Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B4100(E)	1.10	187.00	34.9	F	524	786
A43 (S)	0.76	8.30	3.7	A	1359	2038
B4100 (W)	0.77	19.33	3.5	C	572	858
A43 (N)	1.03	89.13	54.6	F	1704	2556

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	430	107	1316	833	0.516	425	620	0.0	1.1	9.469	A
A43 (S)	1115	279	481	2237	0.498	1110	1260	0.0	1.1	3.688	A
B4100 (W)	469	117	1230	1159	0.405	466	361	0.0	0.7	5.658	A
A43 (N)	1398	350	547	2133	0.655	1389	1150	0.0	2.2	5.550	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	513	128	1572	711	0.722	507	741	1.1	2.6	18.601	C
A43 (S)	1331	333	574	2180	0.611	1329	1506	1.1	1.8	4.890	A
B4100 (W)	560	140	1471	1040	0.539	558	432	0.7	1.3	8.128	A
A43 (N)	1669	417	654	2067	0.807	1660	1375	2.2	4.6	10.002	B

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	629	157	1837	586	1.073	562	887	2.6	19.4	89.401	F
A43 (S)	1631	408	644	2136	0.763	1623	1754	1.8	3.6	8.025	A
B4100 (W)	686	171	1773	891	0.770	677	495	1.3	3.4	17.748	C
A43 (N)	2045	511	796	1981	1.032	1929	1654	4.6	33.6	45.632	E

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	629	157	1866	572	1.099	566	897	19.4	34.9	186.996	F
A43 (S)	1631	408	651	2132	0.765	1630	1782	3.6	3.7	8.304	A
B4100 (W)	686	171	1781	887	0.773	685	500	3.4	3.5	19.329	C
A43 (N)	2045	511	803	1977	1.034	1961	1663	33.6	54.6	89.131	F

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	513	128	1748	628	0.817	609	782	34.9	11.0	142.825	F
A43 (S)	1331	333	677	2116	0.629	1338	1681	3.7	2.0	5.411	A
B4100 (W)	560	140	1523	1014	0.552	569	492	3.5	1.4	8.995	A
A43 (N)	1669	417	664	2061	0.810	1866	1427	54.6	5.5	36.668	E

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service

B4100(E)	430	107	1336	824	0.522	469	627	11.0	1.2	12.208	B
A43 (S)	1115	279	519	2214	0.504	1118	1285	2.0	1.2	3.822	A
B4100 (W)	469	117	1256	1146	0.409	471	382	1.4	0.8	5.856	A
A43 (N)	1398	350	552	2130	0.656	1411	1175	5.5	2.3	5.907	A

2019 Baseline + Both Developments, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	66.26	F

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	-15	B4100(E)	66.26	F

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	2019 Baseline + Both Developments	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 (PCU/hr)	Scaling Factor (%)
B4100(E)		ONE HOUR	✓	756	100.000
A43 (S)		ONE HOUR	✓	1865	100.000
B4100 (W)		ONE HOUR	✓	533	100.000
A43 (N)		ONE HOUR	✓	1514	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		B4100(E)	A43 (S)	B4100 (W)	A43 (N)
From	B4100(E)	0	173	269	314
	A43 (S)	128	6	149	1582
	B4100 (W)	239	151	16	127
	A43 (N)	245	1169	100	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		B4100(E)	A43 (S)	B4100 (W)	A43 (N)
From	B4100(E)	0	9	1	4
	A43 (S)	8	0	13	7
	B4100 (W)	3	10	0	8
	A43 (N)	5	10	9	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B4100(E)	1.18	276.80	69.8	F	694	1041
A43 (S)	0.97	37.17	20.1	E	1711	2567
B4100 (W)	0.84	32.31	5.0	D	489	734
A43 (N)	0.79	8.91	4.0	A	1389	2084

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	569	142	1081	944	0.603	563	458	0.0	1.5	9.667	A
A43 (S)	1404	351	521	2213	0.635	1397	1123	0.0	1.8	4.702	A
B4100 (W)	401	100	1519	1016	0.395	399	399	0.0	0.7	6.149	A
A43 (N)	1140	285	404	2220	0.513	1135	1514	0.0	1.1	3.607	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	680	170	1293	844	0.806	670	548	1.5	3.9	20.566	C
A43 (S)	1677	419	621	2151	0.780	1669	1343	1.8	3.7	7.920	A
B4100 (W)	479	120	1814	871	0.550	477	476	0.7	1.3	9.627	A
A43 (N)	1361	340	483	2172	0.627	1358	1808	1.1	1.8	4.814	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	832	208	1577	709	1.173	698	664	3.9	37.5	122.473	F
A43 (S)	2053	513	665	2124	0.967	2003	1610	3.7	16.2	25.425	D
B4100 (W)	587	147	2133	714	0.822	575	535	1.3	4.2	25.626	D
A43 (N)	1667	417	582	2111	0.789	1658	2126	1.8	3.9	8.514	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	832	208	1586	705	1.181	703	671	37.5	69.8	276.801	F
A43 (S)	2053	513	670	2120	0.968	2037	1620	16.2	20.1	37.172	E
B4100 (W)	587	147	2167	697	0.842	584	541	4.2	5.0	32.305	D
A43 (N)	1667	417	591	2106	0.792	1666	2160	3.9	4.0	8.914	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	680	170	1308	837	0.812	824	562	69.8	33.6	227.432	F
A43 (S)	1677	419	741	2076	0.808	1738	1391	20.1	4.8	13.288	B
B4100 (W)	479	120	1942	808	0.593	493	537	5.0	1.6	12.574	B
A43 (N)	1361	340	500	2161	0.630	1370	1934	4.0	1.9	5.015	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service

B4100(E)	569	142	1089	941	0.605	697	463	33.6	1.7	25.403	D
A43 (S)	1404	351	625	2148	0.654	1415	1161	4.8	2.1	5.355	A
B4100 (W)	401	100	1591	981	0.409	405	449	1.6	0.7	6.661	A
A43 (N)	1140	285	410	2216	0.514	1143	1586	1.9	1.2	3.667	A

2019 Baseline + Committed + Western Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	15.46	C

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	1	B4100 (W)	15.46	C

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	2019 Baseline + Committed + Western Development	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
B4100(E)		ONE HOUR	✓	542	100.000
A43 (S)		ONE HOUR	✓	1713	100.000
B4100 (W)		ONE HOUR	✓	619	100.000
A43 (N)		ONE HOUR	✓	1059	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		B4100(E)	A43 (S)	B4100 (W)	A43 (N)
From	B4100(E)	0	78	232	232
	A43 (S)	204	0	180	1329
	B4100 (W)	289	198	12	120
	A43 (N)	297	605	157	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		B4100(E)	A43 (S)	B4100 (W)	A43 (N)
From	B4100(E)	0	15	3	7
	A43 (S)	8	0	15	17
	B4100 (W)	6	13	8	12

	A43 (N)	7	18	13	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B4100(E)	0.63	10.82	1.8	B	497	746
A43 (S)	0.90	18.38	9.1	C	1572	2358
B4100 (W)	0.84	29.46	5.3	D	568	852
A43 (N)	0.58	4.94	1.6	A	972	1458

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	408	102	729	1111	0.367	406	592	0.0	0.6	5.403	A
A43 (S)	1290	322	474	2242	0.575	1283	660	0.0	1.5	4.317	A
B4100 (W)	466	117	1322	1113	0.419	463	435	0.0	0.8	6.023	A
A43 (N)	797	199	526	2145	0.372	795	1259	0.0	0.7	3.030	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	487	122	872	1043	0.467	486	708	0.6	0.9	6.850	A
A43 (S)	1540	385	568	2184	0.705	1535	790	1.5	2.7	6.375	A
B4100 (W)	556	139	1582	985	0.565	554	521	0.8	1.4	9.077	A
A43 (N)	952	238	629	2083	0.457	951	1507	0.7	1.0	3.622	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	597	149	1064	952	0.627	594	860	0.9	1.7	10.560	B
A43 (S)	1886	472	694	2106	0.896	1863	964	2.7	8.5	15.836	C
B4100 (W)	682	170	1921	818	0.833	668	635	1.4	4.7	24.425	C
A43 (N)	1166	291	761	2003	0.582	1164	1829	1.0	1.6	4.874	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	597	149	1069	950	0.628	597	868	1.7	1.8	10.820	B
A43 (S)	1886	472	697	2104	0.897	1883	969	8.5	9.1	18.382	C
B4100 (W)	682	170	1941	808	0.843	679	639	4.7	5.3	29.455	D
A43 (N)	1166	291	772	1996	0.584	1166	1848	1.6	1.6	4.943	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	487	122	881	1039	0.469	491	721	1.8	1.0	7.014	A
A43 (S)	1540	385	572	2181	0.706	1565	799	9.1	2.8	7.029	A
B4100 (W)	556	139	1611	971	0.573	571	527	5.3	1.5	10.199	B
A43 (N)	952	238	647	2072	0.460	954	1535	1.6	1.0	3.678	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	408	102	734	1109	0.368	409	597	1.0	0.6	5.480	A
A43 (S)	1290	322	478	2239	0.576	1295	665	2.8	1.6	4.431	A
B4100 (W)	466	117	1334	1108	0.421	469	439	1.5	0.8	6.188	A
A43 (N)	797	199	532	2142	0.372	798	1271	1.0	0.7	3.058	A

2019 Baseline + Committed + Western Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	96.09	F

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	-14	B4100(E)	96.09	F

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	2019 Baseline + Committed + Western Development	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
B4100(E)		ONE HOUR	✓	716	100.000
A43 (S)		ONE HOUR	✓	2051	100.000
B4100 (W)		ONE HOUR	✓	501	100.000
A43 (N)		ONE HOUR	✓	1626	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		B4100(E)	A43 (S)	B4100 (W)	A43 (N)
From	B4100(E)	0	150	264	302
	A43 (S)	116	0	149	1786
	B4100 (W)	237	121	16	127
	A43 (N)	239	1287	100	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		B4100(E)	A43 (S)	B4100 (W)	A43 (N)
From	B4100(E)	0	6	1	3
	A43 (S)	3	0	13	7
	B4100 (W)	2	10	0	8

	A43 (N)	4	10	9	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B4100(E)	1.19	286.89	68.5	F	657	986
A43 (S)	1.06	112.10	78.4	F	1882	2823
B4100 (W)	0.84	33.87	4.9	D	460	690
A43 (N)	0.84	11.03	5.3	B	1492	2238

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	539	135	1142	915	0.589	533	443	0.0	1.4	9.554	A
A43 (S)	1544	386	508	2220	0.695	1535	1167	0.0	2.4	5.550	A
B4100 (W)	377	94	1648	953	0.396	374	395	0.0	0.7	6.523	A
A43 (N)	1224	306	366	2243	0.546	1219	1656	0.0	1.3	3.815	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	644	161	1367	809	0.796	635	530	1.4	3.6	20.325	C
A43 (S)	1844	461	606	2160	0.854	1830	1396	2.4	5.8	11.265	B
B4100 (W)	450	113	1965	796	0.565	448	471	0.7	1.3	10.786	B
A43 (N)	1462	365	438	2199	0.665	1458	1975	1.3	2.1	5.275	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	788	197	1665	668	1.181	656	636	3.6	36.6	126.314	F
A43 (S)	2258	565	645	2135	1.057	2100	1676	5.8	45.2	52.791	F
B4100 (W)	552	138	2225	669	0.825	540	521	1.3	4.2	27.353	D
A43 (N)	1790	448	522	2148	0.833	1778	2243	2.1	5.1	10.297	B

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	788	197	1677	662	1.191	661	643	36.6	68.5	286.893	F
A43 (S)	2258	565	650	2133	1.059	2125	1687	45.2	78.4	112.102	F
B4100 (W)	552	138	2250	656	0.840	549	526	4.2	4.9	33.874	D
A43 (N)	1790	448	530	2143	0.835	1789	2269	5.1	5.3	11.032	B

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	644	161	1383	801	0.804	789	551	68.5	32.1	231.231	F
A43 (S)	1844	461	729	2084	0.885	2055	1443	78.4	25.5	94.336	F
B4100 (W)	450	113	2239	662	0.681	460	546	4.9	2.4	19.670	C
A43 (N)	1462	365	460	2186	0.669	1474	2239	5.3	2.2	5.606	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	539	135	1152	911	0.592	661	454	32.1	1.5	23.933	C
A43 (S)	1544	386	611	2157	0.716	1635	1203	25.5	2.8	8.723	A
B4100 (W)	377	94	1795	880	0.428	383	450	2.4	0.8	7.723	A
A43 (N)	1224	306	379	2235	0.548	1228	1800	2.2	1.3	3.909	A

2019 Baseline + Committed + Eastern Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	99.12	F

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	-14	B4100(E)	99.12	F

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	2019 Baseline + Committed + Eastern Development	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
B4100(E)		ONE HOUR	✓	513	100.000
A43 (S)		ONE HOUR	✓	1694	100.000
B4100 (W)		ONE HOUR	✓	543	100.000
A43 (N)		ONE HOUR	✓	2049	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		B4100(E)	A43 (S)	B4100 (W)	A43 (N)
From	B4100(E)	0	95	177	241
	A43 (S)	227	0	138	1329
	B4100 (W)	261	166	12	104
	A43 (N)	308	1605	136	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		B4100(E)	A43 (S)	B4100 (W)	A43 (N)
From	B4100(E)	0	22	4	8
	A43 (S)	11	0	20	17
	B4100 (W)	7	16	8	14

	A43 (N)	9	18	15	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B4100(E)	1.02	129.35	20.3	F	471	706
A43 (S)	0.86	13.37	6.7	B	1554	2332
B4100 (W)	0.75	19.79	3.2	C	498	747
A43 (N)	1.12	183.47	129.6	F	1880	2820

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	386	97	1434	777	0.497	382	596	0.0	1.1	9.826	A
A43 (S)	1275	319	422	2274	0.561	1269	1394	0.0	1.5	4.147	A
B4100 (W)	409	102	1345	1102	0.371	406	346	0.0	0.6	5.722	A
A43 (N)	1543	386	499	2162	0.713	1531	1253	0.0	2.8	6.538	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	461	115	1709	646	0.713	455	711	1.1	2.5	19.918	C
A43 (S)	1523	381	503	2224	0.685	1519	1662	1.5	2.5	5.908	A
B4100 (W)	488	122	1609	972	0.502	486	413	0.6	1.1	8.194	A
A43 (N)	1842	461	597	2102	0.876	1824	1499	2.8	7.3	14.203	B

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	565	141	1897	557	1.014	522	833	2.5	13.2	72.883	F
A43 (S)	1865	466	572	2181	0.855	1850	1848	2.5	6.3	12.117	B
B4100 (W)	598	149	1944	807	0.741	590	477	1.1	3.0	17.894	C
A43 (N)	2256	564	725	2024	1.114	2005	1810	7.3	70.0	78.469	F

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	565	141	1910	551	1.025	536	840	13.2	20.3	129.353	F
A43 (S)	1865	466	584	2173	0.858	1864	1862	6.3	6.7	13.374	B
B4100 (W)	598	149	1964	797	0.750	597	484	3.0	3.2	19.788	C
A43 (N)	2256	564	732	2020	1.117	2018	1828	70.0	129.6	183.471	F

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	461	115	1928	543	0.850	509	757	20.3	8.4	104.631	F
A43 (S)	1523	381	563	2186	0.697	1539	1873	6.7	2.7	6.620	A
B4100 (W)	488	122	1652	951	0.513	496	450	3.2	1.2	8.931	A
A43 (N)	1842	461	607	2096	0.879	2077	1541	129.6	70.7	174.895	F

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	386	97	1676	662	0.583	414	642	8.4	1.6	17.370	C
A43 (S)	1275	319	466	2246	0.568	1280	1623	2.7	1.5	4.356	A
B4100 (W)	409	102	1370	1090	0.375	411	376	1.2	0.7	5.903	A
A43 (N)	1543	386	504	2159	0.714	1813	1277	70.7	3.0	25.567	D

2019 Baseline + Committed + Eastern Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	93.40	F

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	-15	B4100(E)	93.40	F

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	2019 Baseline + Committed + Eastern Development	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
B4100(E)		ONE HOUR	✓	735	100.000
A43 (S)		ONE HOUR	✓	2042	100.000
B4100 (W)		ONE HOUR	✓	400	100.000
A43 (N)		ONE HOUR	✓	1621	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		B4100(E)	A43 (S)	B4100 (W)	A43 (N)
From	B4100(E)	0	173	248	314
	A43 (S)	128	0	128	1786
	B4100 (W)	171	108	16	105
	A43 (N)	245	1287	89	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		B4100(E)	A43 (S)	B4100 (W)	A43 (N)
From	B4100(E)	0	9	1	4
	A43 (S)	8	0	6	7
	B4100 (W)	3	4	0	4

	A43 (N)	5	10	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B4100(E)	1.20	299.88	73.2	F	674	1012
A43 (S)	1.05	100.16	69.1	F	1874	2811
B4100 (W)	0.69	18.75	2.2	C	367	551
A43 (N)	0.82	9.69	4.7	A	1487	2231

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	553	138	1124	924	0.599	547	407	0.0	1.5	9.800	A
A43 (S)	1537	384	497	2227	0.690	1528	1175	0.0	2.3	5.437	A
B4100 (W)	301	75	1666	944	0.319	299	359	0.0	0.5	5.757	A
A43 (N)	1220	305	316	2273	0.537	1215	1649	0.0	1.3	3.688	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	661	165	1345	819	0.807	651	487	1.5	3.9	21.234	C
A43 (S)	1836	459	592	2169	0.847	1823	1405	2.3	5.5	10.775	B
B4100 (W)	360	90	1987	786	0.458	358	428	0.5	0.9	8.675	A
A43 (N)	1457	364	378	2235	0.652	1454	1967	1.3	2.0	4.996	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	809	202	1641	679	1.192	668	587	3.9	39.1	131.727	F
A43 (S)	2248	562	626	2148	1.047	2107	1684	5.5	40.8	48.653	E
B4100 (W)	440	110	2261	651	0.677	436	472	0.9	2.0	16.930	C
A43 (N)	1785	446	453	2190	0.815	1775	2243	2.0	4.5	9.215	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	809	202	1651	674	1.200	673	591	39.1	73.2	299.882	F
A43 (S)	2248	562	630	2145	1.048	2135	1694	40.8	69.1	100.155	F
B4100 (W)	440	110	2289	637	0.691	440	476	2.0	2.2	18.752	C
A43 (N)	1785	446	458	2187	0.816	1784	2270	4.5	4.7	9.695	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	661	165	1358	813	0.813	801	506	73.2	38.0	250.472	F
A43 (S)	1836	459	708	2097	0.876	2065	1452	69.1	11.6	75.347	F
B4100 (W)	360	90	2278	642	0.560	363	495	2.2	1.4	13.495	B
A43 (N)	1457	364	397	2224	0.655	1468	2244	4.7	2.1	5.247	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	553	138	1133	920	0.602	699	414	38.0	1.6	31.631	D
A43 (S)	1537	384	614	2155	0.713	1573	1218	11.6	2.7	7.009	A
B4100 (W)	301	75	1773	891	0.338	304	414	1.4	0.5	6.380	A
A43 (N)	1220	305	323	2269	0.538	1224	1754	2.1	1.3	3.758	A

2019 Baseline + Committed + Both Developments, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	145.39	F

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	-19	B4100(E)	145.39	F

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D15	2019 Baseline + Committed + Both Developments	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 (PCU/hr)	Scaling Factor (%)
B4100(E)		ONE HOUR	✓	571	100.000
A43 (S)		ONE HOUR	✓	1736	100.000
B4100 (W)		ONE HOUR	✓	623	100.000
A43 (N)		ONE HOUR	✓	2070	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		B4100(E)	A43 (S)	B4100 (W)	A43 (N)
From	B4100(E)	0	95	235	241
	A43 (S)	227	0	180	1329
	B4100 (W)	293	198	12	120
	A43 (N)	308	1605	157	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		B4100(E)	A43 (S)	B4100 (W)	A43 (N)
From	B4100(E)	0	22	3	8
	A43 (S)	11	0	15	17
	B4100 (W)	6	13	8	12

	A43 (N)	9	18	13	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B4100(E)	1.14	303.49	46.7	F	524	786
A43 (S)	0.89	16.82	8.5	C	1593	2389
B4100 (W)	0.85	30.48	5.5	D	572	858
A43 (N)	1.15	244.19	161.2	F	1899	2849

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	430	107	1473	758	0.567	424	619	0.0	1.4	11.452	B
A43 (S)	1307	327	480	2238	0.584	1301	1417	0.0	1.6	4.424	A
B4100 (W)	469	117	1345	1102	0.426	466	436	0.0	0.8	6.154	A
A43 (N)	1558	390	546	2133	0.731	1546	1264	0.0	3.1	6.988	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	513	128	1752	626	0.820	502	739	1.4	4.2	29.079	D
A43 (S)	1561	390	569	2183	0.715	1556	1686	1.6	2.8	6.601	A
B4100 (W)	560	140	1606	973	0.575	557	518	0.8	1.4	9.406	A
A43 (N)	1861	465	654	2068	0.900	1838	1510	3.1	8.8	16.725	C

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	629	157	1905	554	1.136	540	857	4.2	26.4	121.298	F
A43 (S)	1911	478	613	2156	0.887	1891	1832	2.8	7.9	14.745	B
B4100 (W)	686	171	1923	817	0.839	672	581	1.4	4.9	25.114	D
A43 (N)	2279	570	790	1985	1.148	1972	1805	8.8	85.6	94.851	F

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	629	157	1913	550	1.143	547	865	26.4	46.7	257.266	F
A43 (S)	1911	478	619	2152	0.888	1909	1841	7.9	8.5	16.823	C
B4100 (W)	686	171	1942	808	0.849	683	586	4.9	5.5	30.481	D
A43 (N)	2279	570	801	1978	1.152	1977	1824	85.6	161.2	228.912	F

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	513	128	1932	541	0.949	529	781	46.7	42.9	303.493	F
A43 (S)	1561	390	607	2160	0.723	1582	1854	8.5	3.1	7.489	A
B4100 (W)	560	140	1641	956	0.586	576	548	5.5	1.6	10.743	B
A43 (N)	1861	465	672	2057	0.905	2042	1545	161.2	115.9	244.188	F

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	430	107	1868	571	0.753	557	692	42.9	11.1	182.800	F
A43 (S)	1307	327	626	2148	0.609	1312	1799	3.1	1.8	5.028	A
B4100 (W)	469	117	1411	1069	0.439	472	527	1.6	0.9	6.616	A
A43 (N)	1558	390	553	2129	0.732	2008	1331	115.9	3.6	87.371	F

2019 Baseline + Committed + Both Developments, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	116.38	F

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	-18	B4100(E)	116.38	F

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D16	2019 Baseline + Committed + Both Developments	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 (PCU/hr)	Scaling Factor (%)
B4100(E)		ONE HOUR	✓	756	100.000
A43 (S)		ONE HOUR	✓	2063	100.000
B4100 (W)		ONE HOUR	✓	533	100.000
A43 (N)		ONE HOUR	✓	1632	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		B4100(E)	A43 (S)	B4100 (W)	A43 (N)
From	B4100(E)	0	173	269	314
	A43 (S)	128	0	149	1786
	B4100 (W)	239	151	16	127
	A43 (N)	245	1287	100	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		B4100(E)	A43 (S)	B4100 (W)	A43 (N)
From	B4100(E)	0	9	1	4
	A43 (S)	8	0	13	7
	B4100 (W)	3	10	0	8

	A43 (N)	5	10	9	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B4100(E)	1.29	402.58	97.8	F	694	1041
A43 (S)	1.06	111.77	78.5	F	1893	2840
B4100 (W)	0.90	47.28	7.2	E	489	734
A43 (N)	0.85	12.20	5.9	B	1498	2246

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	569	142	1164	905	0.629	562	458	0.0	1.7	10.729	B
A43 (S)	1553	388	521	2213	0.702	1543	1206	0.0	2.5	5.696	A
B4100 (W)	401	100	1665	944	0.425	398	398	0.0	0.8	6.949	A
A43 (N)	1229	307	399	2223	0.553	1223	1664	0.0	1.3	3.912	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	680	170	1393	796	0.853	666	547	1.7	5.0	26.433	D
A43 (S)	1855	464	618	2153	0.862	1840	1441	2.5	6.1	11.854	B
B4100 (W)	479	120	1984	787	0.609	476	474	0.8	1.6	12.126	B
A43 (N)	1467	367	477	2176	0.674	1464	1983	1.3	2.2	5.492	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	832	208	1694	654	1.273	647	654	5.0	51.3	171.943	F
A43 (S)	2271	568	626	2148	1.058	2113	1716	6.1	45.6	53.200	F
B4100 (W)	587	147	2230	666	0.881	570	509	1.6	5.9	34.802	D
A43 (N)	1797	449	565	2122	0.847	1783	2234	2.2	5.6	11.192	B

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	832	208	1708	647	1.287	646	663	51.3	97.8	402.581	F
A43 (S)	2271	568	626	2148	1.058	2140	1729	45.6	78.5	111.773	F
B4100 (W)	587	147	2254	654	0.897	582	512	5.9	7.2	47.284	E
A43 (N)	1797	449	576	2115	0.850	1796	2260	5.6	5.9	12.196	B

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	680	170	1414	786	0.864	778	573	97.8	73.1	387.429	F
A43 (S)	1855	464	706	2098	0.884	2070	1487	78.5	24.7	93.190	F
B4100 (W)	479	120	2244	659	0.727	496	532	7.2	3.0	25.238	D
A43 (N)	1467	367	506	2158	0.680	1481	2233	5.9	2.4	5.927	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	569	142	1176	899	0.633	853	470	73.1	2.1	144.599	F
A43 (S)	1553	388	746	2073	0.749	1639	1283	24.7	3.3	10.650	B
B4100 (W)	401	100	1875	841	0.477	410	510	3.0	1.0	9.002	A
A43 (N)	1229	307	414	2214	0.555	1233	1870	2.4	1.4	4.020	A

2025 Baseline, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	89.39	F

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	-13	B4100(E)	89.39	F

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
D17	2025 Baseline	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 (PCU/hr)	Scaling Factor (%)
B4100(E)		ONE HOUR	✓	530	100.000
A43 (S)		ONE HOUR	✓	1657	100.000
B4100 (W)		ONE HOUR	✓	589	100.000
A43 (N)		ONE HOUR	✓	1994	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		B4100(E)	A43 (S)	B4100 (W)	A43 (N)
From	B4100(E)	0	85	191	254
	A43 (S)	223	0	151	1283
	B4100 (W)	280	182	14	113
	A43 (N)	324	1521	149	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		B4100(E)	A43 (S)	B4100 (W)	A43 (N)
From	B4100(E)	0	15	4	7
	A43 (S)	8	0	9	17
	B4100 (W)	6	6	8	6
	A43 (N)	7	18	9	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B4100(E)	1.04	136.65	22.5	F	486	730
A43 (S)	0.85	12.65	6.2	B	1520	2281
B4100 (W)	0.79	22.01	3.8	C	540	811
A43 (N)	1.10	160.51	110.7	F	1830	2745

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	399	100	1395	795	0.502	395	619	0.0	1.1	9.526	A
A43 (S)	1247	312	453	2255	0.553	1242	1337	0.0	1.4	4.063	A
B4100 (W)	443	111	1318	1115	0.398	441	377	0.0	0.7	5.635	A
A43 (N)	1501	375	523	2147	0.699	1491	1235	0.0	2.6	6.232	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	476	119	1664	668	0.713	471	739	1.1	2.5	19.020	C
A43 (S)	1490	372	541	2200	0.677	1486	1594	1.4	2.4	5.758	A
B4100 (W)	529	132	1576	988	0.536	527	450	0.7	1.2	8.248	A
A43 (N)	1793	448	626	2085	0.860	1777	1477	2.6	6.4	12.915	B

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	584	146	1870	570	1.024	537	869	2.5	14.1	74.198	F
A43 (S)	1824	456	614	2155	0.847	1810	1793	2.4	5.9	11.561	B
B4100 (W)	649	162	1903	827	0.784	639	522	1.2	3.5	19.440	C
A43 (N)	2195	549	760	2003	1.096	1979	1782	6.4	60.5	70.200	F

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	584	146	1886	563	1.037	550	877	14.1	22.5	136.654	F
A43 (S)	1824	456	626	2147	0.850	1823	1810	5.9	6.2	12.645	B
B4100 (W)	649	162	1921	818	0.792	647	529	3.5	3.8	22.008	C
A43 (N)	2195	549	768	1998	1.099	1995	1799	60.5	110.7	160.506	F

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	476	119	1901	555	0.858	529	793	22.5	9.3	114.808	F
A43 (S)	1490	372	611	2157	0.691	1504	1820	6.2	2.6	6.465	A
B4100 (W)	529	132	1620	966	0.548	539	494	3.8	1.3	9.140	A
A43 (N)	1793	448	638	2077	0.863	2056	1521	110.7	44.9	138.529	F

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service

B4100(E)	399	100	1547	724	0.551	431	652	9.3	1.4	14.566	B
A43 (S)	1247	312	497	2227	0.560	1252	1480	2.6	1.5	4.263	A
B4100 (W)	443	111	1344	1102	0.402	446	405	1.3	0.7	5.837	A
A43 (N)	1501	375	529	2144	0.700	1670	1262	44.9	2.8	12.449	B

2025 Baseline, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	99.60	F

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	-17	B4100(E)	99.60	F

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
D18	2025 Baseline	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 (PCU/hr)	Scaling Factor (%)
B4100(E)		ONE HOUR	✓	761	100.000
A43 (S)		ONE HOUR	✓	2004	100.000
B4100 (W)		ONE HOUR	✓	439	100.000
A43 (N)		ONE HOUR	✓	1643	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		B4100(E)	A43 (S)	B4100 (W)	A43 (N)
From	B4100(E)	0	164	266	331
	A43 (S)	127	0	141	1736
	B4100 (W)	186	119	18	116
	A43 (N)	262	1283	98	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		B4100(E)	A43 (S)	B4100 (W)	A43 (N)
From	B4100(E)	0	6	1	3
	A43 (S)	3	0	6	7
	B4100 (W)	3	4	0	4
	A43 (N)	4	10	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B4100(E)	1.26	371.41	91.8	F	698	1047
A43 (S)	1.03	86.24	57.2	F	1839	2758
B4100 (W)	0.74	21.72	2.8	C	403	604
A43 (N)	0.83	10.81	5.3	B	1508	2261

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	573	143	1138	917	0.624	566	431	0.0	1.7	10.366	B
A43 (S)	1509	377	531	2206	0.684	1500	1173	0.0	2.3	5.368	A
B4100 (W)	331	83	1640	956	0.346	328	390	0.0	0.5	5.906	A
A43 (N)	1237	309	337	2261	0.547	1232	1632	0.0	1.3	3.780	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	684	171	1361	811	0.843	672	515	1.7	4.7	24.653	C
A43 (S)	1802	450	631	2144	0.840	1790	1402	2.3	5.2	10.487	B
B4100 (W)	395	99	1956	801	0.493	393	465	0.5	1.0	9.082	A
A43 (N)	1477	369	402	2221	0.665	1474	1946	1.3	2.1	5.209	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	838	209	1659	670	1.250	663	621	4.7	48.4	159.393	F
A43 (S)	2206	552	647	2135	1.034	2086	1676	5.2	35.3	44.123	E
B4100 (W)	483	121	2228	667	0.725	477	505	1.0	2.5	19.023	C
A43 (N)	1809	452	483	2171	0.833	1797	2222	2.1	5.1	10.132	B

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	838	209	1670	665	1.260	664	627	48.4	91.8	371.406	F
A43 (S)	2206	552	649	2133	1.034	2119	1686	35.3	57.2	86.242	F
B4100 (W)	483	121	2259	652	0.742	482	509	2.5	2.8	21.717	C
A43 (N)	1809	452	489	2168	0.834	1808	2252	5.1	5.3	10.806	B

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	684	171	1377	804	0.851	795	533	91.8	64.0	347.720	F
A43 (S)	1802	450	729	2084	0.865	1996	1443	57.2	8.4	54.810	F
B4100 (W)	395	99	2202	680	0.581	400	524	2.8	1.5	13.537	B
A43 (N)	1477	369	421	2210	0.668	1489	2181	5.3	2.2	5.513	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service

B4100(E)	573	143	1147	913	0.627	821	436	64.0	1.9	105.963	F
A43 (S)	1509	377	732	2082	0.725	1531	1236	8.4	2.9	7.238	A
B4100 (W)	331	83	1780	888	0.372	334	482	1.5	0.6	6.766	A
A43 (N)	1237	309	343	2257	0.548	1241	1772	2.2	1.3	3.858	A

2025 Baseline + Committed, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	194.21	F

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	-19	B4100(E)	194.21	F

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
D19	2025 Baseline + Committed	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 (PCU/hr)	Scaling Factor (%)
B4100(E)		ONE HOUR	✓	530	100.000
A43 (S)		ONE HOUR	✓	1812	100.000
B4100 (W)		ONE HOUR	✓	589	100.000
A43 (N)		ONE HOUR	✓	2207	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		B4100(E)	A43 (S)	B4100 (W)	A43 (N)
From	B4100(E)	0	85	191	254
	A43 (S)	223	0	151	1438
	B4100 (W)	280	182	14	113
	A43 (N)	324	1734	149	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		B4100(E)	A43 (S)	B4100 (W)	A43 (N)
From	B4100(E)	0	15	4	7
	A43 (S)	8	0	9	17
	B4100 (W)	6	6	8	6
	A43 (N)	7	18	9	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B4100(E)	1.07	176.41	29.4	F	486	730
A43 (S)	0.92	22.69	11.8	C	1663	2494
B4100 (W)	0.88	37.75	6.4	E	540	811
A43 (N)	1.22	381.06	229.1	F	2025	3038

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	399	100	1551	721	0.553	394	618	0.0	1.3	11.596	B
A43 (S)	1364	341	452	2255	0.605	1357	1493	0.0	1.7	4.581	A
B4100 (W)	443	111	1433	1059	0.419	440	377	0.0	0.8	6.145	A
A43 (N)	1662	415	523	2147	0.774	1646	1350	0.0	3.8	8.079	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	476	119	1832	588	0.810	466	735	1.3	3.9	29.376	D
A43 (S)	1629	407	535	2204	0.739	1623	1763	1.7	3.2	7.064	A
B4100 (W)	529	132	1711	922	0.575	527	447	0.8	1.4	9.611	A
A43 (N)	1984	496	626	2085	0.952	1942	1613	3.8	14.3	24.086	C

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	584	146	1918	547	1.066	526	837	3.9	18.3	95.526	F
A43 (S)	1995	499	592	2169	0.920	1966	1852	3.2	10.5	18.249	C
B4100 (W)	649	162	2054	753	0.862	633	504	1.4	5.3	28.777	D
A43 (N)	2430	607	753	2007	1.211	2001	1934	14.3	121.5	129.794	F

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	584	146	1920	546	1.068	539	845	18.3	29.4	176.411	F
A43 (S)	1995	499	603	2162	0.923	1990	1856	10.5	11.8	22.695	C
B4100 (W)	649	162	2082	739	0.878	644	510	5.3	6.4	37.751	E
A43 (N)	2430	607	766	2000	1.215	1999	1961	121.5	229.1	317.726	F

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	476	119	1941	537	0.888	518	768	29.4	19.0	172.658	F
A43 (S)	1629	407	587	2172	0.750	1662	1872	11.8	3.6	8.623	A
B4100 (W)	529	132	1772	892	0.594	549	477	6.4	1.6	11.704	B
A43 (N)	1984	496	648	2071	0.958	2061	1672	229.1	209.9	381.060	F

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service

B4100(E)	399	100	1967	524	0.761	459	694	19.0	4.1	74.855	F
A43 (S)	1364	341	540	2201	0.620	1371	1886	3.6	1.9	5.032	A
B4100 (W)	443	111	1476	1037	0.427	447	434	1.6	0.8	6.496	A
A43 (N)	1662	415	530	2143	0.775	2132	1393	209.9	92.4	256.792	F

2025 Baseline + Committed, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	185.68	F

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	-20	B4100(E)	185.68	F

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
D20	2025 Baseline + Committed	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 (PCU/hr)	Scaling Factor (%)
B4100(E)		ONE HOUR	✓	761	100.000
A43 (S)		ONE HOUR	✓	2208	100.000
B4100 (W)		ONE HOUR	✓	439	100.000
A43 (N)		ONE HOUR	✓	1761	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		B4100(E)	A43 (S)	B4100 (W)	A43 (N)
From	B4100(E)	0	164	266	331
	A43 (S)	127	0	141	1940
	B4100 (W)	186	119	18	116
	A43 (N)	262	1401	98	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		B4100(E)	A43 (S)	B4100 (W)	A43 (N)
From	B4100(E)	0	6	1	3
	A43 (S)	3	0	6	7
	B4100 (W)	3	4	0	4
	A43 (N)	4	10	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B4100(E)	1.39	534.74	122.5	F	698	1047
A43 (S)	1.12	232.81	148.3	F	2026	3039
B4100 (W)	0.76	23.64	3.0	C	403	604
A43 (N)	0.89	16.14	8.3	C	1616	2424

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	573	143	1226	876	0.654	565	430	0.0	1.9	11.676	B
A43 (S)	1662	416	530	2207	0.753	1650	1261	0.0	3.2	6.750	A
B4100 (W)	331	83	1790	883	0.374	328	390	0.0	0.6	6.682	A
A43 (N)	1326	331	336	2261	0.586	1320	1782	0.0	1.5	4.130	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	684	171	1466	762	0.898	665	514	1.9	6.6	33.401	D
A43 (S)	1985	496	626	2148	0.924	1957	1506	3.2	10.3	17.917	C
B4100 (W)	395	99	2121	720	0.548	392	461	0.6	1.2	11.284	B
A43 (N)	1583	396	401	2221	0.713	1579	2112	1.5	2.6	6.042	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	838	209	1782	612	1.369	609	611	6.6	63.9	223.846	F
A43 (S)	2431	608	604	2161	1.125	2148	1787	10.3	80.9	84.471	F
B4100 (W)	483	121	2276	643	0.751	477	476	1.2	2.9	21.549	C
A43 (N)	1939	485	474	2177	0.891	1918	2278	2.6	7.7	14.139	B

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	838	209	1799	604	1.388	604	617	63.9	122.5	523.690	F
A43 (S)	2431	608	601	2163	1.124	2161	1802	80.9	148.3	197.093	F
B4100 (W)	483	121	2286	638	0.757	483	477	2.9	3.0	23.638	C
A43 (N)	1939	485	479	2174	0.892	1937	2289	7.7	8.3	16.140	C

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	684	171	1491	750	0.912	744	529	122.5	107.6	534.740	F
A43 (S)	1985	496	689	2108	0.941	2093	1546	148.3	121.2	232.814	F
B4100 (W)	395	99	2283	640	0.617	400	499	3.0	1.7	15.838	C
A43 (N)	1583	396	415	2213	0.715	1605	2268	8.3	2.8	6.655	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service

B4100(E)	573	143	1237	871	0.658	862	457	107.6	35.2	301.565	F
A43 (S)	1662	416	764	2062	0.806	2044	1335	121.2	25.8	132.619	F
B4100 (W)	331	83	2288	637	0.519	333	520	1.7	1.1	12.328	B
A43 (N)	1326	331	362	2245	0.591	1331	2259	2.8	1.6	4.299	A

2025 Baseline + Western Development , AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	130.27	F

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	-18	B4100(E)	130.27	F

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
D21	2025 Baseline + Western Development	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
B4100(E)		ONE HOUR	✓	587	100.000
A43 (S)		ONE HOUR	✓	1699	100.000
B4100 (W)		ONE HOUR	✓	668	100.000
A43 (N)		ONE HOUR	✓	2014	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		B4100(E)	A43 (S)	B4100 (W)	A43 (N)
From	B4100(E)	0	85	248	254
	A43 (S)	223	0	193	1283
	B4100 (W)	312	213	14	129
	A43 (N)	324	1521	169	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		B4100(E)	A43 (S)	B4100 (W)	A43 (N)
From	B4100(E)	0	15	4	9
	A43 (S)	11	0	18	21
	B4100 (W)	8	20	6	22
	A43 (N)	4	20	15	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B4100(E)	1.15	311.11	49.4	F	539	808
A43 (S)	0.88	16.23	8.1	C	1559	2339
B4100 (W)	0.89	38.87	7.4	E	613	919
A43 (N)	1.13	204.07	140.2	F	1848	2772

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	442	110	1432	778	0.568	436	642	0.0	1.4	11.179	B
A43 (S)	1279	320	510	2219	0.576	1273	1359	0.0	1.6	4.503	A
B4100 (W)	503	126	1317	1116	0.451	499	466	0.0	0.9	6.622	A
A43 (N)	1516	379	570	2119	0.716	1505	1246	0.0	2.9	6.722	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	528	132	1706	648	0.814	517	767	1.4	4.1	27.591	D
A43 (S)	1527	382	605	2161	0.707	1523	1618	1.6	2.8	6.677	A
B4100 (W)	601	150	1573	990	0.607	597	554	0.9	1.7	10.393	B
A43 (N)	1811	453	682	2051	0.883	1791	1489	2.9	7.7	15.165	C

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	646	162	1879	566	1.142	552	891	4.1	27.5	122.026	F
A43 (S)	1871	468	651	2132	0.877	1852	1781	2.8	7.6	14.420	B
B4100 (W)	735	184	1880	838	0.877	717	622	1.7	6.4	30.173	D
A43 (N)	2217	554	821	1966	1.128	1949	1776	7.7	74.7	85.202	F

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	646	162	1889	561	1.152	559	901	27.5	49.4	264.316	F
A43 (S)	1871	468	657	2128	0.879	1869	1791	7.6	8.1	16.234	C
B4100 (W)	735	184	1898	830	0.887	731	628	6.4	7.4	38.869	E
A43 (N)	2217	554	835	1957	1.133	1955	1794	74.7	140.2	202.838	F

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	528	132	1906	553	0.954	541	819	49.4	46.0	311.112	F
A43 (S)	1527	382	645	2136	0.715	1547	1802	8.1	3.1	7.534	A
B4100 (W)	601	150	1606	974	0.617	623	587	7.4	1.9	12.395	B
A43 (N)	1811	453	705	2036	0.889	2019	1523	140.2	88.0	204.069	F

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service

B4100(E)	442	110	1729	637	0.694	613	704	46.0	3.4	147.012	F
A43 (S)	1279	320	690	2108	0.607	1284	1652	3.1	1.9	5.242	A
B4100 (W)	503	126	1403	1073	0.469	506	571	1.9	1.0	7.291	A
A43 (N)	1516	379	577	2114	0.717	1856	1332	88.0	3.1	44.572	E

2025 Baseline + Western Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	107.82	F

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	-17	B4100(E)	107.82	F

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
D22	2025 Baseline + Western Development	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
B4100(E)		ONE HOUR	✓	782	100.000
A43 (S)		ONE HOUR	✓	2025	100.000
B4100 (W)		ONE HOUR	✓	471	100.000
A43 (N)		ONE HOUR	✓	1653	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		B4100(E)	A43 (S)	B4100 (W)	A43 (N)
From	B4100(E)	0	164	287	331
	A43 (S)	127	0	162	1736
	B4100 (W)	254	62	18	137
	A43 (N)	262	1283	108	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		B4100(E)	A43 (S)	B4100 (W)	A43 (N)
From	B4100(E)	0	10	1	4
	A43 (S)	8	0	5	7
	B4100 (W)	2	3	0	3
	A43 (N)	5	10	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B4100(E)	1.25	358.70	91.3	F	718	1076
A43 (S)	1.06	109.15	75.1	F	1858	2787
B4100 (W)	0.78	24.19	3.3	C	432	648
A43 (N)	0.84	11.34	5.6	B	1517	2275

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	589	147	1103	934	0.630	582	481	0.0	1.7	10.441	B
A43 (S)	1525	381	554	2192	0.695	1515	1130	0.0	2.4	5.610	A
B4100 (W)	355	89	1640	957	0.371	352	429	0.0	0.6	6.072	A
A43 (N)	1244	311	345	2256	0.552	1239	1647	0.0	1.3	3.829	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	703	176	1319	831	0.846	691	576	1.7	4.8	24.655	C
A43 (S)	1820	455	659	2127	0.856	1807	1351	2.4	5.8	11.533	B
B4100 (W)	423	106	1954	802	0.528	421	511	0.6	1.1	9.630	A
A43 (N)	1486	372	412	2215	0.671	1483	1964	1.3	2.2	5.320	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	861	215	1608	695	1.239	687	692	4.8	48.3	154.229	F
A43 (S)	2230	557	681	2114	1.055	2078	1614	5.8	43.8	52.148	F
B4100 (W)	519	130	2202	680	0.763	511	556	1.1	3.0	20.993	C
A43 (N)	1820	455	493	2166	0.840	1807	2221	2.2	5.3	10.562	B

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	861	215	1619	689	1.249	689	699	48.3	91.3	358.695	F
A43 (S)	2230	557	683	2112	1.056	2104	1624	43.8	75.1	109.151	F
B4100 (W)	519	130	2227	667	0.777	517	560	3.0	3.3	24.190	C
A43 (N)	1820	455	499	2162	0.842	1819	2246	5.3	5.6	11.339	B

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	703	176	1334	824	0.853	815	597	91.3	63.4	337.544	F
A43 (S)	1820	455	758	2065	0.881	2036	1391	75.1	21.1	88.799	F
B4100 (W)	423	106	2219	672	0.630	429	576	3.3	1.8	15.568	C
A43 (N)	1486	372	432	2203	0.675	1499	2216	5.6	2.3	5.663	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service

B4100(E)	589	147	1111	930	0.633	834	492	63.4	2.0	101.944	F
A43 (S)	1525	381	755	2068	0.737	1596	1191	21.1	3.1	9.402	A
B4100 (W)	355	89	1822	867	0.409	359	529	1.8	0.7	7.314	A
A43 (N)	1244	311	355	2250	0.553	1248	1826	2.3	1.4	3.921	A

2025 Baseline + Eastern Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	103.00	F

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	-15	B4100(E)	103.00	F

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
D23	2025 Baseline + Eastern Development	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
B4100(E)		ONE HOUR	✓	560	100.000
A43 (S)		ONE HOUR	✓	1680	100.000
B4100 (W)		ONE HOUR	✓	594	100.000
A43 (N)		ONE HOUR	✓	2006	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		B4100(E)	A43 (S)	B4100 (W)	A43 (N)
From	B4100(E)	0	103	194	263
	A43 (S)	246	0	151	1283
	B4100 (W)	285	182	14	113
	A43 (N)	336	1521	149	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		B4100(E)	A43 (S)	B4100 (W)	A43 (N)
From	B4100(E)	0	21	4	8
	A43 (S)	11	0	9	17
	B4100 (W)	7	6	8	6
	A43 (N)	8	18	9	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B4100(E)	1.07	172.54	30.6	F	514	771
A43 (S)	0.86	13.68	6.8	B	1542	2312
B4100 (W)	0.81	24.70	4.3	C	545	818
A43 (N)	1.12	181.57	125.7	F	1841	2761

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	422	105	1395	796	0.530	417	649	0.0	1.2	10.209	B
A43 (S)	1265	316	462	2249	0.562	1259	1350	0.0	1.5	4.169	A
B4100 (W)	447	112	1342	1104	0.405	444	379	0.0	0.7	5.791	A
A43 (N)	1510	378	544	2134	0.708	1499	1242	0.0	2.7	6.441	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	503	126	1663	669	0.753	496	775	1.2	3.0	21.808	C
A43 (S)	1510	378	550	2195	0.688	1506	1609	1.5	2.5	5.995	A
B4100 (W)	534	133	1604	975	0.548	532	452	0.7	1.3	8.619	A
A43 (N)	1803	451	651	2069	0.871	1786	1484	2.7	7.0	13.912	B

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	617	154	1849	580	1.062	556	907	3.0	18.3	88.095	F
A43 (S)	1850	462	615	2155	0.858	1834	1790	2.5	6.4	12.389	B
B4100 (W)	654	164	1930	814	0.804	644	518	1.3	3.9	21.345	C
A43 (N)	2209	552	790	1985	1.113	1966	1784	7.0	67.8	77.641	F

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	617	154	1861	574	1.073	567	915	18.3	30.6	172.537	F
A43 (S)	1850	462	625	2148	0.861	1848	1803	6.4	6.8	13.682	B
B4100 (W)	654	164	1948	805	0.813	653	525	3.9	4.3	24.702	C
A43 (N)	2209	552	799	1979	1.116	1977	1802	67.8	125.7	181.573	F

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	503	126	1880	566	0.890	546	827	30.6	20.0	168.885	F
A43 (S)	1510	378	610	2157	0.700	1526	1816	6.8	2.8	6.741	A
B4100 (W)	534	133	1646	954	0.560	546	491	4.3	1.4	9.643	A
A43 (N)	1803	451	665	2061	0.875	2042	1526	125.7	66.0	170.403	F

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service

B4100(E)	422	105	1616	691	0.610	494	697	20.0	1.8	27.389	D
A43 (S)	1265	316	545	2198	0.575	1269	1565	2.8	1.6	4.495	A
B4100 (W)	447	112	1388	1081	0.414	450	427	1.4	0.8	6.096	A
A43 (N)	1510	378	550	2131	0.709	1763	1287	66.0	2.9	22.121	C

2025 Baseline + Eastern Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	118.90	F

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	-19	B4100(E)	118.90	F

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
D24	2025 Baseline + Eastern Development	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
B4100(E)		ONE HOUR	✓	803	100.000
A43 (S)		ONE HOUR	✓	2016	100.000
B4100 (W)		ONE HOUR	✓	441	100.000
A43 (N)		ONE HOUR	✓	1649	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		B4100(E)	A43 (S)	B4100 (W)	A43 (N)
From	B4100(E)	0	188	272	343
	A43 (S)	139	0	141	1736
	B4100 (W)	188	119	18	116
	A43 (N)	268	1283	98	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		B4100(E)	A43 (S)	B4100 (W)	A43 (N)
From	B4100(E)	0	8	1	4
	A43 (S)	8	0	6	7
	B4100 (W)	3	4	0	4
	A43 (N)	5	10	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B4100(E)	1.33	467.41	115.8	F	737	1105
A43 (S)	1.04	89.25	59.7	F	1850	2775
B4100 (W)	0.75	22.23	2.9	C	405	607
A43 (N)	0.84	11.29	5.5	B	1513	2270

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	605	151	1138	917	0.659	597	446	0.0	1.9	11.402	B
A43 (S)	1518	379	544	2198	0.690	1508	1191	0.0	2.3	5.510	A
B4100 (W)	332	83	1658	948	0.350	330	395	0.0	0.6	5.999	A
A43 (N)	1241	310	347	2254	0.551	1236	1641	0.0	1.3	3.824	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	722	180	1361	812	0.890	704	533	1.9	6.4	30.797	D
A43 (S)	1812	453	643	2137	0.848	1800	1422	2.3	5.5	11.020	B
B4100 (W)	396	99	1974	792	0.501	395	468	0.6	1.0	9.326	A
A43 (N)	1482	371	415	2213	0.670	1479	1954	1.3	2.2	5.307	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	884	221	1659	670	1.319	666	642	6.4	60.9	196.357	F
A43 (S)	2220	555	637	2141	1.037	2095	1688	5.5	36.7	45.473	E
B4100 (W)	486	121	2233	664	0.731	479	499	1.0	2.6	19.462	C
A43 (N)	1816	454	498	2163	0.839	1803	2215	2.2	5.3	10.528	B

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	884	221	1670	665	1.330	665	648	60.9	115.8	459.475	F
A43 (S)	2220	555	637	2141	1.037	2127	1698	36.7	59.7	89.248	F
B4100 (W)	486	121	2263	650	0.747	484	502	2.6	2.9	22.235	C
A43 (N)	1816	454	504	2159	0.841	1815	2243	5.3	5.5	11.294	B

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	722	180	1377	804	0.898	797	553	115.8	97.0	467.406	F
A43 (S)	1812	453	716	2092	0.866	2016	1458	59.7	8.8	58.583	F
B4100 (W)	396	99	2215	673	0.589	402	516	2.9	1.5	13.979	B
A43 (N)	1482	371	435	2201	0.674	1495	2182	5.5	2.3	5.646	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service

B4100(E)	605	151	1147	913	0.662	903	452	97.0	22.3	242.226	F
A43 (S)	1518	379	780	2052	0.740	1540	1271	8.8	3.1	7.836	A
B4100 (W)	332	83	1818	869	0.382	336	501	1.5	0.6	7.028	A
A43 (N)	1241	310	353	2250	0.552	1245	1801	2.3	1.4	3.907	A

2025 Baseline + Both Developments, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	154.97	F

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	-20	B4100(E)	154.97	F

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
D25	2025 Baseline + Both Developments	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 (PCU/hr)	Scaling Factor (%)
B4100(E)		ONE HOUR	✓	617	100.000
A43 (S)		ONE HOUR	✓	1722	100.000
B4100 (W)		ONE HOUR	✓	673	100.000
A43 (N)		ONE HOUR	✓	2026	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		B4100(E)	A43 (S)	B4100 (W)	A43 (N)
From	B4100(E)	0	103	251	263
	A43 (S)	246	0	193	1283
	B4100 (W)	317	213	14	129
	A43 (N)	336	1521	169	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		B4100(E)	A43 (S)	B4100 (W)	A43 (N)
From	B4100(E)	0	21	3	8
	A43 (S)	11	0	15	17
	B4100 (W)	6	13	8	12
	A43 (N)	8	18	12	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B4100(E)	1.19	387.20	60.3	F	566	849
A43 (S)	0.89	17.18	8.6	C	1580	2370
B4100 (W)	0.91	43.74	8.4	E	618	926
A43 (N)	1.15	238.30	155.5	F	1859	2789

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	465	116	1432	778	0.597	458	672	0.0	1.5	11.928	B
A43 (S)	1296	324	519	2214	0.586	1290	1372	0.0	1.6	4.482	A
B4100 (W)	507	127	1341	1104	0.459	503	468	0.0	0.9	6.507	A
A43 (N)	1525	381	591	2106	0.724	1513	1253	0.0	3.0	6.899	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	555	139	1704	649	0.855	541	802	1.5	5.1	32.360	D
A43 (S)	1548	387	613	2156	0.718	1543	1632	1.6	2.9	6.752	A
B4100 (W)	605	151	1600	976	0.620	602	555	0.9	1.7	10.419	B
A43 (N)	1821	455	707	2035	0.895	1800	1495	3.0	8.4	16.329	C

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	679	170	1857	576	1.178	567	928	5.1	33.2	140.413	F
A43 (S)	1896	474	648	2134	0.889	1875	1775	2.9	8.0	15.067	C
B4100 (W)	741	185	1907	825	0.898	720	617	1.7	7.0	32.454	D
A43 (N)	2231	558	850	1948	1.145	1935	1777	8.4	82.3	93.209	F

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	679	170	1865	573	1.186	571	938	33.2	60.3	310.418	F
A43 (S)	1896	474	653	2131	0.890	1894	1783	8.0	8.6	17.183	C
B4100 (W)	741	185	1925	816	0.908	735	622	7.0	8.4	43.739	E
A43 (N)	2231	558	865	1939	1.150	1938	1795	82.3	155.5	225.185	F

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	555	139	1884	563	0.984	555	854	60.3	60.3	387.205	F
A43 (S)	1548	387	642	2137	0.724	1570	1797	8.6	3.1	7.622	A
B4100 (W)	605	151	1630	961	0.629	631	582	8.4	1.9	12.786	B
A43 (N)	1821	455	734	2019	0.902	2004	1527	155.5	109.9	238.301	F

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service

B4100(E)	465	116	1800	604	0.770	593	750	60.3	28.2	273.029	F
A43 (S)	1296	324	667	2122	0.611	1302	1725	3.1	1.8	5.117	A
B4100 (W)	507	127	1408	1071	0.473	510	560	1.9	1.0	7.068	A
A43 (N)	1525	381	598	2101	0.726	1951	1320	109.9	3.4	78.237	F

2025 Baseline + Both Developments, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	151.46	F

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	-22	B4100(E)	151.46	F

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
D26	2025 Baseline + Both Developments	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 (PCU/hr)	Scaling Factor (%)
B4100(E)		ONE HOUR	✓	824	100.000
A43 (S)		ONE HOUR	✓	2037	100.000
B4100 (W)		ONE HOUR	✓	573	100.000
A43 (N)		ONE HOUR	✓	1659	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		B4100(E)	A43 (S)	B4100 (W)	A43 (N)
From	B4100(E)	0	188	293	343
	A43 (S)	139	0	162	1736
	B4100 (W)	256	162	18	137
	A43 (N)	268	1283	108	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		B4100(E)	A43 (S)	B4100 (W)	A43 (N)
From	B4100(E)	0	8	1	4
	A43 (S)	8	0	12	7
	B4100 (W)	3	10	0	7
	A43 (N)	5	10	8	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B4100(E)	1.42	614.96	141.6	F	756	1134
A43 (S)	1.05	99.74	68.3	F	1869	2804
B4100 (W)	0.95	65.08	10.8	F	526	789
A43 (N)	0.87	14.57	7.1	B	1522	2283

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	620	155	1177	899	0.690	612	496	0.0	2.2	12.643	B
A43 (S)	1534	383	566	2185	0.702	1524	1222	0.0	2.5	5.769	A
B4100 (W)	431	108	1657	948	0.455	428	433	0.0	0.9	7.268	A
A43 (N)	1249	312	430	2204	0.567	1243	1655	0.0	1.4	4.062	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	741	185	1408	789	0.938	714	593	2.2	8.9	40.116	E
A43 (S)	1831	458	664	2124	0.862	1817	1458	2.5	6.1	12.044	B
B4100 (W)	515	129	1969	794	0.648	511	511	0.9	1.9	13.252	B
A43 (N)	1491	373	513	2153	0.693	1487	1968	1.4	2.4	5.858	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	907	227	1708	647	1.402	645	707	8.9	74.5	247.379	F
A43 (S)	2243	561	634	2142	1.047	2103	1718	6.1	41.0	49.592	E
B4100 (W)	631	158	2204	679	0.930	606	533	1.9	8.0	42.816	E
A43 (N)	1827	457	605	2098	0.871	1810	2206	2.4	6.6	12.943	B

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	907	227	1725	639	1.419	639	717	74.5	141.6	573.656	F
A43 (S)	2243	561	631	2144	1.046	2134	1732	41.0	68.3	99.741	F
B4100 (W)	631	158	2230	666	0.947	620	535	8.0	10.8	65.085	F
A43 (N)	1827	457	617	2090	0.874	1825	2233	6.6	7.1	14.573	B

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	741	185	1436	776	0.955	770	627	141.6	134.2	614.959	F
A43 (S)	1831	458	710	2096	0.874	2060	1496	68.3	11.0	73.632	F
B4100 (W)	515	129	2217	672	0.766	543	553	10.8	3.8	33.697	D
A43 (N)	1491	373	554	2129	0.701	1509	2206	7.1	2.6	6.514	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service

B4100(E)	620	155	1190	893	0.695	886	507	134.2	67.8	412.598	F
A43 (S)	1534	383	779	2053	0.747	1565	1297	11.0	3.3	8.403	A
B4100 (W)	431	108	1809	873	0.494	443	535	3.8	1.1	9.054	A
A43 (N)	1249	312	444	2196	0.569	1254	1808	2.6	1.5	4.186	A

2025 Baseline + Committed + Western Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	257.38	F

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	-23	B4100(E)	257.38	F

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
D27	2025 Baseline + Committed + Western Development	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
B4100(E)		ONE HOUR	✓	587	100.000
A43 (S)		ONE HOUR	✓	1854	100.000
B4100 (W)		ONE HOUR	✓	668	100.000
A43 (N)		ONE HOUR	✓	2227	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		B4100(E)	A43 (S)	B4100 (W)	A43 (N)
From	B4100(E)	0	85	248	254
	A43 (S)	223	0	193	1438
	B4100 (W)	312	213	14	129
	A43 (N)	324	1734	169	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		B4100(E)	A43 (S)	B4100 (W)	A43 (N)
From	B4100(E)	0	15	3	7
	A43 (S)	8	0	15	17
	B4100 (W)	6	13	8	12

	A43 (N)	7	18	13	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B4100(E)	1.19	411.15	59.9	F	539	808
A43 (S)	0.95	31.55	16.8	D	1701	2552
B4100 (W)	0.98	75.60	15.1	F	613	919
A43 (N)	1.25	459.39	260.7	F	2044	3065

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	442	110	1588	704	0.628	435	642	0.0	1.7	13.902	B
A43 (S)	1396	349	508	2220	0.629	1388	1515	0.0	1.9	4.956	A
B4100 (W)	503	126	1432	1059	0.475	499	465	0.0	1.0	6.979	A
A43 (N)	1677	419	570	2119	0.791	1660	1361	0.0	4.2	8.792	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	528	132	1864	573	0.921	506	761	1.7	7.3	46.539	E
A43 (S)	1667	417	592	2168	0.769	1660	1777	1.9	3.7	8.070	A
B4100 (W)	601	150	1706	924	0.650	597	546	1.0	2.0	11.867	B
A43 (N)	2002	501	681	2051	0.976	1944	1621	4.2	18.6	29.561	D

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	646	162	1923	545	1.185	538	855	7.3	34.3	158.220	F
A43 (S)	2041	510	624	2149	0.950	1999	1836	3.7	14.2	23.221	C
B4100 (W)	735	184	2024	767	0.958	701	600	2.0	10.5	45.865	E
A43 (N)	2452	613	806	1975	1.242	1971	1919	18.6	138.8	151.145	F

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	646	162	1922	545	1.185	544	865	34.3	59.9	327.719	F
A43 (S)	2041	510	629	2146	0.951	2031	1837	14.2	16.8	31.551	D
B4100 (W)	735	184	2055	752	0.978	717	605	10.5	15.1	75.596	F
A43 (N)	2452	613	823	1965	1.248	1965	1949	138.8	260.7	367.793	F

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	528	132	1940	537	0.982	528	803	59.9	59.9	411.150	F
A43 (S)	1667	417	618	2153	0.774	1717	1850	16.8	4.1	10.593	B
B4100 (W)	601	150	1767	894	0.672	651	568	15.1	2.3	19.403	C
A43 (N)	2002	501	732	2020	0.991	2011	1686	260.7	258.4	459.391	F

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	442	110	1970	523	0.846	514	712	59.9	42.0	359.715	F
A43 (S)	1396	349	609	2158	0.647	1404	1875	4.1	2.2	5.578	A
B4100 (W)	503	126	1480	1036	0.486	508	533	2.3	1.0	7.531	A
A43 (N)	1677	419	579	2113	0.793	2104	1409	258.4	151.6	351.715	F

2025 Baseline + Committed + Western Development , PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	222.64	F

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	-22	B4100(E)	222.64	F

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
D28	2025 Baseline + Committed + Western Development	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
B4100(E)		ONE HOUR	✓	782	100.000
A43 (S)		ONE HOUR	✓	2229	100.000
B4100 (W)		ONE HOUR	✓	571	100.000
A43 (N)		ONE HOUR	✓	1771	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		B4100(E)	A43 (S)	B4100 (W)	A43 (N)
From	B4100(E)	0	164	287	331
	A43 (S)	127	0	162	1940
	B4100 (W)	254	162	18	137
	A43 (N)	262	1401	108	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		B4100(E)	A43 (S)	B4100 (W)	A43 (N)
From	B4100(E)	0	6	1	3
	A43 (S)	3	0	13	7
	B4100 (W)	2	10	0	8

	A43 (N)	4	10	9	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B4100(E)	1.49	692.45	147.8	F	718	1076
A43 (S)	1.13	254.37	159.7	F	2045	3068
B4100 (W)	0.96	74.92	12.4	F	524	786
A43 (N)	0.93	22.88	11.6	C	1625	2438

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	589	147	1265	857	0.687	580	481	0.0	2.2	12.992	B
A43 (S)	1678	420	553	2193	0.765	1665	1292	0.0	3.4	7.133	A
B4100 (W)	430	107	1789	883	0.487	426	428	0.0	1.0	8.239	A
A43 (N)	1333	333	419	2211	0.603	1327	1797	0.0	1.6	4.406	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	703	176	1512	740	0.950	674	573	2.2	9.4	44.075	E
A43 (S)	2004	501	645	2135	0.938	1970	1541	3.4	11.8	20.135	C
B4100 (W)	513	128	2112	724	0.709	508	503	1.0	2.4	17.112	C
A43 (N)	1592	398	498	2163	0.736	1587	2122	1.6	3.0	6.755	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	861	215	1826	591	1.456	589	674	9.4	77.3	280.777	F
A43 (S)	2454	614	602	2163	1.135	2152	1813	11.8	87.4	90.954	F
B4100 (W)	629	157	2245	659	0.954	600	509	2.4	9.5	50.191	F
A43 (N)	1950	487	579	2113	0.923	1921	2266	3.0	10.2	18.150	C

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	861	215	1851	579	1.487	579	685	77.3	147.8	647.667	F
A43 (S)	2454	614	596	2166	1.133	2165	1835	87.4	159.7	211.525	F
B4100 (W)	629	157	2253	655	0.960	617	508	9.5	12.4	74.918	F
A43 (N)	1950	487	592	2105	0.926	1944	2278	10.2	11.6	22.877	C

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	703	176	1557	719	0.978	714	603	147.8	145.2	692.447	F
A43 (S)	2004	501	680	2114	0.948	2100	1591	159.7	135.7	254.366	F
B4100 (W)	513	128	2249	656	0.782	546	531	12.4	4.3	40.287	E
A43 (N)	1592	398	534	2140	0.744	1626	2261	11.6	3.3	8.095	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	589	147	1280	850	0.692	844	510	145.2	81.3	484.660	F
A43 (S)	1678	420	763	2063	0.814	2047	1361	135.7	43.6	160.027	F
B4100 (W)	430	107	2255	654	0.658	438	554	4.3	2.1	18.307	C
A43 (N)	1333	333	450	2192	0.608	1340	2244	3.3	1.7	4.638	A

2025 Baseline + Committed + Eastern Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	218.96	F

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	-21	B4100(E)	218.96	F

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
D29	2025 Baseline + Committed + Eastern Development	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
B4100(E)		ONE HOUR	✓	560	100.000
A43 (S)		ONE HOUR	✓	1835	100.000
B4100 (W)		ONE HOUR	✓	594	100.000
A43 (N)		ONE HOUR	✓	2219	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		B4100(E)	A43 (S)	B4100 (W)	A43 (N)
From	B4100(E)	0	103	194	263
	A43 (S)	246	0	151	1438
	B4100 (W)	285	182	14	113
	A43 (N)	336	1734	149	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		B4100(E)	A43 (S)	B4100 (W)	A43 (N)
From	B4100(E)	0	22	4	8
	A43 (S)	11	0	20	17
	B4100 (W)	7	16	8	14

	A43 (N)	9	18	15	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B4100(E)	1.10	241.19	39.0	F	514	771
A43 (S)	0.93	25.73	13.6	D	1684	2526
B4100 (W)	0.90	45.89	7.8	E	545	818
A43 (N)	1.23	419.46	246.0	F	2036	3054

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	422	105	1550	722	0.584	416	648	0.0	1.5	12.574	B
A43 (S)	1381	345	461	2250	0.614	1374	1505	0.0	1.8	4.747	A
B4100 (W)	447	112	1456	1047	0.427	444	379	0.0	0.8	6.586	A
A43 (N)	1671	418	544	2135	0.783	1655	1357	0.0	4.0	8.462	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	503	126	1826	591	0.852	490	770	1.5	4.9	34.764	D
A43 (S)	1650	412	543	2199	0.750	1643	1773	1.8	3.4	7.456	A
B4100 (W)	534	133	1738	908	0.588	531	448	0.8	1.5	10.506	B
A43 (N)	1995	499	650	2070	0.964	1946	1619	4.0	16.3	26.743	D

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	617	154	1895	559	1.104	543	872	4.9	23.3	113.447	F
A43 (S)	2020	505	592	2169	0.932	1987	1846	3.4	11.8	20.062	C
B4100 (W)	654	164	2078	741	0.883	635	500	1.5	6.3	33.216	D
A43 (N)	2443	611	781	1991	1.227	1986	1933	16.3	130.7	140.782	F

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	617	154	1895	558	1.105	554	881	23.3	39.0	219.532	F
A43 (S)	2020	505	600	2163	0.934	2013	1849	11.8	13.6	25.733	D
B4100 (W)	654	164	2108	726	0.901	648	506	6.3	7.8	45.891	E
A43 (N)	2443	611	795	1982	1.233	1982	1961	130.7	246.0	343.691	F

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	503	126	1918	548	0.919	533	803	39.0	31.7	241.187	F
A43 (S)	1650	412	585	2173	0.759	1689	1866	13.6	3.8	9.300	A
B4100 (W)	534	133	1800	878	0.608	558	474	7.8	1.8	13.364	B
A43 (N)	1995	499	678	2053	0.972	2043	1680	246.0	233.9	419.464	F

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	422	105	1947	534	0.790	517	723	31.7	7.9	148.756	F
A43 (S)	1381	345	575	2179	0.634	1389	1890	3.8	2.0	5.343	A
B4100 (W)	447	112	1517	1017	0.440	451	446	1.8	0.9	7.095	A
A43 (N)	1671	418	551	2130	0.784	2120	1417	233.9	121.7	303.167	F

2025 Baseline + Committed + Eastern Development , PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	211.27	F

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	-22	B4100(E)	211.27	F

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
D30	2025 Baseline + Committed + Eastern Development	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
B4100(E)		ONE HOUR	✓	803	100.000
A43 (S)		ONE HOUR	✓	2220	100.000
B4100 (W)		ONE HOUR	✓	441	100.000
A43 (N)		ONE HOUR	✓	1767	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		B4100(E)	A43 (S)	B4100 (W)	A43 (N)
From	B4100(E)	0	188	272	343
	A43 (S)	139	0	141	1940
	B4100 (W)	188	119	18	116
	A43 (N)	268	1401	98	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		B4100(E)	A43 (S)	B4100 (W)	A43 (N)
From	B4100(E)	0	9	1	4
	A43 (S)	8	0	6	7
	B4100 (W)	3	4	0	4

	A43 (N)	5	10	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B4100(E)	1.46	664.52	147.9	F	737	1105
A43 (S)	1.13	239.00	152.2	F	2037	3056
B4100 (W)	0.76	24.16	3.1	C	405	607
A43 (N)	0.90	17.14	8.8	C	1621	2432

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	605	151	1226	876	0.690	596	445	0.0	2.2	12.998	B
A43 (S)	1671	418	543	2199	0.760	1658	1278	0.0	3.3	6.966	A
B4100 (W)	332	83	1807	874	0.380	330	394	0.0	0.6	6.802	A
A43 (N)	1330	333	347	2255	0.590	1324	1790	0.0	1.5	4.182	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	722	180	1466	762	0.948	693	531	2.2	9.4	43.114	E
A43 (S)	1996	499	635	2142	0.932	1965	1524	3.3	11.1	19.047	C
B4100 (W)	396	99	2136	712	0.557	394	463	0.6	1.3	11.597	B
A43 (N)	1588	397	413	2214	0.717	1584	2117	1.5	2.7	6.170	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	884	221	1781	613	1.443	611	631	9.4	77.8	272.113	F
A43 (S)	2444	611	594	2167	1.128	2155	1797	11.1	83.3	86.793	F
B4100 (W)	486	121	2279	642	0.757	479	470	1.3	2.9	22.010	C
A43 (N)	1946	486	488	2169	0.897	1924	2270	2.7	8.2	14.819	B

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	884	221	1799	604	1.464	604	637	77.8	147.9	624.342	F
A43 (S)	2444	611	590	2170	1.126	2168	1813	83.3	152.2	201.606	F
B4100 (W)	486	121	2289	637	0.762	485	470	2.9	3.1	24.163	C
A43 (N)	1946	486	493	2166	0.898	1943	2280	8.2	8.8	17.140	C

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	722	180	1493	749	0.963	744	547	147.9	142.3	664.523	F
A43 (S)	1996	499	676	2117	0.943	2102	1561	152.2	125.7	239.000	F
B4100 (W)	396	99	2286	638	0.621	402	491	3.1	1.8	16.090	C
A43 (N)	1588	397	428	2205	0.720	1612	2260	8.8	2.9	6.858	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B4100(E)	605	151	1237	871	0.694	864	474	142.3	77.4	459.583	F
A43 (S)	1671	418	750	2071	0.807	2053	1351	125.7	30.1	139.460	F
B4100 (W)	332	83	2292	635	0.523	334	511	1.8	1.2	12.468	B
A43 (N)	1330	333	375	2237	0.595	1335	2252	2.9	1.6	4.365	A

2025 Baseline + Committed + Both Developments, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	288.17	F

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	-25	B4100(E)	288.17	F

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
D31	2025 Baseline + Committed + Both Developments	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 (PCU/hr)	Scaling Factor (%)
B4100(E)		ONE HOUR	✓	617	100.000
A43 (S)		ONE HOUR	✓	1877	100.000
B4100 (W)		ONE HOUR	✓	673	100.000
A43 (N)		ONE HOUR	✓	2239	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		B4100(E)	A43 (S)	B4100 (W)	A43 (N)
From	B4100(E)	0	103	251	263
	A43 (S)	246	0	193	1438
	B4100 (W)	317	213	14	129
	A43 (N)	336	1734	169	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		B4100(E)	A43 (S)	B4100 (W)	A43 (N)
From	B4100(E)	0	22	3	8
	A43 (S)	11	0	15	17
	B4100 (W)	6	13	8	12