

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.5.1.7462
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Filename: Mill Lane. EPR. Blackbrook. Ballater Rbt Opt A.j9

Path: C:\Users\Brad\Highgate Transportation\HTp - Documents\1900 - Projects\1901 - Peel Hall\Modelling\Junctions 9\Mill Lane. Enfield Park Road. Blackbrook Avenue. Ballater Drive Roundabout

Report generation date: 30/01/2020 13:13:00

Summary of junction performance

	AM					PM				
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS
2018 Validation										
Arm 1	D1	0.4	2.65	0.28	A	D9	0.3	2.57	0.26	A
Arm 2		0.1	2.52	0.05	A		0.1	2.69	0.13	A
Arm 3		0.2	2.32	0.20	A		0.3	2.53	0.22	A
Arm 4		0.1	2.72	0.06	A		0.0	2.74	0.04	A
2022 Do Minimum										
Arm 1	D2	0.5	2.83	0.32	A	D10	0.4	2.61	0.27	A
Arm 2		0.1	2.64	0.06	A		0.1	2.73	0.13	A
Arm 3		0.3	2.37	0.21	A		0.3	2.55	0.22	A
Arm 4		0.1	2.76	0.06	A		0.0	2.75	0.04	A
2022 Do Something										
Arm 1	D3	0.5	2.90	0.34	A	D11	0.4	2.65	0.28	A
Arm 2		0.1	2.67	0.06	A		0.2	2.78	0.14	A
Arm 3		0.3	2.39	0.22	A		0.3	2.59	0.24	A
Arm 4		0.1	2.78	0.06	A		0.0	2.79	0.04	A
2022 Do Something Full										
Arm 1	D4	1.3	4.32	0.56	A	D12	0.7	3.29	0.42	A
Arm 2		0.1	3.28	0.09	A		0.3	3.42	0.22	A
Arm 3		0.5	2.78	0.32	A		0.7	3.49	0.41	A
Arm 4		0.1	3.11	0.07	A		0.1	3.45	0.05	A
2027 Do Minimum										
Arm 1	D5	0.5	2.93	0.35	A	D13	0.4	2.69	0.29	A
Arm 2		0.1	2.69	0.06	A		0.2	2.80	0.14	A
Arm 3		0.3	2.41	0.23	A		0.3	2.63	0.25	A
Arm 4		0.1	2.80	0.06	A		0.0	2.82	0.04	A
2027 Do Something										
Arm 1	D6	0.8	3.54	0.46	A	D14	0.6	2.99	0.36	A
Arm 2		0.1	2.98	0.07	A		0.2	3.15	0.19	A
Arm 3		0.4	2.56	0.27	A		0.5	3.11	0.35	A
Arm 4		0.1	2.93	0.06	A		0.0	3.19	0.05	A

	AM					PM				
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS
2032 Do Minimum										
Arm 1	D7	0.6	3.07	0.38	A	D15	0.4	2.75	0.31	A
Arm 2		0.1	2.76	0.06	A		0.2	2.86	0.15	A
Arm 3		0.3	2.44	0.24	A		0.4	2.70	0.27	A
Arm 4		0.1	2.82	0.06	A		0.0	2.88	0.04	A
2032 Do Something Full										
Arm 1	D8	1.6	5.05	0.62	A	D16	0.8	3.48	0.45	A
Arm 2		0.1	3.45	0.08	A		0.3	3.50	0.22	A
Arm 3		0.6	2.89	0.36	A		0.9	3.86	0.47	A
Arm 4		0.1	3.19	0.07	A		0.1	3.67	0.05	A

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

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

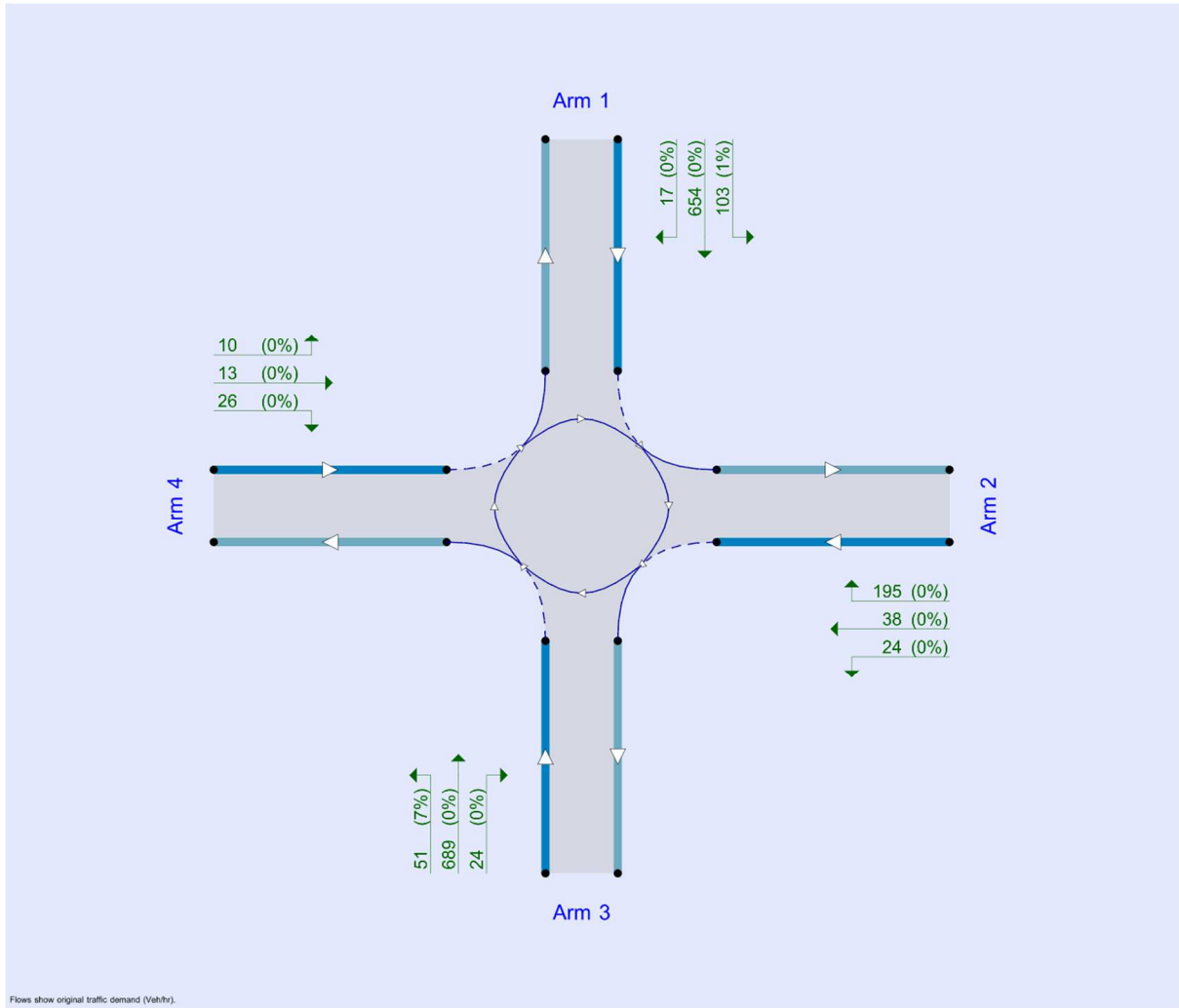
File summary

File Description

Title	
Location	
Site number	
Date	28/01/2020
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	AzureAD\Brad
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	Veh	Veh	perHour	s	-Min	perMin



Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2018 Validation	AM	ONE HOUR	07:45	09:15	15	✓
D2	2022 Do Minimum	AM	ONE HOUR	07:45	09:15	15	✓
D3	2022 Do Something	AM	ONE HOUR	07:45	09:15	15	✓
D4	2022 Do Something Full	AM	ONE HOUR	07:45	09:15	15	✓
D5	2027 Do Minimum	AM	ONE HOUR	07:45	09:15	15	✓
D6	2027 Do Something	AM	ONE HOUR	07:45	09:15	15	✓
D7	2032 Do Minimum	AM	ONE HOUR	07:45	09:15	15	✓
D8	2032 Do Something Full	AM	ONE HOUR	07:45	09:15	15	✓
D9	2018 Validation	PM	ONE HOUR	16:45	18:15	15	✓
D10	2022 Do Minimum	PM	ONE HOUR	16:45	18:15	15	✓
D11	2022 Do Something	PM	ONE HOUR	16:45	18:15	15	✓
D12	2022 Do Something Full	PM	ONE HOUR	16:45	18:15	15	✓
D13	2027 Do Minimum	PM	ONE HOUR	16:45	18:15	15	✓
D14	2027 Do Something	PM	ONE HOUR	16:45	18:15	15	✓
D15	2032 Do Minimum	PM	ONE HOUR	16:45	18:15	15	✓
D16	2032 Do Something Full	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

2018 Validation, AM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	2.53	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Mill Lane	
2	Enfield Park Road	
3	Blackbrook Avenue	
4	Ballater Drive	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1	4.00	7.75	19.2	21.0	40.0	27.0	
2	2.86	7.20	34.0	22.0	40.0	27.0	
3	4.14	7.85	16.2	40.0	40.0	26.0	
4	3.05	7.24	20.6	22.0	40.0	36.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.693	1936
2	0.672	1827
3	0.709	1976
4	0.630	1665

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2018 Validation	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	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	477	100.000
2		ONE HOUR	✓	72	100.000
3		ONE HOUR	✓	345	100.000
4		ONE HOUR	✓	77	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	82	393	2
	2	39	0	24	9
	3	316	15	0	14
	4	26	22	29	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	0	1	0	0
	2	1	0	0	0
	3	0	0	0	7
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.28	2.65	0.4	A	438	657
2	0.05	2.52	0.1	A	66	99
3	0.20	2.32	0.2	A	317	475
4	0.06	2.72	0.1	A	71	106

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	359	90	50	1898	0.189	358	286	0.0	0.2	2.337	A
2	54	14	318	1604	0.034	54	89	0.0	0.0	2.321	A
3	260	65	38	1944	0.134	259	335	0.0	0.2	2.137	A
4	58	14	278	1490	0.039	58	19	0.0	0.0	2.513	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	429	107	59	1891	0.227	429	342	0.2	0.3	2.461	A
2	65	16	381	1563	0.041	65	107	0.0	0.0	2.402	A
3	310	78	45	1938	0.160	310	401	0.2	0.2	2.210	A
4	69	17	332	1456	0.048	69	22	0.0	0.0	2.595	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	525	131	73	1882	0.279	525	419	0.3	0.4	2.652	A
2	79	20	467	1505	0.053	79	131	0.0	0.1	2.523	A
3	380	95	55	1931	0.197	380	491	0.2	0.2	2.319	A
4	85	21	407	1409	0.060	85	28	0.0	0.1	2.718	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	525	131	73	1882	0.279	525	419	0.4	0.4	2.652	A
2	79	20	467	1505	0.053	79	131	0.1	0.1	2.524	A
3	380	95	55	1931	0.197	380	491	0.2	0.2	2.320	A
4	85	21	407	1409	0.060	85	28	0.1	0.1	2.719	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	429	107	59	1891	0.227	429	343	0.4	0.3	2.464	A
2	65	16	381	1562	0.041	65	107	0.1	0.0	2.405	A
3	310	78	45	1938	0.160	310	401	0.2	0.2	2.212	A
4	69	17	333	1456	0.048	69	22	0.1	0.1	2.598	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	359	90	50	1898	0.189	359	287	0.3	0.2	2.339	A
2	54	14	319	1604	0.034	54	90	0.0	0.0	2.324	A
3	260	65	38	1944	0.134	260	336	0.2	0.2	2.137	A
4	58	14	279	1490	0.039	58	19	0.1	0.0	2.516	A

2022 Do Minimum, AM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	2.65	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2022 Do Minimum	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	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	555	100.000
2		ONE HOUR	✓	78	100.000
3		ONE HOUR	✓	371	100.000
4		ONE HOUR	✓	77	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	87	466	2
	2	43	0	26	9
	3	341	16	0	14
	4	26	22	29	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	0	1	0	0
	2	1	0	0	0
	3	0	0	0	7
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.32	2.83	0.5	A	509	764
2	0.06	2.64	0.1	A	72	107
3	0.21	2.37	0.3	A	340	511
4	0.06	2.76	0.1	A	71	106

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	418	104	50	1898	0.220	417	308	0.0	0.3	2.430	A
2	59	15	373	1568	0.037	59	94	0.0	0.0	2.385	A
3	279	70	41	1942	0.144	279	391	0.0	0.2	2.163	A
4	58	14	300	1476	0.039	58	19	0.0	0.0	2.538	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	499	125	60	1891	0.264	499	368	0.3	0.4	2.585	A
2	70	18	447	1519	0.046	70	112	0.0	0.0	2.484	A
3	334	83	49	1936	0.172	333	468	0.2	0.2	2.245	A
4	69	17	359	1439	0.048	69	22	0.0	0.1	2.628	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	611	153	74	1882	0.325	611	451	0.4	0.5	2.832	A
2	86	21	547	1452	0.059	86	138	0.0	0.1	2.635	A
3	408	102	59	1929	0.212	408	573	0.2	0.3	2.367	A
4	85	21	440	1388	0.061	85	28	0.1	0.1	2.762	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	611	153	74	1882	0.325	611	451	0.5	0.5	2.833	A
2	86	21	547	1451	0.059	86	138	0.1	0.1	2.635	A
3	408	102	59	1929	0.212	408	574	0.3	0.3	2.367	A
4	85	21	440	1388	0.061	85	28	0.1	0.1	2.762	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	499	125	60	1891	0.264	499	369	0.5	0.4	2.589	A
2	70	18	447	1518	0.046	70	112	0.1	0.0	2.485	A
3	334	83	49	1936	0.172	334	469	0.3	0.2	2.246	A
4	69	17	360	1438	0.048	69	22	0.1	0.1	2.628	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	418	104	50	1898	0.220	418	309	0.4	0.3	2.435	A
2	59	15	374	1567	0.037	59	94	0.0	0.0	2.386	A
3	279	70	41	1942	0.144	279	393	0.2	0.2	2.167	A
4	58	14	301	1475	0.039	58	19	0.1	0.0	2.541	A

2022 Do Something, AM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	2.70	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2022 Do Something	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	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	582	100.000
2		ONE HOUR	✓	79	100.000
3		ONE HOUR	✓	383	100.000
4		ONE HOUR	✓	77	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	92	488	2
	2	44	0	26	9
	3	353	16	0	14
	4	26	22	29	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	0	1	0	0
	2	1	0	0	0
	3	0	0	0	7
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.34	2.90	0.5	A	534	801
2	0.06	2.67	0.1	A	72	109
3	0.22	2.39	0.3	A	351	527
4	0.06	2.78	0.1	A	71	106

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	438	110	50	1898	0.231	437	318	0.0	0.3	2.462	A
2	59	15	390	1557	0.038	59	98	0.0	0.0	2.404	A
3	288	72	41	1942	0.149	288	408	0.0	0.2	2.175	A
4	58	14	310	1470	0.039	58	19	0.0	0.0	2.549	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	523	131	60	1891	0.277	523	380	0.3	0.4	2.631	A
2	71	18	466	1505	0.047	71	117	0.0	0.0	2.509	A
3	344	86	49	1936	0.178	344	488	0.2	0.2	2.261	A
4	69	17	371	1431	0.048	69	22	0.0	0.1	2.642	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	641	160	74	1882	0.341	640	465	0.4	0.5	2.898	A
2	87	22	571	1435	0.061	87	143	0.0	0.1	2.669	A
3	422	105	61	1928	0.219	421	597	0.2	0.3	2.389	A
4	85	21	454	1379	0.061	85	28	0.1	0.1	2.781	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	641	160	74	1881	0.341	641	466	0.5	0.5	2.900	A
2	87	22	571	1435	0.061	87	143	0.1	0.1	2.669	A
3	422	105	61	1928	0.219	422	598	0.3	0.3	2.389	A
4	85	21	455	1379	0.061	85	28	0.1	0.1	2.781	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	523	131	60	1891	0.277	524	381	0.5	0.4	2.633	A
2	71	18	467	1505	0.047	71	117	0.1	0.0	2.512	A
3	344	86	49	1936	0.178	345	489	0.3	0.2	2.262	A
4	69	17	372	1431	0.048	69	22	0.1	0.1	2.643	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	438	110	50	1898	0.231	438	319	0.4	0.3	2.469	A
2	59	15	391	1556	0.038	60	98	0.0	0.0	2.407	A
3	288	72	41	1942	0.149	289	409	0.2	0.2	2.179	A
4	58	14	311	1469	0.039	58	19	0.1	0.0	2.550	A

2022 Do Something Full, AM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	3.69	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2022 Do Something Full	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	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	955	100.000
2		ONE HOUR	✓	99	100.000
3		ONE HOUR	✓	562	100.000
4		ONE HOUR	✓	77	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	153	800	2
	2	64	0	26	9
	3	532	16	0	14
	4	26	22	29	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	0	0	0	0
	2	1	0	0	0
	3	0	0	0	7
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.56	4.32	1.3	A	876	1314
2	0.09	3.28	0.1	A	91	136
3	0.32	2.78	0.5	A	516	774
4	0.07	3.11	0.1	A	71	106

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	719	180	50	1901	0.378	717	467	0.0	0.6	3.033	A
2	75	19	624	1399	0.053	74	143	0.0	0.1	2.717	A
3	423	106	56	1932	0.219	422	642	0.0	0.3	2.382	A
4	58	14	460	1376	0.042	58	19	0.0	0.0	2.731	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	859	215	60	1894	0.453	858	559	0.6	0.8	3.470	A
2	89	22	746	1317	0.068	89	172	0.1	0.1	2.930	A
3	505	126	67	1925	0.263	505	768	0.3	0.4	2.535	A
4	69	17	550	1319	0.052	69	22	0.0	0.1	2.880	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	1051	263	74	1885	0.558	1050	684	0.8	1.2	4.304	A
2	109	27	913	1206	0.090	109	210	0.1	0.1	3.282	A
3	619	155	82	1914	0.323	618	940	0.4	0.5	2.779	A
4	85	21	673	1241	0.068	85	28	0.1	0.1	3.113	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	1051	263	74	1884	0.558	1051	685	1.2	1.3	4.321	A
2	109	27	915	1205	0.090	109	210	0.1	0.1	3.285	A
3	619	155	83	1914	0.323	619	941	0.5	0.5	2.779	A
4	85	21	674	1240	0.068	85	28	0.1	0.1	3.114	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	859	215	60	1894	0.453	860	560	1.3	0.8	3.490	A
2	89	22	748	1316	0.068	89	172	0.1	0.1	2.936	A
3	505	126	68	1924	0.263	506	770	0.5	0.4	2.539	A
4	69	17	551	1318	0.053	69	22	0.1	0.1	2.884	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	719	180	50	1901	0.378	720	469	0.8	0.6	3.052	A
2	75	19	626	1397	0.053	75	144	0.1	0.1	2.721	A
3	423	106	57	1932	0.219	423	644	0.4	0.3	2.387	A
4	58	14	461	1375	0.042	58	19	0.1	0.0	2.735	A

2027 Do Minimum, AM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	2.72	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2027 Do Minimum	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	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	593	100.000
2		ONE HOUR	✓	78	100.000
3		ONE HOUR	✓	397	100.000
4		ONE HOUR	✓	77	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	87	504	2
	2	42	0	27	9
	3	366	17	0	14
	4	26	22	29	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	0	1	0	0
	2	1	0	0	0
	3	0	0	0	7
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.35	2.93	0.5	A	544	816
2	0.06	2.69	0.1	A	72	107
3	0.23	2.41	0.3	A	364	546
4	0.06	2.80	0.1	A	71	106

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	446	112	51	1897	0.235	445	326	0.0	0.3	2.476	A
2	59	15	402	1549	0.038	59	95	0.0	0.0	2.415	A
3	299	75	40	1943	0.154	298	420	0.0	0.2	2.187	A
4	58	14	319	1464	0.040	58	19	0.0	0.0	2.559	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	533	133	61	1890	0.282	533	390	0.3	0.4	2.651	A
2	70	18	481	1496	0.047	70	113	0.0	0.0	2.524	A
3	357	89	48	1937	0.184	357	503	0.2	0.2	2.277	A
4	69	17	382	1425	0.049	69	22	0.0	0.1	2.655	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	653	163	75	1881	0.347	652	478	0.4	0.5	2.928	A
2	86	21	589	1424	0.060	86	139	0.0	0.1	2.689	A
3	437	109	58	1930	0.227	437	616	0.2	0.3	2.411	A
4	85	21	468	1371	0.062	85	28	0.1	0.1	2.799	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	653	163	75	1881	0.347	653	478	0.5	0.5	2.930	A
2	86	21	589	1424	0.060	86	139	0.1	0.1	2.690	A
3	437	109	58	1930	0.227	437	617	0.3	0.3	2.411	A
4	85	21	468	1370	0.062	85	28	0.1	0.1	2.799	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	533	133	61	1890	0.282	534	390	0.5	0.4	2.653	A
2	70	18	481	1496	0.047	70	113	0.1	0.0	2.525	A
3	357	89	48	1937	0.184	357	504	0.3	0.2	2.278	A
4	69	17	382	1424	0.049	69	22	0.1	0.1	2.656	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	446	112	51	1897	0.235	447	327	0.4	0.3	2.483	A
2	59	15	403	1548	0.038	59	95	0.0	0.0	2.419	A
3	299	75	40	1943	0.154	299	422	0.2	0.2	2.191	A
4	58	14	320	1464	0.040	58	19	0.1	0.0	2.562	A

2027 Do Something, AM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	3.14	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2027 Do Something	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	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	784	100.000
2		ONE HOUR	✓	84	100.000
3		ONE HOUR	✓	473	100.000
4		ONE HOUR	✓	77	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	111	671	2
	2	48	0	27	9
	3	442	17	0	14
	4	26	22	29	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	0	1	0	0
	2	1	0	0	0
	3	0	0	0	7
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.46	3.54	0.8	A	719	1079
2	0.07	2.98	0.1	A	77	116
3	0.27	2.56	0.4	A	434	651
4	0.06	2.93	0.1	A	71	106

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	590	148	51	1898	0.311	588	387	0.0	0.4	2.746	A
2	63	16	527	1465	0.043	63	113	0.0	0.0	2.568	A
3	356	89	44	1940	0.184	355	546	0.0	0.2	2.270	A
4	58	14	381	1425	0.041	58	19	0.0	0.0	2.632	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	705	176	61	1891	0.373	704	464	0.4	0.6	3.032	A
2	76	19	631	1395	0.054	75	135	0.0	0.1	2.726	A
3	425	106	53	1934	0.220	425	653	0.2	0.3	2.385	A
4	69	17	456	1378	0.050	69	22	0.0	0.1	2.749	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	863	216	75	1881	0.459	862	568	0.6	0.8	3.530	A
2	92	23	772	1301	0.071	92	165	0.1	0.1	2.978	A
3	521	130	65	1926	0.270	520	800	0.3	0.4	2.561	A
4	85	21	558	1314	0.065	85	28	0.1	0.1	2.928	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	863	216	75	1881	0.459	863	568	0.8	0.8	3.536	A
2	92	23	773	1300	0.071	92	165	0.1	0.1	2.979	A
3	521	130	65	1926	0.270	521	800	0.4	0.4	2.561	A
4	85	21	558	1313	0.065	85	28	0.1	0.1	2.929	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	705	176	61	1891	0.373	706	464	0.8	0.6	3.042	A
2	76	19	632	1394	0.054	76	135	0.1	0.1	2.729	A
3	425	106	53	1934	0.220	426	654	0.4	0.3	2.386	A
4	69	17	456	1378	0.050	69	22	0.1	0.1	2.752	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	590	148	51	1897	0.311	591	389	0.6	0.5	2.758	A
2	63	16	529	1463	0.043	63	113	0.1	0.0	2.573	A
3	356	89	44	1940	0.184	356	548	0.3	0.2	2.274	A
4	58	14	382	1425	0.041	58	19	0.1	0.0	2.635	A

2032 Do Minimum, AM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	2.82	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2032 Do Minimum	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	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	643	100.000
2		ONE HOUR	✓	79	100.000
3		ONE HOUR	✓	416	100.000
4		ONE HOUR	✓	77	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	92	549	2
	2	39	0	31	9
	3	384	18	0	14
	4	26	22	29	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	0	1	0	0
	2	1	0	0	0
	3	0	0	0	7
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.38	3.07	0.6	A	590	885
2	0.06	2.76	0.1	A	72	109
3	0.24	2.44	0.3	A	382	573
4	0.06	2.82	0.1	A	71	106

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	484	121	52	1897	0.255	483	337	0.0	0.3	2.543	A
2	59	15	435	1527	0.039	59	99	0.0	0.0	2.452	A
3	313	78	38	1945	0.161	312	457	0.0	0.2	2.204	A
4	58	14	331	1457	0.040	58	19	0.0	0.0	2.573	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	578	145	62	1890	0.306	578	403	0.3	0.4	2.743	A
2	71	18	521	1470	0.048	71	119	0.0	0.1	2.573	A
3	374	93	45	1939	0.193	374	547	0.2	0.2	2.299	A
4	69	17	396	1416	0.049	69	22	0.0	0.1	2.673	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	708	177	76	1880	0.377	707	494	0.4	0.6	3.067	A
2	87	22	638	1392	0.063	87	145	0.1	0.1	2.759	A
3	458	115	55	1932	0.237	458	670	0.2	0.3	2.441	A
4	85	21	485	1359	0.062	85	28	0.1	0.1	2.823	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	708	177	76	1880	0.377	708	494	0.6	0.6	3.070	A
2	87	22	639	1391	0.063	87	145	0.1	0.1	2.759	A
3	458	115	55	1932	0.237	458	671	0.3	0.3	2.441	A
4	85	21	486	1359	0.062	85	28	0.1	0.1	2.824	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	578	145	62	1890	0.306	579	404	0.6	0.4	2.746	A
2	71	18	522	1469	0.048	71	119	0.1	0.1	2.576	A
3	374	93	45	1939	0.193	374	548	0.3	0.2	2.300	A
4	69	17	397	1415	0.049	69	22	0.1	0.1	2.676	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	484	121	52	1897	0.255	484	338	0.4	0.3	2.551	A
2	59	15	437	1526	0.039	60	99	0.1	0.0	2.454	A
3	313	78	38	1945	0.161	313	459	0.2	0.2	2.206	A
4	58	14	332	1456	0.040	58	19	0.1	0.0	2.576	A

2032 Do Something Full, AM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	4.17	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2032 Do Something Full	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	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	1062	100.000
2		ONE HOUR	✓	83	100.000
3		ONE HOUR	✓	624	100.000
4		ONE HOUR	✓	77	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	161	899	2
	2	43	0	31	9
	3	591	19	0	14
	4	26	22	29	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	0	0	0	0
	2	1	0	0	0
	3	0	0	0	7
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.62	5.05	1.6	A	975	1462
2	0.08	3.45	0.1	A	76	114
3	0.36	2.89	0.6	A	573	859
4	0.07	3.19	0.1	A	71	106

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	800	200	53	1899	0.421	797	496	0.0	0.7	3.257	A
2	62	16	698	1351	0.046	62	152	0.0	0.0	2.792	A
3	470	117	41	1944	0.242	469	719	0.0	0.3	2.437	A
4	58	14	490	1356	0.043	58	19	0.0	0.0	2.772	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	955	239	63	1892	0.505	954	593	0.7	1.0	3.831	A
2	75	19	835	1260	0.059	75	181	0.0	0.1	3.037	A
3	561	140	49	1938	0.289	561	861	0.3	0.4	2.613	A
4	69	17	587	1296	0.053	69	22	0.0	0.1	2.934	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	1169	292	77	1882	0.621	1167	726	1.0	1.6	5.015	A
2	91	23	1022	1135	0.081	91	222	0.1	0.1	3.449	A
3	687	172	59	1931	0.356	686	1054	0.4	0.5	2.891	A
4	85	21	718	1213	0.070	85	27	0.1	0.1	3.191	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	1169	292	77	1882	0.621	1169	727	1.6	1.6	5.049	A
2	91	23	1024	1133	0.081	91	222	0.1	0.1	3.454	A
3	687	172	59	1931	0.356	687	1056	0.5	0.6	2.894	A
4	85	21	719	1212	0.070	85	28	0.1	0.1	3.192	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	955	239	63	1892	0.505	957	594	1.6	1.0	3.860	A
2	75	19	838	1257	0.059	75	182	0.1	0.1	3.043	A
3	561	140	49	1938	0.289	562	864	0.6	0.4	2.615	A
4	69	17	588	1295	0.053	69	23	0.1	0.1	2.936	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	800	200	53	1899	0.421	801	497	1.0	0.7	3.280	A
2	62	16	701	1349	0.046	63	152	0.1	0.0	2.800	A
3	470	117	41	1944	0.242	470	723	0.4	0.3	2.442	A
4	58	14	492	1355	0.043	58	19	0.1	0.0	2.774	A

2018 Validation, PM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	2.58	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2018 Validation	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	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	439	100.000
2		ONE HOUR	✓	174	100.000
3		ONE HOUR	✓	364	100.000
4		ONE HOUR	✓	49	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	60	362	17
	2	117	0	19	38
	3	294	19	0	51
	4	10	13	26	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	0	2	0	0
	2	0	0	0	0
	3	0	0	0	7
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.26	2.57	0.3	A	403	604
2	0.13	2.69	0.1	A	160	239
3	0.22	2.53	0.3	A	334	501
4	0.04	2.74	0.0	A	45	67

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	331	83	44	1900	0.174	330	316	0.0	0.2	2.291	A
2	131	33	304	1623	0.081	131	69	0.0	0.1	2.412	A
3	274	69	129	1866	0.147	273	306	0.0	0.2	2.258	A
4	37	9	323	1462	0.025	37	80	0.0	0.0	2.525	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	395	99	52	1894	0.208	394	378	0.2	0.3	2.400	A
2	156	39	364	1583	0.099	156	83	0.1	0.1	2.523	A
3	327	82	155	1848	0.177	327	366	0.2	0.2	2.366	A
4	44	11	386	1422	0.031	44	95	0.0	0.0	2.612	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	483	121	64	1886	0.256	483	463	0.3	0.3	2.565	A
2	192	48	446	1528	0.125	191	101	0.1	0.1	2.693	A
3	401	100	189	1824	0.220	401	448	0.2	0.3	2.528	A
4	54	13	473	1367	0.039	54	117	0.0	0.0	2.740	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	483	121	64	1886	0.256	483	464	0.3	0.3	2.565	A
2	192	48	446	1527	0.125	192	101	0.1	0.1	2.694	A
3	401	100	189	1824	0.220	401	448	0.3	0.3	2.528	A
4	54	13	473	1367	0.039	54	117	0.0	0.0	2.740	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	395	99	52	1894	0.208	395	379	0.3	0.3	2.403	A
2	156	39	364	1582	0.099	157	83	0.1	0.1	2.524	A
3	327	82	155	1848	0.177	327	366	0.3	0.2	2.367	A
4	44	11	387	1422	0.031	44	95	0.0	0.0	2.612	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	331	83	44	1900	0.174	331	317	0.3	0.2	2.295	A
2	131	33	305	1622	0.081	131	69	0.1	0.1	2.414	A
3	274	69	130	1866	0.147	274	307	0.2	0.2	2.261	A
4	37	9	324	1461	0.025	37	80	0.0	0.0	2.528	A

2022 Do Minimum, PM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	2.61	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2022 Do Minimum	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	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	460	100.000
2		ONE HOUR	✓	179	100.000
3		ONE HOUR	✓	371	100.000
4		ONE HOUR	✓	49	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	63	380	17
	2	120	0	21	38
	3	300	20	0	51
	4	10	13	26	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	0	2	0	0
	2	0	0	0	0
	3	0	0	0	7
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.27	2.61	0.4	A	422	633
2	0.13	2.73	0.1	A	164	246
3	0.22	2.55	0.3	A	340	511
4	0.04	2.75	0.0	A	45	67

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	346	87	44	1900	0.182	345	323	0.0	0.2	2.315	A
2	135	34	318	1614	0.084	134	72	0.0	0.1	2.433	A
3	279	70	131	1865	0.150	279	321	0.0	0.2	2.268	A
4	37	9	330	1457	0.025	37	80	0.0	0.0	2.534	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	414	103	53	1894	0.218	413	386	0.2	0.3	2.431	A
2	161	40	380	1572	0.102	161	86	0.1	0.1	2.551	A
3	334	83	157	1847	0.181	333	384	0.2	0.2	2.378	A
4	44	11	395	1416	0.031	44	95	0.0	0.0	2.622	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	506	127	65	1885	0.269	506	473	0.3	0.4	2.610	A
2	197	49	465	1514	0.130	197	106	0.1	0.1	2.732	A
3	408	102	193	1822	0.224	408	470	0.2	0.3	2.546	A
4	54	13	484	1360	0.040	54	117	0.0	0.0	2.754	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	506	127	65	1885	0.269	506	473	0.4	0.4	2.610	A
2	197	49	466	1514	0.130	197	106	0.1	0.1	2.732	A
3	408	102	193	1822	0.224	408	470	0.3	0.3	2.546	A
4	54	13	484	1360	0.040	54	117	0.0	0.0	2.755	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	414	103	53	1894	0.218	414	387	0.4	0.3	2.434	A
2	161	40	381	1571	0.102	161	86	0.1	0.1	2.554	A
3	334	83	157	1847	0.181	334	384	0.3	0.2	2.381	A
4	44	11	396	1416	0.031	44	95	0.0	0.0	2.625	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	346	87	44	1900	0.182	347	324	0.3	0.2	2.317	A
2	135	34	319	1613	0.084	135	72	0.1	0.1	2.437	A
3	279	70	132	1865	0.150	279	322	0.2	0.2	2.272	A
4	37	9	331	1457	0.025	37	80	0.0	0.0	2.537	A

2022 Do Something, PM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	2.66	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2022 Do Something	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	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	479	100.000
2		ONE HOUR	✓	188	100.000
3		ONE HOUR	✓	389	100.000
4		ONE HOUR	✓	49	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	65	397	17
	2	129	0	21	38
	3	318	20	0	51
	4	10	13	26	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	0	2	0	0
	2	0	0	0	0
	3	0	0	0	7
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.28	2.65	0.4	A	440	659
2	0.14	2.78	0.2	A	173	259
3	0.24	2.59	0.3	A	357	535
4	0.04	2.79	0.0	A	45	67

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	361	90	44	1900	0.190	360	343	0.0	0.2	2.336	A
2	142	35	330	1605	0.088	141	74	0.0	0.1	2.459	A
3	293	73	138	1861	0.157	292	333	0.0	0.2	2.293	A
4	37	9	351	1445	0.026	37	80	0.0	0.0	2.557	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	431	108	53	1894	0.227	430	411	0.2	0.3	2.460	A
2	169	42	395	1561	0.108	169	88	0.1	0.1	2.584	A
3	350	87	165	1842	0.190	350	399	0.2	0.2	2.411	A
4	44	11	420	1401	0.031	44	95	0.0	0.0	2.652	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	527	132	65	1885	0.280	527	503	0.3	0.4	2.650	A
2	207	52	484	1502	0.138	207	108	0.1	0.2	2.779	A
3	428	107	202	1816	0.236	428	489	0.2	0.3	2.593	A
4	54	13	514	1342	0.040	54	117	0.0	0.0	2.794	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	527	132	65	1885	0.280	527	503	0.4	0.4	2.650	A
2	207	52	484	1502	0.138	207	108	0.2	0.2	2.780	A
3	428	107	203	1816	0.236	428	489	0.3	0.3	2.593	A
4	54	13	514	1341	0.040	54	117	0.0	0.0	2.795	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	431	108	53	1894	0.227	431	411	0.4	0.3	2.461	A
2	169	42	396	1561	0.108	169	88	0.2	0.1	2.586	A
3	350	87	166	1842	0.190	350	399	0.3	0.2	2.414	A
4	44	11	420	1401	0.031	44	95	0.0	0.0	2.653	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	361	90	44	1900	0.190	361	344	0.3	0.2	2.339	A
2	142	35	331	1604	0.088	142	74	0.1	0.1	2.462	A
3	293	73	139	1861	0.157	293	334	0.2	0.2	2.296	A
4	37	9	352	1444	0.026	37	80	0.0	0.0	2.558	A

2022 Do Something Full, PM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	3.39	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2022 Do Something Full	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	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	720	100.000
2		ONE HOUR	✓	269	100.000
3		ONE HOUR	✓	663	100.000
4		ONE HOUR	✓	49	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	100	603	17
	2	209	0	22	38
	3	592	20	0	51
	4	10	13	26	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	0	1	0	0
	2	0	0	0	0
	3	0	0	0	7
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.42	3.29	0.7	A	661	991
2	0.22	3.42	0.3	A	247	370
3	0.41	3.49	0.7	A	608	913
4	0.05	3.45	0.1	A	45	67

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	542	136	44	1902	0.285	540	609	0.0	0.4	2.641	A
2	203	51	485	1501	0.135	202	100	0.0	0.2	2.769	A
3	499	125	198	1826	0.273	498	489	0.0	0.4	2.708	A
4	37	9	616	1277	0.029	37	80	0.0	0.0	2.901	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	647	162	53	1896	0.341	647	728	0.4	0.5	2.881	A
2	242	60	580	1437	0.168	242	119	0.2	0.2	3.011	A
3	596	149	237	1798	0.331	596	585	0.4	0.5	2.991	A
4	44	11	737	1201	0.037	44	95	0.0	0.0	3.111	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	793	198	65	1888	0.420	792	892	0.5	0.7	3.283	A
2	296	74	711	1350	0.219	296	146	0.2	0.3	3.416	A
3	730	182	290	1761	0.415	729	716	0.5	0.7	3.485	A
4	54	13	903	1097	0.049	54	117	0.0	0.1	3.451	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	793	198	65	1888	0.420	793	893	0.7	0.7	3.286	A
2	296	74	711	1349	0.220	296	146	0.3	0.3	3.417	A
3	730	182	291	1761	0.415	730	717	0.7	0.7	3.492	A
4	54	13	904	1096	0.049	54	117	0.1	0.1	3.454	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	647	162	53	1896	0.341	648	730	0.7	0.5	2.885	A
2	242	60	581	1436	0.168	242	120	0.3	0.2	3.016	A
3	596	149	238	1798	0.331	597	586	0.7	0.5	3.000	A
4	44	11	739	1200	0.037	44	95	0.1	0.0	3.116	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	542	136	44	1902	0.285	543	611	0.5	0.4	2.650	A
2	203	51	487	1500	0.135	203	100	0.2	0.2	2.777	A
3	499	125	199	1825	0.273	500	491	0.5	0.4	2.718	A
4	37	9	619	1276	0.029	37	80	0.0	0.0	2.905	A

2027 Do Minimum, PM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	2.69	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2027 Do Minimum	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	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	495	100.000
2		ONE HOUR	✓	185	100.000
3		ONE HOUR	✓	411	100.000
4		ONE HOUR	✓	49	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	63	415	17
	2	125	0	22	38
	3	338	22	0	51
	4	10	13	26	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	0	2	0	0
	2	0	0	0	0
	3	0	0	0	7
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.29	2.69	0.4	A	454	681
2	0.14	2.80	0.2	A	170	255
3	0.25	2.63	0.3	A	377	566
4	0.04	2.82	0.0	A	45	67

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	373	93	46	1899	0.196	372	355	0.0	0.2	2.356	A
2	139	35	344	1596	0.087	139	74	0.0	0.1	2.470	A
3	309	77	135	1864	0.166	309	348	0.0	0.2	2.313	A
4	37	9	364	1436	0.026	37	80	0.0	0.0	2.572	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	445	111	55	1893	0.235	445	425	0.2	0.3	2.486	A
2	166	42	411	1551	0.107	166	88	0.1	0.1	2.600	A
3	369	92	162	1845	0.200	369	416	0.2	0.2	2.438	A
4	44	11	436	1391	0.032	44	95	0.0	0.0	2.672	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	545	136	67	1884	0.289	545	520	0.3	0.4	2.687	A
2	204	51	504	1488	0.137	204	108	0.1	0.2	2.801	A
3	453	113	198	1820	0.249	452	509	0.2	0.3	2.632	A
4	54	13	534	1329	0.041	54	117	0.0	0.0	2.822	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	545	136	67	1884	0.289	545	521	0.4	0.4	2.687	A
2	204	51	504	1488	0.137	204	108	0.2	0.2	2.801	A
3	453	113	198	1820	0.249	453	510	0.3	0.3	2.632	A
4	54	13	534	1329	0.041	54	117	0.0	0.0	2.822	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	445	111	55	1893	0.235	445	426	0.4	0.3	2.487	A
2	166	42	412	1550	0.107	166	88	0.2	0.1	2.601	A
3	369	92	162	1845	0.200	370	417	0.3	0.3	2.439	A
4	44	11	436	1391	0.032	44	95	0.0	0.0	2.675	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	373	93	46	1899	0.196	373	356	0.3	0.2	2.360	A
2	139	35	345	1595	0.087	139	74	0.1	0.1	2.474	A
3	309	77	136	1864	0.166	310	349	0.3	0.2	2.318	A
4	37	9	365	1435	0.026	37	80	0.0	0.0	2.574	A

2027 Do Something, PM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	3.07	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2027 Do Something	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	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	620	100.000
2		ONE HOUR	✓	243	100.000
3		ONE HOUR	✓	566	100.000
4		ONE HOUR	✓	49	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	81	522	17
	2	182	0	23	38
	3	493	22	0	51
	4	10	13	26	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	0	1	0	0
	2	0	0	0	0
	3	0	0	0	7
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.36	2.99	0.6	A	569	853
2	0.19	3.15	0.2	A	223	334
3	0.35	3.11	0.5	A	519	779
4	0.05	3.19	0.0	A	45	67

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	467	117	46	1901	0.245	465	514	0.0	0.3	2.505	A
2	183	46	424	1542	0.119	182	87	0.0	0.1	2.646	A
3	426	107	178	1838	0.232	425	429	0.0	0.3	2.544	A
4	37	9	523	1336	0.028	37	80	0.0	0.0	2.771	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	557	139	55	1895	0.294	557	615	0.3	0.4	2.690	A
2	218	55	508	1486	0.147	218	104	0.1	0.2	2.839	A
3	509	127	213	1814	0.281	508	513	0.3	0.4	2.758	A
4	44	11	626	1271	0.035	44	95	0.0	0.0	2.933	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	683	171	67	1887	0.362	682	753	0.4	0.6	2.987	A
2	268	67	622	1409	0.190	267	128	0.2	0.2	3.151	A
3	623	156	261	1780	0.350	623	628	0.4	0.5	3.108	A
4	54	13	767	1182	0.046	54	117	0.0	0.0	3.189	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	683	171	67	1887	0.362	683	754	0.6	0.6	2.989	A
2	268	67	622	1409	0.190	268	128	0.2	0.2	3.152	A
3	623	156	261	1780	0.350	623	629	0.5	0.5	3.111	A
4	54	13	767	1182	0.046	54	117	0.0	0.0	3.190	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	557	139	55	1895	0.294	558	617	0.6	0.4	2.693	A
2	218	55	508	1485	0.147	219	104	0.2	0.2	2.841	A
3	509	127	213	1814	0.281	509	514	0.5	0.4	2.761	A
4	44	11	627	1270	0.035	44	95	0.0	0.0	2.937	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	467	117	46	1901	0.246	467	516	0.4	0.3	2.512	A
2	183	46	426	1541	0.119	183	87	0.2	0.1	2.650	A
3	426	107	179	1838	0.232	426	430	0.4	0.3	2.550	A
4	37	9	525	1335	0.028	37	80	0.0	0.0	2.773	A

2032 Do Minimum, PM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	2.76	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D15	2032 Do Minimum	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	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	523	100.000
2		ONE HOUR	✓	194	100.000
3		ONE HOUR	✓	440	100.000
4		ONE HOUR	✓	49	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	66	440	17
	2	132	0	24	38
	3	366	23	0	51
	4	10	13	26	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	0	1	0	0
	2	0	0	0	0
	3	0	0	0	7
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.31	2.75	0.4	A	480	720
2	0.15	2.86	0.2	A	178	267
3	0.27	2.70	0.4	A	404	606
4	0.04	2.88	0.0	A	45	67

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	394	98	47	1901	0.207	393	381	0.0	0.3	2.386	A
2	146	37	363	1583	0.092	146	77	0.0	0.1	2.504	A
3	331	83	140	1862	0.178	330	368	0.0	0.2	2.350	A
4	37	9	391	1419	0.026	37	80	0.0	0.0	2.604	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	470	118	56	1895	0.248	470	456	0.3	0.3	2.526	A
2	174	44	434	1535	0.114	174	92	0.1	0.1	2.644	A
3	396	99	168	1842	0.215	395	440	0.2	0.3	2.488	A
4	44	11	468	1371	0.032	44	95	0.0	0.0	2.713	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	576	144	68	1886	0.305	575	559	0.3	0.4	2.747	A
2	214	53	531	1470	0.145	213	112	0.1	0.2	2.864	A
3	484	121	206	1816	0.267	484	539	0.3	0.4	2.703	A
4	54	13	573	1304	0.041	54	117	0.0	0.0	2.878	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	576	144	68	1886	0.305	576	559	0.4	0.4	2.747	A
2	214	53	532	1470	0.145	214	112	0.2	0.2	2.865	A
3	484	121	206	1815	0.267	484	539	0.4	0.4	2.704	A
4	54	13	574	1304	0.041	54	117	0.0	0.0	2.879	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	470	118	56	1895	0.248	471	457	0.4	0.3	2.530	A
2	174	44	435	1535	0.114	175	92	0.2	0.1	2.648	A
3	396	99	168	1842	0.215	396	441	0.4	0.3	2.489	A
4	44	11	469	1370	0.032	44	95	0.0	0.0	2.714	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	394	98	47	1901	0.207	394	383	0.3	0.3	2.389	A
2	146	37	364	1583	0.092	146	77	0.1	0.1	2.506	A
3	331	83	141	1861	0.178	331	369	0.3	0.2	2.353	A
4	37	9	393	1418	0.026	37	80	0.0	0.0	2.607	A

2032 Do Something Full, PM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	3.65	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D16	2032 Do Something Full	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	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	774	100.000
2		ONE HOUR	✓	257	100.000
3		ONE HOUR	✓	764	100.000
4		ONE HOUR	✓	49	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	103	654	17
	2	195	0	24	38
	3	689	24	0	51
	4	10	13	26	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	0	1	0	0
	2	0	0	0	0
	3	0	0	0	7
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.45	3.48	0.8	A	710	1065
2	0.22	3.50	0.3	A	236	354
3	0.47	3.86	0.9	A	701	1052
4	0.05	3.67	0.1	A	45	67

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	583	146	47	1900	0.307	581	671	0.0	0.4	2.725	A
2	193	48	523	1476	0.131	193	105	0.0	0.2	2.805	A
3	575	144	188	1835	0.314	573	528	0.0	0.5	2.851	A
4	37	9	681	1236	0.030	37	80	0.0	0.0	3.001	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	696	174	57	1894	0.367	695	803	0.4	0.6	3.001	A
2	231	58	626	1406	0.164	231	126	0.2	0.2	3.062	A
3	687	172	225	1809	0.380	686	632	0.5	0.6	3.206	A
4	44	11	816	1152	0.038	44	95	0.0	0.0	3.249	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	852	213	69	1885	0.452	851	983	0.6	0.8	3.479	A
2	283	71	767	1312	0.216	283	154	0.2	0.3	3.497	A
3	841	210	275	1773	0.474	840	774	0.6	0.9	3.854	A
4	54	13	998	1036	0.052	54	117	0.0	0.1	3.663	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	852	213	69	1885	0.452	852	984	0.8	0.8	3.484	A
2	283	71	767	1311	0.216	283	154	0.3	0.3	3.499	A
3	841	210	275	1773	0.475	841	775	0.9	0.9	3.864	A
4	54	13	1000	1036	0.052	54	117	0.1	0.1	3.666	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	696	174	57	1894	0.367	697	805	0.8	0.6	3.009	A
2	231	58	627	1405	0.164	231	126	0.3	0.2	3.068	A
3	687	172	225	1808	0.380	688	634	0.9	0.6	3.218	A
4	44	11	818	1150	0.038	44	95	0.1	0.0	3.256	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	583	146	47	1900	0.307	583	674	0.6	0.4	2.734	A
2	193	48	525	1474	0.131	194	106	0.2	0.2	2.813	A
3	575	144	188	1834	0.314	576	531	0.6	0.5	2.862	A
4	37	9	684	1234	0.030	37	80	0.0	0.0	3.005	A