Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.5.1.7462
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Filename: 1901 050320 Mill L BBrook A New Rb.j9
Path: C:\Users\Charlie\Highgate Transportation\HTp - 1901 - Peel Hall\Modelling\Site Access Junctions\CJ\Option A\Mill Lane_Blackbrook_Site\050320 Site Access Blackbrook Avenue
Report generation date: 05/03/2020 09:51:54

»2022 Do Something, AM
»2022 Do Something, PM
»2022 Do Something (FULL), AM
»2022 Do Something (FULL), PM
»2027 Do Something, AM
»2027 Do Something, PM
»2032 Do Something (FULL), AM
»2032 Do Something (FULL), PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS
	2022 Do Something									
Arm 1	D1	0.6	3.64	0.38	A	D2	0.5	3.31	0.31	A
Arm 2		0.2	1.90	0.19	A		0.3	1.94	0.20	A
Arm 3		0.0	0.00	0.00	A		0.0	0.00	0.00	A
	2022 Do Something (FULL)									
Arm 1	D3	1.0	5.27	0.50	A	D4	0.7	4.08	0.40	A
Arm 2		0.4	2.19	0.28	A		0.6	2.51	0.38	A
Arm 3		0.5	4.16	0.34	A		0.2	3.51	0.20	A
	2027 Do Something									
Arm 1	D5	0.9	4.45	0.47	A	D6	0.6	3.73	0.38	A
Arm 2		0.3	2.02	0.23	A		0.5	2.26	0.31	A
Arm 3		0.1	3.17	0.12	A		0.1	3.16	0.08	A
	2032 Do Something (FULL)									
Arm 1	D7	1.3	6.20	0.57	A	D8	0.8	4.35	0.43	A
Arm 2		0.4	2.24	0.30	A		0.7	2.67	0.41	A
Arm 3		0.5	4.27	0.35	A		0.3	3.69	0.21	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.

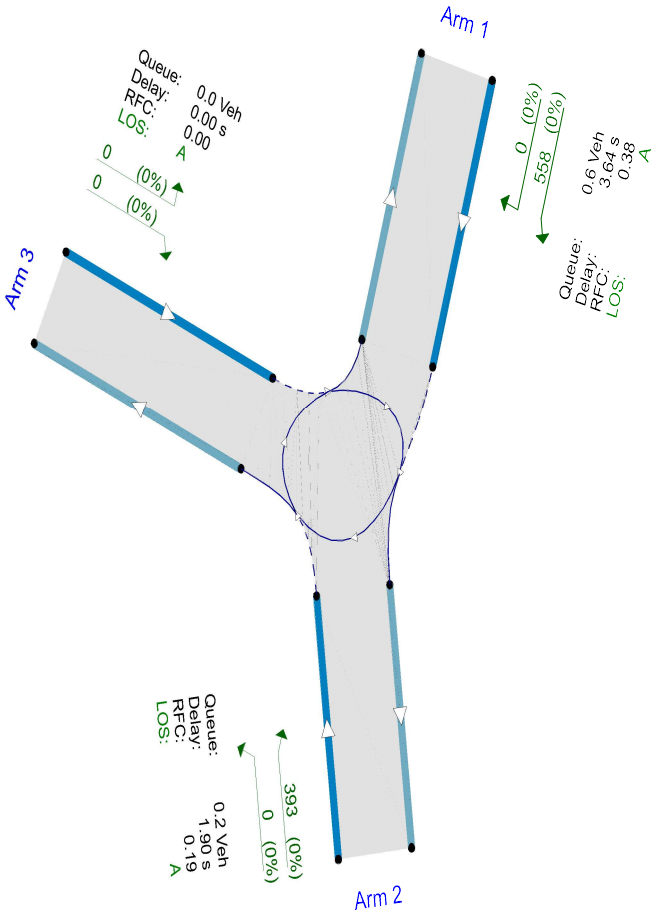
File summary

File Description

Title	(untitled)
Location	
Site number	
Date	18/05/2016
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DESKTOP-MD9GBJC\Fiona
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



The junction diagram reflects the last run of Junctions.

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2022 Do Something	AM	ONE HOUR	07:45	09:15	15
D2	2022 Do Something	PM	ONE HOUR	16:45	18:15	15
D3	2022 Do Something (FULL)	AM	ONE HOUR	07:45	09:15	15
D4	2022 Do Something (FULL)	PM	ONE HOUR	16:45	18:15	15
D5	2027 Do Something	AM	ONE HOUR	07:45	09:15	15
D6	2027 Do Something	PM	ONE HOUR	16:45	18:15	15
D7	2032 Do Something (FULL)	AM	ONE HOUR	07:45	09:15	15
D8	2032 Do Something (FULL)	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2022 Do Something, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	2.92	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Mill Lane (N)	
2	Mill Lane (S)	
3	Site Access	

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
1	3.50	7.80	10.0	20.0	36.0	31.0	
2	7.00	8.00	10.0	30.0	36.0	38.0	
3	3.65	7.35	20.0	11.0	36.0	56.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.629	1603
2	0.772	2324
3	0.585	1574

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)
D1	2022 Do Something	AM	ONE HOUR	07:45	09:15	15

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 (Veh/hr)	Scaling Factor (%)
1		✓	558	100.000
2		✓	393	100.000
3		✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		1	2	3
From	1	0	558	0
	2	393	0	0
	3	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1	0.38	3.64	0.6	2.6	A
2	0.19	1.90	0.2	0.5	A
3	0.00	0.00	0.0	~1	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	420	0	1603	0.262	419	0.4	3.034	A
2	296	0	2324	0.127	295	0.1	1.774	A
3	0	295	1402	0.000	0	0.0	0.000	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	502	0	1603	0.313	501	0.5	3.267	A
2	353	0	2324	0.152	353	0.2	1.826	A
3	0	353	1368	0.000	0	0.0	0.000	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	614	0	1603	0.383	614	0.6	3.636	A
2	433	0	2324	0.186	433	0.2	1.902	A
3	0	433	1322	0.000	0	0.0	0.000	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	614	0	1603	0.383	614	0.6	3.639	A
2	433	0	2324	0.186	433	0.2	1.902	A
3	0	433	1321	0.000	0	0.0	0.000	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	502	0	1603	0.313	502	0.5	3.270	A
2	353	0	2324	0.152	353	0.2	1.829	A
3	0	353	1368	0.000	0	0.0	0.000	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	420	0	1603	0.262	420	0.4	3.044	A
2	296	0	2324	0.127	296	0.1	1.774	A
3	0	296	1401	0.000	0	0.0	0.000	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.35	0.00	0.00	0.35	0.35			N/A	N/A
2	0.15	0.00	0.00	0.15	0.15			N/A	N/A
3	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.45	0.00	0.00	0.45	0.45			N/A	N/A
2	0.18	0.00	0.00	0.18	0.18			N/A	N/A
3	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.62	0.03	0.25	0.62	0.62			N/A	N/A
2	0.23	0.03	0.25	0.45	0.48			N/A	N/A
3	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.62	0.03	0.29	1.03	2.62			N/A	N/A
2	0.23	0.03	0.25	0.45	0.48			N/A	N/A
3	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.46	0.00	0.00	0.46	0.46			N/A	N/A
2	0.18	0.00	0.00	0.18	0.18			N/A	N/A
3	0.00	0.00	0.00	0.00	0.00			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.36	0.00	0.00	0.36	0.36			N/A	N/A
2	0.15	0.00	0.00	0.15	0.15			N/A	N/A
3	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2022 Do Something, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	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)
D2	2022 Do Something	PM	ONE HOUR	16:45	18:15	15

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 (Veh/hr)	Scaling Factor (%)
1		✓	454	100.000
2		✓	428	100.000
3		✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		1	2	3
From	1	0	454	0
	2	428	0	0
	3	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1	0.31	3.31	0.5	1.9	A
2	0.20	1.94	0.3	0.5	A
3	0.00	0.00	0.0	~1	A

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	342	0	1587	0.215	341	0.3	2.885	A
2	322	0	2324	0.139	322	0.2	1.797	A
3	0	322	1386	0.000	0	0.0	0.000	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	408	0	1587	0.257	408	0.3	3.052	A
2	385	0	2324	0.166	385	0.2	1.855	A
3	0	385	1350	0.000	0	0.0	0.000	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	500	0	1587	0.315	499	0.5	3.306	A
2	471	0	2324	0.203	471	0.3	1.943	A
3	0	471	1299	0.000	0	0.0	0.000	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	500	0	1587	0.315	500	0.5	3.309	A
2	471	0	2324	0.203	471	0.3	1.943	A
3	0	471	1299	0.000	0	0.0	0.000	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	408	0	1587	0.257	409	0.3	3.056	A
2	385	0	2324	0.166	385	0.2	1.856	A
3	0	385	1349	0.000	0	0.0	0.000	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	342	0	1587	0.215	342	0.3	2.893	A
2	322	0	2324	0.139	322	0.2	1.798	A
3	0	322	1386	0.000	0	0.0	0.000	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.27	0.00	0.00	0.27	0.27			N/A	N/A
2	0.16	0.00	0.00	0.16	0.16			N/A	N/A
3	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.34	0.00	0.00	0.34	0.34			N/A	N/A
2	0.20	0.00	0.00	0.20	0.20			N/A	N/A
3	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.46	0.03	0.25	0.46	0.48			N/A	N/A
2	0.25	0.03	0.25	0.45	0.48			N/A	N/A
3	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.46	0.03	0.31	1.38	1.92			N/A	N/A
2	0.25	0.03	0.26	0.47	0.49			N/A	N/A
3	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.35	0.00	0.00	0.35	0.35			N/A	N/A
2	0.20	0.00	0.00	0.20	0.20			N/A	N/A
3	0.00	0.00	0.00	0.00	0.00			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.28	0.00	0.00	0.28	0.28			N/A	N/A
2	0.16	0.00	0.00	0.16	0.16			N/A	N/A
3	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2022 Do Something (FULL), AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	3.86	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)
D3	2022 Do Something (FULL)	AM	ONE HOUR	07:45	09:15	15

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 (Veh/hr)	Scaling Factor (%)
1		✓	620	100.000
2		✓	591	100.000
3		✓	406	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		1	2	3
From	1	0	588	32
	2	408	0	183
	3	63	343	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1	0.50	5.27	1.0	1.6	A
2	0.28	2.19	0.4	1.2	A
3	0.34	4.16	0.5	2.4	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	467	257	1441	0.324	465	0.5	3.681	A
2	445	24	2305	0.193	444	0.2	1.933	A
3	306	307	1395	0.219	305	0.3	3.298	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	557	308	1409	0.395	557	0.6	4.218	A
2	531	29	2301	0.231	531	0.3	2.033	A
3	365	367	1360	0.268	365	0.4	3.616	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	683	377	1366	0.500	681	1.0	5.247	A
2	651	35	2296	0.283	650	0.4	2.187	A
3	447	449	1312	0.341	446	0.5	4.157	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	683	378	1366	0.500	683	1.0	5.270	A
2	651	35	2296	0.283	651	0.4	2.187	A
3	447	449	1312	0.341	447	0.5	4.162	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	557	309	1409	0.396	559	0.7	4.240	A
2	531	29	2301	0.231	532	0.3	2.034	A
3	365	367	1360	0.268	366	0.4	3.622	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	467	259	1441	0.324	467	0.5	3.704	A
2	445	24	2305	0.193	445	0.2	1.937	A
3	306	307	1395	0.219	306	0.3	3.309	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.48	0.00	0.00	0.48	0.48			N/A	N/A
2	0.24	0.00	0.00	0.24	0.24			N/A	N/A
3	0.28	0.00	0.00	0.28	0.28			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.65	0.10	0.83	1.37	1.43			N/A	N/A
2	0.30	0.00	0.00	0.30	0.30			N/A	N/A
3	0.36	0.00	0.00	0.36	0.36			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.99	0.03	0.26	0.99	0.99			N/A	N/A
2	0.39	0.03	0.25	0.45	0.48			N/A	N/A
3	0.51	0.03	0.25	0.51	0.51			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.99	0.03	0.27	0.99	1.63			N/A	N/A
2	0.39	0.03	0.33	1.19	1.19			N/A	N/A
3	0.52	0.03	0.30	1.38	2.36			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.66	0.30	0.95	1.39	1.45			N/A	N/A
2	0.30	0.00	0.00	0.30	0.30			N/A	N/A
3	0.37	0.00	0.00	0.37	0.37			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.48	0.04	0.42	1.25	1.38			N/A	N/A
2	0.24	0.00	0.00	0.24	0.24			N/A	N/A
3	0.28	0.00	0.00	0.28	0.28			N/A	N/A

2022 Do Something (FULL), PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	3.20	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)
D4	2022 Do Something (FULL)	PM	ONE HOUR	16:45	18:15	15

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 (Veh/hr)	Scaling Factor (%)
1		✓	529	100.000
2		✓	782	100.000
3		✓	229	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		1	2	3
From	1	0	494	35
	2	460	0	322
	3	29	200	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1	0.40	4.08	0.7	2.7	A
2	0.38	2.51	0.6	2.7	A
3	0.20	3.51	0.2	0.8	A

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	398	150	1509	0.264	397	0.4	3.233	A
2	589	26	2303	0.256	587	0.3	2.096	A
3	172	346	1372	0.126	172	0.1	2.996	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	476	180	1490	0.319	475	0.5	3.544	A
2	703	31	2299	0.306	703	0.4	2.254	A
3	206	413	1333	0.154	206	0.2	3.193	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	582	220	1465	0.398	582	0.7	4.073	A
2	861	38	2294	0.375	860	0.6	2.509	A
3	252	506	1279	0.197	252	0.2	3.506	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	582	220	1465	0.398	582	0.7	4.080	A
2	861	39	2294	0.375	861	0.6	2.512	A
3	252	506	1278	0.197	252	0.2	3.507	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	476	180	1490	0.319	476	0.5	3.555	A
2	703	32	2299	0.306	704	0.4	2.256	A
3	206	414	1332	0.155	206	0.2	3.198	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	398	151	1508	0.264	399	0.4	3.247	A
2	589	26	2303	0.256	589	0.3	2.100	A
3	172	347	1372	0.126	173	0.1	3.001	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.36	0.00	0.00	0.36	0.36			N/A	N/A
2	0.34	0.00	0.00	0.34	0.34			N/A	N/A
3	0.14	0.00	0.00	0.14	0.14			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.47	0.00	0.00	0.47	0.47			N/A	N/A
2	0.44	0.00	0.00	0.44	0.44			N/A	N/A
3	0.18	0.00	0.00	0.18	0.18			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.66	0.03	0.25	0.66	0.66			N/A	N/A
2	0.60	0.03	0.25	0.60	0.60			N/A	N/A
3	0.24	0.03	0.25	0.46	0.48			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.66	0.03	0.28	0.93	2.68			N/A	N/A
2	0.60	0.03	0.29	1.21	2.71			N/A	N/A
3	0.25	0.03	0.27	0.48	0.79			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.47	0.00	0.00	0.47	0.47			N/A	N/A
2	0.44	0.00	0.00	0.44	0.44			N/A	N/A
3	0.18	0.00	0.00	0.18	0.18			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.36	0.00	0.00	0.36	0.36			N/A	N/A
2	0.34	0.00	0.00	0.34	0.34			N/A	N/A
3	0.14	0.00	0.00	0.14	0.14			N/A	N/A

2027 Do Something, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	3.38	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	2027 Do Something	AM	ONE HOUR	07:45	09:15	15

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 (Veh/hr)	Scaling Factor (%)
1		✓	643	100.000
2		✓	486	100.000
3		✓	147	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		1	2	3
From	1	0	634	9
	2	432	0	54
	3	22	125	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1	0.47	4.45	0.9	1.8	A
2	0.23	2.02	0.3	1.2	A
3	0.12	3.17	0.1	0.5	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	484	94	1544	0.313	482	0.5	3.384	A
2	366	7	2318	0.158	365	0.2	1.842	A
3	111	325	1385	0.080	110	0.1	2.825	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	578	112	1533	0.377	577	0.6	3.767	A
2	437	8	2317	0.189	437	0.2	1.913	A
3	132	388	1347	0.098	132	0.1	2.961	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	708	138	1517	0.467	707	0.9	4.440	A
2	535	10	2316	0.231	535	0.3	2.021	A
3	162	475	1296	0.125	162	0.1	3.172	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	708	138	1517	0.467	708	0.9	4.451	A
2	535	10	2316	0.231	535	0.3	2.021	A
3	162	476	1296	0.125	162	0.1	3.172	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	578	112	1532	0.377	579	0.6	3.782	A
2	437	8	2317	0.189	437	0.2	1.916	A
3	132	389	1347	0.098	132	0.1	2.962	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	484	94	1544	0.314	485	0.5	3.399	A
2	366	7	2318	0.158	366	0.2	1.843	A
3	111	325	1384	0.080	111	0.1	2.826	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.45	0.00	0.00	0.45	0.45			N/A	N/A
2	0.19	0.00	0.00	0.19	0.19			N/A	N/A
3	0.09	0.00	0.00	0.09	0.09			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.60	0.10	0.83	1.37	1.43			N/A	N/A
2	0.23	0.00	0.00	0.23	0.23			N/A	N/A
3	0.11	0.00	0.00	0.11	0.11			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.87	0.03	0.25	0.87	0.87			N/A	N/A
2	0.30	0.03	0.25	0.45	0.48			N/A	N/A
3	0.14	0.03	0.26	0.46	0.49			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.87	0.03	0.27	0.87	1.76			N/A	N/A
2	0.30	0.03	0.30	0.89	1.20			N/A	N/A
3	0.14	0.00	0.00	0.14	0.14			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.61	0.55	1.00	1.40	1.45			N/A	N/A
2	0.23	0.00	0.00	0.23	0.23			N/A	N/A
3	0.11	0.00	0.00	0.11	0.11			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.46	0.00	0.00	0.46	0.46			N/A	N/A
2	0.19	0.00	0.00	0.19	0.19			N/A	N/A
3	0.09	0.00	0.00	0.09	0.09			N/A	N/A

2027 Do Something, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	2.94	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)
D6	2027 Do Something	PM	ONE HOUR	16:45	18:15	15

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 (Veh/hr)	Scaling Factor (%)
1		✓	532	100.000
2		✓	655	100.000
3		✓	86	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		1	2	3
From	1	0	518	14
	2	530	0	125
	3	9	77	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1	0.38	3.73	0.6	2.7	A
2	0.31	2.26	0.5	1.8	A
3	0.08	3.16	0.1	0.5	A

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	401	58	1567	0.256	399	0.3	3.080	A
2	493	11	2315	0.213	492	0.3	1.973	A
3	65	398	1342	0.048	65	0.1	2.818	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	478	69	1560	0.307	478	0.4	3.327	A
2	589	13	2314	0.254	589	0.3	2.086	A
3	77	476	1296	0.060	77	0.1	2.953	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	586	85	1550	0.378	585	0.6	3.729	A
2	721	15	2312	0.312	721	0.5	2.262	A
3	95	583	1233	0.077	95	0.1	3.160	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	586	85	1550	0.378	586	0.6	3.732	A
2	721	15	2312	0.312	721	0.5	2.263	A
3	95	584	1233	0.077	95	0.1	3.161	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	478	69	1560	0.307	479	0.4	3.332	A
2	589	13	2314	0.254	589	0.3	2.089	A
3	77	477	1296	0.060	77	0.1	2.954	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	401	58	1567	0.256	401	0.3	3.090	A
2	493	11	2315	0.213	493	0.3	1.975	A
3	65	399	1341	0.048	65	0.1	2.820	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.34	0.00	0.00	0.34	0.34			N/A	N/A
2	0.27	0.00	0.00	0.27	0.27			N/A	N/A
3	0.05	0.00	0.00	0.05	0.05			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.44	0.00	0.00	0.44	0.44			N/A	N/A
2	0.34	0.00	0.00	0.34	0.34			N/A	N/A
3	0.06	0.03	0.25	0.45	0.48			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.60	0.03	0.25	0.60	0.60			N/A	N/A
2	0.45	0.03	0.25	0.45	0.48			N/A	N/A
3	0.08	0.03	0.26	0.47	0.49			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.61	0.03	0.29	1.12	2.66			N/A	N/A
2	0.45	0.03	0.32	1.40	1.80			N/A	N/A
3	0.08	0.00	0.00	0.08	0.08			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.44	0.00	0.00	0.44	0.44			N/A	N/A
2	0.34	0.00	0.00	0.34	0.34			N/A	N/A
3	0.06	0.00	0.00	0.06	0.06			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.34	0.00	0.00	0.34	0.34			N/A	N/A
2	0.27	0.00	0.00	0.27	0.27			N/A	N/A
3	0.05	0.00	0.00	0.05	0.05			N/A	N/A

2032 Do Something (FULL), AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	4.31	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D7	2032 Do Something (FULL)	AM	ONE HOUR	07:45	09:15	15

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 (Veh/hr)	Scaling Factor (%)
1		✓	701	100.000
2		✓	627	100.000
3		✓	406	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		1	2	3
From	1	0	672	29
	2	441	0	186
	3	44	362	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1	0.57	6.20	1.3	1.5	A
2	0.30	2.24	0.4	1.6	A
3	0.35	4.27	0.5	2.4	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	528	272	1432	0.368	525	0.6	3.960	A
2	472	22	2307	0.205	471	0.3	1.960	A
3	306	331	1381	0.221	305	0.3	3.342	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	630	325	1399	0.451	629	0.8	4.673	A
2	564	26	2303	0.245	563	0.3	2.068	A
3	365	396	1343	0.272	365	0.4	3.680	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	772	398	1353	0.571	770	1.3	6.154	A
2	690	32	2299	0.300	690	0.4	2.237	A
3	447	485	1291	0.346	446	0.5	4.261	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	772	399	1352	0.571	772	1.3	6.199	A
2	690	32	2299	0.300	690	0.4	2.237	A
3	447	486	1291	0.346	447	0.5	4.267	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	630	326	1398	0.451	632	0.8	4.713	A
2	564	26	2303	0.245	564	0.3	2.071	A
3	365	397	1342	0.272	366	0.4	3.686	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	528	273	1432	0.369	529	0.6	3.992	A
2	472	22	2307	0.205	472	0.3	1.962	A
3	306	332	1380	0.221	306	0.3	3.354	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.58	0.55	1.00	1.40	1.45			N/A	N/A
2	0.26	0.00	0.00	0.26	0.26			N/A	N/A
3	0.28	0.00	0.00	0.28	0.28			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.81	0.09	0.84	1.46	1.46			N/A	N/A
2	0.32	0.00	0.00	0.32	0.32			N/A	N/A
3	0.37	0.00	0.00	0.37	0.37			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1.31	0.03	0.26	1.31	1.31			N/A	N/A
2	0.43	0.03	0.25	0.45	0.48			N/A	N/A
3	0.53	0.03	0.25	0.53	0.53			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1.32	0.03	0.27	1.32	1.45			N/A	N/A
2	0.43	0.03	0.33	1.36	1.59			N/A	N/A
3	0.53	0.03	0.30	1.38	2.45			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.83	0.19	0.94	1.42	1.48			N/A	N/A
2	0.32	0.00	0.00	0.32	0.32			N/A	N/A
3	0.38	0.00	0.00	0.38	0.38			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.59	0.06	0.62	1.33	1.42			N/A	N/A
2	0.26	0.00	0.00	0.26	0.26			N/A	N/A
3	0.29	0.00	0.00	0.29	0.29			N/A	N/A

2032 Do Something (FULL), PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	3.39	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)
D8	2032 Do Something (FULL)	PM	ONE HOUR	16:45	18:15	15

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 (Veh/hr)	Scaling Factor (%)
1		✓	576	100.000
2		✓	861	100.000
3		✓	229	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		1	2	3
From	1	0	541	35
	2	539	0	322
	3	25	204	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1	0.43	4.35	0.8	2.4	A
2	0.41	2.67	0.7	2.5	A
3	0.21	3.69	0.3	1.0	A

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	434	153	1507	0.288	432	0.4	3.345	A
2	648	26	2303	0.281	647	0.4	2.171	A
3	172	405	1338	0.129	172	0.1	3.086	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	518	183	1488	0.348	517	0.5	3.706	A
2	774	31	2299	0.337	774	0.5	2.359	A
3	206	484	1291	0.159	206	0.2	3.315	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	634	224	1462	0.434	633	0.8	4.339	A
2	948	38	2294	0.413	947	0.7	2.672	A
3	252	593	1228	0.205	252	0.3	3.689	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	634	225	1462	0.434	634	0.8	4.348	A
2	948	39	2294	0.413	948	0.7	2.674	A
3	252	593	1227	0.205	252	0.3	3.690	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	518	184	1488	0.348	519	0.5	3.717	A
2	774	32	2299	0.337	775	0.5	2.362	A
3	206	485	1291	0.159	206	0.2	3.321	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	434	154	1507	0.288	434	0.4	3.357	A
2	648	26	2303	0.281	649	0.4	2.176	A
3	172	406	1337	0.129	173	0.1	3.093	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.40	0.00	0.00	0.40	0.40			N/A	N/A
2	0.39	0.00	0.00	0.39	0.39			N/A	N/A
3	0.15	0.00	0.00	0.15	0.15			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.53	0.53	1.00	1.40	1.45			N/A	N/A
2	0.51	0.51	1.00	1.40	1.45			N/A	N/A
3	0.19	0.00	0.00	0.19	0.19			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.76	0.03	0.25	0.76	0.76			N/A	N/A
2	0.70	0.03	0.25	0.70	0.70			N/A	N/A
3	0.26	0.03	0.25	0.46	0.48			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.76	0.03	0.28	0.76	2.38			N/A	N/A
2	0.70	0.03	0.28	0.70	2.47			N/A	N/A
3	0.26	0.03	0.28	0.55	1.02			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.54	0.54	1.00	1.40	1.45			N/A	N/A
2	0.51	0.51	1.00	1.40	1.45			N/A	N/A
3	0.19	0.00	0.00	0.19	0.19			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.41	0.00	0.00	0.41	0.41			N/A	N/A
2	0.39	0.00	0.00	0.39	0.39			N/A	N/A
3	0.15	0.00	0.00	0.15	0.15			N/A	N/A