13.74	54.96	0.00	-	-	-	-	-	-
A-C	106.15	26.54	106.15	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (17:00-17:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.46	0.03	5.583	A	A
B-A	1.41	0.09	7.580	A	A
C-A	-	-	-	-	-
C-B	0.49	0.03	6.742	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:15-17:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.56	0.04	5.709	A	A
B-A	1.80	0.12	7.999	A	A
C-A	-	-	-	-	-
C-B	0.60	0.04	6.882	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:30-17:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.71	0.05	5.895	A	A
B-A	2.37	0.16	8.643	A	A
C-A	-	-	-	-	-
C-B	0.76	0.05	7.081	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:45-18:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.73	0.05	5.895	A	A
B-A	2.44	0.16	8.646	A	A
C-A	-	-	-	-	-
C-B	0.78	0.05	7.081	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (18:00-18:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.59	0.04	5.713	A	A
B-A	1.92	0.13	8.008	A	A
C-A	-	-	-	-	-
C-B	0.64	0.04	6.886	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (18:15-18:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.48	0.03	5.587	A	A
B-A	1.52	0.10	7.599	A	A
C-A	-	-	-	-	-
C-B	0.52	0.03	6.746	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queue Variation Results for each time segment

Queue Variation results: (17:00-17:15)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.03	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.10	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.03	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (17:15-17:30)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.04	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.12	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.04	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (17:30-17:45)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.05	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.16	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.05	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (17:45-18:00)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.05	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.16	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.05	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (18:00-18:15)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.04	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.13	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.04	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

Queue Variation results: (18:15-18:30)

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
B-C	0.03	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
B-A	0.10	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
C-A	-	-	-	-	-	-	-	-	-
C-B	0.03	~1	~1	~1	~1	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
A-B	-	-	-	-	-	-	-	-	-
A-C	-	-	-	-	-	-	-	-	-

