

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 - A507 E	419	105	890	1661	0.252	417	382	0.0	0.3	2.893	A
2 - A1(M) S	278	69	708	1518	0.183	277	599	0.0	0.2	2.898	A
3 - A507 W	909	227	245	2082	0.437	906	741	0.0	0.8	3.056	A
4 - A1(M) N	483	121	753	1554	0.311	519	398	9.4	0.5	3.601	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 - A507 E	500	125	1033	1591	0.314	499	444	0.3	0.5	3.294	A
2 - A1(M) S	332	83	816	1467	0.226	331	717	0.2	0.3	3.171	A
3 - A507 W	1086	271	293	2052	0.529	1085	855	0.8	1.1	3.715	A
4 - A1(M) N	577	144	901	1481	0.390	576	477	0.5	0.6	3.975	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 - A507 E	612	153	1264	1480	0.414	611	543	0.5	0.7	4.139	A
2 - A1(M) S	406	102	999	1379	0.295	406	877	0.3	0.4	3.696	A
3 - A507 W	1330	333	358	2012	0.661	1327	1046	1.1	1.9	5.234	A
4 - A1(M) N	707	177	1102	1382	0.512	705	583	0.6	1.0	5.307	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 - A507 E	612	153	1267	1479	0.414	612	544	0.7	0.7	4.154	A
2 - A1(M) S	406	102	1001	1378	0.295	406	879	0.4	0.4	3.702	A
3 - A507 W	1330	333	359	2012	0.661	1330	1048	1.9	1.9	5.277	A
4 - A1(M) N	707	177	1104	1381	0.512	707	585	1.0	1.0	5.342	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 - A507 E	500	125	1038	1589	0.315	501	445	0.7	0.5	3.312	A
2 - A1(M) S	332	83	819	1465	0.226	332	719	0.4	0.3	3.178	A
3 - A507 W	1086	271	294	2052	0.529	1089	858	1.9	1.1	3.753	A
4 - A1(M) N	577	144	904	1479	0.390	579	479	1.0	0.6	4.005	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 - A507 E	419	105	868	1671	0.250	419	372	0.5	0.3	2.877	A
2 - A1(M) S	278	69	685	1529	0.182	278	602	0.3	0.2	2.877	A
3 - A507 W	909	227	246	2081	0.437	911	718	1.1	0.8	3.082	A
4 - A1(M) N	483	121	756	1552	0.311	484	400	0.6	0.5	3.374	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 - A507 E	0.34	0.00	0.00	0.34	0.34			N/A	N/A
2 - A1(M) S	0.22	0.00	0.00	0.22	0.22			N/A	N/A
3 - A507 W	0.77	0.55	1.00	1.40	1.45			N/A	N/A
4 - A1(M) N	0.45	0.00	0.00	0.45	0.45			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 - A507 E	0.46	0.00	0.00	0.46	0.46			N/A	N/A
2 - A1(M) S	0.29	0.00	0.00	0.29	0.29			N/A	N/A
3 - A507 W	1.11	0.06	0.67	2.44	3.50			N/A	N/A
4 - A1(M) N	0.63	0.09	0.79	1.36	1.43			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 - A507 E	0.70	0.03	0.25	0.70	0.70			N/A	N/A
2 - A1(M) S	0.42	0.03	0.25	0.45	0.48			N/A	N/A
3 - A507 W	1.92	0.03	0.26	1.92	1.92			N/A	N/A
4 - A1(M) N	1.03	0.03	0.26	1.03	1.03			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 - A507 E	0.70	0.03	0.28	1.02	2.90			N/A	N/A
2 - A1(M) S	0.42	0.03	0.32	1.34	1.54			N/A	N/A
3 - A507 W	1.93	0.03	0.26	1.93	1.93			N/A	N/A
4 - A1(M) N	1.04	0.03	0.27	1.04	1.86			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 - A507 E	0.46	0.00	0.00	0.46	0.46			N/A	N/A
2 - A1(M) S	0.29	0.00	0.00	0.29	0.29			N/A	N/A
3 - A507 W	1.13	0.17	1.08	1.70	1.95			N/A	N/A
4 - A1(M) N	0.64	0.23	0.94	1.39	1.44			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 - A507 E	0.34	0.00	0.00	0.34	0.34			N/A	N/A
2 - A1(M) S	0.22	0.00	0.00	0.22	0.22			N/A	N/A
3 - A507 W	0.78	0.06	0.72	1.16	1.67			N/A	N/A
4 - A1(M) N	0.45	0.04	0.37	1.19	1.34			N/A	N/A

2022, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - A507 W - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
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	A1(M) Junction 10	Standard Roundabout		1, 2, 3, 4	5.08	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	29	2 - A1(M) S

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	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 - A507 E		ONE HOUR	✓	832	100.000
2 - A1(M) S		ONE HOUR	✓	780	100.000
3 - A507 W		ONE HOUR	✓	1106	100.000
4 - A1(M) N		ONE HOUR	✓	553	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
From		1 - A507 E	2 - A1(M) S	3 - A507 W	4 - A1(M) N
	1 - A507 E	0	73	377	382
	2 - A1(M) S	153	0	627	0
	3 - A507 W	248	431	5	422
	4 - A1(M) N	172	0	366	15

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		1 - A507 E	2 - A1(M) S	3 - A507 W	4 - A1(M) N
	1 - A507 E	0	7	1	3
	2 - A1(M) S	10	0	1	0
	3 - A507 W	2	2	0	1
	4 - A1(M) N	6	0	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A507 E	0.51	4.14	1.0	1.5	A	763	1145
2 - A1(M) S	0.62	6.89	1.6	1.9	A	716	1074
3 - A507 W	0.63	5.10	1.7	2.7	A	1015	1522
4 - A1(M) N	0.40	3.89	0.7	2.8	A	507	761

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 - A507 E	626	157	640	1919	0.326	624	442	0.0	0.5	2.777	A
2 - A1(M) S	587	147	886	1569	0.374	585	378	0.0	0.6	3.650	A
3 - A507 W	833	208	414	2033	0.410	830	1057	0.0	0.7	2.986	A
4 - A1(M) N	416	104	628	1684	0.247	454	616	9.8	0.3	3.017	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 - A507 E	748	187	734	1871	0.400	747	514	0.5	0.7	3.202	A
2 - A1(M) S	701	175	1028	1497	0.468	700	453	0.6	0.9	4.508	A
3 - A507 W	994	249	494	1987	0.500	993	1235	0.7	1.0	3.615	A
4 - A1(M) N	497	124	751	1621	0.307	497	735	0.3	0.4	3.199	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 - A507 E	916	229	898	1786	0.513	915	629	0.7	1.0	4.123	A
2 - A1(M) S	859	215	1259	1382	0.621	856	554	0.9	1.6	6.800	A
3 - A507 W	1218	304	604	1925	0.633	1215	1510	1.0	1.7	5.052	A
4 - A1(M) N	609	152	919	1536	0.396	608	900	0.4	0.7	3.874	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 - A507 E	916	229	900	1785	0.513	916	631	1.0	1.0	4.140	A
2 - A1(M) S	859	215	1261	1381	0.622	859	555	1.6	1.6	6.886	A
3 - A507 W	1218	304	606	1924	0.633	1218	1514	1.7	1.7	5.097	A
4 - A1(M) N	609	152	922	1535	0.397	609	902	0.7	0.7	3.885	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 - A507 E	748	187	736	1870	0.400	749	517	1.0	0.7	3.220	A
2 - A1(M) S	701	175	1031	1496	0.469	704	454	1.6	0.9	4.564	A
3 - A507 W	994	249	496	1986	0.501	997	1240	1.7	1.0	3.651	A
4 - A1(M) N	497	124	755	1620	0.307	498	738	0.7	0.4	3.211	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 - A507 E	626	157	616	1931	0.324	627	432	0.7	0.5	2.763	A
2 - A1(M) S	587	147	863	1580	0.372	588	380	0.9	0.6	3.636	A
3 - A507 W	833	208	415	2032	0.410	834	1037	1.0	0.7	3.008	A
4 - A1(M) N	416	104	631	1682	0.247	417	617	0.4	0.3	2.845	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 - A507 E	0.48	0.00	0.00	0.48	0.48			N/A	N/A
2 - A1(M) S	0.59	0.55	1.00	1.40	1.45			N/A	N/A
3 - A507 W	0.69	0.55	1.00	1.40	1.45			N/A	N/A
4 - A1(M) N	0.33	0.00	0.00	0.33	0.33			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 - A507 E	0.66	0.08	0.78	1.37	1.44			N/A	N/A
2 - A1(M) S	0.87	0.07	0.78	1.48	1.88			N/A	N/A
3 - A507 W	0.99	0.06	0.73	1.90	2.70			N/A	N/A
4 - A1(M) N	0.44	0.00	0.00	0.44	0.44			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 - A507 E	1.04	0.03	0.26	1.04	1.04			N/A	N/A
2 - A1(M) S	1.61	0.03	0.27	1.61	1.61			N/A	N/A
3 - A507 W	1.70	0.03	0.26	1.70	1.70			N/A	N/A
4 - A1(M) N	0.65	0.03	0.25	0.65	0.65			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 - A507 E	1.05	0.03	0.27	1.05	1.14			N/A	N/A
2 - A1(M) S	1.63	0.03	0.27	1.63	1.63			N/A	N/A
3 - A507 W	1.71	0.03	0.26	1.71	1.71			N/A	N/A
4 - A1(M) N	0.65	0.03	0.29	1.13	2.83			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 - A507 E	0.67	0.55	1.00	1.40	1.45			N/A	N/A
2 - A1(M) S	0.89	0.13	0.93	1.50	1.52			N/A	N/A
3 - A507 W	1.01	0.22	1.02	1.32	1.68			N/A	N/A
4 - A1(M) N	0.45	0.00	0.00	0.45	0.45			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 - A507 E	0.48	0.04	0.42	1.25	1.37			N/A	N/A
2 - A1(M) S	0.60	0.05	0.50	1.37	1.48			N/A	N/A
3 - A507 W	0.70	0.07	0.71	1.05	1.05			N/A	N/A
4 - A1(M) N	0.33	0.00	0.00	0.33	0.33			N/A	N/A

2028, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - A507 W - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
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	A1(M) Junction 10	Standard Roundabout		1, 2, 3, 4	5.38	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	32	3 - A507 W

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	2028	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 - A507 E		ONE HOUR	✓	583	100.000
2 - A1(M) S		ONE HOUR	✓	387	100.000
3 - A507 W		ONE HOUR	✓	1267	100.000
4 - A1(M) N		ONE HOUR	✓	682	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
From		1 - A507 E	2 - A1(M) S	3 - A507 W	4 - A1(M) N
	1 - A507 E	0	107	234	242
	2 - A1(M) S	100	0	287	0
	3 - A507 W	217	730	5	315
	4 - A1(M) N	201	0	472	9

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		1 - A507 E	2 - A1(M) S	3 - A507 W	4 - A1(M) N
	1 - A507 E	0	22	4	11
	2 - A1(M) S	21	0	8	0
	3 - A507 W	7	2	0	4
	4 - A1(M) N	15	0	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A507 E	0.44	4.49	0.8	2.8	A	535	802
2 - A1(M) S	0.32	3.89	0.5	1.9	A	355	533
3 - A507 W	0.70	5.99	2.3	4.5	A	1163	1744
4 - A1(M) N	0.55	5.96	1.2	1.5	A	626	939

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 - A507 E	439	110	939	1637	0.268	437	400	0.0	0.4	2.996	A
2 - A1(M) S	291	73	748	1499	0.194	290	628	0.0	0.2	2.974	A
3 - A507 W	954	238	264	2070	0.461	950	775	0.0	0.8	3.205	A
4 - A1(M) N	513	128	789	1537	0.334	549	425	9.4	0.5	3.773	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 - A507 E	524	131	1092	1563	0.335	524	465	0.4	0.5	3.460	A
2 - A1(M) S	348	87	864	1444	0.241	348	751	0.2	0.3	3.283	A
3 - A507 W	1139	285	315	2039	0.559	1137	896	0.8	1.3	3.984	A
4 - A1(M) N	613	153	944	1461	0.420	612	508	0.5	0.7	4.238	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 - A507 E	642	160	1335	1446	0.444	641	569	0.5	0.8	4.464	A
2 - A1(M) S	426	107	1057	1352	0.315	426	919	0.3	0.5	3.884	A
3 - A507 W	1395	349	386	1997	0.699	1391	1097	1.3	2.3	5.904	A
4 - A1(M) N	751	188	1155	1357	0.553	749	622	0.7	1.2	5.901	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 - A507 E	642	160	1339	1444	0.444	642	570	0.8	0.8	4.486	A
2 - A1(M) S	426	107	1059	1351	0.315	426	921	0.5	0.5	3.893	A
3 - A507 W	1395	349	386	1996	0.699	1395	1099	2.3	2.3	5.985	A
4 - A1(M) N	751	188	1158	1355	0.554	751	623	1.2	1.2	5.956	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 - A507 E	524	131	1097	1561	0.336	525	467	0.8	0.5	3.479	A
2 - A1(M) S	348	87	867	1442	0.241	348	755	0.5	0.3	3.294	A
3 - A507 W	1139	285	316	2039	0.559	1143	899	2.3	1.3	4.037	A
4 - A1(M) N	613	153	949	1459	0.420	615	510	1.2	0.7	4.278	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 - A507 E	439	110	917	1648	0.266	439	391	0.5	0.4	2.980	A
2 - A1(M) S	291	73	725	1510	0.193	292	631	0.3	0.2	2.957	A
3 - A507 W	954	238	265	2070	0.461	956	752	1.3	0.9	3.237	A
4 - A1(M) N	513	128	793	1535	0.334	514	427	0.7	0.5	3.530	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 - A507 E	0.36	0.00	0.00	0.36	0.36			N/A	N/A
2 - A1(M) S	0.24	0.00	0.00	0.24	0.24			N/A	N/A
3 - A507 W	0.85	0.55	1.00	1.40	1.45			N/A	N/A
4 - A1(M) N	0.50	0.50	1.00	1.40	1.45			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 - A507 E	0.50	0.50	1.00	1.40	1.45			N/A	N/A
2 - A1(M) S	0.32	0.00	0.00	0.32	0.32			N/A	N/A
3 - A507 W	1.25	0.05	0.54	2.94	4.47			N/A	N/A
4 - A1(M) N	0.72	0.08	0.80	1.40	1.47			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 - A507 E	0.79	0.03	0.25	0.79	0.79			N/A	N/A
2 - A1(M) S	0.46	0.03	0.25	0.46	0.48			N/A	N/A
3 - A507 W	2.27	0.03	0.27	2.27	2.27			N/A	N/A
4 - A1(M) N	1.22	0.03	0.26	1.22	1.22			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 - A507 E	0.80	0.03	0.28	0.80	2.78			N/A	N/A
2 - A1(M) S	0.46	0.03	0.32	1.40	1.88			N/A	N/A
3 - A507 W	2.30	0.03	0.26	2.30	2.30			N/A	N/A
4 - A1(M) N	1.23	0.03	0.27	1.23	1.53			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 - A507 E	0.51	0.51	1.00	1.40	1.45			N/A	N/A
2 - A1(M) S	0.32	0.00	0.00	0.32	0.32			N/A	N/A
3 - A507 W	1.28	0.11	1.11	2.15	2.81			N/A	N/A
4 - A1(M) N	0.73	0.19	0.93	1.39	1.44			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 - A507 E	0.36	0.00	0.00	0.36	0.36			N/A	N/A
2 - A1(M) S	0.24	0.00	0.00	0.24	0.24			N/A	N/A
3 - A507 W	0.86	0.05	0.62	1.66	2.24			N/A	N/A
4 - A1(M) N	0.51	0.05	0.46	1.28	1.39			N/A	N/A

2028, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - A507 W - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
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	A1(M) Junction 10	Standard Roundabout		1, 2, 3, 4	5.65	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	23	2 - A1(M) S

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	2028	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 - A507 E		ONE HOUR	✓	871	100.000
2 - A1(M) S		ONE HOUR	✓	816	100.000
3 - A507 W		ONE HOUR	✓	1158	100.000
4 - A1(M) N		ONE HOUR	✓	579	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - A507 E	2 - A1(M) S	3 - A507 W	4 - A1(M) N
From	1 - A507 E	0	76	395	400
	2 - A1(M) S	160	0	656	0
	3 - A507 W	260	451	5	442
	4 - A1(M) N	180	0	383	16

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		1 - A507 E	2 - A1(M) S	3 - A507 W	4 - A1(M) N
	1 - A507 E	0	7	1	3
	2 - A1(M) S	10	0	1	0
	3 - A507 W	2	2	0	1
	4 - A1(M) N	6	0	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A507 E	0.54	4.47	1.2	1.5	A	799	1199
2 - A1(M) S	0.66	7.94	2.0	2.6	A	749	1123
3 - A507 W	0.67	5.69	2.0	3.5	A	1063	1594
4 - A1(M) N	0.42	4.11	0.7	2.8	A	531	797

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 - A507 E	656	164	668	1904	0.344	654	462	0.0	0.5	2.873	A
2 - A1(M) S	614	154	927	1548	0.397	612	395	0.0	0.7	3.832	A
3 - A507 W	872	218	433	2022	0.431	869	1105	0.0	0.8	3.114	A
4 - A1(M) N	436	109	657	1669	0.261	473	645	9.8	0.4	3.108	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 - A507 E	783	196	768	1853	0.422	782	539	0.5	0.7	3.360	A
2 - A1(M) S	734	183	1077	1473	0.498	732	473	0.7	1.0	4.849	A
3 - A507 W	1041	260	517	1974	0.527	1040	1292	0.8	1.1	3.847	A
4 - A1(M) N	521	130	786	1604	0.325	520	770	0.4	0.5	3.320	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 - A507 E	959	240	939	1765	0.543	957	659	0.7	1.2	4.446	A
2 - A1(M) S	898	225	1318	1353	0.664	895	579	1.0	1.9	7.791	A
3 - A507 W	1275	319	633	1909	0.668	1271	1580	1.1	2.0	5.621	A
4 - A1(M) N	637	159	962	1515	0.421	637	942	0.5	0.7	4.094	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 - A507 E	959	240	941	1764	0.544	959	661	1.2	1.2	4.471	A
2 - A1(M) S	898	225	1320	1352	0.665	898	580	1.9	2.0	7.937	A
3 - A507 W	1275	319	634	1908	0.668	1275	1584	2.0	2.0	5.687	A
4 - A1(M) N	637	159	964	1514	0.421	637	945	0.7	0.7	4.108	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 - A507 E	783	196	771	1852	0.423	785	541	1.2	0.7	3.378	A
2 - A1(M) S	734	183	1080	1472	0.499	737	475	2.0	1.0	4.929	A
3 - A507 W	1041	260	519	1973	0.528	1044	1298	2.0	1.1	3.893	A
4 - A1(M) N	521	130	790	1602	0.325	521	774	0.7	0.5	3.335	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 - A507 E	656	164	645	1917	0.342	657	452	0.7	0.5	2.858	A
2 - A1(M) S	614	154	904	1560	0.394	616	397	1.0	0.7	3.818	A
3 - A507 W	872	218	434	2021	0.431	873	1085	1.1	0.8	3.141	A
4 - A1(M) N	436	109	661	1667	0.261	436	647	0.5	0.4	2.927	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 - A507 E	0.52	0.52	1.00	1.40	1.45			N/A	N/A
2 - A1(M) S	0.65	0.55	1.00	1.40	1.45			N/A	N/A
3 - A507 W	0.75	0.55	1.00	1.40	1.45			N/A	N/A
4 - A1(M) N	0.36	0.00	0.00	0.36	0.36			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 - A507 E	0.73	0.08	0.78	1.41	1.49			N/A	N/A
2 - A1(M) S	0.98	0.06	0.75	1.86	2.61			N/A	N/A
3 - A507 W	1.11	0.05	0.65	2.42	3.48			N/A	N/A
4 - A1(M) N	0.48	0.00	0.00	0.48	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 - A507 E	1.18	0.03	0.26	1.18	1.18			N/A	N/A
2 - A1(M) S	1.93	0.03	0.27	1.93	2.44			N/A	N/A
3 - A507 W	1.98	0.03	0.27	1.98	1.98			N/A	N/A
4 - A1(M) N	0.72	0.03	0.25	0.72	0.72			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 - A507 E	1.18	0.03	0.27	1.18	1.32			N/A	N/A
2 - A1(M) S	1.96	0.03	0.27	1.96	1.96			N/A	N/A
3 - A507 W	2.00	0.03	0.26	2.00	2.00			N/A	N/A
4 - A1(M) N	0.72	0.03	0.28	0.85	2.80			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 - A507 E	0.74	0.51	0.98	1.40	1.45			N/A	N/A
2 - A1(M) S	1.00	0.09	0.94	1.64	1.95			N/A	N/A
3 - A507 W	1.13	0.14	1.06	1.73	1.99			N/A	N/A
4 - A1(M) N	0.48	0.00	0.00	0.48	0.48			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 - A507 E	0.52	0.05	0.55	1.31	1.41			N/A	N/A
2 - A1(M) S	0.65	0.05	0.47	1.01	1.64			N/A	N/A
3 - A507 W	0.76	0.06	0.66	1.21	1.72			N/A	N/A
4 - A1(M) N	0.36	0.00	0.00	0.36	0.36			N/A	N/A

2033, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - A507 W - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
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	A1(M) Junction 10	Standard Roundabout		1, 2, 3, 4	5.68	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	29	3 - A507 W

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	2033	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 - A507 E		ONE HOUR	✓	596	100.000
2 - A1(M) S		ONE HOUR	✓	396	100.000
3 - A507 W		ONE HOUR	✓	1295	100.000
4 - A1(M) N		ONE HOUR	✓	698	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
From		1 - A507 E	2 - A1(M) S	3 - A507 W	4 - A1(M) N
	1 - A507 E	0	109	239	248
	2 - A1(M) S	102	0	294	0
	3 - A507 W	222	746	5	322
	4 - A1(M) N	206	0	482	10

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		1 - A507 E	2 - A1(M) S	3 - A507 W	4 - A1(M) N
	1 - A507 E	0	22	4	11
	2 - A1(M) S	21	0	8	0
	3 - A507 W	7	2	0	4
	4 - A1(M) N	15	0	3	22

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A507 E	0.46	4.66	0.8	2.7	A	547	820
2 - A1(M) S	0.33	3.99	0.5	2.0	A	363	545
3 - A507 W	0.72	6.39	2.5	4.9	A	1188	1782
4 - A1(M) N	0.57	6.31	1.3	1.5	A	640	961

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 - A507 E	449	112	959	1627	0.276	447	409	0.0	0.4	3.048	A
2 - A1(M) S	298	75	764	1491	0.200	297	641	0.0	0.2	3.012	A
3 - A507 W	975	244	271	2065	0.472	971	791	0.0	0.9	3.280	A
4 - A1(M) N	525	131	806	1524	0.345	561	436	9.4	0.5	3.874	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 - A507 E	536	134	1116	1551	0.345	535	476	0.4	0.5	3.542	A
2 - A1(M) S	356	89	883	1434	0.248	356	768	0.2	0.3	3.339	A
3 - A507 W	1164	291	323	2033	0.573	1162	916	0.9	1.3	4.125	A
4 - A1(M) N	627	157	965	1446	0.434	627	521	0.5	0.8	4.387	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 - A507 E	656	164	1364	1431	0.459	655	582	0.5	0.8	4.632	A
2 - A1(M) S	436	109	1081	1339	0.326	435	939	0.3	0.5	3.980	A
3 - A507 W	1426	356	396	1989	0.717	1421	1121	1.3	2.5	6.285	A
4 - A1(M) N	769	192	1180	1340	0.573	766	637	0.8	1.3	6.244	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 - A507 E	656	164	1368	1429	0.459	656	584	0.8	0.8	4.659	A
2 - A1(M) S	436	109	1083	1338	0.326	436	941	0.5	0.5	3.990	A
3 - A507 W	1426	356	396	1989	0.717	1426	1123	2.5	2.5	6.387	A
4 - A1(M) N	769	192	1184	1339	0.574	768	639	1.3	1.3	6.312	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 - A507 E	536	134	1122	1548	0.346	537	478	0.8	0.5	3.567	A
2 - A1(M) S	356	89	887	1432	0.249	357	771	0.5	0.3	3.348	A
3 - A507 W	1164	291	324	2033	0.573	1169	919	2.5	1.4	4.190	A
4 - A1(M) N	627	157	970	1444	0.435	630	523	1.3	0.8	4.435	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 - A507 E	449	112	938	1637	0.274	449	400	0.5	0.4	3.034	A
2 - A1(M) S	298	75	742	1501	0.199	298	645	0.3	0.2	2.995	A
3 - A507 W	975	244	271	2065	0.472	977	769	1.4	0.9	3.312	A
4 - A1(M) N	525	131	811	1522	0.345	526	437	0.8	0.5	3.620	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 - A507 E	0.38	0.00	0.00	0.38	0.38			N/A	N/A
2 - A1(M) S	0.25	0.00	0.00	0.25	0.25			N/A	N/A
3 - A507 W	0.89	0.55	1.00	1.40	1.45			N/A	N/A
4 - A1(M) N	0.53	0.53	1.00	1.40	1.45			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 - A507 E	0.52	0.06	0.63	1.33	1.41			N/A	N/A
2 - A1(M) S	0.33	0.00	0.00	0.33	0.33			N/A	N/A
3 - A507 W	1.33	0.05	0.49	3.24	4.93			N/A	N/A
4 - A1(M) N	0.76	0.08	0.80	1.25	1.25			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 - A507 E	0.84	0.03	0.25	0.84	0.84			N/A	N/A
2 - A1(M) S	0.48	0.03	0.25	0.48	0.48			N/A	N/A
3 - A507 W	2.47	0.03	0.27	2.47	3.12			N/A	N/A
4 - A1(M) N	1.32	0.03	0.26	1.32	1.32			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 - A507 E	0.84	0.03	0.28	0.84	2.67			N/A	N/A
2 - A1(M) S	0.48	0.03	0.31	1.42	2.01			N/A	N/A
3 - A507 W	2.50	0.03	0.26	2.50	2.50			N/A	N/A
4 - A1(M) N	1.34	0.03	0.27	1.34	1.45			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 - A507 E	0.53	0.53	1.00	1.40	1.45			N/A	N/A
2 - A1(M) S	0.33	0.00	0.00	0.33	0.33			N/A	N/A
3 - A507 W	1.35	0.10	1.11	2.53	3.28			N/A	N/A
4 - A1(M) N	0.78	0.17	0.92	1.40	1.46			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 - A507 E	0.38	0.00	0.00	0.38	0.38			N/A	N/A
2 - A1(M) S	0.25	0.00	0.00	0.25	0.25			N/A	N/A
3 - A507 W	0.90	0.05	0.54	1.83	2.66			N/A	N/A
4 - A1(M) N	0.53	0.05	0.49	1.30	1.40			N/A	N/A

2033, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - A507 W - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
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	A1(M) Junction 10	Standard Roundabout		1, 2, 3, 4	5.99	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	20	2 - A1(M) S

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	2033	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 - A507 E		ONE HOUR	✓	890	100.000
2 - A1(M) S		ONE HOUR	✓	835	100.000
3 - A507 W		ONE HOUR	✓	1182	100.000
4 - A1(M) N		ONE HOUR	✓	592	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
From		1 - A507 E	2 - A1(M) S	3 - A507 W	4 - A1(M) N
	1 - A507 E	0	78	403	409
	2 - A1(M) S	164	0	671	0
	3 - A507 W	265	461	5	451
	4 - A1(M) N	184	0	392	16

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		1 - A507 E	2 - A1(M) S	3 - A507 W	4 - A1(M) N
	1 - A507 E	0	7	1	3
	2 - A1(M) S	10	0	1	0
	3 - A507 W	2	2	0	1
	4 - A1(M) N	6	0	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A507 E	0.56	4.65	1.3	1.5	A	817	1225
2 - A1(M) S	0.69	8.60	2.2	4.1	A	766	1149
3 - A507 W	0.69	6.02	2.2	3.9	A	1085	1627
4 - A1(M) N	0.43	4.23	0.8	2.7	A	543	815

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 - A507 E	670	168	683	1897	0.353	668	472	0.0	0.5	2.924	A
2 - A1(M) S	629	157	946	1539	0.409	626	404	0.0	0.7	3.932	A
3 - A507 W	890	222	443	2016	0.441	887	1129	0.0	0.8	3.177	A
4 - A1(M) N	446	111	671	1662	0.268	483	658	9.8	0.4	3.154	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 - A507 E	800	200	785	1845	0.434	799	550	0.5	0.8	3.440	A
2 - A1(M) S	751	188	1100	1462	0.514	749	484	0.7	1.0	5.043	A
3 - A507 W	1063	266	529	1967	0.540	1061	1320	0.8	1.2	3.965	A
4 - A1(M) N	532	133	803	1595	0.334	532	787	0.4	0.5	3.383	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 - A507 E	980	245	960	1754	0.559	978	673	0.8	1.3	4.626	A
2 - A1(M) S	919	230	1346	1338	0.687	915	592	1.0	2.1	8.416	A
3 - A507 W	1301	325	647	1900	0.685	1298	1615	1.2	2.1	5.933	A
4 - A1(M) N	652	163	982	1505	0.433	651	962	0.5	0.8	4.211	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 - A507 E	980	245	962	1753	0.559	980	675	1.3	1.3	4.655	A
2 - A1(M) S	919	230	1349	1337	0.688	919	593	2.1	2.2	8.604	A
3 - A507 W	1301	325	648	1899	0.685	1301	1619	2.1	2.2	6.016	A
4 - A1(M) N	652	163	985	1503	0.434	652	964	0.8	0.8	4.229	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 - A507 E	800	200	788	1843	0.434	802	553	1.3	0.8	3.467	A
2 - A1(M) S	751	188	1104	1460	0.514	755	486	2.2	1.1	5.141	A
3 - A507 W	1063	266	531	1966	0.540	1066	1327	2.2	1.2	4.018	A
4 - A1(M) N	532	133	808	1593	0.334	533	790	0.8	0.5	3.400	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 - A507 E	670	168	659	1909	0.351	671	462	0.8	0.5	2.908	A
2 - A1(M) S	629	157	923	1550	0.406	630	406	1.1	0.7	3.920	A
3 - A507 W	890	222	444	2016	0.441	891	1109	1.2	0.8	3.208	A
4 - A1(M) N	446	111	675	1660	0.268	446	661	0.5	0.4	2.969	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 - A507 E	0.54	0.54	1.00	1.40	1.45			N/A	N/A
2 - A1(M) S	0.69	0.55	1.00	1.40	1.45			N/A	N/A
3 - A507 W	0.78	0.55	1.00	1.40	1.45			N/A	N/A
4 - A1(M) N	0.37	0.00	0.00	0.37	0.37			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 - A507 E	0.76	0.08	0.78	1.34	1.34			N/A	N/A
2 - A1(M) S	1.04	0.06	0.71	2.08	2.95			N/A	N/A
3 - A507 W	1.16	0.05	0.60	2.65	3.85			N/A	N/A
4 - A1(M) N	0.50	0.00	0.00	0.50	0.50			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 - A507 E	1.25	0.03	0.26	1.25	1.25			N/A	N/A
2 - A1(M) S	2.13	0.03	0.27	2.13	4.07			N/A	N/A
3 - A507 W	2.13	0.03	0.27	2.13	2.13			N/A	N/A
4 - A1(M) N	0.76	0.03	0.25	0.76	0.76			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 - A507 E	1.26	0.03	0.27	1.26	1.26			N/A	N/A
2 - A1(M) S	2.17	0.03	0.27	2.17	2.28			N/A	N/A
3 - A507 W	2.15	0.03	0.26	2.15	2.15			N/A	N/A
4 - A1(M) N	0.76	0.03	0.28	0.76	2.72			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 - A507 E	0.77	0.45	0.97	1.40	1.45			N/A	N/A
2 - A1(M) S	1.07	0.08	0.93	1.85	2.47			N/A	N/A
3 - A507 W	1.19	0.12	1.08	1.89	2.47			N/A	N/A
4 - A1(M) N	0.50	0.50	1.00	1.40	1.45			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 - A507 E	0.54	0.06	0.61	1.32	1.41			N/A	N/A
2 - A1(M) S	0.69	0.04	0.45	1.33	1.90			N/A	N/A
3 - A507 W	0.80	0.06	0.62	1.44	1.90			N/A	N/A
4 - A1(M) N	0.37	0.00	0.00	0.37	0.37			N/A	N/A

2033 + Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - A507 W - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
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	A1(M) Junction 10	Standard Roundabout		1, 2, 3, 4	5.49	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	32	3 - A507 W

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	2033 + Dev	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 - A507 E		ONE HOUR	✓	563	100.000
2 - A1(M) S		ONE HOUR	✓	377	100.000
3 - A507 W		ONE HOUR	✓	1254	100.000
4 - A1(M) N		ONE HOUR	✓	749	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - A507 E	2 - A1(M) S	3 - A507 W	4 - A1(M) N
From	1 - A507 E	0	89	194	280
	2 - A1(M) S	83	0	294	0
	3 - A507 W	181	746	5	322
	4 - A1(M) N	257	0	482	10

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		1 - A507 E	2 - A1(M) S	3 - A507 W	4 - A1(M) N
	1 - A507 E	0	24	5	9
	2 - A1(M) S	22	0	8	0
	3 - A507 W	8	2	0	4
	4 - A1(M) N	10	0	3	22

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A507 E	0.43	4.43	0.8	2.9	A	517	775
2 - A1(M) S	0.31	3.86	0.4	1.8	A	346	519
3 - A507 W	0.70	5.96	2.3	4.4	A	1151	1726
4 - A1(M) N	0.59	6.40	1.5	1.6	A	687	1031

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 - A507 E	424	106	957	1631	0.260	422	404	0.0	0.3	2.978	A
2 - A1(M) S	284	71	753	1500	0.189	283	626	0.0	0.2	2.956	A
3 - A507 W	944	236	280	2062	0.458	941	756	0.0	0.8	3.202	A
4 - A1(M) N	564	141	761	1564	0.361	599	460	9.5	0.6	3.871	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 - A507 E	506	127	1116	1554	0.326	506	468	0.3	0.5	3.432	A
2 - A1(M) S	339	85	872	1443	0.235	339	750	0.2	0.3	3.259	A
3 - A507 W	1127	282	335	2029	0.556	1126	875	0.8	1.2	3.977	A
4 - A1(M) N	673	168	911	1489	0.452	672	549	0.6	0.8	4.400	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 - A507 E	620	155	1365	1433	0.432	619	572	0.5	0.8	4.414	A
2 - A1(M) S	415	104	1067	1350	0.307	415	917	0.3	0.4	3.847	A
3 - A507 W	1381	345	410	1984	0.696	1377	1071	1.2	2.2	5.886	A
4 - A1(M) N	825	206	1114	1388	0.594	822	672	0.8	1.4	6.329	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 - A507 E	620	155	1368	1432	0.433	620	574	0.8	0.8	4.434	A
2 - A1(M) S	415	104	1069	1349	0.308	415	919	0.4	0.4	3.855	A
3 - A507 W	1381	345	411	1984	0.696	1381	1073	2.2	2.3	5.965	A
4 - A1(M) N	825	206	1117	1387	0.595	825	674	1.4	1.5	6.401	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 - A507 E	506	127	1121	1551	0.326	507	470	0.8	0.5	3.454	A
2 - A1(M) S	339	85	875	1441	0.235	339	753	0.4	0.3	3.270	A
3 - A507 W	1127	282	336	2029	0.556	1131	879	2.3	1.3	4.029	A
4 - A1(M) N	673	168	916	1487	0.453	676	552	1.5	0.8	4.450	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 - A507 E	424	106	937	1640	0.258	424	393	0.5	0.4	2.964	A
2 - A1(M) S	284	71	732	1510	0.188	284	630	0.3	0.2	2.936	A
3 - A507 W	944	236	281	2061	0.458	946	735	1.3	0.9	3.230	A
4 - A1(M) N	564	141	765	1562	0.361	565	461	0.8	0.6	3.616	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 - A507 E	0.35	0.00	0.00	0.35	0.35			N/A	N/A
2 - A1(M) S	0.23	0.00	0.00	0.23	0.23			N/A	N/A
3 - A507 W	0.84	0.55	1.00	1.40	1.45			N/A	N/A
4 - A1(M) N	0.57	0.55	1.00	1.40	1.45			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 - A507 E	0.48	0.00	0.00	0.48	0.48			N/A	N/A
2 - A1(M) S	0.31	0.00	0.00	0.31	0.31			N/A	N/A
3 - A507 W	1.24	0.05	0.56	2.90	4.36			N/A	N/A
4 - A1(M) N	0.82	0.07	0.80	1.15	1.64			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 - A507 E	0.76	0.03	0.25	0.76	0.76			N/A	N/A
2 - A1(M) S	0.44	0.03	0.25	0.45	0.48			N/A	N/A
3 - A507 W	2.24	0.03	0.27	2.24	2.24			N/A	N/A
4 - A1(M) N	1.44	0.03	0.26	1.44	1.44			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 - A507 E	0.76	0.03	0.28	0.84	2.88			N/A	N/A
2 - A1(M) S	0.44	0.03	0.32	1.38	1.75			N/A	N/A
3 - A507 W	2.26	0.03	0.26	2.26	2.26			N/A	N/A
4 - A1(M) N	1.45	0.03	0.27	1.45	1.45			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 - A507 E	0.49	0.00	0.00	0.49	0.49			N/A	N/A
2 - A1(M) S	0.31	0.00	0.00	0.31	0.31			N/A	N/A
3 - A507 W	1.26	0.12	1.11	2.06	2.76			N/A	N/A
4 - A1(M) N	0.83	0.16	0.93	1.43	1.49			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 - A507 E	0.35	0.00	0.00	0.35	0.35			N/A	N/A
2 - A1(M) S	0.23	0.00	0.00	0.23	0.23			N/A	N/A
3 - A507 W	0.85	0.06	0.63	1.62	2.14			N/A	N/A
4 - A1(M) N	0.57	0.05	0.53	1.33	1.43			N/A	N/A

2033 + Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - A507 W - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
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	A1(M) Junction 10	Standard Roundabout		1, 2, 3, 4	5.52	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	24	2 - A1(M) S

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	2033 + Dev	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 - A507 E		ONE HOUR	✓	845	100.000
2 - A1(M) S		ONE HOUR	✓	808	100.000
3 - A507 W		ONE HOUR	✓	1139	100.000
4 - A1(M) N		ONE HOUR	✓	653	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - A507 E	2 - A1(M) S	3 - A507 W	4 - A1(M) N
From	1 - A507 E	0	67	344	434
	2 - A1(M) S	137	0	671	0
	3 - A507 W	222	461	5	451
	4 - A1(M) N	245	0	392	16

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		1 - A507 E	2 - A1(M) S	3 - A507 W	4 - A1(M) N
	1 - A507 E	0	7	1	2
	2 - A1(M) S	11	0	1	0
	3 - A507 W	2	2	0	1
	4 - A1(M) N	4	0	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A507 E	0.53	4.33	1.1	1.5	A	775	1163
2 - A1(M) S	0.65	7.66	1.9	2.4	A	741	1112
3 - A507 W	0.66	5.54	1.9	3.2	A	1045	1568
4 - A1(M) N	0.46	4.34	0.9	2.2	A	599	899

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 - A507 E	636	159	680	1907	0.334	634	468	0.0	0.5	2.829	A
2 - A1(M) S	608	152	918	1555	0.391	606	396	0.0	0.6	3.783	A
3 - A507 W	858	214	441	2019	0.425	855	1083	0.0	0.7	3.082	A
4 - A1(M) N	492	123	619	1695	0.290	529	677	9.8	0.4	3.186	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 - A507 E	760	190	785	1853	0.410	759	542	0.5	0.7	3.290	A
2 - A1(M) S	726	182	1070	1479	0.491	725	474	0.6	1.0	4.765	A
3 - A507 W	1024	256	527	1971	0.519	1023	1268	0.7	1.1	3.790	A
4 - A1(M) N	587	147	741	1633	0.359	586	809	0.4	0.6	3.436	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 - A507 E	930	233	960	1762	0.528	929	663	0.7	1.1	4.311	A
2 - A1(M) S	890	222	1309	1360	0.654	886	580	1.0	1.8	7.538	A
3 - A507 W	1254	314	645	1905	0.658	1251	1550	1.1	1.9	5.478	A
4 - A1(M) N	719	180	906	1550	0.464	718	990	0.6	0.9	4.322	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 - A507 E	930	233	962	1761	0.528	930	665	1.1	1.1	4.333	A
2 - A1(M) S	890	222	1311	1359	0.655	890	581	1.8	1.9	7.663	A
3 - A507 W	1254	314	646	1904	0.659	1254	1555	1.9	1.9	5.537	A
4 - A1(M) N	719	180	908	1548	0.464	719	992	0.9	0.9	4.340	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 - A507 E	760	190	788	1851	0.410	761	545	1.1	0.7	3.309	A
2 - A1(M) S	726	182	1073	1478	0.492	730	476	1.9	1.0	4.838	A
3 - A507 W	1024	256	529	1970	0.520	1027	1274	1.9	1.1	3.834	A
4 - A1(M) N	587	147	744	1632	0.360	588	812	0.9	0.6	3.453	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 - A507 E	636	159	659	1918	0.332	637	455	0.7	0.5	2.814	A
2 - A1(M) S	608	152	898	1565	0.389	610	398	1.0	0.6	3.771	A
3 - A507 W	858	214	443	2019	0.425	859	1065	1.1	0.7	3.109	A
4 - A1(M) N	492	123	622	1694	0.290	492	679	0.6	0.4	2.999	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 - A507 E	0.50	0.00	0.00	0.50	0.50			N/A	N/A
2 - A1(M) S	0.64	0.55	1.00	1.40	1.45			N/A	N/A
3 - A507 W	0.73	0.55	1.00	1.40	1.45			N/A	N/A
4 - A1(M) N	0.41	0.00	0.00	0.41	0.41			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 - A507 E	0.69	0.08	0.78	1.38	1.46			N/A	N/A
2 - A1(M) S	0.95	0.06	0.76	1.78	2.43			N/A	N/A
3 - A507 W	1.07	0.06	0.68	2.26	3.21			N/A	N/A
4 - A1(M) N	0.56	0.07	0.74	1.35	1.42			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 - A507 E	1.11	0.03	0.26	1.11	1.11			N/A	N/A
2 - A1(M) S	1.85	0.03	0.27	1.85	1.85			N/A	N/A
3 - A507 W	1.89	0.03	0.26	1.89	1.89			N/A	N/A
4 - A1(M) N	0.86	0.03	0.25	0.86	0.86			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 - A507 E	1.11	0.03	0.27	1.11	1.47			N/A	N/A
2 - A1(M) S	1.87	0.03	0.27	1.87	1.87			N/A	N/A
3 - A507 W	1.91	0.03	0.26	1.91	1.91			N/A	N/A
4 - A1(M) N	0.86	0.03	0.27	0.86	2.24			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 - A507 E	0.70	0.55	1.00	1.40	1.45			N/A	N/A
2 - A1(M) S	0.98	0.10	0.94	1.53	1.86			N/A	N/A
3 - A507 W	1.09	0.16	1.05	1.64	1.91			N/A	N/A
4 - A1(M) N	0.57	0.55	1.00	1.40	1.45			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 - A507 E	0.50	0.05	0.47	1.29	1.39			N/A	N/A
2 - A1(M) S	0.64	0.05	0.48	1.47	1.51			N/A	N/A
3 - A507 W	0.74	0.06	0.67	1.02	1.59			N/A	N/A
4 - A1(M) N	0.41	0.00	0.00	0.41	0.41			N/A	N/A

2040, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - A507 W - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
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	A1(M) Junction 10	Standard Roundabout		1, 2, 3, 4	5.22	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	34	3 - A507 W

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	2040	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 - A507 E		ONE HOUR	✓	574	100.000
2 - A1(M) S		ONE HOUR	✓	381	100.000
3 - A507 W		ONE HOUR	✓	1248	100.000
4 - A1(M) N		ONE HOUR	✓	672	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - A507 E	2 - A1(M) S	3 - A507 W	4 - A1(M) N
From	1 - A507 E	0	105	230	239
	2 - A1(M) S	98	0	283	0
	3 - A507 W	214	719	5	310
	4 - A1(M) N	198	0	465	9

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		1 - A507 E	2 - A1(M) S	3 - A507 W	4 - A1(M) N
	1 - A507 E	0	22	4	11
	2 - A1(M) S	21	0	8	0
	3 - A507 W	7	2	0	4
	4 - A1(M) N	15	0	3	22

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A507 E	0.44	4.39	0.8	2.8	A	527	790
2 - A1(M) S	0.31	3.84	0.4	1.8	A	350	524
3 - A507 W	0.69	5.76	2.2	4.1	A	1145	1718
4 - A1(M) N	0.54	5.80	1.2	1.6	A	617	925

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 - A507 E	432	108	925	1643	0.263	431	394	0.0	0.4	2.967	A
2 - A1(M) S	287	72	738	1504	0.191	286	618	0.0	0.2	2.954	A
3 - A507 W	940	235	260	2072	0.454	936	763	0.0	0.8	3.161	A
4 - A1(M) N	506	126	777	1539	0.329	541	419	9.4	0.5	3.737	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 - A507 E	516	129	1076	1570	0.329	515	458	0.4	0.5	3.410	A
2 - A1(M) S	343	86	851	1449	0.236	342	740	0.2	0.3	3.252	A
3 - A507 W	1122	280	311	2041	0.550	1120	883	0.8	1.2	3.904	A
4 - A1(M) N	604	151	930	1464	0.413	603	501	0.5	0.7	4.180	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 - A507 E	632	158	1315	1454	0.435	631	560	0.5	0.8	4.366	A
2 - A1(M) S	419	105	1042	1358	0.309	419	905	0.3	0.4	3.831	A
3 - A507 W	1374	344	380	1999	0.687	1370	1080	1.2	2.2	5.695	A
4 - A1(M) N	740	185	1138	1362	0.543	738	613	0.7	1.2	5.755	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 - A507 E	632	158	1319	1453	0.435	632	561	0.8	0.8	4.385	A
2 - A1(M) S	419	105	1044	1357	0.309	419	907	0.4	0.4	3.838	A
3 - A507 W	1374	344	381	1998	0.688	1374	1082	2.2	2.2	5.764	A
4 - A1(M) N	740	185	1141	1360	0.544	740	614	1.2	1.2	5.802	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 - A507 E	516	129	1081	1568	0.329	517	460	0.8	0.5	3.428	A
2 - A1(M) S	343	86	854	1448	0.237	343	743	0.4	0.3	3.262	A
3 - A507 W	1122	280	312	2040	0.550	1126	886	2.2	1.2	3.951	A
4 - A1(M) N	604	151	934	1462	0.413	606	503	1.2	0.7	4.217	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 - A507 E	432	108	903	1653	0.261	433	385	0.5	0.4	2.949	A
2 - A1(M) S	287	72	715	1515	0.189	287	621	0.3	0.2	2.935	A
3 - A507 W	940	235	261	2071	0.454	941	741	1.2	0.8	3.188	A
4 - A1(M) N	506	126	781	1537	0.329	507	421	0.7	0.5	3.496	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 - A507 E	0.36	0.00	0.00	0.36	0.36			N/A	N/A
2 - A1(M) S	0.23	0.00	0.00	0.23	0.23			N/A	N/A
3 - A507 W	0.82	0.55	1.00	1.40	1.45			N/A	N/A
4 - A1(M) N	0.49	0.00	0.00	0.49	0.49			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 - A507 E	0.49	0.00	0.00	0.49	0.49			N/A	N/A
2 - A1(M) S	0.31	0.00	0.00	0.31	0.31			N/A	N/A
3 - A507 W	1.21	0.05	0.58	2.80	4.12			N/A	N/A
4 - A1(M) N	0.70	0.08	0.80	1.38	1.46			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 - A507 E	0.76	0.03	0.25	0.76	0.76			N/A	N/A
2 - A1(M) S	0.44	0.03	0.25	0.45	0.48			N/A	N/A
3 - A507 W	2.16	0.03	0.27	2.16	2.16			N/A	N/A
4 - A1(M) N	1.17	0.03	0.26	1.17	1.17			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 - A507 E	0.77	0.03	0.28	0.78	2.84			N/A	N/A
2 - A1(M) S	0.45	0.03	0.32	1.38	1.77			N/A	N/A
3 - A507 W	2.18	0.03	0.26	2.18	2.18			N/A	N/A
4 - A1(M) N	1.18	0.03	0.27	1.18	1.59			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 - A507 E	0.49	0.00	0.00	0.49	0.49			N/A	N/A
2 - A1(M) S	0.31	0.00	0.00	0.31	0.31			N/A	N/A
3 - A507 W	1.23	0.13	1.10	1.95	2.59			N/A	N/A
4 - A1(M) N	0.71	0.21	0.93	1.39	1.44			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 - A507 E	0.36	0.00	0.00	0.36	0.36			N/A	N/A
2 - A1(M) S	0.23	0.00	0.00	0.23	0.23			N/A	N/A
3 - A507 W	0.84	0.06	0.66	1.53	1.96			N/A	N/A
4 - A1(M) N	0.49	0.04	0.45	1.27	1.39			N/A	N/A

2040, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - A507 W - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
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	A1(M) Junction 10	Standard Roundabout		1, 2, 3, 4	5.41	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	25	2 - A1(M) S

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	2040	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 - A507 E		ONE HOUR	✓	856	100.000
2 - A1(M) S		ONE HOUR	✓	802	100.000
3 - A507 W		ONE HOUR	✓	1138	100.000
4 - A1(M) N		ONE HOUR	✓	569	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - A507 E	2 - A1(M) S	3 - A507 W	4 - A1(M) N
From	1 - A507 E	0	75	388	393
	2 - A1(M) S	157	0	645	0
	3 - A507 W	255	444	5	434
	4 - A1(M) N	177	0	377	15

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		1 - A507 E	2 - A1(M) S	3 - A507 W	4 - A1(M) N
	1 - A507 E	0	7	1	3
	2 - A1(M) S	10	0	1	0
	3 - A507 W	2	2	0	1
	4 - A1(M) N	6	0	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A507 E	0.53	4.34	1.1	1.5	A	785	1178
2 - A1(M) S	0.65	7.49	1.8	2.3	A	736	1104
3 - A507 W	0.65	5.44	1.9	3.1	A	1044	1566
4 - A1(M) N	0.41	4.02	0.7	2.8	A	522	783

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 - A507 E	644	161	658	1910	0.337	642	454	0.0	0.5	2.835	A
2 - A1(M) S	604	151	911	1556	0.388	601	389	0.0	0.6	3.760	A
3 - A507 W	857	214	425	2027	0.423	854	1087	0.0	0.7	3.062	A
4 - A1(M) N	428	107	646	1675	0.256	466	633	9.8	0.3	3.074	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 - A507 E	770	192	755	1860	0.414	769	529	0.5	0.7	3.298	A
2 - A1(M) S	721	180	1058	1483	0.486	720	466	0.6	0.9	4.710	A
3 - A507 W	1023	256	507	1980	0.517	1022	1270	0.7	1.1	3.753	A
4 - A1(M) N	512	128	773	1610	0.318	511	756	0.3	0.5	3.272	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 - A507 E	942	236	924	1773	0.532	941	647	0.7	1.1	4.318	A
2 - A1(M) S	883	221	1295	1364	0.647	880	570	0.9	1.8	7.381	A
3 - A507 W	1253	313	621	1915	0.654	1250	1554	1.1	1.9	5.383	A
4 - A1(M) N	626	157	945	1523	0.411	626	925	0.5	0.7	4.006	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 - A507 E	942	236	926	1772	0.532	942	648	1.1	1.1	4.340	A
2 - A1(M) S	883	221	1297	1363	0.648	883	571	1.8	1.8	7.493	A
3 - A507 W	1253	313	622	1914	0.654	1253	1558	1.9	1.9	5.439	A
4 - A1(M) N	626	157	948	1522	0.412	626	927	0.7	0.7	4.020	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 - A507 E	770	192	758	1858	0.414	771	531	1.1	0.7	3.315	A
2 - A1(M) S	721	180	1061	1481	0.487	724	468	1.8	1.0	4.778	A
3 - A507 W	1023	256	509	1979	0.517	1026	1276	1.9	1.1	3.794	A
4 - A1(M) N	512	128	777	1609	0.318	512	759	0.7	0.5	3.286	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 - A507 E	644	161	634	1922	0.335	645	444	0.7	0.5	2.820	A
2 - A1(M) S	604	151	888	1568	0.385	605	391	1.0	0.6	3.746	A
3 - A507 W	857	214	426	2026	0.423	858	1067	1.1	0.7	3.085	A
4 - A1(M) N	428	107	649	1673	0.256	429	635	0.5	0.3	2.896	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 - A507 E	0.51	0.51	1.00	1.40	1.45			N/A	N/A
2 - A1(M) S	0.63	0.55	1.00	1.40	1.45			N/A	N/A
3 - A507 W	0.73	0.55	1.00	1.40	1.45			N/A	N/A
4 - A1(M) N	0.35	0.00	0.00	0.35	0.35			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 - A507 E	0.70	0.08	0.78	1.39	1.47			N/A	N/A
2 - A1(M) S	0.94	0.06	0.77	1.72	2.29			N/A	N/A
3 - A507 W	1.06	0.06	0.69	2.20	3.10			N/A	N/A
4 - A1(M) N	0.46	0.00	0.00	0.46	0.46			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 - A507 E	1.12	0.03	0.26	1.12	1.12			N/A	N/A
2 - A1(M) S	1.79	0.03	0.27	1.79	1.79			N/A	N/A
3 - A507 W	1.86	0.03	0.26	1.86	1.86			N/A	N/A
4 - A1(M) N	0.69	0.03	0.25	0.69	0.69			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 - A507 E	1.13	0.03	0.27	1.13	1.41			N/A	N/A
2 - A1(M) S	1.82	0.03	0.27	1.82	1.82			N/A	N/A
3 - A507 W	1.88	0.03	0.26	1.88	1.88			N/A	N/A
4 - A1(M) N	0.70	0.03	0.28	0.97	2.83			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 - A507 E	0.71	0.51	0.98	1.40	1.45			N/A	N/A
2 - A1(M) S	0.96	0.11	0.94	1.45	1.80			N/A	N/A
3 - A507 W	1.08	0.17	1.05	1.60	1.87			N/A	N/A
4 - A1(M) N	0.47	0.00	0.00	0.47	0.47			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 - A507 E	0.51	0.05	0.49	1.30	1.40			N/A	N/A
2 - A1(M) S	0.63	0.05	0.48	1.40	1.40			N/A	N/A
3 - A507 W	0.74	0.06	0.69	1.49	1.53			N/A	N/A
4 - A1(M) N	0.35	0.00	0.00	0.35	0.35			N/A	N/A

2040 + Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - A507 W - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
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	A1(M) Junction 10	Standard Roundabout		1, 2, 3, 4	7.69	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	17	4 - A1(M) N

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	2040 + Dev	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 - A507 E		ONE HOUR	✓	845	100.000
2 - A1(M) S		ONE HOUR	✓	381	100.000
3 - A507 W		ONE HOUR	✓	1248	100.000
4 - A1(M) N		ONE HOUR	✓	933	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - A507 E	2 - A1(M) S	3 - A507 W	4 - A1(M) N
From	1 - A507 E	0	105	230	510
	2 - A1(M) S	98	0	283	0
	3 - A507 W	214	719	5	310
	4 - A1(M) N	459	0	465	9

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		1 - A507 E	2 - A1(M) S	3 - A507 W	4 - A1(M) N
	1 - A507 E	0	22	4	6
	2 - A1(M) S	21	0	8	0
	3 - A507 W	7	2	0	4
	4 - A1(M) N	7	0	3	22

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A507 E	0.62	6.43	1.6	1.9	A	775	1163
2 - A1(M) S	0.34	4.50	0.5	2.4	A	350	524
3 - A507 W	0.75	7.77	2.9	7.2	A	1145	1718
4 - A1(M) N	0.74	10.14	2.8	9.5	B	856	1284

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 - A507 E	636	159	917	1689	0.377	634	597	0.0	0.6	3.405	A
2 - A1(M) S	287	72	933	1414	0.203	286	618	0.0	0.3	3.188	A
3 - A507 W	940	235	463	1962	0.479	936	756	0.0	0.9	3.495	A
4 - A1(M) N	702	176	777	1563	0.449	737	622	9.5	0.8	4.544	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 - A507 E	760	190	1075	1611	0.472	759	692	0.6	0.9	4.218	A
2 - A1(M) S	343	86	1094	1337	0.256	342	739	0.3	0.3	3.617	A
3 - A507 W	1122	280	554	1909	0.588	1120	882	0.9	1.4	4.550	A
4 - A1(M) N	839	210	930	1487	0.564	837	744	0.8	1.3	5.524	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 - A507 E	930	233	1313	1493	0.623	927	845	0.9	1.6	6.329	A
2 - A1(M) S	419	105	1337	1222	0.343	419	904	0.3	0.5	4.477	A
3 - A507 W	1374	344	677	1838	0.748	1368	1078	1.4	2.9	7.572	A
4 - A1(M) N	1027	257	1136	1384	0.742	1021	909	1.3	2.8	9.777	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 - A507 E	930	233	1319	1490	0.624	930	849	1.6	1.6	6.426	A
2 - A1(M) S	419	105	1342	1220	0.344	419	907	0.5	0.5	4.499	A
3 - A507 W	1374	344	679	1837	0.748	1374	1082	2.9	2.9	7.768	A
4 - A1(M) N	1027	257	1140	1381	0.744	1027	913	2.8	2.8	10.135	B

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 - A507 E	760	190	1083	1607	0.473	763	697	1.6	0.9	4.278	A
2 - A1(M) S	343	86	1102	1334	0.257	343	745	0.5	0.3	3.636	A
3 - A507 W	1122	280	557	1908	0.588	1128	888	2.9	1.4	4.649	A
4 - A1(M) N	839	210	936	1484	0.565	845	749	2.8	1.3	5.688	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 - A507 E	636	159	904	1696	0.375	637	582	0.9	0.6	3.407	A
2 - A1(M) S	287	72	920	1420	0.202	287	622	0.3	0.3	3.180	A
3 - A507 W	940	235	465	1961	0.479	942	742	1.4	0.9	3.541	A
4 - A1(M) N	702	176	782	1561	0.450	704	625	1.3	0.8	4.214	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 - A507 E	0.60	0.55	1.00	1.40	1.45			N/A	N/A
2 - A1(M) S	0.25	0.00	0.00	0.25	0.25			N/A	N/A
3 - A507 W	0.91	0.55	1.00	1.40	1.45			N/A	N/A
4 - A1(M) N	0.82	0.55	1.00	1.40	1.45			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 - A507 E	0.88	0.07	0.77	1.55	1.94			N/A	N/A
2 - A1(M) S	0.34	0.00	0.00	0.34	0.34			N/A	N/A
3 - A507 W	1.41	0.05	0.48	3.56	5.54			N/A	N/A
4 - A1(M) N	1.28	0.05	0.59	2.97	4.49			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 - A507 E	1.62	0.03	0.26	1.62	1.62			N/A	N/A
2 - A1(M) S	0.52	0.03	0.25	0.52	0.52			N/A	N/A
3 - A507 W	2.87	0.03	0.28	2.87	7.16			N/A	N/A
4 - A1(M) N	2.77	0.03	0.29	2.77	9.52			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 - A507 E	1.64	0.03	0.27	1.64	1.64			N/A	N/A
2 - A1(M) S	0.52	0.03	0.31	1.45	2.38			N/A	N/A
3 - A507 W	2.92	0.03	0.27	2.92	2.92			N/A	N/A
4 - A1(M) N	2.84	0.03	0.27	2.84	4.12			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 - A507 E	0.90	0.14	0.95	1.50	1.51			N/A	N/A
2 - A1(M) S	0.35	0.00	0.00	0.35	0.35			N/A	N/A
3 - A507 W	1.45	0.08	1.02	2.98	4.15			N/A	N/A
4 - A1(M) N	1.32	0.07	0.88	2.83	3.95			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 - A507 E	0.60	0.05	0.54	1.37	1.47			N/A	N/A
2 - A1(M) S	0.25	0.00	0.00	0.25	0.25			N/A	N/A
3 - A507 W	0.93	0.04	0.44	2.09	3.29			N/A	N/A
4 - A1(M) N	0.83	0.04	0.40	1.89	3.01			N/A	N/A

2040 + Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - A507 W - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
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	A1(M) Junction 10	Standard Roundabout		1, 2, 3, 4	6.59	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	18	2 - A1(M) S

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	2040 + Dev	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 - A507 E		ONE HOUR	✓	1021	100.000
2 - A1(M) S		ONE HOUR	✓	802	100.000
3 - A507 W		ONE HOUR	✓	1138	100.000
4 - A1(M) N		ONE HOUR	✓	813	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - A507 E	2 - A1(M) S	3 - A507 W	4 - A1(M) N
From	1 - A507 E	0	75	388	558
	2 - A1(M) S	157	0	645	0
	3 - A507 W	255	444	5	434
	4 - A1(M) N	421	0	377	15

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		1 - A507 E	2 - A1(M) S	3 - A507 W	4 - A1(M) N
	1 - A507 E	0	7	1	2
	2 - A1(M) S	10	0	1	0
	3 - A507 W	2	2	0	1
	4 - A1(M) N	3	0	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A507 E	0.63	5.49	1.7	2.5	A	937	1405
2 - A1(M) S	0.69	9.19	2.2	4.9	A	736	1104
3 - A507 W	0.69	6.39	2.2	3.8	A	1044	1566
4 - A1(M) N	0.59	5.67	1.4	1.6	A	746	1119

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 - A507 E	769	192	650	1923	0.400	766	645	0.0	0.7	3.106	A
2 - A1(M) S	604	151	1026	1500	0.403	601	389	0.0	0.7	3.994	A
3 - A507 W	857	214	548	1960	0.437	854	1079	0.0	0.8	3.244	A
4 - A1(M) N	612	153	646	1683	0.364	649	756	9.8	0.6	3.608	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 - A507 E	918	229	755	1868	0.491	917	748	0.7	1.0	3.778	A
2 - A1(M) S	721	180	1206	1410	0.511	720	466	0.7	1.0	5.201	A
3 - A507 W	1023	256	655	1900	0.539	1022	1270	0.8	1.2	4.091	A
4 - A1(M) N	731	183	773	1619	0.452	730	904	0.6	0.8	4.047	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 - A507 E	1124	281	923	1781	0.631	1121	914	1.0	1.7	5.431	A
2 - A1(M) S	883	221	1475	1276	0.692	878	570	1.0	2.2	8.948	A
3 - A507 W	1253	313	801	1818	0.689	1249	1552	1.2	2.2	6.283	A
4 - A1(M) N	895	224	945	1531	0.585	893	1106	0.8	1.4	5.618	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 - A507 E	1124	281	926	1780	0.632	1124	917	1.7	1.7	5.489	A
2 - A1(M) S	883	221	1479	1274	0.693	883	571	2.2	2.2	9.190	A
3 - A507 W	1253	313	804	1816	0.690	1253	1558	2.2	2.2	6.386	A
4 - A1(M) N	895	224	948	1530	0.585	895	1109	1.4	1.4	5.673	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 - A507 E	918	229	759	1866	0.492	921	752	1.7	1.0	3.821	A
2 - A1(M) S	721	180	1211	1408	0.512	726	468	2.2	1.1	5.315	A
3 - A507 W	1023	256	659	1898	0.539	1027	1278	2.2	1.2	4.153	A
4 - A1(M) N	731	183	777	1616	0.452	733	908	1.4	0.8	4.086	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 - A507 E	769	192	634	1931	0.398	770	628	1.0	0.7	3.104	A
2 - A1(M) S	604	151	1013	1507	0.401	605	391	1.1	0.7	4.001	A
3 - A507 W	857	214	551	1959	0.437	858	1067	1.2	0.8	3.275	A
4 - A1(M) N	612	153	649	1681	0.364	613	759	0.8	0.6	3.372	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 - A507 E	0.66	0.55	1.00	1.40	1.45			N/A	N/A
2 - A1(M) S	0.67	0.55	1.00	1.40	1.45			N/A	N/A
3 - A507 W	0.77	0.55	1.00	1.40	1.45			N/A	N/A
4 - A1(M) N	0.57	0.55	1.00	1.40	1.45			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 - A507 E	0.96	0.06	0.74	1.81	2.50			N/A	N/A
2 - A1(M) S	1.03	0.06	0.71	2.05	2.93			N/A	N/A
3 - A507 W	1.16	0.05	0.60	2.63	3.82			N/A	N/A
4 - A1(M) N	0.82	0.07	0.80	1.14	1.63			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 - A507 E	1.68	0.03	0.26	1.68	1.68			N/A	N/A
2 - A1(M) S	2.18	0.03	0.28	2.18	4.89			N/A	N/A
3 - A507 W	2.17	0.03	0.27	2.17	2.17			N/A	N/A
4 - A1(M) N	1.39	0.03	0.26	1.39	1.39			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 - A507 E	1.70	0.03	0.26	1.70	1.70			N/A	N/A
2 - A1(M) S	2.22	0.03	0.27	2.22	2.87			N/A	N/A
3 - A507 W	2.20	0.03	0.26	2.20	2.20			N/A	N/A
4 - A1(M) N	1.40	0.03	0.27	1.40	1.40			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 - A507 E	0.98	0.19	1.00	1.23	1.64			N/A	N/A
2 - A1(M) S	1.06	0.08	0.91	1.87	2.54			N/A	N/A
3 - A507 W	1.18	0.11	1.06	1.91	2.54			N/A	N/A
4 - A1(M) N	0.83	0.22	0.95	1.41	1.47			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 - A507 E	0.67	0.06	0.65	1.40	1.50			N/A	N/A
2 - A1(M) S	0.67	0.04	0.43	1.33	1.92			N/A	N/A
3 - A507 W	0.78	0.05	0.56	1.46	1.93			N/A	N/A
4 - A1(M) N	0.58	0.06	0.60	1.33	1.42			N/A	N/A

2040 + Dev + School, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - A507 W - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
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	A1(M) Junction 10	Standard Roundabout		1, 2, 3, 4	7.68	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	15	4 - A1(M) N

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	2040 + Dev + School	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 - A507 E		ONE HOUR	✓	810	100.000
2 - A1(M) S		ONE HOUR	✓	381	100.000
3 - A507 W		ONE HOUR	✓	1248	100.000
4 - A1(M) N		ONE HOUR	✓	954	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - A507 E	2 - A1(M) S	3 - A507 W	4 - A1(M) N
From	1 - A507 E	0	105	230	475
	2 - A1(M) S	98	0	283	0
	3 - A507 W	214	719	5	310
	4 - A1(M) N	480	0	465	9

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		1 - A507 E	2 - A1(M) S	3 - A507 W	4 - A1(M) N
	1 - A507 E	0	22	4	6
	2 - A1(M) S	21	0	8	0
	3 - A507 W	7	2	0	4
	4 - A1(M) N	7	0	3	22

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A507 E	0.60	6.02	1.5	1.7	A	743	1115
2 - A1(M) S	0.34	4.40	0.5	2.3	A	350	524
3 - A507 W	0.74	7.42	2.8	6.0	A	1145	1718
4 - A1(M) N	0.76	10.85	3.1	11.8	B	875	1313

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 - A507 E	610	152	917	1688	0.361	608	613	0.0	0.6	3.324	A
2 - A1(M) S	287	72	907	1427	0.201	286	618	0.0	0.3	3.153	A
3 - A507 W	940	235	437	1977	0.475	936	756	0.0	0.9	3.448	A
4 - A1(M) N	718	180	777	1563	0.460	753	596	9.5	0.9	4.638	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 - A507 E	728	182	1075	1610	0.452	727	711	0.6	0.8	4.071	A
2 - A1(M) S	343	86	1063	1352	0.253	342	740	0.3	0.3	3.563	A
3 - A507 W	1122	280	522	1927	0.582	1120	882	0.9	1.4	4.449	A
4 - A1(M) N	858	214	930	1486	0.577	856	713	0.9	1.3	5.693	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 - A507 E	892	223	1313	1492	0.598	889	868	0.8	1.5	5.943	A
2 - A1(M) S	419	105	1298	1241	0.338	419	904	0.3	0.5	4.376	A
3 - A507 W	1374	344	639	1859	0.739	1369	1078	1.4	2.7	7.253	A
4 - A1(M) N	1050	263	1136	1383	0.760	1044	871	1.3	3.0	10.411	B

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 - A507 E	892	223	1319	1489	0.599	892	872	1.5	1.5	6.021	A
2 - A1(M) S	419	105	1303	1238	0.339	419	907	0.5	0.5	4.397	A
3 - A507 W	1374	344	641	1859	0.739	1374	1082	2.7	2.8	7.421	A
4 - A1(M) N	1050	263	1141	1381	0.761	1050	874	3.0	3.1	10.852	B

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 - A507 E	728	182	1084	1606	0.453	731	717	1.5	0.8	4.127	A
2 - A1(M) S	343	86	1070	1349	0.254	343	744	0.5	0.3	3.581	A
3 - A507 W	1122	280	525	1926	0.583	1127	888	2.8	1.4	4.542	A
4 - A1(M) N	858	214	936	1483	0.578	864	717	3.1	1.4	5.881	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 - A507 E	610	152	904	1695	0.360	611	598	0.8	0.6	3.324	A
2 - A1(M) S	287	72	893	1433	0.200	287	622	0.3	0.3	3.145	A
3 - A507 W	940	235	439	1976	0.476	942	742	1.4	0.9	3.487	A
4 - A1(M) N	718	180	782	1560	0.460	720	599	1.4	0.9	4.298	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 - A507 E	0.56	0.55	1.00	1.40	1.45			N/A	N/A
2 - A1(M) S	0.25	0.00	0.00	0.25	0.25			N/A	N/A
3 - A507 W	0.90	0.55	1.00	1.40	1.45			N/A	N/A
4 - A1(M) N	0.86	0.55	1.00	1.40	1.45			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 - A507 E	0.82	0.07	0.78	1.23	1.70			N/A	N/A
2 - A1(M) S	0.34	0.00	0.00	0.34	0.34			N/A	N/A
3 - A507 W	1.38	0.05	0.48	3.46	5.34			N/A	N/A
4 - A1(M) N	1.34	0.05	0.54	3.26	4.91			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 - A507 E	1.46	0.03	0.26	1.46	1.46			N/A	N/A
2 - A1(M) S	0.51	0.03	0.25	0.51	0.51			N/A	N/A
3 - A507 W	2.75	0.03	0.28	2.75	5.96			N/A	N/A
4 - A1(M) N	3.02	0.03	0.29	3.02	11.80			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 - A507 E	1.48	0.03	0.27	1.48	1.48			N/A	N/A
2 - A1(M) S	0.51	0.03	0.31	1.45	2.29			N/A	N/A
3 - A507 W	2.79	0.03	0.27	2.79	2.79			N/A	N/A
4 - A1(M) N	3.10	0.03	0.28	3.10	5.43			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 - A507 E	0.84	0.18	0.94	1.42	1.49			N/A	N/A
2 - A1(M) S	0.34	0.00	0.00	0.34	0.34			N/A	N/A
3 - A507 W	1.41	0.08	1.04	2.86	3.88			N/A	N/A
4 - A1(M) N	1.39	0.06	0.82	3.13	4.54			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 - A507 E	0.57	0.05	0.53	1.32	1.42			N/A	N/A
2 - A1(M) S	0.25	0.00	0.00	0.25	0.25			N/A	N/A
3 - A507 W	0.91	0.05	0.46	1.99	3.04			N/A	N/A
4 - A1(M) N	0.86	0.04	0.39	2.00	3.46			N/A	N/A

2040 + Dev + School, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - A507 W - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
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	A1(M) Junction 10	Standard Roundabout		1, 2, 3, 4	6.76	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	17	2 - A1(M) S

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	2040 + Dev + School	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 - A507 E		ONE HOUR	✓	1050	100.000
2 - A1(M) S		ONE HOUR	✓	802	100.000
3 - A507 W		ONE HOUR	✓	1138	100.000
4 - A1(M) N		ONE HOUR	✓	789	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - A507 E	2 - A1(M) S	3 - A507 W	4 - A1(M) N
From	1 - A507 E	0	75	388	587
	2 - A1(M) S	157	0	645	0
	3 - A507 W	255	444	5	434
	4 - A1(M) N	397	0	377	15

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		1 - A507 E	2 - A1(M) S	3 - A507 W	4 - A1(M) N
	1 - A507 E	0	7	1	2
	2 - A1(M) S	10	0	1	0
	3 - A507 W	2	2	0	1
	4 - A1(M) N	3	0	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A507 E	0.65	5.77	1.8	2.8	A	963	1445
2 - A1(M) S	0.70	9.58	2.3	5.8	A	736	1104
3 - A507 W	0.70	6.59	2.3	3.9	A	1044	1566
4 - A1(M) N	0.57	5.44	1.3	1.5	A	724	1086

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 - A507 E	790	198	650	1922	0.411	788	626	0.0	0.7	3.165	A
2 - A1(M) S	604	151	1049	1489	0.406	601	389	0.0	0.7	4.044	A
3 - A507 W	857	214	570	1948	0.440	854	1080	0.0	0.8	3.280	A
4 - A1(M) N	594	149	646	1684	0.353	631	778	9.8	0.5	3.543	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 - A507 E	944	236	755	1868	0.505	943	726	0.7	1.0	3.884	A
2 - A1(M) S	721	180	1232	1397	0.516	719	466	0.7	1.1	5.300	A
3 - A507 W	1023	256	681	1885	0.543	1021	1270	0.8	1.2	4.159	A
4 - A1(M) N	709	177	773	1619	0.438	708	930	0.5	0.8	3.948	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 - A507 E	1156	289	923	1781	0.649	1153	888	1.0	1.8	5.699	A
2 - A1(M) S	883	221	1507	1260	0.701	878	570	1.1	2.3	9.308	A
3 - A507 W	1253	313	833	1800	0.696	1249	1552	1.2	2.2	6.476	A
4 - A1(M) N	869	217	944	1532	0.567	867	1137	0.8	1.3	5.378	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 - A507 E	1156	289	926	1780	0.650	1156	891	1.8	1.8	5.768	A
2 - A1(M) S	883	221	1511	1258	0.702	883	571	2.3	2.3	9.578	A
3 - A507 W	1253	313	836	1799	0.697	1253	1558	2.2	2.3	6.590	A
4 - A1(M) N	869	217	948	1530	0.568	869	1141	1.3	1.3	5.443	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 - A507 E	944	236	759	1866	0.506	947	730	1.8	1.0	3.931	A
2 - A1(M) S	721	180	1237	1394	0.517	726	468	2.3	1.1	5.423	A
3 - A507 W	1023	256	685	1883	0.543	1027	1278	2.3	1.2	4.227	A
4 - A1(M) N	709	177	778	1617	0.439	711	935	1.3	0.8	3.985	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 - A507 E	790	198	634	1931	0.409	792	610	1.0	0.7	3.166	A
2 - A1(M) S	604	151	1035	1496	0.404	605	391	1.1	0.7	4.052	A
3 - A507 W	857	214	572	1947	0.440	858	1068	1.2	0.8	3.312	A
4 - A1(M) N	594	149	650	1682	0.353	595	781	0.8	0.5	3.314	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 - A507 E	0.69	0.55	1.00	1.40	1.45			N/A	N/A
2 - A1(M) S	0.68	0.55	1.00	1.40	1.45			N/A	N/A
3 - A507 W	0.78	0.55	1.00	1.40	1.45			N/A	N/A
4 - A1(M) N	0.55	0.55	1.00	1.40	1.45			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 - A507 E	1.01	0.06	0.71	1.97	2.83			N/A	N/A
2 - A1(M) S	1.05	0.06	0.69	2.16	3.05			N/A	N/A
3 - A507 W	1.17	0.05	0.58	2.70	3.94			N/A	N/A
4 - A1(M) N	0.77	0.08	0.80	1.37	1.37			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 - A507 E	1.82	0.03	0.26	1.82	1.82			N/A	N/A
2 - A1(M) S	2.26	0.03	0.28	2.26	5.79			N/A	N/A
3 - A507 W	2.24	0.03	0.27	2.24	2.43			N/A	N/A
4 - A1(M) N	1.29	0.03	0.26	1.29	1.29			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 - A507 E	1.84	0.03	0.26	1.84	1.84			N/A	N/A
2 - A1(M) S	2.31	0.03	0.27	2.31	3.29			N/A	N/A
3 - A507 W	2.27	0.03	0.27	2.27	2.27			N/A	N/A
4 - A1(M) N	1.30	0.03	0.27	1.30	1.42			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 - A507 E	1.03	0.16	1.02	1.51	1.82			N/A	N/A
2 - A1(M) S	1.08	0.07	0.89	1.94	2.70			N/A	N/A
3 - A507 W	1.20	0.10	1.05	1.97	2.67			N/A	N/A
4 - A1(M) N	0.79	0.26	0.95	1.40	1.45			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 - A507 E	0.70	0.06	0.64	1.41	1.41			N/A	N/A
2 - A1(M) S	0.68	0.04	0.42	1.41	2.01			N/A	N/A
3 - A507 W	0.79	0.05	0.52	1.53	2.00			N/A	N/A
4 - A1(M) N	0.55	0.05	0.57	1.32	1.41			N/A	N/A