Appendix A13.5 Junction 9 Outputs

Junctions 9

ARCADY 9 - Roundabout Module

Filename: Junction 1 AM.j9
Path: C:\Users\Maria Rooney\Desktop
Report generation date: 06/03/2018 12:50:18

Summary of junction performance

	AM			
	Queue (PCU)	Delay (s)	RFC	LOS
	2016 Base Year			
	Phase 5 2024 No construction			
	Phase 5 2024 With construction			
Arm A	0.3	5.07	0.21	A
Arm B	0.7	4.97	0.42	A
Arm C	0.3	2.21	0.23	A
Arm D	0.1	2.74	0.07	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	Junciton2
Location	Clonshagh
Site number	2
Date	05/07/2016
Version	
Status	
Identifier	
Client	Irish Water
Jobnumber	7556
Enumerator	TOBIN"Maria Rooney
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

Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
2016 Base Year	AM	ONE HOUR	08:00	09:30	15	✓
Phase 5 2024 No construction	AM	ONE HOUR	08:00	09:30	15	✓
Phase 5 2024 With construction	AM	ONE HOUR	08:00	09:30	15	✓

2016 Base Year , AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A,B,C,D	3.16	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	Petrol Station	
B	Clonshaugh Rd (N)	
C	Clonshaugh Rd (S)	
D	Hotel Access	

Capacity Options

Arm	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)	Assume flat start profile	Initial queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00
D	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
A	4.50	4.80	8.6	12.6	57.0	65.0	
B	4.00	5.80	10.4	11.2	57.0	49.0	
C	8.20	9.00	6.3	16.7	57.0	55.0	
D	7.10	7.60	9.8	16.1	57.0	77.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A	0.449	1228.237
B	0.492	1399.899
C	0.673	2400.796
D	0.559	1882.415

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	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2016 Base Year	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	✓	153.00	100.000
B		ONE HOUR	✓	355.00	100.000
C		ONE HOUR	✓	367.00	100.000
D		ONE HOUR	✓	80.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	1.000	30.000	120.000	2.000
	B	17.000	2.000	326.000	10.000
	C	145.000	159.000	6.000	57.000
	D	11.000	14.000	55.000	0.000

Proportions

		To			
		A	B	C	D
From	A	0.01	0.20	0.78	0.01
	B	0.05	0.01	0.92	0.03
	C	0.40	0.43	0.02	0.16
	D	0.14	0.18	0.69	0.00

Vehicle Mix

Heavy Vehicle proportion

		To			
		A	B	C	D
From	A	0	8	13	0
	B	0	100	1	0
	C	17	5	27	10
	D	14	14	10	0

Average PCU Per Veh

		To			
		A	B	C	D
From	A	1.000	1.080	1.130	1.000
	B	1.000	2.000	1.010	1.000
	C	1.170	1.050	1.270	1.100
	D	1.140	1.140	1.100	1.000

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)
A	0.15	4.26	0.2	A	140.40	210.59
B	0.30	4.01	0.4	A	325.75	488.63
C	0.17	2.02	0.2	A	336.77	505.15
D	0.05	2.52	0.1	A	73.41	110.11

Main Results for each time segment

Main results: (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)	LOS
A	115.19	28.80	177.27	1148.67	0.100	114.69	130.69	0.0	0.1	3.887	A
B	267.26	66.82	138.01	1332.01	0.201	266.25	153.95	0.0	0.3	3.415	A
C	276.30	69.07	24.00	2384.65	0.116	275.72	380.26	0.0	0.1	1.887	A
D	60.23	15.06	247.90	1743.87	0.035	60.07	51.82	0.0	0.0	2.377	A

Main results: (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)	LOS
A	137.54	34.39	212.07	1133.05	0.121	137.43	156.35	0.1	0.2	4.039	A
B	319.14	79.78	165.29	1318.59	0.242	318.86	184.20	0.3	0.3	3.644	A
C	329.93	82.48	28.74	2381.46	0.139	329.79	455.41	0.1	0.2	1.940	A
D	71.92	17.98	296.54	1716.68	0.042	71.88	62.00	0.0	0.0	2.433	A

Main results: (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)	LOS
A	168.46	42.11	259.71	1111.66	0.152	168.28	191.47	0.2	0.2	4.263	A
B	390.86	97.72	202.40	1300.34	0.301	390.42	225.58	0.3	0.4	4.002	A
C	404.07	101.02	35.19	2377.12	0.170	403.88	557.63	0.2	0.2	2.017	A
D	88.08	22.02	363.15	1679.45	0.052	88.03	75.93	0.0	0.1	2.515	A

Main results: (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)	LOS
A	168.46	42.11	259.84	1111.60	0.152	168.45	191.58	0.2	0.2	4.263	A
B	390.86	97.72	202.59	1300.25	0.301	390.86	225.71	0.4	0.4	4.006	A
C	404.07	101.02	35.23	2377.10	0.170	404.07	558.21	0.2	0.2	2.017	A
D	88.08	22.02	363.34	1679.35	0.052	88.08	75.97	0.1	0.1	2.515	A

Main results: (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)	LOS
A	137.54	34.39	212.29	1132.95	0.121	137.72	156.53	0.2	0.2	4.040	A
B	319.14	79.78	165.59	1318.45	0.242	319.57	184.42	0.4	0.3	3.648	A
C	329.93	82.48	28.81	2381.42	0.139	330.12	456.36	0.2	0.2	1.940	A
D	71.92	17.98	296.85	1716.51	0.042	71.97	62.07	0.1	0.0	2.436	A

Main results: (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)	LOS
A	115.19	28.80	177.76	1148.44	0.100	115.31	131.07	0.2	0.1	3.893	A
B	267.26	66.82	138.65	1331.70	0.201	267.54	154.42	0.3	0.3	3.426	A
C	276.30	69.07	24.12	2384.57	0.116	276.43	382.07	0.2	0.1	1.887	A
D	60.23	15.06	248.57	1743.49	0.035	60.26	51.98	0.0	0.0	2.378	A

Phase 5 2024 No construction , AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A,B,C,D	3.66	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Capacity Options

[same as above]

Roundabout Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D2	Phase 5 2024 No construction	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	✓	209.00	100.000
B		ONE HOUR	✓	475.00	100.000
C		ONE HOUR	✓	495.00	100.000
D		ONE HOUR	✓	109.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0.000	40.000	166.000	3.000
	B	23.000	0.000	439.000	13.000
	C	201.000	216.000	0.000	78.000
	D	15.000	19.000	75.000	0.000

Proportions

		To			
		A	B	C	D
From	A	0.00	0.19	0.79	0.01
	B	0.05	0.00	0.92	0.03
	C	0.41	0.44	0.00	0.16
	D	0.14	0.17	0.69	0.00

Vehicle Mix

Heavy Vehicle proportion

		To			
		A	B	C	D
From	A	0	9	15	0
	B	0	100	1	0
	C	20	6	31	11
	D	16	17	12	0

Average PCU Per Veh

		To			
		A	B	C	D
From	A	1.000	1.090	1.150	1.000
	B	1.000	2.000	1.010	1.000
	C	1.200	1.060	1.310	1.110
	D	1.160	1.170	1.120	1.000

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)
A	0.21	4.84	0.3	A	191.78	287.67
B	0.41	4.88	0.7	A	435.87	653.80
C	0.23	2.21	0.3	A	454.22	681.33
D	0.07	2.74	0.1	A	100.02	150.03

Main Results for each time segment

Main results: (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)	LOS
A	157.35	39.34	232.82	1123.73	0.140	156.61	179.49	0.0	0.2	4.225	A
B	357.60	89.40	182.94	1309.91	0.273	356.10	206.49	0.0	0.4	3.797	A
C	372.66	93.17	29.24	2381.13	0.157	371.83	509.80	0.0	0.2	2.007	A
D	82.06	20.52	330.48	1697.71	0.048	81.83	70.59	0.0	0.1	2.525	A

Main results: (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)	LOS
A	187.89	46.97	278.55	1103.20	0.170	187.70	214.74	0.2	0.2	4.464	A
B	427.02	106.75	219.16	1292.10	0.330	426.54	247.09	0.4	0.5	4.196	A
C	444.99	111.25	35.02	2377.24	0.187	444.79	610.68	0.2	0.3	2.088	A
D	97.99	24.50	395.36	1661.45	0.059	97.94	84.46	0.1	0.1	2.610	A

Main results: (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)	LOS
A	230.11	57.53	341.11	1075.12	0.214	229.81	262.97	0.2	0.3	4.835	A
B	522.98	130.75	268.35	1267.90	0.412	522.16	302.58	0.5	0.7	4.867	A
C	545.01	136.25	42.87	2371.96	0.230	544.70	747.63	0.3	0.3	2.208	A
D	120.01	30.00	484.15	1611.82	0.074	119.93	103.42	0.1	0.1	2.735	A

Main results: (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)	LOS
A	230.11	57.53	341.31	1075.03	0.214	230.11	263.14	0.3	0.3	4.838	A
B	522.98	130.75	268.65	1267.75	0.413	522.97	302.78	0.7	0.7	4.877	A
C	545.01	136.25	42.94	2371.91	0.230	545.00	748.68	0.3	0.3	2.208	A
D	120.01	30.00	484.45	1611.66	0.074	120.01	103.50	0.1	0.1	2.735	A

Main results: (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)	LOS
A	187.89	46.97	278.88	1103.05	0.170	188.18	215.03	0.3	0.2	4.471	A
B	427.02	106.75	219.64	1291.86	0.331	427.83	247.42	0.7	0.5	4.210	A
C	444.99	111.25	35.13	2377.17	0.187	445.29	612.35	0.3	0.3	2.089	A
D	97.99	24.50	395.84	1661.18	0.059	98.07	84.58	0.1	0.1	2.610	A

Main results: (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)	LOS
A	157.35	39.34	233.52	1123.42	0.140	157.54	180.04	0.2	0.2	4.234	A
B	357.60	89.40	183.89	1309.44	0.273	358.09	207.17	0.5	0.4	3.819	A
C	372.66	93.17	29.40	2381.02	0.157	372.86	512.58	0.3	0.2	2.011	A
D	82.06	20.52	331.45	1697.17	0.048	82.11	70.82	0.1	0.1	2.528	A

Phase 5 2024 With construction, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A,B,C,D	3.75	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Capacity Options

[same as above]

Roundabout Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D3	Phase 5 2024 With construction	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	✓	209.00	100.000
B		ONE HOUR	✓	488.00	100.000
C		ONE HOUR	✓	495.00	100.000
D		ONE HOUR	✓	109.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0.000	40.000	166.000	3.000
	B	23.000	0.000	452.000	13.000
	C	201.000	216.000	0.000	78.000
	D	15.000	19.000	75.000	0.000

Proportions

		To			
		A	B	C	D
From	A	0.00	0.19	0.79	0.01
	B	0.05	0.00	0.93	0.03
	C	0.41	0.44	0.00	0.16
	D	0.14	0.17	0.69	0.00

Vehicle Mix

Heavy Vehicle proportion

		To			
		A	B	C	D
From	A	0	9	22	0
	B	0	100	1	0
	C	20	6	31	11
	D	16	17	12	0

Average PCU Per Veh

		To			
		A	B	C	D
From	A	1.000	1.090	1.220	1.000
	B	1.000	2.000	1.010	1.000
	C	1.200	1.060	1.310	1.110
	D	1.160	1.170	1.120	1.000

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)
A	0.21	5.07	0.3	A	191.78	287.67
B	0.42	4.97	0.7	A	447.80	671.70
C	0.23	2.21	0.3	A	454.22	681.33
D	0.07	2.74	0.1	A	100.02	150.03

Main Results for each time segment

Main results: (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)	LOS
A	157.35	39.34	232.82	1123.73	0.140	156.58	179.49	0.0	0.2	4.422	A
B	367.39	91.85	182.92	1309.92	0.280	365.83	206.48	0.0	0.4	3.842	A
C	372.66	93.17	29.23	2381.13	0.157	371.83	519.51	0.0	0.2	2.007	A
D	82.06	20.52	330.48	1697.71	0.048	81.83	70.58	0.0	0.1	2.525	A

Main results: (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)	LOS
A	187.89	46.97	278.55	1103.20	0.170	187.69	214.74	0.2	0.2	4.674	A
B	438.70	109.68	219.15	1292.10	0.340	438.21	247.08	0.4	0.5	4.252	A
C	444.99	111.25	35.02	2377.24	0.187	444.79	622.34	0.2	0.3	2.088	A
D	97.99	24.50	395.36	1661.45	0.059	97.94	84.46	0.1	0.1	2.610	A

Main results: (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)	LOS
A	230.11	57.53	341.11	1075.12	0.214	229.80	262.97	0.2	0.3	5.063	A
B	537.30	134.32	268.34	1267.91	0.424	536.42	302.57	0.5	0.7	4.960	A
C	545.01	136.25	42.87	2371.96	0.230	544.70	761.89	0.3	0.3	2.208	A
D	120.01	30.00	484.15	1611.82	0.074	119.93	103.42	0.1	0.1	2.735	A

Main results: (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)	LOS
A	230.11	57.53	341.31	1075.03	0.214	230.11	263.14	0.3	0.3	5.066	A
B	537.30	134.32	268.64	1267.75	0.424	537.28	302.78	0.7	0.7	4.973	A
C	545.01	136.25	42.94	2371.91	0.230	545.00	762.99	0.3	0.3	2.208	A
D	120.01	30.00	484.45	1611.66	0.074	120.01	103.50	0.1	0.1	2.735	A

Main results: (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)	LOS
A	187.89	46.97	278.88	1103.05	0.170	188.20	215.03	0.3	0.2	4.682	A
B	438.70	109.68	219.65	1291.85	0.340	439.57	247.42	0.7	0.5	4.268	A
C	444.99	111.25	35.13	2377.17	0.187	445.29	624.09	0.3	0.3	2.089	A
D	97.99	24.50	395.84	1661.18	0.059	98.07	84.58	0.1	0.1	2.610	A

Main results: (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)	LOS
A	157.35	39.34	233.52	1123.42	0.140	157.55	180.04	0.2	0.2	4.434	A
B	367.39	91.85	183.90	1309.44	0.281	367.90	207.17	0.5	0.4	3.862	A
C	372.66	93.17	29.40	2381.02	0.157	372.86	522.40	0.3	0.2	2.009	A
D	82.06	20.52	331.45	1697.17	0.048	82.11	70.82	0.1	0.1	2.526	A

Junctions 9

ARCADY 9 - Roundabout Module

Filename: Junction 1 PM.j9
Path: C:\Users\Maria Rooney\Desktop
Report generation date: 06/03/2018 12:52:25

Summary of junction performance

	PM			
	Queue (PCU)	Delay (s)	RFC	LOS
	2016 Base Year			
	Phase 5 2024 No construction			
Arm A	0.3	5.39	0.23	A
Arm B	0.5	4.30	0.33	A
Arm C	0.5	2.27	0.31	A
Arm D	0.1	2.66	0.07	A
	Phase 5 2024 With construction			
Arm A	0.3	5.39	0.23	A
Arm B	0.7	4.78	0.39	A
Arm C	0.5	2.27	0.31	A
Arm D	0.1	2.66	0.07	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	Junciton2
Location	Clonshagh
Site number	2
Date	05/07/2016
Version	
Status	
Identifier	
Client	Irish Water
Jobnumber	7556
Enumerator	TOBIN"Maria Rooney
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

Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
2016 Base Year	PM	ONE HOUR	16:00	17:30	15	✓
Phase 5 2024 No construction	PM	ONE HOUR	16:00	17:30	15	✓
Phase 5 2024 With construction	PM	ONE HOUR	16:00	17:30	15	✓

2016 Base Year , PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A,B,C,D	2.91	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	Petrol Station	
B	Clonshaugh Rd (N)	
C	Clonshaugh Rd (S)	
D	Hotel Access	

Capacity Options

Arm	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)	Assume flat start profile	Initial queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00
D	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
A	4.50	4.80	8.6	12.6	57.0	65.0	
B	4.00	5.80	10.4	11.2	57.0	49.0	
C	8.20	9.00	6.3	16.7	57.0	55.0	
D	7.10	7.60	9.8	16.1	57.0	77.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A	0.449	1228.237
B	0.492	1399.899
C	0.673	2400.796
D	0.559	1882.415

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	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2016 Base Year	PM	ONE HOUR	16:00	17:30	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	✓	153.00	100.000
B		ONE HOUR	✓	283.00	100.000
C		ONE HOUR	✓	501.00	100.000
D		ONE HOUR	✓	67.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	1.000	43.000	108.000	1.000
	B	22.000	0.000	254.000	7.000
	C	108.000	330.000	5.000	58.000
	D	5.000	12.000	49.000	1.000

Proportions

		To			
		A	B	C	D
From	A	0.01	0.28	0.71	0.01
	B	0.08	0.00	0.90	0.02
	C	0.22	0.66	0.01	0.12
	D	0.07	0.18	0.73	0.01

Vehicle Mix

Heavy Vehicle proportion

		To			
		A	B	C	D
From	A	0	0	13	0
	B	7	0	2	0
	C	8	1	33	3
	D	0	0	4	0

Average PCU Per Veh

		To			
		A	B	C	D
From	A	1.000	1.000	1.130	1.000
	B	1.070	1.000	1.020	1.000
	C	1.080	1.010	1.330	1.030
	D	1.000	1.000	1.040	1.000

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)
A	0.16	4.54	0.2	A	140.40	210.59
B	0.24	3.69	0.3	A	259.69	389.53
C	0.23	2.03	0.3	A	459.73	689.59
D	0.05	2.43	0.0	A	61.48	92.22

Main Results for each time segment

Main results: (16:00-16:15)

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)	LOS
A	115.19	28.80	298.25	1094.36	0.105	114.68	102.15	0.0	0.1	3.998	A
B	213.06	53.26	123.75	1339.03	0.159	212.29	289.17	0.0	0.2	3.268	A
C	377.18	94.29	24.00	2384.65	0.158	376.41	312.03	0.0	0.2	1.844	A
D	50.44	12.61	350.08	1686.75	0.030	50.31	50.33	0.0	0.0	2.263	A

Main results: (16:15-16:30)

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)	LOS
A	137.54	34.39	356.74	1068.11	0.129	137.41	122.20	0.1	0.2	4.210	A
B	254.41	63.60	148.21	1326.99	0.192	254.22	345.94	0.2	0.2	3.433	A
C	450.39	112.60	28.75	2381.46	0.189	450.20	373.68	0.2	0.2	1.917	A
D	60.23	15.06	418.74	1648.38	0.037	60.20	60.20	0.0	0.0	2.331	A

Main results: (16:30-16:45)

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)	LOS
A	168.46	42.11	436.88	1032.14	0.163	168.25	149.65	0.2	0.2	4.534	A
B	311.59	77.90	181.49	1310.63	0.238	311.29	423.64	0.2	0.3	3.686	A
C	551.61	137.90	35.20	2377.12	0.232	551.33	457.57	0.2	0.3	2.029	A
D	73.77	18.44	512.80	1595.81	0.046	73.73	73.73	0.0	0.0	2.433	A

Main results: (16:45-17:00)

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)	LOS
A	168.46	42.11	437.10	1032.03	0.163	168.45	149.74	0.2	0.2	4.536	A
B	311.59	77.90	181.67	1310.54	0.238	311.59	423.89	0.3	0.3	3.686	A
C	551.61	137.90	35.23	2377.10	0.232	551.61	458.02	0.3	0.3	2.029	A
D	73.77	18.44	513.07	1595.66	0.046	73.77	73.77	0.0	0.0	2.433	A

Main results: (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)	LOS
A	137.54	34.39	357.12	1067.94	0.129	137.74	122.35	0.2	0.2	4.212	A
B	254.41	63.60	148.51	1326.85	0.192	254.71	346.35	0.3	0.2	3.435	A
C	450.39	112.60	28.80	2381.42	0.189	450.67	374.42	0.3	0.2	1.918	A
D	60.23	15.06	419.20	1648.13	0.037	60.27	60.27	0.0	0.0	2.332	A

Main results: (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)	LOS
A	115.19	28.80	299.03	1094.01	0.105	115.32	102.45	0.2	0.1	4.003	A
B	213.06	53.26	124.34	1338.74	0.159	213.25	290.01	0.2	0.2	3.275	A
C	377.18	94.29	24.11	2384.58	0.158	377.37	313.48	0.2	0.2	1.845	A
D	50.44	12.61	351.01	1686.24	0.030	50.47	50.47	0.0	0.0	2.264	A

Phase 5 2024 No construction, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A,B,C,D	3.35	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Capacity Options

[same as above]

Roundabout Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D2	Phase 5 2024 No construction	PM	ONE HOUR	16:00	17:30	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	✓	206.00	100.000
B		ONE HOUR	✓	381.00	100.000
C		ONE HOUR	✓	671.00	100.000
D		ONE HOUR	✓	89.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0.000	57.000	148.000	1.000
	B	29.000	0.000	343.000	9.000
	C	148.000	444.000	0.000	79.000
	D	7.000	16.000	66.000	0.000

Proportions

		To			
		A	B	C	D
From	A	0.00	0.28	0.72	0.00
	B	0.08	0.00	0.90	0.02
	C	0.22	0.66	0.00	0.12
	D	0.08	0.18	0.74	0.00

Vehicle Mix

Heavy Vehicle proportion

		To			
		A	B	C	D
From	A	0	0	16	0
	B	8	0	3	0
	C	9	1	37	4
	D	0	0	5	0

Average PCU Per Veh

		To			
		A	B	C	D
From	A	1.000	1.000	1.160	1.000
	B	1.080	1.000	1.030	1.000
	C	1.090	1.010	1.370	1.040
	D	1.000	1.000	1.050	1.000

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)
A	0.23	5.39	0.3	A	189.03	283.54
B	0.33	4.30	0.5	A	349.61	524.42
C	0.31	2.27	0.5	A	615.72	923.58
D	0.07	2.66	0.1	A	81.67	122.50

Main Results for each time segment

Main results: (16:00-16:15)

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)	LOS
A	155.09	38.77	395.10	1050.89	0.148	154.32	138.18	0.0	0.2	4.453	A
B	286.84	71.71	161.18	1320.62	0.217	285.70	388.25	0.0	0.3	3.590	A
C	505.16	126.29	29.24	2381.13	0.212	504.06	417.63	0.0	0.3	1.975	A
D	67.00	16.75	466.46	1621.71	0.041	66.83	66.84	0.0	0.0	2.399	A

Main results: (16:15-16:30)

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)	LOS
A	185.19	46.30	472.63	1016.09	0.182	184.97	165.32	0.2	0.2	4.806	A
B	342.51	85.63	193.09	1304.92	0.262	342.19	464.51	0.3	0.4	3.861	A
C	603.22	150.80	35.03	2377.24	0.254	602.92	500.25	0.3	0.3	2.090	A
D	80.01	20.00	557.99	1570.56	0.051	79.97	79.97	0.0	0.1	2.503	A

Main results: (16:30-16:45)

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)	LOS
A	226.81	56.70	578.77	968.44	0.234	226.45	202.44	0.2	0.3	5.383	A
B	419.49	104.87	236.41	1283.61	0.327	418.96	568.81	0.4	0.5	4.297	A
C	738.78	184.70	42.89	2371.95	0.311	738.32	612.48	0.3	0.5	2.270	A
D	97.99	24.50	683.29	1500.53	0.065	97.92	97.92	0.1	0.1	2.660	A

Main results: (16:45-17:00)

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)	LOS
A	226.81	56.70	579.13	968.28	0.234	226.80	202.59	0.3	0.3	5.388	A
B	419.49	104.87	236.72	1283.46	0.327	419.48	569.22	0.5	0.5	4.303	A
C	738.78	184.70	42.94	2371.91	0.311	738.78	613.26	0.5	0.5	2.270	A
D	97.99	24.50	683.73	1500.28	0.065	97.99	97.99	0.1	0.1	2.660	A

Main results: (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)	LOS
A	185.19	46.30	473.23	1015.82	0.182	185.55	165.56	0.3	0.2	4.816	A
B	342.51	85.63	193.59	1304.67	0.263	343.03	465.18	0.5	0.4	3.870	A
C	603.22	150.80	35.11	2377.18	0.254	603.67	501.50	0.5	0.4	2.092	A
D	80.01	20.00	558.71	1570.15	0.051	80.08	80.08	0.1	0.1	2.506	A

Main results: (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)	LOS
A	155.09	38.77	396.23	1050.38	0.148	155.31	138.62	0.2	0.2	4.466	A
B	286.84	71.71	162.06	1320.18	0.217	287.16	389.49	0.4	0.3	3.599	A
C	505.16	126.29	29.39	2381.02	0.212	505.46	419.83	0.4	0.3	1.977	A
D	67.00	16.75	467.80	1620.96	0.041	67.05	67.05	0.1	0.0	2.403	A

Phase 5 2024 With construction, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A,B,C,D	3.56	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Capacity Options

[same as above]

Roundabout Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D3	Phase 5 2024 With construction	PM	ONE HOUR	16:00	17:30	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	✓	206.00	100.000
B		ONE HOUR	✓	460.00	100.000
C		ONE HOUR	✓	671.00	100.000
D		ONE HOUR	✓	89.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0.000	57.000	148.000	1.000
	B	29.000	0.000	422.000	9.000
	C	148.000	444.000	0.000	79.000
	D	7.000	16.000	66.000	0.000

Proportions

		To			
		A	B	C	D
From	A	0.00	0.28	0.72	0.00
	B	0.06	0.00	0.92	0.02
	C	0.22	0.66	0.00	0.12
	D	0.08	0.18	0.74	0.00

Vehicle Mix

Heavy Vehicle proportion

		To			
		A	B	C	D
From	A	0	0	16	0
	B	8	0	3	0
	C	9	1	37	4
	D	0	0	5	0

Average PCU Per Veh

		To			
		A	B	C	D
From	A	1.000	1.000	1.160	1.000
	B	1.080	1.000	1.030	1.000
	C	1.090	1.010	1.370	1.040
	D	1.000	1.000	1.050	1.000

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)
A	0.23	5.39	0.3	A	189.03	283.54
B	0.39	4.78	0.7	A	422.10	633.16
C	0.31	2.27	0.5	A	615.72	923.58
D	0.07	2.66	0.1	A	81.67	122.50

Main Results for each time segment

Main results: (16:00-16:15)

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)	LOS
A	155.09	38.77	395.10	1050.89	0.148	154.32	138.17	0.0	0.2	4.453	A
B	346.31	86.58	161.18	1320.62	0.262	344.85	388.25	0.0	0.4	3.804	A
C	505.16	126.29	29.24	2381.13	0.212	504.06	476.79	0.0	0.3	1.975	A
D	67.00	16.75	466.45	1621.71	0.041	66.83	66.84	0.0	0.0	2.399	A

Main results: (16:15-16:30)

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)	LOS
A	185.19	46.30	472.63	1016.09	0.182	184.97	165.32	0.2	0.2	4.806	A
B	413.53	103.38	193.09	1304.92	0.317	413.09	464.51	0.4	0.5	4.165	A
C	603.22	150.80	35.02	2377.24	0.254	602.92	571.15	0.3	0.3	2.090	A
D	80.01	20.00	557.98	1570.56	0.051	79.97	79.97	0.0	0.1	2.503	A

Main results: (16:30-16:45)

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)	LOS
A	226.81	56.70	578.77	968.44	0.234	226.45	202.43	0.2	0.3	5.383	A
B	506.47	126.62	236.41	1283.61	0.395	505.70	568.81	0.5	0.7	4.772	A
C	738.78	184.70	42.87	2371.96	0.311	738.32	699.24	0.3	0.5	2.270	A
D	97.99	24.50	683.28	1500.53	0.065	97.92	97.92	0.1	0.1	2.660	A

Main results: (16:45-17:00)

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)	LOS
A	226.81	56.70	579.13	968.28	0.234	226.80	202.59	0.3	0.3	5.388	A
B	506.47	126.62	236.72	1283.46	0.395	506.46	569.22	0.7	0.7	4.782	A
C	738.78	184.70	42.94	2371.91	0.311	738.78	700.23	0.5	0.5	2.270	A
D	97.99	24.50	683.73	1500.28	0.065	97.99	97.99	0.1	0.1	2.660	A

Main results: (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)	LOS
A	185.19	46.30	473.23	1015.82	0.182	185.55	165.57	0.3	0.2	4.816	A
B	413.53	103.38	193.59	1304.67	0.317	414.28	465.18	0.7	0.5	4.177	A
C	603.22	150.80	35.12	2377.17	0.254	603.67	572.75	0.5	0.4	2.092	A
D	80.01	20.00	558.72	1570.15	0.051	80.08	80.08	0.1	0.1	2.506	A

Main results: (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)	LOS
A	155.09	38.77	396.23	1050.38	0.148	155.31	138.62	0.2	0.2	4.465	A
B	346.31	86.58	162.06	1320.18	0.262	346.76	389.49	0.5	0.4	3.818	A
C	505.16	126.29	29.40	2381.02	0.212	505.46	479.42	0.4	0.3	1.978	A
D	67.00	16.75	467.81	1620.96	0.041	67.05	67.05	0.1	0.0	2.403	A

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.0.0.4211 []

Filename: Junction 2 AM.j9
Path: Z:\Junction 2
Report generation date: 13/10/2017 09:59:06

»2016 Base Year , AM
»Phase 5 2024 No Construction, AM
»Phase 5 2024 With Construction, AM

Summary of junction performance

	AM			
	Queue (PCU)	Delay (s)	RFC	LOS
	2016 Base Year			
	Phase 5 2024 No Construction			
Arm A	2.9	15.48	0.73	C
Arm B	999.9	1702.86	1.61	F
Arm C	0.0	0.00	0.00	A
Arm D	544.3	756.73	1.34	F
	Phase 5 2024 With Construction			
Arm A	3.2	17.02	0.75	C
Arm B	1017.9	1737.21	1.62	F
Arm C	0.0	0.00	0.00	A
Arm D	652.1	928.00	1.38	F

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	Junciton2
Location	Clonshagh
Site number	2
Date	05/07/2016
Version	
Status	
Identifier	
Client	Irish Water
Jobnumber	7556
Enumerator	TOBIN"Maria Rooney
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

Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
2016 Base Year	AM	ONE HOUR	07:30	09:00	15	✓
Phase 5 2024 No Construction	AM	ONE HOUR	07:30	09:00	15	✓
Phase 5 2024 With Construction	AM	ONE HOUR	07:30	09:00	15	✓

2016 Base Year , AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A,B,C,D	136.49	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	Clonshaugh Road	
B	R139 East	
C	Access Road	
D	R139 West	

Capacity Options

Arm	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)	Assume flat start profile	Initial queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00
D	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
A	8.00	8.10	30.0	38.0	66.0	35.0	
B	5.30	8.80	16.4	23.0	66.0	33.0	
C	4.20	5.90	9.0	14.0	66.0	53.0	
D	6.70	9.20	18.0	65.0	66.0	38.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A	0.651	2468.246
B	0.610	2227.037
C	0.456	1433.059
D	0.668	2570.090

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	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2016 Base Year	AM	ONE HOUR	07:30	09:00	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	✓	460.00	100.000
B		ONE HOUR	✓	2163.00	100.000
C		ONE HOUR	✓	0.00	100.000
D		ONE HOUR	✓	2208.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0.000	228.000	0.000	232.000
	B	133.000	19.000	0.000	2011.000
	C	0.000	0.000	0.000	0.000
	D	135.000	2071.000	0.000	2.000

Proportions

		To			
		A	B	C	D
From	A	0.00	0.50	0.00	0.50
	B	0.06	0.01	0.00	0.93
	C	0.25	0.25	0.25	0.25
	D	0.06	0.94	0.00	0.00

Vehicle Mix

Heavy Vehicle proportion

		To			
		A	B	C	D
From	A	0	6	0	9
	B	6	12	0	7
	C	0	0	0	0
	D	11	6	0	0

Average PCU Per Veh

		To			
		A	B	C	D
From	A	1.000	1.060	1.000	1.090
	B	1.060	1.120	1.000	1.070
	C	1.000	1.000	1.000	1.000
	D	1.110	1.060	1.000	1.000

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)
A	0.51	8.08	1.1	A	422.10	633.16
B	1.15	261.41	168.8	F	1984.81	2977.21
C	0.00	0.00	0.0	A	0.00	0.00
D	0.98	40.86	26.7	E	2026.10	3039.15

Main Results for each time segment

Main results: (07:30-07:45)

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)	LOS
A	346.31	86.58	1566.99	1447.52	0.239	344.97	200.41	0.0	0.3	3.504	A
B	1628.42	407.10	175.48	2120.06	0.768	1614.75	1736.48	0.0	3.4	7.433	A
C	0.00	0.00	1790.23	616.48	0.000	0.00	0.00	0.0	0.0	0.000	A
D	1662.30	415.57	113.47	2494.28	0.666	1653.93	1676.75	0.0	2.1	4.510	A

Main results: (07:45-08:00)

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)	LOS
A	413.53	103.38	1872.90	1248.26	0.331	412.76	238.71	0.3	0.5	4.628	A
B	1944.49	486.12	209.97	2099.04	0.926	1916.33	2075.69	3.4	10.5	18.705	C
C	0.00	0.00	2126.30	463.19	0.000	0.00	0.00	0.0	0.0	0.000	A
D	1984.95	496.24	134.67	2480.12	0.800	1976.94	1991.63	2.1	4.1	7.485	A

Main results: (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)	LOS
A	506.47	126.62	2238.75	1009.95	0.501	504.33	271.31	0.5	1.1	7.621	A
B	2381.51	595.38	256.50	2070.67	1.150	2060.51	2486.58	10.5	90.7	96.289	F
C	0.00	0.00	2317.01	376.20	0.000	0.00	0.00	0.0	0.0	0.000	A
D	2431.05	607.76	144.80	2473.35	0.983	2365.27	2172.21	4.1	20.5	26.290	D

Main results: (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)	LOS
A	506.47	126.62	2277.35	984.81	0.514	506.24	274.35	1.1	1.1	8.080	A
B	2381.51	595.38	257.50	2070.07	1.150	2069.03	2526.08	90.7	168.8	230.358	F
C	0.00	0.00	2326.53	371.86	0.000	0.00	0.00	0.0	0.0	0.000	A
D	2431.05	607.76	145.40	2472.95	0.983	2406.29	2181.13	20.5	26.7	40.865	E

Main results: (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)	LOS
A	413.53	103.38	1965.22	1188.12	0.348	415.70	254.98	1.1	0.6	5.025	A
B	1944.49	486.12	211.54	2098.08	0.927	2084.87	2169.38	168.8	133.7	261.413	F
C	0.00	0.00	2296.41	385.60	0.000	0.00	0.00	0.0	0.0	0.000	A
D	1984.95	496.24	146.51	2472.21	0.803	2073.69	2149.90	26.7	4.5	11.635	B

Main results: (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)	LOS
A	346.31	86.58	1587.87	1433.92	0.242	347.25	231.49	0.6	0.3	3.563	A
B	1628.42	407.10	176.65	2119.35	0.768	2102.53	1758.47	133.7	15.2	130.983	F
C	0.00	0.00	2279.18	393.46	0.000	0.00	0.00	0.0	0.0	0.000	A
D	1662.30	415.57	147.75	2471.38	0.673	1671.60	2131.43	4.5	2.2	4.840	A

Phase 5 2024 No Construction, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A,B,C,D	1110.05	F

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Capacity Options

[same as above]

Roundabout Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D2	Phase 5 2024 No Construction	AM	ONE HOUR	07:30	09:00	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	✓	628.00	100.000
B		ONE HOUR	✓	2950.00	100.000
C		ONE HOUR	✓	0.00	100.000
D		ONE HOUR	✓	3004.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0.000	311.000	0.000	317.000
	B	181.000	27.000	0.000	2742.000
	C	0.000	0.000	0.000	0.000
	D	186.000	2815.000	0.000	3.000

Proportions

		To			
		A	B	C	D
From	A	0.00	0.50	0.00	0.50
	B	0.06	0.01	0.00	0.93
	C	0.25	0.25	0.25	0.25
	D	0.06	0.94	0.00	0.00

Vehicle Mix

Heavy Vehicle proportion

		To			
		A	B	C	D
From	A	0	7	0	11
	B	7	14	0	9
	C	0	0	0	0
	D	13	7	0	0

Average PCU Per Veh

		To			
		A	B	C	D
From	A	1.000	1.070	1.000	1.110
	B	1.070	1.140	1.000	1.090
	C	1.000	1.000	1.000	1.000
	D	1.130	1.070	1.000	1.000

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)
A	0.73	15.48	2.9	C	576.26	864.40
B	1.61	1702.86	999.9	F	2706.97	4060.46
C	0.00	0.00	0.0	A	0.00	0.00
D	1.34	756.73	544.3	F	2756.52	4134.78

Main Results for each time segment

Main results: (07:30-07:45)

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)	LOS
A	472.79	118.20	2104.44	1097.43	0.431	469.53	262.46	0.0	0.8	6.216	A
B	2220.91	555.23	239.23	2081.20	1.067	2033.84	2334.74	0.0	46.8	49.342	E
C	0.00	0.00	2273.07	396.24	0.000	0.00	0.00	0.0	0.0	0.000	A
D	2261.57	565.39	143.40	2474.29	0.914	2223.50	2129.66	0.0	9.5	13.802	B

Main results: (07:45-08:00)

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)	LOS
A	564.56	141.14	2320.61	956.62	0.590	561.70	277.81	0.8	1.5	9.863	A
B	2651.99	663.00	285.98	2052.70	1.292	2051.66	2596.33	46.8	196.9	220.237	F
C	0.00	0.00	2337.65	366.79	0.000	0.00	0.00	0.0	0.0	0.000	A
D	2700.53	675.13	144.66	2473.45	1.092	2453.76	2192.99	9.5	71.2	67.189	F

Main results: (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)	LOS
A	691.44	172.86	2339.89	944.07	0.732	686.29	276.81	1.5	2.8	14.920	B
B	3248.01	812.00	348.90	2014.35	1.612	2014.29	2677.28	196.9	505.3	630.948	F
C	0.00	0.00	2363.18	355.14	0.000	0.00	0.00	0.0	0.0	0.000	A
D	3307.47	826.87	142.02	2475.21	1.336	2474.68	2221.16	71.2	279.4	259.147	F

Main results: (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)	LOS
A	691.44	172.86	2340.36	943.76	0.733	691.12	276.76	2.8	2.9	15.476	C
B	3248.01	812.00	351.33	2012.86	1.614	2012.85	2680.14	505.3	814.1	1182.516	F
C	0.00	0.00	2364.18	354.68	0.000	0.00	0.00	0.0	0.0	0.000	A
D	3307.47	826.87	141.92	2475.27	1.336	2475.19	2222.26	279.4	487.5	560.621	F

Main results: (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)	LOS
A	564.56	141.14	2339.01	944.64	0.598	569.49	278.94	2.9	1.7	10.593	B
B	2651.99	663.00	289.94	2050.29	1.293	2050.28	2618.56	814.1	964.5	1554.631	F
C	0.00	0.00	2340.21	365.62	0.000	0.00	0.00	0.0	0.0	0.000	A
D	2700.53	675.13	144.56	2473.51	1.092	2473.39	2195.65	487.5	544.3	753.458	F

Main results: (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)	LOS
A	472.79	118.20	2333.54	948.20	0.499	475.03	280.35	1.7	1.1	8.332	A
B	2220.91	555.23	242.25	2079.36	1.068	2079.32	2566.32	964.5	999.9	1702.858	F
C	0.00	0.00	2321.57	374.12	0.000	0.00	0.00	0.0	0.0	0.000	A
D	2261.57	565.39	146.61	2472.14	0.915	2467.28	2174.96	544.3	492.8	756.731	F

Phase 5 2024 With Construction, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A,B,C,D	1197.28	F

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Capacity Options

[same as above]

Roundabout Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D3	Phase 5 2024 With Construction	AM	ONE HOUR	07:30	09:00	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	✓	642.00	100.000
B		ONE HOUR	✓	2955.00	100.000
C		ONE HOUR	✓	0.00	100.000
D		ONE HOUR	✓	3111.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0.000	311.000	0.000	331.000
	B	181.000	27.000	0.000	2747.000
	C	0.000	0.000	0.000	0.000
	D	186.000	2922.000	0.000	3.000

Proportions

		To			
		A	B	C	D
From	A	0.00	0.48	0.00	0.52
	B	0.06	0.01	0.00	0.93
	C	0.25	0.25	0.25	0.25
	D	0.06	0.94	0.00	0.00

Vehicle Mix

Heavy Vehicle proportion

		To			
		A	B	C	D
From	A	0	7	0	15
	B	7	14	0	9
	C	0	0	0	0
	D	13	7	0	0

Average PCU Per Veh

		To			
		A	B	C	D
From	A	1.000	1.070	1.000	1.150
	B	1.070	1.140	1.000	1.090
	C	1.000	1.000	1.000	1.000
	D	1.130	1.070	1.000	1.000

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)
A	0.75	17.02	3.2	C	589.11	883.67
B	1.62	1737.21	1017.9	F	2711.56	4067.34
C	0.00	0.00	0.0	A	0.00	0.00
D	1.38	928.00	652.1	F	2854.71	4282.06

Main Results for each time segment

Main results: (07:30-07:45)

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)	LOS
A	483.33	120.83	2170.82	1054.19	0.458	479.63	261.18	0.0	0.9	6.910	A
B	2224.68	556.17	249.49	2074.95	1.072	2029.62	2400.96	0.0	48.8	51.084	F
C	0.00	0.00	2279.11	393.49	0.000	0.00	0.00	0.0	0.0	0.000	A
D	2342.12	585.53	142.86	2474.65	0.946	2289.14	2136.24	0.0	13.2	17.536	C

Main results: (07:45-08:00)

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)	LOS
A	577.14	144.29	2334.68	947.46	0.609	574.13	272.48	0.9	1.7	10.615	B
B	2656.48	664.12	298.38	2045.14	1.299	2044.19	2610.43	48.8	201.8	227.193	F
C	0.00	0.00	2342.57	364.54	0.000	0.00	0.00	0.0	0.0	0.000	A
D	2796.73	699.18	143.89	2473.96	1.130	2463.28	2198.68	13.2	96.6	87.563	F

Main results: (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)	LOS
A	706.86	176.71	2345.81	940.21	0.752	701.00	270.83	1.7	3.1	16.301	C
B	3253.52	813.38	363.81	2005.26	1.622	2005.20	2683.00	201.8	513.9	646.044	F
C	0.00	0.00	2369.01	352.48	0.000	0.00	0.00	0.0	0.0	0.000	A
D	3425.27	856.32	141.14	2475.79	1.384	2475.49	2227.86	96.6	334.1	316.827	F

Main results: (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)	LOS
A	706.86	176.71	2346.10	940.02	0.752	706.45	270.74	3.1	3.2	17.022	C
B	3253.52	813.38	366.61	2003.55	1.624	2003.53	2685.93	513.9	826.4	1206.845	F
C	0.00	0.00	2370.15	351.96	0.000	0.00	0.00	0.0	0.0	0.000	A
D	3425.27	856.32	141.03	2475.87	1.383	2475.82	2229.12	334.1	571.4	661.113	F

Main results: (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)	LOS
A	577.14	144.29	2344.73	940.91	0.613	582.87	273.01	3.2	1.8	11.332	B
B	2656.48	664.12	302.90	2042.39	1.301	2042.38	2624.70	826.4	979.9	1584.223	F
C	0.00	0.00	2345.28	363.31	0.000	0.00	0.00	0.0	0.0	0.000	A
D	2796.73	699.18	143.76	2474.05	1.130	2473.98	2201.52	571.4	652.1	892.771	F

Main results: (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)	LOS
A	483.33	120.83	2339.90	944.06	0.512	485.84	274.56	1.8	1.2	8.768	A
B	2224.68	556.17	252.87	2072.89	1.073	2072.85	2572.87	979.9	1017.9	1737.206	F
C	0.00	0.00	2325.72	372.23	0.000	0.00	0.00	0.0	0.0	0.000	A
D	2342.12	585.53	145.91	2472.61	0.947	2468.55	2179.82	652.1	620.5	928.002	F

Junctions 9

ARCADY 9 - Roundabout Module

Filename: Junction 2 PM.j9
Path: Z:\Junction 2
Report generation date: 13/10/2017 09:59:37

Summary of junction performance

	PM			
	Queue (PCU)	Delay (s)	RFC	LOS
2016 Base Year				
Phase 5 2024 No Construction				
Phase 5 2024 With Construction				

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	Junciton2
Location	Clonshagh
Site number	2
Date	05/07/2016
Version	
Status	
Identifier	
Client	Irish Water
Jobnumber	7556
Enumerator	TOBIN"Maria Rooney
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

Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
2016 Base Year	PM	ONE HOUR	16:00	17:30	15	✓
Phase 5 2024 No Construction	PM	ONE HOUR	16:00	17:30	15	✓
Phase 5 2024 With Construction	PM	ONE HOUR	16:00	17:30	15	✓

2016 Base Year , PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A,B,C,D	253.83	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	Clonshaugh Road	
B	R139 East	
C	Access Road	
D	R139 East	

Capacity Options

Arm	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)	Assume flat start profile	Initial queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00
D	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
A	8.00	8.10	30.0	38.0	66.0	35.0	
B	5.30	8.80	16.4	23.0	66.0	33.0	
C	4.20	5.90	9.0	14.0	66.0	53.0	
D	6.70	9.20	18.0	65.0	66.0	38.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A	0.651	2468.246
B	0.610	2227.037
C	0.456	1433.059
D	0.668	2570.090

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	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2016 Base Year	PM	ONE HOUR	16:00	17:30	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	✓	409.00	100.000
B		ONE HOUR	✓	2370.00	100.000
C		ONE HOUR	✓	0.00	100.000
D		ONE HOUR	✓	2185.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0.000	225.000	0.000	184.000
	B	272.000	25.000	0.000	2073.000
	C	0.000	0.000	0.000	0.000
	D	201.000	1979.000	0.000	5.000

Proportions

		To			
		A	B	C	D
From	A	0.00	0.55	0.00	0.45
	B	0.11	0.01	0.00	0.87
	C	0.25	0.25	0.25	0.25
	D	0.09	0.91	0.00	0.00

Vehicle Mix

Heavy Vehicle proportion

		To			
		A	B	C	D
From	A	0	4	0	10
	B	2	0	0	7
	C	0	0	0	0
	D	5	4	0	0

Average PCU Per Veh

		To			
		A	B	C	D
From	A	1.000	1.040	1.000	1.100
	B	1.020	1.000	1.000	1.070
	C	1.000	1.000	1.000	1.000
	D	1.050	1.040	1.000	1.000

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)
A	0.43	6.31	0.8	A	375.31	562.96
B	1.24	478.86	282.6	F	2174.75	3262.13
C	0.00	0.00	0.0	A	0.00	0.00
D	1.00	56.07	38.2	F	2004.99	3007.49

Main Results for each time segment

Main results: (16:00-16:15)

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)	LOS
A	307.92	76.98	1504.40	1488.29	0.207	306.81	353.01	0.0	0.3	3.245	A
B	1784.26	446.07	141.77	2140.61	0.834	1764.32	1669.44	0.0	5.0	9.714	A
C	0.00	0.00	1906.09	563.63	0.000	0.00	0.00	0.0	0.0	0.000	A
D	1644.98	411.25	221.10	2422.38	0.679	1636.32	1684.99	0.0	2.2	4.717	A

Main results: (16:15-16:30)

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)	LOS
A	367.68	91.92	1796.79	1297.84	0.283	367.11	415.27	0.3	0.4	4.121	A
B	2130.58	532.65	169.63	2123.63	1.003	2051.32	1994.27	5.0	24.8	34.953	D
C	0.00	0.00	2220.95	420.01	0.000	0.00	0.00	0.0	0.0	0.000	A
D	1964.27	491.07	257.06	2398.35	0.819	1954.99	1963.89	2.2	4.5	8.280	A

Main results: (16:30-16:45)

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)	LOS
A	450.32	112.58	2126.73	1082.91	0.416	448.99	454.01	0.4	0.8	6.042	A
B	2609.42	652.35	207.29	2100.67	1.242	2098.11	2368.43	24.8	152.6	158.485	F
C	0.00	0.00	2305.41	381.49	0.000	0.00	0.00	0.0	0.0	0.000	A
D	2405.73	601.43	262.93	2394.43	1.005	2317.82	2042.48	4.5	26.5	32.262	D

Main results: (16:45-17:00)

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)	LOS
A	450.32	112.58	2164.00	1058.64	0.425	450.19	458.01	0.8	0.8	6.306	A
B	2609.42	652.35	207.93	2100.28	1.242	2100.01	2406.26	152.6	280.0	373.592	F
C	0.00	0.00	2307.94	380.34	0.000	0.00	0.00	0.0	0.0	0.000	A
D	2405.73	601.43	263.17	2394.27	1.005	2358.83	2044.78	26.5	38.2	56.072	F

Main results: (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)	LOS
A	367.68	91.92	1926.10	1213.60	0.303	368.94	436.20	0.8	0.5	4.550	A
B	2130.58	532.65	170.78	2122.93	1.004	2120.21	2124.27	280.0	282.6	478.863	F
C	0.00	0.00	2290.99	388.07	0.000	0.00	0.00	0.0	0.0	0.000	A
D	1964.27	491.07	265.70	2392.58	0.821	2096.61	2025.29	38.2	5.1	17.882	C

Main results: (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)	LOS
A	307.92	76.98	1526.22	1474.08	0.209	308.65	397.04	0.5	0.3	3.294	A
B	1784.26	446.07	142.65	2140.08	0.834	2132.06	1692.22	282.6	195.6	404.292	F
C	0.00	0.00	2274.70	395.50	0.000	0.00	0.00	0.0	0.0	0.000	A
D	1644.98	411.25	267.18	2391.59	0.688	1656.07	2007.52	5.1	2.3	5.170	A

Phase 5 2024 No Construction , PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A,B,C,D	1417.33	F

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Capacity Options

[same as above]

Roundabout Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D2	Phase 5 2024 No Construction	PM	ONE HOUR	16:00	17:30	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	✓	557.00	100.000
B		ONE HOUR	✓	3224.00	100.000
C		ONE HOUR	✓	0.00	100.000
D		ONE HOUR	✓	2963.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0.000	304.000	0.000	253.000
	B	367.000	34.000	0.000	2823.000
	C	0.000	0.000	0.000	0.000
	D	273.000	2684.000	0.000	6.000

Proportions

		To			
		A	B	C	D
From	A	0.00	0.55	0.00	0.45
	B	0.11	0.01	0.00	0.88
	C	0.25	0.25	0.25	0.25
	D	0.09	0.91	0.00	0.00

Vehicle Mix

Heavy Vehicle proportion

		To			
		A	B	C	D
From	A	0	5	0	11
	B	2	0	0	8
	C	0	0	0	0
	D	6	5	0	0

Average PCU Per Veh

		To			
		A	B	C	D
From	A	1.000	1.050	1.000	1.110
	B	1.020	1.000	1.000	1.080
	C	1.000	1.000	1.000	1.000
	D	1.060	1.050	1.000	1.000

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)
A	0.59	9.18	1.5	A	511.11	766.67
B	1.73	2188.74	1320.1	F	2958.40	4437.60
C	0.00	0.00	0.0	A	0.00	0.00
D	1.36	842.67	579.5	F	2718.90	4078.35

Main Results for each time segment

Main results: (16:00-16:15)

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)	LOS
A	419.34	104.83	2007.41	1160.64	0.361	416.93	438.61	0.0	0.6	5.194	A
B	2427.20	606.80	193.80	2108.89	1.151	2082.95	2230.53	0.0	86.1	80.154	F
C	0.00	0.00	2276.75	394.56	0.000	0.00	0.00	0.0	0.0	0.000	A
D	2230.70	557.68	259.08	2397.01	0.931	2186.94	2017.68	0.0	10.9	15.673	C

Main results: (16:15-16:30)

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)	LOS
A	500.73	125.18	2185.10	1044.89	0.479	499.24	456.93	0.6	1.0	7.081	A
B	2898.31	724.58	231.59	2085.86	1.390	2085.54	2452.75	86.1	289.3	329.723	F
C	0.00	0.00	2317.12	376.15	0.000	0.00	0.00	0.0	0.0	0.000	A
D	2663.68	665.92	259.40	2396.79	1.111	2382.63	2057.73	10.9	81.2	77.297	F

Main results: (16:30-16:45)

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)	LOS
A	613.27	153.32	2199.59	1035.45	0.592	611.06	454.94	1.0	1.5	9.083	A
B	3549.69	887.42	282.41	2054.88	1.727	2054.85	2528.24	289.3	663.0	836.787	F
C	0.00	0.00	2337.26	366.96	0.000	0.00	0.00	0.0	0.0	0.000	A
D	3262.32	815.58	255.58	2399.34	1.360	2398.95	2081.68	81.2	297.0	287.729	F

Main results: (16:45-17:00)

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)	LOS
A	613.27	153.32	2199.92	1035.24	0.592	613.20	454.91	1.5	1.5	9.177	A
B	3549.69	887.42	283.38	2054.29	1.728	2054.28	2529.74	663.0	1036.8	1491.821	F
C	0.00	0.00	2337.66	366.78	0.000	0.00	0.00	0.0	0.0	0.000	A
D	3262.32	815.58	255.51	2399.39	1.360	2399.32	2082.15	297.0	512.8	610.518	F

Main results: (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)	LOS
A	500.73	125.18	2197.92	1036.54	0.483	502.83	458.15	1.5	1.0	7.288	A
B	2898.31	724.58	233.25	2084.85	1.390	2084.84	2467.50	1036.8	1240.2	1956.617	F
C	0.00	0.00	2318.09	375.71	0.000	0.00	0.00	0.0	0.0	0.000	A
D	2663.68	665.92	259.31	2396.85	1.111	2396.76	2058.78	512.8	579.5	823.039	F

Main results: (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)	LOS
A	419.34	104.83	2192.58	1040.02	0.403	420.48	460.18	1.0	0.7	6.265	A
B	2427.20	606.80	195.83	2107.66	1.152	2107.65	2417.23	1240.2	1320.1	2188.737	F
C	0.00	0.00	2303.48	382.37	0.000	0.00	0.00	0.0	0.0	0.000	A
D	2230.70	557.68	262.15	2394.95	0.931	2390.62	2041.33	579.5	539.5	842.674	F

Phase 5 2024 With Construction , PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A,B,C,D	1509.76	F

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Capacity Options

[same as above]

Roundabout Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D3	Phase 5 2024 With Construction	PM	ONE HOUR	16:00	17:30	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	✓	636.00	100.000
B		ONE HOUR	✓	3252.00	100.000
C		ONE HOUR	✓	0.00	100.000
D		ONE HOUR	✓	2982.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0.000	304.000	0.000	332.000
	B	367.000	34.000	0.000	2851.000
	C	0.000	0.000	0.000	0.000
	D	273.000	2703.000	0.000	6.000

Proportions

		To			
		A	B	C	D
From	A	0.00	0.48	0.00	0.52
	B	0.11	0.01	0.00	0.88
	C	0.25	0.25	0.25	0.25
	D	0.09	0.91	0.00	0.00

Vehicle Mix

Heavy Vehicle proportion

		To			
		A	B	C	D
From	A	0	5	0	13
	B	2	0	0	8
	C	0	0	0	0
	D	6	6	0	0

Average PCU Per Veh

		To			
		A	B	C	D
From	A	1.000	1.050	1.000	1.130
	B	1.020	1.000	1.000	1.080
	C	1.000	1.000	1.000	1.000
	D	1.060	1.060	1.000	1.000

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)
A	0.68	11.83	2.3	B	583.60	875.41
B	1.79	2395.05	1423.8	F	2984.09	4476.14
C	0.00	0.00	0.0	A	0.00	0.00
D	1.37	863.78	593.4	F	2736.34	4104.50

Main Results for each time segment

Main results: (16:00-16:15)

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)	LOS
A	478.81	119.70	2019.04	1153.06	0.415	475.75	432.75	0.0	0.8	5.770	A
B	2448.28	612.07	252.77	2072.95	1.181	2050.82	2242.02	0.0	99.4	92.614	F
C	0.00	0.00	2303.59	382.32	0.000	0.00	0.00	0.0	0.0	0.000	A
D	2245.01	561.25	252.88	2401.14	0.935	2198.91	2050.71	0.0	11.5	16.272	C

Main results: (16:15-16:30)

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)	LOS
A	571.75	142.94	2191.30	1040.86	0.549	569.60	449.19	0.8	1.3	8.291	A
B	2923.48	730.87	302.15	2042.85	1.431	2042.61	2458.75	99.4	319.6	375.774	F
C	0.00	0.00	2344.76	363.54	0.000	0.00	0.00	0.0	0.0	0.000	A
D	2680.76	670.19	251.87	2401.82	1.116	2388.62	2092.89	11.5	84.6	80.040	F

Main results: (16:30-16:45)

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)	LOS
A	700.25	175.06	2205.54	1031.58	0.679	696.58	446.13	1.3	2.2	11.586	B
B	3580.52	895.13	368.46	2002.42	1.788	2002.40	2533.66	319.6	714.1	931.425	F
C	0.00	0.00	2370.86	351.64	0.000	0.00	0.00	0.0	0.0	0.000	A
D	3283.24	820.81	246.91	2405.13	1.365	2404.76	2123.95	84.6	304.2	294.867	F

Main results: (16:45-17:00)

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)	LOS
A	700.25	175.06	2205.89	1031.35	0.679	700.08	446.04	2.2	2.3	11.833	B
B	3580.52	895.13	370.29	2001.31	1.789	2001.30	2535.68	714.1	1108.9	1642.107	F
C	0.00	0.00	2371.59	351.30	0.000	0.00	0.00	0.0	0.0	0.000	A
D	3283.24	820.81	246.78	2405.22	1.365	2405.16	2124.81	304.2	523.7	622.626	F

Main results: (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)	LOS
A	571.75	142.94	2203.32	1033.03	0.553	575.28	450.23	2.3	1.4	8.641	A
B	2923.48	730.87	305.13	2041.03	1.432	2041.02	2473.46	1108.9	1329.5	2134.534	F
C	0.00	0.00	2346.16	362.91	0.000	0.00	0.00	0.0	0.0	0.000	A
D	2680.76	670.19	251.68	2401.95	1.116	2401.87	2094.48	523.7	593.4	839.995	F

Main results: (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)	LOS
A	478.81	119.70	2197.56	1036.77	0.462	480.53	453.02	1.4	0.9	7.080	A
B	2448.28	612.07	255.66	2071.18	1.182	2071.18	2422.44	1329.5	1423.8	2395.048	F
C	0.00	0.00	2326.84	371.72	0.000	0.00	0.00	0.0	0.0	0.000	A
D	2245.01	561.25	255.39	2399.47	0.936	2395.19	2071.45	593.4	555.9	863.783	F

TRL LIMITED

OPTIMISED SIGNAL CAPACITY AND DELAY

OSCADY 4 ANALYSIS PROGRAM
RELEASE 2.2 (APR 2001)

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Run with file:-
"C:\Documents and Settings\Laura Gaffney\Desktop\7556\7556 Junction 5 2016 AM.voi"
(drive-on-the-left) at 15:27:57 on Tuesday, 13 September 2016

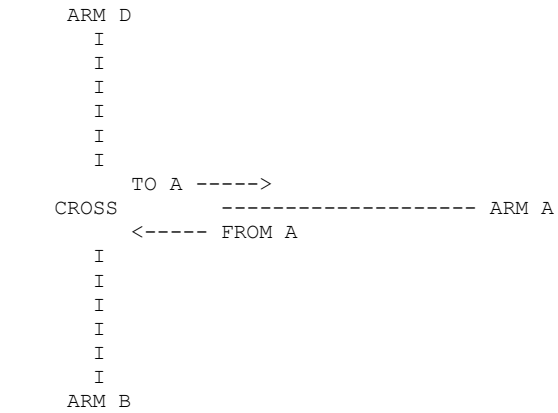
RUN TITLE
****
Junction 5 AM

**** ERROR AND WARNING MESSAGES ****
====================================

No errors or warnings in the data.

.TRAFFIC SIGNAL JUNCTION ANALYSIS
****

INPUT DATA



ARM A IS R107 (N)
ARM B IS R139 (E)
ARM C IS R107 (S)
ARM D IS R139 (W)

.GEOMETRIC DATA

DATA ITEM		ARM A	ARM B	ARM C	ARM D
GRADIENT		0.0 %	0.0 %	0.0 %	0.0 %
NUMBER OF LANES		3	3	4	4
PERMITTED MOVEMENTS	LANE 1	LS	LS	L	L
	LANE 2	S	S	S	S
	LANE 3	R	R	S	SR
	LANE 4			R	R

TOTAL EXIT WIDTH FOR STRAIGHT-					
AHEAD VEHICLES FROM THIS ARM	N/A	N/A	N/A	N/A	
LANE WIDTHS	LANE 1	3.40 M	2.80 M	2.60 M	2.80 M
	LANE 2	3.00 M	3.00 M	3.00 M	3.00 M
	LANE 3	3.60 M	2.80 M	2.80 M	2.70 M
	LANE 4	0.00 M	0.00 M	2.60 M	3.00 M
LEFT TURN RADII	LANE 1	5.0 M	5.0 M	5.0 M	5.0 M
RIGHT TURN RADII	LANE 3	5.0 M	5.0 M	N/A	5.0 M
	LANE 4	N/A	N/A	5.0 M	5.0 M

.TRAFFIC DEMAND DATA

DEMAND PROFILES ARE SYNTHESISED USING THE ** ODTAB ** OPTION

DEFAULT VEHICLE TYPE PROPORTIONS ARE USED

DEMAND DATA SUPPLIED BETWEEN TIMES - 07.30 TO 09.00
PERIOD OF INTEREST (FOR QUEUE AND DELAY CALCULATIONS) - 07.30 TO 09.00

THE FOLLOWING DATA HAS BEEN INPUT
\+ / DEFAULTED

TRAFFIC SCALING FACTOR HAS BEEN SET TO 100 %

TOTAL TRAFFIC DEMAND (VEHICLES / HOUR)

FROM/TO	ARM A	ARM B	ARM C	ARM D
ARM A	0.0	58.0	749.0	285.0
ARM B	78.0	0.0	400.0	725.0
ARM C	423.0	236.0	0.0	572.0
ARM D	251.0	633.0	477.0	0.0

TIME PERIOD	ARM	VEHICLE TYPE PROPORTIONS					
		CARS AND LIGHT GOODS	MEDIUM GOODS	HEAVY GOODS	BUSES AND COACHES	MOTOR CYCLES	PEDAL CYCLES
ALL	ALL	0.927	0.041	0.016	0.016	0.000	0.000

.DATA DETERMINED FOR USE IN SYNTHESIS OF DEMAND PROFILES ARE AS FOLLOWS-

ENTRY/EXIT FLOWS	ARM	TIME WHEN FLOW STARTS TO RISE	TIME WHEN TOP OF PEAK IS REACHED	TIME WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ENTRY	A	07.45	08.15	08.45	13.65	20.47	13.65
	B	07.45	08.15	08.45	15.04	22.56	15.04
	C	07.45	08.15	08.45	15.39	23.08	15.39
	D	07.45	08.15	08.45	17.01	25.52	17.01

.SIGNAL TIMING DETAILS FOR SIGNAL SET 1

TIMING OPTION- FIXED MODE: TIMINGS ARE PROVIDED BY USER

FIXED CYCLE TIME- 50.0 SECONDS
PERIODS FOR WHICH THESE SETTINGS APPLY- 07.30-09.00

GLOBAL EFFECTIVE GREEN DISPLACEMENTS - START = 1.4
END = 2.9

DATA ITEM		STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5
LANES ON GREEN:	ARM A	1 2				1 2 3
	B				1 2 3	
	C	1 2 3	1 2 3 4			
	D			1 2 3 4		

GREEN TIME (SECS)		5.0		5.0		5.0		5.0		5.0		
PRECEDING INTERSTAGE		5.0		5.0		5.0		5.0		5.0		

.DEMAND AND CAPACITY INFORMATION FOR EACH 15 MINUTE TIME SEGMENT BETWEEN 07.30 AND 09.00

TIME	ARM	LANES	MOVEMENT	DEMAND (VEHS/MIN)	SAT FLOW (PCU/HR)	SAT FLOW (VEHS/MIN)	EFFECTIVE GREEN-TIME TRUE (SECS)	EFFECTIVE GREEN-TIME FLARE+NOTIONL (SECS)	CAPACITY (VEHS /MIN)
07.30-07.45									
	A	12	L S	10.09	3925.4	61.88	16.5		20.42
		3	R	3.56	1626.9	25.65	6.5		3.33
	B	12	L S	14.06	3569.3	56.26	6.5		7.31
		3	R	0.98	1565.4	24.68	6.5		3.21
	C	1	L	7.15	1442.3	22.74	16.5		7.50
		23	S	5.29	4090.0	64.47	16.5		21.28
		4	R	2.95	1550.0	24.43	6.5		3.18
	D	1	L	3.14	1457.7	22.98	6.5		2.99
		234	S R	13.88	5434.4	85.66	6.5		11.14
07.45-08.00									
	A	12	L S	12.05	3925.4	61.88	16.5		20.42
		3	R	4.25	1626.9	25.65	6.5		3.33
	B	12	L S	16.79	3569.3	56.26	6.5		7.31
		3	R	1.16	1565.4	24.68	6.5		3.21
	C	1	L	8.54	1442.3	22.74	16.5		7.50
		23	S	6.31	4090.0	64.47	16.5		21.28
		4	R	3.52	1550.0	24.43	6.5		3.18
	D	1	L	3.75	1457.7	22.98	6.5		2.99
		234	S R	16.57	5434.4	85.66	6.5		11.14
08.00-08.15									
	A	12	L S	14.75	3925.4	61.88	16.5		20.42
		3	R	5.21	1626.9	25.65	6.5		3.33
	B	12	L S	20.57	3569.3	56.26	6.5		7.31
		3	R	1.43	1565.4	24.68	6.5		3.21
	C	1	L	10.46	1442.3	22.74	16.5		7.50
		23	S	7.73	4090.0	64.47	16.5		21.28
		4	R	4.31	1550.0	24.43	6.5		3.18
	D	1	L	4.59	1457.7	22.98	6.5		2.99
		234	S R	20.29	5434.4	85.66	6.5		11.14
08.15-08.30									
	A	12	L S	14.75	3925.4	61.88	16.5		20.42
		3	R	5.21	1626.9	25.65	6.5		3.33
	B	12	L S	20.57	3569.3	56.26	6.5		7.31
		3	R	1.43	1565.4	24.68	6.5		3.21
	C	1	L	10.46	1442.3	22.74	16.5		7.50
		23	S	7.73	4090.0	64.47	16.5		21.28
		4	R	4.31	1550.0	24.43	6.5		3.18
	D	1	L	4.59	1457.7	22.98	6.5		2.99
		234	S R	20.29	5434.4	85.66	6.5		11.14
08.30-08.45									
	A	12	L S	12.05	3925.4	61.88	16.5		20.42
		3	R	4.25	1626.9	25.65	6.5		3.33
	B	12	L S	16.79	3569.3	56.26	6.5		7.31
		3	R	1.16	1565.4	24.68	6.5		3.21
	C	1	L	8.54	1442.3	22.74	16.5		7.50
		23	S	6.31	4090.0	64.47	16.5		21.28
		4	R	3.52	1550.0	24.43	6.5		3.18
	D	1	L	3.75	1457.7	22.98	6.5		2.99
		234	S R	16.57	5434.4	85.66	6.5		11.14
08.45-09.00									
	A	12	L S	10.09	3925.4	61.88	16.5		20.42
		3	R	3.56	1626.9	25.65	6.5		3.33
	B	12	L S	14.06	3569.3	56.26	6.5		7.31
		3	R	0.98	1565.4	24.68	6.5		3.21
	C	1	L	7.15	1442.3	22.74	16.5		7.50
		23	S	5.29	4090.0	64.47	16.5		21.28
		4	R	2.95	1550.0	24.43	6.5		3.18
	D	1	L	3.14	1457.7	22.98	6.5		2.99
		234	S R	13.88	5434.4	85.66	6.5		11.14

.QUEUE AND DELAY INFORMATION FOR EACH 15 MINUTE TIME SEGMENT BETWEEN 07.30 AND 09.00

TIME	ARM	LANES	MOVEMENT	DEMAND EXCL 2-WHEEL (VEHS/MIN)	CAPACITY (VEHS/MIN)	DEGREE OF SAT (RFC)	QUEUE AT END OF SEGMENT MEAN (PHASE AVERAGED) (VEHS/LANE)	QUEUE AT END OF SEGMENT MAXIMUM (END OF RED) (VEHS/LANE)	QUEUEING DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)
07.30-07.45										
	A	12	L S	10.09	20.42	0.494	1.3	3.0	38.1	
		3	R	3.56	3.33	1.069	8.3	9.5	84.4	
	B	12	L S	14.06	7.31	1.923	52.3	53.6	808.4	
		3	R	0.98	3.21	0.304	0.4	0.8	6.0	
	C	1	L	7.15	7.50	0.953	7.2	9.2	88.8	
		23	S	5.29	21.28	0.249	0.6	1.5	16.9	
		4	R	2.95	3.18	0.929	4.3	5.3	51.8	
	D	1	L	3.14	2.99	1.050	7.1	8.2	73.8	
		234	S R	13.88	11.14	1.246	15.8	17.1	400.2	
07.45-08.00										
	A	12	L S	12.05	20.42	0.590	1.7	3.6	49.5	
		3	R	4.25	3.33	1.276	22.5	23.7	241.7	
	B	12	L S	16.79	7.31	2.296	123.3	124.7	2636.8	
		3	R	1.16	3.21	0.363	0.5	1.0	7.6	
	C	1	L	8.54	7.50	1.138	24.2	26.3	257.8	
		23	S	6.31	21.28	0.297	0.7	1.8	20.8	
		4	R	3.52	3.18	1.109	11.0	12.2	129.2	
	D	1	L	3.75	2.99	1.254	19.0	20.0	206.4	
		234	S R	16.57	11.14	1.488	43.0	44.3	1330.3	
08.00-08.15										
	A	12	L S	14.75	20.42	0.722	2.4	4.7	70.9	
		3	R	5.21	3.33	1.563	50.7	51.9	554.4	
	B	12	L S	20.57	7.31	2.812	222.7	224.1	5192.5	
		3	R	1.43	3.21	0.445	0.7	1.2	10.3	
	C	1	L	10.46	7.50	1.394	68.6	70.7	706.7	
		23	S	7.73	21.28	0.363	0.9	2.2	26.5	
		4	R	4.31	3.18	1.358	28.3	29.5	304.3	
	D	1	L	4.59	2.99	1.536	43.1	44.1	471.0	
		234	S R	20.29	11.14	1.822	88.7	90.1	2967.1	
08.15-08.30										

```
 I   A   12      L S        14.75      20.42      0.722       2.4          4.7         71.3
I
 I         3         R       5.21       3.33      1.563      78.8         80.0        974.7
I
 I   B   12      L S        20.57       7.31      2.812     322.1        323.4       8173.6
I
 I         3         R       1.43       3.21      0.445       0.7          1.2         10.4
I
 I   C   1       L          10.46       7.50      1.394     113.0        115.1       1367.6
I
 I        23       S          7.73      21.28      0.363       0.9          2.2         26.5
I
 I          4        R       4.31       3.18      1.358      45.5         46.6        558.7
I
 I   D   1       L           4.59       2.99      1.536      67.1         68.2        829.6
I
 I        234      S R       20.29      11.14      1.822     134.5        135.9       5025.5
I
.-------------------------------------------------------------------------------------------------------------
-----
 I 08.30-08.45
I
 I   A   12      L S        12.05      20.42      0.590       1.7          3.6         49.8
I
 I         3         R       4.25       3.33      1.276      92.6         93.9       1288.7
I
 I   B   12      L S        16.79       7.31      2.296     393.2        394.5      10730.4
I
 I         3         R       1.16       3.21      0.363       0.5          1.0          7.7
I
 I   C   1       L           8.54       7.50      1.138     128.5        130.6       1815.3
I
 I        23       S          6.31      21.28      0.297       0.7          1.8         20.8
I
 I          4        R       3.52       3.18      1.109      50.7         51.9        725.2
I
 I   D   1       L           3.75       2.99      1.254      78.5         79.6       1094.6
I
 I        234      S R       16.57      11.14      1.488     161.7        163.0       6666.0
I
.-------------------------------------------------------------------------------------------------------------
-----
 I 08.45-09.00
I
 I   A   12      L S        10.09      20.42      0.494       1.3          3.0         38.2
I
 I         3         R       3.56       3.33      1.069      96.1         97.3       1417.8
I
 I   B   12      L S        14.06       7.31      1.923     443.8        445.1      12555.7
I
 I         3         R       0.98       3.21      0.304       0.4          0.8          6.0
I
 I   C   1       L           7.15       7.50      0.953     123.8        125.9       1892.2
I
 I        23       S          5.29      21.28      0.249       0.6          1.5         16.9
I
 I          4        R       2.95       3.18      0.929      47.9         49.0        739.6
I
 I   D   1       L           3.14       2.99      1.050      80.8         81.9       1196.9
I
 I        234      S R       13.88      11.14      1.246     175.4        176.7       7585.0
I
 -------------------------------------------------------------------------------------------------------------
-----

.QUEUES FOR ARM A
 ----------------

                NUMBER OF VEHICLES IN QUEUE
  TIME   LANE     MEAN      MAXIMUM
 SEGMENT         (PHASE     (AT END
 ENDING         AVERAGED)  OF RED)
                    *          +

  07.45    3       8.3        9.5    ********+
           2       1.3        3.0    *++
           1       1.3        3.0    *++

  08.00    3      22.5       23.7    **********************++
           2       1.7        3.6    **++
           1       1.7        3.6    **++

  08.15    3      50.7       51.9    ************************************************+
           2       2.4        4.7    **+++
```

```
           1      2.4        4.7    **+++

  08.30    3     78.8       80.0
*********************************************************************************+
           2      2.4        4.7    **+++
           1      2.4        4.7    **+++

  08.45    3     92.6       93.9
*********************************************************************************
           2      1.7        3.6    **++
           1      1.7        3.6    **++

  09.00    3     96.1       97.3
*********************************************************************************
           2      1.3        3.0    *++
           1      1.3        3.0    *++


.QUEUES FOR ARM B
 ----------------

               NUMBER OF VEHICLES IN QUEUE
  TIME   LANE    MEAN     MAXIMUM
 SEGMENT        (PHASE    (AT END
 ENDING        AVERAGED)  OF RED)
                   *          +

  07.45    3      0.4        0.8    +
           2     52.3       53.6    ******************************************************++
           1     52.3       53.6    ******************************************************++

  08.00    3      0.5        1.0    *
           2    123.3      124.7
*********************************************************************************
           1    123.3      124.7
*********************************************************************************

  08.15    3      0.7        1.2    *
           2    222.7      224.1
*********************************************************************************
           1    222.7      224.1
*********************************************************************************

  08.30    3      0.7        1.2    *
           2    322.1      323.4
*********************************************************************************
           1    322.1      323.4
*********************************************************************************

  08.45    3      0.5        1.0    *
           2    393.2      394.5
*********************************************************************************
           1    393.2      394.5
*********************************************************************************

  09.00    3      0.4        0.8    +
           2    443.8      445.1
*********************************************************************************
           1    443.8      445.1
*********************************************************************************


.QUEUES FOR ARM C
 ----------------

               NUMBER OF VEHICLES IN QUEUE
  TIME   LANE    MEAN     MAXIMUM
 SEGMENT        (PHASE    (AT END
 ENDING        AVERAGED)  OF RED)
                   *          +

  07.45    4      4.3        5.3    ****+
           3      0.6        1.5    *+
           2      0.6        1.5    *+
           1      7.2        9.2    *******++

  08.00    4     11.0       12.2    ***********+
           3      0.7        1.8    *+
           2      0.7        1.8    *+
           1     24.2       26.3    ************************++

  08.15    4     28.3       29.5    ****************************+
           3      0.9        2.2    *+
           2      0.9        2.2    *+
```

```
           1     68.6       70.7    ********************************************************************************++

  08.30    4     45.5       46.6    *********************************************++
           3      0.9        2.2    *+
           2      0.9        2.2    *+
           1    113.0      115.1
*******************************************************************************

  08.45    4     50.7       51.9    ************************************************+
           3      0.7        1.8    *+
           2      0.7        1.8    *+
           1    128.5      130.6
*******************************************************************************

  09.00    4     47.9       49.0    ************************************************+
           3      0.6        1.5    *+
           2      0.6        1.5    *+
           1    123.8      125.9
*******************************************************************************


.QUEUES FOR ARM D
 ----------------

               NUMBER OF VEHICLES IN QUEUE
  TIME   LANE    MEAN     MAXIMUM
 SEGMENT        (PHASE    (AT END
 ENDING        AVERAGED)  OF RED)
                   *         +

  07.45    4     15.8       17.1    ***************+
           3     15.8       17.1    ***************+
           2     15.8       17.1    ***************+
           1      7.1        8.2    *******+

  08.00    4     43.0       44.3    *******************************************+
           3     43.0       44.3    *******************************************+
           2     43.0       44.3    *******************************************+
           1     19.0       20.0    ******************+

  08.15    4     88.7       90.1
*******************************************************************************
           3     88.7       90.1
*******************************************************************************
           2     88.7       90.1
*******************************************************************************
           1     43.1       44.1    *******************************************+

  08.30    4    134.5      135.9
*******************************************************************************
           3    134.5      135.9
*******************************************************************************
           2    134.5      135.9
*******************************************************************************
           1     67.1       68.2    ********************************************************************************+

  08.45    4    161.7      163.0
*******************************************************************************
           3    161.7      163.0
*******************************************************************************
           2    161.7      163.0
*******************************************************************************
           1     78.5       79.6
*********************************************************************************++

  09.00    4    175.4      176.7
*******************************************************************************
           3    175.4      176.7
*******************************************************************************
           2    175.4      176.7
*******************************************************************************
           1     80.8       81.9
*********************************************************************************+


.QUEUEING DELAY INFORMATION OVER WHOLE PERIOD (07.30-09.00)
 ---------------------------------------------------------

 ------------------------------------------------------------------------
 I STREAM I   TOTAL DEMAND  I   * QUEUEING *      I * INCLUSIVE QUEUEING * I
 I        I  (EXCL 2-WHEEL) I    * DELAY *        I       * DELAY *        I
 I        I----------------------------------- ----------------------I
 I        I  (VEH)   (VEH/H) I  (MIN)     (MIN/VEH) I    (MIN)      (MIN/VEH) I
 ------------------------------------------------------------------------
```

A-B	79.5	53.0	22.8	0.29	22.8	0.29		
A-C	1027.0	684.7	294.9	0.29	295.0	0.29		
A-D	390.8	260.5	4561.7	11.67	5946.9	15.22		
B-C	548.5	365.7	14256.8	25.99	33406.3	60.91		
B-D	994.1	662.8	25840.5	25.99	60548.9	60.91		
B-A	107.0	71.3	47.9	0.45	48.0	0.45		
C-D	784.3	522.9	6128.5	7.81	7149.2	9.12		
C-A	580.0	386.7	128.4	0.22	128.4	0.22		
C-B	323.6	215.7	2508.9	7.75	2869.9	8.87		
D-A	344.2	229.4	3872.2	11.25	4964.8	14.43		
D-B	868.0	578.7	13671.7	15.75	20758.6	23.92		
D-C	654.1	436.0	10302.4	15.75	15642.7	23.92		
ALL	6701.1	4467.4	81636.6	12.18	151781.5	22.65		

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
* THESE WILL BE SIGNIFICANTLY DIFFERENT ONLY IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

* TOTAL GEOMETRIC DELAY INCLUDES DELAY SUFFERED BY VEHICLES STILL QUEUEING AT THE END OF THE WHOLE TIME PERIOD.
* THE SUM OF DELAYS FOR EACH SEGMENT AND THE TOTAL GEOMETRIC DELAY WILL BE SIGNIFICANTLY DIFFERENT ONLY IF THERE IS
* A LARGE QUEUE AT THE END OF THE TIME PERIOD.

.

****** OSCADY 4 run completed

TRL LIMITED

OPTIMISED SIGNAL CAPACITY AND DELAY

OSCADY 4 ANALYSIS PROGRAM
RELEASE 2.2 (APR 2001)

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TRL SOFTWARE BUREAU
TEL: CROWTHORNE (01344) 770758, FAX: 770864
EMAIL: SoftwareBureau@trl.co.uk

Run with file:-
"C:\Documents and Settings\Laura Gaffney\Desktop\7556\7556 Junction 5 2016 PM.voi"
(drive-on-the-left) at 15:50:33 on Tuesday, 13 September 2016

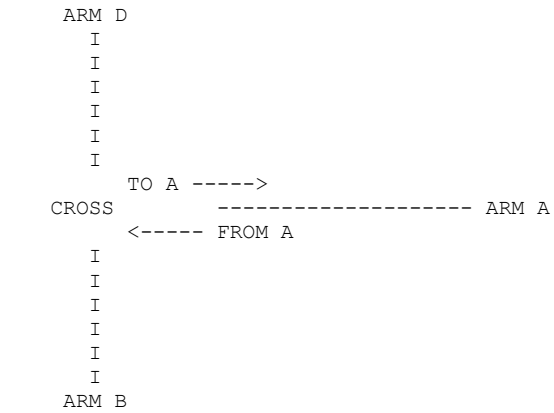
RUN TITLE
****
Junction 5 AM

**** ERROR AND WARNING MESSAGES ****
====================================

No errors or warnings in the data.

.TRAFFIC SIGNAL JUNCTION ANALYSIS
****

INPUT DATA



ARM A IS R107 (N)
ARM B IS R139 (E)
ARM C IS R107 (S)
ARM D IS R139 (W)

.GEOMETRIC DATA

DATA ITEM		ARM A	ARM B	ARM C	ARM D
GRADIENT		0.0 %	0.0 %	0.0 %	0.0 %
NUMBER OF LANES		3	3	4	4
PERMITTED MOVEMENTS	LANE 1	LS	LS	L	L
	LANE 2	S	S	S	S
	LANE 3	R	R	S	SR
	LANE 4			R	R

TOTAL EXIT WIDTH FOR STRAIGHT- AHEAD VEHICLES FROM THIS ARM		N/A	N/A	N/A	N/A	
LANE WIDTHS	LANE 1	3.40 M	2.80 M	2.60 M	2.80 M	
	LANE 2	3.00 M	3.00 M	3.00 M	3.00 M	
	LANE 3	3.60 M	2.80 M	2.80 M	2.70 M	
	LANE 4	0.00 M	0.00 M	2.60 M	3.00 M	
LEFT TURN RADII	LANE 1	5.0 M	5.0 M	5.0 M	5.0 M	
RIGHT TURN RADII	LANE 3	5.0 M	5.0 M	N/A	5.0 M	
	LANE 4	N/A	N/A	5.0 M	5.0 M	

.TRAFFIC DEMAND DATA

DEMAND PROFILES ARE SYNTHESISED USING THE ** ODTAB ** OPTION

DEFAULT VEHICLE TYPE PROPORTIONS ARE USED

DEMAND DATA SUPPLIED BETWEEN TIMES - 16.00 TO 17.30
PERIOD OF INTEREST (FOR QUEUE AND DELAY CALCULATIONS) - 16.00 TO 17.30

THE FOLLOWING DATA HAS BEEN INPUT
\+ / DEFAULTED

TRAFFIC SCALING FACTOR HAS BEEN SET TO 100 %

TOTAL TRAFFIC DEMAND (VEHICLES / HOUR)

FROM/TO	ARM A	ARM B	ARM C	ARM D
ARM A	0.0	70.0	507.0	273.0
ARM B	66.0	0.0	338.0	677.0
ARM C	671.0	423.0	0.0	670.0
ARM D	237.0	637.0	456.0	0.0

TIME PERIOD	ARM	VEHICLE TYPE PROPORTIONS					
		CARS AND LIGHT GOODS	MEDIUM GOODS	HEAVY GOODS	BUSES AND COACHES	MOTOR CYCLES	PEDAL CYCLES
ALL	ALL	0.927	0.041	0.016	0.016	0.000	0.000

.DATA DETERMINED FOR USE IN SYNTHESIS OF DEMAND PROFILES ARE AS FOLLOWS-

ENTRY/EXIT FLOWS	ARM	TIME WHEN FLOW STARTS TO RISE	TIME WHEN TOP OF PEAK IS REACHED	TIME WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ENTRY	A	16.15	16.45	17.15	10.63	15.94	10.63
	B	16.15	16.45	17.15	13.51	20.27	13.51
	C	16.15	16.45	17.15	22.05	33.07	22.05
	D	16.15	16.45	17.15	16.63	24.94	16.63

.SIGNAL TIMING DETAILS FOR SIGNAL SET 1

TIMING OPTION- FIXED MODE: TIMINGS ARE PROVIDED BY USER

FIXED CYCLE TIME- 50.0 SECONDS
PERIODS FOR WHICH THESE SETTINGS APPLY- 16.00-17.30

GLOBAL EFFECTIVE GREEN DISPLACEMENTS - START = 1.4
END = 2.9

DATA ITEM		STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5
LANES ON GREEN:	ARM A	1 2				1 2 3
	B				1 2 3	
	C	1 2 3	1 2 3 4			
	D			1 2 3 4		

GREEN TIME (SECS)		5.0		5.0		5.0		5.0		5.0		
PRECEDING INTERSTAGE		5.0		5.0		5.0		5.0		5.0		

.DEMAND AND CAPACITY INFORMATION FOR EACH 15 MINUTE TIME SEGMENT BETWEEN 16.00 AND 17.30

TIME	ARM	LANES	MOVEMENT	DEMAND (VEHS/MIN)	SAT FLOW (PCU/HR)	SAT FLOW (VEHS/MIN)	EFFECTIVE GREEN-TIME TRUE (SECS)	EFFECTIVE GREEN-TIME FLARE+NOTIONL (SECS)	CAPACITY (VEHS /MIN)
16.00-16.15									
	A	12	L S	7.21	3869.2	60.99	16.5		20.13
		3	R	3.41	1626.9	25.65	6.5		3.33
	B	12	L S	12.69	3591.2	56.61	6.5		7.36
		3	R	0.82	1565.4	24.68	6.5		3.21
	C	1	L	8.38	1442.3	22.74	16.5		7.50
		23	S	8.39	4090.0	64.47	16.5		21.28
		4	R	5.29	1550.0	24.43	6.5		3.18
	D	1	L	2.96	1457.7	22.98	6.5		2.99
		234	S R	13.66	5452.6	85.95	6.5		11.17
16.15-16.30									
	A	12	L S	8.61	3869.2	60.99	16.5		20.13
		3	R	4.07	1626.9	25.65	6.5		3.33
	B	12	L S	15.15	3591.2	56.61	6.5		7.36
		3	R	0.99	1565.4	24.68	6.5		3.21
	C	1	L	10.00	1442.3	22.74	16.5		7.50
		23	S	10.02	4090.0	64.47	16.5		21.28
		4	R	6.31	1550.0	24.43	6.5		3.18
	D	1	L	3.54	1457.7	22.98	6.5		2.99
		234	S R	16.31	5452.6	85.95	6.5		11.17
16.30-16.45									
	A	12	L S	10.55	3869.2	60.99	16.5		20.13
		3	R	4.99	1626.9	25.65	6.5		3.33
	B	12	L S	18.56	3591.2	56.61	6.5		7.36
		3	R	1.21	1565.4	24.68	6.5		3.21
	C	1	L	12.25	1442.3	22.74	16.5		7.50
		23	S	12.27	4090.0	64.47	16.5		21.28
		4	R	7.73	1550.0	24.43	6.5		3.18
	D	1	L	4.33	1457.7	22.98	6.5		2.99
		234	S R	19.98	5452.6	85.95	6.5		11.17
16.45-17.00									
	A	12	L S	10.55	3869.2	60.99	16.5		20.13
		3	R	4.99	1626.9	25.65	6.5		3.33
	B	12	L S	18.56	3591.2	56.61	6.5		7.36
		3	R	1.21	1565.4	24.68	6.5		3.21
	C	1	L	12.25	1442.3	22.74	16.5		7.50
		23	S	12.27	4090.0	64.47	16.5		21.28
		4	R	7.73	1550.0	24.43	6.5		3.18
	D	1	L	4.33	1457.7	22.98	6.5		2.99
		234	S R	19.98	5452.6	85.95	6.5		11.17
17.00-17.15									
	A	12	L S	8.61	3869.2	60.99	16.5		20.13
		3	R	4.07	1626.9	25.65	6.5		3.33
	B	12	L S	15.15	3591.2	56.61	6.5		7.36
		3	R	0.99	1565.4	24.68	6.5		3.21
	C	1	L	10.00	1442.3	22.74	16.5		7.50
		23	S	10.02	4090.0	64.47	16.5		21.28
		4	R	6.31	1550.0	24.43	6.5		3.18
	D	1	L	3.54	1457.7	22.98	6.5		2.99
		234	S R	16.31	5452.6	85.95	6.5		11.17
17.15-17.30									
	A	12	L S	7.21	3869.2	60.99	16.5		20.13
		3	R	3.41	1626.9	25.65	6.5		3.33
	B	12	L S	12.69	3591.2	56.61	6.5		7.36
		3	R	0.82	1565.4	24.68	6.5		3.21
	C	1	L	8.38	1442.3	22.74	16.5		7.50
		23	S	8.39	4090.0	64.47	16.5		21.28
		4	R	5.29	1550.0	24.43	6.5		3.18
	D	1	L	2.96	1457.7	22.98	6.5		2.99
		234	S R	13.66	5452.6	85.95	6.5		11.17

.QUEUE AND DELAY INFORMATION FOR EACH 15 MINUTE TIME SEGMENT BETWEEN 16.00 AND 17.30

TIME	ARM	LANES	MOVEMENT	DEMAND EXCL 2-WHEEL (VEHS/MIN)	CAPACITY (VEHS/MIN)	DEGREE OF SAT (RFC)	QUEUE AT END OF SEGMENT MEAN (PHASE AVERAGED) (VEHS/LANE)	QUEUE AT END OF SEGMENT MAXIMUM (END OF RED) (VEHS/LANE)	QUEUEING DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)
16.00-16.15										
	A	12	L S	7.21	20.13	0.358	0.8	2.1	24.7	
		3	R	3.41	3.33	1.024	6.8	8.0	73.6	
	B	12	L S	12.69	7.36	1.724	41.7	43.0	651.3	
		3	R	0.82	3.21	0.257	0.3	0.7	4.8	
	C	1	L	8.38	7.50	1.116	18.9	21.0	176.3	
		23	S	8.39	21.28	0.394	1.0	2.4	29.3	
		4	R	5.29	3.18	1.665	33.7	34.8	266.8	
	D	1	L	2.96	2.99	0.992	5.5	6.6	61.8	
		234	S R	13.66	11.17	1.223	14.6	16.0	374.8	
16.15-16.30										
	A	12	L S	8.61	20.13	0.428	1.0	2.5	31.0	
		3	R	4.07	3.33	1.222	18.5	19.7	202.4	
	B	12	L S	15.15	7.36	2.059	100.1	101.5	2131.0	
		3	R	0.99	3.21	0.307	0.4	0.8	6.1	
	C	1	L	10.00	7.50	1.333	56.6	58.7	578.4	
		23	S	10.02	21.28	0.471	1.2	2.9	37.0	
		4	R	6.31	3.18	1.988	80.7	81.9	861.7	
	D	1	L	3.54	2.99	1.184	14.6	15.7	163.2	
		234	S R	16.31	11.17	1.460	40.3	41.7	1245.3	
16.30-16.45										
	A	12	L S	10.55	20.13	0.524	1.4	3.1	40.9	
		3	R	4.99	3.33	1.497	43.5	44.7	471.7	
	B	12	L S	18.56	7.36	2.521	184.1	185.4	4265.3	
		3	R	1.21	3.21	0.376	0.5	1.0	8.0	
	C	1	L	12.25	7.50	1.632	127.8	129.9	1387.9	
		23	S	12.27	21.28	0.577	1.7	3.7	49.5	
		4	R	7.73	3.18	2.435	149.1	150.2	1725.7	
	D	1	L	4.33	2.99	1.450	34.9	36.0	378.3	
		234	S R	19.98	11.17	1.788	84.4	85.7	2809.9	
16.45-17.00										

```
 I   A   12      L S        10.55      20.13      0.524       1.4          3.1         41.0
I
 I         3         R       4.99       3.33      1.497      68.3         69.6        842.5
I
 I   B   12      L S        18.56       7.36      2.521     268.1        269.4       6783.7
I
 I         3         R       1.21       3.21      0.376       0.5          1.0          8.0
I
 I   C   1       L          12.25       7.50      1.632     199.0        201.1       2453.5
I
 I        23       S        12.27      21.28      0.577       1.7          3.7         49.6
I
 I          4        R       7.73       3.18      2.435     217.4        218.6       2750.2
I
 I   D   1       L           4.33       2.99      1.450      55.1         56.2        679.2
I
 I        234      S R      19.98      11.17      1.788     128.4        129.8       4789.9
I
.-------------------------------------------------------------------------------------------------------------
-----
 I 17.00-17.15
I
 I   A   12      L S         8.61      20.13      0.428       1.0          2.5         31.0
I
 I         3         R       4.07       3.33      1.222      79.5         80.7       1111.6
I
 I   B   12      L S        15.15       7.36      2.059     326.5        327.8       8919.4
I
 I         3         R       0.99       3.21      0.307       0.4          0.8          6.1
I
 I   C   1       L          10.00       7.50      1.333     236.4        238.5       3267.7
I
 I        23       S        10.02      21.28      0.471       1.2          2.9         37.1
I
 I          4        R       6.31       3.18      1.988     264.5        265.7       3615.5
I
 I   D   1       L           3.54       2.99      1.184      63.4         64.5        891.9
I
 I        234      S R      16.31      11.17      1.460     154.1        155.5       6358.5
I
.-------------------------------------------------------------------------------------------------------------
-----
 I 17.15-17.30
I
 I   A   12      L S         7.21      20.13      0.358       0.8          2.1         24.8
I
 I         3         R       3.41       3.33      1.024      80.7         81.9       1203.8
I
 I   B   12      L S        12.69       7.36      1.724     366.5        367.8      10395.2
I
 I         3         R       0.82       3.21      0.257       0.3          0.7          4.8
I
 I   C   1       L           8.38       7.50      1.116     249.5        251.6       3646.6
I
 I        23       S         8.39      21.28      0.394       1.0          2.4         29.4
I
 I          4        R       5.29       3.18      1.665     296.2        297.3       4205.9
I
 I   D   1       L           2.96       2.99      0.992      63.4         64.5        951.2
I
 I        234      S R      13.66      11.17      1.223     166.6        167.9       7216.7
I
 -------------------------------------------------------------------------------------------------------------
-----

.QUEUES FOR ARM A
 ----------------

                NUMBER OF VEHICLES IN QUEUE
  TIME   LANE     MEAN      MAXIMUM
 SEGMENT         (PHASE     (AT END
 ENDING         AVERAGED)  OF RED)
                    *          +

  16.15    3       6.8        8.0    *******+
           2       0.8        2.1    *+
           1       0.8        2.1    *+

  16.30    3      18.5       19.7    ******************+
           2       1.0        2.5    *+
           1       1.0        2.5    *+

  16.45    3      43.5       44.7    ******************************************++
           2       1.4        3.1    *++
```

```
           1      1.4        3.1    *++

  17.00    3     68.3       69.6    ************************************************************************++
           2      1.4        3.1    *++
           1      1.4        3.1    *++

  17.15    3     79.5       80.7
*************************************************************************++
           2      1.0        2.5    *++
           1      1.0        2.5    *++

  17.30    3     80.7       81.9
*************************************************************************+
           2      0.8        2.1    *+
           1      0.8        2.1    *+


.QUEUES FOR ARM B
 ----------------

               NUMBER OF VEHICLES IN QUEUE
  TIME   LANE    MEAN     MAXIMUM
 SEGMENT        (PHASE    (AT END
 ENDING        AVERAGED)  OF RED)
                   *          +

  16.15    3      0.3        0.7    +
           2     41.7       43.0    ******************************************+
           1     41.7       43.0    ******************************************+

  16.30    3      0.4        0.8    +
           2    100.1      101.5
*********************************************************************************
           1    100.1      101.5
*********************************************************************************

  16.45    3      0.5        1.0    *
           2    184.1      185.4
*********************************************************************************
           1    184.1      185.4
*********************************************************************************

  17.00    3      0.5        1.0    *
           2    268.1      269.4
*********************************************************************************
           1    268.1      269.4
*********************************************************************************

  17.15    3      0.4        0.8    +
           2    326.5      327.8
*********************************************************************************
           1    326.5      327.8
*********************************************************************************

  17.30    3      0.3        0.7    +
           2    366.5      367.8
*********************************************************************************
           1    366.5      367.8
*********************************************************************************


.QUEUES FOR ARM C
 ----------------

               NUMBER OF VEHICLES IN QUEUE
  TIME   LANE    MEAN     MAXIMUM
 SEGMENT        (PHASE    (AT END
 ENDING        AVERAGED)  OF RED)
                   *          +

  16.15    4     33.7       34.8    ***********************************+
           3      1.0        2.4    *+
           2      1.0        2.4    *+
           1     18.9       21.0    ******************++

  16.30    4     80.7       81.9
*************************************************************************+
           3      1.2        2.9    *++
           2      1.2        2.9    *++
           1     56.6       58.7    ************************************************************++

  16.45    4    149.1      150.2
*************************************************************************
           3      1.7        3.7    **++
```

```
           2      1.7        3.7    **++
           1    127.8      129.9
*******************************************************************************

  17.00    4    217.4      218.6
*******************************************************************************
           3      1.7        3.7    **++
           2      1.7        3.7    **++
           1    199.0      201.1
*******************************************************************************

  17.15    4    264.5      265.7
*******************************************************************************
           3      1.2        2.9    *++
           2      1.2        2.9    *++
           1    236.4      238.5
*******************************************************************************

  17.30    4    296.2      297.3
*******************************************************************************
           3      1.0        2.4    *+
           2      1.0        2.4    *+
           1    249.5      251.6
*******************************************************************************


.QUEUES FOR ARM D
 ----------------

               NUMBER OF VEHICLES IN QUEUE
  TIME   LANE    MEAN     MAXIMUM
 SEGMENT        (PHASE    (AT END
 ENDING        AVERAGED)  OF RED)
                   *          +

  16.15    4     14.6       16.0    ***************+
           3     14.6       16.0    ***************+
           2     14.6       16.0    ***************+
           1      5.5        6.6    ******+

  16.30    4     40.3       41.7    ****************************************++
           3     40.3       41.7    ****************************************++
           2     40.3       41.7    ****************************************++
           1     14.6       15.7    ***************+

  16.45    4     84.4       85.7
*******************************************************************************+
           3     84.4       85.7
*******************************************************************************+
           2     84.4       85.7
*******************************************************************************+
           1     34.9       36.0    ***********************************+

  17.00    4    128.4      129.8
*******************************************************************************
           3    128.4      129.8
*******************************************************************************
           2    128.4      129.8
*******************************************************************************
           1     55.1       56.2    ********************************************************+

  17.15    4    154.1      155.5
*******************************************************************************
           3    154.1      155.5
*******************************************************************************
           2    154.1      155.5
*******************************************************************************
           1     63.4       64.5    ************************************************************+

  17.30    4    166.6      167.9
*******************************************************************************
           3    166.6      167.9
*******************************************************************************
           2    166.6      167.9
*******************************************************************************
           1     63.4       64.5    ************************************************************+


.QUEUEING DELAY INFORMATION OVER WHOLE PERIOD (16.00-17.30)
 ---------------------------------------------------------

 ---------------------------------------------------------------------------
 I STREAM I   TOTAL DEMAND  I   * QUEUEING *      I * INCLUSIVE QUEUEING * I
 I        I  (EXCL 2-WHEEL) I    * DELAY *        I       * DELAY *        I
```

		(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
A-B		96.0	64.0	23.5	0.24	23.5	0.24
A-C		695.2	463.5	170.0	0.24	170.0	0.24
A-D		374.3	249.6	3905.6	10.43	4883.1	13.04
B-C		463.5	309.0	11037.7	23.82	23191.3	50.04
B-D		928.3	618.9	22108.1	23.82	46451.3	50.04
B-A		90.5	60.3	37.9	0.42	37.9	0.42
C-D		918.7	612.5	11510.5	12.53	15659.6	17.05
C-A		920.1	613.4	231.9	0.25	232.0	0.25
C-B		580.0	386.7	13425.9	23.15	27234.4	46.95
D-A		325.0	216.7	3125.7	9.62	3798.3	11.69
D-B		873.5	582.3	13285.0	15.21	19796.3	22.66
D-C		625.3	416.8	9510.1	15.21	14171.3	22.66
ALL		6890.3	4593.6	88371.9	12.83	155649.1	22.59

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
* THESE WILL BE SIGNIFICANTLY DIFFERENT ONLY IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

* TOTAL GEOMETRIC DELAY INCLUDES DELAY SUFFERED BY VEHICLES STILL QUEUEING AT THE END OF THE WHOLE TIME PERIOD.
* THE SUM OF DELAYS FOR EACH SEGMENT AND THE TOTAL GEOMETRIC DELAY WILL BE SIGNIFICANTLY DIFFERENT ONLY IF THERE IS
* A LARGE QUEUE AT THE END OF THE TIME PERIOD.
.
****** OSCADY 4 run completed

TRL LIMITED

OPTIMISED SIGNAL CAPACITY AND DELAY

OSCADY 4 ANALYSIS PROGRAM
RELEASE 2.2 (APR 2001)

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TEL: CROWTHORNE (01344) 770758, FAX: 770864
EMAIL: SoftwareBureau@trl.co.uk

Run with file:-
"j:\Projects\7556 Greater Dublin Reg. Drainage Project\05-Design\01-Calculations\Junction 5\AM\
7556 Junction 5 2024 no development AM.voi"
(drive-on-the-left) at 15:50:47 on Wednesday, 4 October 2017

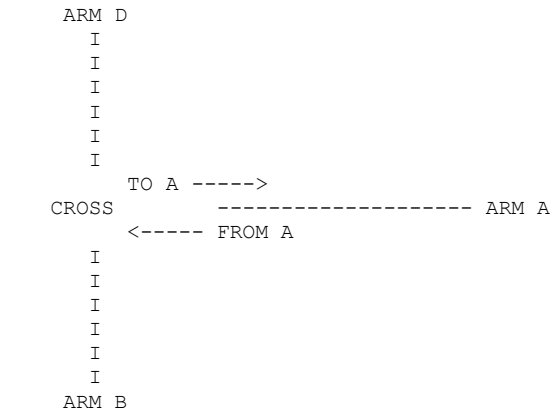
RUN TITLE
****
Junction 5 AM

**** ERROR AND WARNING MESSAGES ****
==========

No errors or warnings in the data.

.TRAFFIC SIGNAL JUNCTION ANALYSIS
****

INPUT DATA



ARM A IS R107 (N)
ARM B IS R139 (E)
ARM C IS R107 (S)
ARM D IS R139 (W)

.GEOMETRIC DATA

DATA ITEM		ARM A	ARM B	ARM C	ARM D
GRADIENT		0.0 %	0.0 %	0.0 %	0.0 %
NUMBER OF LANES		3	3	4	4
PERMITTED MOVEMENTS	LANE 1	LS	LS	L	L
	LANE 2	S	S	S	S
	LANE 3	R	R	S	SR

	LANE 4				R	R
TOTAL EXIT WIDTH FOR STRAIGHT- AHEAD VEHICLES FROM THIS ARM		N/A	N/A	N/A	N/A	
LANE WIDTHS	LANE 1	3.40 M	2.80 M	2.60 M	2.80 M	
	LANE 2	3.00 M	3.00 M	3.00 M	3.00 M	
	LANE 3	3.60 M	2.80 M	2.80 M	2.70 M	
	LANE 4	0.00 M	0.00 M	2.60 M	3.00 M	
LEFT TURN RADII	LANE 1	5.0 M	5.0 M	5.0 M	5.0 M	
RIGHT TURN RADII	LANE 3	5.0 M	5.0 M	N/A	5.0 M	
	LANE 4	N/A	N/A	5.0 M	5.0 M	

.TRAFFIC DEMAND DATA

DEMAND PROFILES ARE SYNTHESISED USING THE ** ODTAB ** OPTION

DEFAULT VEHICLE TYPE PROPORTIONS ARE USED

DEMAND DATA SUPPLIED BETWEEN TIMES - 07.30 TO 09.00
PERIOD OF INTEREST (FOR QUEUE AND DELAY CALCULATIONS) - 07.30 TO 09.00

THE FOLLOWING DATA HAS BEEN INPUT
+ / DEFAULTED

TRAFFIC SCALING FACTOR HAS BEEN SET TO 100 %

TOTAL TRAFFIC DEMAND (VEHICLES / HOUR)

FROM/TO	ARM A	ARM B	ARM C	ARM D
ARM A	0.0	79.0	1013.0	288.0
ARM B	106.0	0.0	551.0	990.0
ARM C	575.0	322.0	0.0	785.0
ARM D	347.0	861.0	653.0	0.0

TIME PERIOD	ARM	VEHICLE TYPE PROPORTIONS					
		CARS AND LIGHT GOODS	MEDIUM GOODS	HEAVY GOODS	BUSES AND COACHES	MOTOR CYCLES	PEDAL CYCLES
ALL	ALL	0.927	0.041	0.016	0.016	0.000	0.000

.DATA DETERMINED FOR USE IN SYNTHESIS OF DEMAND PROFILES ARE AS FOLLOWS-

ENTRY/EXIT FLOWS	ARM	TIME WHEN FLOW STARTS TO RISE	TIME WHEN TOP OF PEAK IS REACHED	TIME WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ENTRY	A	07.45	08.15	08.45	17.25	25.88	17.25
	B	07.45	08.15	08.45	20.59	30.88	20.59
	C	07.45	08.15	08.45	21.02	31.54	21.02
	D	07.45	08.15	08.45	23.26	34.89	23.26

.SIGNAL TIMING DETAILS FOR SIGNAL SET 1

TIMING OPTION- FIXED MODE: TIMINGS ARE PROVIDED BY USER

FIXED CYCLE TIME- 50.0 SECONDS
PERIODS FOR WHICH THESE SETTINGS APPLY- 07.30-09.00

GLOBAL EFFECTIVE GREEN DISPLACEMENTS - START = 1.4
END = 2.9

DATA ITEM		STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5
LANES ON GREEN:	ARM A	1 2				1 2 3
	B				1 2 3	
	C	1 2 3	1 2 3 4			

D			1 2 3 4		
GREEN TIME (SECS)	5.0	5.0	5.0	5.0	5.0
PRECEDING INTERSTAGE	5.0	5.0	5.0	5.0	5.0

.DEMAND AND CAPACITY INFORMATION FOR EACH 15 MINUTE TIME SEGMENT BETWEEN 07.30 AND 09.00

TIME ARM	LANES	MOVEMENT	DEMAND (VEHS/MIN)	SAT FLOW (PCU/HR)	SAT FLOW (VEHS/MIN)	EFFECTIVE GREEN-TIME TRUE (SECS)	FLARE+NOTIONL (SECS)	CAPACITY (VEHS /MIN)
07.30-07.45								
A	12	L S	13.65	3924.8	61.87	16.5		20.42
	3	R	3.60	1626.9	25.65	6.5		3.33
B	12	L S	19.26	3567.3	56.23	6.5		7.31
	3	R	1.33	1565.4	24.68	6.5		3.21
C	1	L	9.81	1442.3	22.74	16.5		7.50
	23	S	7.19	4090.0	64.47	16.5		21.28
	4	R	4.03	1550.0	24.43	6.5		3.18
D	1	L	4.34	1457.7	22.98	6.5		2.99
	234	S R	18.93	5432.1	85.63	6.5		11.13
07.45-08.00								
A	12	L S	16.30	3924.8	61.87	16.5		20.42
	3	R	4.30	1626.9	25.65	6.5		3.33
B	12	L S	23.00	3567.3	56.23	6.5		7.31
	3	R	1.58	1565.4	24.68	6.5		3.21
C	1	L	11.72	1442.3	22.74	16.5		7.50
	23	S	8.58	4090.0	64.47	16.5		21.28
	4	R	4.81	1550.0	24.43	6.5		3.18
D	1	L	5.18	1457.7	22.98	6.5		2.99
	234	S R	22.60	5432.1	85.63	6.5		11.13
08.00-08.15								
A	12	L S	19.96	3924.8	61.87	16.5		20.42
	3	R	5.26	1626.9	25.65	6.5		3.33
B	12	L S	28.17	3567.3	56.23	6.5		7.31
	3	R	1.94	1565.4	24.68	6.5		3.21
C	1	L	14.35	1442.3	22.74	16.5		7.50
	23	S	10.51	4090.0	64.47	16.5		21.28
	4	R	5.89	1550.0	24.43	6.5		3.18
D	1	L	6.34	1457.7	22.98	6.5		2.99
	234	S R	27.68	5432.1	85.63	6.5		11.13
08.15-08.30								
A	12	L S	19.96	3924.8	61.87	16.5		20.42
	3	R	5.26	1626.9	25.65	6.5		3.33
B	12	L S	28.17	3567.3	56.23	6.5		7.31
	3	R	1.94	1565.4	24.68	6.5		3.21
C	1	L	14.35	1442.3	22.74	16.5		7.50
	23	S	10.51	4090.0	64.47	16.5		21.28
	4	R	5.89	1550.0	24.43	6.5		3.18
D	1	L	6.34	1457.7	22.98	6.5		2.99
	234	S R	27.68	5432.1	85.63	6.5		11.13
08.30-08.45								
A	12	L S	16.30	3924.8	61.87	16.5		20.42
	3	R	4.30	1626.9	25.65	6.5		3.33
B	12	L S	23.00	3567.3	56.23	6.5		7.31
	3	R	1.58	1565.4	24.68	6.5		3.21
C	1	L	11.72	1442.3	22.74	16.5		7.50
	23	S	8.58	4090.0	64.47	16.5		21.28
	4	R	4.81	1550.0	24.43	6.5		3.18
D	1	L	5.18	1457.7	22.98	6.5		2.99
	234	S R	22.60	5432.1	85.63	6.5		11.13
08.45-09.00								
A	12	L S	13.65	3924.8	61.87	16.5		20.42
	3	R	3.60	1626.9	25.65	6.5		3.33
B	12	L S	19.26	3567.3	56.23	6.5		7.31
	3	R	1.33	1565.4	24.68	6.5		3.21
C	1	L	9.81	1442.3	22.74	16.5		7.50
	23	S	7.19	4090.0	64.47	16.5		21.28
	4	R	4.03	1550.0	24.43	6.5		3.18
D	1	L	4.34	1457.7	22.98	6.5		2.99
	234	S R	18.93	5432.1	85.63	6.5		11.13

.QUEUE AND DELAY INFORMATION FOR EACH 15 MINUTE TIME SEGMENT BETWEEN 07.30 AND 09.00

ARM	LANES	MOVEMENT	DEMAND EXCL 2-WHEEL (VEHS/MIN)	CAPACITY (VEHS/MIN)	DEGREE OF SAT (RFC)	QUEUE AT END OF SEGMENT MEAN (PHASE AVERAGED) (VEHS/LANE)	QUEUE AT END OF SEGMENT MAXIMUM (END OF RED) (VEHS/LANE)	QUEUEING DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)
07.30-07.45									
A	12	L S	13.65	20.42	0.669	2.0	4.2	60.9	
	3	R	3.60	3.33	1.080	8.7	9.9	87.2	
B	12	L S	19.26	7.31	2.635	91.1	92.5	1389.8	
	3	R	1.33	3.21	0.413	0.6	1.1	9.1	
C	1	L	9.81	7.50	1.308	38.5	40.6	316.4	
	23	S	7.19	21.28	0.338	0.8	2.1	24.2	
	4	R	4.03	3.18	1.267	15.7	16.9	136.3	
D	1	L	4.34	2.99	1.452	22.5	23.6	184.4	
	234	S R	18.93	11.13	1.700	40.6	41.9	949.7	
07.45-08.00									
A	12	L S	16.30	20.42	0.798	3.0	5.5	89.2	
	3	R	4.30	3.33	1.289	23.5	24.7	252.1	
B	12	L S	23.00	7.31	3.146	208.8	210.2	4501.3	
	3	R	1.58	3.21	0.493	0.8	1.4	12.2	
C	1	L	11.72	7.50	1.562	101.8	103.9	1059.4	
	23	S	8.58	21.28	0.403	1.0	2.5	30.2	
	4	R	4.81	3.18	1.513	40.2	41.4	426.4	
D	1	L	5.18	2.99	1.734	55.5	56.5	589.6	
	234	S R	22.60	11.13	2.030	97.9	99.3	3120.3	
08.00-08.15									
A	12	L S	19.96	20.42	0.978	7.7	10.6	205.9	
	3	R	5.26	3.33	1.579	52.5	53.7	575.8	
B	12	L S	28.17	7.31	3.854	365.3	366.6	8612.6	
	3	R	1.94	3.21	0.604	1.2	1.9	17.8	
C	1	L	14.35	7.50	1.913	204.5	206.6	2300.5	
	23	S	10.51	21.28	0.494	1.3	3.1	39.6	
	4	R	5.89	3.18	1.853	80.9	82.1	912.1	
D	1	L	6.34	2.99	2.124	105.8	106.9	1211.8	
	234	S R	27.68	11.13	2.486	180.7	182.0	6269.9	

```
 I 08.15-08.30
I
 I   A   12      L S        19.96      20.42      0.978       9.2         12.0        278.3
I
 I         3         R       5.26       3.33      1.579      81.5         82.7       1008.5
I
 I   B   12      L S        28.17       7.31      3.854     521.7        523.1      13305.9
I
 I         3         R       1.94       3.21      0.604       1.2          1.9         18.2
I
 I   C   1       L          14.35       7.50      1.913     307.2        309.3       3840.0
I
 I        23       S         10.51      21.28      0.494       1.3          3.1         39.6
I
 I          4        R       5.89       3.18      1.853     121.6        122.7       1520.7
I
 I   D   1       L           6.34       2.99      2.124     156.1        157.2       1966.1
I
 I        234      S R       27.68      11.13      2.486     263.4        264.7       9991.9
I
.-------------------------------------------------------------------------------------------------------------
-----
 I 08.30-08.45
I
 I   A   12      L S        16.30      20.42      0.798       3.1          5.5        110.2
I
 I         3         R       4.30       3.33      1.289      96.0         97.2       1333.6
I
 I   B   12      L S        23.00       7.31      3.146     639.4        640.7      17417.8
I
 I         3         R       1.58       3.21      0.493       0.8          1.4         12.6
I
 I   C   1       L          11.72       7.50      1.562     370.4        372.5       5084.0
I
 I        23       S          8.58      21.28      0.403       1.0          2.5         30.2
I
 I          4        R       4.81       3.18      1.513     146.0        147.2       2008.5
I
 I   D   1       L           5.18       2.99      1.734     189.0        190.1       2590.0
I
 I        234      S R       22.60      11.13      2.030     320.7        322.1      13143.0
I
.-------------------------------------------------------------------------------------------------------------
-----
 I 08.45-09.00
I
 I   A   12      L S        13.65      20.42      0.669       2.0          4.2         61.8
I
 I         3         R       3.60       3.33      1.080     100.0        101.2       1472.0
I
 I   B   12      L S        19.26       7.31      2.635     729.1        730.4      20527.6
I
 I         3         R       1.33       3.21      0.413       0.6          1.1          9.3
I
 I   C   1       L           9.81       7.50      1.308     405.1        407.2       5817.8
I
 I        23       S          7.19      21.28      0.338       0.8          2.1         24.3
I
 I          4        R       4.03       3.18      1.267     158.8        159.9       2287.2
I
 I   D   1       L           4.34       2.99      1.452     209.3        210.4       2988.4
I
 I        234      S R       18.93      11.13      1.700     359.7        361.0      15309.6
I
 -------------------------------------------------------------------------------------------------------------
-----

.QUEUES FOR ARM A
 ----------------

                NUMBER OF VEHICLES IN QUEUE
  TIME   LANE     MEAN     MAXIMUM
 SEGMENT         (PHASE    (AT END
 ENDING         AVERAGED)  OF RED)
                    *         +

  07.45    3       8.7        9.9    *********+
           2       2.0        4.2    **++
           1       2.0        4.2    **++

  08.00    3      23.5       24.7    ************************+
           2       3.0        5.5    ***++
           1       3.0        5.5    ***++
```

```
  08.15    3     52.5       53.7    ******************************************************+
           2      7.7       10.6    ********+++
           1      7.7       10.6    ********+++

  08.30    3     81.5       82.7
*************************************************************************************+
           2      9.2       12.0    *********+++
           1      9.2       12.0    *********+++

  08.45    3     96.0       97.2
*****************************************************************************************
           2      3.1        5.5    ***+++
           1      3.1        5.5    ***+++

  09.00    3    100.0      101.2
*****************************************************************************************
           2      2.0        4.2    **++
           1      2.0        4.2    **++


.QUEUES FOR ARM B
 ----------------

               NUMBER OF VEHICLES IN QUEUE
  TIME   LANE    MEAN     MAXIMUM
 SEGMENT        (PHASE    (AT END
 ENDING        AVERAGED)  OF RED)
                   *          +

  07.45    3      0.6        1.1    *
           2     91.1       92.5
*****************************************************************************************
           1     91.1       92.5
*****************************************************************************************

  08.00    3      0.8        1.4    *
           2    208.8      210.2
*****************************************************************************************
           1    208.8      210.2
*****************************************************************************************

  08.15    3      1.2        1.9    *+
           2    365.3      366.6
*****************************************************************************************
           1    365.3      366.6
*****************************************************************************************

  08.30    3      1.2        1.9    *+
           2    521.7      523.1
*****************************************************************************************
           1    521.7      523.1
*****************************************************************************************

  08.45    3      0.8        1.4    *
           2    639.4      640.7
*****************************************************************************************
           1    639.4      640.7
*****************************************************************************************

  09.00    3      0.6        1.1    *
           2    729.1      730.4
*****************************************************************************************
           1    729.1      730.4
*****************************************************************************************


.QUEUES FOR ARM C
 ----------------

               NUMBER OF VEHICLES IN QUEUE
  TIME   LANE    MEAN     MAXIMUM
 SEGMENT        (PHASE    (AT END
 ENDING        AVERAGED)  OF RED)
                   *          +

  07.45    4     15.7       16.9    ****************+
           3      0.8        2.1    *+
           2      0.8        2.1    *+
           1     38.5       40.6    ****************************************++

  08.00    4     40.2       41.4    ******************************************+
           3      1.0        2.5    *+
           2      1.0        2.5    *+
```

```
           1    101.8      103.9
********************************************************************************

  08.15    4     80.9       82.1
********************************************************************************+
           3      1.3        3.1    *++
           2      1.3        3.1    *++
           1    204.5      206.6
********************************************************************************

  08.30    4    121.6      122.7
********************************************************************************
           3      1.3        3.1    *++
           2      1.3        3.1    *++
           1    307.2      309.3
********************************************************************************

  08.45    4    146.0      147.2
********************************************************************************
           3      1.0        2.5    *+
           2      1.0        2.5    *+
           1    370.4      372.5
********************************************************************************

  09.00    4    158.8      159.9
********************************************************************************
           3      0.8        2.1    *+
           2      0.8        2.1    *+
           1    405.1      407.2
********************************************************************************


.QUEUES FOR ARM D
 ----------------

               NUMBER OF VEHICLES IN QUEUE
  TIME   LANE    MEAN     MAXIMUM
 SEGMENT        (PHASE    (AT END
 ENDING        AVERAGED)  OF RED)
                   *          +

  07.45    4     40.6       41.9    ******************************************+
           3     40.6       41.9    ******************************************+
           2     40.6       41.9    ******************************************+
           1     22.5       23.6    ***********************+

  08.00    4     97.9       99.3
********************************************************************************
           3     97.9       99.3
********************************************************************************
           2     97.9       99.3
********************************************************************************
           1     55.5       56.5    ********************************************************++

  08.15    4    180.7      182.0
********************************************************************************
           3    180.7      182.0
********************************************************************************
           2    180.7      182.0
********************************************************************************
           1    105.8      106.9
********************************************************************************

  08.30    4    263.4      264.7
********************************************************************************
           3    263.4      264.7
********************************************************************************
           2    263.4      264.7
********************************************************************************
           1    156.1      157.2
********************************************************************************

  08.45    4    320.7      322.1
********************************************************************************
           3    320.7      322.1
********************************************************************************
           2    320.7      322.1
********************************************************************************
           1    189.0      190.1
********************************************************************************

  09.00    4    359.7      361.0
********************************************************************************
```

```
           3    359.7      361.0
*******************************************************************************
           2    359.7      361.0
*******************************************************************************
           1    209.3      210.4
*******************************************************************************


.QUEUEING DELAY INFORMATION OVER WHOLE PERIOD (07.30-09.00)
 ----------------------------------------------------------
```

STREAM	TOTAL DEMAND (EXCL 2-WHEEL)		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
A-B	108.3	72.2	58.3	0.54	58.4	0.54
A-C	1389.0	926.0	747.9	0.54	748.3	0.54
A-D	394.9	263.3	4729.2	11.98	6229.0	15.77
B-C	755.5	503.7	23511.3	31.12	75507.0	99.94
B-D	1357.5	905.0	42243.6	31.12	135666.0	99.94
B-A	145.3	96.9	79.2	0.54	79.2	0.55
C-D	1076.4	717.6	18418.0	17.11	29353.7	27.27
C-A	788.4	525.6	188.1	0.24	188.2	0.24
C-B	441.5	294.4	7291.1	16.51	11258.5	25.50
D-A	475.8	317.2	9530.5	20.03	16862.3	35.44
D-B	1180.6	787.1	27743.3	23.50	57484.5	48.69
D-C	895.4	596.9	21041.1	23.50	43597.4	48.69
ALL	9008.9	6005.9	155581.6	17.27	377032.6	41.85

```
 * DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
 * INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME
PERIOD.
 * THESE WILL BE SIGNIFICANTLY DIFFERENT ONLY IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME
PERIOD.


 * TOTAL GEOMETRIC DELAY INCLUDES DELAY SUFFERED BY VEHICLES STILL QUEUEING AT THE END OF THE WHOLE TIME
PERIOD.
 * THE SUM OF DELAYS FOR EACH SEGMENT AND THE TOTAL GEOMETRIC DELAY WILL BE SIGNIFICANTLY DIFFERENT ONLY IF
THERE IS
 * A LARGE QUEUE AT THE END OF THE TIME PERIOD.
.
 ****** OSCADY 4 run completed
```

TRL LIMITED

OPTIMISED SIGNAL CAPACITY AND DELAY

OSCADY 4 ANALYSIS PROGRAM
RELEASE 2.2 (APR 2001)

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TRL SOFTWARE BUREAU
TEL: CROWTHORNE (01344) 770758, FAX: 770864
EMAIL: SoftwareBureau@trl.co.uk

Run with file:-
"j:\Projects\7556 Greater Dublin Reg. Drainage Project\05-Design\01-Calculations\Junction 5\PM\
7556 Junction 5 2024 no development PM.voi"
(drive-on-the-left) at 15:52:37 on Wednesday, 4 October 2017

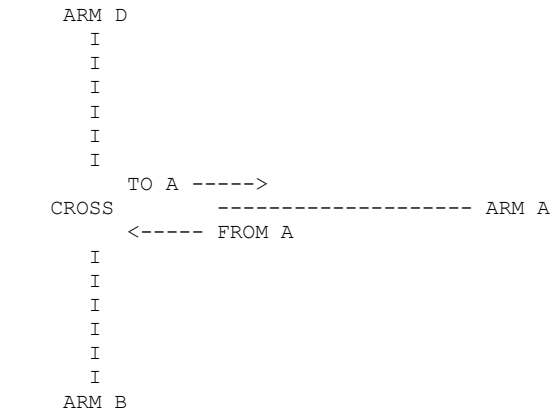
RUN TITLE
****
Junction 5 AM

**** ERROR AND WARNING MESSAGES ****
==========

No errors or warnings in the data.

.TRAFFIC SIGNAL JUNCTION ANALYSIS
****

INPUT DATA



ARM A IS R107 (N)
ARM B IS R139 (E)
ARM C IS R107 (S)
ARM D IS R139 (W)

.GEOMETRIC DATA

DATA ITEM		ARM A	ARM B	ARM C	ARM D
GRADIENT		0.0 %	0.0 %	0.0 %	0.0 %
NUMBER OF LANES		3	3	4	4
PERMITTED MOVEMENTS	LANE 1	LS	LS	L	L
	LANE 2	S	S	S	S
	LANE 3	R	R	S	SR

	LANE 4			R	R	
TOTAL EXIT WIDTH FOR STRAIGHT-AHEAD VEHICLES FROM THIS ARM		N/A	N/A	N/A	N/A	
LANE WIDTHS	LANE 1	3.40 M	2.80 M	2.60 M	2.80 M	
	LANE 2	3.00 M	3.00 M	3.00 M	3.00 M	
	LANE 3	3.60 M	2.80 M	2.80 M	2.70 M	
	LANE 4	0.00 M	0.00 M	2.60 M	3.00 M	
LEFT TURN RADII	LANE 1	5.0 M	5.0 M	5.0 M	5.0 M	
RIGHT TURN RADII	LANE 3	5.0 M	5.0 M	N/A	5.0 M	
	LANE 4	N/A	N/A	5.0 M	5.0 M	

.TRAFFIC DEMAND DATA

DEMAND PROFILES ARE SYNTHESISED USING THE ** ODTAB ** OPTION

DEFAULT VEHICLE TYPE PROPORTIONS ARE USED

DEMAND DATA SUPPLIED BETWEEN TIMES - 16.00 TO 17.30
PERIOD OF INTEREST (FOR QUEUE AND DELAY CALCULATIONS) - 16.00 TO 17.30

THE FOLLOWING DATA HAS BEEN INPUT
\+ / DEFAULTED

TRAFFIC SCALING FACTOR HAS BEEN SET TO 100 %

TOTAL TRAFFIC DEMAND (VEHICLES / HOUR)

FROM/TO	ARM A	ARM B	ARM C	ARM D
ARM A	0.0	94.0	687.0	373.0
ARM B	89.0	0.0	462.0	924.0
ARM C	907.0	576.0	0.0	909.0
ARM D	325.0	869.0	617.0	0.0

TIME PERIOD	ARM	VEHICLE TYPE PROPORTIONS					
		CARS AND LIGHT GOODS	MEDIUM GOODS	HEAVY GOODS	BUSES AND COACHES	MOTOR CYCLES	PEDAL CYCLES
ALL	ALL	0.927	0.041	0.016	0.016	0.000	0.000

.DATA DETERMINED FOR USE IN SYNTHESIS OF DEMAND PROFILES ARE AS FOLLOWS-

ENTRY/EXIT FLOWS	ARM	TIME WHEN FLOW STARTS TO RISE	TIME WHEN TOP OF PEAK IS REACHED	TIME WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ENTRY	A	16.15	16.45	17.15	14.43	21.64	14.43
	B	16.15	16.45	17.15	18.44	27.66	18.44
	C	16.15	16.45	17.15	29.90	44.85	29.90
	D	16.15	16.45	17.15	22.64	33.96	22.64

.SIGNAL TIMING DETAILS FOR SIGNAL SET 1

TIMING OPTION- FIXED MODE: TIMINGS ARE PROVIDED BY USER

FIXED CYCLE TIME- 50.0 SECONDS
PERIODS FOR WHICH THESE SETTINGS APPLY- 16.00-17.30

GLOBAL EFFECTIVE GREEN DISPLACEMENTS - START = 1.4
END = 2.9

DATA ITEM		STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5
LANES ON GREEN:	ARM A	1 2				1 2 3
	B				1 2 3	
	C	1 2 3	1 2 3 4			

	D			1 2 3 4		
GREEN TIME (SECS)		5.0	5.0	5.0	5.0	5.0
PRECEDING INTERSTAGE		5.0	5.0	5.0	5.0	5.0

.DEMAND AND CAPACITY INFORMATION FOR EACH 15 MINUTE TIME SEGMENT BETWEEN 16.00 AND 17.30

TIME ARM	LANES	MOVEMENT	DEMAND (VEHS/MIN)	SAT FLOW (PCU/HR)	SAT FLOW (VEHS/MIN)	EFFECTIVE GREEN-TIME TRUE (SECS)	FLARE+NOTIONL (SECS)	CAPACITY (VEHS /MIN)
16.00-16.15								
A	12	L S	9.76	3870.3	61.01	16.5		20.13
	3	R	4.66	1626.9	25.65	6.5		3.33
B	12	L S	17.33	3590.9	56.61	6.5		7.36
	3	R	1.11	1565.4	24.68	6.5		3.21
C	1	L	11.36	1442.3	22.74	16.5		7.50
	23	S	11.34	4090.0	64.47	16.5		21.28
	4	R	7.20	1550.0	24.43	6.5		3.18
D	1	L	4.06	1457.7	22.98	6.5		2.99
	234	S R	18.57	5455.5	86.00	6.5		11.18
16.15-16.30								
A	12	L S	11.66	3870.3	61.01	16.5		20.13
	3	R	5.57	1626.9	25.65	6.5		3.33
B	12	L S	20.69	3590.9	56.61	6.5		7.36
	3	R	1.33	1565.4	24.68	6.5		3.21
C	1	L	13.57	1442.3	22.74	16.5		7.50
	23	S	13.54	4090.0	64.47	16.5		21.28
	4	R	8.60	1550.0	24.43	6.5		3.18
D	1	L	4.85	1457.7	22.98	6.5		2.99
	234	S R	22.18	5455.5	86.00	6.5		11.18
16.30-16.45								
A	12	L S	14.28	3870.3	61.01	16.5		20.13
	3	R	6.82	1626.9	25.65	6.5		3.33
B	12	L S	25.34	3590.9	56.61	6.5		7.36
	3	R	1.63	1565.4	24.68	6.5		3.21
C	1	L	16.62	1442.3	22.74	16.5		7.50
	23	S	16.58	4090.0	64.47	16.5		21.28
	4	R	10.53	1550.0	24.43	6.5		3.18
D	1	L	5.94	1457.7	22.98	6.5		2.99
	234	S R	27.17	5455.5	86.00	6.5		11.18
16.45-17.00								
A	12	L S	14.28	3870.3	61.01	16.5		20.13
	3	R	6.82	1626.9	25.65	6.5		3.33
B	12	L S	25.34	3590.9	56.61	6.5		7.36
	3	R	1.63	1565.4	24.68	6.5		3.21
C	1	L	16.62	1442.3	22.74	16.5		7.50
	23	S	16.58	4090.0	64.47	16.5		21.28
	4	R	10.53	1550.0	24.43	6.5		3.18
D	1	L	5.94	1457.7	22.98	6.5		2.99
	234	S R	27.17	5455.5	86.00	6.5		11.18
17.00-17.15								
A	12	L S	11.66	3870.3	61.01	16.5		20.13
	3	R	5.57	1626.9	25.65	6.5		3.33
B	12	L S	20.69	3590.9	56.61	6.5		7.36
	3	R	1.33	1565.4	24.68	6.5		3.21
C	1	L	13.57	1442.3	22.74	16.5		7.50
	23	S	13.54	4090.0	64.47	16.5		21.28
	4	R	8.60	1550.0	24.43	6.5		3.18
D	1	L	4.85	1457.7	22.98	6.5		2.99
	234	S R	22.18	5455.5	86.00	6.5		11.18
17.15-17.30								
A	12	L S	9.76	3870.3	61.01	16.5		20.13
	3	R	4.66	1626.9	25.65	6.5		3.33
B	12	L S	17.33	3590.9	56.61	6.5		7.36
	3	R	1.11	1565.4	24.68	6.5		3.21
C	1	L	11.36	1442.3	22.74	16.5		7.50
	23	S	11.34	4090.0	64.47	16.5		21.28
	4	R	7.20	1550.0	24.43	6.5		3.18
D	1	L	4.06	1457.7	22.98	6.5		2.99
	234	S R	18.57	5455.5	86.00	6.5		11.18

.QUEUE AND DELAY INFORMATION FOR EACH 15 MINUTE TIME SEGMENT BETWEEN 16.00 AND 17.30

ARM	LANES	MOVEMENT	DEMAND EXCL 2-WHEEL (VEHS/MIN)	CAPACITY (VEHS/MIN)	DEGREE OF SAT (RFC)	QUEUE AT END OF SEGMENT MEAN (PHASE AVERAGED) (VEHS/LANE)	QUEUE AT END OF SEGMENT MAXIMUM (END OF RED) (VEHS/LANE)	QUEUEING DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)
16.00-16.15									
A	12	L S	9.76	20.13	0.485	1.2	2.9	36.7	
	3	R	4.66	3.33	1.398	22.5	23.7	185.8	
B	12	L S	17.33	7.36	2.354	76.3	77.6	1167.7	
	3	R	1.11	3.21	0.347	0.5	0.9	7.1	
C	1	L	11.36	7.50	1.514	61.1	63.2	481.9	
	23	S	11.34	21.28	0.533	1.5	3.3	44.0	
	4	R	7.20	3.18	2.267	62.0	63.1	476.7	
D	1	L	4.06	2.99	1.360	18.6	19.7	156.4	
	234	S R	18.57	11.18	1.662	38.6	40.0	905.9	
16.15-16.30									
A	12	L S	11.66	20.13	0.579	1.6	3.5	47.5	
	3	R	5.57	3.33	1.670	56.0	57.2	594.1	
B	12	L S	20.69	7.36	2.811	176.3	177.6	3790.5	
	3	R	1.33	3.21	0.414	0.6	1.1	9.2	
C	1	L	13.57	7.50	1.808	152.1	154.2	1603.8	
	23	S	13.54	21.28	0.636	1.9	4.1	58.0	
	4	R	8.60	3.18	2.707	143.3	144.4	1541.5	
D	1	L	4.85	2.99	1.624	46.7	47.7	495.5	
	234	S R	22.18	11.18	1.984	93.6	95.0	2979.6	
16.30-16.45									
A	12	L S	14.28	20.13	0.709	2.3	4.5	67.5	
	3	R	6.82	3.33	2.045	108.3	109.5	1235.1	
B	12	L S	25.34	7.36	3.443	311.1	312.4	7311.7	
	3	R	1.63	3.21	0.507	0.9	1.5	12.8	
C	1	L	16.62	7.50	2.215	288.8	290.9	3309.2	
	23	S	16.58	21.28	0.779	2.9	5.4	86.4	
	4	R	10.53	3.18	3.315	253.6	254.7	2977.7	
D	1	L	5.94	2.99	1.989	91.0	92.1	1035.2	
	234	S R	27.17	11.18	2.430	173.6	174.9	6013.7	

```
 I 16.45-17.00
I
 I   A   12      L S        14.28      20.13      0.709       2.3          4.5         67.8
I
 I         3         R       6.82       3.33      2.045     160.6        161.8       2018.3
I
 I   B   12      L S        25.34       7.36      3.443     445.9        447.3      11356.5
I
 I         3         R       1.63       3.21      0.507       0.9          1.5         12.9
I
 I   C   1       L          16.62       7.50      2.215     425.5        427.6       5359.1
I
 I        23       S         16.58      21.28      0.779       2.9          5.4         87.3
I
 I          4        R       10.53       3.18      3.315     363.9        365.0       4631.8
I
 I   D   1       L           5.94       2.99      1.989     135.3        136.4       1698.9
I
 I        234      S R       27.17      11.18      2.430     253.5        254.8       9609.8
I
.-------------------------------------------------------------------------------------------------------------
-----
 I 17.00-17.15
I
 I   A   12      L S        11.66      20.13      0.579       1.6          3.5         47.8
I
 I         3         R       5.57       3.33      1.670     194.1        195.3       2661.2
I
 I   B   12      L S        20.69       7.36      2.811     545.9        547.3      14878.5
I
 I         3         R       1.33       3.21      0.414       0.6          1.1          9.4
I
 I   C   1       L          13.57       7.50      1.808     516.5        518.6       7066.5
I
 I        23       S         13.54      21.28      0.636       1.9          4.1         58.4
I
 I          4        R       8.60       3.18      2.707     445.2        446.4       6068.8
I
 I   D   1       L           4.85       2.99      1.624     163.3        164.3       2240.6
I
 I        234      S R       22.18      11.18      1.984     308.5        309.8      12645.5
I
.-------------------------------------------------------------------------------------------------------------
-----
 I 17.15-17.30
I
 I   A   12      L S         9.76      20.13      0.485       1.2          2.9         36.8
I
 I         3         R       4.66       3.33      1.398     214.0        215.2       3061.8
I
 I   B   12      L S        17.33       7.36      2.354     620.7        622.0      17499.1
I
 I         3         R       1.11       3.21      0.347       0.5          0.9          7.2
I
 I   C   1       L          11.36       7.50      1.514     574.4        576.5       8182.9
I
 I        23       S         11.34      21.28      0.533       1.5          3.3         44.1
I
 I          4        R       7.20       3.18      2.267     505.6        506.7       7131.3
I
 I   D   1       L           4.06       2.99      1.360     179.4        180.5       2571.1
I
 I        234      S R       18.57      11.18      1.662     345.5        346.8      14714.9
I
 -------------------------------------------------------------------------------------------------------------
-----

.QUEUES FOR ARM A
 ----------------

                NUMBER OF VEHICLES IN QUEUE
  TIME   LANE     MEAN     MAXIMUM
 SEGMENT         (PHASE    (AT END
 ENDING         AVERAGED)  OF RED)
                    *         +

  16.15    3      22.5       23.7    **********************++
           2       1.2        2.9    *++
           1       1.2        2.9    *++

  16.30    3      56.0       57.2    ********************************************************+
           2       1.6        3.5    **+
           1       1.6        3.5    **+
```

```
  16.45    3    108.3      109.5
*********************************************************************************
           2      2.3        4.5    **++
           1      2.3        4.5    **++

  17.00    3    160.6      161.8
*********************************************************************************
           2      2.3        4.5    **++
           1      2.3        4.5    **++

  17.15    3    194.1      195.3
*********************************************************************************
           2      1.6        3.5    **+
           1      1.6        3.5    **+

  17.30    3    214.0      215.2
*********************************************************************************
           2      1.2        2.9    *++
           1      1.2        2.9    *++


.QUEUES FOR ARM B
 ----------------

               NUMBER OF VEHICLES IN QUEUE
  TIME   LANE    MEAN     MAXIMUM
 SEGMENT        (PHASE    (AT END
 ENDING        AVERAGED)  OF RED)
                   *          +

  16.15    3      0.5        0.9    +
           2     76.3       77.6
*********************************************************************************++
           1     76.3       77.6
*********************************************************************************++

  16.30    3      0.6        1.1    *
           2    176.3      177.6
*********************************************************************************
           1    176.3      177.6
*********************************************************************************

  16.45    3      0.9        1.5    *
           2    311.1      312.4
*********************************************************************************
           1    311.1      312.4
*********************************************************************************

  17.00    3      0.9        1.5    *
           2    445.9      447.3
*********************************************************************************
           1    445.9      447.3
*********************************************************************************

  17.15    3      0.6        1.1    *
           2    545.9      547.3
*********************************************************************************
           1    545.9      547.3
*********************************************************************************

  17.30    3      0.5        0.9    +
           2    620.7      622.0
*********************************************************************************
           1    620.7      622.0
*********************************************************************************


.QUEUES FOR ARM C
 ----------------

               NUMBER OF VEHICLES IN QUEUE
  TIME   LANE    MEAN     MAXIMUM
 SEGMENT        (PHASE    (AT END
 ENDING        AVERAGED)  OF RED)
                   *          +

  16.15    4     62.0       63.1    ************************************************************+
           3      1.5        3.3    *++
           2      1.5        3.3    *++
           1     61.1       63.2    ************************************************************++

  16.30    4    143.3      144.4
*********************************************************************************
           3      1.9        4.1    **++
```

```
           2      1.9        4.1    **++
           1    152.1      154.2
********************************************************************************

  16.45    4    253.6      254.7
********************************************************************************
           3      2.9        5.4    ***++
           2      2.9        5.4    ***++
           1    288.8      290.9
********************************************************************************

  17.00    4    363.9      365.0
********************************************************************************
           3      2.9        5.4    ***++
           2      2.9        5.4    ***++
           1    425.5      427.6
********************************************************************************

  17.15    4    445.2      446.4
********************************************************************************
           3      1.9        4.1    **++
           2      1.9        4.1    **++
           1    516.5      518.6
********************************************************************************

  17.30    4    505.6      506.7
********************************************************************************
           3      1.5        3.3    *++
           2      1.5        3.3    *++
           1    574.4      576.5
********************************************************************************


.QUEUES FOR ARM D
 ----------------

                NUMBER OF VEHICLES IN QUEUE
  TIME   LANE     MEAN     MAXIMUM
 SEGMENT         (PHASE    (AT END
 ENDING         AVERAGED)  OF RED)
                    *          +

  16.15    4     38.6       40.0    ****************************************+
           3     38.6       40.0    ****************************************+
           2     38.6       40.0    ****************************************+
           1     18.6       19.7    ******************+

  16.30    4     93.6       95.0
********************************************************************************
           3     93.6       95.0
********************************************************************************
           2     93.6       95.0
********************************************************************************
           1     46.7       47.7    ***********************************************+

  16.45    4    173.6      174.9
********************************************************************************
           3    173.6      174.9
********************************************************************************
           2    173.6      174.9
********************************************************************************
           1     91.0       92.1
********************************************************************************

  17.00    4    253.5      254.8
********************************************************************************
           3    253.5      254.8
********************************************************************************
           2    253.5      254.8
********************************************************************************
           1    135.3      136.4
********************************************************************************

  17.15    4    308.5      309.8
********************************************************************************
           3    308.5      309.8
********************************************************************************
           2    308.5      309.8
********************************************************************************
           1    163.3      164.3
********************************************************************************

  17.30    4    345.5      346.8
********************************************************************************
```

```
           3    345.5      346.8
*******************************************************************************
           2    345.5      346.8
*******************************************************************************
           1    179.4      180.5
*******************************************************************************


.QUEUEING DELAY INFORMATION OVER WHOLE PERIOD (16.00-17.30)
 ------------------------------------------------------------
```

STREAM	TOTAL DEMAND (EXCL 2-WHEEL)		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
A-B	128.9	85.9	36.6	0.28	36.6	0.28
A-C	942.0	628.0	267.5	0.28	267.6	0.28
A-D	511.5	341.0	9756.3	19.08	16625.2	32.51
B-C	633.5	422.3	18668.0	29.47	53567.9	84.56
B-D	1267.0	844.7	37336.1	29.47	107135.8	84.56
B-A	122.0	81.4	58.6	0.48	58.7	0.48
C-D	1246.4	831.0	26003.5	20.86	47992.1	38.50
C-A	1243.7	829.1	378.3	0.30	378.5	0.30
C-B	789.8	526.5	22827.8	28.90	63062.7	79.84
D-A	445.6	297.1	8197.8	18.40	13584.7	30.48
D-B	1191.6	794.4	27408.8	23.00	55502.5	46.58
D-C	846.0	564.0	19460.5	23.00	39407.4	46.58
ALL	9368.1	6245.4	170399.7	18.19	397619.7	42.44

```
 * DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
 * INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME
PERIOD.
 * THESE WILL BE SIGNIFICANTLY DIFFERENT ONLY IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME
PERIOD.


 * TOTAL GEOMETRIC DELAY INCLUDES DELAY SUFFERED BY VEHICLES STILL QUEUEING AT THE END OF THE WHOLE TIME
PERIOD.
 * THE SUM OF DELAYS FOR EACH SEGMENT AND THE TOTAL GEOMETRIC DELAY WILL BE SIGNIFICANTLY DIFFERENT ONLY IF
THERE IS
 * A LARGE QUEUE AT THE END OF THE TIME PERIOD.
.
 ****** OSCADY 4 run completed
```

TRL LIMITED

OPTIMISED SIGNAL CAPACITY AND DELAY

OSCADY 4 ANALYSIS PROGRAM
RELEASE 2.2 (APR 2001)

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TRL SOFTWARE BUREAU
TEL: CROWTHORNE (01344) 770758, FAX: 770864
EMAIL: SoftwareBureau@trl.co.uk

Run with file:-
"j:\Projects\7556 Greater Dublin Reg. Drainage Project\05-Design\01-Calculations\Junction 5\AM\
7556 Junction 5 2024 with development AM.voi"
(drive-on-the-left) at 15:51:37 on Wednesday, 4 October 2017

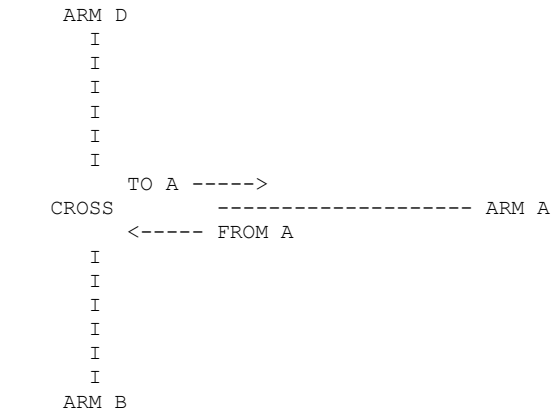
RUN TITLE
****
Junction 5 AM

**** ERROR AND WARNING MESSAGES ****
==========

No errors or warnings in the data.

.TRAFFIC SIGNAL JUNCTION ANALYSIS
****

INPUT DATA



ARM A IS R107 (N)
ARM B IS R139 (E)
ARM C IS R107 (S)
ARM D IS R139 (W)

.GEOMETRIC DATA

DATA ITEM		ARM A	ARM B	ARM C	ARM D
GRADIENT		0.0 %	0.0 %	0.0 %	0.0 %
NUMBER OF LANES		3	3	4	4
PERMITTED MOVEMENTS	LANE 1	LS	LS	L	L
	LANE 2	S	S	S	S
	LANE 3	R	R	S	SR

	LANE 4				R	R
TOTAL EXIT WIDTH FOR STRAIGHT- AHEAD VEHICLES FROM THIS ARM		N/A	N/A	N/A	N/A	
LANE WIDTHS	LANE 1	3.40 M	2.80 M	2.60 M	2.80 M	
	LANE 2	3.00 M	3.00 M	3.00 M	3.00 M	
	LANE 3	3.60 M	2.80 M	2.80 M	2.70 M	
	LANE 4	0.00 M	0.00 M	2.60 M	3.00 M	
LEFT TURN RADII	LANE 1	5.0 M	5.0 M	5.0 M	5.0 M	
RIGHT TURN RADII	LANE 3	5.0 M	5.0 M	N/A	5.0 M	
	LANE 4	N/A	N/A	5.0 M	5.0 M	

.TRAFFIC DEMAND DATA

DEMAND PROFILES ARE SYNTHESISED USING THE ** ODTAB ** OPTION

DEFAULT VEHICLE TYPE PROPORTIONS ARE USED

DEMAND DATA SUPPLIED BETWEEN TIMES - 07.30 TO 09.00
PERIOD OF INTEREST (FOR QUEUE AND DELAY CALCULATIONS) - 07.30 TO 09.00

THE FOLLOWING DATA HAS BEEN INPUT
\+ / DEFAULTED

TRAFFIC SCALING FACTOR HAS BEEN SET TO 100 %

TOTAL TRAFFIC DEMAND (VEHICLES / HOUR)

FROM/TO	ARM A	ARM B	ARM C	ARM D
ARM A	0.0	79.0	1013.0	416.0
ARM B	106.0	0.0	551.0	990.0
ARM C	575.0	322.0	0.0	785.0
ARM D	352.0	861.0	653.0	0.0

TIME PERIOD	ARM	VEHICLE TYPE PROPORTIONS					
		CARS AND LIGHT GOODS	MEDIUM GOODS	HEAVY GOODS	BUSES AND COACHES	MOTOR CYCLES	PEDAL CYCLES
ALL	ALL	0.927	0.041	0.016	0.016	0.000	0.000

.DATA DETERMINED FOR USE IN SYNTHESIS OF DEMAND PROFILES ARE AS FOLLOWS-

ENTRY/EXIT FLOWS	ARM	TIME WHEN FLOW STARTS TO RISE	TIME WHEN TOP OF PEAK IS REACHED	TIME WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ENTRY	A	07.45	08.15	08.45	18.85	28.28	18.85
	B	07.45	08.15	08.45	20.59	30.88	20.59
	C	07.45	08.15	08.45	21.02	31.54	21.02
	D	07.45	08.15	08.45	23.33	34.99	23.33

.SIGNAL TIMING DETAILS FOR SIGNAL SET 1

TIMING OPTION- FIXED MODE: TIMINGS ARE PROVIDED BY USER

FIXED CYCLE TIME- 50.0 SECONDS
PERIODS FOR WHICH THESE SETTINGS APPLY- 07.30-09.00

GLOBAL EFFECTIVE GREEN DISPLACEMENTS - START = 1.4
END = 2.9

DATA ITEM		STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5
LANES ON GREEN:	ARM A	1 2				1 2 3
	B				1 2 3	
	C	1 2 3	1 2 3 4			

D			1 2 3 4		
GREEN TIME (SECS)	5.0	5.0	5.0	5.0	5.0
PRECEDING INTERSTAGE	5.0	5.0	5.0	5.0	5.0

.DEMAND AND CAPACITY INFORMATION FOR EACH 15 MINUTE TIME SEGMENT BETWEEN 07.30 AND 09.00

TIME ARM	LANES	MOVEMENT	DEMAND (VEHS/MIN)	SAT FLOW (PCU/HR)	SAT FLOW (VEHS/MIN)	EFFECTIVE GREEN-TIME TRUE (SECS)	FLARE+NOTIONL (SECS)	CAPACITY (VEHS /MIN)
07.30-07.45								
A	12	L S	13.65	3924.8	61.87	16.5		20.42
	3	R	5.20	1626.9	25.65	6.5		3.33
B	12	L S	19.26	3567.3	56.23	6.5		7.31
	3	R	1.33	1565.4	24.68	6.5		3.21
C	1	L	9.81	1442.3	22.74	16.5		7.50
	23	S	7.19	4090.0	64.47	16.5		21.28
	4	R	4.03	1550.0	24.43	6.5		3.18
D	1	L	4.40	1457.7	22.98	6.5		2.99
	234	S R	18.92	5432.1	85.63	6.5		11.13
07.45-08.00								
A	12	L S	16.30	3924.8	61.87	16.5		20.42
	3	R	6.21	1626.9	25.65	6.5		3.33
B	12	L S	23.00	3567.3	56.23	6.5		7.31
	3	R	1.58	1565.4	24.68	6.5		3.21
C	1	L	11.72	1442.3	22.74	16.5		7.50
	23	S	8.58	4090.0	64.47	16.5		21.28
	4	R	4.81	1550.0	24.43	6.5		3.18
D	1	L	5.25	1457.7	22.98	6.5		2.99
	234	S R	22.60	5432.1	85.63	6.5		11.13
08.00-08.15								
A	12	L S	19.96	3924.8	61.87	16.5		20.42
	3	R	7.60	1626.9	25.65	6.5		3.33
B	12	L S	28.17	3567.3	56.23	6.5		7.31
	3	R	1.94	1565.4	24.68	6.5		3.21
C	1	L	14.35	1442.3	22.74	16.5		7.50
	23	S	10.51	4090.0	64.47	16.5		21.28
	4	R	5.89	1550.0	24.43	6.5		3.18
D	1	L	6.43	1457.7	22.98	6.5		2.99
	234	S R	27.68	5432.1	85.63	6.5		11.13
08.15-08.30								
A	12	L S	19.96	3924.8	61.87	16.5		20.42
	3	R	7.60	1626.9	25.65	6.5		3.33
B	12	L S	28.17	3567.3	56.23	6.5		7.31
	3	R	1.94	1565.4	24.68	6.5		3.21
C	1	L	14.35	1442.3	22.74	16.5		7.50
	23	S	10.51	4090.0	64.47	16.5		21.28
	4	R	5.89	1550.0	24.43	6.5		3.18
D	1	L	6.43	1457.7	22.98	6.5		2.99
	234	S R	27.68	5432.1	85.63	6.5		11.13
08.30-08.45								
A	12	L S	16.30	3924.8	61.87	16.5		20.42
	3	R	6.21	1626.9	25.65	6.5		3.33
B	12	L S	23.00	3567.3	56.23	6.5		7.31
	3	R	1.58	1565.4	24.68	6.5		3.21
C	1	L	11.72	1442.3	22.74	16.5		7.50
	23	S	8.58	4090.0	64.47	16.5		21.28
	4	R	4.81	1550.0	24.43	6.5		3.18
D	1	L	5.25	1457.7	22.98	6.5		2.99
	234	S R	22.60	5432.1	85.63	6.5		11.13
08.45-09.00								
A	12	L S	13.65	3924.8	61.87	16.5		20.42
	3	R	5.20	1626.9	25.65	6.5		3.33
B	12	L S	19.26	3567.3	56.23	6.5		7.31
	3	R	1.33	1565.4	24.68	6.5		3.21
C	1	L	9.81	1442.3	22.74	16.5		7.50
	23	S	7.19	4090.0	64.47	16.5		21.28
	4	R	4.03	1550.0	24.43	6.5		3.18
D	1	L	4.40	1457.7	22.98	6.5		2.99
	234	S R	18.92	5432.1	85.63	6.5		11.13

.QUEUE AND DELAY INFORMATION FOR EACH 15 MINUTE TIME SEGMENT BETWEEN 07.30 AND 09.00

ARM	LANES	MOVEMENT	DEMAND EXCL 2-WHEEL (VEHS/MIN)	CAPACITY (VEHS/MIN)	DEGREE OF SAT (RFC)	QUEUE AT END OF SEGMENT MEAN (PHASE AVERAGED) (VEHS/LANE)	QUEUE AT END OF SEGMENT MAXIMUM (END OF RED) (VEHS/LANE)	QUEUEING DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)
07.30-07.45									
A	12	L S	13.65	20.42	0.669	2.0	4.2	60.9	
	3	R	5.20	3.33	1.560	30.2	31.4	242.0	
B	12	L S	19.26	7.31	2.635	91.1	92.5	1389.8	
	3	R	1.33	3.21	0.413	0.6	1.1	9.1	
C	1	L	9.81	7.50	1.308	38.5	40.6	316.4	
	23	S	7.19	21.28	0.338	0.8	2.1	24.2	
	4	R	4.03	3.18	1.267	15.7	16.9	136.3	
D	1	L	4.40	2.99	1.473	23.4	24.5	190.9	
	234	S R	18.92	11.13	1.700	40.6	41.9	949.7	
07.45-08.00									
A	12	L S	16.30	20.42	0.798	3.0	5.5	89.2	
	3	R	6.21	3.33	1.862	73.3	74.6	780.7	
B	12	L S	23.00	7.31	3.146	208.8	210.2	4501.3	
	3	R	1.58	3.21	0.493	0.8	1.4	12.2	
C	1	L	11.72	7.50	1.562	101.8	103.9	1059.4	
	23	S	8.58	21.28	0.403	1.0	2.5	30.2	
	4	R	4.81	3.18	1.513	40.2	41.4	426.4	
D	1	L	5.25	2.99	1.759	57.5	58.5	611.2	
	234	S R	22.60	11.13	2.030	97.9	99.3	3120.3	
08.00-08.15									
A	12	L S	19.96	20.42	0.978	7.7	10.6	205.9	
	3	R	7.60	3.33	2.281	137.4	138.6	1582.8	
B	12	L S	28.17	7.31	3.854	365.3	366.6	8612.6	
	3	R	1.94	3.21	0.604	1.2	1.9	17.8	
C	1	L	14.35	7.50	1.913	204.5	206.6	2300.5	
	23	S	10.51	21.28	0.494	1.3	3.1	39.6	
	4	R	5.89	3.18	1.853	80.9	82.1	912.1	
D	1	L	6.43	2.99	2.154	109.2	110.3	1252.2	
	234	S R	27.68	11.13	2.486	180.7	182.0	6269.9	

```
 I 08.15-08.30
I
 I   A   12      L S        19.96      20.42      0.978       9.2         12.0        278.3
I
 I         3         R       7.60       3.33      2.281     201.5        202.7       2543.0
I
 I   B   12      L S        28.17       7.31      3.854     521.7        523.1      13305.9
I
 I         3         R       1.94       3.21      0.604       1.2          1.9         18.2
I
 I   C   1       L          14.35       7.50      1.913     307.2        309.3       3840.0
I
 I        23       S        10.51      21.28      0.494       1.3          3.1         39.6
I
 I          4        R       5.89       3.18      1.853     121.6        122.7       1520.7
I
 I   D   1       L           6.43       2.99      2.154     160.9        162.0       2027.1
I
 I        234      S R      27.68      11.13      2.486     263.4        264.7       9991.9
I
.-------------------------------------------------------------------------------------------------------------
-----
 I 08.30-08.45
I
 I   A   12      L S        16.30      20.42      0.798       3.1          5.5        110.2
I
 I         3         R       6.21       3.33      1.862     244.6        245.8       3346.7
I
 I   B   12      L S        23.00       7.31      3.146     639.4        640.7      17417.8
I
 I         3         R       1.58       3.21      0.493       0.8          1.4         12.6
I
 I   C   1       L          11.72       7.50      1.562     370.4        372.5       5084.0
I
 I        23       S         8.58      21.28      0.403       1.0          2.5         30.2
I
 I          4        R       4.81       3.18      1.513     146.0        147.2       2008.5
I
 I   D   1       L           5.25       2.99      1.759     194.9        196.0       2669.6
I
 I        234      S R      22.60      11.13      2.030     320.7        322.1      13143.0
I
.-------------------------------------------------------------------------------------------------------------
-----
 I 08.45-09.00
I
 I   A   12      L S        13.65      20.42      0.669       2.0          4.2         61.8
I
 I         3         R       5.20       3.33      1.560     272.6        273.8       3880.0
I
 I   B   12      L S        19.26       7.31      2.635     729.1        730.4      20527.6
I
 I         3         R       1.33       3.21      0.413       0.6          1.1          9.3
I
 I   C   1       L           9.81       7.50      1.308     405.1        407.2       5817.8
I
 I        23       S         7.19      21.28      0.338       0.8          2.1         24.3
I
 I          4        R       4.03       3.18      1.267     158.8        159.9       2287.2
I
 I   D   1       L           4.40       2.99      1.473     216.1        217.2       3083.5
I
 I        234      S R      18.92      11.13      1.700     359.7        361.0      15309.6
I
 -------------------------------------------------------------------------------------------------------------
-----

.QUEUES FOR ARM A
 ----------------

                NUMBER OF VEHICLES IN QUEUE
  TIME   LANE     MEAN     MAXIMUM
 SEGMENT         (PHASE    (AT END
 ENDING        AVERAGED)  OF RED)
                    *         +

  07.45    3      30.2       31.4    ******************************+
           2       2.0        4.2    **++
           1       2.0        4.2    **++

  08.00    3      73.3       74.6
*************************************************************************++
           2       3.0        5.5    ***++
           1       3.0        5.5    ***++
```

```
  08.15    3    137.4      138.6
********************************************************************************
           2      7.7       10.6    ********+++
           1      7.7       10.6    ********+++

  08.30    3    201.5      202.7
********************************************************************************
           2      9.2       12.0    **********+++
           1      9.2       12.0    **********+++

  08.45    3    244.6      245.8
********************************************************************************
           2      3.1        5.5    ***+++
           1      3.1        5.5    ***+++

  09.00    3    272.6      273.8
********************************************************************************
           2      2.0        4.2    **++
           1      2.0        4.2    **++


.QUEUES FOR ARM B
 ----------------

                NUMBER OF VEHICLES IN QUEUE
  TIME   LANE    MEAN     MAXIMUM
 SEGMENT        (PHASE    (AT END
 ENDING        AVERAGED)  OF RED)
                   *          +

  07.45    3      0.6        1.1    *
           2     91.1       92.5
********************************************************************************
           1     91.1       92.5
********************************************************************************

  08.00    3      0.8        1.4    *
           2    208.8      210.2
********************************************************************************
           1    208.8      210.2
********************************************************************************

  08.15    3      1.2        1.9    *+
           2    365.3      366.6
********************************************************************************
           1    365.3      366.6
********************************************************************************

  08.30    3      1.2        1.9    *+
           2    521.7      523.1
********************************************************************************
           1    521.7      523.1
********************************************************************************

  08.45    3      0.8        1.4    *
           2    639.4      640.7
********************************************************************************
           1    639.4      640.7
********************************************************************************

  09.00    3      0.6        1.1    *
           2    729.1      730.4
********************************************************************************
           1    729.1      730.4
********************************************************************************


.QUEUES FOR ARM C
 ----------------

                NUMBER OF VEHICLES IN QUEUE
  TIME   LANE    MEAN     MAXIMUM
 SEGMENT        (PHASE    (AT END
 ENDING        AVERAGED)  OF RED)
                   *          +

  07.45    4     15.7       16.9    ***************+
           3      0.8        2.1    *+
           2      0.8        2.1    *+
           1     38.5       40.6    ****************************************++

  08.00    4     40.2       41.4    ****************************************+
           3      1.0        2.5    *+
```

```
           2      1.0        2.5    *+
           1    101.8      103.9
*******************************************************************************

  08.15    4     80.9       82.1
*******************************************************************************+
           3      1.3        3.1    *++
           2      1.3        3.1    *++
           1    204.5      206.6
*******************************************************************************

  08.30    4    121.6      122.7
*******************************************************************************
           3      1.3        3.1    *++
           2      1.3        3.1    *++
           1    307.2      309.3
*******************************************************************************

  08.45    4    146.0      147.2
*******************************************************************************
           3      1.0        2.5    *+
           2      1.0        2.5    *+
           1    370.4      372.5
*******************************************************************************

  09.00    4    158.8      159.9
*******************************************************************************
           3      0.8        2.1    *+
           2      0.8        2.1    *+
           1    405.1      407.2
*******************************************************************************


.QUEUES FOR ARM D
 ----------------

               NUMBER OF VEHICLES IN QUEUE
  TIME   LANE    MEAN     MAXIMUM
 SEGMENT        (PHASE    (AT END
 ENDING        AVERAGED)  OF RED)
                   *          +

  07.45    4     40.6       41.9    *****************************************+
           3     40.6       41.9    *****************************************+
           2     40.6       41.9    *****************************************+
           1     23.4       24.5    ***********************++

  08.00    4     97.9       99.3
*******************************************************************************
           3     97.9       99.3
*******************************************************************************
           2     97.9       99.3
*******************************************************************************
           1     57.5       58.5    ************************************************************++

  08.15    4    180.7      182.0
*******************************************************************************
           3    180.7      182.0
*******************************************************************************
           2    180.7      182.0
*******************************************************************************
           1    109.2      110.3
*******************************************************************************

  08.30    4    263.4      264.7
*******************************************************************************
           3    263.4      264.7
*******************************************************************************
           2    263.4      264.7
*******************************************************************************
           1    160.9      162.0
*******************************************************************************

  08.45    4    320.7      322.1
*******************************************************************************
           3    320.7      322.1
*******************************************************************************
           2    320.7      322.1
*******************************************************************************
           1    194.9      196.0
*******************************************************************************

  09.00    4    359.7      361.0
*******************************************************************************
```

```
           3    359.7      361.0
*******************************************************************************
           2    359.7      361.0
*******************************************************************************
           1    216.1      217.2
*******************************************************************************


.QUEUEING DELAY INFORMATION OVER WHOLE PERIOD (07.30-09.00)
 ------------------------------------------------------------
```

STREAM	TOTAL DEMAND (EXCL 2-WHEEL) (VEH)	TOTAL DEMAND (EXCL 2-WHEEL) (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
A-B	108.3	72.2	58.3	0.54	58.4	0.54
A-C	1389.0	926.0	747.9	0.54	748.3	0.54
A-D	570.4	380.3	12375.3	21.69	23520.1	41.23
B-C	755.5	503.7	23511.3	31.12	75507.0	99.94
B-D	1357.5	905.0	42243.6	31.12	135666.0	99.94
B-A	145.3	96.9	79.2	0.54	79.2	0.55
C-D	1076.4	717.6	18418.0	17.11	29353.7	27.27
C-A	788.4	525.6	188.1	0.24	188.2	0.24
C-B	441.5	294.4	7291.1	16.51	11258.5	25.50
D-A	482.7	321.8	9834.5	20.38	17650.9	36.57
D-B	1180.6	787.1	27743.3	23.50	57484.5	48.69
D-C	895.4	596.9	21041.1	23.50	43597.4	48.69
ALL	9191.2	6127.5	163531.7	17.79	395112.3	42.99

```
 * DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
 * INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME
PERIOD.
 * THESE WILL BE SIGNIFICANTLY DIFFERENT ONLY IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME
PERIOD.


 * TOTAL GEOMETRIC DELAY INCLUDES DELAY SUFFERED BY VEHICLES STILL QUEUEING AT THE END OF THE WHOLE TIME
PERIOD.
 * THE SUM OF DELAYS FOR EACH SEGMENT AND THE TOTAL GEOMETRIC DELAY WILL BE SIGNIFICANTLY DIFFERENT ONLY IF
THERE IS
 * A LARGE QUEUE AT THE END OF THE TIME PERIOD.
.
 ****** OSCADY 4 run completed
```

TRL LIMITED

OPTIMISED SIGNAL CAPACITY AND DELAY

OSCADY 4 ANALYSIS PROGRAM
RELEASE 2.2 (APR 2001)

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TRL SOFTWARE BUREAU
TEL: CROWTHORNE (01344) 770758, FAX: 770864
EMAIL: SoftwareBureau@trl.co.uk

Run with file:-
"j:\Projects\7556 Greater Dublin Reg. Drainage Project\05-Design\01-Calculations\Junction 5\PM\
7556 Junction 5 2024 with development PM.voi"
(drive-on-the-left) at 15:53:41 on Wednesday, 4 October 2017

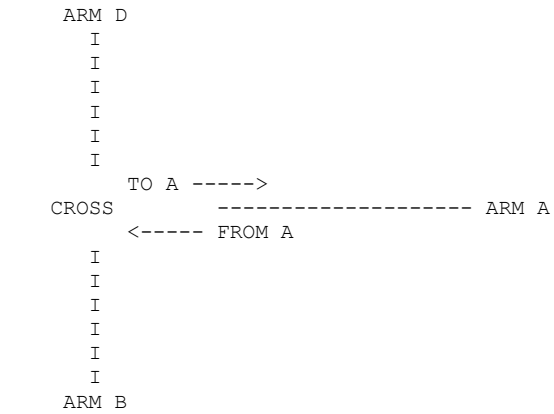
RUN TITLE
****
Junction 5 AM

**** ERROR AND WARNING MESSAGES ****
==========

No errors or warnings in the data.

.TRAFFIC SIGNAL JUNCTION ANALYSIS
****

INPUT DATA



ARM A IS R107 (N)
ARM B IS R139 (E)
ARM C IS R107 (S)
ARM D IS R139 (W)

.GEOMETRIC DATA

DATA ITEM		ARM A	ARM B	ARM C	ARM D
GRADIENT		0.0 %	0.0 %	0.0 %	0.0 %
NUMBER OF LANES		3	3	4	4
PERMITTED MOVEMENTS	LANE 1	LS	LS	L	L
	LANE 2	S	S	S	S
	LANE 3	R	R	S	SR

	LANE 4				R	R
TOTAL EXIT WIDTH FOR STRAIGHT- AHEAD VEHICLES FROM THIS ARM		N/A	N/A	N/A	N/A	
LANE WIDTHS	LANE 1	3.40 M	2.80 M	2.60 M	2.80 M	
	LANE 2	3.00 M	3.00 M	3.00 M	3.00 M	
	LANE 3	3.60 M	2.80 M	2.80 M	2.70 M	
	LANE 4	0.00 M	0.00 M	2.60 M	3.00 M	
LEFT TURN RADII	LANE 1	5.0 M	5.0 M	5.0 M	5.0 M	
RIGHT TURN RADII	LANE 3	5.0 M	5.0 M	N/A	5.0 M	
	LANE 4	N/A	N/A	5.0 M	5.0 M	

.TRAFFIC DEMAND DATA

DEMAND PROFILES ARE SYNTHESISED USING THE ** ODTAB ** OPTION

DEFAULT VEHICLE TYPE PROPORTIONS ARE USED

DEMAND DATA SUPPLIED BETWEEN TIMES - 16.00 TO 17.30
PERIOD OF INTEREST (FOR QUEUE AND DELAY CALCULATIONS) - 16.00 TO 17.30

THE FOLLOWING DATA HAS BEEN INPUT
\+ / DEFAULTED

TRAFFIC SCALING FACTOR HAS BEEN SET TO 100 %

TOTAL TRAFFIC DEMAND (VEHICLES / HOUR)

FROM/TO	ARM A	ARM B	ARM C	ARM D
ARM A	0.0	94.0	687.0	378.0
ARM B	89.0	0.0	462.0	924.0
ARM C	907.0	576.0	0.0	909.0
ARM D	353.0	869.0	617.0	0.0

TIME PERIOD	ARM	VEHICLE TYPE PROPORTIONS					
		CARS AND LIGHT GOODS	MEDIUM GOODS	HEAVY GOODS	BUSES AND COACHES	MOTOR CYCLES	PEDAL CYCLES
ALL	ALL	0.927	0.041	0.016	0.016	0.000	0.000

.DATA DETERMINED FOR USE IN SYNTHESIS OF DEMAND PROFILES ARE AS FOLLOWS-

ENTRY/EXIT FLOWS	ARM	TIME WHEN FLOW STARTS TO RISE	TIME WHEN TOP OF PEAK IS REACHED	TIME WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ENTRY	A	16.15	16.45	17.15	14.49	21.73	14.49
	B	16.15	16.45	17.15	18.44	27.66	18.44
	C	16.15	16.45	17.15	29.90	44.85	29.90
	D	16.15	16.45	17.15	22.99	34.48	22.99

.SIGNAL TIMING DETAILS FOR SIGNAL SET 1

TIMING OPTION- FIXED MODE: TIMINGS ARE PROVIDED BY USER

FIXED CYCLE TIME- 50.0 SECONDS
PERIODS FOR WHICH THESE SETTINGS APPLY- 16.00-17.30

GLOBAL EFFECTIVE GREEN DISPLACEMENTS - START = 1.4
END = 2.9

DATA ITEM		STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5
LANES ON GREEN:	ARM A	1 2				1 2 3
	B				1 2 3	
	C	1 2 3	1 2 3 4			

	D			1 2 3 4		
GREEN TIME (SECS)		5.0	5.0	5.0	5.0	5.0
PRECEDING INTERSTAGE		5.0	5.0	5.0	5.0	5.0

.DEMAND AND CAPACITY INFORMATION FOR EACH 15 MINUTE TIME SEGMENT BETWEEN 16.00 AND 17.30

TIME ARM	LANES	MOVEMENT	DEMAND (VEHS/MIN)	SAT FLOW (PCU/HR)	SAT FLOW (VEHS/MIN)	EFFECTIVE GREEN-TIME TRUE (SECS)	FLARE+NOTIONL (SECS)	CAPACITY (VEHS /MIN)
16.00-16.15								
A	12	L S	9.76	3870.3	61.01	16.5		20.13
	3	R	4.73	1626.9	25.65	6.5		3.33
B	12	L S	17.33	3590.9	56.61	6.5		7.36
	3	R	1.11	1565.4	24.68	6.5		3.21
C	1	L	11.36	1442.3	22.74	16.5		7.50
	23	S	11.34	4090.0	64.47	16.5		21.28
	4	R	7.20	1550.0	24.43	6.5		3.18
D	1	L	4.41	1457.7	22.98	6.5		2.99
	234	S R	18.57	5455.5	86.00	6.5		11.18
16.15-16.30								
A	12	L S	11.66	3870.3	61.01	16.5		20.13
	3	R	5.64	1626.9	25.65	6.5		3.33
B	12	L S	20.69	3590.9	56.61	6.5		7.36
	3	R	1.33	1565.4	24.68	6.5		3.21
C	1	L	13.57	1442.3	22.74	16.5		7.50
	23	S	13.54	4090.0	64.47	16.5		21.28
	4	R	8.60	1550.0	24.43	6.5		3.18
D	1	L	5.27	1457.7	22.98	6.5		2.99
	234	S R	22.18	5455.5	86.00	6.5		11.18
16.30-16.45								
A	12	L S	14.28	3870.3	61.01	16.5		20.13
	3	R	6.91	1626.9	25.65	6.5		3.33
B	12	L S	25.34	3590.9	56.61	6.5		7.36
	3	R	1.63	1565.4	24.68	6.5		3.21
C	1	L	16.62	1442.3	22.74	16.5		7.50
	23	S	16.58	4090.0	64.47	16.5		21.28
	4	R	10.53	1550.0	24.43	6.5		3.18
D	1	L	6.45	1457.7	22.98	6.5		2.99
	234	S R	27.17	5455.5	86.00	6.5		11.18
16.45-17.00								
A	12	L S	14.28	3870.3	61.01	16.5		20.13
	3	R	6.91	1626.9	25.65	6.5		3.33
B	12	L S	25.34	3590.9	56.61	6.5		7.36
	3	R	1.63	1565.4	24.68	6.5		3.21
C	1	L	16.62	1442.3	22.74	16.5		7.50
	23	S	16.58	4090.0	64.47	16.5		21.28
	4	R	10.53	1550.0	24.43	6.5		3.18
D	1	L	6.45	1457.7	22.98	6.5		2.99
	234	S R	27.17	5455.5	86.00	6.5		11.18
17.00-17.15								
A	12	L S	11.66	3870.3	61.01	16.5		20.13
	3	R	5.64	1626.9	25.65	6.5		3.33
B	12	L S	20.69	3590.9	56.61	6.5		7.36
	3	R	1.33	1565.4	24.68	6.5		3.21
C	1	L	13.57	1442.3	22.74	16.5		7.50
	23	S	13.54	4090.0	64.47	16.5		21.28
	4	R	8.60	1550.0	24.43	6.5		3.18
D	1	L	5.27	1457.7	22.98	6.5		2.99
	234	S R	22.18	5455.5	86.00	6.5		11.18
17.15-17.30								
A	12	L S	9.76	3870.3	61.01	16.5		20.13
	3	R	4.73	1626.9	25.65	6.5		3.33
B	12	L S	17.33	3590.9	56.61	6.5		7.36
	3	R	1.11	1565.4	24.68	6.5		3.21
C	1	L	11.36	1442.3	22.74	16.5		7.50
	23	S	11.34	4090.0	64.47	16.5		21.28
	4	R	7.20	1550.0	24.43	6.5		3.18
D	1	L	4.41	1457.7	22.98	6.5		2.99
	234	S R	18.57	5455.5	86.00	6.5		11.18

.QUEUE AND DELAY INFORMATION FOR EACH 15 MINUTE TIME SEGMENT BETWEEN 16.00 AND 17.30

ARM	LANES	MOVEMENT	DEMAND EXCL 2-WHEEL (VEHS/MIN)	CAPACITY (VEHS/MIN)	DEGREE OF SAT (RFC)	QUEUE AT END OF SEGMENT MEAN (PHASE AVERAGED) (VEHS/LANE)	QUEUE AT END OF SEGMENT MAXIMUM (END OF RED) (VEHS/LANE)	QUEUEING DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)
16.00-16.15									
A	12	L S	9.76	20.13	0.485	1.2	2.9	36.7	
	3	R	4.72	3.33	1.417	23.4	24.6	192.2	
B	12	L S	17.33	7.36	2.354	76.3	77.6	1167.7	
	3	R	1.11	3.21	0.347	0.5	0.9	7.1	
C	1	L	11.36	7.50	1.514	61.1	63.2	481.9	
	23	S	11.34	21.28	0.533	1.5	3.3	44.0	
	4	R	7.20	3.18	2.267	62.0	63.1	476.7	
D	1	L	4.41	2.99	1.477	23.6	24.7	192.2	
	234	S R	18.57	11.18	1.662	38.6	40.0	905.9	
16.15-16.30									
A	12	L S	11.66	20.13	0.579	1.6	3.5	47.5	
	3	R	5.64	3.33	1.692	58.0	59.2	615.6	
B	12	L S	20.69	7.36	2.811	176.3	177.6	3790.5	
	3	R	1.33	3.21	0.414	0.6	1.1	9.2	
C	1	L	13.57	7.50	1.808	152.1	154.2	1603.8	
	23	S	13.54	21.28	0.636	1.9	4.1	58.0	
	4	R	8.60	3.18	2.707	143.3	144.4	1541.5	
D	1	L	5.27	2.99	1.764	57.9	58.9	615.6	
	234	S R	22.18	11.18	1.984	93.6	95.0	2979.6	
16.30-16.45									
A	12	L S	14.28	20.13	0.709	2.3	4.5	67.5	
	3	R	6.91	3.33	2.073	111.7	112.9	1275.3	
B	12	L S	25.34	7.36	3.443	311.1	312.4	7311.7	
	3	R	1.63	3.21	0.507	0.9	1.5	12.8	
C	1	L	16.62	7.50	2.215	288.8	290.9	3309.2	
	23	S	16.58	21.28	0.779	2.9	5.4	86.4	
	4	R	10.53	3.18	3.315	253.6	254.7	2977.7	
D	1	L	6.45	2.99	2.160	109.9	110.9	1260.2	
	234	S R	27.17	11.18	2.430	173.6	174.9	6013.7	

```
 I 16.45-17.00
I
 I   A   12      L S        14.28      20.13      0.709       2.3          4.5         67.8
I
 I         3         R       6.91       3.33      2.073     165.3        166.5       2079.1
I
 I   B   12      L S        25.34       7.36      3.443     445.9        447.3      11356.5
I
 I         3         R       1.63       3.21      0.507       0.9          1.5         12.9
I
 I   C   1       L          16.62       7.50      2.215     425.5        427.6       5359.1
I
 I        23       S        16.58      21.28      0.779       2.9          5.4         87.3
I
 I          4        R      10.53       3.18      3.315     363.9        365.0       4631.8
I
 I   D   1       L           6.45       2.99      2.160     161.8        162.9       2039.3
I
 I        234      S R      27.17      11.18      2.430     253.5        254.8       9609.8
I
.-------------------------------------------------------------------------------------------------------------
-----
 I 17.00-17.15
I
 I   A   12      L S        11.66      20.13      0.579       1.6          3.5         47.8
I
 I         3         R       5.64       3.33      1.692     199.9        201.2       2740.7
I
 I   B   12      L S        20.69       7.36      2.811     545.9        547.3      14878.5
I
 I         3         R       1.33       3.21      0.414       0.6          1.1          9.4
I
 I   C   1       L          13.57       7.50      1.808     516.5        518.6       7066.5
I
 I        23       S        13.54      21.28      0.636       1.9          4.1         58.4
I
 I          4        R       8.60       3.18      2.707     445.2        446.4       6068.8
I
 I   D   1       L           5.27       2.99      1.764     196.1        197.2       2685.6
I
 I        234      S R      22.18      11.18      1.984     308.5        309.8      12645.5
I
.-------------------------------------------------------------------------------------------------------------
-----
 I 17.15-17.30
I
 I   A   12      L S         9.76      20.13      0.485       1.2          2.9         36.8
I
 I         3         R       4.72       3.33      1.417     220.8        222.0       3156.7
I
 I   B   12      L S        17.33       7.36      2.354     620.7        622.0      17499.1
I
 I         3         R       1.11       3.21      0.347       0.5          0.9          7.2
I
 I   C   1       L          11.36       7.50      1.514     574.4        576.5       8182.9
I
 I        23       S        11.34      21.28      0.533       1.5          3.3         44.1
I
 I          4        R       7.20       3.18      2.267     505.6        506.7       7131.3
I
 I   D   1       L           4.41       2.99      1.477     217.5        218.5       3102.5
I
 I        234      S R      18.57      11.18      1.662     345.5        346.8      14714.9
I
 -------------------------------------------------------------------------------------------------------------
-----

.QUEUES FOR ARM A
 ----------------

                NUMBER OF VEHICLES IN QUEUE
  TIME   LANE     MEAN     MAXIMUM
 SEGMENT         (PHASE    (AT END
 ENDING         AVERAGED)  OF RED)
                    *         +

  16.15    3      23.4       24.6    ************************++
           2       1.2        2.9    *++
           1       1.2        2.9    *++

  16.30    3      58.0       59.2    ************************************************************+
           2       1.6        3.5    **+
           1       1.6        3.5    **+
```

```
  16.45    3    111.7      112.9
*********************************************************************************
           2      2.3        4.5    **++
           1      2.3        4.5    **++

  17.00    3    165.3      166.5
*********************************************************************************
           2      2.3        4.5    **++
           1      2.3        4.5    **++

  17.15    3    199.9      201.2
*********************************************************************************
           2      1.6        3.5    **+
           1      1.6        3.5    **+

  17.30    3    220.8      222.0
*********************************************************************************
           2      1.2        2.9    *++
           1      1.2        2.9    *++


.QUEUES FOR ARM B
 ----------------

               NUMBER OF VEHICLES IN QUEUE
  TIME   LANE    MEAN     MAXIMUM
 SEGMENT        (PHASE    (AT END
 ENDING        AVERAGED)  OF RED)
                   *          +

  16.15    3      0.5        0.9    +
           2     76.3       77.6
*********************************************************************************++
           1     76.3       77.6
*********************************************************************************++

  16.30    3      0.6        1.1    *
           2    176.3      177.6
*********************************************************************************
           1    176.3      177.6
*********************************************************************************

  16.45    3      0.9        1.5    *
           2    311.1      312.4
*********************************************************************************
           1    311.1      312.4
*********************************************************************************

  17.00    3      0.9        1.5    *
           2    445.9      447.3
*********************************************************************************
           1    445.9      447.3
*********************************************************************************

  17.15    3      0.6        1.1    *
           2    545.9      547.3
*********************************************************************************
           1    545.9      547.3
*********************************************************************************

  17.30    3      0.5        0.9    +
           2    620.7      622.0
*********************************************************************************
           1    620.7      622.0
*********************************************************************************


.QUEUES FOR ARM C
 ----------------

               NUMBER OF VEHICLES IN QUEUE
  TIME   LANE    MEAN     MAXIMUM
 SEGMENT        (PHASE    (AT END
 ENDING        AVERAGED)  OF RED)
                   *          +

  16.15    4     62.0       63.1    ************************************************************+
           3      1.5        3.3    *++
           2      1.5        3.3    *++
           1     61.1       63.2    ************************************************************++

  16.30    4    143.3      144.4
*********************************************************************************
           3      1.9        4.1    **++
```

```
           2      1.9        4.1    **++
           1    152.1      154.2
********************************************************************************

  16.45    4    253.6      254.7
********************************************************************************
           3      2.9        5.4    ***++
           2      2.9        5.4    ***++
           1    288.8      290.9
********************************************************************************

  17.00    4    363.9      365.0
********************************************************************************
           3      2.9        5.4    ***++
           2      2.9        5.4    ***++
           1    425.5      427.6
********************************************************************************

  17.15    4    445.2      446.4
********************************************************************************
           3      1.9        4.1    **++
           2      1.9        4.1    **++
           1    516.5      518.6
********************************************************************************

  17.30    4    505.6      506.7
********************************************************************************
           3      1.5        3.3    *++
           2      1.5        3.3    *++
           1    574.4      576.5
********************************************************************************


.QUEUES FOR ARM D
 ----------------

               NUMBER OF VEHICLES IN QUEUE
  TIME   LANE    MEAN     MAXIMUM
 SEGMENT        (PHASE    (AT END
 ENDING        AVERAGED)  OF RED)
                   *          +

  16.15    4     38.6       40.0    ****************************************+
           3     38.6       40.0    ****************************************+
           2     38.6       40.0    ****************************************+
           1     23.6       24.7    ************************+

  16.30    4     93.6       95.0
********************************************************************************
           3     93.6       95.0
********************************************************************************
           2     93.6       95.0
********************************************************************************
           1     57.9       58.9    ************************************************************+

  16.45    4    173.6      174.9
********************************************************************************
           3    173.6      174.9
********************************************************************************
           2    173.6      174.9
********************************************************************************
           1    109.9      110.9
********************************************************************************

  17.00    4    253.5      254.8
********************************************************************************
           3    253.5      254.8
********************************************************************************
           2    253.5      254.8
********************************************************************************
           1    161.8      162.9
********************************************************************************

  17.15    4    308.5      309.8
********************************************************************************
           3    308.5      309.8
********************************************************************************
           2    308.5      309.8
********************************************************************************
           1    196.1      197.2
********************************************************************************

  17.30    4    345.5      346.8
********************************************************************************
```

```
           3    345.5      346.8
*******************************************************************************
           2    345.5      346.8
*******************************************************************************
           1    217.5      218.5
*******************************************************************************


.QUEUEING DELAY INFORMATION OVER WHOLE PERIOD (16.00-17.30)
 ------------------------------------------------------------
```

STREAM	TOTAL DEMAND (EXCL 2-WHEEL)		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
A-B	128.9	85.9	36.6	0.28	36.6	0.28
A-C	942.0	628.0	267.5	0.28	267.6	0.28
A-D	518.3	345.5	10059.7	19.41	17372.1	33.52
B-C	633.5	422.3	18668.0	29.47	53567.9	84.56
B-D	1267.0	844.7	37336.1	29.47	107135.8	84.56
B-A	122.0	81.4	58.6	0.48	58.7	0.48
C-D	1246.4	831.0	26003.5	20.86	47992.1	38.50
C-A	1243.7	829.1	378.3	0.30	378.5	0.30
C-B	789.8	526.5	22827.8	28.90	63062.7	79.84
D-A	484.0	322.7	9895.3	20.44	17810.6	36.80
D-B	1191.6	794.4	27408.8	23.00	55502.5	46.58
D-C	846.0	564.0	19460.5	23.00	39407.4	46.58
ALL	9413.4	6275.6	172400.6	18.31	402592.4	42.77

```
 * DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
 * INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME
PERIOD.
 * THESE WILL BE SIGNIFICANTLY DIFFERENT ONLY IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME
PERIOD.


 * TOTAL GEOMETRIC DELAY INCLUDES DELAY SUFFERED BY VEHICLES STILL QUEUEING AT THE END OF THE WHOLE TIME
PERIOD.
 * THE SUM OF DELAYS FOR EACH SEGMENT AND THE TOTAL GEOMETRIC DELAY WILL BE SIGNIFICANTLY DIFFERENT ONLY IF
THERE IS
 * A LARGE QUEUE AT THE END OF THE TIME PERIOD.
.
 ****** OSCADY 4 run completed
```

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.0.0.4211 []

For sales and distribution information, program advice and maintenance, contact TRL:
Tel: +44 (0)1344 770758 email: software@trl.co.uk Web: http://www.trlsoftware.co.uk

Filename: Junction 8 AM.j9
Path: Z:\Junction 8
Report generation date: 13/10/2017 10:40:29

Summary of junction performance

	AM			
	Queue (PCU)	Delay (s)	RFC	LOS
	2016 Base Year			
Stream B-AC	3.4	57.00	0.78	F
Stream C-AB	2.4	10.05	0.56	B
Stream C-A				
Stream A-B				
Stream A-C				
	2024 no Phase 5			
Stream B-AC	78.0	1100.15	1.77	F
Stream C-AB	37.9	121.31	1.02	F
Stream C-A				
Stream A-B				
Stream A-C				
	2024 with Phase 5			
Stream B-AC	85.3	1155.88	1.81	F
Stream C-AB	38.8	123.96	1.03	F
Stream C-A				
Stream A-B				
Stream A-C				

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

File summary

File Description

Title	(untitled)
Location	
Site number	
Date	04/08/2016
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	TOBIN"Maria Rooney
Description	

Units

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

Analysis Options

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

Demand Set Summary

Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
2016 Base Year	AM	ONE HOUR	08:00	09:30	15
2024 no Phase 5	AM	ONE HOUR	08:00	09:30	15
2024 with Phase 5	AM	ONE HOUR	08:00	09:30	15

2016 Base Year, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	10.62	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	R106(S)		Major
B	R123		Minor
C	R106(N)		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	6.80			107.0	✓	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	3.90	19	14

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	534.655	0.094	0.238	0.149	0.339
1	B-C	689.558	0.102	0.258	-	-
1	C-B	635.928	0.238	0.238	-	-

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	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
D1	2016 Base Year	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	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	608.00	100.000
B		✓	209.00	100.000
C		✓	674.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0.000	274.000	334.000
	B	174.000	0.000	35.000
	C	507.000	167.000	0.000

Vehicle Mix

Heavy Vehicle proportion

		To		
		A	B	C
From	A	0	6	9
	B	11	0	17
	C	7	6	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.78	57.00	3.4	F
C-AB	0.56	10.05	2.4	B
C-A				
A-B				
A-C				

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	157.35	382.08	0.412	154.31	0.8	17.477	C
C-AB	240.66	796.57	0.302	237.74	0.7	6.851	A
C-A	266.76			266.76			
A-B	206.28			206.28			
A-C	251.45			251.45			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	187.89	346.75	0.542	185.91	1.3	24.740	C
C-AB	331.47	833.60	0.398	329.75	1.2	7.640	A
C-A	274.45			274.45			
A-B	246.32			246.32			
A-C	300.26			300.26			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	230.11	297.83	0.773	222.78	3.1	49.472	E
C-AB	498.23	888.14	0.561	493.51	2.3	9.803	A
C-A	243.86			243.86			
A-B	301.68			301.68			
A-C	367.74			367.74			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	230.11	296.87	0.775	228.86	3.4	57.005	F
C-AB	501.32	890.58	0.563	501.05	2.4	10.052	B
C-A	240.77			240.77			
A-B	301.68			301.68			
A-C	367.74			367.74			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	187.89	345.40	0.544	195.83	1.4	28.190	D
C-AB	334.44	836.92	0.400	339.12	1.2	7.846	A
C-A	271.47			271.47			
A-B	246.32			246.32			
A-C	300.26			300.26			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	157.35	380.97	0.413	159.75	0.8	18.409	C
C-AB	242.90	798.48	0.304	244.77	0.8	6.980	A
C-A	264.52			264.52			
A-B	206.28			206.28			
A-C	251.45			251.45			

2024 no Phase 5, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	201.91	F

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
D2	2024 no Phase 5	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	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	829.00	100.000
B		✓	288.00	100.000
C		✓	919.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0.000	372.000	457.000
	B	239.000	0.000	49.000
	C	691.000	228.000	0.000

Vehicle Mix

Heavy Vehicle proportion

		To		
		A	B	C
From	A	0	7	11
	B	13	0	20
	C	9	7	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	1.77	1100.15	78.0	F
C-AB	1.02	121.31	37.9	F
C-A				
A-B				
A-C				

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	216.82	317.15	0.684	208.11	2.2	35.380	E
C-AB	425.36	864.94	0.492	418.23	1.8	8.700	A
C-A	266.52			266.52			
A-B	280.06			280.06			
A-C	344.05			344.05			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	258.91	267.06	0.969	237.65	7.5	102.607	F
C-AB	632.04	923.21	0.685	623.10	4.0	13.183	B
C-A	194.13			194.13			
A-B	334.42			334.42			
A-C	410.83			410.83			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	317.09	196.51	1.614	194.92	38.0	472.948	F
C-AB	1011.84	987.93	1.024	925.58	25.6	59.243	F
C-A	0.00			0.00			
A-B	409.58			409.58			
A-C	503.17			503.17			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	317.09	178.76	1.774	178.59	72.7	967.678	F
C-AB	1011.84	990.07	1.022	962.44	37.9	121.313	F
C-A	0.00			0.00			
A-B	409.58			409.58			
A-C	503.17			503.17			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	258.91	238.18	1.087	237.68	78.0	1100.150	F
C-AB	755.74	1005.09	0.752	879.04	7.1	58.199	F
C-A	70.42			70.42			
A-B	334.42			334.42			
A-C	410.83			410.83			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	216.82	311.49	0.696	307.00	55.4	785.100	F
C-AB	440.50	879.68	0.501	460.96	2.0	9.939	A
C-A	251.37			251.37			
A-B	280.06			280.06			
A-C	344.05			344.05			

2024 with Phase 5, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	216.90	F

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
D3	2024 with Phase 5	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	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	829.00	100.000
B		✓	301.00	100.000
C		✓	920.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0.000	372.000	457.000
	B	239.000	0.000	62.000
	C	691.000	229.000	0.000

Vehicle Mix

Heavy Vehicle proportion

		To		
		A	B	C
From	A	0	7	11
	B	13	0	17
	C	9	8	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	1.81	1155.88	85.3	F
C-AB	1.03	123.96	38.8	F
C-A				
A-B				
A-C				

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	226.61	323.12	0.701	217.27	2.3	36.141	E
C-AB	427.22	864.94	0.494	420.02	1.8	8.768	A
C-A	265.40			265.40			
A-B	280.06			280.06			
A-C	344.05			344.05			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	270.59	272.80	0.992	246.34	8.4	108.882	F
C-AB	634.87	923.25	0.688	625.75	4.1	13.356	B
C-A	192.20			192.20			
A-B	334.42			334.42			
A-C	410.83			410.83			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	331.41	201.46	1.645	200.12	41.2	499.422	F
C-AB	1012.94	986.47	1.027	925.16	26.0	60.374	F
C-A	0.00			0.00			
A-B	409.58			409.58			
A-C	503.17			503.17			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	331.41	183.17	1.809	183.02	78.3	1011.777	F
C-AB	1012.94	988.60	1.025	961.99	38.8	123.962	F
C-A	0.00			0.00			
A-B	409.58			409.58			
A-C	503.17			503.17			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	270.59	243.13	1.113	242.76	85.3	1155.881	F
C-AB	762.00	1006.82	0.757	887.56	7.4	61.518	F
C-A	65.06			65.06			
A-B	334.42			334.42			
A-C	410.83			410.83			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	226.61	317.29	0.714	313.11	63.7	858.638	F
C-AB	446.28	881.83	0.506	467.62	2.0	10.098	B
C-A	246.34			246.34			
A-B	280.06			280.06			
A-C	344.05			344.05			

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.0.0.4211 []

For sales and distribution information, program advice and maintenance, contact TRL:
Tel: +44 (0)1344 770758 email: software@trl.co.uk Web: http://www.trlsoftware.co.uk

Filename: Junction 8 PM.j9
Path: Z:\Junction 8
Report generation date: 13/10/2017 10:41:11

Summary of junction performance

	PM			
	Queue (PCU)	Delay (s)	RFC	LOS
	2016 Base Year			
Stream B-AC	1.3	22.90	0.56	C
Stream C-AB	0.6	5.92	0.24	A
Stream C-A				
Stream A-B				
Stream A-C				
	2024 no Phase 5			
Stream B-AC	9.1	123.48	0.96	F
Stream C-AB	1.5	7.01	0.41	A
Stream C-A				
Stream A-B				
Stream A-C				
	2024 with Phase 5			
Stream B-AC	10.2	136.07	0.98	F
Stream C-AB	1.7	7.62	0.46	A
Stream C-A				
Stream A-B				
Stream A-C				

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

File summary

File Description

Title	(untitled)
Location	
Site number	
Date	04/08/2016
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	TOBIN"Maria Rooney
Description	

Units

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

Analysis Options

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

Demand Set Summary

Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
2016 Base Year	PM	ONE HOUR	17:00	18:30	15
2024 no Phase 5	PM	ONE HOUR	17:00	18:30	15
2024 with Phase 5	PM	ONE HOUR	17:00	18:30	15

2016 Base Year, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	4.43	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	R106(S)		Major
B	R123		Minor
C	R106(N)		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	6.80			107.0	✓	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	3.90	19	14

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	534.655	0.094	0.238	0.149	0.339
1	B-C	689.558	0.102	0.258	-	-
1	C-B	635.928	0.238	0.238	-	-

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	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
D1	2016 Base Year	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	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	505.00	100.000
B		✓	188.00	100.000
C		✓	496.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0.000	135.000	370.000
	B	136.000	0.000	52.000
	C	413.000	83.000	0.000

Vehicle Mix

Heavy Vehicle proportion

	To			
		A	B	C
From	A	0	4	4
	B	4	0	0
	C	4	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.56	22.90	1.3	C
C-AB	0.24	5.92	0.6	A
C-A				
A-B				
A-C				

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	141.54	433.96	0.326	139.59	0.5	12.499	B
C-AB	104.87	761.29	0.138	103.79	0.3	5.626	A
C-A	268.55			268.55			
A-B	101.64			101.64			
A-C	278.56			278.56			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	169.01	406.53	0.416	168.11	0.7	15.471	C
C-AB	139.73	788.81	0.177	139.29	0.4	5.707	A
C-A	306.16			306.16			
A-B	121.36			121.36			
A-C	332.62			332.62			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	206.99	368.35	0.562	204.83	1.3	22.345	C
C-AB	201.73	830.68	0.243	200.84	0.6	5.898	A
C-A	344.38			344.38			
A-B	148.64			148.64			
A-C	407.38			407.38			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	206.99	368.18	0.562	206.86	1.3	22.903	C
C-AB	202.11	831.11	0.243	202.08	0.6	5.919	A
C-A	344.00			344.00			
A-B	148.64			148.64			
A-C	407.38			407.38			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	169.01	406.27	0.416	171.13	0.8	15.887	C
C-AB	140.16	789.43	0.178	141.02	0.4	5.741	A
C-A	305.73			305.73			
A-B	121.36			121.36			
A-C	332.62			332.62			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	141.54	433.60	0.326	142.52	0.5	12.765	B
C-AB	105.45	761.79	0.138	105.92	0.3	5.658	A
C-A	267.96			267.96			
A-B	101.64			101.64			
A-C	278.56			278.56			

2024 no Phase 5, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	20.75	C

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
D2	2024 no Phase 5	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	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	683.00	100.000
B		✓	254.00	100.000
C		✓	672.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0.000	182.000	501.000
	B	184.000	0.000	70.000
	C	560.000	112.000	0.000

Vehicle Mix

Heavy Vehicle proportion

		To		
		A	B	C
From	A	0	5	4
	B	5	0	0
	C	5	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.96	123.48	9.1	F
C-AB	0.41	7.01	1.5	A
C-A				
A-B				
A-C				

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	191.22	384.06	0.498	187.28	1.0	18.604	C
C-AB	171.82	811.96	0.212	169.84	0.5	5.802	A
C-A	334.09			334.09			
A-B	137.02			137.02			
A-C	377.18			377.18			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	228.34	345.94	0.660	224.92	1.8	29.960	D
C-AB	243.84	855.42	0.285	242.72	0.8	6.104	A
C-A	360.28			360.28			
A-B	163.61			163.61			
A-C	450.39			450.39			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	279.66	292.40	0.956	259.49	6.9	84.075	F
C-AB	376.92	917.00	0.411	374.23	1.4	6.927	A
C-A	362.97			362.97			
A-B	200.39			200.39			
A-C	551.61			551.61			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	279.66	291.88	0.958	270.84	9.1	123.481	F
C-AB	378.58	918.52	0.412	378.47	1.5	7.008	A
C-A	361.30			361.30			
A-B	200.39			200.39			
A-C	551.61			551.61			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	228.34	345.21	0.661	255.67	2.3	50.147	F
C-AB	245.47	857.54	0.286	248.10	0.8	6.200	A
C-A	358.65			358.65			
A-B	163.61			163.61			
A-C	450.39			450.39			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	191.22	383.37	0.499	195.95	1.1	20.355	C
C-AB	173.31	813.29	0.213	174.51	0.5	5.873	A
C-A	332.61			332.61			
A-B	137.02			137.02			
A-C	377.18			377.18			

2024 with Phase 5, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	22.90	C

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
D3	2024 with Phase 5	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	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	683.00	100.000
B		✓	255.00	100.000
C		✓	684.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0.000	182.000	501.000
	B	184.000	0.000	71.000
	C	560.000	124.000	0.000

Vehicle Mix

Heavy Vehicle proportion

		To		
		A	B	C
From	A	0	5	4
	B	5	0	1
	C	5	3	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.98	136.07	10.2	F
C-AB	0.46	7.62	1.7	A
C-A				
A-B				
A-C				

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	191.98	381.74	0.503	187.95	1.0	18.930	C
C-AB	190.23	811.96	0.234	188.00	0.6	5.998	A
C-A	324.72			324.72			
A-B	137.02			137.02			
A-C	377.18			377.18			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	229.24	342.92	0.668	225.63	1.9	30.929	D
C-AB	270.00	855.51	0.316	268.70	0.9	6.407	A
C-A	344.90			344.90			
A-B	163.61			163.61			
A-C	450.39			450.39			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	280.76	288.36	0.974	258.53	7.5	89.875	F
C-AB	417.44	917.18	0.455	414.18	1.7	7.510	A
C-A	335.66			335.66			
A-B	200.39			200.39			
A-C	551.61			551.61			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	280.76	287.73	0.976	269.99	10.2	136.067	F
C-AB	419.54	919.01	0.457	419.39	1.7	7.619	A
C-A	333.56			333.56			
A-B	200.39			200.39			
A-C	551.61			551.61			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	229.24	342.04	0.670	260.36	2.4	56.492	F
C-AB	272.02	858.04	0.317	275.23	0.9	6.519	A
C-A	342.88			342.88			
A-B	163.61			163.61			
A-C	450.39			450.39			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	191.98	380.95	0.504	197.09	1.1	20.851	C
C-AB	194.44	815.80	0.238	195.81	0.6	6.079	A
C-A	320.51			320.51			
A-B	137.02			137.02			
A-C	377.18			377.18			

Junctions 9

PICADY 9 - Priority Intersection Module

Filename: Junction 9 AM.j9
Path: Z:\Junction 9
Report generation date: 13/10/2017 10:41:48

Summary of junction performance

	AM			
	Queue (PCU)	Delay (s)	RFC	LOS
	2016 Base Year			
Stream B-AC	0.1	12.15	0.11	B
Stream C-AB	0.3	5.19	0.11	A
Stream C-A				
Stream A-B				
Stream A-C				
	2024 Phase 5 No Construction			
Stream B-AC	0.3	18.58	0.20	C
Stream C-AB	1.0	5.11	0.22	A
Stream C-A				
Stream A-B				
Stream A-C				
	2024 Phase 5 With Construction			
Stream B-AC	0.3	18.98	0.20	C
Stream C-AB	1.3	5.57	0.29	A
Stream C-A				
Stream A-B				
Stream A-C				

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

File summary

File Description

Title	(untitled)
Location	
Site number	
Date	04/08/2016
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	TOBIN"Maria Rooney
Description	

Units

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

Analysis Options

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

Demand Set Summary

Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
2016 Base Year	AM	ONE HOUR	08:00	09:30	15
2024 Phase 5 No Construction	AM	ONE HOUR	08:00	09:30	15
2024 Phase 5 With Construction	AM	ONE HOUR	08:00	09:30	15

2016 Base Year, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.68	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	R106(N)		Major
B	Golf Link Road		Minor
C	R106(S)		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	6.60			150.0	✓	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	3.10	21	44

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	511.042	0.091	0.229	0.144	0.327
1	B-C	658.160	0.098	0.248	-	-
1	C-B	660.830	0.249	0.249	-	-

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	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
D1	2016 Base Year	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	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	692.00	100.000
B		✓	38.00	100.000
C		✓	563.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0.000	18.000	674.000
	B	9.000	0.000	29.000
	C	529.000	34.000	0.000

Vehicle Mix

Heavy Vehicle proportion

		To		
		A	B	C
From	A	0	9	6
	B	41	0	10
	C	9	10	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.11	12.15	0.1	B
C-AB	0.11	5.19	0.3	A
C-A				
A-B				
A-C				

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	28.61	462.89	0.062	28.31	0.1	9.605	A
C-AB	49.56	809.34	0.061	49.13	0.1	5.186	A
C-A	374.29			374.29			
A-B	13.55			13.55			
A-C	507.42			507.42			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	34.16	431.26	0.079	34.07	0.1	10.515	B
C-AB	68.25	843.14	0.081	68.03	0.2	5.086	A
C-A	437.88			437.88			
A-B	16.18			16.18			
A-C	605.91			605.91			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	41.84	385.74	0.108	41.68	0.1	12.137	B
C-AB	101.69	891.21	0.114	101.22	0.3	4.989	A
C-A	518.19			518.19			
A-B	19.82			19.82			
A-C	742.09			742.09			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	41.84	385.69	0.108	41.83	0.1	12.148	B
C-AB	101.90	891.44	0.114	101.89	0.3	4.995	A
C-A	517.97			517.97			
A-B	19.82			19.82			
A-C	742.09			742.09			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	34.16	431.19	0.079	34.32	0.1	10.531	B
C-AB	68.49	843.49	0.081	68.95	0.2	5.092	A
C-A	437.63			437.63			
A-B	16.18			16.18			
A-C	605.91			605.91			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	28.61	462.82	0.062	28.70	0.1	9.624	A
C-AB	49.85	809.59	0.062	50.08	0.1	5.191	A
C-A	374.00			374.00			
A-B	13.55			13.55			
A-C	507.42			507.42			

2024 Phase 5 No Construction, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	1.02	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
D2	2024 Phase 5 No Construction	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	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	941.00	100.000
B		✓	52.00	100.000
C		✓	770.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0.000	24.000	917.000
	B	12.000	0.000	40.000
	C	724.000	46.000	0.000

Vehicle Mix

Heavy Vehicle proportion

		To		
		A	B	C
From	A	0	10	7
	B	46	0	12
	C	11	12	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.20	18.58	0.3	C
C-AB	0.22	5.11	1.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	39.15	404.96	0.097	38.65	0.1	11.617	B
C-AB	87.26	874.85	0.100	86.34	0.2	5.085	A
C-A	492.44			492.44			
A-B	18.07			18.07			
A-C	690.37			690.37			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	46.75	358.47	0.130	46.55	0.2	13.652	B
C-AB	132.83	933.11	0.142	132.10	0.4	5.012	A
C-A	559.38			559.38			
A-B	21.58			21.58			
A-C	824.36			824.36			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	57.25	286.84	0.200	56.80	0.3	18.486	C
C-AB	227.39	1016.30	0.224	225.29	0.9	5.083	A
C-A	620.40			620.40			
A-B	26.42			26.42			
A-C	1009.64			1009.64			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	57.25	286.52	0.200	57.24	0.3	18.581	C
C-AB	228.75	1017.61	0.225	228.67	1.0	5.106	A
C-A	619.03			619.03			
A-B	26.42			26.42			
A-C	1009.64			1009.64			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	46.75	358.13	0.131	47.19	0.2	13.721	B
C-AB	134.04	934.84	0.143	136.13	0.4	5.040	A
C-A	558.17			558.17			
A-B	21.58			21.58			
A-C	824.36			824.36			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	39.15	404.77	0.097	39.36	0.1	11.666	B
C-AB	88.11	875.67	0.101	88.89	0.2	5.106	A
C-A	491.59			491.59			
A-B	18.07			18.07			
A-C	690.37			690.37			

2024 Phase 5 With Construction, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	1.21	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
D3	2024 Phase 5 With Construction	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	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	942.00	100.000
B		✓	52.00	100.000
C		✓	783.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0.000	24.000	918.000
	B	12.000	0.000	40.000
	C	724.000	59.000	0.000

Vehicle Mix

Heavy Vehicle proportion

		To		
		A	B	C
From	A	0	10	7
	B	46	0	12
	C	11	11	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.20	18.98	0.3	C
C-AB	0.29	5.57	1.3	A
C-A				
A-B				
A-C				

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	39.15	402.98	0.097	38.65	0.1	11.681	B
C-AB	111.95	874.72	0.128	110.57	0.3	5.230	A
C-A	477.54			477.54			
A-B	18.07			18.07			
A-C	691.12			691.12			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	46.75	355.62	0.131	46.54	0.2	13.778	B
C-AB	170.62	933.16	0.183	169.47	0.6	5.247	A
C-A	533.28			533.28			
A-B	21.58			21.58			
A-C	825.26			825.26			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	57.25	282.06	0.203	56.78	0.3	18.873	C
C-AB	292.34	1016.59	0.288	289.87	1.2	5.527	A
C-A	569.76			569.76			
A-B	26.42			26.42			
A-C	1010.74			1010.74			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	57.25	281.67	0.203	57.24	0.3	18.982	C
C-AB	293.88	1018.17	0.289	293.78	1.3	5.566	A
C-A	568.22			568.22			
A-B	26.42			26.42			
A-C	1010.74			1010.74			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	46.75	355.19	0.132	47.21	0.2	13.854	B
C-AB	172.15	935.40	0.184	174.57	0.7	5.292	A
C-A	531.75			531.75			
A-B	21.58			21.58			
A-C	825.26			825.26			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	39.15	402.67	0.097	39.36	0.1	11.734	B
C-AB	113.26	875.97	0.129	114.47	0.4	5.268	A
C-A	476.22			476.22			
A-B	18.07			18.07			
A-C	691.12			691.12			

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.0.0.4211 []

For sales and distribution information, program advice and maintenance, contact TRL:
Tel: +44 (0)1344 770758 email: software@trl.co.uk Web: http://www.trlsoftware.co.uk

Filename: Junction 9 PM.j9
Path: Z:\Junction 9
Report generation date: 13/10/2017 10:42:16

Summary of junction performance

	PM			
	Queue (PCU)	Delay (s)	RFC	LOS
	2016 Base Year			
Stream B-AC	0.3	11.96	0.23	B
Stream C-AB	0.5	4.41	0.17	A
Stream C-A				
Stream A-B				
Stream A-C				
	2024 Phase 5 No construction			
	2024 Phase 5 With construction			
Stream B-AC	0.8	20.20	0.43	C
Stream C-AB	1.4	4.68	0.34	A
Stream C-A				
Stream A-B				
Stream A-C				

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

File summary

File Description

Title	(untitled)
Location	
Site number	
Date	04/08/2016
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	TOBIN"Maria Rooney
Description	

Units

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

Analysis Options

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

Demand Set Summary

Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
2016 Base Year	PM	ONE HOUR	17:15	18:45	15
2024 Phase 5 No construction	PM	ONE HOUR	17:15	18:45	15
2024 Phase 5 With construction	PM	ONE HOUR	17:15	18:45	15

2016 Base Year, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	1.22	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	R106(N)		Major
B	Golf Link Road		Minor
C	R106(S)		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	6.60			150.0	✓	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	3.10	21	44

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	511.042	0.091	0.229	0.144	0.327
1	B-C	658.160	0.098	0.248	-	-
1	C-B	660.830	0.249	0.249	-	-

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	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
D1	2016 Base Year	PM	ONE HOUR	17:15	18:45	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	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	499.00	100.000
B		✓	84.00	100.000
C		✓	716.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0.000	36.000	463.000
	B	27.000	0.000	57.000
	C	668.000	48.000	0.000

Vehicle Mix

Heavy Vehicle proportion

		To		
		A	B	C
From	A	0	0	2
	B	0	0	4
	C	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.23	11.96	0.3	B
C-AB	0.17	4.41	0.5	A
C-A				
A-B				
A-C				

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	63.24	470.36	0.134	62.61	0.2	9.052	A
C-AB	78.37	906.15	0.086	77.70	0.2	4.391	A
C-A	460.67			460.67			
A-B	27.10			27.10			
A-C	348.57			348.57			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	75.51	442.34	0.171	75.31	0.2	10.066	B
C-AB	109.05	956.11	0.114	108.68	0.3	4.301	A
C-A	534.62			534.62			
A-B	32.36			32.36			
A-C	416.23			416.23			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	92.49	401.71	0.230	92.11	0.3	11.925	B
C-AB	172.88	1036.99	0.167	171.94	0.5	4.223	A
C-A	615.45			615.45			
A-B	39.64			39.64			
A-C	509.77			509.77			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	92.49	401.58	0.230	92.48	0.3	11.958	B
C-AB	173.39	1037.49	0.167	173.36	0.5	4.236	A
C-A	614.94			614.94			
A-B	39.64			39.64			
A-C	509.77			509.77			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	75.51	442.18	0.171	75.88	0.2	10.102	B
C-AB	109.54	956.77	0.114	110.47	0.3	4.320	A
C-A	534.13			534.13			
A-B	32.36			32.36			
A-C	416.23			416.23			

Main results: (18:30-18:45)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	63.24	470.22	0.134	63.45	0.2	9.091	A
C-AB	78.89	906.58	0.087	79.27	0.2	4.406	A
C-A	460.16			460.16			
A-B	27.10			27.10			
A-C	348.57			348.57			

2024 Phase 5 No construction , PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	2.01	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
D2	2024 Phase 5 No construction	PM	ONE HOUR	17:15	18:45	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	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	674.00	100.000
B		✓	114.00	100.000
C		✓	967.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0.000	48.000	626.000
	B	37.000	0.000	77.000
	C	902.000	65.000	0.000

Vehicle Mix

Heavy Vehicle proportion

		To		
		A	B	C
From	A	0	0	3
	B	0	0	4
	C	3	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.40	19.72	0.7	C
C-AB	0.33	4.63	1.4	A
C-A				
A-B				
A-C				

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	85.83	418.10	0.205	84.78	0.3	11.055	B
C-AB	144.92	1005.73	0.144	143.37	0.4	4.254	A
C-A	583.09			583.09			
A-B	36.14			36.14			
A-C	471.29			471.29			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	102.48	376.56	0.272	102.02	0.4	13.439	B
C-AB	223.75	1085.71	0.206	222.53	0.7	4.269	A
C-A	645.56			645.56			
A-B	43.15			43.15			
A-C	562.76			562.76			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	125.52	313.19	0.401	124.37	0.7	19.454	C
C-AB	394.20	1198.40	0.329	391.41	1.4	4.589	A
C-A	670.49			670.49			
A-B	52.85			52.85			
A-C	689.24			689.24			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	125.52	312.75	0.401	125.47	0.7	19.719	C
C-AB	396.28	1200.10	0.330	396.18	1.4	4.627	A
C-A	668.40			668.40			
A-B	52.85			52.85			
A-C	689.24			689.24			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	102.48	376.02	0.273	103.62	0.4	13.622	B
C-AB	225.65	1088.15	0.207	228.39	0.7	4.320	A
C-A	643.66			643.66			
A-B	43.15			43.15			
A-C	562.76			562.76			

Main results: (18:30-18:45)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	85.83	417.71	0.205	86.32	0.3	11.169	B
C-AB	146.55	1007.17	0.146	147.83	0.4	4.294	A
C-A	581.46			581.46			
A-B	36.14			36.14			
A-C	471.29			471.29			

2024 Phase 5 With construction, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	2.20	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
D3	2024 Phase 5 With construction	PM	ONE HOUR	17:15	18:45	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	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	674.00	100.000
B		✓	127.00	100.000
C		✓	968.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0.000	48.000	626.000
	B	37.000	0.000	90.000
	C	902.000	66.000	0.000

Vehicle Mix

Heavy Vehicle proportion

		To		
		A	B	C
From	A	0	0	3
	B	0	0	5
	C	3	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.43	20.20	0.8	C
C-AB	0.34	4.68	1.4	A
C-A				
A-B				
A-C				

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	95.61	427.67	0.224	94.44	0.3	11.142	B
C-AB	147.15	1005.73	0.146	145.55	0.4	4.297	A
C-A	581.61			581.61			
A-B	36.14			36.14			
A-C	471.29			471.29			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	114.17	386.93	0.295	113.65	0.4	13.600	B
C-AB	227.22	1085.73	0.209	226.00	0.7	4.311	A
C-A	642.99			642.99			
A-B	43.15			43.15			
A-C	562.76			562.76			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	139.83	324.48	0.431	138.51	0.8	19.891	C
C-AB	400.30	1198.43	0.334	397.44	1.4	4.643	A
C-A	665.49			665.49			
A-B	52.85			52.85			
A-C	689.24			689.24			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	139.83	324.04	0.432	139.77	0.8	20.201	C
C-AB	402.45	1200.18	0.335	402.35	1.4	4.681	A
C-A	663.34			663.34			
A-B	52.85			52.85			
A-C	689.24			689.24			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	114.17	386.41	0.295	115.48	0.4	13.817	B
C-AB	229.16	1088.23	0.211	231.97	0.7	4.354	A
C-A	641.05			641.05			
A-B	43.15			43.15			
A-C	562.76			562.76			

Main results: (18:30-18:45)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	95.61	427.30	0.224	96.17	0.3	11.272	B
C-AB	148.81	1007.19	0.148	150.09	0.4	4.331	A
C-A	579.95			579.95			
A-B	36.14			36.14			
A-C	471.29			471.29			

Junctions 9

ARCADY 9 - Roundabout Module

Filename: Junction 10 AM.j9
Path: C:\Users\Maria Rooney\Desktop
Report generation date: 22/01/2018 14:57:45

Summary of junction performance

	AM			
	Queue (PCU)	Delay (min)	RFC	LOS
	2016 Base Year			
	2024 No Phase 5			
Arm A	8.2	0.75	0.91	E
Arm B	50.2	3.49	1.14	F
Arm C	9.1	0.90	0.94	F
	2024 With Phase 5			
Arm A	8.1	0.74	0.90	E
Arm B	50.0	3.48	1.14	F
Arm C	9.1	0.90	0.94	F

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	Junction 10 AM
Location	Dublin
Site number	
Date	06/07/2016
Version	
Status	On-going
Identifier	
Client	Irish Water
Jobnumber	7556
Enumerator	TRLLIMITED"mariarooney
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	min	-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 (min)	Queue threshold (PCU)
JUNCTIONS 9	9.56				0.85	0.60	20.00

Demand Set Summary

Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Model time period length (min)	Time segment length (min)	Run automatically
2016 Base Year	AM	DIRECT	07:45	10:15	150	15	✓
2024 No Phase 5	AM	DIRECT	07:45	10:15	150	15	✓
2024 With Phase 5	AM	DIRECT	07:45	10:15	150	15	✓

2016 Base Year , AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (min)	Junction LOS
1	(untitled)	Mini-roundabout	A,B,C	1.88	F

Junction Network Options

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

Arms

Arms

Arm	Name	Description
A	R106 (S)	
B	Station Road	
C	R106 (N)	

Capacity Options

Arm	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)	Assume flat start profile	Initial queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00

Mini Roundabout Geometry

Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
A	3.00	3.00	4.00	9.8	17.90	14.30	0.0	
B	3.10	2.60	6.00	15.0	16.70	13.70	0.0	✓
C	3.80	3.80	4.70	10.0	14.50	10.30	2.0	✓

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A	0.636	894.028
B	0.552	1086.905
C	0.514	902.682

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	Model start time (HH:mm)	Model finish time (HH:mm)	Model time period length (min)	Time segment length (min)	Run automatically
D1	2016 Base Year	AM	DIRECT	07:45	10:15	150	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	Scaling Factor (%)
A		DIRECT		100.000
B		DIRECT		100.000
C		DIRECT		100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0.000	111.000	251.000
	B	241.000	0.000	269.000
	C	477.000	226.000	3.000

Proportions

		To		
		A	B	C
From	A	0.00	0.31	0.69
	B	0.47	0.00	0.53
	C	0.68	0.32	0.00

Vehicle Mix

Heavy Vehicle proportion

		To		
		A	B	C
From	A	0	5	11
	B	6	0	6
	C	7	5	60

Average PCU Per Veh

		To		
		A	B	C
From	A	1.000	1.050	1.110
	B	1.060	1.000	1.060
	C	1.070	1.050	1.600

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (min)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A	0.91	0.74	8.1	E	529.98	1324.95
B	1.14	3.47	49.8	F	662.22	1655.55
C	0.94	0.90	9.0	F	460.26	1150.65

Main Results for each time segment

Main results: (07:45-08:00)

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 (min)	LOS
A	373.80	93.45	113.50	821.81	0.455	370.22	476.23	0.0	0.9	0.144	A
B	512.40	128.10	258.19	944.46	0.543	507.48	225.54	0.0	1.2	0.144	A
C	353.40	88.35	239.81	779.34	0.453	349.93	525.86	0.0	0.9	0.148	A

Main results: (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 (min)	LOS
A	478.80	119.70	122.95	815.80	0.587	476.36	543.86	0.9	1.5	0.191	B
B	612.60	153.15	331.90	903.79	0.678	608.97	267.40	1.2	2.1	0.213	B
C	379.80	94.95	287.77	754.68	0.503	379.04	653.10	0.9	1.1	0.170	B

Main results: (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 (min)	LOS
A	547.20	136.80	148.34	799.65	0.684	544.21	653.63	1.5	2.3	0.253	C
B	740.40	185.10	379.28	877.65	0.844	729.32	313.27	2.1	4.9	0.401	C
C	460.20	115.05	344.64	725.42	0.634	457.33	763.96	1.1	1.8	0.236	B

Main results: (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 (min)	LOS
A	613.80	153.45	208.63	761.29	0.806	606.71	798.64	2.3	4.0	0.405	C
B	784.20	196.05	423.40	853.31	0.919	770.42	391.93	4.9	8.4	0.660	E
C	670.80	167.70	364.06	715.43	0.938	643.21	829.77	1.8	8.7	0.712	E

Main results: (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 (min)	LOS
A	691.20	172.80	206.98	762.34	0.907	677.26	816.93	4.0	7.5	0.668	E
B	943.20	235.80	472.31	826.33	1.141	816.44	411.93	8.4	40.0	2.031	F
C	639.60	159.90	385.81	704.25	0.908	638.10	902.94	8.7	9.0	0.898	F

Main results: (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 (min)	LOS
A	693.60	173.40	189.23	773.64	0.897	691.38	779.66	7.5	8.1	0.744	E
B	855.00	213.75	481.86	821.06	1.041	815.81	398.75	40.0	49.8	3.467	F
C	567.00	141.75	385.51	704.40	0.805	583.38	912.16	9.0	5.0	0.577	D

Main results: (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 (min)	LOS
A	612.60	153.15	163.82	789.80	0.776	628.36	732.39	8.1	4.1	0.437	D
B	673.80	168.45	437.83	845.35	0.797	827.75	354.35	49.8	11.4	2.331	F
C	496.20	124.05	391.15	701.50	0.707	505.06	874.43	5.0	2.7	0.338	C

Main results: (09:30-09:45)

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 (min)	LOS
A	548.40	137.10	132.34	809.83	0.677	555.32	560.92	4.1	2.4	0.264	C
B	566.40	141.60	386.78	873.52	0.648	603.67	300.88	11.4	2.0	0.266	C
C	402.00	100.50	285.27	755.96	0.532	407.99	705.19	2.7	1.2	0.187	B

Main results: (09:45-10:00)

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 (min)	LOS
A	384.60	96.15	104.76	827.38	0.465	390.33	450.07	2.4	1.0	0.152	A
B	487.20	121.80	272.01	936.83	0.520	490.67	223.07	2.0	1.2	0.144	A
C	321.00	80.25	231.86	783.43	0.410	322.96	530.82	1.2	0.8	0.139	A

Main results: (10:00-10:15)

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 (min)	LOS
A	355.80	88.95	101.46	829.48	0.429	356.33	422.97	1.0	0.8	0.139	A
B	447.00	111.75	248.40	949.86	0.471	447.86	209.39	1.2	1.0	0.127	A
C	312.60	78.15	211.63	793.83	0.394	312.80	484.62	0.8	0.7	0.133	A

2024 No Phase 5, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (min)	Junction LOS
1	(untitled)	Mini-roundabout	A,B,C	1.89	F

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Capacity Options

[same as above]

Mini Roundabout Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Model time period length (min)	Time segment length (min)	Run automatically
D2	2024 No Phase 5	AM	DIRECT	07:45	10:15	150	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	Scaling Factor (%)
A		DIRECT		100.000
B		DIRECT		100.000
C		DIRECT		100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0.000	151.000	344.000
	B	328.000	0.000	366.000
	C	650.000	307.000	4.000

Proportions

		To		
		A	B	C
From	A	0.00	0.31	0.69
	B	0.47	0.00	0.53
	C	0.68	0.32	0.00

Vehicle Mix

Heavy Vehicle proportion

		To		
		A	B	C
From	A	0	6	13
	B	7	0	7
	C	8	6	64

Average PCU Per Veh

		To		
		A	B	C
From	A	1.000	1.060	1.130
	B	1.070	1.000	1.070
	C	1.080	1.060	1.640

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (min)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A	0.91	0.75	8.2	E	529.98	1324.95
B	1.14	3.49	50.2	F	662.22	1655.55
C	0.94	0.90	9.1	F	460.26	1150.65

Main Results for each time segment

Main results: (07:45-08:00)

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 (min)	LOS
A	373.80	93.45	113.23	821.98	0.455	370.17	476.48	0.0	0.9	0.146	A
B	512.40	128.10	258.71	944.17	0.543	507.43	224.70	0.0	1.2	0.145	A
C	353.40	88.35	239.82	779.33	0.453	349.90	526.31	0.0	0.9	0.149	A

Main results: (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 (min)	LOS
A	478.80	119.70	122.66	815.98	0.587	476.32	544.16	0.9	1.5	0.194	B
B	612.60	153.15	332.60	903.41	0.678	608.93	266.39	1.2	2.2	0.215	B
C	379.80	94.95	287.79	754.66	0.503	379.04	653.73	0.9	1.1	0.171	B

Main results: (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 (min)	LOS
A	547.20	136.80	147.99	799.87	0.684	544.17	653.95	1.5	2.3	0.257	C
B	740.40	185.10	380.07	877.21	0.844	729.20	312.09	2.2	5.0	0.405	C
C	460.20	115.05	344.64	725.43	0.634	457.30	764.64	1.1	1.8	0.238	B

Main results: (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 (min)	LOS
A	613.80	153.45	208.11	761.62	0.806	606.64	798.99	2.3	4.1	0.410	C
B	784.20	196.05	424.26	852.84	0.920	770.26	390.49	5.0	8.4	0.667	E
C	670.80	167.70	364.04	715.44	0.938	643.06	830.48	1.8	8.7	0.716	E

Main results: (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 (min)	LOS
A	691.20	172.80	206.49	762.65	0.906	677.17	817.20	4.1	7.6	0.674	E
B	943.20	235.80	473.25	825.81	1.142	815.92	410.41	8.4	40.3	2.045	F
C	639.60	159.90	385.62	704.35	0.908	638.07	903.55	8.7	9.1	0.905	F

Main results: (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 (min)	LOS
A	693.60	173.40	188.81	773.90	0.896	691.33	779.94	7.6	8.2	0.752	E
B	855.00	213.75	482.87	820.50	1.042	815.27	397.28	40.3	50.2	3.492	F
C	567.00	141.75	385.31	704.50	0.805	583.44	912.82	9.1	5.0	0.582	D

Main results: (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 (min)	LOS
A	612.60	153.15	163.47	790.02	0.775	628.45	732.60	8.2	4.2	0.443	D
B	673.80	168.45	438.84	844.79	0.798	827.16	353.08	50.2	11.9	2.363	F
C	496.20	124.05	390.93	701.61	0.707	505.14	875.07	5.0	2.8	0.342	C

Main results: (09:30-09:45)

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 (min)	LOS
A	548.40	137.10	132.05	810.01	0.677	555.43	562.21	4.2	2.4	0.268	C
B	566.40	141.60	387.69	873.01	0.649	605.60	299.78	11.9	2.1	0.273	C
C	402.00	100.50	286.22	755.47	0.532	408.04	707.07	2.8	1.3	0.189	B

Main results: (09:45-10:00)

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 (min)	LOS
A	384.60	96.15	104.52	827.53	0.465	390.42	450.38	2.4	1.0	0.154	A
B	487.20	121.80	272.66	936.47	0.520	490.71	222.28	2.1	1.2	0.145	A
C	321.00	80.25	231.92	783.40	0.410	322.98	531.46	1.3	0.8	0.141	A

Main results: (10:00-10:15)

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 (min)	LOS
A	355.80	88.95	101.23	829.62	0.429	356.34	423.24	1.0	0.8	0.141	A
B	447.00	111.75	248.94	949.56	0.471	447.87	208.63	1.2	1.0	0.128	A
C	312.60	78.15	211.67	793.81	0.394	312.80	485.14	0.8	0.7	0.134	A

2024 With Phase 5, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (min)	Junction LOS
1	(untitled)	Mini-roundabout	A,B,C	1.88	F

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Capacity Options

[same as above]

Mini Roundabout Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Model time period length (min)	Time segment length (min)	Run automatically
D3	2024 With Phase 5	AM	DIRECT	07:45	10:15	150	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	Scaling Factor (%)
A		DIRECT		100.000
B		DIRECT		100.000
C		DIRECT		100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0.000	152.000	344.000
	B	329.000	0.000	367.000
	C	662.000	308.000	4.000

Proportions

		To		
		A	B	C
From	A	0.00	0.31	0.69
	B	0.47	0.00	0.53
	C	0.68	0.32	0.00

Vehicle Mix

Heavy Vehicle proportion

		To		
		A	B	C
From	A	0	6	13
	B	7	0	8
	C	7	6	64

Average PCU Per Veh

		To		
		A	B	C
From	A	1.000	1.060	1.130
	B	1.070	1.000	1.080
	C	1.070	1.060	1.640

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (min)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A	0.90	0.74	8.1	E	529.98	1324.95
B	1.14	3.48	50.0	F	662.22	1655.55
C	0.94	0.90	9.1	F	460.26	1150.65

Main Results for each time segment

Main results: (07:45-08:00)

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 (min)	LOS
A	373.80	93.45	112.09	822.71	0.454	370.18	477.68	0.0	0.9	0.146	A
B	512.40	128.10	258.17	944.47	0.543	507.41	224.09	0.0	1.2	0.146	A
C	353.40	88.35	239.85	779.32	0.453	349.92	525.73	0.0	0.9	0.148	A

Main results: (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 (min)	LOS
A	478.80	119.70	121.42	816.78	0.586	476.33	545.46	0.9	1.5	0.194	B
B	612.60	153.15	331.92	903.78	0.678	608.92	265.83	1.2	2.2	0.216	B
C	379.80	94.95	287.84	754.64	0.503	379.04	653.00	0.9	1.1	0.170	B

Main results: (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 (min)	LOS
A	547.20	136.80	146.49	800.82	0.683	544.19	655.52	1.5	2.3	0.256	C
B	740.40	185.10	379.30	877.64	0.844	729.19	311.38	2.2	5.0	0.406	C
C	460.20	115.05	344.69	725.40	0.634	457.32	763.80	1.1	1.8	0.236	B

Main results: (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 (min)	LOS
A	613.80	153.45	206.02	762.95	0.805	606.72	801.25	2.3	4.0	0.407	C
B	784.20	196.05	423.43	853.29	0.919	770.29	389.31	5.0	8.4	0.667	E
C	670.80	167.70	364.12	715.41	0.938	643.15	829.61	1.8	8.7	0.713	E

Main results: (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 (min)	LOS
A	691.20	172.80	204.40	763.98	0.905	677.37	819.54	4.0	7.5	0.668	E
B	943.20	235.80	472.41	826.27	1.142	816.27	409.36	8.4	40.2	2.042	F
C	639.60	159.90	385.85	704.23	0.908	638.08	902.83	8.7	9.1	0.901	F

Main results: (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 (min)	LOS
A	693.60	173.40	186.88	775.13	0.895	691.38	782.11	7.5	8.1	0.743	E
B	855.00	213.75	481.90	821.03	1.041	815.70	396.36	40.2	50.0	3.480	F
C	567.00	141.75	385.58	704.37	0.805	583.41	912.02	9.1	5.0	0.579	D

Main results: (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 (min)	LOS
A	612.60	153.15	161.80	791.09	0.774	628.18	734.50	8.1	4.2	0.439	D
B	673.80	168.45	437.75	845.39	0.797	827.60	352.23	50.0	11.6	2.346	F
C	496.20	124.05	391.21	701.47	0.707	505.09	874.14	5.0	2.7	0.340	C

Main results: (09:30-09:45)

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 (min)	LOS
A	548.40	137.10	130.70	810.87	0.676	555.34	562.99	4.2	2.4	0.267	C
B	566.40	141.60	386.83	873.49	0.648	604.36	299.21	11.6	2.1	0.271	C
C	402.00	100.50	285.68	755.75	0.532	408.01	705.51	2.7	1.2	0.187	B

Main results: (09:45-10:00)

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 (min)	LOS
A	384.60	96.15	103.46	828.21	0.464	390.39	451.47	2.4	1.0	0.154	A
B	487.20	121.80	272.08	936.80	0.520	490.72	221.76	2.1	1.2	0.146	A
C	321.00	80.25	231.96	783.38	0.410	322.97	530.84	1.2	0.8	0.140	A

Main results: (10:00-10:15)

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 (min)	LOS
A	355.80	88.95	100.20	830.28	0.429	356.34	424.31	1.0	0.8	0.140	A
B	447.00	111.75	248.42	949.85	0.471	447.87	208.12	1.2	1.0	0.129	A
C	312.60	78.15	211.71	793.79	0.394	312.80	484.58	0.8	0.7	0.133	A

Junctions 9

ARCADY 9 - Roundabout Module

Filename: Junction 10 PM.j9
Path: C:\Users\Maria Rooney\Desktop
Report generation date: 22/01/2018 15:00:22

Summary of junction performance

	PM			
	Queue (PCU)	Delay (min)	RFC	LOS
	2016 Base Year			
	2024 No Phase 5			
Arm A	7.9	0.73	0.91	E
Arm B	62.7	4.30	1.18	F
Arm C	4.9	0.43	0.85	D
	2024 With Phase 5			
Arm A	7.9	0.73	0.91	E
Arm B	63.3	4.34	1.18	F
Arm C	4.9	0.43	0.85	D

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	Junction 10 AM
Location	Dublin
Site number	
Date	06/07/2016
Version	
Status	On-going
Identifier	
Client	Irish Water
Jobnumber	7556
Enumerator	TRLLIMITED"mariarooney
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	min	-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 (min)	Queue threshold (PCU)
JUNCTIONS 9	9.56				0.85	0.60	20.00

Demand Set Summary

Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Model time period length (min)	Time segment length (min)	Run automatically
2016 Base Year	PM	DIRECT	17:15	19:45	150	15	✓
2024 No Phase 5	PM	DIRECT	17:15	19:45	150	15	✓
2024 With Phase 5	PM	DIRECT	17:15	19:45	150	15	✓

2016 Base Year , PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (min)	Junction LOS
1	(untitled)	Mini-roundabout	A,B,C	2.10	F

Junction Network Options

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

Arms

Arms

Arm	Name	Description
A	R106 (S)	
B	Station Road	
C	R106 (N)	

Capacity Options

Arm	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)	Assume flat start profile	Initial queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00

Mini Roundabout Geometry

Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
A	3.00	3.00	4.00	9.8	17.90	14.30	0.0	
B	3.10	2.60	6.00	15.0	16.70	13.70	0.0	✓
C	3.80	3.80	4.70	10.0	14.50	10.30	2.0	✓

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A	0.636	894.028
B	0.552	1086.905
C	0.514	902.682

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	Model start time (HH:mm)	Model finish time (HH:mm)	Model time period length (min)	Time segment length (min)	Run automatically
D1	2016 Base Year	PM	DIRECT	17:15	19:45	150	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	Scaling Factor (%)
A		DIRECT		100.000
B		DIRECT		100.000
C		DIRECT		100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0.000	105.000	342.000
	B	152.000	1.000	372.000
	C	342.000	171.000	2.000

Proportions

		To		
		A	B	C
From	A	0.00	0.23	0.77
	B	0.29	0.00	0.71
	C	0.66	0.33	0.00

Vehicle Mix

Heavy Vehicle proportion

		To		
		A	B	C
From	A	0	3	4
	B	0	0	1
	C	4	0	0

Average PCU Per Veh

		To		
		A	B	C
From	A	1.000	1.030	1.040
	B	1.000	1.000	1.010
	C	1.040	1.000	1.000

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (min)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A	0.91	0.74	8.1	E	529.98	1324.95
B	1.18	4.34	63.2	F	662.22	1655.55
C	0.85	0.43	4.9	D	460.26	1150.65

Main Results for each time segment

Main results: (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 (min)	LOS
A	373.80	93.45	118.67	818.53	0.457	370.37	379.63	0.0	0.9	0.138	A
B	512.40	128.10	284.73	929.82	0.551	507.56	204.31	0.0	1.2	0.142	A
C	353.40	88.35	147.92	826.60	0.428	350.38	644.37	0.0	0.8	0.129	A

Main results: (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 (min)	LOS
A	478.80	119.70	128.56	812.23	0.589	476.44	428.12	0.9	1.4	0.184	B
B	612.60	153.15	366.00	884.98	0.692	608.77	239.01	1.2	2.2	0.216	B
C	379.80	94.95	177.41	811.43	0.468	379.27	797.35	0.8	0.9	0.142	A

Main results: (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 (min)	LOS
A	547.20	136.80	155.32	795.21	0.688	544.26	515.00	1.4	2.2	0.245	B
B	740.40	185.10	418.19	856.18	0.865	727.74	281.39	2.2	5.3	0.432	D
C	460.20	115.05	212.08	793.60	0.580	458.24	933.85	0.9	1.4	0.183	B

Main results: (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 (min)	LOS
A	613.80	153.45	222.05	752.75	0.815	606.38	657.90	2.2	4.0	0.405	C
B	784.20	196.05	466.49	829.54	0.945	766.13	361.94	5.3	9.9	0.764	E
C	670.80	167.70	223.27	787.85	0.851	656.67	1009.35	1.4	4.9	0.430	D

Main results: (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 (min)	LOS
A	691.20	172.80	216.53	756.27	0.914	676.95	654.80	4.0	7.6	0.674	E
B	943.20	235.80	520.42	799.78	1.179	793.51	373.06	9.9	47.3	2.399	F
C	639.60	159.90	231.25	783.74	0.816	640.08	1082.68	4.9	4.8	0.434	D

Main results: (18:30-18:45)

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 (min)	LOS
A	693.60	173.40	194.59	770.22	0.901	691.71	610.78	7.6	8.1	0.743	E
B	855.00	213.75	531.46	793.69	1.077	791.23	354.84	47.3	63.2	4.335	F
C	567.00	141.75	230.59	784.08	0.723	574.79	1092.10	4.8	2.8	0.304	C

Main results: (18:45-19:00)

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 (min)	LOS
A	612.60	153.15	169.56	786.15	0.779	628.87	565.95	8.1	4.0	0.428	D
B	673.80	168.45	483.09	820.38	0.821	807.51	315.34	63.2	29.8	3.507	F
C	496.20	124.05	235.33	781.64	0.635	500.18	1055.27	2.8	1.8	0.222	B

Main results: (19:00-19:15)

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 (min)	LOS
A	548.40	137.10	137.40	806.61	0.680	555.21	465.09	4.0	2.3	0.254	C
B	566.40	141.60	426.36	851.67	0.665	677.04	266.24	29.8	2.1	0.578	D
C	402.00	100.50	197.31	801.20	0.502	405.18	906.10	1.8	1.1	0.157	A

Main results: (19:15-19:30)

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 (min)	LOS
A	384.60	96.15	109.30	824.49	0.466	390.13	356.41	2.3	0.9	0.145	A
B	487.20	121.80	299.74	921.53	0.529	491.10	199.69	2.1	1.2	0.142	A
C	321.00	80.25	143.12	829.07	0.387	322.59	647.72	1.1	0.7	0.122	A

Main results: (19:30-19:45)

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 (min)	LOS
A	355.80	88.95	105.91	826.64	0.430	356.31	337.36	0.9	0.8	0.133	A
B	447.00	111.75	273.83	935.83	0.478	447.87	188.39	1.2	0.9	0.124	A
C	312.60	78.15	130.52	835.55	0.374	312.75	591.17	0.7	0.6	0.118	A

2024 No Phase 5, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (min)	Junction LOS
1	(untitled)	Mini-roundabout	A,B,C	2.08	F

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Capacity Options

[same as above]

Mini Roundabout Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Model time period length (min)	Time segment length (min)	Run automatically
D2	2024 No Phase 5	PM	DIRECT	17:15	19:45	150	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	Scaling Factor (%)
A		DIRECT		100.000
B		DIRECT		100.000
C		DIRECT		100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0.000	142.000	463.000
	B	204.000	0.000	502.000
	C	463.000	229.000	0.000

Proportions

		To		
		A	B	C
From	A	0.00	0.23	0.77
	B	0.29	0.00	0.71
	C	0.67	0.33	0.00

Vehicle Mix

Heavy Vehicle proportion

		To		
		A	B	C
From	A	0	3	5
	B	0	0	2
	C	5	0	0

Average PCU Per Veh

		To		
		A	B	C
From	A	1.000	1.030	1.050
	B	1.000	1.000	1.020
	C	1.050	1.000	1.000

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (min)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A	0.91	0.73	7.9	E	529.98	1324.95
B	1.18	4.30	62.7	F	662.22	1655.55
C	0.85	0.43	4.9	D	460.26	1150.65

Main Results for each time segment

Main results: (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 (min)	LOS
A	373.80	93.45	115.94	820.26	0.456	370.36	381.07	0.0	0.9	0.138	A
B	512.40	128.10	283.43	930.53	0.551	507.53	202.87	0.0	1.2	0.142	A
C	353.40	88.35	146.65	827.25	0.427	350.36	644.31	0.0	0.8	0.129	A

Main results: (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 (min)	LOS
A	478.80	119.70	125.51	814.18	0.588	476.44	429.66	0.9	1.5	0.184	B
B	612.60	153.15	364.61	885.74	0.692	608.76	237.33	1.2	2.2	0.217	B
C	379.80	94.95	175.90	812.21	0.468	379.27	797.47	0.8	0.9	0.143	A

Main results: (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 (min)	LOS
A	547.20	136.80	151.64	797.55	0.686	544.28	516.88	1.5	2.2	0.245	B
B	740.40	185.10	416.53	857.10	0.864	727.77	279.39	2.2	5.3	0.433	D
C	460.20	115.05	210.29	794.52	0.579	458.24	934.01	0.9	1.4	0.183	B

Main results: (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 (min)	LOS
A	613.80	153.45	217.32	755.76	0.812	606.53	660.83	2.2	4.0	0.401	C
B	784.20	196.05	464.17	830.82	0.944	766.38	359.68	5.3	9.8	0.760	E
C	670.80	167.70	221.45	788.78	0.850	656.70	1009.11	1.4	4.9	0.431	D

Main results: (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 (min)	LOS
A	691.20	172.80	211.82	759.26	0.910	677.36	657.82	4.0	7.5	0.662	E
B	943.20	235.80	518.38	800.91	1.178	794.47	370.80	9.8	47.0	2.384	F
C	639.60	159.90	229.56	784.61	0.815	640.07	1083.29	4.9	4.8	0.434	D

Main results: (18:30-18:45)

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 (min)	LOS
A	693.60	173.40	190.20	773.02	0.897	691.81	613.48	7.5	7.9	0.727	E
B	855.00	213.75	529.43	794.81	1.076	792.25	352.58	47.0	62.7	4.299	F
C	567.00	141.75	228.92	784.94	0.722	574.76	1092.76	4.8	2.9	0.305	C

Main results: (18:45-19:00)

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 (min)	LOS
A	612.60	153.15	165.52	788.72	0.777	628.33	568.28	7.9	4.0	0.421	D
B	673.80	168.45	480.85	821.61	0.820	808.53	313.00	62.7	29.0	3.454	F
C	496.20	124.05	233.63	782.52	0.634	500.18	1055.75	2.9	1.9	0.223	B

Main results: (19:00-19:15)

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 (min)	LOS
A	548.40	137.10	134.09	808.72	0.678	555.07	465.79	4.0	2.3	0.253	C
B	566.40	141.60	424.79	852.54	0.664	673.78	264.37	29.0	2.1	0.556	D
C	402.00	100.50	194.69	802.55	0.501	405.19	903.88	1.9	1.1	0.157	A

Main results: (19:15-19:30)

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 (min)	LOS
A	384.60	96.15	106.75	826.11	0.466	390.11	357.74	2.3	0.9	0.146	A
B	487.20	121.80	298.54	922.19	0.528	491.10	198.31	2.1	1.2	0.142	A
C	321.00	80.25	141.90	829.70	0.387	322.59	647.74	1.1	0.7	0.123	A

Main results: (19:30-19:45)

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 (min)	LOS
A	355.80	88.95	103.50	828.18	0.430	356.31	338.66	0.9	0.8	0.133	A
B	447.00	111.75	272.68	936.46	0.477	447.87	187.13	1.2	0.9	0.125	A
C	312.60	78.15	129.41	836.12	0.374	312.75	591.14	0.7	0.6	0.118	A

2024 With Phase 5, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (min)	Junction LOS
1	(untitled)	Mini-roundabout	A,B,C	2.10	F

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Capacity Options

[same as above]

Mini Roundabout Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Model time period length (min)	Time segment length (min)	Run automatically
D3	2024 With Phase 5	PM	DIRECT	17:15	19:45	150	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	Scaling Factor (%)
A		DIRECT		100.000
B		DIRECT		100.000
C		DIRECT		100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0.000	143.000	475.000
	B	205.000	0.000	503.000
	C	463.000	230.000	0.000

Proportions

		To		
		A	B	C
From	A	0.00	0.23	0.77
	B	0.29	0.00	0.71
	C	0.67	0.33	0.00

Vehicle Mix

Heavy Vehicle proportion

		To		
		A	B	C
From	A	0	4	5
	B	0	0	2
	C	5	0	0

Average PCU Per Veh

		To		
		A	B	C
From	A	1.000	1.040	1.050
	B	1.000	1.000	1.020
	C	1.050	1.000	1.000

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (min)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A	0.91	0.73	7.9	E	529.98	1324.95
B	1.18	4.34	63.3	F	662.22	1655.55
C	0.85	0.43	4.9	D	460.26	1150.65

Main Results for each time segment

Main results: (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 (min)	LOS
A	373.80	93.45	116.28	820.05	0.456	370.35	381.03	0.0	0.9	0.139	A
B	512.40	128.10	284.65	929.86	0.551	507.53	201.98	0.0	1.2	0.143	A
C	353.40	88.35	146.95	827.10	0.427	350.36	645.23	0.0	0.8	0.129	A

Main results: (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 (min)	LOS
A	478.80	119.70	125.87	813.94	0.588	476.43	429.65	0.9	1.5	0.185	B
B	612.60	153.15	366.19	884.87	0.692	608.74	236.12	1.2	2.2	0.217	B
C	379.80	94.95	176.26	812.03	0.468	379.26	798.67	0.8	0.9	0.143	A

Main results: (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 (min)	LOS
A	547.20	136.80	152.08	797.27	0.686	544.27	516.84	1.5	2.2	0.245	B
B	740.40	185.10	418.33	856.11	0.865	727.66	278.02	2.2	5.4	0.435	D
C	460.20	115.05	210.69	794.32	0.579	458.24	935.30	0.9	1.4	0.183	B

Main results: (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 (min)	LOS
A	613.80	153.45	217.95	755.36	0.813	606.49	660.56	2.2	4.0	0.402	C
B	784.20	196.05	466.16	829.72	0.945	766.12	358.28	5.4	9.9	0.767	E
C	670.80	167.70	221.83	788.59	0.851	656.68	1010.45	1.4	4.9	0.431	D

Main results: (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 (min)	LOS
A	691.20	172.80	212.44	758.87	0.911	677.28	657.37	4.0	7.5	0.665	E
B	943.20	235.80	520.56	799.71	1.179	793.39	369.15	9.9	47.3	2.404	F
C	639.60	159.90	229.72	784.53	0.815	640.08	1084.23	4.9	4.8	0.434	D

Main results: (18:30-18:45)

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 (min)	LOS
A	693.60	173.40	190.76	772.66	0.898	691.79	613.06	7.5	7.9	0.731	E
B	855.00	213.75	531.71	793.55	1.077	791.07	350.83	47.3	63.3	4.343	F
C	567.00	141.75	229.05	784.87	0.722	574.77	1093.73	4.8	2.9	0.305	C

Main results: (18:45-19:00)

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 (min)	LOS
A	612.60	153.15	166.01	788.41	0.777	628.43	567.98	7.9	4.0	0.424	D
B	673.80	168.45	483.02	820.42	0.821	807.49	311.42	63.3	29.9	3.515	F
C	496.20	124.05	233.81	782.43	0.634	500.18	1056.70	2.9	1.9	0.223	B

Main results: (19:00-19:15)

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 (min)	LOS
A	548.40	137.10	134.48	808.47	0.678	555.11	466.86	4.0	2.3	0.254	C
B	566.40	141.60	426.67	851.51	0.665	677.43	262.93	29.9	2.1	0.584	E
C	402.00	100.50	196.15	801.80	0.501	405.19	907.94	1.9	1.1	0.157	A

Main results: (19:15-19:30)

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 (min)	LOS
A	384.60	96.15	107.07	825.91	0.466	390.13	357.74	2.3	0.9	0.146	A
B	487.20	121.80	299.86	921.47	0.529	491.13	197.34	2.1	1.2	0.143	A
C	321.00	80.25	142.21	829.54	0.387	322.60	648.78	1.1	0.7	0.123	A

Main results: (19:30-19:45)

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 (min)	LOS
A	355.80	88.95	103.80	827.99	0.430	356.31	338.63	0.9	0.8	0.133	A
B	447.00	111.75	273.87	935.81	0.478	447.87	186.25	1.2	0.9	0.125	A
C	312.60	78.15	129.68	835.98	0.374	312.75	592.06	0.7	0.6	0.118	A

TRL LIMITED

OPTIMISED SIGNAL CAPACITY AND DELAY

OSCADY 4 ANALYSIS PROGRAM
RELEASE 2.2 (APR 2001)

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Run with file:-
"C:\Documents and Settings\Laura Gaffney\Desktop\7556 GDD\7556 Jn 11 2016 Exisintg AM.voi"
(drive-on-the-left) at 12:32:04 on Friday, 12 August 2016

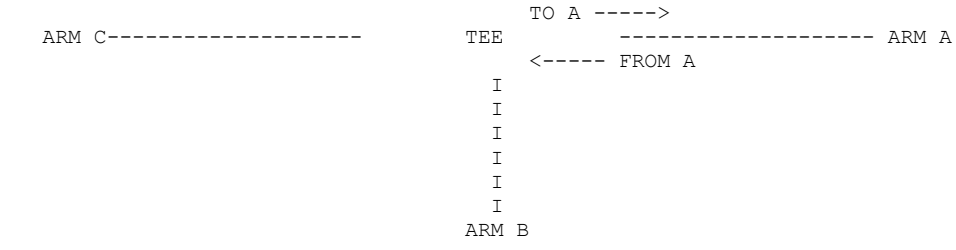
RUN TITLE
****
Junction 11 - R843 (Snugborough Rd) - Aquatic Cnetre Signalised Priority Jn

**** ERROR AND WARNING MESSAGES ****
==========

No errors or warnings in the data.

.TRAFFIC SIGNAL JUNCTION ANALYSIS
****

INPUT DATA



ARM A IS R843 (Snugborough Rd) (N)
ARM B IS Aquatic Centre
ARM C IS R843 (Snugborough Rd) (S)

.GEOMETRIC DATA

DATA ITEM		ARM A	ARM B	ARM C
GRADIENT		0.0 %	0.0 %	0.0 %
NUMBER OF LANES		2	2	2
PERMITTED MOVEMENTS	LANE 1	L	L	S
	LANE 2	S	R	R
TOTAL EXIT WIDTH FOR STRAIGHT-AHEAD VEHICLES FROM THIS ARM		N/A	N/A	N/A
LANE WIDTHS	LANE 1	3.00 M	3.00 M	3.00 M

	LANE 2	2.80 M	3.00 M	3.00 M
LEFT TURN RADII	LANE 1	5.0 M	5.0 M	N/A
RIGHT TURN RADII	LANE 2	N/A	5.0 M	5.0 M

EXIT WIDTH FOR IMAGINARY ARM D = 50.10

.TRAFFIC DEMAND DATA

DEMAND PROFILES ARE SYNTHESISED USING THE ** ODTAB ** OPTION

DEFAULT VEHICLE TYPE PROPORTIONS ARE USED

DEMAND DATA SUPPLIED BETWEEN TIMES - 07.30 TO 09.00
PERIOD OF INTEREST (FOR QUEUE AND DELAY CALCULATIONS) - 07.45 TO 08.45

THE FOLLOWING DATA HAS BEEN INPUT
\+ / DEFAULTED

TRAFFIC SCALING FACTOR HAS BEEN SET TO 100 %

TOTAL TRAFFIC DEMAND (VEHICLES / HOUR)

FROM/TO	ARM A	ARM B	ARM C
ARM A	0.0	56.0	555.0
ARM B	34.0	0.0	34.0
ARM C	967.0	68.0	0.0

TIME PERIOD	ARM	VEHICLE TYPE PROPORTIONS					
		CARS AND LIGHT GOODS	MEDIUM GOODS	HEAVY GOODS	BUSES AND COACHES	MOTOR CYCLES	PEDAL CYCLES
ALL	ALL	0.927	0.041	0.016	0.016	0.000	0.000

.DATA DETERMINED FOR USE IN SYNTHESIS OF DEMAND PROFILES ARE AS FOLLOWS-

ENTRY/EXIT FLOWS	ARM	TIME WHEN FLOW STARTS TO RISE	TIME WHEN TOP OF PEAK IS REACHED	TIME WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ENTRY	A	07.45	08.15	08.45	7.64	11.46	7.64
	B	07.45	08.15	08.45	0.85	1.28	0.85
	C	07.45	08.15	08.45	12.94	19.41	12.94

.SIGNAL TIMING DETAILS FOR SIGNAL SET 1

TIMING OPTION- FIXED MODE: TIMINGS ARE PROVIDED BY USER

FIXED CYCLE TIME- 141.0 SECONDS
PERIODS FOR WHICH THESE SETTINGS APPLY- 07.45-08.45

GLOBAL EFFECTIVE GREEN DISPLACEMENTS - START = 1.4
END = 2.9

DATA ITEM		STAGE 1	STAGE 2	STAGE 3
LANES ON GREEN:	ARM A	1 2		
	B		1	1 2
	C	1	1 2	
GREEN TIME (SECS)		60.0	25.0	45.0
PRECEDING INTERSTAGE		5.0	5.0	1.0

.DEMAND AND CAPACITY INFORMATION FOR EACH 15 MINUTE TIME SEGMENT BETWEEN 07.45 AND 08.45

TIME	ARM	LANES	MOVEMENT	DEMAND (VEHS/MIN)	SAT FLOW (PCU/HR)	SAT FLOW (VEHS/MIN)	EFFECTIVE GREEN-TIME TRUE (SECS)	EFFECTIVE GREEN-TIME FLARE+NOTIONL (SECS)	CAPACITY (VEHS /MIN)
07.45-08.00									
	A	1	L	0.84	1473.1	23.22	61.5		10.13
		2	S	8.28	2035.0	32.08	61.5		13.99
	B	1	L	0.51	1473.1	23.22	72.5		11.94
		2	R	0.51	1580.8	24.92	46.5		8.22
	C	1	S	14.43	1915.0	30.19	91.5		19.59
		2	R	1.01	1580.8	24.92	26.5		4.68
08.00-08.15									
	A	1	L	1.02	1473.1	23.22	61.5		10.13
		2	S	10.15	2035.0	32.08	61.5		13.99
	B	1	L	0.62	1473.1	23.22	72.5		11.94
		2	R	0.62	1580.8	24.92	46.5		8.22
	C	1	S	17.68	1915.0	30.19	91.5		19.59
		2	R	1.24	1580.8	24.92	26.5		4.68
08.15-08.30									
	A	1	L	1.02	1473.1	23.22	61.5		10.13
		2	S	10.15	2035.0	32.08	61.5		13.99
	B	1	L	0.62	1473.1	23.22	72.5		11.94
		2	R	0.62	1580.8	24.92	46.5		8.22
	C	1	S	17.68	1915.0	30.19	91.5		19.59
		2	R	1.24	1580.8	24.92	26.5		4.68
08.30-08.45									
	A	1	L	0.84	1473.1	23.22	61.5		10.13
		2	S	8.28	2035.0	32.08	61.5		13.99
	B	1	L	0.51	1473.1	23.22	72.5		11.94
		2	R	0.51	1580.8	24.92	46.5		8.22
	C	1	S	14.43	1915.0	30.19	91.5		19.59
		2	R	1.01	1580.8	24.92	26.5		4.68

.QUEUE AND DELAY INFORMATION FOR EACH 15 MINUTE TIME SEGMENT BETWEEN 07.45 AND 08.45

TIME	ARM	LANES	MOVEMENT	DEMAND EXCL 2-WHEEL (VEHS/MIN)	CAPACITY (VEHS/MIN)	DEGREE OF SAT (RFC)	QUEUE AT END OF SEGMENT MEAN (PHASE AVERAGED) (VEHS/LANE)	QUEUE AT END OF SEGMENT MAXIMUM (END OF RED) (VEHS/LANE)	QUEUEING DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)
07.45-08.00										
	A	1	L	0.84	10.13	0.083	0.3	1.1	4.9	
		2	S	8.28	13.99	0.592	4.7	11.5	70.1	
	B	1	L	0.51	11.94	0.043	0.1	0.6	2.2	
		2	R	0.51	8.22	0.062	0.3	0.8	4.1	
	C	1	S	14.43	19.59	0.737	5.2	13.1	77.7	
		2	R	1.01	4.68	0.217	0.9	2.0	12.8	
08.00-08.15										
	A	1	L	1.02	10.13	0.101	0.4	1.4	6.1	
		2	S	10.15	13.99	0.725	6.7	14.6	99.7	
	B	1	L	0.62	11.94	0.052	0.2	0.7	2.7	

```
 I        2          R       0.62       8.22      0.076       0.3          1.0          5.1
I
 I   C   1         S        17.68      19.59      0.902      10.4         18.8        152.8
I
 I        2          R       1.24       4.68      0.265       1.1          2.4         16.1
I
.-------------------------------------------------------------------------------------------------------------
-----
 I 08.15-08.30
I
 I   A   1       L           1.02      10.13      0.101       0.4          1.4          6.1
I
 I        2        S        10.15      13.99      0.725       6.7         14.6        100.3
I
 I   B   1       L           0.62      11.94      0.052       0.2          0.7          2.7
I
 I        2          R       0.62       8.22      0.076       0.3          1.0          5.1
I
 I   C   1         S        17.68      19.59      0.902      10.7         19.1        164.4
I
 I        2          R       1.24       4.68      0.265       1.1          2.4         16.1
I
.-------------------------------------------------------------------------------------------------------------
-----
 I 08.30-08.45
I
 I   A   1       L           0.84      10.13      0.083       0.3          1.1          4.9
I
 I        2        S         8.28      13.99      0.592       4.7         11.5         70.6
I
 I   B   1       L           0.51      11.94      0.043       0.1          0.6          2.2
I
 I        2          R       0.51       8.22      0.062       0.3          0.8          4.1
I
 I   C   1         S        14.43      19.59      0.737       5.3         13.2         81.5
I
 I        2          R       1.01       4.68      0.217       0.9          2.0         12.8
I
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.QUEUES FOR ARM A

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TIME SEGMENT ENDING	LANE	NUMBER OF VEHICLES IN QUEUE MEAN (PHASE AVERAGED) *	MAXIMUM (AT END OF RED) +	
08.00	2	4.7	11.5	**********
	1	0.3	1.1	+
08.15	2	6.7	14.6	**********
	1	0.4	1.4	+
08.30	2	6.7	14.6	**********
	1	0.4	1.4	+
08.45	2	4.7	11.5	**********
	1	0.3	1.1	+

.QUEUES FOR ARM B

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TIME SEGMENT ENDING	LANE	NUMBER OF VEHICLES IN QUEUE MEAN (PHASE AVERAGED) *	MAXIMUM (AT END OF RED) +	
08.00	2	0.3	0.8	+
	1	0.1	0.6	+
08.15	2	0.3	1.0	+
	1	0.2	0.7	+
08.30	2	0.3	1.0	+
	1	0.2	0.7	+
08.45	2	0.3	0.8	+
	1	0.1	0.6	+

.QUEUES FOR ARM C

TIME SEGMENT ENDING	LANE	NUMBER OF VEHICLES IN QUEUE MEAN (PHASE AVERAGED) *	MAXIMUM (AT END OF RED) +	
08.00	2	0.9	2.0	*+
	1	5.2	13.1	************
08.15	2	1.1	2.4	*+
	1	10.4	18.8	**********
08.30	2	1.1	2.4	*+
	1	10.7	19.1	**********
08.45	2	0.9	2.0	*+
	1	5.3	13.2	************

.QUEUEING DELAY INFORMATION OVER WHOLE PERIOD (07.45-08.45)

STREAM	TOTAL DEMAND (EXCL 2-WHEEL)		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
A-B	55.8	55.8	22.1	0.40	22.1	0.40
A-C	552.9	552.9	340.7	0.62	341.5	0.62
B-C	33.9	33.9	9.7	0.29	9.7	0.29
B-A	33.9	33.9	18.5	0.55	18.5	0.55
C-A	963.3	963.3	476.4	0.49	477.1	0.50
C-B	67.7	67.7	57.8	0.85	57.9	0.85
ALL	1707.5	1707.5	925.2	0.54	926.8	0.54

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
* THESE WILL BE SIGNIFICANTLY DIFFERENT ONLY IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

* TOTAL GEOMETRIC DELAY INCLUDES DELAY SUFFERED BY VEHICLES STILL QUEUEING AT THE END OF THE WHOLE TIME PERIOD.
* THE SUM OF DELAYS FOR EACH SEGMENT AND THE TOTAL GEOMETRIC DELAY WILL BE SIGNIFICANTLY DIFFERENT ONLY IF THERE IS
* A LARGE QUEUE AT THE END OF THE TIME PERIOD.
.
****** OSCADY 4 run completed

TRL LIMITED

OPTIMISED SIGNAL CAPACITY AND DELAY

OSCADY 4 ANALYSIS PROGRAM
RELEASE 2.2 (APR 2001)

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Run with file:-
"C:\Documents and Settings\Laura Gaffney\Desktop\7556 GDD\7556 Jn 11 2016 Exisintg PM.voi"
(drive-on-the-left) at 12:28:43 on Friday, 12 August 2016

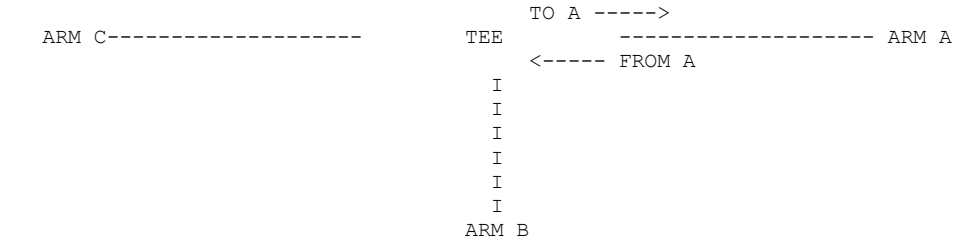
RUN TITLE
****
Junction 11 - R843 (Snugborough Rd) - Aquatic Centre Signalised Priority Jn

**** ERROR AND WARNING MESSAGES ****
==========

No errors or warnings in the data.

.TRAFFIC SIGNAL JUNCTION ANALYSIS
****

INPUT DATA



ARM A IS R843 (Snugborough Rd) (N)
ARM B IS Aquatic Centre
ARM C IS R843 (Snugborough Rd) (S)

.GEOMETRIC DATA

DATA ITEM		ARM A	ARM B	ARM C
GRADIENT		0.0 %	0.0 %	0.0 %
NUMBER OF LANES		2	2	2
PERMITTED MOVEMENTS	LANE 1	L	L	S
	LANE 2	S	R	R
TOTAL EXIT WIDTH FOR STRAIGHT-AHEAD VEHICLES FROM THIS ARM		N/A	N/A	N/A
LANE WIDTHS	LANE 1	3.00 M	3.00 M	3.00 M

	LANE 2	2.80 M	3.00 M	3.00 M
LEFT TURN RADII	LANE 1	5.0 M	5.0 M	N/A
RIGHT TURN RADII	LANE 2	N/A	5.0 M	5.0 M

EXIT WIDTH FOR IMAGINARY ARM D = 50.10

.TRAFFIC DEMAND DATA

DEMAND PROFILES ARE SYNTHESISED USING THE ** ODTAB ** OPTION

DEFAULT VEHICLE TYPE PROPORTIONS ARE USED

DEMAND DATA SUPPLIED BETWEEN TIMES - 16.45 TO 18.15
PERIOD OF INTEREST (FOR QUEUE AND DELAY CALCULATIONS) - 17.00 TO 18.00

THE FOLLOWING DATA HAS BEEN INPUT
\+ / DEFAULTED

TRAFFIC SCALING FACTOR HAS BEEN SET TO 100 %

TOTAL TRAFFIC DEMAND (VEHICLES / HOUR)

FROM/TO	ARM A	ARM B	ARM C
ARM A	0.0	83.0	824.0
ARM B	71.0	0.0	179.0
ARM C	341.0	99.0	0.0

TIME PERIOD	ARM	VEHICLE TYPE PROPORTIONS					
		CARS AND LIGHT GOODS	MEDIUM GOODS	HEAVY GOODS	BUSES AND COACHES	MOTOR CYCLES	PEDAL CYCLES
ALL	ALL	0.927	0.041	0.016	0.016	0.000	0.000

.DATA DETERMINED FOR USE IN SYNTHESIS OF DEMAND PROFILES ARE AS FOLLOWS-

ENTRY/EXIT FLOWS	ARM	TIME WHEN FLOW STARTS TO RISE	TIME WHEN TOP OF PEAK IS REACHED	TIME WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ENTRY	A	17.00	17.30	18.00	11.34	17.01	11.34
	B	17.00	17.30	18.00	3.13	4.69	3.13
	C	17.00	17.30	18.00	5.50	8.25	5.50

.SIGNAL TIMING DETAILS FOR SIGNAL SET 1

TIMING OPTION- FIXED MODE: TIMINGS ARE PROVIDED BY USER

FIXED CYCLE TIME- 141.0 SECONDS
PERIODS FOR WHICH THESE SETTINGS APPLY- 17.00-18.00

GLOBAL EFFECTIVE GREEN DISPLACEMENTS - START = 1.4
END = 2.9

DATA ITEM		STAGE 1	STAGE 2	STAGE 3
LANES ON GREEN:	ARM A	1 2		
	B		1	1 2
	C	1	1 2	
GREEN TIME (SECS)		60.0	25.0	45.0
PRECEDING INTERSTAGE		5.0	5.0	1.0

.DEMAND AND CAPACITY INFORMATION FOR EACH 15 MINUTE TIME SEGMENT BETWEEN 17.00 AND 18.00

TIME	ARM	LANES	MOVEMENT	DEMAND (VEHS/MIN)	SAT FLOW (PCU/HR)	SAT FLOW (VEHS/MIN)	EFFECTIVE GREEN-TIME TRUE (SECS)	EFFECTIVE GREEN-TIME FLARE+NOTIONL (SECS)	CAPACITY (VEHS /MIN)
17.00-17.15									
	A	1	L	1.24	1473.1	23.22	61.5		10.13
		2	S	12.30	2035.0	32.08	61.5		13.99
	B	1	L	2.67	1473.1	23.22	72.5		11.94
		2	R	1.06	1580.8	24.92	46.5		8.22
	C	1	S	5.09	1915.0	30.19	91.5		19.59
		2	R	1.48	1580.8	24.92	26.5		4.68
17.15-17.30									
	A	1	L	1.52	1473.1	23.22	61.5		10.13
		2	S	15.06	2035.0	32.08	61.5		13.99
	B	1	L	3.27	1473.1	23.22	72.5		11.94
		2	R	1.30	1580.8	24.92	46.5		8.22
	C	1	S	6.23	1915.0	30.19	91.5		19.59
		2	R	1.81	1580.8	24.92	26.5		4.68
17.30-17.45									
	A	1	L	1.52	1473.1	23.22	61.5		10.13
		2	S	15.06	2035.0	32.08	61.5		13.99
	B	1	L	3.27	1473.1	23.22	72.5		11.94
		2	R	1.30	1580.8	24.92	46.5		8.22
	C	1	S	6.23	1915.0	30.19	91.5		19.59
		2	R	1.81	1580.8	24.92	26.5		4.68
17.45-18.00									
	A	1	L	1.24	1473.1	23.22	61.5		10.13
		2	S	12.30	2035.0	32.08	61.5		13.99
	B	1	L	2.67	1473.1	23.22	72.5		11.94
		2	R	1.06	1580.8	24.92	46.5		8.22
	C	1	S	5.09	1915.0	30.19	91.5		19.59
		2	R	1.48	1580.8	24.92	26.5		4.68

.QUEUE AND DELAY INFORMATION FOR EACH 15 MINUTE TIME SEGMENT BETWEEN 17.00 AND 18.00

TIME	ARM	LANES	MOVEMENT	DEMAND EXCL 2-WHEEL (VEHS/MIN)	CAPACITY (VEHS/MIN)	DEGREE OF SAT (RFC)	QUEUE AT END OF SEGMENT MEAN (PHASE AVERAGED) (VEHS/LANE)	QUEUE AT END OF SEGMENT MAXIMUM (END OF RED) (VEHS/LANE)	QUEUEING DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)
17.00-17.15										
	A	1	L	1.24	10.13	0.122	0.5	1.7	7.5	
		2	S	12.30	13.99	0.879	10.7	19.6	155.6	
	B	1	L	2.67	11.94	0.224	0.9	3.1	13.1	
		2	R	1.06	8.22	0.129	0.6	1.7	8.9	
	C	1	S	5.09	19.59	0.260	0.9	4.3	14.1	
		2	R	1.48	4.68	0.316	1.3	2.9	19.5	
17.15-17.30										
	A	1	L	1.52	10.13	0.150	0.6	2.0	9.3	
		2	S	15.06	13.99	1.077	32.1	41.4	366.5	
	B	1	L	3.27	11.94	0.274	1.1	3.8	16.8	

```
 I        2          R       1.30       8.22      0.158       0.7          2.1         11.1
I
 I   C   1          S         6.23      19.59      0.318       1.2          5.2         18.4
I
 I        2          R       1.81       4.68      0.386       1.7          3.6         24.8
I
.-------------------------------------------------------------------------------------------------------------
-----
 I 17.30-17.45
I
 I   A   1       L           1.52      10.13      0.150       0.6          2.0          9.3
I
 I        2        S        15.06      13.99      1.077      49.0         58.2        630.5
I
 I   B   1       L           3.27      11.94      0.274       1.1          3.8         16.8
I
 I        2          R       1.30       8.22      0.158       0.7          2.1         11.1
I
 I   C   1          S         6.23      19.59      0.318       1.2          5.2         18.4
I
 I        2          R       1.81       4.68      0.386       1.7          3.6         24.9
I
.-------------------------------------------------------------------------------------------------------------
-----
 I 17.45-18.00
I
 I   A   1       L           1.24      10.13      0.122       0.5          1.7          7.5
I
 I        2        S        12.30      13.99      0.879      26.7         35.9        575.5
I
 I   B   1       L           2.67      11.94      0.224       0.9          3.1         13.1
I
 I        2          R       1.06       8.22      0.129       0.6          1.7          8.9
I
 I   C   1          S         5.09      19.59      0.260       0.9          4.3         14.1
I
 I        2          R       1.48       4.68      0.316       1.3          2.9         19.6
I
 -------------------------------------------------------------------------------------------------------------
-----

.QUEUES FOR ARM A
 ----------------

                NUMBER OF VEHICLES IN QUEUE
  TIME   LANE     MEAN     MAXIMUM
 SEGMENT         (PHASE    (AT END
 ENDING         AVERAGED)  OF RED)
                    *         +

  17.15    2     10.7       19.6    **********++++++++++
           1      0.5        1.7    ++

  17.30    2     32.1       41.4    ************************************+++++++++
           1      0.6        2.0    *+

  17.45    2     49.0       58.2    ************************************************++++++++++
           1      0.6        2.0    *+

  18.00    2     26.7       35.9    ****************************+++++++++
           1      0.5        1.7    ++


.QUEUES FOR ARM B
 ----------------

                NUMBER OF VEHICLES IN QUEUE
  TIME   LANE     MEAN     MAXIMUM
 SEGMENT         (PHASE    (AT END
 ENDING         AVERAGED)  OF RED)
                    *         +

  17.15    2      0.6        1.7    *+
           1      0.9        3.1    *++

  17.30    2      0.7        2.1    *+
           1      1.1        3.8    *+++

  17.45    2      0.7        2.1    *+
           1      1.1        3.8    *+++

  18.00    2      0.6        1.7    *+
           1      0.9        3.1    *++
```

.QUEUES FOR ARM C

TIME SEGMENT ENDING	LANE	NUMBER OF VEHICLES IN QUEUE MEAN (PHASE AVERAGED) *	MAXIMUM (AT END OF RED) +	
17.15	2	1.3	2.9	*++
	1	0.9	4.3	*+++
17.30	2	1.7	3.6	**++
	1	1.2	5.2	*++++
17.45	2	1.7	3.6	**++
	1	1.2	5.2	*++++
18.00	2	1.3	2.9	*++
	1	0.9	4.3	*+++

.QUEUEING DELAY INFORMATION OVER WHOLE PERIOD (17.00-18.00)

STREAM	TOTAL DEMAND (EXCL 2-WHEEL)		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
A-B	82.7	82.7	33.6	0.41	33.7	0.41
A-C	820.9	820.9	1728.1	2.11	1753.5	2.14
B-C	178.3	178.3	59.8	0.34	59.9	0.34
B-A	70.7	70.7	40.1	0.57	40.1	0.57
C-A	339.7	339.7	65.0	0.19	65.1	0.19
C-B	98.6	98.6	88.8	0.90	89.0	0.90
ALL	1590.9	1590.9	2015.5	1.27	2041.2	1.28

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
* THESE WILL BE SIGNIFICANTLY DIFFERENT ONLY IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

* TOTAL GEOMETRIC DELAY INCLUDES DELAY SUFFERED BY VEHICLES STILL QUEUEING AT THE END OF THE WHOLE TIME PERIOD.
* THE SUM OF DELAYS FOR EACH SEGMENT AND THE TOTAL GEOMETRIC DELAY WILL BE SIGNIFICANTLY DIFFERENT ONLY IF THERE IS
* A LARGE QUEUE AT THE END OF THE TIME PERIOD.
.
****** OSCADY 4 run completed

TRL LIMITED

OPTIMISED SIGNAL CAPACITY AND DELAY

OSCADY 4 ANALYSIS PROGRAM
RELEASE 2.2 (APR 2001)

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PROGRAM ADVICE AND MAINTENANCE CONTACT:
TRL SOFTWARE BUREAU
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Run with file:- "C:\Junction 11\7556 Jn 11 2021 No Phase 5 AM.voi" (drive-on-the-left) at 14:31:37 on Friday, 12 August 2016

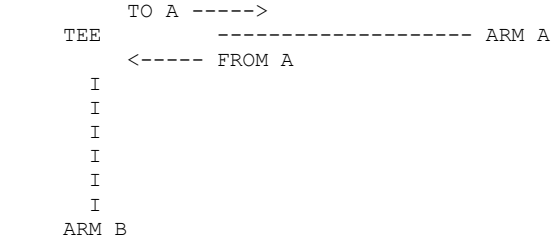
RUN TITLE
****
Junction 11 - R843 (Snugborough Rd) - Aquatic Cnetre Signalised Priority Jn

**** ERROR AND WARNING MESSAGES ****
==========

No errors or warnings in the data.

.TRAFFIC SIGNAL JUNCTION ANALYSIS
****

INPUT DATA



ARM A IS R843 (Snugborough Rd) (N)
ARM B IS Aquatic Centre
ARM C IS R843 (Snugborough Rd) (S)

.GEOMETRIC DATA

DATA ITEM		ARM A	ARM B	ARM C
GRADIENT		0.0 %	0.0 %	0.0 %
NUMBER OF LANES		2	2	2
PERMITTED MOVEMENTS	LANE 1	L	L	S
	LANE 2	S	R	R
TOTAL EXIT WIDTH FOR STRAIGHT-AHEAD VEHICLES FROM THIS ARM		N/A	N/A	N/A
LANE WIDTHS	LANE 1	3.00 M	3.00 M	3.00 M
	LANE 2	2.80 M	3.00 M	3.00 M

LEFT TURN RADII	LANE 1	5.0 M	5.0 M	N/A	
RIGHT TURN RADII	LANE 2	N/A	5.0 M	5.0 M	

EXIT WIDTH FOR IMAGINARY ARM D = 50.10

.TRAFFIC DEMAND DATA

DEMAND PROFILES ARE SYNTHESISED USING THE ** ODTAB ** OPTION

DEFAULT VEHICLE TYPE PROPORTIONS ARE USED

DEMAND DATA SUPPLIED BETWEEN TIMES - 07.30 TO 09.00
PERIOD OF INTEREST (FOR QUEUE AND DELAY CALCULATIONS) - 07.45 TO 08.45

THE FOLLOWING DATA HAS BEEN INPUT
+ / DEFAULTED

TRAFFIC SCALING FACTOR HAS BEEN SET TO 100 %

TOTAL TRAFFIC DEMAND (VEHICLES / HOUR)

FROM/TO	ARM A	ARM B	ARM C
ARM A	0.0	66.0	657.0
ARM B	40.0	0.0	41.0
ARM C	1150.0	81.0	0.0

TIME PERIOD	ARM	VEHICLE TYPE PROPORTIONS					
		CARS AND LIGHT GOODS	MEDIUM GOODS	HEAVY GOODS	BUSES AND COACHES	MOTOR CYCLES	PEDAL CYCLES
ALL	ALL	0.927	0.041	0.016	0.016	0.000	0.000

.DATA DETERMINED FOR USE IN SYNTHESIS OF DEMAND PROFILES ARE AS FOLLOWS-

ENTRY/EXIT FLOWS	ARM	TIME WHEN FLOW STARTS TO RISE	TIME WHEN TOP OF PEAK IS REACHED	TIME WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ENTRY	A	07.45	08.15	08.45	9.04	13.56	9.04
	B	07.45	08.15	08.45	1.01	1.52	1.01
	C	07.45	08.15	08.45	15.39	23.08	15.39

.SIGNAL TIMING DETAILS FOR SIGNAL SET 1

TIMING OPTION- FIXED MODE: TIMINGS ARE PROVIDED BY USER

FIXED CYCLE TIME- 141.0 SECONDS
PERIODS FOR WHICH THESE SETTINGS APPLY- 07.45-08.45

GLOBAL EFFECTIVE GREEN DISPLACEMENTS - START = 1.4
END = 2.9

DATA ITEM	STAGE 1	STAGE 2	STAGE 3
LANES ON GREEN: ARM A	1 2		
B		1	1 2
C	1	1 2	
GREEN TIME (SECS)	60.0	25.0	45.0
PRECEDING INTERSTAGE	5.0	5.0	1.0

.DEMAND AND CAPACITY INFORMATION FOR EACH 15 MINUTE TIME SEGMENT BETWEEN 07.45 AND 08.45

TIME	ARM	LANES	MOVEMENT	DEMAND (VEHS/MIN)	SAT FLOW (PCU/HR)	SAT FLOW (VEHS/MIN)	EFFECTIVE GREEN-TIME TRUE (SECS)	EFFECTIVE GREEN-TIME FLARE+NOTIONL (SECS)	CAPACITY (VEHS /MIN)
07.45-08.00									
	A	1	L	0.99	1473.1	23.22	61.5		10.13
		2	S	9.81	2035.0	32.08	61.5		13.99
	B	1	L	0.61	1473.1	23.22	72.5		11.94
		2	R	0.60	1580.8	24.92	46.5		8.22
	C	1	S	17.17	1915.0	30.19	91.5		19.59
		2	R	1.21	1580.8	24.92	26.5		4.68
08.00-08.15									
	A	1	L	1.21	1473.1	23.22	61.5		10.13
		2	S	12.01	2035.0	32.08	61.5		13.99
	B	1	L	0.75	1473.1	23.22	72.5		11.94
		2	R	0.73	1580.8	24.92	46.5		8.22
	C	1	S	21.02	1915.0	30.19	91.5		19.59
		2	R	1.48	1580.8	24.92	26.5		4.68
08.15-08.30									
	A	1	L	1.21	1473.1	23.22	61.5		10.13
		2	S	12.01	2035.0	32.08	61.5		13.99
	B	1	L	0.75	1473.1	23.22	72.5		11.94
		2	R	0.73	1580.8	24.92	46.5		8.22
	C	1	S	21.02	1915.0	30.19	91.5		19.59
		2	R	1.48	1580.8	24.92	26.5		4.68
08.30-08.45									
	A	1	L	0.99	1473.1	23.22	61.5		10.13
		2	S	9.81	2035.0	32.08	61.5		13.99
	B	1	L	0.61	1473.1	23.22	72.5		11.94
		2	R	0.60	1580.8	24.92	46.5		8.22
	C	1	S	17.17	1915.0	30.19	91.5		19.59
		2	R	1.21	1580.8	24.92	26.5		4.68

.QUEUE AND DELAY INFORMATION FOR EACH 15 MINUTE TIME SEGMENT BETWEEN 07.45 AND 08.45

TIME	ARM	LANES	MOVEMENT	DEMAND EXCL 2-WHEEL (VEHS/MIN)	CAPACITY (VEHS/MIN)	DEGREE OF SAT (RFC)	QUEUE AT END OF SEGMENT MEAN (PHASE AVERAGED) (VEHS/LANE)	QUEUE AT END OF SEGMENT MAXIMUM (END OF RED) (VEHS/LANE)	QUEUEING DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)
07.45-08.00										
	A	1	L	0.99	10.13	0.097	0.4	1.3	5.9	
		2	S	9.81	13.99	0.701	6.2	14.0	93.1	
	B	1	L	0.61	11.94	0.051	0.2	0.7	2.6	
		2	R	0.60	8.22	0.073	0.3	0.9	4.9	
	C	1	S	17.17	19.59	0.876	9.1	17.5	132.0	
		2	R	1.21	4.68	0.258	1.0	2.4	15.6	
08.00-08.15										
	A	1	L	1.21	10.13	0.119	0.5	1.6	7.3	
		2	S	12.01	13.99	0.858	9.9	18.7	147.9	
	B	1	L	0.75	11.94	0.063	0.2	0.9	3.3	
		2	R	0.73	8.22	0.089	0.4	1.2	6.0	

```
 I   C   1         S        21.02      19.59      1.073      36.9         45.0        399.4
I
 I        2          R       1.48       4.68      0.316       1.3          2.9         19.6
I
.-------------------------------------------------------------------------------------------------------------
-----
 I 08.15-08.30
I
 I   A   1       L           1.21      10.13      0.119       0.5          1.6          7.3
I
 I        2        S        12.01      13.99      0.858      10.1         18.8        153.3
I
 I   B   1       L           0.75      11.94      0.063       0.2          0.9          3.3
I
 I        2          R       0.73       8.22      0.089       0.4          1.2          6.0
I
 I   C   1         S        21.02      19.59      1.073      59.2         67.3        746.2
I
 I        2          R       1.48       4.68      0.316       1.3          2.9         19.6
I
.-------------------------------------------------------------------------------------------------------------
-----
 I 08.30-08.45
I
 I   A   1       L           0.99      10.13      0.097       0.4          1.3          5.9
I
 I        2        S         9.81      13.99      0.701       6.3         14.0         95.6
I
 I   B   1       L           0.61      11.94      0.051       0.2          0.7          2.6
I
 I        2          R       0.60       8.22      0.073       0.3          0.9          4.9
I
 I   C   1         S        17.17      19.59      0.876      26.2         34.3        651.2
I
 I        2          R       1.21       4.68      0.258       1.0          2.4         15.6
I
 -------------------------------------------------------------------------------------------------------------
-----

.QUEUES FOR ARM A
 ----------------

                NUMBER OF VEHICLES IN QUEUE
  TIME   LANE     MEAN     MAXIMUM
 SEGMENT         (PHASE    (AT END
 ENDING         AVERAGED)  OF RED)
                    *         +

  08.00    2      6.2       14.0    ***************
           1      0.4        1.3    +

  08.15    2      9.9       18.7    ***********++++++++++
           1      0.5        1.6    ++

  08.30    2     10.1       18.8    ***********++++++++++
           1      0.5        1.6    ++

  08.45    2      6.3       14.0    ***************
           1      0.4        1.3    +


.QUEUES FOR ARM B
 ----------------

                NUMBER OF VEHICLES IN QUEUE
  TIME   LANE     MEAN     MAXIMUM
 SEGMENT         (PHASE    (AT END
 ENDING         AVERAGED)  OF RED)
                    *         +

  08.00    2      0.3        0.9    +
           1      0.2        0.7    +

  08.15    2      0.4        1.2    +
           1      0.2        0.9    +

  08.30    2      0.4        1.2    +
           1      0.2        0.9    +

  08.45    2      0.3        0.9    +
           1      0.2        0.7    +


.QUEUES FOR ARM C
```

TIME SEGMENT ENDING	LANE	NUMBER OF VEHICLES IN QUEUE: MEAN (PHASE AVERAGED) *	MAXIMUM (AT END OF RED) +	
08.00	2	1.0	2.4	*+
	1	9.1	17.5	**********
08.15	2	1.3	2.9	*++
	1	36.9	45.0	**++++++++
08.30	2	1.3	2.9	*++
	1	59.2	67.3	**++++++++
08.45	2	1.0	2.4	*+
	1	26.2	34.3	****************************++++++++

.QUEUEING DELAY INFORMATION OVER WHOLE PERIOD (07.45-08.45)

STREAM	TOTAL DEMAND (EXCL 2-WHEEL)		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
A-B	65.7	65.7	26.3	0.40	26.3	0.40
A-C	654.5	654.5	490.0	0.75	491.4	0.75
B-C	40.8	40.8	11.8	0.29	11.8	0.29
B-A	39.8	39.8	21.9	0.55	21.9	0.55
C-A	1145.6	1145.6	1928.8	1.68	1946.3	1.70
C-B	80.7	80.7	70.4	0.87	70.5	0.87
ALL	2027.3	2027.3	2549.1	1.26	2568.1	1.27

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
* THESE WILL BE SIGNIFICANTLY DIFFERENT ONLY IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

* TOTAL GEOMETRIC DELAY INCLUDES DELAY SUFFERED BY VEHICLES STILL QUEUEING AT THE END OF THE WHOLE TIME PERIOD.
* THE SUM OF DELAYS FOR EACH SEGMENT AND THE TOTAL GEOMETRIC DELAY WILL BE SIGNIFICANTLY DIFFERENT ONLY IF THERE IS
* A LARGE QUEUE AT THE END OF THE TIME PERIOD.
.
****** OSCADY 4 run completed

TRL LIMITED

OPTIMISED SIGNAL CAPACITY AND DELAY

OSCADY 4 ANALYSIS PROGRAM
RELEASE 2.2 (APR 2001)

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EMAIL: SoftwareBureau@trl.co.uk

Run with file:- "C:\Junction 11\7556 Jn 11 2021 No Phase 5 PM.voi" (drive-on-the-left) at 14:32:36 on Friday, 12 August 2016

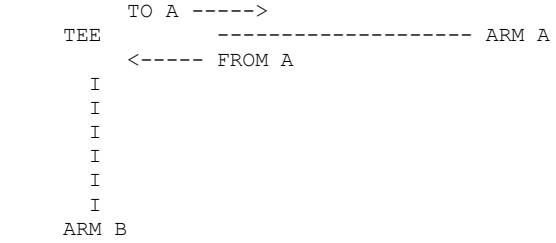
RUN TITLE
****
Junction 11 - R843 (Snugborough Rd) - Aquatic Centre Signalised Priority Jn

**** ERROR AND WARNING MESSAGES ****
==========

No errors or warnings in the data.

.TRAFFIC SIGNAL JUNCTION ANALYSIS
****

INPUT DATA



ARM A IS R843 (Snugborough Rd) (N)
ARM B IS Aquatic Centre
ARM C IS R843 (Snugborough Rd) (S)

.GEOMETRIC DATA

DATA ITEM		ARM A	ARM B	ARM C
GRADIENT		0.0 %	0.0 %	0.0 %
NUMBER OF LANES		2	2	2
PERMITTED MOVEMENTS	LANE 1	L	L	S
	LANE 2	S	R	R
TOTAL EXIT WIDTH FOR STRAIGHT-AHEAD VEHICLES FROM THIS ARM		N/A	N/A	N/A
LANE WIDTHS	LANE 1	3.00 M	3.00 M	3.00 M
	LANE 2	2.80 M	3.00 M	3.00 M

LEFT TURN RADII	LANE 1	5.0 M	5.0 M	N/A	
RIGHT TURN RADII	LANE 2	N/A	5.0 M	5.0 M	

EXIT WIDTH FOR IMAGINARY ARM D = 50.10

.TRAFFIC DEMAND DATA

DEMAND PROFILES ARE SYNTHESISED USING THE ** ODTAB ** OPTION

DEFAULT VEHICLE TYPE PROPORTIONS ARE USED

DEMAND DATA SUPPLIED BETWEEN TIMES - 16.45 TO 18.15
PERIOD OF INTEREST (FOR QUEUE AND DELAY CALCULATIONS) - 17.00 TO 18.00

THE FOLLOWING DATA HAS BEEN INPUT
\+ / DEFAULTED

TRAFFIC SCALING FACTOR HAS BEEN SET TO 100 %

TOTAL TRAFFIC DEMAND (VEHICLES / HOUR)

FROM/TO	ARM A	ARM B	ARM C
ARM A	0.0	98.0	980.0
ARM B	85.0	0.0	214.0
ARM C	403.0	118.0	0.0

TIME PERIOD	ARM	VEHICLE TYPE PROPORTIONS					
		CARS AND LIGHT GOODS	MEDIUM GOODS	HEAVY GOODS	BUSES AND COACHES	MOTOR CYCLES	PEDAL CYCLES
ALL	ALL	0.927	0.041	0.016	0.016	0.000	0.000

.DATA DETERMINED FOR USE IN SYNTHESIS OF DEMAND PROFILES ARE AS FOLLOWS-

ENTRY/EXIT FLOWS	ARM	TIME WHEN FLOW STARTS TO RISE	TIME WHEN TOP OF PEAK IS REACHED	TIME WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ENTRY	A	17.00	17.30	18.00	13.48	20.21	13.48
	B	17.00	17.30	18.00	3.74	5.61	3.74
	C	17.00	17.30	18.00	6.51	9.77	6.51

.SIGNAL TIMING DETAILS FOR SIGNAL SET 1

TIMING OPTION- FIXED MODE: TIMINGS ARE PROVIDED BY USER

FIXED CYCLE TIME- 141.0 SECONDS
PERIODS FOR WHICH THESE SETTINGS APPLY- 17.00-18.00

GLOBAL EFFECTIVE GREEN DISPLACEMENTS - START = 1.4
END = 2.9

DATA ITEM	STAGE 1	STAGE 2	STAGE 3
LANES ON GREEN: ARM A	1 2		
B		1	1 2
C	1	1 2	
GREEN TIME (SECS)	60.0	25.0	45.0
PRECEDING INTERSTAGE	5.0	5.0	1.0

.DEMAND AND CAPACITY INFORMATION FOR EACH 15 MINUTE TIME SEGMENT BETWEEN 17.00 AND 18.00

TIME	ARM	LANES	MOVEMENT	DEMAND (VEHS/MIN)	SAT FLOW (PCU/HR)	SAT FLOW (VEHS/MIN)	EFFECTIVE GREEN-TIME TRUE (SECS)	EFFECTIVE GREEN-TIME FLARE+NOTIONL (SECS)	CAPACITY (VEHS /MIN)
17.00-17.15									
	A	1	L	1.46	1473.1	23.22	61.5		10.13
		2	S	14.63	2035.0	32.08	61.5		13.99
	B	1	L	3.19	1473.1	23.22	72.5		11.94
		2	R	1.27	1580.8	24.92	46.5		8.22
	C	1	S	6.02	1915.0	30.19	91.5		19.59
		2	R	1.76	1580.8	24.92	26.5		4.68
17.15-17.30									
	A	1	L	1.79	1473.1	23.22	61.5		10.13
		2	S	17.92	2035.0	32.08	61.5		13.99
	B	1	L	3.91	1473.1	23.22	72.5		11.94
		2	R	1.55	1580.8	24.92	46.5		8.22
	C	1	S	7.37	1915.0	30.19	91.5		19.59
		2	R	2.16	1580.8	24.92	26.5		4.68
17.30-17.45									
	A	1	L	1.79	1473.1	23.22	61.5		10.13
		2	S	17.92	2035.0	32.08	61.5		13.99
	B	1	L	3.91	1473.1	23.22	72.5		11.94
		2	R	1.55	1580.8	24.92	46.5		8.22
	C	1	S	7.37	1915.0	30.19	91.5		19.59
		2	R	2.16	1580.8	24.92	26.5		4.68
17.45-18.00									
	A	1	L	1.46	1473.1	23.22	61.5		10.13
		2	S	14.63	2035.0	32.08	61.5		13.99
	B	1	L	3.19	1473.1	23.22	72.5		11.94
		2	R	1.27	1580.8	24.92	46.5		8.22
	C	1	S	6.02	1915.0	30.19	91.5		19.59
		2	R	1.76	1580.8	24.92	26.5		4.68

.QUEUE AND DELAY INFORMATION FOR EACH 15 MINUTE TIME SEGMENT BETWEEN 17.00 AND 18.00

TIME	ARM	LANES	MOVEMENT	DEMAND EXCL 2-WHEEL (VEHS/MIN)	CAPACITY (VEHS/MIN)	DEGREE OF SAT (RFC)	QUEUE AT END OF SEGMENT MEAN (PHASE AVERAGED) (VEHS/LANE)	QUEUE AT END OF SEGMENT MAXIMUM (END OF RED) (VEHS/LANE)	QUEUEING DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)
17.00-17.15										
	A	1	L	1.46	10.13	0.144	0.6	2.0	9.0	
		2	S	14.63	13.99	1.045	25.9	35.2	293.1	
	B	1	L	3.19	11.94	0.268	1.1	3.7	16.3	
		2	R	1.27	8.22	0.154	0.7	2.0	10.8	
	C	1	S	6.02	19.59	0.307	1.2	5.0	17.5	
		2	R	1.76	4.68	0.376	1.6	3.5	24.0	
17.15-17.30										
	A	1	L	1.79	10.13	0.177	0.7	2.4	11.2	
		2	S	17.92	13.99	1.280	85.0	94.3	849.1	
	B	1	L	3.91	11.94	0.328	1.4	4.6	21.0	
		2	R	1.55	8.22	0.189	0.9	2.5	13.5	

```
 I   C   1         S         7.37      19.59      0.376       1.5          6.2         23.2
I
 I        2          R       2.16       4.68      0.461       2.1          4.3         30.9
I
.-------------------------------------------------------------------------------------------------------------
-----
 I 17.30-17.45
I
 I   A   1       L           1.79      10.13      0.177       0.7          2.4         11.2
I
 I        2        S        17.92      13.99      1.280     143.9        153.2       1725.3
I
 I   B   1       L           3.91      11.94      0.328       1.4          4.6         21.0
I
 I        2          R       1.55       8.22      0.189       0.9          2.5         13.5
I
 I   C   1         S         7.37      19.59      0.376       1.5          6.2         23.2
I
 I        2          R       2.16       4.68      0.461       2.1          4.4         31.0
I
.-------------------------------------------------------------------------------------------------------------
-----
 I 17.45-18.00
I
 I   A   1       L           1.46      10.13      0.144       0.6          2.0          9.0
I
 I        2        S        14.63      13.99      1.045     153.5        162.8       2236.7
I
 I   B   1       L           3.19      11.94      0.268       1.1          3.7         16.3
I
 I        2          R       1.27       8.22      0.154       0.7          2.0         10.8
I
 I   C   1         S         6.02      19.59      0.307       1.2          5.0         17.5
I
 I        2          R       1.76       4.68      0.376       1.6          3.5         24.1
I
 -------------------------------------------------------------------------------------------------------------
-----

.QUEUES FOR ARM A
 ----------------

               NUMBER OF VEHICLES IN QUEUE
  TIME   LANE    MEAN     MAXIMUM
 SEGMENT        (PHASE    (AT END
 ENDING        AVERAGED)  OF RED)
                   *          +

  17.15    2     25.9       35.2    ****************************+++++++++
           1      0.6        2.0    *+

  17.30    2     85.0       94.3
*********************************************************************************
           1      0.7        2.4    *+

  17.45    2    143.9      153.2
*********************************************************************************
           1      0.7        2.4    *+

  18.00    2    153.5      162.8
*********************************************************************************
           1      0.6        2.0    *+


.QUEUES FOR ARM B
 ----------------

               NUMBER OF VEHICLES IN QUEUE
  TIME   LANE    MEAN     MAXIMUM
 SEGMENT        (PHASE    (AT END
 ENDING        AVERAGED)  OF RED)
                   *          +

  17.15    2      0.7        2.0    *+
           1      1.1        3.7    *+++

  17.30    2      0.9        2.5    *+
           1      1.4        4.6    *++++

  17.45    2      0.9        2.5    *+
           1      1.4        4.6    *++++

  18.00    2      0.7        2.0    *+
           1      1.1        3.7    *+++
```

.QUEUES FOR ARM C

TIME SEGMENT ENDING	LANE	NUMBER OF VEHICLES IN QUEUE MEAN (PHASE AVERAGED) *	MAXIMUM (AT END OF RED) +	
17.15	2	1.6	3.5	**+
	1	1.2	5.0	*++++
17.30	2	2.1	4.3	**++
	1	1.5	6.2	**+++++
17.45	2	2.1	4.4	**++
	1	1.5	6.2	**+++++
18.00	2	1.6	3.5	**+
	1	1.2	5.0	*++++

.QUEUEING DELAY INFORMATION OVER WHOLE PERIOD (17.00-18.00)

STREAM	TOTAL DEMAND (EXCL 2-WHEEL)		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
A-B	97.6	97.6	40.4	0.41	40.4	0.41
A-C	976.3	976.3	5104.2	5.23	5946.3	6.09
B-C	213.2	213.2	74.6	0.35	74.6	0.35
B-A	84.7	84.7	48.7	0.58	48.7	0.58
C-A	401.5	401.5	81.5	0.20	81.5	0.20
C-B	117.6	117.6	110.0	0.94	110.3	0.94
ALL	1890.8	1890.8	5459.4	2.89	6301.9	3.33

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
* THESE WILL BE SIGNIFICANTLY DIFFERENT ONLY IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

* TOTAL GEOMETRIC DELAY INCLUDES DELAY SUFFERED BY VEHICLES STILL QUEUEING AT THE END OF THE WHOLE TIME PERIOD.
* THE SUM OF DELAYS FOR EACH SEGMENT AND THE TOTAL GEOMETRIC DELAY WILL BE SIGNIFICANTLY DIFFERENT ONLY IF THERE IS
* A LARGE QUEUE AT THE END OF THE TIME PERIOD.
.
****** OSCADY 4 run completed

TRL LIMITED

OPTIMISED SIGNAL CAPACITY AND DELAY

OSCADY 4 ANALYSIS PROGRAM
RELEASE 2.2 (APR 2001)

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TRL SOFTWARE BUREAU
TEL: CROWTHORNE (01344) 770758, FAX: 770864
EMAIL: SoftwareBureau@trl.co.uk

Run with file:-
"C:\Documents and Settings\Laura Gaffney\Desktop\7556 GDD\7556 Jn 11 2021 Phase 5 AM.voi"
(drive-on-the-left) at 12:36:49 on Friday, 12 August 2016

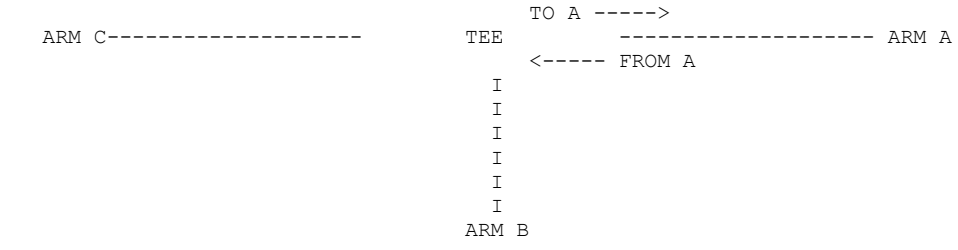
RUN TITLE
****
Junction 11 - R843 (Snugborough Rd) - Aquatic Cnetre Signalised Priority Jn

**** ERROR AND WARNING MESSAGES ****
==========

No errors or warnings in the data.

.TRAFFIC SIGNAL JUNCTION ANALYSIS
****

INPUT DATA



ARM A IS R843 (Snugborough Rd) (N)
ARM B IS Aquatic Centre
ARM C IS R843 (Snugborough Rd) (S)

.GEOMETRIC DATA

DATA ITEM		ARM A	ARM B	ARM C
GRADIENT		0.0 %	0.0 %	0.0 %
NUMBER OF LANES		2	2	2
PERMITTED MOVEMENTS	LANE 1	L	L	S
	LANE 2	S	R	R
TOTAL EXIT WIDTH FOR STRAIGHT-AHEAD VEHICLES FROM THIS ARM		N/A	N/A	N/A
LANE WIDTHS	LANE 1	3.00 M	3.00 M	3.00 M

	LANE 2	2.80 M	3.00 M	3.00 M
LEFT TURN RADII	LANE 1	5.0 M	5.0 M	N/A
RIGHT TURN RADII	LANE 2	N/A	5.0 M	5.0 M

EXIT WIDTH FOR IMAGINARY ARM D = 50.10

.TRAFFIC DEMAND DATA

DEMAND PROFILES ARE SYNTHESISED USING THE ** ODTAB ** OPTION

DEFAULT VEHICLE TYPE PROPORTIONS ARE USED

DEMAND DATA SUPPLIED BETWEEN TIMES - 07.30 TO 09.00
PERIOD OF INTEREST (FOR QUEUE AND DELAY CALCULATIONS) - 07.45 TO 08.45

THE FOLLOWING DATA HAS BEEN INPUT
\+ / DEFAULTED

TRAFFIC SCALING FACTOR HAS BEEN SET TO 100 %

TOTAL TRAFFIC DEMAND (VEHICLES / HOUR)

FROM/TO	ARM A	ARM B	ARM C
ARM A	0.0	66.0	659.0
ARM B	40.0	0.0	42.0
ARM C	1155.0	90.0	0.0

TIME PERIOD	ARM	VEHICLE TYPE PROPORTIONS					
		CARS AND LIGHT GOODS	MEDIUM GOODS	HEAVY GOODS	BUSES AND COACHES	MOTOR CYCLES	PEDAL CYCLES
ALL	ALL	0.927	0.041	0.016	0.016	0.000	0.000

.DATA DETERMINED FOR USE IN SYNTHESIS OF DEMAND PROFILES ARE AS FOLLOWS-

ENTRY/EXIT FLOWS	ARM	TIME WHEN FLOW STARTS TO RISE	TIME WHEN TOP OF PEAK IS REACHED	TIME WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ENTRY	A	07.45	08.15	08.45	9.06	13.59	9.06
	B	07.45	08.15	08.45	1.02	1.54	1.02
	C	07.45	08.15	08.45	15.56	23.34	15.56

.SIGNAL TIMING DETAILS FOR SIGNAL SET 1

TIMING OPTION- FIXED MODE: TIMINGS ARE PROVIDED BY USER

FIXED CYCLE TIME- 141.0 SECONDS
PERIODS FOR WHICH THESE SETTINGS APPLY- 07.45-08.45

GLOBAL EFFECTIVE GREEN DISPLACEMENTS - START = 1.4
END = 2.9

DATA ITEM		STAGE 1	STAGE 2	STAGE 3
LANES ON GREEN:	ARM A	1 2		
	B		1	1 2
	C	1	1 2	
GREEN TIME (SECS)		60.0	25.0	45.0
PRECEDING INTERSTAGE		5.0	5.0	1.0

.DEMAND AND CAPACITY INFORMATION FOR EACH 15 MINUTE TIME SEGMENT BETWEEN 07.45 AND 08.45

TIME	ARM	LANES	MOVEMENT	DEMAND (VEHS/MIN)	SAT FLOW (PCU/HR)	SAT FLOW (VEHS/MIN)	EFFECTIVE GREEN-TIME TRUE (SECS)	EFFECTIVE GREEN-TIME FLARE+NOTIONL (SECS)	CAPACITY (VEHS /MIN)
07.45-08.00									
	A	1	L	0.99	1473.1	23.22	61.5		10.13
		2	S	9.84	2035.0	32.08	61.5		13.99
	B	1	L	0.63	1473.1	23.22	72.5		11.94
		2	R	0.60	1580.8	24.92	46.5		8.22
	C	1	S	17.24	1915.0	30.19	91.5		19.59
		2	R	1.34	1580.8	24.92	26.5		4.68
08.00-08.15									
	A	1	L	1.21	1473.1	23.22	61.5		10.13
		2	S	12.05	2035.0	32.08	61.5		13.99
	B	1	L	0.77	1473.1	23.22	72.5		11.94
		2	R	0.73	1580.8	24.92	46.5		8.22
	C	1	S	21.11	1915.0	30.19	91.5		19.59
		2	R	1.65	1580.8	24.92	26.5		4.68
08.15-08.30									
	A	1	L	1.21	1473.1	23.22	61.5		10.13
		2	S	12.05	2035.0	32.08	61.5		13.99
	B	1	L	0.77	1473.1	23.22	72.5		11.94
		2	R	0.73	1580.8	24.92	46.5		8.22
	C	1	S	21.11	1915.0	30.19	91.5		19.59
		2	R	1.65	1580.8	24.92	26.5		4.68
08.30-08.45									
	A	1	L	0.99	1473.1	23.22	61.5		10.13
		2	S	9.84	2035.0	32.08	61.5		13.99
	B	1	L	0.63	1473.1	23.22	72.5		11.94
		2	R	0.60	1580.8	24.92	46.5		8.22
	C	1	S	17.24	1915.0	30.19	91.5		19.59
		2	R	1.34	1580.8	24.92	26.5		4.68

.QUEUE AND DELAY INFORMATION FOR EACH 15 MINUTE TIME SEGMENT BETWEEN 07.45 AND 08.45

TIME	ARM	LANES	MOVEMENT	DEMAND EXCL 2-WHEEL (VEHS/MIN)	CAPACITY (VEHS/MIN)	DEGREE OF SAT (RFC)	QUEUE AT END OF SEGMENT MEAN (PHASE AVERAGED) (VEHS/LANE)	QUEUE AT END OF SEGMENT MAXIMUM (END OF RED) (VEHS/LANE)	QUEUEING DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)
07.45-08.00										
	A	1	L	0.99	10.13	0.097	0.4	1.3	5.9	
		2	S	9.84	13.99	0.703	6.3	14.0	93.7	
	B	1	L	0.63	11.94	0.053	0.2	0.7	2.7	
		2	R	0.60	8.22	0.073	0.3	0.9	4.9	
	C	1	S	17.24	19.59	0.880	9.3	17.7	134.3	
		2	R	1.34	4.68	0.287	1.2	2.6	17.5	
08.00-08.15										
	A	1	L	1.21	10.13	0.119	0.5	1.6	7.3	
		2	S	12.05	13.99	0.861	10.0	18.8	149.2	
	B	1	L	0.77	11.94	0.064	0.2	0.9	3.3	

```
 I        2          R       0.73       8.22      0.089       0.4          1.2          6.0
I
 I   C   1          S        21.11      19.59      1.078      38.2         46.3        409.2
I
 I        2          R       1.65       4.68      0.351       1.5          3.3         22.2
I
.-------------------------------------------------------------------------------------------------------------
-----
 I 08.15-08.30
I
 I   A   1       L           1.21      10.13      0.119       0.5          1.6          7.3
I
 I        2        S        12.05      13.99      0.861      10.2         19.0        154.9
I
 I   B   1       L           0.77      11.94      0.064       0.2          0.9          3.3
I
 I        2          R       0.73       8.22      0.089       0.4          1.2          6.0
I
 I   C   1          S        21.11      19.59      1.078      61.7         69.8        773.9
I
 I        2          R       1.65       4.68      0.351       1.5          3.3         22.2
I
.-------------------------------------------------------------------------------------------------------------
-----
 I 08.30-08.45
I
 I   A   1       L           0.99      10.13      0.097       0.4          1.3          5.9
I
 I        2        S         9.84      13.99      0.703       6.3         14.1         96.2
I
 I   B   1       L           0.63      11.94      0.053       0.2          0.7          2.7
I
 I        2          R       0.60       8.22      0.073       0.3          0.9          4.9
I
 I   C   1          S        17.24      19.59      0.880      29.7         37.8        694.9
I
 I        2          R       1.34       4.68      0.287       1.2          2.6         17.6
I
 -------------------------------------------------------------------------------------------------------------
-----
```

.QUEUES FOR ARM A

TIME SEGMENT ENDING	LANE	NUMBER OF VEHICLES IN QUEUE MEAN (PHASE AVERAGED) *	MAXIMUM (AT END OF RED) +	
08.00	2	6.3	14.0	**********
	1	0.4	1.3	+
08.15	2	10.0	18.8	**********
	1	0.5	1.6	++
08.30	2	10.2	19.0	**********
	1	0.5	1.6	++
08.45	2	6.3	14.1	**********
	1	0.4	1.3	+

.QUEUES FOR ARM B

TIME SEGMENT ENDING	LANE	NUMBER OF VEHICLES IN QUEUE MEAN (PHASE AVERAGED) *	MAXIMUM (AT END OF RED) +	
08.00	2	0.3	0.9	+
	1	0.2	0.7	+
08.15	2	0.4	1.2	+
	1	0.2	0.9	+
08.30	2	0.4	1.2	+
	1	0.2	0.9	+
08.45	2	0.3	0.9	+
	1	0.2	0.7	+

.QUEUES FOR ARM C

TIME SEGMENT ENDING	LANE	NUMBER OF VEHICLES IN QUEUE MEAN (PHASE AVERAGED) *	MAXIMUM (AT END OF RED) +	
08.00	2	1.2	2.6	*++
	1	9.3	17.7	**********++++++++++
08.15	2	1.5	3.3	*++
	1	38.2	46.3	**++++++++
08.30	2	1.5	3.3	*++
	1	61.7	69.8	**++++++++
08.45	2	1.2	2.6	*++
	1	29.7	37.8	***********************************++++++++

.QUEUEING DELAY INFORMATION OVER WHOLE PERIOD (07.45-08.45)

STREAM	TOTAL DEMAND (EXCL 2-WHEEL)		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
A-B	65.7	65.7	26.3	0.40	26.3	0.40
A-C	656.5	656.5	494.0	0.75	495.5	0.75
B-C	41.8	41.8	12.1	0.29	12.1	0.29
B-A	39.8	39.8	21.9	0.55	21.9	0.55
C-A	1150.6	1150.6	2012.3	1.75	2034.8	1.77
C-B	89.7	89.7	79.4	0.89	79.6	0.89
ALL	2044.2	2044.2	2646.0	1.29	2670.1	1.31

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
* THESE WILL BE SIGNIFICANTLY DIFFERENT ONLY IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

* TOTAL GEOMETRIC DELAY INCLUDES DELAY SUFFERED BY VEHICLES STILL QUEUEING AT THE END OF THE WHOLE TIME PERIOD.
* THE SUM OF DELAYS FOR EACH SEGMENT AND THE TOTAL GEOMETRIC DELAY WILL BE SIGNIFICANTLY DIFFERENT ONLY IF THERE IS
* A LARGE QUEUE AT THE END OF THE TIME PERIOD.
.
****** OSCADY 4 run completed

TRL LIMITED

OPTIMISED SIGNAL CAPACITY AND DELAY

OSCADY 4 ANALYSIS PROGRAM
RELEASE 2.2 (APR 2001)

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EMAIL: SoftwareBureau@trl.co.uk

Run with file:-
"C:\Documents and Settings\Laura Gaffney\Desktop\7556 GDD\7556 Jn 11 2021 Phase 5 PM.voi"
(drive-on-the-left) at 12:30:25 on Friday, 12 August 2016

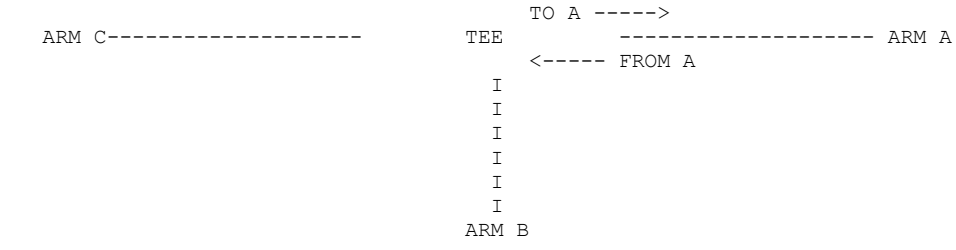
RUN TITLE
****
Junction 11 - R843 (Snugborough Rd) - Aquatic Centre Signalised Priority Jn

**** ERROR AND WARNING MESSAGES ****
==========

No errors or warnings in the data.

.TRAFFIC SIGNAL JUNCTION ANALYSIS
****

INPUT DATA



ARM A IS R843 (Snugborough Rd) (N)
ARM B IS Aquatic Centre
ARM C IS R843 (Snugborough Rd) (S)

.GEOMETRIC DATA

DATA ITEM		ARM A	ARM B	ARM C
GRADIENT		0.0 %	0.0 %	0.0 %
NUMBER OF LANES		2	2	2
PERMITTED MOVEMENTS	LANE 1	L	L	S
	LANE 2	S	R	R
TOTAL EXIT WIDTH FOR STRAIGHT-AHEAD VEHICLES FROM THIS ARM		N/A	N/A	N/A
LANE WIDTHS	LANE 1	3.00 M	3.00 M	3.00 M

	LANE 2	2.80 M	3.00 M	3.00 M
LEFT TURN RADII	LANE 1	5.0 M	5.0 M	N/A
RIGHT TURN RADII	LANE 2	N/A	5.0 M	5.0 M

EXIT WIDTH FOR IMAGINARY ARM D = 50.10

.TRAFFIC DEMAND DATA

DEMAND PROFILES ARE SYNTHESISED USING THE ** ODTAB ** OPTION

DEFAULT VEHICLE TYPE PROPORTIONS ARE USED

DEMAND DATA SUPPLIED BETWEEN TIMES - 16.45 TO 18.15
PERIOD OF INTEREST (FOR QUEUE AND DELAY CALCULATIONS) - 17.00 TO 18.00

THE FOLLOWING DATA HAS BEEN INPUT
+ / DEFAULTED

TRAFFIC SCALING FACTOR HAS BEEN SET TO 100 %

TOTAL TRAFFIC DEMAND (VEHICLES / HOUR)

FROM/TO	ARM A	ARM B	ARM C
ARM A	0.0	98.0	985.0
ARM B	85.0	0.0	223.0
ARM C	405.0	120.0	0.0

TIME PERIOD	ARM	VEHICLE TYPE PROPORTIONS					
		CARS AND LIGHT GOODS	MEDIUM GOODS	HEAVY GOODS	BUSES AND COACHES	MOTOR CYCLES	PEDAL CYCLES
ALL	ALL	0.927	0.041	0.016	0.016	0.000	0.000

.DATA DETERMINED FOR USE IN SYNTHESIS OF DEMAND PROFILES ARE AS FOLLOWS-

ENTRY/EXIT FLOWS	ARM	TIME WHEN FLOW STARTS TO RISE	TIME WHEN TOP OF PEAK IS REACHED	TIME WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ENTRY	A	17.00	17.30	18.00	13.54	20.31	13.54
	B	17.00	17.30	18.00	3.85	5.77	3.85
	C	17.00	17.30	18.00	6.56	9.84	6.56

.SIGNAL TIMING DETAILS FOR SIGNAL SET 1

TIMING OPTION- FIXED MODE: TIMINGS ARE PROVIDED BY USER

FIXED CYCLE TIME- 141.0 SECONDS
PERIODS FOR WHICH THESE SETTINGS APPLY- 17.00-18.00

GLOBAL EFFECTIVE GREEN DISPLACEMENTS - START = 1.4
END = 2.9

DATA ITEM		STAGE 1	STAGE 2	STAGE 3
LANES ON GREEN:	ARM A	1 2		
	B		1	1 2
	C	1	1 2	
GREEN TIME (SECS)		60.0	25.0	45.0
PRECEDING INTERSTAGE		5.0	5.0	1.0

.DEMAND AND CAPACITY INFORMATION FOR EACH 15 MINUTE TIME SEGMENT BETWEEN 17.00 AND 18.00

TIME	ARM	LANES	MOVEMENT	DEMAND (VEHS/MIN)	SAT FLOW (PCU/HR)	SAT FLOW (VEHS/MIN)	EFFECTIVE GREEN-TIME TRUE (SECS)	EFFECTIVE GREEN-TIME FLARE+NOTIONL (SECS)	CAPACITY (VEHS /MIN)
17.00-17.15									
	A	1	L	1.46	1473.1	23.22	61.5		10.13
		2	S	14.70	2035.0	32.08	61.5		13.99
	B	1	L	3.33	1473.1	23.22	72.5		11.94
		2	R	1.27	1580.8	24.92	46.5		8.22
	C	1	S	6.05	1915.0	30.19	91.5		19.59
		2	R	1.79	1580.8	24.92	26.5		4.68
17.15-17.30									
	A	1	L	1.79	1473.1	23.22	61.5		10.13
		2	S	18.01	2035.0	32.08	61.5		13.99
	B	1	L	4.08	1473.1	23.22	72.5		11.94
		2	R	1.55	1580.8	24.92	46.5		8.22
	C	1	S	7.40	1915.0	30.19	91.5		19.59
		2	R	2.19	1580.8	24.92	26.5		4.68
17.30-17.45									
	A	1	L	1.79	1473.1	23.22	61.5		10.13
		2	S	18.01	2035.0	32.08	61.5		13.99
	B	1	L	4.08	1473.1	23.22	72.5		11.94
		2	R	1.55	1580.8	24.92	46.5		8.22
	C	1	S	7.40	1915.0	30.19	91.5		19.59
		2	R	2.19	1580.8	24.92	26.5		4.68
17.45-18.00									
	A	1	L	1.46	1473.1	23.22	61.5		10.13
		2	S	14.70	2035.0	32.08	61.5		13.99
	B	1	L	3.33	1473.1	23.22	72.5		11.94
		2	R	1.27	1580.8	24.92	46.5		8.22
	C	1	S	6.05	1915.0	30.19	91.5		19.59
		2	R	1.79	1580.8	24.92	26.5		4.68

.QUEUE AND DELAY INFORMATION FOR EACH 15 MINUTE TIME SEGMENT BETWEEN 17.00 AND 18.00

TIME	ARM	LANES	MOVEMENT	DEMAND EXCL 2-WHEEL (VEHS/MIN)	CAPACITY (VEHS/MIN)	DEGREE OF SAT (RFC)	QUEUE AT END OF SEGMENT MEAN (PHASE AVERAGED) (VEHS/LANE)	QUEUE AT END OF SEGMENT MAXIMUM (END OF RED) (VEHS/LANE)	QUEUEING DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)
17.00-17.15										
	A	1	L	1.46	10.13	0.144	0.6	2.0	9.0	
		2	S	14.70	13.99	1.051	26.7	36.0	298.9	
	B	1	L	3.33	11.94	0.279	1.1	3.9	17.1	
		2	R	1.27	8.22	0.154	0.7	2.0	10.8	
	C	1	S	6.05	19.59	0.309	1.2	5.1	17.7	
		2	R	1.79	4.68	0.382	1.6	3.6	24.5	
17.15-17.30										
	A	1	L	1.79	10.13	0.177	0.7	2.4	11.2	
		2	S	18.01	13.99	1.287	87.2	96.4	871.0	
	B	1	L	4.08	11.94	0.341	1.5	4.8	22.2	

```
 I        2          R       1.55       8.22      0.189       0.9          2.5         13.5
I
 I   C   1          S         7.40      19.59      0.378       1.6          6.2         23.4
I
 I        2          R       2.19       4.68      0.468       2.1          4.4         31.6
I
.-------------------------------------------------------------------------------------------------------------
-----
 I 17.30-17.45
I
 I   A   1       L           1.79      10.13      0.177       0.7          2.4         11.2
I
 I        2        S        18.01      13.99      1.287     147.4        156.7       1767.8
I
 I   B   1       L           4.08      11.94      0.341       1.5          4.8         22.2
I
 I        2          R       1.55       8.22      0.189       0.9          2.5         13.5
I
 I   C   1          S         7.40      19.59      0.378       1.6          6.2         23.4
I
 I        2          R       2.19       4.68      0.468       2.1          4.4         31.7
I
.-------------------------------------------------------------------------------------------------------------
-----
 I 17.45-18.00
I
 I   A   1       L           1.46      10.13      0.144       0.6          2.0          9.0
I
 I        2        S        14.70      13.99      1.051     158.2        167.4       2297.8
I
 I   B   1       L           3.33      11.94      0.279       1.1          3.9         17.1
I
 I        2          R       1.27       8.22      0.154       0.7          2.0         10.8
I
 I   C   1          S         6.05      19.59      0.309       1.2          5.1         17.7
I
 I        2          R       1.79       4.68      0.382       1.6          3.6         24.6
I
 -------------------------------------------------------------------------------------------------------------
-----

.QUEUES FOR ARM A
 ----------------

                NUMBER OF VEHICLES IN QUEUE
  TIME   LANE     MEAN     MAXIMUM
 SEGMENT         (PHASE    (AT END
 ENDING         AVERAGED)  OF RED)
                    *         +

  17.15    2      26.7       36.0    ******************************+++++++++
           1       0.6        2.0    *+

  17.30    2      87.2       96.4
*********************************************************************************
           1       0.7        2.4    *+

  17.45    2     147.4      156.7
*********************************************************************************
           1       0.7        2.4    *+

  18.00    2     158.2      167.4
*********************************************************************************
           1       0.6        2.0    *+


.QUEUES FOR ARM B
 ----------------

                NUMBER OF VEHICLES IN QUEUE
  TIME   LANE     MEAN     MAXIMUM
 SEGMENT         (PHASE    (AT END
 ENDING         AVERAGED)  OF RED)
                    *         +

  17.15    2       0.7        2.0    *+
           1       1.1        3.9    *+++

  17.30    2       0.9        2.5    *+
           1       1.5        4.8    *++++

  17.45    2       0.9        2.5    *+
           1       1.5        4.8    *++++
```

18.00	2	0.7	2.0	*+
	1	1.1	3.9	*+++

.QUEUES FOR ARM C

TIME SEGMENT ENDING	LANE	NUMBER OF VEHICLES IN QUEUE MEAN (PHASE AVERAGED) *	MAXIMUM (AT END OF RED) +	
17.15	2	1.6	3.6	**++
	1	1.2	5.1	*++++
17.30	2	2.1	4.4	**++
	1	1.6	6.2	**+++++
17.45	2	2.1	4.4	**++
	1	1.6	6.2	**+++++
18.00	2	1.6	3.6	**++
	1	1.2	5.1	*++++

.QUEUEING DELAY INFORMATION OVER WHOLE PERIOD (17.00-18.00)

STREAM	TOTAL DEMAND (EXCL 2-WHEEL) (VEH)	(VEH/H)	* QUEUEING * DELAY * (MIN)	(MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	(MIN/VEH)
A-B	97.6	97.6	40.4	0.41	40.4	0.41
A-C	981.3	981.3	5235.5	5.34	6129.3	6.25
B-C	222.2	222.2	78.6	0.35	78.6	0.35
B-A	84.7	84.7	48.7	0.58	48.7	0.58
C-A	403.5	403.5	82.1	0.20	82.1	0.20
C-B	119.5	119.5	112.4	0.94	112.7	0.94
ALL	1908.7	1908.7	5597.6	2.93	6491.8	3.40

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
* THESE WILL BE SIGNIFICANTLY DIFFERENT ONLY IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

* TOTAL GEOMETRIC DELAY INCLUDES DELAY SUFFERED BY VEHICLES STILL QUEUEING AT THE END OF THE WHOLE TIME PERIOD.
* THE SUM OF DELAYS FOR EACH SEGMENT AND THE TOTAL GEOMETRIC DELAY WILL BE SIGNIFICANTLY DIFFERENT ONLY IF THERE IS
* A LARGE QUEUE AT THE END OF THE TIME PERIOD.
.
****** OSCADY 4 run completed

Junctions 9

PICADY 9 - Priority Intersection Module

Filename: Junction 12 AM.j9
Path: Z:\Junction 12
Report generation date: 13/10/2017 10:53:03

Summary of junction performance

	AM			
	Queue (PCU)	Delay (s)	RFC	LOS
2016 Base Year				
2024 No Phase 5				
2024 With Phase 5				

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

File summary

File Description

Title	(untitled)
Location	
Site number	
Date	08/08/2016
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	TOBIN"Maria Rooney
Description	

Units

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

Analysis Options

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

Demand Set Summary

Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
2016 Base Year	AM	ONE HOUR	07:45	09:15	15
2024 No Phase 5	AM	ONE HOUR	07:45	09:15	15
2024 With Phase 5	AM	ONE HOUR	07:45	09:15	15

2016 Base Year , AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.00	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Snugborough Road (N)		Major
B	Existing Gateway		Minor
C	Snugborough Road (S)		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	13.20			170.0	✓	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	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B	One lane plus flare	8.50	4.00	3.00	3.00	3.00		1.00	22	37

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	525.537	0.066	0.166	0.105	0.237
1	B-C	728.228	0.077	0.194	-	-
1	C-B	672.412	0.179	0.179	-	-

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	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
D1	2016 Base Year	AM	ONE HOUR	07:45	09:15	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	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	640.00	100.000
B		✓	0.00	100.000
C		✓	1759.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0.000	0.000	640.000
	B	0.000	0.000	0.000
	C	1759.000	0.000	0.000

Vehicle Mix

Heavy Vehicle proportion

		To		
		A	B	C
From	A	0	0	35
	B	0	0	0
	C	53	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-C	0.00	0.00	0.0	A
B-A	0.00	0.00	0.0	A
C-AB	0.00	0.00	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

Main results: (07:45-08:00)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	0.00	634.86	0.000	0.00	0.0	0.000	A
B-A	0.00	307.05	0.000	0.00	0.0	0.000	A
C-AB	0.00	586.20	0.000	0.00	0.0	0.000	A
C-A	1324.27			1324.27			
A-B	0.00			0.00			
A-C	481.83			481.83			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	0.00	616.74	0.000	0.00	0.0	0.000	A
B-A	0.00	264.64	0.000	0.00	0.0	0.000	A
C-AB	0.00	569.47	0.000	0.00	0.0	0.000	A
C-A	1581.30			1581.30			
A-B	0.00			0.00			
A-C	575.35			575.35			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	0.00	591.69	0.000	0.00	0.0	0.000	A
B-A	0.00	206.01	0.000	0.00	0.0	0.000	A
C-AB	0.00	546.34	0.000	0.00	0.0	0.000	A
C-A	1936.70			1936.70			
A-B	0.00			0.00			
A-C	704.65			704.65			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	0.00	591.69	0.000	0.00	0.0	0.000	A
B-A	0.00	206.01	0.000	0.00	0.0	0.000	A
C-AB	0.00	546.34	0.000	0.00	0.0	0.000	A
C-A	1936.70			1936.70			
A-B	0.00			0.00			
A-C	704.65			704.65			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	0.00	616.74	0.000	0.00	0.0	0.000	A
B-A	0.00	264.64	0.000	0.00	0.0	0.000	A
C-AB	0.00	569.47	0.000	0.00	0.0	0.000	A
C-A	1581.30			1581.30			
A-B	0.00			0.00			
A-C	575.35			575.35			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	0.00	634.86	0.000	0.00	0.0	0.000	A
B-A	0.00	307.05	0.000	0.00	0.0	0.000	A
C-AB	0.00	586.20	0.000	0.00	0.0	0.000	A
C-A	1324.27			1324.27			
A-B	0.00			0.00			
A-C	481.83			481.83			

2024 No Phase 5 , AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.00	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
D2	2024 No Phase 5	AM	ONE HOUR	07:45	09:15	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	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	920.00	100.000
B		✓	0.00	100.000
C		✓	2616.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0.000	0.000	920.000
	B	0.000	0.000	0.000
	C	2616.000	0.000	0.000

Vehicle Mix

Heavy Vehicle proportion

		To		
		A	B	C
From	A	0	0	39
	B	0	0	0
	C	58	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-C	0.00	0.00	0.0	A
B-A	0.00	0.00	0.0	A
C-AB	0.00	0.00	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

Main results: (07:45-08:00)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	0.00	594.02	0.000	0.00	0.0	0.000	A
B-A	0.00	204.58	0.000	0.00	0.0	0.000	A
C-AB	0.00	548.49	0.000	0.00	0.0	0.000	A
C-A	1969.46			1969.46			
A-B	0.00			0.00			
A-C	692.62			692.62			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	0.00	567.97	0.000	0.00	0.0	0.000	A
B-A	0.00	142.29	0.000	0.00	0.0	0.000	A
C-AB	0.00	524.43	0.000	0.00	0.0	0.000	A
C-A	2351.73			2351.73			
A-B	0.00			0.00			
A-C	827.06			827.06			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	0.00	531.95	0.000	0.00	0.0	0.000	A
B-A	0.00	56.15	0.000	0.00	0.0	0.000	A
C-AB	0.00	491.18	0.000	0.00	0.0	0.000	A
C-A	2880.27			2880.27			
A-B	0.00			0.00			
A-C	1012.94			1012.94			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	0.00	531.95	0.000	0.00	0.0	0.000	A
B-A	0.00	56.15	0.000	0.00	0.0	0.000	A
C-AB	0.00	491.18	0.000	0.00	0.0	0.000	A
C-A	2880.27			2880.27			
A-B	0.00			0.00			
A-C	1012.94			1012.94			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	0.00	567.97	0.000	0.00	0.0	0.000	A
B-A	0.00	142.29	0.000	0.00	0.0	0.000	A
C-AB	0.00	524.43	0.000	0.00	0.0	0.000	A
C-A	2351.73			2351.73			
A-B	0.00			0.00			
A-C	827.06			827.06			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	0.00	594.02	0.000	0.00	0.0	0.000	A
B-A	0.00	204.58	0.000	0.00	0.0	0.000	A
C-AB	0.00	548.49	0.000	0.00	0.0	0.000	A
C-A	1969.46			1969.46			
A-B	0.00			0.00			
A-C	692.62			692.62			

2024 With Phase 5 , AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.00	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
D3	2024 With Phase 5	AM	ONE HOUR	07:45	09:15	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	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	923.00	100.000
B		✓	0.00	100.000
C		✓	2623.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0.000	0.000	923.000
	B	0.000	0.000	0.000
	C	2623.000	0.000	0.000

Vehicle Mix

Heavy Vehicle proportion

		To		
		A	B	C
From	A	0	0	39
	B	0	0	0
	C	58	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-C	0.00	0.00	0.0	A
B-A	0.00	0.00	0.0	A
C-AB	0.00	0.00	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

Main results: (07:45-08:00)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	0.00	593.58	0.000	0.00	0.0	0.000	A
B-A	0.00	203.66	0.000	0.00	0.0	0.000	A
C-AB	0.00	548.08	0.000	0.00	0.0	0.000	A
C-A	1974.73			1974.73			
A-B	0.00			0.00			
A-C	694.88			694.88			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	0.00	567.44	0.000	0.00	0.0	0.000	A
B-A	0.00	141.18	0.000	0.00	0.0	0.000	A
C-AB	0.00	523.95	0.000	0.00	0.0	0.000	A
C-A	2358.02			2358.02			
A-B	0.00			0.00			
A-C	829.76			829.76			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	0.00	531.31	0.000	0.00	0.0	0.000	A
B-A	0.00	54.80	0.000	0.00	0.0	0.000	A
C-AB	0.00	490.59	0.000	0.00	0.0	0.000	A
C-A	2887.98			2887.98			
A-B	0.00			0.00			
A-C	1016.24			1016.24			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	0.00	531.31	0.000	0.00	0.0	0.000	A
B-A	0.00	54.80	0.000	0.00	0.0	0.000	A
C-AB	0.00	490.59	0.000	0.00	0.0	0.000	A
C-A	2887.98			2887.98			
A-B	0.00			0.00			
A-C	1016.24			1016.24			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	0.00	567.44	0.000	0.00	0.0	0.000	A
B-A	0.00	141.18	0.000	0.00	0.0	0.000	A
C-AB	0.00	523.95	0.000	0.00	0.0	0.000	A
C-A	2358.02			2358.02			
A-B	0.00			0.00			
A-C	829.76			829.76			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	0.00	593.58	0.000	0.00	0.0	0.000	A
B-A	0.00	203.66	0.000	0.00	0.0	0.000	A
C-AB	0.00	548.08	0.000	0.00	0.0	0.000	A
C-A	1974.73			1974.73			
A-B	0.00			0.00			
A-C	694.88			694.88			

Junctions 9

PICADY 9 - Priority Intersection Module

Filename: Junction 12 PM.j9
Path: Z:\Junction 12
Report generation date: 13/10/2017 10:53:31

Summary of junction performance

	PM			
	Queue (PCU)	Delay (s)	RFC	LOS
2016 Base Year				
2024 No Phase 5				
2024 With Phase 5				

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

File summary

File Description

Title	(untitled)
Location	
Site number	
Date	08/08/2016
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	TOBIN"Maria Rooney
Description	

Units

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

Analysis Options

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

Demand Set Summary

Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
2016 Base Year	PM	ONE HOUR	15:45	17:15	15
2024 No Phase 5	PM	ONE HOUR	15:45	17:15	15
2024 With Phase 5	PM	ONE HOUR	15:45	17:15	15

2016 Base Year , PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.00	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Snugborough Road (N)		Major
B	Existing Gateway		Minor
C	Snugborough Road (S)		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	13.20			170.0	✓	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	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B	One lane plus flare	8.50	4.00	3.00	3.00	3.00		1.00	22	37

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	525.537	0.066	0.166	0.105	0.237
1	B-C	728.228	0.077	0.194	-	-
1	C-B	672.412	0.179	0.179	-	-

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	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
D1	2016 Base Year	PM	ONE HOUR	15:45	17:15	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	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	915.00	100.000
B		✓	0.00	100.000
C		✓	337.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0.000	0.000	915.000
	B	0.000	0.000	0.000
	C	337.000	0.000	0.000

Vehicle Mix

Heavy Vehicle proportion

		To		
		A	B	C
From	A	0	0	15
	B	0	0	0
	C	27	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-C	0.00	0.00	0.0	A
B-A	0.00	0.00	0.0	A
C-AB	0.00	0.00	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

Main results: (15:45-16:00)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	0.00	594.75	0.000	0.00	0.0	0.000	A
B-A	0.00	384.56	0.000	0.00	0.0	0.000	A
C-AB	0.00	549.16	0.000	0.00	0.0	0.000	A
C-A	253.71			253.71			
A-B	0.00			0.00			
A-C	688.86			688.86			

Main results: (16:00-16:15)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	0.00	568.84	0.000	0.00	0.0	0.000	A
B-A	0.00	357.19	0.000	0.00	0.0	0.000	A
C-AB	0.00	525.24	0.000	0.00	0.0	0.000	A
C-A	302.96			302.96			
A-B	0.00			0.00			
A-C	822.57			822.57			

Main results: (16:15-16:30)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	0.00	533.02	0.000	0.00	0.0	0.000	A
B-A	0.00	319.36	0.000	0.00	0.0	0.000	A
C-AB	0.00	492.16	0.000	0.00	0.0	0.000	A
C-A	371.04			371.04			
A-B	0.00			0.00			
A-C	1007.43			1007.43			

Main results: (16:30-16:45)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	0.00	533.02	0.000	0.00	0.0	0.000	A
B-A	0.00	319.36	0.000	0.00	0.0	0.000	A
C-AB	0.00	492.16	0.000	0.00	0.0	0.000	A
C-A	371.04			371.04			
A-B	0.00			0.00			
A-C	1007.43			1007.43			

Main results: (16:45-17:00)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	0.00	568.84	0.000	0.00	0.0	0.000	A
B-A	0.00	357.19	0.000	0.00	0.0	0.000	A
C-AB	0.00	525.24	0.000	0.00	0.0	0.000	A
C-A	302.96			302.96			
A-B	0.00			0.00			
A-C	822.57			822.57			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	0.00	594.75	0.000	0.00	0.0	0.000	A
B-A	0.00	384.56	0.000	0.00	0.0	0.000	A
C-AB	0.00	549.16	0.000	0.00	0.0	0.000	A
C-A	253.71			253.71			
A-B	0.00			0.00			
A-C	688.86			688.86			

2024 No Phase 5 , PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.00	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
D2	2024 No Phase 5	PM	ONE HOUR	15:45	17:15	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	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	1268.00	100.000
B		✓	0.00	100.000
C		✓	478.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0.000	0.000	1268.000
	B	0.000	0.000	0.000
	C	478.000	0.000	0.000

Vehicle Mix

Heavy Vehicle proportion

		To		
		A	B	C
From	A	0	0	18
	B	0	0	0
	C	31	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-C	0.00	0.00	0.0	A
B-A	0.00	0.00	0.0	A
C-AB	0.00	0.00	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

Main results: (15:45-16:00)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	0.00	543.25	0.000	0.00	0.0	0.000	A
B-A	0.00	329.31	0.000	0.00	0.0	0.000	A
C-AB	0.00	501.61	0.000	0.00	0.0	0.000	A
C-A	359.86			359.86			
A-B	0.00			0.00			
A-C	954.62			954.62			

Main results: (16:00-16:15)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	0.00	507.35	0.000	0.00	0.0	0.000	A
B-A	0.00	291.22	0.000	0.00	0.0	0.000	A
C-AB	0.00	468.46	0.000	0.00	0.0	0.000	A
C-A	429.71			429.71			
A-B	0.00			0.00			
A-C	1139.91			1139.91			

Main results: (16:15-16:30)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	0.00	457.70	0.000	0.00	0.0	0.000	A
B-A	0.00	238.55	0.000	0.00	0.0	0.000	A
C-AB	0.00	422.62	0.000	0.00	0.0	0.000	A
C-A	526.29			526.29			
A-B	0.00			0.00			
A-C	1396.09			1396.09			

Main results: (16:30-16:45)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	0.00	457.70	0.000	0.00	0.0	0.000	A
B-A	0.00	238.55	0.000	0.00	0.0	0.000	A
C-AB	0.00	422.62	0.000	0.00	0.0	0.000	A
C-A	526.29			526.29			
A-B	0.00			0.00			
A-C	1396.09			1396.09			

Main results: (16:45-17:00)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	0.00	507.35	0.000	0.00	0.0	0.000	A
B-A	0.00	291.22	0.000	0.00	0.0	0.000	A
C-AB	0.00	468.46	0.000	0.00	0.0	0.000	A
C-A	429.71			429.71			
A-B	0.00			0.00			
A-C	1139.91			1139.91			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	0.00	543.25	0.000	0.00	0.0	0.000	A
B-A	0.00	329.31	0.000	0.00	0.0	0.000	A
C-AB	0.00	501.61	0.000	0.00	0.0	0.000	A
C-A	359.86			359.86			
A-B	0.00			0.00			
A-C	954.62			954.62			

2024 With Phase 5 , PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.00	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
D3	2024 With Phase 5	PM	ONE HOUR	15:45	17:15	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	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	1275.00	100.000
B		✓	0.00	100.000
C		✓	481.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0.000	0.000	1275.000
	B	0.000	0.000	0.000
	C	481.000	0.000	0.000

Vehicle Mix

Heavy Vehicle proportion

		To		
		A	B	C
From	A	0	0	18
	B	0	0	0
	C	32	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-C	0.00	0.00	0.0	A
B-A	0.00	0.00	0.0	A
C-AB	0.00	0.00	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

Main results: (15:45-16:00)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	0.00	542.23	0.000	0.00	0.0	0.000	A
B-A	0.00	328.19	0.000	0.00	0.0	0.000	A
C-AB	0.00	500.67	0.000	0.00	0.0	0.000	A
C-A	362.12			362.12			
A-B	0.00			0.00			
A-C	959.89			959.89			

Main results: (16:00-16:15)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	0.00	506.13	0.000	0.00	0.0	0.000	A
B-A	0.00	289.89	0.000	0.00	0.0	0.000	A
C-AB	0.00	467.33	0.000	0.00	0.0	0.000	A
C-A	432.41			432.41			
A-B	0.00			0.00			
A-C	1146.20			1146.20			

Main results: (16:15-16:30)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	0.00	456.21	0.000	0.00	0.0	0.000	A
B-A	0.00	236.93	0.000	0.00	0.0	0.000	A
C-AB	0.00	421.24	0.000	0.00	0.0	0.000	A
C-A	529.59			529.59			
A-B	0.00			0.00			
A-C	1403.80			1403.80			

Main results: (16:30-16:45)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	0.00	456.21	0.000	0.00	0.0	0.000	A
B-A	0.00	236.93	0.000	0.00	0.0	0.000	A
C-AB	0.00	421.24	0.000	0.00	0.0	0.000	A
C-A	529.59			529.59			
A-B	0.00			0.00			
A-C	1403.80			1403.80			

Main results: (16:45-17:00)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	0.00	506.13	0.000	0.00	0.0	0.000	A
B-A	0.00	289.89	0.000	0.00	0.0	0.000	A
C-AB	0.00	467.33	0.000	0.00	0.0	0.000	A
C-A	432.41			432.41			
A-B	0.00			0.00			
A-C	1146.20			1146.20			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	0.00	542.23	0.000	0.00	0.0	0.000	A
B-A	0.00	328.19	0.000	0.00	0.0	0.000	A
C-AB	0.00	500.67	0.000	0.00	0.0	0.000	A
C-A	362.12			362.12			
A-B	0.00			0.00			
A-C	959.89			959.89			

Junctions 9

PICADY 9 - Priority Intersection Module

Filename: Junction A AM.j9
Path: Z:\Junction A
Report generation date: 13/10/2017 10:54:02

Summary of junction performance

	AM			
	Queue (PCU)	Delay (s)	RFC	LOS
2016 Base Year				
2024 No Phase 5				
2024 With Phase 5				

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

File summary

File Description

Title	(untitled)
Location	
Site number	
Date	08/08/2016
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	TOBIN"Maria Rooney
Description	

Units

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

Analysis Options

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

Demand Set Summary

Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
2016 Base Year	AM	ONE HOUR	07:45	09:15	15
2024 No Phase 5	AM	ONE HOUR	07:45	09:15	15
2024 With Phase 5	AM	ONE HOUR	07:45	09:15	15

2016 Base Year , AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.00	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Clonshaugh Rd (N)		Major
B	WWTP		Minor
C	Clonshaugh Rd (S)		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			80.0	✓	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	3.00	110	70

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	548.706	0.100	0.253	0.159	0.361
1	B-C	668.004	0.102	0.259	-	-
1	C-B	620.292	0.240	0.240	-	-

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	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
D1	2016 Base Year	AM	ONE HOUR	07:45	09:15	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	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	360.00	100.000
B		✓	0.00	100.000
C		✓	186.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0.000	0.000	360.000
	B	0.000	0.000	0.000
	C	186.000	0.000	0.000

Vehicle Mix

Heavy Vehicle proportion

	To			
		A	B	C
From	A	0	0	13
	B	0	0	0
	C	15	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.00	0.00	0.0	A
C-AB	0.00	0.00	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

Main results: (07:45-08:00)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	518.66	0.000	0.00	0.0	0.000	A
C-AB	0.00	555.16	0.000	0.00	0.0	0.000	A
C-A	140.03			140.03			
A-B	0.00			0.00			
A-C	271.03			271.03			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	502.21	0.000	0.00	0.0	0.000	A
C-AB	0.00	542.51	0.000	0.00	0.0	0.000	A
C-A	167.21			167.21			
A-B	0.00			0.00			
A-C	323.63			323.63			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	479.36	0.000	0.00	0.0	0.000	A
C-AB	0.00	525.03	0.000	0.00	0.0	0.000	A
C-A	204.79			204.79			
A-B	0.00			0.00			
A-C	396.37			396.37			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	479.36	0.000	0.00	0.0	0.000	A
C-AB	0.00	525.03	0.000	0.00	0.0	0.000	A
C-A	204.79			204.79			
A-B	0.00			0.00			
A-C	396.37			396.37			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	502.21	0.000	0.00	0.0	0.000	A
C-AB	0.00	542.51	0.000	0.00	0.0	0.000	A
C-A	167.21			167.21			
A-B	0.00			0.00			
A-C	323.63			323.63			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	518.66	0.000	0.00	0.0	0.000	A
C-AB	0.00	555.16	0.000	0.00	0.0	0.000	A
C-A	140.03			140.03			
A-B	0.00			0.00			
A-C	271.03			271.03			

2024 No Phase 5 , AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.00	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
D2	2024 No Phase 5	AM	ONE HOUR	07:45	09:15	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	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	497.00	100.000
B		✓	0.00	100.000
C		✓	257.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0.000	0.000	497.000
	B	0.000	0.000	0.000
	C	257.000	0.000	0.000

Vehicle Mix

Heavy Vehicle proportion

		To		
		A	B	C
From	A	0	0	15
	B	0	0	0
	C	18	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.00	0.00	0.0	A
C-AB	0.00	0.00	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

Main results: (07:45-08:00)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	486.33	0.000	0.00	0.0	0.000	A
C-AB	0.00	530.37	0.000	0.00	0.0	0.000	A
C-A	193.48			193.48			
A-B	0.00			0.00			
A-C	374.17			374.17			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	463.41	0.000	0.00	0.0	0.000	A
C-AB	0.00	512.91	0.000	0.00	0.0	0.000	A
C-A	231.04			231.04			
A-B	0.00			0.00			
A-C	446.79			446.79			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	431.43	0.000	0.00	0.0	0.000	A
C-AB	0.00	488.78	0.000	0.00	0.0	0.000	A
C-A	282.96			282.96			
A-B	0.00			0.00			
A-C	547.21			547.21			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	431.43	0.000	0.00	0.0	0.000	A
C-AB	0.00	488.78	0.000	0.00	0.0	0.000	A
C-A	282.96			282.96			
A-B	0.00			0.00			
A-C	547.21			547.21			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	463.41	0.000	0.00	0.0	0.000	A
C-AB	0.00	512.91	0.000	0.00	0.0	0.000	A
C-A	231.04			231.04			
A-B	0.00			0.00			
A-C	446.79			446.79			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	486.33	0.000	0.00	0.0	0.000	A
C-AB	0.00	530.37	0.000	0.00	0.0	0.000	A
C-A	193.48			193.48			
A-B	0.00			0.00			
A-C	374.17			374.17			

2024 With Phase 5 , AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.24	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
D3	2024 With Phase 5	AM	ONE HOUR	07:45	09:15	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	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	497.00	100.000
B		✓	13.00	100.000
C		✓	257.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0.000	0.000	497.000
	B	0.000	0.000	13.000
	C	257.000	0.000	0.000

Vehicle Mix

Heavy Vehicle proportion

		To		
		A	B	C
From	A	0	0	15
	B	0	0	100
	C	18	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.03	14.06	0.1	B
C-AB	0.00	0.00	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

Main results: (07:45-08:00)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	9.79	571.16	0.017	9.65	0.0	12.819	B
C-AB	0.00	530.37	0.000	0.00	0.0	0.000	A
C-A	193.48			193.48			
A-B	0.00			0.00			
A-C	374.17			374.17			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	11.69	552.37	0.021	11.65	0.0	13.315	B
C-AB	0.00	512.91	0.000	0.00	0.0	0.000	A
C-A	231.04			231.04			
A-B	0.00			0.00			
A-C	446.79			446.79			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	14.31	526.38	0.027	14.26	0.1	14.057	B
C-AB	0.00	488.78	0.000	0.00	0.0	0.000	A
C-A	282.96			282.96			
A-B	0.00			0.00			
A-C	547.21			547.21			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	14.31	526.38	0.027	14.31	0.1	14.059	B
C-AB	0.00	488.78	0.000	0.00	0.0	0.000	A
C-A	282.96			282.96			
A-B	0.00			0.00			
A-C	547.21			547.21			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	11.69	552.37	0.021	11.73	0.0	13.318	B
C-AB	0.00	512.91	0.000	0.00	0.0	0.000	A
C-A	231.04			231.04			
A-B	0.00			0.00			
A-C	446.79			446.79			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	9.79	571.16	0.017	9.82	0.0	12.828	B
C-AB	0.00	530.37	0.000	0.00	0.0	0.000	A
C-A	193.48			193.48			
A-B	0.00			0.00			
A-C	374.17			374.17			

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.0.0.4211 []

For sales and distribution information, program advice and maintenance, contact TRL:
Tel: +44 (0)1344 770758 email: software@trl.co.uk Web: http://www.trlsoftware.co.uk

Filename: Junction A PM.j9
Path: Z:\Junction A
Report generation date: 13/10/2017 10:54:32

Summary of junction performance

	PM			
	Queue (PCU)	Delay (s)	RFC	LOS
2016 Base Year				
2024 No Phase 5				
2024 With Phase 5				

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

File summary

File Description

Title	(untitled)
Location	
Site number	
Date	08/08/2016
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	TOBIN"Maria Rooney
Description	

Units

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

Analysis Options

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

Demand Set Summary

Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
2016 Base Year	PM	ONE HOUR	15:45	17:15	15
2024 No Phase 5	PM	ONE HOUR	15:45	17:15	15
2024 With Phase 5	PM	ONE HOUR	15:45	17:15	15

2016 Base Year , PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.00	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Clonshaugh Rd (N)		Major
B	WWTP		Minor
C	Clonshaugh Rd (S)		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			80.0	✓	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	3.00	110	70

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	548.706	0.100	0.253	0.159	0.361
1	B-C	668.004	0.102	0.259	-	-
1	C-B	620.292	0.240	0.240	-	-

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	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
D1	2016 Base Year	PM	ONE HOUR	15:45	17:15	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	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	915.00	100.000
B		✓	0.00	100.000
C		✓	337.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0.000	0.000	915.000
	B	0.000	0.000	0.000
	C	337.000	0.000	0.000

Vehicle Mix

Heavy Vehicle proportion

	To			
		A	B	C
From	A	0	0	15
	B	0	0	0
	C	27	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.00	0.00	0.0	A
C-AB	0.00	0.00	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

Main results: (15:45-16:00)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	397.40	0.000	0.00	0.0	0.000	A
C-AB	0.00	454.74	0.000	0.00	0.0	0.000	A
C-A	253.71			253.71			
A-B	0.00			0.00			
A-C	688.86			688.86			

Main results: (16:00-16:15)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	356.32	0.000	0.00	0.0	0.000	A
C-AB	0.00	422.60	0.000	0.00	0.0	0.000	A
C-A	302.96			302.96			
A-B	0.00			0.00			
A-C	822.57			822.57			

Main results: (16:15-16:30)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	298.23	0.000	0.00	0.0	0.000	A
C-AB	0.00	378.17	0.000	0.00	0.0	0.000	A
C-A	371.04			371.04			
A-B	0.00			0.00			
A-C	1007.43			1007.43			

Main results: (16:30-16:45)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	298.23	0.000	0.00	0.0	0.000	A
C-AB	0.00	378.17	0.000	0.00	0.0	0.000	A
C-A	371.04			371.04			
A-B	0.00			0.00			
A-C	1007.43			1007.43			

Main results: (16:45-17:00)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	356.32	0.000	0.00	0.0	0.000	A
C-AB	0.00	422.60	0.000	0.00	0.0	0.000	A
C-A	302.96			302.96			
A-B	0.00			0.00			
A-C	822.57			822.57			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	397.40	0.000	0.00	0.0	0.000	A
C-AB	0.00	454.74	0.000	0.00	0.0	0.000	A
C-A	253.71			253.71			
A-B	0.00			0.00			
A-C	688.86			688.86			

2024 No Phase 5 , PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.00	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
D2	2024 No Phase 5	PM	ONE HOUR	15:45	17:15	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	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	1087.00	100.000
B		✓	0.00	100.000
C		✓	399.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0.000	0.000	1087.000
	B	0.000	0.000	0.000
	C	399.000	0.000	0.000

Vehicle Mix

Heavy Vehicle proportion

		To		
		A	B	C
From	A	0	0	18
	B	0	0	0
	C	31	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.00	0.00	0.0	A
C-AB	0.00	0.00	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

Main results: (15:45-16:00)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	357.75	0.000	0.00	0.0	0.000	A
C-AB	0.00	423.61	0.000	0.00	0.0	0.000	A
C-A	300.39			300.39			
A-B	0.00			0.00			
A-C	818.35			818.35			

Main results: (16:00-16:15)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	308.02	0.000	0.00	0.0	0.000	A
C-AB	0.00	385.44	0.000	0.00	0.0	0.000	A
C-A	358.69			358.69			
A-B	0.00			0.00			
A-C	977.19			977.19			

Main results: (16:15-16:30)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	236.55	0.000	0.00	0.0	0.000	A
C-AB	0.00	332.66	0.000	0.00	0.0	0.000	A
C-A	439.31			439.31			
A-B	0.00			0.00			
A-C	1196.81			1196.81			

Main results: (16:30-16:45)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	236.55	0.000	0.00	0.0	0.000	A
C-AB	0.00	332.66	0.000	0.00	0.0	0.000	A
C-A	439.31			439.31			
A-B	0.00			0.00			
A-C	1196.81			1196.81			

Main results: (16:45-17:00)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	308.02	0.000	0.00	0.0	0.000	A
C-AB	0.00	385.44	0.000	0.00	0.0	0.000	A
C-A	358.69			358.69			
A-B	0.00			0.00			
A-C	977.19			977.19			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	357.75	0.000	0.00	0.0	0.000	A
C-AB	0.00	423.61	0.000	0.00	0.0	0.000	A
C-A	300.39			300.39			
A-B	0.00			0.00			
A-C	818.35			818.35			

2024 With Phase 5 , PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.83	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
D3	2024 With Phase 5	PM	ONE HOUR	15:45	17:15	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	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	1268.00	100.000
B		✓	79.00	100.000
C		✓	478.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0.000	0.000	1268.000
	B	0.000	0.000	79.000
	C	478.000	0.000	0.000

Vehicle Mix

Heavy Vehicle proportion

		To		
		A	B	C
From	A	0	0	18
	B	0	0	17
	C	31	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.28	19.16	0.5	C
C-AB	0.00	0.00	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

Main results: (15:45-16:00)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	59.48	420.93	0.141	58.72	0.2	11.604	B
C-AB	0.00	390.87	0.000	0.00	0.0	0.000	A
C-A	359.86			359.86			
A-B	0.00			0.00			
A-C	954.62			954.62			

Main results: (16:00-16:15)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	71.02	372.97	0.190	70.70	0.3	13.918	B
C-AB	0.00	346.33	0.000	0.00	0.0	0.000	A
C-A	429.71			429.71			
A-B	0.00			0.00			
A-C	1139.91			1139.91			

Main results: (16:15-16:30)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	86.98	306.67	0.284	86.26	0.5	19.046	C
C-AB	0.00	284.76	0.000	0.00	0.0	0.000	A
C-A	526.29			526.29			
A-B	0.00			0.00			
A-C	1396.09			1396.09			

Main results: (16:30-16:45)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	86.98	306.67	0.284	86.96	0.5	19.164	C
C-AB	0.00	284.76	0.000	0.00	0.0	0.000	A
C-A	526.29			526.29			
A-B	0.00			0.00			
A-C	1396.09			1396.09			

Main results: (16:45-17:00)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	71.02	372.97	0.190	71.72	0.3	14.015	B
C-AB	0.00	346.33	0.000	0.00	0.0	0.000	A
C-A	429.71			429.71			
A-B	0.00			0.00			
A-C	1139.91			1139.91			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	59.48	420.93	0.141	59.81	0.2	11.676	B
C-AB	0.00	390.87	0.000	0.00	0.0	0.000	A
C-A	359.86			359.86			
A-B	0.00			0.00			
A-C	954.62			954.62			

Junctions 9

PICADY 9 - Priority Intersection Module

Filename: Junction B AM.j9
Path: Z:\Junction B
Report generation date: 13/10/2017 10:56:17

Summary of junction performance

	AM			
	Queue (PCU)	Delay (s)	RFC	LOS
2016 Base Year				
2024 No Phase 5				
2024 With Phase 5				

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

File summary

File Description

Title	(untitled)
Location	
Site number	
Date	08/08/2016
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	TOBIN"Maria Rooney
Description	

Units

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

Analysis Options

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

Demand Set Summary

Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
2016 Base Year	AM	ONE HOUR	07:45	09:15	15
2024 No Phase 5	AM	ONE HOUR	07:45	09:15	15
2024 With Phase 5	AM	ONE HOUR	07:45	09:15	15

2016 Base Year , AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.00	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	R139 (W)		Major
B	WWTP		Minor
C	R139 (E)		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	12.00			200.0	✓	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	3.00	250	250

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	697.021	0.094	0.237	0.149	0.339
1	B-C	781.320	0.089	0.224	-	-
1	C-B	689.785	0.198	0.198	-	-

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	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
D1	2016 Base Year	AM	ONE HOUR	07:45	09:15	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	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	1289.00	100.000
B		✓	0.00	100.000
C		✓	1778.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0.000	0.000	1289.000
	B	0.000	0.000	0.000
	C	1778.000	0.000	0.000

Vehicle Mix

Heavy Vehicle proportion

		To		
		A	B	C
From	A	0	0	12
	B	0	0	0
	C	14	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.00	0.00	0.0	A
C-AB	0.00	0.00	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

Main results: (07:45-08:00)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	362.68	0.000	0.00	0.0	0.000	A
C-AB	0.00	498.13	0.000	0.00	0.0	0.000	A
C-A	1338.57			1338.57			
A-B	0.00			0.00			
A-C	970.43			970.43			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	271.88	0.000	0.00	0.0	0.000	A
C-AB	0.00	460.93	0.000	0.00	0.0	0.000	A
C-A	1598.39			1598.39			
A-B	0.00			0.00			
A-C	1158.78			1158.78			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	119.30	0.000	0.00	0.0	0.000	A
C-AB	0.00	409.50	0.000	0.00	0.0	0.000	A
C-A	1957.61			1957.61			
A-B	0.00			0.00			
A-C	1419.22			1419.22			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	119.30	0.000	0.00	0.0	0.000	A
C-AB	0.00	409.50	0.000	0.00	0.0	0.000	A
C-A	1957.61			1957.61			
A-B	0.00			0.00			
A-C	1419.22			1419.22			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	271.88	0.000	0.00	0.0	0.000	A
C-AB	0.00	460.93	0.000	0.00	0.0	0.000	A
C-A	1598.39			1598.39			
A-B	0.00			0.00			
A-C	1158.78			1158.78			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	362.68	0.000	0.00	0.0	0.000	A
C-AB	0.00	498.13	0.000	0.00	0.0	0.000	A
C-A	1338.57			1338.57			
A-B	0.00			0.00			
A-C	970.43			970.43			

2024 No Phase 5 , AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.00	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
D2	2024 No Phase 5	AM	ONE HOUR	07:45	09:15	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	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	1774.00	100.000
B		✓	0.00	100.000
C		✓	2455.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0.000	0.000	1774.000
	B	0.000	0.000	0.000
	C	2455.000	0.000	0.000

Vehicle Mix

Heavy Vehicle proportion

		To		
		A	B	C
From	A	0	0	14
	B	0	0	0
	C	16	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.00	0.00	0.0	A
C-AB	0.00	0.00	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

Main results: (07:45-08:00)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	171.94	0.000	0.00	0.0	0.000	A
C-AB	0.00	426.02	0.000	0.00	0.0	0.000	A
C-A	1848.25			1848.25			
A-B	0.00			0.00			
A-C	1335.56			1335.56			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	0.00	0.000	0.00	0.0	0.000	A
C-AB	0.00	374.82	0.000	0.00	0.0	0.000	A
C-A	2206.99			2206.99			
A-B	0.00			0.00			
A-C	1594.79			1594.79			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	0.00	0.000	0.00	0.0	0.000	A
C-AB	0.00	304.04	0.000	0.00	0.0	0.000	A
C-A	2703.01			2703.01			
A-B	0.00			0.00			
A-C	1953.21			1953.21			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	0.00	0.000	0.00	0.0	0.000	A
C-AB	0.00	304.04	0.000	0.00	0.0	0.000	A
C-A	2703.01			2703.01			
A-B	0.00			0.00			
A-C	1953.21			1953.21			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	0.00	0.000	0.00	0.0	0.000	A
C-AB	0.00	374.82	0.000	0.00	0.0	0.000	A
C-A	2206.99			2206.99			
A-B	0.00			0.00			
A-C	1594.79			1594.79			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	171.94	0.000	0.00	0.0	0.000	A
C-AB	0.00	426.02	0.000	0.00	0.0	0.000	A
C-A	1848.25			1848.25			
A-B	0.00			0.00			
A-C	1335.56			1335.56			

2024 With Phase 5 , AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.00	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
D3	2024 With Phase 5	AM	ONE HOUR	07:45	09:15	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	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	1881.00	100.000
B		✓	0.00	100.000
C		✓	2460.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0.000	79.000	1802.000
	B	0.000	0.000	0.000
	C	2460.000	0.000	0.000

Vehicle Mix

Heavy Vehicle proportion

		To		
		A	B	C
From	A	0	17	14
	B	0	0	0
	C	16	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.00	0.00	0.0	A
C-AB	0.00	0.00	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

Main results: (07:45-08:00)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	156.06	0.000	0.00	0.0	0.000	A
C-AB	0.00	410.11	0.000	0.00	0.0	0.000	A
C-A	1852.02			1852.02			
A-B	59.48			59.48			
A-C	1356.64			1356.64			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	0.00	0.000	0.00	0.0	0.000	A
C-AB	0.00	355.82	0.000	0.00	0.0	0.000	A
C-A	2211.49			2211.49			
A-B	71.02			71.02			
A-C	1619.96			1619.96			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	0.00	0.000	0.00	0.0	0.000	A
C-AB	0.00	280.77	0.000	0.00	0.0	0.000	A
C-A	2708.51			2708.51			
A-B	86.98			86.98			
A-C	1984.04			1984.04			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	0.00	0.000	0.00	0.0	0.000	A
C-AB	0.00	280.77	0.000	0.00	0.0	0.000	A
C-A	2708.51			2708.51			
A-B	86.98			86.98			
A-C	1984.04			1984.04			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	0.00	0.000	0.00	0.0	0.000	A
C-AB	0.00	355.82	0.000	0.00	0.0	0.000	A
C-A	2211.49			2211.49			
A-B	71.02			71.02			
A-C	1619.96			1619.96			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	156.06	0.000	0.00	0.0	0.000	A
C-AB	0.00	410.11	0.000	0.00	0.0	0.000	A
C-A	1852.02			1852.02			
A-B	59.48			59.48			
A-C	1356.64			1356.64			

Junctions 9

PICADY 9 - Priority Intersection Module

Filename: Junction B PM.j9
Path: Z:\Junction B
Report generation date: 13/10/2017 10:56:47

Summary of junction performance

	PM			
	Queue (PCU)	Delay (s)	RFC	LOS
2016 Base Year				
2024 No Phase 5				
2024 With Phase 5				

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

File summary

File Description

Title	(untitled)
Location	
Site number	
Date	08/08/2016
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	TOBIN"Maria Rooney
Description	

Units

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

Analysis Options

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

Demand Set Summary

Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
2016 Base Year	PM	ONE HOUR	16:45	18:15	15
2024 No Phase 5	PM	ONE HOUR	16:45	18:15	15
2024 With Phase 5	PM	ONE HOUR	16:45	18:15	15

2016 Base Year , PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.00	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	R139 (W)		Major
B	WWTP		Minor
C	R139 (E)		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	12.00			200.0	✓	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	3.00	250	250

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	697.021	0.094	0.237	0.149	0.339
1	B-C	781.320	0.089	0.224	-	-
1	C-B	689.785	0.198	0.198	-	-

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	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
D1	2016 Base Year	PM	ONE HOUR	16:45	18:15	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	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	1554.00	100.000
B		✓	0.00	100.000
C		✓	1787.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0.000	0.000	1554.000
	B	0.000	0.000	0.000
	C	1787.000	0.000	0.000

Vehicle Mix

Heavy Vehicle proportion

	To			
		A	B	C
From	A	0	0	12
	B	0	0	0
	C	20	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.00	0.00	0.0	A
C-AB	0.00	0.00	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

Main results: (16:45-17:00)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	308.03	0.000	0.00	0.0	0.000	A
C-AB	0.00	458.73	0.000	0.00	0.0	0.000	A
C-A	1345.35			1345.35			
A-B	0.00			0.00			
A-C	1169.93			1169.93			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	198.74	0.000	0.00	0.0	0.000	A
C-AB	0.00	413.88	0.000	0.00	0.0	0.000	A
C-A	1606.48			1606.48			
A-B	0.00			0.00			
A-C	1397.01			1397.01			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	0.00	0.000	0.00	0.0	0.000	A
C-AB	0.00	351.87	0.000	0.00	0.0	0.000	A
C-A	1967.52			1967.52			
A-B	0.00			0.00			
A-C	1710.99			1710.99			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	0.00	0.000	0.00	0.0	0.000	A
C-AB	0.00	351.87	0.000	0.00	0.0	0.000	A
C-A	1967.52			1967.52			
A-B	0.00			0.00			
A-C	1710.99			1710.99			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	198.74	0.000	0.00	0.0	0.000	A
C-AB	0.00	413.88	0.000	0.00	0.0	0.000	A
C-A	1606.48			1606.48			
A-B	0.00			0.00			
A-C	1397.01			1397.01			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	308.03	0.000	0.00	0.0	0.000	A
C-AB	0.00	458.73	0.000	0.00	0.0	0.000	A
C-A	1345.35			1345.35			
A-B	0.00			0.00			
A-C	1169.93			1169.93			

2024 No Phase 5 , PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.00	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
D2	2024 No Phase 5	PM	ONE HOUR	16:45	18:15	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	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	1864.00	100.000
B		✓	0.00	100.000
C		✓	2498.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0.000	0.000	1864.000
	B	0.000	0.000	0.000
	C	2498.000	0.000	0.000

Vehicle Mix

Heavy Vehicle proportion

		To		
		A	B	C
From	A	0	0	14
	B	0	0	0
	C	23	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.00	0.00	0.0	A
C-AB	0.00	0.00	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

Main results: (16:45-17:00)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	141.99	0.000	0.00	0.0	0.000	A
C-AB	0.00	412.64	0.000	0.00	0.0	0.000	A
C-A	1880.63			1880.63			
A-B	0.00			0.00			
A-C	1403.32			1403.32			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	0.00	0.000	0.00	0.0	0.000	A
C-AB	0.00	358.84	0.000	0.00	0.0	0.000	A
C-A	2245.65			2245.65			
A-B	0.00			0.00			
A-C	1675.70			1675.70			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	0.00	0.000	0.00	0.0	0.000	A
C-AB	0.00	284.47	0.000	0.00	0.0	0.000	A
C-A	2750.35			2750.35			
A-B	0.00			0.00			
A-C	2052.30			2052.30			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	0.00	0.000	0.00	0.0	0.000	A
C-AB	0.00	284.47	0.000	0.00	0.0	0.000	A
C-A	2750.35			2750.35			
A-B	0.00			0.00			
A-C	2052.30			2052.30			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	0.00	0.000	0.00	0.0	0.000	A
C-AB	0.00	358.84	0.000	0.00	0.0	0.000	A
C-A	2245.65			2245.65			
A-B	0.00			0.00			
A-C	1675.70			1675.70			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	141.99	0.000	0.00	0.0	0.000	A
C-AB	0.00	412.64	0.000	0.00	0.0	0.000	A
C-A	1880.63			1880.63			
A-B	0.00			0.00			
A-C	1403.32			1403.32			

2024 With Phase 5 , PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.00	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
D3	2024 With Phase 5	PM	ONE HOUR	16:45	18:15	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	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	1882.00	100.000
B		✓	0.00	100.000
C		✓	2526.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0.000	13.000	1869.000
	B	0.000	0.000	0.000
	C	2526.000	0.000	0.000

Vehicle Mix

Heavy Vehicle proportion

		To		
		A	B	C
From	A	0	100	14
	B	0	0	0
	C	23	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.00	0.00	0.0	A
C-AB	0.00	0.00	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

Main results: (16:45-17:00)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	134.72	0.000	0.00	0.0	0.000	A
C-AB	0.00	409.96	0.000	0.00	0.0	0.000	A
C-A	1901.71			1901.71			
A-B	9.79			9.79			
A-C	1407.08			1407.08			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	0.00	0.000	0.00	0.0	0.000	A
C-AB	0.00	355.65	0.000	0.00	0.0	0.000	A
C-A	2270.82			2270.82			
A-B	11.69			11.69			
A-C	1680.19			1680.19			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	0.00	0.000	0.00	0.0	0.000	A
C-AB	0.00	280.55	0.000	0.00	0.0	0.000	A
C-A	2781.18			2781.18			
A-B	14.31			14.31			
A-C	2057.81			2057.81			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	0.00	0.000	0.00	0.0	0.000	A
C-AB	0.00	280.55	0.000	0.00	0.0	0.000	A
C-A	2781.18			2781.18			
A-B	14.31			14.31			
A-C	2057.81			2057.81			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	0.00	0.000	0.00	0.0	0.000	A
C-AB	0.00	355.65	0.000	0.00	0.0	0.000	A
C-A	2270.82			2270.82			
A-B	11.69			11.69			
A-C	1680.19			1680.19			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	134.72	0.000	0.00	0.0	0.000	A
C-AB	0.00	409.96	0.000	0.00	0.0	0.000	A
C-A	1901.71			1901.71			
A-B	9.79			9.79			
A-C	1407.08			1407.08			

Junctions 9

ARCADY 9 - Roundabout Module

Filename: Junction 1 AM.j9
Path: Y:\Junction 1
Report generation date: 13/10/2017 10:57:23

Summary of junction performance

	AM			
	Queue (PCU)	Delay (s)	RFC	LOS
2016 Base Year				
2025 No Development				
2025 With Development				
2030 No Development				
2030 With Development				
2040 No Development				
2040 With Development				

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	Junciton2
Location	Clonshagh
Site number	2
Date	05/07/2016
Version	
Status	
Identifier	
Client	Irish Water
Jobnumber	7556
Enumerator	TOBIN"Maria Rooney
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

Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
2016 Base Year	AM	ONE HOUR	08:00	09:30	15	✓
2025 No Development	AM	ONE HOUR	08:00	09:30	15	✓
2025 With Development	AM	ONE HOUR	08:00	09:30	15	✓
2030 No Development	AM	ONE HOUR	08:00	09:30	15	✓
2030 With Development	AM	ONE HOUR	08:00	09:30	15	✓
2040 No Development	AM	ONE HOUR	08:00	09:30	15	✓
2040 With Development	AM	ONE HOUR	08:00	09:30	15	✓

2016 Base Year , AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A,B,C,D	3.16	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	Petrol Station	
B	Clonshaugh Rd (N)	
C	Clonshaugh Rd (S)	
D	Hotel Access	

Capacity Options

Arm	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)	Assume flat start profile	Initial queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00
D	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
A	4.50	4.80	8.6	12.6	57.0	65.0	
B	4.00	5.80	10.4	11.2	57.0	49.0	
C	8.20	9.00	6.3	16.7	57.0	55.0	
D	7.10	7.60	9.8	16.1	57.0	77.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A	0.449	1228.237
B	0.492	1399.899
C	0.673	2400.796
D	0.559	1882.415

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	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2016 Base Year	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	✓	153.00	100.000
B		ONE HOUR	✓	355.00	100.000
C		ONE HOUR	✓	367.00	100.000
D		ONE HOUR	✓	80.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	1.000	30.000	120.000	2.000
	B	17.000	2.000	326.000	10.000
	C	145.000	159.000	6.000	57.000
	D	11.000	14.000	55.000	0.000

Proportions

		To			
		A	B	C	D
From	A	0.01	0.20	0.78	0.01
	B	0.05	0.01	0.92	0.03
	C	0.40	0.43	0.02	0.16
	D	0.14	0.18	0.69	0.00

Vehicle Mix

Heavy Vehicle proportion

		To			
		A	B	C	D
From	A	0	8	13	0
	B	0	100	1	0
	C	17	5	27	10
	D	14	14	10	0

Average PCU Per Veh

		To			
		A	B	C	D
From	A	1.000	1.080	1.130	1.000
	B	1.000	2.000	1.010	1.000
	C	1.170	1.050	1.270	1.100
	D	1.140	1.140	1.100	1.000

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)
A	0.15	4.26	0.2	A	140.40	210.59
B	0.30	4.01	0.4	A	325.75	488.63
C	0.17	2.02	0.2	A	336.77	505.15
D	0.05	2.52	0.1	A	73.41	110.11

Main Results for each time segment

Main results: (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)	LOS
A	115.19	28.80	177.27	1148.67	0.100	114.69	130.69	0.0	0.1	3.887	A
B	267.26	66.82	138.01	1332.01	0.201	266.25	153.95	0.0	0.3	3.415	A
C	276.30	69.07	24.00	2384.65	0.116	275.72	380.26	0.0	0.1	1.887	A
D	60.23	15.06	247.90	1743.87	0.035	60.07	51.82	0.0	0.0	2.377	A

Main results: (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)	LOS
A	137.54	34.39	212.07	1133.05	0.121	137.43	156.35	0.1	0.2	4.039	A
B	319.14	79.78	165.29	1318.59	0.242	318.86	184.20	0.3	0.3	3.644	A
C	329.93	82.48	28.74	2381.46	0.139	329.79	455.41	0.1	0.2	1.940	A
D	71.92	17.98	296.54	1716.68	0.042	71.88	62.00	0.0	0.0	2.433	A

Main results: (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)	LOS
A	168.46	42.11	259.71	1111.66	0.152	168.28	191.47	0.2	0.2	4.263	A
B	390.86	97.72	202.40	1300.34	0.301	390.42	225.58	0.3	0.4	4.002	A
C	404.07	101.02	35.19	2377.12	0.170	403.88	557.63	0.2	0.2	2.017	A
D	88.08	22.02	363.15	1679.45	0.052	88.03	75.93	0.0	0.1	2.515	A

Main results: (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)	LOS
A	168.46	42.11	259.84	1111.60	0.152	168.45	191.58	0.2	0.2	4.263	A
B	390.86	97.72	202.59	1300.25	0.301	390.86	225.71	0.4	0.4	4.006	A
C	404.07	101.02	35.23	2377.10	0.170	404.07	558.21	0.2	0.2	2.017	A
D	88.08	22.02	363.34	1679.35	0.052	88.08	75.97	0.1	0.1	2.515	A

Main results: (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)	LOS
A	137.54	34.39	212.29	1132.95	0.121	137.72	156.53	0.2	0.2	4.040	A
B	319.14	79.78	165.59	1318.45	0.242	319.57	184.42	0.4	0.3	3.648	A
C	329.93	82.48	28.81	2381.42	0.139	330.12	456.36	0.2	0.2	1.940	A
D	71.92	17.98	296.85	1716.51	0.042	71.97	62.07	0.1	0.0	2.436	A

Main results: (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)	LOS
A	115.19	28.80	177.76	1148.44	0.100	115.31	131.07	0.2	0.1	3.893	A
B	267.26	66.82	138.65	1331.70	0.201	267.54	154.42	0.3	0.3	3.426	A
C	276.30	69.07	24.12	2384.57	0.116	276.43	382.07	0.2	0.1	1.887	A
D	60.23	15.06	248.57	1743.49	0.035	60.26	51.98	0.0	0.0	2.378	A

2025 No Development , AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A,B,C,D	3.33	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Capacity Options

[same as above]

Roundabout Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2025 No Development	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	✓	166.00	100.000
B		ONE HOUR	✓	404.00	100.000
C		ONE HOUR	✓	421.00	100.000
D		ONE HOUR	✓	92.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	1.000	24.000	139.000	2.000
	B	19.000	2.000	372.000	11.000
	C	167.000	182.000	6.000	66.000
	D	13.000	16.000	63.000	0.000

Proportions

		To			
		A	B	C	D
From	A	0.01	0.14	0.84	0.01
	B	0.05	0.00	0.92	0.03
	C	0.40	0.43	0.01	0.16
	D	0.14	0.17	0.68	0.00

Vehicle Mix

Heavy Vehicle proportion

		To			
		A	B	C	D
From	A	0	8	14	0
	B	0	100	1	0
	C	18	6	29	10
	D	15	15	11	0

Average PCU Per Veh

		To			
		A	B	C	D
From	A	1.000	1.080	1.140	1.000
	B	1.000	2.000	1.010	1.000
	C	1.180	1.060	1.290	1.100
	D	1.150	1.150	1.110	1.000

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)
A	0.17	4.45	0.2	A	152.32	228.49
B	0.35	4.33	0.5	A	370.72	556.08
C	0.20	2.10	0.3	A	386.32	579.48
D	0.06	2.61	0.1	A	84.42	126.63

Main Results for each time segment

Main results: (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)	LOS
A	124.97	31.24	202.05	1137.54	0.110	124.42	150.21	0.0	0.1	4.007	A
B	304.15	76.04	158.24	1322.06	0.230	302.95	168.23	0.0	0.3	3.568	A
C	316.95	79.24	26.24	2383.14	0.133	316.27	434.94	0.0	0.2	1.940	A
D	69.26	17.32	283.18	1724.14	0.040	69.08	59.33	0.0	0.0	2.440	A

Main results: (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)	LOS
A	149.23	37.31	241.72	1119.74	0.133	149.09	179.71	0.1	0.2	4.184	A
B	363.19	90.80	189.54	1306.67	0.278	362.84	201.27	0.3	0.4	3.858	A
C	378.47	94.62	31.43	2379.65	0.159	378.31	520.94	0.2	0.2	2.003	A
D	82.71	20.68	338.76	1693.08	0.049	82.66	70.98	0.0	0.1	2.508	A

Main results: (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)	LOS
A	182.77	45.69	296.01	1095.37	0.167	182.56	220.07	0.2	0.2	4.447	A
B	444.81	111.20	232.09	1285.74	0.346	444.24	246.48	0.4	0.5	4.325	A
C	463.53	115.88	38.49	2374.91	0.195	463.29	637.84	0.2	0.3	2.098	A
D	101.29	25.32	414.85	1650.55	0.061	101.23	86.93	0.1	0.1	2.607	A

Main results: (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)	LOS
A	182.77	45.69	296.17	1095.29	0.167	182.77	220.20	0.2	0.2	4.450	A
B	444.81	111.20	232.31	1285.63	0.346	444.80	246.63	0.5	0.5	4.331	A
C	463.53	115.88	38.54	2374.88	0.195	463.53	638.58	0.3	0.3	2.098	A
D	101.29	25.32	415.08	1650.43	0.061	101.29	86.98	0.1	0.1	2.607	A

Main results: (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)	LOS
A	149.23	37.31	241.99	1119.62	0.133	149.43	179.93	0.2	0.2	4.186	A
B	363.19	90.80	189.90	1306.49	0.278	363.75	201.52	0.5	0.4	3.865	A
C	378.47	94.62	31.51	2379.60	0.159	378.70	522.15	0.3	0.2	2.006	A
D	82.71	20.68	339.14	1692.87	0.049	82.77	71.07	0.1	0.1	2.508	A

Main results: (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)	LOS
A	124.97	31.24	202.63	1137.28	0.110	125.11	150.66	0.2	0.1	4.014	A
B	304.15	76.04	159.00	1321.69	0.230	304.50	168.74	0.4	0.3	3.583	A
C	316.95	79.24	26.38	2383.05	0.133	317.11	437.12	0.2	0.2	1.941	A
D	69.26	17.32	283.98	1723.70	0.040	69.31	59.51	0.1	0.0	2.443	A

2025 With Development , AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A,B,C,D	3.40	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Capacity Options

[same as above]

Roundabout Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2025 With Development	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	✓	176.00	100.000
B		ONE HOUR	✓	414.00	100.000
C		ONE HOUR	✓	421.00	100.000
D		ONE HOUR	✓	92.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	1.000	34.000	139.000	2.000
	B	19.000	2.000	382.000	11.000
	C	167.000	182.000	6.000	66.000
	D	13.000	16.000	63.000	0.000

Proportions

		To			
		A	B	C	D
From	A	0.01	0.19	0.79	0.01
	B	0.05	0.00	0.92	0.03
	C	0.40	0.43	0.01	0.16
	D	0.14	0.17	0.68	0.00

Vehicle Mix

Heavy Vehicle proportion

		To			
		A	B	C	D
From	A	0	8	14	0
	B	0	100	2	0
	C	18	6	29	10
	D	15	15	11	0

Average PCU Per Veh

		To			
		A	B	C	D
From	A	1.000	1.080	1.140	1.000
	B	1.000	2.000	1.020	1.000
	C	1.180	1.060	1.290	1.100
	D	1.150	1.150	1.110	1.000

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)
A	0.18	4.49	0.2	A	161.50	242.25
B	0.35	4.43	0.6	A	379.89	569.84
C	0.20	2.10	0.3	A	386.32	579.48
D	0.06	2.61	0.1	A	84.42	126.63

Main Results for each time segment

Main results: (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)	LOS
A	132.50	33.13	202.05	1137.54	0.116	131.91	150.21	0.0	0.1	4.027	A
B	311.68	77.92	158.24	1322.06	0.236	310.43	175.72	0.0	0.3	3.628	A
C	316.95	79.24	26.24	2383.14	0.133	316.27	442.42	0.0	0.2	1.940	A
D	69.26	17.32	283.18	1724.14	0.040	69.08	59.33	0.0	0.0	2.440	A

Main results: (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)	LOS
A	158.22	39.56	241.72	1119.74	0.141	158.07	179.71	0.1	0.2	4.212	A
B	372.18	93.04	189.54	1306.67	0.285	371.81	210.26	0.3	0.4	3.928	A
C	378.47	94.62	31.43	2379.65	0.159	378.31	529.92	0.2	0.2	2.003	A
D	82.71	20.68	338.76	1693.08	0.049	82.66	70.98	0.0	0.1	2.508	A

Main results: (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)	LOS
A	193.78	48.44	296.01	1095.37	0.177	193.55	220.07	0.2	0.2	4.490	A
B	455.82	113.96	232.09	1285.74	0.355	455.21	257.48	0.4	0.6	4.423	A
C	463.53	115.88	38.48	2374.91	0.195	463.29	648.82	0.2	0.3	2.098	A
D	101.29	25.32	414.85	1650.55	0.061	101.23	86.92	0.1	0.1	2.607	A

Main results: (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)	LOS
A	193.78	48.44	296.17	1095.29	0.177	193.78	220.20	0.2	0.2	4.493	A
B	455.82	113.96	232.31	1285.63	0.355	455.81	257.64	0.6	0.6	4.428	A
C	463.53	115.88	38.54	2374.88	0.195	463.53	649.59	0.3	0.3	2.098	A
D	101.29	25.32	415.08	1650.43	0.061	101.29	86.98	0.1	0.1	2.607	A

Main results: (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)	LOS
A	158.22	39.56	241.99	1119.62	0.141	158.44	179.93	0.2	0.2	4.216	A
B	372.18	93.04	189.91	1306.49	0.285	372.78	210.52	0.6	0.4	3.938	A
C	378.47	94.62	31.51	2379.60	0.159	378.70	531.17	0.3	0.2	2.004	A
D	82.71	20.68	339.14	1692.87	0.049	82.77	71.07	0.1	0.1	2.508	A

Main results: (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)	LOS
A	132.50	33.13	202.63	1137.28	0.117	132.65	150.66	0.2	0.1	4.034	A
B	311.68	77.92	159.00	1321.69	0.236	312.05	176.27	0.4	0.3	3.643	A
C	316.95	79.24	26.38	2383.05	0.133	317.11	444.67	0.2	0.2	1.941	A
D	69.26	17.32	283.98	1723.70	0.040	69.31	59.51	0.1	0.0	2.443	A

2030 No Development , AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A,B,C,D	3.50	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Capacity Options

[same as above]

Roundabout Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2030 No Development	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	✓	191.00	100.000
B		ONE HOUR	✓	436.00	100.000
C		ONE HOUR	✓	457.00	100.000
D		ONE HOUR	✓	100.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	1.000	37.000	151.000	2.000
	B	21.000	2.000	401.000	12.000
	C	182.000	197.000	7.000	71.000
	D	14.000	18.000	68.000	0.000

Proportions

		To			
		A	B	C	D
From	A	0.01	0.19	0.79	0.01
	B	0.05	0.00	0.92	0.03
	C	0.40	0.43	0.02	0.16
	D	0.14	0.18	0.68	0.00

Vehicle Mix

Heavy Vehicle proportion

		To			
		A	B	C	D
From	A	0	9	15	0
	B	0	100	1	0
	C	19	6	30	11
	D	15	16	11	0

Average PCU Per Veh

		To			
		A	B	C	D
From	A	1.000	1.090	1.150	1.000
	B	1.000	2.000	1.010	1.000
	C	1.190	1.060	1.300	1.110
	D	1.150	1.160	1.110	1.000

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)
A	0.19	4.68	0.3	A	175.26	262.90
B	0.38	4.57	0.6	A	400.08	600.12
C	0.21	2.16	0.3	A	419.35	629.03
D	0.07	2.66	0.1	A	91.76	137.64

Main Results for each time segment

Main results: (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)	LOS
A	143.79	35.95	219.31	1129.79	0.127	143.14	163.72	0.0	0.2	4.139	A
B	328.24	82.06	171.72	1315.43	0.250	326.91	190.73	0.0	0.3	3.679	A
C	344.05	86.01	28.49	2381.63	0.144	343.30	470.14	0.0	0.2	1.978	A
D	75.29	18.82	307.96	1710.30	0.044	75.08	63.83	0.0	0.1	2.474	A

Main results: (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)	LOS
A	171.71	42.93	262.38	1110.46	0.155	171.54	195.88	0.2	0.2	4.353	A
B	391.96	97.99	205.70	1298.72	0.302	391.56	228.22	0.3	0.4	4.012	A
C	410.83	102.71	34.13	2377.84	0.173	410.66	563.12	0.2	0.2	2.049	A
D	89.90	22.47	368.41	1676.51	0.054	89.85	76.37	0.1	0.1	2.550	A

Main results: (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)	LOS
A	210.29	52.57	321.31	1084.01	0.194	210.03	239.87	0.2	0.3	4.675	A
B	480.04	120.01	251.87	1276.01	0.376	479.36	279.48	0.4	0.6	4.567	A
C	503.17	125.79	41.78	2372.69	0.212	502.90	689.45	0.2	0.3	2.155	A
D	110.10	27.53	451.15	1630.27	0.068	110.03	93.52	0.1	0.1	2.661	A

Main results: (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)	LOS
A	210.29	52.57	321.50	1083.93	0.194	210.29	240.02	0.3	0.3	4.677	A
B	480.04	120.01	252.13	1275.88	0.376	480.04	279.66	0.6	0.6	4.575	A
C	503.17	125.79	41.84	2372.65	0.212	503.16	690.33	0.3	0.3	2.155	A
D	110.10	27.53	451.42	1630.12	0.068	110.10	93.59	0.1	0.1	2.662	A

Main results: (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)	LOS
A	171.71	42.93	262.68	1110.33	0.155	171.96	196.13	0.3	0.2	4.357	A
B	391.96	97.99	206.12	1298.51	0.302	392.63	228.52	0.6	0.4	4.022	A
C	410.83	102.71	34.22	2377.78	0.173	411.10	564.53	0.3	0.2	2.049	A
D	89.90	22.47	368.84	1676.27	0.054	89.97	76.48	0.1	0.1	2.552	A

Main results: (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)	LOS
A	143.79	35.95	219.96	1129.51	0.127	143.96	164.22	0.2	0.2	4.147	A
B	328.24	82.06	172.58	1315.01	0.250	328.65	191.35	0.4	0.3	3.692	A
C	344.05	86.01	28.64	2381.53	0.144	344.23	472.58	0.2	0.2	1.980	A
D	75.29	18.82	308.84	1709.80	0.044	75.33	64.03	0.1	0.1	2.477	A

2030 With Development , AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A,B,C,D	3.54	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Capacity Options

[same as above]

Roundabout Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2030 With Development	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	✓	191.00	100.000
B		ONE HOUR	✓	446.00	100.000
C		ONE HOUR	✓	457.00	100.000
D		ONE HOUR	✓	100.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	1.000	37.000	151.000	2.000
	B	21.000	2.000	411.000	12.000
	C	182.000	197.000	7.000	71.000
	D	14.000	18.000	68.000	0.000

Proportions

		To			
		A	B	C	D
From	A	0.01	0.19	0.79	0.01
	B	0.05	0.00	0.92	0.03
	C	0.40	0.43	0.02	0.16
	D	0.14	0.18	0.68	0.00

Vehicle Mix

Heavy Vehicle proportion

		To			
		A	B	C	D
From	A	0	9	15	0
	B	0	100	2	0
	C	19	6	30	11
	D	15	16	11	0

Average PCU Per Veh

		To			
		A	B	C	D
From	A	1.000	1.090	1.150	1.000
	B	1.000	2.000	1.020	1.000
	C	1.190	1.060	1.300	1.110
	D	1.150	1.160	1.110	1.000

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)
A	0.19	4.68	0.3	A	175.26	262.90
B	0.38	4.68	0.6	A	409.26	613.89
C	0.21	2.16	0.3	A	419.35	629.03
D	0.07	2.66	0.1	A	91.76	137.64

Main Results for each time segment

Main results: (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)	LOS
A	143.79	35.95	219.31	1129.79	0.127	143.14	163.72	0.0	0.2	4.139	A
B	335.77	83.94	171.72	1315.43	0.255	334.38	190.73	0.0	0.3	3.741	A
C	344.05	86.01	28.49	2381.63	0.144	343.30	477.61	0.0	0.2	1.978	A
D	75.29	18.82	307.96	1710.30	0.044	75.08	63.83	0.0	0.1	2.474	A

Main results: (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)	LOS
A	171.71	42.93	262.38	1110.46	0.155	171.54	195.88	0.2	0.2	4.353	A
B	400.94	100.24	205.70	1298.72	0.309	400.52	228.22	0.3	0.5	4.089	A
C	410.83	102.71	34.13	2377.84	0.173	410.66	572.10	0.2	0.2	2.048	A
D	89.90	22.47	368.41	1676.51	0.054	89.85	76.37	0.1	0.1	2.550	A

Main results: (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)	LOS
A	210.29	52.57	321.31	1084.01	0.194	210.03	239.87	0.2	0.3	4.675	A
B	491.06	122.76	251.87	1276.01	0.385	490.33	279.48	0.5	0.6	4.673	A
C	503.17	125.79	41.78	2372.70	0.212	502.90	700.43	0.2	0.3	2.155	A
D	110.10	27.53	451.15	1630.27	0.068	110.03	93.52	0.1	0.1	2.661	A

Main results: (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)	LOS
A	210.29	52.57	321.50	1083.93	0.194	210.29	240.02	0.3	0.3	4.677	A
B	491.06	122.76	252.13	1275.88	0.385	491.04	279.66	0.6	0.6	4.681	A
C	503.17	125.79	41.84	2372.65	0.212	503.16	701.34	0.3	0.3	2.155	A
D	110.10	27.53	451.42	1630.12	0.068	110.10	93.59	0.1	0.1	2.662	A

Main results: (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)	LOS
A	171.71	42.93	262.68	1110.33	0.155	171.96	196.13	0.3	0.2	4.356	A
B	400.94	100.24	206.12	1298.51	0.309	401.65	228.52	0.6	0.5	4.101	A
C	410.83	102.71	34.22	2377.78	0.173	411.10	573.55	0.3	0.2	2.051	A
D	89.90	22.47	368.84	1676.27	0.054	89.97	76.48	0.1	0.1	2.552	A

Main results: (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)	LOS
A	143.79	35.95	219.96	1129.51	0.127	143.96	164.22	0.2	0.2	4.147	A
B	335.77	83.94	172.58	1315.01	0.255	336.20	191.35	0.5	0.4	3.757	A
C	344.05	86.01	28.64	2381.53	0.144	344.23	480.13	0.2	0.2	1.978	A
D	75.29	18.82	308.84	1709.80	0.044	75.33	64.03	0.1	0.1	2.477	A

2040 No Development , AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A,B,C,D	3.65	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Capacity Options

[same as above]

Roundabout Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2040 No Development	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	✓	206.00	100.000
B		ONE HOUR	✓	462.00	100.000
C		ONE HOUR	✓	491.00	100.000
D		ONE HOUR	✓	107.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	1.000	39.000	163.000	3.000
	B	22.000	3.000	424.000	13.000
	C	197.000	210.000	8.000	76.000
	D	15.000	19.000	73.000	0.000

Proportions

		To			
		A	B	C	D
From	A	0.00	0.19	0.79	0.01
	B	0.05	0.01	0.92	0.03
	C	0.40	0.43	0.02	0.15
	D	0.14	0.18	0.68	0.00

Vehicle Mix

Heavy Vehicle proportion

		To			
		A	B	C	D
From	A	0	10	17	0
	B	0	100	1	0
	C	21	7	33	12
	D	17	18	13	0

Average PCU Per Veh

		To			
		A	B	C	D
From	A	1.000	1.100	1.170	1.000
	B	1.000	2.000	1.010	1.000
	C	1.210	1.070	1.330	1.120
	D	1.170	1.180	1.130	1.000

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)
A	0.21	4.90	0.3	A	189.03	283.54
B	0.40	4.81	0.7	A	423.94	635.91
C	0.23	2.23	0.3	A	450.55	675.83
D	0.07	2.76	0.1	A	98.19	147.28

Main Results for each time segment

Main results: (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)	LOS
A	155.09	38.77	235.07	1122.72	0.138	154.35	176.48	0.0	0.2	4.281	A
B	347.82	86.95	185.94	1308.44	0.266	346.36	203.48	0.0	0.4	3.784	A
C	369.65	92.41	31.49	2379.62	0.155	368.82	500.82	0.0	0.2	2.029	A
D	80.56	20.14	331.22	1697.30	0.047	80.33	69.08	0.0	0.1	2.547	A

Main results: (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)	LOS
A	185.19	46.30	281.24	1102.00	0.168	185.00	211.15	0.2	0.2	4.522	A
B	415.33	103.83	222.75	1290.33	0.322	414.88	243.49	0.4	0.5	4.162	A
C	441.40	110.35	37.72	2375.43	0.186	441.20	599.91	0.2	0.3	2.110	A
D	96.19	24.05	396.26	1660.95	0.058	96.14	82.66	0.1	0.1	2.631	A

Main results: (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)	LOS
A	226.81	56.70	344.41	1073.64	0.211	226.51	258.57	0.2	0.3	4.896	A
B	508.67	127.17	272.75	1265.74	0.402	507.88	298.17	0.5	0.7	4.804	A
C	540.60	135.15	46.17	2369.74	0.228	540.30	734.46	0.3	0.3	2.231	A
D	117.81	29.45	485.25	1611.21	0.073	117.73	101.22	0.1	0.1	2.757	A

Main results: (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)	LOS
A	226.81	56.70	344.62	1073.55	0.211	226.81	258.74	0.3	0.3	4.898	A
B	508.67	127.17	273.05	1265.59	0.402	508.66	298.37	0.7	0.7	4.815	A
C	540.60	135.15	46.24	2369.69	0.228	540.60	735.47	0.3	0.3	2.231	A
D	117.81	29.45	485.55	1611.04	0.073	117.81	101.29	0.1	0.1	2.757	A

Main results: (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)	LOS
A	185.19	46.30	281.59	1101.84	0.168	185.48	211.43	0.3	0.2	4.529	A
B	415.33	103.83	223.24	1290.09	0.322	416.10	243.83	0.7	0.5	4.175	A
C	441.40	110.35	37.83	2375.35	0.186	441.70	601.52	0.3	0.3	2.113	A
D	96.19	24.05	396.75	1660.67	0.058	96.27	82.78	0.1	0.1	2.632	A

Main results: (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)	LOS
A	155.09	38.77	235.78	1122.40	0.138	155.28	177.03	0.2	0.2	4.291	A
B	347.82	86.95	186.90	1307.96	0.266	348.28	204.16	0.5	0.4	3.798	A
C	369.65	92.41	31.66	2379.50	0.155	369.85	503.52	0.3	0.2	2.033	A
D	80.56	20.14	332.20	1696.75	0.047	80.61	69.31	0.1	0.1	2.548	A

2040 With Development , AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A,B,C,D	3.70	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Capacity Options

[same as above]

Roundabout Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2040 With Development	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	✓	206.00	100.000
B		ONE HOUR	✓	471.00	100.000
C		ONE HOUR	✓	491.00	100.000
D		ONE HOUR	✓	107.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	1.000	39.000	163.000	3.000
	B	22.000	3.000	433.000	13.000
	C	197.000	210.000	8.000	76.000
	D	15.000	19.000	73.000	0.000

Proportions

		To			
		A	B	C	D
From	A	0.00	0.19	0.79	0.01
	B	0.05	0.01	0.92	0.03
	C	0.40	0.43	0.02	0.15
	D	0.14	0.18	0.68	0.00

Vehicle Mix

Heavy Vehicle proportion

		To			
		A	B	C	D
From	A	0	10	17	0
	B	0	100	2	0
	C	21	7	33	12
	D	17	18	13	0

Average PCU Per Veh

		To			
		A	B	C	D
From	A	1.000	1.100	1.170	1.000
	B	1.000	2.000	1.020	1.000
	C	1.210	1.070	1.330	1.120
	D	1.170	1.180	1.130	1.000

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)
A	0.21	4.90	0.3	A	189.03	283.54
B	0.41	4.92	0.7	A	432.20	648.30
C	0.23	2.23	0.3	A	450.55	675.83
D	0.07	2.76	0.1	A	98.19	147.28

Main Results for each time segment

Main results: (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)	LOS
A	155.09	38.77	235.07	1122.72	0.138	154.35	176.48	0.0	0.2	4.281	A
B	354.59	88.65	185.94	1308.44	0.271	353.08	203.48	0.0	0.4	3.838	A
C	369.65	92.41	31.48	2379.62	0.155	368.82	507.54	0.0	0.2	2.029	A
D	80.56	20.14	331.22	1697.30	0.047	80.33	69.08	0.0	0.1	2.547	A

Main results: (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)	LOS
A	185.19	46.30	281.24	1102.00	0.168	185.00	211.15	0.2	0.2	4.522	A
B	423.42	105.85	222.75	1290.33	0.328	422.95	243.49	0.4	0.5	4.239	A
C	441.40	110.35	37.72	2375.43	0.186	441.20	607.98	0.2	0.3	2.110	A
D	96.19	24.05	396.25	1660.95	0.058	96.14	82.66	0.1	0.1	2.631	A

Main results: (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)	LOS
A	226.81	56.70	344.41	1073.64	0.211	226.51	258.57	0.2	0.3	4.896	A
B	518.58	129.65	272.75	1265.74	0.410	517.75	298.17	0.5	0.7	4.912	A
C	540.60	135.15	46.17	2369.74	0.228	540.30	744.33	0.3	0.3	2.231	A
D	117.81	29.45	485.25	1611.21	0.073	117.73	101.22	0.1	0.1	2.757	A

Main results: (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)	LOS
A	226.81	56.70	344.62	1073.55	0.211	226.81	258.74	0.3	0.3	4.898	A
B	518.58	129.65	273.05	1265.59	0.410	518.57	298.37	0.7	0.7	4.923	A
C	540.60	135.15	46.24	2369.69	0.228	540.60	745.38	0.3	0.3	2.231	A
D	117.81	29.45	485.55	1611.04	0.073	117.81	101.29	0.1	0.1	2.757	A

Main results: (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)	LOS
A	185.19	46.30	281.59	1101.84	0.168	185.48	211.43	0.3	0.2	4.529	A
B	423.42	105.85	223.24	1290.09	0.328	424.23	243.83	0.7	0.5	4.253	A
C	441.40	110.35	37.83	2375.35	0.186	441.70	609.65	0.3	0.3	2.113	A
D	96.19	24.05	396.75	1660.67	0.058	96.27	82.78	0.1	0.1	2.632	A

Main results: (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)	LOS
A	155.09	38.77	235.78	1122.40	0.138	155.28	177.03	0.2	0.2	4.291	A
B	354.59	88.65	186.90	1307.96	0.271	355.08	204.16	0.5	0.4	3.863	A
C	369.65	92.41	31.66	2379.50	0.155	369.85	510.32	0.3	0.2	2.033	A
D	80.56	20.14	332.20	1696.75	0.047	80.61	69.31	0.1	0.1	2.548	A

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.0.0.4211 []

For sales and distribution information, program advice and maintenance, contact TRL:
Tel: +44 (0)1344 770758 email: software@trl.co.uk Web: http://www.trlsoftware.co.uk

Filename: Junction 1 PM.j9
Path: Y:\Junction 1
Report generation date: 13/10/2017 10:57:58

Summary of junction performance

	PM			
	Queue (PCU)	Delay (s)	RFC	LOS
	2016 Base Year			
	2025 No Development			
Arm A	0.3	4.86	0.19	A
Arm B	0.4	3.95	0.27	A
Arm C	0.4	2.13	0.27	A
Arm D	0.1	2.52	0.05	A
	2025 With Development			
Arm A	0.3	4.86	0.19	A
Arm B	0.4	4.12	0.30	A
Arm C	0.4	2.13	0.27	A
Arm D	0.1	2.52	0.05	A
	2030 No Development			
Arm A	0.3	5.10	0.21	A
Arm B	0.4	4.11	0.30	A
Arm C	0.4	2.20	0.29	A
Arm D	0.1	2.59	0.06	A
	2030 With Development			
Arm A	0.3	5.10	0.21	A
Arm B	0.5	4.30	0.32	A
Arm C	0.4	2.20	0.29	A
Arm D	0.1	2.59	0.06	A
	2040 No Development			
Arm A	0.3	5.35	0.23	A
Arm B	0.5	4.25	0.32	A
Arm C	0.5	2.26	0.30	A
Arm D	0.1	2.64	0.06	A
	2040 With Development			
Arm A	0.3	5.35	0.23	A
Arm B	0.5	4.45	0.34	A
Arm C	0.5	2.26	0.30	A
Arm D	0.1	2.64	0.06	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	Junciton2
Location	Clonshagh
Site number	2
Date	05/07/2016
Version	
Status	
Identifier	
Client	Irish Water
Jobnumber	7556
Enumerator	TOBIN"Maria Rooney
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

Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
2016 Base Year	PM	ONE HOUR	16:00	17:30	15	✓
2025 No Development	PM	ONE HOUR	16:00	17:30	15	✓
2025 With Development	PM	ONE HOUR	16:00	17:30	15	✓
2030 No Development	PM	ONE HOUR	16:00	17:30	15	✓
2030 With Development	PM	ONE HOUR	16:00	17:30	15	✓
2040 No Development	PM	ONE HOUR	16:00	17:30	15	✓
2040 With Development	PM	ONE HOUR	16:00	17:30	15	✓

2016 Base Year , PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A,B,C,D	2.90	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	Petrol Station	
B	Clonshaugh Rd (N)	
C	Clonshaugh Rd (S)	
D	Hotel Access	

Capacity Options

Arm	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)	Assume flat start profile	Initial queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00
D	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
A	4.50	4.80	8.6	12.6	57.0	65.0	
B	4.00	5.80	10.4	11.2	57.0	49.0	
C	8.20	9.00	6.3	16.7	57.0	55.0	
D	7.10	7.60	9.8	16.1	57.0	77.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A	0.449	1228.237
B	0.492	1399.899
C	0.673	2400.796
D	0.559	1882.415

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	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2016 Base Year	PM	ONE HOUR	16:00	17:30	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	✓	153.00	100.000
B		ONE HOUR	✓	283.00	100.000
C		ONE HOUR	✓	501.00	100.000
D		ONE HOUR	✓	67.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	1.000	43.000	108.000	1.000
	B	22.000	0.000	254.000	7.000
	C	108.000	330.000	5.000	58.000
	D	5.000	12.000	49.000	1.000

Proportions

		To			
		A	B	C	D
From	A	0.01	0.28	0.71	0.01
	B	0.08	0.00	0.90	0.02
	C	0.22	0.66	0.01	0.12
	D	0.07	0.18	0.73	0.01

Vehicle Mix

Heavy Vehicle proportion

		To			
		A	B	C	D
From	A	0	0	13	0
	B	7	0	2	0
	C	7	1	33	3
	D	0	0	4	0

Average PCU Per Veh

		To			
		A	B	C	D
From	A	1.000	1.000	1.130	1.000
	B	1.070	1.000	1.020	1.000
	C	1.070	1.010	1.330	1.030
	D	1.000	1.000	1.040	1.000

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)
A	0.16	4.54	0.2	A	140.40	210.59
B	0.24	3.69	0.3	A	259.69	389.53
C	0.23	2.02	0.3	A	459.73	689.59
D	0.05	2.43	0.0	A	61.48	92.22

Main Results for each time segment

Main results: (16:00-16:15)

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)	LOS
A	115.19	28.80	298.25	1094.36	0.105	114.68	102.15	0.0	0.1	3.998	A
B	213.06	53.26	123.75	1339.03	0.159	212.29	289.18	0.0	0.2	3.268	A
C	377.18	94.29	24.00	2384.65	0.158	376.41	312.03	0.0	0.2	1.841	A
D	50.44	12.61	350.08	1686.75	0.030	50.31	50.33	0.0	0.0	2.263	A

Main results: (16:15-16:30)

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)	LOS
A	137.54	34.39	356.74	1068.11	0.129	137.41	122.20	0.1	0.2	4.210	A
B	254.41	63.60	148.21	1326.99	0.192	254.22	345.94	0.2	0.2	3.433	A
C	450.39	112.60	28.75	2381.46	0.189	450.20	373.68	0.2	0.2	1.913	A
D	60.23	15.06	418.74	1648.38	0.037	60.20	60.20	0.0	0.0	2.331	A

Main results: (16:30-16:45)

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)	LOS
A	168.46	42.11	436.88	1032.14	0.163	168.25	149.65	0.2	0.2	4.534	A
B	311.59	77.90	181.49	1310.63	0.238	311.29	423.64	0.2	0.3	3.686	A
C	551.61	137.90	35.20	2377.12	0.232	551.33	457.57	0.2	0.3	2.025	A
D	73.77	18.44	512.80	1595.81	0.046	73.73	73.73	0.0	0.0	2.433	A

Main results: (16:45-17:00)

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)	LOS
A	168.46	42.11	437.10	1032.03	0.163	168.45	149.74	0.2	0.2	4.536	A
B	311.59	77.90	181.67	1310.54	0.238	311.59	423.89	0.3	0.3	3.686	A
C	551.61	137.90	35.23	2377.10	0.232	551.61	458.02	0.3	0.3	2.025	A
D	73.77	18.44	513.07	1595.66	0.046	73.77	73.77	0.0	0.0	2.433	A

Main results: (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)	LOS
A	137.54	34.39	357.12	1067.94	0.129	137.74	122.35	0.2	0.2	4.212	A
B	254.41	63.60	148.51	1326.85	0.192	254.71	346.35	0.3	0.2	3.435	A
C	450.39	112.60	28.80	2381.42	0.189	450.67	374.42	0.3	0.2	1.917	A
D	60.23	15.06	419.20	1648.13	0.037	60.27	60.27	0.0	0.0	2.332	A

Main results: (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)	LOS
A	115.19	28.80	299.03	1094.01	0.105	115.32	102.45	0.2	0.1	4.005	A
B	213.06	53.26	124.34	1338.74	0.159	213.25	290.01	0.2	0.2	3.272	A
C	377.18	94.29	24.11	2384.58	0.158	377.37	313.48	0.2	0.2	1.841	A
D	50.44	12.61	351.01	1686.24	0.030	50.47	50.47	0.0	0.0	2.264	A

2025 No Development, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A,B,C,D	3.08	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Capacity Options

[same as above]

Roundabout Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2025 No Development	PM	ONE HOUR	16:00	17:30	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	✓	175.00	100.000
B		ONE HOUR	✓	324.00	100.000
C		ONE HOUR	✓	572.00	100.000
D		ONE HOUR	✓	77.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	1.000	49.000	124.000	1.000
	B	25.000	0.000	291.000	8.000
	C	124.000	377.000	5.000	66.000
	D	6.000	14.000	56.000	1.000

Proportions

		To			
		A	B	C	D
From	A	0.01	0.28	0.71	0.01
	B	0.08	0.00	0.90	0.02
	C	0.22	0.66	0.01	0.12
	D	0.08	0.18	0.73	0.01

Vehicle Mix

Heavy Vehicle proportion

		To			
		A	B	C	D
From	A	0	0	14	0
	B	8	0	3	0
	C	8	1	35	4
	D	0	0	4	0

Average PCU Per Veh

		To			
		A	B	C	D
From	A	1.000	1.000	1.140	1.000
	B	1.080	1.000	1.030	1.000
	C	1.080	1.010	1.350	1.040
	D	1.000	1.000	1.040	1.000

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)
A	0.19	4.86	0.3	A	160.58	240.87
B	0.27	3.95	0.4	A	297.31	445.96
C	0.27	2.13	0.4	A	524.88	787.32
D	0.05	2.52	0.1	A	70.66	105.98

Main Results for each time segment

Main results: (16:00-16:15)

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)	LOS
A	131.75	32.94	340.30	1075.49	0.123	131.14	117.16	0.0	0.2	4.172	A
B	243.92	60.98	140.98	1330.55	0.183	243.00	330.46	0.0	0.2	3.415	A
C	430.63	107.66	27.00	2382.64	0.181	429.72	356.98	0.0	0.2	1.898	A
D	57.97	14.49	399.64	1659.06	0.035	57.82	57.08	0.0	0.0	2.312	A

Main results: (16:15-16:30)

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)	LOS
A	157.32	39.33	407.05	1045.52	0.150	157.16	140.17	0.2	0.2	4.439	A
B	291.27	72.82	168.86	1316.84	0.221	291.03	395.35	0.2	0.3	3.624	A
C	514.22	128.55	32.34	2379.05	0.216	513.99	427.55	0.2	0.3	1.988	A
D	69.22	17.31	478.04	1615.24	0.043	69.19	68.29	0.0	0.0	2.395	A

Main results: (16:30-16:45)

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)	LOS
A	192.68	48.17	498.48	1004.48	0.192	192.42	171.65	0.2	0.3	4.854	A
B	356.73	89.18	206.76	1298.19	0.275	356.34	484.14	0.3	0.4	3.946	A
C	629.78	157.45	39.59	2374.16	0.265	629.43	523.51	0.3	0.4	2.125	A
D	84.78	21.19	585.40	1555.23	0.055	84.73	83.63	0.0	0.1	2.518	A

Main results: (16:45-17:00)

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)	LOS
A	192.68	48.17	498.76	1004.36	0.192	192.68	171.76	0.3	0.3	4.857	A
B	356.73	89.18	206.99	1298.08	0.275	356.73	484.45	0.4	0.4	3.949	A
C	629.78	157.45	39.64	2374.14	0.265	629.78	524.08	0.4	0.4	2.125	A
D	84.78	21.19	585.74	1555.05	0.055	84.78	83.68	0.1	0.1	2.518	A

Main results: (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)	LOS
A	157.32	39.33	407.52	1045.31	0.151	157.58	140.35	0.3	0.2	4.444	A
B	291.27	72.82	169.23	1316.65	0.221	291.65	395.86	0.4	0.3	3.628	A
C	514.22	128.55	32.41	2379.00	0.216	514.56	428.48	0.4	0.3	1.990	A
D	69.22	17.31	478.59	1614.93	0.043	69.27	68.37	0.1	0.0	2.395	A

Main results: (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)	LOS
A	131.75	32.94	341.23	1075.07	0.123	131.91	117.52	0.2	0.2	4.181	A
B	243.92	60.98	141.68	1330.21	0.183	244.17	331.46	0.3	0.2	3.423	A
C	430.63	107.66	27.13	2382.55	0.181	430.86	358.73	0.3	0.2	1.899	A
D	57.97	14.49	400.74	1658.44	0.035	58.00	57.25	0.0	0.0	2.313	A

2025 With Development, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A,B,C,D	3.16	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Capacity Options

[same as above]

Roundabout Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2025 With Development	PM	ONE HOUR	16:00	17:30	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	✓	175.00	100.000
B		ONE HOUR	✓	353.00	100.000
C		ONE HOUR	✓	572.00	100.000
D		ONE HOUR	✓	77.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	1.000	49.000	124.000	1.000
	B	25.000	0.000	320.000	8.000
	C	124.000	377.000	5.000	66.000
	D	6.000	14.000	56.000	1.000

Proportions

		To			
		A	B	C	D
From	A	0.01	0.28	0.71	0.01
	B	0.07	0.00	0.91	0.02
	C	0.22	0.66	0.01	0.12
	D	0.08	0.18	0.73	0.01

Vehicle Mix

Heavy Vehicle proportion

		To			
		A	B	C	D
From	A	0	0	14	0
	B	8	0	4	0
	C	8	1	35	4
	D	0	0	4	0

Average PCU Per Veh

		To			
		A	B	C	D
From	A	1.000	1.000	1.140	1.000
	B	1.080	1.000	1.040	1.000
	C	1.080	1.010	1.350	1.040
	D	1.000	1.000	1.040	1.000

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)
A	0.19	4.86	0.3	A	160.58	240.87
B	0.30	4.12	0.4	A	323.92	485.88
C	0.27	2.13	0.4	A	524.88	787.32
D	0.05	2.52	0.1	A	70.66	105.98

Main Results for each time segment

Main results: (16:00-16:15)

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)	LOS
A	131.75	32.94	340.30	1075.49	0.123	131.14	117.16	0.0	0.2	4.172	A
B	265.76	66.44	140.98	1330.55	0.200	264.72	330.46	0.0	0.3	3.515	A
C	430.63	107.66	27.00	2382.64	0.181	429.72	378.71	0.0	0.2	1.898	A
D	57.97	14.49	399.64	1659.06	0.035	57.82	57.08	0.0	0.0	2.312	A

Main results: (16:15-16:30)

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)	LOS
A	157.32	39.33	407.05	1045.52	0.150	157.16	140.17	0.2	0.2	4.439	A
B	317.34	79.33	168.86	1316.84	0.241	317.06	395.35	0.3	0.3	3.751	A
C	514.22	128.55	32.33	2379.05	0.216	513.99	453.59	0.2	0.3	1.988	A
D	69.22	17.31	478.04	1615.24	0.043	69.19	68.29	0.0	0.0	2.395	A

Main results: (16:30-16:45)

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)	LOS
A	192.68	48.17	498.48	1004.48	0.192	192.42	171.65	0.2	0.3	4.854	A
B	388.66	97.17	206.76	1298.19	0.299	388.21	484.14	0.3	0.4	4.119	A
C	629.78	157.45	39.59	2374.17	0.265	629.43	555.38	0.3	0.4	2.125	A
D	84.78	21.19	585.40	1555.24	0.055	84.73	83.62	0.0	0.1	2.518	A

Main results: (16:45-17:00)

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)	LOS
A	192.68	48.17	498.76	1004.36	0.192	192.68	171.76	0.3	0.3	4.857	A
B	388.66	97.17	206.99	1298.08	0.299	388.65	484.45	0.4	0.4	4.123	A
C	629.78	157.45	39.64	2374.14	0.265	629.78	556.01	0.4	0.4	2.125	A
D	84.78	21.19	585.74	1555.05	0.055	84.78	83.68	0.1	0.1	2.518	A

Main results: (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)	LOS
A	157.32	39.33	407.52	1045.31	0.151	157.58	140.35	0.3	0.2	4.442	A
B	317.34	79.33	169.23	1316.65	0.241	317.78	395.86	0.4	0.3	3.755	A
C	514.22	128.55	32.41	2379.00	0.216	514.56	454.61	0.4	0.3	1.990	A
D	69.22	17.31	478.60	1614.93	0.043	69.27	68.37	0.1	0.0	2.395	A

Main results: (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)	LOS
A	131.75	32.94	341.23	1075.07	0.123	131.91	117.52	0.2	0.2	4.182	A
B	265.76	66.44	141.68	1330.21	0.200	266.04	331.46	0.3	0.3	3.527	A
C	430.63	107.66	27.13	2382.55	0.181	430.86	380.59	0.3	0.2	1.899	A
D	57.97	14.49	400.74	1658.44	0.035	58.00	57.25	0.0	0.0	2.313	A

2030 No Development, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A,B,C,D	3.20	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Capacity Options

[same as above]

Roundabout Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2030 No Development	PM	ONE HOUR	16:00	17:30	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	✓	189.00	100.000
B		ONE HOUR	✓	349.00	100.000
C		ONE HOUR	✓	618.00	100.000
D		ONE HOUR	✓	83.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	1.000	52.000	135.000	1.000
	B	27.000	0.000	313.000	9.000
	C	134.000	406.000	6.000	72.000
	D	6.000	15.000	61.000	1.000

Proportions

		To			
		A	B	C	D
From	A	0.01	0.28	0.71	0.01
	B	0.08	0.00	0.90	0.03
	C	0.22	0.66	0.01	0.12
	D	0.07	0.18	0.73	0.01

Vehicle Mix

Heavy Vehicle proportion

		To			
		A	B	C	D
From	A	0	0	15	0
	B	8	0	3	0
	C	9	1	36	4
	D	0	0	5	0

Average PCU Per Veh

		To			
		A	B	C	D
From	A	1.000	1.000	1.150	1.000
	B	1.080	1.000	1.030	1.000
	C	1.090	1.010	1.360	1.040
	D	1.000	1.000	1.050	1.000

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)
A	0.21	5.10	0.3	A	173.43	260.14
B	0.30	4.11	0.4	A	320.25	480.37
C	0.29	2.20	0.4	A	567.09	850.63
D	0.06	2.59	0.1	A	76.16	114.24

Main Results for each time segment

Main results: (16:00-16:15)

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)	LOS
A	142.29	35.57	367.33	1063.36	0.134	141.61	126.17	0.0	0.2	4.304	A
B	262.75	65.69	153.71	1324.29	0.198	261.73	355.23	0.0	0.3	3.496	A
C	465.26	116.32	29.25	2381.12	0.195	464.26	386.19	0.0	0.3	1.938	A
D	62.49	15.62	431.17	1641.43	0.038	62.32	62.34	0.0	0.0	2.362	A

Main results: (16:15-16:30)

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)	LOS
A	169.91	42.48	439.39	1031.01	0.165	169.72	150.95	0.2	0.2	4.608	A
B	313.74	78.44	184.12	1309.33	0.240	313.47	424.99	0.3	0.3	3.733	A
C	555.57	138.89	35.03	2377.23	0.234	555.31	462.56	0.3	0.3	2.040	A
D	74.62	18.65	515.77	1594.15	0.047	74.58	74.58	0.0	0.1	2.454	A

Main results: (16:30-16:45)

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)	LOS
A	208.09	52.02	538.08	986.71	0.211	207.79	184.84	0.2	0.3	5.093	A
B	384.26	96.06	225.44	1289.01	0.298	383.81	520.43	0.3	0.4	4.106	A
C	680.43	170.11	42.89	2371.95	0.287	680.03	566.36	0.3	0.4	2.197	A
D	91.38	22.85	631.60	1529.42	0.060	91.33	91.32	0.1	0.1	2.593	A

Main results: (16:45-17:00)

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)	LOS
A	208.09	52.02	538.40	986.57	0.211	208.09	184.97	0.3	0.3	5.099	A
B	384.26	96.06	225.71	1288.88	0.298	384.25	520.78	0.4	0.4	4.110	A
C	680.43	170.11	42.94	2371.91	0.287	680.43	567.02	0.4	0.4	2.197	A
D	91.38	22.85	631.98	1529.20	0.060	91.38	91.38	0.1	0.1	2.594	A

Main results: (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)	LOS
A	169.91	42.48	439.92	1030.77	0.165	170.21	151.15	0.3	0.2	4.614	A
B	313.74	78.44	184.56	1309.12	0.240	314.18	425.57	0.4	0.3	3.741	A
C	555.57	138.89	35.11	2377.18	0.234	555.96	463.63	0.4	0.3	2.042	A
D	74.62	18.65	516.40	1593.80	0.047	74.67	74.67	0.1	0.1	2.455	A

Main results: (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)	LOS
A	142.29	35.57	368.35	1062.89	0.134	142.48	126.56	0.2	0.2	4.313	A
B	262.75	65.69	154.50	1323.90	0.198	263.03	356.33	0.3	0.3	3.507	A
C	465.26	116.32	29.39	2381.03	0.195	465.52	388.14	0.3	0.3	1.940	A
D	62.49	15.62	432.39	1640.75	0.038	62.53	62.53	0.1	0.0	2.365	A

2030 With Development, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A,B,C,D	3.28	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Capacity Options

[same as above]

Roundabout Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2030 With Development	PM	ONE HOUR	16:00	17:30	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	✓	189.00	100.000
B		ONE HOUR	✓	379.00	100.000
C		ONE HOUR	✓	618.00	100.000
D		ONE HOUR	✓	83.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	1.000	52.000	135.000	1.000
	B	27.000	0.000	343.000	9.000
	C	134.000	406.000	6.000	72.000
	D	6.000	15.000	61.000	1.000

Proportions

		To			
		A	B	C	D
From	A	0.01	0.28	0.71	0.01
	B	0.07	0.00	0.91	0.02
	C	0.22	0.66	0.01	0.12
	D	0.07	0.18	0.73	0.01

Vehicle Mix

Heavy Vehicle proportion

		To			
		A	B	C	D
From	A	0	0	15	0
	B	8	0	4	0
	C	9	1	36	4
	D	0	0	5	0

Average PCU Per Veh

		To			
		A	B	C	D
From	A	1.000	1.000	1.150	1.000
	B	1.080	1.000	1.040	1.000
	C	1.090	1.010	1.360	1.040
	D	1.000	1.000	1.050	1.000

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)
A	0.21	5.10	0.3	A	173.43	260.14
B	0.32	4.30	0.5	A	347.78	521.67
C	0.29	2.20	0.4	A	567.09	850.63
D	0.06	2.59	0.1	A	76.16	114.24

Main Results for each time segment

Main results: (16:00-16:15)

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)	LOS
A	142.29	35.57	367.33	1063.36	0.134	141.61	126.17	0.0	0.2	4.304	A
B	285.33	71.33	153.71	1324.29	0.215	284.19	355.23	0.0	0.3	3.603	A
C	465.26	116.32	29.24	2381.13	0.195	464.26	408.66	0.0	0.3	1.938	A
D	62.49	15.62	431.17	1641.44	0.038	62.32	62.34	0.0	0.0	2.362	A

Main results: (16:15-16:30)

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)	LOS
A	169.91	42.48	439.39	1031.01	0.165	169.72	150.95	0.2	0.2	4.608	A
B	340.71	85.18	184.12	1309.33	0.260	340.39	424.99	0.3	0.4	3.870	A
C	555.57	138.89	35.03	2377.24	0.234	555.31	489.49	0.3	0.3	2.040	A
D	74.62	18.65	515.76	1594.15	0.047	74.58	74.58	0.0	0.1	2.454	A

Main results: (16:30-16:45)

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)	LOS
A	208.09	52.02	538.08	986.71	0.211	207.79	184.84	0.2	0.3	5.093	A
B	417.29	104.32	225.44	1289.01	0.324	416.76	520.43	0.4	0.5	4.296	A
C	680.43	170.11	42.89	2371.95	0.287	680.03	599.32	0.3	0.4	2.197	A
D	91.38	22.85	631.59	1529.42	0.060	91.33	91.32	0.1	0.1	2.593	A

Main results: (16:45-17:00)

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)	LOS
A	208.09	52.02	538.40	986.57	0.211	208.09	184.97	0.3	0.3	5.099	A
B	417.29	104.32	225.71	1288.88	0.324	417.28	520.78	0.5	0.5	4.302	A
C	680.43	170.11	42.94	2371.91	0.287	680.43	600.05	0.4	0.4	2.197	A
D	91.38	22.85	631.98	1529.20	0.060	91.38	91.38	0.1	0.1	2.594	A

Main results: (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)	LOS
A	169.91	42.48	439.92	1030.77	0.165	170.21	151.16	0.3	0.2	4.614	A
B	340.71	85.18	184.56	1309.12	0.260	341.23	425.57	0.5	0.4	3.876	A
C	555.57	138.89	35.11	2377.18	0.234	555.96	490.67	0.4	0.3	2.042	A
D	74.62	18.65	516.40	1593.80	0.047	74.67	74.68	0.1	0.1	2.455	A

Main results: (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)	LOS
A	142.29	35.57	368.35	1062.89	0.134	142.48	126.56	0.2	0.2	4.313	A
B	285.33	71.33	154.50	1323.90	0.216	285.65	356.33	0.4	0.3	3.615	A
C	465.26	116.32	29.39	2381.02	0.195	465.52	410.77	0.3	0.3	1.940	A
D	62.49	15.62	432.39	1640.75	0.038	62.53	62.53	0.1	0.0	2.365	A

2040 No Development, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A,B,C,D	3.32	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Capacity Options

[same as above]

Roundabout Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2040 No Development	PM	ONE HOUR	16:00	17:30	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	✓	202.00	100.000
B		ONE HOUR	✓	369.00	100.000
C		ONE HOUR	✓	655.00	100.000
D		ONE HOUR	✓	87.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	1.000	55.000	145.000	1.000
	B	28.000	0.000	332.000	9.000
	C	144.000	429.000	6.000	76.000
	D	6.000	16.000	64.000	1.000

Proportions

		To			
		A	B	C	D
From	A	0.00	0.27	0.72	0.00
	B	0.08	0.00	0.90	0.02
	C	0.22	0.65	0.01	0.12
	D	0.07	0.18	0.74	0.01

Vehicle Mix

Heavy Vehicle proportion

		To			
		A	B	C	D
From	A	0	0	17	0
	B	9	0	3	0
	C	10	1	40	4
	D	0	0	5	0

Average PCU Per Veh

		To			
		A	B	C	D
From	A	1.000	1.000	1.170	1.000
	B	1.090	1.000	1.030	1.000
	C	1.100	1.010	1.400	1.040
	D	1.000	1.000	1.050	1.000

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)
A	0.23	5.35	0.3	A	185.36	278.04
B	0.32	4.25	0.5	A	338.60	507.90
C	0.30	2.26	0.5	A	601.04	901.56
D	0.06	2.64	0.1	A	79.83	119.75

Main Results for each time segment

Main results: (16:00-16:15)

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)	LOS
A	152.08	38.02	387.59	1054.26	0.144	151.33	134.42	0.0	0.2	4.447	A
B	277.80	69.45	163.44	1319.51	0.211	276.71	375.48	0.0	0.3	3.565	A
C	493.12	123.28	29.99	2380.62	0.207	492.04	410.15	0.0	0.3	1.971	A
D	65.50	16.37	456.69	1627.17	0.040	65.32	65.34	0.0	0.0	2.388	A

Main results: (16:15-16:30)

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)	LOS
A	181.59	45.40	463.65	1020.12	0.178	181.38	160.83	0.2	0.2	4.790	A
B	331.72	82.93	195.79	1303.59	0.254	331.42	449.24	0.3	0.4	3.827	A
C	588.83	147.21	35.93	2376.63	0.248	588.55	491.28	0.3	0.3	2.083	A
D	78.21	19.55	546.31	1577.08	0.050	78.17	78.17	0.0	0.1	2.488	A

Main results: (16:30-16:45)

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)	LOS
A	222.41	55.60	567.77	973.38	0.228	222.05	196.94	0.2	0.3	5.347	A
B	406.28	101.57	239.71	1281.99	0.317	405.77	550.11	0.4	0.5	4.245	A
C	721.17	180.29	43.99	2371.21	0.304	720.72	601.50	0.3	0.5	2.257	A
D	95.79	23.95	668.99	1508.52	0.064	95.72	95.72	0.1	0.1	2.640	A

Main results: (16:45-17:00)

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)	LOS
A	222.41	55.60	568.12	973.22	0.229	222.40	197.08	0.3	0.3	5.352	A
B	406.28	101.57	240.02	1281.84	0.317	406.27	550.51	0.5	0.5	4.249	A
C	721.17	180.29	44.04	2371.17	0.304	721.17	602.25	0.5	0.5	2.257	A
D	95.79	23.95	669.42	1508.28	0.064	95.79	95.79	0.1	0.1	2.640	A

Main results: (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)	LOS
A	181.59	45.40	464.22	1019.86	0.178	181.94	161.06	0.3	0.2	4.798	A
B	331.72	82.93	196.28	1303.35	0.255	332.22	449.88	0.5	0.4	3.835	A
C	588.83	147.21	36.01	2376.57	0.248	589.27	492.48	0.5	0.3	2.084	A
D	78.21	19.55	547.01	1576.69	0.050	78.27	78.28	0.1	0.1	2.491	A

Main results: (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)	LOS
A	152.08	38.02	388.70	1053.76	0.144	152.29	134.85	0.2	0.2	4.460	A
B	277.80	69.45	164.31	1319.07	0.211	278.11	376.68	0.4	0.3	3.574	A
C	493.12	123.28	30.15	2380.52	0.207	493.40	412.28	0.3	0.3	1.973	A
D	65.50	16.37	458.01	1626.43	0.040	65.54	65.54	0.1	0.0	2.389	A

2040 With Development, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A,B,C,D	3.40	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Capacity Options

[same as above]

Roundabout Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2040 With Development	PM	ONE HOUR	16:00	17:30	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	✓	202.00	100.000
B		ONE HOUR	✓	399.00	100.000
C		ONE HOUR	✓	655.00	100.000
D		ONE HOUR	✓	87.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	1.000	55.000	145.000	1.000
	B	28.000	0.000	362.000	9.000
	C	144.000	429.000	6.000	76.000
	D	6.000	16.000	64.000	1.000

Proportions

		To			
		A	B	C	D
From	A	0.00	0.27	0.72	0.00
	B	0.07	0.00	0.91	0.02
	C	0.22	0.65	0.01	0.12
	D	0.07	0.18	0.74	0.01

Vehicle Mix

Heavy Vehicle proportion

		To			
		A	B	C	D
From	A	0	0	17	0
	B	9	0	4	0
	C	10	1	40	4
	D	0	0	5	0

Average PCU Per Veh

		To			
		A	B	C	D
From	A	1.000	1.000	1.170	1.000
	B	1.090	1.000	1.040	1.000
	C	1.100	1.010	1.400	1.040
	D	1.000	1.000	1.050	1.000

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)
A	0.23	5.35	0.3	A	185.36	278.04
B	0.34	4.45	0.5	A	366.13	549.19
C	0.30	2.26	0.5	A	601.04	901.56
D	0.06	2.64	0.1	A	79.83	119.75

Main Results for each time segment

Main results: (16:00-16:15)

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)	LOS
A	152.08	38.02	387.59	1054.26	0.144	151.33	134.42	0.0	0.2	4.447	A
B	300.39	75.10	163.44	1319.51	0.228	299.17	375.48	0.0	0.3	3.672	A
C	493.12	123.28	29.99	2380.62	0.207	492.04	432.61	0.0	0.3	1.971	A
D	65.50	16.37	456.69	1627.17	0.040	65.32	65.34	0.0	0.0	2.388	A

Main results: (16:15-16:30)

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)	LOS
A	181.59	45.40	463.65	1020.12	0.178	181.38	160.83	0.2	0.2	4.790	A
B	358.69	89.67	195.79	1303.59	0.275	358.34	449.24	0.3	0.4	3.969	A
C	588.83	147.21	35.92	2376.63	0.248	588.55	518.21	0.3	0.3	2.083	A
D	78.21	19.55	546.31	1577.09	0.050	78.17	78.17	0.0	0.1	2.488	A

Main results: (16:30-16:45)

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)	LOS
A	222.41	55.60	567.77	973.38	0.228	222.05	196.94	0.2	0.3	5.347	A
B	439.31	109.83	239.71	1281.99	0.343	438.72	550.11	0.4	0.5	4.447	A
C	721.17	180.29	43.98	2371.21	0.304	720.72	634.45	0.3	0.5	2.257	A
D	95.79	23.95	668.99	1508.52	0.064	95.72	95.72	0.1	0.1	2.640	A

Main results: (16:45-17:00)

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)	LOS
A	222.41	55.60	568.12	973.22	0.229	222.40	197.08	0.3	0.3	5.352	A
B	439.31	109.83	240.02	1281.84	0.343	439.30	550.51	0.5	0.5	4.453	A
C	721.17	180.29	44.04	2371.17	0.304	721.17	635.28	0.5	0.5	2.257	A
D	95.79	23.95	669.42	1508.28	0.064	95.79	95.79	0.1	0.1	2.640	A

Main results: (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)	LOS
A	181.59	45.40	464.22	1019.86	0.178	181.94	161.06	0.3	0.2	4.800	A
B	358.69	89.67	196.28	1303.35	0.275	359.27	449.88	0.5	0.4	3.978	A
C	588.83	147.21	36.02	2376.57	0.248	589.27	519.53	0.5	0.3	2.085	A
D	78.21	19.55	547.01	1576.69	0.050	78.27	78.28	0.1	0.1	2.489	A

Main results: (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)	LOS
A	152.08	38.02	388.70	1053.76	0.144	152.29	134.85	0.2	0.2	4.460	A
B	300.39	75.10	164.31	1319.07	0.228	300.74	376.68	0.4	0.3	3.685	A
C	493.12	123.28	30.15	2380.52	0.207	493.40	434.91	0.3	0.3	1.973	A
D	65.50	16.37	458.01	1626.43	0.040	65.54	65.54	0.1	0.0	2.391	A

Junctions 9

ARCADY 9 - Roundabout Module

Filename: Junction 2 AM.j9
Path: Y:\Junction 2
Report generation date: 13/10/2017 10:58:31

Summary of junction performance

	AM			
	Queue (PCU)	Delay (s)	RFC	LOS
2016 Base Year				
2025 No Development				
2025 With Development				
2030 No Development				
2030 With Development				
2040 No Development				
2040 With Development				

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	Junciton2
Location	Clonshagh
Site number	2
Date	05/07/2016
Version	
Status	
Identifier	
Client	Irish Water
Jobnumber	7556
Enumerator	TOBIN"Maria Rooney
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

Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
2016 Base Year	AM	ONE HOUR	07:30	09:00	15	✓
2025 No Development	AM	ONE HOUR	07:30	09:00	15	✓
2025 With Development	AM	ONE HOUR	07:30	09:00	15	✓
2030 No Development	AM	ONE HOUR	07:30	09:00	15	✓
2030 With Development	AM	ONE HOUR	07:30	09:00	15	✓
2040 No Development	AM	ONE HOUR	07:30	09:00	15	✓
2040 With Development	AM	ONE HOUR	07:30	09:00	15	✓

2016 Base Year , AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A,B,C,D	136.49	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	Clonshaugh Road	
B	R139 East	
C	Access Road	
D	R139 West	

Capacity Options

Arm	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)	Assume flat start profile	Initial queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00
D	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
A	8.00	8.10	30.0	38.0	66.0	35.0	
B	5.30	8.80	16.4	23.0	66.0	33.0	
C	4.20	5.90	9.0	14.0	66.0	53.0	
D	6.70	9.20	18.0	65.0	66.0	38.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A	0.651	2468.246
B	0.610	2227.037
C	0.456	1433.059
D	0.668	2570.090

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	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2016 Base Year	AM	ONE HOUR	07:30	09:00	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	✓	460.00	100.000
B		ONE HOUR	✓	2163.00	100.000
C		ONE HOUR	✓	0.00	100.000
D		ONE HOUR	✓	2208.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0.000	228.000	0.000	232.000
	B	133.000	19.000	0.000	2011.000
	C	0.000	0.000	0.000	0.000
	D	135.000	2071.000	0.000	2.000

Proportions

		To			
		A	B	C	D
From	A	0.00	0.50	0.00	0.50
	B	0.06	0.01	0.00	0.93
	C	0.25	0.25	0.25	0.25
	D	0.06	0.94	0.00	0.00

Vehicle Mix

Heavy Vehicle proportion

		To			
		A	B	C	D
From	A	0	6	0	9
	B	6	12	0	7
	C	0	0	0	0
	D	11	6	0	0

Average PCU Per Veh

		To			
		A	B	C	D
From	A	1.000	1.060	1.000	1.090
	B	1.060	1.120	1.000	1.070
	C	1.000	1.000	1.000	1.000
	D	1.110	1.060	1.000	1.000

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)
A	0.51	8.08	1.1	A	422.10	633.16
B	1.15	261.41	168.8	F	1984.81	2977.21
C	0.00	0.00	0.0	A	0.00	0.00
D	0.98	40.86	26.7	E	2026.10	3039.15

Main Results for each time segment

Main results: (07:30-07:45)

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)	LOS
A	346.31	86.58	1566.99	1447.52	0.239	344.97	200.41	0.0	0.3	3.504	A
B	1628.42	407.10	175.48	2120.06	0.768	1614.75	1736.48	0.0	3.4	7.433	A
C	0.00	0.00	1790.23	616.48	0.000	0.00	0.00	0.0	0.0	0.000	A
D	1662.30	415.57	113.47	2494.28	0.666	1653.93	1676.75	0.0	2.1	4.510	A

Main results: (07:45-08:00)

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)	LOS
A	413.53	103.38	1872.90	1248.26	0.331	412.76	238.71	0.3	0.5	4.628	A
B	1944.49	486.12	209.97	2099.04	0.926	1916.33	2075.69	3.4	10.5	18.705	C
C	0.00	0.00	2126.30	463.19	0.000	0.00	0.00	0.0	0.0	0.000	A
D	1984.95	496.24	134.67	2480.12	0.800	1976.94	1991.63	2.1	4.1	7.485	A

Main results: (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)	LOS
A	506.47	126.62	2238.75	1009.95	0.501	504.33	271.31	0.5	1.1	7.621	A
B	2381.51	595.38	256.50	2070.67	1.150	2060.51	2486.58	10.5	90.7	96.289	F
C	0.00	0.00	2317.01	376.20	0.000	0.00	0.00	0.0	0.0	0.000	A
D	2431.05	607.76	144.80	2473.35	0.983	2365.27	2172.21	4.1	20.5	26.290	D

Main results: (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)	LOS
A	506.47	126.62	2277.35	984.81	0.514	506.24	274.35	1.1	1.1	8.080	A
B	2381.51	595.38	257.50	2070.07	1.150	2069.03	2526.08	90.7	168.8	230.358	F
C	0.00	0.00	2326.53	371.86	0.000	0.00	0.00	0.0	0.0	0.000	A
D	2431.05	607.76	145.40	2472.95	0.983	2406.29	2181.13	20.5	26.7	40.865	E

Main results: (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)	LOS
A	413.53	103.38	1965.22	1188.12	0.348	415.70	254.98	1.1	0.6	5.025	A
B	1944.49	486.12	211.54	2098.08	0.927	2084.87	2169.38	168.8	133.7	261.413	F
C	0.00	0.00	2296.41	385.60	0.000	0.00	0.00	0.0	0.0	0.000	A
D	1984.95	496.24	146.51	2472.21	0.803	2073.69	2149.90	26.7	4.5	11.635	B

Main results: (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)	LOS
A	346.31	86.58	1587.87	1433.92	0.242	347.25	231.49	0.6	0.3	3.563	A
B	1628.42	407.10	176.65	2119.35	0.768	2102.53	1758.47	133.7	15.2	130.983	F
C	0.00	0.00	2279.18	393.46	0.000	0.00	0.00	0.0	0.0	0.000	A
D	1662.30	415.57	147.75	2471.38	0.673	1671.60	2131.43	4.5	2.2	4.840	A

2025 No Development , AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A,B,C,D	417.38	F

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Capacity Options

[same as above]

Roundabout Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2025 No Development	AM	ONE HOUR	07:30	09:00	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	✓	629.00	100.000
B		ONE HOUR	✓	2485.00	100.000
C		ONE HOUR	✓	0.00	100.000
D		ONE HOUR	✓	2534.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0.000	362.000	0.000	267.000
	B	153.000	22.000	0.000	2310.000
	C	0.000	0.000	0.000	0.000
	D	156.000	2376.000	0.000	2.000

Proportions

		To			
		A	B	C	D
From	A	0.00	0.58	0.00	0.42
	B	0.06	0.01	0.00	0.93
	C	0.25	0.25	0.25	0.25
	D	0.06	0.94	0.00	0.00

Vehicle Mix

Heavy Vehicle proportion

		To			
		A	B	C	D
From	A	0	6	0	10
	B	7	13	0	8
	C	0	0	0	0
	D	12	6	0	0

Average PCU Per Veh

		To			
		A	B	C	D
From	A	1.000	1.060	1.000	1.100
	B	1.070	1.130	1.000	1.080
	C	1.000	1.000	1.000	1.000
	D	1.120	1.060	1.000	1.000

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)
A	0.73	15.25	2.8	C	577.18	865.77
B	1.34	720.91	435.9	F	2280.28	3420.42
C	0.00	0.00	0.0	A	0.00	0.00
D	1.13	219.55	171.8	F	2325.24	3487.86

Main Results for each time segment

Main results: (07:30-07:45)

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)	LOS
A	473.54	118.39	1793.75	1299.81	0.364	471.10	229.93	0.0	0.6	4.664	A
B	1870.84	467.71	201.47	2104.22	0.889	1840.67	2063.38	0.0	7.5	13.503	B
C	0.00	0.00	2042.14	501.58	0.000	0.00	0.00	0.0	0.0	0.000	A
D	1907.73	476.93	129.62	2483.49	0.768	1894.06	1912.51	0.0	3.4	6.357	A

Main results: (07:45-08:00)

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)	LOS
A	565.46	141.36	2130.70	1080.33	0.523	563.26	265.06	0.6	1.2	7.465	A
B	2233.96	558.49	240.87	2080.20	1.074	2054.19	2453.09	7.5	52.5	61.868	F
C	0.00	0.00	2295.06	386.21	0.000	0.00	0.00	0.0	0.0	0.000	A
D	2278.01	569.50	144.66	2473.44	0.921	2251.10	2150.39	3.4	10.1	15.604	C

Main results: (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)	LOS
A	692.54	173.14	2327.47	952.16	0.727	686.32	277.56	1.2	2.7	14.257	B
B	2736.04	684.01	293.28	2048.26	1.336	2047.52	2720.52	52.5	224.6	248.733	F
C	0.00	0.00	2340.80	365.35	0.000	0.00	0.00	0.0	0.0	0.000	A
D	2789.99	697.50	144.19	2473.76	1.128	2460.84	2196.61	10.1	92.4	82.299	F

Main results: (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)	LOS
A	692.54	173.14	2338.36	945.06	0.733	692.02	278.22	2.7	2.8	15.248	C
B	2736.04	684.01	295.70	2046.78	1.337	2046.67	2734.68	224.6	397.0	546.962	F
C	0.00	0.00	2342.38	364.63	0.000	0.00	0.00	0.0	0.0	0.000	A
D	2789.99	697.50	144.13	2473.80	1.128	2472.45	2198.24	92.4	171.8	197.130	F

Main results: (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)	LOS
A	565.46	141.36	2324.24	954.26	0.593	570.42	279.21	2.8	1.6	10.225	B
B	2233.96	558.49	244.07	2078.25	1.075	2078.06	2650.59	397.0	435.9	720.910	F
C	0.00	0.00	2322.14	373.86	0.000	0.00	0.00	0.0	0.0	0.000	A
D	2278.01	569.50	146.34	2472.32	0.921	2457.11	2175.79	171.8	127.0	219.548	F

Main results: (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)	LOS
A	473.54	118.39	2269.61	989.84	0.478	475.96	276.81	1.6	1.0	7.579	A
B	1870.84	467.71	203.93	2102.72	0.890	2097.53	2541.64	435.9	379.3	699.753	F
C	0.00	0.00	2301.46	383.30	0.000	0.00	0.00	0.0	0.0	0.000	A
D	1907.73	476.93	147.71	2471.41	0.772	2398.71	2153.74	127.0	4.3	91.582	F

2025 With Development , AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A,B,C,D	437.25	F

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Capacity Options

[same as above]

Roundabout Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2025 With Development	AM	ONE HOUR	07:30	09:00	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	✓	538.00	100.000
B		ONE HOUR	✓	2485.00	100.000
C		ONE HOUR	✓	0.00	100.000
D		ONE HOUR	✓	2557.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0.000	262.000	0.000	276.000
	B	153.000	22.000	0.000	2310.000
	C	0.000	0.000	0.000	0.000
	D	156.000	2399.000	0.000	2.000

Proportions

		To			
		A	B	C	D
From	A	0.00	0.49	0.00	0.51
	B	0.06	0.01	0.00	0.93
	C	0.25	0.25	0.25	0.25
	D	0.06	0.94	0.00	0.00

Vehicle Mix

Heavy Vehicle proportion

		To			
		A	B	C	D
From	A	0	6	0	11
	B	7	13	0	8
	C	0	0	0	0
	D	12	6	0	0

Average PCU Per Veh

		To			
		A	B	C	D
From	A	1.000	1.060	1.000	1.110
	B	1.070	1.130	1.000	1.080
	C	1.000	1.000	1.000	1.000
	D	1.120	1.060	1.000	1.000

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)
A	0.63	11.09	1.8	B	493.68	740.52
B	1.34	730.68	441.3	F	2280.28	3420.42
C	0.00	0.00	0.0	A	0.00	0.00
D	1.14	241.74	184.7	F	2346.35	3519.52

Main Results for each time segment

Main results: (07:30-07:45)

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)	LOS
A	405.03	101.26	1810.56	1288.86	0.314	403.06	229.88	0.0	0.5	4.400	A
B	1870.84	467.71	208.27	2100.08	0.891	1840.25	2005.35	0.0	7.6	13.669	B
C	0.00	0.00	2048.52	498.67	0.000	0.00	0.00	0.0	0.0	0.000	A
D	1925.04	481.26	129.59	2483.51	0.775	1910.85	1918.92	0.0	3.5	6.532	A

Main results: (07:45-08:00)

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)	LOS
A	483.65	120.91	2148.50	1068.73	0.453	482.09	264.64	0.5	0.9	6.641	A
B	2233.96	558.49	249.09	2075.19	1.077	2050.11	2381.50	7.6	53.6	63.042	F
C	0.00	0.00	2299.20	384.33	0.000	0.00	0.00	0.0	0.0	0.000	A
D	2298.69	574.67	144.37	2473.64	0.929	2268.77	2154.82	3.5	11.0	16.668	C

Main results: (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)	LOS
A	592.35	148.09	2330.72	950.04	0.624	588.92	275.92	0.9	1.7	10.715	B
B	2736.04	684.01	304.05	2041.69	1.340	2040.99	2615.59	53.6	227.4	252.895	F
C	0.00	0.00	2345.04	363.42	0.000	0.00	0.00	0.0	0.0	0.000	A
D	2815.31	703.83	143.73	2474.07	1.138	2462.91	2201.31	11.0	99.1	87.610	F

Main results: (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)	LOS
A	592.35	148.09	2340.17	943.88	0.628	592.15	276.51	1.7	1.8	11.091	B
B	2736.04	684.01	305.71	2040.67	1.341	2040.57	2626.60	227.4	401.2	554.550	F
C	0.00	0.00	2346.29	362.85	0.000	0.00	0.00	0.0	0.0	0.000	A
D	2815.31	703.83	143.70	2474.09	1.138	2472.98	2202.59	99.1	184.7	211.172	F

Main results: (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)	LOS
A	483.65	120.91	2326.75	952.62	0.508	486.27	277.65	1.8	1.1	8.424	A
B	2233.96	558.49	251.38	2073.79	1.077	2073.62	2561.64	401.2	441.3	730.681	F
C	0.00	0.00	2325.00	372.56	0.000	0.00	0.00	0.0	0.0	0.000	A
D	2298.69	574.67	146.03	2472.53	0.930	2458.38	2178.97	184.7	144.8	241.743	F

Main results: (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)	LOS
A	405.03	101.26	2322.41	955.45	0.424	406.36	278.60	1.1	0.8	7.133	A
B	1870.84	467.71	210.38	2098.79	0.891	2093.66	2518.38	441.3	385.6	711.146	F
C	0.00	0.00	2304.05	382.11	0.000	0.00	0.00	0.0	0.0	0.000	A
D	1925.04	481.26	147.44	2471.59	0.779	2453.57	2156.61	144.8	12.7	118.801	F

2030 No Development , AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A,B,C,D	696.14	F

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Capacity Options

[same as above]

Roundabout Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2030 No Development	AM	ONE HOUR	07:30	09:00	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	✓	571.00	100.000
B		ONE HOUR	✓	2687.00	100.000
C		ONE HOUR	✓	0.00	100.000
D		ONE HOUR	✓	2738.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0.000	283.000	0.000	288.000
	B	165.000	24.000	0.000	2498.000
	C	0.000	0.000	0.000	0.000
	D	169.000	2567.000	0.000	2.000

Proportions

		To			
		A	B	C	D
From	A	0.00	0.50	0.00	0.50
	B	0.06	0.01	0.00	0.93
	C	0.25	0.25	0.25	0.25
	D	0.06	0.94	0.00	0.00

Vehicle Mix

Heavy Vehicle proportion

		To			
		A	B	C	D
From	A	0	7	0	10
	B	7	13	0	8
	C	0	0	0	0
	D	13	6	0	0

Average PCU Per Veh

		To			
		A	B	C	D
From	A	1.000	1.070	1.000	1.100
	B	1.070	1.130	1.000	1.080
	C	1.000	1.000	1.000	1.000
	D	1.130	1.060	1.000	1.000

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)
A	0.67	12.35	2.1	B	523.96	785.94
B	1.46	1111.95	653.8	F	2465.64	3698.46
C	0.00	0.00	0.0	A	0.00	0.00
D	1.22	430.67	295.1	F	2512.44	3768.65

Main Results for each time segment

Main results: (07:30-07:45)

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)	LOS
A	429.88	107.47	1932.91	1209.17	0.356	427.51	246.36	0.0	0.6	4.982	A
B	2022.91	505.73	217.12	2094.68	0.966	1960.04	2143.30	0.0	15.7	22.902	C
C	0.00	0.00	2177.15	439.99	0.000	0.00	0.00	0.0	0.0	0.000	A
D	2061.31	515.33	137.87	2477.98	0.832	2041.41	2039.29	0.0	5.0	8.427	A

Main results: (07:45-08:00)

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)	LOS
A	513.32	128.33	2255.78	998.85	0.514	511.18	273.82	0.6	1.1	7.974	A
B	2415.56	603.89	259.57	2068.80	1.168	2062.20	2507.39	15.7	104.1	112.483	F
C	0.00	0.00	2321.77	374.03	0.000	0.00	0.00	0.0	0.0	0.000	A
D	2461.41	615.35	145.05	2473.18	0.995	2384.55	2176.72	5.0	24.2	29.932	D

Main results: (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)	LOS
A	628.68	157.17	2337.00	945.95	0.665	624.91	277.42	1.1	2.1	12.023	B
B	2958.44	739.61	317.00	2033.80	1.455	2033.59	2644.92	104.1	335.3	392.955	F
C	0.00	0.00	2350.58	360.89	0.000	0.00	0.00	0.0	0.0	0.000	A
D	3014.59	753.65	143.04	2474.53	1.218	2471.38	2207.54	24.2	160.0	139.930	F

Main results: (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)	LOS
A	628.68	157.17	2339.69	944.19	0.666	628.50	277.54	2.1	2.1	12.354	B
B	2958.44	739.61	318.81	2032.69	1.455	2032.65	2649.38	335.3	566.7	795.239	F
C	0.00	0.00	2351.46	360.49	0.000	0.00	0.00	0.0	0.0	0.000	A
D	3014.59	753.65	142.97	2474.57	1.218	2474.26	2208.49	160.0	295.1	334.647	F

Main results: (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)	LOS
A	513.32	128.33	2329.01	951.15	0.540	516.59	278.93	2.1	1.3	9.055	A
B	2415.56	603.89	262.36	2067.10	1.169	2067.06	2583.25	566.7	653.8	1063.442	F
C	0.00	0.00	2329.42	370.54	0.000	0.00	0.00	0.0	0.0	0.000	A
D	2461.41	615.35	145.39	2472.95	0.995	2462.55	2184.02	295.1	294.8	430.670	F

Main results: (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)	LOS
A	429.88	107.47	2329.64	950.74	0.452	431.44	280.36	1.3	0.9	7.545	A
B	2022.91	505.73	219.41	2093.29	0.966	2089.84	2541.67	653.8	637.1	1111.951	F
C	0.00	0.00	2309.24	379.74	0.000	0.00	0.00	0.0	0.0	0.000	A
D	2061.31	515.33	147.00	2471.88	0.834	2462.99	2162.25	294.8	194.4	358.083	F

2030 With Development , AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A,B,C,D	711.71	F

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Capacity Options

[same as above]

Roundabout Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2030 With Development	AM	ONE HOUR	07:30	09:00	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	✓	581.00	100.000
B		ONE HOUR	✓	2687.00	100.000
C		ONE HOUR	✓	0.00	100.000
D		ONE HOUR	✓	2760.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0.000	283.000	0.000	298.000
	B	165.000	24.000	0.000	2498.000
	C	0.000	0.000	0.000	0.000
	D	169.000	2589.000	0.000	2.000

Proportions

		To			
		A	B	C	D
From	A	0.00	0.49	0.00	0.51
	B	0.06	0.01	0.00	0.93
	C	0.25	0.25	0.25	0.25
	D	0.06	0.94	0.00	0.00

Vehicle Mix

Heavy Vehicle proportion

		To			
		A	B	C	D
From	A	0	7	0	12
	B	7	13	0	8
	C	0	0	0	0
	D	13	6	0	0

Average PCU Per Veh

		To			
		A	B	C	D
From	A	1.000	1.070	1.000	1.120
	B	1.070	1.130	1.000	1.080
	C	1.000	1.000	1.000	1.000
	D	1.130	1.060	1.000	1.000

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)
A	0.68	12.96	2.3	B	533.14	799.70
B	1.46	1126.37	660.2	F	2465.64	3698.46
C	0.00	0.00	0.0	A	0.00	0.00
D	1.23	455.10	312.2	F	2532.62	3798.94

Main Results for each time segment

Main results: (07:30-07:45)

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)	LOS
A	437.41	109.35	1948.61	1198.94	0.365	434.91	246.23	0.0	0.6	5.143	A
B	2022.91	505.73	224.56	2090.14	0.968	1958.60	2158.96	0.0	16.1	23.302	C
C	0.00	0.00	2183.16	437.25	0.000	0.00	0.00	0.0	0.0	0.000	A
D	2077.87	519.47	137.77	2478.05	0.839	2057.08	2045.40	0.0	5.2	8.713	A

Main results: (07:45-08:00)

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)	LOS
A	522.31	130.58	2266.53	991.85	0.527	520.02	272.96	0.6	1.2	8.315	A
B	2415.56	603.89	268.46	2063.38	1.171	2057.06	2518.09	16.1	105.7	114.474	F
C	0.00	0.00	2325.52	372.32	0.000	0.00	0.00	0.0	0.0	0.000	A
D	2481.18	620.30	144.69	2473.42	1.003	2394.79	2180.83	5.2	26.8	32.181	D

Main results: (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)	LOS
A	639.69	159.92	2338.89	944.72	0.677	635.66	275.85	1.2	2.2	12.590	B
B	2958.44	739.61	327.83	2027.19	1.459	2026.99	2646.72	105.7	338.6	398.596	F
C	0.00	0.00	2354.82	358.96	0.000	0.00	0.00	0.0	0.0	0.000	A
D	3038.82	759.70	142.58	2474.84	1.228	2472.16	2212.24	26.8	168.5	147.787	F

Main results: (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)	LOS
A	639.69	159.92	2341.18	943.22	0.678	639.49	275.93	2.2	2.3	12.956	B
B	2958.44	739.61	329.79	2026.00	1.460	2025.96	2650.88	338.6	571.7	804.831	F
C	0.00	0.00	2355.75	358.53	0.000	0.00	0.00	0.0	0.0	0.000	A
D	3038.82	759.70	142.50	2474.89	1.228	2474.61	2213.25	168.5	309.5	351.177	F

Main results: (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)	LOS
A	522.31	130.58	2337.49	945.63	0.552	525.81	277.85	2.3	1.4	9.468	A
B	2415.56	603.89	271.48	2061.54	1.172	2061.50	2591.81	571.7	660.2	1075.952	F
C	0.00	0.00	2332.98	368.92	0.000	0.00	0.00	0.0	0.0	0.000	A
D	2481.18	620.30	145.00	2473.22	1.003	2470.34	2187.98	309.5	312.2	455.105	F

Main results: (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)	LOS
A	437.41	109.35	2331.47	949.55	0.461	439.13	278.90	1.4	0.9	7.751	A
B	2022.91	505.73	227.02	2088.65	0.969	2085.23	2543.59	660.2	644.6	1126.367	F
C	0.00	0.00	2312.26	378.37	0.000	0.00	0.00	0.0	0.0	0.000	A
D	2077.87	519.47	146.67	2472.10	0.841	2463.71	2165.58	312.2	215.8	386.268	F

2040 No Development , AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A,B,C,D	975.54	F

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Capacity Options

[same as above]

Roundabout Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2040 No Development	AM	ONE HOUR	07:30	09:00	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	✓	611.00	100.000
B		ONE HOUR	✓	2869.00	100.000
C		ONE HOUR	✓	0.00	100.000
D		ONE HOUR	✓	2918.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0.000	302.000	0.000	309.000
	B	176.000	26.000	0.000	2667.000
	C	0.000	0.000	0.000	0.000
	D	181.000	2734.000	0.000	3.000

Proportions

		To			
		A	B	C	D
From	A	0.00	0.49	0.00	0.51
	B	0.06	0.01	0.00	0.93
	C	0.25	0.25	0.25	0.25
	D	0.06	0.94	0.00	0.00

Vehicle Mix

Heavy Vehicle proportion

		To			
		A	B	C	D
From	A	0	8	0	12
	B	8	15	0	9
	C	0	0	0	0
	D	14	7	0	0

Average PCU Per Veh

		To			
		A	B	C	D
From	A	1.000	1.080	1.000	1.120
	B	1.080	1.150	1.000	1.090
	C	1.000	1.000	1.000	1.000
	D	1.140	1.070	1.000	1.000

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)
A	0.71	14.54	2.7	B	560.66	841.00
B	1.57	1517.03	886.0	F	2632.64	3948.97
C	0.00	0.00	0.0	A	0.00	0.00
D	1.30	644.36	459.6	F	2677.61	4016.41

Main Results for each time segment

Main results: (07:30-07:45)

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)	LOS
A	459.99	115.00	2050.56	1132.53	0.406	457.02	258.39	0.0	0.7	5.836	A
B	2159.93	539.98	233.35	2084.78	1.036	2021.25	2274.23	0.0	34.7	39.554	E
C	0.00	0.00	2254.60	404.67	0.000	0.00	0.00	0.0	0.0	0.000	A
D	2196.82	549.21	142.31	2475.01	0.888	2166.64	2112.29	0.0	7.5	11.598	B

Main results: (07:45-08:00)

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)	LOS
A	549.28	137.32	2308.56	964.47	0.570	546.57	277.51	0.7	1.4	9.412	A
B	2579.17	644.79	278.93	2057.00	1.254	2055.24	2576.20	34.7	165.7	182.264	F
C	0.00	0.00	2334.16	368.38	0.000	0.00	0.00	0.0	0.0	0.000	A
D	2623.22	655.81	144.70	2473.42	1.061	2441.37	2189.46	7.5	53.0	53.058	F

Main results: (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)	LOS
A	672.72	168.18	2339.04	944.62	0.712	668.06	277.36	1.4	2.6	14.078	B
B	3158.83	789.71	340.40	2019.53	1.564	2019.44	2666.70	165.7	450.5	552.839	F
C	0.00	0.00	2359.84	356.66	0.000	0.00	0.00	0.0	0.0	0.000	A
D	3212.78	803.19	142.18	2475.10	1.298	2474.21	2217.66	53.0	237.7	216.034	F

Main results: (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)	LOS
A	672.72	168.18	2339.81	944.12	0.713	672.46	277.33	2.6	2.7	14.537	B
B	3158.83	789.71	342.63	2018.17	1.565	2018.15	2669.64	450.5	735.7	1049.018	F
C	0.00	0.00	2360.78	356.24	0.000	0.00	0.00	0.0	0.0	0.000	A
D	3212.78	803.19	142.09	2475.16	1.298	2475.04	2218.68	237.7	422.1	482.887	F

Main results: (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)	LOS
A	549.28	137.32	2338.41	945.03	0.581	553.63	279.46	2.7	1.6	10.227	B
B	2579.17	644.79	282.53	2054.81	1.255	2054.79	2609.51	735.7	866.8	1399.384	F
C	0.00	0.00	2337.32	366.94	0.000	0.00	0.00	0.0	0.0	0.000	A
D	2623.22	655.81	144.67	2473.44	1.061	2473.20	2192.64	422.1	459.6	644.364	F

Main results: (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)	LOS
A	459.99	115.00	2332.24	949.05	0.485	462.05	280.76	1.6	1.1	8.166	A
B	2159.93	539.98	236.21	2083.05	1.037	2082.96	2558.08	866.8	886.0	1517.030	F
C	0.00	0.00	2319.17	375.22	0.000	0.00	0.00	0.0	0.0	0.000	A
D	2196.82	549.21	146.66	2472.11	0.889	2466.35	2172.51	459.6	392.2	621.863	F

2040 With Development , AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A,B,C,D	992.63	F

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Capacity Options

[same as above]

Roundabout Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2040 With Development	AM	ONE HOUR	07:30	09:00	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	✓	621.00	100.000
B		ONE HOUR	✓	2869.00	100.000
C		ONE HOUR	✓	0.00	100.000
D		ONE HOUR	✓	2940.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0.000	302.000	0.000	319.000
	B	176.000	26.000	0.000	2667.000
	C	0.000	0.000	0.000	0.000
	D	181.000	2756.000	0.000	3.000

Proportions

		To			
		A	B	C	D
From	A	0.00	0.49	0.00	0.51
	B	0.06	0.01	0.00	0.93
	C	0.25	0.25	0.25	0.25
	D	0.06	0.94	0.00	0.00

Vehicle Mix

Heavy Vehicle proportion

		To			
		A	B	C	D
From	A	0	8	0	13
	B	8	15	0	9
	C	0	0	0	0
	D	14	7	0	0

Average PCU Per Veh

		To			
		A	B	C	D
From	A	1.000	1.080	1.000	1.130
	B	1.080	1.150	1.000	1.090
	C	1.000	1.000	1.000	1.000
	D	1.140	1.070	1.000	1.000

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)
A	0.72	15.27	2.8	C	569.84	854.76
B	1.57	1533.21	894.0	F	2632.64	3948.97
C	0.00	0.00	0.0	A	0.00	0.00
D	1.31	671.55	480.8	F	2697.80	4046.69

Main Results for each time segment

Main results: (07:30-07:45)

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)	LOS
A	467.52	116.88	2065.46	1122.82	0.416	464.40	258.11	0.0	0.8	6.015	A
B	2159.93	539.98	240.78	2080.25	1.038	2018.18	2289.08	0.0	35.4	40.252	E
C	0.00	0.00	2258.97	402.68	0.000	0.00	0.00	0.0	0.0	0.000	A
D	2213.39	553.35	142.10	2475.16	0.894	2181.48	2116.87	0.0	8.0	12.094	B

Main results: (07:45-08:00)

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)	LOS
A	558.27	139.57	2313.36	961.34	0.581	555.41	276.30	0.8	1.5	9.732	A
B	2579.17	644.79	287.80	2051.59	1.257	2049.90	2580.97	35.4	167.8	185.243	F
C	0.00	0.00	2337.70	366.76	0.000	0.00	0.00	0.0	0.0	0.000	A
D	2643.00	660.75	144.33	2473.67	1.068	2445.33	2193.37	8.0	57.4	56.435	F

Main results: (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)	LOS
A	683.73	170.93	2340.52	943.65	0.725	678.70	275.83	1.5	2.8	14.734	B
B	3158.83	789.71	351.17	2012.97	1.569	2012.88	2668.06	167.8	454.2	559.864	F
C	0.00	0.00	2364.05	354.75	0.000	0.00	0.00	0.0	0.0	0.000	A
D	3237.00	809.25	141.72	2475.41	1.308	2474.63	2222.33	57.4	248.0	226.580	F

Main results: (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)	LOS
A	683.73	170.93	2341.20	943.21	0.725	683.43	275.79	2.8	2.8	15.265	C
B	3158.83	789.71	353.59	2011.49	1.570	2011.47	2671.03	454.2	741.1	1060.090	F
C	0.00	0.00	2365.06	354.28	0.000	0.00	0.00	0.0	0.0	0.000	A
D	3237.00	809.25	141.62	2475.47	1.308	2475.37	2223.44	248.0	438.4	502.158	F

Main results: (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)	LOS
A	558.27	139.57	2339.79	944.13	0.591	563.01	277.99	2.8	1.6	10.564	B
B	2579.17	644.79	291.73	2049.20	1.259	2049.18	2611.07	741.1	873.6	1413.509	F
C	0.00	0.00	2340.91	365.30	0.000	0.00	0.00	0.0	0.0	0.000	A
D	2643.00	660.75	144.28	2473.70	1.068	2473.50	2196.63	438.4	480.8	671.552	F

Main results: (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)	LOS
A	467.52	116.88	2333.78	948.04	0.493	469.71	279.37	1.6	1.1	8.356	A
B	2159.93	539.98	243.80	2078.42	1.039	2078.34	2559.69	873.6	894.0	1533.213	F
C	0.00	0.00	2322.14	373.86	0.000	0.00	0.00	0.0	0.0	0.000	A
D	2213.39	553.35	146.33	2472.33	0.895	2466.82	2175.81	480.8	417.4	655.563	F

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.0.0.4211 []

For sales and distribution information, program advice and maintenance, contact TRL:
Tel: +44 (0)1344 770758 email: software@trl.co.uk Web: http://www.trlsoftware.co.uk

Filename: Junction 2 PM.j9
Path: Y:\Junction 2
Report generation date: 13/10/2017 10:59:12

Summary of junction performance

	PM			
	Queue (PCU)	Delay (s)	RFC	LOS
	2016 Base Year			
	2025 No Development			
Arm A	1.0	7.37	0.50	A
Arm B	642.9	1074.36	1.44	F
Arm C	0.0	0.00	0.00	A
Arm D	195.6	271.55	1.15	F
	2025 With Development			
Arm A	1.2	7.94	0.53	A
Arm B	662.0	1116.82	1.45	F
Arm C	0.0	0.00	0.00	A
Arm D	203.5	285.44	1.16	F
	2030 No Development			
Arm A	1.2	8.12	0.54	A
Arm B	918.5	1543.24	1.56	F
Arm C	0.0	0.00	0.00	A
Arm D	330.0	492.02	1.24	F
	2030 With Development			
Arm A	1.4	8.75	0.57	A
Arm B	941.8	1590.05	1.58	F
Arm C	0.0	0.00	0.00	A
Arm D	342.4	508.13	1.25	F
	2040 No Development			
Arm A	1.4	8.84	0.58	A
Arm B	1187.9	1975.74	1.67	F
Arm C	0.0	0.00	0.00	A
Arm D	490.8	704.67	1.32	F
	2040 With Development			
Arm A	1.7	9.73	0.61	A
Arm B	1212.7	2028.24	1.69	F
Arm C	0.0	0.00	0.00	A
Arm D	503.2	720.75	1.32	F

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	Junciton2
Location	Clonshagh
Site number	2
Date	05/07/2016
Version	
Status	
Identifier	
Client	Irish Water
Jobnumber	7556
Enumerator	TOBIN"Maria Rooney
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

Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
2016 Base Year	PM	ONE HOUR	16:00	17:30	15	✓
2025 No Development	PM	ONE HOUR	16:00	17:30	15	✓
2025 With Development	PM	ONE HOUR	16:00	17:30	15	✓
2030 No Development	PM	ONE HOUR	16:00	17:30	15	✓
2030 With Development	PM	ONE HOUR	16:00	17:30	15	✓
2040 No Development	PM	ONE HOUR	16:00	17:30	15	✓
2040 With Development	PM	ONE HOUR	16:00	17:30	15	✓

2016 Base Year , PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A,B,C,D	253.83	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	Clonshaugh Road	
B	R139 East	
C	Access Road	
D	R139 East	

Capacity Options

Arm	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)	Assume flat start profile	Initial queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00
D	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
A	8.00	8.10	30.0	38.0	66.0	35.0	
B	5.30	8.80	16.4	23.0	66.0	33.0	
C	4.20	5.90	9.0	14.0	66.0	53.0	
D	6.70	9.20	18.0	65.0	66.0	38.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A	0.651	2468.246
B	0.610	2227.037
C	0.456	1433.059
D	0.668	2570.090

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	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2016 Base Year	PM	ONE HOUR	16:00	17:30	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	✓	409.00	100.000
B		ONE HOUR	✓	2370.00	100.000
C		ONE HOUR	✓	0.00	100.000
D		ONE HOUR	✓	2185.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0.000	225.000	0.000	184.000
	B	272.000	25.000	0.000	2073.000
	C	0.000	0.000	0.000	0.000
	D	201.000	1979.000	0.000	5.000

Proportions

		To			
		A	B	C	D
From	A	0.00	0.55	0.00	0.45
	B	0.11	0.01	0.00	0.87
	C	0.25	0.25	0.25	0.25
	D	0.09	0.91	0.00	0.00

Vehicle Mix

Heavy Vehicle proportion

		To			
		A	B	C	D
From	A	0	4	0	10
	B	2	0	0	7
	C	0	0	0	0
	D	5	4	0	0

Average PCU Per Veh

		To			
		A	B	C	D
From	A	1.000	1.040	1.000	1.100
	B	1.020	1.000	1.000	1.070
	C	1.000	1.000	1.000	1.000
	D	1.050	1.040	1.000	1.000

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)
A	0.43	6.31	0.8	A	375.31	562.96
B	1.24	478.86	282.6	F	2174.75	3262.13
C	0.00	0.00	0.0	A	0.00	0.00
D	1.00	56.07	38.2	F	2004.99	3007.49

Main Results for each time segment

Main results: (16:00-16:15)

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)	LOS
A	307.92	76.98	1504.40	1488.29	0.207	306.81	353.01	0.0	0.3	3.245	A
B	1784.26	446.07	141.77	2140.61	0.834	1764.32	1669.44	0.0	5.0	9.714	A
C	0.00	0.00	1906.09	563.63	0.000	0.00	0.00	0.0	0.0	0.000	A
D	1644.98	411.25	221.10	2422.38	0.679	1636.32	1684.99	0.0	2.2	4.717	A

Main results: (16:15-16:30)

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)	LOS
A	367.68	91.92	1796.79	1297.84	0.283	367.11	415.27	0.3	0.4	4.121	A
B	2130.58	532.65	169.63	2123.63	1.003	2051.32	1994.27	5.0	24.8	34.953	D
C	0.00	0.00	2220.95	420.01	0.000	0.00	0.00	0.0	0.0	0.000	A
D	1964.27	491.07	257.06	2398.35	0.819	1954.99	1963.89	2.2	4.5	8.280	A

Main results: (16:30-16:45)

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)	LOS
A	450.32	112.58	2126.73	1082.91	0.416	448.99	454.01	0.4	0.8	6.042	A
B	2609.42	652.35	207.29	2100.67	1.242	2098.11	2368.43	24.8	152.6	158.485	F
C	0.00	0.00	2305.41	381.49	0.000	0.00	0.00	0.0	0.0	0.000	A
D	2405.73	601.43	262.93	2394.43	1.005	2317.82	2042.48	4.5	26.5	32.262	D

Main results: (16:45-17:00)

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)	LOS
A	450.32	112.58	2164.00	1058.64	0.425	450.19	458.01	0.8	0.8	6.306	A
B	2609.42	652.35	207.93	2100.28	1.242	2100.01	2406.26	152.6	280.0	373.592	F
C	0.00	0.00	2307.94	380.34	0.000	0.00	0.00	0.0	0.0	0.000	A
D	2405.73	601.43	263.17	2394.27	1.005	2358.83	2044.78	26.5	38.2	56.072	F

Main results: (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)	LOS
A	367.68	91.92	1926.10	1213.60	0.303	368.94	436.20	0.8	0.5	4.550	A
B	2130.58	532.65	170.78	2122.93	1.004	2120.21	2124.27	280.0	282.6	478.863	F
C	0.00	0.00	2290.99	388.07	0.000	0.00	0.00	0.0	0.0	0.000	A
D	1964.27	491.07	265.70	2392.58	0.821	2096.61	2025.29	38.2	5.1	17.882	C

Main results: (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)	LOS
A	307.92	76.98	1526.22	1474.08	0.209	308.65	397.04	0.5	0.3	3.294	A
B	1784.26	446.07	142.65	2140.08	0.834	2132.06	1692.22	282.6	195.6	404.292	F
C	0.00	0.00	2274.70	395.50	0.000	0.00	0.00	0.0	0.0	0.000	A
D	1644.98	411.25	267.18	2391.59	0.688	1656.07	2007.52	5.1	2.3	5.170	A

2025 No Development, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A,B,C,D	633.37	F

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Capacity Options

[same as above]

Roundabout Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2025 No Development	PM	ONE HOUR	16:00	17:30	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	✓	469.00	100.000
B		ONE HOUR	✓	2721.00	100.000
C		ONE HOUR	✓	0.00	100.000
D		ONE HOUR	✓	2505.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0.000	257.000	0.000	212.000
	B	311.000	29.000	0.000	2381.000
	C	0.000	0.000	0.000	0.000
	D	231.000	2269.000	0.000	5.000

Proportions

		To			
		A	B	C	D
From	A	0.00	0.55	0.00	0.45
	B	0.11	0.01	0.00	0.88
	C	0.25	0.25	0.25	0.25
	D	0.09	0.91	0.00	0.00

Vehicle Mix

Heavy Vehicle proportion

		To			
		A	B	C	D
From	A	0	4	0	10
	B	2	0	0	7
	C	0	0	0	0
	D	5	5	0	0

Average PCU Per Veh

		To			
		A	B	C	D
From	A	1.000	1.040	1.000	1.100
	B	1.020	1.000	1.000	1.070
	C	1.000	1.000	1.000	1.000
	D	1.050	1.050	1.000	1.000

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)
A	0.50	7.37	1.0	A	430.36	645.54
B	1.44	1074.36	642.9	F	2496.84	3745.26
C	0.00	0.00	0.0	A	0.00	0.00
D	1.15	271.55	195.6	F	2298.63	3447.95

Main Results for each time segment

Main results: (16:00-16:15)

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)	LOS
A	353.09	88.27	1719.79	1347.99	0.262	351.58	399.78	0.0	0.4	3.847	A
B	2048.51	512.13	162.66	2127.88	0.963	1988.05	1908.71	0.0	15.1	21.929	C
C	0.00	0.00	2150.71	452.06	0.000	0.00	0.00	0.0	0.0	0.000	A
D	1885.90	471.47	248.41	2404.13	0.784	1871.15	1902.29	0.0	3.7	6.913	A

Main results: (16:15-16:30)

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)	LOS
A	421.62	105.41	2035.76	1142.17	0.369	420.65	444.70	0.4	0.6	5.314	A
B	2446.12	611.53	194.57	2108.43	1.160	2101.34	2261.84	15.1	101.3	107.506	F
C	0.00	0.00	2295.91	385.82	0.000	0.00	0.00	0.0	0.0	0.000	A
D	2251.94	562.99	262.57	2394.67	0.940	2217.89	2033.34	3.7	12.2	18.561	C

Main results: (16:30-16:45)

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)	LOS
A	516.38	129.09	2189.28	1042.17	0.495	514.73	458.11	0.6	1.0	7.254	A
B	2995.88	748.97	237.43	2082.30	1.439	2082.08	2466.57	101.3	329.8	376.648	F
C	0.00	0.00	2319.51	375.06	0.000	0.00	0.00	0.0	0.0	0.000	A
D	2758.06	689.51	260.16	2396.28	1.151	2387.23	2059.35	12.2	104.9	95.292	F

Main results: (16:45-17:00)

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)	LOS
A	516.38	129.09	2196.72	1037.33	0.498	516.32	458.84	1.0	1.0	7.367	A
B	2995.88	748.97	238.17	2081.85	1.439	2081.81	2474.86	329.8	558.3	766.287	F
C	0.00	0.00	2319.98	374.85	0.000	0.00	0.00	0.0	0.0	0.000	A
D	2758.06	689.51	260.13	2396.30	1.151	2395.42	2059.85	104.9	195.6	230.235	F

Main results: (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)	LOS
A	421.62	105.41	2184.23	1045.46	0.403	422.89	460.49	1.0	0.7	6.180	A
B	2446.12	611.53	195.91	2107.61	1.161	2107.56	2411.21	558.3	642.9	1027.334	F
C	0.00	0.00	2303.47	382.37	0.000	0.00	0.00	0.0	0.0	0.000	A
D	2251.94	562.99	263.35	2394.15	0.941	2381.37	2040.13	195.6	163.2	271.549	F

Main results: (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)	LOS
A	353.09	88.27	2180.94	1047.60	0.337	353.81	461.91	0.7	0.5	5.538	A
B	2048.51	512.13	164.68	2126.65	0.963	2123.14	2370.07	642.9	624.3	1074.358	F
C	0.00	0.00	2287.82	389.52	0.000	0.00	0.00	0.0	0.0	0.000	A
D	1885.90	471.47	265.29	2392.85	0.788	2377.56	2022.52	163.2	40.3	156.332	F

2025 With Development, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A,B,C,D	655.42	F

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Capacity Options

[same as above]

Roundabout Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2025 With Development	PM	ONE HOUR	16:00	17:30	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	✓	499.00	100.000
B		ONE HOUR	✓	2721.00	100.000
C		ONE HOUR	✓	0.00	100.000
D		ONE HOUR	✓	2520.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0.000	257.000	0.000	242.000
	B	311.000	29.000	0.000	2381.000
	C	0.000	0.000	0.000	0.000
	D	231.000	2284.000	0.000	5.000

Proportions

		To			
		A	B	C	D
From	A	0.00	0.52	0.00	0.48
	B	0.11	0.01	0.00	0.88
	C	0.25	0.25	0.25	0.25
	D	0.09	0.91	0.00	0.00

Vehicle Mix

Heavy Vehicle proportion

		To			
		A	B	C	D
From	A	0	4	0	11
	B	2	0	0	7
	C	0	0	0	0
	D	5	5	0	35

Average PCU Per Veh

		To			
		A	B	C	D
From	A	1.000	1.040	1.000	1.110
	B	1.020	1.000	1.000	1.070
	C	1.000	1.000	1.000	1.000
	D	1.050	1.050	1.000	1.350

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)
A	0.53	7.94	1.2	A	457.89	686.84
B	1.45	1116.82	662.0	F	2496.84	3745.26
C	0.00	0.00	0.0	A	0.00	0.00
D	1.16	285.44	203.5	F	2312.40	3468.59

Main Results for each time segment

Main results: (16:00-16:15)

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)	LOS
A	375.67	93.92	1730.67	1340.90	0.280	374.01	399.26	0.0	0.4	3.988	A
B	2048.51	512.13	185.12	2114.19	0.969	1983.80	1919.57	0.0	16.2	23.100	C
C	0.00	0.00	2168.92	443.75	0.000	0.00	0.00	0.0	0.0	0.000	A
D	1897.19	474.30	247.88	2404.48	0.789	1882.05	1921.04	0.0	3.8	7.048	A

Main results: (16:15-16:30)

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)	LOS
A	448.59	112.15	2046.83	1134.96	0.395	447.47	442.72	0.4	0.7	5.608	A
B	2446.12	611.53	221.43	2092.05	1.169	2085.83	2272.87	16.2	106.3	113.352	F
C	0.00	0.00	2307.26	380.65	0.000	0.00	0.00	0.0	0.0	0.000	A
D	2265.43	566.36	260.63	2395.97	0.946	2228.92	2046.63	3.8	12.9	19.386	C

Main results: (16:30-16:45)

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)	LOS
A	549.41	137.35	2192.62	1040.00	0.528	547.46	454.75	0.7	1.2	7.810	A
B	2995.88	748.97	270.25	2062.30	1.453	2062.10	2469.84	106.3	339.7	393.203	F
C	0.00	0.00	2332.34	369.21	0.000	0.00	0.00	0.0	0.0	0.000	A
D	2774.57	693.64	257.67	2397.95	1.157	2389.69	2074.67	12.9	109.1	98.820	F

Main results: (16:45-17:00)

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)	LOS
A	549.41	137.35	2199.42	1035.57	0.531	549.33	455.39	1.2	1.2	7.940	A
B	2995.88	748.97	271.17	2061.73	1.453	2061.70	2477.59	339.7	573.2	794.499	F
C	0.00	0.00	2332.86	368.97	0.000	0.00	0.00	0.0	0.0	0.000	A
D	2774.57	693.64	257.62	2397.98	1.157	2397.19	2075.25	109.1	203.5	239.099	F

Main results: (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)	LOS
A	448.59	112.15	2187.05	1043.62	0.430	450.11	457.46	1.2	0.8	6.523	A
B	2446.12	611.53	223.02	2091.08	1.170	2091.04	2414.14	573.2	662.0	1064.189	F
C	0.00	0.00	2314.06	377.55	0.000	0.00	0.00	0.0	0.0	0.000	A
D	2265.43	566.36	261.28	2395.53	0.946	2383.23	2052.78	203.5	174.0	285.440	F

Main results: (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)	LOS
A	375.67	93.92	2183.98	1045.62	0.359	376.52	459.24	0.8	0.6	5.781	A
B	2048.51	512.13	187.32	2112.85	0.970	2109.46	2373.18	662.0	646.8	1116.816	F
C	0.00	0.00	2296.78	385.43	0.000	0.00	0.00	0.0	0.0	0.000	A
D	1897.19	474.30	263.59	2393.99	0.792	2379.63	2033.19	174.0	53.4	173.977	F

2030 No Development, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A,B,C,D	954.43	F

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Capacity Options

[same as above]

Roundabout Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2030 No Development	PM	ONE HOUR	16:00	17:30	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	✓	508.00	100.000
B		ONE HOUR	✓	2940.00	100.000
C		ONE HOUR	✓	0.00	100.000
D		ONE HOUR	✓	2704.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0.000	278.000	0.000	230.000
	B	336.000	31.000	0.000	2573.000
	C	0.000	0.000	0.000	0.000
	D	249.000	2449.000	0.000	6.000

Proportions

		To			
		A	B	C	D
From	A	0.00	0.55	0.00	0.45
	B	0.11	0.01	0.00	0.88
	C	0.25	0.25	0.25	0.25
	D	0.09	0.91	0.00	0.00

Vehicle Mix

Heavy Vehicle proportion

		To			
		A	B	C	D
From	A	0	5	0	11
	B	2	0	0	7
	C	0	0	0	0
	D	5	5	0	0

Average PCU Per Veh

		To			
		A	B	C	D
From	A	1.000	1.050	1.000	1.110
	B	1.020	1.000	1.000	1.070
	C	1.000	1.000	1.000	1.000
	D	1.050	1.050	1.000	1.000

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)
A	0.54	8.12	1.2	A	466.15	699.22
B	1.56	1543.24	918.5	F	2697.80	4046.69
C	0.00	0.00	0.0	A	0.00	0.00
D	1.24	492.02	330.0	F	2481.24	3721.86

Main Results for each time segment

Main results: (16:00-16:15)

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)	LOS
A	382.45	95.61	1850.02	1263.16	0.303	380.59	421.04	0.0	0.5	4.382	A
B	2213.39	553.35	176.78	2119.27	1.044	2061.53	2053.83	0.0	38.0	41.439	E
C	0.00	0.00	2238.32	412.10	0.000	0.00	0.00	0.0	0.0	0.000	A
D	2035.71	508.93	257.34	2398.17	0.849	2013.72	1980.97	0.0	5.5	9.358	A

Main results: (16:15-16:30)

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)	LOS
A	456.68	114.17	2138.66	1075.15	0.425	455.40	454.30	0.5	0.8	6.240	A
B	2643.00	660.75	211.36	2098.19	1.260	2096.71	2382.70	38.0	174.5	188.727	F
C	0.00	0.00	2308.06	380.28	0.000	0.00	0.00	0.0	0.0	0.000	A
D	2430.84	607.71	261.73	2395.23	1.015	2331.22	2046.33	5.5	30.4	36.166	E

Main results: (16:30-16:45)

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)	LOS
A	559.32	139.83	2196.62	1037.39	0.539	557.52	457.13	0.8	1.2	8.044	A
B	3237.00	809.25	257.73	2069.92	1.564	2069.84	2496.40	174.5	466.3	560.666	F
C	0.00	0.00	2327.58	371.38	0.000	0.00	0.00	0.0	0.0	0.000	A
D	2977.16	744.29	258.38	2397.47	1.242	2395.37	2069.20	30.4	175.9	160.457	F

Main results: (16:45-17:00)

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)	LOS
A	559.32	139.83	2198.34	1036.27	0.540	559.26	457.26	1.2	1.2	8.120	A
B	3237.00	809.25	258.53	2069.44	1.564	2069.42	2499.08	466.3	758.2	1058.922	F
C	0.00	0.00	2327.95	371.21	0.000	0.00	0.00	0.0	0.0	0.000	A
D	2977.16	744.29	258.33	2397.51	1.242	2397.28	2069.62	175.9	320.8	376.412	F

Main results: (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)	LOS
A	456.68	114.17	2195.66	1038.01	0.440	458.25	460.15	1.2	0.9	6.703	A
B	2643.00	660.75	212.79	2097.32	1.260	2097.30	2441.13	758.2	894.6	1415.867	F
C	0.00	0.00	2310.09	379.36	0.000	0.00	0.00	0.0	0.0	0.000	A
D	2430.84	607.71	261.81	2395.18	1.015	2394.00	2048.29	320.8	330.0	492.018	F

Main results: (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)	LOS
A	382.45	95.61	2188.50	1042.68	0.367	383.36	461.76	0.9	0.6	5.886	A
B	2213.39	553.35	178.86	2118.00	1.045	2117.94	2392.99	894.6	918.5	1543.240	F
C	0.00	0.00	2296.80	385.42	0.000	0.00	0.00	0.0	0.0	0.000	A
D	2035.71	508.93	264.38	2393.46	0.851	2385.87	2032.42	330.0	242.5	432.360	F

2030 With Development, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A,B,C,D	978.22	F

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Capacity Options

[same as above]

Roundabout Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2030 With Development	PM	ONE HOUR	16:00	17:30	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	✓	537.00	100.000
B		ONE HOUR	✓	2940.00	100.000
C		ONE HOUR	✓	0.00	100.000
D		ONE HOUR	✓	2719.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0.000	278.000	0.000	259.000
	B	336.000	31.000	0.000	2573.000
	C	0.000	0.000	0.000	0.000
	D	249.000	2464.000	0.000	6.000

Proportions

		To			
		A	B	C	D
From	A	0.00	0.52	0.00	0.48
	B	0.11	0.01	0.00	0.88
	C	0.25	0.25	0.25	0.25
	D	0.09	0.91	0.00	0.00

Vehicle Mix

Heavy Vehicle proportion

		To			
		A	B	C	D
From	A	0	5	0	11
	B	2	0	0	7
	C	0	0	0	0
	D	5	5	0	36

Average PCU Per Veh

		To			
		A	B	C	D
From	A	1.000	1.050	1.000	1.110
	B	1.020	1.000	1.000	1.070
	C	1.000	1.000	1.000	1.000
	D	1.050	1.050	1.000	1.360

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)
A	0.57	8.75	1.4	A	492.76	739.14
B	1.58	1590.05	941.8	F	2697.80	4046.69
C	0.00	0.00	0.0	A	0.00	0.00
D	1.25	508.13	342.4	F	2495.00	3742.50

Main Results for each time segment

Main results: (16:00-16:15)

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)	LOS
A	404.28	101.07	1860.56	1256.30	0.322	402.25	419.89	0.0	0.5	4.533	A
B	2213.39	553.35	198.48	2106.05	1.051	2051.98	2064.33	0.0	40.4	43.567	E
C	0.00	0.00	2250.45	406.56	0.000	0.00	0.00	0.0	0.0	0.000	A
D	2047.01	511.75	256.15	2398.96	0.853	2024.30	1994.31	0.0	5.7	9.584	A

Main results: (16:15-16:30)

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)	LOS
A	482.75	120.69	2145.27	1070.84	0.451	481.29	451.89	0.5	0.9	6.568	A
B	2643.00	660.75	237.29	2082.39	1.269	2081.07	2389.28	40.4	180.8	197.630	F
C	0.00	0.00	2318.35	375.59	0.000	0.00	0.00	0.0	0.0	0.000	A
D	2444.33	611.08	259.78	2396.54	1.020	2337.38	2058.58	5.7	32.4	37.842	E

Main results: (16:30-16:45)

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)	LOS
A	591.25	147.81	2199.28	1035.66	0.571	589.13	453.87	0.9	1.4	8.651	A
B	3237.00	809.25	289.43	2050.60	1.579	2050.53	2498.97	180.8	477.5	581.211	F
C	0.00	0.00	2339.96	365.73	0.000	0.00	0.00	0.0	0.0	0.000	A
D	2993.67	748.42	255.97	2399.08	1.248	2397.18	2083.99	32.4	181.5	166.012	F

Main results: (16:45-17:00)

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)	LOS
A	591.25	147.81	2200.84	1034.64	0.571	591.18	453.97	1.4	1.4	8.749	A
B	3237.00	809.25	290.42	2049.99	1.579	2049.98	2501.60	477.5	774.2	1091.054	F
C	0.00	0.00	2340.40	365.53	0.000	0.00	0.00	0.0	0.0	0.000	A
D	2993.67	748.42	255.90	2399.13	1.248	2398.92	2084.50	181.5	330.2	387.447	F

Main results: (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)	LOS
A	482.75	120.69	2198.17	1036.38	0.466	484.62	457.25	1.4	1.0	7.057	A
B	2643.00	660.75	239.02	2081.33	1.270	2081.31	2443.77	774.2	914.6	1456.730	F
C	0.00	0.00	2320.34	374.68	0.000	0.00	0.00	0.0	0.0	0.000	A
D	2444.33	611.08	259.81	2396.52	1.020	2395.61	2060.53	330.2	342.4	508.127	F

Main results: (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)	LOS
A	404.28	101.07	2190.82	1041.17	0.388	405.33	459.14	1.0	0.7	6.113	A
B	2213.39	553.35	200.76	2104.65	1.052	2104.60	2395.39	914.6	941.8	1590.053	F
C	0.00	0.00	2305.36	381.51	0.000	0.00	0.00	0.0	0.0	0.000	A
D	2047.01	511.75	262.72	2394.57	0.855	2387.25	2042.64	342.4	257.3	452.600	F

2040 No Development, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A,B,C,D	1255.04	F

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Capacity Options

[same as above]

Roundabout Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2040 No Development	PM	ONE HOUR	16:00	17:30	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	✓	541.00	100.000
B		ONE HOUR	✓	3131.00	100.000
C		ONE HOUR	✓	0.00	100.000
D		ONE HOUR	✓	2875.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0.000	295.000	0.000	246.000
	B	355.000	32.000	0.000	2744.000
	C	0.000	0.000	0.000	0.000
	D	265.000	2604.000	0.000	6.000

Proportions

		To			
		A	B	C	D
From	A	0.00	0.55	0.00	0.45
	B	0.11	0.01	0.00	0.88
	C	0.25	0.25	0.25	0.25
	D	0.09	0.91	0.00	0.00

Vehicle Mix

Heavy Vehicle proportion

		To			
		A	B	C	D
From	A	0	5	0	12
	B	3	0	0	8
	C	0	0	0	0
	D	6	6	0	0

Average PCU Per Veh

		To			
		A	B	C	D
From	A	1.000	1.050	1.000	1.120
	B	1.030	1.000	1.000	1.080
	C	1.000	1.000	1.000	1.000
	D	1.060	1.060	1.000	1.000

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)
A	0.58	8.84	1.4	A	496.43	744.65
B	1.67	1975.74	1187.9	F	2873.06	4309.59
C	0.00	0.00	0.0	A	0.00	0.00
D	1.32	704.67	490.8	F	2638.15	3957.23

Main Results for each time segment

Main results: (16:00-16:15)

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)	LOS
A	407.29	101.82	1955.56	1194.41	0.341	405.07	432.21	0.0	0.6	4.915	A
B	2357.18	589.30	188.64	2112.04	1.116	2079.85	2172.00	0.0	69.3	66.523	F
C	0.00	0.00	2268.49	398.33	0.000	0.00	0.00	0.0	0.0	0.000	A
D	2164.45	541.11	257.07	2398.34	0.902	2130.70	2011.41	0.0	8.4	12.957	B

Main results: (16:15-16:30)

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)	LOS
A	486.35	121.59	2176.16	1050.72	0.463	484.89	455.65	0.6	0.9	6.857	A
B	2814.70	703.68	225.44	2089.61	1.347	2089.11	2435.61	69.3	250.7	281.564	F
C	0.00	0.00	2314.55	377.32	0.000	0.00	0.00	0.0	0.0	0.000	A
D	2584.57	646.14	258.22	2397.58	1.078	2373.59	2056.33	8.4	61.2	61.076	F

Main results: (16:30-16:45)

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)	LOS
A	595.65	148.91	2199.26	1035.67	0.575	593.60	454.66	0.9	1.4	8.745	A
B	3447.30	861.82	274.93	2059.44	1.674	2059.40	2517.93	250.7	597.7	744.547	F
C	0.00	0.00	2334.33	368.30	0.000	0.00	0.00	0.0	0.0	0.000	A
D	3165.43	791.36	254.55	2400.03	1.319	2399.37	2079.78	61.2	252.7	239.854	F

Main results: (16:45-17:00)

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)	LOS
A	595.65	148.91	2199.81	1035.31	0.575	595.59	454.66	1.4	1.4	8.845	A
B	3447.30	861.82	275.83	2058.89	1.674	2058.88	2519.56	597.7	944.8	1351.054	F
C	0.00	0.00	2334.71	368.13	0.000	0.00	0.00	0.0	0.0	0.000	A
D	3165.43	791.36	254.48	2400.07	1.319	2399.98	2080.23	252.7	444.1	525.680	F

Main results: (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)	LOS
A	486.35	121.59	2197.82	1036.61	0.469	488.26	457.80	1.4	1.0	7.121	A
B	2814.70	703.68	227.02	2088.64	1.348	2088.64	2459.06	944.8	1126.3	1777.913	F
C	0.00	0.00	2315.66	376.82	0.000	0.00	0.00	0.0	0.0	0.000	A
D	2584.57	646.14	258.16	2397.62	1.078	2397.46	2057.50	444.1	490.8	704.667	F

Main results: (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)	LOS
A	407.29	101.82	2191.85	1040.50	0.391	408.36	459.68	1.0	0.7	6.164	A
B	2357.18	589.30	190.67	2110.80	1.117	2110.78	2409.53	1126.3	1187.9	1975.736	F
C	0.00	0.00	2301.46	383.29	0.000	0.00	0.00	0.0	0.0	0.000	A
D	2164.45	541.11	260.90	2395.79	0.903	2390.63	2040.56	490.8	434.3	696.722	F

2040 With Development, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A,B,C,D	1279.69	F

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Capacity Options

[same as above]

Roundabout Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2040 With Development	PM	ONE HOUR	16:00	17:30	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	✓	574.00	100.000
B		ONE HOUR	✓	3131.00	100.000
C		ONE HOUR	✓	0.00	100.000
D		ONE HOUR	✓	2889.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0.000	298.000	0.000	276.000
	B	355.000	32.000	0.000	2744.000
	C	0.000	0.000	0.000	0.000
	D	265.000	2618.000	0.000	6.000

Proportions

		To			
		A	B	C	D
From	A	0.00	0.52	0.00	0.48
	B	0.11	0.01	0.00	0.88
	C	0.25	0.25	0.25	0.25
	D	0.09	0.91	0.00	0.00

Vehicle Mix

Heavy Vehicle proportion

		To			
		A	B	C	D
From	A	0	5	0	13
	B	3	0	0	8
	C	0	0	0	0
	D	6	6	0	40

Average PCU Per Veh

		To			
		A	B	C	D
From	A	1.000	1.050	1.000	1.130
	B	1.030	1.000	1.000	1.080
	C	1.000	1.000	1.000	1.000
	D	1.060	1.060	1.000	1.400

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)
A	0.61	9.73	1.7	A	526.71	790.07
B	1.69	2028.24	1212.7	F	2873.06	4309.59
C	0.00	0.00	0.0	A	0.00	0.00
D	1.32	720.75	503.2	F	2651.00	3976.50

Main Results for each time segment

Main results: (16:00-16:15)

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)	LOS
A	432.14	108.03	1964.83	1188.38	0.364	429.67	430.74	0.0	0.6	5.141	A
B	2357.18	589.30	211.05	2098.38	1.123	2067.72	2183.45	0.0	72.4	69.391	F
C	0.00	0.00	2278.76	393.65	0.000	0.00	0.00	0.0	0.0	0.000	A
D	2174.99	543.75	255.58	2399.35	0.906	2139.99	2023.19	0.0	8.8	13.311	B

Main results: (16:15-16:30)

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)	LOS
A	516.01	129.00	2179.78	1048.36	0.492	514.33	453.02	0.6	1.0	7.304	A
B	2814.70	703.68	252.24	2073.27	1.358	2072.82	2441.87	72.4	257.8	292.709	F
C	0.00	0.00	2325.06	372.53	0.000	0.00	0.00	0.0	0.0	0.000	A
D	2597.15	649.29	256.21	2398.92	1.083	2376.59	2068.85	8.8	63.9	63.228	F

Main results: (16:30-16:45)

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)	LOS
A	631.99	158.00	2201.67	1034.10	0.611	629.48	451.48	1.0	1.7	9.671	A
B	3447.30	861.82	307.66	2039.49	1.690	2039.45	2523.48	257.8	609.8	768.712	F
C	0.00	0.00	2347.11	362.47	0.000	0.00	0.00	0.0	0.0	0.000	A
D	3180.85	795.21	252.08	2401.68	1.324	2401.06	2095.03	63.9	258.8	246.252	F

Main results: (16:45-17:00)

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)	LOS
A	631.99	158.00	2202.19	1033.76	0.611	631.90	451.46	1.7	1.7	9.731	A
B	3447.30	861.82	308.83	2038.78	1.691	2038.77	2525.26	609.8	961.9	1390.161	F
C	0.00	0.00	2347.59	362.25	0.000	0.00	0.00	0.0	0.0	0.000	A
D	3180.85	795.21	252.00	2401.74	1.324	2401.64	2095.60	258.8	453.6	537.097	F

Main results: (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)	LOS
A	516.01	129.00	2199.98	1035.20	0.498	518.37	454.97	1.7	1.1	7.607	A
B	2814.70	703.68	254.23	2072.06	1.358	2072.05	2464.12	961.9	1147.6	1823.765	F
C	0.00	0.00	2326.28	371.97	0.000	0.00	0.00	0.0	0.0	0.000	A
D	2597.15	649.29	256.11	2398.99	1.083	2398.84	2070.17	453.6	503.2	720.751	F

Main results: (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)	LOS
A	432.14	108.03	2193.92	1039.15	0.416	433.40	457.16	1.1	0.8	6.475	A
B	2357.18	589.30	213.36	2096.97	1.124	2096.96	2413.96	1147.6	1212.7	2028.237	F
C	0.00	0.00	2310.32	379.25	0.000	0.00	0.00	0.0	0.0	0.000	A
D	2174.99	543.75	259.19	2396.93	0.907	2391.89	2051.13	503.2	449.0	716.714	F

Junctions 9

PICADY 9 - Priority Intersection Module

Filename: Junction A AM.j9
Path: Y:\Junction A
Report generation date: 13/10/2017 11:03:10

Summary of junction performance

	AM			
	Queue (PCU)	Delay (s)	RFC	LOS
2016 Base Year				
2025 No Development				
2025 With Development				
2030 No Development				
2030 With Development				
2040 No Development				
2040 With Development				

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

File summary

File Description

Title	(untitled)
Location	
Site number	
Date	08/08/2016
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	TOBIN"Maria Rooney
Description	

Units

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

Analysis Options

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

Demand Set Summary

Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
2016 Base Year	AM	ONE HOUR	07:45	09:15	15
2025 No Development	AM	ONE HOUR	07:45	09:15	15
2025 With Development	AM	ONE HOUR	07:45	09:15	15
2030 No Development	AM	ONE HOUR	07:45	09:15	15
2030 With Development	AM	ONE HOUR	07:45	09:15	15
2040 No Development	AM	ONE HOUR	07:45	09:15	15
2040 With Development	AM	ONE HOUR	07:45	09:15	15

2016 Base Year , AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.00	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Clonshaugh Rd (N)		Major
B	WWTP		Minor
C	Clonshaugh Rd (S)		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			80.0	✓	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	3.00	110	70

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	548.706	0.100	0.253	0.159	0.361
1	B-C	668.004	0.102	0.259	-	-
1	C-B	620.292	0.240	0.240	-	-

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	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
D1	2016 Base Year	AM	ONE HOUR	07:45	09:15	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	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	360.00	100.000
B		✓	0.00	100.000
C		✓	186.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0.000	0.000	360.000
	B	0.000	0.000	0.000
	C	186.000	0.000	0.000

Vehicle Mix

Heavy Vehicle proportion

	To			
		A	B	C
From	A	0	0	13
	B	0	0	0
	C	15	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.00	0.00	0.0	A
C-AB	0.00	0.00	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

Main results: (07:45-08:00)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	518.66	0.000	0.00	0.0	0.000	A
C-AB	0.00	555.16	0.000	0.00	0.0	0.000	A
C-A	140.03			140.03			
A-B	0.00			0.00			
A-C	271.03			271.03			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	502.21	0.000	0.00	0.0	0.000	A
C-AB	0.00	542.51	0.000	0.00	0.0	0.000	A
C-A	167.21			167.21			
A-B	0.00			0.00			
A-C	323.63			323.63			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	479.36	0.000	0.00	0.0	0.000	A
C-AB	0.00	525.03	0.000	0.00	0.0	0.000	A
C-A	204.79			204.79			
A-B	0.00			0.00			
A-C	396.37			396.37			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	479.36	0.000	0.00	0.0	0.000	A
C-AB	0.00	525.03	0.000	0.00	0.0	0.000	A
C-A	204.79			204.79			
A-B	0.00			0.00			
A-C	396.37			396.37			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	502.21	0.000	0.00	0.0	0.000	A
C-AB	0.00	542.51	0.000	0.00	0.0	0.000	A
C-A	167.21			167.21			
A-B	0.00			0.00			
A-C	323.63			323.63			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	518.66	0.000	0.00	0.0	0.000	A
C-AB	0.00	555.16	0.000	0.00	0.0	0.000	A
C-A	140.03			140.03			
A-B	0.00			0.00			
A-C	271.03			271.03			

2025 No Development , AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.00	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
D2	2025 No Development	AM	ONE HOUR	07:45	09:15	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	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	416.00	100.000
B		✓	0.00	100.000
C		✓	215.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0.000	0.000	416.000
	B	0.000	0.000	0.000
	C	215.000	0.000	0.000

Vehicle Mix

Heavy Vehicle proportion

		To		
		A	B	C
From	A	0	0	14
	B	0	0	0
	C	16	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.00	0.00	0.0	A
C-AB	0.00	0.00	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

Main results: (07:45-08:00)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	505.48	0.000	0.00	0.0	0.000	A
C-AB	0.00	545.02	0.000	0.00	0.0	0.000	A
C-A	161.86			161.86			
A-B	0.00			0.00			
A-C	313.19			313.19			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	486.40	0.000	0.00	0.0	0.000	A
C-AB	0.00	530.41	0.000	0.00	0.0	0.000	A
C-A	193.28			193.28			
A-B	0.00			0.00			
A-C	373.98			373.98			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	459.86	0.000	0.00	0.0	0.000	A
C-AB	0.00	510.21	0.000	0.00	0.0	0.000	A
C-A	236.72			236.72			
A-B	0.00			0.00			
A-C	458.02			458.02			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	459.86	0.000	0.00	0.0	0.000	A
C-AB	0.00	510.21	0.000	0.00	0.0	0.000	A
C-A	236.72			236.72			
A-B	0.00			0.00			
A-C	458.02			458.02			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	486.40	0.000	0.00	0.0	0.000	A
C-AB	0.00	530.41	0.000	0.00	0.0	0.000	A
C-A	193.28			193.28			
A-B	0.00			0.00			
A-C	373.98			373.98			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	505.48	0.000	0.00	0.0	0.000	A
C-AB	0.00	545.02	0.000	0.00	0.0	0.000	A
C-A	161.86			161.86			
A-B	0.00			0.00			
A-C	313.19			313.19			

2025 With Development , AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.15	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
D3	2025 With Development	AM	ONE HOUR	07:45	09:15	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	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	416.00	100.000
B		✓	10.00	100.000
C		✓	215.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0.000	0.000	416.000
	B	0.000	0.000	10.000
	C	215.000	0.000	0.000

Vehicle Mix

Heavy Vehicle proportion

		To		
		A	B	C
From	A	0	0	14
	B	0	0	48
	C	16	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.02	9.89	0.0	A
C-AB	0.00	0.00	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

Main results: (07:45-08:00)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	7.53	586.95	0.013	7.45	0.0	9.193	A
C-AB	0.00	545.02	0.000	0.00	0.0	0.000	A
C-A	161.86			161.86			
A-B	0.00			0.00			
A-C	313.19			313.19			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	8.99	571.21	0.016	8.97	0.0	9.476	A
C-AB	0.00	530.41	0.000	0.00	0.0	0.000	A
C-A	193.28			193.28			
A-B	0.00			0.00			
A-C	373.98			373.98			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	11.01	549.46	0.020	10.98	0.0	9.894	A
C-AB	0.00	510.21	0.000	0.00	0.0	0.000	A
C-A	236.72			236.72			
A-B	0.00			0.00			
A-C	458.02			458.02			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	11.01	549.46	0.020	11.01	0.0	9.894	A
C-AB	0.00	510.21	0.000	0.00	0.0	0.000	A
C-A	236.72			236.72			
A-B	0.00			0.00			
A-C	458.02			458.02			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	8.99	571.21	0.016	9.01	0.0	9.478	A
C-AB	0.00	530.41	0.000	0.00	0.0	0.000	A
C-A	193.28			193.28			
A-B	0.00			0.00			
A-C	373.98			373.98			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	7.53	586.95	0.013	7.55	0.0	9.195	A
C-AB	0.00	545.02	0.000	0.00	0.0	0.000	A
C-A	161.86			161.86			
A-B	0.00			0.00			
A-C	313.19			313.19			

2030 No Development , AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.00	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
D4	2030 No Development	AM	ONE HOUR	07:45	09:15	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	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	451.00	100.000
B		✓	0.00	100.000
C		✓	233.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0.000	0.000	451.000
	B	0.000	0.000	0.000
	C	233.000	0.000	0.000

Vehicle Mix

Heavy Vehicle proportion

		To		
		A	B	C
From	A	0	0	15
	B	0	0	0
	C	17	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.00	0.00	0.0	A
C-AB	0.00	0.00	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

Main results: (07:45-08:00)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	497.23	0.000	0.00	0.0	0.000	A
C-AB	0.00	538.69	0.000	0.00	0.0	0.000	A
C-A	175.41			175.41			
A-B	0.00			0.00			
A-C	339.54			339.54			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	476.50	0.000	0.00	0.0	0.000	A
C-AB	0.00	522.85	0.000	0.00	0.0	0.000	A
C-A	209.46			209.46			
A-B	0.00			0.00			
A-C	405.44			405.44			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	447.63	0.000	0.00	0.0	0.000	A
C-AB	0.00	500.95	0.000	0.00	0.0	0.000	A
C-A	256.54			256.54			
A-B	0.00			0.00			
A-C	496.56			496.56			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	447.63	0.000	0.00	0.0	0.000	A
C-AB	0.00	500.95	0.000	0.00	0.0	0.000	A
C-A	256.54			256.54			
A-B	0.00			0.00			
A-C	496.56			496.56			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	476.50	0.000	0.00	0.0	0.000	A
C-AB	0.00	522.85	0.000	0.00	0.0	0.000	A
C-A	209.46			209.46			
A-B	0.00			0.00			
A-C	405.44			405.44			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	497.23	0.000	0.00	0.0	0.000	A
C-AB	0.00	538.69	0.000	0.00	0.0	0.000	A
C-A	175.41			175.41			
A-B	0.00			0.00			
A-C	339.54			339.54			

2030 With Development , AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.15	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
D5	2030 With Development	AM	ONE HOUR	07:45	09:15	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	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	451.00	100.000
B		✓	10.00	100.000
C		✓	233.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0.000	0.000	451.000
	B	0.000	0.000	10.000
	C	233.000	0.000	0.000

Vehicle Mix

Heavy Vehicle proportion

		To		
		A	B	C
From	A	0	0	15
	B	0	0	48
	C	17	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.02	10.08	0.0	B
C-AB	0.00	0.00	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

Main results: (07:45-08:00)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	7.53	580.13	0.013	7.45	0.0	9.302	A
C-AB	0.00	538.69	0.000	0.00	0.0	0.000	A
C-A	175.41			175.41			
A-B	0.00			0.00			
A-C	339.54			339.54			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	8.99	563.07	0.016	8.97	0.0	9.615	A
C-AB	0.00	522.85	0.000	0.00	0.0	0.000	A
C-A	209.46			209.46			
A-B	0.00			0.00			
A-C	405.44			405.44			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	11.01	539.48	0.020	10.98	0.0	10.081	B
C-AB	0.00	500.95	0.000	0.00	0.0	0.000	A
C-A	256.54			256.54			
A-B	0.00			0.00			
A-C	496.56			496.56			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	11.01	539.48	0.020	11.01	0.0	10.081	B
C-AB	0.00	500.95	0.000	0.00	0.0	0.000	A
C-A	256.54			256.54			
A-B	0.00			0.00			
A-C	496.56			496.56			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	8.99	563.07	0.016	9.02	0.0	9.618	A
C-AB	0.00	522.85	0.000	0.00	0.0	0.000	A
C-A	209.46			209.46			
A-B	0.00			0.00			
A-C	405.44			405.44			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	7.53	580.13	0.013	7.55	0.0	9.306	A
C-AB	0.00	538.69	0.000	0.00	0.0	0.000	A
C-A	175.41			175.41			
A-B	0.00			0.00			
A-C	339.54			339.54			

2040 No Development , AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.00	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
D6	2040 No Development	AM	ONE HOUR	07:45	09:15	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	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	486.00	100.000
B		✓	0.00	100.000
C		✓	252.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0.000	0.000	486.000
	B	0.000	0.000	0.000
	C	252.000	0.000	0.000

Vehicle Mix

Heavy Vehicle proportion

		To		
		A	B	C
From	A	0	0	17
	B	0	0	0
	C	19	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.00	0.00	0.0	A
C-AB	0.00	0.00	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

Main results: (07:45-08:00)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	488.88	0.000	0.00	0.0	0.000	A
C-AB	0.00	532.36	0.000	0.00	0.0	0.000	A
C-A	189.72			189.72			
A-B	0.00			0.00			
A-C	365.89			365.89			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	466.47	0.000	0.00	0.0	0.000	A
C-AB	0.00	515.29	0.000	0.00	0.0	0.000	A
C-A	226.54			226.54			
A-B	0.00			0.00			
A-C	436.90			436.90			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	435.23	0.000	0.00	0.0	0.000	A
C-AB	0.00	491.69	0.000	0.00	0.0	0.000	A
C-A	277.46			277.46			
A-B	0.00			0.00			
A-C	535.10			535.10			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	435.23	0.000	0.00	0.0	0.000	A
C-AB	0.00	491.69	0.000	0.00	0.0	0.000	A
C-A	277.46			277.46			
A-B	0.00			0.00			
A-C	535.10			535.10			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	466.47	0.000	0.00	0.0	0.000	A
C-AB	0.00	515.29	0.000	0.00	0.0	0.000	A
C-A	226.54			226.54			
A-B	0.00			0.00			
A-C	436.90			436.90			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	488.88	0.000	0.00	0.0	0.000	A
C-AB	0.00	532.36	0.000	0.00	0.0	0.000	A
C-A	189.72			189.72			
A-B	0.00			0.00			
A-C	365.89			365.89			

2040 With Development , AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.14	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
D7	2040 With Development	AM	ONE HOUR	07:45	09:15	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	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	486.00	100.000
B		✓	10.00	100.000
C		✓	252.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0.000	0.000	486.000
	B	0.000	0.000	10.000
	C	252.000	0.000	0.000

Vehicle Mix

Heavy Vehicle proportion

		To		
		A	B	C
From	A	0	0	17
	B	0	0	48
	C	19	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.02	10.27	0.0	B
C-AB	0.00	0.00	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

Main results: (07:45-08:00)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	7.53	573.31	0.013	7.45	0.0	9.414	A
C-AB	0.00	532.36	0.000	0.00	0.0	0.000	A
C-A	189.72			189.72			
A-B	0.00			0.00			
A-C	365.89			365.89			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	8.99	554.92	0.016	8.97	0.0	9.758	A
C-AB	0.00	515.29	0.000	0.00	0.0	0.000	A
C-A	226.54			226.54			
A-B	0.00			0.00			
A-C	436.90			436.90			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	11.01	529.51	0.021	10.98	0.0	10.275	B
C-AB	0.00	491.69	0.000	0.00	0.0	0.000	A
C-A	277.46			277.46			
A-B	0.00			0.00			
A-C	535.10			535.10			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	11.01	529.51	0.021	11.01	0.0	10.275	B
C-AB	0.00	491.69	0.000	0.00	0.0	0.000	A
C-A	277.46			277.46			
A-B	0.00			0.00			
A-C	535.10			535.10			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	8.99	554.92	0.016	9.02	0.0	9.759	A
C-AB	0.00	515.29	0.000	0.00	0.0	0.000	A
C-A	226.54			226.54			
A-B	0.00			0.00			
A-C	436.90			436.90			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	7.53	573.31	0.013	7.55	0.0	9.419	A
C-AB	0.00	532.36	0.000	0.00	0.0	0.000	A
C-A	189.72			189.72			
A-B	0.00			0.00			
A-C	365.89			365.89			

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.0.0.4211 []

For sales and distribution information, program advice and maintenance, contact TRL:
Tel: +44 (0)1344 770758 email: software@trl.co.uk Web: http://www.trlsoftware.co.uk

Filename: Junction A PM.j9
Path: Y:\Junction A
Report generation date: 13/10/2017 11:03:43

Summary of junction performance

	PM			
	Queue (PCU)	Delay (s)	RFC	LOS
2016 Base Year				
2025 No Development				
2025 With Development				
2030 No Development				
2030 With Development				
2040 No Development				
2040 With Development				

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

File summary

File Description

Title	(untitled)
Location	
Site number	
Date	08/08/2016
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	TOBIN"Maria Rooney
Description	

Units

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

Analysis Options

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

Demand Set Summary

Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
2016 Base Year	PM	ONE HOUR	15:45	17:15	15
2025 No Development	PM	ONE HOUR	15:45	17:15	15
2025 With Development	PM	ONE HOUR	15:45	17:15	15
2030 No Development	PM	ONE HOUR	15:45	17:15	15
2030 With Development	PM	ONE HOUR	15:45	17:15	15
2040 No Development	PM	ONE HOUR	15:45	17:15	15
2040 With Development	PM	ONE HOUR	15:45	17:15	15

2016 Base Year , PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.00	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Clonshaugh Rd (N)		Major
B	WWTP		Minor
C	Clonshaugh Rd (S)		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			80.0	✓	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	3.00	110	70

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	548.706	0.100	0.253	0.159	0.361
1	B-C	668.004	0.102	0.259	-	-
1	C-B	620.292	0.240	0.240	-	-

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	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
D1	2016 Base Year	PM	ONE HOUR	15:45	17:15	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	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	287.00	100.000
B		✓	0.00	100.000
C		✓	329.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0.000	0.000	287.000
	B	0.000	0.000	0.000
	C	329.000	0.000	0.000

Vehicle Mix

Heavy Vehicle proportion

	To			
		A	B	C
From	A	0	0	16
	B	0	0	0
	C	8	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.00	0.00	0.0	A
C-AB	0.00	0.00	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

Main results: (15:45-16:00)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	521.82	0.000	0.00	0.0	0.000	A
C-AB	0.00	568.36	0.000	0.00	0.0	0.000	A
C-A	247.69			247.69			
A-B	0.00			0.00			
A-C	216.07			216.07			

Main results: (16:00-16:15)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	505.81	0.000	0.00	0.0	0.000	A
C-AB	0.00	558.28	0.000	0.00	0.0	0.000	A
C-A	295.76			295.76			
A-B	0.00			0.00			
A-C	258.01			258.01			

Main results: (16:15-16:30)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	483.43	0.000	0.00	0.0	0.000	A
C-AB	0.00	544.35	0.000	0.00	0.0	0.000	A
C-A	362.24			362.24			
A-B	0.00			0.00			
A-C	315.99			315.99			

Main results: (16:30-16:45)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	483.43	0.000	0.00	0.0	0.000	A
C-AB	0.00	544.35	0.000	0.00	0.0	0.000	A
C-A	362.24			362.24			
A-B	0.00			0.00			
A-C	315.99			315.99			

Main results: (16:45-17:00)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	505.81	0.000	0.00	0.0	0.000	A
C-AB	0.00	558.28	0.000	0.00	0.0	0.000	A
C-A	295.76			295.76			
A-B	0.00			0.00			
A-C	258.01			258.01			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	521.82	0.000	0.00	0.0	0.000	A
C-AB	0.00	568.36	0.000	0.00	0.0	0.000	A
C-A	247.69			247.69			
A-B	0.00			0.00			
A-C	216.07			216.07			

2025 No Development , PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.00	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
D2	2025 No Development	PM	ONE HOUR	15:45	17:15	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	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	332.00	100.000
B		✓	0.00	100.000
C		✓	378.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0.000	0.000	332.000
	B	0.000	0.000	0.000
	C	378.000	0.000	0.000

Vehicle Mix

Heavy Vehicle proportion

		To		
		A	B	C
From	A	0	0	17
	B	0	0	0
	C	9	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.00	0.00	0.0	A
C-AB	0.00	0.00	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

Main results: (15:45-16:00)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	509.10	0.000	0.00	0.0	0.000	A
C-AB	0.00	560.22	0.000	0.00	0.0	0.000	A
C-A	284.58			284.58			
A-B	0.00			0.00			
A-C	249.95			249.95			

Main results: (16:00-16:15)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	490.48	0.000	0.00	0.0	0.000	A
C-AB	0.00	548.56	0.000	0.00	0.0	0.000	A
C-A	339.81			339.81			
A-B	0.00			0.00			
A-C	298.46			298.46			

Main results: (16:15-16:30)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	464.40	0.000	0.00	0.0	0.000	A
C-AB	0.00	532.44	0.000	0.00	0.0	0.000	A
C-A	416.19			416.19			
A-B	0.00			0.00			
A-C	365.54			365.54			

Main results: (16:30-16:45)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	464.40	0.000	0.00	0.0	0.000	A
C-AB	0.00	532.44	0.000	0.00	0.0	0.000	A
C-A	416.19			416.19			
A-B	0.00			0.00			
A-C	365.54			365.54			

Main results: (16:45-17:00)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	490.48	0.000	0.00	0.0	0.000	A
C-AB	0.00	548.56	0.000	0.00	0.0	0.000	A
C-A	339.81			339.81			
A-B	0.00			0.00			
A-C	298.46			298.46			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	509.10	0.000	0.00	0.0	0.000	A
C-AB	0.00	560.22	0.000	0.00	0.0	0.000	A
C-A	284.58			284.58			
A-B	0.00			0.00			
A-C	249.95			249.95			

2025 With Development , PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.31	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
D3	2025 With Development	PM	ONE HOUR	15:45	17:15	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	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	332.00	100.000
B		✓	30.00	100.000
C		✓	378.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0.000	0.000	332.000
	B	0.000	0.000	30.000
	C	378.000	0.000	0.000

Vehicle Mix

Heavy Vehicle proportion

		To		
		A	B	C
From	A	0	0	17
	B	0	0	16
	C	9	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.06	7.73	0.1	A
C-AB	0.00	0.00	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

Main results: (15:45-16:00)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	22.59	603.31	0.037	22.41	0.0	7.187	A
C-AB	0.00	560.22	0.000	0.00	0.0	0.000	A
C-A	284.58			284.58			
A-B	0.00			0.00			
A-C	249.95			249.95			

Main results: (16:00-16:15)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	26.97	590.76	0.046	26.93	0.1	7.406	A
C-AB	0.00	548.56	0.000	0.00	0.0	0.000	A
C-A	339.81			339.81			
A-B	0.00			0.00			
A-C	298.46			298.46			

Main results: (16:15-16:30)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	33.03	573.40	0.058	32.97	0.1	7.726	A
C-AB	0.00	532.44	0.000	0.00	0.0	0.000	A
C-A	416.19			416.19			
A-B	0.00			0.00			
A-C	365.54			365.54			

Main results: (16:30-16:45)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	33.03	573.40	0.058	33.03	0.1	7.727	A
C-AB	0.00	532.44	0.000	0.00	0.0	0.000	A
C-A	416.19			416.19			
A-B	0.00			0.00			
A-C	365.54			365.54			

Main results: (16:45-17:00)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	26.97	590.76	0.046	27.03	0.1	7.410	A
C-AB	0.00	548.56	0.000	0.00	0.0	0.000	A
C-A	339.81			339.81			
A-B	0.00			0.00			
A-C	298.46			298.46			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	22.59	603.31	0.037	22.63	0.0	7.193	A
C-AB	0.00	560.22	0.000	0.00	0.0	0.000	A
C-A	284.58			284.58			
A-B	0.00			0.00			
A-C	249.95			249.95			

2030 No Development , PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.00	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
D4	2030 No Development	PM	ONE HOUR	15:45	17:15	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	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	360.00	100.000
B		✓	0.00	100.000
C		✓	409.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0.000	0.000	360.000
	B	0.000	0.000	0.000
	C	409.000	0.000	0.000

Vehicle Mix

Heavy Vehicle proportion

		To		
		A	B	C
From	A	0	0	17
	B	0	0	0
	C	9	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.00	0.00	0.0	A
C-AB	0.00	0.00	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

Main results: (15:45-16:00)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	501.11	0.000	0.00	0.0	0.000	A
C-AB	0.00	555.16	0.000	0.00	0.0	0.000	A
C-A	307.92			307.92			
A-B	0.00			0.00			
A-C	271.03			271.03			

Main results: (16:00-16:15)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	480.83	0.000	0.00	0.0	0.000	A
C-AB	0.00	542.51	0.000	0.00	0.0	0.000	A
C-A	367.68			367.68			
A-B	0.00			0.00			
A-C	323.63			323.63			

Main results: (16:15-16:30)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	452.38	0.000	0.00	0.0	0.000	A
C-AB	0.00	525.03	0.000	0.00	0.0	0.000	A
C-A	450.32			450.32			
A-B	0.00			0.00			
A-C	396.37			396.37			

Main results: (16:30-16:45)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	452.38	0.000	0.00	0.0	0.000	A
C-AB	0.00	525.03	0.000	0.00	0.0	0.000	A
C-A	450.32			450.32			
A-B	0.00			0.00			
A-C	396.37			396.37			

Main results: (16:45-17:00)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	480.83	0.000	0.00	0.0	0.000	A
C-AB	0.00	542.51	0.000	0.00	0.0	0.000	A
C-A	367.68			367.68			
A-B	0.00			0.00			
A-C	323.63			323.63			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	501.11	0.000	0.00	0.0	0.000	A
C-AB	0.00	555.16	0.000	0.00	0.0	0.000	A
C-A	307.92			307.92			
A-B	0.00			0.00			
A-C	271.03			271.03			

2030 With Development , PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.29	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
D5	2030 With Development	PM	ONE HOUR	15:45	17:15	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	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	360.00	100.000
B		✓	30.00	100.000
C		✓	409.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0.000	0.000	360.000
	B	0.000	0.000	30.000
	C	409.000	0.000	0.000

Vehicle Mix

Heavy Vehicle proportion

		To		
		A	B	C
From	A	0	0	17
	B	0	0	16
	C	9	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.06	7.84	0.1	A
C-AB	0.00	0.00	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

Main results: (15:45-16:00)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	22.59	597.86	0.038	22.40	0.0	7.255	A
C-AB	0.00	555.16	0.000	0.00	0.0	0.000	A
C-A	307.92			307.92			
A-B	0.00			0.00			
A-C	271.03			271.03			

Main results: (16:00-16:15)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	26.97	584.24	0.046	26.93	0.1	7.492	A
C-AB	0.00	542.51	0.000	0.00	0.0	0.000	A
C-A	367.68			367.68			
A-B	0.00			0.00			
A-C	323.63			323.63			

Main results: (16:15-16:30)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	33.03	565.42	0.058	32.97	0.1	7.842	A
C-AB	0.00	525.03	0.000	0.00	0.0	0.000	A
C-A	450.32			450.32			
A-B	0.00			0.00			
A-C	396.37			396.37			

Main results: (16:30-16:45)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	33.03	565.42	0.058	33.03	0.1	7.843	A
C-AB	0.00	525.03	0.000	0.00	0.0	0.000	A
C-A	450.32			450.32			
A-B	0.00			0.00			
A-C	396.37			396.37			

Main results: (16:45-17:00)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	26.97	584.24	0.046	27.03	0.1	7.497	A
C-AB	0.00	542.51	0.000	0.00	0.0	0.000	A
C-A	367.68			367.68			
A-B	0.00			0.00			
A-C	323.63			323.63			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	22.59	597.86	0.038	22.63	0.0	7.259	A
C-AB	0.00	555.16	0.000	0.00	0.0	0.000	A
C-A	307.92			307.92			
A-B	0.00			0.00			
A-C	271.03			271.03			

2040 No Development , PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.00	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
D6	2040 No Development	PM	ONE HOUR	15:45	17:15	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	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	390.00	100.000
B		✓	0.00	100.000
C		✓	437.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0.000	0.000	390.000
	B	0.000	0.000	0.000
	C	437.000	0.000	0.000

Vehicle Mix

Heavy Vehicle proportion

		To		
		A	B	C
From	A	0	0	20
	B	0	0	0
	C	10	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.00	0.00	0.0	A
C-AB	0.00	0.00	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

Main results: (15:45-16:00)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	492.93	0.000	0.00	0.0	0.000	A
C-AB	0.00	549.73	0.000	0.00	0.0	0.000	A
C-A	329.00			329.00			
A-B	0.00			0.00			
A-C	293.61			293.61			

Main results: (16:00-16:15)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	470.95	0.000	0.00	0.0	0.000	A
C-AB	0.00	536.03	0.000	0.00	0.0	0.000	A
C-A	392.85			392.85			
A-B	0.00			0.00			
A-C	350.60			350.60			

Main results: (16:15-16:30)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	440.07	0.000	0.00	0.0	0.000	A
C-AB	0.00	517.09	0.000	0.00	0.0	0.000	A
C-A	481.15			481.15			
A-B	0.00			0.00			
A-C	429.40			429.40			

Main results: (16:30-16:45)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	440.07	0.000	0.00	0.0	0.000	A
C-AB	0.00	517.09	0.000	0.00	0.0	0.000	A
C-A	481.15			481.15			
A-B	0.00			0.00			
A-C	429.40			429.40			

Main results: (16:45-17:00)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	470.95	0.000	0.00	0.0	0.000	A
C-AB	0.00	536.03	0.000	0.00	0.0	0.000	A
C-A	392.85			392.85			
A-B	0.00			0.00			
A-C	350.60			350.60			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	492.93	0.000	0.00	0.0	0.000	A
C-AB	0.00	549.73	0.000	0.00	0.0	0.000	A
C-A	329.00			329.00			
A-B	0.00			0.00			
A-C	293.61			293.61			

2040 With Development , PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.28	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
D7	2040 With Development	PM	ONE HOUR	15:45	17:15	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	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	390.00	100.000
B		✓	30.00	100.000
C		✓	437.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0.000	0.000	390.000
	B	0.000	0.000	30.000
	C	437.000	0.000	0.000

Vehicle Mix

Heavy Vehicle proportion

		To		
		A	B	C
From	A	0	0	20
	B	0	0	16
	C	10	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.06	7.97	0.1	A
C-AB	0.00	0.00	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

Main results: (15:45-16:00)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	22.59	592.01	0.038	22.40	0.0	7.329	A
C-AB	0.00	549.73	0.000	0.00	0.0	0.000	A
C-A	329.00			329.00			
A-B	0.00			0.00			
A-C	293.61			293.61			

Main results: (16:00-16:15)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	26.97	577.26	0.047	26.93	0.1	7.587	A
C-AB	0.00	536.03	0.000	0.00	0.0	0.000	A
C-A	392.85			392.85			
A-B	0.00			0.00			
A-C	350.60			350.60			

Main results: (16:15-16:30)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	33.03	556.87	0.059	32.97	0.1	7.970	A
C-AB	0.00	517.09	0.000	0.00	0.0	0.000	A
C-A	481.15			481.15			
A-B	0.00			0.00			
A-C	429.40			429.40			

Main results: (16:30-16:45)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	33.03	556.87	0.059	33.03	0.1	7.971	A
C-AB	0.00	517.09	0.000	0.00	0.0	0.000	A
C-A	481.15			481.15			
A-B	0.00			0.00			
A-C	429.40			429.40			

Main results: (16:45-17:00)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	26.97	577.26	0.047	27.03	0.1	7.589	A
C-AB	0.00	536.03	0.000	0.00	0.0	0.000	A
C-A	392.85			392.85			
A-B	0.00			0.00			
A-C	350.60			350.60			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	22.59	592.01	0.038	22.63	0.0	7.336	A
C-AB	0.00	549.73	0.000	0.00	0.0	0.000	A
C-A	329.00			329.00			
A-B	0.00			0.00			
A-C	293.61			293.61			

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.0.0.4211 []

For sales and distribution information, program advice and maintenance, contact TRL:
Tel: +44 (0)1344 770758 email: software@trl.co.uk Web: http://www.trlsoftware.co.uk

Filename: Junction B AM.j9
Path: Y:\Junction B
Report generation date: 13/10/2017 11:04:22

Summary of junction performance

	AM			
	Queue (PCU)	Delay (s)	RFC	LOS
	2016 Base Year			
	2025 No Development			
Stream B-AC	0.0	0.00	0.00	A
Stream C-AB	0.0	0.00	0.00	A
Stream C-A				
Stream A-B				
Stream A-C				
	2025 With Development			
Stream B-AC	0.0	0.00	0.00	A
Stream C-AB	0.0	0.00	0.00	A
Stream C-A				
Stream A-B				
Stream A-C				
	2030 No Development			
Stream B-AC	0.0	0.00	0.00	A
Stream C-AB	0.0	0.00	0.00	A
Stream C-A				
Stream A-B				
Stream A-C				
	2030 Wth Development			
Stream B-AC	0.0	0.00	0.00	A
Stream C-AB	0.0	0.00	0.00	A
Stream C-A				
Stream A-B				
Stream A-C				
	2040 No Development			
Stream B-AC	0.0	0.00	0.00	A
Stream C-AB	0.0	0.00	0.00	A
Stream C-A				
Stream A-B				
Stream A-C				
	2040 With Development			
Stream B-AC	0.0	0.00	0.00	A
Stream C-AB	0.0	0.00	0.00	A
Stream C-A				
Stream A-B				
Stream A-C				

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

File summary

File Description

Title	(untitled)
Location	
Site number	
Date	08/08/2016
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	TOBIN"Maria Rooney
Description	

Units

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

Analysis Options

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

Demand Set Summary

Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
2016 Base Year	AM	ONE HOUR	07:45	09:15	15
2025 No Development	AM	ONE HOUR	07:45	09:15	15
2025 With Development	AM	ONE HOUR	07:45	09:15	15
2030 No Development	AM	ONE HOUR	07:45	09:15	15
2030 Wth Development	AM	ONE HOUR	07:45	09:15	15
2040 No Development	AM	ONE HOUR	07:45	09:15	15
2040 With Development	AM	ONE HOUR	07:45	09:15	15

2016 Base Year , AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.00	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	R139 (W)		Major
B	WWTP		Minor
C	R139 (E)		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	12.00			200.0	✓	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	3.00	250	250

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	697.021	0.094	0.237	0.149	0.339
1	B-C	781.320	0.089	0.224	-	-
1	C-B	689.785	0.198	0.198	-	-

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	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
D1	2016 Base Year	AM	ONE HOUR	07:45	09:15	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	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	1289.00	100.000
B		✓	0.00	100.000
C		✓	1778.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0.000	0.000	1289.000
	B	0.000	0.000	0.000
	C	1778.000	0.000	0.000

Vehicle Mix

Heavy Vehicle proportion

	To			
		A	B	C
From	A	0	0	12
	B	0	0	0
	C	14	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.00	0.00	0.0	A
C-AB	0.00	0.00	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

Main results: (07:45-08:00)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	362.68	0.000	0.00	0.0	0.000	A
C-AB	0.00	498.13	0.000	0.00	0.0	0.000	A
C-A	1338.57			1338.57			
A-B	0.00			0.00			
A-C	970.43			970.43			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	271.88	0.000	0.00	0.0	0.000	A
C-AB	0.00	460.93	0.000	0.00	0.0	0.000	A
C-A	1598.39			1598.39			
A-B	0.00			0.00			
A-C	1158.78			1158.78			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	119.30	0.000	0.00	0.0	0.000	A
C-AB	0.00	409.50	0.000	0.00	0.0	0.000	A
C-A	1957.61			1957.61			
A-B	0.00			0.00			
A-C	1419.22			1419.22			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	119.30	0.000	0.00	0.0	0.000	A
C-AB	0.00	409.50	0.000	0.00	0.0	0.000	A
C-A	1957.61			1957.61			
A-B	0.00			0.00			
A-C	1419.22			1419.22			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	271.88	0.000	0.00	0.0	0.000	A
C-AB	0.00	460.93	0.000	0.00	0.0	0.000	A
C-A	1598.39			1598.39			
A-B	0.00			0.00			
A-C	1158.78			1158.78			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	362.68	0.000	0.00	0.0	0.000	A
C-AB	0.00	498.13	0.000	0.00	0.0	0.000	A
C-A	1338.57			1338.57			
A-B	0.00			0.00			
A-C	970.43			970.43			

2025 No Development, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.00	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
D2	2025 No Development	AM	ONE HOUR	07:45	09:15	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	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	1487.00	100.000
B		✓	0.00	100.000
C		✓	2054.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0.000	0.000	1487.000
	B	0.000	0.000	0.000
	C	2054.000	0.000	0.000

Vehicle Mix

Heavy Vehicle proportion

		To		
		A	B	C
From	A	0	0	13
	B	0	0	0
	C	15	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.00	0.00	0.0	A
C-AB	0.00	0.00	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

Main results: (07:45-08:00)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	291.47	0.000	0.00	0.0	0.000	A
C-AB	0.00	468.69	0.000	0.00	0.0	0.000	A
C-A	1546.36			1546.36			
A-B	0.00			0.00			
A-C	1119.49			1119.49			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	171.88	0.000	0.00	0.0	0.000	A
C-AB	0.00	425.78	0.000	0.00	0.0	0.000	A
C-A	1846.50			1846.50			
A-B	0.00			0.00			
A-C	1336.78			1336.78			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	0.00	0.000	0.00	0.0	0.000	A
C-AB	0.00	366.44	0.000	0.00	0.0	0.000	A
C-A	2261.50			2261.50			
A-B	0.00			0.00			
A-C	1637.22			1637.22			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	0.00	0.000	0.00	0.0	0.000	A
C-AB	0.00	366.44	0.000	0.00	0.0	0.000	A
C-A	2261.50			2261.50			
A-B	0.00			0.00			
A-C	1637.22			1637.22			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	171.88	0.000	0.00	0.0	0.000	A
C-AB	0.00	425.78	0.000	0.00	0.0	0.000	A
C-A	1846.50			1846.50			
A-B	0.00			0.00			
A-C	1336.78			1336.78			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	291.47	0.000	0.00	0.0	0.000	A
C-AB	0.00	468.69	0.000	0.00	0.0	0.000	A
C-A	1546.36			1546.36			
A-B	0.00			0.00			
A-C	1119.49			1119.49			

2025 With Development, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.00	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
D3	2025 With Development	AM	ONE HOUR	07:45	09:15	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	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	1509.00	100.000
B		✓	0.00	100.000
C		✓	2054.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0.000	22.000	1487.000
	B	0.000	0.000	0.000
	C	2054.000	0.000	0.000

Vehicle Mix

Heavy Vehicle proportion

		To		
		A	B	C
From	A	0	21	13
	B	0	0	0
	C	15	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.00	0.00	0.0	A
C-AB	0.00	0.00	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

Main results: (07:45-08:00)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	289.61	0.000	0.00	0.0	0.000	A
C-AB	0.00	465.42	0.000	0.00	0.0	0.000	A
C-A	1546.36			1546.36			
A-B	16.56			16.56			
A-C	1119.49			1119.49			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	169.26	0.000	0.00	0.0	0.000	A
C-AB	0.00	421.87	0.000	0.00	0.0	0.000	A
C-A	1846.50			1846.50			
A-B	19.78			19.78			
A-C	1336.78			1336.78			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	0.00	0.000	0.00	0.0	0.000	A
C-AB	0.00	361.66	0.000	0.00	0.0	0.000	A
C-A	2261.50			2261.50			
A-B	24.22			24.22			
A-C	1637.22			1637.22			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	0.00	0.000	0.00	0.0	0.000	A
C-AB	0.00	361.66	0.000	0.00	0.0	0.000	A
C-A	2261.50			2261.50			
A-B	24.22			24.22			
A-C	1637.22			1637.22			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	169.26	0.000	0.00	0.0	0.000	A
C-AB	0.00	421.87	0.000	0.00	0.0	0.000	A
C-A	1846.50			1846.50			
A-B	19.78			19.78			
A-C	1336.78			1336.78			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	289.61	0.000	0.00	0.0	0.000	A
C-AB	0.00	465.42	0.000	0.00	0.0	0.000	A
C-A	1546.36			1546.36			
A-B	16.56			16.56			
A-C	1119.49			1119.49			

2030 No Development, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.00	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
D4	2030 No Development	AM	ONE HOUR	07:45	09:15	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	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	1611.00	100.000
B		✓	0.00	100.000
C		✓	2228.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0.000	0.000	1611.000
	B	0.000	0.000	0.000
	C	2228.000	0.000	0.000

Vehicle Mix

Heavy Vehicle proportion

		To		
		A	B	C
From	A	0	0	13
	B	0	0	0
	C	15	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.00	0.00	0.0	A
C-AB	0.00	0.00	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

Main results: (07:45-08:00)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	242.65	0.000	0.00	0.0	0.000	A
C-AB	0.00	450.25	0.000	0.00	0.0	0.000	A
C-A	1677.36			1677.36			
A-B	0.00			0.00			
A-C	1212.85			1212.85			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	97.88	0.000	0.00	0.0	0.000	A
C-AB	0.00	403.76	0.000	0.00	0.0	0.000	A
C-A	2002.93			2002.93			
A-B	0.00			0.00			
A-C	1448.26			1448.26			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	0.00	0.000	0.00	0.0	0.000	A
C-AB	0.00	339.48	0.000	0.00	0.0	0.000	A
C-A	2453.07			2453.07			
A-B	0.00			0.00			
A-C	1773.74			1773.74			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	0.00	0.000	0.00	0.0	0.000	A
C-AB	0.00	339.48	0.000	0.00	0.0	0.000	A
C-A	2453.07			2453.07			
A-B	0.00			0.00			
A-C	1773.74			1773.74			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	97.88	0.000	0.00	0.0	0.000	A
C-AB	0.00	403.76	0.000	0.00	0.0	0.000	A
C-A	2002.93			2002.93			
A-B	0.00			0.00			
A-C	1448.26			1448.26			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	242.65	0.000	0.00	0.0	0.000	A
C-AB	0.00	450.25	0.000	0.00	0.0	0.000	A
C-A	1677.36			1677.36			
A-B	0.00			0.00			
A-C	1212.85			1212.85			

2030 Wth Development, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.00	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
D5	2030 Wth Development	AM	ONE HOUR	07:45	09:15	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	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	1633.00	100.000
B		✓	0.00	100.000
C		✓	2228.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0.000	22.000	1611.000
	B	0.000	0.000	0.000
	C	2228.000	0.000	0.000

Vehicle Mix

Heavy Vehicle proportion

		To		
		A	B	C
From	A	0	21	13
	B	0	0	0
	C	15	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.00	0.00	0.0	A
C-AB	0.00	0.00	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

Main results: (07:45-08:00)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	240.68	0.000	0.00	0.0	0.000	A
C-AB	0.00	446.98	0.000	0.00	0.0	0.000	A
C-A	1677.36			1677.36			
A-B	16.56			16.56			
A-C	1212.85			1212.85			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	94.88	0.000	0.00	0.0	0.000	A
C-AB	0.00	399.86	0.000	0.00	0.0	0.000	A
C-A	2002.93			2002.93			
A-B	19.78			19.78			
A-C	1448.26			1448.26			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	0.00	0.000	0.00	0.0	0.000	A
C-AB	0.00	334.70	0.000	0.00	0.0	0.000	A
C-A	2453.07			2453.07			
A-B	24.22			24.22			
A-C	1773.74			1773.74			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	0.00	0.000	0.00	0.0	0.000	A
C-AB	0.00	334.70	0.000	0.00	0.0	0.000	A
C-A	2453.07			2453.07			
A-B	24.22			24.22			
A-C	1773.74			1773.74			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	94.88	0.000	0.00	0.0	0.000	A
C-AB	0.00	399.86	0.000	0.00	0.0	0.000	A
C-A	2002.93			2002.93			
A-B	19.78			19.78			
A-C	1448.26			1448.26			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	240.68	0.000	0.00	0.0	0.000	A
C-AB	0.00	446.98	0.000	0.00	0.0	0.000	A
C-A	1677.36			1677.36			
A-B	16.56			16.56			
A-C	1212.85			1212.85			

2040 No Development, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.00	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
D6	2040 No Development	AM	ONE HOUR	07:45	09:15	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	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	1733.00	100.000
B		✓	0.00	100.000
C		✓	2404.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0.000	0.000	1733.000
	B	0.000	0.000	0.000
	C	2404.000	0.000	0.000

Vehicle Mix

Heavy Vehicle proportion

		To		
		A	B	C
From	A	0	0	15
	B	0	0	0
	C	17	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.00	0.00	0.0	A
C-AB	0.00	0.00	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

Main results: (07:45-08:00)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	189.70	0.000	0.00	0.0	0.000	A
C-AB	0.00	432.11	0.000	0.00	0.0	0.000	A
C-A	1809.86			1809.86			
A-B	0.00			0.00			
A-C	1304.69			1304.69			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	10.27	0.000	0.00	0.0	0.000	A
C-AB	0.00	382.10	0.000	0.00	0.0	0.000	A
C-A	2161.15			2161.15			
A-B	0.00			0.00			
A-C	1557.93			1557.93			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	0.00	0.000	0.00	0.0	0.000	A
C-AB	0.00	312.95	0.000	0.00	0.0	0.000	A
C-A	2646.85			2646.85			
A-B	0.00			0.00			
A-C	1908.07			1908.07			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	0.00	0.000	0.00	0.0	0.000	A
C-AB	0.00	312.95	0.000	0.00	0.0	0.000	A
C-A	2646.85			2646.85			
A-B	0.00			0.00			
A-C	1908.07			1908.07			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	10.27	0.000	0.00	0.0	0.000	A
C-AB	0.00	382.10	0.000	0.00	0.0	0.000	A
C-A	2161.15			2161.15			
A-B	0.00			0.00			
A-C	1557.93			1557.93			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	189.70	0.000	0.00	0.0	0.000	A
C-AB	0.00	432.11	0.000	0.00	0.0	0.000	A
C-A	1809.86			1809.86			
A-B	0.00			0.00			
A-C	1304.69			1304.69			

2040 With Development, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.00	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
D7	2040 With Development	AM	ONE HOUR	07:45	09:15	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	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	1755.00	100.000
B		✓	0.00	100.000
C		✓	2404.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0.000	22.000	1733.000
	B	0.000	0.000	0.000
	C	2404.000	0.000	0.000

Vehicle Mix

Heavy Vehicle proportion

		To		
		A	B	C
From	A	0	21	15
	B	0	0	0
	C	17	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.00	0.00	0.0	A
C-AB	0.00	0.00	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

Main results: (07:45-08:00)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	187.57	0.000	0.00	0.0	0.000	A
C-AB	0.00	428.84	0.000	0.00	0.0	0.000	A
C-A	1809.86			1809.86			
A-B	16.56			16.56			
A-C	1304.69			1304.69			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	6.63	0.000	0.00	0.0	0.000	A
C-AB	0.00	378.20	0.000	0.00	0.0	0.000	A
C-A	2161.15			2161.15			
A-B	19.78			19.78			
A-C	1557.93			1557.93			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	0.00	0.000	0.00	0.0	0.000	A
C-AB	0.00	308.17	0.000	0.00	0.0	0.000	A
C-A	2646.85			2646.85			
A-B	24.22			24.22			
A-C	1908.07			1908.07			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	0.00	0.000	0.00	0.0	0.000	A
C-AB	0.00	308.17	0.000	0.00	0.0	0.000	A
C-A	2646.85			2646.85			
A-B	24.22			24.22			
A-C	1908.07			1908.07			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	6.63	0.000	0.00	0.0	0.000	A
C-AB	0.00	378.20	0.000	0.00	0.0	0.000	A
C-A	2161.15			2161.15			
A-B	19.78			19.78			
A-C	1557.93			1557.93			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	187.57	0.000	0.00	0.0	0.000	A
C-AB	0.00	428.84	0.000	0.00	0.0	0.000	A
C-A	1809.86			1809.86			
A-B	16.56			16.56			
A-C	1304.69			1304.69			

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.0.0.4211 []

For sales and distribution information, program advice and maintenance, contact TRL:
Tel: +44 (0)1344 770758 email: software@trl.co.uk Web: http://www.trlsoftware.co.uk

Filename: Junction B PM.j9
Path: Y:\Junction B
Report generation date: 13/10/2017 11:05:06

Summary of junction performance

	PM			
	Queue (PCU)	Delay (s)	RFC	LOS
	2016 Base Year			
	2025 No Development			
Stream B-AC	0.0	0.00	0.00	A
Stream C-AB	0.0	0.00	0.00	A
Stream C-A				
Stream A-B				
Stream A-C				
	2025 With Development			
Stream B-AC	0.0	0.00	0.00	A
Stream C-AB	0.0	0.00	0.00	A
Stream C-A				
Stream A-B				
Stream A-C				
	2030 No Development			
Stream B-AC	0.0	0.00	0.00	A
Stream C-AB	0.0	0.00	0.00	A
Stream C-A				
Stream A-B				
Stream A-C				
	2030 Wth Development			
Stream B-AC	0.0	0.00	0.00	A
Stream C-AB	0.0	0.00	0.00	A
Stream C-A				
Stream A-B				
Stream A-C				
	2040 No Development			
Stream B-AC	0.0	0.00	0.00	A
Stream C-AB	0.0	0.00	0.00	A
Stream C-A				
Stream A-B				
Stream A-C				
	2040 With Development			
Stream B-AC	0.0	0.00	0.00	A
Stream C-AB	0.0	0.00	0.00	A
Stream C-A				
Stream A-B				
Stream A-C				

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

File summary

File Description

Title	(untitled)
Location	
Site number	
Date	08/08/2016
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	TOBIN"Maria Rooney
Description	

Units

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

Analysis Options

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

Demand Set Summary

Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
2016 Base Year	PM	ONE HOUR	16:45	18:15	15
2025 No Development	PM	ONE HOUR	16:45	18:15	15
2025 With Development	PM	ONE HOUR	16:45	18:15	15
2030 No Development	PM	ONE HOUR	16:45	18:15	15
2030 Wth Development	PM	ONE HOUR	16:45	18:15	15
2040 No Development	PM	ONE HOUR	16:45	18:15	15
2040 With Development	PM	ONE HOUR	16:45	18:15	15

2016 Base Year , PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.00	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	R139 (W)		Major
B	WWTP		Minor
C	R139 (E)		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	12.00			200.0	✓	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	3.00	250	250

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	697.021	0.094	0.237	0.149	0.339
1	B-C	781.320	0.089	0.224	-	-
1	C-B	689.785	0.198	0.198	-	-

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	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
D1	2016 Base Year	PM	ONE HOUR	16:45	18:15	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	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	1355.00	100.000
B		✓	0.00	100.000
C		✓	1787.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0.000	0.000	1355.000
	B	0.000	0.000	0.000
	C	1787.000	0.000	0.000

Vehicle Mix

Heavy Vehicle proportion

	To			
		A	B	C
From	A	0	0	12
	B	0	0	0
	C	20	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.00	0.00	0.0	A
C-AB	0.00	0.00	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

Main results: (16:45-17:00)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	348.53	0.000	0.00	0.0	0.000	A
C-AB	0.00	488.32	0.000	0.00	0.0	0.000	A
C-A	1345.35			1345.35			
A-B	0.00			0.00			
A-C	1020.12			1020.12			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	253.19	0.000	0.00	0.0	0.000	A
C-AB	0.00	449.21	0.000	0.00	0.0	0.000	A
C-A	1606.48			1606.48			
A-B	0.00			0.00			
A-C	1218.12			1218.12			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	89.53	0.000	0.00	0.0	0.000	A
C-AB	0.00	395.15	0.000	0.00	0.0	0.000	A
C-A	1967.52			1967.52			
A-B	0.00			0.00			
A-C	1491.88			1491.88			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	89.53	0.000	0.00	0.0	0.000	A
C-AB	0.00	395.15	0.000	0.00	0.0	0.000	A
C-A	1967.52			1967.52			
A-B	0.00			0.00			
A-C	1491.88			1491.88			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	253.19	0.000	0.00	0.0	0.000	A
C-AB	0.00	449.21	0.000	0.00	0.0	0.000	A
C-A	1606.48			1606.48			
A-B	0.00			0.00			
A-C	1218.12			1218.12			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	348.53	0.000	0.00	0.0	0.000	A
C-AB	0.00	488.32	0.000	0.00	0.0	0.000	A
C-A	1345.35			1345.35			
A-B	0.00			0.00			
A-C	1020.12			1020.12			

2025 No Development, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.00	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
D2	2025 No Development	PM	ONE HOUR	16:45	18:15	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	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	1563.00	100.000
B		✓	0.00	100.000
C		✓	2076.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0.000	0.000	1563.000
	B	0.000	0.000	0.000
	C	2076.000	0.000	0.000

Vehicle Mix

Heavy Vehicle proportion

		To		
		A	B	C
From	A	0	0	12
	B	0	0	0
	C	21	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.00	0.00	0.0	A
C-AB	0.00	0.00	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

Main results: (16:45-17:00)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	272.47	0.000	0.00	0.0	0.000	A
C-AB	0.00	457.39	0.000	0.00	0.0	0.000	A
C-A	1562.92			1562.92			
A-B	0.00			0.00			
A-C	1176.71			1176.71			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	144.43	0.000	0.00	0.0	0.000	A
C-AB	0.00	412.28	0.000	0.00	0.0	0.000	A
C-A	1866.28			1866.28			
A-B	0.00			0.00			
A-C	1405.10			1405.10			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	0.00	0.000	0.00	0.0	0.000	A
C-AB	0.00	349.92	0.000	0.00	0.0	0.000	A
C-A	2285.72			2285.72			
A-B	0.00			0.00			
A-C	1720.90			1720.90			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	0.00	0.000	0.00	0.0	0.000	A
C-AB	0.00	349.92	0.000	0.00	0.0	0.000	A
C-A	2285.72			2285.72			
A-B	0.00			0.00			
A-C	1720.90			1720.90			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	144.43	0.000	0.00	0.0	0.000	A
C-AB	0.00	412.28	0.000	0.00	0.0	0.000	A
C-A	1866.28			1866.28			
A-B	0.00			0.00			
A-C	1405.10			1405.10			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	272.47	0.000	0.00	0.0	0.000	A
C-AB	0.00	457.39	0.000	0.00	0.0	0.000	A
C-A	1562.92			1562.92			
A-B	0.00			0.00			
A-C	1176.71			1176.71			

2025 With Development, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.00	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
D3	2025 With Development	PM	ONE HOUR	16:45	18:15	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	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	1578.00	100.000
B		✓	0.00	100.000
C		✓	2076.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0.000	15.000	1563.000
	B	0.000	0.000	0.000
	C	2076.000	0.000	0.000

Vehicle Mix

Heavy Vehicle proportion

		To		
		A	B	C
From	A	0	32	12
	B	0	0	0
	C	21	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.00	0.00	0.0	A
C-AB	0.00	0.00	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

Main results: (16:45-17:00)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	271.18	0.000	0.00	0.0	0.000	A
C-AB	0.00	455.16	0.000	0.00	0.0	0.000	A
C-A	1562.92			1562.92			
A-B	11.29			11.29			
A-C	1176.71			1176.71			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	142.56	0.000	0.00	0.0	0.000	A
C-AB	0.00	409.62	0.000	0.00	0.0	0.000	A
C-A	1866.28			1866.28			
A-B	13.48			13.48			
A-C	1405.10			1405.10			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	0.00	0.000	0.00	0.0	0.000	A
C-AB	0.00	346.66	0.000	0.00	0.0	0.000	A
C-A	2285.72			2285.72			
A-B	16.52			16.52			
A-C	1720.90			1720.90			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	0.00	0.000	0.00	0.0	0.000	A
C-AB	0.00	346.66	0.000	0.00	0.0	0.000	A
C-A	2285.72			2285.72			
A-B	16.52			16.52			
A-C	1720.90			1720.90			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	142.56	0.000	0.00	0.0	0.000	A
C-AB	0.00	409.62	0.000	0.00	0.0	0.000	A
C-A	1866.28			1866.28			
A-B	13.48			13.48			
A-C	1405.10			1405.10			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	271.18	0.000	0.00	0.0	0.000	A
C-AB	0.00	455.16	0.000	0.00	0.0	0.000	A
C-A	1562.92			1562.92			
A-B	11.29			11.29			
A-C	1176.71			1176.71			

2030 No Development, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.00	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
D4	2030 No Development	PM	ONE HOUR	16:45	18:15	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	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	1693.00	100.000
B		✓	0.00	100.000
C		✓	2258.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0.000	0.000	1693.000
	B	0.000	0.000	0.000
	C	2258.000	0.000	0.000

Vehicle Mix

Heavy Vehicle proportion

		To		
		A	B	C
From	A	0	0	13
	B	0	0	0
	C	22	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.00	0.00	0.0	A
C-AB	0.00	0.00	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

Main results: (16:45-17:00)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	219.83	0.000	0.00	0.0	0.000	A
C-AB	0.00	438.06	0.000	0.00	0.0	0.000	A
C-A	1699.94			1699.94			
A-B	0.00			0.00			
A-C	1274.58			1274.58			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	61.93	0.000	0.00	0.0	0.000	A
C-AB	0.00	389.20	0.000	0.00	0.0	0.000	A
C-A	2029.90			2029.90			
A-B	0.00			0.00			
A-C	1521.97			1521.97			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	0.00	0.000	0.00	0.0	0.000	A
C-AB	0.00	321.65	0.000	0.00	0.0	0.000	A
C-A	2486.10			2486.10			
A-B	0.00			0.00			
A-C	1864.03			1864.03			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	0.00	0.000	0.00	0.0	0.000	A
C-AB	0.00	321.65	0.000	0.00	0.0	0.000	A
C-A	2486.10			2486.10			
A-B	0.00			0.00			
A-C	1864.03			1864.03			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	61.93	0.000	0.00	0.0	0.000	A
C-AB	0.00	389.20	0.000	0.00	0.0	0.000	A
C-A	2029.90			2029.90			
A-B	0.00			0.00			
A-C	1521.97			1521.97			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	219.83	0.000	0.00	0.0	0.000	A
C-AB	0.00	438.06	0.000	0.00	0.0	0.000	A
C-A	1699.94			1699.94			
A-B	0.00			0.00			
A-C	1274.58			1274.58			

2030 Wth Development, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.00	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
D5	2030 Wth Development	PM	ONE HOUR	16:45	18:15	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	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	1708.00	100.000
B		✓	0.00	100.000
C		✓	2258.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0.000	15.000	1693.000
	B	0.000	0.000	0.000
	C	2258.000	0.000	0.000

Vehicle Mix

Heavy Vehicle proportion

		To		
		A	B	C
From	A	0	32	13
	B	0	0	0
	C	22	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.00	0.00	0.0	A
C-AB	0.00	0.00	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

Main results: (16:45-17:00)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	218.44	0.000	0.00	0.0	0.000	A
C-AB	0.00	435.83	0.000	0.00	0.0	0.000	A
C-A	1699.94			1699.94			
A-B	11.29			11.29			
A-C	1274.58			1274.58			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	59.72	0.000	0.00	0.0	0.000	A
C-AB	0.00	386.54	0.000	0.00	0.0	0.000	A
C-A	2029.90			2029.90			
A-B	13.48			13.48			
A-C	1521.97			1521.97			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	0.00	0.000	0.00	0.0	0.000	A
C-AB	0.00	318.39	0.000	0.00	0.0	0.000	A
C-A	2486.10			2486.10			
A-B	16.52			16.52			
A-C	1864.03			1864.03			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	0.00	0.000	0.00	0.0	0.000	A
C-AB	0.00	318.39	0.000	0.00	0.0	0.000	A
C-A	2486.10			2486.10			
A-B	16.52			16.52			
A-C	1864.03			1864.03			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	59.72	0.000	0.00	0.0	0.000	A
C-AB	0.00	386.54	0.000	0.00	0.0	0.000	A
C-A	2029.90			2029.90			
A-B	13.48			13.48			
A-C	1521.97			1521.97			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	218.44	0.000	0.00	0.0	0.000	A
C-AB	0.00	435.83	0.000	0.00	0.0	0.000	A
C-A	1699.94			1699.94			
A-B	11.29			11.29			
A-C	1274.58			1274.58			

2040 No Development, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.00	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
D6	2040 No Development	PM	ONE HOUR	16:45	18:15	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	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	1821.00	100.000
B		✓	0.00	100.000
C		✓	2461.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0.000	0.000	1821.000
	B	0.000	0.000	0.000
	C	2461.000	0.000	0.000

Vehicle Mix

Heavy Vehicle proportion

		To		
		A	B	C
From	A	0	0	15
	B	0	0	0
	C	24	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.00	0.00	0.0	A
C-AB	0.00	0.00	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

Main results: (16:45-17:00)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	159.06	0.000	0.00	0.0	0.000	A
C-AB	0.00	419.03	0.000	0.00	0.0	0.000	A
C-A	1852.77			1852.77			
A-B	0.00			0.00			
A-C	1370.94			1370.94			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	0.00	0.000	0.00	0.0	0.000	A
C-AB	0.00	366.48	0.000	0.00	0.0	0.000	A
C-A	2212.39			2212.39			
A-B	0.00			0.00			
A-C	1637.04			1637.04			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	0.00	0.000	0.00	0.0	0.000	A
C-AB	0.00	293.82	0.000	0.00	0.0	0.000	A
C-A	2709.61			2709.61			
A-B	0.00			0.00			
A-C	2004.96			2004.96			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	0.00	0.000	0.00	0.0	0.000	A
C-AB	0.00	293.82	0.000	0.00	0.0	0.000	A
C-A	2709.61			2709.61			
A-B	0.00			0.00			
A-C	2004.96			2004.96			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	0.00	0.000	0.00	0.0	0.000	A
C-AB	0.00	366.48	0.000	0.00	0.0	0.000	A
C-A	2212.39			2212.39			
A-B	0.00			0.00			
A-C	1637.04			1637.04			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	159.06	0.000	0.00	0.0	0.000	A
C-AB	0.00	419.03	0.000	0.00	0.0	0.000	A
C-A	1852.77			1852.77			
A-B	0.00			0.00			
A-C	1370.94			1370.94			

2040 With Development, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.00	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
D7	2040 With Development	PM	ONE HOUR	16:45	18:15	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	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	1836.00	100.000
B		✓	0.00	100.000
C		✓	2461.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0.000	15.000	1821.000
	B	0.000	0.000	0.000
	C	2461.000	0.000	0.000

Vehicle Mix

Heavy Vehicle proportion

		To		
		A	B	C
From	A	0	32	15
	B	0	0	0
	C	24	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.00	0.00	0.0	A
C-AB	0.00	0.00	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

Main results: (16:45-17:00)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	157.53	0.000	0.00	0.0	0.000	A
C-AB	0.00	416.80	0.000	0.00	0.0	0.000	A
C-A	1852.77			1852.77			
A-B	11.29			11.29			
A-C	1370.94			1370.94			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	0.00	0.000	0.00	0.0	0.000	A
C-AB	0.00	363.81	0.000	0.00	0.0	0.000	A
C-A	2212.39			2212.39			
A-B	13.48			13.48			
A-C	1637.04			1637.04			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	0.00	0.000	0.00	0.0	0.000	A
C-AB	0.00	290.55	0.000	0.00	0.0	0.000	A
C-A	2709.61			2709.61			
A-B	16.52			16.52			
A-C	2004.96			2004.96			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	0.00	0.000	0.00	0.0	0.000	A
C-AB	0.00	290.55	0.000	0.00	0.0	0.000	A
C-A	2709.61			2709.61			
A-B	16.52			16.52			
A-C	2004.96			2004.96			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	0.00	0.000	0.00	0.0	0.000	A
C-AB	0.00	363.81	0.000	0.00	0.0	0.000	A
C-A	2212.39			2212.39			
A-B	13.48			13.48			
A-C	1637.04			1637.04			

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

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0.00	157.53	0.000	0.00	0.0	0.000	A
C-AB	0.00	416.80	0.000	0.00	0.0	0.000	A
C-A	1852.77			1852.77			
A-B	11.29			11.29			
A-C	1370.94			1370.94			

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