

Appendix G

Junctions 9				
PICADY 9 - Priority Intersection Module				
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Filename: Sunny Bank Rd-Channel View.j9

Path: K:\T20\Jobs\T20.101 - Aberavon Seafront\Analysis

Report generation date: 14/10/2020 12:02:14

»2018 Base, AM
 »2018 Base, PM
 »2020 Base, AM
 »2020 Base, PM
 »2022 Base, AM
 »2022 Base, PM
 »2035 Base, AM
 »2035 Base, PM
 »2022 + Dev , AM
 »2022 + Dev , PM
 »2035 + Dev , AM
 »2035 + Dev , PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	2018 Base									
Stream B-AC	D1	0.2	9.00	0.18	A	D2	0.1	7.52	0.08	A
Stream C-AB		0.1	7.57	0.10	A		0.1	7.31	0.05	A
	2020 Base									
Stream B-AC	D3	0.2	9.07	0.18	A	D4	0.1	7.54	0.08	A
Stream C-AB		0.1	7.59	0.10	A		0.1	7.32	0.05	A
	2022 Base									
Stream B-AC	D5	0.2	9.14	0.19	A	D6	0.1	7.56	0.09	A
Stream C-AB		0.1	7.61	0.10	A		0.1	7.33	0.06	A
	2035 Base									
Stream B-AC	D7	0.3	9.41	0.21	A	D8	0.1	7.65	0.10	A
Stream C-AB		0.1	7.69	0.11	A		0.1	7.37	0.06	A
	2022 + Dev									
Stream B-AC	D9	0.4	10.04	0.26	B	D10	0.1	7.86	0.12	A
Stream C-AB		0.2	7.75	0.12	A		0.1	7.62	0.09	A
	2035 + Dev									
Stream B-AC	D11	0.4	10.38	0.28	B	D12	0.2	7.95	0.13	A
Stream C-AB		0.2	7.84	0.13	A		0.1	7.67	0.10	A

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

File summary

File Description

Title	
Location	
Site number	
Date	26/07/2018
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	ATRANS\Katie
Description	

Units

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

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2018 Base	AM	ONE HOUR	08:00	09:30	15	✓
D2	2018 Base	PM	ONE HOUR	17:00	18:30	15	✓
D3	2020 Base	AM	ONE HOUR	08:00	09:30	15	✓
D4	2020 Base	PM	ONE HOUR	17:00	18:30	15	✓
D5	2022 Base	AM	ONE HOUR	08:00	09:30	15	✓
D6	2022 Base	PM	ONE HOUR	17:00	18:30	15	✓
D7	2035 Base	AM	ONE HOUR	08:00	09:30	15	✓
D8	2035 Base	PM	ONE HOUR	17:00	18:30	15	✓
D9	2022 + Dev	AM	ONE HOUR	08:00	09:30	15	✓
D10	2022 + Dev	PM	ONE HOUR	17:00	18:30	15	✓
D11	2035 + Dev	AM	ONE HOUR	08:00	09:30	15	✓
D12	2035 + Dev	PM	ONE HOUR	17:00	18:30	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2018 Base, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		5.69	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Sunny Bank Road (E)		Major
B	Channel View		Minor
C	Sunny Bank Road (W)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	6.00			0.0	✓	0.00

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)	Visibility to left (m)	Visibility to right (m)
B	One lane	2.20	0	0

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	440	0.080	0.202	0.127	0.289
B-C	574	0.088	0.222	-	-
C-B	574	0.222	0.222	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2018 Base	AM	ONE HOUR	08:00	09:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	43	100.000
B		ONE HOUR	✓	82	100.000
C		ONE HOUR	✓	71	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	27	16
	B	27	0	55
	C	23	48	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
	A	0	0	0
	B	4	0	4
	C	0	11	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.18	9.00	0.2	A	75	113
C-AB	0.10	7.57	0.1	A	46	69
C-A					19	29
A-B					25	37
A-C					15	22

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	62	15	511	0.121	61	0.0	0.1	8.311	A
C-AB	37	9	579	0.064	37	0.0	0.1	7.350	A
C-A	16	4			16				
A-B	20	5			20				
A-C	12	3			12				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	74	18	509	0.145	74	0.1	0.2	8.594	A
C-AB	45	11	580	0.077	45	0.1	0.1	7.444	A
C-A	19	5			19				
A-B	24	6			24				
A-C	14	4			14				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	90	23	506	0.178	90	0.2	0.2	8.993	A
C-AB	55	14	581	0.095	55	0.1	0.1	7.568	A
C-A	23	6			23				
A-B	30	7			30				
A-C	18	4			18				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	90	23	506	0.178	90	0.2	0.2	9.001	A
C-AB	55	14	581	0.095	55	0.1	0.1	7.566	A
C-A	23	6			23				
A-B	30	7			30				
A-C	18	4			18				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	74	18	509	0.145	74	0.2	0.2	8.607	A
C-AB	45	11	580	0.077	45	0.1	0.1	7.443	A
C-A	19	5			19				
A-B	24	6			24				
A-C	14	4			14				

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	62	15	511	0.121	62	0.2	0.1	8.338	A
C-AB	37	9	579	0.064	37	0.1	0.1	7.355	A
C-A	16	4			16				
A-B	20	5			20				
A-C	12	3			12				

2018 Base, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		5.30	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2018 Base	PM	ONE HOUR	17:00	18:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	18	100.000
B		ONE HOUR	✓	41	100.000
C		ONE HOUR	✓	37	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	12	6
	B	5	0	36
	C	10	27	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
	A	0	17	0
	B	0	0	6
	C	10	11	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.08	7.52	0.1	A	38	56
C-AB	0.05	7.31	0.1	A	25	38
C-A					9	13
A-B					11	17
A-C					6	8

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	31	8	550	0.056	31	0.0	0.1	7.287	A
C-AB	21	5	576	0.036	20	0.0	0.0	7.189	A
C-A	7	2			7				
A-B	9	2			9				
A-C	5	1			5				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	37	9	550	0.067	37	0.1	0.1	7.387	A
C-AB	25	6	577	0.043	25	0.0	0.1	7.239	A
C-A	9	2			9				
A-B	11	3			11				
A-C	5	1			5				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	45	11	549	0.082	45	0.1	0.1	7.521	A
C-AB	30	8	577	0.053	30	0.1	0.1	7.306	A
C-A	10	3			10				
A-B	13	3			13				
A-C	7	2			7				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	45	11	549	0.082	45	0.1	0.1	7.521	A
C-AB	30	8	577	0.053	30	0.1	0.1	7.309	A
C-A	10	3			10				
A-B	13	3			13				
A-C	7	2			7				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	37	9	550	0.067	37	0.1	0.1	7.389	A
C-AB	25	6	577	0.043	25	0.1	0.1	7.240	A
C-A	9	2			9				
A-B	11	3			11				
A-C	5	1			5				

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	31	8	550	0.056	31	0.1	0.1	7.297	A
C-AB	21	5	576	0.036	21	0.1	0.0	7.195	A
C-A	7	2			7				
A-B	9	2			9				
A-C	5	1			5				

2020 Base, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		5.73	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2020 Base	AM	ONE HOUR	08:00	09:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	44	100.000
B		ONE HOUR	✓	84	100.000
C		ONE HOUR	✓	73	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	28	16
	B	28	0	57
	C	24	49	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
	A	0	0	0
	B	4	0	4
	C	0	11	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.18	9.07	0.2	A	77	116
C-AB	0.10	7.59	0.1	A	47	71
C-A					20	30
A-B					25	38
A-C					15	23

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	63	16	511	0.124	63	0.0	0.1	8.347	A
C-AB	38	10	579	0.066	38	0.0	0.1	7.362	A
C-A	17	4			17				
A-B	21	5			21				
A-C	12	3			12				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	76	19	509	0.149	76	0.1	0.2	8.643	A
C-AB	46	12	580	0.079	46	0.1	0.1	7.459	A
C-A	20	5			20				
A-B	25	6			25				
A-C	15	4			15				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	93	23	506	0.184	93	0.2	0.2	9.057	A
C-AB	57	14	581	0.098	57	0.1	0.1	7.588	A
C-A	23	6			23				
A-B	31	8			31				
A-C	18	5			18				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	93	23	506	0.184	93	0.2	0.2	9.066	A
C-AB	57	14	581	0.098	57	0.1	0.1	7.588	A
C-A	23	6			23				
A-B	31	8			31				
A-C	18	5			18				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	76	19	509	0.149	76	0.2	0.2	8.656	A
C-AB	46	12	580	0.079	46	0.1	0.1	7.459	A
C-A	20	5			20				
A-B	25	6			25				
A-C	15	4			15				

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	63	16	511	0.124	64	0.2	0.1	8.375	A
C-AB	38	10	579	0.066	38	0.1	0.1	7.367	A
C-A	17	4			17				
A-B	21	5			21				
A-C	12	3			12				

2020 Base, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		5.31	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2020 Base	PM	ONE HOUR	17:00	18:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	18	100.000
B		ONE HOUR	✓	42	100.000
C		ONE HOUR	✓	38	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	12	6
	B	5	0	37
	C	10	28	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
	A	0	17	0
	B	0	0	6
	C	10	11	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.08	7.54	0.1	A	39	58
C-AB	0.05	7.32	0.1	A	26	39
C-A					9	13
A-B					11	17
A-C					6	8

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	32	8	550	0.058	31	0.0	0.1	7.300	A
C-AB	21	5	576	0.037	21	0.0	0.0	7.195	A
C-A	7	2			7				
A-B	9	2			9				
A-C	5	1			5				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	38	9	549	0.069	38	0.1	0.1	7.403	A
C-AB	25	6	577	0.044	25	0.0	0.1	7.247	A
C-A	9	2			9				
A-B	11	3			11				
A-C	6	1			6				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	46	12	549	0.085	46	0.1	0.1	7.541	A
C-AB	31	8	577	0.054	31	0.1	0.1	7.316	A
C-A	11	3			11				
A-B	14	3			14				
A-C	7	2			7				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	46	12	549	0.085	46	0.1	0.1	7.541	A
C-AB	31	8	577	0.054	31	0.1	0.1	7.319	A
C-A	11	3			11				
A-B	14	3			14				
A-C	7	2			7				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	38	9	549	0.069	38	0.1	0.1	7.405	A
C-AB	25	6	577	0.044	25	0.1	0.1	7.248	A
C-A	9	2			9				
A-B	11	3			11				
A-C	6	1			6				

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	32	8	550	0.058	32	0.1	0.1	7.310	A
C-AB	21	5	576	0.037	21	0.1	0.0	7.202	A
C-A	7	2			7				
A-B	9	2			9				
A-C	5	1			5				

2022 Base, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		5.76	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2022 Base	AM	ONE HOUR	08:00	09:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	46	100.000
B		ONE HOUR	✓	87	100.000
C		ONE HOUR	✓	75	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
From		A	B	C
	A	0	29	17
	B	29	0	58
	C	24	51	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
From		A	B	C	
	A	0	0	0	
	B	4	0	4	
	C	0	11	0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.19	9.14	0.2	A	80	119
C-AB	0.10	7.61	0.1	A	49	73
C-A					20	31
A-B					26	39
A-C					16	23

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	65	16	511	0.128	65	0.0	0.2	8.388	A
C-AB	40	10	579	0.068	39	0.0	0.1	7.372	A
C-A	17	4			17				
A-B	22	5			22				
A-C	13	3			13				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	78	20	508	0.154	78	0.2	0.2	8.695	A
C-AB	47	12	580	0.082	47	0.1	0.1	7.475	A
C-A	20	5			20				
A-B	26	6			26				
A-C	15	4			15				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	96	24	505	0.189	95	0.2	0.2	9.128	A
C-AB	59	15	581	0.101	59	0.1	0.1	7.610	A
C-A	24	6			24				
A-B	31	8			31				
A-C	19	5			19				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	96	24	505	0.189	96	0.2	0.2	9.137	A
C-AB	59	15	581	0.101	59	0.1	0.1	7.610	A
C-A	24	6			24				
A-B	31	8			31				
A-C	19	5			19				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	78	20	508	0.154	78	0.2	0.2	8.709	A
C-AB	47	12	580	0.082	48	0.1	0.1	7.475	A
C-A	20	5			20				
A-B	26	6			26				
A-C	15	4			15				

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	65	16	510	0.128	66	0.2	0.2	8.418	A
C-AB	40	10	579	0.068	40	0.1	0.1	7.380	A
C-A	17	4			17				
A-B	22	5			22				
A-C	13	3			13				

2022 Base, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		5.33	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2022 Base	PM	ONE HOUR	17:00	18:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	19	100.000
B		ONE HOUR	✓	43	100.000
C		ONE HOUR	✓	39	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	13	6
	B	5	0	38
	C	11	29	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
	A	0	17	0
	B	0	0	6
	C	10	11	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.09	7.56	0.1	A	40	60
C-AB	0.06	7.33	0.1	A	27	40
C-A					9	14
A-B					12	17
A-C					6	9

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	33	8	550	0.059	32	0.0	0.1	7.314	A
C-AB	22	5	576	0.038	22	0.0	0.0	7.202	A
C-A	8	2			8				
A-B	10	2			10				
A-C	5	1			5				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	39	10	549	0.071	39	0.1	0.1	7.420	A
C-AB	26	7	577	0.045	26	0.0	0.1	7.255	A
C-A	9	2			9				
A-B	11	3			11				
A-C	6	1			6				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	48	12	548	0.087	48	0.1	0.1	7.563	A
C-AB	32	8	577	0.056	32	0.1	0.1	7.327	A
C-A	11	3			11				
A-B	14	3			14				
A-C	7	2			7				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	48	12	548	0.087	48	0.1	0.1	7.563	A
C-AB	32	8	577	0.056	32	0.1	0.1	7.330	A
C-A	11	3			11				
A-B	14	3			14				
A-C	7	2			7				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	39	10	549	0.071	39	0.1	0.1	7.425	A
C-AB	26	7	577	0.045	26	0.1	0.1	7.257	A
C-A	9	2			9				
A-B	11	3			11				
A-C	6	1			6				

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	33	8	550	0.059	33	0.1	0.1	7.322	A
C-AB	22	5	576	0.038	22	0.1	0.0	7.206	A
C-A	8	2			8				
A-B	10	2			10				
A-C	5	1			5				

2035 Base, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		5.91	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2035 Base	AM	ONE HOUR	08:00	09:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	50	100.000
B		ONE HOUR	✓	96	100.000
C		ONE HOUR	✓	83	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	32	19
	B	32	0	64
	C	27	56	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
	A	0	0	0
	B	4	0	4
	C	0	11	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.21	9.41	0.3	A	88	132
C-AB	0.11	7.69	0.1	A	54	81
C-A					22	34
A-B					29	44
A-C					17	26

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	72	18	509	0.142	72	0.0	0.2	8.543	A
C-AB	44	11	579	0.076	44	0.0	0.1	7.423	A
C-A	19	5			19				
A-B	24	6			24				
A-C	14	4			14				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	86	22	507	0.171	86	0.2	0.2	8.897	A
C-AB	53	13	581	0.091	53	0.1	0.1	7.539	A
C-A	22	6			22				
A-B	28	7			28				
A-C	17	4			17				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	106	26	504	0.210	106	0.2	0.3	9.403	A
C-AB	65	16	582	0.112	65	0.1	0.1	7.692	A
C-A	26	7			26				
A-B	35	9			35				
A-C	21	5			21				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	106	26	504	0.210	106	0.3	0.3	9.415	A
C-AB	65	16	582	0.112	65	0.1	0.1	7.691	A
C-A	26	7			26				
A-B	35	9			35				
A-C	21	5			21				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	86	22	507	0.171	87	0.3	0.2	8.915	A
C-AB	53	13	581	0.091	53	0.1	0.1	7.538	A
C-A	22	6			22				
A-B	28	7			28				
A-C	17	4			17				

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	72	18	509	0.142	73	0.2	0.2	8.578	A
C-AB	44	11	579	0.076	44	0.1	0.1	7.431	A
C-A	19	5			19				
A-B	24	6			24				
A-C	14	4			14				

2035 Base, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		5.38	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2035 Base	PM	ONE HOUR	17:00	18:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	21	100.000
B		ONE HOUR	✓	48	100.000
C		ONE HOUR	✓	43	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	14	7
	B	6	0	42
	C	12	32	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
	A	0	17	0
	B	0	0	6
	C	10	11	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.10	7.65	0.1	A	44	66
C-AB	0.06	7.37	0.1	A	30	44
C-A					10	15
A-B					13	19
A-C					6	10

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	36	9	550	0.066	36	0.0	0.1	7.370	A
C-AB	24	6	576	0.042	24	0.0	0.0	7.230	A
C-A	8	2			8				
A-B	11	3			11				
A-C	5	1			5				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	43	11	549	0.079	43	0.1	0.1	7.488	A
C-AB	29	7	577	0.050	29	0.0	0.1	7.289	A
C-A	10	2			10				
A-B	13	3			13				
A-C	6	2			6				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	53	13	548	0.096	53	0.1	0.1	7.650	A
C-AB	36	9	578	0.062	36	0.1	0.1	7.370	A
C-A	12	3			12				
A-B	15	4			15				
A-C	8	2			8				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	53	13	548	0.096	53	0.1	0.1	7.650	A
C-AB	36	9	578	0.062	36	0.1	0.1	7.373	A
C-A	12	3			12				
A-B	15	4			15				
A-C	8	2			8				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	43	11	549	0.079	43	0.1	0.1	7.491	A
C-AB	29	7	577	0.050	29	0.1	0.1	7.294	A
C-A	10	2			10				
A-B	13	3			13				
A-C	6	2			6				

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	36	9	550	0.066	36	0.1	0.1	7.380	A
C-AB	24	6	576	0.042	24	0.1	0.1	7.237	A
C-A	8	2			8				
A-B	11	3			11				
A-C	5	1			5				

2022 + Dev , AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		6.62	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2022 + Dev	AM	ONE HOUR	08:00	09:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	50	100.000
B		ONE HOUR	✓	119	100.000
C		ONE HOUR	✓	83	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	33	17
	B	39	0	80
	C	24	59	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	A	B	C	
From	A	0	0	0
	B	4	0	4
	C	0	11	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.26	10.04	0.4	B	109	164
C-AB	0.12	7.75	0.2	A	56	84
C-A					20	30
A-B					30	45
A-C					16	23

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	90	22	509	0.176	89	0.0	0.2	8.879	A
C-AB	45	11	578	0.079	45	0.0	0.1	7.465	A
C-A	17	4			17				
A-B	25	6			25				
A-C	13	3			13				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	107	27	507	0.211	107	0.2	0.3	9.348	A
C-AB	55	14	579	0.094	55	0.1	0.1	7.590	A
C-A	20	5			20				
A-B	30	7			30				
A-C	15	4			15				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	131	33	504	0.260	131	0.3	0.4	10.026	B
C-AB	68	17	580	0.116	67	0.1	0.2	7.754	A
C-A	24	6			24				
A-B	36	9			36				
A-C	19	5			19				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	131	33	504	0.260	131	0.4	0.4	10.044	B
C-AB	68	17	580	0.116	68	0.2	0.2	7.755	A
C-A	24	6			24				
A-B	36	9			36				
A-C	19	5			19				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	107	27	507	0.211	107	0.4	0.3	9.373	A
C-AB	55	14	579	0.094	55	0.2	0.1	7.590	A
C-A	20	5			20				
A-B	30	7			30				
A-C	15	4			15				

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	90	22	509	0.176	90	0.3	0.2	8.929	A
C-AB	46	11	578	0.079	46	0.1	0.1	7.474	A
C-A	17	4			17				
A-B	25	6			25				
A-C	13	3			13				

2022 + Dev , PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		5.76	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2022 + Dev	PM	ONE HOUR	17:00	18:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	27	100.000
B		ONE HOUR	✓	59	100.000
C		ONE HOUR	✓	56	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
From		A	B	C
	A	0	20	6
	B	7	0	51
	C	11	46	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
From		A	B	C
	A	0	17	0
	B	0	0	6
	C	10	11	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.12	7.86	0.1	A	54	81
C-AB	0.09	7.62	0.1	A	43	64
C-A					9	13
A-B					19	28
A-C					6	9

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	44	11	549	0.080	44	0.0	0.1	7.496	A
C-AB	35	9	575	0.060	34	0.0	0.1	7.389	A
C-A	7	2			7				
A-B	15	4			15				
A-C	5	1			5				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	53	13	548	0.096	53	0.1	0.1	7.649	A
C-AB	42	10	575	0.072	42	0.1	0.1	7.487	A
C-A	9	2			9				
A-B	18	5			18				
A-C	6	1			6				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	65	16	547	0.118	64	0.1	0.1	7.854	A
C-AB	51	13	575	0.089	51	0.1	0.1	7.619	A
C-A	11	3			11				
A-B	22	6			22				
A-C	7	2			7				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	65	16	547	0.118	65	0.1	0.1	7.857	A
C-AB	51	13	575	0.089	51	0.1	0.1	7.619	A
C-A	11	3			11				
A-B	22	6			22				
A-C	7	2			7				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	53	13	548	0.096	53	0.1	0.1	7.652	A
C-AB	42	10	575	0.072	42	0.1	0.1	7.489	A
C-A	9	2			9				
A-B	18	5			18				
A-C	6	1			6				

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	44	11	549	0.080	44	0.1	0.1	7.508	A
C-AB	35	9	575	0.060	35	0.1	0.1	7.397	A
C-A	7	2			7				
A-B	15	4			15				
A-C	5	1			5				

2035 + Dev , AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		6.78	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2035 + Dev	AM	ONE HOUR	08:00	09:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	55	100.000
B		ONE HOUR	✓	128	100.000
C		ONE HOUR	✓	91	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
From		A	B	C
	A	0	36	19
	B	42	0	86
	C	27	64	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
From		A	B	C
	A	0	0	0
	B	4	0	4
	C	0	11	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.28	10.38	0.4	B	118	177
C-AB	0.13	7.84	0.2	A	61	92
C-A					22	33
A-B					33	50
A-C					17	26

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	97	24	508	0.190	96	0.0	0.2	9.053	A
C-AB	50	12	579	0.086	49	0.0	0.1	7.522	A
C-A	19	5			19				
A-B	27	7			27				
A-C	14	4			14				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	115	29	506	0.228	115	0.2	0.3	9.582	A
C-AB	60	15	580	0.104	60	0.1	0.1	7.656	A
C-A	22	5			22				
A-B	32	8			32				
A-C	17	4			17				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	141	35	502	0.281	141	0.3	0.4	10.358	B
C-AB	74	19	581	0.128	74	0.1	0.2	7.841	A
C-A	26	6			26				
A-B	40	10			40				
A-C	21	5			21				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	141	35	502	0.281	141	0.4	0.4	10.381	B
C-AB	74	19	581	0.128	74	0.2	0.2	7.843	A
C-A	26	6			26				
A-B	40	10			40				
A-C	21	5			21				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	115	29	506	0.228	116	0.4	0.3	9.614	A
C-AB	60	15	580	0.104	60	0.2	0.1	7.653	A
C-A	22	5			22				
A-B	32	8			32				
A-C	17	4			17				

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	97	24	508	0.190	97	0.3	0.2	9.107	A
C-AB	50	12	579	0.086	50	0.1	0.1	7.526	A
C-A	19	5			19				
A-B	27	7			27				
A-C	14	4			14				

2035 + Dev , PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		5.80	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2035 + Dev	PM	ONE HOUR	17:00	18:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	29	100.000
B		ONE HOUR	✓	63	100.000
C		ONE HOUR	✓	60	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	22	7
	B	8	0	56
	C	12	49	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	A	B	C	
From	A	0	17	0
	B	0	0	6
	C	10	11	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.13	7.95	0.2	A	58	87
C-AB	0.10	7.67	0.1	A	45	68
C-A					10	15
A-B					20	30
A-C					6	10

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	48	12	548	0.087	47	0.0	0.1	7.547	A
C-AB	37	9	575	0.065	37	0.0	0.1	7.419	A
C-A	8	2			8				
A-B	16	4			16				
A-C	5	1			5				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	57	14	547	0.104	57	0.1	0.1	7.720	A
C-AB	45	11	575	0.077	44	0.1	0.1	7.524	A
C-A	10	2			10				
A-B	19	5			19				
A-C	6	2			6				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	70	17	546	0.128	70	0.1	0.2	7.948	A
C-AB	55	14	576	0.095	55	0.1	0.1	7.666	A
C-A	12	3			12				
A-B	24	6			24				
A-C	8	2			8				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	70	17	546	0.128	70	0.2	0.2	7.951	A
C-AB	55	14	576	0.095	55	0.1	0.1	7.669	A
C-A	12	3			12				
A-B	24	6			24				
A-C	8	2			8				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	57	14	547	0.104	57	0.2	0.1	7.727	A
C-AB	45	11	575	0.077	45	0.1	0.1	7.529	A
C-A	10	2			10				
A-B	19	5			19				
A-C	6	2			6				

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	48	12	548	0.087	48	0.1	0.1	7.566	A
C-AB	37	9	575	0.065	37	0.1	0.1	7.429	A
C-A	8	2			8				
A-B	16	4			16				
A-C	5	1			5				

Appendix H

Junctions 9	
ARCADY 9 - Roundabout Module	
Version: 9.5.1.7462 © Copyright TRL Limited, 2019	
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Filename: Channel View Mini Roundabout.j9
Path: K:\T20\Jobs\T20.101 - Aberavon Seafront\Analysis
Report generation date: 14/10/2020 12:04:15

»2018 Base, AM
 »2018 Base, PM
 »2020 Base, AM
 »2020 Base, PM
 »2022 Base, AM
 »2022 Base, PM
 »2035 Base, AM
 »2035 Base, PM
 »2022 + Dev , AM
 »2022 + Dev , PM
 »2035 + Dev , AM
 »2035 + Dev , PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	2018 Base									
Arm 1	D1	0.1	5.75	0.08	A	D2	0.1	6.80	0.06	A
Arm 2		0.2	4.69	0.17	A		0.4	5.10	0.25	A
Arm 3		0.2	4.76	0.17	A		0.4	5.10	0.25	A
	2020 Base									
Arm 1	D3	0.1	5.79	0.08	A	D4	0.1	6.86	0.06	A
Arm 2		0.2	4.72	0.17	A		0.4	5.14	0.25	A
Arm 3		0.2	4.80	0.18	A		0.4	5.15	0.26	A
	2022 Base									
Arm 1	D5	0.1	5.82	0.08	A	D6	0.1	6.92	0.07	A
Arm 2		0.2	4.75	0.18	A		0.4	5.20	0.26	A
Arm 3		0.2	4.83	0.18	A		0.4	5.20	0.26	A
	2035 Base									
Arm 1	D7	0.1	5.97	0.09	A	D8	0.1	7.19	0.08	A
Arm 2		0.3	4.88	0.20	A		0.4	5.42	0.29	A
Arm 3		0.3	4.97	0.20	A		0.4	5.43	0.29	A
	2022 + Dev									
Arm 1	D9	0.1	6.04	0.12	A	D10	0.1	7.14	0.09	A
Arm 2		0.2	4.81	0.18	A		0.4	5.30	0.28	A
Arm 3		0.3	4.88	0.19	A		0.4	5.39	0.28	A
	2035 + Dev									
Arm 1	D11	0.1	6.19	0.13	A	D12	0.1	7.43	0.10	A
Arm 2		0.3	4.94	0.20	A		0.5	5.54	0.30	A
Arm 3		0.3	5.02	0.21	A		0.5	5.63	0.31	A

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

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

File summary

File Description

Title	
Location	
Site number	
Date	31/07/2018
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	ATRANS\Katie
Description	

Units

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

Analysis Options

Mini-roundabout model	Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
JUNCTIONS 9	5.75				0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2018 Base	AM	ONE HOUR	08:00	09:30	15	✓
D2	2018 Base	PM	ONE HOUR	17:00	18:30	15	✓
D3	2020 Base	AM	ONE HOUR	08:00	09:30	15	✓
D4	2020 Base	PM	ONE HOUR	17:00	18:30	15	✓
D5	2022 Base	AM	ONE HOUR	08:00	09:30	15	✓
D6	2022 Base	PM	ONE HOUR	17:00	18:30	15	✓
D7	2035 Base	AM	ONE HOUR	08:00	09:30	15	✓
D8	2035 Base	PM	ONE HOUR	17:00	18:30	15	✓
D9	2022 + Dev	AM	ONE HOUR	08:00	09:30	15	✓
D10	2022 + Dev	PM	ONE HOUR	17:00	18:30	15	✓
D11	2035 + Dev	AM	ONE HOUR	08:00	09:30	15	✓
D12	2035 + Dev	PM	ONE HOUR	17:00	18:30	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2018 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 2 and 3 have 85% of the total flow for the roundabout for one or more time segments]

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3	4.87	A

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

Arm	Name	Description
1	Channel View	
2	Princess Margaret Way (E)	
3	Princess Margaret Way (W)	

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	3.33	3.33	5.04	1.4	14.00	6.93	0.0	
2	4.66	4.00	4.16	1.1	19.22	16.64	0.0	
3	4.36	4.36	5.00	2.2	12.63	9.10	0.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.616	771
2	0.689	1020
3	0.656	1025

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2018 Base	AM	ONE HOUR	08:00	09:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	50	100.000
2		ONE HOUR	✓	151	100.000
3		ONE HOUR	✓	154	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	1	2	3	
From	1	3	27	20
	2	31	6	114
	3	46	106	2

Vehicle Mix

Heavy Vehicle Percentages

	To			
	1	2	3	
From	1	0	4	0
	2	0	0	12
	3	7	10	33

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.08	5.75	0.1	A	46	69
2	0.17	4.69	0.2	A	139	208
3	0.17	4.76	0.2	A	141	212

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	38	9	85	719	0.052	37	60	0.0	0.1	5.394	A
2	114	28	19	1007	0.113	113	104	0.0	0.1	4.377	A
3	116	29	30	1005	0.115	115	102	0.0	0.1	4.422	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	45	11	102	708	0.063	45	72	0.1	0.1	5.541	A
2	136	34	22	1005	0.135	136	125	0.1	0.2	4.506	A
3	138	35	36	1001	0.138	138	122	0.1	0.2	4.562	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	55	14	125	694	0.079	55	88	0.1	0.1	5.751	A
2	166	42	27	1001	0.166	166	153	0.2	0.2	4.688	A
3	170	42	44	996	0.170	169	150	0.2	0.2	4.761	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	55	14	126	694	0.079	55	88	0.1	0.1	5.752	A
2	166	42	28	1001	0.166	166	153	0.2	0.2	4.690	A
3	170	42	44	996	0.170	170	150	0.2	0.2	4.763	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	45	11	103	708	0.063	45	72	0.1	0.1	5.543	A
2	136	34	23	1005	0.135	136	125	0.2	0.2	4.510	A
3	138	35	36	1001	0.138	139	122	0.2	0.2	4.565	A

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	38	9	86	718	0.052	38	60	0.1	0.1	5.400	A
2	114	28	19	1007	0.113	114	105	0.2	0.1	4.384	A
3	116	29	30	1005	0.115	116	103	0.2	0.1	4.430	A

2018 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 2 and 3 have 92% of the total flow for the roundabout for one or more time segments]

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3	5.22	A

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2018 Base	PM	ONE HOUR	17:00	18:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	35	100.000
2		ONE HOUR	✓	226	100.000
3		ONE HOUR	✓	228	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		1	2	3
	1	0	22	13
	2	16	9	201
	3	20	201	7

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1	2	3
	1	0	18	0
	2	0	0	8
	3	10	7	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.06	6.80	0.1	A	32	48
2	0.25	5.10	0.4	A	207	311
3	0.25	5.10	0.4	A	209	314

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	26	7	163	671	0.039	26	27	0.0	0.0	6.170	A
2	170	43	15	1010	0.168	169	174	0.0	0.2	4.580	A
3	172	43	19	1012	0.170	171	166	0.0	0.2	4.574	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	31	8	195	651	0.048	31	32	0.0	0.1	6.422	A
2	203	51	18	1008	0.202	203	208	0.2	0.3	4.787	A
3	205	51	22	1010	0.203	205	198	0.2	0.3	4.784	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	39	10	239	624	0.062	38	40	0.1	0.1	6.795	A
2	249	62	22	1005	0.248	249	255	0.3	0.3	5.091	A
3	251	63	27	1007	0.249	251	243	0.3	0.4	5.095	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	39	10	239	624	0.062	39	40	0.1	0.1	6.797	A
2	249	62	22	1005	0.248	249	255	0.3	0.4	5.095	A
3	251	63	28	1006	0.249	251	243	0.4	0.4	5.099	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	31	8	195	651	0.048	32	32	0.1	0.1	6.427	A
2	203	51	18	1008	0.202	203	209	0.4	0.3	4.794	A
3	205	51	23	1010	0.203	205	199	0.4	0.3	4.792	A

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	26	7	164	671	0.039	26	27	0.1	0.0	6.180	A
2	170	43	15	1010	0.168	170	175	0.3	0.2	4.593	A
3	172	43	19	1012	0.170	172	167	0.3	0.2	4.585	A

2020 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 2 and 3 have 85% of the total flow for the roundabout for one or more time segments]

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3	4.90	A

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2020 Base	AM	ONE HOUR	08:00	09:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	51	100.000
2		ONE HOUR	✓	155	100.000
3		ONE HOUR	✓	158	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		1	2	3
	1	3	28	21
	2	32	6	117
	3	47	109	2

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1	2	3
	1	0	4	0
	2	0	0	12
	3	7	10	33

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.08	5.79	0.1	A	47	71
2	0.17	4.72	0.2	A	142	214
3	0.18	4.80	0.2	A	145	218

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	39	10	88	717	0.054	38	62	0.0	0.1	5.415	A
2	117	29	19	1007	0.116	116	107	0.0	0.1	4.395	A
3	119	30	31	1004	0.119	119	105	0.0	0.1	4.441	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	46	12	105	707	0.065	46	74	0.1	0.1	5.567	A
2	140	35	23	1004	0.139	139	128	0.1	0.2	4.529	A
3	142	36	37	1000	0.142	142	126	0.1	0.2	4.587	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	57	14	129	692	0.082	57	90	0.1	0.1	5.785	A
2	171	43	28	1001	0.171	171	157	0.2	0.2	4.718	A
3	174	44	45	995	0.175	174	154	0.2	0.2	4.794	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	57	14	129	692	0.082	57	91	0.1	0.1	5.786	A
2	171	43	28	1001	0.171	171	157	0.2	0.2	4.720	A
3	174	44	45	995	0.175	174	154	0.2	0.2	4.796	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	46	12	106	706	0.065	46	74	0.1	0.1	5.569	A
2	140	35	23	1004	0.139	140	129	0.2	0.2	4.531	A
3	142	36	37	1000	0.142	143	126	0.2	0.2	4.591	A

09:15 - 09:30

Am	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	39	10	88	717	0.054	39	62	0.1	0.1	5.420	A
2	117	29	19	1007	0.116	117	108	0.2	0.1	4.403	A
3	119	30	31	1004	0.119	119	105	0.2	0.1	4.450	A

2020 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 2 and 3 have 92% of the total flow for the roundabout for one or more time segments]

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3	5.27	A

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2020 Base	PM	ONE HOUR	17:00	18:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	36	100.000
2		ONE HOUR	✓	232	100.000
3		ONE HOUR	✓	234	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		1	2	3
	1	0	23	13
	2	16	9	206
	3	21	206	7

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1	2	3
	1	0	18	0
	2	0	0	8
	3	10	7	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.06	6.86	0.1	A	33	49
2	0.25	5.14	0.4	A	213	319
3	0.26	5.15	0.4	A	215	322

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	27	7	167	669	0.040	27	28	0.0	0.0	6.203	A
2	175	44	15	1010	0.173	174	178	0.0	0.2	4.606	A
3	176	44	19	1012	0.174	175	170	0.0	0.2	4.601	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	32	8	200	648	0.050	32	33	0.0	0.1	6.465	A
2	209	52	18	1007	0.207	208	214	0.2	0.3	4.822	A
3	211	53	23	1009	0.209	210	204	0.2	0.3	4.820	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	40	10	245	620	0.064	40	41	0.1	0.1	6.853	A
2	256	64	23	1005	0.254	255	262	0.3	0.4	5.140	A
3	258	64	28	1006	0.256	257	250	0.3	0.4	5.145	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	40	10	245	620	0.064	40	41	0.1	0.1	6.856	A
2	256	64	23	1005	0.254	256	262	0.4	0.4	5.144	A
3	258	64	28	1006	0.256	258	250	0.4	0.4	5.149	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	32	8	201	648	0.050	32	33	0.1	0.1	6.470	A
2	209	52	18	1007	0.207	209	215	0.4	0.3	4.828	A
3	211	53	23	1009	0.209	211	204	0.4	0.3	4.826	A

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	27	7	168	668	0.041	27	28	0.1	0.0	6.213	A
2	175	44	15	1010	0.173	175	180	0.3	0.2	4.620	A
3	176	44	19	1012	0.174	177	171	0.3	0.2	4.613	A

2022 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 2 and 3 have 85% of the total flow for the roundabout for one or more time segments]

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3	4.94	A

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2022 Base	AM	ONE HOUR	08:00	09:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	53	100.000
2		ONE HOUR	✓	160	100.000
3		ONE HOUR	✓	163	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		1	2	3
	1	3	29	21
	2	33	6	121
	3	49	112	2

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1	2	3
	1	0	4	0
	2	0	0	12
	3	7	10	33

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.08	5.82	0.1	A	49	73
2	0.18	4.75	0.2	A	147	220
3	0.18	4.83	0.2	A	150	224

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	40	10	90	716	0.056	40	63	0.0	0.1	5.437	A
2	120	30	20	1007	0.120	120	110	0.0	0.1	4.414	A
3	123	31	32	1004	0.122	122	108	0.0	0.2	4.461	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	48	12	108	705	0.068	48	76	0.1	0.1	5.594	A
2	144	36	24	1004	0.143	144	132	0.1	0.2	4.553	A
3	147	37	38	1000	0.147	146	129	0.2	0.2	4.613	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	58	15	133	690	0.085	58	93	0.1	0.1	5.822	A
2	176	44	29	1000	0.176	176	162	0.2	0.2	4.750	A
3	180	45	47	994	0.181	179	158	0.2	0.2	4.830	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	58	15	133	690	0.085	58	93	0.1	0.1	5.823	A
2	176	44	29	1000	0.176	176	162	0.2	0.2	4.752	A
3	180	45	47	994	0.181	180	159	0.2	0.2	4.832	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	48	12	109	704	0.068	48	76	0.1	0.1	5.599	A
2	144	36	24	1004	0.143	144	132	0.2	0.2	4.555	A
3	147	37	38	1000	0.147	147	130	0.2	0.2	4.616	A

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	40	10	91	715	0.056	40	64	0.1	0.1	5.442	A
2	120	30	20	1006	0.120	120	111	0.2	0.1	4.421	A
3	123	31	32	1004	0.122	123	109	0.2	0.2	4.469	A

2022 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 2 and 3 have 92% of the total flow for the roundabout for one or more time segments]

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3	5.32	A

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2022 Base	PM	ONE HOUR	17:00	18:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	37	100.000
2		ONE HOUR	✓	239	100.000
3		ONE HOUR	✓	241	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	1	2	3	
From	1	0	23	14
	2	17	10	212
	3	21	212	7

Vehicle Mix

Heavy Vehicle Percentages

	To			
	1	2	3	
From	1	0	18	0
	2	0	0	8
	3	10	7	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.07	6.92	0.1	A	34	51
2	0.26	5.20	0.4	A	219	329
3	0.26	5.20	0.4	A	221	332

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	28	7	172	666	0.042	28	28	0.0	0.0	6.240	A
2	180	45	16	1009	0.178	179	184	0.0	0.2	4.636	A
3	181	45	20	1012	0.179	180	175	0.0	0.2	4.631	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	33	8	206	645	0.052	33	34	0.0	0.1	6.512	A
2	215	54	19	1007	0.213	214	220	0.2	0.3	4.860	A
3	217	54	24	1009	0.215	216	210	0.2	0.3	4.859	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	41	10	252	616	0.066	41	42	0.1	0.1	6.919	A
2	263	66	23	1004	0.262	263	270	0.3	0.4	5.194	A
3	265	66	29	1005	0.264	265	257	0.3	0.4	5.200	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	41	10	252	616	0.066	41	42	0.1	0.1	6.921	A
2	263	66	23	1004	0.262	263	270	0.4	0.4	5.198	A
3	265	66	29	1005	0.264	265	257	0.4	0.4	5.204	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	33	8	206	644	0.052	33	34	0.1	0.1	6.520	A
2	215	54	19	1007	0.213	215	221	0.4	0.3	4.869	A
3	217	54	24	1009	0.215	217	210	0.4	0.3	4.866	A

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	28	7	173	665	0.042	28	29	0.1	0.0	6.250	A
2	180	45	16	1009	0.178	180	185	0.3	0.2	4.650	A
3	181	45	20	1011	0.179	182	176	0.3	0.2	4.645	A

2035 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 2 and 3 have 85% of the total flow for the roundabout for one or more time segments]

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3	5.07	A

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2035 Base	AM	ONE HOUR	08:00	09:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	59	100.000
2		ONE HOUR	✓	177	100.000
3		ONE HOUR	✓	181	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		1	2	3
	1	4	32	23
	2	36	7	134
	3	54	124	2

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1	2	3
	1	0	4	0
	2	0	0	12
	3	7	10	33

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.09	5.97	0.1	A	54	81
2	0.20	4.88	0.3	A	162	244
3	0.20	4.97	0.3	A	166	249

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	44	11	100	710	0.062	44	70	0.0	0.1	5.518	A
2	133	33	22	1005	0.133	133	122	0.0	0.2	4.487	A
3	136	34	35	1001	0.136	135	119	0.0	0.2	4.537	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	53	13	120	697	0.076	53	84	0.1	0.1	5.701	A
2	159	40	26	1002	0.159	159	146	0.2	0.2	4.646	A
3	162	41	42	997	0.163	162	143	0.2	0.2	4.713	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	65	16	147	681	0.095	64	103	0.1	0.1	5.964	A
2	195	49	32	998	0.195	195	179	0.2	0.3	4.875	A
3	199	50	52	991	0.201	199	175	0.2	0.3	4.967	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	65	16	147	681	0.095	65	103	0.1	0.1	5.965	A
2	195	49	32	998	0.195	195	179	0.3	0.3	4.877	A
3	199	50	52	991	0.201	199	176	0.3	0.3	4.970	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	53	13	120	697	0.076	53	84	0.1	0.1	5.704	A
2	159	40	26	1002	0.159	159	147	0.3	0.2	4.651	A
3	162	41	42	997	0.163	163	144	0.3	0.2	4.718	A

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	44	11	101	709	0.062	44	71	0.1	0.1	5.529	A
2	133	33	22	1005	0.133	133	123	0.2	0.2	4.496	A
3	136	34	35	1001	0.136	136	120	0.2	0.2	4.551	A

2035 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 2 and 3 have 92% of the total flow for the roundabout for one or more time segments]

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3	5.55	A

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2035 Base	PM	ONE HOUR	17:00	18:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	41	100.000
2		ONE HOUR	✓	265	100.000
3		ONE HOUR	✓	267	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		1	2	3
	1	0	26	15
	2	19	11	235
	3	23	235	8

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1	2	3
	1	0	18	0
	2	0	0	8
	3	10	7	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.08	7.19	0.1	A	38	56
2	0.29	5.42	0.4	A	243	364
3	0.29	5.43	0.4	A	245	367

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	31	8	190	654	0.047	31	32	0.0	0.1	6.384	A
2	199	50	18	1008	0.198	198	203	0.0	0.3	4.752	A
3	201	50	22	1010	0.199	200	194	0.0	0.3	4.749	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	37	9	228	631	0.058	37	38	0.1	0.1	6.702	A
2	238	59	21	1006	0.237	238	244	0.3	0.3	5.016	A
3	240	60	26	1007	0.238	240	232	0.3	0.3	5.018	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	45	11	279	599	0.075	45	46	0.1	0.1	7.183	A
2	291	73	26	1002	0.291	291	299	0.3	0.4	5.412	A
3	294	73	32	1003	0.293	293	284	0.3	0.4	5.423	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	45	11	280	599	0.075	45	46	0.1	0.1	7.186	A
2	291	73	26	1002	0.291	291	299	0.4	0.4	5.418	A
3	294	73	32	1003	0.293	294	285	0.4	0.4	5.429	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	37	9	229	630	0.058	37	38	0.1	0.1	6.711	A
2	238	59	21	1006	0.237	238	245	0.4	0.3	5.026	A
3	240	60	26	1007	0.238	240	233	0.4	0.3	5.026	A

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	31	8	192	653	0.047	31	32	0.1	0.1	6.396	A
2	199	50	18	1008	0.198	199	205	0.3	0.3	4.769	A
3	201	50	22	1010	0.199	201	195	0.3	0.3	4.766	A

2022 + Dev , AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3	5.06	A

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2022 + Dev	AM	ONE HOUR	08:00	09:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	72	100.000
2		ONE HOUR	✓	165	100.000
3		ONE HOUR	✓	168	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		1	2	3
	1	3	40	29
	2	36	6	122
	3	53	113	2

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1	2	3
	1	0	4	0
	2	0	0	12
	3	7	10	33

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.12	6.04	0.1	A	67	100
2	0.18	4.81	0.2	A	151	227
3	0.19	4.88	0.3	A	154	231

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	55	14	91	715	0.076	54	69	0.0	0.1	5.561	A
2	124	31	26	1002	0.124	123	119	0.0	0.2	4.447	A
3	127	32	34	1002	0.126	126	115	0.0	0.2	4.487	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	65	16	109	704	0.093	65	83	0.1	0.1	5.755	A
2	148	37	31	999	0.148	148	143	0.2	0.2	4.597	A
3	151	38	41	998	0.152	151	138	0.2	0.2	4.647	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	80	20	134	689	0.116	80	102	0.1	0.1	6.033	A
2	182	45	38	994	0.183	181	175	0.2	0.2	4.811	A
3	185	46	50	992	0.187	185	169	0.2	0.2	4.875	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	80	20	134	689	0.116	80	102	0.1	0.1	6.036	A
2	182	45	38	994	0.183	181	175	0.2	0.2	4.813	A
3	185	46	50	992	0.187	185	169	0.2	0.3	4.877	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	65	16	109	704	0.093	65	83	0.1	0.1	5.758	A
2	148	37	31	999	0.148	148	143	0.2	0.2	4.602	A
3	151	38	41	998	0.152	151	139	0.3	0.2	4.651	A

09:15 - 09:30

Am	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	55	14	92	715	0.076	55	70	0.1	0.1	5.572	A
2	124	31	26	1002	0.124	124	120	0.2	0.2	4.456	A
3	127	32	34	1002	0.126	127	116	0.2	0.2	4.495	A

2022 + Dev , PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 2 and 3 have 90% of the total flow for the roundabout for one or more time segments]

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3	5.51	A

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2022 + Dev	PM	ONE HOUR	17:00	18:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	52	100.000
2		ONE HOUR	✓	250	100.000
3		ONE HOUR	✓	256	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	1	2	3	
From	1	0	33	19
	2	27	10	213
	3	34	214	7

Vehicle Mix

Heavy Vehicle Percentages

	To			
	1	2	3	
From	1	0	18	0
	2	0	0	8
	3	10	7	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.09	7.14	0.1	A	48	72
2	0.28	5.30	0.4	A	230	345
3	0.28	5.39	0.4	A	235	352

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	39	10	173	665	0.059	39	46	0.0	0.1	6.359	A
2	188	47	20	1006	0.187	187	192	0.0	0.2	4.685	A
3	193	48	28	1006	0.191	192	180	0.0	0.3	4.729	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	47	12	207	644	0.073	47	55	0.1	0.1	6.671	A
2	225	56	24	1004	0.224	225	230	0.2	0.3	4.932	A
3	230	57	33	1003	0.229	230	215	0.3	0.3	4.990	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	57	14	254	615	0.093	57	68	0.1	0.1	7.140	A
2	276	69	29	1000	0.276	275	282	0.3	0.4	5.299	A
3	282	70	41	998	0.282	281	264	0.3	0.4	5.382	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	57	14	254	615	0.093	57	68	0.1	0.1	7.143	A
2	276	69	29	1000	0.276	276	282	0.4	0.4	5.303	A
3	282	70	41	998	0.282	282	264	0.4	0.4	5.387	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	47	12	208	643	0.073	47	56	0.1	0.1	6.678	A
2	225	56	24	1004	0.224	225	231	0.4	0.3	4.941	A
3	230	57	33	1003	0.229	230	216	0.4	0.3	4.997	A

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	39	10	174	664	0.059	39	47	0.1	0.1	6.373	A
2	188	47	20	1006	0.187	189	193	0.3	0.2	4.702	A
3	193	48	28	1006	0.191	193	181	0.3	0.3	4.746	A

2035 + Dev , AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3	5.19	A

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2035 + Dev	AM	ONE HOUR	08:00	09:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	78	100.000
2		ONE HOUR	✓	182	100.000
3		ONE HOUR	✓	186	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		1	2	3
	1	4	43	32
	2	40	7	135
	3	58	125	2

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1	2	3
	1	0	4	0
	2	0	0	12
	3	7	10	33

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.13	6.19	0.1	A	72	108
2	0.20	4.94	0.3	A	167	251
3	0.21	5.02	0.3	A	170	256

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	59	15	101	709	0.083	58	76	0.0	0.1	5.649	A
2	137	34	28	1001	0.137	136	131	0.0	0.2	4.518	A
3	140	35	38	1000	0.140	139	127	0.0	0.2	4.566	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	70	18	121	697	0.101	70	91	0.1	0.1	5.867	A
2	164	41	34	997	0.164	164	157	0.2	0.2	4.691	A
3	167	42	45	995	0.168	167	152	0.2	0.2	4.749	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	86	22	148	680	0.127	86	112	0.1	0.1	6.186	A
2	200	50	41	992	0.202	200	193	0.2	0.3	4.940	A
3	204	51	55	988	0.207	204	186	0.2	0.3	5.016	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	86	22	148	680	0.127	86	112	0.1	0.1	6.189	A
2	200	50	41	992	0.202	200	193	0.3	0.3	4.942	A
3	204	51	55	988	0.207	204	186	0.3	0.3	5.018	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	70	18	121	697	0.101	70	91	0.1	0.1	5.872	A
2	164	41	34	997	0.164	164	158	0.3	0.2	4.698	A
3	167	42	45	995	0.168	167	152	0.3	0.2	4.756	A

09:15 - 09:30

Am	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	59	15	101	709	0.083	59	76	0.1	0.1	5.660	A
2	137	34	28	1001	0.137	137	132	0.2	0.2	4.532	A
3	140	35	38	1000	0.140	140	128	0.2	0.2	4.576	A

2035 + Dev , PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 2 and 3 have 90% of the total flow for the roundabout for one or more time segments]

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3	5.75	A

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2035 + Dev	PM	ONE HOUR	17:00	18:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	56	100.000
2		ONE HOUR	✓	276	100.000
3		ONE HOUR	✓	282	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	1	2	3	
From	1	0	35	21
	2	29	11	236
	3	37	237	8

Vehicle Mix

Heavy Vehicle Percentages

	To			
	1	2	3	
From	1	0	18	0
	2	0	0	8
	3	10	7	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.10	7.43	0.1	A	51	77
2	0.30	5.54	0.5	A	253	380
3	0.31	5.63	0.5	A	259	388

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	42	11	192	653	0.064	42	49	0.0	0.1	6.509	A
2	208	52	22	1005	0.207	207	212	0.0	0.3	4.806	A
3	212	53	30	1005	0.211	211	199	0.0	0.3	4.852	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	50	13	230	630	0.080	50	59	0.1	0.1	6.870	A
2	248	62	26	1002	0.248	248	254	0.3	0.3	5.091	A
3	253	63	36	1001	0.253	253	238	0.3	0.4	5.155	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	62	15	281	598	0.103	61	72	0.1	0.1	7.419	A
2	304	76	32	998	0.305	304	311	0.3	0.5	5.528	A
3	310	78	44	996	0.312	310	291	0.4	0.5	5.620	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	62	15	282	598	0.103	62	73	0.1	0.1	7.425	A
2	304	76	32	998	0.305	304	311	0.5	0.5	5.535	A
3	310	78	44	996	0.312	310	292	0.5	0.5	5.627	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	50	13	230	629	0.080	50	59	0.1	0.1	6.878	A
2	248	62	26	1002	0.248	249	255	0.5	0.4	5.104	A
3	253	63	36	1001	0.253	254	239	0.5	0.4	5.166	A

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	42	11	193	653	0.065	42	50	0.1	0.1	6.525	A
2	208	52	22	1005	0.207	208	213	0.4	0.3	4.823	A
3	212	53	30	1005	0.211	213	200	0.4	0.3	4.872	A

Appendix I

Junctions 9	
ARCADY 9 - Roundabout Module	
Version: 9.5.1.7462 © Copyright TRL Limited, 2019	
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Filename: Victoria Rd Roundabout.j9

Path: K:\T20\Jobs\T20.101 - Aberavon Seafront\Analysis

Report generation date: 14/10/2020 12:06:06

»2018 Base, AM
 »2018 Base, PM
 »2020 Base, AM
 »2020 Base, PM
 »2022 Base , AM
 »2022 Base, PM
 »2035 Base, AM
 »2035 Base , PM
 »2022 + Dev , AM
 »2022 + Dev , PM
 »2035 + Dev , AM
 »2035 + Dev , PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	2018 Base									
Arm 1	D1	0.1	2.86	0.10	A	D2	0.2	3.01	0.18	A
Arm 2		0.1	3.52	0.06	A		0.1	3.93	0.07	A
Arm 3		0.2	3.44	0.13	A		0.3	3.73	0.19	A
	2020 Base									
Arm 1	D3	0.1	2.87	0.11	A	D4	0.2	3.03	0.18	A
Arm 2		0.1	3.53	0.07	A		0.1	3.95	0.07	A
Arm 3		0.2	3.46	0.13	A		0.3	3.76	0.20	A
	2022 Base									
Arm 1	D5	0.1	2.88	0.11	A	D6	0.2	3.05	0.19	A
Arm 2		0.1	3.54	0.07	A		0.1	3.97	0.07	A
Arm 3		0.2	3.47	0.14	A		0.3	3.78	0.20	A
	2035 Base									
Arm 1	D7	0.2	2.92	0.12	A	D8	0.3	3.14	0.21	A
Arm 2		0.1	3.60	0.08	A		0.1	4.06	0.08	A
Arm 3		0.2	3.54	0.15	A		0.3	3.90	0.22	A
	2022 + Dev									
Arm 1	D9	0.1	2.89	0.11	A	D10	0.3	3.09	0.20	A
Arm 2		0.1	3.55	0.07	A		0.1	4.01	0.08	A
Arm 3		0.2	3.52	0.15	A		0.3	3.83	0.21	A
	2035 + Dev									
Arm 1	D11	0.2	2.94	0.13	A	D12	0.3	3.19	0.22	A
Arm 2		0.1	3.62	0.08	A		0.1	4.11	0.09	A
Arm 3		0.2	3.60	0.17	A		0.3	3.95	0.23	A

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

File summary

File Description

Title	
Location	
Site number	
Date	31/07/2018
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	ATRANS\Katie
Description	

Units

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

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2018 Base	AM	ONE HOUR	08:00	09:30	15	✓
D2	2018 Base	PM	ONE HOUR	17:00	18:30	15	✓
D3	2020 Base	AM	ONE HOUR	08:00	09:30	15	✓
D4	2020 Base	PM	ONE HOUR	17:00	18:30	15	✓
D5	2022 Base	AM	ONE HOUR	08:00	09:30	15	✓
D6	2022 Base	PM	ONE HOUR	17:00	18:30	15	✓
D7	2035 Base	AM	ONE HOUR	08:00	09:30	15	✓
D8	2035 Base	PM	ONE HOUR	17:00	18:30	15	✓
D9	2022 + Dev	AM	ONE HOUR	08:00	09:30	15	✓
D10	2022 + Dev	PM	ONE HOUR	17:00	18:30	15	✓
D11	2035 + Dev	AM	ONE HOUR	08:00	09:30	15	✓
D12	2035 + Dev	PM	ONE HOUR	17:00	18:30	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2018 Base, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	3.22	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Victoria Road (N)	
2	Victoria Road (S)	
3	Princess Margaret Way	

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	3.75	5.90	10.4	117.9	128.0	33.2	
2	3.10	5.00	4.0	32.6	28.0	7.7	
3	3.70	5.90	2.9	8.4	128.0	12.1	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.435	1573
2	0.604	1280
3	0.390	1308

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2018 Base	AM	ONE HOUR	08:00	09:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	146	100.000
2		ONE HOUR	✓	69	100.000
3		ONE HOUR	✓	152	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	1	2	3	
From	1	7	29	110
	2	28	0	41
	3	123	24	5

Vehicle Mix

Heavy Vehicle Percentages

	To			
	1	2	3	
From	1	0	14	11
	2	14	0	7
	3	8	8	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.10	2.86	0.1	A	134	201
2	0.06	3.52	0.1	A	63	95
3	0.13	3.44	0.2	A	139	209

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	110	27	22	1564	0.070	110	119	0.0	0.1	2.747	A
2	52	13	92	1225	0.042	52	40	0.0	0.0	3.367	A
3	114	29	26	1298	0.088	114	117	0.0	0.1	3.275	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	131	33	26	1562	0.084	131	142	0.1	0.1	2.792	A
2	62	16	110	1214	0.051	62	48	0.0	0.1	3.428	A
3	137	34	31	1296	0.105	137	140	0.1	0.1	3.343	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	161	40	32	1560	0.103	161	174	0.1	0.1	2.855	A
2	76	19	134	1199	0.063	76	58	0.1	0.1	3.516	A
3	167	42	39	1293	0.129	167	172	0.1	0.2	3.442	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	161	40	32	1560	0.103	161	174	0.1	0.1	2.856	A
2	76	19	134	1199	0.063	76	58	0.1	0.1	3.516	A
3	167	42	39	1293	0.129	167	172	0.2	0.2	3.442	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	131	33	26	1562	0.084	131	142	0.1	0.1	2.792	A
2	62	16	110	1214	0.051	62	48	0.1	0.1	3.431	A
3	137	34	31	1296	0.105	137	140	0.2	0.1	3.344	A

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	110	27	22	1564	0.070	110	119	0.1	0.1	2.750	A
2	52	13	92	1225	0.042	52	40	0.1	0.0	3.370	A
3	114	29	26	1298	0.088	115	118	0.1	0.1	3.275	A

2018 Base, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	3.43	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2018 Base	PM	ONE HOUR	17:00	18:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	251	100.000
2		ONE HOUR	✓	73	100.000
3		ONE HOUR	✓	224	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		1	2	3
	1	2	68	181
	2	42	0	31
	3	165	45	14

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1	2	3
	1	0	7	6
	2	17	0	16
	3	8	9	7

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.18	3.01	0.2	A	230	345
2	0.07	3.93	0.1	A	67	100
3	0.19	3.73	0.3	A	206	308

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	189	47	44	1554	0.122	188	157	0.0	0.1	2.798	A
2	55	14	148	1191	0.046	55	85	0.0	0.1	3.693	A
3	169	42	33	1296	0.130	168	170	0.0	0.2	3.450	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	226	56	53	1550	0.146	226	188	0.1	0.2	2.885	A
2	66	16	177	1173	0.056	66	102	0.1	0.1	3.787	A
3	201	50	40	1293	0.156	201	203	0.2	0.2	3.565	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	276	69	65	1545	0.179	276	230	0.2	0.2	3.012	A
2	80	20	217	1149	0.070	80	124	0.1	0.1	3.925	A
3	247	62	48	1290	0.191	246	249	0.2	0.3	3.731	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	276	69	65	1545	0.179	276	230	0.2	0.2	3.013	A
2	80	20	217	1149	0.070	80	124	0.1	0.1	3.925	A
3	247	62	48	1290	0.191	247	249	0.3	0.3	3.731	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	226	56	53	1550	0.146	226	188	0.2	0.2	2.886	A
2	66	16	177	1173	0.056	66	102	0.1	0.1	3.788	A
3	201	50	40	1293	0.156	202	203	0.3	0.2	3.569	A

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	189	47	44	1554	0.122	189	157	0.2	0.1	2.803	A
2	55	14	148	1191	0.046	55	85	0.1	0.1	3.694	A
3	169	42	33	1296	0.130	169	170	0.2	0.2	3.457	A

2020 Base, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	3.24	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2020 Base	AM	ONE HOUR	08:00	09:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	151	100.000
2		ONE HOUR	✓	71	100.000
3		ONE HOUR	✓	157	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		1	2	3
	1	7	30	114
	2	29	0	42
	3	127	25	5

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1	2	3
	1	0	14	11
	2	14	0	7
	3	8	8	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.11	2.87	0.1	A	139	208
2	0.07	3.53	0.1	A	65	98
3	0.13	3.46	0.2	A	144	216

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	114	28	23	1564	0.073	113	122	0.0	0.1	2.755	A
2	53	13	95	1223	0.044	53	41	0.0	0.0	3.377	A
3	118	30	27	1298	0.091	118	121	0.0	0.1	3.286	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	136	34	27	1562	0.087	136	146	0.1	0.1	2.802	A
2	64	16	113	1212	0.053	64	49	0.0	0.1	3.440	A
3	141	35	32	1296	0.109	141	145	0.1	0.1	3.357	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	166	42	33	1559	0.107	166	179	0.1	0.1	2.868	A
2	78	20	139	1197	0.065	78	61	0.1	0.1	3.532	A
3	173	43	40	1293	0.134	173	177	0.1	0.2	3.461	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	166	42	33	1559	0.107	166	179	0.1	0.1	2.868	A
2	78	20	139	1196	0.065	78	61	0.1	0.1	3.532	A
3	173	43	40	1293	0.134	173	177	0.2	0.2	3.461	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	136	34	27	1562	0.087	136	147	0.1	0.1	2.802	A
2	64	16	113	1212	0.053	64	49	0.1	0.1	3.441	A
3	141	35	32	1296	0.109	141	145	0.2	0.1	3.358	A

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	114	28	23	1564	0.073	114	123	0.1	0.1	2.756	A
2	53	13	95	1223	0.044	53	41	0.1	0.1	3.378	A
3	118	30	27	1298	0.091	118	121	0.1	0.1	3.287	A

2020 Base, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	3.45	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2020 Base	PM	ONE HOUR	17:00	18:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	259	100.000
2		ONE HOUR	✓	75	100.000
3		ONE HOUR	✓	230	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		1	2	3
	1	2	70	187
	2	43	0	32
	3	170	46	14

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1	2	3
	1	0	7	6
	2	17	0	16
	3	8	9	7

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.18	3.03	0.2	A	238	356
2	0.07	3.95	0.1	A	69	103
3	0.20	3.76	0.3	A	211	317

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	195	49	45	1554	0.125	194	161	0.0	0.2	2.811	A
2	56	14	152	1188	0.048	56	87	0.0	0.1	3.706	A
3	173	43	34	1295	0.134	172	175	0.0	0.2	3.465	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	233	58	54	1550	0.150	233	193	0.2	0.2	2.902	A
2	67	17	182	1170	0.058	67	104	0.1	0.1	3.804	A
3	207	52	40	1293	0.160	207	209	0.2	0.2	3.584	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	285	71	66	1545	0.185	285	237	0.2	0.2	3.035	A
2	83	21	223	1145	0.072	82	128	0.1	0.1	3.948	A
3	253	63	50	1289	0.196	253	256	0.2	0.3	3.757	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	285	71	66	1545	0.185	285	237	0.2	0.2	3.035	A
2	83	21	224	1145	0.072	83	128	0.1	0.1	3.948	A
3	253	63	50	1289	0.196	253	257	0.3	0.3	3.757	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	233	58	54	1550	0.150	233	193	0.2	0.2	2.905	A
2	67	17	183	1170	0.058	67	104	0.1	0.1	3.808	A
3	207	52	40	1293	0.160	207	210	0.3	0.2	3.585	A

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	195	49	45	1554	0.125	195	162	0.2	0.2	2.816	A
2	56	14	153	1188	0.048	57	87	0.1	0.1	3.711	A
3	173	43	34	1295	0.134	173	176	0.2	0.2	3.469	A

2022 Base , AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	3.25	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2022 Base	AM	ONE HOUR	08:00	09:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	154	100.000
2		ONE HOUR	✓	72	100.000
3		ONE HOUR	✓	160	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		1	2	3
	1	7	31	116
	2	29	0	43
	3	130	25	5

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1	2	3
	1	0	14	11
	2	14	0	7
	3	8	8	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.11	2.88	0.1	A	141	212
2	0.07	3.54	0.1	A	66	99
3	0.14	3.47	0.2	A	147	220

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	116	29	23	1564	0.074	116	125	0.0	0.1	2.760	A
2	54	14	96	1222	0.044	54	42	0.0	0.1	3.380	A
3	120	30	27	1298	0.093	120	123	0.0	0.1	3.293	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	138	35	27	1562	0.089	138	149	0.1	0.1	2.807	A
2	65	16	115	1211	0.053	65	50	0.1	0.1	3.445	A
3	144	36	32	1296	0.111	144	147	0.1	0.1	3.365	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	170	42	33	1559	0.109	169	183	0.1	0.1	2.876	A
2	79	20	141	1195	0.066	79	62	0.1	0.1	3.538	A
3	176	44	40	1293	0.136	176	180	0.1	0.2	3.471	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	170	42	33	1559	0.109	170	183	0.1	0.1	2.876	A
2	79	20	141	1195	0.066	79	62	0.1	0.1	3.538	A
3	176	44	40	1293	0.136	176	181	0.2	0.2	3.471	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	138	35	27	1562	0.089	139	149	0.1	0.1	2.810	A
2	65	16	115	1211	0.053	65	50	0.1	0.1	3.446	A
3	144	36	32	1296	0.111	144	148	0.2	0.1	3.366	A

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	116	29	23	1564	0.074	116	125	0.1	0.1	2.763	A
2	54	14	96	1222	0.044	54	42	0.1	0.1	3.381	A
3	120	30	27	1298	0.093	121	124	0.1	0.1	3.293	A

2022 Base, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	3.47	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2022 Base	PM	ONE HOUR	17:00	18:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	263	100.000
2		ONE HOUR	✓	77	100.000
3		ONE HOUR	✓	235	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		1	2	3
	1	2	71	190
	2	44	0	33
	3	173	47	15

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1	2	3
	1	0	7	6
	2	17	0	16
	3	8	9	7

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.19	3.05	0.2	A	241	362
2	0.07	3.97	0.1	A	71	106
3	0.20	3.78	0.3	A	216	323

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	198	50	46	1553	0.127	197	164	0.0	0.2	2.818	A
2	58	14	155	1186	0.049	58	89	0.0	0.1	3.717	A
3	177	44	34	1295	0.137	176	179	0.0	0.2	3.478	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	236	59	56	1549	0.153	236	197	0.2	0.2	2.912	A
2	69	17	186	1168	0.059	69	106	0.1	0.1	3.818	A
3	211	53	41	1292	0.163	211	214	0.2	0.2	3.600	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	290	72	68	1544	0.188	289	241	0.2	0.2	3.048	A
2	85	21	228	1143	0.074	85	130	0.1	0.1	3.966	A
3	259	65	51	1289	0.201	259	262	0.2	0.3	3.778	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	290	72	68	1544	0.188	290	241	0.2	0.2	3.048	A
2	85	21	228	1143	0.074	85	130	0.1	0.1	3.966	A
3	259	65	51	1289	0.201	259	262	0.3	0.3	3.778	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	236	59	56	1549	0.153	237	197	0.2	0.2	2.915	A
2	69	17	186	1168	0.059	69	106	0.1	0.1	3.822	A
3	211	53	41	1292	0.163	211	214	0.3	0.2	3.604	A

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	198	50	47	1553	0.127	198	165	0.2	0.2	2.824	A
2	58	14	156	1186	0.049	58	89	0.1	0.1	3.719	A
3	177	44	35	1295	0.137	177	179	0.2	0.2	3.482	A

2035 Base, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	3.30	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2035 Base	AM	ONE HOUR	08:00	09:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	171	100.000
2		ONE HOUR	✓	81	100.000
3		ONE HOUR	✓	178	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		1	2	3
	1	8	34	129
	2	33	0	48
	3	144	28	6

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1	2	3
	1	0	14	11
	2	14	0	7
	3	8	8	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.12	2.92	0.2	A	157	235
2	0.08	3.60	0.1	A	74	111
3	0.15	3.54	0.2	A	163	245

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	129	32	26	1562	0.082	128	139	0.0	0.1	2.787	A
2	61	15	107	1215	0.050	61	47	0.0	0.1	3.421	A
3	134	34	31	1296	0.103	134	137	0.0	0.1	3.332	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	154	38	31	1560	0.099	154	166	0.1	0.1	2.840	A
2	73	18	128	1203	0.061	73	56	0.1	0.1	3.495	A
3	160	40	37	1294	0.124	160	164	0.1	0.2	3.418	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	188	47	37	1557	0.121	188	204	0.1	0.2	2.918	A
2	89	22	157	1185	0.075	89	68	0.1	0.1	3.603	A
3	196	49	45	1291	0.152	196	201	0.2	0.2	3.540	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	188	47	37	1557	0.121	188	204	0.2	0.2	2.918	A
2	89	22	157	1185	0.075	89	68	0.1	0.1	3.603	A
3	196	49	45	1291	0.152	196	201	0.2	0.2	3.540	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	154	38	31	1560	0.099	154	166	0.2	0.1	2.843	A
2	73	18	129	1203	0.061	73	56	0.1	0.1	3.496	A
3	160	40	37	1294	0.124	160	165	0.2	0.2	3.419	A

09:15 - 09:30

Am	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	129	32	26	1562	0.082	129	139	0.1	0.1	2.787	A
2	61	15	108	1215	0.050	61	47	0.1	0.1	3.422	A
3	134	34	31	1296	0.103	134	138	0.2	0.1	3.338	A

2035 Base , PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	3.57	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2035 Base	PM	ONE HOUR	17:00	18:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	294	100.000
2		ONE HOUR	✓	85	100.000
3		ONE HOUR	✓	262	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		1	2	3
	1	2	80	212
	2	49	0	36
	3	193	53	16

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1	2	3
	1	0	7	6
	2	17	0	16
	3	8	9	7

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.21	3.14	0.3	A	270	405
2	0.08	4.06	0.1	A	78	117
3	0.22	3.90	0.3	A	240	361

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	221	55	52	1551	0.143	221	183	0.0	0.2	2.873	A
2	64	16	173	1176	0.054	64	100	0.0	0.1	3.772	A
3	197	49	38	1294	0.152	196	198	0.0	0.2	3.547	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	264	66	62	1546	0.171	264	219	0.2	0.2	2.981	A
2	76	19	207	1155	0.066	76	119	0.1	0.1	3.888	A
3	236	59	46	1291	0.183	235	237	0.2	0.2	3.688	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	324	81	76	1540	0.210	323	268	0.2	0.3	3.142	A
2	94	23	253	1127	0.083	93	146	0.1	0.1	4.058	A
3	288	72	56	1287	0.224	288	290	0.2	0.3	3.898	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	324	81	76	1540	0.210	324	269	0.3	0.3	3.142	A
2	94	23	253	1127	0.083	94	146	0.1	0.1	4.059	A
3	288	72	56	1287	0.224	288	291	0.3	0.3	3.900	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	264	66	62	1546	0.171	265	220	0.3	0.2	2.983	A
2	76	19	207	1155	0.066	77	120	0.1	0.1	3.891	A
3	236	59	46	1291	0.183	236	238	0.3	0.2	3.693	A

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	221	55	52	1551	0.143	222	184	0.2	0.2	2.878	A
2	64	16	173	1176	0.054	64	100	0.1	0.1	3.774	A
3	197	49	38	1293	0.153	197	199	0.2	0.2	3.551	A

2022 + Dev , AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	3.28	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2022 + Dev	AM	ONE HOUR	08:00	09:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	159	100.000
2		ONE HOUR	✓	74	100.000
3		ONE HOUR	✓	175	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		1	2	3
	1	7	31	121
	2	29	0	45
	3	142	28	5

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1	2	3
	1	0	14	11
	2	14	0	7
	3	8	8	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.11	2.89	0.1	A	146	219
2	0.07	3.55	0.1	A	68	102
3	0.15	3.52	0.2	A	161	241

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	120	30	25	1563	0.077	119	134	0.0	0.1	2.769	A
2	56	14	100	1220	0.046	56	44	0.0	0.1	3.389	A
3	132	33	27	1298	0.102	131	128	0.0	0.1	3.323	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	143	36	30	1561	0.092	143	160	0.1	0.1	2.819	A
2	67	17	119	1208	0.055	66	53	0.1	0.1	3.456	A
3	157	39	32	1296	0.121	157	154	0.1	0.1	3.406	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	175	44	36	1558	0.112	175	196	0.1	0.1	2.890	A
2	81	20	146	1192	0.068	81	65	0.1	0.1	3.553	A
3	193	48	40	1293	0.149	193	188	0.1	0.2	3.524	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	175	44	36	1558	0.112	175	196	0.1	0.1	2.890	A
2	81	20	146	1192	0.068	81	65	0.1	0.1	3.553	A
3	193	48	40	1293	0.149	193	188	0.2	0.2	3.524	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	143	36	30	1561	0.092	143	160	0.1	0.1	2.819	A
2	67	17	120	1208	0.055	67	53	0.1	0.1	3.457	A
3	157	39	32	1296	0.121	157	154	0.2	0.1	3.407	A

09:15 - 09:30

Am	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	120	30	25	1563	0.077	120	134	0.1	0.1	2.772	A
2	56	14	100	1220	0.046	56	44	0.1	0.1	3.390	A
3	132	33	27	1298	0.102	132	129	0.1	0.1	3.328	A

2022 + Dev , PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	3.51	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2022 + Dev	PM	ONE HOUR	17:00	18:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	279	100.000
2		ONE HOUR	✓	79	100.000
3		ONE HOUR	✓	247	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		1	2	3
	1	2	71	206
	2	44	0	35
	3	182	50	15

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1	2	3
	1	0	7	6
	2	17	0	16
	3	8	9	7

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.20	3.09	0.3	A	256	384
2	0.08	4.01	0.1	A	72	109
3	0.21	3.83	0.3	A	227	340

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	210	53	49	1552	0.135	209	171	0.0	0.2	2.845	A
2	59	15	167	1179	0.050	59	91	0.0	0.1	3.746	A
3	186	46	34	1295	0.144	185	192	0.0	0.2	3.506	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	251	63	58	1548	0.162	251	205	0.2	0.2	2.946	A
2	71	18	200	1159	0.061	71	109	0.1	0.1	3.855	A
3	222	56	41	1292	0.172	222	230	0.2	0.2	3.636	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	307	77	71	1542	0.199	307	251	0.2	0.3	3.094	A
2	87	22	245	1132	0.077	87	133	0.1	0.1	4.014	A
3	272	68	51	1289	0.211	272	282	0.2	0.3	3.827	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	307	77	72	1542	0.199	307	251	0.3	0.3	3.094	A
2	87	22	246	1132	0.077	87	133	0.1	0.1	4.014	A
3	272	68	51	1289	0.211	272	282	0.3	0.3	3.827	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	251	63	59	1548	0.162	251	205	0.3	0.2	2.950	A
2	71	18	201	1159	0.061	71	109	0.1	0.1	3.858	A
3	222	56	41	1292	0.172	222	230	0.3	0.2	3.641	A

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	210	53	49	1552	0.135	210	172	0.2	0.2	2.848	A
2	59	15	168	1179	0.050	60	91	0.1	0.1	3.751	A
3	186	46	35	1295	0.144	186	193	0.2	0.2	3.510	A

2035 + Dev , AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	3.34	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2035 + Dev	AM	ONE HOUR	08:00	09:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	177	100.000
2		ONE HOUR	✓	83	100.000
3		ONE HOUR	✓	194	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	1	2	3	
From	1	8	34	135
	2	33	0	50
	3	157	31	6

Vehicle Mix

Heavy Vehicle Percentages

	To			
	1	2	3	
From	1	0	14	11
	2	14	0	7
	3	8	8	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.13	2.94	0.2	A	162	244
2	0.08	3.62	0.1	A	76	114
3	0.17	3.60	0.2	A	178	267

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	133	33	28	1561	0.085	133	149	0.0	0.1	2.797	A
2	62	16	112	1213	0.052	62	49	0.0	0.1	3.431	A
3	146	37	31	1296	0.113	146	143	0.0	0.1	3.367	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	159	40	33	1559	0.102	159	178	0.1	0.1	2.854	A
2	75	19	134	1199	0.062	75	58	0.1	0.1	3.509	A
3	174	44	37	1294	0.135	174	172	0.1	0.2	3.463	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	195	49	41	1556	0.125	195	218	0.1	0.2	2.936	A
2	91	23	164	1181	0.077	91	72	0.1	0.1	3.621	A
3	214	53	45	1291	0.165	213	210	0.2	0.2	3.599	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	195	49	41	1556	0.125	195	218	0.2	0.2	2.936	A
2	91	23	164	1181	0.077	91	72	0.1	0.1	3.622	A
3	214	53	45	1291	0.165	214	210	0.2	0.2	3.599	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	159	40	33	1559	0.102	159	178	0.2	0.1	2.854	A
2	75	19	134	1199	0.062	75	58	0.1	0.1	3.513	A
3	174	44	37	1294	0.135	175	172	0.2	0.2	3.464	A

09:15 - 09:30

Am	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	133	33	28	1561	0.085	133	149	0.1	0.1	2.798	A
2	62	16	112	1212	0.052	63	49	0.1	0.1	3.433	A
3	146	37	31	1296	0.113	146	144	0.2	0.1	3.374	A

2035 + Dev , PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	3.62	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2035 + Dev	PM	ONE HOUR	17:00	18:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	310	100.000
2		ONE HOUR	✓	88	100.000
3		ONE HOUR	✓	273	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
From	1	2	3	
	1	2	80	228
	2	49	0	39
	3	202	55	16

Vehicle Mix

Heavy Vehicle Percentages

	To			
From	1	2	3	
	1	0	7	6
	2	17	0	16
	3	8	9	7

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.22	3.19	0.3	A	284	427
2	0.09	4.11	0.1	A	81	121
3	0.23	3.95	0.3	A	251	376

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	233	58	53	1550	0.151	233	190	0.0	0.2	2.900	A
2	66	17	185	1169	0.057	66	101	0.0	0.1	3.804	A
3	206	51	38	1294	0.159	205	212	0.0	0.2	3.574	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	279	70	64	1546	0.180	279	227	0.2	0.2	3.017	A
2	79	20	221	1147	0.069	79	121	0.1	0.1	3.929	A
3	245	61	46	1291	0.190	245	254	0.2	0.3	3.723	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	341	85	78	1539	0.222	341	278	0.2	0.3	3.190	A
2	97	24	271	1117	0.087	97	149	0.1	0.1	4.113	A
3	301	75	56	1287	0.234	300	311	0.3	0.3	3.946	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	341	85	78	1539	0.222	341	279	0.3	0.3	3.190	A
2	97	24	271	1117	0.087	97	149	0.1	0.1	4.114	A
3	301	75	56	1287	0.234	301	312	0.3	0.3	3.948	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	279	70	64	1546	0.180	279	228	0.3	0.2	3.018	A
2	79	20	221	1147	0.069	79	121	0.1	0.1	3.932	A
3	245	61	46	1291	0.190	246	255	0.3	0.3	3.729	A

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	233	58	54	1550	0.151	234	191	0.2	0.2	2.904	A
2	66	17	185	1168	0.057	66	102	0.1	0.1	3.809	A
3	206	51	38	1293	0.159	206	213	0.3	0.2	3.581	A