

J2:1/1	Newgate Ln S/B Ahead	U	A		1	35	-	716	1915	985	72.7%	-	-	-	3.9	19.8	10.7	12.1
J2:1/2+J2:1/3	Newgate Ln S/B Ahead Right	U	A C		1	35:9	-	839	2055:1827	1161	72.3%	-	-	-	4.6	19.9	11.2	12.5
J2:2/2+J2:2/1	Newgate Ln N/B Ahead Left	U	B		1	35	-	575	2055:1702	1056	54.4%	-	-	-	2.4	15.1	7.4	8.0
J2:2/3	Newgate Ln N/B Ahead	U	B		1	35	-	430	2055	1057	40.7%	-	-	-	1.6	13.3	5.0	5.4
J2:3/1	HMS Collingwood Right Left	U	D		1	7	-	105	1813	207	50.7%	-	-	-	1.4	46.6	1.9	2.4
J2:4/1	Newgate Ln S/B Exit Merge Ahead	U	G		1	54	-	744	1965	1544	48.2%	-	-	-	0.5	2.4	0.2	0.6
J2:4/2	Newgate Ln S/B Exit Merge Ahead	U	G		1	54	-	814	2105	1654	49.2%	-	-	-	0.5	2.3	0.2	0.7
J2:5/1	Newgate Ln N/B Exit Ahead	U	-		-	-	-	564	1915	1915	29.5%	-	-	-	0.2	1.5	0.3	0.5
J2:5/2	Newgate Ln N/B Exit Ahead	U	-		-	-	-	454	2055	2055	22.1%	-	-	-	0.1	1.1	0.0	0.1
J2:P1	Newgate Ln S/B	-	E		1	5	-	0	-	0	0.0%	-	-	-	-	-	-	-
J2:P2	Newgate Ln N/B	-	F		1	23	-	0	-	0	0.0%	-	-	-	-	-	-	-

C1 - Collingwood T-Junction

PRC for Signalled Lanes (%): 23.8
 PRC Over All Lanes (%): 23.8

Total Delay for Signalled Lanes (pcuHr): 14.96
 Total Delay Over All Lanes(pcuHr): 20.51

Cycle Time (s): 70

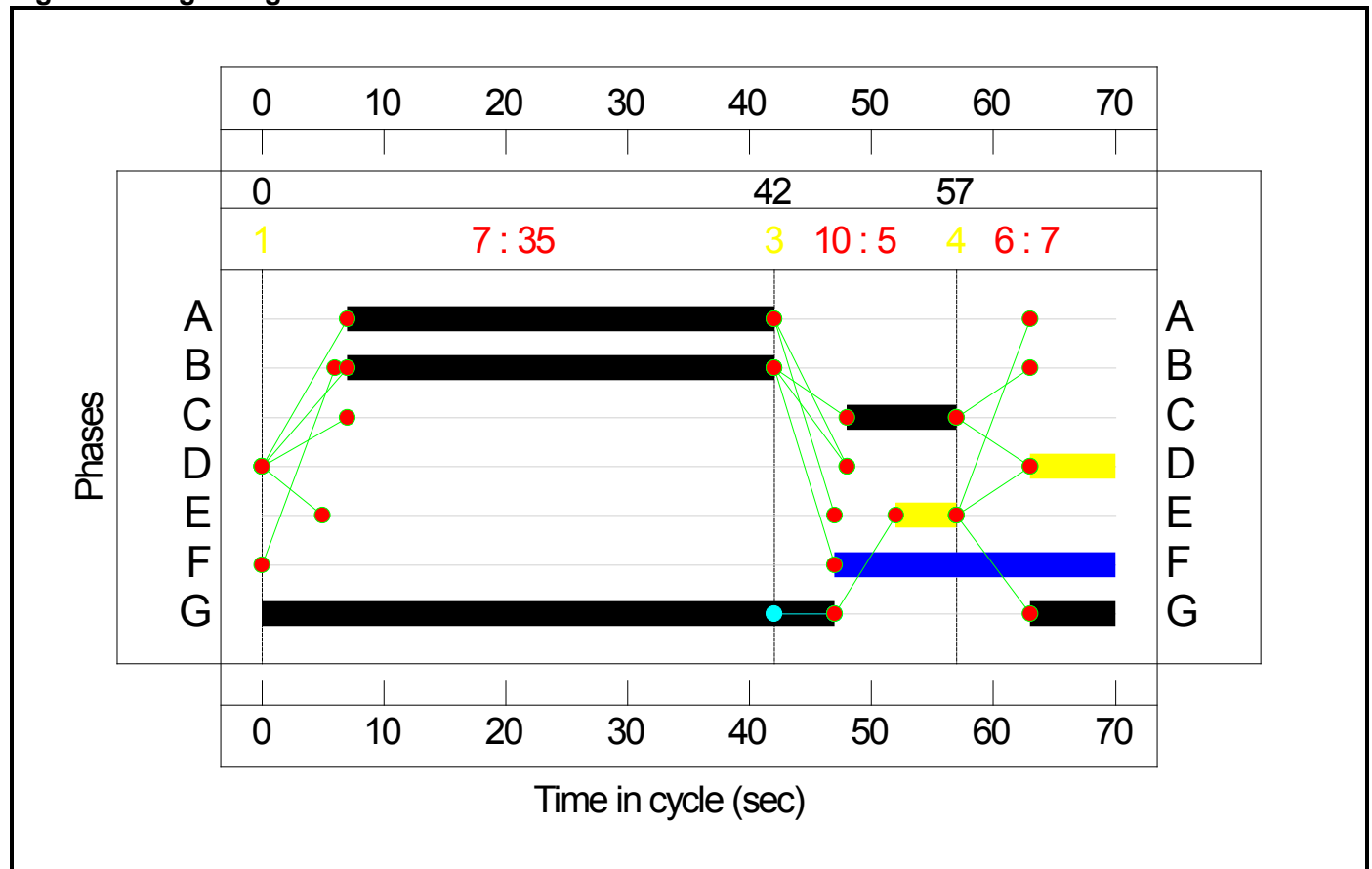
Scenario 7: '2019 DS2 AM Base' (FG7: '2019 DS2 AM Base', Plan 1: 'Plan 1')

Traffic Flows, Actual

Actual Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	1267	210	144	1621
	B	503	0	242	184	929
	C	42	167	0	10	219
	D	16	59	6	0	81
	Tot.	561	1493	458	338	2850

Signal Timings Diagram



Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Mean Max Queue (pcu)
J1:1/2+J1:1/1	Newgate Ln S/B Ahead Left	O	-		-	-	-	740	2029:1786	1580	46.8%	1480	0	0	0.4	2.1	0.0	0.4
J1:1/3	Newgate Ln S/B Ahead	O	-		-	-	-	189	2029	1063	17.8%	189	0	0	0.1	2.1	0.0	0.1
J1:2/1	Speedfields Pk Ahead Left	O	-		-	-	-	219	1894	1361	16.1%	219	0	0	0.1	1.6	0.0	0.1
J1:3/1	Newgate Lane N/B Ahead	U	-		-	-	-	768	1965	1965	39.1%	-	-	-	0.3	1.5	0.0	0.3
J1:3/2	Newgate Lane N/B Ahead	O	-		-	-	-	715	2029	1186	60.3%	715	0	0	1.7	8.5	12.8	13.6
J1:4/1	HMS C'wood LT G-way Ahead	O	-		-	-	-	59	1747	546	10.8%	59	0	0	0.1	3.7	0.0	0.1
J1:5/1	Right Ahead	U	-		-	-	-	216	2077	2077	10.4%	-	-	-	0.1	1.0	0.0	0.1
J1:6/1	Ahead	U	-		-	-	-	498	2077	2077	24.0%	-	-	-	0.2	1.1	0.0	0.2
J1:6/2	Right Ahead	U	-		-	-	-	189	2077	2077	9.1%	-	-	-	0.1	1.0	0.0	0.1
J1:7/1	Right	U	-		-	-	-	167	2005	2005	8.3%	-	-	-	0.0	1.0	0.0	0.0
J1:8/1	Ahead	U	-		-	-	-	827	1965	1965	42.1%	-	-	-	0.4	1.6	0.0	0.4
J1:8/2	Ahead	U	-		-	-	-	666	2077	2077	32.1%	-	-	-	0.2	1.3	0.0	0.2
J1:8/3	Right	U	-		-	-	-	216	2005	2005	10.8%	-	-	-	0.1	1.0	0.0	0.1
J1:9/1	Newgate Ln N/B Exit	U	-		-	-	-	1493	4070	4070	36.7%	-	-	-	0.3	0.7	0.0	0.1
J1:11/1	Newgate Ln S/B Exit Ahead	U	-		-	-	-	540	1965	1965	27.5%	-	-	-	0.2	1.3	0.0	0.2
J1:11/2	Newgate Ln S/B Exit Ahead	U	-		-	-	-	199	2105	2105	9.5%	-	-	-	0.1	0.9	0.0	0.1

J2:1/1	Newgate Ln S/B Ahead	U	A		1	35	-	540	1915	985	54.8%	-	-	-	2.3	15.5	7.1	7.7
J2:1/2+J2:1/3	Newgate Ln S/B Ahead Right	U	A C		1	35:9	-	199	2055:1827	268	74.3%	-	-	-	3.0	53.4	3.6	5.0
J2:2/2+J2:2/1	Newgate Ln N/B Ahead Left	U	B		1	35	-	912	2055:1702	1080	84.4%	-	-	-	6.1	24.1	14.0	16.6
J2:2/3	Newgate Ln N/B Ahead	U	B		1	35	-	709	2055	1057	67.1%	-	-	-	3.5	17.8	10.0	11.1
J2:3/1	HMS Collingwood Right Left	U	D		1	7	-	22	1809	207	10.6%	-	-	-	0.2	37.6	0.4	0.4
J2:4/1	Newgate Ln S/B Exit Merge Ahead	U	G		1	54	-	540	1965	1544	35.0%	-	-	-	0.3	2.0	0.1	0.4
J2:4/2	Newgate Ln S/B Exit Merge Ahead	U	G		1	54	-	21	2105	1654	1.3%	-	-	-	0.0	1.1	0.0	0.0
J2:5/1	Newgate Ln N/B Exit Ahead	U	-		-	-	-	768	1915	1915	40.1%	-	-	-	0.3	1.6	0.2	0.5
J2:5/2	Newgate Ln N/B Exit Ahead	U	-		-	-	-	715	2055	2055	34.8%	-	-	-	0.3	1.3	0.0	0.3
J2:P1	Newgate Ln S/B	-	E		1	5	-	0	-	0	0.0%	-	-	-	-	-	-	-
J2:P2	Newgate Ln N/B	-	F		1	23	-	0	-	0	0.0%	-	-	-	-	-	-	-

C1 - Collingwood T-Junction

PRC for Signalled Lanes (%): 6.6
 PRC Over All Lanes (%): 6.6

Total Delay for Signalled Lanes (pcuHr): 15.41
 Total Delay Over All Lanes(pcuHr): 20.24

Cycle Time (s): 70

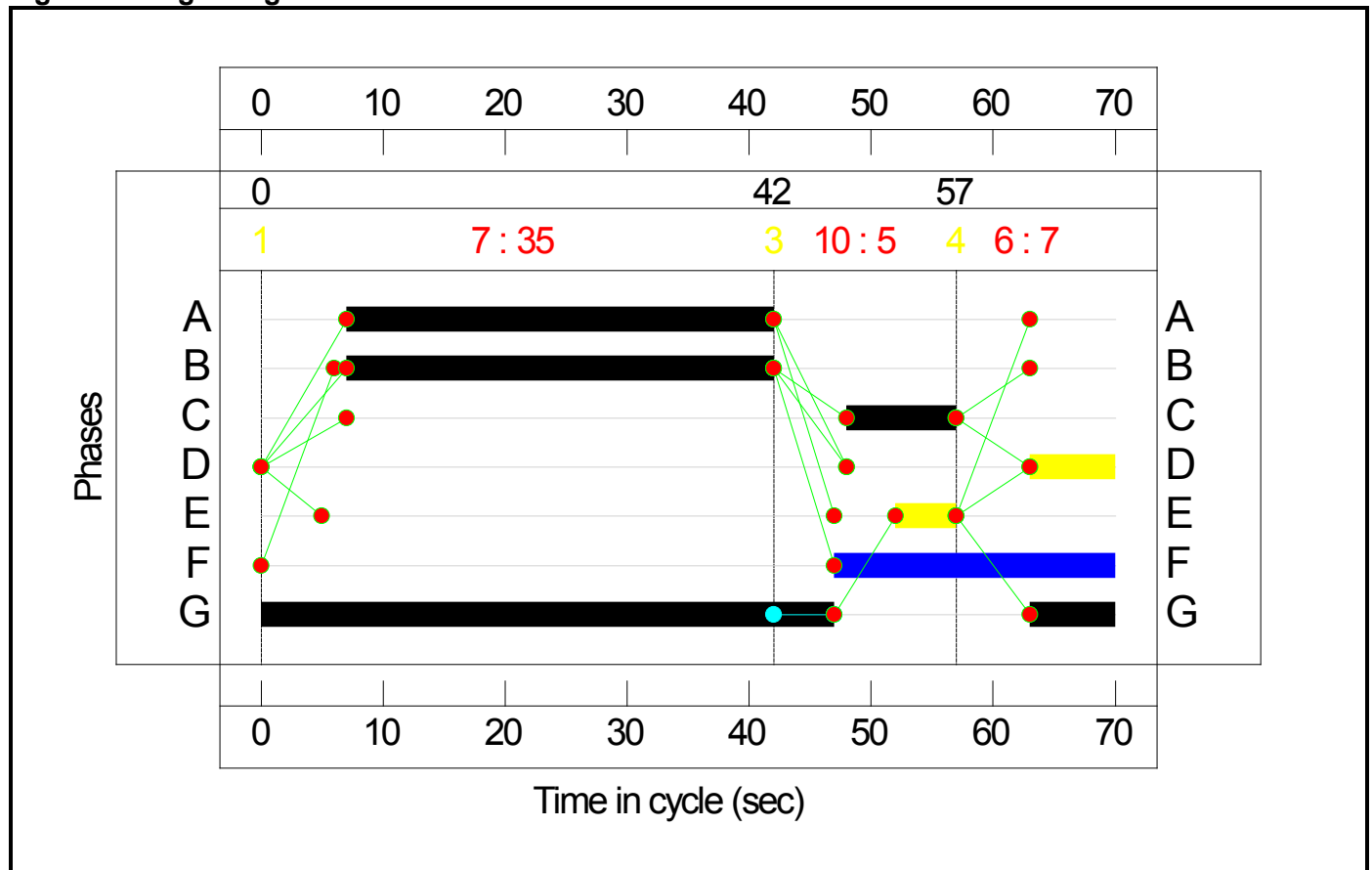
Scenario 8: '2019 DS2 PM Base' (FG8: '2019 DS2 PM Base', Plan 1: 'Plan 1')

Traffic Flows, Actual

Actual Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	739	151	10	900
	B	655	0	254	69	978
	C	116	269	0	7	392
	D	69	124	23	0	216
	Tot.	840	1132	428	86	2486

Signal Timings Diagram



Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Mean Max Queue (pcu)
J1:1/2+J1:1/1	Newgate Ln S/B Ahead Left	O	-		-	-	-	622	2029:1786	1873	33.2%	1244	0	0	0.2	1.4	0.0	0.2
J1:1/3	Newgate Ln S/B Ahead	O	-		-	-	-	356	2029	1088	32.7%	356	0	0	0.2	2.5	0.0	0.2
J1:2/1	Speedfields Pk Ahead Left	O	-		-	-	-	392	1894	1335	29.4%	392	0	0	0.2	1.9	0.0	0.2
J1:3/1	Newgate Lane N/B Ahead	U	-		-	-	-	503	1965	1965	25.6%	-	-	-	0.2	1.2	0.0	0.2
J1:3/2	Newgate Lane N/B Ahead	O	-		-	-	-	410	2029	1130	36.3%	410	0	0	0.4	3.1	4.2	4.5
J1:4/1	HMS C'wood LT G-way Ahead	O	-		-	-	-	124	1747	604	20.5%	124	0	0	0.1	3.7	0.0	0.1
J1:5/1	Right Ahead	U	-		-	-	-	174	2077	2077	8.4%	-	-	-	0.0	0.9	0.0	0.0
J1:6/1	Ahead	U	-		-	-	-	368	2077	2077	17.7%	-	-	-	0.1	1.1	0.0	0.1
J1:6/2	Right Ahead	U	-		-	-	-	356	2077	2077	17.1%	-	-	-	0.1	1.0	0.0	0.1
J1:7/1	Right	U	-		-	-	-	269	2005	2005	13.4%	-	-	-	0.1	1.0	0.0	0.1
J1:8/1	Ahead	U	-		-	-	-	627	1965	1965	31.9%	-	-	-	0.2	1.3	0.0	0.2
J1:8/2	Ahead	U	-		-	-	-	505	2077	2077	24.3%	-	-	-	0.2	1.1	0.0	0.2
J1:8/3	Right	U	-		-	-	-	174	2005	2005	8.7%	-	-	-	0.0	1.0	0.0	0.0
J1:9/1	Newgate Ln N/B Exit	U	-		-	-	-	1132	4070	4070	27.8%	-	-	-	0.2	0.6	0.0	0.1
J1:11/1	Newgate Ln S/B Exit Ahead	U	-		-	-	-	387	1965	1965	19.7%	-	-	-	0.1	1.1	0.0	0.1
J1:11/2	Newgate Ln S/B Exit Ahead	U	-		-	-	-	460	2105	2105	21.9%	-	-	-	0.1	1.1	0.0	0.1

J2:1/1	Newgate Ln S/B Ahead	U	A		1	35	-	387	1915	985	39.3%	-	-	-	1.4	13.4	4.5	4.8
J2:1/2+J2:1/3	Newgate Ln S/B Ahead Right	U	A C		1	35:9	-	460	2055:1827	1236	37.2%	-	-	-	1.9	15.2	4.4	4.7
J2:2/2+J2:2/1	Newgate Ln N/B Ahead Left	U	B		1	35	-	513	2055:1702	1056	48.6%	-	-	-	2.0	14.2	6.3	6.8
J2:2/3	Newgate Ln N/B Ahead	U	B		1	35	-	387	2055	1057	36.6%	-	-	-	1.4	12.9	4.4	4.7
J2:3/1	HMS Collingwood Right Left	U	D		1	7	-	92	1811	207	44.5%	-	-	-	1.1	44.5	1.7	2.1
J2:4/1	Newgate Ln S/B Exit Merge Ahead	U	G		1	54	-	390	1965	1544	25.3%	-	-	-	0.2	1.7	0.1	0.3
J2:4/2	Newgate Ln S/B Exit Merge Ahead	U	G		1	54	-	450	2105	1654	27.2%	-	-	-	0.2	1.6	0.1	0.3
J2:5/1	Newgate Ln N/B Exit Ahead	U	-		-	-	-	503	1915	1915	26.3%	-	-	-	0.2	1.4	0.2	0.4
J2:5/2	Newgate Ln N/B Exit Ahead	U	-		-	-	-	410	2055	2055	20.0%	-	-	-	0.1	1.1	0.0	0.1
J2:P1	Newgate Ln S/B	-	E		1	5	-	0	-	0	0.0%	-	-	-	-	-	-	-
J2:P2	Newgate Ln N/B	-	F		1	23	-	0	-	0	0.0%	-	-	-	-	-	-	-

C1 - Collingwood T-Junction

PRC for Signalled Lanes (%): 85.3
 PRC Over All Lanes (%): 85.3

Total Delay for Signalled Lanes (pcuHr): 8.32
 Total Delay Over All Lanes(pcuHr): 11.22

Cycle Time (s): 70

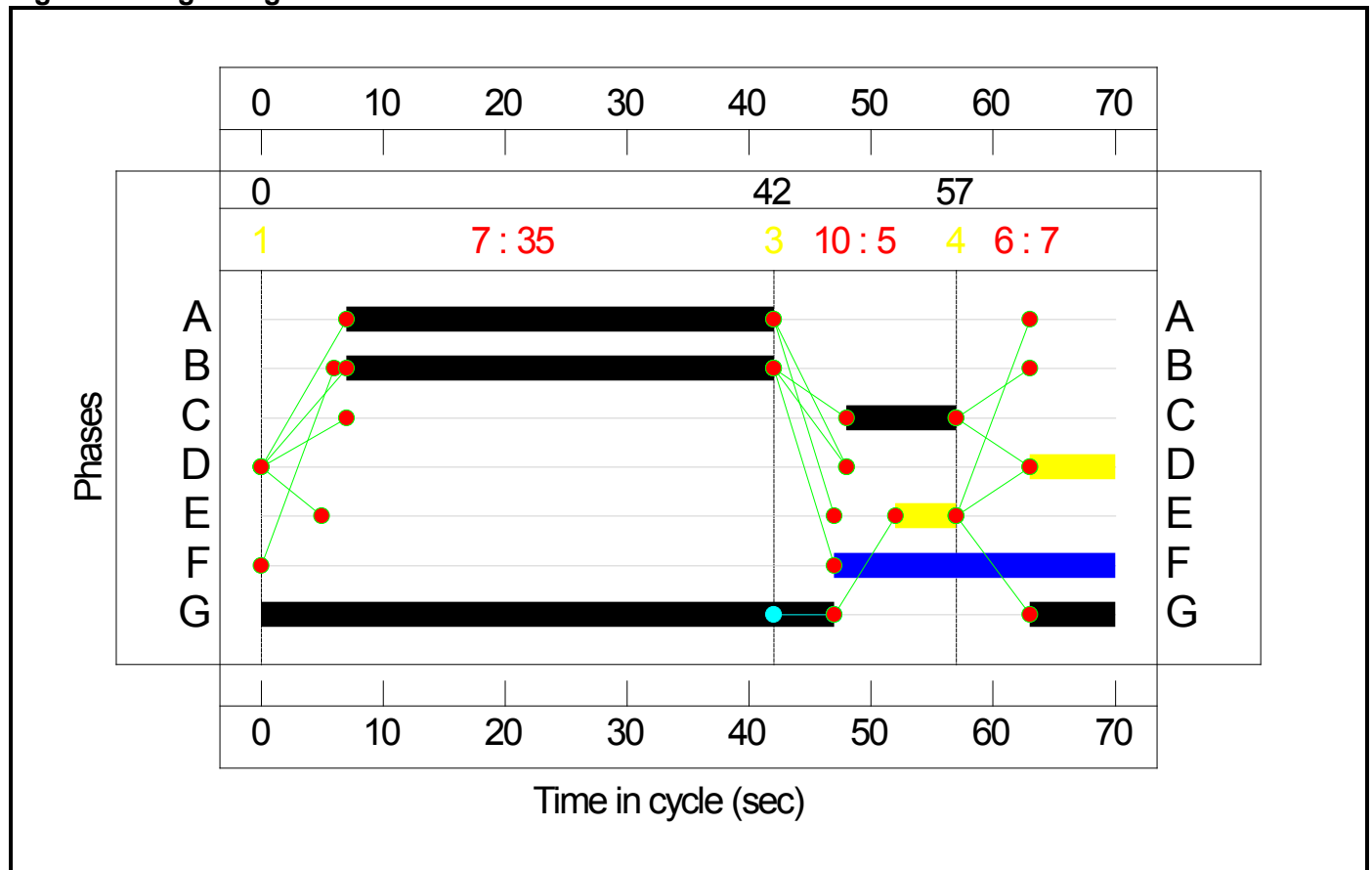
Scenario 9: '2024 DS2 AM Base' (FG9: '2024 DS2 AM Base', Plan 1: 'Plan 1')

Traffic Flows, Actual

Actual Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	1337	222	152	1711
	B	658	0	250	190	1098
	C	55	173	0	11	239
	D	21	61	6	0	88
	Tot.	734	1571	478	353	3136

Signal Timings Diagram



Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Mean Max Queue (pcu)
J1:1/2+J1:1/1	Newgate Ln S/B Ahead Left	O	-		-	-	-	908	2029:1786	1458	62.3%	1816	0	0	0.8	3.3	0.0	0.8
J1:1/3	Newgate Ln S/B Ahead	O	-		-	-	-	190	2029	1056	18.0%	190	0	0	0.1	2.1	0.0	0.1
J1:2/1	Speedfields Pk Ahead Left	O	-		-	-	-	239	1894	1245	19.2%	239	0	0	0.1	1.8	0.0	0.1
J1:3/1	Newgate Lane N/B Ahead	U	-		-	-	-	796	1965	1965	40.5%	-	-	-	0.3	1.5	0.0	0.3
J1:3/2	Newgate Lane N/B Ahead	O	-		-	-	-	769	2029	1183	65.0%	769	0	0	2.2	10.1	14.0	14.9
J1:4/1	HMS C'wood LT G-way Ahead	O	-		-	-	-	61	1747	540	11.3%	61	0	0	0.1	3.8	0.0	0.1
J1:5/1	Right Ahead	U	-		-	-	-	228	2077	2077	11.0%	-	-	-	0.1	1.0	0.0	0.1
J1:6/1	Ahead	U	-		-	-	-	658	2077	2077	31.7%	-	-	-	0.2	1.3	0.0	0.2
J1:6/2	Right Ahead	U	-		-	-	-	190	2077	2077	9.1%	-	-	-	0.1	1.0	0.0	0.1
J1:7/1	Right	U	-		-	-	-	173	2005	2005	8.6%	-	-	-	0.0	1.0	0.0	0.0
J1:8/1	Ahead	U	-		-	-	-	857	1965	1965	43.6%	-	-	-	0.4	1.6	0.0	0.4
J1:8/2	Ahead	U	-		-	-	-	714	2077	2077	34.4%	-	-	-	0.3	1.3	0.0	0.3
J1:8/3	Right	U	-		-	-	-	228	2005	2005	11.4%	-	-	-	0.1	1.0	0.0	0.1
J1:9/1	Newgate Ln N/B Exit	U	-		-	-	-	1571	4070	4070	38.6%	-	-	-	0.3	0.7	0.0	0.2
J1:11/1	Newgate Ln S/B Exit Ahead	U	-		-	-	-	712	1965	1965	36.2%	-	-	-	0.3	1.4	0.0	0.3
J1:11/2	Newgate Ln S/B Exit Ahead	U	-		-	-	-	202	2105	2105	9.6%	-	-	-	0.1	0.9	0.0	0.1

J2:1/1	Newgate Ln S/B Ahead	U	A		1	35	-	712	1915	985	72.3%	-	-	-	3.9	19.7	10.7	12.0
J2:1/2+J2:1/3	Newgate Ln S/B Ahead Right	U	A C		1	35:9	-	202	2055:1827	262	77.0%	-	-	-	3.2	57.2	3.7	5.3
J2:2/2+J2:2/1	Newgate Ln N/B Ahead Left	U	B		1	35	-	948	2055:1702	1081	87.7%	-	-	-	7.1	27.0	15.1	18.5
J2:2/3	Newgate Ln N/B Ahead	U	B		1	35	-	763	2055	1057	72.2%	-	-	-	4.1	19.2	11.4	12.7
J2:3/1	HMS Collingwood Right Left	U	D		1	7	-	27	1814	207	13.0%	-	-	-	0.3	37.9	0.5	0.5
J2:4/1	Newgate Ln S/B Exit Merge Ahead	U	G		1	54	-	713	1965	1544	46.2%	-	-	-	0.5	2.3	0.2	0.6
J2:4/2	Newgate Ln S/B Exit Merge Ahead	U	G		1	54	-	21	2105	1654	1.3%	-	-	-	0.0	1.1	0.0	0.0
J2:5/1	Newgate Ln N/B Exit Ahead	U	-		-	-	-	796	1915	1915	41.6%	-	-	-	0.4	1.7	0.2	0.6
J2:5/2	Newgate Ln N/B Exit Ahead	U	-		-	-	-	769	2055	2055	37.4%	-	-	-	0.3	1.4	0.0	0.3
J2:P1	Newgate Ln S/B	-	E		1	5	-	0	-	0	0.0%	-	-	-	-	-	-	-
J2:P2	Newgate Ln N/B	-	F		1	23	-	0	-	0	0.0%	-	-	-	-	-	-	-

C1 - Collingwood T-Junction

PRC for Signalled Lanes (%): 2.6
 PRC Over All Lanes (%): 2.6

Total Delay for Signalled Lanes (pcuHr): 19.04
 Total Delay Over All Lanes(pcuHr): 25.08

Cycle Time (s): 70

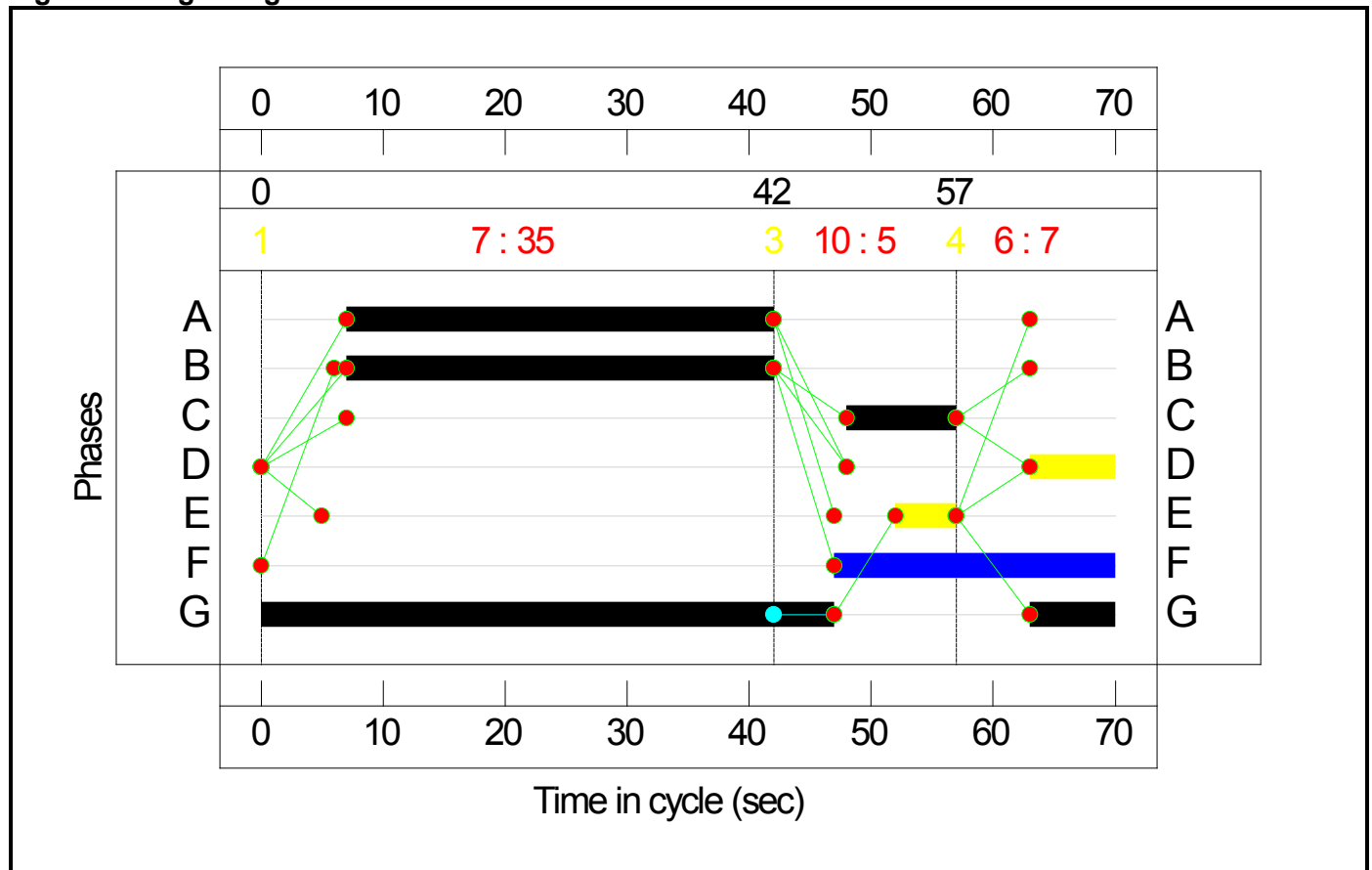
Scenario 10: '2024 DS2 PM Base' (FG10: '2024 DS2 PM Base', Plan 1: 'Plan 1')

Traffic Flows, Actual

Actual Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	794	162	11	967
	B	799	0	263	71	1133
	C	142	278	0	7	427
	D	84	128	24	0	236
	Tot.	1025	1200	449	89	2763

Signal Timings Diagram



Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Mean Max Queue (pcu)
J1:1/2+J1:1/1	Newgate Ln S/B Ahead Left	O	-		-	-	-	704	2029:1786	1777	39.6%	1408	0	0	0.3	1.7	0.0	0.3
J1:1/3	Newgate Ln S/B Ahead	O	-		-	-	-	429	2029	1081	39.7%	429	0	0	0.3	2.8	0.0	0.3
J1:2/1	Speedfields Pk Ahead Left	O	-		-	-	-	427	1894	1229	34.7%	427	0	0	0.3	2.2	0.0	0.3
J1:3/1	Newgate Lane N/B Ahead	U	-		-	-	-	542	1965	1965	27.6%	-	-	-	0.2	1.3	0.0	0.2
J1:3/2	Newgate Lane N/B Ahead	O	-		-	-	-	438	2029	1125	38.9%	438	0	0	0.4	3.4	5.0	5.3
J1:4/1	HMS C'wood LT G-way Ahead	O	-		-	-	-	128	1747	596	21.5%	128	0	0	0.1	3.8	0.0	0.1
J1:5/1	Right Ahead	U	-		-	-	-	186	2077	2077	9.0%	-	-	-	0.0	1.0	0.0	0.0
J1:6/1	Ahead	U	-		-	-	-	441	2077	2077	21.2%	-	-	-	0.1	1.1	0.0	0.1
J1:6/2	Right Ahead	U	-		-	-	-	429	2077	2077	20.7%	-	-	-	0.1	1.1	0.0	0.1
J1:7/1	Right	U	-		-	-	-	278	2005	2005	13.9%	-	-	-	0.1	1.0	0.0	0.1
J1:8/1	Ahead	U	-		-	-	-	670	1965	1965	34.1%	-	-	-	0.3	1.4	0.0	0.3
J1:8/2	Ahead	U	-		-	-	-	530	2077	2077	25.5%	-	-	-	0.2	1.2	0.0	0.2
J1:8/3	Right	U	-		-	-	-	186	2005	2005	9.3%	-	-	-	0.1	1.0	0.0	0.1
J1:9/1	Newgate Ln N/B Exit	U	-		-	-	-	1200	4070	4070	29.5%	-	-	-	0.2	0.6	0.0	0.1
J1:11/1	Newgate Ln S/B Exit Ahead	U	-		-	-	-	462	1965	1965	23.5%	-	-	-	0.2	1.2	0.0	0.2
J1:11/2	Newgate Ln S/B Exit Ahead	U	-		-	-	-	557	2105	2105	26.5%	-	-	-	0.2	1.2	0.0	0.2

J2:1/1	Newgate Ln S/B Ahead	U	A		1	35	-	462	1915	985	46.9%	-	-	-	1.8	14.3	5.6	6.1
J2:1/2+J2:1/3	Newgate Ln S/B Ahead Right	U	A C		1	35:9	-	557	2055:1827	1208	46.1%	-	-	-	2.4	15.8	5.9	6.3
J2:2/2+J2:2/1	Newgate Ln N/B Ahead Left	U	B		1	35	-	553	2055:1702	1057	52.3%	-	-	-	2.3	14.8	7.0	7.5
J2:2/3	Newgate Ln N/B Ahead	U	B		1	35	-	414	2055	1057	39.2%	-	-	-	1.5	13.1	4.8	5.2
J2:3/1	HMS Collingwood Right Left	U	D		1	7	-	108	1814	207	52.1%	-	-	-	1.4	47.1	2.0	2.5
J2:4/1	Newgate Ln S/B Exit Merge Ahead	U	G		1	54	-	468	1965	1544	30.3%	-	-	-	0.2	1.8	0.1	0.3
J2:4/2	Newgate Ln S/B Exit Merge Ahead	U	G		1	54	-	557	2105	1654	33.7%	-	-	-	0.3	1.8	0.1	0.4
J2:5/1	Newgate Ln N/B Exit Ahead	U	-		-	-	-	542	1915	1915	28.3%	-	-	-	0.2	1.5	0.2	0.4
J2:5/2	Newgate Ln N/B Exit Ahead	U	-		-	-	-	438	2055	2055	21.3%	-	-	-	0.1	1.1	0.0	0.1
J2:P1	Newgate Ln S/B	-	E		1	5	-	0	-	0	0.0%	-	-	-	-	-	-	-
J2:P2	Newgate Ln N/B	-	F		1	23	-	0	-	0	0.0%	-	-	-	-	-	-	-

C1 - Collingwood T-Junction

PRC for Signalled Lanes (%): 71.9
 PRC Over All Lanes (%): 71.9

Total Delay for Signalled Lanes (pcuHr): 9.99
 Total Delay Over All Lanes(pcuHr): 13.43

Cycle Time (s): 70

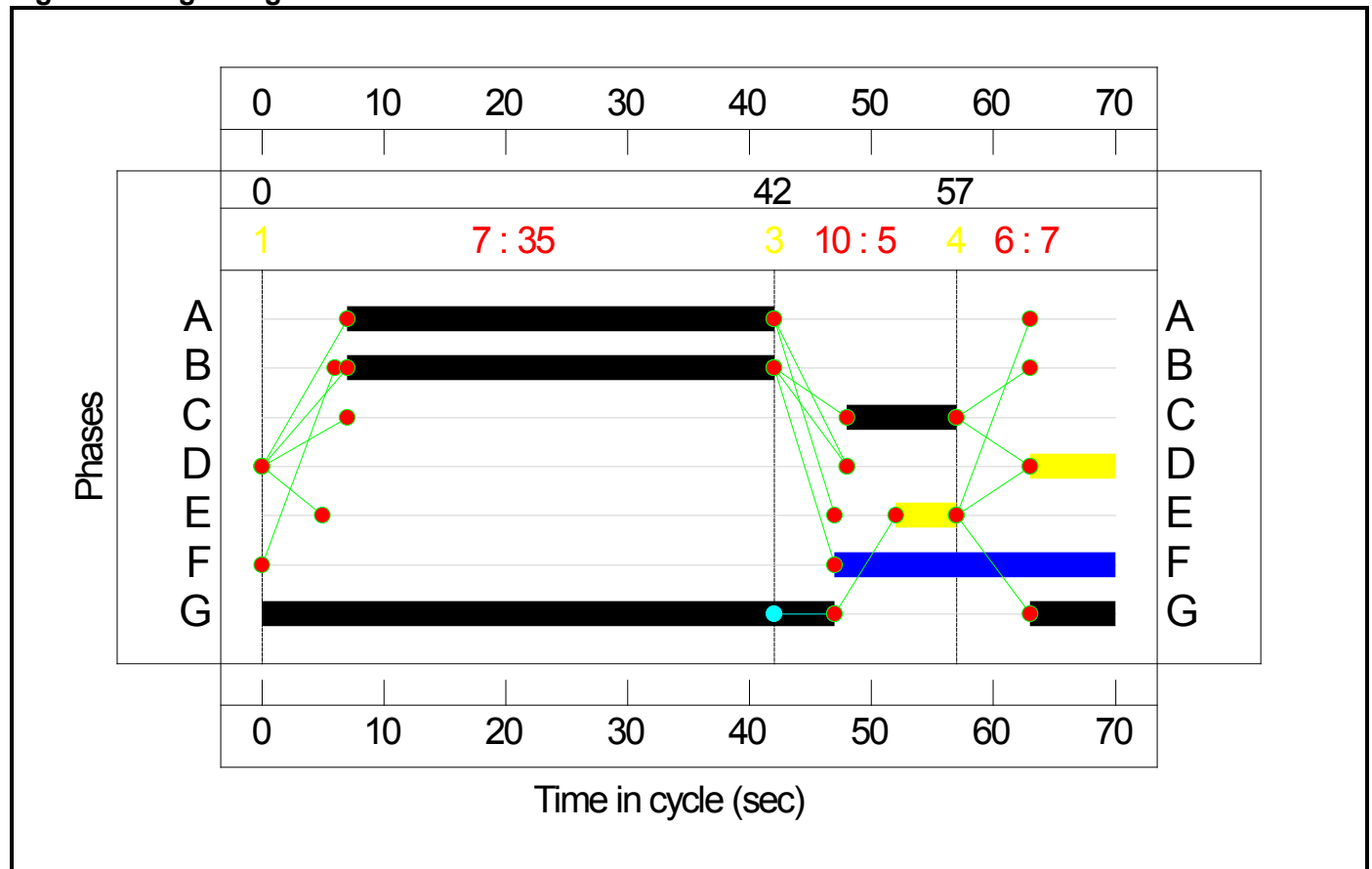
Scenario 11: '2024 DS2 AM Base + Development' (FG11: '2024 DS2 AM Base + Dev', Plan 1: 'Plan 1')

Traffic Flows, Actual

Actual Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	1348	224	153	1725
	B	676	0	250	190	1116
	C	57	173	0	11	241
	D	22	61	6	0	89
	Tot.	755	1582	480	354	3171

Signal Timings Diagram



Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Mean Max Queue (pcu)
J1:1/2+J1:1/1	Newgate Ln S/B Ahead Left	O	-		-	-	-	926	2029:1786	1446	64.1%	1852	0	0	0.9	3.5	0.0	0.9
J1:1/3	Newgate Ln S/B Ahead	O	-		-	-	-	190	2029	1055	18.0%	190	0	0	0.1	2.1	0.0	0.1
J1:2/1	Speedfields Pk Ahead Left	O	-		-	-	-	241	1894	1232	19.6%	241	0	0	0.1	1.8	0.0	0.1
J1:3/1	Newgate Lane N/B Ahead	U	-		-	-	-	801	1965	1965	40.8%	-	-	-	0.3	1.5	0.0	0.3
J1:3/2	Newgate Lane N/B Ahead	O	-		-	-	-	777	2029	1183	65.7%	777	0	0	2.2	10.3	14.1	15.1
J1:4/1	HMS C'wood LT G-way Ahead	O	-		-	-	-	61	1747	539	11.3%	61	0	0	0.1	3.8	0.0	0.1
J1:5/1	Right Ahead	U	-		-	-	-	230	2077	2077	11.1%	-	-	-	0.1	1.0	0.0	0.1
J1:6/1	Ahead	U	-		-	-	-	676	2077	2077	32.5%	-	-	-	0.2	1.3	0.0	0.2
J1:6/2	Right Ahead	U	-		-	-	-	190	2077	2077	9.1%	-	-	-	0.1	1.0	0.0	0.1
J1:7/1	Right	U	-		-	-	-	173	2005	2005	8.6%	-	-	-	0.0	1.0	0.0	0.0
J1:8/1	Ahead	U	-		-	-	-	862	1965	1965	43.9%	-	-	-	0.4	1.6	0.0	0.4
J1:8/2	Ahead	U	-		-	-	-	720	2077	2077	34.7%	-	-	-	0.3	1.3	0.0	0.3
J1:8/3	Right	U	-		-	-	-	230	2005	2005	11.5%	-	-	-	0.1	1.0	0.0	0.1
J1:9/1	Newgate Ln N/B Exit	U	-		-	-	-	1582	4070	4070	38.9%	-	-	-	0.3	0.7	0.0	0.2
J1:11/1	Newgate Ln S/B Exit Ahead	U	-		-	-	-	732	1965	1965	37.3%	-	-	-	0.3	1.5	0.0	0.3
J1:11/2	Newgate Ln S/B Exit Ahead	U	-		-	-	-	202	2105	2105	9.6%	-	-	-	0.1	0.9	0.0	0.1

J2:1/1	Newgate Ln S/B Ahead	U	A		1	35	-	732	1915	985	74.3%	-	-	-	4.1	20.4	11.2	12.6
J2:1/2+J2:1/3	Newgate Ln S/B Ahead Right	U	A C		1	35:9	-	202	2055:1827	262	77.0%	-	-	-	3.2	57.2	3.7	5.3
J2:2/2+J2:2/1	Newgate Ln N/B Ahead Left	U	B		1	35	-	954	2055:1702	1081	88.3%	-	-	-	7.3	27.7	15.2	18.7
J2:2/3	Newgate Ln N/B Ahead	U	B		1	35	-	771	2055	1057	73.0%	-	-	-	4.2	19.5	11.6	12.9
J2:3/1	HMS Collingwood Right Left	U	D		1	7	-	28	1814	207	13.5%	-	-	-	0.3	37.9	0.5	0.6
J2:4/1	Newgate Ln S/B Exit Merge Ahead	U	G		1	54	-	733	1965	1544	47.5%	-	-	-	0.5	2.4	0.2	0.6
J2:4/2	Newgate Ln S/B Exit Merge Ahead	U	G		1	54	-	22	2105	1654	1.3%	-	-	-	0.0	1.1	0.0	0.0
J2:5/1	Newgate Ln N/B Exit Ahead	U	-		-	-	-	801	1915	1915	41.8%	-	-	-	0.4	1.7	0.2	0.6
J2:5/2	Newgate Ln N/B Exit Ahead	U	-		-	-	-	777	2055	2055	37.8%	-	-	-	0.3	1.4	0.0	0.3
J2:P1	Newgate Ln S/B	-	E		1	5	-	0	-	0	0.0%	-	-	-	-	-	-	-
J2:P2	Newgate Ln N/B	-	F		1	23	-	0	-	0	0.0%	-	-	-	-	-	-	-

C1 - Collingwood T-Junction

PRC for Signalled Lanes (%): 2.0
 PRC Over All Lanes (%): 2.0

Total Delay for Signalled Lanes (pcuHr): 19.64
 Total Delay Over All Lanes(pcuHr): 25.86

Cycle Time (s): 70

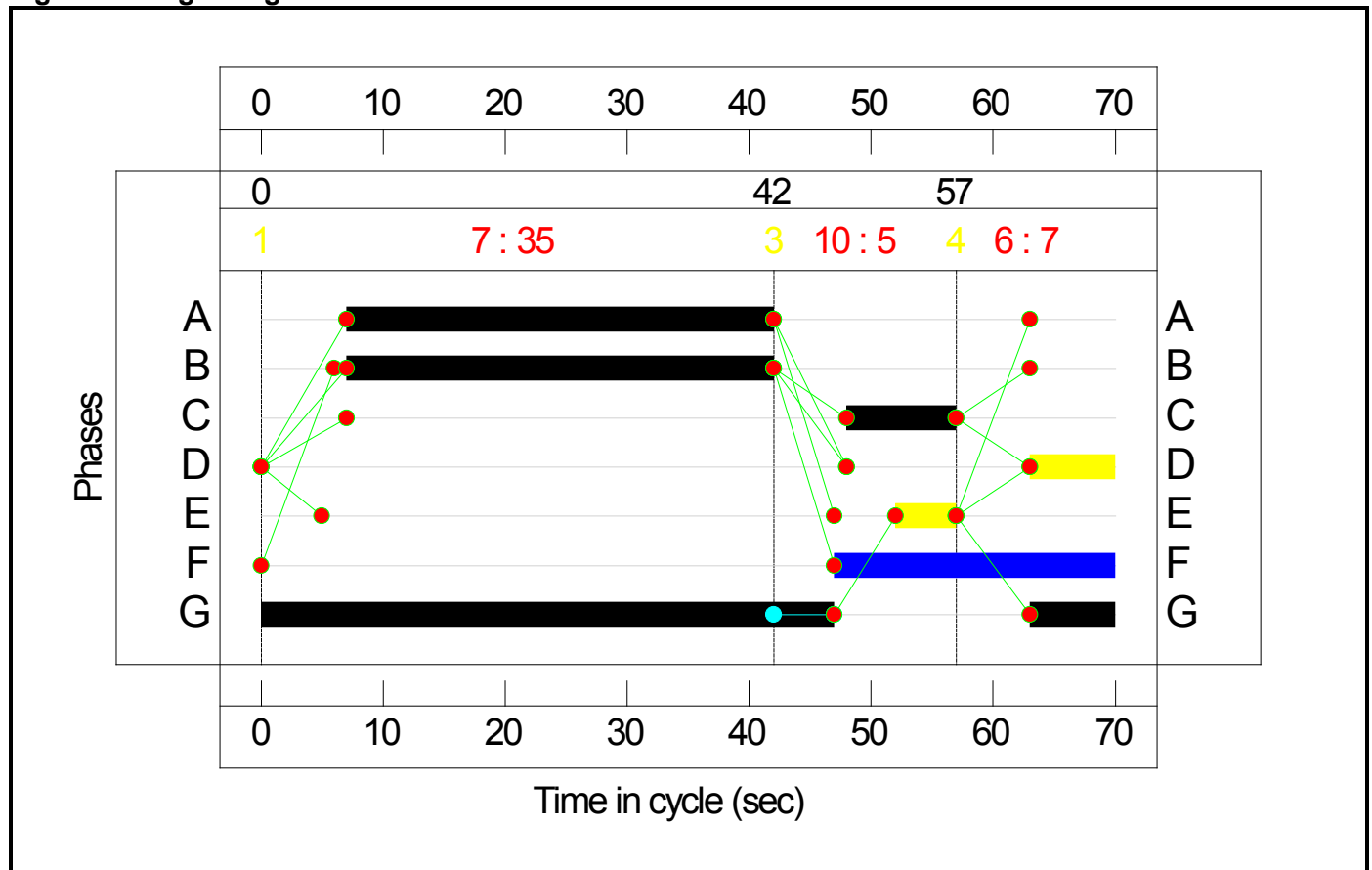
Scenario 12: '2024 DS2 PM Base + Development' (FG12: '2024 DS2 PM Base + Dev', Plan 1: 'Plan 1')

Traffic Flows, Actual

Actual Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	813	166	11	990
	B	821	0	263	71	1155
	C	144	278	0	7	429
	D	86	128	24	0	238
	Tot.	1051	1219	453	89	2812

Signal Timings Diagram



Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Mean Max Queue (pcu)
J1:1/2+J1:1/1	Newgate Ln S/B Ahead Left	O	-		-	-	-	713	2029:1786	1746	40.8%	1426	0	0	0.3	1.7	0.0	0.3
J1:1/3	Newgate Ln S/B Ahead	O	-		-	-	-	442	2029	1079	41.0%	442	0	0	0.3	2.8	0.0	0.3
J1:2/1	Speedfields Pk Ahead Left	O	-		-	-	-	429	1894	1214	35.4%	429	0	0	0.3	2.3	0.0	0.3
J1:3/1	Newgate Lane N/B Ahead	U	-		-	-	-	555	1965	1965	28.2%	-	-	-	0.2	1.3	0.0	0.2
J1:3/2	Newgate Lane N/B Ahead	O	-		-	-	-	448	2029	1125	39.8%	448	0	0	0.4	3.6	5.1	5.5
J1:4/1	HMS C'wood LT G-way Ahead	O	-		-	-	-	128	1747	593	21.6%	128	0	0	0.1	3.9	0.0	0.1
J1:5/1	Right Ahead	U	-		-	-	-	190	2077	2077	9.1%	-	-	-	0.1	1.0	0.0	0.1
J1:6/1	Ahead	U	-		-	-	-	450	2077	2077	21.7%	-	-	-	0.1	1.1	0.0	0.1
J1:6/2	Right Ahead	U	-		-	-	-	442	2077	2077	21.3%	-	-	-	0.1	1.1	0.0	0.1
J1:7/1	Right	U	-		-	-	-	278	2005	2005	13.9%	-	-	-	0.1	1.0	0.0	0.1
J1:8/1	Ahead	U	-		-	-	-	683	1965	1965	34.8%	-	-	-	0.3	1.4	0.0	0.3
J1:8/2	Ahead	U	-		-	-	-	536	2077	2077	25.8%	-	-	-	0.2	1.2	0.0	0.2
J1:8/3	Right	U	-		-	-	-	190	2005	2005	9.5%	-	-	-	0.1	1.0	0.0	0.1
J1:9/1	Newgate Ln N/B Exit	U	-		-	-	-	1219	4070	4070	30.0%	-	-	-	0.2	0.6	0.0	0.1
J1:11/1	Newgate Ln S/B Exit Ahead	U	-		-	-	-	475	1965	1965	24.2%	-	-	-	0.2	1.2	0.0	0.2
J1:11/2	Newgate Ln S/B Exit Ahead	U	-		-	-	-	568	2105	2105	27.0%	-	-	-	0.2	1.2	0.0	0.2

J2:1/1	Newgate Ln S/B Ahead	U	A		1	35	-	475	1915	985	48.2%	-	-	-	1.9	14.5	5.9	6.4
J2:1/2+J2:1/3	Newgate Ln S/B Ahead Right	U	A C		1	35:9	-	568	2055:1827	1205	47.1%	-	-	-	2.5	15.9	6.0	6.4
J2:2/2+J2:2/1	Newgate Ln N/B Ahead Left	U	B		1	35	-	566	2055:1702	1056	53.6%	-	-	-	2.4	15.0	7.1	7.7
J2:2/3	Newgate Ln N/B Ahead	U	B		1	35	-	424	2055	1057	40.1%	-	-	-	1.6	13.2	4.9	5.3
J2:3/1	HMS Collingwood Right Left	U	D		1	7	-	110	1814	207	53.1%	-	-	-	1.5	47.5	2.0	2.6
J2:4/1	Newgate Ln S/B Exit Merge Ahead	U	G		1	54	-	481	1965	1544	31.2%	-	-	-	0.2	1.8	0.1	0.3
J2:4/2	Newgate Ln S/B Exit Merge Ahead	U	G		1	54	-	570	2105	1654	34.5%	-	-	-	0.3	1.8	0.1	0.4
J2:5/1	Newgate Ln N/B Exit Ahead	U	-		-	-	-	555	1915	1915	29.0%	-	-	-	0.2	1.5	0.2	0.5
J2:5/2	Newgate Ln N/B Exit Ahead	U	-		-	-	-	448	2055	2055	21.8%	-	-	-	0.1	1.1	0.0	0.1
J2:P1	Newgate Ln S/B	-	E		1	5	-	0	-	0	0.0%	-	-	-	-	-	-	-
J2:P2	Newgate Ln N/B	-	F		1	23	-	0	-	0	0.0%	-	-	-	-	-	-	-

C1 - Collingwood T-Junction

PRC for Signalled Lanes (%): 68.0
 PRC Over All Lanes (%): 68.0

Total Delay for Signalled Lanes (pcuHr): 10.31
 Total Delay Over All Lanes(pcuHr): 13.88

Cycle Time (s): 70

Pegasus Group LinSig Report

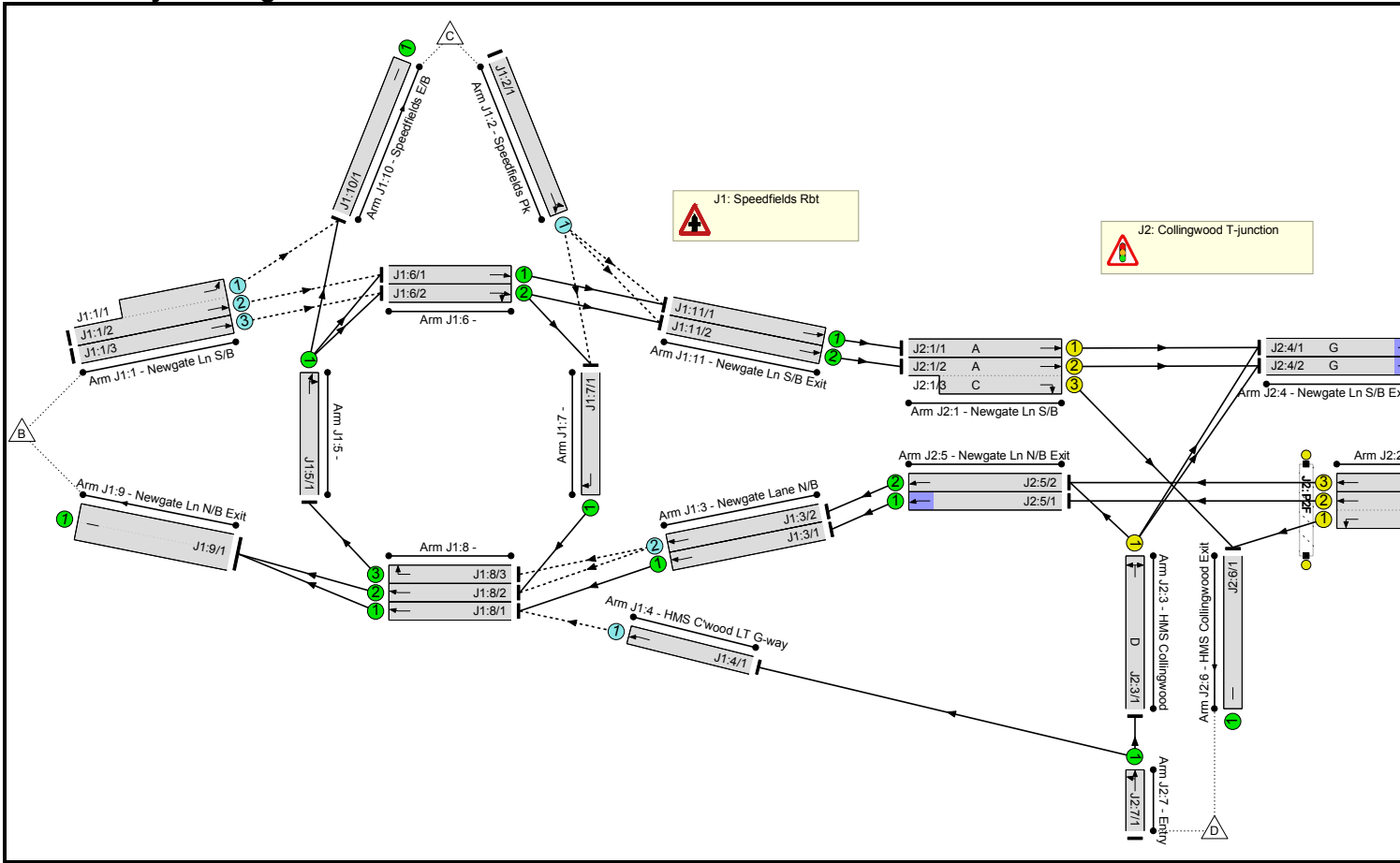
User and Project Details

Project:	Collingwood signals & Speedfield Rbt
Title:	Land to the West of Newgate Lane, Fareham
Location:	
Company:	Pegasus Group
Address:	
Linsig Version:	3, 2, 39, 0

Scenarios

Number	Scenario Name	Flow Group	Network Control Plan	Time	Cycle Time (s)	PRC (%)	Delay (pcuHr)
1	2019 DS1 AM Base	2019 DS1 AM Base	Plan 1	08:00 - 09:00	70	7.6	20.17
2	2019 DS1 PM Base	2019 DS1 PM Base	Plan 1	17:00 - 18:00	70	44.1	16.07
3	2024 DS1 AM Base	2024 DS1 AM Base	Plan 1	08:00 - 09:00	70	3.4	23.68
4	2024 DS1 PM Base	2024 DS1 PM Base	Plan 1	17:00 - 18:00	70	25.5	19.83
5	2024 DS1 AM Base + Development	2024 DS1 AM Base+Dev	Plan 1	08:00 - 09:00	70	2.4	24.47
6	2024 DS1 PM Base + Development	2024 DS1 PM Base+Dev	Plan 1	17:00 - 18:00	70	23.6	20.54
7	2019 DS2 AM Base	2019 DS2 AM Base	Plan 1	08:00 - 09:00	70	6.6	20.24
8	2019 DS2 PM Base	2019 DS2 PM Base	Plan 1	17:00 - 18:00	70	85.3	11.22
9	2024 DS2 AM Base	2024 DS2 AM Base	Plan 1	08:00 - 09:00	70	2.6	25.08
10	2024 DS2 PM Base	2024 DS2 PM Base	Plan 1	17:00 - 18:00	70	71.9	13.43
11	2024 DS2 AM Base + Development	2024 DS2 AM Base + Dev	Plan 1	08:00 - 09:00	70	1.9	25.97
12	2024 DS2 PM Base + Development	2024 DS2 PM Base + Dev	Plan 1	17:00 - 18:00	70	67.7	13.89

Network Layout Diagram



Lane Input Data

Junction: J1: Speedfields Rbt												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
J1:1/1 (Newgate Ln S/B)	O		2	3	8.7	Geom	-	3.50	0.00	Y	Arm J1:10 Left	15.00
J1:1/2 (Newgate Ln S/B)	O		2	3	60.0	Geom	-	3.50	0.00	N	Arm J1:6 Ahead	40.00
J1:1/3 (Newgate Ln S/B)	O		2	3	60.0	Geom	-	3.50	0.00	N	Arm J1:6 Ahead	40.00
J1:2/1 (Speedfields Pk)	O		2	3	60.0	Geom	-	3.50	0.00	Y	Arm J1:7 Ahead	40.00
											Arm J1:11 Left	40.00
J1:3/1 (Newgate Lane N/B)	U		2	3	60.0	Geom	-	3.50	0.00	Y	Arm J1:8 Ahead	Inf
J1:3/2 (Newgate Lane N/B)	O		2	3	60.0	Geom	-	3.50	0.00	N	Arm J1:8 Ahead	40.00
J1:4/1 (HMS C'wood LT G-way)	O		2	3	60.0	Geom	-	3.50	0.00	Y	Arm J1:8 Ahead	12.00
J1:5/1	U		2	3	60.0	Geom	-	4.00	0.00	N	Arm J1:6 Right	20.00
											Arm J1:10 Ahead	40.00
J1:6/1	U		2	3	60.0	Geom	-	4.00	0.00	N	Arm J1:11 Ahead	40.00
J1:6/2	U		2	3	60.0	Geom	-	4.00	0.00	N	Arm J1:7 Right	20.00
											Arm J1:11 Ahead	40.00
J1:7/1	U		2	3	60.0	Geom	-	4.00	0.00	N	Arm J1:8 Right	20.00
J1:8/1	U		2	3	60.0	Geom	-	3.50	0.00	Y	Arm J1:9 Ahead	Inf
J1:8/2	U		2	3	60.0	Geom	-	4.00	0.00	N	Arm J1:9 Ahead	40.00
J1:8/3	U		2	3	60.0	Geom	-	4.00	0.00	N	Arm J1:5 Right	20.00

J1:9/1 (Newgate Ln N/B Exit)	U		2	3	60.0	User	4070	-	-	-	-	-
J1:10/1 (Speedfields E/B)	U		2	3	60.0	Inf	-	-	-	-	-	-
J1:11/1 (Newgate Ln S/B Exit)	U		2	3	60.0	Geom	-	3.50	0.00	Y	Arm J2:1 Ahead	Inf
J1:11/2 (Newgate Ln S/B Exit)	U		2	3	60.0	Geom	-	3.50	0.00	N	Arm J2:1 Ahead	Inf

Junction: J2: Collingwood T-junction												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
J2:1/1 (Newgate Ln S/B)	U	A	2	3	60.0	Geom	-	3.00	0.00	Y	Arm J2:4 Ahead	Inf
J2:1/2 (Newgate Ln S/B)	U	A	2	3	60.0	Geom	-	3.00	0.00	N	Arm J2:4 Ahead	Inf
J2:1/3 (Newgate Ln S/B)	U	C	2	3	15.7	Geom	-	3.00	0.00	N	Arm J2:6 Right	12.00
J2:2/1 (Newgate Ln N/B)	U	B	2	3	5.2	Geom	-	3.00	0.00	Y	Arm J2:6 Left	12.00
J2:2/2 (Newgate Ln N/B)	U	B	2	3	60.0	Geom	-	3.00	0.00	N	Arm J2:5 Ahead	Inf
J2:2/3 (Newgate Ln N/B)	U	B	2	3	60.0	Geom	-	3.00	0.00	N	Arm J2:5 Ahead	Inf
J2:3/1 (HMS Collingwood)	U	D	2	3	60.0	Geom	-	4.00	0.00	Y	Arm J2:4 Right Arm J2:5 Left	15.00 10.00
J2:4/1 (Newgate Ln S/B Exit Merge)	U	G	2	3	5.2	Geom	-	3.50	0.00	Y	Arm J2:8 Ahead	Inf
J2:4/2 (Newgate Ln S/B Exit Merge)	U	G	2	3	5.2	Geom	-	3.50	0.00	N	Arm J2:8 Ahead	Inf
J2:5/1 (Newgate Ln N/B Exit)	U		2	3	60.0	Geom	-	3.00	0.00	Y	Arm J1:3 Ahead	Inf
J2:5/2 (Newgate Ln N/B Exit)	U		2	3	60.0	Geom	-	3.00	0.00	N	Arm J1:3 Ahead	Inf
J2:6/1 (HMS Collingwood Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
J2:7/1 (Entry)	U		2	3	60.0	Inf	-	-	-	-	-	-
J2:8/1	U		2	3	19.1	Inf	-	-	-	-	-	-

Give-Way Lane Input Data

Junction: J1: Speedfields Rbt											
Lane	Movement	Max Flow when Giving Way (PCU/Hr)	Min Flow when Giving Way (PCU/Hr)	Opposing Lane	Opp. Lane Coeff.	Opp. Mvmnts.	Right Turn Storage (PCU)	Non-Blocking Storage (PCU)	RTF	Right Turn Move up (s)	Max Turns in Intergreen (PCU)
J1:1/1 (Newgate Ln S/B)	J1:10/1 (Left)	1189	0	J1:5/1	0.58	All	-	-	-	-	-
J1:1/2 (Newgate Ln S/B)	J1:6/1 (Ahead)	1189	0	J1:5/1	0.58	All	-	-	-	-	-
J1:1/3 (Newgate Ln S/B)	J1:6/2 (Ahead)	1189	0	J1:5/1	0.58	All	-	-	-	-	-
J1:2/1 (Speedfields Pk)	J1:7/1 (Ahead)	1856	0	J1:6/1	0.72	All	-	-	-	-	-
				J1:6/2	0.72	All					
	J1:11/1 (Left)	1856	0	J1:6/1	0.72	All					
				J1:6/2	0.72	All					
	J1:11/2 (Left)	1856	0	J1:6/1	0.72	All					
				J1:6/2	0.72	All					
J1:3/2 (Newgate Lane N/B)	J1:8/2 (Ahead)	1278	0	J1:7/1	0.55	All	-	-	-	-	-
		J1:8/3 (Ahead)	1278	0	J1:7/1	0.55					
J1:4/1 (HMS C'wood LT G-way)	J1:8/1 (Ahead)	715	0	J1:3/1	0.22	All	-	-	-	-	-

Junction: J2: Collingwood T-junction

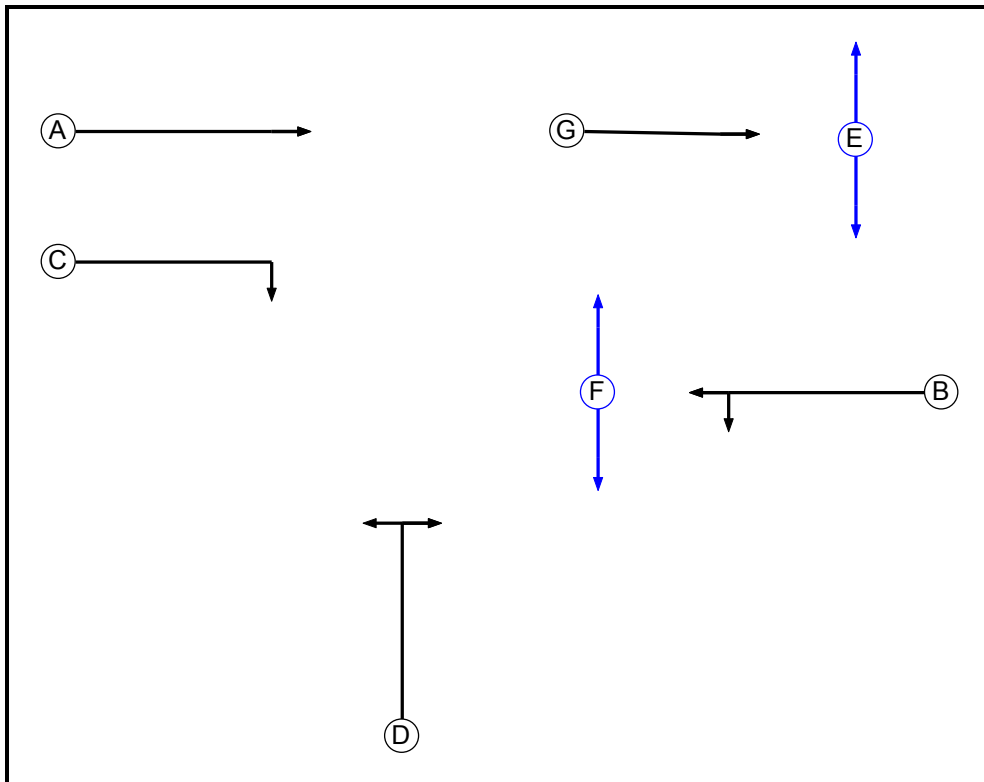
There are no Opposed Lanes in this Junction

Lane Connector Input Data

Junction: J1: Speedfields Rbt				
Org Lane	Dest Lane	Junction	Mean Cruise Time	Platoon Dispersion
J1:1/1	J1:10/1	Internal	10	35
J1:1/2	J1:6/1	Internal	2	35
J1:1/3	J1:6/2	Internal	2	35
J1:2/1	J1:7/1	Internal	2	35
J1:2/1	J1:11/1	Internal	2	35
J1:2/1	J1:11/2	Internal	2	35
J1:3/1	J1:8/1	Internal	2	35
J1:3/2	J1:8/2	Internal	2	35
J1:3/2	J1:8/3	Internal	2	35
J1:4/1	J1:8/1	Internal	2	35
J1:5/1	J1:6/1	Internal	2	35
J1:5/1	J1:6/2	Internal	2	35
J1:5/1	J1:10/1	Internal	10	35
J1:6/1	J1:11/1	Internal	2	35
J1:6/2	J1:7/1	Internal	2	35
J1:6/2	J1:11/2	Internal	2	35
J1:7/1	J1:8/2	Internal	2	35
J1:8/1	J1:9/1	Internal	2	35
J1:8/2	J1:9/1	Internal	2	35
J1:8/3	J1:5/1	Internal	2	35
J1:11/1	J2:1/1	Leaving	13	35
J1:11/2	J2:1/2	Leaving	13	35
J2:5/1	J1:3/1	Entering	13	35
J2:5/2	J1:3/2	Entering	13	35
J2:7/1	J1:4/1	Entering	1	35

Junction: J2: Collingwood T-junction				
Org Lane	Dest Lane	Junction	Mean Cruise Time	Platoon Dispersion
J1:11/1	J2:1/1	Entering	13	35
J1:11/2	J2:1/2	Entering	13	35
J2:1/1	J2:4/1	Internal	5	35
J2:1/2	J2:4/2	Internal	5	35
J2:1/3	J2:6/1	Internal	10	35
J2:2/1	J2:6/1	Internal	10	35
J2:2/2	J2:5/1	Internal	2	35
J2:2/3	J2:5/2	Internal	2	35
J2:3/1	J2:4/1	Internal	6	35
J2:3/1	J2:4/2	Internal	6	35
J2:3/1	J2:5/2	Internal	2	35
J2:4/1	J2:8/1	Internal	10	35
J2:4/2	J2:8/1	Internal	10	35
J2:5/1	J1:3/1	Leaving	13	35
J2:5/2	J1:3/2	Leaving	13	35
J2:7/1	J1:4/1	Leaving	1	35
J2:7/1	J2:3/1	Internal	1	35

Phase Diagram



Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		7	7
B	Traffic		7	7
C	Traffic		7	7
D	Traffic		7	7
E	Pedestrian		5	5
F	Pedestrian		5	5
G	Traffic		7	2

Phase Intergreens Matrix

		Starting Phase						
		A	B	C	D	E	F	G
Terminating Phase	A	-	-	6	5	-	-	-
	B	-	-	6	6	-	5	-
	C	-	6	-	6	-	-	-
	D	7	7	7	-	5	-	-
	E	6	-	-	6	-	-	6
	F	-	6	-	-	-	-	-
	G	-	-	-	-	5	-	-

Phases in Stage

Stage No.	Phases in Stage
1	A B G
2	A C F G
3	C E F
4	D F G

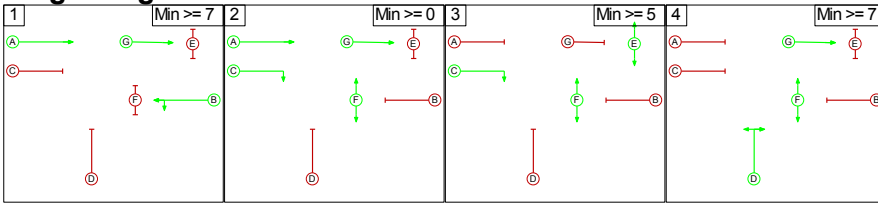
Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
1	3	G	Losing	5	5
2	3	G	Losing	5	5
4	3	G	Losing	5	5

Prohibited Stage Change

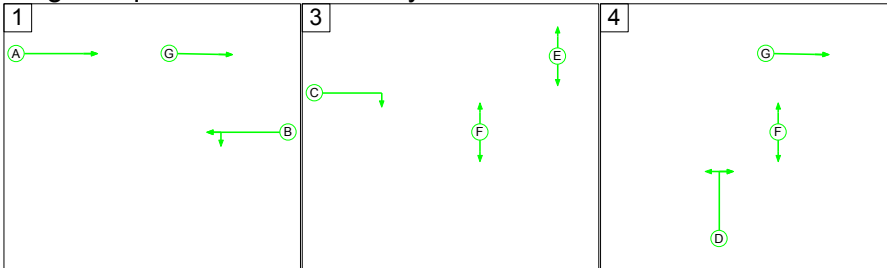
		To Stage			
		1	2	3	4
From Stage	1	-	6	10	6
	2	6	-	10	6
	3	6	6	-	6
	4	7	7	10	-

Stage Diagram



Stage Sequence Summary

Stage Sequence: Peds Each Cycle



Network Control Plans

Plan	Controller	Sequence Name	Sequence
Plan 1	C1 - Collingwood T-Junction	Peds Each Cycle	1,3,4

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2019 DS1 AM Base'	08:00	09:00	01:00	
2: '2019 DS1 PM Base'	17:00	18:00	01:00	
3: '2024 DS1 AM Base'	08:00	09:00	01:00	
4: '2024 DS1 PM Base'	17:00	18:00	01:00	
5: '2024 DS1 AM Base+Dev'	08:00	09:00	01:00	
6: '2024 DS1 PM Base+Dev'	17:00	18:00	01:00	
7: '2019 DS2 AM Base'	08:00	09:00	01:00	
8: '2019 DS2 PM Base'	17:00	18:00	01:00	
9: '2024 DS2 AM Base'	08:00	09:00	01:00	
10: '2024 DS2 PM Base'	17:00	18:00	01:00	
11: '2024 DS2 AM Base + Dev'	08:00	09:00	01:00	
12: '2024 DS2 PM Base + Dev'	17:00	18:00	01:00	

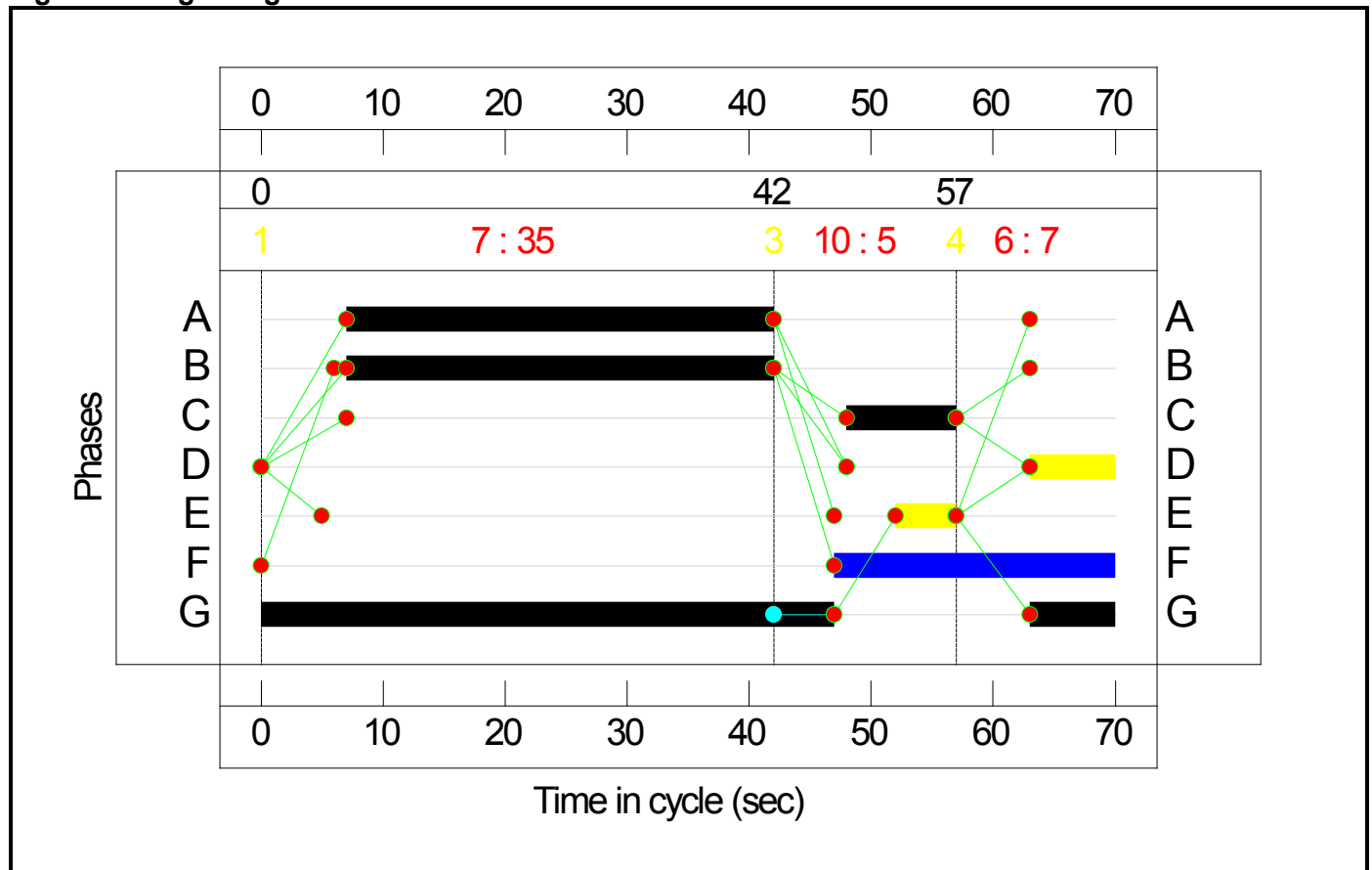
Scenario 1: '2019 DS1 AM Base' (FG1: '2019 DS1 AM Base', Plan 1: 'Plan 1')

Traffic Flows, Actual

Actual Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	1248	210	144	1602
	B	769	0	242	184	1195
	C	42	167	0	10	219
	D	16	59	6	0	81
	Tot.	827	1474	458	338	3097

Signal Timings Diagram



Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Mean Max Queue (pcu)
J1:1/2+J1:1/1	Newgate Ln S/B Ahead Left	O	-		-	-	-	726	2029:1786	1595	45.5%	1452	0	0	0.4	2.1	0.0	0.4
J1:1/3	Newgate Ln S/B Ahead	O	-		-	-	-	469	2029	1063	44.1%	469	0	0	0.4	3.0	0.0	0.4
J1:2/1	Speedfields Pk Ahead Left	O	-		-	-	-	219	1894	1170	18.7%	219	0	0	0.1	1.9	0.0	0.1
J1:3/1	Newgate Lane N/B Ahead	U	-		-	-	-	760	1965	1965	38.7%	-	-	-	0.3	1.5	0.0	0.3
J1:3/2	Newgate Lane N/B Ahead	O	-		-	-	-	704	2029	1186	59.4%	704	0	0	1.6	8.2	12.6	13.3
J1:4/1	HMS C'wood LT G-way Ahead	O	-		-	-	-	59	1747	548	10.8%	59	0	0	0.1	3.7	0.0	0.1
J1:5/1	Right Ahead	U	-		-	-	-	216	2077	2077	10.4%	-	-	-	0.1	1.0	0.0	0.1
J1:6/1	Ahead	U	-		-	-	-	484	2077	2077	23.3%	-	-	-	0.2	1.1	0.0	0.2
J1:6/2	Right Ahead	U	-		-	-	-	469	2077	2077	22.6%	-	-	-	0.1	1.1	0.0	0.1
J1:7/1	Right	U	-		-	-	-	167	2005	2005	8.3%	-	-	-	0.0	1.0	0.0	0.0
J1:8/1	Ahead	U	-		-	-	-	819	1965	1965	41.7%	-	-	-	0.4	1.6	0.0	0.4
J1:8/2	Ahead	U	-		-	-	-	655	2077	2077	31.5%	-	-	-	0.2	1.3	0.0	0.2
J1:8/3	Right	U	-		-	-	-	216	2005	2005	10.8%	-	-	-	0.1	1.0	0.0	0.1
J1:9/1	Newgate Ln N/B Exit	U	-		-	-	-	1474	4070	4070	36.2%	-	-	-	0.3	0.7	0.0	0.1
J1:11/1	Newgate Ln S/B Exit Ahead	U	-		-	-	-	488	1965	1965	24.8%	-	-	-	0.2	1.2	0.0	0.2
J1:11/2	Newgate Ln S/B Exit Ahead	U	-		-	-	-	517	2105	2105	24.6%	-	-	-	0.2	1.1	0.0	0.2

J2:1/1	Newgate Ln S/B Ahead	U	A		1	35	-	488	1915	985	49.6%	-	-	-	2.0	14.7	6.1	6.6
J2:1/2+J2:1/3	Newgate Ln S/B Ahead Right	U	A C		1	35:9	-	517	2055:1827	906	57.0%	-	-	-	3.1	21.5	3.6	4.3
J2:2/2+J2:2/1	Newgate Ln N/B Ahead Left	U	B		1	35	-	904	2055:1702	1081	83.7%	-	-	-	5.9	23.5	13.6	16.1
J2:2/3	Newgate Ln N/B Ahead	U	B		1	35	-	698	2055	1057	66.0%	-	-	-	3.4	17.5	9.9	10.9
J2:3/1	HMS Collingwood Right Left	U	D		1	7	-	22	1809	207	10.6%	-	-	-	0.2	37.6	0.4	0.4
J2:4/1	Newgate Ln S/B Exit Merge Ahead	U	G		1	54	-	489	1965	1544	31.7%	-	-	-	0.3	1.9	0.1	0.3
J2:4/2	Newgate Ln S/B Exit Merge Ahead	U	G		1	54	-	338	2105	1654	20.4%	-	-	-	0.1	1.5	0.1	0.2
J2:5/1	Newgate Ln N/B Exit Ahead	U	-		-	-	-	760	1915	1915	39.7%	-	-	-	0.3	1.6	0.2	0.5
J2:5/2	Newgate Ln N/B Exit Ahead	U	-		-	-	-	704	2055	2055	34.3%	-	-	-	0.3	1.3	0.0	0.3
J2:P1	Newgate Ln S/B	-	E		1	5	-	0	-	0	0.0%	-	-	-	-	-	-	-
J2:P2	Newgate Ln N/B	-	F		1	23	-	0	-	0	0.0%	-	-	-	-	-	-	-

C1 - Collingwood T-Junction

PRC for Signalled Lanes (%): 7.6
 PRC Over All Lanes (%): 7.6

Total Delay for Signalled Lanes (pcuHr): 15.00
 Total Delay Over All Lanes(pcuHr): 20.17

Cycle Time (s): 70

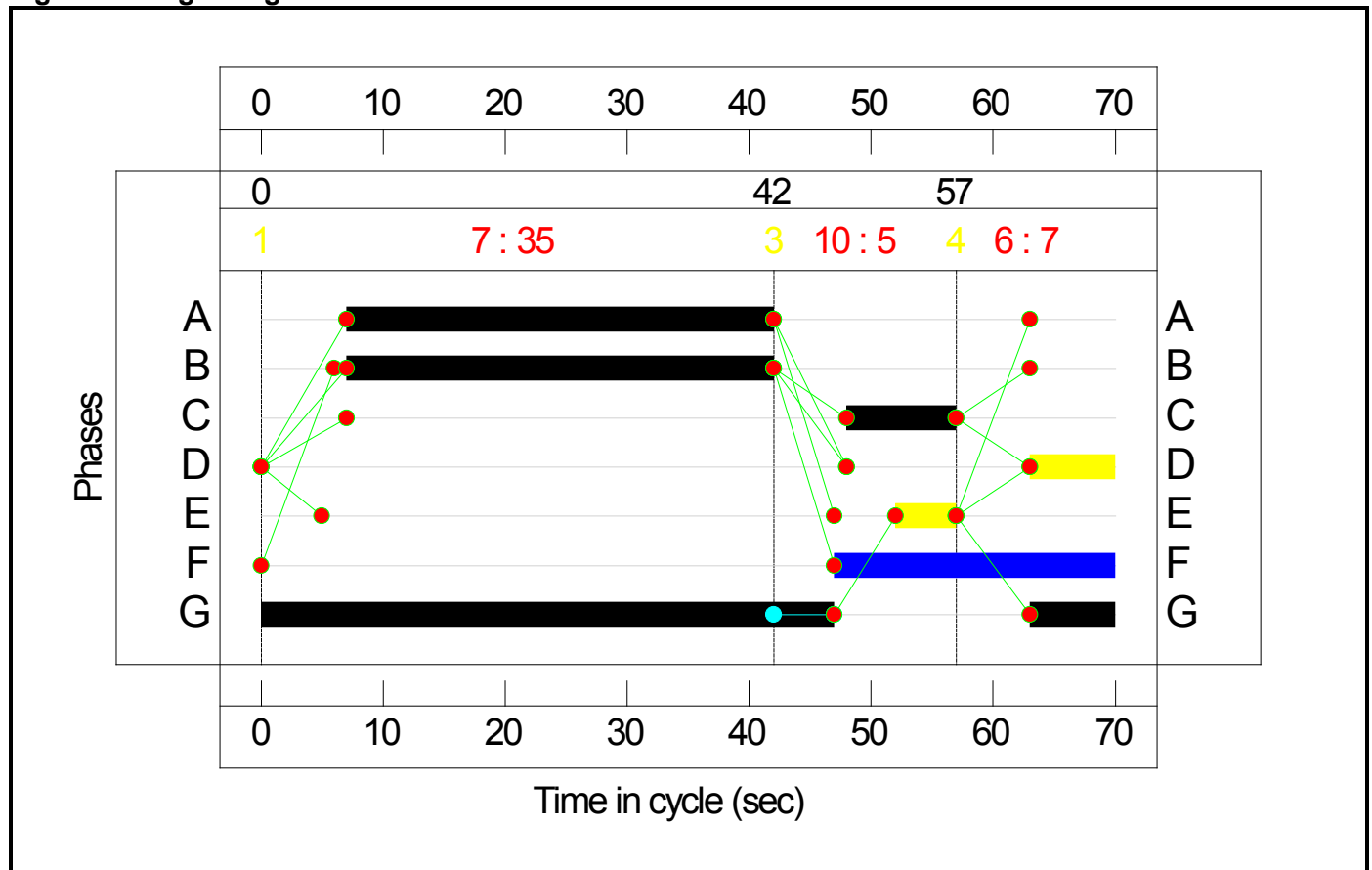
Scenario 2: '2019 DS1 PM Base' (FG2: '2019 DS1 PM Base', Plan 1: 'Plan 1')

Traffic Flows, Actual

Actual Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	753	151	10	914
	B	1144	0	254	69	1467
	C	116	269	0	7	392
	D	69	124	23	0	216
	Tot.	1329	1146	428	86	2989

Signal Timings Diagram



Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Mean Max Queue (pcu)
J1:1/2+J1:1/1	Newgate Ln S/B Ahead Left	O	-		-	-	-	852	2029:1786	1550	55.0%	1704	0	0	0.6	2.6	0.0	0.6
J1:1/3	Newgate Ln S/B Ahead	O	-		-	-	-	615	2029	1088	56.5%	615	0	0	0.6	3.8	0.0	0.6
J1:2/1	Speedfields Pk Ahead Left	O	-		-	-	-	392	1894	982	39.9%	392	0	0	0.3	3.0	0.0	0.3
J1:3/1	Newgate Lane N/B Ahead	U	-		-	-	-	511	1965	1965	26.0%	-	-	-	0.2	1.2	0.0	0.2
J1:3/2	Newgate Lane N/B Ahead	O	-		-	-	-	416	2029	1130	36.8%	416	0	0	0.4	3.2	4.5	4.8
J1:4/1	HMS C'wood LT G-way Ahead	O	-		-	-	-	124	1747	603	20.6%	124	0	0	0.1	3.8	0.0	0.1
J1:5/1	Right Ahead	U	-		-	-	-	174	2077	2077	8.4%	-	-	-	0.0	0.9	0.0	0.0
J1:6/1	Ahead	U	-		-	-	-	598	2077	2077	28.8%	-	-	-	0.2	1.2	0.0	0.2
J1:6/2	Right Ahead	U	-		-	-	-	615	2077	2077	29.6%	-	-	-	0.2	1.2	0.0	0.2
J1:7/1	Right	U	-		-	-	-	269	2005	2005	13.4%	-	-	-	0.1	1.0	0.0	0.1
J1:8/1	Ahead	U	-		-	-	-	635	1965	1965	32.3%	-	-	-	0.2	1.4	0.0	0.2
J1:8/2	Ahead	U	-		-	-	-	511	2077	2077	24.6%	-	-	-	0.2	1.1	0.0	0.2
J1:8/3	Right	U	-		-	-	-	174	2005	2005	8.7%	-	-	-	0.0	1.0	0.0	0.0
J1:9/1	Newgate Ln N/B Exit	U	-		-	-	-	1146	4070	4070	28.2%	-	-	-	0.2	0.6	0.0	0.1
J1:11/1	Newgate Ln S/B Exit Ahead	U	-		-	-	-	615	1965	1965	31.3%	-	-	-	0.2	1.3	0.0	0.2
J1:11/2	Newgate Ln S/B Exit Ahead	U	-		-	-	-	721	2105	2105	34.3%	-	-	-	0.3	1.3	0.0	0.3

J2:1/1	Newgate Ln S/B Ahead	U	A		1	35	-	615	1915	985	62.4%	-	-	-	2.9	17.0	8.5	9.4
J2:1/2+J2:1/3	Newgate Ln S/B Ahead Right	U	A C		1	35:9	-	721	2055:1827	1173	61.5%	-	-	-	3.5	17.6	8.8	9.6
J2:2/2+J2:2/1	Newgate Ln N/B Ahead Left	U	B		1	35	-	521	2055:1702	1056	49.3%	-	-	-	2.1	14.3	6.4	6.9
J2:2/3	Newgate Ln N/B Ahead	U	B		1	35	-	393	2055	1057	37.2%	-	-	-	1.4	12.9	4.6	4.9
J2:3/1	HMS Collingwood Right Left	U	D		1	7	-	92	1811	207	44.5%	-	-	-	1.1	44.5	1.7	2.1
J2:4/1	Newgate Ln S/B Exit Merge Ahead	U	G		1	54	-	626	1965	1544	40.5%	-	-	-	0.4	2.1	0.1	0.5
J2:4/2	Newgate Ln S/B Exit Merge Ahead	U	G		1	54	-	703	2105	1654	42.5%	-	-	-	0.4	2.0	0.1	0.5
J2:5/1	Newgate Ln N/B Exit Ahead	U	-		-	-	-	511	1915	1915	26.7%	-	-	-	0.2	1.4	0.2	0.4
J2:5/2	Newgate Ln N/B Exit Ahead	U	-		-	-	-	416	2055	2055	20.2%	-	-	-	0.1	1.1	0.0	0.1
J2:P1	Newgate Ln S/B	-	E		1	5	-	0	-	0	0.0%	-	-	-	-	-	-	-
J2:P2	Newgate Ln N/B	-	F		1	23	-	0	-	0	0.0%	-	-	-	-	-	-	-

C1 - Collingwood T-Junction

PRC for Signalled Lanes (%): 44.1
 PRC Over All Lanes (%): 44.1

Total Delay for Signalled Lanes (pcuHr): 11.81
 Total Delay Over All Lanes(pcuHr): 16.07

Cycle Time (s): 70

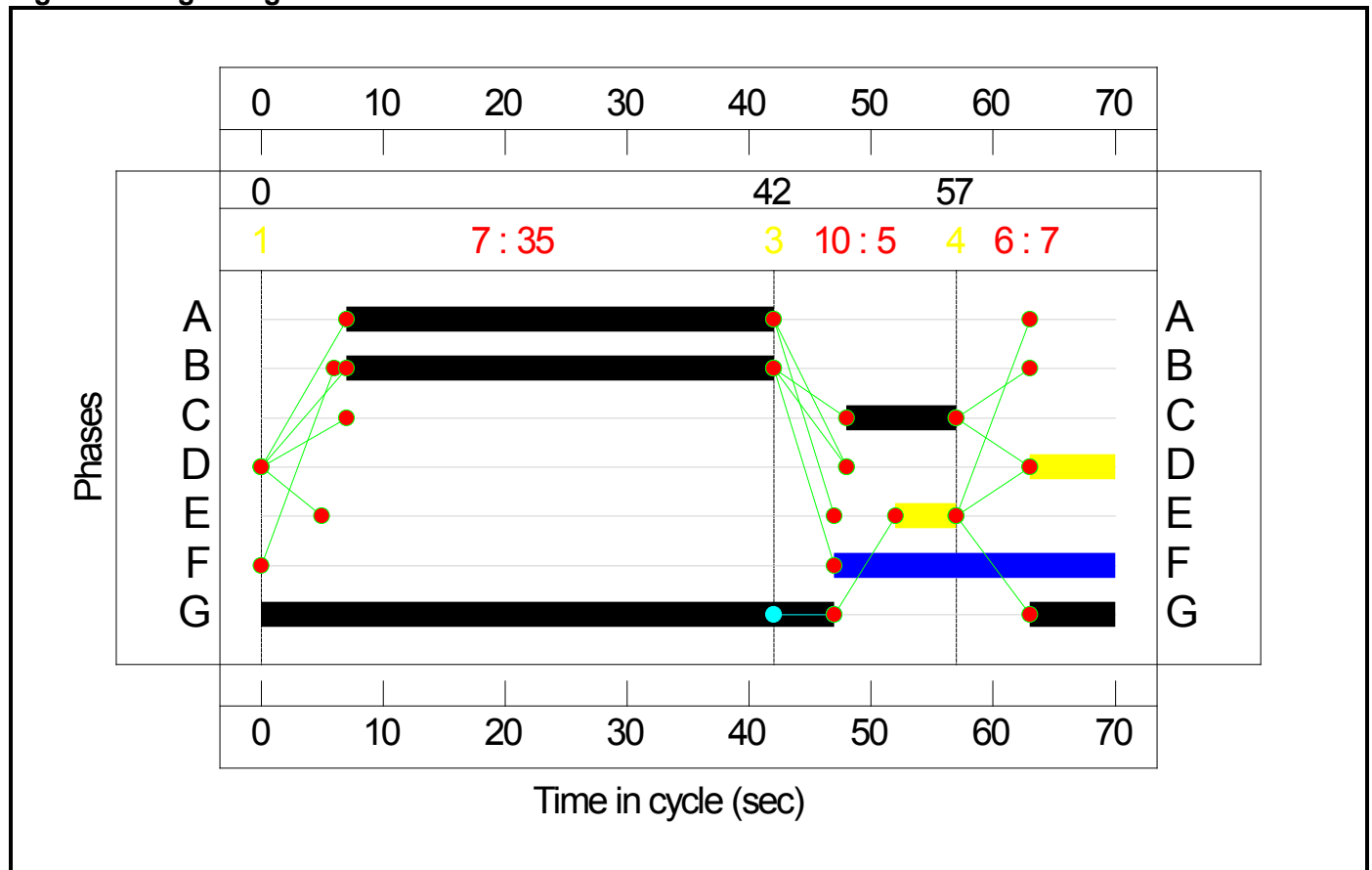
Scenario 3: '2024 DS1 AM Base' (FG3: '2024 DS1 AM Base', Plan 1: 'Plan 1')

Traffic Flows, Actual

Actual Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	1317	222	152	1691
	B	939	0	250	190	1379
	C	51	173	0	11	235
	D	20	61	6	0	87
	Tot.	1010	1551	478	353	3392

Signal Timings Diagram



Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Mean Max Queue (pcu)
J1:1/2+J1:1/1	Newgate Ln S/B Ahead Left	O	-		-	-	-	773	2029:1786	1561	49.5%	1546	0	0	0.5	2.3	0.0	0.5
J1:1/3	Newgate Ln S/B Ahead	O	-		-	-	-	606	2029	1056	57.4%	606	0	0	0.7	4.0	0.0	0.7
J1:2/1	Speedfields Pk Ahead Left	O	-		-	-	-	235	1894	1043	22.5%	235	0	0	0.1	2.2	0.0	0.1
J1:3/1	Newgate Lane N/B Ahead	U	-		-	-	-	789	1965	1965	40.2%	-	-	-	0.3	1.5	0.0	0.3
J1:3/2	Newgate Lane N/B Ahead	O	-		-	-	-	756	2029	1183	63.9%	756	0	0	2.0	9.7	13.7	14.6
J1:4/1	HMS C'wood LT G-way Ahead	O	-		-	-	-	61	1747	541	11.3%	61	0	0	0.1	3.7	0.0	0.1
J1:5/1	Right Ahead	U	-		-	-	-	228	2077	2077	11.0%	-	-	-	0.1	1.0	0.0	0.1
J1:6/1	Ahead	U	-		-	-	-	523	2077	2077	25.2%	-	-	-	0.2	1.2	0.0	0.2
J1:6/2	Right Ahead	U	-		-	-	-	606	2077	2077	29.2%	-	-	-	0.2	1.2	0.0	0.2
J1:7/1	Right	U	-		-	-	-	173	2005	2005	8.6%	-	-	-	0.0	1.0	0.0	0.0
J1:8/1	Ahead	U	-		-	-	-	850	1965	1965	43.3%	-	-	-	0.4	1.6	0.0	0.4
J1:8/2	Ahead	U	-		-	-	-	701	2077	2077	33.8%	-	-	-	0.3	1.3	0.0	0.3
J1:8/3	Right	U	-		-	-	-	228	2005	2005	11.4%	-	-	-	0.1	1.0	0.0	0.1
J1:9/1	Newgate Ln N/B Exit	U	-		-	-	-	1551	4070	4070	38.1%	-	-	-	0.3	0.7	0.0	0.2
J1:11/1	Newgate Ln S/B Exit Ahead	U	-		-	-	-	524	1965	1965	26.7%	-	-	-	0.2	1.2	0.0	0.2
J1:11/2	Newgate Ln S/B Exit Ahead	U	-		-	-	-	667	2105	2105	31.7%	-	-	-	0.2	1.3	0.0	0.2

J2:1/1	Newgate Ln S/B Ahead	U	A		1	35	-	524	1915	985	53.2%	-	-	-	2.2	15.3	6.7	7.3
J2:1/2+J2:1/3	Newgate Ln S/B Ahead Right	U	A C		1	35:9	-	667	2055:1827	1254	53.2%	-	-	-	3.6	19.2	5.6	6.1
J2:2/2+J2:2/1	Newgate Ln N/B Ahead Left	U	B		1	35	-	941	2055:1702	1081	87.0%	-	-	-	6.9	26.3	14.7	17.9
J2:2/3	Newgate Ln N/B Ahead	U	B		1	35	-	750	2055	1057	71.0%	-	-	-	3.9	18.8	11.0	12.3
J2:3/1	HMS Collingwood Right Left	U	D		1	7	-	26	1813	207	12.5%	-	-	-	0.3	37.8	0.4	0.5
J2:4/1	Newgate Ln S/B Exit Merge Ahead	U	G		1	54	-	525	1965	1544	34.0%	-	-	-	0.3	1.9	0.1	0.4
J2:4/2	Newgate Ln S/B Exit Merge Ahead	U	G		1	54	-	485	2105	1654	29.3%	-	-	-	0.2	1.7	0.1	0.3
J2:5/1	Newgate Ln N/B Exit Ahead	U	-		-	-	-	789	1915	1915	41.2%	-	-	-	0.4	1.7	0.2	0.6
J2:5/2	Newgate Ln N/B Exit Ahead	U	-		-	-	-	756	2055	2055	36.8%	-	-	-	0.3	1.4	0.0	0.3
J2:P1	Newgate Ln S/B	-	E		1	5	-	0	-	0	0.0%	-	-	-	-	-	-	-
J2:P2	Newgate Ln N/B	-	F		1	23	-	0	-	0	0.0%	-	-	-	-	-	-	-

C1 - Collingwood T-Junction

PRC for Signalled Lanes (%): 3.4
 PRC Over All Lanes (%): 3.4

Total Delay for Signalled Lanes (pcuHr): 17.37
 Total Delay Over All Lanes(pcuHr): 23.68

Cycle Time (s): 70

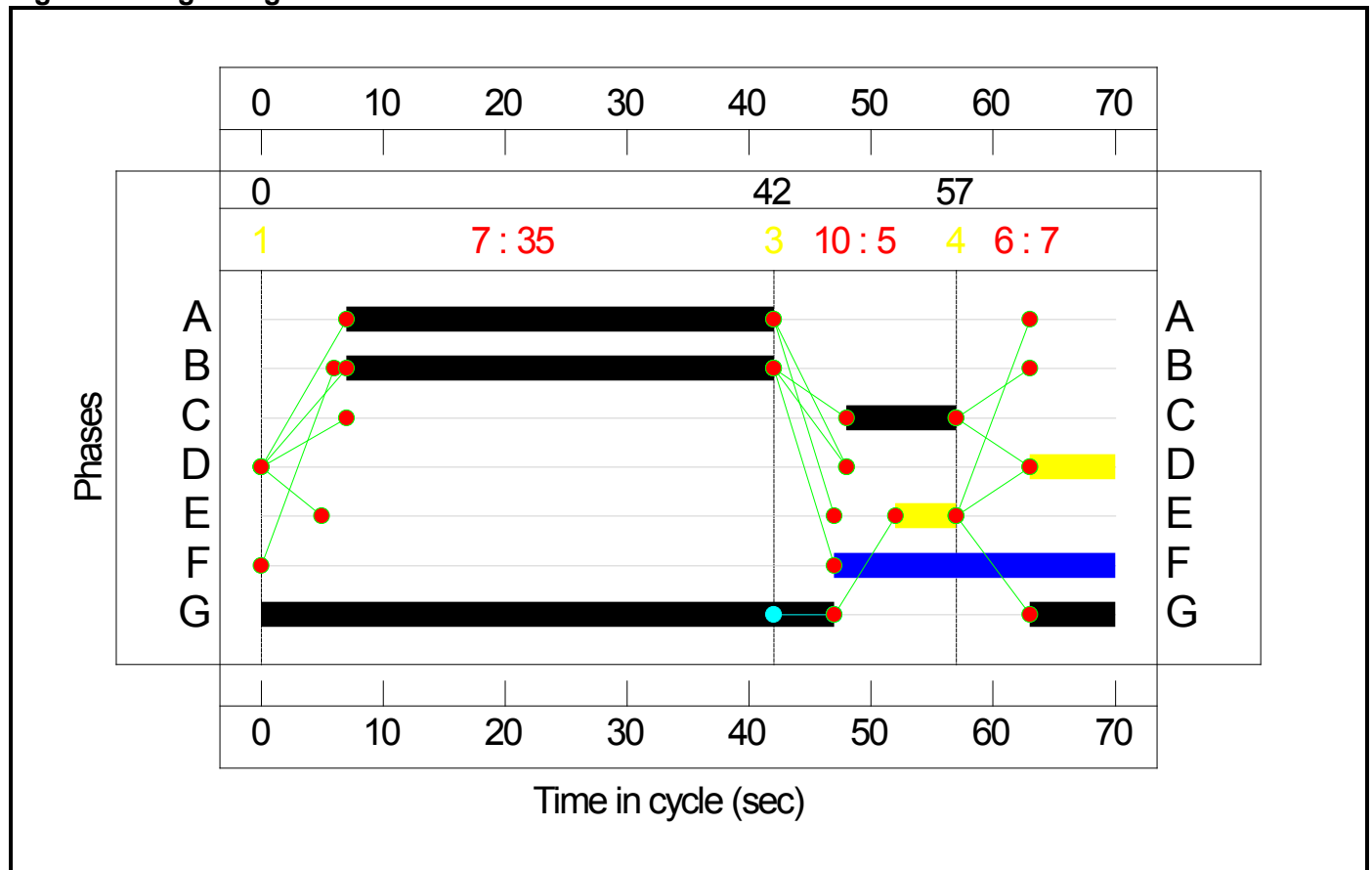
Scenario 4: '2024 DS1 PM Base' (FG4: '2024 DS1 PM Base', Plan 1: 'Plan 1')

Traffic Flows, Actual

Actual Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	808	162	11	981
	B	1319	0	263	71	1653
	C	134	278	0	7	419
	D	80	128	24	0	232
	Tot.	1533	1214	449	89	3285

Signal Timings Diagram



Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Mean Max Queue (pcu)
J1:1/2+J1:1/1	Newgate Ln S/B Ahead Left	O	-		-	-	-	953	2029:1786	1493	63.8%	1906	0	0	0.9	3.3	0.0	0.9
J1:1/3	Newgate Ln S/B Ahead	O	-		-	-	-	700	2029	1081	64.8%	700	0	0	0.9	4.7	0.0	0.9
J1:2/1	Speedfields Pk Ahead Left	O	-		-	-	-	419	1894	855	49.0%	419	0	0	0.5	4.1	0.0	0.5
J1:3/1	Newgate Lane N/B Ahead	U	-		-	-	-	550	1965	1965	28.0%	-	-	-	0.2	1.3	0.0	0.2
J1:3/2	Newgate Lane N/B Ahead	O	-		-	-	-	444	2029	1125	39.5%	444	0	0	0.4	3.5	5.1	5.4
J1:4/1	HMS C'wood LT G-way Ahead	O	-		-	-	-	128	1747	594	21.6%	128	0	0	0.1	3.9	0.0	0.1
J1:5/1	Right Ahead	U	-		-	-	-	186	2077	2077	9.0%	-	-	-	0.0	1.0	0.0	0.0
J1:6/1	Ahead	U	-		-	-	-	690	2077	2077	33.2%	-	-	-	0.2	1.3	0.0	0.2
J1:6/2	Right Ahead	U	-		-	-	-	700	2077	2077	33.7%	-	-	-	0.3	1.3	0.0	0.3
J1:7/1	Right	U	-		-	-	-	278	2005	2005	13.9%	-	-	-	0.1	1.0	0.0	0.1
J1:8/1	Ahead	U	-		-	-	-	678	1965	1965	34.5%	-	-	-	0.3	1.4	0.0	0.3
J1:8/2	Ahead	U	-		-	-	-	536	2077	2077	25.8%	-	-	-	0.2	1.2	0.0	0.2
J1:8/3	Right	U	-		-	-	-	186	2005	2005	9.3%	-	-	-	0.1	1.0	0.0	0.1
J1:9/1	Newgate Ln N/B Exit	U	-		-	-	-	1214	4070	4070	29.8%	-	-	-	0.2	0.6	0.0	0.1
J1:11/1	Newgate Ln S/B Exit Ahead	U	-		-	-	-	706	1965	1965	35.9%	-	-	-	0.3	1.4	0.0	0.3
J1:11/2	Newgate Ln S/B Exit Ahead	U	-		-	-	-	825	2105	2105	39.2%	-	-	-	0.3	1.4	0.0	0.3

J2:1/1	Newgate Ln S/B Ahead	U	A		1	35	-	706	1915	985	71.7%	-	-	-	3.8	19.5	10.4	11.6
J2:1/2+J2:1/3	Newgate Ln S/B Ahead Right	U	A C		1	35:9	-	825	2055:1827	1162	71.0%	-	-	-	4.5	19.6	11.0	12.2
J2:2/2+J2:2/1	Newgate Ln N/B Ahead Left	U	B		1	35	-	561	2055:1702	1056	53.1%	-	-	-	2.3	14.9	7.1	7.6
J2:2/3	Newgate Ln N/B Ahead	U	B		1	35	-	420	2055	1057	39.7%	-	-	-	1.5	13.2	4.9	5.2
J2:3/1	HMS Collingwood Right Left	U	D		1	7	-	104	1813	207	50.2%	-	-	-	1.3	46.4	1.9	2.4
J2:4/1	Newgate Ln S/B Exit Merge Ahead	U	G		1	54	-	732	1965	1544	47.4%	-	-	-	0.5	2.4	0.2	0.6
J2:4/2	Newgate Ln S/B Exit Merge Ahead	U	G		1	54	-	801	2105	1654	48.4%	-	-	-	0.5	2.3	0.2	0.6
J2:5/1	Newgate Ln N/B Exit Ahead	U	-		-	-	-	550	1915	1915	28.7%	-	-	-	0.2	1.5	0.2	0.4
J2:5/2	Newgate Ln N/B Exit Ahead	U	-		-	-	-	444	2055	2055	21.6%	-	-	-	0.1	1.1	0.0	0.1
J2:P1	Newgate Ln S/B	-	E		1	5	-	0	-	0	0.0%	-	-	-	-	-	-	-
J2:P2	Newgate Ln N/B	-	F		1	23	-	0	-	0	0.0%	-	-	-	-	-	-	-

C1 - Collingwood T-Junction

PRC for Signalled Lanes (%): 25.5
 PRC Over All Lanes (%): 25.5

Total Delay for Signalled Lanes (pcuHr): 14.49
 Total Delay Over All Lanes(pcuHr): 19.83

Cycle Time (s): 70

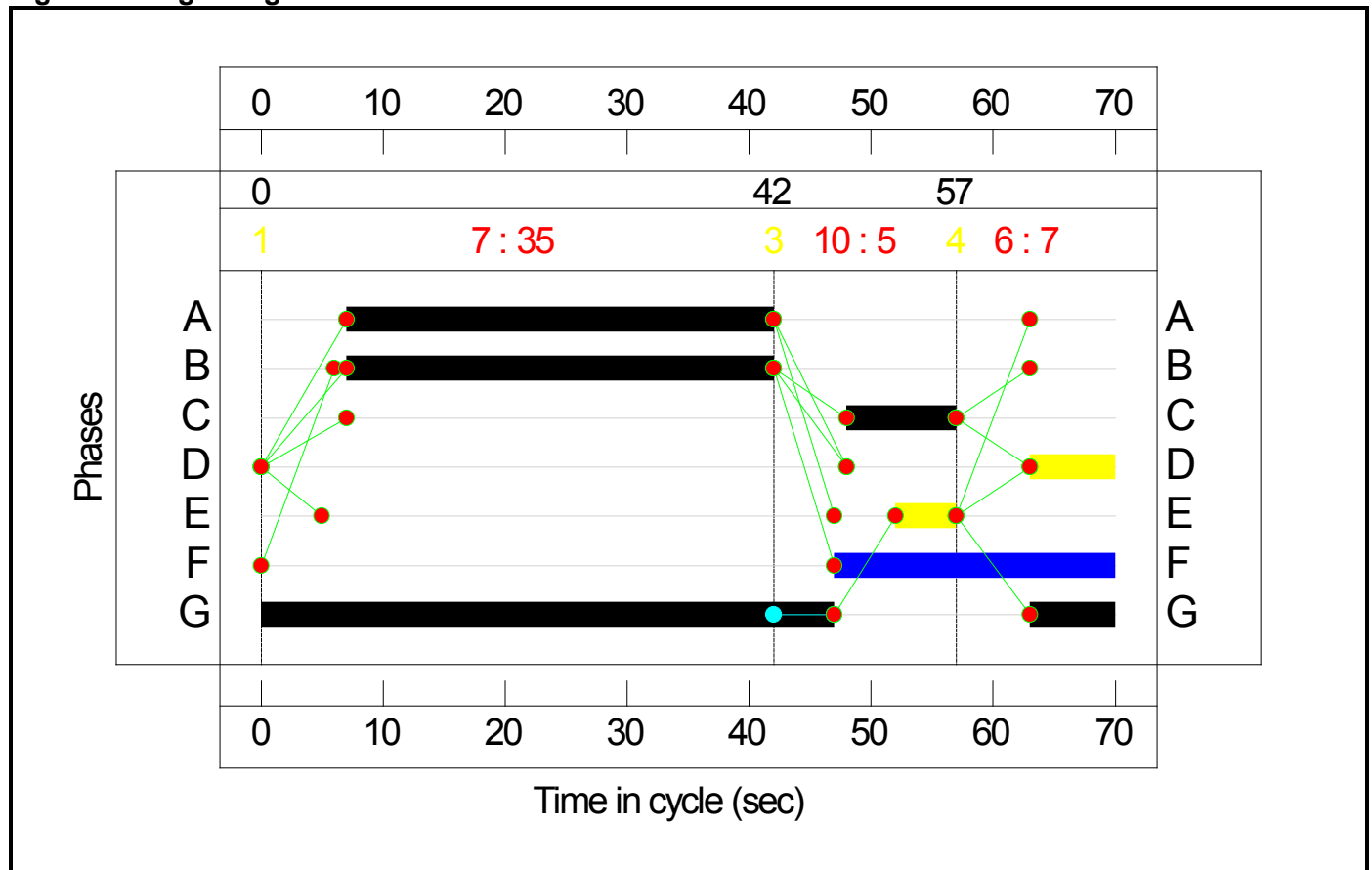
Scenario 5: '2024 DS1 AM Base + Development' (FG5: '2024 DS1 AM Base+Dev', Plan 1: 'Plan 1')

Traffic Flows, Actual

Actual Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	1334	225	154	1713
	B	957	0	250	190	1397
	C	52	173	0	11	236
	D	20	61	6	0	87
	Tot.	1029	1568	481	355	3433

Signal Timings Diagram



Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Mean Max Queue (pcu)
J1:1/2+J1:1/1	Newgate Ln S/B Ahead Left	O	-		-	-	-	783	2029:1786	1549	50.5%	1566	0	0	0.5	2.3	0.0	0.5
J1:1/3	Newgate Ln S/B Ahead	O	-		-	-	-	614	2029	1055	58.2%	614	0	0	0.7	4.1	0.0	0.7
J1:2/1	Speedfields Pk Ahead Left	O	-		-	-	-	236	1894	1030	22.9%	236	0	0	0.1	2.3	0.0	0.1
J1:3/1	Newgate Lane N/B Ahead	U	-		-	-	-	796	1965	1965	40.5%	-	-	-	0.3	1.5	0.0	0.3
J1:3/2	Newgate Lane N/B Ahead	O	-		-	-	-	769	2029	1183	65.0%	769	0	0	2.2	10.1	14.0	14.9
J1:4/1	HMS C'wood LT G-way Ahead	O	-		-	-	-	61	1747	540	11.3%	61	0	0	0.1	3.8	0.0	0.1
J1:5/1	Right Ahead	U	-		-	-	-	231	2077	2077	11.1%	-	-	-	0.1	1.0	0.0	0.1
J1:6/1	Ahead	U	-		-	-	-	533	2077	2077	25.7%	-	-	-	0.2	1.2	0.0	0.2
J1:6/2	Right Ahead	U	-		-	-	-	614	2077	2077	29.6%	-	-	-	0.2	1.2	0.0	0.2
J1:7/1	Right	U	-		-	-	-	173	2005	2005	8.6%	-	-	-	0.0	1.0	0.0	0.0
J1:8/1	Ahead	U	-		-	-	-	857	1965	1965	43.6%	-	-	-	0.4	1.6	0.0	0.4
J1:8/2	Ahead	U	-		-	-	-	711	2077	2077	34.2%	-	-	-	0.3	1.3	0.0	0.3
J1:8/3	Right	U	-		-	-	-	231	2005	2005	11.5%	-	-	-	0.1	1.0	0.0	0.1
J1:9/1	Newgate Ln N/B Exit	U	-		-	-	-	1568	4070	4070	38.5%	-	-	-	0.3	0.7	0.0	0.2
J1:11/1	Newgate Ln S/B Exit Ahead	U	-		-	-	-	534	1965	1965	27.2%	-	-	-	0.2	1.3	0.0	0.2
J1:11/2	Newgate Ln S/B Exit Ahead	U	-		-	-	-	676	2105	2105	32.1%	-	-	-	0.2	1.3	0.0	0.2

J2:1/1	Newgate Ln S/B Ahead	U	A		1	35	-	534	1915	985	54.2%	-	-	-	2.3	15.4	7.0	7.6
J2:1/2+J2:1/3	Newgate Ln S/B Ahead Right	U	A C		1	35:9	-	676	2055:1827	1255	53.9%	-	-	-	3.6	19.2	5.8	6.4
J2:2/2+J2:2/1	Newgate Ln N/B Ahead Left	U	B		1	35	-	950	2055:1702	1081	87.9%	-	-	-	7.2	27.2	15.1	18.5
J2:2/3	Newgate Ln N/B Ahead	U	B		1	35	-	763	2055	1057	72.2%	-	-	-	4.1	19.2	11.4	12.7
J2:3/1	HMS Collingwood Right Left	U	D		1	7	-	26	1813	207	12.5%	-	-	-	0.3	37.8	0.4	0.5
J2:4/1	Newgate Ln S/B Exit Merge Ahead	U	G		1	54	-	535	1965	1544	34.7%	-	-	-	0.3	1.9	0.1	0.4
J2:4/2	Newgate Ln S/B Exit Merge Ahead	U	G		1	54	-	494	2105	1654	29.9%	-	-	-	0.2	1.7	0.1	0.3
J2:5/1	Newgate Ln N/B Exit Ahead	U	-		-	-	-	796	1915	1915	41.6%	-	-	-	0.4	1.7	0.2	0.6
J2:5/2	Newgate Ln N/B Exit Ahead	U	-		-	-	-	769	2055	2055	37.4%	-	-	-	0.3	1.4	0.0	0.3
J2:P1	Newgate Ln S/B	-	E		1	5	-	0	-	0	0.0%	-	-	-	-	-	-	-
J2:P2	Newgate Ln N/B	-	F		1	23	-	0	-	0	0.0%	-	-	-	-	-	-	-

C1 - Collingwood T-Junction

PRC for Signalled Lanes (%): 2.4
 PRC Over All Lanes (%): 2.4

Total Delay for Signalled Lanes (pcuHr): 17.94
 Total Delay Over All Lanes(pcuHr): 24.47

Cycle Time (s): 70

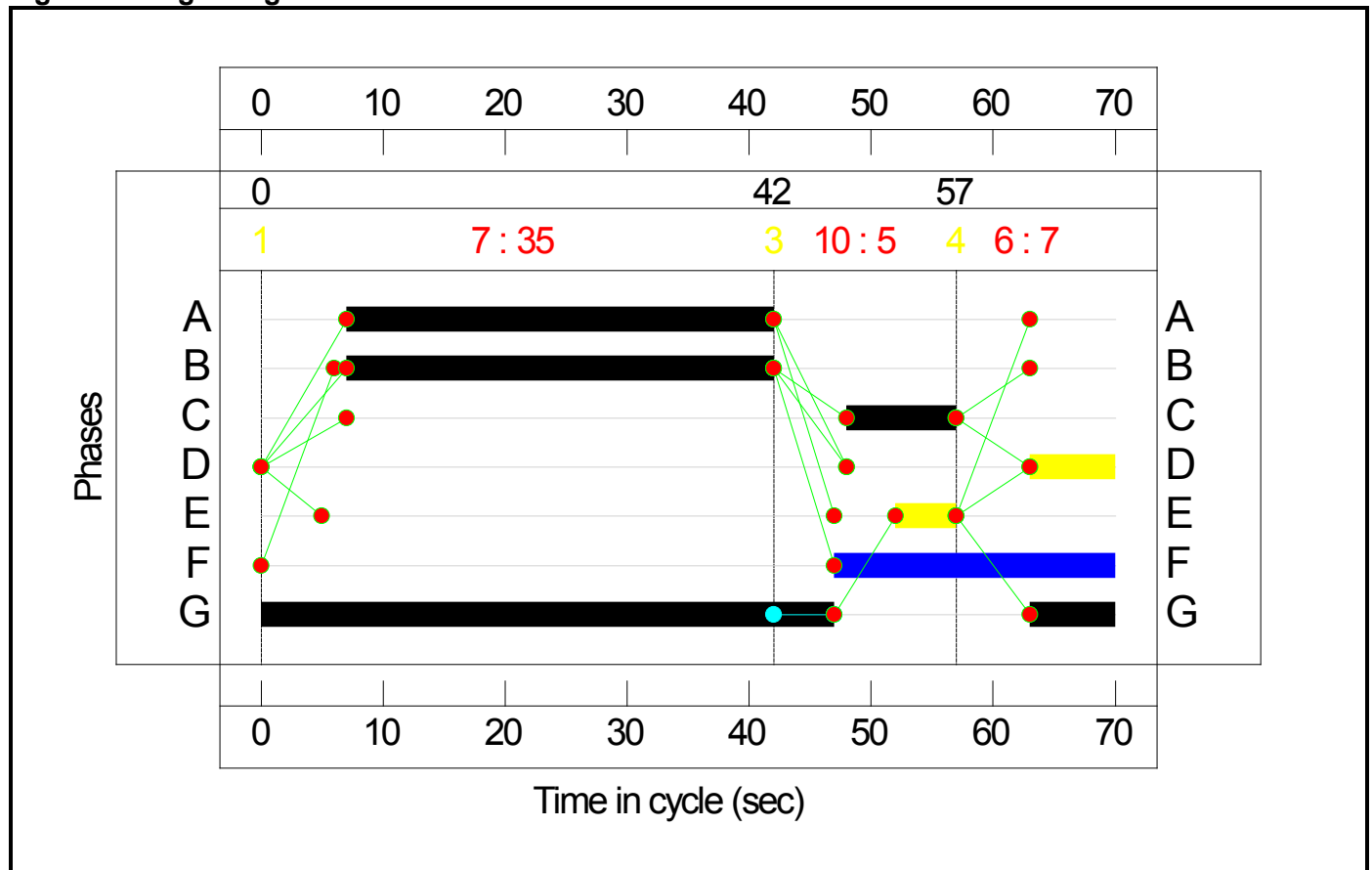
Scenario 6: '2024 DS1 PM Base + Development' (FG6: '2024 DS1 PM Base+Dev', Plan 1: 'Plan 1')

Traffic Flows, Actual

Actual Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	829	166	11	1006
	B	1342	0	263	71	1676
	C	136	278	0	7	421
	D	81	128	24	0	233
	Tot.	1559	1235	453	89	3336

Signal Timings Diagram



Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Mean Max Queue (pcu)
J1:1/2+J1:1/1	Newgate Ln S/B Ahead Left	O	-		-	-	-	973	2029:1786	1478	65.8%	1946	0	0	1.0	3.6	0.0	1.0
J1:1/3	Newgate Ln S/B Ahead	O	-		-	-	-	703	2029	1079	65.2%	703	0	0	0.9	4.8	0.0	0.9
J1:2/1	Speedfields Pk Ahead Left	O	-		-	-	-	421	1894	838	50.2%	421	0	0	0.5	4.3	0.0	0.5
J1:3/1	Newgate Lane N/B Ahead	U	-		-	-	-	564	1965	1965	28.7%	-	-	-	0.2	1.3	0.0	0.2
J1:3/2	Newgate Lane N/B Ahead	O	-		-	-	-	455	2029	1125	40.4%	455	0	0	0.5	3.7	5.4	5.7
J1:4/1	HMS C'wood LT G-way Ahead	O	-		-	-	-	128	1747	591	21.7%	128	0	0	0.1	3.9	0.0	0.1
J1:5/1	Right Ahead	U	-		-	-	-	190	2077	2077	9.1%	-	-	-	0.1	1.0	0.0	0.1
J1:6/1	Ahead	U	-		-	-	-	710	2077	2077	34.2%	-	-	-	0.3	1.3	0.0	0.3
J1:6/2	Right Ahead	U	-		-	-	-	703	2077	2077	33.8%	-	-	-	0.3	1.3	0.0	0.3
J1:7/1	Right	U	-		-	-	-	278	2005	2005	13.9%	-	-	-	0.1	1.0	0.0	0.1
J1:8/1	Ahead	U	-		-	-	-	692	1965	1965	35.2%	-	-	-	0.3	1.4	0.0	0.3
J1:8/2	Ahead	U	-		-	-	-	543	2077	2077	26.1%	-	-	-	0.2	1.2	0.0	0.2
J1:8/3	Right	U	-		-	-	-	190	2005	2005	9.5%	-	-	-	0.1	1.0	0.0	0.1
J1:9/1	Newgate Ln N/B Exit	U	-		-	-	-	1235	4070	4070	30.3%	-	-	-	0.2	0.6	0.0	0.1
J1:11/1	Newgate Ln S/B Exit Ahead	U	-		-	-	-	717	1965	1965	36.5%	-	-	-	0.3	1.4	0.0	0.3
J1:11/2	Newgate Ln S/B Exit Ahead	U	-		-	-	-	839	2105	2105	39.9%	-	-	-	0.3	1.4	0.0	0.3

J2:1/1	Newgate Ln S/B Ahead	U	A		1	35	-	717	1915	985	72.8%	-	-	-	4.0	19.9	10.8	12.1
J2:1/2+J2:1/3	Newgate Ln S/B Ahead Right	U	A C		1	35:9	-	839	2055:1827	1161	72.3%	-	-	-	4.6	19.9	11.2	12.5
J2:2/2+J2:2/1	Newgate Ln N/B Ahead Left	U	B		1	35	-	575	2055:1702	1056	54.4%	-	-	-	2.4	15.1	7.4	8.0
J2:2/3	Newgate Ln N/B Ahead	U	B		1	35	-	431	2055	1057	40.8%	-	-	-	1.6	13.3	5.1	5.5
J2:3/1	HMS Collingwood Right Left	U	D		1	7	-	105	1813	207	50.7%	-	-	-	1.4	46.6	1.9	2.4
J2:4/1	Newgate Ln S/B Exit Merge Ahead	U	G		1	54	-	745	1965	1544	48.3%	-	-	-	0.5	2.4	0.2	0.6
J2:4/2	Newgate Ln S/B Exit Merge Ahead	U	G		1	54	-	814	2105	1654	49.2%	-	-	-	0.5	2.3	0.2	0.7
J2:5/1	Newgate Ln N/B Exit Ahead	U	-		-	-	-	564	1915	1915	29.5%	-	-	-	0.2	1.5	0.3	0.5
J2:5/2	Newgate Ln N/B Exit Ahead	U	-		-	-	-	455	2055	2055	22.1%	-	-	-	0.1	1.1	0.0	0.1
J2:P1	Newgate Ln S/B	-	E		1	5	-	0	-	0	0.0%	-	-	-	-	-	-	-
J2:P2	Newgate Ln N/B	-	F		1	23	-	0	-	0	0.0%	-	-	-	-	-	-	-

C1 - Collingwood T-Junction

PRC for Signalled Lanes (%):

23.6

Total Delay for Signalled Lanes (pcuHr):

14.98

Cycle Time (s): 70

PRC Over All Lanes (%):

23.6

Total Delay Over All Lanes(pcuHr):

20.54

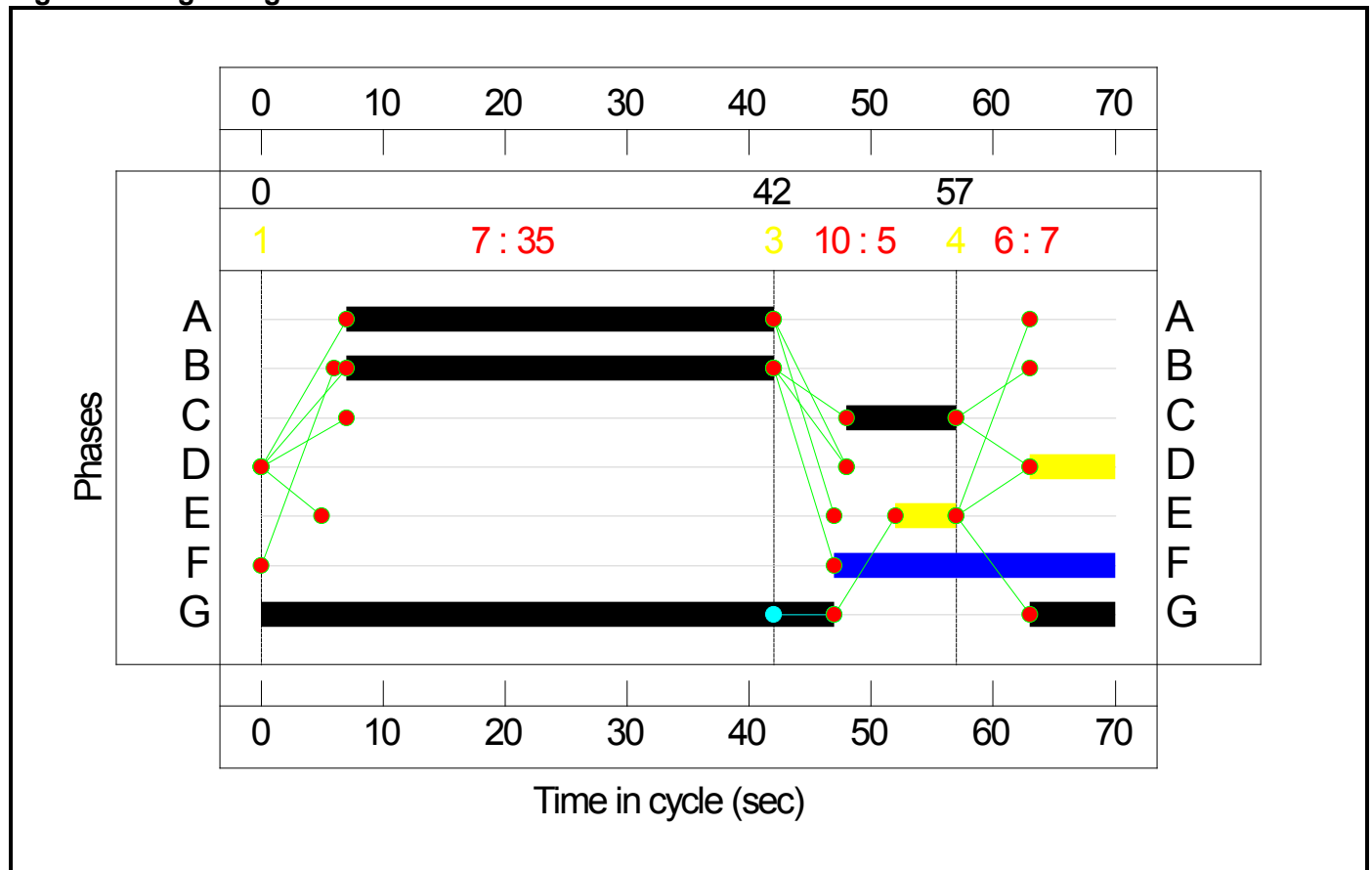
Scenario 7: '2019 DS2 AM Base' (FG7: '2019 DS2 AM Base', Plan 1: 'Plan 1')

Traffic Flows, Actual

Actual Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	1267	210	144	1621
	B	503	0	242	184	929
	C	42	167	0	10	219
	D	16	59	6	0	81
	Tot.	561	1493	458	338	2850

Signal Timings Diagram



Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Mean Max Queue (pcu)
J1:1/2+J1:1/1	Newgate Ln S/B Ahead Left	O	-		-	-	-	740	2029:1786	1580	46.8%	1480	0	0	0.4	2.1	0.0	0.4
J1:1/3	Newgate Ln S/B Ahead	O	-		-	-	-	189	2029	1063	17.8%	189	0	0	0.1	2.1	0.0	0.1
J1:2/1	Speedfields Pk Ahead Left	O	-		-	-	-	219	1894	1361	16.1%	219	0	0	0.1	1.6	0.0	0.1
J1:3/1	Newgate Lane N/B Ahead	U	-		-	-	-	768	1965	1965	39.1%	-	-	-	0.3	1.5	0.0	0.3
J1:3/2	Newgate Lane N/B Ahead	O	-		-	-	-	715	2029	1186	60.3%	715	0	0	1.7	8.5	12.8	13.6
J1:4/1	HMS C'wood LT G-way Ahead	O	-		-	-	-	59	1747	546	10.8%	59	0	0	0.1	3.7	0.0	0.1
J1:5/1	Right Ahead	U	-		-	-	-	216	2077	2077	10.4%	-	-	-	0.1	1.0	0.0	0.1
J1:6/1	Ahead	U	-		-	-	-	498	2077	2077	24.0%	-	-	-	0.2	1.1	0.0	0.2
J1:6/2	Right Ahead	U	-		-	-	-	189	2077	2077	9.1%	-	-	-	0.1	1.0	0.0	0.1
J1:7/1	Right	U	-		-	-	-	167	2005	2005	8.3%	-	-	-	0.0	1.0	0.0	0.0
J1:8/1	Ahead	U	-		-	-	-	827	1965	1965	42.1%	-	-	-	0.4	1.6	0.0	0.4
J1:8/2	Ahead	U	-		-	-	-	666	2077	2077	32.1%	-	-	-	0.2	1.3	0.0	0.2
J1:8/3	Right	U	-		-	-	-	216	2005	2005	10.8%	-	-	-	0.1	1.0	0.0	0.1
J1:9/1	Newgate Ln N/B Exit	U	-		-	-	-	1493	4070	4070	36.7%	-	-	-	0.3	0.7	0.0	0.1
J1:11/1	Newgate Ln S/B Exit Ahead	U	-		-	-	-	540	1965	1965	27.5%	-	-	-	0.2	1.3	0.0	0.2
J1:11/2	Newgate Ln S/B Exit Ahead	U	-		-	-	-	199	2105	2105	9.5%	-	-	-	0.1	0.9	0.0	0.1

J2:1/1	Newgate Ln S/B Ahead	U	A		1	35	-	540	1915	985	54.8%	-	-	-	2.3	15.5	7.1	7.7
J2:1/2+J2:1/3	Newgate Ln S/B Ahead Right	U	A C		1	35:9	-	199	2055:1827	268	74.3%	-	-	-	3.0	53.4	3.6	5.0
J2:2/2+J2:2/1	Newgate Ln N/B Ahead Left	U	B		1	35	-	912	2055:1702	1080	84.4%	-	-	-	6.1	24.1	14.0	16.6
J2:2/3	Newgate Ln N/B Ahead	U	B		1	35	-	709	2055	1057	67.1%	-	-	-	3.5	17.8	10.0	11.1
J2:3/1	HMS Collingwood Right Left	U	D		1	7	-	22	1809	207	10.6%	-	-	-	0.2	37.6	0.4	0.4
J2:4/1	Newgate Ln S/B Exit Merge Ahead	U	G		1	54	-	540	1965	1544	35.0%	-	-	-	0.3	2.0	0.1	0.4
J2:4/2	Newgate Ln S/B Exit Merge Ahead	U	G		1	54	-	21	2105	1654	1.3%	-	-	-	0.0	1.1	0.0	0.0
J2:5/1	Newgate Ln N/B Exit Ahead	U	-		-	-	-	768	1915	1915	40.1%	-	-	-	0.3	1.6	0.2	0.5
J2:5/2	Newgate Ln N/B Exit Ahead	U	-		-	-	-	715	2055	2055	34.8%	-	-	-	0.3	1.3	0.0	0.3
J2:P1	Newgate Ln S/B	-	E		1	5	-	0	-	0	0.0%	-	-	-	-	-	-	-
J2:P2	Newgate Ln N/B	-	F		1	23	-	0	-	0	0.0%	-	-	-	-	-	-	-

C1 - Collingwood T-Junction

PRC for Signalled Lanes (%): 6.6
 PRC Over All Lanes (%): 6.6

Total Delay for Signalled Lanes (pcuHr): 15.41
 Total Delay Over All Lanes(pcuHr): 20.24

Cycle Time (s): 70

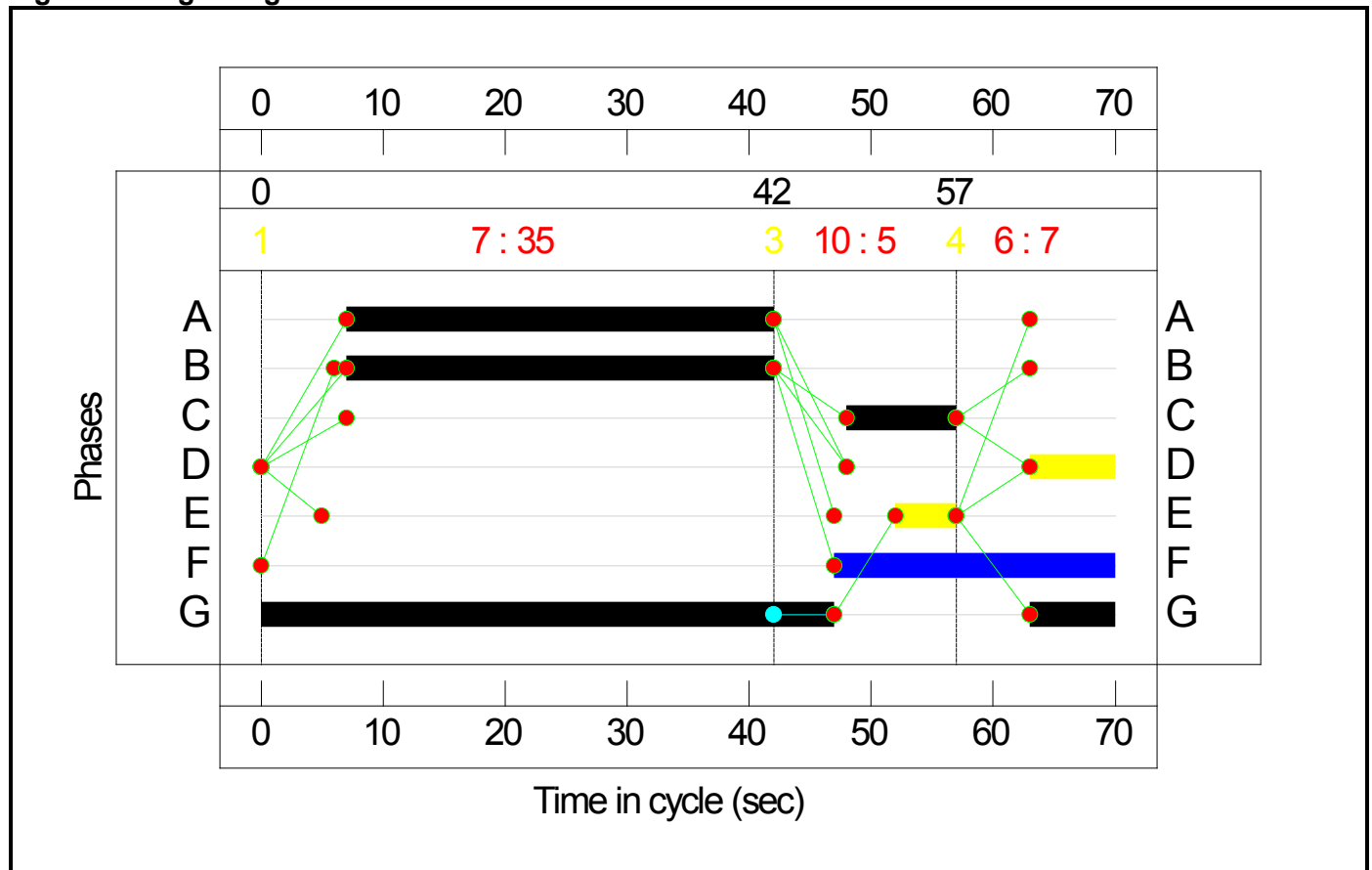
Scenario 8: '2019 DS2 PM Base' (FG8: '2019 DS2 PM Base', Plan 1: 'Plan 1')

Traffic Flows, Actual

Actual Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	739	151	10	900
	B	655	0	254	69	978
	C	116	269	0	7	392
	D	69	124	23	0	216
	Tot.	840	1132	428	86	2486

Signal Timings Diagram



Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Mean Max Queue (pcu)
J1:1/2+J1:1/1	Newgate Ln S/B Ahead Left	O	-		-	-	-	622	2029:1786	1873	33.2%	1244	0	0	0.2	1.4	0.0	0.2
J1:1/3	Newgate Ln S/B Ahead	O	-		-	-	-	356	2029	1088	32.7%	356	0	0	0.2	2.5	0.0	0.2
J1:2/1	Speedfields Pk Ahead Left	O	-		-	-	-	392	1894	1335	29.4%	392	0	0	0.2	1.9	0.0	0.2
J1:3/1	Newgate Lane N/B Ahead	U	-		-	-	-	503	1965	1965	25.6%	-	-	-	0.2	1.2	0.0	0.2
J1:3/2	Newgate Lane N/B Ahead	O	-		-	-	-	410	2029	1130	36.3%	410	0	0	0.4	3.1	4.2	4.5
J1:4/1	HMS C'wood LT G-way Ahead	O	-		-	-	-	124	1747	604	20.5%	124	0	0	0.1	3.7	0.0	0.1
J1:5/1	Right Ahead	U	-		-	-	-	174	2077	2077	8.4%	-	-	-	0.0	0.9	0.0	0.0
J1:6/1	Ahead	U	-		-	-	-	368	2077	2077	17.7%	-	-	-	0.1	1.1	0.0	0.1
J1:6/2	Right Ahead	U	-		-	-	-	356	2077	2077	17.1%	-	-	-	0.1	1.0	0.0	0.1
J1:7/1	Right	U	-		-	-	-	269	2005	2005	13.4%	-	-	-	0.1	1.0	0.0	0.1
J1:8/1	Ahead	U	-		-	-	-	627	1965	1965	31.9%	-	-	-	0.2	1.3	0.0	0.2
J1:8/2	Ahead	U	-		-	-	-	505	2077	2077	24.3%	-	-	-	0.2	1.1	0.0	0.2
J1:8/3	Right	U	-		-	-	-	174	2005	2005	8.7%	-	-	-	0.0	1.0	0.0	0.0
J1:9/1	Newgate Ln N/B Exit	U	-		-	-	-	1132	4070	4070	27.8%	-	-	-	0.2	0.6	0.0	0.1
J1:11/1	Newgate Ln S/B Exit Ahead	U	-		-	-	-	387	1965	1965	19.7%	-	-	-	0.1	1.1	0.0	0.1
J1:11/2	Newgate Ln S/B Exit Ahead	U	-		-	-	-	460	2105	2105	21.9%	-	-	-	0.1	1.1	0.0	0.1

J2:1/1	Newgate Ln S/B Ahead	U	A		1	35	-	387	1915	985	39.3%	-	-	-	1.4	13.4	4.5	4.8
J2:1/2+J2:1/3	Newgate Ln S/B Ahead Right	U	A C		1	35:9	-	460	2055:1827	1236	37.2%	-	-	-	1.9	15.2	4.4	4.7
J2:2/2+J2:2/1	Newgate Ln N/B Ahead Left	U	B		1	35	-	513	2055:1702	1056	48.6%	-	-	-	2.0	14.2	6.3	6.8
J2:2/3	Newgate Ln N/B Ahead	U	B		1	35	-	387	2055	1057	36.6%	-	-	-	1.4	12.9	4.4	4.7
J2:3/1	HMS Collingwood Right Left	U	D		1	7	-	92	1811	207	44.5%	-	-	-	1.1	44.5	1.7	2.1
J2:4/1	Newgate Ln S/B Exit Merge Ahead	U	G		1	54	-	390	1965	1544	25.3%	-	-	-	0.2	1.7	0.1	0.3
J2:4/2	Newgate Ln S/B Exit Merge Ahead	U	G		1	54	-	450	2105	1654	27.2%	-	-	-	0.2	1.6	0.1	0.3
J2:5/1	Newgate Ln N/B Exit Ahead	U	-		-	-	-	503	1915	1915	26.3%	-	-	-	0.2	1.4	0.2	0.4
J2:5/2	Newgate Ln N/B Exit Ahead	U	-		-	-	-	410	2055	2055	20.0%	-	-	-	0.1	1.1	0.0	0.1
J2:P1	Newgate Ln S/B	-	E		1	5	-	0	-	0	0.0%	-	-	-	-	-	-	-
J2:P2	Newgate Ln N/B	-	F		1	23	-	0	-	0	0.0%	-	-	-	-	-	-	-

C1 - Collingwood T-Junction

PRC for Signalled Lanes (%): 85.3
 PRC Over All Lanes (%): 85.3

Total Delay for Signalled Lanes (pcuHr): 8.32
 Total Delay Over All Lanes(pcuHr): 11.22

Cycle Time (s): 70

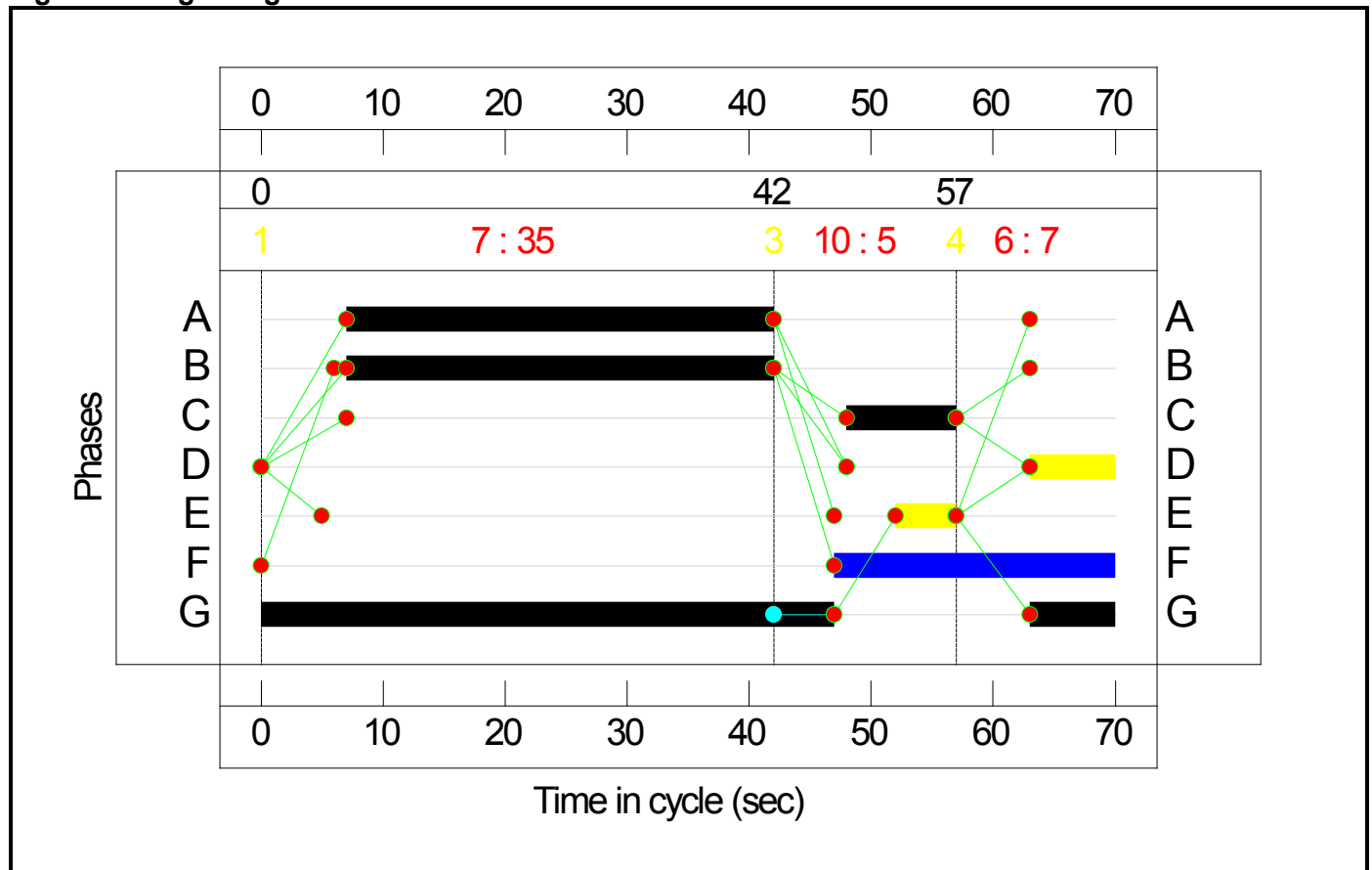
Scenario 9: '2024 DS2 AM Base' (FG9: '2024 DS2 AM Base', Plan 1: 'Plan 1')

Traffic Flows, Actual

Actual Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	1337	222	152	1711
	B	658	0	250	190	1098
	C	55	173	0	11	239
	D	21	61	6	0	88
	Tot.	734	1571	478	353	3136

Signal Timings Diagram



Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Mean Max Queue (pcu)
J1:1/2+J1:1/1	Newgate Ln S/B Ahead Left	O	-		-	-	-	908	2029:1786	1458	62.3%	1816	0	0	0.8	3.3	0.0	0.8
J1:1/3	Newgate Ln S/B Ahead	O	-		-	-	-	190	2029	1056	18.0%	190	0	0	0.1	2.1	0.0	0.1
J1:2/1	Speedfields Pk Ahead Left	O	-		-	-	-	239	1894	1245	19.2%	239	0	0	0.1	1.8	0.0	0.1
J1:3/1	Newgate Lane N/B Ahead	U	-		-	-	-	796	1965	1965	40.5%	-	-	-	0.3	1.5	0.0	0.3
J1:3/2	Newgate Lane N/B Ahead	O	-		-	-	-	769	2029	1183	65.0%	769	0	0	2.2	10.1	14.0	14.9
J1:4/1	HMS C'wood LT G-way Ahead	O	-		-	-	-	61	1747	540	11.3%	61	0	0	0.1	3.8	0.0	0.1
J1:5/1	Right Ahead	U	-		-	-	-	228	2077	2077	11.0%	-	-	-	0.1	1.0	0.0	0.1
J1:6/1	Ahead	U	-		-	-	-	658	2077	2077	31.7%	-	-	-	0.2	1.3	0.0	0.2
J1:6/2	Right Ahead	U	-		-	-	-	190	2077	2077	9.1%	-	-	-	0.1	1.0	0.0	0.1
J1:7/1	Right	U	-		-	-	-	173	2005	2005	8.6%	-	-	-	0.0	1.0	0.0	0.0
J1:8/1	Ahead	U	-		-	-	-	857	1965	1965	43.6%	-	-	-	0.4	1.6	0.0	0.4
J1:8/2	Ahead	U	-		-	-	-	714	2077	2077	34.4%	-	-	-	0.3	1.3	0.0	0.3
J1:8/3	Right	U	-		-	-	-	228	2005	2005	11.4%	-	-	-	0.1	1.0	0.0	0.1
J1:9/1	Newgate Ln N/B Exit	U	-		-	-	-	1571	4070	4070	38.6%	-	-	-	0.3	0.7	0.0	0.2
J1:11/1	Newgate Ln S/B Exit Ahead	U	-		-	-	-	712	1965	1965	36.2%	-	-	-	0.3	1.4	0.0	0.3
J1:11/2	Newgate Ln S/B Exit Ahead	U	-		-	-	-	202	2105	2105	9.6%	-	-	-	0.1	0.9	0.0	0.1

J2:1/1	Newgate Ln S/B Ahead	U	A		1	35	-	712	1915	985	72.3%	-	-	-	3.9	19.7	10.7	12.0
J2:1/2+J2:1/3	Newgate Ln S/B Ahead Right	U	A C		1	35:9	-	202	2055:1827	262	77.0%	-	-	-	3.2	57.2	3.7	5.3
J2:2/2+J2:2/1	Newgate Ln N/B Ahead Left	U	B		1	35	-	948	2055:1702	1081	87.7%	-	-	-	7.1	27.0	15.1	18.5
J2:2/3	Newgate Ln N/B Ahead	U	B		1	35	-	763	2055	1057	72.2%	-	-	-	4.1	19.2	11.4	12.7
J2:3/1	HMS Collingwood Right Left	U	D		1	7	-	27	1814	207	13.0%	-	-	-	0.3	37.9	0.5	0.5
J2:4/1	Newgate Ln S/B Exit Merge Ahead	U	G		1	54	-	713	1965	1544	46.2%	-	-	-	0.5	2.3	0.2	0.6
J2:4/2	Newgate Ln S/B Exit Merge Ahead	U	G		1	54	-	21	2105	1654	1.3%	-	-	-	0.0	1.1	0.0	0.0
J2:5/1	Newgate Ln N/B Exit Ahead	U	-		-	-	-	796	1915	1915	41.6%	-	-	-	0.4	1.7	0.2	0.6
J2:5/2	Newgate Ln N/B Exit Ahead	U	-		-	-	-	769	2055	2055	37.4%	-	-	-	0.3	1.4	0.0	0.3
J2:P1	Newgate Ln S/B	-	E		1	5	-	0	-	0	0.0%	-	-	-	-	-	-	-
J2:P2	Newgate Ln N/B	-	F		1	23	-	0	-	0	0.0%	-	-	-	-	-	-	-

C1 - Collingwood T-Junction

PRC for Signalled Lanes (%): 2.6
 PRC Over All Lanes (%): 2.6

Total Delay for Signalled Lanes (pcuHr): 19.04
 Total Delay Over All Lanes(pcuHr): 25.08

Cycle Time (s): 70

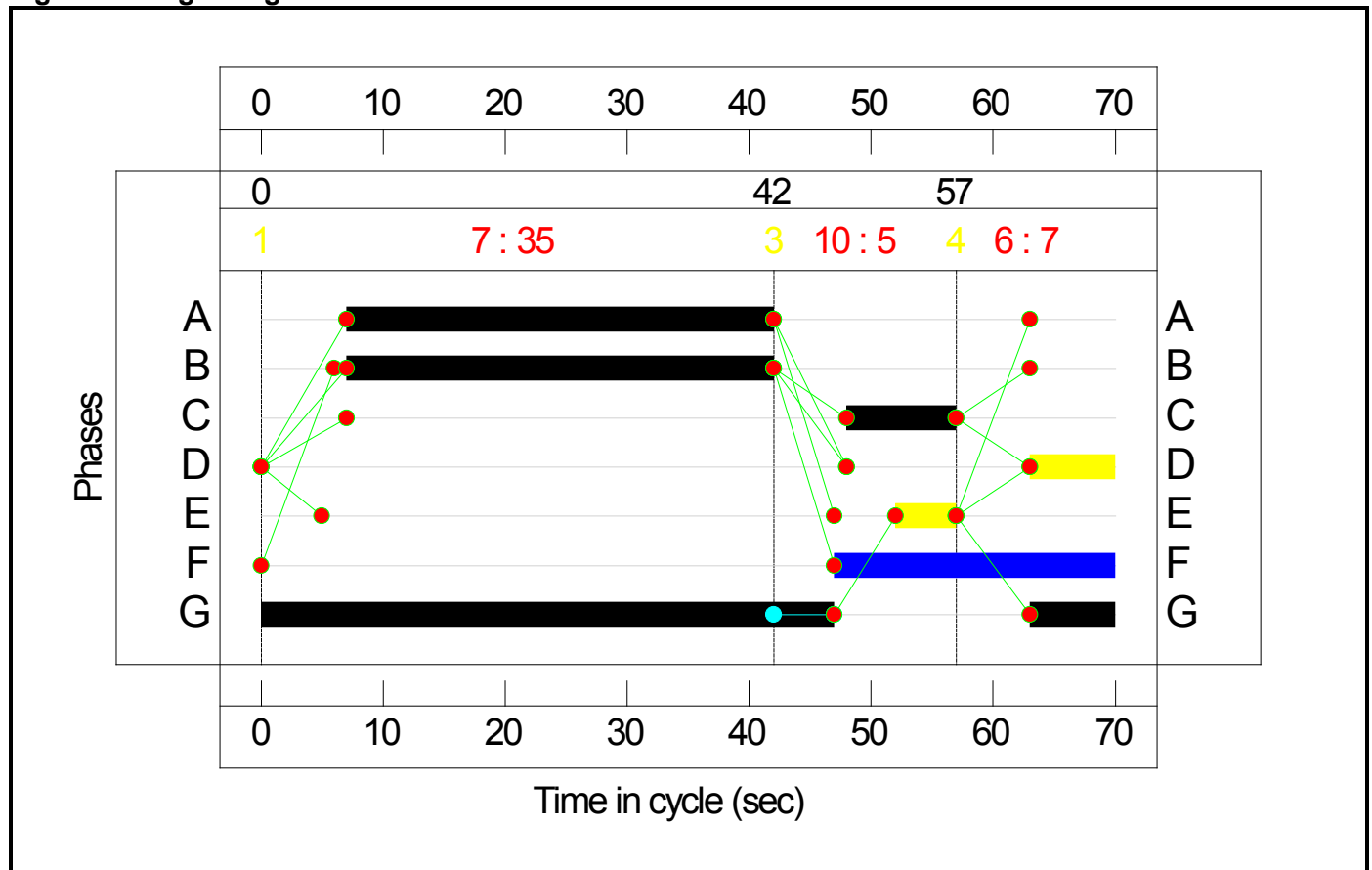
Scenario 10: '2024 DS2 PM Base' (FG10: '2024 DS2 PM Base', Plan 1: 'Plan 1')

Traffic Flows, Actual

Actual Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	794	162	11	967
	B	799	0	263	71	1133
	C	142	278	0	7	427
	D	84	128	24	0	236
	Tot.	1025	1200	449	89	2763

Signal Timings Diagram



Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Mean Max Queue (pcu)
J1:1/2+J1:1/1	Newgate Ln S/B Ahead Left	O	-		-	-	-	704	2029:1786	1777	39.6%	1408	0	0	0.3	1.7	0.0	0.3
J1:1/3	Newgate Ln S/B Ahead	O	-		-	-	-	429	2029	1081	39.7%	429	0	0	0.3	2.8	0.0	0.3
J1:2/1	Speedfields Pk Ahead Left	O	-		-	-	-	427	1894	1229	34.7%	427	0	0	0.3	2.2	0.0	0.3
J1:3/1	Newgate Lane N/B Ahead	U	-		-	-	-	542	1965	1965	27.6%	-	-	-	0.2	1.3	0.0	0.2
J1:3/2	Newgate Lane N/B Ahead	O	-		-	-	-	438	2029	1125	38.9%	438	0	0	0.4	3.4	5.0	5.3
J1:4/1	HMS C'wood LT G-way Ahead	O	-		-	-	-	128	1747	596	21.5%	128	0	0	0.1	3.8	0.0	0.1
J1:5/1	Right Ahead	U	-		-	-	-	186	2077	2077	9.0%	-	-	-	0.0	1.0	0.0	0.0
J1:6/1	Ahead	U	-		-	-	-	441	2077	2077	21.2%	-	-	-	0.1	1.1	0.0	0.1
J1:6/2	Right Ahead	U	-		-	-	-	429	2077	2077	20.7%	-	-	-	0.1	1.1	0.0	0.1
J1:7/1	Right	U	-		-	-	-	278	2005	2005	13.9%	-	-	-	0.1	1.0	0.0	0.1
J1:8/1	Ahead	U	-		-	-	-	670	1965	1965	34.1%	-	-	-	0.3	1.4	0.0	0.3
J1:8/2	Ahead	U	-		-	-	-	530	2077	2077	25.5%	-	-	-	0.2	1.2	0.0	0.2
J1:8/3	Right	U	-		-	-	-	186	2005	2005	9.3%	-	-	-	0.1	1.0	0.0	0.1
J1:9/1	Newgate Ln N/B Exit	U	-		-	-	-	1200	4070	4070	29.5%	-	-	-	0.2	0.6	0.0	0.1
J1:11/1	Newgate Ln S/B Exit Ahead	U	-		-	-	-	462	1965	1965	23.5%	-	-	-	0.2	1.2	0.0	0.2
J1:11/2	Newgate Ln S/B Exit Ahead	U	-		-	-	-	557	2105	2105	26.5%	-	-	-	0.2	1.2	0.0	0.2

J2:1/1	Newgate Ln S/B Ahead	U	A		1	35	-	462	1915	985	46.9%	-	-	-	1.8	14.3	5.6	6.1
J2:1/2+J2:1/3	Newgate Ln S/B Ahead Right	U	A C		1	35:9	-	557	2055:1827	1208	46.1%	-	-	-	2.4	15.8	5.9	6.3
J2:2/2+J2:2/1	Newgate Ln N/B Ahead Left	U	B		1	35	-	553	2055:1702	1057	52.3%	-	-	-	2.3	14.8	7.0	7.5
J2:2/3	Newgate Ln N/B Ahead	U	B		1	35	-	414	2055	1057	39.2%	-	-	-	1.5	13.1	4.8	5.2
J2:3/1	HMS Collingwood Right Left	U	D		1	7	-	108	1814	207	52.1%	-	-	-	1.4	47.1	2.0	2.5
J2:4/1	Newgate Ln S/B Exit Merge Ahead	U	G		1	54	-	468	1965	1544	30.3%	-	-	-	0.2	1.8	0.1	0.3
J2:4/2	Newgate Ln S/B Exit Merge Ahead	U	G		1	54	-	557	2105	1654	33.7%	-	-	-	0.3	1.8	0.1	0.4
J2:5/1	Newgate Ln N/B Exit Ahead	U	-		-	-	-	542	1915	1915	28.3%	-	-	-	0.2	1.5	0.2	0.4
J2:5/2	Newgate Ln N/B Exit Ahead	U	-		-	-	-	438	2055	2055	21.3%	-	-	-	0.1	1.1	0.0	0.1
J2:P1	Newgate Ln S/B	-	E		1	5	-	0	-	0	0.0%	-	-	-	-	-	-	-
J2:P2	Newgate Ln N/B	-	F		1	23	-	0	-	0	0.0%	-	-	-	-	-	-	-

C1 - Collingwood T-Junction

PRC for Signalled Lanes (%): 71.9
 PRC Over All Lanes (%): 71.9

Total Delay for Signalled Lanes (pcuHr): 9.99
 Total Delay Over All Lanes(pcuHr): 13.43

Cycle Time (s): 70

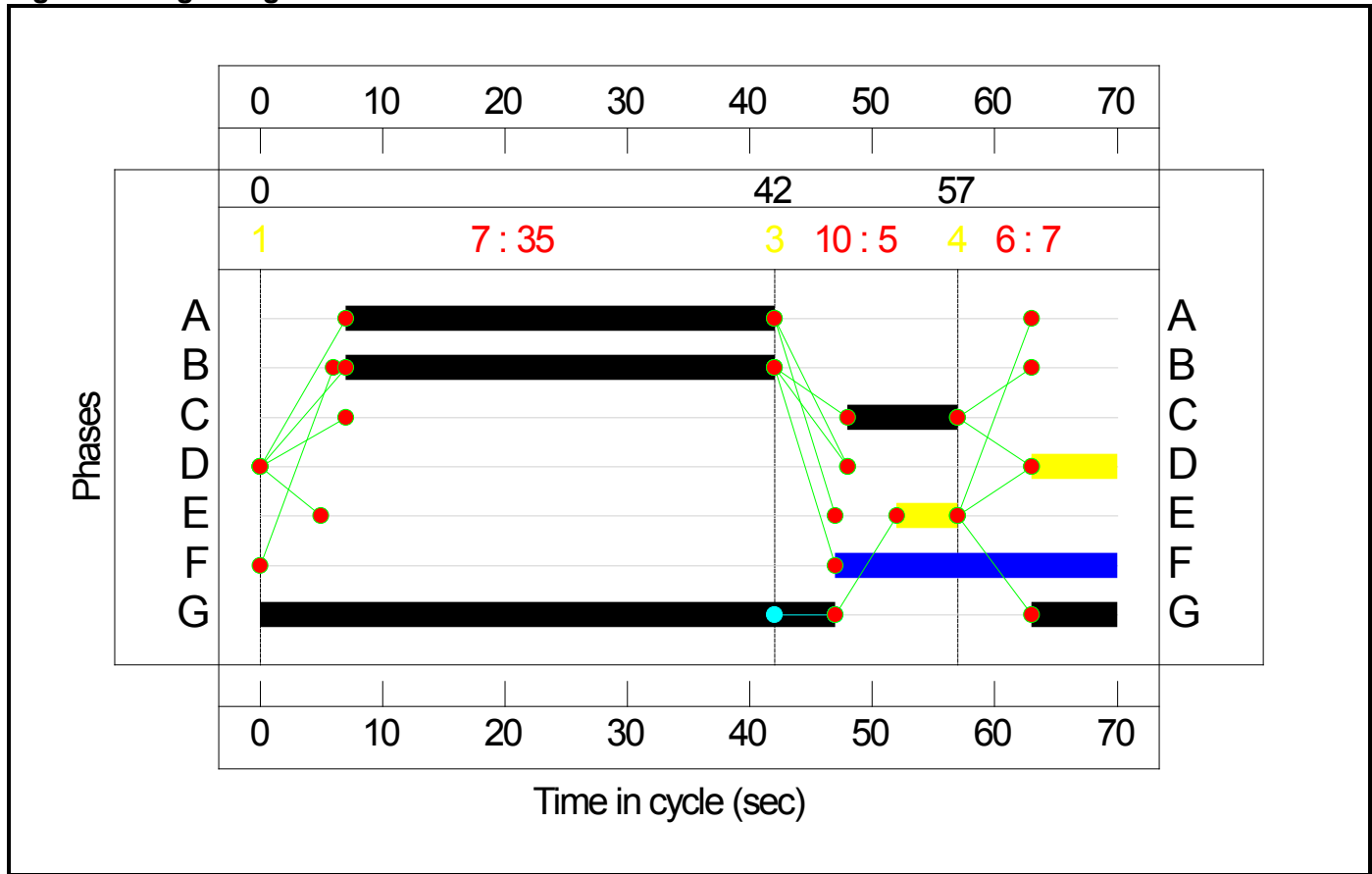
Scenario 11: '2024 DS2 AM Base + Development' (FG11: '2024 DS2 AM Base + Dev', Plan 1: 'Plan 1')

Traffic Flows, Actual

Actual Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	1350	224	154	1728
	B	677	0	250	190	1117
	C	57	173	0	11	241
	D	22	61	6	0	89
	Tot.	756	1584	480	355	3175

Signal Timings Diagram



Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Mean Max Queue (pcu)
J1:1/2+J1:1/1	Newgate Ln S/B Ahead Left	O	-		-	-	-	927	2029:1786	1445	64.2%	1854	0	0	0.9	3.5	0.0	0.9
J1:1/3	Newgate Ln S/B Ahead	O	-		-	-	-	190	2029	1055	18.0%	190	0	0	0.1	2.1	0.0	0.1
J1:2/1	Speedfields Pk Ahead Left	O	-		-	-	-	241	1894	1232	19.6%	241	0	0	0.1	1.8	0.0	0.1
J1:3/1	Newgate Lane N/B Ahead	U	-		-	-	-	801	1965	1965	40.8%	-	-	-	0.3	1.5	0.0	0.3
J1:3/2	Newgate Lane N/B Ahead	O	-		-	-	-	779	2029	1183	65.9%	779	0	0	2.3	10.4	14.2	15.1
J1:4/1	HMS C'wood LT G-way Ahead	O	-		-	-	-	61	1747	539	11.3%	61	0	0	0.1	3.8	0.0	0.1
J1:5/1	Right Ahead	U	-		-	-	-	230	2077	2077	11.1%	-	-	-	0.1	1.0	0.0	0.1
J1:6/1	Ahead	U	-		-	-	-	677	2077	2077	32.6%	-	-	-	0.2	1.3	0.0	0.2
J1:6/2	Right Ahead	U	-		-	-	-	190	2077	2077	9.1%	-	-	-	0.1	1.0	0.0	0.1
J1:7/1	Right	U	-		-	-	-	173	2005	2005	8.6%	-	-	-	0.0	1.0	0.0	0.0
J1:8/1	Ahead	U	-		-	-	-	862	1965	1965	43.9%	-	-	-	0.4	1.6	0.0	0.4
J1:8/2	Ahead	U	-		-	-	-	722	2077	2077	34.8%	-	-	-	0.3	1.3	0.0	0.3
J1:8/3	Right	U	-		-	-	-	230	2005	2005	11.5%	-	-	-	0.1	1.0	0.0	0.1
J1:9/1	Newgate Ln N/B Exit	U	-		-	-	-	1584	4070	4070	38.9%	-	-	-	0.3	0.7	0.0	0.2
J1:11/1	Newgate Ln S/B Exit Ahead	U	-		-	-	-	734	1965	1965	37.4%	-	-	-	0.3	1.5	0.0	0.3
J1:11/2	Newgate Ln S/B Exit Ahead	U	-		-	-	-	201	2105	2105	9.5%	-	-	-	0.1	0.9	0.0	0.1

J2:1/1	Newgate Ln S/B Ahead	U	A		1	35	-	734	1915	985	74.5%	-	-	-	4.2	20.5	11.2	12.7
J2:1/2+J2:1/3	Newgate Ln S/B Ahead Right	U	A C		1	35:9	-	201	2055:1827	261	77.0%	-	-	-	3.2	57.4	3.7	5.3
J2:2/2+J2:2/1	Newgate Ln N/B Ahead Left	U	B		1	35	-	955	2055:1702	1081	88.3%	-	-	-	7.4	27.7	15.2	18.8
J2:2/3	Newgate Ln N/B Ahead	U	B		1	35	-	773	2055	1057	73.1%	-	-	-	4.2	19.5	11.6	12.9
J2:3/1	HMS Collingwood Right Left	U	D		1	7	-	28	1814	207	13.5%	-	-	-	0.3	37.9	0.5	0.6
J2:4/1	Newgate Ln S/B Exit Merge Ahead	U	G		1	54	-	735	1965	1544	47.6%	-	-	-	0.5	2.4	0.2	0.6
J2:4/2	Newgate Ln S/B Exit Merge Ahead	U	G		1	54	-	21	2105	1654	1.3%	-	-	-	0.0	1.1	0.0	0.0
J2:5/1	Newgate Ln N/B Exit Ahead	U	-		-	-	-	801	1915	1915	41.8%	-	-	-	0.4	1.7	0.2	0.6
J2:5/2	Newgate Ln N/B Exit Ahead	U	-		-	-	-	779	2055	2055	37.9%	-	-	-	0.3	1.4	0.0	0.3
J2:P1	Newgate Ln S/B	-	E		1	5	-	0	-	0	0.0%	-	-	-	-	-	-	-
J2:P2	Newgate Ln N/B	-	F		1	23	-	0	-	0	0.0%	-	-	-	-	-	-	-

C1 - Collingwood T-Junction

PRC for Signalled Lanes (%): 1.9
 PRC Over All Lanes (%): 1.9

Total Delay for Signalled Lanes (pcuHr): 19.72
 Total Delay Over All Lanes(pcuHr): 25.97

Cycle Time (s): 70

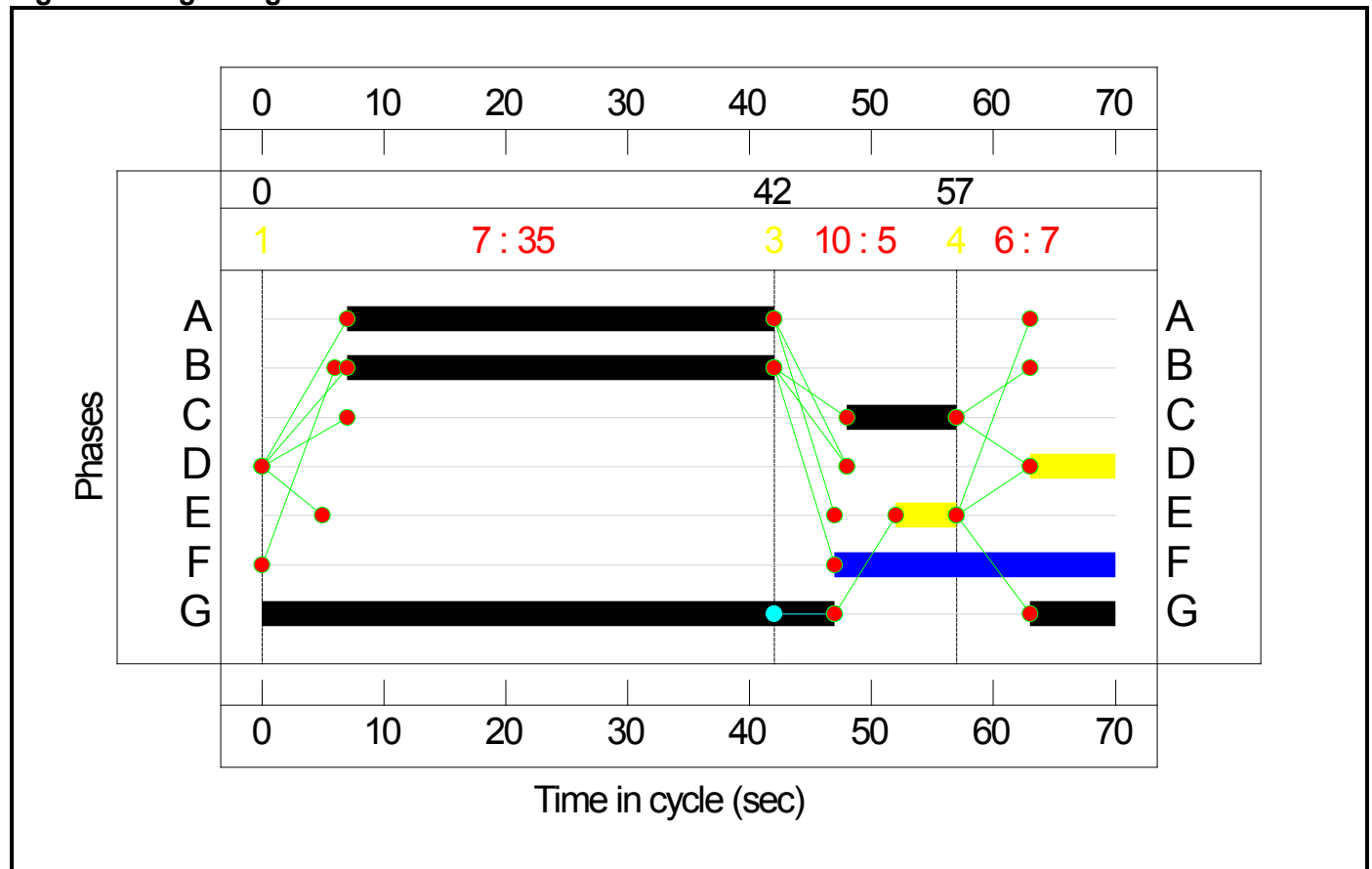
Scenario 12: '2024 DS2 PM Base + Development' (FG12: '2024 DS2 PM Base + Dev', Plan 1: 'Plan 1')

Traffic Flows, Actual

Actual Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	814	166	11	991
	B	822	0	263	71	1156
	C	144	278	0	7	429
	D	86	128	24	0	238
	Tot.	1052	1220	453	89	2814

Signal Timings Diagram



Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Mean Max Queue (pcu)
J1:1/2+J1:1/1	Newgate Ln S/B Ahead Left	O	-		-	-	-	715	2029:1786	1741	41.1%	1430	0	0	0.3	1.8	0.0	0.3
J1:1/3	Newgate Ln S/B Ahead	O	-		-	-	-	441	2029	1079	40.9%	441	0	0	0.3	2.8	0.0	0.3
J1:2/1	Speedfields Pk Ahead Left	O	-		-	-	-	429	1894	1213	35.4%	429	0	0	0.3	2.3	0.0	0.3
J1:3/1	Newgate Lane N/B Ahead	U	-		-	-	-	556	1965	1965	28.3%	-	-	-	0.2	1.3	0.0	0.2
J1:3/2	Newgate Lane N/B Ahead	O	-		-	-	-	448	2029	1125	39.8%	448	0	0	0.4	3.6	5.1	5.5
J1:4/1	HMS C'wood LT G-way Ahead	O	-		-	-	-	128	1747	593	21.6%	128	0	0	0.1	3.9	0.0	0.1
J1:5/1	Right Ahead	U	-		-	-	-	190	2077	2077	9.1%	-	-	-	0.1	1.0	0.0	0.1
J1:6/1	Ahead	U	-		-	-	-	452	2077	2077	21.8%	-	-	-	0.1	1.1	0.0	0.1
J1:6/2	Right Ahead	U	-		-	-	-	441	2077	2077	21.2%	-	-	-	0.1	1.1	0.0	0.1
J1:7/1	Right	U	-		-	-	-	278	2005	2005	13.9%	-	-	-	0.1	1.0	0.0	0.1
J1:8/1	Ahead	U	-		-	-	-	684	1965	1965	34.8%	-	-	-	0.3	1.4	0.0	0.3
J1:8/2	Ahead	U	-		-	-	-	536	2077	2077	25.8%	-	-	-	0.2	1.2	0.0	0.2
J1:8/3	Right	U	-		-	-	-	190	2005	2005	9.5%	-	-	-	0.1	1.0	0.0	0.1
J1:9/1	Newgate Ln N/B Exit	U	-		-	-	-	1220	4070	4070	30.0%	-	-	-	0.2	0.6	0.0	0.1
J1:11/1	Newgate Ln S/B Exit Ahead	U	-		-	-	-	472	1965	1965	24.0%	-	-	-	0.2	1.2	0.0	0.2
J1:11/2	Newgate Ln S/B Exit Ahead	U	-		-	-	-	572	2105	2105	27.2%	-	-	-	0.2	1.2	0.0	0.2

J2:1/1	Newgate Ln S/B Ahead	U	A		1	35	-	472	1915	985	47.9%	-	-	-	1.9	14.5	5.9	6.4
J2:1/2+J2:1/3	Newgate Ln S/B Ahead Right	U	A C		1	35:9	-	572	2055:1827	1204	47.5%	-	-	-	2.5	15.9	6.0	6.5
J2:2/2+J2:2/1	Newgate Ln N/B Ahead Left	U	B		1	35	-	567	2055:1702	1056	53.7%	-	-	-	2.4	15.0	7.1	7.7
J2:2/3	Newgate Ln N/B Ahead	U	B		1	35	-	424	2055	1057	40.1%	-	-	-	1.6	13.2	4.9	5.3
J2:3/1	HMS Collingwood Right Left	U	D		1	7	-	110	1814	207	53.1%	-	-	-	1.5	47.5	2.0	2.6
J2:4/1	Newgate Ln S/B Exit Merge Ahead	U	G		1	54	-	478	1965	1544	31.0%	-	-	-	0.2	1.8	0.1	0.3
J2:4/2	Newgate Ln S/B Exit Merge Ahead	U	G		1	54	-	574	2105	1654	34.7%	-	-	-	0.3	1.8	0.1	0.4
J2:5/1	Newgate Ln N/B Exit Ahead	U	-		-	-	-	556	1915	1915	29.0%	-	-	-	0.2	1.5	0.2	0.5
J2:5/2	Newgate Ln N/B Exit Ahead	U	-		-	-	-	448	2055	2055	21.8%	-	-	-	0.1	1.1	0.0	0.1
J2:P1	Newgate Ln S/B	-	E		1	5	-	0	-	0	0.0%	-	-	-	-	-	-	-
J2:P2	Newgate Ln N/B	-	F		1	23	-	0	-	0	0.0%	-	-	-	-	-	-	-

C1 - Collingwood T-Junction

PRC for Signalled Lanes (%): 67.7
 PRC Over All Lanes (%): 67.7

Total Delay for Signalled Lanes (pcuHr): 10.33
 Total Delay Over All Lanes(pcuHr): 13.89

Cycle Time (s): 70

Pegasus Group LinSig Report

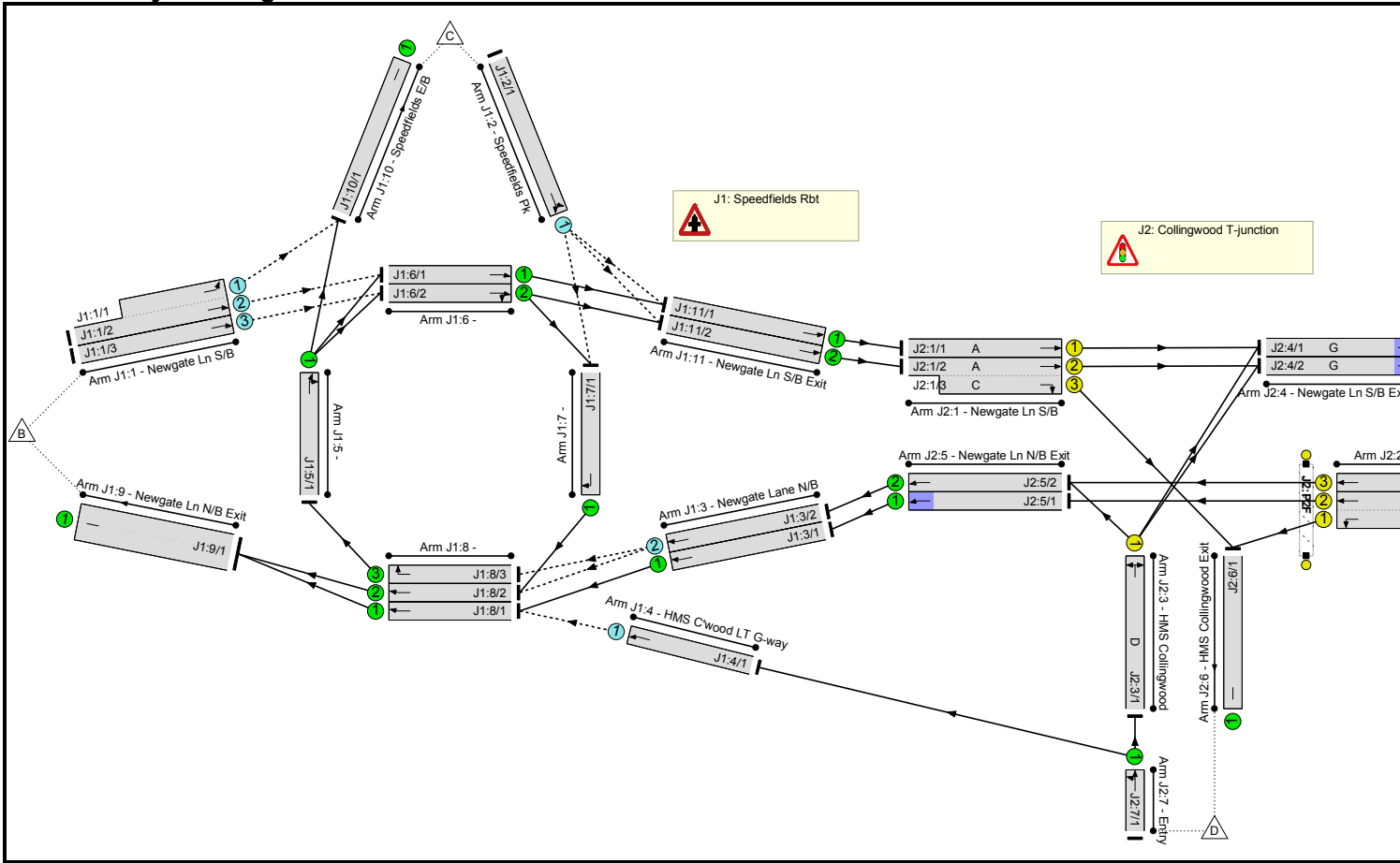
User and Project Details

Project:	Collingwood signals & Speedfield Rbt
Title:	Land to the West of Newgate Lane, Fareham
Location:	
Company:	Pegasus Group
Address:	
Linsig Version:	3, 2, 39, 0

Scenarios

Number	Scenario Name	Flow Group	Network Control Plan	Time	Cycle Time (s)	PRC (%)	Delay (pcuHr)
1	2019 DS1 AM Base	2019 DS1 AM Base	Plan 1	08:00 - 09:00	70	7.6	20.17
2	2019 DS1 PM Base	2019 DS1 PM Base	Plan 1	17:00 - 18:00	70	44.1	16.07
3	2024 DS1 AM Base	2024 DS1 AM Base	Plan 1	08:00 - 09:00	70	3.4	23.68
4	2024 DS1 PM Base	2024 DS1 PM Base	Plan 1	17:00 - 18:00	70	25.5	19.83
5	2024 DS1 AM Base + Development	2024 DS1 AM Base+Dev	Plan 1	08:00 - 09:00	70	2.7	24.32
6	2024 DS1 PM Base + Development	2024 DS1 PM Base+Dev	Plan 1	17:00 - 18:00	70	24.1	20.43
7	2019 DS2 AM Base	2019 DS2 AM Base	Plan 1	08:00 - 09:00	70	6.6	20.24
8	2019 DS2 PM Base	2019 DS2 PM Base	Plan 1	17:00 - 18:00	70	85.3	11.22
9	2024 DS2 AM Base	2024 DS2 AM Base	Plan 1	08:00 - 09:00	70	2.6	25.08
10	2024 DS2 PM Base	2024 DS2 PM Base	Plan 1	17:00 - 18:00	70	71.9	13.43
11	2024 DS2 AM Base + Development	2024 DS2 AM Base + Dev	Plan 1	08:00 - 09:00	70	2.1	25.80
12	2024 DS2 PM Base + Development	2024 DS2 PM Base + Dev	Plan 1	17:00 - 18:00	70	68.0	13.84

Network Layout Diagram



Lane Input Data

Junction: J1: Speedfields Rbt												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
J1:1/1 (Newgate Ln S/B)	O		2	3	8.7	Geom	-	3.50	0.00	Y	Arm J1:10 Left	15.00
J1:1/2 (Newgate Ln S/B)	O		2	3	60.0	Geom	-	3.50	0.00	N	Arm J1:6 Ahead	40.00
J1:1/3 (Newgate Ln S/B)	O		2	3	60.0	Geom	-	3.50	0.00	N	Arm J1:6 Ahead	40.00
J1:2/1 (Speedfields Pk)	O		2	3	60.0	Geom	-	3.50	0.00	Y	Arm J1:7 Ahead	40.00
											Arm J1:11 Left	40.00
J1:3/1 (Newgate Lane N/B)	U		2	3	60.0	Geom	-	3.50	0.00	Y	Arm J1:8 Ahead	Inf
J1:3/2 (Newgate Lane N/B)	O		2	3	60.0	Geom	-	3.50	0.00	N	Arm J1:8 Ahead	40.00
J1:4/1 (HMS C'wood LT G-way)	O		2	3	60.0	Geom	-	3.50	0.00	Y	Arm J1:8 Ahead	12.00
J1:5/1	U		2	3	60.0	Geom	-	4.00	0.00	N	Arm J1:6 Right	20.00
											Arm J1:10 Ahead	40.00
J1:6/1	U		2	3	60.0	Geom	-	4.00	0.00	N	Arm J1:11 Ahead	40.00
J1:6/2	U		2	3	60.0	Geom	-	4.00	0.00	N	Arm J1:7 Right	20.00
											Arm J1:11 Ahead	40.00
J1:7/1	U		2	3	60.0	Geom	-	4.00	0.00	N	Arm J1:8 Right	20.00
J1:8/1	U		2	3	60.0	Geom	-	3.50	0.00	Y	Arm J1:9 Ahead	Inf
J1:8/2	U		2	3	60.0	Geom	-	4.00	0.00	N	Arm J1:9 Ahead	40.00
J1:8/3	U		2	3	60.0	Geom	-	4.00	0.00	N	Arm J1:5 Right	20.00

J1:9/1 (Newgate Ln N/B Exit)	U		2	3	60.0	User	4070	-	-	-	-	-
J1:10/1 (Speedfields E/B)	U		2	3	60.0	Inf	-	-	-	-	-	-
J1:11/1 (Newgate Ln S/B Exit)	U		2	3	60.0	Geom	-	3.50	0.00	Y	Arm J2:1 Ahead	Inf
J1:11/2 (Newgate Ln S/B Exit)	U		2	3	60.0	Geom	-	3.50	0.00	N	Arm J2:1 Ahead	Inf

Junction: J2: Collingwood T-junction												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
J2:1/1 (Newgate Ln S/B)	U	A	2	3	60.0	Geom	-	3.00	0.00	Y	Arm J2:4 Ahead	Inf
J2:1/2 (Newgate Ln S/B)	U	A	2	3	60.0	Geom	-	3.00	0.00	N	Arm J2:4 Ahead	Inf
J2:1/3 (Newgate Ln S/B)	U	C	2	3	15.7	Geom	-	3.00	0.00	N	Arm J2:6 Right	12.00
J2:2/1 (Newgate Ln N/B)	U	B	2	3	5.2	Geom	-	3.00	0.00	Y	Arm J2:6 Left	12.00
J2:2/2 (Newgate Ln N/B)	U	B	2	3	60.0	Geom	-	3.00	0.00	N	Arm J2:5 Ahead	Inf
J2:2/3 (Newgate Ln N/B)	U	B	2	3	60.0	Geom	-	3.00	0.00	N	Arm J2:5 Ahead	Inf
J2:3/1 (HMS Collingwood)	U	D	2	3	60.0	Geom	-	4.00	0.00	Y	Arm J2:4 Right Arm J2:5 Left	15.00 10.00
J2:4/1 (Newgate Ln S/B Exit Merge)	U	G	2	3	5.2	Geom	-	3.50	0.00	Y	Arm J2:8 Ahead	Inf
J2:4/2 (Newgate Ln S/B Exit Merge)	U	G	2	3	5.2	Geom	-	3.50	0.00	N	Arm J2:8 Ahead	Inf
J2:5/1 (Newgate Ln N/B Exit)	U		2	3	60.0	Geom	-	3.00	0.00	Y	Arm J1:3 Ahead	Inf
J2:5/2 (Newgate Ln N/B Exit)	U		2	3	60.0	Geom	-	3.00	0.00	N	Arm J1:3 Ahead	Inf
J2:6/1 (HMS Collingwood Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
J2:7/1 (Entry)	U		2	3	60.0	Inf	-	-	-	-	-	-
J2:8/1	U		2	3	19.1	Inf	-	-	-	-	-	-

Give-Way Lane Input Data

Junction: J1: Speedfields Rbt											
Lane	Movement	Max Flow when Giving Way (PCU/Hr)	Min Flow when Giving Way (PCU/Hr)	Opposing Lane	Opp. Lane Coeff.	Opp. Mvmnts.	Right Turn Storage (PCU)	Non-Blocking Storage (PCU)	RTF	Right Turn Move up (s)	Max Turns in Intergreen (PCU)
J1:1/1 (Newgate Ln S/B)	J1:10/1 (Left)	1189	0	J1:5/1	0.58	All	-	-	-	-	-
J1:1/2 (Newgate Ln S/B)	J1:6/1 (Ahead)	1189	0	J1:5/1	0.58	All	-	-	-	-	-
J1:1/3 (Newgate Ln S/B)	J1:6/2 (Ahead)	1189	0	J1:5/1	0.58	All	-	-	-	-	-
J1:2/1 (Speedfields Pk)	J1:7/1 (Ahead)	1856	0	J1:6/1	0.72	All	-	-	-	-	-
				J1:6/2	0.72	All					
	J1:11/1 (Left)	1856	0	J1:6/1	0.72	All					
				J1:6/2	0.72	All					
	J1:11/2 (Left)	1856	0	J1:6/1	0.72	All					
				J1:6/2	0.72	All					
J1:3/2 (Newgate Lane N/B)	J1:8/2 (Ahead)	1278	0	J1:7/1	0.55	All	-	-	-	-	-
	J1:8/3 (Ahead)	1278	0	J1:7/1	0.55	All					
J1:4/1 (HMS C'wood LT G-way)	J1:8/1 (Ahead)	715	0	J1:3/1	0.22	All	-	-	-	-	-

Junction: J2: Collingwood T-junction

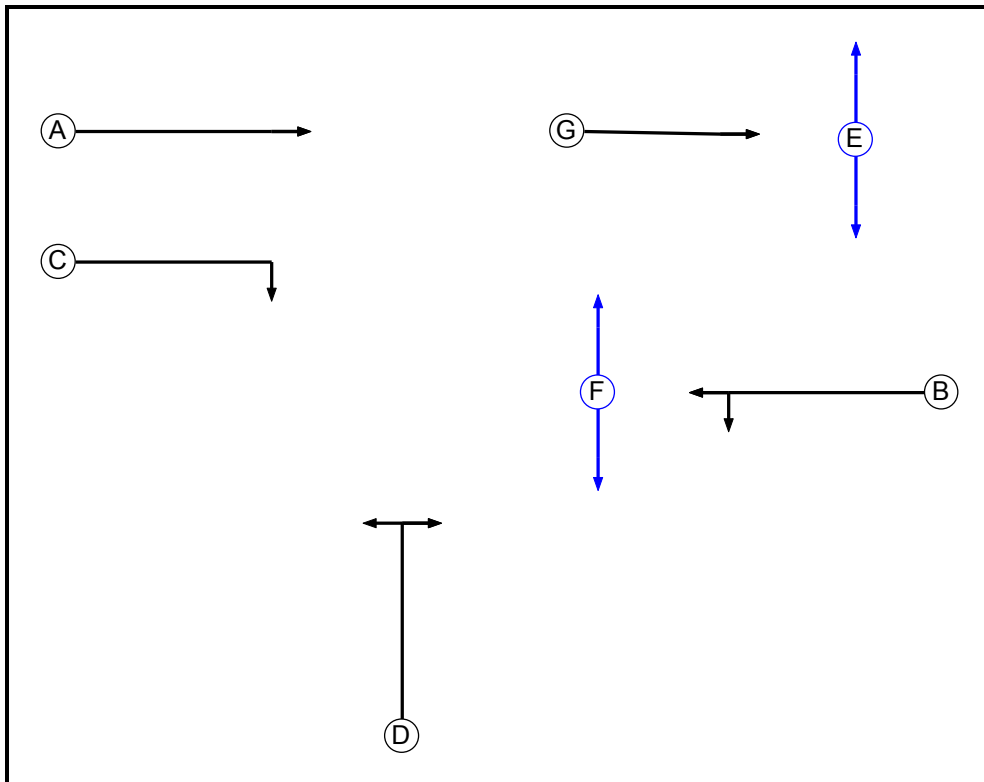
There are no Opposed Lanes in this Junction

Lane Connector Input Data

Junction: J1: Speedfields Rbt				
Org Lane	Dest Lane	Junction	Mean Cruise Time	Platoon Dispersion
J1:1/1	J1:10/1	Internal	10	35
J1:1/2	J1:6/1	Internal	2	35
J1:1/3	J1:6/2	Internal	2	35
J1:2/1	J1:7/1	Internal	2	35
J1:2/1	J1:11/1	Internal	2	35
J1:2/1	J1:11/2	Internal	2	35
J1:3/1	J1:8/1	Internal	2	35
J1:3/2	J1:8/2	Internal	2	35
J1:3/2	J1:8/3	Internal	2	35
J1:4/1	J1:8/1	Internal	2	35
J1:5/1	J1:6/1	Internal	2	35
J1:5/1	J1:6/2	Internal	2	35
J1:5/1	J1:10/1	Internal	10	35
J1:6/1	J1:11/1	Internal	2	35
J1:6/2	J1:7/1	Internal	2	35
J1:6/2	J1:11/2	Internal	2	35
J1:7/1	J1:8/2	Internal	2	35
J1:8/1	J1:9/1	Internal	2	35
J1:8/2	J1:9/1	Internal	2	35
J1:8/3	J1:5/1	Internal	2	35
J1:11/1	J2:1/1	Leaving	13	35
J1:11/2	J2:1/2	Leaving	13	35
J2:5/1	J1:3/1	Entering	13	35
J2:5/2	J1:3/2	Entering	13	35
J2:7/1	J1:4/1	Entering	1	35

Junction: J2: Collingwood T-junction				
Org Lane	Dest Lane	Junction	Mean Cruise Time	Platoon Dispersion
J1:11/1	J2:1/1	Entering	13	35
J1:11/2	J2:1/2	Entering	13	35
J2:1/1	J2:4/1	Internal	5	35
J2:1/2	J2:4/2	Internal	5	35
J2:1/3	J2:6/1	Internal	10	35
J2:2/1	J2:6/1	Internal	10	35
J2:2/2	J2:5/1	Internal	2	35
J2:2/3	J2:5/2	Internal	2	35
J2:3/1	J2:4/1	Internal	6	35
J2:3/1	J2:4/2	Internal	6	35
J2:3/1	J2:5/2	Internal	2	35
J2:4/1	J2:8/1	Internal	10	35
J2:4/2	J2:8/1	Internal	10	35
J2:5/1	J1:3/1	Leaving	13	35
J2:5/2	J1:3/2	Leaving	13	35
J2:7/1	J1:4/1	Leaving	1	35
J2:7/1	J2:3/1	Internal	1	35

Phase Diagram



Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		7	7
B	Traffic		7	7
C	Traffic		7	7
D	Traffic		7	7
E	Pedestrian		5	5
F	Pedestrian		5	5
G	Traffic		7	2

Phase Intergreens Matrix

		Starting Phase						
		A	B	C	D	E	F	G
Terminating Phase	A	-	-	6	5	-	-	-
	B	-	-	6	6	-	5	-
	C	-	6	-	6	-	-	-
	D	7	7	7	-	5	-	-
	E	6	-	-	6	-	-	6
	F	-	6	-	-	-	-	-
	G	-	-	-	-	5	-	-

Phases in Stage

Stage No.	Phases in Stage
1	A B G
2	A C F G
3	C E F
4	D F G

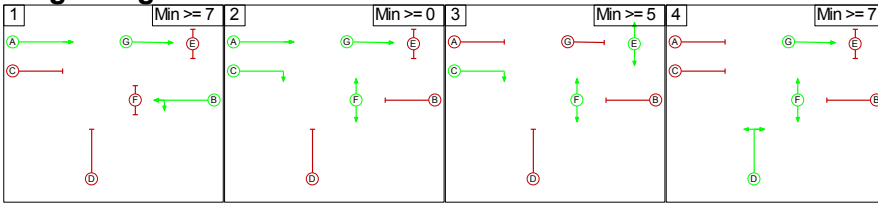
Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
1	3	G	Losing	5	5
2	3	G	Losing	5	5
4	3	G	Losing	5	5

Prohibited Stage Change

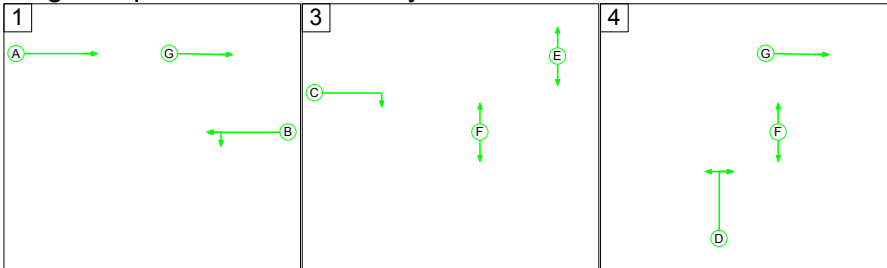
		To Stage			
		1	2	3	4
From Stage	1	-	6	10	6
	2	6	-	10	6
	3	6	6	-	6
	4	7	7	10	-

Stage Diagram



Stage Sequence Summary

Stage Sequence: Peds Each Cycle



Network Control Plans

Plan	Controller	Sequence Name	Sequence
Plan 1	C1 - Collingwood T-Junction	Peds Each Cycle	1,3,4

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2019 DS1 AM Base'	08:00	09:00	01:00	
2: '2019 DS1 PM Base'	17:00	18:00	01:00	
3: '2024 DS1 AM Base'	08:00	09:00	01:00	
4: '2024 DS1 PM Base'	17:00	18:00	01:00	
5: '2024 DS1 AM Base+Dev'	08:00	09:00	01:00	
6: '2024 DS1 PM Base+Dev'	17:00	18:00	01:00	
7: '2019 DS2 AM Base'	08:00	09:00	01:00	
8: '2019 DS2 PM Base'	17:00	18:00	01:00	
9: '2024 DS2 AM Base'	08:00	09:00	01:00	
10: '2024 DS2 PM Base'	17:00	18:00	01:00	
11: '2024 DS2 AM Base + Dev'	08:00	09:00	01:00	
12: '2024 DS2 PM Base + Dev'	17:00	18:00	01:00	

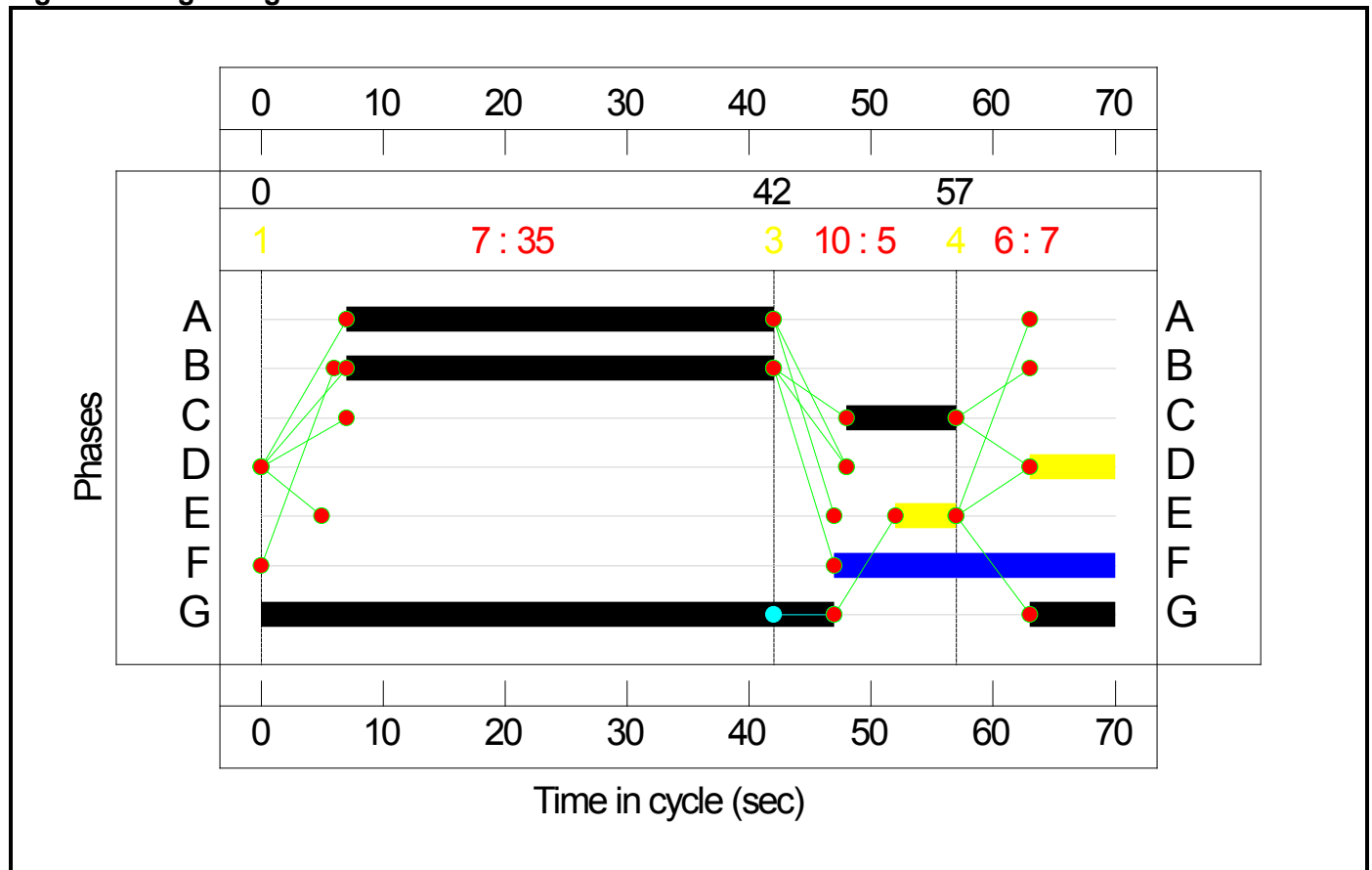
Scenario 1: '2019 DS1 AM Base' (FG1: '2019 DS1 AM Base', Plan 1: 'Plan 1')

Traffic Flows, Actual

Actual Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	1248	210	144	1602
	B	769	0	242	184	1195
	C	42	167	0	10	219
	D	16	59	6	0	81
	Tot.	827	1474	458	338	3097

Signal Timings Diagram



Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Mean Max Queue (pcu)
J1:1/2+J1:1/1	Newgate Ln S/B Ahead Left	O	-		-	-	-	726	2029:1786	1595	45.5%	1452	0	0	0.4	2.1	0.0	0.4
J1:1/3	Newgate Ln S/B Ahead	O	-		-	-	-	469	2029	1063	44.1%	469	0	0	0.4	3.0	0.0	0.4
J1:2/1	Speedfields Pk Ahead Left	O	-		-	-	-	219	1894	1170	18.7%	219	0	0	0.1	1.9	0.0	0.1
J1:3/1	Newgate Lane N/B Ahead	U	-		-	-	-	760	1965	1965	38.7%	-	-	-	0.3	1.5	0.0	0.3
J1:3/2	Newgate Lane N/B Ahead	O	-		-	-	-	704	2029	1186	59.4%	704	0	0	1.6	8.2	12.6	13.3
J1:4/1	HMS C'wood LT G-way Ahead	O	-		-	-	-	59	1747	548	10.8%	59	0	0	0.1	3.7	0.0	0.1
J1:5/1	Right Ahead	U	-		-	-	-	216	2077	2077	10.4%	-	-	-	0.1	1.0	0.0	0.1
J1:6/1	Ahead	U	-		-	-	-	484	2077	2077	23.3%	-	-	-	0.2	1.1	0.0	0.2
J1:6/2	Right Ahead	U	-		-	-	-	469	2077	2077	22.6%	-	-	-	0.1	1.1	0.0	0.1
J1:7/1	Right	U	-		-	-	-	167	2005	2005	8.3%	-	-	-	0.0	1.0	0.0	0.0
J1:8/1	Ahead	U	-		-	-	-	819	1965	1965	41.7%	-	-	-	0.4	1.6	0.0	0.4
J1:8/2	Ahead	U	-		-	-	-	655	2077	2077	31.5%	-	-	-	0.2	1.3	0.0	0.2
J1:8/3	Right	U	-		-	-	-	216	2005	2005	10.8%	-	-	-	0.1	1.0	0.0	0.1
J1:9/1	Newgate Ln N/B Exit	U	-		-	-	-	1474	4070	4070	36.2%	-	-	-	0.3	0.7	0.0	0.1
J1:11/1	Newgate Ln S/B Exit Ahead	U	-		-	-	-	488	1965	1965	24.8%	-	-	-	0.2	1.2	0.0	0.2
J1:11/2	Newgate Ln S/B Exit Ahead	U	-		-	-	-	517	2105	2105	24.6%	-	-	-	0.2	1.1	0.0	0.2

J2:1/1	Newgate Ln S/B Ahead	U	A		1	35	-	488	1915	985	49.6%	-	-	-	2.0	14.7	6.1	6.6
J2:1/2+J2:1/3	Newgate Ln S/B Ahead Right	U	A C		1	35:9	-	517	2055:1827	906	57.0%	-	-	-	3.1	21.5	3.6	4.3
J2:2/2+J2:2/1	Newgate Ln N/B Ahead Left	U	B		1	35	-	904	2055:1702	1081	83.7%	-	-	-	5.9	23.5	13.6	16.1
J2:2/3	Newgate Ln N/B Ahead	U	B		1	35	-	698	2055	1057	66.0%	-	-	-	3.4	17.5	9.9	10.9
J2:3/1	HMS Collingwood Right Left	U	D		1	7	-	22	1809	207	10.6%	-	-	-	0.2	37.6	0.4	0.4
J2:4/1	Newgate Ln S/B Exit Merge Ahead	U	G		1	54	-	489	1965	1544	31.7%	-	-	-	0.3	1.9	0.1	0.3
J2:4/2	Newgate Ln S/B Exit Merge Ahead	U	G		1	54	-	338	2105	1654	20.4%	-	-	-	0.1	1.5	0.1	0.2
J2:5/1	Newgate Ln N/B Exit Ahead	U	-		-	-	-	760	1915	1915	39.7%	-	-	-	0.3	1.6	0.2	0.5
J2:5/2	Newgate Ln N/B Exit Ahead	U	-		-	-	-	704	2055	2055	34.3%	-	-	-	0.3	1.3	0.0	0.3
J2:P1	Newgate Ln S/B	-	E		1	5	-	0	-	0	0.0%	-	-	-	-	-	-	-
J2:P2	Newgate Ln N/B	-	F		1	23	-	0	-	0	0.0%	-	-	-	-	-	-	-

C1 - Collingwood T-Junction

PRC for Signalled Lanes (%):

7.6

Total Delay for Signalled Lanes (pcuHr):

15.00

Cycle Time (s): 70

PRC Over All Lanes (%):

7.6

Total Delay Over All Lanes(pcuHr):

20.17

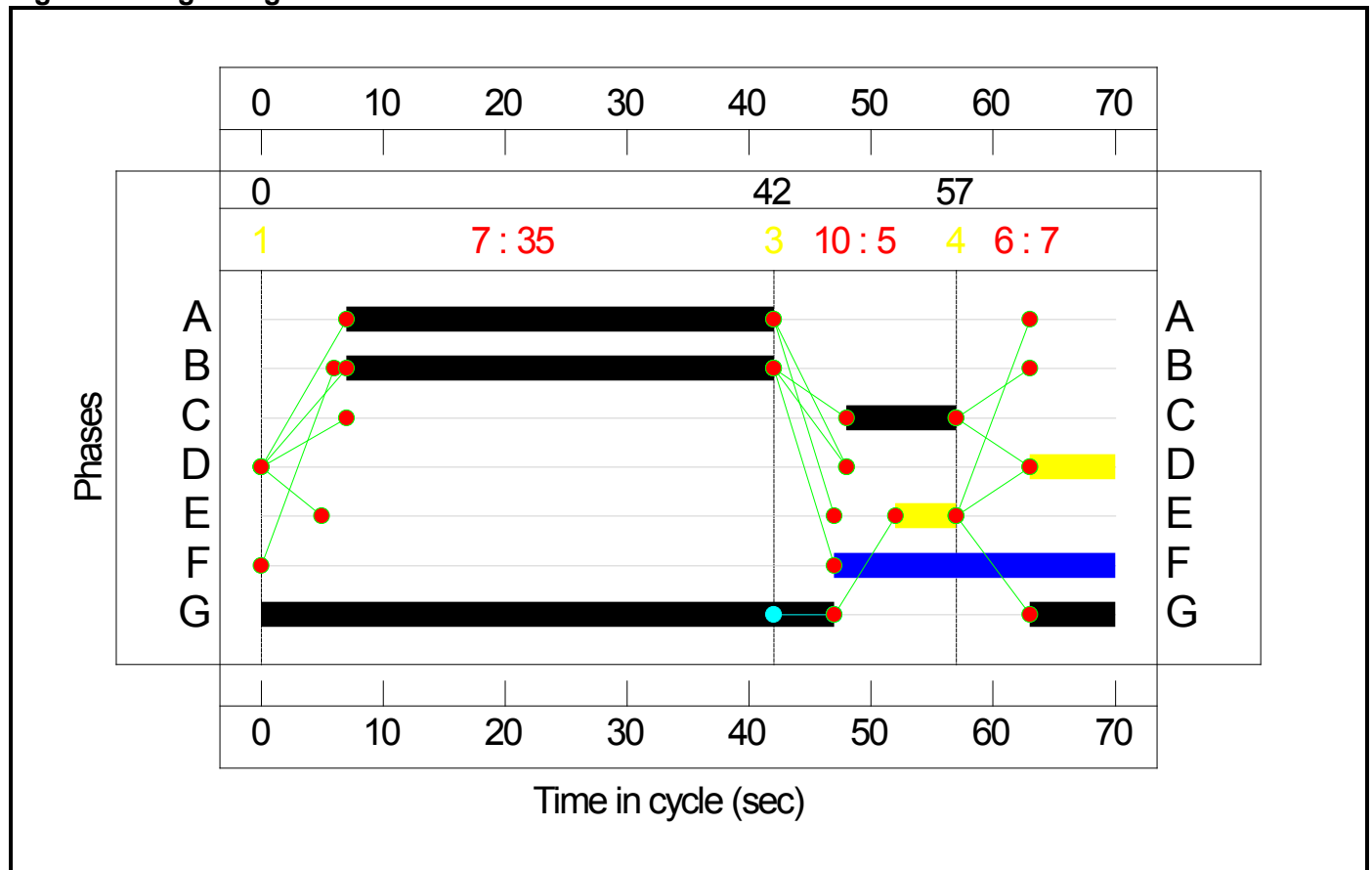
Scenario 2: '2019 DS1 PM Base' (FG2: '2019 DS1 PM Base', Plan 1: 'Plan 1')

Traffic Flows, Actual

Actual Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	753	151	10	914
	B	1144	0	254	69	1467
	C	116	269	0	7	392
	D	69	124	23	0	216
	Tot.	1329	1146	428	86	2989

Signal Timings Diagram



Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Mean Max Queue (pcu)
J1:1/2+J1:1/1	Newgate Ln S/B Ahead Left	O	-		-	-	-	852	2029:1786	1550	55.0%	1704	0	0	0.6	2.6	0.0	0.6
J1:1/3	Newgate Ln S/B Ahead	O	-		-	-	-	615	2029	1088	56.5%	615	0	0	0.6	3.8	0.0	0.6
J1:2/1	Speedfields Pk Ahead Left	O	-		-	-	-	392	1894	982	39.9%	392	0	0	0.3	3.0	0.0	0.3
J1:3/1	Newgate Lane N/B Ahead	U	-		-	-	-	511	1965	1965	26.0%	-	-	-	0.2	1.2	0.0	0.2
J1:3/2	Newgate Lane N/B Ahead	O	-		-	-	-	416	2029	1130	36.8%	416	0	0	0.4	3.2	4.5	4.8
J1:4/1	HMS C'wood LT G-way Ahead	O	-		-	-	-	124	1747	603	20.6%	124	0	0	0.1	3.8	0.0	0.1
J1:5/1	Right Ahead	U	-		-	-	-	174	2077	2077	8.4%	-	-	-	0.0	0.9	0.0	0.0
J1:6/1	Ahead	U	-		-	-	-	598	2077	2077	28.8%	-	-	-	0.2	1.2	0.0	0.2
J1:6/2	Right Ahead	U	-		-	-	-	615	2077	2077	29.6%	-	-	-	0.2	1.2	0.0	0.2
J1:7/1	Right	U	-		-	-	-	269	2005	2005	13.4%	-	-	-	0.1	1.0	0.0	0.1
J1:8/1	Ahead	U	-		-	-	-	635	1965	1965	32.3%	-	-	-	0.2	1.4	0.0	0.2
J1:8/2	Ahead	U	-		-	-	-	511	2077	2077	24.6%	-	-	-	0.2	1.1	0.0	0.2
J1:8/3	Right	U	-		-	-	-	174	2005	2005	8.7%	-	-	-	0.0	1.0	0.0	0.0
J1:9/1	Newgate Ln N/B Exit	U	-		-	-	-	1146	4070	4070	28.2%	-	-	-	0.2	0.6	0.0	0.1
J1:11/1	Newgate Ln S/B Exit Ahead	U	-		-	-	-	615	1965	1965	31.3%	-	-	-	0.2	1.3	0.0	0.2
J1:11/2	Newgate Ln S/B Exit Ahead	U	-		-	-	-	721	2105	2105	34.3%	-	-	-	0.3	1.3	0.0	0.3

J2:1/1	Newgate Ln S/B Ahead	U	A		1	35	-	615	1915	985	62.4%	-	-	-	2.9	17.0	8.5	9.4
J2:1/2+J2:1/3	Newgate Ln S/B Ahead Right	U	A C		1	35:9	-	721	2055:1827	1173	61.5%	-	-	-	3.5	17.6	8.8	9.6
J2:2/2+J2:2/1	Newgate Ln N/B Ahead Left	U	B		1	35	-	521	2055:1702	1056	49.3%	-	-	-	2.1	14.3	6.4	6.9
J2:2/3	Newgate Ln N/B Ahead	U	B		1	35	-	393	2055	1057	37.2%	-	-	-	1.4	12.9	4.6	4.9
J2:3/1	HMS Collingwood Right Left	U	D		1	7	-	92	1811	207	44.5%	-	-	-	1.1	44.5	1.7	2.1
J2:4/1	Newgate Ln S/B Exit Merge Ahead	U	G		1	54	-	626	1965	1544	40.5%	-	-	-	0.4	2.1	0.1	0.5
J2:4/2	Newgate Ln S/B Exit Merge Ahead	U	G		1	54	-	703	2105	1654	42.5%	-	-	-	0.4	2.0	0.1	0.5
J2:5/1	Newgate Ln N/B Exit Ahead	U	-		-	-	-	511	1915	1915	26.7%	-	-	-	0.2	1.4	0.2	0.4
J2:5/2	Newgate Ln N/B Exit Ahead	U	-		-	-	-	416	2055	2055	20.2%	-	-	-	0.1	1.1	0.0	0.1
J2:P1	Newgate Ln S/B	-	E		1	5	-	0	-	0	0.0%	-	-	-	-	-	-	-
J2:P2	Newgate Ln N/B	-	F		1	23	-	0	-	0	0.0%	-	-	-	-	-	-	-

C1 - Collingwood T-Junction

PRC for Signalled Lanes (%): 44.1
 PRC Over All Lanes (%): 44.1

Total Delay for Signalled Lanes (pcuHr): 11.81
 Total Delay Over All Lanes(pcuHr): 16.07

Cycle Time (s): 70

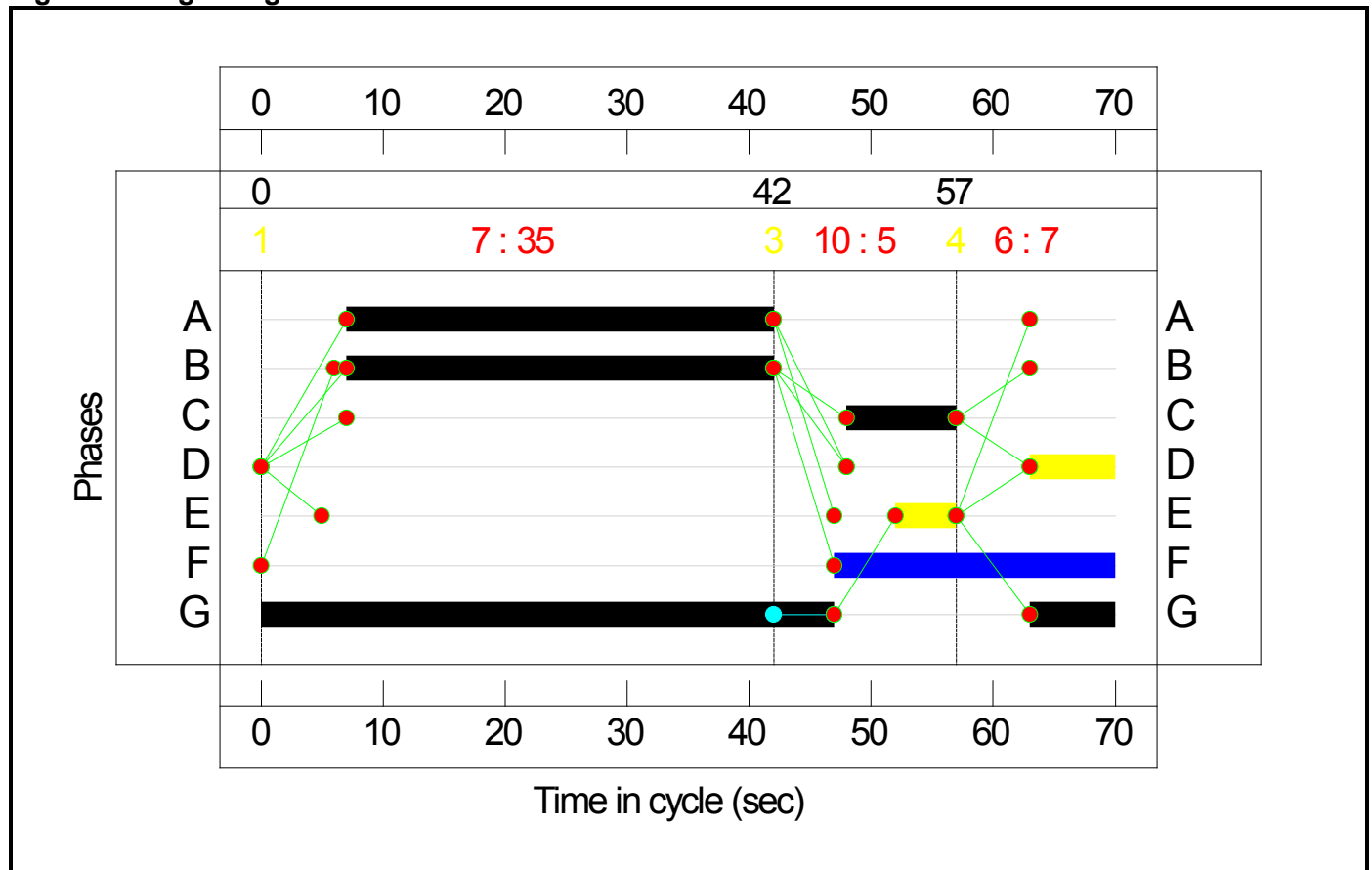
Scenario 3: '2024 DS1 AM Base' (FG3: '2024 DS1 AM Base', Plan 1: 'Plan 1')

Traffic Flows, Actual

Actual Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	1317	222	152	1691
	B	939	0	250	190	1379
	C	51	173	0	11	235
	D	20	61	6	0	87
	Tot.	1010	1551	478	353	3392

Signal Timings Diagram



Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Mean Max Queue (pcu)
J1:1/2+J1:1/1	Newgate Ln S/B Ahead Left	O	-		-	-	-	773	2029:1786	1561	49.5%	1546	0	0	0.5	2.3	0.0	0.5
J1:1/3	Newgate Ln S/B Ahead	O	-		-	-	-	606	2029	1056	57.4%	606	0	0	0.7	4.0	0.0	0.7
J1:2/1	Speedfields Pk Ahead Left	O	-		-	-	-	235	1894	1043	22.5%	235	0	0	0.1	2.2	0.0	0.1
J1:3/1	Newgate Lane N/B Ahead	U	-		-	-	-	789	1965	1965	40.2%	-	-	-	0.3	1.5	0.0	0.3
J1:3/2	Newgate Lane N/B Ahead	O	-		-	-	-	756	2029	1183	63.9%	756	0	0	2.0	9.7	13.7	14.6
J1:4/1	HMS C'wood LT G-way Ahead	O	-		-	-	-	61	1747	541	11.3%	61	0	0	0.1	3.7	0.0	0.1
J1:5/1	Right Ahead	U	-		-	-	-	228	2077	2077	11.0%	-	-	-	0.1	1.0	0.0	0.1
J1:6/1	Ahead	U	-		-	-	-	523	2077	2077	25.2%	-	-	-	0.2	1.2	0.0	0.2
J1:6/2	Right Ahead	U	-		-	-	-	606	2077	2077	29.2%	-	-	-	0.2	1.2	0.0	0.2
J1:7/1	Right	U	-		-	-	-	173	2005	2005	8.6%	-	-	-	0.0	1.0	0.0	0.0
J1:8/1	Ahead	U	-		-	-	-	850	1965	1965	43.3%	-	-	-	0.4	1.6	0.0	0.4
J1:8/2	Ahead	U	-		-	-	-	701	2077	2077	33.8%	-	-	-	0.3	1.3	0.0	0.3
J1:8/3	Right	U	-		-	-	-	228	2005	2005	11.4%	-	-	-	0.1	1.0	0.0	0.1
J1:9/1	Newgate Ln N/B Exit	U	-		-	-	-	1551	4070	4070	38.1%	-	-	-	0.3	0.7	0.0	0.2
J1:11/1	Newgate Ln S/B Exit Ahead	U	-		-	-	-	524	1965	1965	26.7%	-	-	-	0.2	1.2	0.0	0.2
J1:11/2	Newgate Ln S/B Exit Ahead	U	-		-	-	-	667	2105	2105	31.7%	-	-	-	0.2	1.3	0.0	0.2

J2:1/1	Newgate Ln S/B Ahead	U	A		1	35	-	524	1915	985	53.2%	-	-	-	2.2	15.3	6.7	7.3
J2:1/2+J2:1/3	Newgate Ln S/B Ahead Right	U	A C		1	35:9	-	667	2055:1827	1254	53.2%	-	-	-	3.6	19.2	5.6	6.1
J2:2/2+J2:2/1	Newgate Ln N/B Ahead Left	U	B		1	35	-	941	2055:1702	1081	87.0%	-	-	-	6.9	26.3	14.7	17.9
J2:2/3	Newgate Ln N/B Ahead	U	B		1	35	-	750	2055	1057	71.0%	-	-	-	3.9	18.8	11.0	12.3
J2:3/1	HMS Collingwood Right Left	U	D		1	7	-	26	1813	207	12.5%	-	-	-	0.3	37.8	0.4	0.5
J2:4/1	Newgate Ln S/B Exit Merge Ahead	U	G		1	54	-	525	1965	1544	34.0%	-	-	-	0.3	1.9	0.1	0.4
J2:4/2	Newgate Ln S/B Exit Merge Ahead	U	G		1	54	-	485	2105	1654	29.3%	-	-	-	0.2	1.7	0.1	0.3
J2:5/1	Newgate Ln N/B Exit Ahead	U	-		-	-	-	789	1915	1915	41.2%	-	-	-	0.4	1.7	0.2	0.6
J2:5/2	Newgate Ln N/B Exit Ahead	U	-		-	-	-	756	2055	2055	36.8%	-	-	-	0.3	1.4	0.0	0.3
J2:P1	Newgate Ln S/B	-	E		1	5	-	0	-	0	0.0%	-	-	-	-	-	-	-
J2:P2	Newgate Ln N/B	-	F		1	23	-	0	-	0	0.0%	-	-	-	-	-	-	-

C1 - Collingwood T-Junction

PRC for Signalled Lanes (%): 3.4
 PRC Over All Lanes (%): 3.4

Total Delay for Signalled Lanes (pcuHr): 17.37
 Total Delay Over All Lanes(pcuHr): 23.68

Cycle Time (s): 70

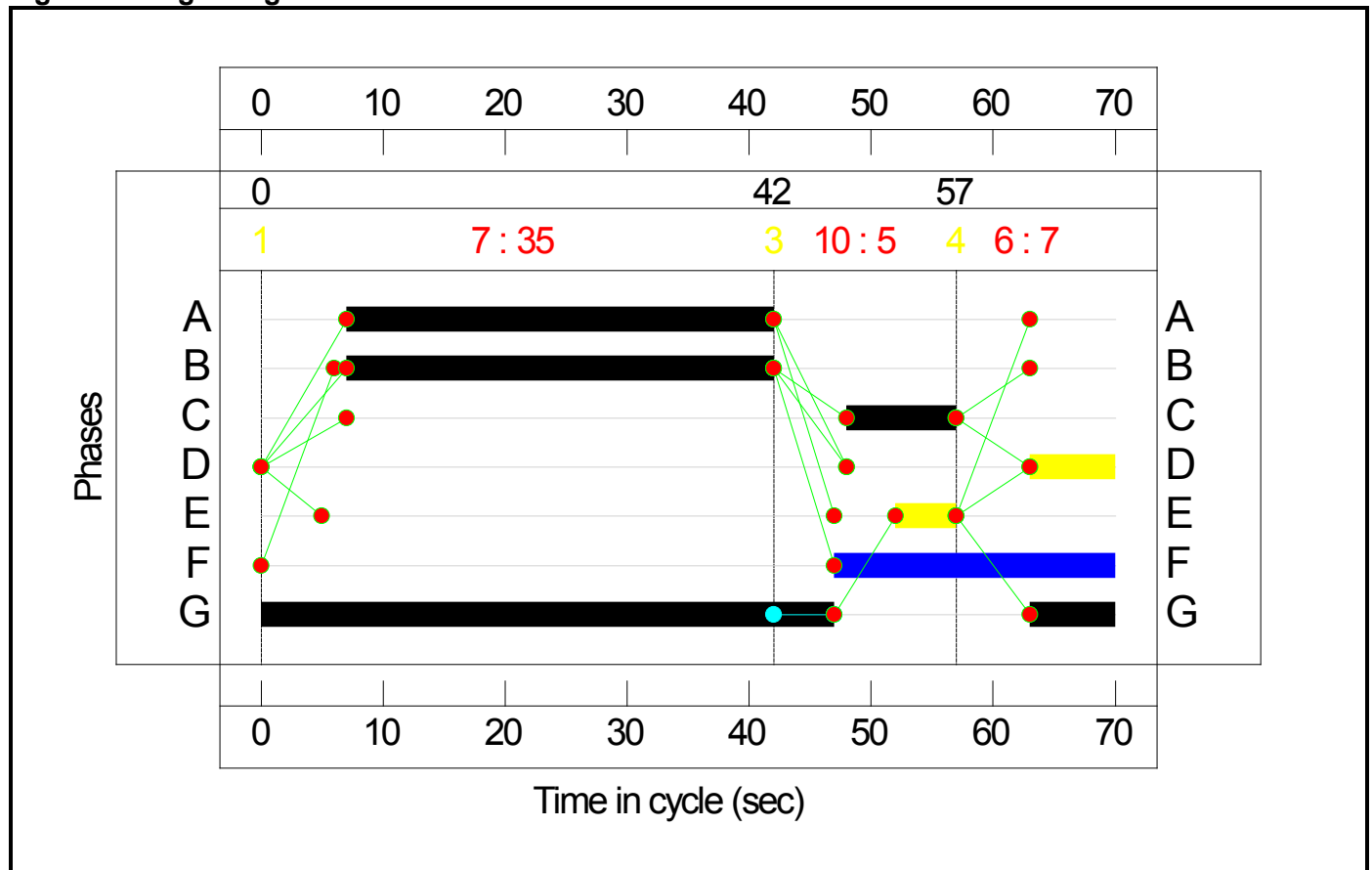
Scenario 4: '2024 DS1 PM Base' (FG4: '2024 DS1 PM Base', Plan 1: 'Plan 1')

Traffic Flows, Actual

Actual Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	808	162	11	981
	B	1319	0	263	71	1653
	C	134	278	0	7	419
	D	80	128	24	0	232
	Tot.	1533	1214	449	89	3285

Signal Timings Diagram



Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Mean Max Queue (pcu)
J1:1/2+J1:1/1	Newgate Ln S/B Ahead Left	O	-		-	-	-	953	2029:1786	1493	63.8%	1906	0	0	0.9	3.3	0.0	0.9
J1:1/3	Newgate Ln S/B Ahead	O	-		-	-	-	700	2029	1081	64.8%	700	0	0	0.9	4.7	0.0	0.9
J1:2/1	Speedfields Pk Ahead Left	O	-		-	-	-	419	1894	855	49.0%	419	0	0	0.5	4.1	0.0	0.5
J1:3/1	Newgate Lane N/B Ahead	U	-		-	-	-	550	1965	1965	28.0%	-	-	-	0.2	1.3	0.0	0.2
J1:3/2	Newgate Lane N/B Ahead	O	-		-	-	-	444	2029	1125	39.5%	444	0	0	0.4	3.5	5.1	5.4
J1:4/1	HMS C'wood LT G-way Ahead	O	-		-	-	-	128	1747	594	21.6%	128	0	0	0.1	3.9	0.0	0.1
J1:5/1	Right Ahead	U	-		-	-	-	186	2077	2077	9.0%	-	-	-	0.0	1.0	0.0	0.0
J1:6/1	Ahead	U	-		-	-	-	690	2077	2077	33.2%	-	-	-	0.2	1.3	0.0	0.2
J1:6/2	Right Ahead	U	-		-	-	-	700	2077	2077	33.7%	-	-	-	0.3	1.3	0.0	0.3
J1:7/1	Right	U	-		-	-	-	278	2005	2005	13.9%	-	-	-	0.1	1.0	0.0	0.1
J1:8/1	Ahead	U	-		-	-	-	678	1965	1965	34.5%	-	-	-	0.3	1.4	0.0	0.3
J1:8/2	Ahead	U	-		-	-	-	536	2077	2077	25.8%	-	-	-	0.2	1.2	0.0	0.2
J1:8/3	Right	U	-		-	-	-	186	2005	2005	9.3%	-	-	-	0.1	1.0	0.0	0.1
J1:9/1	Newgate Ln N/B Exit	U	-		-	-	-	1214	4070	4070	29.8%	-	-	-	0.2	0.6	0.0	0.1
J1:11/1	Newgate Ln S/B Exit Ahead	U	-		-	-	-	706	1965	1965	35.9%	-	-	-	0.3	1.4	0.0	0.3
J1:11/2	Newgate Ln S/B Exit Ahead	U	-		-	-	-	825	2105	2105	39.2%	-	-	-	0.3	1.4	0.0	0.3

J2:1/1	Newgate Ln S/B Ahead	U	A		1	35	-	706	1915	985	71.7%	-	-	-	3.8	19.5	10.4	11.6
J2:1/2+J2:1/3	Newgate Ln S/B Ahead Right	U	A C		1	35:9	-	825	2055:1827	1162	71.0%	-	-	-	4.5	19.6	11.0	12.2
J2:2/2+J2:2/1	Newgate Ln N/B Ahead Left	U	B		1	35	-	561	2055:1702	1056	53.1%	-	-	-	2.3	14.9	7.1	7.6
J2:2/3	Newgate Ln N/B Ahead	U	B		1	35	-	420	2055	1057	39.7%	-	-	-	1.5	13.2	4.9	5.2
J2:3/1	HMS Collingwood Right Left	U	D		1	7	-	104	1813	207	50.2%	-	-	-	1.3	46.4	1.9	2.4
J2:4/1	Newgate Ln S/B Exit Merge Ahead	U	G		1	54	-	732	1965	1544	47.4%	-	-	-	0.5	2.4	0.2	0.6
J2:4/2	Newgate Ln S/B Exit Merge Ahead	U	G		1	54	-	801	2105	1654	48.4%	-	-	-	0.5	2.3	0.2	0.6
J2:5/1	Newgate Ln N/B Exit Ahead	U	-		-	-	-	550	1915	1915	28.7%	-	-	-	0.2	1.5	0.2	0.4
J2:5/2	Newgate Ln N/B Exit Ahead	U	-		-	-	-	444	2055	2055	21.6%	-	-	-	0.1	1.1	0.0	0.1
J2:P1	Newgate Ln S/B	-	E		1	5	-	0	-	0	0.0%	-	-	-	-	-	-	-
J2:P2	Newgate Ln N/B	-	F		1	23	-	0	-	0	0.0%	-	-	-	-	-	-	-

C1 - Collingwood T-Junction

PRC for Signalled Lanes (%): 25.5
 PRC Over All Lanes (%): 25.5

Total Delay for Signalled Lanes (pcuHr): 14.49
 Total Delay Over All Lanes(pcuHr): 19.83

Cycle Time (s): 70

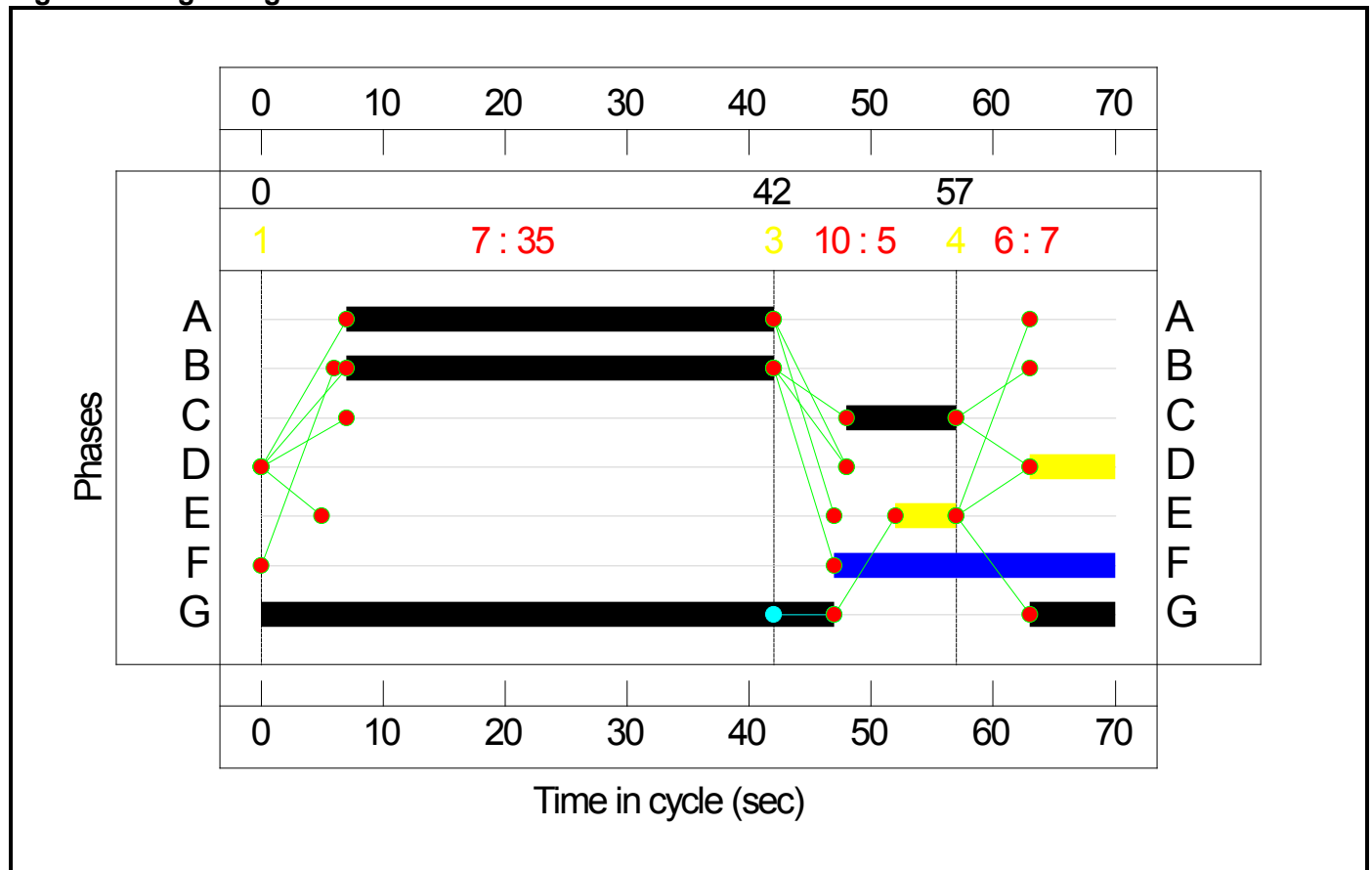
Scenario 5: '2024 DS1 AM Base + Development' (FG5: '2024 DS1 AM Base+Dev', Plan 1: 'Plan 1')

Traffic Flows, Actual

Actual Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	1331	224	154	1709
	B	954	0	250	190	1394
	C	52	173	0	11	236
	D	20	61	6	0	87
	Tot.	1026	1565	480	355	3426

Signal Timings Diagram



Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Mean Max Queue (pcu)
J1:1/2+J1:1/1	Newgate Ln S/B Ahead Left	O	-		-	-	-	781	2029:1786	1552	50.3%	1562	0	0	0.5	2.3	0.0	0.5
J1:1/3	Newgate Ln S/B Ahead	O	-		-	-	-	613	2029	1055	58.1%	613	0	0	0.7	4.1	0.0	0.7
J1:2/1	Speedfields Pk Ahead Left	O	-		-	-	-	236	1894	1032	22.9%	236	0	0	0.1	2.3	0.0	0.1
J1:3/1	Newgate Lane N/B Ahead	U	-		-	-	-	794	1965	1965	40.4%	-	-	-	0.3	1.5	0.0	0.3
J1:3/2	Newgate Lane N/B Ahead	O	-		-	-	-	767	2029	1183	64.8%	767	0	0	2.1	10.1	13.9	14.8
J1:4/1	HMS C'wood LT G-way Ahead	O	-		-	-	-	61	1747	540	11.3%	61	0	0	0.1	3.8	0.0	0.1
J1:5/1	Right Ahead	U	-		-	-	-	230	2077	2077	11.1%	-	-	-	0.1	1.0	0.0	0.1
J1:6/1	Ahead	U	-		-	-	-	531	2077	2077	25.6%	-	-	-	0.2	1.2	0.0	0.2
J1:6/2	Right Ahead	U	-		-	-	-	613	2077	2077	29.5%	-	-	-	0.2	1.2	0.0	0.2
J1:7/1	Right	U	-		-	-	-	173	2005	2005	8.6%	-	-	-	0.0	1.0	0.0	0.0
J1:8/1	Ahead	U	-		-	-	-	855	1965	1965	43.5%	-	-	-	0.4	1.6	0.0	0.4
J1:8/2	Ahead	U	-		-	-	-	710	2077	2077	34.2%	-	-	-	0.3	1.3	0.0	0.3
J1:8/3	Right	U	-		-	-	-	230	2005	2005	11.5%	-	-	-	0.1	1.0	0.0	0.1
J1:9/1	Newgate Ln N/B Exit	U	-		-	-	-	1565	4070	4070	38.5%	-	-	-	0.3	0.7	0.0	0.2
J1:11/1	Newgate Ln S/B Exit Ahead	U	-		-	-	-	532	1965	1965	27.1%	-	-	-	0.2	1.3	0.0	0.2
J1:11/2	Newgate Ln S/B Exit Ahead	U	-		-	-	-	675	2105	2105	32.1%	-	-	-	0.2	1.3	0.0	0.2

J2:1/1	Newgate Ln S/B Ahead	U	A		1	35	-	532	1915	985	54.0%	-	-	-	2.3	15.4	6.9	7.5
J2:1/2+J2:1/3	Newgate Ln S/B Ahead Right	U	A C		1	35:9	-	675	2055:1827	1255	53.8%	-	-	-	3.6	19.2	5.8	6.4
J2:2/2+J2:2/1	Newgate Ln N/B Ahead Left	U	B		1	35	-	948	2055:1702	1081	87.7%	-	-	-	7.1	27.0	15.1	18.4
J2:2/3	Newgate Ln N/B Ahead	U	B		1	35	-	761	2055	1057	72.0%	-	-	-	4.0	19.1	11.2	12.5
J2:3/1	HMS Collingwood Right Left	U	D		1	7	-	26	1813	207	12.5%	-	-	-	0.3	37.8	0.4	0.5
J2:4/1	Newgate Ln S/B Exit Merge Ahead	U	G		1	54	-	533	1965	1544	34.5%	-	-	-	0.3	1.9	0.1	0.4
J2:4/2	Newgate Ln S/B Exit Merge Ahead	U	G		1	54	-	493	2105	1654	29.8%	-	-	-	0.2	1.7	0.1	0.3
J2:5/1	Newgate Ln N/B Exit Ahead	U	-		-	-	-	794	1915	1915	41.5%	-	-	-	0.4	1.7	0.2	0.6
J2:5/2	Newgate Ln N/B Exit Ahead	U	-		-	-	-	767	2055	2055	37.3%	-	-	-	0.3	1.4	0.0	0.3
J2:P1	Newgate Ln S/B	-	E		1	5	-	0	-	0	0.0%	-	-	-	-	-	-	-
J2:P2	Newgate Ln N/B	-	F		1	23	-	0	-	0	0.0%	-	-	-	-	-	-	-

C1 - Collingwood T-Junction

PRC for Signalled Lanes (%): 2.7
 PRC Over All Lanes (%): 2.7

Total Delay for Signalled Lanes (pcuHr): 17.83
 Total Delay Over All Lanes(pcuHr): 24.32

Cycle Time (s): 70

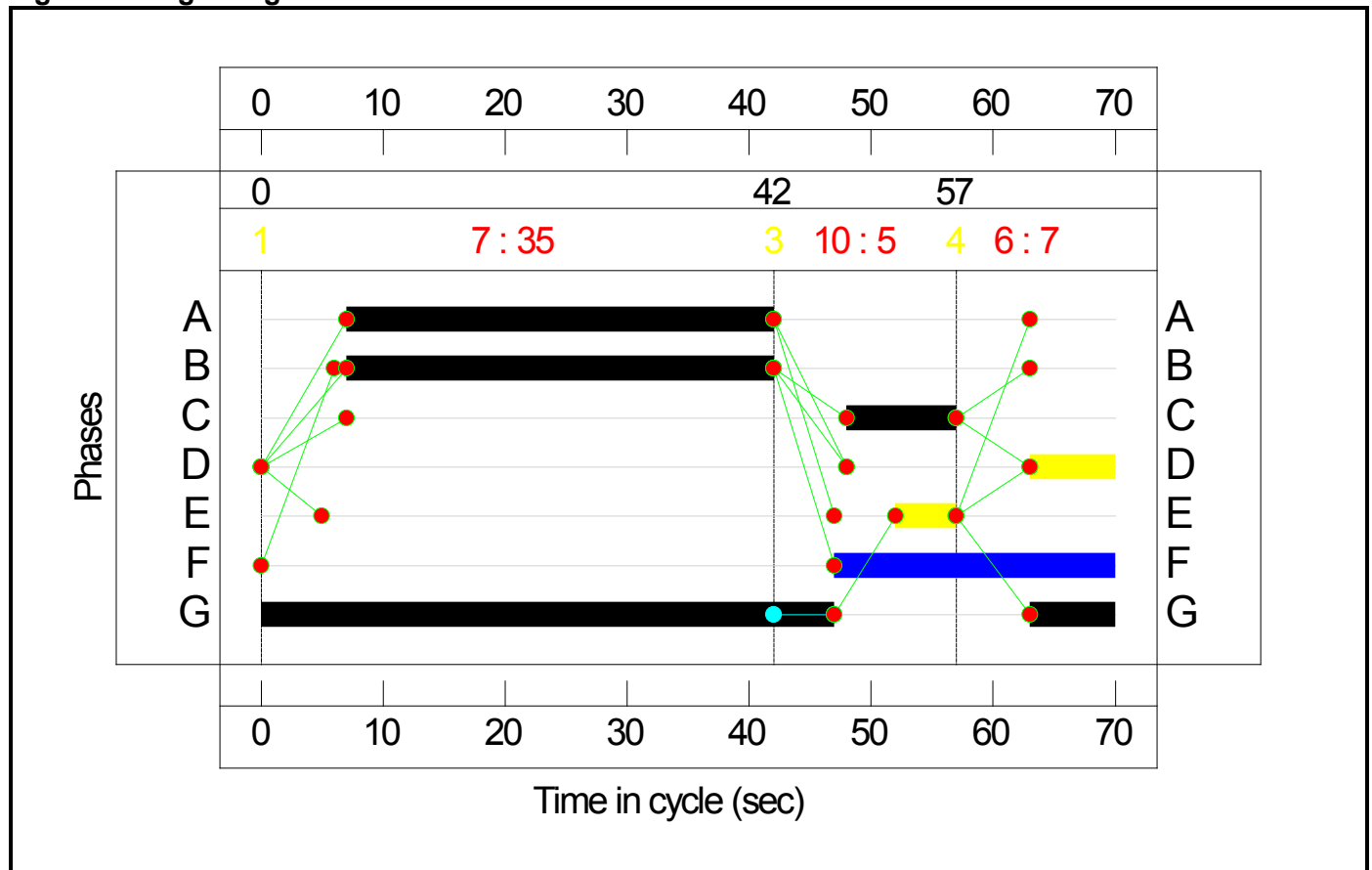
Scenario 6: '2024 DS1 PM Base + Development' (FG6: '2024 DS1 PM Base+Dev', Plan 1: 'Plan 1')

Traffic Flows, Actual

Actual Flow :

	Destination					
	A	B	C	D	Tot.	
Origin	A	0	826	166	11	1003
	B	1338	0	263	71	1672
	C	136	278	0	7	421
	D	81	128	24	0	233
	Tot.	1555	1232	453	89	3329

Signal Timings Diagram



Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Mean Max Queue (pcu)
J1:1/2+J1:1/1	Newgate Ln S/B Ahead Left	O	-		-	-	-	968	2029:1786	1481	65.4%	1936	0	0	0.9	3.5	0.0	0.9
J1:1/3	Newgate Ln S/B Ahead	O	-		-	-	-	704	2029	1079	65.3%	704	0	0	0.9	4.8	0.0	0.9
J1:2/1	Speedfields Pk Ahead Left	O	-		-	-	-	421	1894	841	50.0%	421	0	0	0.5	4.3	0.0	0.5
J1:3/1	Newgate Lane N/B Ahead	U	-		-	-	-	562	1965	1965	28.6%	-	-	-	0.2	1.3	0.0	0.2
J1:3/2	Newgate Lane N/B Ahead	O	-		-	-	-	454	2029	1125	40.4%	454	0	0	0.5	3.6	5.4	5.7
J1:4/1	HMS C'wood LT G-way Ahead	O	-		-	-	-	128	1747	591	21.6%	128	0	0	0.1	3.9	0.0	0.1
J1:5/1	Right Ahead	U	-		-	-	-	190	2077	2077	9.1%	-	-	-	0.1	1.0	0.0	0.1
J1:6/1	Ahead	U	-		-	-	-	705	2077	2077	33.9%	-	-	-	0.3	1.3	0.0	0.3
J1:6/2	Right Ahead	U	-		-	-	-	704	2077	2077	33.9%	-	-	-	0.3	1.3	0.0	0.3
J1:7/1	Right	U	-		-	-	-	278	2005	2005	13.9%	-	-	-	0.1	1.0	0.0	0.1
J1:8/1	Ahead	U	-		-	-	-	690	1965	1965	35.1%	-	-	-	0.3	1.4	0.0	0.3
J1:8/2	Ahead	U	-		-	-	-	542	2077	2077	26.1%	-	-	-	0.2	1.2	0.0	0.2
J1:8/3	Right	U	-		-	-	-	190	2005	2005	9.5%	-	-	-	0.1	1.0	0.0	0.1
J1:9/1	Newgate Ln N/B Exit	U	-		-	-	-	1232	4070	4070	30.3%	-	-	-	0.2	0.6	0.0	0.1
J1:11/1	Newgate Ln S/B Exit Ahead	U	-		-	-	-	714	1965	1965	36.3%	-	-	-	0.3	1.4	0.0	0.3
J1:11/2	Newgate Ln S/B Exit Ahead	U	-		-	-	-	838	2105	2105	39.8%	-	-	-	0.3	1.4	0.0	0.3

J2:1/1	Newgate Ln S/B Ahead	U	A		1	35	-	714	1915	985	72.5%	-	-	-	3.9	19.8	10.7	12.0
J2:1/2+J2:1/3	Newgate Ln S/B Ahead Right	U	A C		1	35:9	-	838	2055:1827	1161	72.2%	-	-	-	4.6	19.9	11.2	12.5
J2:2/2+J2:2/1	Newgate Ln N/B Ahead Left	U	B		1	35	-	573	2055:1702	1056	54.2%	-	-	-	2.4	15.1	7.4	8.0
J2:2/3	Newgate Ln N/B Ahead	U	B		1	35	-	430	2055	1057	40.7%	-	-	-	1.6	13.3	5.0	5.4
J2:3/1	HMS Collingwood Right Left	U	D		1	7	-	105	1813	207	50.7%	-	-	-	1.4	46.6	1.9	2.4
J2:4/1	Newgate Ln S/B Exit Merge Ahead	U	G		1	54	-	742	1965	1544	48.1%	-	-	-	0.5	2.4	0.2	0.6
J2:4/2	Newgate Ln S/B Exit Merge Ahead	U	G		1	54	-	813	2105	1654	49.2%	-	-	-	0.5	2.3	0.2	0.7
J2:5/1	Newgate Ln N/B Exit Ahead	U	-		-	-	-	562	1915	1915	29.3%	-	-	-	0.2	1.5	0.3	0.5
J2:5/2	Newgate Ln N/B Exit Ahead	U	-		-	-	-	454	2055	2055	22.1%	-	-	-	0.1	1.1	0.0	0.1
J2:P1	Newgate Ln S/B	-	E		1	5	-	0	-	0	0.0%	-	-	-	-	-	-	-
J2:P2	Newgate Ln N/B	-	F		1	23	-	0	-	0	0.0%	-	-	-	-	-	-	-

C1 - Collingwood T-Junction

PRC for Signalled Lanes (%): 24.1
 PRC Over All Lanes (%): 24.1

Total Delay for Signalled Lanes (pcuHr): 14.91
 Total Delay Over All Lanes(pcuHr): 20.43

Cycle Time (s): 70

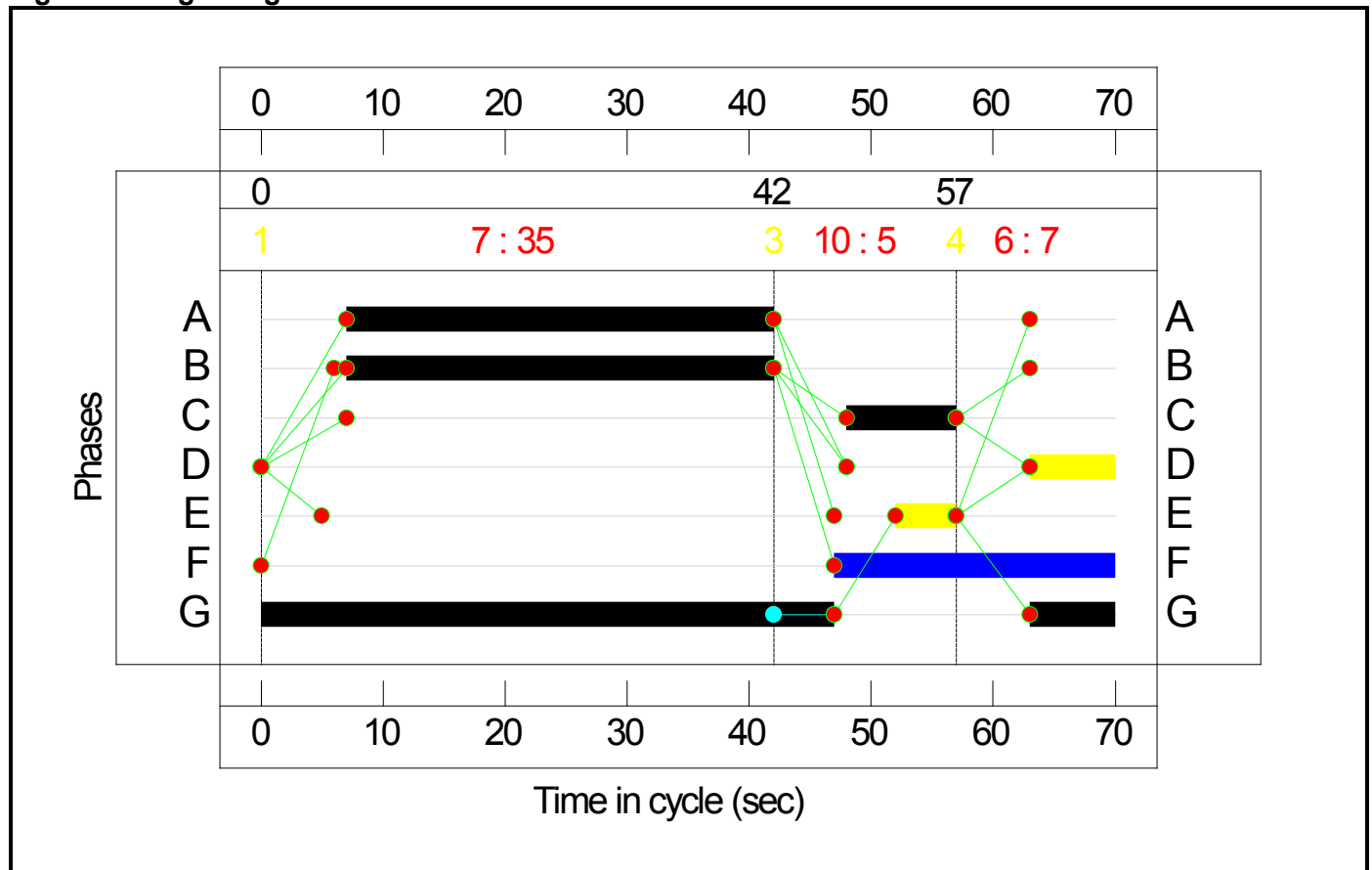
Scenario 7: '2019 DS2 AM Base' (FG7: '2019 DS2 AM Base', Plan 1: 'Plan 1')

Traffic Flows, Actual

Actual Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	1267	210	144	1621
	B	503	0	242	184	929
	C	42	167	0	10	219
	D	16	59	6	0	81
	Tot.	561	1493	458	338	2850

Signal Timings Diagram



Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Mean Max Queue (pcu)
J1:1/2+J1:1/1	Newgate Ln S/B Ahead Left	O	-		-	-	-	740	2029:1786	1580	46.8%	1480	0	0	0.4	2.1	0.0	0.4
J1:1/3	Newgate Ln S/B Ahead	O	-		-	-	-	189	2029	1063	17.8%	189	0	0	0.1	2.1	0.0	0.1
J1:2/1	Speedfields Pk Ahead Left	O	-		-	-	-	219	1894	1361	16.1%	219	0	0	0.1	1.6	0.0	0.1
J1:3/1	Newgate Lane N/B Ahead	U	-		-	-	-	768	1965	1965	39.1%	-	-	-	0.3	1.5	0.0	0.3
J1:3/2	Newgate Lane N/B Ahead	O	-		-	-	-	715	2029	1186	60.3%	715	0	0	1.7	8.5	12.8	13.6
J1:4/1	HMS C'wood LT G-way Ahead	O	-		-	-	-	59	1747	546	10.8%	59	0	0	0.1	3.7	0.0	0.1
J1:5/1	Right Ahead	U	-		-	-	-	216	2077	2077	10.4%	-	-	-	0.1	1.0	0.0	0.1
J1:6/1	Ahead	U	-		-	-	-	498	2077	2077	24.0%	-	-	-	0.2	1.1	0.0	0.2
J1:6/2	Right Ahead	U	-		-	-	-	189	2077	2077	9.1%	-	-	-	0.1	1.0	0.0	0.1
J1:7/1	Right	U	-		-	-	-	167	2005	2005	8.3%	-	-	-	0.0	1.0	0.0	0.0
J1:8/1	Ahead	U	-		-	-	-	827	1965	1965	42.1%	-	-	-	0.4	1.6	0.0	0.4
J1:8/2	Ahead	U	-		-	-	-	666	2077	2077	32.1%	-	-	-	0.2	1.3	0.0	0.2
J1:8/3	Right	U	-		-	-	-	216	2005	2005	10.8%	-	-	-	0.1	1.0	0.0	0.1
J1:9/1	Newgate Ln N/B Exit	U	-		-	-	-	1493	4070	4070	36.7%	-	-	-	0.3	0.7	0.0	0.1
J1:11/1	Newgate Ln S/B Exit Ahead	U	-		-	-	-	540	1965	1965	27.5%	-	-	-	0.2	1.3	0.0	0.2
J1:11/2	Newgate Ln S/B Exit Ahead	U	-		-	-	-	199	2105	2105	9.5%	-	-	-	0.1	0.9	0.0	0.1

J2:1/1	Newgate Ln S/B Ahead	U	A		1	35	-	540	1915	985	54.8%	-	-	-	2.3	15.5	7.1	7.7
J2:1/2+J2:1/3	Newgate Ln S/B Ahead Right	U	A C		1	35:9	-	199	2055:1827	268	74.3%	-	-	-	3.0	53.4	3.6	5.0
J2:2/2+J2:2/1	Newgate Ln N/B Ahead Left	U	B		1	35	-	912	2055:1702	1080	84.4%	-	-	-	6.1	24.1	14.0	16.6
J2:2/3	Newgate Ln N/B Ahead	U	B		1	35	-	709	2055	1057	67.1%	-	-	-	3.5	17.8	10.0	11.1
J2:3/1	HMS Collingwood Right Left	U	D		1	7	-	22	1809	207	10.6%	-	-	-	0.2	37.6	0.4	0.4
J2:4/1	Newgate Ln S/B Exit Merge Ahead	U	G		1	54	-	540	1965	1544	35.0%	-	-	-	0.3	2.0	0.1	0.4
J2:4/2	Newgate Ln S/B Exit Merge Ahead	U	G		1	54	-	21	2105	1654	1.3%	-	-	-	0.0	1.1	0.0	0.0
J2:5/1	Newgate Ln N/B Exit Ahead	U	-		-	-	-	768	1915	1915	40.1%	-	-	-	0.3	1.6	0.2	0.5
J2:5/2	Newgate Ln N/B Exit Ahead	U	-		-	-	-	715	2055	2055	34.8%	-	-	-	0.3	1.3	0.0	0.3
J2:P1	Newgate Ln S/B	-	E		1	5	-	0	-	0	0.0%	-	-	-	-	-	-	-
J2:P2	Newgate Ln N/B	-	F		1	23	-	0	-	0	0.0%	-	-	-	-	-	-	-

C1 - Collingwood T-Junction

PRC for Signalled Lanes (%): 6.6
 PRC Over All Lanes (%): 6.6

Total Delay for Signalled Lanes (pcuHr): 15.41
 Total Delay Over All Lanes(pcuHr): 20.24

Cycle Time (s): 70

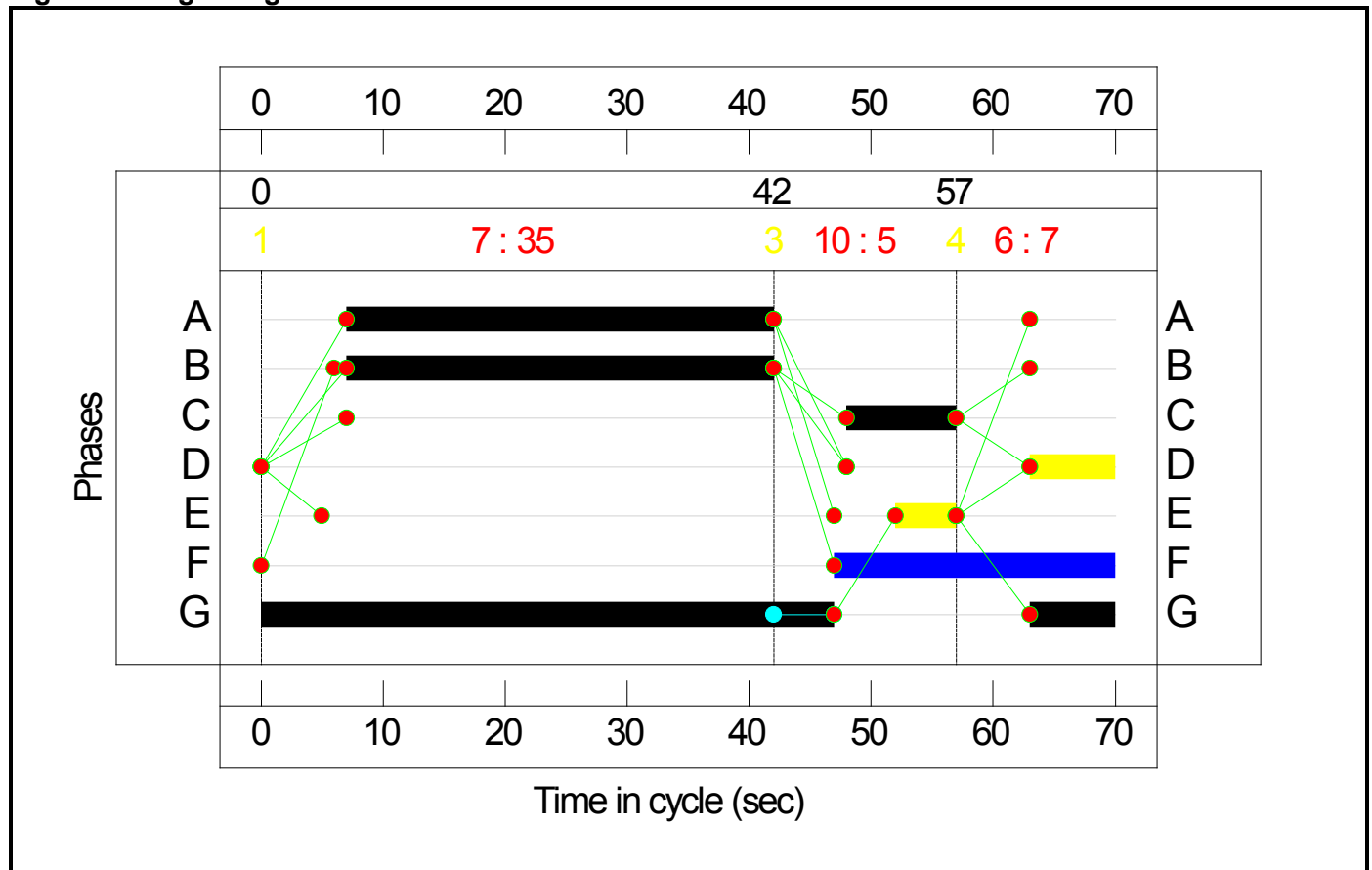
Scenario 8: '2019 DS2 PM Base' (FG8: '2019 DS2 PM Base', Plan 1: 'Plan 1')

Traffic Flows, Actual

Actual Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	739	151	10	900
	B	655	0	254	69	978
	C	116	269	0	7	392
	D	69	124	23	0	216
	Tot.	840	1132	428	86	2486

Signal Timings Diagram



Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Mean Max Queue (pcu)
J1:1/2+J1:1/1	Newgate Ln S/B Ahead Left	O	-		-	-	-	622	2029:1786	1873	33.2%	1244	0	0	0.2	1.4	0.0	0.2
J1:1/3	Newgate Ln S/B Ahead	O	-		-	-	-	356	2029	1088	32.7%	356	0	0	0.2	2.5	0.0	0.2
J1:2/1	Speedfields Pk Ahead Left	O	-		-	-	-	392	1894	1335	29.4%	392	0	0	0.2	1.9	0.0	0.2
J1:3/1	Newgate Lane N/B Ahead	U	-		-	-	-	503	1965	1965	25.6%	-	-	-	0.2	1.2	0.0	0.2
J1:3/2	Newgate Lane N/B Ahead	O	-		-	-	-	410	2029	1130	36.3%	410	0	0	0.4	3.1	4.2	4.5
J1:4/1	HMS C'wood LT G-way Ahead	O	-		-	-	-	124	1747	604	20.5%	124	0	0	0.1	3.7	0.0	0.1
J1:5/1	Right Ahead	U	-		-	-	-	174	2077	2077	8.4%	-	-	-	0.0	0.9	0.0	0.0
J1:6/1	Ahead	U	-		-	-	-	368	2077	2077	17.7%	-	-	-	0.1	1.1	0.0	0.1
J1:6/2	Right Ahead	U	-		-	-	-	356	2077	2077	17.1%	-	-	-	0.1	1.0	0.0	0.1
J1:7/1	Right	U	-		-	-	-	269	2005	2005	13.4%	-	-	-	0.1	1.0	0.0	0.1
J1:8/1	Ahead	U	-		-	-	-	627	1965	1965	31.9%	-	-	-	0.2	1.3	0.0	0.2
J1:8/2	Ahead	U	-		-	-	-	505	2077	2077	24.3%	-	-	-	0.2	1.1	0.0	0.2
J1:8/3	Right	U	-		-	-	-	174	2005	2005	8.7%	-	-	-	0.0	1.0	0.0	0.0
J1:9/1	Newgate Ln N/B Exit	U	-		-	-	-	1132	4070	4070	27.8%	-	-	-	0.2	0.6	0.0	0.1
J1:11/1	Newgate Ln S/B Exit Ahead	U	-		-	-	-	387	1965	1965	19.7%	-	-	-	0.1	1.1	0.0	0.1
J1:11/2	Newgate Ln S/B Exit Ahead	U	-		-	-	-	460	2105	2105	21.9%	-	-	-	0.1	1.1	0.0	0.1

J2:1/1	Newgate Ln S/B Ahead	U	A		1	35	-	387	1915	985	39.3%	-	-	-	1.4	13.4	4.5	4.8
J2:1/2+J2:1/3	Newgate Ln S/B Ahead Right	U	A C		1	35:9	-	460	2055:1827	1236	37.2%	-	-	-	1.9	15.2	4.4	4.7
J2:2/2+J2:2/1	Newgate Ln N/B Ahead Left	U	B		1	35	-	513	2055:1702	1056	48.6%	-	-	-	2.0	14.2	6.3	6.8
J2:2/3	Newgate Ln N/B Ahead	U	B		1	35	-	387	2055	1057	36.6%	-	-	-	1.4	12.9	4.4	4.7
J2:3/1	HMS Collingwood Right Left	U	D		1	7	-	92	1811	207	44.5%	-	-	-	1.1	44.5	1.7	2.1
J2:4/1	Newgate Ln S/B Exit Merge Ahead	U	G		1	54	-	390	1965	1544	25.3%	-	-	-	0.2	1.7	0.1	0.3
J2:4/2	Newgate Ln S/B Exit Merge Ahead	U	G		1	54	-	450	2105	1654	27.2%	-	-	-	0.2	1.6	0.1	0.3
J2:5/1	Newgate Ln N/B Exit Ahead	U	-		-	-	-	503	1915	1915	26.3%	-	-	-	0.2	1.4	0.2	0.4
J2:5/2	Newgate Ln N/B Exit Ahead	U	-		-	-	-	410	2055	2055	20.0%	-	-	-	0.1	1.1	0.0	0.1
J2:P1	Newgate Ln S/B	-	E		1	5	-	0	-	0	0.0%	-	-	-	-	-	-	-
J2:P2	Newgate Ln N/B	-	F		1	23	-	0	-	0	0.0%	-	-	-	-	-	-	-

C1 - Collingwood T-Junction

PRC for Signalled Lanes (%): 85.3
 PRC Over All Lanes (%): 85.3

Total Delay for Signalled Lanes (pcuHr): 8.32
 Total Delay Over All Lanes(pcuHr): 11.22

Cycle Time (s): 70

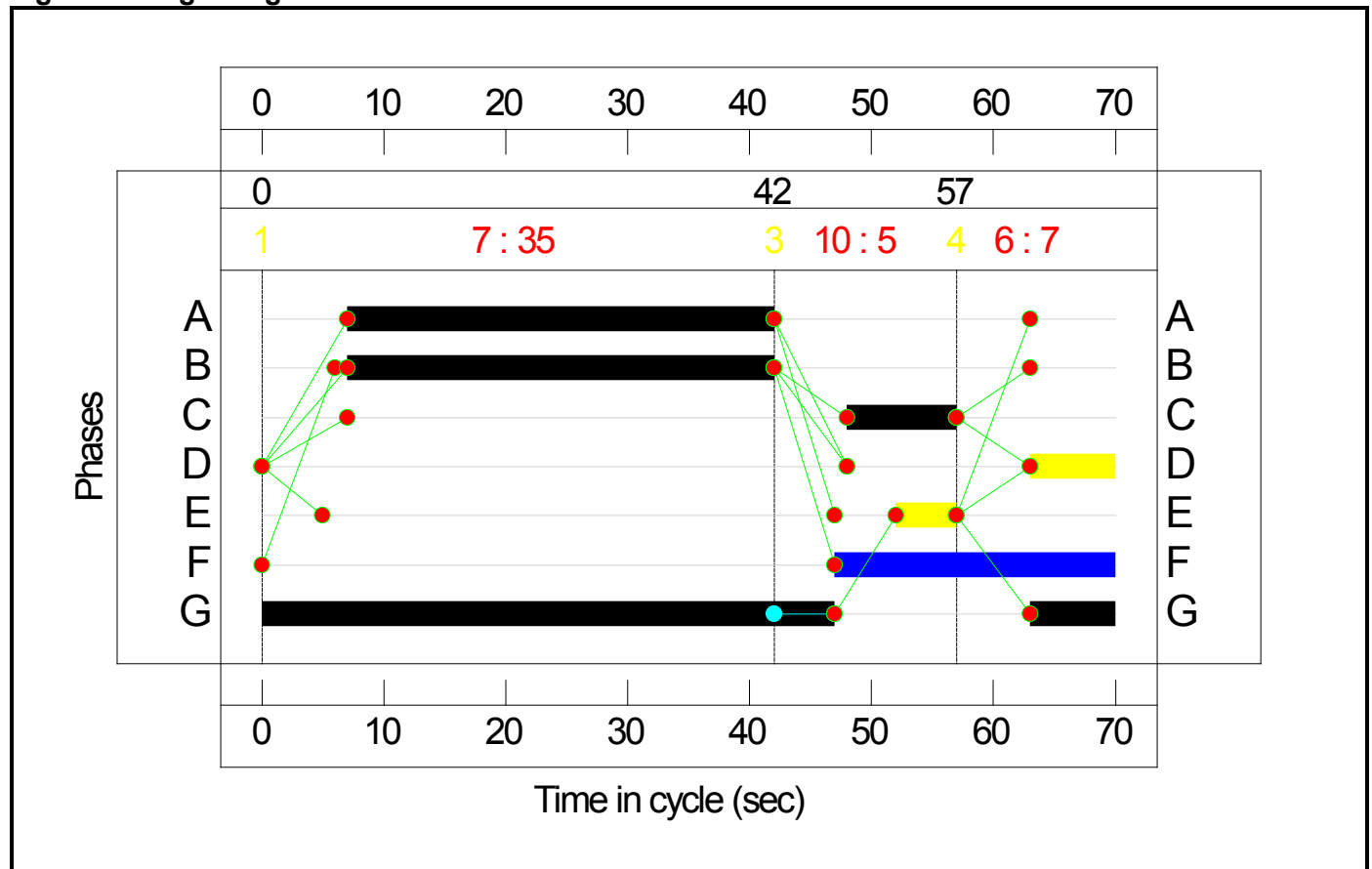
Scenario 9: '2024 DS2 AM Base' (FG9: '2024 DS2 AM Base', Plan 1: 'Plan 1')

Traffic Flows, Actual

Actual Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	1337	222	152	1711
	B	658	0	250	190	1098
	C	55	173	0	11	239
	D	21	61	6	0	88
	Tot.	734	1571	478	353	3136

Signal Timings Diagram



Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Mean Max Queue (pcu)
J1:1/2+J1:1/1	Newgate Ln S/B Ahead Left	O	-		-	-	-	908	2029:1786	1458	62.3%	1816	0	0	0.8	3.3	0.0	0.8
J1:1/3	Newgate Ln S/B Ahead	O	-		-	-	-	190	2029	1056	18.0%	190	0	0	0.1	2.1	0.0	0.1
J1:2/1	Speedfields Pk Ahead Left	O	-		-	-	-	239	1894	1245	19.2%	239	0	0	0.1	1.8	0.0	0.1
J1:3/1	Newgate Lane N/B Ahead	U	-		-	-	-	796	1965	1965	40.5%	-	-	-	0.3	1.5	0.0	0.3
J1:3/2	Newgate Lane N/B Ahead	O	-		-	-	-	769	2029	1183	65.0%	769	0	0	2.2	10.1	14.0	14.9
J1:4/1	HMS C'wood LT G-way Ahead	O	-		-	-	-	61	1747	540	11.3%	61	0	0	0.1	3.8	0.0	0.1
J1:5/1	Right Ahead	U	-		-	-	-	228	2077	2077	11.0%	-	-	-	0.1	1.0	0.0	0.1
J1:6/1	Ahead	U	-		-	-	-	658	2077	2077	31.7%	-	-	-	0.2	1.3	0.0	0.2
J1:6/2	Right Ahead	U	-		-	-	-	190	2077	2077	9.1%	-	-	-	0.1	1.0	0.0	0.1
J1:7/1	Right	U	-		-	-	-	173	2005	2005	8.6%	-	-	-	0.0	1.0	0.0	0.0
J1:8/1	Ahead	U	-		-	-	-	857	1965	1965	43.6%	-	-	-	0.4	1.6	0.0	0.4
J1:8/2	Ahead	U	-		-	-	-	714	2077	2077	34.4%	-	-	-	0.3	1.3	0.0	0.3
J1:8/3	Right	U	-		-	-	-	228	2005	2005	11.4%	-	-	-	0.1	1.0	0.0	0.1
J1:9/1	Newgate Ln N/B Exit	U	-		-	-	-	1571	4070	4070	38.6%	-	-	-	0.3	0.7	0.0	0.2
J1:11/1	Newgate Ln S/B Exit Ahead	U	-		-	-	-	712	1965	1965	36.2%	-	-	-	0.3	1.4	0.0	0.3
J1:11/2	Newgate Ln S/B Exit Ahead	U	-		-	-	-	202	2105	2105	9.6%	-	-	-	0.1	0.9	0.0	0.1

J2:1/1	Newgate Ln S/B Ahead	U	A		1	35	-	712	1915	985	72.3%	-	-	-	3.9	19.7	10.7	12.0
J2:1/2+J2:1/3	Newgate Ln S/B Ahead Right	U	A C		1	35:9	-	202	2055:1827	262	77.0%	-	-	-	3.2	57.2	3.7	5.3
J2:2/2+J2:2/1	Newgate Ln N/B Ahead Left	U	B		1	35	-	948	2055:1702	1081	87.7%	-	-	-	7.1	27.0	15.1	18.5
J2:2/3	Newgate Ln N/B Ahead	U	B		1	35	-	763	2055	1057	72.2%	-	-	-	4.1	19.2	11.4	12.7
J2:3/1	HMS Collingwood Right Left	U	D		1	7	-	27	1814	207	13.0%	-	-	-	0.3	37.9	0.5	0.5
J2:4/1	Newgate Ln S/B Exit Merge Ahead	U	G		1	54	-	713	1965	1544	46.2%	-	-	-	0.5	2.3	0.2	0.6
J2:4/2	Newgate Ln S/B Exit Merge Ahead	U	G		1	54	-	21	2105	1654	1.3%	-	-	-	0.0	1.1	0.0	0.0
J2:5/1	Newgate Ln N/B Exit Ahead	U	-		-	-	-	796	1915	1915	41.6%	-	-	-	0.4	1.7	0.2	0.6
J2:5/2	Newgate Ln N/B Exit Ahead	U	-		-	-	-	769	2055	2055	37.4%	-	-	-	0.3	1.4	0.0	0.3
J2:P1	Newgate Ln S/B	-	E		1	5	-	0	-	0	0.0%	-	-	-	-	-	-	-
J2:P2	Newgate Ln N/B	-	F		1	23	-	0	-	0	0.0%	-	-	-	-	-	-	-

C1 - Collingwood T-Junction

PRC for Signalled Lanes (%): 2.6
 PRC Over All Lanes (%): 2.6

Total Delay for Signalled Lanes (pcuHr): 19.04
 Total Delay Over All Lanes(pcuHr): 25.08

Cycle Time (s): 70

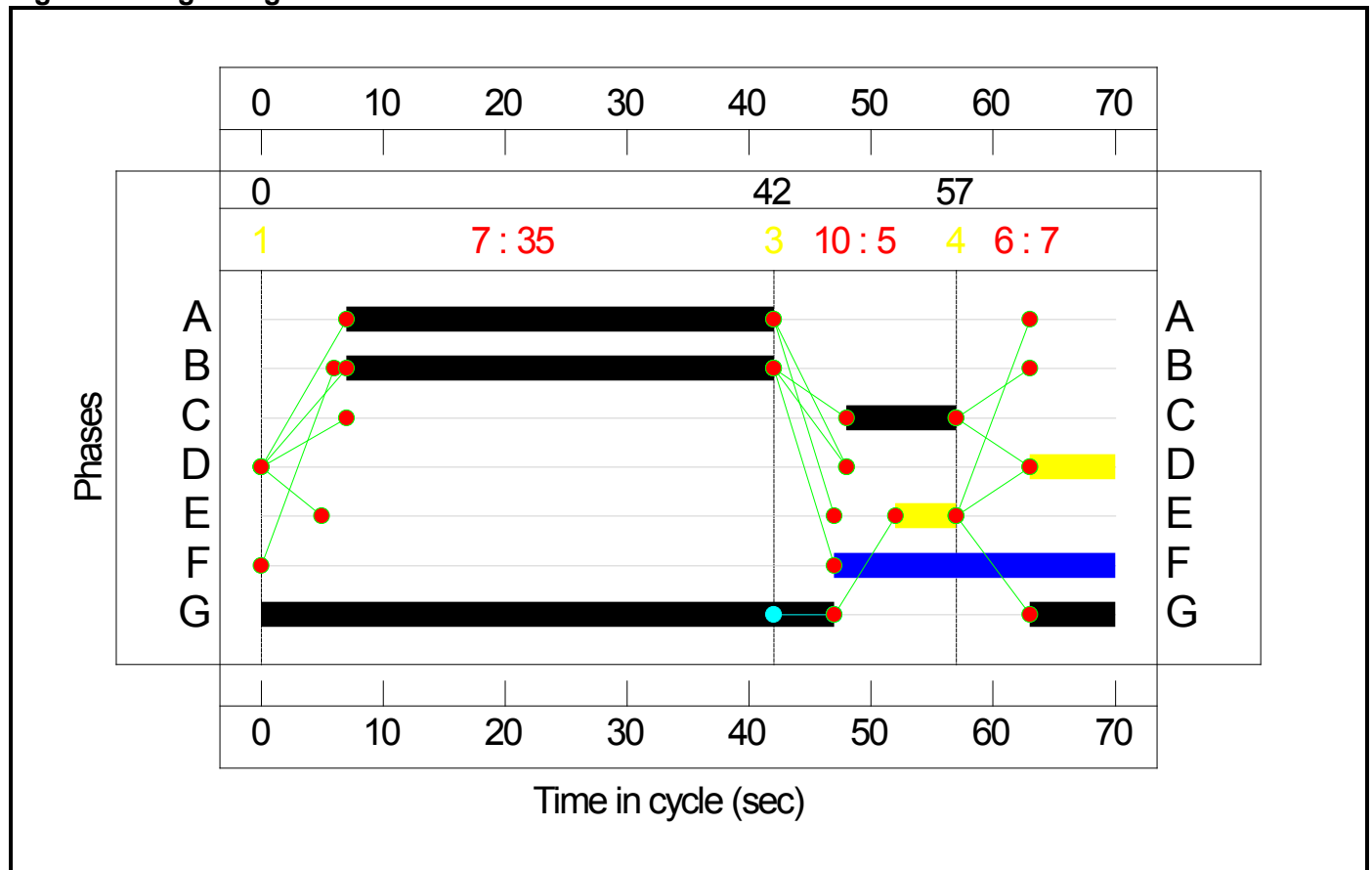
Scenario 10: '2024 DS2 PM Base' (FG10: '2024 DS2 PM Base', Plan 1: 'Plan 1')

Traffic Flows, Actual

Actual Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	794	162	11	967
	B	799	0	263	71	1133
	C	142	278	0	7	427
	D	84	128	24	0	236
	Tot.	1025	1200	449	89	2763

Signal Timings Diagram



Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Mean Max Queue (pcu)
J1:1/2+J1:1/1	Newgate Ln S/B Ahead Left	O	-		-	-	-	704	2029:1786	1777	39.6%	1408	0	0	0.3	1.7	0.0	0.3
J1:1/3	Newgate Ln S/B Ahead	O	-		-	-	-	429	2029	1081	39.7%	429	0	0	0.3	2.8	0.0	0.3
J1:2/1	Speedfields Pk Ahead Left	O	-		-	-	-	427	1894	1229	34.7%	427	0	0	0.3	2.2	0.0	0.3
J1:3/1	Newgate Lane N/B Ahead	U	-		-	-	-	542	1965	1965	27.6%	-	-	-	0.2	1.3	0.0	0.2
J1:3/2	Newgate Lane N/B Ahead	O	-		-	-	-	438	2029	1125	38.9%	438	0	0	0.4	3.4	5.0	5.3
J1:4/1	HMS C'wood LT G-way Ahead	O	-		-	-	-	128	1747	596	21.5%	128	0	0	0.1	3.8	0.0	0.1
J1:5/1	Right Ahead	U	-		-	-	-	186	2077	2077	9.0%	-	-	-	0.0	1.0	0.0	0.0
J1:6/1	Ahead	U	-		-	-	-	441	2077	2077	21.2%	-	-	-	0.1	1.1	0.0	0.1
J1:6/2	Right Ahead	U	-		-	-	-	429	2077	2077	20.7%	-	-	-	0.1	1.1	0.0	0.1
J1:7/1	Right	U	-		-	-	-	278	2005	2005	13.9%	-	-	-	0.1	1.0	0.0	0.1
J1:8/1	Ahead	U	-		-	-	-	670	1965	1965	34.1%	-	-	-	0.3	1.4	0.0	0.3
J1:8/2	Ahead	U	-		-	-	-	530	2077	2077	25.5%	-	-	-	0.2	1.2	0.0	0.2
J1:8/3	Right	U	-		-	-	-	186	2005	2005	9.3%	-	-	-	0.1	1.0	0.0	0.1
J1:9/1	Newgate Ln N/B Exit	U	-		-	-	-	1200	4070	4070	29.5%	-	-	-	0.2	0.6	0.0	0.1
J1:11/1	Newgate Ln S/B Exit Ahead	U	-		-	-	-	462	1965	1965	23.5%	-	-	-	0.2	1.2	0.0	0.2
J1:11/2	Newgate Ln S/B Exit Ahead	U	-		-	-	-	557	2105	2105	26.5%	-	-	-	0.2	1.2	0.0	0.2

J2:1/1	Newgate Ln S/B Ahead	U	A		1	35	-	462	1915	985	46.9%	-	-	-	1.8	14.3	5.6	6.1
J2:1/2+J2:1/3	Newgate Ln S/B Ahead Right	U	A C		1	35:9	-	557	2055:1827	1208	46.1%	-	-	-	2.4	15.8	5.9	6.3
J2:2/2+J2:2/1	Newgate Ln N/B Ahead Left	U	B		1	35	-	553	2055:1702	1057	52.3%	-	-	-	2.3	14.8	7.0	7.5
J2:2/3	Newgate Ln N/B Ahead	U	B		1	35	-	414	2055	1057	39.2%	-	-	-	1.5	13.1	4.8	5.2
J2:3/1	HMS Collingwood Right Left	U	D		1	7	-	108	1814	207	52.1%	-	-	-	1.4	47.1	2.0	2.5
J2:4/1	Newgate Ln S/B Exit Merge Ahead	U	G		1	54	-	468	1965	1544	30.3%	-	-	-	0.2	1.8	0.1	0.3
J2:4/2	Newgate Ln S/B Exit Merge Ahead	U	G		1	54	-	557	2105	1654	33.7%	-	-	-	0.3	1.8	0.1	0.4
J2:5/1	Newgate Ln N/B Exit Ahead	U	-		-	-	-	542	1915	1915	28.3%	-	-	-	0.2	1.5	0.2	0.4
J2:5/2	Newgate Ln N/B Exit Ahead	U	-		-	-	-	438	2055	2055	21.3%	-	-	-	0.1	1.1	0.0	0.1
J2:P1	Newgate Ln S/B	-	E		1	5	-	0	-	0	0.0%	-	-	-	-	-	-	-
J2:P2	Newgate Ln N/B	-	F		1	23	-	0	-	0	0.0%	-	-	-	-	-	-	-

C1 - Collingwood T-Junction

PRC for Signalled Lanes (%): 71.9
 PRC Over All Lanes (%): 71.9

Total Delay for Signalled Lanes (pcuHr): 9.99
 Total Delay Over All Lanes(pcuHr): 13.43

Cycle Time (s): 70

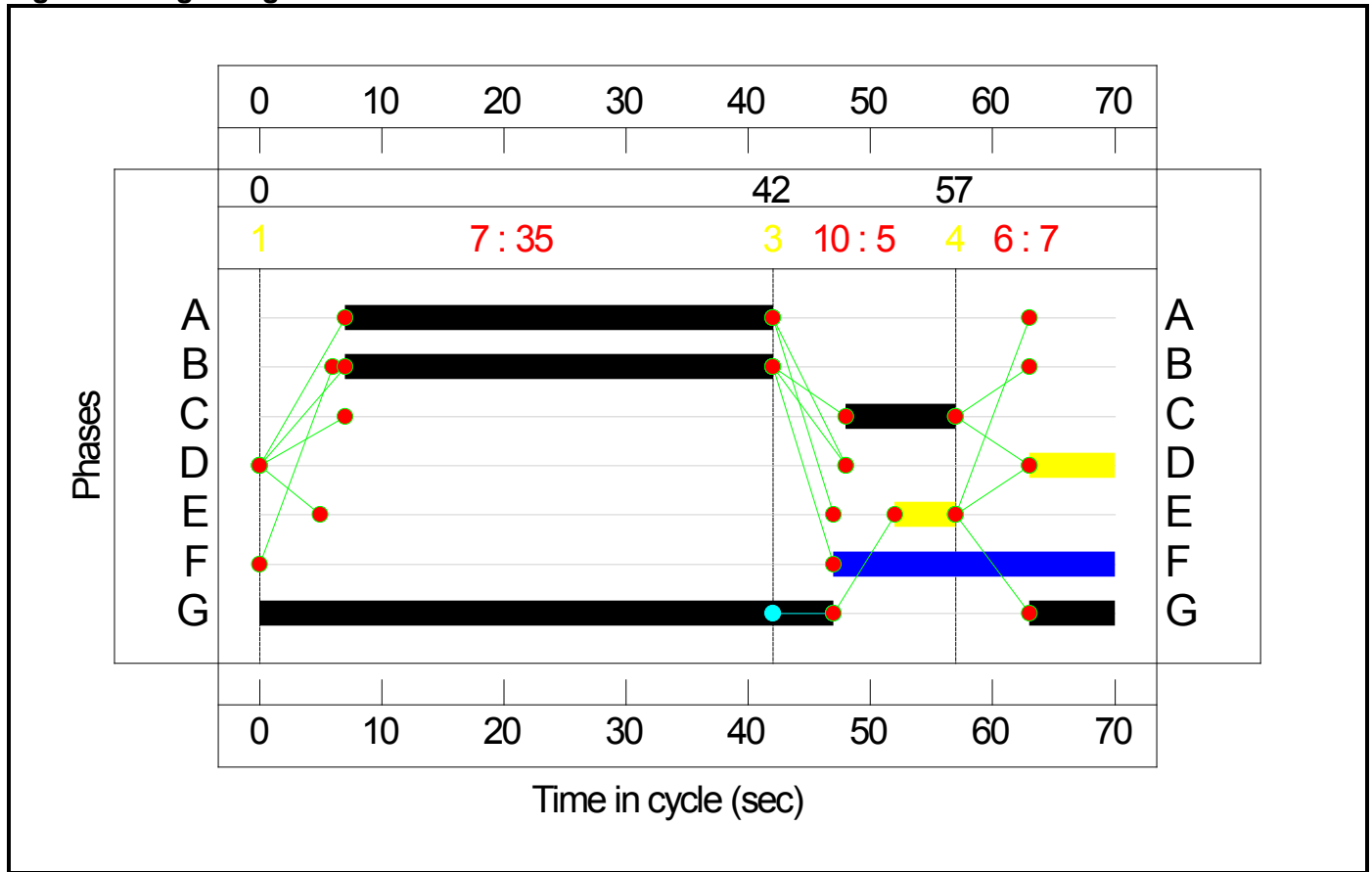
Scenario 11: '2024 DS2 AM Base + Development' (FG11: '2024 DS2 AM Base + Dev', Plan 1: 'Plan 1')

Traffic Flows, Actual

Actual Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	1347	224	153	1724
	B	674	0	250	190	1114
	C	57	173	0	11	241
	D	22	61	6	0	89
	Tot.	753	1581	480	354	3168

Signal Timings Diagram



Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Mean Max Queue (pcu)
J1:1/2+J1:1/1	Newgate Ln S/B Ahead Left	O	-		-	-	-	924	2029:1786	1447	63.9%	1848	0	0	0.9	3.4	0.0	0.9
J1:1/3	Newgate Ln S/B Ahead	O	-		-	-	-	190	2029	1055	18.0%	190	0	0	0.1	2.1	0.0	0.1
J1:2/1	Speedfields Pk Ahead Left	O	-		-	-	-	241	1894	1234	19.5%	241	0	0	0.1	1.8	0.0	0.1
J1:3/1	Newgate Lane N/B Ahead	U	-		-	-	-	800	1965	1965	40.7%	-	-	-	0.3	1.5	0.0	0.3
J1:3/2	Newgate Lane N/B Ahead	O	-		-	-	-	777	2029	1183	65.7%	777	0	0	2.2	10.3	14.1	15.1
J1:4/1	HMS C'wood LT G-way Ahead	O	-		-	-	-	61	1747	539	11.3%	61	0	0	0.1	3.8	0.0	0.1
J1:5/1	Right Ahead	U	-		-	-	-	230	2077	2077	11.1%	-	-	-	0.1	1.0	0.0	0.1
J1:6/1	Ahead	U	-		-	-	-	674	2077	2077	32.5%	-	-	-	0.2	1.3	0.0	0.2
J1:6/2	Right Ahead	U	-		-	-	-	190	2077	2077	9.1%	-	-	-	0.1	1.0	0.0	0.1
J1:7/1	Right	U	-		-	-	-	173	2005	2005	8.6%	-	-	-	0.0	1.0	0.0	0.0
J1:8/1	Ahead	U	-		-	-	-	861	1965	1965	43.8%	-	-	-	0.4	1.6	0.0	0.4
J1:8/2	Ahead	U	-		-	-	-	720	2077	2077	34.7%	-	-	-	0.3	1.3	0.0	0.3
J1:8/3	Right	U	-		-	-	-	230	2005	2005	11.5%	-	-	-	0.1	1.0	0.0	0.1
J1:9/1	Newgate Ln N/B Exit	U	-		-	-	-	1581	4070	4070	38.8%	-	-	-	0.3	0.7	0.0	0.2
J1:11/1	Newgate Ln S/B Exit Ahead	U	-		-	-	-	731	1965	1965	37.2%	-	-	-	0.3	1.5	0.0	0.3
J1:11/2	Newgate Ln S/B Exit Ahead	U	-		-	-	-	201	2105	2105	9.5%	-	-	-	0.1	0.9	0.0	0.1

J2:1/1	Newgate Ln S/B Ahead	U	A		1	35	-	731	1915	985	74.2%	-	-	-	4.1	20.4	11.0	12.4
J2:1/2+J2:1/3	Newgate Ln S/B Ahead Right	U	A C		1	35:9	-	201	2055:1827	261	77.0%	-	-	-	3.2	57.4	3.7	5.3
J2:2/2+J2:2/1	Newgate Ln N/B Ahead Left	U	B		1	35	-	953	2055:1702	1081	88.2%	-	-	-	7.3	27.5	15.2	18.7
J2:2/3	Newgate Ln N/B Ahead	U	B		1	35	-	771	2055	1057	73.0%	-	-	-	4.2	19.5	11.6	12.9
J2:3/1	HMS Collingwood Right Left	U	D		1	7	-	28	1814	207	13.5%	-	-	-	0.3	37.9	0.5	0.6
J2:4/1	Newgate Ln S/B Exit Merge Ahead	U	G		1	54	-	732	1965	1544	47.4%	-	-	-	0.5	2.4	0.2	0.6
J2:4/2	Newgate Ln S/B Exit Merge Ahead	U	G		1	54	-	21	2105	1654	1.3%	-	-	-	0.0	1.1	0.0	0.0
J2:5/1	Newgate Ln N/B Exit Ahead	U	-		-	-	-	800	1915	1915	41.8%	-	-	-	0.4	1.7	0.2	0.6
J2:5/2	Newgate Ln N/B Exit Ahead	U	-		-	-	-	777	2055	2055	37.8%	-	-	-	0.3	1.4	0.0	0.3
J2:P1	Newgate Ln S/B	-	E		1	5	-	0	-	0	0.0%	-	-	-	-	-	-	-
J2:P2	Newgate Ln N/B	-	F		1	23	-	0	-	0	0.0%	-	-	-	-	-	-	-

C1 - Collingwood T-Junction

PRC for Signalled Lanes (%): 2.1
 PRC Over All Lanes (%): 2.1

Total Delay for Signalled Lanes (pcuHr): 19.58
 Total Delay Over All Lanes(pcuHr): 25.80

Cycle Time (s): 70

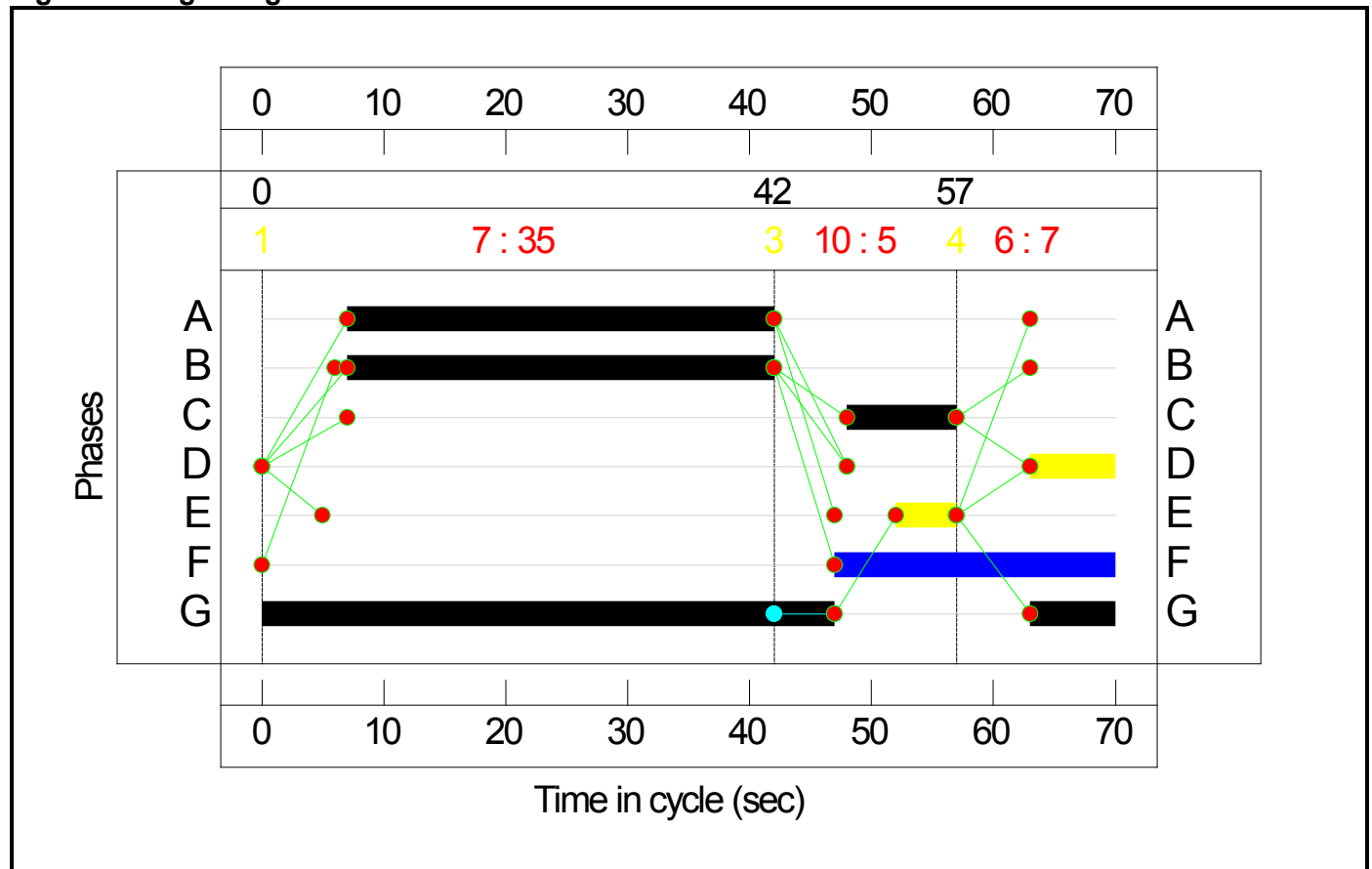
Scenario 12: '2024 DS2 PM Base + Development' (FG12: '2024 DS2 PM Base + Dev', Plan 1: 'Plan 1')

Traffic Flows, Actual

Actual Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	812	166	11	989
	B	818	0	263	71	1152
	C	144	278	0	7	429
	D	86	128	24	0	238
	Tot.	1048	1218	453	89	2808

Signal Timings Diagram



Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Mean Max Queue (pcu)
J1:1/2+J1:1/1	Newgate Ln S/B Ahead Left	O	-		-	-	-	714	2029:1786	1743	41.0%	1428	0	0	0.3	1.7	0.0	0.3
J1:1/3	Newgate Ln S/B Ahead	O	-		-	-	-	438	2029	1079	40.6%	438	0	0	0.3	2.8	0.0	0.3
J1:2/1	Speedfields Pk Ahead Left	O	-		-	-	-	429	1894	1216	35.3%	429	0	0	0.3	2.3	0.0	0.3
J1:3/1	Newgate Lane N/B Ahead	U	-		-	-	-	555	1965	1965	28.2%	-	-	-	0.2	1.3	0.0	0.2
J1:3/2	Newgate Lane N/B Ahead	O	-		-	-	-	447	2029	1125	39.7%	447	0	0	0.4	3.6	5.1	5.5
J1:4/1	HMS C'wood LT G-way Ahead	O	-		-	-	-	128	1747	593	21.6%	128	0	0	0.1	3.9	0.0	0.1
J1:5/1	Right Ahead	U	-		-	-	-	190	2077	2077	9.1%	-	-	-	0.1	1.0	0.0	0.1
J1:6/1	Ahead	U	-		-	-	-	451	2077	2077	21.7%	-	-	-	0.1	1.1	0.0	0.1
J1:6/2	Right Ahead	U	-		-	-	-	438	2077	2077	21.1%	-	-	-	0.1	1.1	0.0	0.1
J1:7/1	Right	U	-		-	-	-	278	2005	2005	13.9%	-	-	-	0.1	1.0	0.0	0.1
J1:8/1	Ahead	U	-		-	-	-	683	1965	1965	34.8%	-	-	-	0.3	1.4	0.0	0.3
J1:8/2	Ahead	U	-		-	-	-	535	2077	2077	25.8%	-	-	-	0.2	1.2	0.0	0.2
J1:8/3	Right	U	-		-	-	-	190	2005	2005	9.5%	-	-	-	0.1	1.0	0.0	0.1
J1:9/1	Newgate Ln N/B Exit	U	-		-	-	-	1218	4070	4070	29.9%	-	-	-	0.2	0.6	0.0	0.1
J1:11/1	Newgate Ln S/B Exit Ahead	U	-		-	-	-	471	1965	1965	24.0%	-	-	-	0.2	1.2	0.0	0.2
J1:11/2	Newgate Ln S/B Exit Ahead	U	-		-	-	-	569	2105	2105	27.0%	-	-	-	0.2	1.2	0.0	0.2

J2:1/1	Newgate Ln S/B Ahead	U	A		1	35	-	471	1915	985	47.8%	-	-	-	1.9	14.4	5.9	6.3
J2:1/2+J2:1/3	Newgate Ln S/B Ahead Right	U	A C		1	35:9	-	569	2055:1827	1205	47.2%	-	-	-	2.5	15.9	6.0	6.4
J2:2/2+J2:2/1	Newgate Ln N/B Ahead Left	U	B		1	35	-	566	2055:1702	1056	53.6%	-	-	-	2.4	15.0	7.1	7.7
J2:2/3	Newgate Ln N/B Ahead	U	B		1	35	-	423	2055	1057	40.0%	-	-	-	1.6	13.2	4.9	5.3
J2:3/1	HMS Collingwood Right Left	U	D		1	7	-	110	1814	207	53.1%	-	-	-	1.5	47.5	2.0	2.6
J2:4/1	Newgate Ln S/B Exit Merge Ahead	U	G		1	54	-	477	1965	1544	30.9%	-	-	-	0.2	1.8	0.1	0.3
J2:4/2	Newgate Ln S/B Exit Merge Ahead	U	G		1	54	-	571	2105	1654	34.5%	-	-	-	0.3	1.8	0.1	0.4
J2:5/1	Newgate Ln N/B Exit Ahead	U	-		-	-	-	555	1915	1915	29.0%	-	-	-	0.2	1.5	0.2	0.5
J2:5/2	Newgate Ln N/B Exit Ahead	U	-		-	-	-	447	2055	2055	21.8%	-	-	-	0.1	1.1	0.0	0.1
J2:P1	Newgate Ln S/B	-	E		1	5	-	0	-	0	0.0%	-	-	-	-	-	-	-
J2:P2	Newgate Ln N/B	-	F		1	23	-	0	-	0	0.0%	-	-	-	-	-	-	-

C1 - Collingwood T-Junction

PRC for Signalled Lanes (%): 68.0
 PRC Over All Lanes (%): 68.0

Total Delay for Signalled Lanes (pcuHr): 10.29
 Total Delay Over All Lanes(pcuHr): 13.84

Cycle Time (s): 70

APPENDIX I

LONGFIELD AVENUE / NEWGATE LANE MODELLING REPORTS

<h1>Junctions 9</h1>
<h2>ARCADY 9 - Roundabout Module</h2>
Version: 9.5.0.6896 © Copyright TRL Limited, 2018
For sales and distribution information, program advice and maintenance, contact TRL: +44 (0)1344 379777 software@trl.co.uk www.trlsoftware.co.uk
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Filename: NGL-Longfield Ave Oct 19.j9

Path: \\Pg-brs-dc01\data\Bristol Projects\Bristol - Live Projects\BRS.4901 - BRS.5000\BRS.4989 - SUSTAINABLE LAND PLC - LAND TO THE NORTH OF GOSPORT ROAD, FAREHAM\Transport\7. Junction Modelling\c. ARCADY\Oct 19

Report generation date: 08/10/2019 10:57:26

-
- »2019 Base DS1, AM
 - »2019 Base DS1, PM
 - »2024 Base DS1, AM
 - »2024 Base DS1, PM
 - »2024 Base + Dev DS1, AM
 - »2024 Base + Dev DS1, PM
 - »2019 Base DS2, AM
 - »2019 Base DS2, PM
 - »2024 Base DS2, AM
 - »2024 Base DS2, PM
 - »2024 Base + Dev DS2, AM
 - »2024 Base + Dev DS2, PM

Summary of junction performance

	AM					PM				
	Queue (PCU)	Delay (s)	RFC	LOS	Junction LOS	Queue (PCU)	Delay (s)	RFC	LOS	Junction LOS
2019 Base DS1										
Arm 1	0.2	9.61	0.13	A	A	0.4	17.75	0.31	C	A
Arm 2	2.9	6.61	0.74	A		1.4	4.08	0.58	A	
Arm 3	0.7	4.26	0.42	A		0.9	4.17	0.49	A	
Arm 4	1.9	6.98	0.65	A		2.9	9.95	0.75	A	
2024 Base DS1										
Arm 1	0.2	12.67	0.17	B	A	0.9	35.64	0.49	E	B
Arm 2	3.6	7.80	0.78	A		1.7	4.48	0.62	A	
Arm 3	0.9	4.95	0.49	A		1.2	4.93	0.56	A	
Arm 4	3.2	10.35	0.76	B		5.9	18.68	0.86	C	
2024 Base + Dev DS1										
Arm 1	0.2	13.09	0.18	B	A	1.1	40.80	0.53	E	B
Arm 2	3.8	8.16	0.79	A		1.7	4.62	0.63	A	
Arm 3	1.0	5.08	0.50	A		1.3	5.10	0.57	A	
Arm 4	3.4	10.89	0.77	B		6.7	21.00	0.88	C	
2019 Base DS2										
Arm 1	0.1	7.15	0.10	A	A	0.2	7.18	0.15	A	A
Arm 2	2.4	5.72	0.70	A		1.3	3.90	0.57	A	
Arm 3	0.3	3.28	0.21	A		0.2	2.72	0.19	A	
Arm 4	1.4	5.11	0.57	A		1.2	4.55	0.54	A	
2024 Base DS2										
Arm 1	0.2	8.56	0.13	A	A	0.2	8.67	0.19	A	A
Arm 2	2.9	6.56	0.74	A		1.5	4.25	0.60	A	
Arm 3	0.3	3.54	0.24	A		0.3	2.89	0.22	A	
Arm 4	2.1	6.66	0.67	A		1.7	5.68	0.63	A	
2024 Base + Dev DS2										
Arm 1	0.2	8.76	0.13	A	A	0.2	8.96	0.20	A	A
Arm 2	3.0	6.75	0.75	A		1.6	4.38	0.62	A	
Arm 3	0.3	3.59	0.25	A		0.3	2.95	0.22	A	
Arm 4	2.2	6.92	0.68	A		1.8	5.88	0.64	A	

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

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages.

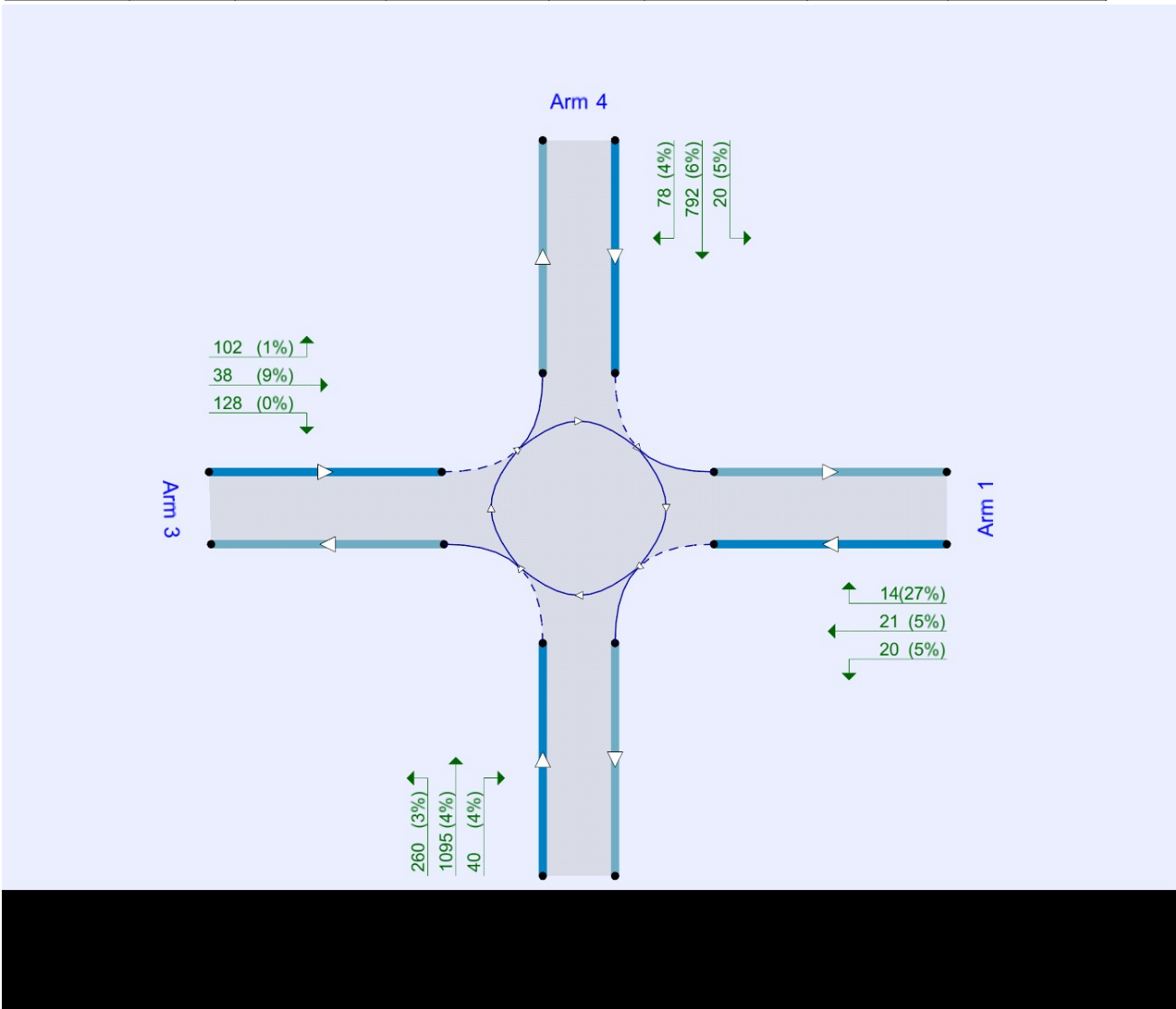
File summary

File Description

Title	Longfield Avenue Roundabout
Location	
Site number	
Date	08/10/2018
Version	V3
Status	(new file)
Identifier	
Client	
Jobnumber	BRS.4989
Enumerator	PEGASUSGROUP\Matthew Haywood
Description	Rev 3 - Updated for total of 190 dwellings

Units

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



The junction diagram reflects the last run of Junctions.

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2019 Base DS1	AM	without Stubbington Bypass	ONE HOUR	07:45	09:15	15	✓
D2	2019 Base DS1	PM	without Stubbington Bypass	ONE HOUR	16:45	18:15	15	✓
D5	2024 Base DS1	AM	w/ Daedalus, w/out Stubbington Bypass	ONE HOUR	07:45	09:15	15	✓
D6	2024 Base DS1	PM	w/ Daedalus, w/out Stubbington Bypass	ONE HOUR	16:45	18:15	15	✓
D7	2024 Base + Dev DS1	AM	w/ Daedalus, w/out Stubbington Bypass	ONE HOUR	07:45	09:15	15	✓
D8	2024 Base + Dev DS1	PM	w/ Daedalus, w/out Stubbington Bypass	ONE HOUR	16:45	18:15	15	✓
D10	2019 Base DS2	AM	with Stubbington Bypass	ONE HOUR	07:45	09:15	15	✓
D11	2019 Base DS2	PM	with Stubbington Bypass	ONE HOUR	16:45	18:15	15	✓
D12	2024 Base DS2	AM	w/ Daedalus, w/ Stubbington Bypass	ONE HOUR	07:45	09:15	15	✓
D13	2024 Base DS2	PM	w/ Daedalus, w/ Stubbington Bypass	ONE HOUR	16:45	18:15	15	✓
D14	2024 Base + Dev DS2	AM	w/ Daedalus, w/ Stubbington Bypass	ONE HOUR	07:45	09:15	15	✓
D15	2024 Base + Dev DS2	PM	w/ Daedalus, w/ Stubbington Bypass	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

2019 Base DS1, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	NGL - Longfield Avenue	Standard Roundabout		1, 2, 3, 4	6.34	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Davis Way	
2	Newgate Lane (South)	
3	Longfield Avenue	
4	Newgate Lane (North)	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1	3.50	4.90	6.7	10.0	46.0	55.0	
2	7.30	7.35	0.0	40.0	46.0	28.0	
3	3.65	11.40	24.8	34.0	46.0	23.0	
4	3.15	9.40	41.6	11.0	46.0	66.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.475	1136
2	0.747	2282
3	0.770	2381
4	0.608	1865

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2019 Base DS1	AM	without Stubbington Bypass	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 (%)
1		ONE HOUR	✓	55	100.000
2		ONE HOUR	✓	1461	100.000
3		ONE HOUR	✓	564	100.000
4		ONE HOUR	✓	917	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
	1	2	3	4	
From	1	0	20	21	14
	2	52	0	402	1007
	3	38	372	0	154
	4	20	800	97	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
	1	2	3	4	
From	1	0	5	5	27
	2	4	0	3	4
	3	9	0	0	1
	4	5	6	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.13	9.61	0.2	0.5	A	50	76
2	0.74	6.61	2.9	6.2	A	1341	2011
3	0.42	4.26	0.7	3.1	A	518	776
4	0.65	6.98	1.9	2.9	A	841	1262

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
1	41	10	952	684	0.061	41	83	0.0	0.1	6.153	A
2	1100	275	99	2208	0.498	1096	894	0.0	1.0	3.347	A
3	425	106	805	1762	0.241	423	390	0.0	0.3	2.706	A
4	690	173	347	1654	0.417	687	881	0.0	0.8	3.936	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
1	49	12	1139	595	0.083	49	99	0.1	0.1	7.251	A
2	1313	328	118	2194	0.599	1311	1070	1.0	1.5	4.227	A
3	507	127	963	1640	0.309	507	467	0.3	0.4	3.196	A
4	824	206	415	1613	0.511	823	1055	0.8	1.1	4.824	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
1	61	15	1393	475	0.128	60	121	0.1	0.2	9.556	A
2	1609	402	145	2174	0.740	1603	1309	1.5	2.9	6.488	A
3	621	155	1177	1475	0.421	620	571	0.4	0.7	4.235	A
4	1010	252	508	1556	0.649	1006	1290	1.1	1.9	6.897	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
1	61	15	1397	473	0.128	61	121	0.2	0.2	9.606	A
2	1609	402	145	2174	0.740	1608	1312	2.9	2.9	6.608	A
3	621	155	1181	1472	0.422	621	572	0.7	0.7	4.259	A
4	1010	252	509	1556	0.649	1010	1294	1.9	1.9	6.984	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
1	49	12	1145	593	0.083	50	99	0.2	0.1	7.295	A
2	1313	328	119	2193	0.599	1319	1075	2.9	1.6	4.302	A
3	507	127	969	1636	0.310	508	469	0.7	0.5	3.217	A
4	824	206	416	1612	0.511	828	1060	1.9	1.1	4.887	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
1	41	10	957	682	0.061	42	83	0.1	0.1	6.188	A
2	1100	275	100	2208	0.498	1102	899	1.6	1.0	3.386	A
3	425	106	809	1758	0.241	425	392	0.5	0.3	2.722	A
4	690	173	348	1653	0.418	692	886	1.1	0.8	3.976	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.07	0.00	0.00	0.07	0.07			N/A	N/A
2	1.02	0.57	1.04	1.45	1.51			N/A	N/A
3	0.32	0.00	0.00	0.32	0.32			N/A	N/A
4	0.75	0.58	1.06	1.48	1.54			N/A	N/A

08:00 - 08:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.10	0.00	0.00	0.10	0.10			N/A	N/A
2	1.53	0.05	0.49	3.92	6.15			N/A	N/A
3	0.45	0.00	0.00	0.45	0.45			N/A	N/A
4	1.10	0.07	0.86	2.04	2.87			N/A	N/A

08:15 - 08:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.16	0.03	0.29	0.51	0.54			N/A	N/A
2	2.88	0.03	0.29	2.88	4.98			N/A	N/A
3	0.73	0.03	0.26	0.73	0.73			N/A	N/A
4	1.92	0.03	0.28	1.92	1.92			N/A	N/A

08:30 - 08:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.16	0.03	0.28	0.50	0.52			N/A	N/A
2	2.91	0.03	0.28	2.91	2.91			N/A	N/A
3	0.73	0.03	0.29	1.11	3.07			N/A	N/A
4	1.94	0.03	0.28	1.94	1.94			N/A	N/A

08:45 - 09:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.10	0.00	0.00	0.10	0.10			N/A	N/A
2	1.57	0.09	1.16	3.11	4.24			N/A	N/A
3	0.45	0.00	0.00	0.45	0.45			N/A	N/A
4	1.12	0.12	1.06	1.77	2.07			N/A	N/A

09:00 - 09:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.07	0.00	0.00	0.07	0.07			N/A	N/A
2	1.04	0.05	0.51	2.30	3.43			N/A	N/A
3	0.32	0.00	0.00	0.32	0.32			N/A	N/A
4	0.77	0.06	0.63	1.16	1.76			N/A	N/A

2019 Base DS1, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	NGL - Longfield Avenue	Standard Roundabout		1, 2, 3, 4	6.43	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2019 Base DS1	PM	without Stubbington Bypass	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 (%)
1		ONE HOUR	✓	84	100.000
2		ONE HOUR	✓	1145	100.000
3		ONE HOUR	✓	747	100.000
4		ONE HOUR	✓	970	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	22	29	33
	2	4	0	356	785
	3	4	638	0	105
	4	4	875	91	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	0	5	0	0
	2	0	0	1	2
	3	0	0	0	0
	4	33	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.31	17.75	0.4	1.5	C	77	116
2	0.58	4.08	1.4	2.0	A	1051	1576
3	0.49	4.17	0.9	1.9	A	685	1028
4	0.75	9.95	2.9	9.7	A	890	1335

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
1	63	16	1203	565	0.112	63	9	0.0	0.1	7.244	A
2	862	216	114	2197	0.392	859	1151	0.0	0.7	2.728	A
3	562	141	617	1907	0.295	561	357	0.0	0.4	2.671	A
4	730	183	485	1570	0.465	727	693	0.0	0.9	4.296	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
1	76	19	1439	453	0.167	75	11	0.1	0.2	9.639	A
2	1029	257	137	2180	0.472	1028	1378	0.7	0.9	3.170	A
3	672	168	738	1813	0.370	671	427	0.4	0.6	3.150	A
4	872	218	580	1512	0.577	870	829	0.9	1.4	5.646	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
1	92	23	1759	301	0.307	92	13	0.2	0.4	17.330	C
2	1261	315	167	2157	0.584	1259	1683	0.9	1.4	4.057	A
3	822	206	903	1686	0.488	821	523	0.6	0.9	4.155	A
4	1068	267	710	1433	0.745	1062	1014	1.4	2.8	9.675	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
1	92	23	1766	298	0.311	92	13	0.4	0.4	17.749	C
2	1261	315	168	2157	0.585	1261	1690	1.4	1.4	4.078	A
3	822	206	905	1685	0.488	822	524	0.9	0.9	4.174	A
4	1068	267	711	1433	0.745	1068	1016	2.8	2.9	9.951	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
1	76	19	1449	448	0.169	76	11	0.4	0.2	9.832	A
2	1029	257	139	2179	0.472	1031	1387	1.4	0.9	3.190	A
3	672	168	741	1811	0.371	673	429	0.9	0.6	3.168	A
4	872	218	582	1511	0.577	878	832	2.9	1.4	5.796	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
1	63	16	1210	562	0.113	64	9	0.2	0.1	7.323	A
2	862	216	116	2196	0.393	863	1158	0.9	0.7	2.745	A
3	562	141	620	1904	0.295	563	359	0.6	0.4	2.686	A
4	730	183	487	1569	0.465	732	696	1.4	0.9	4.359	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.13	0.00	0.00	0.13	0.13			N/A	N/A
2	0.65	0.56	1.02	1.42	1.47			N/A	N/A
3	0.42	0.00	0.00	0.42	0.42			N/A	N/A
4	0.87	0.56	1.01	1.41	1.47			N/A	N/A

17:00 - 17:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.20	0.00	0.00	0.20	0.20			N/A	N/A
2	0.90	0.07	0.80	1.56	1.96			N/A	N/A
3	0.59	0.07	0.74	1.35	1.42			N/A	N/A
4	1.36	0.05	0.62	3.23	4.83			N/A	N/A

17:15 - 17:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.44	0.03	0.26	0.47	0.50			N/A	N/A
2	1.41	0.03	0.26	1.41	1.41			N/A	N/A
3	0.94	0.03	0.25	0.94	0.94			N/A	N/A
4	2.84	0.03	0.29	2.84	9.73			N/A	N/A

17:30 - 17:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.45	0.03	0.34	1.39	1.54			N/A	N/A
2	1.42	0.03	0.27	1.42	1.42			N/A	N/A
3	0.95	0.03	0.27	0.95	1.95			N/A	N/A
4	2.90	0.03	0.28	2.90	3.79			N/A	N/A

17:45 - 18:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.21	0.00	0.00	0.21	0.21			N/A	N/A
2	0.92	0.52	1.01	1.44	1.49			N/A	N/A
3	0.59	0.55	1.00	1.40	1.45			N/A	N/A
4	1.40	0.07	0.90	3.02	4.34			N/A	N/A

18:00 - 18:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.13	0.00	0.00	0.13	0.13			N/A	N/A
2	0.66	0.09	0.82	1.38	1.46			N/A	N/A
3	0.42	0.00	0.00	0.42	0.42			N/A	N/A
4	0.89	0.04	0.41	2.03	3.35			N/A	N/A

2024 Base DS1, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	NGL - Longfield Avenue	Standard Roundabout		1, 2, 3, 4	8.16	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2024 Base DS1	AM	w/ Daedalus, w/out Stubbington Bypass	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 (%)
1		ONE HOUR	✓	59	100.000
2		ONE HOUR	✓	1537	100.000
3		ONE HOUR	✓	630	100.000
4		ONE HOUR	✓	1043	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	23	22	14
	2	55	0	423	1059
	3	39	431	0	159
	4	21	922	100	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1	2	3	4	
From	1	0	5	5	27	
	2	4	0	3	4	
	3	9	0	0	1	
	4	5	6	4	0	

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.17	12.67	0.2	0.5	B	54	82
2	0.78	7.80	3.6	10.7	A	1411	2116
3	0.49	4.95	0.9	2.7	A	578	867
4	0.76	10.35	3.2	11.9	B	957	1435

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
1	45	11	1089	619	0.072	44	86	0.0	0.1	6.860	A
2	1157	289	102	2206	0.525	1153	1031	0.0	1.1	3.533	A
3	474	119	846	1730	0.274	473	409	0.0	0.4	2.878	A
4	785	196	394	1625	0.483	781	925	0.0	1.0	4.475	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
1	53	13	1304	517	0.103	53	103	0.1	0.1	8.498	A
2	1382	345	122	2191	0.631	1379	1235	1.1	1.7	4.590	A
3	566	142	1013	1602	0.353	565	489	0.4	0.5	3.495	A
4	937	234	472	1578	0.594	935	1107	1.0	1.5	5.881	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
1	65	16	1593	380	0.172	65	126	0.1	0.2	12.502	B
2	1692	423	149	2171	0.780	1685	1508	1.7	3.5	7.584	A
3	693	173	1237	1429	0.485	692	597	0.5	0.9	4.907	A
4	1148	287	577	1514	0.758	1141	1352	1.5	3.2	10.003	B

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
1	65	16	1600	376	0.173	65	126	0.2	0.2	12.669	B
2	1692	423	150	2170	0.780	1692	1515	3.5	3.6	7.805	A
3	693	173	1242	1425	0.487	693	600	0.9	0.9	4.952	A
4	1148	287	578	1513	0.758	1148	1357	3.2	3.2	10.352	B

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
1	53	13	1314	512	0.104	54	104	0.2	0.1	8.607	A
2	1382	345	124	2190	0.631	1389	1244	3.6	1.8	4.706	A
3	566	142	1020	1596	0.355	568	493	0.9	0.6	3.530	A
4	937	234	474	1577	0.594	944	1114	3.2	1.6	6.055	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
1	45	11	1097	615	0.072	45	86	0.1	0.1	6.915	A
2	1157	289	103	2205	0.525	1160	1039	1.8	1.2	3.583	A
3	474	119	852	1726	0.275	475	411	0.6	0.4	2.899	A
4	785	196	396	1624	0.483	787	930	1.6	1.0	4.548	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.08	0.00	0.00	0.08	0.08			N/A	N/A
2	1.14	0.57	1.04	1.45	1.50			N/A	N/A
3	0.38	0.00	0.00	0.38	0.38			N/A	N/A
4	0.98	0.58	1.05	1.48	1.53			N/A	N/A

08:00 - 08:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.12	0.00	0.00	0.12	0.12			N/A	N/A
2	1.75	0.05	0.47	4.65	7.59			N/A	N/A
3	0.55	0.06	0.66	1.34	1.43			N/A	N/A
4	1.52	0.06	0.63	3.73	5.59			N/A	N/A

08:15 - 08:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.22	0.03	0.28	0.51	0.54			N/A	N/A
2	3.54	0.03	0.30	3.54	10.73			N/A	N/A
3	0.94	0.03	0.26	0.94	0.94			N/A	N/A
4	3.16	0.03	0.31	3.16	11.86			N/A	N/A

08:30 - 08:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.23	0.03	0.28	0.51	0.54			N/A	N/A
2	3.61	0.03	0.28	3.61	3.61			N/A	N/A
3	0.95	0.03	0.28	0.95	2.72			N/A	N/A
4	3.23	0.03	0.29	3.23	4.62			N/A	N/A

08:45 - 09:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.13	0.00	0.00	0.13	0.13			N/A	N/A
2	1.80	0.07	1.05	4.14	5.95			N/A	N/A
3	0.56	0.55	1.01	1.41	1.46			N/A	N/A
4	1.57	0.07	0.91	3.63	5.17			N/A	N/A

09:00 - 09:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.09	0.00	0.00	0.09	0.09			N/A	N/A
2	1.16	0.04	0.44	2.87	4.62			N/A	N/A
3	0.38	0.00	0.00	0.38	0.38			N/A	N/A
4	1.00	0.04	0.42	2.41	3.96			N/A	N/A

2024 Base DS1, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	NGL - Longfield Avenue	Standard Roundabout		1, 2, 3, 4	10.23	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2024 Base DS1	PM	w/ Daedalus, w/out Stubbington Bypass	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 (%)
1		ONE HOUR	✓	89	100.000
2		ONE HOUR	✓	1214	100.000
3		ONE HOUR	✓	830	100.000
4		ONE HOUR	✓	1081	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	25	30	34
	2	4	0	377	832
	3	4	717	0	109
	4	4	982	94	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	0	4	0	0
	2	0	0	1	2
	3	0	0	0	0
	4	33	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.49	35.64	0.9	4.3	E	81	122
2	0.62	4.48	1.7	2.7	A	1114	1671
3	0.56	4.93	1.2	1.5	A	761	1142
4	0.86	18.68	5.9	30.3	C	992	1487

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
1	67	17	1344	498	0.134	66	9	0.0	0.2	8.424	A
2	914	228	118	2194	0.417	911	1292	0.0	0.7	2.842	A
3	625	156	653	1879	0.332	623	376	0.0	0.5	2.857	A
4	814	203	544	1534	0.530	809	732	0.0	1.1	4.982	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
1	80	20	1608	372	0.214	79	11	0.2	0.3	12.407	B
2	1091	273	142	2176	0.501	1090	1546	0.7	1.0	3.360	A
3	746	186	782	1780	0.419	745	450	0.5	0.7	3.475	A
4	971	243	651	1469	0.661	968	875	1.1	1.9	7.211	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
1	98	24	1958	206	0.474	95	14	0.3	0.9	32.257	D
2	1337	334	171	2154	0.620	1334	1882	1.0	1.6	4.440	A
3	913	228	956	1646	0.555	911	549	0.7	1.2	4.890	A
4	1190	297	797	1381	0.862	1175	1071	1.9	5.6	16.640	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
1	98	24	1973	199	0.491	97	14	0.9	0.9	35.644	E
2	1337	334	174	2152	0.621	1336	1897	1.6	1.7	4.477	A
3	913	228	958	1644	0.556	913	552	1.2	1.2	4.929	A
4	1190	297	798	1380	0.862	1188	1073	5.6	5.9	18.681	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
1	80	20	1629	362	0.220	82	11	0.9	0.3	13.122	B
2	1091	273	146	2174	0.502	1094	1566	1.7	1.0	3.392	A
3	746	186	785	1777	0.420	748	454	1.2	0.7	3.507	A
4	971	243	654	1468	0.662	987	879	5.9	2.0	7.795	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
1	67	17	1354	493	0.136	67	9	0.3	0.2	8.568	A
2	914	228	120	2193	0.417	915	1302	1.0	0.7	2.863	A
3	625	156	656	1876	0.333	626	379	0.7	0.5	2.880	A
4	814	203	547	1533	0.531	817	735	2.0	1.2	5.105	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.16	0.00	0.00	0.16	0.16			N/A	N/A
2	0.72	0.56	1.01	1.42	1.47			N/A	N/A
3	0.50	0.00	0.00	0.50	0.50			N/A	N/A
4	1.13	0.56	1.04	1.15	1.15			N/A	N/A

17:00 - 17:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.27	0.00	0.00	0.27	0.27			N/A	N/A
2	1.01	0.06	0.76	1.93	2.74			N/A	N/A
3	0.72	0.07	0.76	1.41	1.49			N/A	N/A
4	1.93	0.05	0.48	5.15	8.35			N/A	N/A

17:15 - 17:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.85	0.03	0.28	0.85	1.86			N/A	N/A
2	1.64	0.03	0.26	1.64	1.64			N/A	N/A
3	1.23	0.03	0.26	1.23	1.23			N/A	N/A
4	5.55	0.04	0.37	13.22	30.29			N/A	N/A

17:30 - 17:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.93	0.04	0.36	2.24	4.25			N/A	N/A
2	1.65	0.03	0.27	1.65	1.65			N/A	N/A
3	1.24	0.03	0.27	1.24	1.24			N/A	N/A
4	5.90	0.03	0.31	6.20	27.11			N/A	N/A

17:45 - 18:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.29	0.03	0.27	0.49	0.71			N/A	N/A
2	1.03	0.36	1.04	1.18	1.62			N/A	N/A
3	0.73	0.32	0.96	1.39	1.45			N/A	N/A
4	2.02	0.05	0.45	5.50	9.18			N/A	N/A

18:00 - 18:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.16	0.03	0.26	0.46	0.49			N/A	N/A
2	0.73	0.08	0.80	1.42	1.50			N/A	N/A
3	0.50	0.05	0.46	1.28	1.39			N/A	N/A
4	1.16	0.03	0.33	2.48	5.83			N/A	N/A

2024 Base + Dev DS1, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	NGL - Longfield Avenue	Standard Roundabout		1, 2, 3, 4	8.53	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2024 Base + Dev DS1	AM	w/ Daedalus, w/out Stubbington Bypass	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 (%)
1		ONE HOUR	✓	60	100.000
2		ONE HOUR	✓	1557	100.000
3		ONE HOUR	✓	636	100.000
4		ONE HOUR	✓	1055	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	23	22	14
	2	55	0	428	1073
	3	39	438	0	159
	4	21	934	100	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1	2	3	4	
From	1	0	5	5	27	
	2	4	0	3	4	
	3	9	0	0	1	
	4	5	5	4	0	

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.18	13.09	0.2	0.5	B	55	82
2	0.79	8.16	3.8	12.5	A	1428	2142
3	0.50	5.08	1.0	2.6	A	584	875
4	0.77	10.89	3.4	13.6	B	968	1452

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
1	45	11	1103	612	0.073	44	86	0.0	0.1	6.938	A
2	1172	293	102	2206	0.531	1167	1046	0.0	1.2	3.578	A
3	479	120	857	1722	0.278	477	413	0.0	0.4	2.907	A
4	794	199	399	1622	0.490	790	935	0.0	1.0	4.539	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
1	54	13	1321	509	0.105	53	104	0.1	0.1	8.649	A
2	1399	350	122	2191	0.639	1397	1252	1.2	1.8	4.686	A
3	572	143	1025	1592	0.359	571	494	0.4	0.6	3.547	A
4	949	237	478	1574	0.603	946	1118	1.0	1.6	6.017	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
1	66	16	1613	370	0.177	65	126	0.1	0.2	12.899	B
2	1714	428	149	2171	0.789	1706	1529	1.8	3.7	7.904	A
3	700	175	1252	1417	0.494	699	603	0.6	1.0	5.030	A
4	1162	290	585	1510	0.770	1155	1366	1.6	3.4	10.479	B

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
1	66	16	1621	367	0.179	66	127	0.2	0.2	13.094	B
2	1714	428	150	2170	0.790	1713	1536	3.7	3.8	8.160	A
3	700	175	1258	1413	0.496	700	606	1.0	1.0	5.082	A
4	1162	290	586	1509	0.770	1162	1372	3.4	3.4	10.894	B

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
1	54	13	1332	504	0.106	54	104	0.2	0.1	8.770	A
2	1399	350	124	2190	0.639	1407	1262	3.8	1.9	4.815	A
3	572	143	1033	1586	0.360	573	498	1.0	0.6	3.585	A
4	949	237	480	1573	0.603	956	1126	3.4	1.6	6.214	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
1	45	11	1111	609	0.074	45	87	0.1	0.1	6.996	A
2	1172	293	103	2205	0.531	1175	1053	1.9	1.2	3.633	A
3	479	120	862	1718	0.279	480	415	0.6	0.4	2.929	A
4	794	199	401	1621	0.490	797	940	1.6	1.0	4.615	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.09	0.00	0.00	0.09	0.09			N/A	N/A
2	1.17	0.57	1.04	1.45	1.50			N/A	N/A
3	0.39	0.00	0.00	0.39	0.39			N/A	N/A
4	1.00	0.58	1.05	1.48	1.53			N/A	N/A

08:00 - 08:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.13	0.00	0.00	0.13	0.13			N/A	N/A
2	1.81	0.05	0.46	4.83	7.95			N/A	N/A
3	0.56	0.06	0.69	1.35	1.43			N/A	N/A
4	1.57	0.05	0.60	3.91	5.94			N/A	N/A

08:15 - 08:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.23	0.03	0.28	0.51	0.54			N/A	N/A
2	3.74	0.03	0.30	3.74	12.54			N/A	N/A
3	0.97	0.03	0.26	0.97	0.97			N/A	N/A
4	3.35	0.03	0.31	3.35	13.63			N/A	N/A

08:30 - 08:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.24	0.03	0.29	0.52	0.55			N/A	N/A
2	3.81	0.03	0.28	3.81	3.81			N/A	N/A
3	0.98	0.03	0.28	0.98	2.65			N/A	N/A
4	3.44	0.03	0.29	3.44	5.74			N/A	N/A

08:45 - 09:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.13	0.00	0.00	0.13	0.13			N/A	N/A
2	1.86	0.07	1.01	4.45	6.40			N/A	N/A
3	0.57	0.55	1.01	1.41	1.46			N/A	N/A
4	1.63	0.06	0.85	3.88	5.65			N/A	N/A

09:00 - 09:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.09	0.00	0.00	0.09	0.09			N/A	N/A
2	1.19	0.04	0.43	2.97	4.93			N/A	N/A
3	0.39	0.03	0.27	0.49	0.77			N/A	N/A
4	1.02	0.04	0.41	2.53	4.21			N/A	N/A

2024 Base + Dev DS1, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	NGL - Longfield Avenue	Standard Roundabout		1, 2, 3, 4	11.23	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2024 Base + Dev DS1	PM	w/ Daedalus, w/out Stubbington Bypass	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 (%)
1		ONE HOUR	✓	89	100.000
2		ONE HOUR	✓	1236	100.000
3		ONE HOUR	✓	840	100.000
4		ONE HOUR	✓	1095	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	25	30	34
	2	4	0	384	848
	3	4	727	0	109
	4	4	997	94	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	0	4	0	0
	2	0	0	1	2
	3	0	0	0	0
	4	33	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.53	40.80	1.1	4.9	E	82	123
2	0.63	4.62	1.7	2.9	A	1135	1702
3	0.57	5.10	1.3	1.5	A	771	1157
4	0.88	21.00	6.7	33.7	C	1005	1507

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
1	67	17	1363	489	0.137	66	9	0.0	0.2	8.604	A
2	931	233	118	2194	0.424	928	1311	0.0	0.7	2.879	A
3	633	158	665	1870	0.338	631	381	0.0	0.5	2.900	A
4	824	206	552	1529	0.539	820	743	0.0	1.2	5.089	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
1	80	20	1630	362	0.221	80	11	0.2	0.3	12.884	B
2	1111	278	142	2176	0.511	1110	1568	0.7	1.1	3.422	A
3	755	189	796	1769	0.427	754	456	0.5	0.7	3.545	A
4	984	246	661	1463	0.673	981	889	1.2	2.0	7.481	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
1	98	25	1984	194	0.505	95	14	0.3	1.0	35.984	E
2	1361	340	171	2155	0.632	1359	1908	1.1	1.7	4.572	A
3	925	231	973	1633	0.567	923	557	0.7	1.3	5.058	A
4	1206	301	808	1374	0.878	1189	1087	2.0	6.2	18.236	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
1	98	25	2000	186	0.527	98	14	1.0	1.1	40.802	E
2	1361	340	174	2152	0.632	1361	1924	1.7	1.7	4.615	A
3	925	231	975	1631	0.567	925	560	1.3	1.3	5.103	A
4	1206	301	810	1372	0.878	1204	1090	6.2	6.7	21.001	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
1	80	20	1655	350	0.229	83	11	1.1	0.3	13.778	B
2	1111	278	146	2173	0.511	1114	1592	1.7	1.1	3.456	A
3	755	189	800	1766	0.428	758	461	1.3	0.8	3.579	A
4	984	246	664	1462	0.674	1003	894	6.7	2.1	8.215	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
1	67	17	1374	484	0.139	68	10	0.3	0.2	8.763	A
2	931	233	120	2193	0.425	932	1321	1.1	0.8	2.901	A
3	633	158	668	1867	0.339	634	384	0.8	0.5	2.920	A
4	824	206	555	1528	0.540	828	747	2.1	1.2	5.224	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.16	0.00	0.00	0.16	0.16			N/A	N/A
2	0.74	0.56	1.01	1.42	1.47			N/A	N/A
3	0.51	0.51	1.00	1.40	1.45			N/A	N/A
4	1.17	0.56	1.07	1.17	1.57			N/A	N/A

17:00 - 17:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.28	0.00	0.00	0.28	0.28			N/A	N/A
2	1.05	0.06	0.73	2.05	2.94			N/A	N/A
3	0.74	0.07	0.76	1.27	1.27			N/A	N/A
4	2.03	0.05	0.47	5.47	8.90			N/A	N/A

17:15 - 17:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.96	0.03	0.28	0.96	2.85			N/A	N/A
2	1.72	0.03	0.26	1.72	1.72			N/A	N/A
3	1.29	0.03	0.26	1.29	1.29			N/A	N/A
4	6.21	0.04	0.40	16.20	33.72			N/A	N/A

17:30 - 17:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1.06	0.04	0.36	2.65	4.92			N/A	N/A
2	1.73	0.03	0.27	1.73	1.73			N/A	N/A
3	1.30	0.03	0.27	1.30	1.49			N/A	N/A
4	6.68	0.03	0.33	9.68	33.45			N/A	N/A

17:45 - 18:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.31	0.03	0.29	0.67	1.09			N/A	N/A
2	1.07	0.29	1.06	1.41	1.75			N/A	N/A
3	0.75	0.28	0.95	1.39	1.45			N/A	N/A
4	2.14	0.04	0.44	5.83	10.00			N/A	N/A

18:00 - 18:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.16	0.03	0.26	0.47	0.50			N/A	N/A
2	0.75	0.08	0.79	1.16	1.16			N/A	N/A
3	0.51	0.05	0.48	1.29	1.40			N/A	N/A
4	1.20	0.03	0.32	2.40	6.11			N/A	N/A

2019 Base DS2, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	NGL - Longfield Avenue	Standard Roundabout		1, 2, 3, 4	5.29	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2019 Base DS2	AM	with Stubbington Bypass	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 (%)
1		ONE HOUR	✓	55	100.000
2		ONE HOUR	✓	1395	100.000
3		ONE HOUR	✓	268	100.000
4		ONE HOUR	✓	890	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	20	21	14
	2	40	0	260	1095
	3	38	128	0	102
	4	20	792	78	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	0	5	5	27
	2	4	0	3	4
	3	9	0	0	1
	4	5	6	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.10	7.15	0.1	0.5	A	50	76
2	0.70	5.72	2.4	5.0	A	1280	1920
3	0.21	3.28	0.3	0.9	A	246	369
4	0.57	5.11	1.4	1.7	A	817	1226

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
1	41	10	749	781	0.053	41	74	0.0	0.1	5.354	A
2	1050	262	85	2219	0.473	1046	705	0.0	0.9	3.180	A
3	202	50	862	1718	0.118	201	269	0.0	0.1	2.406	A
4	670	168	155	1771	0.379	668	908	0.0	0.6	3.454	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
1	49	12	897	710	0.070	49	88	0.1	0.1	5.989	A
2	1254	313	102	2206	0.568	1252	844	0.9	1.4	3.914	A
3	241	60	1031	1588	0.152	241	322	0.1	0.2	2.710	A
4	800	200	185	1752	0.457	799	1087	0.6	0.9	4.001	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
1	61	15	1097	615	0.098	60	108	0.1	0.1	7.136	A
2	1535	384	124	2189	0.701	1531	1033	1.4	2.4	5.651	A
3	295	74	1261	1410	0.209	295	394	0.2	0.3	3.272	A
4	980	245	227	1727	0.568	978	1330	0.9	1.4	5.084	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
1	61	15	1099	614	0.099	61	108	0.1	0.1	7.151	A
2	1535	384	125	2189	0.701	1535	1035	2.4	2.4	5.722	A
3	295	74	1265	1408	0.210	295	395	0.3	0.3	3.279	A
4	980	245	227	1727	0.568	980	1333	1.4	1.4	5.112	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
1	49	12	900	709	0.070	50	88	0.1	0.1	6.005	A
2	1254	313	102	2206	0.568	1258	847	2.4	1.4	3.963	A
3	241	60	1036	1584	0.152	241	324	0.3	0.2	2.718	A
4	800	200	186	1752	0.457	802	1092	1.4	0.9	4.027	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
1	41	10	753	779	0.053	41	74	0.1	0.1	5.373	A
2	1050	262	85	2219	0.473	1052	709	1.4	0.9	3.214	A
3	202	50	866	1715	0.118	202	271	0.2	0.1	2.414	A
4	670	168	155	1771	0.379	671	913	0.9	0.7	3.478	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.06	0.00	0.00	0.06	0.06			N/A	N/A
2	0.93	0.57	1.04	1.46	1.51			N/A	N/A
3	0.13	0.00	0.00	0.13	0.13			N/A	N/A
4	0.64	0.58	1.06	1.48	1.54			N/A	N/A

08:00 - 08:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.08	0.03	0.28	0.50	0.53			N/A	N/A
2	1.35	0.05	0.53	3.26	4.96			N/A	N/A
3	0.18	0.00	0.00	0.18	0.18			N/A	N/A
4	0.88	0.09	0.89	1.18	1.71			N/A	N/A

08:15 - 08:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.12	0.03	0.29	0.51	0.54			N/A	N/A
2	2.39	0.03	0.28	2.39	2.39			N/A	N/A
3	0.27	0.03	0.26	0.46	0.49			N/A	N/A
4	1.37	0.03	0.27	1.37	1.37			N/A	N/A

08:30 - 08:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.12	0.03	0.28	0.50	0.52			N/A	N/A
2	2.42	0.03	0.27	2.42	2.42			N/A	N/A
3	0.27	0.03	0.28	0.50	0.92			N/A	N/A
4	1.38	0.03	0.28	1.38	1.38			N/A	N/A

08:45 - 09:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.08	0.00	0.00	0.08	0.08			N/A	N/A
2	1.38	0.12	1.19	2.39	3.02			N/A	N/A
3	0.18	0.00	0.00	0.18	0.18			N/A	N/A
4	0.90	0.36	1.03	1.49	1.55			N/A	N/A

09:00 - 09:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.06	0.00	0.00	0.06	0.06			N/A	N/A
2	0.94	0.06	0.70	1.81	2.48			N/A	N/A
3	0.14	0.00	0.00	0.14	0.14			N/A	N/A
4	0.65	0.07	0.77	1.43	1.51			N/A	N/A

2019 Base DS2, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	NGL - Longfield Avenue	Standard Roundabout		1, 2, 3, 4	4.11	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2019 Base DS2	PM	with Stubbington Bypass	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 (%)
1		ONE HOUR	✓	84	100.000
2		ONE HOUR	✓	1121	100.000
3		ONE HOUR	✓	279	100.000
4		ONE HOUR	✓	859	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	22	29	33
	2	4	0	269	848
	3	4	172	0	104
	4	4	783	72	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	0	5	0	0
	2	0	0	1	2
	3	0	0	0	0
	4	33	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.15	7.18	0.2	0.5	A	77	116
2	0.57	3.90	1.3	1.8	A	1029	1543
3	0.19	2.72	0.2	0.5	A	256	384
4	0.54	4.55	1.2	1.5	A	788	1182

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
1	63	16	770	771	0.082	63	9	0.0	0.1	5.146	A
2	844	211	100	2207	0.382	842	733	0.0	0.6	2.672	A
3	210	53	665	1870	0.112	210	277	0.0	0.1	2.168	A
4	647	162	135	1783	0.363	644	739	0.0	0.6	3.188	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
1	76	19	922	698	0.108	75	11	0.1	0.1	5.845	A
2	1008	252	120	2193	0.460	1007	877	0.6	0.9	3.080	A
3	251	63	795	1769	0.142	251	332	0.1	0.2	2.370	A
4	772	193	161	1767	0.437	771	885	0.6	0.8	3.650	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
1	92	23	1128	600	0.154	92	13	0.1	0.2	7.167	A
2	1235	309	147	2173	0.568	1233	1074	0.9	1.3	3.881	A
3	307	77	973	1632	0.188	307	406	0.2	0.2	2.716	A
4	946	236	197	1745	0.542	944	1083	0.8	1.2	4.534	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
1	92	23	1130	600	0.154	92	13	0.2	0.2	7.184	A
2	1235	309	147	2172	0.568	1235	1075	1.3	1.3	3.897	A
3	307	77	975	1631	0.188	307	407	0.2	0.2	2.719	A
4	946	236	198	1745	0.542	946	1084	1.2	1.2	4.552	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
1	76	19	925	697	0.108	76	11	0.2	0.1	5.864	A
2	1008	252	120	2192	0.460	1010	880	1.3	0.9	3.095	A
3	251	63	798	1767	0.142	251	333	0.2	0.2	2.374	A
4	772	193	162	1767	0.437	774	887	1.2	0.8	3.671	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
1	63	16	774	769	0.082	63	9	0.1	0.1	5.166	A
2	844	211	101	2207	0.382	845	736	0.9	0.6	2.687	A
3	210	53	667	1868	0.112	210	278	0.2	0.1	2.171	A
4	647	162	135	1783	0.363	648	742	0.8	0.6	3.206	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.09	0.00	0.00	0.09	0.09			N/A	N/A
2	0.63	0.56	1.02	1.42	1.47			N/A	N/A
3	0.13	0.00	0.00	0.13	0.13			N/A	N/A
4	0.57	0.56	1.01	1.41	1.47			N/A	N/A

17:00 - 17:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.12	0.00	0.00	0.12	0.12			N/A	N/A
2	0.86	0.07	0.81	1.36	1.80			N/A	N/A
3	0.16	0.00	0.00	0.16	0.16			N/A	N/A
4	0.78	0.09	0.83	1.19	1.19			N/A	N/A

17:15 - 17:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.18	0.03	0.26	0.47	0.49			N/A	N/A
2	1.32	0.03	0.26	1.32	1.32			N/A	N/A
3	0.23	0.03	0.25	0.46	0.48			N/A	N/A
4	1.18	0.03	0.26	1.18	1.18			N/A	N/A

17:30 - 17:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.18	0.03	0.25	0.46	0.48			N/A	N/A
2	1.33	0.03	0.27	1.33	1.33			N/A	N/A
3	0.23	0.03	0.25	0.45	0.48			N/A	N/A
4	1.19	0.03	0.27	1.19	1.19			N/A	N/A

17:45 - 18:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.12	0.00	0.00	0.12	0.12			N/A	N/A
2	0.87	0.54	1.01	1.42	1.48			N/A	N/A
3	0.17	0.00	0.00	0.17	0.17			N/A	N/A
4	0.79	0.52	0.99	1.41	1.46			N/A	N/A

18:00 - 18:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.09	0.00	0.00	0.09	0.09			N/A	N/A
2	0.63	0.09	0.82	1.38	1.45			N/A	N/A
3	0.13	0.00	0.00	0.13	0.13			N/A	N/A
4	0.58	0.07	0.73	1.36	1.44			N/A	N/A

2024 Base DS2, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	NGL - Longfield Avenue	Standard Roundabout		1, 2, 3, 4	6.33	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2024 Base DS2	AM	w/ Daedalus, w/ Stubbington Bypass	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 (%)
1		ONE HOUR	✓	60	100.000
2		ONE HOUR	✓	1469	100.000
3		ONE HOUR	✓	297	100.000
4		ONE HOUR	✓	1035	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	24	22	14
	2	42	0	274	1153
	3	39	152	0	106
	4	21	934	81	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1	2	3	4	
From	1	0	5	5	27	
	2	4	0	3	4	
	3	9	0	0	1	
	4	5	5	4	0	

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.13	8.56	0.2	0.5	A	55	82
2	0.74	6.56	2.9	6.2	A	1348	2021
3	0.24	3.54	0.3	1.3	A	272	409
4	0.67	6.66	2.1	3.5	A	950	1425

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
1	45	11	875	721	0.062	45	77	0.0	0.1	5.825	A
2	1106	276	88	2217	0.499	1102	832	0.0	1.0	3.341	A
3	223	56	907	1683	0.133	223	282	0.0	0.2	2.495	A
4	779	195	175	1758	0.443	776	955	0.0	0.8	3.847	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
1	54	13	1047	639	0.084	54	92	0.1	0.1	6.732	A
2	1320	330	105	2204	0.599	1318	996	1.0	1.5	4.213	A
3	267	67	1085	1546	0.173	267	338	0.2	0.2	2.850	A
4	931	233	210	1738	0.536	929	1142	0.8	1.2	4.682	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
1	66	16	1281	528	0.125	66	112	0.1	0.2	8.519	A
2	1617	404	128	2186	0.740	1612	1218	1.5	2.9	6.446	A
3	327	82	1327	1360	0.240	326	413	0.2	0.3	3.526	A
4	1140	285	257	1709	0.667	1136	1397	1.2	2.1	6.583	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
1	66	16	1284	526	0.125	66	112	0.2	0.2	8.557	A
2	1617	404	129	2186	0.740	1617	1221	2.9	2.9	6.565	A
3	327	82	1331	1357	0.241	327	414	0.3	0.3	3.540	A
4	1140	285	257	1709	0.667	1140	1401	2.1	2.1	6.661	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
1	54	13	1052	636	0.084	54	92	0.2	0.1	6.766	A
2	1320	330	105	2203	0.599	1326	1001	2.9	1.6	4.285	A
3	267	67	1092	1541	0.173	267	340	0.3	0.2	2.865	A
4	931	233	210	1737	0.536	934	1149	2.1	1.2	4.743	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
1	45	11	880	718	0.063	45	77	0.1	0.1	5.853	A
2	1106	276	88	2216	0.499	1108	837	1.6	1.0	3.381	A
3	223	56	912	1679	0.133	224	284	0.2	0.2	2.505	A
4	779	195	176	1758	0.443	781	960	1.2	0.8	3.888	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.07	0.00	0.00	0.07	0.07			N/A	N/A
2	1.03	0.57	1.04	1.45	1.51			N/A	N/A
3	0.15	0.00	0.00	0.15	0.15			N/A	N/A
4	0.83	0.58	1.05	1.47	1.53			N/A	N/A

08:00 - 08:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.10	0.03	0.27	0.49	0.52			N/A	N/A
2	1.53	0.05	0.49	3.93	6.17			N/A	N/A
3	0.21	0.00	0.00	0.21	0.21			N/A	N/A
4	1.20	0.06	0.82	2.52	3.52			N/A	N/A

08:15 - 08:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.15	0.03	0.28	0.51	0.54			N/A	N/A
2	2.87	0.03	0.29	2.87	4.89			N/A	N/A
3	0.32	0.03	0.26	0.46	0.49			N/A	N/A
4	2.06	0.03	0.28	2.06	2.06			N/A	N/A

08:30 - 08:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.16	0.03	0.27	0.49	0.52			N/A	N/A
2	2.91	0.03	0.28	2.91	2.91			N/A	N/A
3	0.32	0.03	0.32	1.03	1.29			N/A	N/A
4	2.09	0.03	0.28	2.09	2.09			N/A	N/A

08:45 - 09:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.10	0.00	0.00	0.10	0.10			N/A	N/A
2	1.57	0.09	1.17	3.11	4.24			N/A	N/A
3	0.21	0.00	0.00	0.21	0.21			N/A	N/A
4	1.23	0.12	1.11	1.97	2.57			N/A	N/A

09:00 - 09:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.07	0.00	0.00	0.07	0.07			N/A	N/A
2	1.04	0.05	0.51	2.30	3.43			N/A	N/A
3	0.16	0.00	0.00	0.16	0.16			N/A	N/A
4	0.85	0.06	0.67	1.52	2.00			N/A	N/A

2024 Base DS2, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	NGL - Longfield Avenue	Standard Roundabout		1, 2, 3, 4	4.79	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2024 Base DS2	PM	w/ Daedalus, w/ Stubbington Bypass	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 (%)
1		ONE HOUR	✓	90	100.000
2		ONE HOUR	✓	1189	100.000
3		ONE HOUR	✓	310	100.000
4		ONE HOUR	✓	986	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	25	30	34
	2	4	0	285	900
	3	4	199	0	107
	4	4	908	74	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	0	4	0	0
	2	0	0	1	2
	3	0	0	0	0
	4	33	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.19	8.67	0.2	0.9	A	82	123
2	0.60	4.25	1.5	2.4	A	1091	1637
3	0.22	2.89	0.3	1.0	A	285	427
4	0.63	5.68	1.7	2.6	A	905	1357

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
1	67	17	886	716	0.094	67	9	0.0	0.1	5.612	A
2	895	224	104	2205	0.406	892	849	0.0	0.7	2.778	A
3	234	58	704	1839	0.127	233	292	0.0	0.1	2.241	A
4	742	186	156	1770	0.419	740	781	0.0	0.7	3.515	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
1	81	20	1060	633	0.127	80	11	0.1	0.1	6.593	A
2	1069	267	124	2190	0.488	1068	1017	0.7	1.0	3.255	A
3	279	70	842	1733	0.161	279	350	0.1	0.2	2.475	A
4	887	222	186	1752	0.506	885	935	0.7	1.0	4.189	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
1	99	25	1298	520	0.190	98	14	0.1	0.2	8.629	A
2	1309	327	152	2169	0.604	1307	1244	1.0	1.5	4.228	A
3	342	85	1031	1588	0.215	341	428	0.2	0.3	2.888	A
4	1086	271	228	1726	0.629	1083	1144	1.0	1.7	5.627	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
1	99	25	1300	519	0.190	99	14	0.2	0.2	8.669	A
2	1309	327	152	2169	0.604	1309	1247	1.5	1.5	4.251	A
3	342	85	1033	1586	0.215	342	429	0.3	0.3	2.891	A
4	1086	271	228	1726	0.629	1086	1146	1.7	1.7	5.675	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
1	81	20	1065	631	0.128	81	11	0.2	0.1	6.630	A
2	1069	267	125	2189	0.488	1071	1021	1.5	1.0	3.277	A
3	279	70	845	1731	0.161	279	351	0.3	0.2	2.480	A
4	887	222	187	1752	0.506	889	938	1.7	1.0	4.228	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
1	67	17	891	713	0.095	68	9	0.1	0.1	5.641	A
2	895	224	104	2204	0.406	896	854	1.0	0.7	2.795	A
3	234	58	707	1837	0.127	234	293	0.2	0.1	2.247	A
4	742	186	156	1770	0.419	744	785	1.0	0.7	3.547	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.10	0.00	0.00	0.10	0.10			N/A	N/A
2	0.69	0.56	1.02	1.42	1.47			N/A	N/A
3	0.15	0.00	0.00	0.15	0.15			N/A	N/A
4	0.72	0.56	1.01	1.41	1.46			N/A	N/A

17:00 - 17:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.15	0.00	0.00	0.15	0.15			N/A	N/A
2	0.96	0.06	0.78	1.78	2.39			N/A	N/A
3	0.19	0.00	0.00	0.19	0.19			N/A	N/A
4	1.03	0.07	0.82	1.90	2.64			N/A	N/A

17:15 - 17:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.23	0.03	0.26	0.47	0.49			N/A	N/A
2	1.53	0.03	0.26	1.53	1.53			N/A	N/A
3	0.27	0.03	0.25	0.46	0.48			N/A	N/A
4	1.68	0.03	0.27	1.68	1.68			N/A	N/A

17:30 - 17:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.24	0.03	0.28	0.50	0.91			N/A	N/A
2	1.54	0.03	0.27	1.54	1.54			N/A	N/A
3	0.27	0.03	0.28	0.55	1.02			N/A	N/A
4	1.70	0.03	0.27	1.70	1.70			N/A	N/A

17:45 - 18:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.15	0.00	0.00	0.15	0.15			N/A	N/A
2	0.98	0.50	1.02	1.22	1.22			N/A	N/A
3	0.19	0.00	0.00	0.19	0.19			N/A	N/A
4	1.04	0.18	1.04	1.48	1.80			N/A	N/A

18:00 - 18:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.11	0.00	0.00	0.11	0.11			N/A	N/A
2	0.70	0.09	0.81	1.40	1.47			N/A	N/A
3	0.15	0.00	0.00	0.15	0.15			N/A	N/A
4	0.73	0.07	0.72	1.37	1.37			N/A	N/A

2024 Base + Dev DS2, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	NGL - Longfield Avenue	Standard Roundabout		1, 2, 3, 4	6.52	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2024 Base + Dev DS2	AM	w/ Daedalus, w/ Stubbington Bypass	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 (%)
1		ONE HOUR	✓	60	100.000
2		ONE HOUR	✓	1483	100.000
3		ONE HOUR	✓	300	100.000
4		ONE HOUR	✓	1053	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	24	22	14
	2	43	0	276	1164
	3	39	155	0	106
	4	21	951	81	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1	2	3	4	
From	1	0	4	5	27	
	2	4	0	3	4	
	3	9	0	0	1	
	4	5	5	4	0	

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.13	8.76	0.2	0.5	A	55	83
2	0.75	6.75	3.0	6.4	A	1361	2041
3	0.25	3.59	0.3	1.3	A	275	413
4	0.68	6.92	2.2	3.8	A	966	1449

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
1	45	11	890	714	0.064	45	77	0.0	0.1	5.887	A
2	1117	279	88	2217	0.504	1112	847	0.0	1.0	3.373	A
3	226	56	916	1676	0.135	225	284	0.0	0.2	2.510	A
4	792	198	178	1757	0.451	789	963	0.0	0.9	3.902	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
1	54	14	1065	630	0.086	54	92	0.1	0.1	6.831	A
2	1333	333	105	2204	0.605	1331	1015	1.0	1.6	4.273	A
3	270	67	1096	1538	0.175	269	340	0.2	0.2	2.874	A
4	946	237	213	1736	0.545	945	1153	0.9	1.2	4.780	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
1	66	17	1303	517	0.128	66	113	0.1	0.2	8.720	A
2	1633	408	128	2186	0.747	1627	1241	1.6	3.0	6.618	A
3	330	83	1340	1350	0.245	330	416	0.2	0.3	3.571	A
4	1159	290	260	1707	0.679	1155	1409	1.2	2.2	6.823	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
1	66	17	1307	516	0.129	66	113	0.2	0.2	8.763	A
2	1633	408	129	2186	0.747	1633	1244	3.0	3.0	6.748	A
3	330	83	1344	1347	0.245	330	417	0.3	0.3	3.586	A
4	1159	290	261	1706	0.679	1159	1414	2.2	2.2	6.916	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
1	54	14	1071	628	0.086	54	92	0.2	0.1	6.870	A
2	1333	333	106	2203	0.605	1339	1020	3.0	1.6	4.351	A
3	270	67	1102	1533	0.176	270	342	0.3	0.2	2.889	A
4	946	237	213	1735	0.545	950	1159	2.2	1.3	4.846	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
1	45	11	895	711	0.064	45	77	0.1	0.1	5.918	A
2	1117	279	88	2216	0.504	1119	853	1.6	1.1	3.411	A
3	226	56	921	1672	0.135	226	286	0.2	0.2	2.520	A
4	792	198	179	1756	0.451	794	968	1.3	0.9	3.943	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.07	0.00	0.00	0.07	0.07			N/A	N/A
2	1.05	0.57	1.04	1.45	1.51			N/A	N/A
3	0.16	0.00	0.00	0.16	0.16			N/A	N/A
4	0.86	0.58	1.05	1.47	1.53			N/A	N/A

08:00 - 08:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.10	0.00	0.00	0.10	0.10			N/A	N/A
2	1.57	0.05	0.49	4.04	6.43			N/A	N/A
3	0.21	0.00	0.00	0.21	0.21			N/A	N/A
4	1.25	0.06	0.80	2.71	3.83			N/A	N/A

08:15 - 08:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.16	0.03	0.28	0.51	0.54			N/A	N/A
2	2.98	0.03	0.29	2.98	5.73			N/A	N/A
3	0.33	0.03	0.26	0.46	0.49			N/A	N/A
4	2.18	0.03	0.28	2.18	2.25			N/A	N/A

08:30 - 08:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.16	0.03	0.27	0.49	0.52			N/A	N/A
2	3.02	0.03	0.28	3.02	3.02			N/A	N/A
3	0.33	0.03	0.32	1.07	1.32			N/A	N/A
4	2.20	0.03	0.28	2.20	2.20			N/A	N/A

08:45 - 09:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.10	0.00	0.00	0.10	0.10			N/A	N/A
2	1.61	0.09	1.15	3.33	4.56			N/A	N/A
3	0.22	0.00	0.00	0.22	0.22			N/A	N/A
4	1.28	0.11	1.12	2.09	2.85			N/A	N/A

09:00 - 09:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.07	0.00	0.00	0.07	0.07			N/A	N/A
2	1.06	0.05	0.50	2.43	3.65			N/A	N/A
3	0.16	0.00	0.00	0.16	0.16			N/A	N/A
4	0.87	0.06	0.63	1.66	2.16			N/A	N/A

2024 Base + Dev DS2, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	NGL - Longfield Avenue	Standard Roundabout		1, 2, 3, 4	4.93	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D15	2024 Base + Dev DS2	PM	w/ Daedalus, w/ Stubbington Bypass	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 (%)
1		ONE HOUR	✓	90	100.000
2		ONE HOUR	✓	1212	100.000
3		ONE HOUR	✓	321	100.000
4		ONE HOUR	✓	1001	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	26	30	34
	2	4	0	292	915
	3	4	210	0	107
	4	4	922	74	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	0	4	0	0
	2	0	0	1	2
	3	0	0	0	0
	4	33	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.20	8.96	0.2	1.0	A	83	124
2	0.62	4.38	1.6	2.6	A	1112	1668
3	0.22	2.95	0.3	1.2	A	294	442
4	0.64	5.88	1.8	2.8	A	918	1377

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
1	68	17	905	707	0.096	67	9	0.0	0.1	5.692	A
2	912	228	104	2205	0.414	909	868	0.0	0.7	2.814	A
3	242	60	716	1831	0.132	241	297	0.0	0.2	2.265	A
4	753	188	164	1765	0.427	750	793	0.0	0.7	3.570	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
1	81	20	1083	622	0.130	81	11	0.1	0.1	6.726	A
2	1089	272	124	2190	0.497	1088	1039	0.7	1.0	3.313	A
3	289	72	856	1722	0.168	288	356	0.2	0.2	2.510	A
4	900	225	196	1746	0.515	898	949	0.7	1.1	4.281	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
1	99	25	1325	507	0.195	99	14	0.1	0.2	8.909	A
2	1334	333	152	2169	0.615	1332	1272	1.0	1.6	4.351	A
3	353	88	1048	1575	0.224	353	435	0.2	0.3	2.947	A
4	1102	275	240	1719	0.641	1099	1161	1.1	1.8	5.832	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
1	99	25	1328	506	0.196	99	14	0.2	0.2	8.956	A
2	1334	333	152	2169	0.615	1334	1275	1.6	1.6	4.376	A
3	353	88	1050	1573	0.225	353	436	0.3	0.3	2.950	A
4	1102	275	240	1719	0.641	1102	1163	1.8	1.8	5.884	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
1	81	20	1087	620	0.130	81	11	0.2	0.2	6.767	A
2	1089	272	125	2189	0.498	1092	1044	1.6	1.0	3.335	A
3	289	72	859	1720	0.168	289	357	0.3	0.2	2.515	A
4	900	225	196	1746	0.515	902	952	1.8	1.1	4.323	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
1	68	17	909	704	0.096	68	9	0.2	0.1	5.725	A
2	912	228	104	2204	0.414	913	873	1.0	0.7	2.833	A
3	242	60	719	1828	0.132	242	299	0.2	0.2	2.269	A
4	753	188	164	1765	0.427	755	796	1.1	0.8	3.600	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.11	0.00	0.00	0.11	0.11			N/A	N/A
2	0.71	0.56	1.01	1.42	1.47			N/A	N/A
3	0.15	0.00	0.00	0.15	0.15			N/A	N/A
4	0.75	0.56	1.01	1.41	1.46			N/A	N/A

17:00 - 17:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.15	0.00	0.00	0.15	0.15			N/A	N/A
2	1.00	0.06	0.76	1.89	2.65			N/A	N/A
3	0.20	0.00	0.00	0.20	0.20			N/A	N/A
4	1.06	0.06	0.80	2.00	2.84			N/A	N/A

17:15 - 17:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.24	0.03	0.26	0.47	0.49			N/A	N/A
2	1.60	0.03	0.26	1.60	1.60			N/A	N/A
3	0.29	0.03	0.25	0.45	0.48			N/A	N/A
4	1.77	0.03	0.27	1.77	1.77			N/A	N/A

17:30 - 17:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.24	0.03	0.28	0.52	1.02			N/A	N/A
2	1.61	0.03	0.27	1.61	1.61			N/A	N/A
3	0.29	0.03	0.29	0.81	1.16			N/A	N/A
4	1.79	0.03	0.27	1.79	1.79			N/A	N/A

17:45 - 18:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.15	0.00	0.00	0.15	0.15			N/A	N/A
2	1.01	0.40	1.04	1.52	1.53			N/A	N/A
3	0.20	0.00	0.00	0.20	0.20			N/A	N/A
4	1.08	0.16	1.05	1.62	1.90			N/A	N/A

18:00 - 18:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.11	0.00	0.00	0.11	0.11			N/A	N/A
2	0.72	0.08	0.81	1.41	1.49			N/A	N/A
3	0.15	0.00	0.00	0.15	0.15			N/A	N/A
4	0.76	0.06	0.71	1.51	1.57			N/A	N/A

<h1>Junctions 9</h1>
<h2>ARCADY 9 - Roundabout Module</h2>
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Filename: NGL-Longfield Ave Oct 19.j9

Path: \\Pg-brs-dc01\data\Bristol Projects\Bristol - Live Projects\BRS.4901 - BRS.5000\BRS.4989 - SUSTAINABLE LAND PLC - LAND TO THE NORTH OF GOSPORT ROAD, FAREHAM\Transport\7. Junction Modelling\c. ARCADY\Oct 19\Aff

Report generation date: 15/10/2019 16:54:25

-
- »2019 Base DS1, AM
 - »2019 Base DS1, PM
 - »2024 Base DS1, AM
 - »2024 Base DS1, PM
 - »2024 Base + Dev DS1, AM
 - »2024 Base + Dev DS1, PM
 - »2019 Base DS2, AM
 - »2019 Base DS2, PM
 - »2024 Base DS2, AM
 - »2024 Base DS2, PM
 - »2024 Base + Dev DS2, AM
 - »2024 Base + Dev DS2, PM

Summary of junction performance

	AM					PM				
	Queue (PCU)	Delay (s)	RFC	LOS	Junction LOS	Queue (PCU)	Delay (s)	RFC	LOS	Junction LOS
2019 Base DS1										
1 - Davis Way	0.2	9.61	0.13	A	A	0.4	17.75	0.31	C	A
2 - Newgate Lane (South)	2.9	6.61	0.74	A		1.4	4.08	0.58	A	
3 - Longfield Avenue	0.7	4.26	0.42	A		0.9	4.17	0.49	A	
4 - Newgate Lane (North)	1.9	6.98	0.65	A		2.9	9.95	0.75	A	
2024 Base DS1										
1 - Davis Way	0.2	12.67	0.17	B	A	0.9	35.64	0.49	E	B
2 - Newgate Lane (South)	3.6	7.80	0.78	A		1.7	4.48	0.62	A	
3 - Longfield Avenue	0.9	4.95	0.49	A		1.2	4.93	0.56	A	
4 - Newgate Lane (North)	3.2	10.35	0.76	B		5.9	18.68	0.86	C	
2024 Base + Dev DS1										
1 - Davis Way	0.2	13.04	0.18	B	A	1.0	39.86	0.52	E	B
2 - Newgate Lane (South)	3.8	8.09	0.79	A		1.7	4.60	0.63	A	
3 - Longfield Avenue	1.0	5.06	0.49	A		1.3	5.08	0.57	A	
4 - Newgate Lane (North)	3.4	10.82	0.77	B		6.5	20.58	0.88	C	
2019 Base DS2										
1 - Davis Way	0.1	7.15	0.10	A	A	0.2	7.18	0.15	A	A
2 - Newgate Lane (South)	2.4	5.72	0.70	A		1.3	3.90	0.57	A	
3 - Longfield Avenue	0.3	3.28	0.21	A		0.2	2.72	0.19	A	
4 - Newgate Lane (North)	1.4	5.11	0.57	A		1.2	4.55	0.54	A	
2024 Base DS2										
1 - Davis Way	0.2	8.56	0.13	A	A	0.2	8.67	0.19	A	A
2 - Newgate Lane (South)	2.9	6.56	0.74	A		1.5	4.25	0.60	A	
3 - Longfield Avenue	0.3	3.54	0.24	A		0.3	2.89	0.22	A	
4 - Newgate Lane (North)	2.1	6.66	0.67	A		1.7	5.68	0.63	A	
2024 Base + Dev DS2										
1 - Davis Way	0.2	8.74	0.13	A	A	0.2	8.91	0.19	A	A
2 - Newgate Lane (South)	3.0	6.71	0.75	A		1.6	4.36	0.61	A	
3 - Longfield Avenue	0.3	3.58	0.24	A		0.3	2.94	0.22	A	
4 - Newgate Lane (North)	2.2	6.88	0.68	A		1.8	5.85	0.64	A	

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

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages.

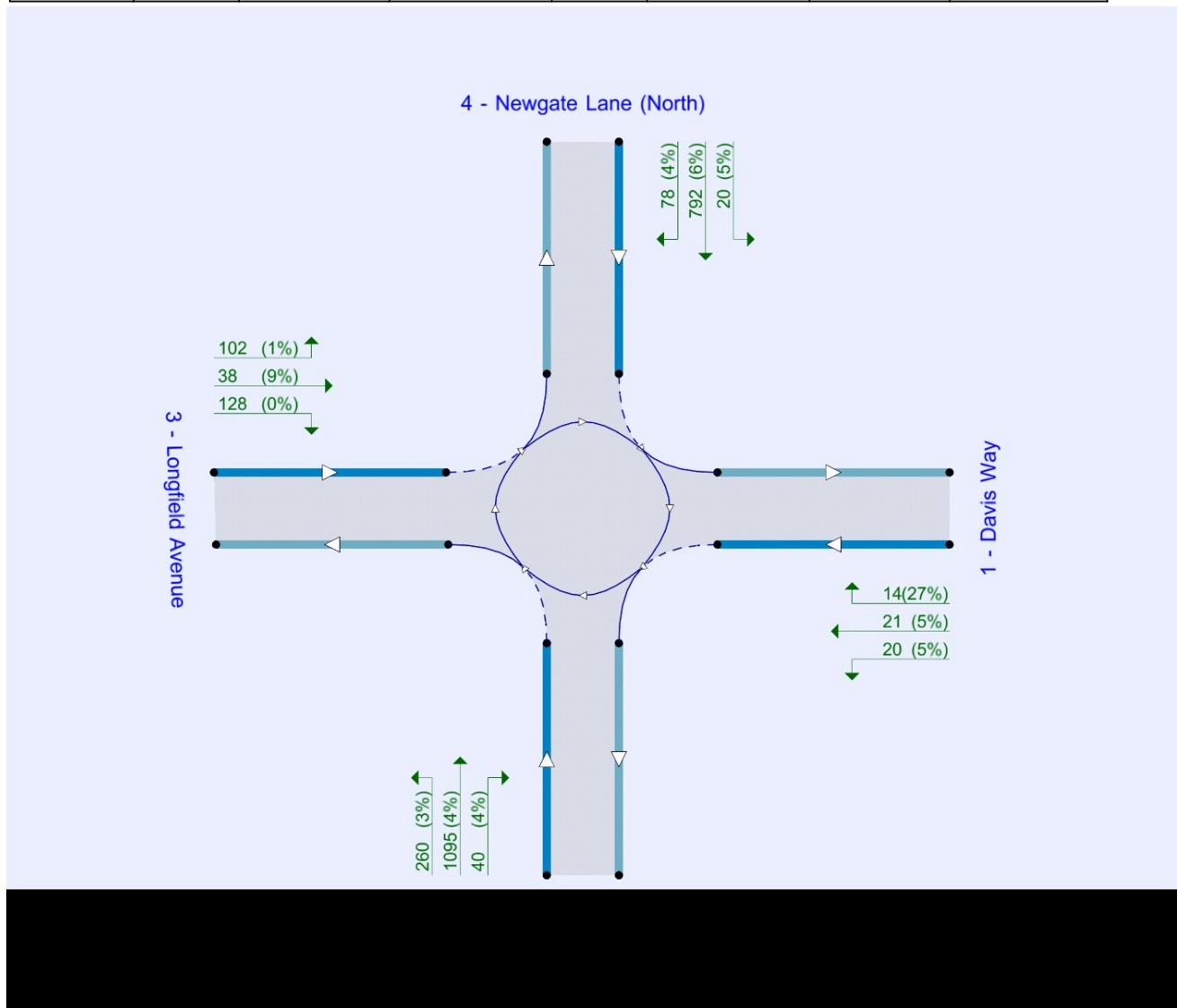
File summary

File Description

Title	Longfield Avenue Roundabout
Location	
Site number	
Date	08/10/2018
Version	V3
Status	(new file)
Identifier	
Client	
Jobnumber	BRS.4989
Enumerator	PEGASUSGROUP\Matthew Haywood
Description	Rev 3 - Updated for total of 190 dwellings

Units

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



The junction diagram reflects the last run of Junctions.

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2019 Base DS1	AM	without Stubbington Bypass	ONE HOUR	07:45	09:15	15	✓
D2	2019 Base DS1	PM	without Stubbington Bypass	ONE HOUR	16:45	18:15	15	✓
D5	2024 Base DS1	AM	w/ Daedalus, w/out Stubbington Bypass	ONE HOUR	07:45	09:15	15	✓
D6	2024 Base DS1	PM	w/ Daedalus, w/out Stubbington Bypass	ONE HOUR	16:45	18:15	15	✓
D7	2024 Base + Dev DS1	AM	w/ Daedalus, w/out Stubbington Bypass	ONE HOUR	07:45	09:15	15	✓
D8	2024 Base + Dev DS1	PM	w/ Daedalus, w/out Stubbington Bypass	ONE HOUR	16:45	18:15	15	✓
D10	2019 Base DS2	AM	with Stubbington Bypass	ONE HOUR	07:45	09:15	15	✓
D11	2019 Base DS2	PM	with Stubbington Bypass	ONE HOUR	16:45	18:15	15	✓
D12	2024 Base DS2	AM	w/ Daedalus, w/ Stubbington Bypass	ONE HOUR	07:45	09:15	15	✓
D13	2024 Base DS2	PM	w/ Daedalus, w/ Stubbington Bypass	ONE HOUR	16:45	18:15	15	✓
D14	2024 Base + Dev DS2	AM	w/ Daedalus, w/ Stubbington Bypass	ONE HOUR	07:45	09:15	15	✓
D15	2024 Base + Dev DS2	PM	w/ Daedalus, w/ Stubbington Bypass	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

2019 Base DS1, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - Newgate Lane (North) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	NGL - Longfield Avenue	Standard Roundabout		1, 2, 3, 4	6.34	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Davis Way	
2	Newgate Lane (South)	
3	Longfield Avenue	
4	Newgate Lane (North)	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Davis Way	3.50	4.90	6.7	10.0	46.0	55.0	
2 - Newgate Lane (South)	7.30	7.35	0.0	40.0	46.0	28.0	
3 - Longfield Avenue	3.65	11.40	24.8	34.0	46.0	23.0	
4 - Newgate Lane (North)	3.15	9.40	41.6	11.0	46.0	66.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Davis Way	0.475	1136
2 - Newgate Lane (South)	0.747	2282
3 - Longfield Avenue	0.770	2381
4 - Newgate Lane (North)	0.608	1865

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2019 Base DS1	AM	without Stubbington Bypass	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 (%)
1 - Davis Way		ONE HOUR	✓	55	100.000
2 - Newgate Lane (South)		ONE HOUR	✓	1461	100.000
3 - Longfield Avenue		ONE HOUR	✓	564	100.000
4 - Newgate Lane (North)		ONE HOUR	✓	917	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Davis Way	2 - Newgate Lane (South)	3 - Longfield Avenue	4 - Newgate Lane (North)
From	1 - Davis Way	0	20	21	14
	2 - Newgate Lane (South)	52	0	402	1007
	3 - Longfield Avenue	38	372	0	154
	4 - Newgate Lane (North)	20	800	97	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Davis Way	2 - Newgate Lane (South)	3 - Longfield Avenue	4 - Newgate Lane (North)
From	1 - Davis Way	0	5	5	27
	2 - Newgate Lane (South)	4	0	3	4
	3 - Longfield Avenue	9	0	0	1
	4 - Newgate Lane (North)	5	6	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Davis Way	0.13	9.61	0.2	0.5	A	50	76
2 - Newgate Lane (South)	0.74	6.61	2.9	6.2	A	1341	2011
3 - Longfield Avenue	0.42	4.26	0.7	3.1	A	518	776
4 - Newgate Lane (North)	0.65	6.98	1.9	2.9	A	841	1262

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
1 - Davis Way	41	10	952	684	0.061	41	83	0.0	0.1	6.153	A
2 - Newgate Lane (South)	1100	275	99	2208	0.498	1096	894	0.0	1.0	3.347	A
3 - Longfield Avenue	425	106	805	1762	0.241	423	390	0.0	0.3	2.706	A
4 - Newgate Lane (North)	690	173	347	1654	0.417	687	881	0.0	0.8	3.936	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
1 - Davis Way	49	12	1139	595	0.083	49	99	0.1	0.1	7.251	A
2 - Newgate Lane (South)	1313	328	118	2194	0.599	1311	1070	1.0	1.5	4.227	A
3 - Longfield Avenue	507	127	963	1640	0.309	507	467	0.3	0.4	3.196	A
4 - Newgate Lane (North)	824	206	415	1613	0.511	823	1055	0.8	1.1	4.824	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
1 - Davis Way	61	15	1393	475	0.128	60	121	0.1	0.2	9.556	A
2 - Newgate Lane (South)	1609	402	145	2174	0.740	1603	1309	1.5	2.9	6.488	A
3 - Longfield Avenue	621	155	1177	1475	0.421	620	571	0.4	0.7	4.235	A
4 - Newgate Lane (North)	1010	252	508	1556	0.649	1006	1290	1.1	1.9	6.897	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
1 - Davis Way	61	15	1397	473	0.128	61	121	0.2	0.2	9.606	A
2 - Newgate Lane (South)	1609	402	145	2174	0.740	1608	1312	2.9	2.9	6.608	A
3 - Longfield Avenue	621	155	1181	1472	0.422	621	572	0.7	0.7	4.259	A
4 - Newgate Lane (North)	1010	252	509	1556	0.649	1010	1294	1.9	1.9	6.984	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
1 - Davis Way	49	12	1145	593	0.083	50	99	0.2	0.1	7.295	A
2 - Newgate Lane (South)	1313	328	119	2193	0.599	1319	1075	2.9	1.6	4.302	A
3 - Longfield Avenue	507	127	969	1636	0.310	508	469	0.7	0.5	3.217	A
4 - Newgate Lane (North)	824	206	416	1612	0.511	828	1060	1.9	1.1	4.887	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
1 - Davis Way	41	10	957	682	0.061	42	83	0.1	0.1	6.188	A
2 - Newgate Lane (South)	1100	275	100	2208	0.498	1102	899	1.6	1.0	3.386	A
3 - Longfield Avenue	425	106	809	1758	0.241	425	392	0.5	0.3	2.722	A
4 - Newgate Lane (North)	690	173	348	1653	0.418	692	886	1.1	0.8	3.976	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.07	0.00	0.00	0.07	0.07			N/A	N/A
2 - Newgate Lane (South)	1.02	0.57	1.04	1.45	1.51			N/A	N/A
3 - Longfield Avenue	0.32	0.00	0.00	0.32	0.32			N/A	N/A
4 - Newgate Lane (North)	0.75	0.58	1.06	1.48	1.54			N/A	N/A

08:00 - 08:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.10	0.00	0.00	0.10	0.10			N/A	N/A
2 - Newgate Lane (South)	1.53	0.05	0.49	3.92	6.15			N/A	N/A
3 - Longfield Avenue	0.45	0.00	0.00	0.45	0.45			N/A	N/A
4 - Newgate Lane (North)	1.10	0.07	0.86	2.04	2.87			N/A	N/A

08:15 - 08:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.16	0.03	0.29	0.51	0.54			N/A	N/A
2 - Newgate Lane (South)	2.88	0.03	0.29	2.88	4.98			N/A	N/A
3 - Longfield Avenue	0.73	0.03	0.26	0.73	0.73			N/A	N/A
4 - Newgate Lane (North)	1.92	0.03	0.28	1.92	1.92			N/A	N/A

08:30 - 08:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.16	0.03	0.28	0.50	0.52			N/A	N/A
2 - Newgate Lane (South)	2.91	0.03	0.28	2.91	2.91			N/A	N/A
3 - Longfield Avenue	0.73	0.03	0.29	1.11	3.07			N/A	N/A
4 - Newgate Lane (North)	1.94	0.03	0.28	1.94	1.94			N/A	N/A

08:45 - 09:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.10	0.00	0.00	0.10	0.10			N/A	N/A
2 - Newgate Lane (South)	1.57	0.09	1.16	3.11	4.24			N/A	N/A
3 - Longfield Avenue	0.45	0.00	0.00	0.45	0.45			N/A	N/A
4 - Newgate Lane (North)	1.12	0.12	1.06	1.77	2.07			N/A	N/A

09:00 - 09:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.07	0.00	0.00	0.07	0.07			N/A	N/A
2 - Newgate Lane (South)	1.04	0.05	0.51	2.30	3.43			N/A	N/A
3 - Longfield Avenue	0.32	0.00	0.00	0.32	0.32			N/A	N/A
4 - Newgate Lane (North)	0.77	0.06	0.63	1.16	1.76			N/A	N/A

2019 Base DS1, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - Newgate Lane (North) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	NGL - Longfield Avenue	Standard Roundabout		1, 2, 3, 4	6.43	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2019 Base DS1	PM	without Stubbington Bypass	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 (%)
1 - Davis Way		ONE HOUR	✓	84	100.000
2 - Newgate Lane (South)		ONE HOUR	✓	1145	100.000
3 - Longfield Avenue		ONE HOUR	✓	747	100.000
4 - Newgate Lane (North)		ONE HOUR	✓	970	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Davis Way	2 - Newgate Lane (South)	3 - Longfield Avenue	4 - Newgate Lane (North)
From	1 - Davis Way	0	22	29	33
	2 - Newgate Lane (South)	4	0	356	785
	3 - Longfield Avenue	4	638	0	105
	4 - Newgate Lane (North)	4	875	91	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Davis Way	2 - Newgate Lane (South)	3 - Longfield Avenue	4 - Newgate Lane (North)
From	1 - Davis Way	0	5	0	0
	2 - Newgate Lane (South)	0	0	1	2
	3 - Longfield Avenue	0	0	0	0
	4 - Newgate Lane (North)	33	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Davis Way	0.31	17.75	0.4	1.5	C	77	116
2 - Newgate Lane (South)	0.58	4.08	1.4	2.0	A	1051	1576
3 - Longfield Avenue	0.49	4.17	0.9	1.9	A	685	1028
4 - Newgate Lane (North)	0.75	9.95	2.9	9.7	A	890	1335

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
1 - Davis Way	63	16	1203	565	0.112	63	9	0.0	0.1	7.244	A
2 - Newgate Lane (South)	862	216	114	2197	0.392	859	1151	0.0	0.7	2.728	A
3 - Longfield Avenue	562	141	617	1907	0.295	561	357	0.0	0.4	2.671	A
4 - Newgate Lane (North)	730	183	485	1570	0.465	727	693	0.0	0.9	4.296	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
1 - Davis Way	76	19	1439	453	0.167	75	11	0.1	0.2	9.639	A
2 - Newgate Lane (South)	1029	257	137	2180	0.472	1028	1378	0.7	0.9	3.170	A
3 - Longfield Avenue	672	168	738	1813	0.370	671	427	0.4	0.6	3.150	A
4 - Newgate Lane (North)	872	218	580	1512	0.577	870	829	0.9	1.4	5.646	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
1 - Davis Way	92	23	1759	301	0.307	92	13	0.2	0.4	17.330	C
2 - Newgate Lane (South)	1261	315	167	2157	0.584	1259	1683	0.9	1.4	4.057	A
3 - Longfield Avenue	822	206	903	1686	0.488	821	523	0.6	0.9	4.155	A
4 - Newgate Lane (North)	1068	267	710	1433	0.745	1062	1014	1.4	2.8	9.675	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
1 - Davis Way	92	23	1766	298	0.311	92	13	0.4	0.4	17.749	C
2 - Newgate Lane (South)	1261	315	168	2157	0.585	1261	1690	1.4	1.4	4.078	A
3 - Longfield Avenue	822	206	905	1685	0.488	822	524	0.9	0.9	4.174	A
4 - Newgate Lane (North)	1068	267	711	1433	0.745	1068	1016	2.8	2.9	9.951	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
1 - Davis Way	76	19	1449	448	0.169	76	11	0.4	0.2	9.832	A
2 - Newgate Lane (South)	1029	257	139	2179	0.472	1031	1387	1.4	0.9	3.190	A
3 - Longfield Avenue	672	168	741	1811	0.371	673	429	0.9	0.6	3.168	A
4 - Newgate Lane (North)	872	218	582	1511	0.577	878	832	2.9	1.4	5.796	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
1 - Davis Way	63	16	1210	562	0.113	64	9	0.2	0.1	7.323	A
2 - Newgate Lane (South)	862	216	116	2196	0.393	863	1158	0.9	0.7	2.745	A
3 - Longfield Avenue	562	141	620	1904	0.295	563	359	0.6	0.4	2.686	A
4 - Newgate Lane (North)	730	183	487	1569	0.465	732	696	1.4	0.9	4.359	A

Queue Variation Results for each time segment
16:45 - 17:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.13	0.00	0.00	0.13	0.13			N/A	N/A
2 - Newgate Lane (South)	0.65	0.56	1.02	1.42	1.47			N/A	N/A
3 - Longfield Avenue	0.42	0.00	0.00	0.42	0.42			N/A	N/A
4 - Newgate Lane (North)	0.87	0.56	1.01	1.41	1.47			N/A	N/A

17:00 - 17:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.20	0.00	0.00	0.20	0.20			N/A	N/A
2 - Newgate Lane (South)	0.90	0.07	0.80	1.56	1.96			N/A	N/A
3 - Longfield Avenue	0.59	0.07	0.74	1.35	1.42			N/A	N/A
4 - Newgate Lane (North)	1.36	0.05	0.62	3.23	4.83			N/A	N/A

17:15 - 17:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.44	0.03	0.26	0.47	0.50			N/A	N/A
2 - Newgate Lane (South)	1.41	0.03	0.26	1.41	1.41			N/A	N/A
3 - Longfield Avenue	0.94	0.03	0.25	0.94	0.94			N/A	N/A
4 - Newgate Lane (North)	2.84	0.03	0.29	2.84	9.73			N/A	N/A

17:30 - 17:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.45	0.03	0.34	1.39	1.54			N/A	N/A
2 - Newgate Lane (South)	1.42	0.03	0.27	1.42	1.42			N/A	N/A
3 - Longfield Avenue	0.95	0.03	0.27	0.95	1.95			N/A	N/A
4 - Newgate Lane (North)	2.90	0.03	0.28	2.90	3.79			N/A	N/A

17:45 - 18:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.21	0.00	0.00	0.21	0.21			N/A	N/A
2 - Newgate Lane (South)	0.92	0.52	1.01	1.44	1.49			N/A	N/A
3 - Longfield Avenue	0.59	0.55	1.00	1.40	1.45			N/A	N/A
4 - Newgate Lane (North)	1.40	0.07	0.90	3.02	4.34			N/A	N/A

18:00 - 18:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.13	0.00	0.00	0.13	0.13			N/A	N/A
2 - Newgate Lane (South)	0.66	0.09	0.82	1.38	1.46			N/A	N/A
3 - Longfield Avenue	0.42	0.00	0.00	0.42	0.42			N/A	N/A
4 - Newgate Lane (North)	0.89	0.04	0.41	2.03	3.35			N/A	N/A

2024 Base DS1, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - Newgate Lane (North) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	NGL - Longfield Avenue	Standard Roundabout		1, 2, 3, 4	8.16	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2024 Base DS1	AM	w/ Daedalus, w/out Stubbington Bypass	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 (%)
1 - Davis Way		ONE HOUR	✓	59	100.000
2 - Newgate Lane (South)		ONE HOUR	✓	1537	100.000
3 - Longfield Avenue		ONE HOUR	✓	630	100.000
4 - Newgate Lane (North)		ONE HOUR	✓	1043	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Davis Way	2 - Newgate Lane (South)	3 - Longfield Avenue	4 - Newgate Lane (North)
From	1 - Davis Way	0	23	22	14
	2 - Newgate Lane (South)	55	0	423	1059
	3 - Longfield Avenue	39	431	0	159
	4 - Newgate Lane (North)	21	922	100	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Davis Way	2 - Newgate Lane (South)	3 - Longfield Avenue	4 - Newgate Lane (North)
From	1 - Davis Way	0	5	5	27
	2 - Newgate Lane (South)	4	0	3	4
	3 - Longfield Avenue	9	0	0	1
	4 - Newgate Lane (North)	5	6	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Davis Way	0.17	12.67	0.2	0.5	B	54	82
2 - Newgate Lane (South)	0.78	7.80	3.6	10.7	A	1411	2116
3 - Longfield Avenue	0.49	4.95	0.9	2.7	A	578	867
4 - Newgate Lane (North)	0.76	10.35	3.2	11.9	B	957	1435

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
1 - Davis Way	45	11	1089	619	0.072	44	86	0.0	0.1	6.860	A
2 - Newgate Lane (South)	1157	289	102	2206	0.525	1153	1031	0.0	1.1	3.533	A
3 - Longfield Avenue	474	119	846	1730	0.274	473	409	0.0	0.4	2.878	A
4 - Newgate Lane (North)	785	196	394	1625	0.483	781	925	0.0	1.0	4.475	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
1 - Davis Way	53	13	1304	517	0.103	53	103	0.1	0.1	8.498	A
2 - Newgate Lane (South)	1382	345	122	2191	0.631	1379	1235	1.1	1.7	4.590	A
3 - Longfield Avenue	566	142	1013	1602	0.353	565	489	0.4	0.5	3.495	A
4 - Newgate Lane (North)	937	234	472	1578	0.594	935	1107	1.0	1.5	5.881	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
1 - Davis Way	65	16	1593	380	0.172	65	126	0.1	0.2	12.502	B
2 - Newgate Lane (South)	1692	423	149	2171	0.780	1685	1508	1.7	3.5	7.584	A
3 - Longfield Avenue	693	173	1237	1429	0.485	692	597	0.5	0.9	4.907	A
4 - Newgate Lane (North)	1148	287	577	1514	0.758	1141	1352	1.5	3.2	10.003	B

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
1 - Davis Way	65	16	1600	376	0.173	65	126	0.2	0.2	12.669	B
2 - Newgate Lane (South)	1692	423	150	2170	0.780	1692	1515	3.5	3.6	7.805	A
3 - Longfield Avenue	693	173	1242	1425	0.487	693	600	0.9	0.9	4.952	A
4 - Newgate Lane (North)	1148	287	578	1513	0.758	1148	1357	3.2	3.2	10.352	B

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
1 - Davis Way	53	13	1314	512	0.104	54	104	0.2	0.1	8.607	A
2 - Newgate Lane (South)	1382	345	124	2190	0.631	1389	1244	3.6	1.8	4.706	A
3 - Longfield Avenue	566	142	1020	1596	0.355	568	493	0.9	0.6	3.530	A
4 - Newgate Lane (North)	937	234	474	1577	0.594	944	1114	3.2	1.6	6.055	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
1 - Davis Way	45	11	1097	615	0.072	45	86	0.1	0.1	6.915	A
2 - Newgate Lane (South)	1157	289	103	2205	0.525	1160	1039	1.8	1.2	3.583	A
3 - Longfield Avenue	474	119	852	1726	0.275	475	411	0.6	0.4	2.899	A
4 - Newgate Lane (North)	785	196	396	1624	0.483	787	930	1.6	1.0	4.548	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.08	0.00	0.00	0.08	0.08			N/A	N/A
2 - Newgate Lane (South)	1.14	0.57	1.04	1.45	1.50			N/A	N/A
3 - Longfield Avenue	0.38	0.00	0.00	0.38	0.38			N/A	N/A
4 - Newgate Lane (North)	0.98	0.58	1.05	1.48	1.53			N/A	N/A

08:00 - 08:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.12	0.00	0.00	0.12	0.12			N/A	N/A
2 - Newgate Lane (South)	1.75	0.05	0.47	4.65	7.59			N/A	N/A
3 - Longfield Avenue	0.55	0.06	0.66	1.34	1.43			N/A	N/A
4 - Newgate Lane (North)	1.52	0.06	0.63	3.73	5.59			N/A	N/A

08:15 - 08:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.22	0.03	0.28	0.51	0.54			N/A	N/A
2 - Newgate Lane (South)	3.54	0.03	0.30	3.54	10.73			N/A	N/A
3 - Longfield Avenue	0.94	0.03	0.26	0.94	0.94			N/A	N/A
4 - Newgate Lane (North)	3.16	0.03	0.31	3.16	11.86			N/A	N/A

08:30 - 08:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.23	0.03	0.28	0.51	0.54			N/A	N/A
2 - Newgate Lane (South)	3.61	0.03	0.28	3.61	3.61			N/A	N/A
3 - Longfield Avenue	0.95	0.03	0.28	0.95	2.72			N/A	N/A
4 - Newgate Lane (North)	3.23	0.03	0.29	3.23	4.62			N/A	N/A

08:45 - 09:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.13	0.00	0.00	0.13	0.13			N/A	N/A
2 - Newgate Lane (South)	1.80	0.07	1.05	4.14	5.95			N/A	N/A
3 - Longfield Avenue	0.56	0.55	1.01	1.41	1.46			N/A	N/A
4 - Newgate Lane (North)	1.57	0.07	0.91	3.63	5.17			N/A	N/A

09:00 - 09:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.09	0.00	0.00	0.09	0.09			N/A	N/A
2 - Newgate Lane (South)	1.16	0.04	0.44	2.87	4.62			N/A	N/A
3 - Longfield Avenue	0.38	0.00	0.00	0.38	0.38			N/A	N/A
4 - Newgate Lane (North)	1.00	0.04	0.42	2.41	3.96			N/A	N/A

2024 Base DS1, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - Newgate Lane (North) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	NGL - Longfield Avenue	Standard Roundabout		1, 2, 3, 4	10.23	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2024 Base DS1	PM	w/ Daedalus, w/out Stubbington Bypass	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 (%)
1 - Davis Way		ONE HOUR	✓	89	100.000
2 - Newgate Lane (South)		ONE HOUR	✓	1214	100.000
3 - Longfield Avenue		ONE HOUR	✓	830	100.000
4 - Newgate Lane (North)		ONE HOUR	✓	1081	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Davis Way	2 - Newgate Lane (South)	3 - Longfield Avenue	4 - Newgate Lane (North)
From	1 - Davis Way	0	25	30	34
	2 - Newgate Lane (South)	4	0	377	832
	3 - Longfield Avenue	4	717	0	109
	4 - Newgate Lane (North)	4	982	94	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Davis Way	2 - Newgate Lane (South)	3 - Longfield Avenue	4 - Newgate Lane (North)
From	1 - Davis Way	0	4	0	0
	2 - Newgate Lane (South)	0	0	1	2
	3 - Longfield Avenue	0	0	0	0
	4 - Newgate Lane (North)	33	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Davis Way	0.49	35.64	0.9	4.3	E	81	122
2 - Newgate Lane (South)	0.62	4.48	1.7	2.7	A	1114	1671
3 - Longfield Avenue	0.56	4.93	1.2	1.5	A	761	1142
4 - Newgate Lane (North)	0.86	18.68	5.9	30.3	C	992	1487

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
1 - Davis Way	67	17	1344	498	0.134	66	9	0.0	0.2	8.424	A
2 - Newgate Lane (South)	914	228	118	2194	0.417	911	1292	0.0	0.7	2.842	A
3 - Longfield Avenue	625	156	653	1879	0.332	623	376	0.0	0.5	2.857	A
4 - Newgate Lane (North)	814	203	544	1534	0.530	809	732	0.0	1.1	4.982	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
1 - Davis Way	80	20	1608	372	0.214	79	11	0.2	0.3	12.407	B
2 - Newgate Lane (South)	1091	273	142	2176	0.501	1090	1546	0.7	1.0	3.360	A
3 - Longfield Avenue	746	186	782	1780	0.419	745	450	0.5	0.7	3.475	A
4 - Newgate Lane (North)	971	243	651	1469	0.661	968	875	1.1	1.9	7.211	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
1 - Davis Way	98	24	1958	206	0.474	95	14	0.3	0.9	32.257	D
2 - Newgate Lane (South)	1337	334	171	2154	0.620	1334	1882	1.0	1.6	4.440	A
3 - Longfield Avenue	913	228	956	1646	0.555	911	549	0.7	1.2	4.890	A
4 - Newgate Lane (North)	1190	297	797	1381	0.862	1175	1071	1.9	5.6	16.640	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
1 - Davis Way	98	24	1973	199	0.491	97	14	0.9	0.9	35.644	E
2 - Newgate Lane (South)	1337	334	174	2152	0.621	1336	1897	1.6	1.7	4.477	A
3 - Longfield Avenue	913	228	958	1644	0.556	913	552	1.2	1.2	4.929	A
4 - Newgate Lane (North)	1190	297	798	1380	0.862	1188	1073	5.6	5.9	18.681	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
1 - Davis Way	80	20	1629	362	0.220	82	11	0.9	0.3	13.122	B
2 - Newgate Lane (South)	1091	273	146	2174	0.502	1094	1566	1.7	1.0	3.392	A
3 - Longfield Avenue	746	186	785	1777	0.420	748	454	1.2	0.7	3.507	A
4 - Newgate Lane (North)	971	243	654	1468	0.662	987	879	5.9	2.0	7.795	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
1 - Davis Way	67	17	1354	493	0.136	67	9	0.3	0.2	8.568	A
2 - Newgate Lane (South)	914	228	120	2193	0.417	915	1302	1.0	0.7	2.863	A
3 - Longfield Avenue	625	156	656	1876	0.333	626	379	0.7	0.5	2.880	A
4 - Newgate Lane (North)	814	203	547	1533	0.531	817	735	2.0	1.2	5.105	A

Queue Variation Results for each time segment
16:45 - 17:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.16	0.00	0.00	0.16	0.16			N/A	N/A
2 - Newgate Lane (South)	0.72	0.56	1.01	1.42	1.47			N/A	N/A
3 - Longfield Avenue	0.50	0.00	0.00	0.50	0.50			N/A	N/A
4 - Newgate Lane (North)	1.13	0.56	1.04	1.15	1.15			N/A	N/A

17:00 - 17:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.27	0.00	0.00	0.27	0.27			N/A	N/A
2 - Newgate Lane (South)	1.01	0.06	0.76	1.93	2.74			N/A	N/A
3 - Longfield Avenue	0.72	0.07	0.76	1.41	1.49			N/A	N/A
4 - Newgate Lane (North)	1.93	0.05	0.48	5.15	8.35			N/A	N/A

17:15 - 17:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.85	0.03	0.28	0.85	1.86			N/A	N/A
2 - Newgate Lane (South)	1.64	0.03	0.26	1.64	1.64			N/A	N/A
3 - Longfield Avenue	1.23	0.03	0.26	1.23	1.23			N/A	N/A
4 - Newgate Lane (North)	5.55	0.04	0.37	13.22	30.29			N/A	N/A

17:30 - 17:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.93	0.04	0.36	2.24	4.25			N/A	N/A
2 - Newgate Lane (South)	1.65	0.03	0.27	1.65	1.65			N/A	N/A
3 - Longfield Avenue	1.24	0.03	0.27	1.24	1.24			N/A	N/A
4 - Newgate Lane (North)	5.90	0.03	0.31	6.20	27.11			N/A	N/A

17:45 - 18:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.29	0.03	0.27	0.49	0.71			N/A	N/A
2 - Newgate Lane (South)	1.03	0.36	1.04	1.18	1.62			N/A	N/A
3 - Longfield Avenue	0.73	0.32	0.96	1.39	1.45			N/A	N/A
4 - Newgate Lane (North)	2.02	0.05	0.45	5.50	9.18			N/A	N/A

18:00 - 18:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.16	0.03	0.26	0.46	0.49			N/A	N/A
2 - Newgate Lane (South)	0.73	0.08	0.80	1.42	1.50			N/A	N/A
3 - Longfield Avenue	0.50	0.05	0.46	1.28	1.39			N/A	N/A
4 - Newgate Lane (North)	1.16	0.03	0.33	2.48	5.83			N/A	N/A

2024 Base + Dev DS1, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - Newgate Lane (North) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	NGL - Longfield Avenue	Standard Roundabout		1, 2, 3, 4	8.47	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2024 Base + Dev DS1	AM	w/ Daedalus, w/out Stubbington Bypass	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 (%)
1 - Davis Way		ONE HOUR	✓	60	100.000
2 - Newgate Lane (South)		ONE HOUR	✓	1553	100.000
3 - Longfield Avenue		ONE HOUR	✓	635	100.000
4 - Newgate Lane (North)		ONE HOUR	✓	1054	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Davis Way	2 - Newgate Lane (South)	3 - Longfield Avenue	4 - Newgate Lane (North)
From	1 - Davis Way	0	23	22	14
	2 - Newgate Lane (South)	55	0	427	1070
	3 - Longfield Avenue	39	437	0	159
	4 - Newgate Lane (North)	21	933	100	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Davis Way	2 - Newgate Lane (South)	3 - Longfield Avenue	4 - Newgate Lane (North)
From	1 - Davis Way	0	5	5	27
	2 - Newgate Lane (South)	4	0	3	4
	3 - Longfield Avenue	9	0	0	1
	4 - Newgate Lane (North)	5	5	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Davis Way	0.18	13.04	0.2	0.5	B	55	82
2 - Newgate Lane (South)	0.79	8.09	3.8	12.2	A	1425	2137
3 - Longfield Avenue	0.49	5.06	1.0	2.7	A	583	874
4 - Newgate Lane (North)	0.77	10.82	3.4	13.4	B	967	1450

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
1 - Davis Way	45	11	1102	613	0.073	44	86	0.0	0.1	6.927	A
2 - Newgate Lane (South)	1169	292	102	2206	0.530	1164	1044	0.0	1.2	3.568	A
3 - Longfield Avenue	478	120	855	1723	0.277	477	412	0.0	0.4	2.902	A
4 - Newgate Lane (North)	793	198	399	1623	0.489	789	933	0.0	1.0	4.530	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
1 - Davis Way	53	13	1319	510	0.105	53	103	0.1	0.1	8.629	A
2 - Newgate Lane (South)	1396	349	122	2191	0.637	1393	1250	1.2	1.8	4.666	A
3 - Longfield Avenue	571	143	1023	1594	0.358	570	493	0.4	0.6	3.538	A
4 - Newgate Lane (North)	947	237	477	1575	0.601	945	1116	1.0	1.6	5.999	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
1 - Davis Way	66	16	1610	372	0.176	65	126	0.1	0.2	12.849	B
2 - Newgate Lane (South)	1710	427	149	2171	0.788	1702	1526	1.8	3.7	7.839	A
3 - Longfield Avenue	699	175	1249	1420	0.493	698	602	0.6	1.0	5.008	A
4 - Newgate Lane (North)	1160	290	583	1510	0.768	1153	1364	1.6	3.3	10.415	B

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
1 - Davis Way	66	16	1618	368	0.178	66	127	0.2	0.2	13.037	B
2 - Newgate Lane (South)	1710	427	150	2170	0.788	1709	1533	3.7	3.8	8.088	A
3 - Longfield Avenue	699	175	1255	1415	0.494	699	605	1.0	1.0	5.059	A
4 - Newgate Lane (North)	1160	290	585	1509	0.769	1160	1369	3.3	3.4	10.819	B

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
1 - Davis Way	53	13	1329	505	0.106	54	104	0.2	0.1	8.749	A
2 - Newgate Lane (South)	1396	349	124	2190	0.637	1404	1260	3.8	1.8	4.793	A
3 - Longfield Avenue	571	143	1030	1588	0.360	573	497	1.0	0.6	3.575	A
4 - Newgate Lane (North)	947	237	479	1574	0.602	954	1124	3.4	1.6	6.195	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
1 - Davis Way	45	11	1109	609	0.074	45	87	0.1	0.1	6.985	A
2 - Newgate Lane (South)	1169	292	103	2205	0.530	1172	1051	1.8	1.2	3.620	A
3 - Longfield Avenue	478	120	860	1719	0.278	479	415	0.6	0.4	2.924	A
4 - Newgate Lane (North)	793	198	401	1621	0.489	796	938	1.6	1.0	4.606	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.09	0.00	0.00	0.09	0.09			N/A	N/A
2 - Newgate Lane (South)	1.16	0.57	1.04	1.45	1.50			N/A	N/A
3 - Longfield Avenue	0.38	0.00	0.00	0.38	0.38			N/A	N/A
4 - Newgate Lane (North)	1.00	0.58	1.05	1.48	1.53			N/A	N/A

08:00 - 08:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.13	0.00	0.00	0.13	0.13			N/A	N/A
2 - Newgate Lane (South)	1.80	0.05	0.46	4.79	7.88			N/A	N/A
3 - Longfield Avenue	0.56	0.06	0.69	1.35	1.43			N/A	N/A
4 - Newgate Lane (North)	1.56	0.05	0.61	3.89	5.89			N/A	N/A

08:15 - 08:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.23	0.03	0.28	0.51	0.54			N/A	N/A
2 - Newgate Lane (South)	3.70	0.03	0.30	3.70	12.17			N/A	N/A
3 - Longfield Avenue	0.97	0.03	0.26	0.97	0.97			N/A	N/A
4 - Newgate Lane (North)	3.33	0.03	0.31	3.33	13.40			N/A	N/A

08:30 - 08:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.23	0.03	0.29	0.52	0.55			N/A	N/A
2 - Newgate Lane (South)	3.77	0.03	0.28	3.77	3.77			N/A	N/A
3 - Longfield Avenue	0.98	0.03	0.28	0.98	2.66			N/A	N/A
4 - Newgate Lane (North)	3.41	0.03	0.29	3.41	5.58			N/A	N/A

08:45 - 09:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.13	0.00	0.00	0.13	0.13			N/A	N/A
2 - Newgate Lane (South)	1.85	0.07	1.02	4.39	6.29			N/A	N/A
3 - Longfield Avenue	0.57	0.55	1.01	1.41	1.46			N/A	N/A
4 - Newgate Lane (North)	1.62	0.06	0.86	3.85	5.59			N/A	N/A

09:00 - 09:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.09	0.00	0.00	0.09	0.09			N/A	N/A
2 - Newgate Lane (South)	1.18	0.04	0.43	2.95	4.87			N/A	N/A
3 - Longfield Avenue	0.39	0.03	0.27	0.48	0.70			N/A	N/A
4 - Newgate Lane (North)	1.02	0.04	0.41	2.52	4.18			N/A	N/A

2024 Base + Dev DS1, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - Newgate Lane (North) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	NGL - Longfield Avenue	Standard Roundabout		1, 2, 3, 4	11.06	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2024 Base + Dev DS1	PM	w/ Daedalus, w/out Stubbington Bypass	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 (%)
1 - Davis Way		ONE HOUR	✓	89	100.000
2 - Newgate Lane (South)		ONE HOUR	✓	1233	100.000
3 - Longfield Avenue		ONE HOUR	✓	839	100.000
4 - Newgate Lane (North)		ONE HOUR	✓	1093	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Davis Way	2 - Newgate Lane (South)	3 - Longfield Avenue	4 - Newgate Lane (North)
From	1 - Davis Way	0	25	30	34
	2 - Newgate Lane (South)	4	0	384	846
	3 - Longfield Avenue	4	726	0	109
	4 - Newgate Lane (North)	4	994	94	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Davis Way	2 - Newgate Lane (South)	3 - Longfield Avenue	4 - Newgate Lane (North)
From	1 - Davis Way	0	4	0	0
	2 - Newgate Lane (South)	0	0	1	2
	3 - Longfield Avenue	0	0	0	0
	4 - Newgate Lane (North)	33	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Davis Way	0.52	39.86	1.0	4.8	E	82	123
2 - Newgate Lane (South)	0.63	4.60	1.7	2.9	A	1132	1698
3 - Longfield Avenue	0.57	5.08	1.3	1.5	A	769	1154
4 - Newgate Lane (North)	0.88	20.58	6.5	33.1	C	1003	1504

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
1 - Davis Way	67	17	1360	491	0.137	66	9	0.0	0.2	8.574	A
2 - Newgate Lane (South)	929	232	118	2194	0.423	926	1308	0.0	0.7	2.874	A
3 - Longfield Avenue	631	158	663	1871	0.337	629	381	0.0	0.5	2.894	A
4 - Newgate Lane (North)	823	206	551	1530	0.538	818	742	0.0	1.2	5.072	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
1 - Davis Way	80	20	1627	364	0.220	80	11	0.2	0.3	12.802	B
2 - Newgate Lane (South)	1109	277	142	2176	0.509	1108	1565	0.7	1.0	3.414	A
3 - Longfield Avenue	754	188	794	1770	0.426	753	456	0.5	0.7	3.534	A
4 - Newgate Lane (North)	982	246	659	1464	0.671	979	887	1.2	2.0	7.436	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
1 - Davis Way	98	25	1979	196	0.500	95	14	0.3	0.9	35.317	E
2 - Newgate Lane (South)	1358	340	171	2155	0.630	1355	1904	1.0	1.7	4.554	A
3 - Longfield Avenue	923	231	971	1634	0.565	921	556	0.7	1.3	5.032	A
4 - Newgate Lane (North)	1203	301	806	1375	0.875	1187	1085	2.0	6.1	17.957	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
1 - Davis Way	98	25	1996	188	0.521	98	14	0.9	1.0	39.859	E
2 - Newgate Lane (South)	1358	340	174	2152	0.631	1358	1920	1.7	1.7	4.597	A
3 - Longfield Avenue	923	231	973	1632	0.566	923	559	1.3	1.3	5.076	A
4 - Newgate Lane (North)	1203	301	808	1374	0.876	1201	1088	6.1	6.5	20.585	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
1 - Davis Way	80	20	1651	352	0.227	83	11	1.0	0.3	13.663	B
2 - Newgate Lane (South)	1109	277	146	2173	0.510	1111	1588	1.7	1.1	3.447	A
3 - Longfield Avenue	754	188	798	1767	0.427	756	460	1.3	0.7	3.566	A
4 - Newgate Lane (North)	982	246	662	1463	0.672	1000	892	6.5	2.1	8.141	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
1 - Davis Way	67	17	1370	485	0.138	68	10	0.3	0.2	8.730	A
2 - Newgate Lane (South)	929	232	120	2193	0.424	930	1318	1.1	0.7	2.894	A
3 - Longfield Avenue	631	158	667	1868	0.338	632	383	0.7	0.5	2.916	A
4 - Newgate Lane (North)	823	206	554	1528	0.538	826	745	2.1	1.2	5.204	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.16	0.00	0.00	0.16	0.16			N/A	N/A
2 - Newgate Lane (South)	0.74	0.56	1.01	1.42	1.47			N/A	N/A
3 - Longfield Avenue	0.51	0.51	1.00	1.40	1.45			N/A	N/A
4 - Newgate Lane (North)	1.16	0.56	1.03	1.16	1.53			N/A	N/A

17:00 - 17:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.28	0.00	0.00	0.28	0.28			N/A	N/A
2 - Newgate Lane (South)	1.05	0.06	0.74	2.03	2.92			N/A	N/A
3 - Longfield Avenue	0.74	0.07	0.76	1.22	1.22			N/A	N/A
4 - Newgate Lane (North)	2.01	0.05	0.47	5.42	8.81			N/A	N/A

17:15 - 17:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.94	0.03	0.28	0.94	2.67			N/A	N/A
2 - Newgate Lane (South)	1.71	0.03	0.26	1.71	1.71			N/A	N/A
3 - Longfield Avenue	1.28	0.03	0.26	1.28	1.28			N/A	N/A
4 - Newgate Lane (North)	6.09	0.04	0.40	15.68	33.11			N/A	N/A

17:30 - 17:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	1.04	0.04	0.36	2.58	4.81			N/A	N/A
2 - Newgate Lane (South)	1.72	0.03	0.27	1.72	1.72			N/A	N/A
3 - Longfield Avenue	1.29	0.03	0.27	1.29	1.49			N/A	N/A
4 - Newgate Lane (North)	6.54	0.03	0.32	9.00	32.25			N/A	N/A

17:45 - 18:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.30	0.03	0.28	0.59	1.05			N/A	N/A
2 - Newgate Lane (South)	1.06	0.30	1.06	1.39	1.73			N/A	N/A
3 - Longfield Avenue	0.75	0.29	0.95	1.39	1.45			N/A	N/A
4 - Newgate Lane (North)	2.12	0.04	0.44	5.78	9.87			N/A	N/A

18:00 - 18:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.16	0.03	0.26	0.47	0.50			N/A	N/A
2 - Newgate Lane (South)	0.75	0.08	0.79	1.10	1.10			N/A	N/A
3 - Longfield Avenue	0.51	0.05	0.48	1.29	1.40			N/A	N/A
4 - Newgate Lane (North)	1.19	0.03	0.32	2.41	6.06			N/A	N/A

2019 Base DS2, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - Newgate Lane (North) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	NGL - Longfield Avenue	Standard Roundabout		1, 2, 3, 4	5.29	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2019 Base DS2	AM	with Stubbington Bypass	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 (%)
1 - Davis Way		ONE HOUR	✓	55	100.000
2 - Newgate Lane (South)		ONE HOUR	✓	1395	100.000
3 - Longfield Avenue		ONE HOUR	✓	268	100.000
4 - Newgate Lane (North)		ONE HOUR	✓	890	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Davis Way	2 - Newgate Lane (South)	3 - Longfield Avenue	4 - Newgate Lane (North)
From	1 - Davis Way	0	20	21	14
	2 - Newgate Lane (South)	40	0	260	1095
	3 - Longfield Avenue	38	128	0	102
	4 - Newgate Lane (North)	20	792	78	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Davis Way	2 - Newgate Lane (South)	3 - Longfield Avenue	4 - Newgate Lane (North)
From	1 - Davis Way	0	5	5	27
	2 - Newgate Lane (South)	4	0	3	4
	3 - Longfield Avenue	9	0	0	1
	4 - Newgate Lane (North)	5	6	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Davis Way	0.10	7.15	0.1	0.5	A	50	76
2 - Newgate Lane (South)	0.70	5.72	2.4	5.0	A	1280	1920
3 - Longfield Avenue	0.21	3.28	0.3	0.9	A	246	369
4 - Newgate Lane (North)	0.57	5.11	1.4	1.7	A	817	1226

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
1 - Davis Way	41	10	749	781	0.053	41	74	0.0	0.1	5.354	A
2 - Newgate Lane (South)	1050	262	85	2219	0.473	1046	705	0.0	0.9	3.180	A
3 - Longfield Avenue	202	50	862	1718	0.118	201	269	0.0	0.1	2.406	A
4 - Newgate Lane (North)	670	168	155	1771	0.379	668	908	0.0	0.6	3.454	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
1 - Davis Way	49	12	897	710	0.070	49	88	0.1	0.1	5.989	A
2 - Newgate Lane (South)	1254	313	102	2206	0.568	1252	844	0.9	1.4	3.914	A
3 - Longfield Avenue	241	60	1031	1588	0.152	241	322	0.1	0.2	2.710	A
4 - Newgate Lane (North)	800	200	185	1752	0.457	799	1087	0.6	0.9	4.001	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
1 - Davis Way	61	15	1097	615	0.098	60	108	0.1	0.1	7.136	A
2 - Newgate Lane (South)	1535	384	124	2189	0.701	1531	1033	1.4	2.4	5.651	A
3 - Longfield Avenue	295	74	1261	1410	0.209	295	394	0.2	0.3	3.272	A
4 - Newgate Lane (North)	980	245	227	1727	0.568	978	1330	0.9	1.4	5.084	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
1 - Davis Way	61	15	1099	614	0.099	61	108	0.1	0.1	7.151	A
2 - Newgate Lane (South)	1535	384	125	2189	0.701	1535	1035	2.4	2.4	5.722	A
3 - Longfield Avenue	295	74	1265	1408	0.210	295	395	0.3	0.3	3.279	A
4 - Newgate Lane (North)	980	245	227	1727	0.568	980	1333	1.4	1.4	5.112	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
1 - Davis Way	49	12	900	709	0.070	50	88	0.1	0.1	6.005	A
2 - Newgate Lane (South)	1254	313	102	2206	0.568	1258	847	2.4	1.4	3.963	A
3 - Longfield Avenue	241	60	1036	1584	0.152	241	324	0.3	0.2	2.718	A
4 - Newgate Lane (North)	800	200	186	1752	0.457	802	1092	1.4	0.9	4.027	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
1 - Davis Way	41	10	753	779	0.053	41	74	0.1	0.1	5.373	A
2 - Newgate Lane (South)	1050	262	85	2219	0.473	1052	709	1.4	0.9	3.214	A
3 - Longfield Avenue	202	50	866	1715	0.118	202	271	0.2	0.1	2.414	A
4 - Newgate Lane (North)	670	168	155	1771	0.379	671	913	0.9	0.7	3.478	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.06	0.00	0.00	0.06	0.06			N/A	N/A
2 - Newgate Lane (South)	0.93	0.57	1.04	1.46	1.51			N/A	N/A
3 - Longfield Avenue	0.13	0.00	0.00	0.13	0.13			N/A	N/A
4 - Newgate Lane (North)	0.64	0.58	1.06	1.48	1.54			N/A	N/A

08:00 - 08:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.08	0.03	0.28	0.50	0.53			N/A	N/A
2 - Newgate Lane (South)	1.35	0.05	0.53	3.26	4.96			N/A	N/A
3 - Longfield Avenue	0.18	0.00	0.00	0.18	0.18			N/A	N/A
4 - Newgate Lane (North)	0.88	0.09	0.89	1.18	1.71			N/A	N/A

08:15 - 08:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.12	0.03	0.29	0.51	0.54			N/A	N/A
2 - Newgate Lane (South)	2.39	0.03	0.28	2.39	2.39			N/A	N/A
3 - Longfield Avenue	0.27	0.03	0.26	0.46	0.49			N/A	N/A
4 - Newgate Lane (North)	1.37	0.03	0.27	1.37	1.37			N/A	N/A

08:30 - 08:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.12	0.03	0.28	0.50	0.52			N/A	N/A
2 - Newgate Lane (South)	2.42	0.03	0.27	2.42	2.42			N/A	N/A
3 - Longfield Avenue	0.27	0.03	0.28	0.50	0.92			N/A	N/A
4 - Newgate Lane (North)	1.38	0.03	0.28	1.38	1.38			N/A	N/A

08:45 - 09:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.08	0.00	0.00	0.08	0.08			N/A	N/A
2 - Newgate Lane (South)	1.38	0.12	1.19	2.39	3.02			N/A	N/A
3 - Longfield Avenue	0.18	0.00	0.00	0.18	0.18			N/A	N/A
4 - Newgate Lane (North)	0.90	0.36	1.03	1.49	1.55			N/A	N/A

09:00 - 09:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.06	0.00	0.00	0.06	0.06			N/A	N/A
2 - Newgate Lane (South)	0.94	0.06	0.70	1.81	2.48			N/A	N/A
3 - Longfield Avenue	0.14	0.00	0.00	0.14	0.14			N/A	N/A
4 - Newgate Lane (North)	0.65	0.07	0.77	1.43	1.51			N/A	N/A

2019 Base DS2, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - Newgate Lane (North) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	NGL - Longfield Avenue	Standard Roundabout		1, 2, 3, 4	4.11	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2019 Base DS2	PM	with Stubbington Bypass	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 (%)
1 - Davis Way		ONE HOUR	✓	84	100.000
2 - Newgate Lane (South)		ONE HOUR	✓	1121	100.000
3 - Longfield Avenue		ONE HOUR	✓	279	100.000
4 - Newgate Lane (North)		ONE HOUR	✓	859	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Davis Way	2 - Newgate Lane (South)	3 - Longfield Avenue	4 - Newgate Lane (North)
From	1 - Davis Way	0	22	29	33
	2 - Newgate Lane (South)	4	0	269	848
	3 - Longfield Avenue	4	172	0	104
	4 - Newgate Lane (North)	4	783	72	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Davis Way	2 - Newgate Lane (South)	3 - Longfield Avenue	4 - Newgate Lane (North)
From	1 - Davis Way	0	5	0	0
	2 - Newgate Lane (South)	0	0	1	2
	3 - Longfield Avenue	0	0	0	0
	4 - Newgate Lane (North)	33	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Davis Way	0.15	7.18	0.2	0.5	A	77	116
2 - Newgate Lane (South)	0.57	3.90	1.3	1.8	A	1029	1543
3 - Longfield Avenue	0.19	2.72	0.2	0.5	A	256	384
4 - Newgate Lane (North)	0.54	4.55	1.2	1.5	A	788	1182

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
1 - Davis Way	63	16	770	771	0.082	63	9	0.0	0.1	5.146	A
2 - Newgate Lane (South)	844	211	100	2207	0.382	842	733	0.0	0.6	2.672	A
3 - Longfield Avenue	210	53	665	1870	0.112	210	277	0.0	0.1	2.168	A
4 - Newgate Lane (North)	647	162	135	1783	0.363	644	739	0.0	0.6	3.188	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
1 - Davis Way	76	19	922	698	0.108	75	11	0.1	0.1	5.845	A
2 - Newgate Lane (South)	1008	252	120	2193	0.460	1007	877	0.6	0.9	3.080	A
3 - Longfield Avenue	251	63	795	1769	0.142	251	332	0.1	0.2	2.370	A
4 - Newgate Lane (North)	772	193	161	1767	0.437	771	885	0.6	0.8	3.650	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
1 - Davis Way	92	23	1128	600	0.154	92	13	0.1	0.2	7.167	A
2 - Newgate Lane (South)	1235	309	147	2173	0.568	1233	1074	0.9	1.3	3.881	A
3 - Longfield Avenue	307	77	973	1632	0.188	307	406	0.2	0.2	2.716	A
4 - Newgate Lane (North)	946	236	197	1745	0.542	944	1083	0.8	1.2	4.534	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
1 - Davis Way	92	23	1130	600	0.154	92	13	0.2	0.2	7.184	A
2 - Newgate Lane (South)	1235	309	147	2172	0.568	1235	1075	1.3	1.3	3.897	A
3 - Longfield Avenue	307	77	975	1631	0.188	307	407	0.2	0.2	2.719	A
4 - Newgate Lane (North)	946	236	198	1745	0.542	946	1084	1.2	1.2	4.552	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
1 - Davis Way	76	19	925	697	0.108	76	11	0.2	0.1	5.864	A
2 - Newgate Lane (South)	1008	252	120	2192	0.460	1010	880	1.3	0.9	3.095	A
3 - Longfield Avenue	251	63	798	1767	0.142	251	333	0.2	0.2	2.374	A
4 - Newgate Lane (North)	772	193	162	1767	0.437	774	887	1.2	0.8	3.671	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
1 - Davis Way	63	16	774	769	0.082	63	9	0.1	0.1	5.166	A
2 - Newgate Lane (South)	844	211	101	2207	0.382	845	736	0.9	0.6	2.687	A
3 - Longfield Avenue	210	53	667	1868	0.112	210	278	0.2	0.1	2.171	A
4 - Newgate Lane (North)	647	162	135	1783	0.363	648	742	0.8	0.6	3.206	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.09	0.00	0.00	0.09	0.09			N/A	N/A
2 - Newgate Lane (South)	0.63	0.56	1.02	1.42	1.47			N/A	N/A
3 - Longfield Avenue	0.13	0.00	0.00	0.13	0.13			N/A	N/A
4 - Newgate Lane (North)	0.57	0.56	1.01	1.41	1.47			N/A	N/A

17:00 - 17:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.12	0.00	0.00	0.12	0.12			N/A	N/A
2 - Newgate Lane (South)	0.86	0.07	0.81	1.36	1.80			N/A	N/A
3 - Longfield Avenue	0.16	0.00	0.00	0.16	0.16			N/A	N/A
4 - Newgate Lane (North)	0.78	0.09	0.83	1.19	1.19			N/A	N/A

17:15 - 17:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.18	0.03	0.26	0.47	0.49			N/A	N/A
2 - Newgate Lane (South)	1.32	0.03	0.26	1.32	1.32			N/A	N/A
3 - Longfield Avenue	0.23	0.03	0.25	0.46	0.48			N/A	N/A
4 - Newgate Lane (North)	1.18	0.03	0.26	1.18	1.18			N/A	N/A

17:30 - 17:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.18	0.03	0.25	0.46	0.48			N/A	N/A
2 - Newgate Lane (South)	1.33	0.03	0.27	1.33	1.33			N/A	N/A
3 - Longfield Avenue	0.23	0.03	0.25	0.45	0.48			N/A	N/A
4 - Newgate Lane (North)	1.19	0.03	0.27	1.19	1.19			N/A	N/A

17:45 - 18:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.12	0.00	0.00	0.12	0.12			N/A	N/A
2 - Newgate Lane (South)	0.87	0.54	1.01	1.42	1.48			N/A	N/A
3 - Longfield Avenue	0.17	0.00	0.00	0.17	0.17			N/A	N/A
4 - Newgate Lane (North)	0.79	0.52	0.99	1.41	1.46			N/A	N/A

18:00 - 18:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.09	0.00	0.00	0.09	0.09			N/A	N/A
2 - Newgate Lane (South)	0.63	0.09	0.82	1.38	1.45			N/A	N/A
3 - Longfield Avenue	0.13	0.00	0.00	0.13	0.13			N/A	N/A
4 - Newgate Lane (North)	0.58	0.07	0.73	1.36	1.44			N/A	N/A

2024 Base DS2, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - Newgate Lane (North) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	NGL - Longfield Avenue	Standard Roundabout		1, 2, 3, 4	6.33	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2024 Base DS2	AM	w/ Daedalus, w/ Stubbington Bypass	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 (%)
1 - Davis Way		ONE HOUR	✓	60	100.000
2 - Newgate Lane (South)		ONE HOUR	✓	1469	100.000
3 - Longfield Avenue		ONE HOUR	✓	297	100.000
4 - Newgate Lane (North)		ONE HOUR	✓	1035	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Davis Way	2 - Newgate Lane (South)	3 - Longfield Avenue	4 - Newgate Lane (North)
From	1 - Davis Way	0	24	22	14
	2 - Newgate Lane (South)	42	0	274	1153
	3 - Longfield Avenue	39	152	0	106
	4 - Newgate Lane (North)	21	934	81	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Davis Way	2 - Newgate Lane (South)	3 - Longfield Avenue	4 - Newgate Lane (North)
From	1 - Davis Way	0	5	5	27
	2 - Newgate Lane (South)	4	0	3	4
	3 - Longfield Avenue	9	0	0	1
	4 - Newgate Lane (North)	5	5	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Davis Way	0.13	8.56	0.2	0.5	A	55	82
2 - Newgate Lane (South)	0.74	6.56	2.9	6.2	A	1348	2021
3 - Longfield Avenue	0.24	3.54	0.3	1.3	A	272	409
4 - Newgate Lane (North)	0.67	6.66	2.1	3.5	A	950	1425

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
1 - Davis Way	45	11	875	721	0.062	45	77	0.0	0.1	5.825	A
2 - Newgate Lane (South)	1106	276	88	2217	0.499	1102	832	0.0	1.0	3.341	A
3 - Longfield Avenue	223	56	907	1683	0.133	223	282	0.0	0.2	2.495	A
4 - Newgate Lane (North)	779	195	175	1758	0.443	776	955	0.0	0.8	3.847	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
1 - Davis Way	54	13	1047	639	0.084	54	92	0.1	0.1	6.732	A
2 - Newgate Lane (South)	1320	330	105	2204	0.599	1318	996	1.0	1.5	4.213	A
3 - Longfield Avenue	267	67	1085	1546	0.173	267	338	0.2	0.2	2.850	A
4 - Newgate Lane (North)	931	233	210	1738	0.536	929	1142	0.8	1.2	4.682	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
1 - Davis Way	66	16	1281	528	0.125	66	112	0.1	0.2	8.519	A
2 - Newgate Lane (South)	1617	404	128	2186	0.740	1612	1218	1.5	2.9	6.446	A
3 - Longfield Avenue	327	82	1327	1360	0.240	326	413	0.2	0.3	3.526	A
4 - Newgate Lane (North)	1140	285	257	1709	0.667	1136	1397	1.2	2.1	6.583	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
1 - Davis Way	66	16	1284	526	0.125	66	112	0.2	0.2	8.557	A
2 - Newgate Lane (South)	1617	404	129	2186	0.740	1617	1221	2.9	2.9	6.565	A
3 - Longfield Avenue	327	82	1331	1357	0.241	327	414	0.3	0.3	3.540	A
4 - Newgate Lane (North)	1140	285	257	1709	0.667	1140	1401	2.1	2.1	6.661	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
1 - Davis Way	54	13	1052	636	0.084	54	92	0.2	0.1	6.766	A
2 - Newgate Lane (South)	1320	330	105	2203	0.599	1326	1001	2.9	1.6	4.285	A
3 - Longfield Avenue	267	67	1092	1541	0.173	267	340	0.3	0.2	2.865	A
4 - Newgate Lane (North)	931	233	210	1737	0.536	934	1149	2.1	1.2	4.743	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
1 - Davis Way	45	11	880	718	0.063	45	77	0.1	0.1	5.853	A
2 - Newgate Lane (South)	1106	276	88	2216	0.499	1108	837	1.6	1.0	3.381	A
3 - Longfield Avenue	223	56	912	1679	0.133	224	284	0.2	0.2	2.505	A
4 - Newgate Lane (North)	779	195	176	1758	0.443	781	960	1.2	0.8	3.888	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.07	0.00	0.00	0.07	0.07			N/A	N/A
2 - Newgate Lane (South)	1.03	0.57	1.04	1.45	1.51			N/A	N/A
3 - Longfield Avenue	0.15	0.00	0.00	0.15	0.15			N/A	N/A
4 - Newgate Lane (North)	0.83	0.58	1.05	1.47	1.53			N/A	N/A

08:00 - 08:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.10	0.03	0.27	0.49	0.52			N/A	N/A
2 - Newgate Lane (South)	1.53	0.05	0.49	3.93	6.17			N/A	N/A
3 - Longfield Avenue	0.21	0.00	0.00	0.21	0.21			N/A	N/A
4 - Newgate Lane (North)	1.20	0.06	0.82	2.52	3.52			N/A	N/A

08:15 - 08:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.15	0.03	0.28	0.51	0.54			N/A	N/A
2 - Newgate Lane (South)	2.87	0.03	0.29	2.87	4.89			N/A	N/A
3 - Longfield Avenue	0.32	0.03	0.26	0.46	0.49			N/A	N/A
4 - Newgate Lane (North)	2.06	0.03	0.28	2.06	2.06			N/A	N/A

08:30 - 08:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.16	0.03	0.27	0.49	0.52			N/A	N/A
2 - Newgate Lane (South)	2.91	0.03	0.28	2.91	2.91			N/A	N/A
3 - Longfield Avenue	0.32	0.03	0.32	1.03	1.29			N/A	N/A
4 - Newgate Lane (North)	2.09	0.03	0.28	2.09	2.09			N/A	N/A

08:45 - 09:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.10	0.00	0.00	0.10	0.10			N/A	N/A
2 - Newgate Lane (South)	1.57	0.09	1.17	3.11	4.24			N/A	N/A
3 - Longfield Avenue	0.21	0.00	0.00	0.21	0.21			N/A	N/A
4 - Newgate Lane (North)	1.23	0.12	1.11	1.97	2.57			N/A	N/A

09:00 - 09:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.07	0.00	0.00	0.07	0.07			N/A	N/A
2 - Newgate Lane (South)	1.04	0.05	0.51	2.30	3.43			N/A	N/A
3 - Longfield Avenue	0.16	0.00	0.00	0.16	0.16			N/A	N/A
4 - Newgate Lane (North)	0.85	0.06	0.67	1.52	2.00			N/A	N/A

2024 Base DS2, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - Newgate Lane (North) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	NGL - Longfield Avenue	Standard Roundabout		1, 2, 3, 4	4.79	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2024 Base DS2	PM	w/ Daedalus, w/ Stubbington Bypass	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 (%)
1 - Davis Way		ONE HOUR	✓	90	100.000
2 - Newgate Lane (South)		ONE HOUR	✓	1189	100.000
3 - Longfield Avenue		ONE HOUR	✓	310	100.000
4 - Newgate Lane (North)		ONE HOUR	✓	986	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Davis Way	2 - Newgate Lane (South)	3 - Longfield Avenue	4 - Newgate Lane (North)
From	1 - Davis Way	0	25	30	34
	2 - Newgate Lane (South)	4	0	285	900
	3 - Longfield Avenue	4	199	0	107
	4 - Newgate Lane (North)	4	908	74	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Davis Way	2 - Newgate Lane (South)	3 - Longfield Avenue	4 - Newgate Lane (North)
From	1 - Davis Way	0	4	0	0
	2 - Newgate Lane (South)	0	0	1	2
	3 - Longfield Avenue	0	0	0	0
	4 - Newgate Lane (North)	33	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Davis Way	0.19	8.67	0.2	0.9	A	82	123
2 - Newgate Lane (South)	0.60	4.25	1.5	2.4	A	1091	1637
3 - Longfield Avenue	0.22	2.89	0.3	1.0	A	285	427
4 - Newgate Lane (North)	0.63	5.68	1.7	2.6	A	905	1357

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
1 - Davis Way	67	17	886	716	0.094	67	9	0.0	0.1	5.612	A
2 - Newgate Lane (South)	895	224	104	2205	0.406	892	849	0.0	0.7	2.778	A
3 - Longfield Avenue	234	58	704	1839	0.127	233	292	0.0	0.1	2.241	A
4 - Newgate Lane (North)	742	186	156	1770	0.419	740	781	0.0	0.7	3.515	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
1 - Davis Way	81	20	1060	633	0.127	80	11	0.1	0.1	6.593	A
2 - Newgate Lane (South)	1069	267	124	2190	0.488	1068	1017	0.7	1.0	3.255	A
3 - Longfield Avenue	279	70	842	1733	0.161	279	350	0.1	0.2	2.475	A
4 - Newgate Lane (North)	887	222	186	1752	0.506	885	935	0.7	1.0	4.189	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
1 - Davis Way	99	25	1298	520	0.190	98	14	0.1	0.2	8.629	A
2 - Newgate Lane (South)	1309	327	152	2169	0.604	1307	1244	1.0	1.5	4.228	A
3 - Longfield Avenue	342	85	1031	1588	0.215	341	428	0.2	0.3	2.888	A
4 - Newgate Lane (North)	1086	271	228	1726	0.629	1083	1144	1.0	1.7	5.627	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
1 - Davis Way	99	25	1300	519	0.190	99	14	0.2	0.2	8.669	A
2 - Newgate Lane (South)	1309	327	152	2169	0.604	1309	1247	1.5	1.5	4.251	A
3 - Longfield Avenue	342	85	1033	1586	0.215	342	429	0.3	0.3	2.891	A
4 - Newgate Lane (North)	1086	271	228	1726	0.629	1086	1146	1.7	1.7	5.675	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
1 - Davis Way	81	20	1065	631	0.128	81	11	0.2	0.1	6.630	A
2 - Newgate Lane (South)	1069	267	125	2189	0.488	1071	1021	1.5	1.0	3.277	A
3 - Longfield Avenue	279	70	845	1731	0.161	279	351	0.3	0.2	2.480	A
4 - Newgate Lane (North)	887	222	187	1752	0.506	889	938	1.7	1.0	4.228	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
1 - Davis Way	67	17	891	713	0.095	68	9	0.1	0.1	5.641	A
2 - Newgate Lane (South)	895	224	104	2204	0.406	896	854	1.0	0.7	2.795	A
3 - Longfield Avenue	234	58	707	1837	0.127	234	293	0.2	0.1	2.247	A
4 - Newgate Lane (North)	742	186	156	1770	0.419	744	785	1.0	0.7	3.547	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.10	0.00	0.00	0.10	0.10			N/A	N/A
2 - Newgate Lane (South)	0.69	0.56	1.02	1.42	1.47			N/A	N/A
3 - Longfield Avenue	0.15	0.00	0.00	0.15	0.15			N/A	N/A
4 - Newgate Lane (North)	0.72	0.56	1.01	1.41	1.46			N/A	N/A

17:00 - 17:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.15	0.00	0.00	0.15	0.15			N/A	N/A
2 - Newgate Lane (South)	0.96	0.06	0.78	1.78	2.39			N/A	N/A
3 - Longfield Avenue	0.19	0.00	0.00	0.19	0.19			N/A	N/A
4 - Newgate Lane (North)	1.03	0.07	0.82	1.90	2.64			N/A	N/A

17:15 - 17:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.23	0.03	0.26	0.47	0.49			N/A	N/A
2 - Newgate Lane (South)	1.53	0.03	0.26	1.53	1.53			N/A	N/A
3 - Longfield Avenue	0.27	0.03	0.25	0.46	0.48			N/A	N/A
4 - Newgate Lane (North)	1.68	0.03	0.27	1.68	1.68			N/A	N/A

17:30 - 17:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.24	0.03	0.28	0.50	0.91			N/A	N/A
2 - Newgate Lane (South)	1.54	0.03	0.27	1.54	1.54			N/A	N/A
3 - Longfield Avenue	0.27	0.03	0.28	0.55	1.02			N/A	N/A
4 - Newgate Lane (North)	1.70	0.03	0.27	1.70	1.70			N/A	N/A

17:45 - 18:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.15	0.00	0.00	0.15	0.15			N/A	N/A
2 - Newgate Lane (South)	0.98	0.50	1.02	1.22	1.22			N/A	N/A
3 - Longfield Avenue	0.19	0.00	0.00	0.19	0.19			N/A	N/A
4 - Newgate Lane (North)	1.04	0.18	1.04	1.48	1.80			N/A	N/A

18:00 - 18:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.11	0.00	0.00	0.11	0.11			N/A	N/A
2 - Newgate Lane (South)	0.70	0.09	0.81	1.40	1.47			N/A	N/A
3 - Longfield Avenue	0.15	0.00	0.00	0.15	0.15			N/A	N/A
4 - Newgate Lane (North)	0.73	0.07	0.72	1.37	1.37			N/A	N/A

2024 Base + Dev DS2, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - Newgate Lane (North) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	NGL - Longfield Avenue	Standard Roundabout		1, 2, 3, 4	6.49	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2024 Base + Dev DS2	AM	w/ Daedalus, w/ Stubbington Bypass	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 (%)
1 - Davis Way		ONE HOUR	✓	60	100.000
2 - Newgate Lane (South)		ONE HOUR	✓	1480	100.000
3 - Longfield Avenue		ONE HOUR	✓	299	100.000
4 - Newgate Lane (North)		ONE HOUR	✓	1050	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Davis Way	2 - Newgate Lane (South)	3 - Longfield Avenue	4 - Newgate Lane (North)
From	1 - Davis Way	0	24	22	14
	2 - Newgate Lane (South)	42	0	276	1162
	3 - Longfield Avenue	39	155	0	106
	4 - Newgate Lane (North)	21	949	81	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Davis Way	2 - Newgate Lane (South)	3 - Longfield Avenue	4 - Newgate Lane (North)
From	1 - Davis Way	0	5	5	27
	2 - Newgate Lane (South)	4	0	3	4
	3 - Longfield Avenue	9	0	0	1
	4 - Newgate Lane (North)	5	5	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Davis Way	0.13	8.74	0.2	0.5	A	55	83
2 - Newgate Lane (South)	0.75	6.71	3.0	6.4	A	1358	2037
3 - Longfield Avenue	0.24	3.58	0.3	1.3	A	275	412
4 - Newgate Lane (North)	0.68	6.88	2.2	3.8	A	964	1446

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
1 - Davis Way	45	11	888	715	0.063	45	77	0.0	0.1	5.879	A
2 - Newgate Lane (South)	1114	279	88	2217	0.503	1110	845	0.0	1.0	3.366	A
3 - Longfield Avenue	225	56	914	1678	0.134	225	284	0.0	0.2	2.508	A
4 - Newgate Lane (North)	791	198	177	1757	0.450	787	961	0.0	0.9	3.894	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
1 - Davis Way	54	14	1063	631	0.086	54	92	0.1	0.1	6.818	A
2 - Newgate Lane (South)	1331	333	105	2204	0.604	1329	1012	1.0	1.6	4.261	A
3 - Longfield Avenue	269	67	1094	1539	0.175	269	340	0.2	0.2	2.870	A
4 - Newgate Lane (North)	944	236	212	1736	0.544	943	1151	0.9	1.2	4.767	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
1 - Davis Way	66	17	1300	519	0.128	66	112	0.1	0.2	8.693	A
2 - Newgate Lane (South)	1630	407	128	2186	0.745	1624	1238	1.6	3.0	6.584	A
3 - Longfield Avenue	330	82	1337	1352	0.244	329	415	0.2	0.3	3.563	A
4 - Newgate Lane (North)	1156	289	260	1707	0.677	1153	1407	1.2	2.2	6.794	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
1 - Davis Way	66	17	1304	517	0.128	66	113	0.2	0.2	8.736	A
2 - Newgate Lane (South)	1630	407	129	2186	0.745	1630	1241	3.0	3.0	6.713	A
3 - Longfield Avenue	330	82	1342	1349	0.245	330	417	0.3	0.3	3.577	A
4 - Newgate Lane (North)	1156	289	260	1707	0.678	1156	1411	2.2	2.2	6.882	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
1 - Davis Way	54	14	1069	629	0.086	54	92	0.2	0.1	6.856	A
2 - Newgate Lane (South)	1331	333	106	2203	0.604	1336	1017	3.0	1.6	4.340	A
3 - Longfield Avenue	269	67	1100	1534	0.175	270	342	0.3	0.2	2.883	A
4 - Newgate Lane (North)	944	236	213	1736	0.544	948	1157	2.2	1.3	4.834	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
1 - Davis Way	45	11	893	712	0.064	45	77	0.1	0.1	5.910	A
2 - Newgate Lane (South)	1114	279	88	2216	0.503	1117	851	1.6	1.1	3.408	A
3 - Longfield Avenue	225	56	919	1674	0.135	226	285	0.2	0.2	2.519	A
4 - Newgate Lane (North)	791	198	178	1757	0.450	792	967	1.3	0.9	3.935	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.07	0.00	0.00	0.07	0.07			N/A	N/A
2 - Newgate Lane (South)	1.04	0.57	1.04	1.45	1.51			N/A	N/A
3 - Longfield Avenue	0.16	0.00	0.00	0.16	0.16			N/A	N/A
4 - Newgate Lane (North)	0.85	0.58	1.05	1.47	1.53			N/A	N/A

08:00 - 08:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.10	0.00	0.00	0.10	0.10			N/A	N/A
2 - Newgate Lane (South)	1.56	0.05	0.49	4.02	6.37			N/A	N/A
3 - Longfield Avenue	0.21	0.00	0.00	0.21	0.21			N/A	N/A
4 - Newgate Lane (North)	1.24	0.06	0.80	2.68	3.79			N/A	N/A

08:15 - 08:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.16	0.03	0.28	0.51	0.54			N/A	N/A
2 - Newgate Lane (South)	2.96	0.03	0.29	2.96	5.55			N/A	N/A
3 - Longfield Avenue	0.32	0.03	0.26	0.46	0.49			N/A	N/A
4 - Newgate Lane (North)	2.16	0.03	0.28	2.16	2.16			N/A	N/A

08:30 - 08:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.16	0.03	0.27	0.49	0.52			N/A	N/A
2 - Newgate Lane (South)	3.00	0.03	0.28	3.00	3.00			N/A	N/A
3 - Longfield Avenue	0.33	0.03	0.32	1.06	1.31			N/A	N/A
4 - Newgate Lane (North)	2.19	0.03	0.28	2.19	2.19			N/A	N/A

08:45 - 09:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.10	0.00	0.00	0.10	0.10			N/A	N/A
2 - Newgate Lane (South)	1.60	0.09	1.16	3.29	4.50			N/A	N/A
3 - Longfield Avenue	0.22	0.00	0.00	0.22	0.22			N/A	N/A
4 - Newgate Lane (North)	1.27	0.11	1.12	2.08	2.81			N/A	N/A

09:00 - 09:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.07	0.00	0.00	0.07	0.07			N/A	N/A
2 - Newgate Lane (South)	1.06	0.05	0.50	2.40	3.60			N/A	N/A
3 - Longfield Avenue	0.16	0.00	0.00	0.16	0.16			N/A	N/A
4 - Newgate Lane (North)	0.87	0.06	0.64	1.64	2.11			N/A	N/A

2024 Base + Dev DS2, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - Newgate Lane (North) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	NGL - Longfield Avenue	Standard Roundabout		1, 2, 3, 4	4.91	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D15	2024 Base + Dev DS2	PM	w/ Daedalus, w/ Stubbington Bypass	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 (%)
1 - Davis Way		ONE HOUR	✓	90	100.000
2 - Newgate Lane (South)		ONE HOUR	✓	1209	100.000
3 - Longfield Avenue		ONE HOUR	✓	319	100.000
4 - Newgate Lane (North)		ONE HOUR	✓	998	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Davis Way	2 - Newgate Lane (South)	3 - Longfield Avenue	4 - Newgate Lane (North)
From	1 - Davis Way	0	26	30	34
	2 - Newgate Lane (South)	4	0	291	913
	3 - Longfield Avenue	4	208	0	107
	4 - Newgate Lane (North)	4	920	74	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Davis Way	2 - Newgate Lane (South)	3 - Longfield Avenue	4 - Newgate Lane (North)
From	1 - Davis Way	0	4	0	0
	2 - Newgate Lane (South)	0	0	1	2
	3 - Longfield Avenue	0	0	0	0
	4 - Newgate Lane (North)	33	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Davis Way	0.19	8.91	0.2	1.0	A	82	124
2 - Newgate Lane (South)	0.61	4.36	1.6	2.6	A	1109	1664
3 - Longfield Avenue	0.22	2.94	0.3	1.1	A	293	439
4 - Newgate Lane (North)	0.64	5.85	1.8	2.8	A	916	1374

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
1 - Davis Way	68	17	902	708	0.096	67	9	0.0	0.1	5.679	A
2 - Newgate Lane (South)	910	227	104	2205	0.413	907	865	0.0	0.7	2.809	A
3 - Longfield Avenue	240	60	714	1832	0.131	240	297	0.0	0.2	2.261	A
4 - Newgate Lane (North)	752	188	162	1766	0.426	749	791	0.0	0.7	3.561	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
1 - Davis Way	81	20	1079	624	0.130	81	11	0.1	0.1	6.704	A
2 - Newgate Lane (South)	1087	272	124	2190	0.496	1085	1036	0.7	1.0	3.306	A
3 - Longfield Avenue	287	72	855	1724	0.166	287	355	0.2	0.2	2.505	A
4 - Newgate Lane (North)	897	224	194	1747	0.514	896	947	0.7	1.1	4.266	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
1 - Davis Way	99	25	1320	509	0.194	99	14	0.1	0.2	8.862	A
2 - Newgate Lane (South)	1331	333	152	2169	0.614	1328	1267	1.0	1.6	4.334	A
3 - Longfield Avenue	351	88	1046	1576	0.223	351	434	0.2	0.3	2.938	A
4 - Newgate Lane (North)	1099	275	238	1720	0.639	1096	1159	1.1	1.8	5.796	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
1 - Davis Way	99	25	1323	508	0.195	99	14	0.2	0.2	8.908	A
2 - Newgate Lane (South)	1331	333	152	2169	0.614	1331	1270	1.6	1.6	4.360	A
3 - Longfield Avenue	351	88	1048	1575	0.223	351	435	0.3	0.3	2.941	A
4 - Newgate Lane (North)	1099	275	238	1720	0.639	1099	1161	1.8	1.8	5.850	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
1 - Davis Way	81	20	1084	622	0.130	81	11	0.2	0.2	6.741	A
2 - Newgate Lane (South)	1087	272	125	2189	0.496	1089	1040	1.6	1.0	3.327	A
3 - Longfield Avenue	287	72	857	1721	0.167	287	356	0.3	0.2	2.510	A
4 - Newgate Lane (North)	897	224	195	1747	0.514	900	950	1.8	1.1	4.308	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
1 - Davis Way	68	17	906	706	0.096	68	9	0.2	0.1	5.711	A
2 - Newgate Lane (South)	910	227	104	2204	0.413	911	870	1.0	0.7	2.826	A
3 - Longfield Avenue	240	60	717	1829	0.131	240	298	0.2	0.2	2.265	A
4 - Newgate Lane (North)	752	188	163	1766	0.426	753	795	1.1	0.8	3.593	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.11	0.00	0.00	0.11	0.11			N/A	N/A
2 - Newgate Lane (South)	0.71	0.56	1.01	1.42	1.47			N/A	N/A
3 - Longfield Avenue	0.15	0.00	0.00	0.15	0.15			N/A	N/A
4 - Newgate Lane (North)	0.74	0.56	1.01	1.41	1.46			N/A	N/A

17:00 - 17:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.15	0.00	0.00	0.15	0.15			N/A	N/A
2 - Newgate Lane (South)	0.99	0.06	0.77	1.87	2.61			N/A	N/A
3 - Longfield Avenue	0.20	0.00	0.00	0.20	0.20			N/A	N/A
4 - Newgate Lane (North)	1.06	0.06	0.81	1.98	2.81			N/A	N/A

17:15 - 17:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.24	0.03	0.26	0.47	0.49			N/A	N/A
2 - Newgate Lane (South)	1.59	0.03	0.26	1.59	1.59			N/A	N/A
3 - Longfield Avenue	0.29	0.03	0.25	0.45	0.48			N/A	N/A
4 - Newgate Lane (North)	1.76	0.03	0.27	1.76	1.76			N/A	N/A

17:30 - 17:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.24	0.03	0.28	0.50	1.01			N/A	N/A
2 - Newgate Lane (South)	1.60	0.03	0.27	1.60	1.60			N/A	N/A
3 - Longfield Avenue	0.29	0.03	0.29	0.78	1.14			N/A	N/A
4 - Newgate Lane (North)	1.77	0.03	0.27	1.77	1.77			N/A	N/A

17:45 - 18:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.15	0.00	0.00	0.15	0.15			N/A	N/A
2 - Newgate Lane (South)	1.01	0.41	1.03	1.50	1.50			N/A	N/A
3 - Longfield Avenue	0.20	0.00	0.00	0.20	0.20			N/A	N/A
4 - Newgate Lane (North)	1.08	0.16	1.05	1.60	1.88			N/A	N/A

18:00 - 18:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.11	0.00	0.00	0.11	0.11			N/A	N/A
2 - Newgate Lane (South)	0.72	0.08	0.81	1.41	1.49			N/A	N/A
3 - Longfield Avenue	0.15	0.00	0.00	0.15	0.15			N/A	N/A
4 - Newgate Lane (North)	0.75	0.06	0.71	1.50	1.54			N/A	N/A

<h1>Junctions 9</h1>
<h2>ARCADY 9 - Roundabout Module</h2>
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Filename: NGL-Longfield Ave Oct 19.j9

Path: \\Pg-brs-dc01\data\Bristol Projects\Bristol - Live Projects\BRS.4901 - BRS.5000\BRS.4989 - SUSTAINABLE LAND PLC - LAND TO THE NORTH OF GOSPORT ROAD, FAREHAM\Transport\7. Junction Modelling\c. ARCADY\Oct 19\TP

Report generation date: 17/10/2019 11:59:14

-
- »2019 Base DS1, AM
 - »2019 Base DS1, PM
 - »2024 Base DS1, AM
 - »2024 Base DS1, PM
 - »2024 Base + Dev DS1, AM
 - »2024 Base + Dev DS1, PM
 - »2019 Base DS2, AM
 - »2019 Base DS2, PM
 - »2024 Base DS2, AM
 - »2024 Base DS2, PM
 - »2024 Base + Dev DS2, AM
 - »2024 Base + Dev DS2, PM

Summary of junction performance

	AM					PM				
	Queue (PCU)	Delay (s)	RFC	LOS	Junction LOS	Queue (PCU)	Delay (s)	RFC	LOS	Junction LOS
2019 Base DS1										
1 - Davis Way	0.2	9.61	0.13	A	A	0.4	17.75	0.31	C	A
2 - Newgate Lane (South)	2.9	6.61	0.74	A		1.4	4.08	0.58	A	
3 - Longfield Avenue	0.7	4.26	0.42	A		0.9	4.17	0.49	A	
4 - Newgate Lane (North)	1.9	6.98	0.65	A		2.9	9.95	0.75	A	
2024 Base DS1										
1 - Davis Way	0.2	12.67	0.17	B	A	0.9	35.64	0.49	E	B
2 - Newgate Lane (South)	3.6	7.80	0.78	A		1.7	4.48	0.62	A	
3 - Longfield Avenue	0.9	4.95	0.49	A		1.2	4.93	0.56	A	
4 - Newgate Lane (North)	3.2	10.35	0.76	B		5.9	18.68	0.86	C	
2024 Base + Dev DS1										
1 - Davis Way	0.2	13.05	0.18	B	A	1.0	40.25	0.52	E	B
2 - Newgate Lane (South)	3.8	8.12	0.79	A		1.7	4.60	0.63	A	
3 - Longfield Avenue	1.0	5.07	0.49	A		1.3	5.09	0.57	A	
4 - Newgate Lane (North)	3.4	10.84	0.77	B		6.6	20.76	0.88	C	
2019 Base DS2										
1 - Davis Way	0.1	7.15	0.10	A	A	0.2	7.18	0.15	A	A
2 - Newgate Lane (South)	2.4	5.72	0.70	A		1.3	3.90	0.57	A	
3 - Longfield Avenue	0.3	3.28	0.21	A		0.2	2.72	0.19	A	
4 - Newgate Lane (North)	1.4	5.11	0.57	A		1.2	4.55	0.54	A	
2024 Base DS2										
1 - Davis Way	0.2	8.56	0.13	A	A	0.2	8.67	0.19	A	A
2 - Newgate Lane (South)	2.9	6.56	0.74	A		1.5	4.25	0.60	A	
3 - Longfield Avenue	0.3	3.54	0.24	A		0.3	2.89	0.22	A	
4 - Newgate Lane (North)	2.1	6.66	0.67	A		1.7	5.68	0.63	A	
2024 Base + Dev DS2										
1 - Davis Way	0.2	8.74	0.13	A	A	0.2	8.93	0.20	A	A
2 - Newgate Lane (South)	3.0	6.73	0.75	A		1.6	4.37	0.61	A	
3 - Longfield Avenue	0.3	3.58	0.24	A		0.3	2.94	0.22	A	
4 - Newgate Lane (North)	2.2	6.89	0.68	A		1.8	5.87	0.64	A	

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

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages.

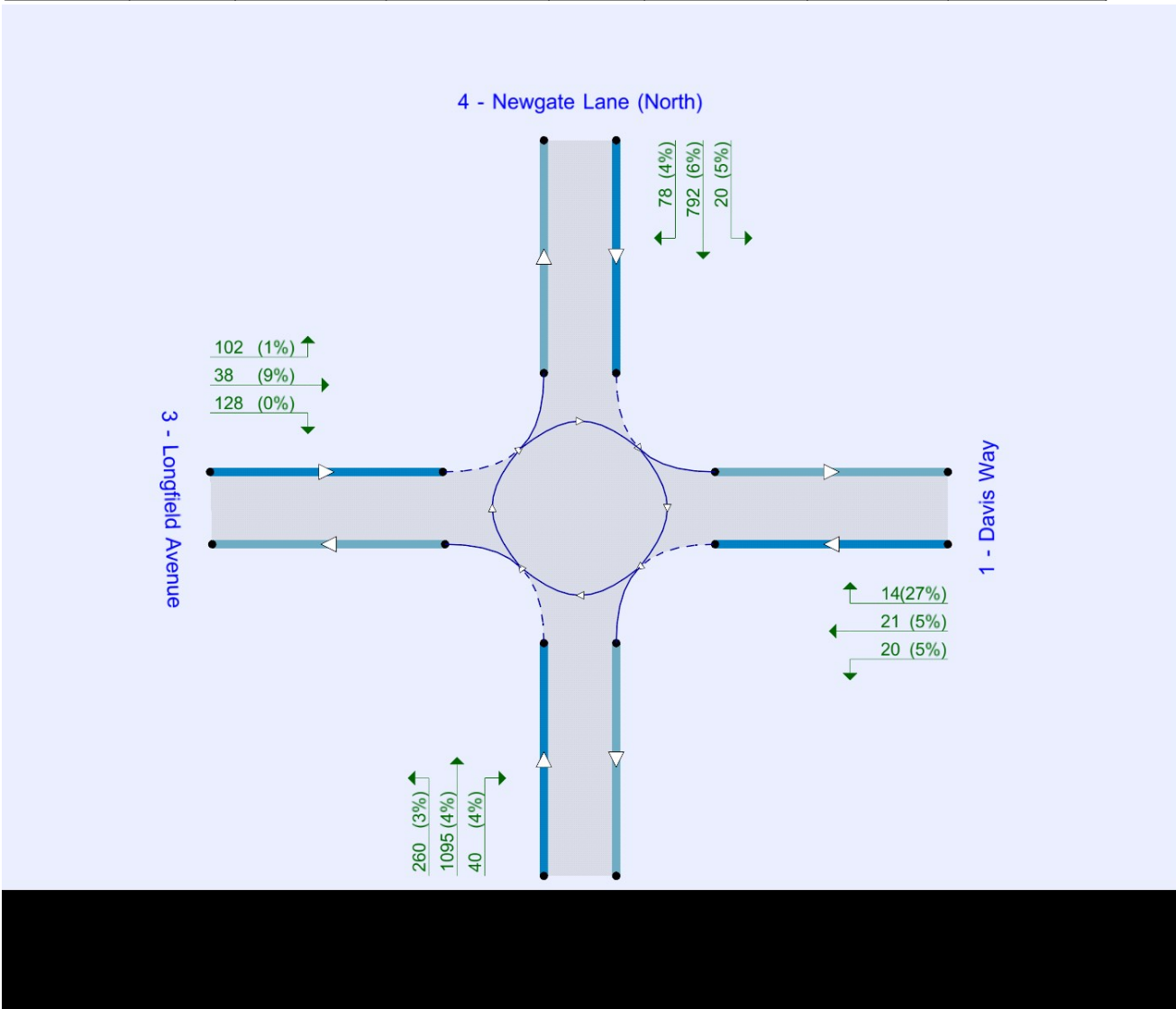
File summary

File Description

Title	Longfield Avenue Roundabout
Location	
Site number	
Date	08/10/2018
Version	V3
Status	(new file)
Identifier	
Client	
Jobnumber	BRS.4989
Enumerator	PEGASUSGROUP\Matthew Haywood
Description	Rev 3 - Updated for total of 190 dwellings

Units

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



The junction diagram reflects the last run of Junctions.

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2019 Base DS1	AM	without Stubbington Bypass	ONE HOUR	07:45	09:15	15	✓
D2	2019 Base DS1	PM	without Stubbington Bypass	ONE HOUR	16:45	18:15	15	✓
D5	2024 Base DS1	AM	w/ Daedalus, w/out Stubbington Bypass	ONE HOUR	07:45	09:15	15	✓
D6	2024 Base DS1	PM	w/ Daedalus, w/out Stubbington Bypass	ONE HOUR	16:45	18:15	15	✓
D7	2024 Base + Dev DS1	AM	w/ Daedalus, w/out Stubbington Bypass	ONE HOUR	07:45	09:15	15	✓
D8	2024 Base + Dev DS1	PM	w/ Daedalus, w/out Stubbington Bypass	ONE HOUR	16:45	18:15	15	✓
D10	2019 Base DS2	AM	with Stubbington Bypass	ONE HOUR	07:45	09:15	15	✓
D11	2019 Base DS2	PM	with Stubbington Bypass	ONE HOUR	16:45	18:15	15	✓
D12	2024 Base DS2	AM	w/ Daedalus, w/ Stubbington Bypass	ONE HOUR	07:45	09:15	15	✓
D13	2024 Base DS2	PM	w/ Daedalus, w/ Stubbington Bypass	ONE HOUR	16:45	18:15	15	✓
D14	2024 Base + Dev DS2	AM	w/ Daedalus, w/ Stubbington Bypass	ONE HOUR	07:45	09:15	15	✓
D15	2024 Base + Dev DS2	PM	w/ Daedalus, w/ Stubbington Bypass	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

2019 Base DS1, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - Newgate Lane (North) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	NGL - Longfield Avenue	Standard Roundabout		1, 2, 3, 4	6.34	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Davis Way	
2	Newgate Lane (South)	
3	Longfield Avenue	
4	Newgate Lane (North)	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Davis Way	3.50	4.90	6.7	10.0	46.0	55.0	
2 - Newgate Lane (South)	7.30	7.35	0.0	40.0	46.0	28.0	
3 - Longfield Avenue	3.65	11.40	24.8	34.0	46.0	23.0	
4 - Newgate Lane (North)	3.15	9.40	41.6	11.0	46.0	66.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Davis Way	0.475	1136
2 - Newgate Lane (South)	0.747	2282
3 - Longfield Avenue	0.770	2381
4 - Newgate Lane (North)	0.608	1865

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2019 Base DS1	AM	without Stubbington Bypass	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 (%)
1 - Davis Way		ONE HOUR	✓	55	100.000
2 - Newgate Lane (South)		ONE HOUR	✓	1461	100.000
3 - Longfield Avenue		ONE HOUR	✓	564	100.000
4 - Newgate Lane (North)		ONE HOUR	✓	917	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Davis Way	2 - Newgate Lane (South)	3 - Longfield Avenue	4 - Newgate Lane (North)
From	1 - Davis Way	0	20	21	14
	2 - Newgate Lane (South)	52	0	402	1007
	3 - Longfield Avenue	38	372	0	154
	4 - Newgate Lane (North)	20	800	97	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Davis Way	2 - Newgate Lane (South)	3 - Longfield Avenue	4 - Newgate Lane (North)
From	1 - Davis Way	0	5	5	27
	2 - Newgate Lane (South)	4	0	3	4
	3 - Longfield Avenue	9	0	0	1
	4 - Newgate Lane (North)	5	6	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Davis Way	0.13	9.61	0.2	0.5	A	50	76
2 - Newgate Lane (South)	0.74	6.61	2.9	6.2	A	1341	2011
3 - Longfield Avenue	0.42	4.26	0.7	3.1	A	518	776
4 - Newgate Lane (North)	0.65	6.98	1.9	2.9	A	841	1262

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
1 - Davis Way	41	10	952	684	0.061	41	83	0.0	0.1	6.153	A
2 - Newgate Lane (South)	1100	275	99	2208	0.498	1096	894	0.0	1.0	3.347	A
3 - Longfield Avenue	425	106	805	1762	0.241	423	390	0.0	0.3	2.706	A
4 - Newgate Lane (North)	690	173	347	1654	0.417	687	881	0.0	0.8	3.936	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
1 - Davis Way	49	12	1139	595	0.083	49	99	0.1	0.1	7.251	A
2 - Newgate Lane (South)	1313	328	118	2194	0.599	1311	1070	1.0	1.5	4.227	A
3 - Longfield Avenue	507	127	963	1640	0.309	507	467	0.3	0.4	3.196	A
4 - Newgate Lane (North)	824	206	415	1613	0.511	823	1055	0.8	1.1	4.824	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
1 - Davis Way	61	15	1393	475	0.128	60	121	0.1	0.2	9.556	A
2 - Newgate Lane (South)	1609	402	145	2174	0.740	1603	1309	1.5	2.9	6.488	A
3 - Longfield Avenue	621	155	1177	1475	0.421	620	571	0.4	0.7	4.235	A
4 - Newgate Lane (North)	1010	252	508	1556	0.649	1006	1290	1.1	1.9	6.897	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
1 - Davis Way	61	15	1397	473	0.128	61	121	0.2	0.2	9.606	A
2 - Newgate Lane (South)	1609	402	145	2174	0.740	1608	1312	2.9	2.9	6.608	A
3 - Longfield Avenue	621	155	1181	1472	0.422	621	572	0.7	0.7	4.259	A
4 - Newgate Lane (North)	1010	252	509	1556	0.649	1010	1294	1.9	1.9	6.984	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
1 - Davis Way	49	12	1145	593	0.083	50	99	0.2	0.1	7.295	A
2 - Newgate Lane (South)	1313	328	119	2193	0.599	1319	1075	2.9	1.6	4.302	A
3 - Longfield Avenue	507	127	969	1636	0.310	508	469	0.7	0.5	3.217	A
4 - Newgate Lane (North)	824	206	416	1612	0.511	828	1060	1.9	1.1	4.887	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
1 - Davis Way	41	10	957	682	0.061	42	83	0.1	0.1	6.188	A
2 - Newgate Lane (South)	1100	275	100	2208	0.498	1102	899	1.6	1.0	3.386	A
3 - Longfield Avenue	425	106	809	1758	0.241	425	392	0.5	0.3	2.722	A
4 - Newgate Lane (North)	690	173	348	1653	0.418	692	886	1.1	0.8	3.976	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.07	0.00	0.00	0.07	0.07			N/A	N/A
2 - Newgate Lane (South)	1.02	0.57	1.04	1.45	1.51			N/A	N/A
3 - Longfield Avenue	0.32	0.00	0.00	0.32	0.32			N/A	N/A
4 - Newgate Lane (North)	0.75	0.58	1.06	1.48	1.54			N/A	N/A

08:00 - 08:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.10	0.00	0.00	0.10	0.10			N/A	N/A
2 - Newgate Lane (South)	1.53	0.05	0.49	3.92	6.15			N/A	N/A
3 - Longfield Avenue	0.45	0.00	0.00	0.45	0.45			N/A	N/A
4 - Newgate Lane (North)	1.10	0.07	0.86	2.04	2.87			N/A	N/A

08:15 - 08:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.16	0.03	0.29	0.51	0.54			N/A	N/A
2 - Newgate Lane (South)	2.88	0.03	0.29	2.88	4.98			N/A	N/A
3 - Longfield Avenue	0.73	0.03	0.26	0.73	0.73			N/A	N/A
4 - Newgate Lane (North)	1.92	0.03	0.28	1.92	1.92			N/A	N/A

08:30 - 08:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.16	0.03	0.28	0.50	0.52			N/A	N/A
2 - Newgate Lane (South)	2.91	0.03	0.28	2.91	2.91			N/A	N/A
3 - Longfield Avenue	0.73	0.03	0.29	1.11	3.07			N/A	N/A
4 - Newgate Lane (North)	1.94	0.03	0.28	1.94	1.94			N/A	N/A

08:45 - 09:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.10	0.00	0.00	0.10	0.10			N/A	N/A
2 - Newgate Lane (South)	1.57	0.09	1.16	3.11	4.24			N/A	N/A
3 - Longfield Avenue	0.45	0.00	0.00	0.45	0.45			N/A	N/A
4 - Newgate Lane (North)	1.12	0.12	1.06	1.77	2.07			N/A	N/A

09:00 - 09:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.07	0.00	0.00	0.07	0.07			N/A	N/A
2 - Newgate Lane (South)	1.04	0.05	0.51	2.30	3.43			N/A	N/A
3 - Longfield Avenue	0.32	0.00	0.00	0.32	0.32			N/A	N/A
4 - Newgate Lane (North)	0.77	0.06	0.63	1.16	1.76			N/A	N/A

2019 Base DS1, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - Newgate Lane (North) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	NGL - Longfield Avenue	Standard Roundabout		1, 2, 3, 4	6.43	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2019 Base DS1	PM	without Stubbington Bypass	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 (%)
1 - Davis Way		ONE HOUR	✓	84	100.000
2 - Newgate Lane (South)		ONE HOUR	✓	1145	100.000
3 - Longfield Avenue		ONE HOUR	✓	747	100.000
4 - Newgate Lane (North)		ONE HOUR	✓	970	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Davis Way	2 - Newgate Lane (South)	3 - Longfield Avenue	4 - Newgate Lane (North)
From	1 - Davis Way	0	22	29	33
	2 - Newgate Lane (South)	4	0	356	785
	3 - Longfield Avenue	4	638	0	105
	4 - Newgate Lane (North)	4	875	91	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Davis Way	2 - Newgate Lane (South)	3 - Longfield Avenue	4 - Newgate Lane (North)
From	1 - Davis Way	0	5	0	0
	2 - Newgate Lane (South)	0	0	1	2
	3 - Longfield Avenue	0	0	0	0
	4 - Newgate Lane (North)	33	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Davis Way	0.31	17.75	0.4	1.5	C	77	116
2 - Newgate Lane (South)	0.58	4.08	1.4	2.0	A	1051	1576
3 - Longfield Avenue	0.49	4.17	0.9	1.9	A	685	1028
4 - Newgate Lane (North)	0.75	9.95	2.9	9.7	A	890	1335

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
1 - Davis Way	63	16	1203	565	0.112	63	9	0.0	0.1	7.244	A
2 - Newgate Lane (South)	862	216	114	2197	0.392	859	1151	0.0	0.7	2.728	A
3 - Longfield Avenue	562	141	617	1907	0.295	561	357	0.0	0.4	2.671	A
4 - Newgate Lane (North)	730	183	485	1570	0.465	727	693	0.0	0.9	4.296	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
1 - Davis Way	76	19	1439	453	0.167	75	11	0.1	0.2	9.639	A
2 - Newgate Lane (South)	1029	257	137	2180	0.472	1028	1378	0.7	0.9	3.170	A
3 - Longfield Avenue	672	168	738	1813	0.370	671	427	0.4	0.6	3.150	A
4 - Newgate Lane (North)	872	218	580	1512	0.577	870	829	0.9	1.4	5.646	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
1 - Davis Way	92	23	1759	301	0.307	92	13	0.2	0.4	17.330	C
2 - Newgate Lane (South)	1261	315	167	2157	0.584	1259	1683	0.9	1.4	4.057	A
3 - Longfield Avenue	822	206	903	1686	0.488	821	523	0.6	0.9	4.155	A
4 - Newgate Lane (North)	1068	267	710	1433	0.745	1062	1014	1.4	2.8	9.675	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
1 - Davis Way	92	23	1766	298	0.311	92	13	0.4	0.4	17.749	C
2 - Newgate Lane (South)	1261	315	168	2157	0.585	1261	1690	1.4	1.4	4.078	A
3 - Longfield Avenue	822	206	905	1685	0.488	822	524	0.9	0.9	4.174	A
4 - Newgate Lane (North)	1068	267	711	1433	0.745	1068	1016	2.8	2.9	9.951	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
1 - Davis Way	76	19	1449	448	0.169	76	11	0.4	0.2	9.832	A
2 - Newgate Lane (South)	1029	257	139	2179	0.472	1031	1387	1.4	0.9	3.190	A
3 - Longfield Avenue	672	168	741	1811	0.371	673	429	0.9	0.6	3.168	A
4 - Newgate Lane (North)	872	218	582	1511	0.577	878	832	2.9	1.4	5.796	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
1 - Davis Way	63	16	1210	562	0.113	64	9	0.2	0.1	7.323	A
2 - Newgate Lane (South)	862	216	116	2196	0.393	863	1158	0.9	0.7	2.745	A
3 - Longfield Avenue	562	141	620	1904	0.295	563	359	0.6	0.4	2.686	A
4 - Newgate Lane (North)	730	183	487	1569	0.465	732	696	1.4	0.9	4.359	A

Queue Variation Results for each time segment
16:45 - 17:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.13	0.00	0.00	0.13	0.13			N/A	N/A
2 - Newgate Lane (South)	0.65	0.56	1.02	1.42	1.47			N/A	N/A
3 - Longfield Avenue	0.42	0.00	0.00	0.42	0.42			N/A	N/A
4 - Newgate Lane (North)	0.87	0.56	1.01	1.41	1.47			N/A	N/A

17:00 - 17:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.20	0.00	0.00	0.20	0.20			N/A	N/A
2 - Newgate Lane (South)	0.90	0.07	0.80	1.56	1.96			N/A	N/A
3 - Longfield Avenue	0.59	0.07	0.74	1.35	1.42			N/A	N/A
4 - Newgate Lane (North)	1.36	0.05	0.62	3.23	4.83			N/A	N/A

17:15 - 17:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.44	0.03	0.26	0.47	0.50			N/A	N/A
2 - Newgate Lane (South)	1.41	0.03	0.26	1.41	1.41			N/A	N/A
3 - Longfield Avenue	0.94	0.03	0.25	0.94	0.94			N/A	N/A
4 - Newgate Lane (North)	2.84	0.03	0.29	2.84	9.73			N/A	N/A

17:30 - 17:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.45	0.03	0.34	1.39	1.54			N/A	N/A
2 - Newgate Lane (South)	1.42	0.03	0.27	1.42	1.42			N/A	N/A
3 - Longfield Avenue	0.95	0.03	0.27	0.95	1.95			N/A	N/A
4 - Newgate Lane (North)	2.90	0.03	0.28	2.90	3.79			N/A	N/A

17:45 - 18:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.21	0.00	0.00	0.21	0.21			N/A	N/A
2 - Newgate Lane (South)	0.92	0.52	1.01	1.44	1.49			N/A	N/A
3 - Longfield Avenue	0.59	0.55	1.00	1.40	1.45			N/A	N/A
4 - Newgate Lane (North)	1.40	0.07	0.90	3.02	4.34			N/A	N/A

18:00 - 18:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.13	0.00	0.00	0.13	0.13			N/A	N/A
2 - Newgate Lane (South)	0.66	0.09	0.82	1.38	1.46			N/A	N/A
3 - Longfield Avenue	0.42	0.00	0.00	0.42	0.42			N/A	N/A
4 - Newgate Lane (North)	0.89	0.04	0.41	2.03	3.35			N/A	N/A

2024 Base DS1, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - Newgate Lane (North) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	NGL - Longfield Avenue	Standard Roundabout		1, 2, 3, 4	8.16	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2024 Base DS1	AM	w/ Daedalus, w/out Stubbington Bypass	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 (%)
1 - Davis Way		ONE HOUR	✓	59	100.000
2 - Newgate Lane (South)		ONE HOUR	✓	1537	100.000
3 - Longfield Avenue		ONE HOUR	✓	630	100.000
4 - Newgate Lane (North)		ONE HOUR	✓	1043	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Davis Way	2 - Newgate Lane (South)	3 - Longfield Avenue	4 - Newgate Lane (North)
From	1 - Davis Way	0	23	22	14
	2 - Newgate Lane (South)	55	0	423	1059
	3 - Longfield Avenue	39	431	0	159
	4 - Newgate Lane (North)	21	922	100	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Davis Way	2 - Newgate Lane (South)	3 - Longfield Avenue	4 - Newgate Lane (North)
From	1 - Davis Way	0	5	5	27
	2 - Newgate Lane (South)	4	0	3	4
	3 - Longfield Avenue	9	0	0	1
	4 - Newgate Lane (North)	5	6	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Davis Way	0.17	12.67	0.2	0.5	B	54	82
2 - Newgate Lane (South)	0.78	7.80	3.6	10.7	A	1411	2116
3 - Longfield Avenue	0.49	4.95	0.9	2.7	A	578	867
4 - Newgate Lane (North)	0.76	10.35	3.2	11.9	B	957	1435

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
1 - Davis Way	45	11	1089	619	0.072	44	86	0.0	0.1	6.860	A
2 - Newgate Lane (South)	1157	289	102	2206	0.525	1153	1031	0.0	1.1	3.533	A
3 - Longfield Avenue	474	119	846	1730	0.274	473	409	0.0	0.4	2.878	A
4 - Newgate Lane (North)	785	196	394	1625	0.483	781	925	0.0	1.0	4.475	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
1 - Davis Way	53	13	1304	517	0.103	53	103	0.1	0.1	8.498	A
2 - Newgate Lane (South)	1382	345	122	2191	0.631	1379	1235	1.1	1.7	4.590	A
3 - Longfield Avenue	566	142	1013	1602	0.353	565	489	0.4	0.5	3.495	A
4 - Newgate Lane (North)	937	234	472	1578	0.594	935	1107	1.0	1.5	5.881	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
1 - Davis Way	65	16	1593	380	0.172	65	126	0.1	0.2	12.502	B
2 - Newgate Lane (South)	1692	423	149	2171	0.780	1685	1508	1.7	3.5	7.584	A
3 - Longfield Avenue	693	173	1237	1429	0.485	692	597	0.5	0.9	4.907	A
4 - Newgate Lane (North)	1148	287	577	1514	0.758	1141	1352	1.5	3.2	10.003	B

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
1 - Davis Way	65	16	1600	376	0.173	65	126	0.2	0.2	12.669	B
2 - Newgate Lane (South)	1692	423	150	2170	0.780	1692	1515	3.5	3.6	7.805	A
3 - Longfield Avenue	693	173	1242	1425	0.487	693	600	0.9	0.9	4.952	A
4 - Newgate Lane (North)	1148	287	578	1513	0.758	1148	1357	3.2	3.2	10.352	B

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
1 - Davis Way	53	13	1314	512	0.104	54	104	0.2	0.1	8.607	A
2 - Newgate Lane (South)	1382	345	124	2190	0.631	1389	1244	3.6	1.8	4.706	A
3 - Longfield Avenue	566	142	1020	1596	0.355	568	493	0.9	0.6	3.530	A
4 - Newgate Lane (North)	937	234	474	1577	0.594	944	1114	3.2	1.6	6.055	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
1 - Davis Way	45	11	1097	615	0.072	45	86	0.1	0.1	6.915	A
2 - Newgate Lane (South)	1157	289	103	2205	0.525	1160	1039	1.8	1.2	3.583	A
3 - Longfield Avenue	474	119	852	1726	0.275	475	411	0.6	0.4	2.899	A
4 - Newgate Lane (North)	785	196	396	1624	0.483	787	930	1.6	1.0	4.548	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.08	0.00	0.00	0.08	0.08			N/A	N/A
2 - Newgate Lane (South)	1.14	0.57	1.04	1.45	1.50			N/A	N/A
3 - Longfield Avenue	0.38	0.00	0.00	0.38	0.38			N/A	N/A
4 - Newgate Lane (North)	0.98	0.58	1.05	1.48	1.53			N/A	N/A

08:00 - 08:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.12	0.00	0.00	0.12	0.12			N/A	N/A
2 - Newgate Lane (South)	1.75	0.05	0.47	4.65	7.59			N/A	N/A
3 - Longfield Avenue	0.55	0.06	0.66	1.34	1.43			N/A	N/A
4 - Newgate Lane (North)	1.52	0.06	0.63	3.73	5.59			N/A	N/A

08:15 - 08:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.22	0.03	0.28	0.51	0.54			N/A	N/A
2 - Newgate Lane (South)	3.54	0.03	0.30	3.54	10.73			N/A	N/A
3 - Longfield Avenue	0.94	0.03	0.26	0.94	0.94			N/A	N/A
4 - Newgate Lane (North)	3.16	0.03	0.31	3.16	11.86			N/A	N/A

08:30 - 08:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.23	0.03	0.28	0.51	0.54			N/A	N/A
2 - Newgate Lane (South)	3.61	0.03	0.28	3.61	3.61			N/A	N/A
3 - Longfield Avenue	0.95	0.03	0.28	0.95	2.72			N/A	N/A
4 - Newgate Lane (North)	3.23	0.03	0.29	3.23	4.62			N/A	N/A

08:45 - 09:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.13	0.00	0.00	0.13	0.13			N/A	N/A
2 - Newgate Lane (South)	1.80	0.07	1.05	4.14	5.95			N/A	N/A
3 - Longfield Avenue	0.56	0.55	1.01	1.41	1.46			N/A	N/A
4 - Newgate Lane (North)	1.57	0.07	0.91	3.63	5.17			N/A	N/A

09:00 - 09:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.09	0.00	0.00	0.09	0.09			N/A	N/A
2 - Newgate Lane (South)	1.16	0.04	0.44	2.87	4.62			N/A	N/A
3 - Longfield Avenue	0.38	0.00	0.00	0.38	0.38			N/A	N/A
4 - Newgate Lane (North)	1.00	0.04	0.42	2.41	3.96			N/A	N/A

2024 Base DS1, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - Newgate Lane (North) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	NGL - Longfield Avenue	Standard Roundabout		1, 2, 3, 4	10.23	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2024 Base DS1	PM	w/ Daedalus, w/out Stubbington Bypass	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 (%)
1 - Davis Way		ONE HOUR	✓	89	100.000
2 - Newgate Lane (South)		ONE HOUR	✓	1214	100.000
3 - Longfield Avenue		ONE HOUR	✓	830	100.000
4 - Newgate Lane (North)		ONE HOUR	✓	1081	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Davis Way	2 - Newgate Lane (South)	3 - Longfield Avenue	4 - Newgate Lane (North)
From	1 - Davis Way	0	25	30	34
	2 - Newgate Lane (South)	4	0	377	832
	3 - Longfield Avenue	4	717	0	109
	4 - Newgate Lane (North)	4	982	94	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Davis Way	2 - Newgate Lane (South)	3 - Longfield Avenue	4 - Newgate Lane (North)
From	1 - Davis Way	0	4	0	0
	2 - Newgate Lane (South)	0	0	1	2
	3 - Longfield Avenue	0	0	0	0
	4 - Newgate Lane (North)	33	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Davis Way	0.49	35.64	0.9	4.3	E	81	122
2 - Newgate Lane (South)	0.62	4.48	1.7	2.7	A	1114	1671
3 - Longfield Avenue	0.56	4.93	1.2	1.5	A	761	1142
4 - Newgate Lane (North)	0.86	18.68	5.9	30.3	C	992	1487

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
1 - Davis Way	67	17	1344	498	0.134	66	9	0.0	0.2	8.424	A
2 - Newgate Lane (South)	914	228	118	2194	0.417	911	1292	0.0	0.7	2.842	A
3 - Longfield Avenue	625	156	653	1879	0.332	623	376	0.0	0.5	2.857	A
4 - Newgate Lane (North)	814	203	544	1534	0.530	809	732	0.0	1.1	4.982	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
1 - Davis Way	80	20	1608	372	0.214	79	11	0.2	0.3	12.407	B
2 - Newgate Lane (South)	1091	273	142	2176	0.501	1090	1546	0.7	1.0	3.360	A
3 - Longfield Avenue	746	186	782	1780	0.419	745	450	0.5	0.7	3.475	A
4 - Newgate Lane (North)	971	243	651	1469	0.661	968	875	1.1	1.9	7.211	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
1 - Davis Way	98	24	1958	206	0.474	95	14	0.3	0.9	32.257	D
2 - Newgate Lane (South)	1337	334	171	2154	0.620	1334	1882	1.0	1.6	4.440	A
3 - Longfield Avenue	913	228	956	1646	0.555	911	549	0.7	1.2	4.890	A
4 - Newgate Lane (North)	1190	297	797	1381	0.862	1175	1071	1.9	5.6	16.640	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
1 - Davis Way	98	24	1973	199	0.491	97	14	0.9	0.9	35.644	E
2 - Newgate Lane (South)	1337	334	174	2152	0.621	1336	1897	1.6	1.7	4.477	A
3 - Longfield Avenue	913	228	958	1644	0.556	913	552	1.2	1.2	4.929	A
4 - Newgate Lane (North)	1190	297	798	1380	0.862	1188	1073	5.6	5.9	18.681	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
1 - Davis Way	80	20	1629	362	0.220	82	11	0.9	0.3	13.122	B
2 - Newgate Lane (South)	1091	273	146	2174	0.502	1094	1566	1.7	1.0	3.392	A
3 - Longfield Avenue	746	186	785	1777	0.420	748	454	1.2	0.7	3.507	A
4 - Newgate Lane (North)	971	243	654	1468	0.662	987	879	5.9	2.0	7.795	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
1 - Davis Way	67	17	1354	493	0.136	67	9	0.3	0.2	8.568	A
2 - Newgate Lane (South)	914	228	120	2193	0.417	915	1302	1.0	0.7	2.863	A
3 - Longfield Avenue	625	156	656	1876	0.333	626	379	0.7	0.5	2.880	A
4 - Newgate Lane (North)	814	203	547	1533	0.531	817	735	2.0	1.2	5.105	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.16	0.00	0.00	0.16	0.16			N/A	N/A
2 - Newgate Lane (South)	0.72	0.56	1.01	1.42	1.47			N/A	N/A
3 - Longfield Avenue	0.50	0.00	0.00	0.50	0.50			N/A	N/A
4 - Newgate Lane (North)	1.13	0.56	1.04	1.15	1.15			N/A	N/A

17:00 - 17:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.27	0.00	0.00	0.27	0.27			N/A	N/A
2 - Newgate Lane (South)	1.01	0.06	0.76	1.93	2.74			N/A	N/A
3 - Longfield Avenue	0.72	0.07	0.76	1.41	1.49			N/A	N/A
4 - Newgate Lane (North)	1.93	0.05	0.48	5.15	8.35			N/A	N/A

17:15 - 17:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.85	0.03	0.28	0.85	1.86			N/A	N/A
2 - Newgate Lane (South)	1.64	0.03	0.26	1.64	1.64			N/A	N/A
3 - Longfield Avenue	1.23	0.03	0.26	1.23	1.23			N/A	N/A
4 - Newgate Lane (North)	5.55	0.04	0.37	13.22	30.29			N/A	N/A

17:30 - 17:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.93	0.04	0.36	2.24	4.25			N/A	N/A
2 - Newgate Lane (South)	1.65	0.03	0.27	1.65	1.65			N/A	N/A
3 - Longfield Avenue	1.24	0.03	0.27	1.24	1.24			N/A	N/A
4 - Newgate Lane (North)	5.90	0.03	0.31	6.20	27.11			N/A	N/A

17:45 - 18:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.29	0.03	0.27	0.49	0.71			N/A	N/A
2 - Newgate Lane (South)	1.03	0.36	1.04	1.18	1.62			N/A	N/A
3 - Longfield Avenue	0.73	0.32	0.96	1.39	1.45			N/A	N/A
4 - Newgate Lane (North)	2.02	0.05	0.45	5.50	9.18			N/A	N/A

18:00 - 18:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.16	0.03	0.26	0.46	0.49			N/A	N/A
2 - Newgate Lane (South)	0.73	0.08	0.80	1.42	1.50			N/A	N/A
3 - Longfield Avenue	0.50	0.05	0.46	1.28	1.39			N/A	N/A
4 - Newgate Lane (North)	1.16	0.03	0.33	2.48	5.83			N/A	N/A

2024 Base + Dev DS1, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - Newgate Lane (North) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	NGL - Longfield Avenue	Standard Roundabout		1, 2, 3, 4	8.49	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2024 Base + Dev DS1	AM	w/ Daedalus, w/out Stubbington Bypass	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 (%)
1 - Davis Way		ONE HOUR	✓	60	100.000
2 - Newgate Lane (South)		ONE HOUR	✓	1554	100.000
3 - Longfield Avenue		ONE HOUR	✓	635	100.000
4 - Newgate Lane (North)		ONE HOUR	✓	1054	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Davis Way	2 - Newgate Lane (South)	3 - Longfield Avenue	4 - Newgate Lane (North)
From	1 - Davis Way	0	23	22	14
	2 - Newgate Lane (South)	55	0	428	1071
	3 - Longfield Avenue	39	437	0	159
	4 - Newgate Lane (North)	21	933	100	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Davis Way	2 - Newgate Lane (South)	3 - Longfield Avenue	4 - Newgate Lane (North)
From	1 - Davis Way	0	5	5	27
	2 - Newgate Lane (South)	4	0	3	4
	3 - Longfield Avenue	9	0	0	1
	4 - Newgate Lane (North)	5	5	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Davis Way	0.18	13.05	0.2	0.5	B	55	82
2 - Newgate Lane (South)	0.79	8.12	3.8	12.3	A	1426	2140
3 - Longfield Avenue	0.49	5.07	1.0	2.7	A	583	875
4 - Newgate Lane (North)	0.77	10.84	3.4	13.5	B	967	1451

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
1 - Davis Way	45	11	1102	613	0.073	44	86	0.0	0.1	6.930	A
2 - Newgate Lane (South)	1170	293	102	2206	0.531	1166	1044	0.0	1.2	3.573	A
3 - Longfield Avenue	478	120	856	1723	0.278	477	412	0.0	0.4	2.904	A
4 - Newgate Lane (North)	794	198	399	1623	0.489	790	934	0.0	1.0	4.532	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
1 - Davis Way	54	13	1319	510	0.105	53	103	0.1	0.1	8.634	A
2 - Newgate Lane (South)	1397	349	122	2191	0.638	1395	1250	1.2	1.8	4.676	A
3 - Longfield Avenue	571	143	1024	1593	0.359	571	493	0.4	0.6	3.542	A
4 - Newgate Lane (North)	948	237	477	1575	0.602	945	1117	1.0	1.6	6.003	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
1 - Davis Way	66	16	1611	371	0.177	65	126	0.1	0.2	12.862	B
2 - Newgate Lane (South)	1712	428	149	2171	0.788	1704	1527	1.8	3.7	7.869	A
3 - Longfield Avenue	700	175	1251	1419	0.493	698	602	0.6	1.0	5.017	A
4 - Newgate Lane (North)	1161	290	584	1510	0.768	1153	1365	1.6	3.3	10.432	B

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
1 - Davis Way	66	16	1619	368	0.178	66	127	0.2	0.2	13.051	B
2 - Newgate Lane (South)	1712	428	150	2170	0.789	1711	1534	3.7	3.8	8.122	A
3 - Longfield Avenue	700	175	1256	1414	0.495	700	605	1.0	1.0	5.068	A
4 - Newgate Lane (North)	1161	290	585	1509	0.769	1160	1370	3.3	3.4	10.839	B

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
1 - Davis Way	54	13	1330	505	0.106	54	104	0.2	0.1	8.756	A
2 - Newgate Lane (South)	1397	349	124	2190	0.638	1405	1260	3.8	1.9	4.803	A
3 - Longfield Avenue	571	143	1032	1587	0.360	573	497	1.0	0.6	3.576	A
4 - Newgate Lane (North)	948	237	479	1574	0.602	955	1125	3.4	1.6	6.200	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
1 - Davis Way	45	11	1110	609	0.074	45	87	0.1	0.1	6.991	A
2 - Newgate Lane (South)	1170	293	103	2205	0.531	1173	1052	1.9	1.2	3.625	A
3 - Longfield Avenue	478	120	861	1719	0.278	479	415	0.6	0.4	2.924	A
4 - Newgate Lane (North)	794	198	401	1621	0.489	796	939	1.6	1.0	4.610	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.09	0.00	0.00	0.09	0.09			N/A	N/A
2 - Newgate Lane (South)	1.16	0.57	1.04	1.45	1.50			N/A	N/A
3 - Longfield Avenue	0.39	0.00	0.00	0.39	0.39			N/A	N/A
4 - Newgate Lane (North)	1.00	0.58	1.05	1.48	1.53			N/A	N/A

08:00 - 08:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.13	0.00	0.00	0.13	0.13			N/A	N/A
2 - Newgate Lane (South)	1.80	0.05	0.46	4.81	7.92			N/A	N/A
3 - Longfield Avenue	0.56	0.06	0.69	1.35	1.43			N/A	N/A
4 - Newgate Lane (North)	1.57	0.05	0.60	3.89	5.91			N/A	N/A

08:15 - 08:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.23	0.03	0.28	0.51	0.54			N/A	N/A
2 - Newgate Lane (South)	3.71	0.03	0.30	3.71	12.34			N/A	N/A
3 - Longfield Avenue	0.97	0.03	0.26	0.97	0.97			N/A	N/A
4 - Newgate Lane (North)	3.33	0.03	0.31	3.33	13.46			N/A	N/A

08:30 - 08:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.24	0.03	0.29	0.52	0.55			N/A	N/A
2 - Newgate Lane (South)	3.79	0.03	0.28	3.79	3.79			N/A	N/A
3 - Longfield Avenue	0.98	0.03	0.28	0.98	2.65			N/A	N/A
4 - Newgate Lane (North)	3.42	0.03	0.29	3.42	5.62			N/A	N/A

08:45 - 09:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.13	0.00	0.00	0.13	0.13			N/A	N/A
2 - Newgate Lane (South)	1.85	0.07	1.02	4.41	6.34			N/A	N/A
3 - Longfield Avenue	0.57	0.55	1.01	1.41	1.46			N/A	N/A
4 - Newgate Lane (North)	1.62	0.06	0.86	3.86	5.61			N/A	N/A

09:00 - 09:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.09	0.00	0.00	0.09	0.09			N/A	N/A
2 - Newgate Lane (South)	1.18	0.04	0.43	2.96	4.90			N/A	N/A
3 - Longfield Avenue	0.39	0.03	0.27	0.48	0.72			N/A	N/A
4 - Newgate Lane (North)	1.02	0.04	0.41	2.52	4.19			N/A	N/A

2024 Base + Dev DS1, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - Newgate Lane (North) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	NGL - Longfield Avenue	Standard Roundabout		1, 2, 3, 4	11.13	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2024 Base + Dev DS1	PM	w/ Daedalus, w/out Stubbington Bypass	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 (%)
1 - Davis Way		ONE HOUR	✓	89	100.000
2 - Newgate Lane (South)		ONE HOUR	✓	1234	100.000
3 - Longfield Avenue		ONE HOUR	✓	839	100.000
4 - Newgate Lane (North)		ONE HOUR	✓	1094	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Davis Way	2 - Newgate Lane (South)	3 - Longfield Avenue	4 - Newgate Lane (North)
From	1 - Davis Way	0	25	30	34
	2 - Newgate Lane (South)	4	0	384	846
	3 - Longfield Avenue	4	726	0	109
	4 - Newgate Lane (North)	4	995	94	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Davis Way	2 - Newgate Lane (South)	3 - Longfield Avenue	4 - Newgate Lane (North)
From	1 - Davis Way	0	4	0	0
	2 - Newgate Lane (South)	0	0	1	2
	3 - Longfield Avenue	0	0	0	0
	4 - Newgate Lane (North)	33	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Davis Way	0.52	40.25	1.0	4.9	E	82	123
2 - Newgate Lane (South)	0.63	4.60	1.7	2.9	A	1133	1699
3 - Longfield Avenue	0.57	5.09	1.3	1.5	A	770	1155
4 - Newgate Lane (North)	0.88	20.76	6.6	33.4	C	1004	1505

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
1 - Davis Way	67	17	1361	490	0.137	66	9	0.0	0.2	8.586	A
2 - Newgate Lane (South)	929	232	118	2194	0.424	926	1309	0.0	0.7	2.876	A
3 - Longfield Avenue	632	158	664	1870	0.338	630	381	0.0	0.5	2.896	A
4 - Newgate Lane (North)	823	206	551	1530	0.538	819	742	0.0	1.2	5.080	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
1 - Davis Way	80	20	1628	363	0.221	80	11	0.2	0.3	12.836	B
2 - Newgate Lane (South)	1110	277	142	2176	0.510	1109	1566	0.7	1.0	3.417	A
3 - Longfield Avenue	754	189	794	1770	0.426	754	456	0.5	0.7	3.538	A
4 - Newgate Lane (North)	983	246	660	1464	0.672	980	888	1.2	2.0	7.453	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
1 - Davis Way	98	25	1981	195	0.502	95	14	0.3	0.9	35.594	E
2 - Newgate Lane (South)	1359	340	171	2155	0.631	1356	1906	1.0	1.7	4.560	A
3 - Longfield Avenue	924	231	971	1634	0.566	922	556	0.7	1.3	5.042	A
4 - Newgate Lane (North)	1204	301	807	1374	0.876	1188	1086	2.0	6.1	18.071	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
1 - Davis Way	98	25	1998	187	0.523	98	14	0.9	1.0	40.247	E
2 - Newgate Lane (South)	1359	340	174	2152	0.631	1359	1921	1.7	1.7	4.603	A
3 - Longfield Avenue	924	231	974	1632	0.566	924	559	1.3	1.3	5.086	A
4 - Newgate Lane (North)	1204	301	809	1373	0.877	1202	1089	6.1	6.6	20.756	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
1 - Davis Way	80	20	1652	352	0.228	83	11	1.0	0.3	13.708	B
2 - Newgate Lane (South)	1110	277	146	2173	0.511	1112	1589	1.7	1.1	3.452	A
3 - Longfield Avenue	754	189	798	1767	0.427	757	460	1.3	0.8	3.570	A
4 - Newgate Lane (North)	983	246	663	1462	0.672	1001	892	6.6	2.1	8.173	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
1 - Davis Way	67	17	1372	485	0.138	68	10	0.3	0.2	8.744	A
2 - Newgate Lane (South)	929	232	120	2193	0.424	931	1319	1.1	0.8	2.895	A
3 - Longfield Avenue	632	158	667	1868	0.338	633	383	0.8	0.5	2.918	A
4 - Newgate Lane (North)	823	206	554	1528	0.539	827	746	2.1	1.2	5.210	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.16	0.00	0.00	0.16	0.16			N/A	N/A
2 - Newgate Lane (South)	0.74	0.56	1.01	1.42	1.47			N/A	N/A
3 - Longfield Avenue	0.51	0.51	1.00	1.40	1.45			N/A	N/A
4 - Newgate Lane (North)	1.16	0.56	1.07	1.16	1.55			N/A	N/A

17:00 - 17:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.28	0.00	0.00	0.28	0.28			N/A	N/A
2 - Newgate Lane (South)	1.05	0.06	0.74	2.03	2.93			N/A	N/A
3 - Longfield Avenue	0.74	0.07	0.76	1.24	1.24			N/A	N/A
4 - Newgate Lane (North)	2.02	0.05	0.47	5.44	8.85			N/A	N/A

17:15 - 17:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.95	0.03	0.28	0.95	2.75			N/A	N/A
2 - Newgate Lane (South)	1.71	0.03	0.26	1.71	1.71			N/A	N/A
3 - Longfield Avenue	1.29	0.03	0.26	1.29	1.29			N/A	N/A
4 - Newgate Lane (North)	6.14	0.04	0.40	15.90	33.36			N/A	N/A

17:30 - 17:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	1.05	0.04	0.36	2.61	4.86			N/A	N/A
2 - Newgate Lane (South)	1.73	0.03	0.27	1.73	1.73			N/A	N/A
3 - Longfield Avenue	1.30	0.03	0.27	1.30	1.49			N/A	N/A
4 - Newgate Lane (North)	6.60	0.03	0.32	9.28	32.75			N/A	N/A

17:45 - 18:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.30	0.03	0.29	0.62	1.07			N/A	N/A
2 - Newgate Lane (South)	1.07	0.30	1.06	1.40	1.74			N/A	N/A
3 - Longfield Avenue	0.75	0.29	0.95	1.39	1.45			N/A	N/A
4 - Newgate Lane (North)	2.13	0.04	0.44	5.80	9.92			N/A	N/A

18:00 - 18:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.16	0.03	0.26	0.47	0.50			N/A	N/A
2 - Newgate Lane (South)	0.75	0.08	0.79	1.13	1.13			N/A	N/A
3 - Longfield Avenue	0.51	0.05	0.48	1.29	1.40			N/A	N/A
4 - Newgate Lane (North)	1.19	0.03	0.32	2.41	6.08			N/A	N/A

2019 Base DS2, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - Newgate Lane (North) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	NGL - Longfield Avenue	Standard Roundabout		1, 2, 3, 4	5.29	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2019 Base DS2	AM	with Stubbington Bypass	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 (%)
1 - Davis Way		ONE HOUR	✓	55	100.000
2 - Newgate Lane (South)		ONE HOUR	✓	1395	100.000
3 - Longfield Avenue		ONE HOUR	✓	268	100.000
4 - Newgate Lane (North)		ONE HOUR	✓	890	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Davis Way	2 - Newgate Lane (South)	3 - Longfield Avenue	4 - Newgate Lane (North)
From	1 - Davis Way	0	20	21	14
	2 - Newgate Lane (South)	40	0	260	1095
	3 - Longfield Avenue	38	128	0	102
	4 - Newgate Lane (North)	20	792	78	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Davis Way	2 - Newgate Lane (South)	3 - Longfield Avenue	4 - Newgate Lane (North)
From	1 - Davis Way	0	5	5	27
	2 - Newgate Lane (South)	4	0	3	4
	3 - Longfield Avenue	9	0	0	1
	4 - Newgate Lane (North)	5	6	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Davis Way	0.10	7.15	0.1	0.5	A	50	76
2 - Newgate Lane (South)	0.70	5.72	2.4	5.0	A	1280	1920
3 - Longfield Avenue	0.21	3.28	0.3	0.9	A	246	369
4 - Newgate Lane (North)	0.57	5.11	1.4	1.7	A	817	1226

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
1 - Davis Way	41	10	749	781	0.053	41	74	0.0	0.1	5.354	A
2 - Newgate Lane (South)	1050	262	85	2219	0.473	1046	705	0.0	0.9	3.180	A
3 - Longfield Avenue	202	50	862	1718	0.118	201	269	0.0	0.1	2.406	A
4 - Newgate Lane (North)	670	168	155	1771	0.379	668	908	0.0	0.6	3.454	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
1 - Davis Way	49	12	897	710	0.070	49	88	0.1	0.1	5.989	A
2 - Newgate Lane (South)	1254	313	102	2206	0.568	1252	844	0.9	1.4	3.914	A
3 - Longfield Avenue	241	60	1031	1588	0.152	241	322	0.1	0.2	2.710	A
4 - Newgate Lane (North)	800	200	185	1752	0.457	799	1087	0.6	0.9	4.001	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
1 - Davis Way	61	15	1097	615	0.098	60	108	0.1	0.1	7.136	A
2 - Newgate Lane (South)	1535	384	124	2189	0.701	1531	1033	1.4	2.4	5.651	A
3 - Longfield Avenue	295	74	1261	1410	0.209	295	394	0.2	0.3	3.272	A
4 - Newgate Lane (North)	980	245	227	1727	0.568	978	1330	0.9	1.4	5.084	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
1 - Davis Way	61	15	1099	614	0.099	61	108	0.1	0.1	7.151	A
2 - Newgate Lane (South)	1535	384	125	2189	0.701	1535	1035	2.4	2.4	5.722	A
3 - Longfield Avenue	295	74	1265	1408	0.210	295	395	0.3	0.3	3.279	A
4 - Newgate Lane (North)	980	245	227	1727	0.568	980	1333	1.4	1.4	5.112	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
1 - Davis Way	49	12	900	709	0.070	50	88	0.1	0.1	6.005	A
2 - Newgate Lane (South)	1254	313	102	2206	0.568	1258	847	2.4	1.4	3.963	A
3 - Longfield Avenue	241	60	1036	1584	0.152	241	324	0.3	0.2	2.718	A
4 - Newgate Lane (North)	800	200	186	1752	0.457	802	1092	1.4	0.9	4.027	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
1 - Davis Way	41	10	753	779	0.053	41	74	0.1	0.1	5.373	A
2 - Newgate Lane (South)	1050	262	85	2219	0.473	1052	709	1.4	0.9	3.214	A
3 - Longfield Avenue	202	50	866	1715	0.118	202	271	0.2	0.1	2.414	A
4 - Newgate Lane (North)	670	168	155	1771	0.379	671	913	0.9	0.7	3.478	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.06	0.00	0.00	0.06	0.06			N/A	N/A
2 - Newgate Lane (South)	0.93	0.57	1.04	1.46	1.51			N/A	N/A
3 - Longfield Avenue	0.13	0.00	0.00	0.13	0.13			N/A	N/A
4 - Newgate Lane (North)	0.64	0.58	1.06	1.48	1.54			N/A	N/A

08:00 - 08:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.08	0.03	0.28	0.50	0.53			N/A	N/A
2 - Newgate Lane (South)	1.35	0.05	0.53	3.26	4.96			N/A	N/A
3 - Longfield Avenue	0.18	0.00	0.00	0.18	0.18			N/A	N/A
4 - Newgate Lane (North)	0.88	0.09	0.89	1.18	1.71			N/A	N/A

08:15 - 08:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.12	0.03	0.29	0.51	0.54			N/A	N/A
2 - Newgate Lane (South)	2.39	0.03	0.28	2.39	2.39			N/A	N/A
3 - Longfield Avenue	0.27	0.03	0.26	0.46	0.49			N/A	N/A
4 - Newgate Lane (North)	1.37	0.03	0.27	1.37	1.37			N/A	N/A

08:30 - 08:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.12	0.03	0.28	0.50	0.52			N/A	N/A
2 - Newgate Lane (South)	2.42	0.03	0.27	2.42	2.42			N/A	N/A
3 - Longfield Avenue	0.27	0.03	0.28	0.50	0.92			N/A	N/A
4 - Newgate Lane (North)	1.38	0.03	0.28	1.38	1.38			N/A	N/A

08:45 - 09:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.08	0.00	0.00	0.08	0.08			N/A	N/A
2 - Newgate Lane (South)	1.38	0.12	1.19	2.39	3.02			N/A	N/A
3 - Longfield Avenue	0.18	0.00	0.00	0.18	0.18			N/A	N/A
4 - Newgate Lane (North)	0.90	0.36	1.03	1.49	1.55			N/A	N/A

09:00 - 09:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.06	0.00	0.00	0.06	0.06			N/A	N/A
2 - Newgate Lane (South)	0.94	0.06	0.70	1.81	2.48			N/A	N/A
3 - Longfield Avenue	0.14	0.00	0.00	0.14	0.14			N/A	N/A
4 - Newgate Lane (North)	0.65	0.07	0.77	1.43	1.51			N/A	N/A

2019 Base DS2, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - Newgate Lane (North) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	NGL - Longfield Avenue	Standard Roundabout		1, 2, 3, 4	4.11	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2019 Base DS2	PM	with Stubbington Bypass	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 (%)
1 - Davis Way		ONE HOUR	✓	84	100.000
2 - Newgate Lane (South)		ONE HOUR	✓	1121	100.000
3 - Longfield Avenue		ONE HOUR	✓	279	100.000
4 - Newgate Lane (North)		ONE HOUR	✓	859	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Davis Way	2 - Newgate Lane (South)	3 - Longfield Avenue	4 - Newgate Lane (North)
From	1 - Davis Way	0	22	29	33
	2 - Newgate Lane (South)	4	0	269	848
	3 - Longfield Avenue	4	172	0	104
	4 - Newgate Lane (North)	4	783	72	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Davis Way	2 - Newgate Lane (South)	3 - Longfield Avenue	4 - Newgate Lane (North)
From	1 - Davis Way	0	5	0	0
	2 - Newgate Lane (South)	0	0	1	2
	3 - Longfield Avenue	0	0	0	0
	4 - Newgate Lane (North)	33	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Davis Way	0.15	7.18	0.2	0.5	A	77	116
2 - Newgate Lane (South)	0.57	3.90	1.3	1.8	A	1029	1543
3 - Longfield Avenue	0.19	2.72	0.2	0.5	A	256	384
4 - Newgate Lane (North)	0.54	4.55	1.2	1.5	A	788	1182

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
1 - Davis Way	63	16	770	771	0.082	63	9	0.0	0.1	5.146	A
2 - Newgate Lane (South)	844	211	100	2207	0.382	842	733	0.0	0.6	2.672	A
3 - Longfield Avenue	210	53	665	1870	0.112	210	277	0.0	0.1	2.168	A
4 - Newgate Lane (North)	647	162	135	1783	0.363	644	739	0.0	0.6	3.188	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
1 - Davis Way	76	19	922	698	0.108	75	11	0.1	0.1	5.845	A
2 - Newgate Lane (South)	1008	252	120	2193	0.460	1007	877	0.6	0.9	3.080	A
3 - Longfield Avenue	251	63	795	1769	0.142	251	332	0.1	0.2	2.370	A
4 - Newgate Lane (North)	772	193	161	1767	0.437	771	885	0.6	0.8	3.650	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
1 - Davis Way	92	23	1128	600	0.154	92	13	0.1	0.2	7.167	A
2 - Newgate Lane (South)	1235	309	147	2173	0.568	1233	1074	0.9	1.3	3.881	A
3 - Longfield Avenue	307	77	973	1632	0.188	307	406	0.2	0.2	2.716	A
4 - Newgate Lane (North)	946	236	197	1745	0.542	944	1083	0.8	1.2	4.534	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
1 - Davis Way	92	23	1130	600	0.154	92	13	0.2	0.2	7.184	A
2 - Newgate Lane (South)	1235	309	147	2172	0.568	1235	1075	1.3	1.3	3.897	A
3 - Longfield Avenue	307	77	975	1631	0.188	307	407	0.2	0.2	2.719	A
4 - Newgate Lane (North)	946	236	198	1745	0.542	946	1084	1.2	1.2	4.552	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
1 - Davis Way	76	19	925	697	0.108	76	11	0.2	0.1	5.864	A
2 - Newgate Lane (South)	1008	252	120	2192	0.460	1010	880	1.3	0.9	3.095	A
3 - Longfield Avenue	251	63	798	1767	0.142	251	333	0.2	0.2	2.374	A
4 - Newgate Lane (North)	772	193	162	1767	0.437	774	887	1.2	0.8	3.671	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
1 - Davis Way	63	16	774	769	0.082	63	9	0.1	0.1	5.166	A
2 - Newgate Lane (South)	844	211	101	2207	0.382	845	736	0.9	0.6	2.687	A
3 - Longfield Avenue	210	53	667	1868	0.112	210	278	0.2	0.1	2.171	A
4 - Newgate Lane (North)	647	162	135	1783	0.363	648	742	0.8	0.6	3.206	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.09	0.00	0.00	0.09	0.09			N/A	N/A
2 - Newgate Lane (South)	0.63	0.56	1.02	1.42	1.47			N/A	N/A
3 - Longfield Avenue	0.13	0.00	0.00	0.13	0.13			N/A	N/A
4 - Newgate Lane (North)	0.57	0.56	1.01	1.41	1.47			N/A	N/A

17:00 - 17:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.12	0.00	0.00	0.12	0.12			N/A	N/A
2 - Newgate Lane (South)	0.86	0.07	0.81	1.36	1.80			N/A	N/A
3 - Longfield Avenue	0.16	0.00	0.00	0.16	0.16			N/A	N/A
4 - Newgate Lane (North)	0.78	0.09	0.83	1.19	1.19			N/A	N/A

17:15 - 17:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.18	0.03	0.26	0.47	0.49			N/A	N/A
2 - Newgate Lane (South)	1.32	0.03	0.26	1.32	1.32			N/A	N/A
3 - Longfield Avenue	0.23	0.03	0.25	0.46	0.48			N/A	N/A
4 - Newgate Lane (North)	1.18	0.03	0.26	1.18	1.18			N/A	N/A

17:30 - 17:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.18	0.03	0.25	0.46	0.48			N/A	N/A
2 - Newgate Lane (South)	1.33	0.03	0.27	1.33	1.33			N/A	N/A
3 - Longfield Avenue	0.23	0.03	0.25	0.45	0.48			N/A	N/A
4 - Newgate Lane (North)	1.19	0.03	0.27	1.19	1.19			N/A	N/A

17:45 - 18:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.12	0.00	0.00	0.12	0.12			N/A	N/A
2 - Newgate Lane (South)	0.87	0.54	1.01	1.42	1.48			N/A	N/A
3 - Longfield Avenue	0.17	0.00	0.00	0.17	0.17			N/A	N/A
4 - Newgate Lane (North)	0.79	0.52	0.99	1.41	1.46			N/A	N/A

18:00 - 18:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.09	0.00	0.00	0.09	0.09			N/A	N/A
2 - Newgate Lane (South)	0.63	0.09	0.82	1.38	1.45			N/A	N/A
3 - Longfield Avenue	0.13	0.00	0.00	0.13	0.13			N/A	N/A
4 - Newgate Lane (North)	0.58	0.07	0.73	1.36	1.44			N/A	N/A

2024 Base DS2, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - Newgate Lane (North) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	NGL - Longfield Avenue	Standard Roundabout		1, 2, 3, 4	6.33	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2024 Base DS2	AM	w/ Daedalus, w/ Stubbington Bypass	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 (%)
1 - Davis Way		ONE HOUR	✓	60	100.000
2 - Newgate Lane (South)		ONE HOUR	✓	1469	100.000
3 - Longfield Avenue		ONE HOUR	✓	297	100.000
4 - Newgate Lane (North)		ONE HOUR	✓	1035	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Davis Way	2 - Newgate Lane (South)	3 - Longfield Avenue	4 - Newgate Lane (North)
From	1 - Davis Way	0	24	22	14
	2 - Newgate Lane (South)	42	0	274	1153
	3 - Longfield Avenue	39	152	0	106
	4 - Newgate Lane (North)	21	934	81	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Davis Way	2 - Newgate Lane (South)	3 - Longfield Avenue	4 - Newgate Lane (North)
From	1 - Davis Way	0	5	5	27
	2 - Newgate Lane (South)	4	0	3	4
	3 - Longfield Avenue	9	0	0	1
	4 - Newgate Lane (North)	5	5	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Davis Way	0.13	8.56	0.2	0.5	A	55	82
2 - Newgate Lane (South)	0.74	6.56	2.9	6.2	A	1348	2021
3 - Longfield Avenue	0.24	3.54	0.3	1.3	A	272	409
4 - Newgate Lane (North)	0.67	6.66	2.1	3.5	A	950	1425

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
1 - Davis Way	45	11	875	721	0.062	45	77	0.0	0.1	5.825	A
2 - Newgate Lane (South)	1106	276	88	2217	0.499	1102	832	0.0	1.0	3.341	A
3 - Longfield Avenue	223	56	907	1683	0.133	223	282	0.0	0.2	2.495	A
4 - Newgate Lane (North)	779	195	175	1758	0.443	776	955	0.0	0.8	3.847	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
1 - Davis Way	54	13	1047	639	0.084	54	92	0.1	0.1	6.732	A
2 - Newgate Lane (South)	1320	330	105	2204	0.599	1318	996	1.0	1.5	4.213	A
3 - Longfield Avenue	267	67	1085	1546	0.173	267	338	0.2	0.2	2.850	A
4 - Newgate Lane (North)	931	233	210	1738	0.536	929	1142	0.8	1.2	4.682	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
1 - Davis Way	66	16	1281	528	0.125	66	112	0.1	0.2	8.519	A
2 - Newgate Lane (South)	1617	404	128	2186	0.740	1612	1218	1.5	2.9	6.446	A
3 - Longfield Avenue	327	82	1327	1360	0.240	326	413	0.2	0.3	3.526	A
4 - Newgate Lane (North)	1140	285	257	1709	0.667	1136	1397	1.2	2.1	6.583	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
1 - Davis Way	66	16	1284	526	0.125	66	112	0.2	0.2	8.557	A
2 - Newgate Lane (South)	1617	404	129	2186	0.740	1617	1221	2.9	2.9	6.565	A
3 - Longfield Avenue	327	82	1331	1357	0.241	327	414	0.3	0.3	3.540	A
4 - Newgate Lane (North)	1140	285	257	1709	0.667	1140	1401	2.1	2.1	6.661	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
1 - Davis Way	54	13	1052	636	0.084	54	92	0.2	0.1	6.766	A
2 - Newgate Lane (South)	1320	330	105	2203	0.599	1326	1001	2.9	1.6	4.285	A
3 - Longfield Avenue	267	67	1092	1541	0.173	267	340	0.3	0.2	2.865	A
4 - Newgate Lane (North)	931	233	210	1737	0.536	934	1149	2.1	1.2	4.743	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
1 - Davis Way	45	11	880	718	0.063	45	77	0.1	0.1	5.853	A
2 - Newgate Lane (South)	1106	276	88	2216	0.499	1108	837	1.6	1.0	3.381	A
3 - Longfield Avenue	223	56	912	1679	0.133	224	284	0.2	0.2	2.505	A
4 - Newgate Lane (North)	779	195	176	1758	0.443	781	960	1.2	0.8	3.888	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.07	0.00	0.00	0.07	0.07			N/A	N/A
2 - Newgate Lane (South)	1.03	0.57	1.04	1.45	1.51			N/A	N/A
3 - Longfield Avenue	0.15	0.00	0.00	0.15	0.15			N/A	N/A
4 - Newgate Lane (North)	0.83	0.58	1.05	1.47	1.53			N/A	N/A

08:00 - 08:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.10	0.03	0.27	0.49	0.52			N/A	N/A
2 - Newgate Lane (South)	1.53	0.05	0.49	3.93	6.17			N/A	N/A
3 - Longfield Avenue	0.21	0.00	0.00	0.21	0.21			N/A	N/A
4 - Newgate Lane (North)	1.20	0.06	0.82	2.52	3.52			N/A	N/A

08:15 - 08:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.15	0.03	0.28	0.51	0.54			N/A	N/A
2 - Newgate Lane (South)	2.87	0.03	0.29	2.87	4.89			N/A	N/A
3 - Longfield Avenue	0.32	0.03	0.26	0.46	0.49			N/A	N/A
4 - Newgate Lane (North)	2.06	0.03	0.28	2.06	2.06			N/A	N/A

08:30 - 08:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.16	0.03	0.27	0.49	0.52			N/A	N/A
2 - Newgate Lane (South)	2.91	0.03	0.28	2.91	2.91			N/A	N/A
3 - Longfield Avenue	0.32	0.03	0.32	1.03	1.29			N/A	N/A
4 - Newgate Lane (North)	2.09	0.03	0.28	2.09	2.09			N/A	N/A

08:45 - 09:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.10	0.00	0.00	0.10	0.10			N/A	N/A
2 - Newgate Lane (South)	1.57	0.09	1.17	3.11	4.24			N/A	N/A
3 - Longfield Avenue	0.21	0.00	0.00	0.21	0.21			N/A	N/A
4 - Newgate Lane (North)	1.23	0.12	1.11	1.97	2.57			N/A	N/A

09:00 - 09:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.07	0.00	0.00	0.07	0.07			N/A	N/A
2 - Newgate Lane (South)	1.04	0.05	0.51	2.30	3.43			N/A	N/A
3 - Longfield Avenue	0.16	0.00	0.00	0.16	0.16			N/A	N/A
4 - Newgate Lane (North)	0.85	0.06	0.67	1.52	2.00			N/A	N/A

2024 Base DS2, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - Newgate Lane (North) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	NGL - Longfield Avenue	Standard Roundabout		1, 2, 3, 4	4.79	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2024 Base DS2	PM	w/ Daedalus, w/ Stubbington Bypass	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 (%)
1 - Davis Way		ONE HOUR	✓	90	100.000
2 - Newgate Lane (South)		ONE HOUR	✓	1189	100.000
3 - Longfield Avenue		ONE HOUR	✓	310	100.000
4 - Newgate Lane (North)		ONE HOUR	✓	986	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Davis Way	2 - Newgate Lane (South)	3 - Longfield Avenue	4 - Newgate Lane (North)
From	1 - Davis Way	0	25	30	34
	2 - Newgate Lane (South)	4	0	285	900
	3 - Longfield Avenue	4	199	0	107
	4 - Newgate Lane (North)	4	908	74	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Davis Way	2 - Newgate Lane (South)	3 - Longfield Avenue	4 - Newgate Lane (North)
From	1 - Davis Way	0	4	0	0
	2 - Newgate Lane (South)	0	0	1	2
	3 - Longfield Avenue	0	0	0	0
	4 - Newgate Lane (North)	33	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Davis Way	0.19	8.67	0.2	0.9	A	82	123
2 - Newgate Lane (South)	0.60	4.25	1.5	2.4	A	1091	1637
3 - Longfield Avenue	0.22	2.89	0.3	1.0	A	285	427
4 - Newgate Lane (North)	0.63	5.68	1.7	2.6	A	905	1357

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
1 - Davis Way	67	17	886	716	0.094	67	9	0.0	0.1	5.612	A
2 - Newgate Lane (South)	895	224	104	2205	0.406	892	849	0.0	0.7	2.778	A
3 - Longfield Avenue	234	58	704	1839	0.127	233	292	0.0	0.1	2.241	A
4 - Newgate Lane (North)	742	186	156	1770	0.419	740	781	0.0	0.7	3.515	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
1 - Davis Way	81	20	1060	633	0.127	80	11	0.1	0.1	6.593	A
2 - Newgate Lane (South)	1069	267	124	2190	0.488	1068	1017	0.7	1.0	3.255	A
3 - Longfield Avenue	279	70	842	1733	0.161	279	350	0.1	0.2	2.475	A
4 - Newgate Lane (North)	887	222	186	1752	0.506	885	935	0.7	1.0	4.189	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
1 - Davis Way	99	25	1298	520	0.190	98	14	0.1	0.2	8.629	A
2 - Newgate Lane (South)	1309	327	152	2169	0.604	1307	1244	1.0	1.5	4.228	A
3 - Longfield Avenue	342	85	1031	1588	0.215	341	428	0.2	0.3	2.888	A
4 - Newgate Lane (North)	1086	271	228	1726	0.629	1083	1144	1.0	1.7	5.627	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
1 - Davis Way	99	25	1300	519	0.190	99	14	0.2	0.2	8.669	A
2 - Newgate Lane (South)	1309	327	152	2169	0.604	1309	1247	1.5	1.5	4.251	A
3 - Longfield Avenue	342	85	1033	1586	0.215	342	429	0.3	0.3	2.891	A
4 - Newgate Lane (North)	1086	271	228	1726	0.629	1086	1146	1.7	1.7	5.675	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
1 - Davis Way	81	20	1065	631	0.128	81	11	0.2	0.1	6.630	A
2 - Newgate Lane (South)	1069	267	125	2189	0.488	1071	1021	1.5	1.0	3.277	A
3 - Longfield Avenue	279	70	845	1731	0.161	279	351	0.3	0.2	2.480	A
4 - Newgate Lane (North)	887	222	187	1752	0.506	889	938	1.7	1.0	4.228	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
1 - Davis Way	67	17	891	713	0.095	68	9	0.1	0.1	5.641	A
2 - Newgate Lane (South)	895	224	104	2204	0.406	896	854	1.0	0.7	2.795	A
3 - Longfield Avenue	234	58	707	1837	0.127	234	293	0.2	0.1	2.247	A
4 - Newgate Lane (North)	742	186	156	1770	0.419	744	785	1.0	0.7	3.547	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.10	0.00	0.00	0.10	0.10			N/A	N/A
2 - Newgate Lane (South)	0.69	0.56	1.02	1.42	1.47			N/A	N/A
3 - Longfield Avenue	0.15	0.00	0.00	0.15	0.15			N/A	N/A
4 - Newgate Lane (North)	0.72	0.56	1.01	1.41	1.46			N/A	N/A

17:00 - 17:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.15	0.00	0.00	0.15	0.15			N/A	N/A
2 - Newgate Lane (South)	0.96	0.06	0.78	1.78	2.39			N/A	N/A
3 - Longfield Avenue	0.19	0.00	0.00	0.19	0.19			N/A	N/A
4 - Newgate Lane (North)	1.03	0.07	0.82	1.90	2.64			N/A	N/A

17:15 - 17:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.23	0.03	0.26	0.47	0.49			N/A	N/A
2 - Newgate Lane (South)	1.53	0.03	0.26	1.53	1.53			N/A	N/A
3 - Longfield Avenue	0.27	0.03	0.25	0.46	0.48			N/A	N/A
4 - Newgate Lane (North)	1.68	0.03	0.27	1.68	1.68			N/A	N/A

17:30 - 17:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.24	0.03	0.28	0.50	0.91			N/A	N/A
2 - Newgate Lane (South)	1.54	0.03	0.27	1.54	1.54			N/A	N/A
3 - Longfield Avenue	0.27	0.03	0.28	0.55	1.02			N/A	N/A
4 - Newgate Lane (North)	1.70	0.03	0.27	1.70	1.70			N/A	N/A

17:45 - 18:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.15	0.00	0.00	0.15	0.15			N/A	N/A
2 - Newgate Lane (South)	0.98	0.50	1.02	1.22	1.22			N/A	N/A
3 - Longfield Avenue	0.19	0.00	0.00	0.19	0.19			N/A	N/A
4 - Newgate Lane (North)	1.04	0.18	1.04	1.48	1.80			N/A	N/A

18:00 - 18:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.11	0.00	0.00	0.11	0.11			N/A	N/A
2 - Newgate Lane (South)	0.70	0.09	0.81	1.40	1.47			N/A	N/A
3 - Longfield Avenue	0.15	0.00	0.00	0.15	0.15			N/A	N/A
4 - Newgate Lane (North)	0.73	0.07	0.72	1.37	1.37			N/A	N/A

2024 Base + Dev DS2, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - Newgate Lane (North) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	NGL - Longfield Avenue	Standard Roundabout		1, 2, 3, 4	6.50	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2024 Base + Dev DS2	AM	w/ Daedalus, w/ Stubbington Bypass	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 (%)
1 - Davis Way		ONE HOUR	✓	60	100.000
2 - Newgate Lane (South)		ONE HOUR	✓	1482	100.000
3 - Longfield Avenue		ONE HOUR	✓	300	100.000
4 - Newgate Lane (North)		ONE HOUR	✓	1051	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Davis Way	2 - Newgate Lane (South)	3 - Longfield Avenue	4 - Newgate Lane (North)
From	1 - Davis Way	0	24	22	14
	2 - Newgate Lane (South)	42	0	276	1163
	3 - Longfield Avenue	39	155	0	106
	4 - Newgate Lane (North)	21	949	81	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Davis Way	2 - Newgate Lane (South)	3 - Longfield Avenue	4 - Newgate Lane (North)
From	1 - Davis Way	0	4	5	27
	2 - Newgate Lane (South)	4	0	3	4
	3 - Longfield Avenue	9	0	0	1
	4 - Newgate Lane (North)	5	5	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Davis Way	0.13	8.74	0.2	0.5	A	55	83
2 - Newgate Lane (South)	0.75	6.73	3.0	6.4	A	1359	2039
3 - Longfield Avenue	0.24	3.58	0.3	1.3	A	275	412
4 - Newgate Lane (North)	0.68	6.89	2.2	3.8	A	964	1446

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
1 - Davis Way	45	11	888	714	0.063	45	77	0.0	0.1	5.881	A
2 - Newgate Lane (South)	1115	279	88	2217	0.503	1111	846	0.0	1.0	3.369	A
3 - Longfield Avenue	226	56	915	1677	0.134	225	284	0.0	0.2	2.509	A
4 - Newgate Lane (North)	791	198	178	1757	0.450	788	962	0.0	0.9	3.896	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
1 - Davis Way	54	14	1064	631	0.086	54	92	0.1	0.1	6.821	A
2 - Newgate Lane (South)	1332	333	105	2204	0.604	1330	1013	1.0	1.6	4.266	A
3 - Longfield Avenue	269	67	1095	1539	0.175	269	340	0.2	0.2	2.871	A
4 - Newgate Lane (North)	945	236	212	1736	0.544	943	1151	0.9	1.2	4.770	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
1 - Davis Way	66	17	1301	518	0.128	66	112	0.1	0.2	8.700	A
2 - Newgate Lane (South)	1631	408	128	2186	0.746	1626	1239	1.6	3.0	6.601	A
3 - Longfield Avenue	330	82	1338	1351	0.244	329	415	0.2	0.3	3.566	A
4 - Newgate Lane (North)	1157	289	260	1707	0.678	1153	1408	1.2	2.2	6.798	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
1 - Davis Way	66	17	1305	517	0.128	66	113	0.2	0.2	8.743	A
2 - Newgate Lane (South)	1631	408	129	2186	0.746	1631	1242	3.0	3.0	6.731	A
3 - Longfield Avenue	330	82	1343	1348	0.245	330	417	0.3	0.3	3.581	A
4 - Newgate Lane (North)	1157	289	260	1707	0.678	1157	1412	2.2	2.2	6.890	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
1 - Davis Way	54	14	1069	629	0.086	54	92	0.2	0.1	6.860	A
2 - Newgate Lane (South)	1332	333	106	2203	0.604	1337	1018	3.0	1.6	4.346	A
3 - Longfield Avenue	269	67	1101	1534	0.176	270	342	0.3	0.2	2.887	A
4 - Newgate Lane (North)	945	236	213	1735	0.544	948	1158	2.2	1.3	4.838	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
1 - Davis Way	45	11	894	712	0.064	45	77	0.1	0.1	5.912	A
2 - Newgate Lane (South)	1115	279	88	2216	0.503	1118	851	1.6	1.1	3.411	A
3 - Longfield Avenue	226	56	920	1673	0.135	226	286	0.2	0.2	2.519	A
4 - Newgate Lane (North)	791	198	178	1757	0.450	793	968	1.3	0.9	3.937	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.07	0.00	0.00	0.07	0.07			N/A	N/A
2 - Newgate Lane (South)	1.04	0.57	1.04	1.45	1.51			N/A	N/A
3 - Longfield Avenue	0.16	0.00	0.00	0.16	0.16			N/A	N/A
4 - Newgate Lane (North)	0.86	0.58	1.05	1.47	1.53			N/A	N/A

08:00 - 08:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.10	0.00	0.00	0.10	0.10			N/A	N/A
2 - Newgate Lane (South)	1.57	0.05	0.49	4.03	6.40			N/A	N/A
3 - Longfield Avenue	0.21	0.00	0.00	0.21	0.21			N/A	N/A
4 - Newgate Lane (North)	1.24	0.06	0.80	2.69	3.80			N/A	N/A

08:15 - 08:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.16	0.03	0.28	0.51	0.54			N/A	N/A
2 - Newgate Lane (South)	2.97	0.03	0.29	2.97	5.63			N/A	N/A
3 - Longfield Avenue	0.33	0.03	0.26	0.46	0.49			N/A	N/A
4 - Newgate Lane (North)	2.17	0.03	0.28	2.17	2.17			N/A	N/A

08:30 - 08:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.16	0.03	0.27	0.49	0.52			N/A	N/A
2 - Newgate Lane (South)	3.01	0.03	0.28	3.01	3.01			N/A	N/A
3 - Longfield Avenue	0.33	0.03	0.32	1.06	1.31			N/A	N/A
4 - Newgate Lane (North)	2.19	0.03	0.28	2.19	2.19			N/A	N/A

08:45 - 09:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.10	0.00	0.00	0.10	0.10			N/A	N/A
2 - Newgate Lane (South)	1.61	0.09	1.16	3.31	4.53			N/A	N/A
3 - Longfield Avenue	0.22	0.00	0.00	0.22	0.22			N/A	N/A
4 - Newgate Lane (North)	1.27	0.11	1.12	2.08	2.82			N/A	N/A

09:00 - 09:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.07	0.00	0.00	0.07	0.07			N/A	N/A
2 - Newgate Lane (South)	1.06	0.05	0.50	2.41	3.63			N/A	N/A
3 - Longfield Avenue	0.16	0.00	0.00	0.16	0.16			N/A	N/A
4 - Newgate Lane (North)	0.87	0.06	0.64	1.65	2.12			N/A	N/A

2024 Base + Dev DS2, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - Newgate Lane (North) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	NGL - Longfield Avenue	Standard Roundabout		1, 2, 3, 4	4.92	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D15	2024 Base + Dev DS2	PM	w/ Daedalus, w/ Stubbington Bypass	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 (%)
1 - Davis Way		ONE HOUR	✓	90	100.000
2 - Newgate Lane (South)		ONE HOUR	✓	1210	100.000
3 - Longfield Avenue		ONE HOUR	✓	320	100.000
4 - Newgate Lane (North)		ONE HOUR	✓	999	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Davis Way	2 - Newgate Lane (South)	3 - Longfield Avenue	4 - Newgate Lane (North)
From	1 - Davis Way	0	26	30	34
	2 - Newgate Lane (South)	4	0	291	914
	3 - Longfield Avenue	4	209	0	107
	4 - Newgate Lane (North)	4	921	74	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Davis Way	2 - Newgate Lane (South)	3 - Longfield Avenue	4 - Newgate Lane (North)
From	1 - Davis Way	0	4	0	0
	2 - Newgate Lane (South)	0	0	1	2
	3 - Longfield Avenue	0	0	0	0
	4 - Newgate Lane (North)	33	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Davis Way	0.20	8.93	0.2	1.0	A	82	124
2 - Newgate Lane (South)	0.61	4.37	1.6	2.6	A	1110	1665
3 - Longfield Avenue	0.22	2.94	0.3	1.1	A	294	440
4 - Newgate Lane (North)	0.64	5.87	1.8	2.8	A	917	1375

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
1 - Davis Way	68	17	903	707	0.096	67	9	0.0	0.1	5.684	A
2 - Newgate Lane (South)	911	228	104	2205	0.413	908	867	0.0	0.7	2.811	A
3 - Longfield Avenue	241	60	715	1831	0.132	240	297	0.0	0.2	2.263	A
4 - Newgate Lane (North)	752	188	163	1766	0.426	749	792	0.0	0.7	3.564	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
1 - Davis Way	81	20	1081	623	0.130	81	11	0.1	0.1	6.713	A
2 - Newgate Lane (South)	1087	272	124	2190	0.497	1086	1037	0.7	1.0	3.308	A
3 - Longfield Avenue	288	72	855	1723	0.167	287	355	0.2	0.2	2.507	A
4 - Newgate Lane (North)	898	225	195	1746	0.514	897	947	0.7	1.1	4.272	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
1 - Davis Way	99	25	1322	508	0.195	99	14	0.1	0.2	8.882	A
2 - Newgate Lane (South)	1332	333	152	2169	0.614	1329	1269	1.0	1.6	4.340	A
3 - Longfield Avenue	352	88	1046	1576	0.224	352	435	0.2	0.3	2.941	A
4 - Newgate Lane (North)	1100	275	239	1720	0.640	1097	1160	1.1	1.8	5.811	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
1 - Davis Way	99	25	1325	507	0.195	99	14	0.2	0.2	8.928	A
2 - Newgate Lane (South)	1332	333	152	2169	0.614	1332	1272	1.6	1.6	4.365	A
3 - Longfield Avenue	352	88	1048	1574	0.224	352	436	0.3	0.3	2.945	A
4 - Newgate Lane (North)	1100	275	239	1720	0.640	1100	1162	1.8	1.8	5.865	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
1 - Davis Way	81	20	1085	621	0.130	81	11	0.2	0.2	6.753	A
2 - Newgate Lane (South)	1087	272	125	2189	0.497	1090	1042	1.6	1.0	3.332	A
3 - Longfield Avenue	288	72	858	1721	0.167	288	357	0.3	0.2	2.514	A
4 - Newgate Lane (North)	898	225	195	1746	0.514	901	951	1.8	1.1	4.315	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
1 - Davis Way	68	17	908	705	0.096	68	9	0.2	0.1	5.717	A
2 - Newgate Lane (South)	911	228	104	2204	0.413	912	871	1.0	0.7	2.830	A
3 - Longfield Avenue	241	60	718	1829	0.132	241	298	0.2	0.2	2.269	A
4 - Newgate Lane (North)	752	188	164	1766	0.426	754	795	1.1	0.8	3.594	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.11	0.00	0.00	0.11	0.11			N/A	N/A
2 - Newgate Lane (South)	0.71	0.56	1.01	1.42	1.47			N/A	N/A
3 - Longfield Avenue	0.15	0.00	0.00	0.15	0.15			N/A	N/A
4 - Newgate Lane (North)	0.74	0.56	1.01	1.41	1.46			N/A	N/A

17:00 - 17:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.15	0.00	0.00	0.15	0.15			N/A	N/A
2 - Newgate Lane (South)	0.99	0.06	0.76	1.88	2.63			N/A	N/A
3 - Longfield Avenue	0.20	0.00	0.00	0.20	0.20			N/A	N/A
4 - Newgate Lane (North)	1.06	0.06	0.80	1.99	2.82			N/A	N/A

17:15 - 17:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.24	0.03	0.26	0.47	0.49			N/A	N/A
2 - Newgate Lane (South)	1.59	0.03	0.26	1.59	1.59			N/A	N/A
3 - Longfield Avenue	0.29	0.03	0.25	0.45	0.48			N/A	N/A
4 - Newgate Lane (North)	1.76	0.03	0.27	1.76	1.76			N/A	N/A

17:30 - 17:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.24	0.03	0.28	0.51	1.01			N/A	N/A
2 - Newgate Lane (South)	1.61	0.03	0.27	1.61	1.61			N/A	N/A
3 - Longfield Avenue	0.29	0.03	0.29	0.79	1.15			N/A	N/A
4 - Newgate Lane (North)	1.78	0.03	0.27	1.78	1.78			N/A	N/A

17:45 - 18:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.15	0.00	0.00	0.15	0.15			N/A	N/A
2 - Newgate Lane (South)	1.01	0.40	1.03	1.50	1.50			N/A	N/A
3 - Longfield Avenue	0.20	0.00	0.00	0.20	0.20			N/A	N/A
4 - Newgate Lane (North)	1.08	0.16	1.05	1.61	1.89			N/A	N/A

18:00 - 18:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.11	0.00	0.00	0.11	0.11			N/A	N/A
2 - Newgate Lane (South)	0.72	0.08	0.81	1.41	1.49			N/A	N/A
3 - Longfield Avenue	0.15	0.00	0.00	0.15	0.15			N/A	N/A
4 - Newgate Lane (North)	0.75	0.06	0.71	1.51	1.56			N/A	N/A

<h1>Junctions 9</h1>
<h2>ARCADY 9 - Roundabout Module</h2>
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Filename: NGL-Longfield Ave Oct 19.j9

Path: \\Pg-brs-dc01\data\Bristol Projects\Bristol - Live Projects\BRS.4901 - BRS.5000\BRS.4989 - SUSTAINABLE LAND PLC - LAND TO THE NORTH OF GOSPORT ROAD, FAREHAM\Transport\7. Junction Modelling\c. ARCADY\Oct 19\AffTP

Report generation date: 17/10/2019 11:53:31

-
- »2019 Base DS1, AM
 - »2019 Base DS1, PM
 - »2024 Base DS1, AM
 - »2024 Base DS1, PM
 - »2024 Base + Dev DS1, AM
 - »2024 Base + Dev DS1, PM
 - »2019 Base DS2, AM
 - »2019 Base DS2, PM
 - »2024 Base DS2, AM
 - »2024 Base DS2, PM
 - »2024 Base + Dev DS2, AM
 - »2024 Base + Dev DS2, PM

Summary of junction performance

	AM					PM				
	Queue (PCU)	Delay (s)	RFC	LOS	Junction LOS	Queue (PCU)	Delay (s)	RFC	LOS	Junction LOS
2019 Base DS1										
1 - Davis Way	0.2	9.61	0.13	A	A	0.4	17.75	0.31	C	A
2 - Newgate Lane (South)	2.9	6.61	0.74	A		1.4	4.08	0.58	A	
3 - Longfield Avenue	0.7	4.26	0.42	A		0.9	4.17	0.49	A	
4 - Newgate Lane (North)	1.9	6.98	0.65	A		2.9	9.95	0.75	A	
2024 Base DS1										
1 - Davis Way	0.2	12.67	0.17	B	A	0.9	35.64	0.49	E	B
2 - Newgate Lane (South)	3.6	7.80	0.78	A		1.7	4.48	0.62	A	
3 - Longfield Avenue	0.9	4.95	0.49	A		1.2	4.93	0.56	A	
4 - Newgate Lane (North)	3.2	10.35	0.76	B		5.9	18.68	0.86	C	
2024 Base + Dev DS1										
1 - Davis Way	0.2	13.00	0.18	B	A	1.0	39.40	0.52	E	B
2 - Newgate Lane (South)	3.8	8.06	0.79	A		1.7	4.58	0.63	A	
3 - Longfield Avenue	1.0	5.05	0.49	A		1.3	5.06	0.56	A	
4 - Newgate Lane (North)	3.4	10.77	0.77	B		6.5	20.38	0.87	C	
2019 Base DS2										
1 - Davis Way	0.1	7.15	0.10	A	A	0.2	7.18	0.15	A	A
2 - Newgate Lane (South)	2.4	5.72	0.70	A		1.3	3.90	0.57	A	
3 - Longfield Avenue	0.3	3.28	0.21	A		0.2	2.72	0.19	A	
4 - Newgate Lane (North)	1.4	5.11	0.57	A		1.2	4.55	0.54	A	
2024 Base DS2										
1 - Davis Way	0.2	8.56	0.13	A	A	0.2	8.67	0.19	A	A
2 - Newgate Lane (South)	2.9	6.56	0.74	A		1.5	4.25	0.60	A	
3 - Longfield Avenue	0.3	3.54	0.24	A		0.3	2.89	0.22	A	
4 - Newgate Lane (North)	2.1	6.66	0.67	A		1.7	5.68	0.63	A	
2024 Base + Dev DS2										
1 - Davis Way	0.2	8.72	0.13	A	A	0.2	8.88	0.19	A	A
2 - Newgate Lane (South)	3.0	6.70	0.74	A		1.6	4.35	0.61	A	
3 - Longfield Avenue	0.3	3.57	0.24	A		0.3	2.94	0.22	A	
4 - Newgate Lane (North)	2.2	6.86	0.68	A		1.8	5.83	0.64	A	

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

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages.

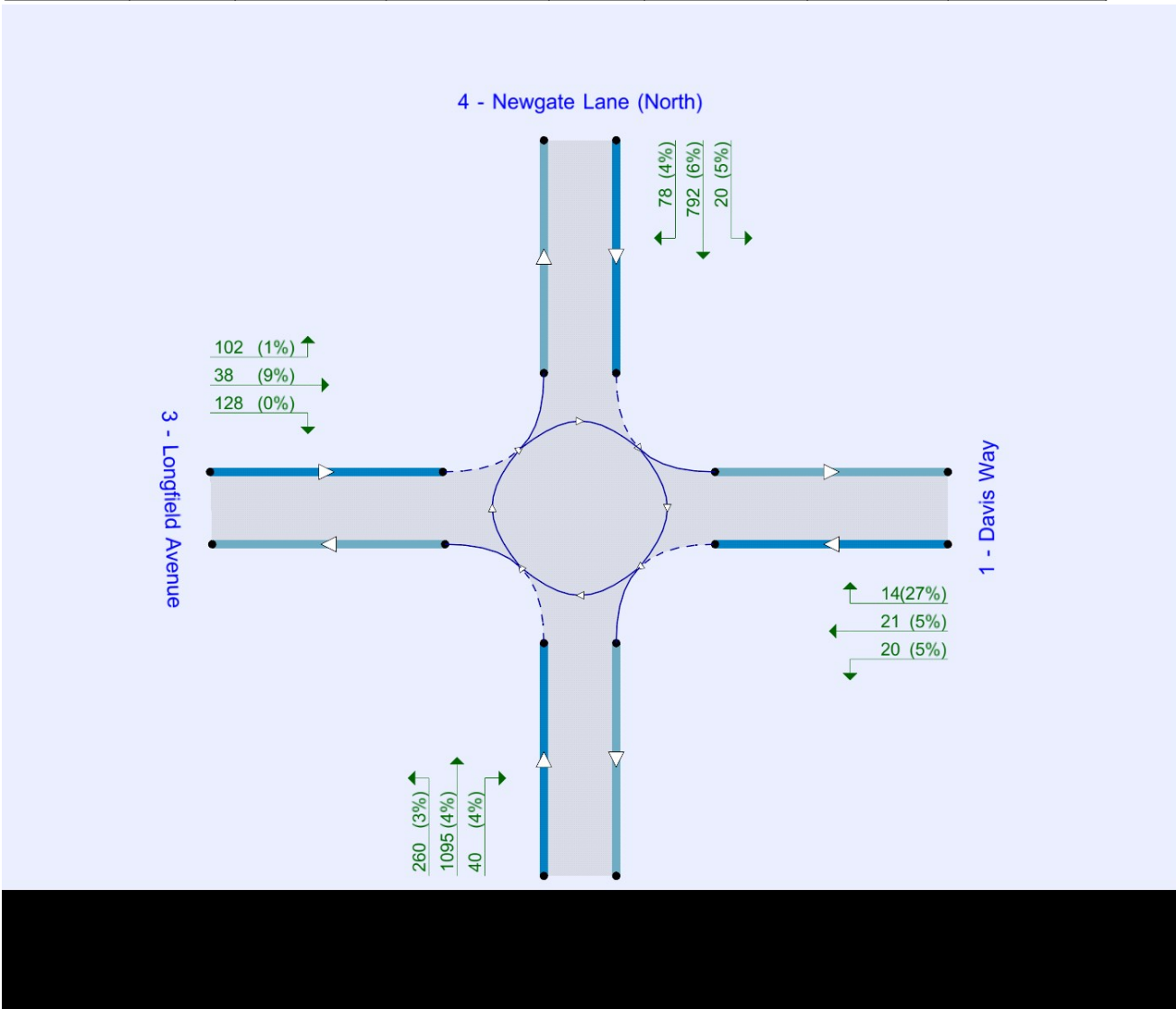
File summary

File Description

Title	Longfield Avenue Roundabout
Location	
Site number	
Date	08/10/2018
Version	V3
Status	(new file)
Identifier	
Client	
Jobnumber	BRS.4989
Enumerator	PEGASUSGROUP\Matthew Haywood
Description	Rev 3 - Updated for total of 190 dwellings

Units

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



The junction diagram reflects the last run of Junctions.

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2019 Base DS1	AM	without Stubbington Bypass	ONE HOUR	07:45	09:15	15	✓
D2	2019 Base DS1	PM	without Stubbington Bypass	ONE HOUR	16:45	18:15	15	✓
D5	2024 Base DS1	AM	w/ Daedalus, w/out Stubbington Bypass	ONE HOUR	07:45	09:15	15	✓
D6	2024 Base DS1	PM	w/ Daedalus, w/out Stubbington Bypass	ONE HOUR	16:45	18:15	15	✓
D7	2024 Base + Dev DS1	AM	w/ Daedalus, w/out Stubbington Bypass	ONE HOUR	07:45	09:15	15	✓
D8	2024 Base + Dev DS1	PM	w/ Daedalus, w/out Stubbington Bypass	ONE HOUR	16:45	18:15	15	✓
D10	2019 Base DS2	AM	with Stubbington Bypass	ONE HOUR	07:45	09:15	15	✓
D11	2019 Base DS2	PM	with Stubbington Bypass	ONE HOUR	16:45	18:15	15	✓
D12	2024 Base DS2	AM	w/ Daedalus, w/ Stubbington Bypass	ONE HOUR	07:45	09:15	15	✓
D13	2024 Base DS2	PM	w/ Daedalus, w/ Stubbington Bypass	ONE HOUR	16:45	18:15	15	✓
D14	2024 Base + Dev DS2	AM	w/ Daedalus, w/ Stubbington Bypass	ONE HOUR	07:45	09:15	15	✓
D15	2024 Base + Dev DS2	PM	w/ Daedalus, w/ Stubbington Bypass	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

2019 Base DS1, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - Newgate Lane (North) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	NGL - Longfield Avenue	Standard Roundabout		1, 2, 3, 4	6.34	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Davis Way	
2	Newgate Lane (South)	
3	Longfield Avenue	
4	Newgate Lane (North)	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Davis Way	3.50	4.90	6.7	10.0	46.0	55.0	
2 - Newgate Lane (South)	7.30	7.35	0.0	40.0	46.0	28.0	
3 - Longfield Avenue	3.65	11.40	24.8	34.0	46.0	23.0	
4 - Newgate Lane (North)	3.15	9.40	41.6	11.0	46.0	66.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Davis Way	0.475	1136
2 - Newgate Lane (South)	0.747	2282
3 - Longfield Avenue	0.770	2381
4 - Newgate Lane (North)	0.608	1865

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2019 Base DS1	AM	without Stubbington Bypass	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 (%)
1 - Davis Way		ONE HOUR	✓	55	100.000
2 - Newgate Lane (South)		ONE HOUR	✓	1461	100.000
3 - Longfield Avenue		ONE HOUR	✓	564	100.000
4 - Newgate Lane (North)		ONE HOUR	✓	917	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Davis Way	2 - Newgate Lane (South)	3 - Longfield Avenue	4 - Newgate Lane (North)
From	1 - Davis Way	0	20	21	14
	2 - Newgate Lane (South)	52	0	402	1007
	3 - Longfield Avenue	38	372	0	154
	4 - Newgate Lane (North)	20	800	97	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Davis Way	2 - Newgate Lane (South)	3 - Longfield Avenue	4 - Newgate Lane (North)
From	1 - Davis Way	0	5	5	27
	2 - Newgate Lane (South)	4	0	3	4
	3 - Longfield Avenue	9	0	0	1
	4 - Newgate Lane (North)	5	6	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Davis Way	0.13	9.61	0.2	0.5	A	50	76
2 - Newgate Lane (South)	0.74	6.61	2.9	6.2	A	1341	2011
3 - Longfield Avenue	0.42	4.26	0.7	3.1	A	518	776
4 - Newgate Lane (North)	0.65	6.98	1.9	2.9	A	841	1262

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
1 - Davis Way	41	10	952	684	0.061	41	83	0.0	0.1	6.153	A
2 - Newgate Lane (South)	1100	275	99	2208	0.498	1096	894	0.0	1.0	3.347	A
3 - Longfield Avenue	425	106	805	1762	0.241	423	390	0.0	0.3	2.706	A
4 - Newgate Lane (North)	690	173	347	1654	0.417	687	881	0.0	0.8	3.936	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
1 - Davis Way	49	12	1139	595	0.083	49	99	0.1	0.1	7.251	A
2 - Newgate Lane (South)	1313	328	118	2194	0.599	1311	1070	1.0	1.5	4.227	A
3 - Longfield Avenue	507	127	963	1640	0.309	507	467	0.3	0.4	3.196	A
4 - Newgate Lane (North)	824	206	415	1613	0.511	823	1055	0.8	1.1	4.824	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
1 - Davis Way	61	15	1393	475	0.128	60	121	0.1	0.2	9.556	A
2 - Newgate Lane (South)	1609	402	145	2174	0.740	1603	1309	1.5	2.9	6.488	A
3 - Longfield Avenue	621	155	1177	1475	0.421	620	571	0.4	0.7	4.235	A
4 - Newgate Lane (North)	1010	252	508	1556	0.649	1006	1290	1.1	1.9	6.897	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
1 - Davis Way	61	15	1397	473	0.128	61	121	0.2	0.2	9.606	A
2 - Newgate Lane (South)	1609	402	145	2174	0.740	1608	1312	2.9	2.9	6.608	A
3 - Longfield Avenue	621	155	1181	1472	0.422	621	572	0.7	0.7	4.259	A
4 - Newgate Lane (North)	1010	252	509	1556	0.649	1010	1294	1.9	1.9	6.984	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
1 - Davis Way	49	12	1145	593	0.083	50	99	0.2	0.1	7.295	A
2 - Newgate Lane (South)	1313	328	119	2193	0.599	1319	1075	2.9	1.6	4.302	A
3 - Longfield Avenue	507	127	969	1636	0.310	508	469	0.7	0.5	3.217	A
4 - Newgate Lane (North)	824	206	416	1612	0.511	828	1060	1.9	1.1	4.887	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
1 - Davis Way	41	10	957	682	0.061	42	83	0.1	0.1	6.188	A
2 - Newgate Lane (South)	1100	275	100	2208	0.498	1102	899	1.6	1.0	3.386	A
3 - Longfield Avenue	425	106	809	1758	0.241	425	392	0.5	0.3	2.722	A
4 - Newgate Lane (North)	690	173	348	1653	0.418	692	886	1.1	0.8	3.976	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.07	0.00	0.00	0.07	0.07			N/A	N/A
2 - Newgate Lane (South)	1.02	0.57	1.04	1.45	1.51			N/A	N/A
3 - Longfield Avenue	0.32	0.00	0.00	0.32	0.32			N/A	N/A
4 - Newgate Lane (North)	0.75	0.58	1.06	1.48	1.54			N/A	N/A

08:00 - 08:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.10	0.00	0.00	0.10	0.10			N/A	N/A
2 - Newgate Lane (South)	1.53	0.05	0.49	3.92	6.15			N/A	N/A
3 - Longfield Avenue	0.45	0.00	0.00	0.45	0.45			N/A	N/A
4 - Newgate Lane (North)	1.10	0.07	0.86	2.04	2.87			N/A	N/A

08:15 - 08:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.16	0.03	0.29	0.51	0.54			N/A	N/A
2 - Newgate Lane (South)	2.88	0.03	0.29	2.88	4.98			N/A	N/A
3 - Longfield Avenue	0.73	0.03	0.26	0.73	0.73			N/A	N/A
4 - Newgate Lane (North)	1.92	0.03	0.28	1.92	1.92			N/A	N/A

08:30 - 08:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.16	0.03	0.28	0.50	0.52			N/A	N/A
2 - Newgate Lane (South)	2.91	0.03	0.28	2.91	2.91			N/A	N/A
3 - Longfield Avenue	0.73	0.03	0.29	1.11	3.07			N/A	N/A
4 - Newgate Lane (North)	1.94	0.03	0.28	1.94	1.94			N/A	N/A

08:45 - 09:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.10	0.00	0.00	0.10	0.10			N/A	N/A
2 - Newgate Lane (South)	1.57	0.09	1.16	3.11	4.24			N/A	N/A
3 - Longfield Avenue	0.45	0.00	0.00	0.45	0.45			N/A	N/A
4 - Newgate Lane (North)	1.12	0.12	1.06	1.77	2.07			N/A	N/A

09:00 - 09:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.07	0.00	0.00	0.07	0.07			N/A	N/A
2 - Newgate Lane (South)	1.04	0.05	0.51	2.30	3.43			N/A	N/A
3 - Longfield Avenue	0.32	0.00	0.00	0.32	0.32			N/A	N/A
4 - Newgate Lane (North)	0.77	0.06	0.63	1.16	1.76			N/A	N/A

2019 Base DS1, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - Newgate Lane (North) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	NGL - Longfield Avenue	Standard Roundabout		1, 2, 3, 4	6.43	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2019 Base DS1	PM	without Stubbington Bypass	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 (%)
1 - Davis Way		ONE HOUR	✓	84	100.000
2 - Newgate Lane (South)		ONE HOUR	✓	1145	100.000
3 - Longfield Avenue		ONE HOUR	✓	747	100.000
4 - Newgate Lane (North)		ONE HOUR	✓	970	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Davis Way	2 - Newgate Lane (South)	3 - Longfield Avenue	4 - Newgate Lane (North)
From	1 - Davis Way	0	22	29	33
	2 - Newgate Lane (South)	4	0	356	785
	3 - Longfield Avenue	4	638	0	105
	4 - Newgate Lane (North)	4	875	91	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Davis Way	2 - Newgate Lane (South)	3 - Longfield Avenue	4 - Newgate Lane (North)
From	1 - Davis Way	0	5	0	0
	2 - Newgate Lane (South)	0	0	1	2
	3 - Longfield Avenue	0	0	0	0
	4 - Newgate Lane (North)	33	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Davis Way	0.31	17.75	0.4	1.5	C	77	116
2 - Newgate Lane (South)	0.58	4.08	1.4	2.0	A	1051	1576
3 - Longfield Avenue	0.49	4.17	0.9	1.9	A	685	1028
4 - Newgate Lane (North)	0.75	9.95	2.9	9.7	A	890	1335

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
1 - Davis Way	63	16	1203	565	0.112	63	9	0.0	0.1	7.244	A
2 - Newgate Lane (South)	862	216	114	2197	0.392	859	1151	0.0	0.7	2.728	A
3 - Longfield Avenue	562	141	617	1907	0.295	561	357	0.0	0.4	2.671	A
4 - Newgate Lane (North)	730	183	485	1570	0.465	727	693	0.0	0.9	4.296	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
1 - Davis Way	76	19	1439	453	0.167	75	11	0.1	0.2	9.639	A
2 - Newgate Lane (South)	1029	257	137	2180	0.472	1028	1378	0.7	0.9	3.170	A
3 - Longfield Avenue	672	168	738	1813	0.370	671	427	0.4	0.6	3.150	A
4 - Newgate Lane (North)	872	218	580	1512	0.577	870	829	0.9	1.4	5.646	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
1 - Davis Way	92	23	1759	301	0.307	92	13	0.2	0.4	17.330	C
2 - Newgate Lane (South)	1261	315	167	2157	0.584	1259	1683	0.9	1.4	4.057	A
3 - Longfield Avenue	822	206	903	1686	0.488	821	523	0.6	0.9	4.155	A
4 - Newgate Lane (North)	1068	267	710	1433	0.745	1062	1014	1.4	2.8	9.675	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
1 - Davis Way	92	23	1766	298	0.311	92	13	0.4	0.4	17.749	C
2 - Newgate Lane (South)	1261	315	168	2157	0.585	1261	1690	1.4	1.4	4.078	A
3 - Longfield Avenue	822	206	905	1685	0.488	822	524	0.9	0.9	4.174	A
4 - Newgate Lane (North)	1068	267	711	1433	0.745	1068	1016	2.8	2.9	9.951	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
1 - Davis Way	76	19	1449	448	0.169	76	11	0.4	0.2	9.832	A
2 - Newgate Lane (South)	1029	257	139	2179	0.472	1031	1387	1.4	0.9	3.190	A
3 - Longfield Avenue	672	168	741	1811	0.371	673	429	0.9	0.6	3.168	A
4 - Newgate Lane (North)	872	218	582	1511	0.577	878	832	2.9	1.4	5.796	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
1 - Davis Way	63	16	1210	562	0.113	64	9	0.2	0.1	7.323	A
2 - Newgate Lane (South)	862	216	116	2196	0.393	863	1158	0.9	0.7	2.745	A
3 - Longfield Avenue	562	141	620	1904	0.295	563	359	0.6	0.4	2.686	A
4 - Newgate Lane (North)	730	183	487	1569	0.465	732	696	1.4	0.9	4.359	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.13	0.00	0.00	0.13	0.13			N/A	N/A
2 - Newgate Lane (South)	0.65	0.56	1.02	1.42	1.47			N/A	N/A
3 - Longfield Avenue	0.42	0.00	0.00	0.42	0.42			N/A	N/A
4 - Newgate Lane (North)	0.87	0.56	1.01	1.41	1.47			N/A	N/A

17:00 - 17:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.20	0.00	0.00	0.20	0.20			N/A	N/A
2 - Newgate Lane (South)	0.90	0.07	0.80	1.56	1.96			N/A	N/A
3 - Longfield Avenue	0.59	0.07	0.74	1.35	1.42			N/A	N/A
4 - Newgate Lane (North)	1.36	0.05	0.62	3.23	4.83			N/A	N/A

17:15 - 17:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.44	0.03	0.26	0.47	0.50			N/A	N/A
2 - Newgate Lane (South)	1.41	0.03	0.26	1.41	1.41			N/A	N/A
3 - Longfield Avenue	0.94	0.03	0.25	0.94	0.94			N/A	N/A
4 - Newgate Lane (North)	2.84	0.03	0.29	2.84	9.73			N/A	N/A

17:30 - 17:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.45	0.03	0.34	1.39	1.54			N/A	N/A
2 - Newgate Lane (South)	1.42	0.03	0.27	1.42	1.42			N/A	N/A
3 - Longfield Avenue	0.95	0.03	0.27	0.95	1.95			N/A	N/A
4 - Newgate Lane (North)	2.90	0.03	0.28	2.90	3.79			N/A	N/A

17:45 - 18:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.21	0.00	0.00	0.21	0.21			N/A	N/A
2 - Newgate Lane (South)	0.92	0.52	1.01	1.44	1.49			N/A	N/A
3 - Longfield Avenue	0.59	0.55	1.00	1.40	1.45			N/A	N/A
4 - Newgate Lane (North)	1.40	0.07	0.90	3.02	4.34			N/A	N/A

18:00 - 18:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.13	0.00	0.00	0.13	0.13			N/A	N/A
2 - Newgate Lane (South)	0.66	0.09	0.82	1.38	1.46			N/A	N/A
3 - Longfield Avenue	0.42	0.00	0.00	0.42	0.42			N/A	N/A
4 - Newgate Lane (North)	0.89	0.04	0.41	2.03	3.35			N/A	N/A

2024 Base DS1, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - Newgate Lane (North) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	NGL - Longfield Avenue	Standard Roundabout		1, 2, 3, 4	8.16	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2024 Base DS1	AM	w/ Daedalus, w/out Stubbington Bypass	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 (%)
1 - Davis Way		ONE HOUR	✓	59	100.000
2 - Newgate Lane (South)		ONE HOUR	✓	1537	100.000
3 - Longfield Avenue		ONE HOUR	✓	630	100.000
4 - Newgate Lane (North)		ONE HOUR	✓	1043	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Davis Way	2 - Newgate Lane (South)	3 - Longfield Avenue	4 - Newgate Lane (North)
From	1 - Davis Way	0	23	22	14
	2 - Newgate Lane (South)	55	0	423	1059
	3 - Longfield Avenue	39	431	0	159
	4 - Newgate Lane (North)	21	922	100	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Davis Way	2 - Newgate Lane (South)	3 - Longfield Avenue	4 - Newgate Lane (North)
From	1 - Davis Way	0	5	5	27
	2 - Newgate Lane (South)	4	0	3	4
	3 - Longfield Avenue	9	0	0	1
	4 - Newgate Lane (North)	5	6	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Davis Way	0.17	12.67	0.2	0.5	B	54	82
2 - Newgate Lane (South)	0.78	7.80	3.6	10.7	A	1411	2116
3 - Longfield Avenue	0.49	4.95	0.9	2.7	A	578	867
4 - Newgate Lane (North)	0.76	10.35	3.2	11.9	B	957	1435

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
1 - Davis Way	45	11	1089	619	0.072	44	86	0.0	0.1	6.860	A
2 - Newgate Lane (South)	1157	289	102	2206	0.525	1153	1031	0.0	1.1	3.533	A
3 - Longfield Avenue	474	119	846	1730	0.274	473	409	0.0	0.4	2.878	A
4 - Newgate Lane (North)	785	196	394	1625	0.483	781	925	0.0	1.0	4.475	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
1 - Davis Way	53	13	1304	517	0.103	53	103	0.1	0.1	8.498	A
2 - Newgate Lane (South)	1382	345	122	2191	0.631	1379	1235	1.1	1.7	4.590	A
3 - Longfield Avenue	566	142	1013	1602	0.353	565	489	0.4	0.5	3.495	A
4 - Newgate Lane (North)	937	234	472	1578	0.594	935	1107	1.0	1.5	5.881	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
1 - Davis Way	65	16	1593	380	0.172	65	126	0.1	0.2	12.502	B
2 - Newgate Lane (South)	1692	423	149	2171	0.780	1685	1508	1.7	3.5	7.584	A
3 - Longfield Avenue	693	173	1237	1429	0.485	692	597	0.5	0.9	4.907	A
4 - Newgate Lane (North)	1148	287	577	1514	0.758	1141	1352	1.5	3.2	10.003	B

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
1 - Davis Way	65	16	1600	376	0.173	65	126	0.2	0.2	12.669	B
2 - Newgate Lane (South)	1692	423	150	2170	0.780	1692	1515	3.5	3.6	7.805	A
3 - Longfield Avenue	693	173	1242	1425	0.487	693	600	0.9	0.9	4.952	A
4 - Newgate Lane (North)	1148	287	578	1513	0.758	1148	1357	3.2	3.2	10.352	B

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
1 - Davis Way	53	13	1314	512	0.104	54	104	0.2	0.1	8.607	A
2 - Newgate Lane (South)	1382	345	124	2190	0.631	1389	1244	3.6	1.8	4.706	A
3 - Longfield Avenue	566	142	1020	1596	0.355	568	493	0.9	0.6	3.530	A
4 - Newgate Lane (North)	937	234	474	1577	0.594	944	1114	3.2	1.6	6.055	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
1 - Davis Way	45	11	1097	615	0.072	45	86	0.1	0.1	6.915	A
2 - Newgate Lane (South)	1157	289	103	2205	0.525	1160	1039	1.8	1.2	3.583	A
3 - Longfield Avenue	474	119	852	1726	0.275	475	411	0.6	0.4	2.899	A
4 - Newgate Lane (North)	785	196	396	1624	0.483	787	930	1.6	1.0	4.548	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.08	0.00	0.00	0.08	0.08			N/A	N/A
2 - Newgate Lane (South)	1.14	0.57	1.04	1.45	1.50			N/A	N/A
3 - Longfield Avenue	0.38	0.00	0.00	0.38	0.38			N/A	N/A
4 - Newgate Lane (North)	0.98	0.58	1.05	1.48	1.53			N/A	N/A

08:00 - 08:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.12	0.00	0.00	0.12	0.12			N/A	N/A
2 - Newgate Lane (South)	1.75	0.05	0.47	4.65	7.59			N/A	N/A
3 - Longfield Avenue	0.55	0.06	0.66	1.34	1.43			N/A	N/A
4 - Newgate Lane (North)	1.52	0.06	0.63	3.73	5.59			N/A	N/A

08:15 - 08:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.22	0.03	0.28	0.51	0.54			N/A	N/A
2 - Newgate Lane (South)	3.54	0.03	0.30	3.54	10.73			N/A	N/A
3 - Longfield Avenue	0.94	0.03	0.26	0.94	0.94			N/A	N/A
4 - Newgate Lane (North)	3.16	0.03	0.31	3.16	11.86			N/A	N/A

08:30 - 08:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.23	0.03	0.28	0.51	0.54			N/A	N/A
2 - Newgate Lane (South)	3.61	0.03	0.28	3.61	3.61			N/A	N/A
3 - Longfield Avenue	0.95	0.03	0.28	0.95	2.72			N/A	N/A
4 - Newgate Lane (North)	3.23	0.03	0.29	3.23	4.62			N/A	N/A

08:45 - 09:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.13	0.00	0.00	0.13	0.13			N/A	N/A
2 - Newgate Lane (South)	1.80	0.07	1.05	4.14	5.95			N/A	N/A
3 - Longfield Avenue	0.56	0.55	1.01	1.41	1.46			N/A	N/A
4 - Newgate Lane (North)	1.57	0.07	0.91	3.63	5.17			N/A	N/A

09:00 - 09:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.09	0.00	0.00	0.09	0.09			N/A	N/A
2 - Newgate Lane (South)	1.16	0.04	0.44	2.87	4.62			N/A	N/A
3 - Longfield Avenue	0.38	0.00	0.00	0.38	0.38			N/A	N/A
4 - Newgate Lane (North)	1.00	0.04	0.42	2.41	3.96			N/A	N/A

2024 Base DS1, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - Newgate Lane (North) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	NGL - Longfield Avenue	Standard Roundabout		1, 2, 3, 4	10.23	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2024 Base DS1	PM	w/ Daedalus, w/out Stubbington Bypass	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 (%)
1 - Davis Way		ONE HOUR	✓	89	100.000
2 - Newgate Lane (South)		ONE HOUR	✓	1214	100.000
3 - Longfield Avenue		ONE HOUR	✓	830	100.000
4 - Newgate Lane (North)		ONE HOUR	✓	1081	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Davis Way	2 - Newgate Lane (South)	3 - Longfield Avenue	4 - Newgate Lane (North)
From	1 - Davis Way	0	25	30	34
	2 - Newgate Lane (South)	4	0	377	832
	3 - Longfield Avenue	4	717	0	109
	4 - Newgate Lane (North)	4	982	94	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Davis Way	2 - Newgate Lane (South)	3 - Longfield Avenue	4 - Newgate Lane (North)
From	1 - Davis Way	0	4	0	0
	2 - Newgate Lane (South)	0	0	1	2
	3 - Longfield Avenue	0	0	0	0
	4 - Newgate Lane (North)	33	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Davis Way	0.49	35.64	0.9	4.3	E	81	122
2 - Newgate Lane (South)	0.62	4.48	1.7	2.7	A	1114	1671
3 - Longfield Avenue	0.56	4.93	1.2	1.5	A	761	1142
4 - Newgate Lane (North)	0.86	18.68	5.9	30.3	C	992	1487

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
1 - Davis Way	67	17	1344	498	0.134	66	9	0.0	0.2	8.424	A
2 - Newgate Lane (South)	914	228	118	2194	0.417	911	1292	0.0	0.7	2.842	A
3 - Longfield Avenue	625	156	653	1879	0.332	623	376	0.0	0.5	2.857	A
4 - Newgate Lane (North)	814	203	544	1534	0.530	809	732	0.0	1.1	4.982	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
1 - Davis Way	80	20	1608	372	0.214	79	11	0.2	0.3	12.407	B
2 - Newgate Lane (South)	1091	273	142	2176	0.501	1090	1546	0.7	1.0	3.360	A
3 - Longfield Avenue	746	186	782	1780	0.419	745	450	0.5	0.7	3.475	A
4 - Newgate Lane (North)	971	243	651	1469	0.661	968	875	1.1	1.9	7.211	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
1 - Davis Way	98	24	1958	206	0.474	95	14	0.3	0.9	32.257	D
2 - Newgate Lane (South)	1337	334	171	2154	0.620	1334	1882	1.0	1.6	4.440	A
3 - Longfield Avenue	913	228	956	1646	0.555	911	549	0.7	1.2	4.890	A
4 - Newgate Lane (North)	1190	297	797	1381	0.862	1175	1071	1.9	5.6	16.640	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
1 - Davis Way	98	24	1973	199	0.491	97	14	0.9	0.9	35.644	E
2 - Newgate Lane (South)	1337	334	174	2152	0.621	1336	1897	1.6	1.7	4.477	A
3 - Longfield Avenue	913	228	958	1644	0.556	913	552	1.2	1.2	4.929	A
4 - Newgate Lane (North)	1190	297	798	1380	0.862	1188	1073	5.6	5.9	18.681	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
1 - Davis Way	80	20	1629	362	0.220	82	11	0.9	0.3	13.122	B
2 - Newgate Lane (South)	1091	273	146	2174	0.502	1094	1566	1.7	1.0	3.392	A
3 - Longfield Avenue	746	186	785	1777	0.420	748	454	1.2	0.7	3.507	A
4 - Newgate Lane (North)	971	243	654	1468	0.662	987	879	5.9	2.0	7.795	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
1 - Davis Way	67	17	1354	493	0.136	67	9	0.3	0.2	8.568	A
2 - Newgate Lane (South)	914	228	120	2193	0.417	915	1302	1.0	0.7	2.863	A
3 - Longfield Avenue	625	156	656	1876	0.333	626	379	0.7	0.5	2.880	A
4 - Newgate Lane (North)	814	203	547	1533	0.531	817	735	2.0	1.2	5.105	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.16	0.00	0.00	0.16	0.16			N/A	N/A
2 - Newgate Lane (South)	0.72	0.56	1.01	1.42	1.47			N/A	N/A
3 - Longfield Avenue	0.50	0.00	0.00	0.50	0.50			N/A	N/A
4 - Newgate Lane (North)	1.13	0.56	1.04	1.15	1.15			N/A	N/A

17:00 - 17:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.27	0.00	0.00	0.27	0.27			N/A	N/A
2 - Newgate Lane (South)	1.01	0.06	0.76	1.93	2.74			N/A	N/A
3 - Longfield Avenue	0.72	0.07	0.76	1.41	1.49			N/A	N/A
4 - Newgate Lane (North)	1.93	0.05	0.48	5.15	8.35			N/A	N/A

17:15 - 17:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.85	0.03	0.28	0.85	1.86			N/A	N/A
2 - Newgate Lane (South)	1.64	0.03	0.26	1.64	1.64			N/A	N/A
3 - Longfield Avenue	1.23	0.03	0.26	1.23	1.23			N/A	N/A
4 - Newgate Lane (North)	5.55	0.04	0.37	13.22	30.29			N/A	N/A

17:30 - 17:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.93	0.04	0.36	2.24	4.25			N/A	N/A
2 - Newgate Lane (South)	1.65	0.03	0.27	1.65	1.65			N/A	N/A
3 - Longfield Avenue	1.24	0.03	0.27	1.24	1.24			N/A	N/A
4 - Newgate Lane (North)	5.90	0.03	0.31	6.20	27.11			N/A	N/A

17:45 - 18:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.29	0.03	0.27	0.49	0.71			N/A	N/A
2 - Newgate Lane (South)	1.03	0.36	1.04	1.18	1.62			N/A	N/A
3 - Longfield Avenue	0.73	0.32	0.96	1.39	1.45			N/A	N/A
4 - Newgate Lane (North)	2.02	0.05	0.45	5.50	9.18			N/A	N/A

18:00 - 18:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.16	0.03	0.26	0.46	0.49			N/A	N/A
2 - Newgate Lane (South)	0.73	0.08	0.80	1.42	1.50			N/A	N/A
3 - Longfield Avenue	0.50	0.05	0.46	1.28	1.39			N/A	N/A
4 - Newgate Lane (North)	1.16	0.03	0.33	2.48	5.83			N/A	N/A

2024 Base + Dev DS1, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - Newgate Lane (North) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	NGL - Longfield Avenue	Standard Roundabout		1, 2, 3, 4	8.43	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2024 Base + Dev DS1	AM	w/ Daedalus, w/out Stubbington Bypass	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 (%)
1 - Davis Way		ONE HOUR	✓	59	100.000
2 - Newgate Lane (South)		ONE HOUR	✓	1551	100.000
3 - Longfield Avenue		ONE HOUR	✓	635	100.000
4 - Newgate Lane (North)		ONE HOUR	✓	1052	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Davis Way	2 - Newgate Lane (South)	3 - Longfield Avenue	4 - Newgate Lane (North)
From	1 - Davis Way	0	23	22	14
	2 - Newgate Lane (South)	55	0	427	1069
	3 - Longfield Avenue	39	436	0	159
	4 - Newgate Lane (North)	21	931	100	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Davis Way	2 - Newgate Lane (South)	3 - Longfield Avenue	4 - Newgate Lane (North)
From	1 - Davis Way	0	5	5	27
	2 - Newgate Lane (South)	4	0	3	4
	3 - Longfield Avenue	9	0	0	1
	4 - Newgate Lane (North)	5	6	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Davis Way	0.18	13.00	0.2	0.5	B	55	82
2 - Newgate Lane (South)	0.79	8.06	3.8	12.0	A	1423	2135
3 - Longfield Avenue	0.49	5.05	1.0	2.7	A	582	873
4 - Newgate Lane (North)	0.77	10.77	3.4	13.2	B	966	1449

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
1 - Davis Way	45	11	1100	614	0.073	44	86	0.0	0.1	6.919	A
2 - Newgate Lane (South)	1168	292	102	2206	0.529	1163	1042	0.0	1.2	3.565	A
3 - Longfield Avenue	478	119	854	1724	0.277	476	411	0.0	0.4	2.899	A
4 - Newgate Lane (North)	792	198	398	1623	0.488	788	932	0.0	1.0	4.523	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
1 - Davis Way	53	13	1317	511	0.105	53	103	0.1	0.1	8.614	A
2 - Newgate Lane (South)	1394	349	122	2191	0.636	1392	1248	1.2	1.8	4.659	A
3 - Longfield Avenue	570	143	1022	1595	0.358	570	492	0.4	0.6	3.533	A
4 - Newgate Lane (North)	946	237	476	1575	0.601	944	1115	1.0	1.6	5.985	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
1 - Davis Way	65	16	1608	372	0.176	65	126	0.1	0.2	12.809	B
2 - Newgate Lane (South)	1708	427	149	2171	0.787	1700	1524	1.8	3.7	7.813	A
3 - Longfield Avenue	699	175	1248	1421	0.492	697	601	0.6	1.0	4.997	A
4 - Newgate Lane (North)	1159	290	583	1511	0.767	1152	1362	1.6	3.3	10.367	B

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
1 - Davis Way	65	16	1616	369	0.178	65	127	0.2	0.2	12.995	B
2 - Newgate Lane (South)	1708	427	150	2170	0.787	1708	1531	3.7	3.8	8.059	A
3 - Longfield Avenue	699	175	1254	1416	0.493	699	604	1.0	1.0	5.048	A
4 - Newgate Lane (North)	1159	290	584	1510	0.767	1158	1368	3.3	3.4	10.767	B

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
1 - Davis Way	53	13	1328	506	0.106	54	104	0.2	0.1	8.734	A
2 - Newgate Lane (South)	1394	349	124	2190	0.637	1402	1258	3.8	1.8	4.784	A
3 - Longfield Avenue	570	143	1029	1589	0.359	572	496	1.0	0.6	3.568	A
4 - Newgate Lane (North)	946	237	479	1574	0.601	953	1123	3.4	1.6	6.179	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
1 - Davis Way	45	11	1108	610	0.073	45	87	0.1	0.1	6.977	A
2 - Newgate Lane (South)	1168	292	103	2205	0.530	1170	1050	1.8	1.2	3.616	A
3 - Longfield Avenue	478	119	859	1720	0.278	478	414	0.6	0.4	2.919	A
4 - Newgate Lane (North)	792	198	400	1622	0.489	795	938	1.6	1.0	4.599	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.09	0.00	0.00	0.09	0.09			N/A	N/A
2 - Newgate Lane (South)	1.16	0.57	1.04	1.45	1.50			N/A	N/A
3 - Longfield Avenue	0.38	0.00	0.00	0.38	0.38			N/A	N/A
4 - Newgate Lane (North)	1.00	0.58	1.05	1.48	1.53			N/A	N/A

08:00 - 08:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.13	0.00	0.00	0.13	0.13			N/A	N/A
2 - Newgate Lane (South)	1.79	0.05	0.46	4.78	7.86			N/A	N/A
3 - Longfield Avenue	0.56	0.06	0.68	1.34	1.43			N/A	N/A
4 - Newgate Lane (North)	1.56	0.05	0.61	3.87	5.86			N/A	N/A

08:15 - 08:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.23	0.03	0.28	0.51	0.54			N/A	N/A
2 - Newgate Lane (South)	3.68	0.03	0.30	3.68	12.03			N/A	N/A
3 - Longfield Avenue	0.96	0.03	0.26	0.96	0.96			N/A	N/A
4 - Newgate Lane (North)	3.31	0.03	0.31	3.31	13.23			N/A	N/A

08:30 - 08:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.23	0.03	0.29	0.52	0.54			N/A	N/A
2 - Newgate Lane (South)	3.75	0.03	0.28	3.75	3.75			N/A	N/A
3 - Longfield Avenue	0.97	0.03	0.28	0.97	2.66			N/A	N/A
4 - Newgate Lane (North)	3.39	0.03	0.29	3.39	5.45			N/A	N/A

08:45 - 09:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.13	0.00	0.00	0.13	0.13			N/A	N/A
2 - Newgate Lane (South)	1.84	0.07	1.02	4.37	6.25			N/A	N/A
3 - Longfield Avenue	0.57	0.55	1.01	1.41	1.46			N/A	N/A
4 - Newgate Lane (North)	1.61	0.06	0.87	3.82	5.54			N/A	N/A

09:00 - 09:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.09	0.00	0.00	0.09	0.09			N/A	N/A
2 - Newgate Lane (South)	1.18	0.04	0.43	2.94	4.84			N/A	N/A
3 - Longfield Avenue	0.39	0.03	0.27	0.48	0.66			N/A	N/A
4 - Newgate Lane (North)	1.02	0.04	0.41	2.51	4.16			N/A	N/A

2024 Base + Dev DS1, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - Newgate Lane (North) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	NGL - Longfield Avenue	Standard Roundabout		1, 2, 3, 4	10.97	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2024 Base + Dev DS1	PM	w/ Daedalus, w/out Stubbington Bypass	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 (%)
1 - Davis Way		ONE HOUR	✓	89	100.000
2 - Newgate Lane (South)		ONE HOUR	✓	1231	100.000
3 - Longfield Avenue		ONE HOUR	✓	838	100.000
4 - Newgate Lane (North)		ONE HOUR	✓	1092	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Davis Way	2 - Newgate Lane (South)	3 - Longfield Avenue	4 - Newgate Lane (North)
From	1 - Davis Way	0	25	30	34
	2 - Newgate Lane (South)	4	0	383	844
	3 - Longfield Avenue	4	725	0	109
	4 - Newgate Lane (North)	4	993	94	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Davis Way	2 - Newgate Lane (South)	3 - Longfield Avenue	4 - Newgate Lane (North)
From	1 - Davis Way	0	4	0	0
	2 - Newgate Lane (South)	0	0	1	2
	3 - Longfield Avenue	0	0	0	0
	4 - Newgate Lane (North)	33	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Davis Way	0.52	39.40	1.0	4.8	E	82	123
2 - Newgate Lane (South)	0.63	4.58	1.7	2.9	A	1130	1695
3 - Longfield Avenue	0.56	5.06	1.3	1.5	A	769	1153
4 - Newgate Lane (North)	0.87	20.38	6.5	32.8	C	1002	1502

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
1 - Davis Way	67	17	1358	491	0.136	66	9	0.0	0.2	8.559	A
2 - Newgate Lane (South)	927	232	118	2194	0.423	924	1306	0.0	0.7	2.871	A
3 - Longfield Avenue	631	158	662	1872	0.337	629	380	0.0	0.5	2.891	A
4 - Newgate Lane (North)	822	205	550	1530	0.537	817	741	0.0	1.2	5.063	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
1 - Davis Way	80	20	1625	364	0.220	80	11	0.2	0.3	12.762	B
2 - Newgate Lane (South)	1107	277	142	2176	0.509	1106	1563	0.7	1.0	3.409	A
3 - Longfield Avenue	753	188	793	1771	0.425	752	455	0.5	0.7	3.528	A
4 - Newgate Lane (North)	981	245	658	1465	0.670	978	886	1.2	2.0	7.413	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
1 - Davis Way	98	25	1977	197	0.497	95	14	0.3	0.9	34.997	D
2 - Newgate Lane (South)	1356	339	171	2155	0.629	1353	1902	1.0	1.7	4.544	A
3 - Longfield Avenue	922	231	969	1635	0.564	920	555	0.7	1.3	5.018	A
4 - Newgate Lane (North)	1202	300	805	1375	0.874	1186	1084	2.0	6.0	17.820	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
1 - Davis Way	98	25	1994	189	0.518	98	14	0.9	1.0	39.403	E
2 - Newgate Lane (South)	1356	339	174	2152	0.630	1356	1917	1.7	1.7	4.584	A
3 - Longfield Avenue	922	231	972	1633	0.565	922	558	1.3	1.3	5.062	A
4 - Newgate Lane (North)	1202	300	807	1374	0.875	1200	1087	6.0	6.5	20.382	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
1 - Davis Way	80	20	1648	353	0.227	83	11	1.0	0.3	13.605	B
2 - Newgate Lane (South)	1107	277	146	2173	0.509	1110	1585	1.7	1.1	3.441	A
3 - Longfield Avenue	753	188	796	1768	0.426	755	459	1.3	0.7	3.562	A
4 - Newgate Lane (North)	981	245	661	1463	0.671	999	891	6.5	2.1	8.107	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
1 - Davis Way	67	17	1369	486	0.138	68	9	0.3	0.2	8.712	A
2 - Newgate Lane (South)	927	232	120	2193	0.423	928	1317	1.1	0.7	2.890	A
3 - Longfield Avenue	631	158	666	1869	0.337	632	383	0.7	0.5	2.913	A
4 - Newgate Lane (North)	822	205	553	1529	0.537	825	744	2.1	1.2	5.194	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.16	0.00	0.00	0.16	0.16			N/A	N/A
2 - Newgate Lane (South)	0.74	0.56	1.01	1.42	1.47			N/A	N/A
3 - Longfield Avenue	0.51	0.51	1.00	1.40	1.45			N/A	N/A
4 - Newgate Lane (North)	1.16	0.56	1.06	1.50	1.50			N/A	N/A

17:00 - 17:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.28	0.00	0.00	0.28	0.28			N/A	N/A
2 - Newgate Lane (South)	1.04	0.06	0.74	2.02	2.90			N/A	N/A
3 - Longfield Avenue	0.73	0.07	0.76	1.20	1.20			N/A	N/A
4 - Newgate Lane (North)	2.00	0.05	0.47	5.39	8.77			N/A	N/A

17:15 - 17:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.93	0.03	0.28	0.93	2.58			N/A	N/A
2 - Newgate Lane (South)	1.70	0.03	0.26	1.70	1.70			N/A	N/A
3 - Longfield Avenue	1.28	0.03	0.26	1.28	1.28			N/A	N/A
4 - Newgate Lane (North)	6.04	0.04	0.40	15.42	32.81			N/A	N/A

17:30 - 17:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	1.02	0.04	0.36	2.54	4.76			N/A	N/A
2 - Newgate Lane (South)	1.71	0.03	0.27	1.71	1.71			N/A	N/A
3 - Longfield Avenue	1.29	0.03	0.27	1.29	1.50			N/A	N/A
4 - Newgate Lane (North)	6.47	0.03	0.32	8.70	31.72			N/A	N/A

17:45 - 18:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.30	0.03	0.28	0.55	1.03			N/A	N/A
2 - Newgate Lane (South)	1.06	0.31	1.06	1.37	1.72			N/A	N/A
3 - Longfield Avenue	0.75	0.29	0.95	1.39	1.45			N/A	N/A
4 - Newgate Lane (North)	2.11	0.04	0.44	5.75	9.81			N/A	N/A

18:00 - 18:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.16	0.03	0.26	0.47	0.50			N/A	N/A
2 - Newgate Lane (South)	0.75	0.08	0.80	1.07	1.07			N/A	N/A
3 - Longfield Avenue	0.51	0.05	0.48	1.29	1.40			N/A	N/A
4 - Newgate Lane (North)	1.19	0.03	0.32	2.42	6.04			N/A	N/A

2019 Base DS2, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - Newgate Lane (North) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	NGL - Longfield Avenue	Standard Roundabout		1, 2, 3, 4	5.29	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2019 Base DS2	AM	with Stubbington Bypass	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 (%)
1 - Davis Way		ONE HOUR	✓	55	100.000
2 - Newgate Lane (South)		ONE HOUR	✓	1395	100.000
3 - Longfield Avenue		ONE HOUR	✓	268	100.000
4 - Newgate Lane (North)		ONE HOUR	✓	890	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Davis Way	2 - Newgate Lane (South)	3 - Longfield Avenue	4 - Newgate Lane (North)
From	1 - Davis Way	0	20	21	14
	2 - Newgate Lane (South)	40	0	260	1095
	3 - Longfield Avenue	38	128	0	102
	4 - Newgate Lane (North)	20	792	78	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Davis Way	2 - Newgate Lane (South)	3 - Longfield Avenue	4 - Newgate Lane (North)
From	1 - Davis Way	0	5	5	27
	2 - Newgate Lane (South)	4	0	3	4
	3 - Longfield Avenue	9	0	0	1
	4 - Newgate Lane (North)	5	6	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Davis Way	0.10	7.15	0.1	0.5	A	50	76
2 - Newgate Lane (South)	0.70	5.72	2.4	5.0	A	1280	1920
3 - Longfield Avenue	0.21	3.28	0.3	0.9	A	246	369
4 - Newgate Lane (North)	0.57	5.11	1.4	1.7	A	817	1226

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
1 - Davis Way	41	10	749	781	0.053	41	74	0.0	0.1	5.354	A
2 - Newgate Lane (South)	1050	262	85	2219	0.473	1046	705	0.0	0.9	3.180	A
3 - Longfield Avenue	202	50	862	1718	0.118	201	269	0.0	0.1	2.406	A
4 - Newgate Lane (North)	670	168	155	1771	0.379	668	908	0.0	0.6	3.454	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
1 - Davis Way	49	12	897	710	0.070	49	88	0.1	0.1	5.989	A
2 - Newgate Lane (South)	1254	313	102	2206	0.568	1252	844	0.9	1.4	3.914	A
3 - Longfield Avenue	241	60	1031	1588	0.152	241	322	0.1	0.2	2.710	A
4 - Newgate Lane (North)	800	200	185	1752	0.457	799	1087	0.6	0.9	4.001	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
1 - Davis Way	61	15	1097	615	0.098	60	108	0.1	0.1	7.136	A
2 - Newgate Lane (South)	1535	384	124	2189	0.701	1531	1033	1.4	2.4	5.651	A
3 - Longfield Avenue	295	74	1261	1410	0.209	295	394	0.2	0.3	3.272	A
4 - Newgate Lane (North)	980	245	227	1727	0.568	978	1330	0.9	1.4	5.084	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
1 - Davis Way	61	15	1099	614	0.099	61	108	0.1	0.1	7.151	A
2 - Newgate Lane (South)	1535	384	125	2189	0.701	1535	1035	2.4	2.4	5.722	A
3 - Longfield Avenue	295	74	1265	1408	0.210	295	395	0.3	0.3	3.279	A
4 - Newgate Lane (North)	980	245	227	1727	0.568	980	1333	1.4	1.4	5.112	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
1 - Davis Way	49	12	900	709	0.070	50	88	0.1	0.1	6.005	A
2 - Newgate Lane (South)	1254	313	102	2206	0.568	1258	847	2.4	1.4	3.963	A
3 - Longfield Avenue	241	60	1036	1584	0.152	241	324	0.3	0.2	2.718	A
4 - Newgate Lane (North)	800	200	186	1752	0.457	802	1092	1.4	0.9	4.027	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
1 - Davis Way	41	10	753	779	0.053	41	74	0.1	0.1	5.373	A
2 - Newgate Lane (South)	1050	262	85	2219	0.473	1052	709	1.4	0.9	3.214	A
3 - Longfield Avenue	202	50	866	1715	0.118	202	271	0.2	0.1	2.414	A
4 - Newgate Lane (North)	670	168	155	1771	0.379	671	913	0.9	0.7	3.478	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.06	0.00	0.00	0.06	0.06			N/A	N/A
2 - Newgate Lane (South)	0.93	0.57	1.04	1.46	1.51			N/A	N/A
3 - Longfield Avenue	0.13	0.00	0.00	0.13	0.13			N/A	N/A
4 - Newgate Lane (North)	0.64	0.58	1.06	1.48	1.54			N/A	N/A

08:00 - 08:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.08	0.03	0.28	0.50	0.53			N/A	N/A
2 - Newgate Lane (South)	1.35	0.05	0.53	3.26	4.96			N/A	N/A
3 - Longfield Avenue	0.18	0.00	0.00	0.18	0.18			N/A	N/A
4 - Newgate Lane (North)	0.88	0.09	0.89	1.18	1.71			N/A	N/A

08:15 - 08:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.12	0.03	0.29	0.51	0.54			N/A	N/A
2 - Newgate Lane (South)	2.39	0.03	0.28	2.39	2.39			N/A	N/A
3 - Longfield Avenue	0.27	0.03	0.26	0.46	0.49			N/A	N/A
4 - Newgate Lane (North)	1.37	0.03	0.27	1.37	1.37			N/A	N/A

08:30 - 08:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.12	0.03	0.28	0.50	0.52			N/A	N/A
2 - Newgate Lane (South)	2.42	0.03	0.27	2.42	2.42			N/A	N/A
3 - Longfield Avenue	0.27	0.03	0.28	0.50	0.92			N/A	N/A
4 - Newgate Lane (North)	1.38	0.03	0.28	1.38	1.38			N/A	N/A

08:45 - 09:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.08	0.00	0.00	0.08	0.08			N/A	N/A
2 - Newgate Lane (South)	1.38	0.12	1.19	2.39	3.02			N/A	N/A
3 - Longfield Avenue	0.18	0.00	0.00	0.18	0.18			N/A	N/A
4 - Newgate Lane (North)	0.90	0.36	1.03	1.49	1.55			N/A	N/A

09:00 - 09:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.06	0.00	0.00	0.06	0.06			N/A	N/A
2 - Newgate Lane (South)	0.94	0.06	0.70	1.81	2.48			N/A	N/A
3 - Longfield Avenue	0.14	0.00	0.00	0.14	0.14			N/A	N/A
4 - Newgate Lane (North)	0.65	0.07	0.77	1.43	1.51			N/A	N/A

2019 Base DS2, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - Newgate Lane (North) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	NGL - Longfield Avenue	Standard Roundabout		1, 2, 3, 4	4.11	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2019 Base DS2	PM	with Stubbington Bypass	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 (%)
1 - Davis Way		ONE HOUR	✓	84	100.000
2 - Newgate Lane (South)		ONE HOUR	✓	1121	100.000
3 - Longfield Avenue		ONE HOUR	✓	279	100.000
4 - Newgate Lane (North)		ONE HOUR	✓	859	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Davis Way	2 - Newgate Lane (South)	3 - Longfield Avenue	4 - Newgate Lane (North)
From	1 - Davis Way	0	22	29	33
	2 - Newgate Lane (South)	4	0	269	848
	3 - Longfield Avenue	4	172	0	104
	4 - Newgate Lane (North)	4	783	72	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Davis Way	2 - Newgate Lane (South)	3 - Longfield Avenue	4 - Newgate Lane (North)
From	1 - Davis Way	0	5	0	0
	2 - Newgate Lane (South)	0	0	1	2
	3 - Longfield Avenue	0	0	0	0
	4 - Newgate Lane (North)	33	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Davis Way	0.15	7.18	0.2	0.5	A	77	116
2 - Newgate Lane (South)	0.57	3.90	1.3	1.8	A	1029	1543
3 - Longfield Avenue	0.19	2.72	0.2	0.5	A	256	384
4 - Newgate Lane (North)	0.54	4.55	1.2	1.5	A	788	1182

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
1 - Davis Way	63	16	770	771	0.082	63	9	0.0	0.1	5.146	A
2 - Newgate Lane (South)	844	211	100	2207	0.382	842	733	0.0	0.6	2.672	A
3 - Longfield Avenue	210	53	665	1870	0.112	210	277	0.0	0.1	2.168	A
4 - Newgate Lane (North)	647	162	135	1783	0.363	644	739	0.0	0.6	3.188	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
1 - Davis Way	76	19	922	698	0.108	75	11	0.1	0.1	5.845	A
2 - Newgate Lane (South)	1008	252	120	2193	0.460	1007	877	0.6	0.9	3.080	A
3 - Longfield Avenue	251	63	795	1769	0.142	251	332	0.1	0.2	2.370	A
4 - Newgate Lane (North)	772	193	161	1767	0.437	771	885	0.6	0.8	3.650	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
1 - Davis Way	92	23	1128	600	0.154	92	13	0.1	0.2	7.167	A
2 - Newgate Lane (South)	1235	309	147	2173	0.568	1233	1074	0.9	1.3	3.881	A
3 - Longfield Avenue	307	77	973	1632	0.188	307	406	0.2	0.2	2.716	A
4 - Newgate Lane (North)	946	236	197	1745	0.542	944	1083	0.8	1.2	4.534	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
1 - Davis Way	92	23	1130	600	0.154	92	13	0.2	0.2	7.184	A
2 - Newgate Lane (South)	1235	309	147	2172	0.568	1235	1075	1.3	1.3	3.897	A
3 - Longfield Avenue	307	77	975	1631	0.188	307	407	0.2	0.2	2.719	A
4 - Newgate Lane (North)	946	236	198	1745	0.542	946	1084	1.2	1.2	4.552	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
1 - Davis Way	76	19	925	697	0.108	76	11	0.2	0.1	5.864	A
2 - Newgate Lane (South)	1008	252	120	2192	0.460	1010	880	1.3	0.9	3.095	A
3 - Longfield Avenue	251	63	798	1767	0.142	251	333	0.2	0.2	2.374	A
4 - Newgate Lane (North)	772	193	162	1767	0.437	774	887	1.2	0.8	3.671	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
1 - Davis Way	63	16	774	769	0.082	63	9	0.1	0.1	5.166	A
2 - Newgate Lane (South)	844	211	101	2207	0.382	845	736	0.9	0.6	2.687	A
3 - Longfield Avenue	210	53	667	1868	0.112	210	278	0.2	0.1	2.171	A
4 - Newgate Lane (North)	647	162	135	1783	0.363	648	742	0.8	0.6	3.206	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.09	0.00	0.00	0.09	0.09			N/A	N/A
2 - Newgate Lane (South)	0.63	0.56	1.02	1.42	1.47			N/A	N/A
3 - Longfield Avenue	0.13	0.00	0.00	0.13	0.13			N/A	N/A
4 - Newgate Lane (North)	0.57	0.56	1.01	1.41	1.47			N/A	N/A

17:00 - 17:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.12	0.00	0.00	0.12	0.12			N/A	N/A
2 - Newgate Lane (South)	0.86	0.07	0.81	1.36	1.80			N/A	N/A
3 - Longfield Avenue	0.16	0.00	0.00	0.16	0.16			N/A	N/A
4 - Newgate Lane (North)	0.78	0.09	0.83	1.19	1.19			N/A	N/A

17:15 - 17:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.18	0.03	0.26	0.47	0.49			N/A	N/A
2 - Newgate Lane (South)	1.32	0.03	0.26	1.32	1.32			N/A	N/A
3 - Longfield Avenue	0.23	0.03	0.25	0.46	0.48			N/A	N/A
4 - Newgate Lane (North)	1.18	0.03	0.26	1.18	1.18			N/A	N/A

17:30 - 17:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.18	0.03	0.25	0.46	0.48			N/A	N/A
2 - Newgate Lane (South)	1.33	0.03	0.27	1.33	1.33			N/A	N/A
3 - Longfield Avenue	0.23	0.03	0.25	0.45	0.48			N/A	N/A
4 - Newgate Lane (North)	1.19	0.03	0.27	1.19	1.19			N/A	N/A

17:45 - 18:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.12	0.00	0.00	0.12	0.12			N/A	N/A
2 - Newgate Lane (South)	0.87	0.54	1.01	1.42	1.48			N/A	N/A
3 - Longfield Avenue	0.17	0.00	0.00	0.17	0.17			N/A	N/A
4 - Newgate Lane (North)	0.79	0.52	0.99	1.41	1.46			N/A	N/A

18:00 - 18:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.09	0.00	0.00	0.09	0.09			N/A	N/A
2 - Newgate Lane (South)	0.63	0.09	0.82	1.38	1.45			N/A	N/A
3 - Longfield Avenue	0.13	0.00	0.00	0.13	0.13			N/A	N/A
4 - Newgate Lane (North)	0.58	0.07	0.73	1.36	1.44			N/A	N/A

2024 Base DS2, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - Newgate Lane (North) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	NGL - Longfield Avenue	Standard Roundabout		1, 2, 3, 4	6.33	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2024 Base DS2	AM	w/ Daedalus, w/ Stubbington Bypass	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 (%)
1 - Davis Way		ONE HOUR	✓	60	100.000
2 - Newgate Lane (South)		ONE HOUR	✓	1469	100.000
3 - Longfield Avenue		ONE HOUR	✓	297	100.000
4 - Newgate Lane (North)		ONE HOUR	✓	1035	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Davis Way	2 - Newgate Lane (South)	3 - Longfield Avenue	4 - Newgate Lane (North)
From	1 - Davis Way	0	24	22	14
	2 - Newgate Lane (South)	42	0	274	1153
	3 - Longfield Avenue	39	152	0	106
	4 - Newgate Lane (North)	21	934	81	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Davis Way	2 - Newgate Lane (South)	3 - Longfield Avenue	4 - Newgate Lane (North)
From	1 - Davis Way	0	5	5	27
	2 - Newgate Lane (South)	4	0	3	4
	3 - Longfield Avenue	9	0	0	1
	4 - Newgate Lane (North)	5	5	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Davis Way	0.13	8.56	0.2	0.5	A	55	82
2 - Newgate Lane (South)	0.74	6.56	2.9	6.2	A	1348	2021
3 - Longfield Avenue	0.24	3.54	0.3	1.3	A	272	409
4 - Newgate Lane (North)	0.67	6.66	2.1	3.5	A	950	1425

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
1 - Davis Way	45	11	875	721	0.062	45	77	0.0	0.1	5.825	A
2 - Newgate Lane (South)	1106	276	88	2217	0.499	1102	832	0.0	1.0	3.341	A
3 - Longfield Avenue	223	56	907	1683	0.133	223	282	0.0	0.2	2.495	A
4 - Newgate Lane (North)	779	195	175	1758	0.443	776	955	0.0	0.8	3.847	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
1 - Davis Way	54	13	1047	639	0.084	54	92	0.1	0.1	6.732	A
2 - Newgate Lane (South)	1320	330	105	2204	0.599	1318	996	1.0	1.5	4.213	A
3 - Longfield Avenue	267	67	1085	1546	0.173	267	338	0.2	0.2	2.850	A
4 - Newgate Lane (North)	931	233	210	1738	0.536	929	1142	0.8	1.2	4.682	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
1 - Davis Way	66	16	1281	528	0.125	66	112	0.1	0.2	8.519	A
2 - Newgate Lane (South)	1617	404	128	2186	0.740	1612	1218	1.5	2.9	6.446	A
3 - Longfield Avenue	327	82	1327	1360	0.240	326	413	0.2	0.3	3.526	A
4 - Newgate Lane (North)	1140	285	257	1709	0.667	1136	1397	1.2	2.1	6.583	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
1 - Davis Way	66	16	1284	526	0.125	66	112	0.2	0.2	8.557	A
2 - Newgate Lane (South)	1617	404	129	2186	0.740	1617	1221	2.9	2.9	6.565	A
3 - Longfield Avenue	327	82	1331	1357	0.241	327	414	0.3	0.3	3.540	A
4 - Newgate Lane (North)	1140	285	257	1709	0.667	1140	1401	2.1	2.1	6.661	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
1 - Davis Way	54	13	1052	636	0.084	54	92	0.2	0.1	6.766	A
2 - Newgate Lane (South)	1320	330	105	2203	0.599	1326	1001	2.9	1.6	4.285	A
3 - Longfield Avenue	267	67	1092	1541	0.173	267	340	0.3	0.2	2.865	A
4 - Newgate Lane (North)	931	233	210	1737	0.536	934	1149	2.1	1.2	4.743	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
1 - Davis Way	45	11	880	718	0.063	45	77	0.1	0.1	5.853	A
2 - Newgate Lane (South)	1106	276	88	2216	0.499	1108	837	1.6	1.0	3.381	A
3 - Longfield Avenue	223	56	912	1679	0.133	224	284	0.2	0.2	2.505	A
4 - Newgate Lane (North)	779	195	176	1758	0.443	781	960	1.2	0.8	3.888	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.07	0.00	0.00	0.07	0.07			N/A	N/A
2 - Newgate Lane (South)	1.03	0.57	1.04	1.45	1.51			N/A	N/A
3 - Longfield Avenue	0.15	0.00	0.00	0.15	0.15			N/A	N/A
4 - Newgate Lane (North)	0.83	0.58	1.05	1.47	1.53			N/A	N/A

08:00 - 08:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.10	0.03	0.27	0.49	0.52			N/A	N/A
2 - Newgate Lane (South)	1.53	0.05	0.49	3.93	6.17			N/A	N/A
3 - Longfield Avenue	0.21	0.00	0.00	0.21	0.21			N/A	N/A
4 - Newgate Lane (North)	1.20	0.06	0.82	2.52	3.52			N/A	N/A

08:15 - 08:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.15	0.03	0.28	0.51	0.54			N/A	N/A
2 - Newgate Lane (South)	2.87	0.03	0.29	2.87	4.89			N/A	N/A
3 - Longfield Avenue	0.32	0.03	0.26	0.46	0.49			N/A	N/A
4 - Newgate Lane (North)	2.06	0.03	0.28	2.06	2.06			N/A	N/A

08:30 - 08:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.16	0.03	0.27	0.49	0.52			N/A	N/A
2 - Newgate Lane (South)	2.91	0.03	0.28	2.91	2.91			N/A	N/A
3 - Longfield Avenue	0.32	0.03	0.32	1.03	1.29			N/A	N/A
4 - Newgate Lane (North)	2.09	0.03	0.28	2.09	2.09			N/A	N/A

08:45 - 09:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.10	0.00	0.00	0.10	0.10			N/A	N/A
2 - Newgate Lane (South)	1.57	0.09	1.17	3.11	4.24			N/A	N/A
3 - Longfield Avenue	0.21	0.00	0.00	0.21	0.21			N/A	N/A
4 - Newgate Lane (North)	1.23	0.12	1.11	1.97	2.57			N/A	N/A

09:00 - 09:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.07	0.00	0.00	0.07	0.07			N/A	N/A
2 - Newgate Lane (South)	1.04	0.05	0.51	2.30	3.43			N/A	N/A
3 - Longfield Avenue	0.16	0.00	0.00	0.16	0.16			N/A	N/A
4 - Newgate Lane (North)	0.85	0.06	0.67	1.52	2.00			N/A	N/A

2024 Base DS2, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - Newgate Lane (North) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	NGL - Longfield Avenue	Standard Roundabout		1, 2, 3, 4	4.79	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2024 Base DS2	PM	w/ Daedalus, w/ Stubbington Bypass	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 (%)
1 - Davis Way		ONE HOUR	✓	90	100.000
2 - Newgate Lane (South)		ONE HOUR	✓	1189	100.000
3 - Longfield Avenue		ONE HOUR	✓	310	100.000
4 - Newgate Lane (North)		ONE HOUR	✓	986	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Davis Way	2 - Newgate Lane (South)	3 - Longfield Avenue	4 - Newgate Lane (North)
From	1 - Davis Way	0	25	30	34
	2 - Newgate Lane (South)	4	0	285	900
	3 - Longfield Avenue	4	199	0	107
	4 - Newgate Lane (North)	4	908	74	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Davis Way	2 - Newgate Lane (South)	3 - Longfield Avenue	4 - Newgate Lane (North)
From	1 - Davis Way	0	4	0	0
	2 - Newgate Lane (South)	0	0	1	2
	3 - Longfield Avenue	0	0	0	0
	4 - Newgate Lane (North)	33	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Davis Way	0.19	8.67	0.2	0.9	A	82	123
2 - Newgate Lane (South)	0.60	4.25	1.5	2.4	A	1091	1637
3 - Longfield Avenue	0.22	2.89	0.3	1.0	A	285	427
4 - Newgate Lane (North)	0.63	5.68	1.7	2.6	A	905	1357

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
1 - Davis Way	67	17	886	716	0.094	67	9	0.0	0.1	5.612	A
2 - Newgate Lane (South)	895	224	104	2205	0.406	892	849	0.0	0.7	2.778	A
3 - Longfield Avenue	234	58	704	1839	0.127	233	292	0.0	0.1	2.241	A
4 - Newgate Lane (North)	742	186	156	1770	0.419	740	781	0.0	0.7	3.515	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
1 - Davis Way	81	20	1060	633	0.127	80	11	0.1	0.1	6.593	A
2 - Newgate Lane (South)	1069	267	124	2190	0.488	1068	1017	0.7	1.0	3.255	A
3 - Longfield Avenue	279	70	842	1733	0.161	279	350	0.1	0.2	2.475	A
4 - Newgate Lane (North)	887	222	186	1752	0.506	885	935	0.7	1.0	4.189	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
1 - Davis Way	99	25	1298	520	0.190	98	14	0.1	0.2	8.629	A
2 - Newgate Lane (South)	1309	327	152	2169	0.604	1307	1244	1.0	1.5	4.228	A
3 - Longfield Avenue	342	85	1031	1588	0.215	341	428	0.2	0.3	2.888	A
4 - Newgate Lane (North)	1086	271	228	1726	0.629	1083	1144	1.0	1.7	5.627	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
1 - Davis Way	99	25	1300	519	0.190	99	14	0.2	0.2	8.669	A
2 - Newgate Lane (South)	1309	327	152	2169	0.604	1309	1247	1.5	1.5	4.251	A
3 - Longfield Avenue	342	85	1033	1586	0.215	342	429	0.3	0.3	2.891	A
4 - Newgate Lane (North)	1086	271	228	1726	0.629	1086	1146	1.7	1.7	5.675	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
1 - Davis Way	81	20	1065	631	0.128	81	11	0.2	0.1	6.630	A
2 - Newgate Lane (South)	1069	267	125	2189	0.488	1071	1021	1.5	1.0	3.277	A
3 - Longfield Avenue	279	70	845	1731	0.161	279	351	0.3	0.2	2.480	A
4 - Newgate Lane (North)	887	222	187	1752	0.506	889	938	1.7	1.0	4.228	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
1 - Davis Way	67	17	891	713	0.095	68	9	0.1	0.1	5.641	A
2 - Newgate Lane (South)	895	224	104	2204	0.406	896	854	1.0	0.7	2.795	A
3 - Longfield Avenue	234	58	707	1837	0.127	234	293	0.2	0.1	2.247	A
4 - Newgate Lane (North)	742	186	156	1770	0.419	744	785	1.0	0.7	3.547	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.10	0.00	0.00	0.10	0.10			N/A	N/A
2 - Newgate Lane (South)	0.69	0.56	1.02	1.42	1.47			N/A	N/A
3 - Longfield Avenue	0.15	0.00	0.00	0.15	0.15			N/A	N/A
4 - Newgate Lane (North)	0.72	0.56	1.01	1.41	1.46			N/A	N/A

17:00 - 17:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.15	0.00	0.00	0.15	0.15			N/A	N/A
2 - Newgate Lane (South)	0.96	0.06	0.78	1.78	2.39			N/A	N/A
3 - Longfield Avenue	0.19	0.00	0.00	0.19	0.19			N/A	N/A
4 - Newgate Lane (North)	1.03	0.07	0.82	1.90	2.64			N/A	N/A

17:15 - 17:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.23	0.03	0.26	0.47	0.49			N/A	N/A
2 - Newgate Lane (South)	1.53	0.03	0.26	1.53	1.53			N/A	N/A
3 - Longfield Avenue	0.27	0.03	0.25	0.46	0.48			N/A	N/A
4 - Newgate Lane (North)	1.68	0.03	0.27	1.68	1.68			N/A	N/A

17:30 - 17:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.24	0.03	0.28	0.50	0.91			N/A	N/A
2 - Newgate Lane (South)	1.54	0.03	0.27	1.54	1.54			N/A	N/A
3 - Longfield Avenue	0.27	0.03	0.28	0.55	1.02			N/A	N/A
4 - Newgate Lane (North)	1.70	0.03	0.27	1.70	1.70			N/A	N/A

17:45 - 18:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.15	0.00	0.00	0.15	0.15			N/A	N/A
2 - Newgate Lane (South)	0.98	0.50	1.02	1.22	1.22			N/A	N/A
3 - Longfield Avenue	0.19	0.00	0.00	0.19	0.19			N/A	N/A
4 - Newgate Lane (North)	1.04	0.18	1.04	1.48	1.80			N/A	N/A

18:00 - 18:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.11	0.00	0.00	0.11	0.11			N/A	N/A
2 - Newgate Lane (South)	0.70	0.09	0.81	1.40	1.47			N/A	N/A
3 - Longfield Avenue	0.15	0.00	0.00	0.15	0.15			N/A	N/A
4 - Newgate Lane (North)	0.73	0.07	0.72	1.37	1.37			N/A	N/A

2024 Base + Dev DS2, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - Newgate Lane (North) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	NGL - Longfield Avenue	Standard Roundabout		1, 2, 3, 4	6.47	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2024 Base + Dev DS2	AM	w/ Daedalus, w/ Stubbington Bypass	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 (%)
1 - Davis Way		ONE HOUR	✓	60	100.000
2 - Newgate Lane (South)		ONE HOUR	✓	1479	100.000
3 - Longfield Avenue		ONE HOUR	✓	299	100.000
4 - Newgate Lane (North)		ONE HOUR	✓	1049	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Davis Way	2 - Newgate Lane (South)	3 - Longfield Avenue	4 - Newgate Lane (North)
From	1 - Davis Way	0	24	22	14
	2 - Newgate Lane (South)	42	0	276	1161
	3 - Longfield Avenue	39	154	0	106
	4 - Newgate Lane (North)	21	947	81	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Davis Way	2 - Newgate Lane (South)	3 - Longfield Avenue	4 - Newgate Lane (North)
From	1 - Davis Way	0	5	5	27
	2 - Newgate Lane (South)	4	0	3	4
	3 - Longfield Avenue	9	0	0	1
	4 - Newgate Lane (North)	5	5	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Davis Way	0.13	8.72	0.2	0.5	A	55	83
2 - Newgate Lane (South)	0.74	6.70	3.0	6.4	A	1357	2036
3 - Longfield Avenue	0.24	3.57	0.3	1.3	A	275	412
4 - Newgate Lane (North)	0.68	6.86	2.2	3.8	A	962	1443

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
1 - Davis Way	45	11	887	715	0.063	45	77	0.0	0.1	5.873	A
2 - Newgate Lane (South)	1114	278	88	2217	0.502	1109	844	0.0	1.0	3.364	A
3 - Longfield Avenue	225	56	913	1678	0.134	225	284	0.0	0.2	2.506	A
4 - Newgate Lane (North)	789	197	177	1757	0.449	786	961	0.0	0.9	3.889	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
1 - Davis Way	54	14	1061	632	0.085	54	92	0.1	0.1	6.808	A
2 - Newgate Lane (South)	1330	332	105	2204	0.603	1328	1010	1.0	1.6	4.256	A
3 - Longfield Avenue	269	67	1093	1540	0.175	269	339	0.2	0.2	2.868	A
4 - Newgate Lane (North)	943	236	212	1736	0.543	941	1150	0.9	1.2	4.756	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
1 - Davis Way	66	17	1298	520	0.127	66	112	0.1	0.2	8.673	A
2 - Newgate Lane (South)	1628	407	128	2186	0.745	1623	1236	1.6	2.9	6.569	A
3 - Longfield Avenue	329	82	1336	1353	0.244	329	415	0.2	0.3	3.559	A
4 - Newgate Lane (North)	1155	289	260	1707	0.676	1151	1406	1.2	2.2	6.767	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
1 - Davis Way	66	17	1302	518	0.128	66	113	0.2	0.2	8.716	A
2 - Newgate Lane (South)	1628	407	129	2186	0.745	1628	1239	2.9	3.0	6.698	A
3 - Longfield Avenue	329	82	1341	1349	0.244	329	416	0.3	0.3	3.574	A
4 - Newgate Lane (North)	1155	289	260	1707	0.676	1154	1410	2.2	2.2	6.856	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
1 - Davis Way	54	14	1067	630	0.086	54	92	0.2	0.1	6.846	A
2 - Newgate Lane (South)	1330	332	106	2203	0.603	1335	1015	3.0	1.6	4.334	A
3 - Longfield Avenue	269	67	1099	1535	0.175	269	341	0.3	0.2	2.881	A
4 - Newgate Lane (North)	943	236	213	1736	0.543	946	1156	2.2	1.3	4.824	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
1 - Davis Way	45	11	892	713	0.063	45	77	0.1	0.1	5.902	A
2 - Newgate Lane (South)	1114	278	88	2216	0.502	1116	849	1.6	1.1	3.402	A
3 - Longfield Avenue	225	56	919	1674	0.135	225	285	0.2	0.2	2.516	A
4 - Newgate Lane (North)	789	197	178	1757	0.449	791	966	1.3	0.9	3.931	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.07	0.00	0.00	0.07	0.07			N/A	N/A
2 - Newgate Lane (South)	1.04	0.57	1.04	1.45	1.51			N/A	N/A
3 - Longfield Avenue	0.16	0.00	0.00	0.16	0.16			N/A	N/A
4 - Newgate Lane (North)	0.85	0.58	1.05	1.47	1.53			N/A	N/A

08:00 - 08:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.10	0.00	0.00	0.10	0.10			N/A	N/A
2 - Newgate Lane (South)	1.56	0.05	0.49	4.01	6.35			N/A	N/A
3 - Longfield Avenue	0.21	0.00	0.00	0.21	0.21			N/A	N/A
4 - Newgate Lane (North)	1.24	0.06	0.80	2.66	3.76			N/A	N/A

08:15 - 08:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.16	0.03	0.28	0.51	0.54			N/A	N/A
2 - Newgate Lane (South)	2.95	0.03	0.29	2.95	5.48			N/A	N/A
3 - Longfield Avenue	0.32	0.03	0.26	0.46	0.49			N/A	N/A
4 - Newgate Lane (North)	2.15	0.03	0.28	2.15	2.15			N/A	N/A

08:30 - 08:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.16	0.03	0.27	0.49	0.52			N/A	N/A
2 - Newgate Lane (South)	2.99	0.03	0.28	2.99	2.99			N/A	N/A
3 - Longfield Avenue	0.33	0.03	0.32	1.06	1.31			N/A	N/A
4 - Newgate Lane (North)	2.17	0.03	0.28	2.17	2.17			N/A	N/A

08:45 - 09:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.10	0.00	0.00	0.10	0.10			N/A	N/A
2 - Newgate Lane (South)	1.60	0.09	1.16	3.28	4.48			N/A	N/A
3 - Longfield Avenue	0.22	0.00	0.00	0.22	0.22			N/A	N/A
4 - Newgate Lane (North)	1.27	0.11	1.12	2.06	2.79			N/A	N/A

09:00 - 09:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.07	0.00	0.00	0.07	0.07			N/A	N/A
2 - Newgate Lane (South)	1.06	0.05	0.50	2.39	3.58			N/A	N/A
3 - Longfield Avenue	0.16	0.00	0.00	0.16	0.16			N/A	N/A
4 - Newgate Lane (North)	0.87	0.06	0.64	1.63	2.09			N/A	N/A

2024 Base + Dev DS2, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - Newgate Lane (North) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	NGL - Longfield Avenue	Standard Roundabout		1, 2, 3, 4	4.90	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D15	2024 Base + Dev DS2	PM	w/ Daedalus, w/ Stubbington Bypass	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 (%)
1 - Davis Way		ONE HOUR	✓	90	100.000
2 - Newgate Lane (South)		ONE HOUR	✓	1207	100.000
3 - Longfield Avenue		ONE HOUR	✓	318	100.000
4 - Newgate Lane (North)		ONE HOUR	✓	997	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Davis Way	2 - Newgate Lane (South)	3 - Longfield Avenue	4 - Newgate Lane (North)
From	1 - Davis Way	0	26	30	34
	2 - Newgate Lane (South)	4	0	291	912
	3 - Longfield Avenue	4	207	0	107
	4 - Newgate Lane (North)	4	919	74	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Davis Way	2 - Newgate Lane (South)	3 - Longfield Avenue	4 - Newgate Lane (North)
From	1 - Davis Way	0	4	0	0
	2 - Newgate Lane (South)	0	0	1	2
	3 - Longfield Avenue	0	0	0	0
	4 - Newgate Lane (North)	33	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Davis Way	0.19	8.88	0.2	1.0	A	82	124
2 - Newgate Lane (South)	0.61	4.35	1.6	2.6	A	1107	1661
3 - Longfield Avenue	0.22	2.94	0.3	1.1	A	292	438
4 - Newgate Lane (North)	0.64	5.83	1.8	2.8	A	915	1372

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
1 - Davis Way	68	17	900	709	0.095	67	9	0.0	0.1	5.672	A
2 - Newgate Lane (South)	908	227	104	2205	0.412	906	864	0.0	0.7	2.806	A
3 - Longfield Avenue	240	60	713	1832	0.131	239	296	0.0	0.2	2.259	A
4 - Newgate Lane (North)	751	188	162	1767	0.425	748	790	0.0	0.7	3.556	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
1 - Davis Way	81	20	1077	625	0.129	81	11	0.1	0.1	6.693	A
2 - Newgate Lane (South)	1085	271	124	2190	0.495	1084	1034	0.7	1.0	3.300	A
3 - Longfield Avenue	286	72	853	1724	0.166	286	354	0.2	0.2	2.502	A
4 - Newgate Lane (North)	896	224	194	1747	0.513	895	946	0.7	1.1	4.258	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
1 - Davis Way	99	25	1318	510	0.194	99	14	0.1	0.2	8.838	A
2 - Newgate Lane (South)	1329	332	152	2169	0.613	1326	1265	1.0	1.6	4.323	A
3 - Longfield Avenue	350	88	1044	1577	0.222	350	434	0.2	0.3	2.933	A
4 - Newgate Lane (North)	1098	274	237	1721	0.638	1095	1157	1.1	1.7	5.781	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
1 - Davis Way	99	25	1321	509	0.194	99	14	0.2	0.2	8.884	A
2 - Newgate Lane (South)	1329	332	152	2169	0.613	1328	1268	1.6	1.6	4.349	A
3 - Longfield Avenue	350	88	1046	1576	0.222	350	435	0.3	0.3	2.936	A
4 - Newgate Lane (North)	1098	274	237	1721	0.638	1098	1159	1.7	1.8	5.833	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
1 - Davis Way	81	20	1082	623	0.130	81	11	0.2	0.2	6.732	A
2 - Newgate Lane (South)	1085	271	125	2189	0.496	1087	1038	1.6	1.0	3.324	A
3 - Longfield Avenue	286	72	856	1722	0.166	286	356	0.3	0.2	2.509	A
4 - Newgate Lane (North)	896	224	194	1747	0.513	899	949	1.8	1.1	4.299	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
1 - Davis Way	68	17	905	707	0.096	68	9	0.2	0.1	5.704	A
2 - Newgate Lane (South)	908	227	104	2204	0.412	910	868	1.0	0.7	2.823	A
3 - Longfield Avenue	240	60	716	1830	0.131	240	298	0.2	0.2	2.265	A
4 - Newgate Lane (North)	751	188	162	1766	0.425	752	794	1.1	0.8	3.589	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.11	0.00	0.00	0.11	0.11			N/A	N/A
2 - Newgate Lane (South)	0.71	0.56	1.01	1.42	1.47			N/A	N/A
3 - Longfield Avenue	0.15	0.00	0.00	0.15	0.15			N/A	N/A
4 - Newgate Lane (North)	0.74	0.56	1.01	1.41	1.46			N/A	N/A

17:00 - 17:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.15	0.00	0.00	0.15	0.15			N/A	N/A
2 - Newgate Lane (South)	0.99	0.06	0.77	1.86	2.59			N/A	N/A
3 - Longfield Avenue	0.20	0.00	0.00	0.20	0.20			N/A	N/A
4 - Newgate Lane (North)	1.05	0.07	0.81	1.97	2.79			N/A	N/A

17:15 - 17:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.24	0.03	0.26	0.47	0.49			N/A	N/A
2 - Newgate Lane (South)	1.59	0.03	0.26	1.59	1.59			N/A	N/A
3 - Longfield Avenue	0.28	0.03	0.25	0.45	0.48			N/A	N/A
4 - Newgate Lane (North)	1.75	0.03	0.27	1.75	1.75			N/A	N/A

17:30 - 17:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.24	0.03	0.28	0.50	1.00			N/A	N/A
2 - Newgate Lane (South)	1.60	0.03	0.27	1.60	1.60			N/A	N/A
3 - Longfield Avenue	0.29	0.03	0.29	0.76	1.13			N/A	N/A
4 - Newgate Lane (North)	1.76	0.03	0.27	1.76	1.76			N/A	N/A

17:45 - 18:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.15	0.00	0.00	0.15	0.15			N/A	N/A
2 - Newgate Lane (South)	1.00	0.42	1.03	1.47	1.47			N/A	N/A
3 - Longfield Avenue	0.20	0.00	0.00	0.20	0.20			N/A	N/A
4 - Newgate Lane (North)	1.07	0.16	1.05	1.59	1.87			N/A	N/A

18:00 - 18:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Davis Way	0.11	0.00	0.00	0.11	0.11			N/A	N/A
2 - Newgate Lane (South)	0.72	0.08	0.81	1.41	1.48			N/A	N/A
3 - Longfield Avenue	0.15	0.00	0.00	0.15	0.15			N/A	N/A
4 - Newgate Lane (North)	0.75	0.06	0.71	1.50	1.53			N/A	N/A

APPENDIX J

PARTIALLY SIGNALISED PEEL COMMON ROUNDABOUT MODELLING REPORTS

Pegasus Group LinSig Report

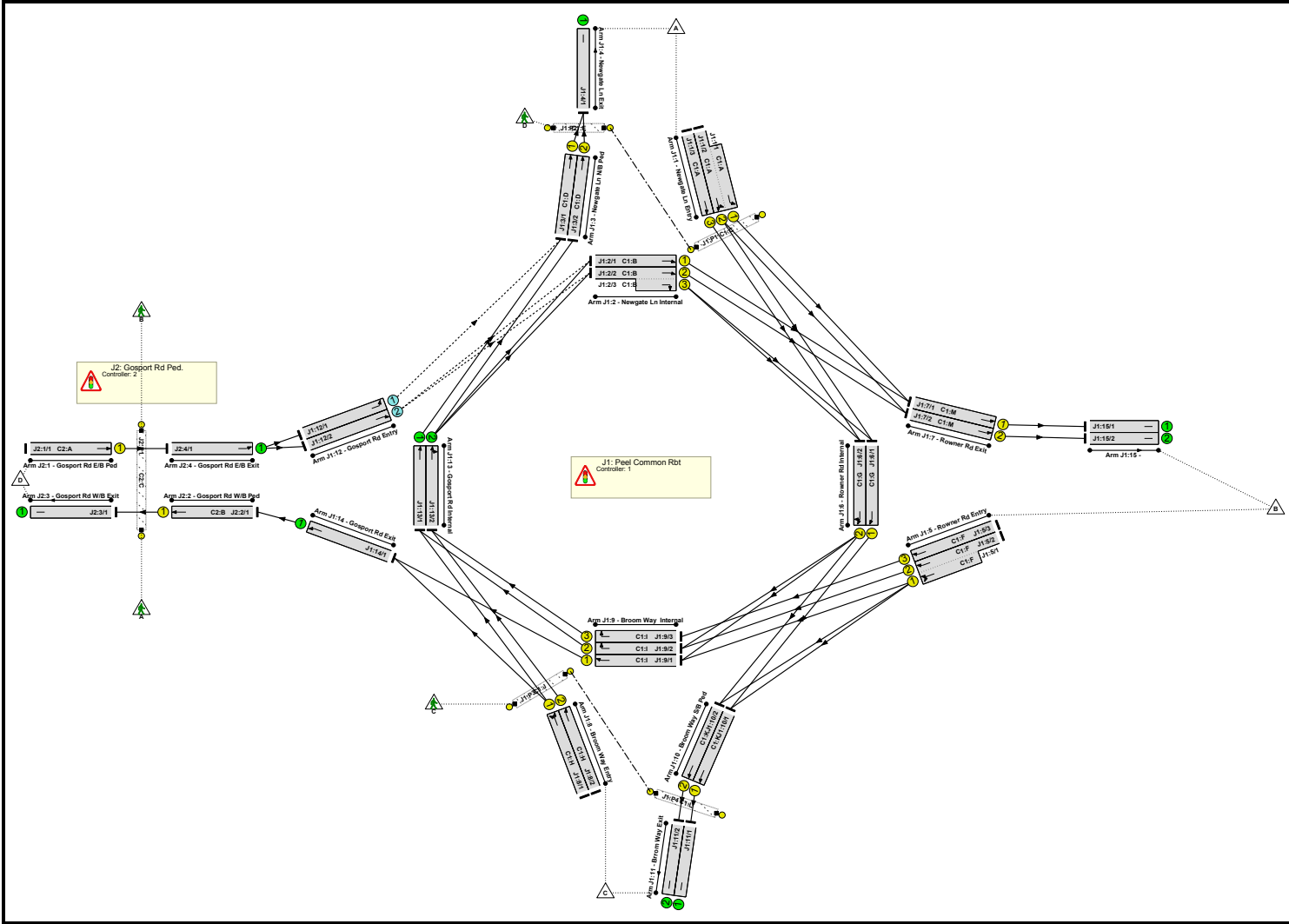
User and Project Details

Project:	
Title:	
Location:	
Company:	
Address:	
Linsig Version:	3, 2, 39, 0

Scenarios

Number	Scenario Name	Flow Group	Network Control Plan	Time	Cycle Time (s)	PRC (%)	Delay (pcuHr)
1	2019 DS1 BASE AM	2019 DS1 BASE AM	Stage Plan 1	08:00 - 09:00	100	53.0	34.79
2	2019 DS1 BASE PM	2019 DS1 BASE PM	Stage Plan 1	17:00 - 18:00	100	33.2	32.33
3	2024 DS1 BASE AM	2024 DS1 BASE AM	Stage Plan 1	08:00 - 09:00	100	33.8	43.56
4	2024 DS1 BASE PM	2024 DS1 BASE PM	Stage Plan 1	17:00 - 18:00	100	25.0	40.70
5	2024 DS1 BASE + DEV AM	2024 DS1 BASE + DEV AM	Stage Plan 1	08:00 - 09:00	100	31.7	43.95
6	2024 DS1 BASE + DEV PM	2024 DS1 BASE + DEV PM	Stage Plan 1	17:00 - 18:00	100	23.4	41.16
7	2019 DS2 BASE AM	2019 DS2 BASE AM	Stage Plan 1	08:00 - 09:00	100	6.2	41.72
8	2019 DS2 BASE PM	2019 DS2 BASE PM	Stage Plan 1	17:00 - 18:00	100	-13.2	75.85
9	2024 DS2 BASE AM	2024 DS2 BASE AM	Stage Plan 1	08:00 - 09:00	100	-0.8	53.20
10	2024 DS2 BASE PM	2024 DS2 BASE PM	Stage Plan 1	17:00 - 18:00	100	-18.1	142.71
11	2024 DS2 BASE + DEV AM	2024 DS2 BASE + DEV AM	Stage Plan 1	08:00 - 09:00	100	-1.8	55.23
12	2024 DS2 BASE + DEV PM	2024 DS2 BASE + DEV PM	Stage Plan 1	17:00 - 18:00	100	-21.9	151.52

Network Layout Diagram



Lane Input Data

Junction: J1: Peel Common Rbt												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
J1:1/1 (Newgate Ln Entry)	U	A	2	3	15.7	Geom	-	3.65	0.00	Y	Arm J1:7 Left	25.00
J1:1/2 (Newgate Ln Entry)	U	A	2	3	60.0	Geom	-	3.65	0.00	N	Arm J1:6 Ahead	28.00
											Arm J1:7 Left	Inf
J1:1/3 (Newgate Ln Entry)	U	A	2	3	60.0	User	1800	-	-	-	-	-
J1:2/1 (Newgate Ln Internal)	U	B	2	3	60.0	User	1800	-	-	-	-	-
J1:2/2 (Newgate Ln Internal)	U	B	2	3	60.0	Geom	-	3.50	0.00	Y	Arm J1:7 Ahead	Inf
J1:2/3 (Newgate Ln Internal)	U	B	2	3	5.0	User	1800	-	-	-	-	-
J1:3/1 (Newgate Ln N/B Ped)	U	D	2	3	60.0	User	1800	-	-	-	-	-
J1:3/2 (Newgate Ln N/B Ped)	U	D	2	3	60.0	User	3600	-	-	-	-	-
J1:4/1 (Newgate Ln Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
J1:5/1 (Rowner Rd Entry)	U	F	2	3	7.8	Geom	-	3.50	0.00	Y	Arm J1:9 Ahead	Inf
											Arm J1:10 Left	40.00
J1:5/2 (Rowner Rd Entry)	U	F	2	3	60.0	Geom	-	3.50	0.00	N	Arm J1:9 Ahead	Inf
J1:5/3 (Rowner Rd Entry)	U	F	2	3	60.0	Geom	-	3.50	0.00	N	Arm J1:9 Ahead	Inf
J1:6/1 (Rowner Rd Internal)	U	G	2	3	60.0	Geom	-	5.00	0.00	Y	Arm J1:10 Ahead	24.00
J1:6/2 (Rowner Rd Internal)	U	G	2	3	60.0	Geom	-	5.00	0.00	N	Arm J1:9 Right	Inf
											Arm J1:10 Ahead	Inf
J1:7/1 (Rowner Rd Exit)	U	M	2	3	60.0	User	1800	-	-	-	-	-

J1:7/2 (Rowner Rd Exit)	U	M	2	3	22.6	Geom	-	3.50	0.00	Y	Arm J1:15 Ahead	Inf
J1:8/1 (Broom Way Entry)	U	H	2	3	60.0	Geom	-	3.50	0.00	Y	Arm J1:13 Ahead	Inf
											Arm J1:14 Left	40.00
J1:8/2 (Broom Way Entry)	U	H	2	3	60.0	Geom	-	3.50	0.00	N	Arm J1:13 Ahead	Inf
J1:9/1 (Broom Way Internal)	U	I	2	3	60.0	Geom	-	4.00	0.00	N	Arm J1:14 Ahead	Inf
J1:9/2 (Broom Way Internal)	U	I	2	3	60.0	Geom	-	4.00	0.00	N	Arm J1:13 Right	50.00
J1:9/3 (Broom Way Internal)	U	I	2	3	60.0	User	1800	-	-	-	-	-
J1:10/1 (Broom Way S/B Ped)	U	K	2	3	10.4	Geom	-	3.50	0.00	Y	Arm J1:11 Ahead	Inf
J1:10/2 (Broom Way S/B Ped)	U	K	2	3	10.4	Geom	-	3.50	0.00	N	Arm J1:11 Ahead	Inf
J1:11/1 (Broom Way Exit)	U		2	3	10.4	User	2000	-	-	-	-	-
J1:11/2 (Broom Way Exit)	U		2	3	60.0	User	2000	-	-	-	-	-
J1:12/1 (Gosport Rd Entry)	O		2	3	60.0	Geom	-	3.25	0.00	Y	Arm J1:3 Left	Inf
J1:12/2 (Gosport Rd Entry)	O		2	3	60.0	User	2500	-	-	-	-	-
J1:13/1 (Gosport Rd Internal)	U		2	3	60.0	Geom	-	4.00	0.00	Y	Arm J1:3 Ahead	24.00
J1:13/2 (Gosport Rd Internal)	U		2	3	60.0	Geom	-	4.00	0.00	N	Arm J1:2 Right	20.00
											Arm J1:3 Ahead	Inf
J1:14/1 (Gosport Rd Exit)	U		2	3	60.0	Geom	-	4.00	0.00	Y	Arm J2:2 Ahead	Inf
J1:15/1	U		2	3	60.0	Inf	-	-	-	-	-	-
J1:15/2	U		2	3	60.0	Inf	-	-	-	-	-	-

Junction: J2: Gosport Rd Ped.												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
J2:1/1 (Gosport Rd E/B Ped)	U	A	2	3	60.0	Geom	-	4.00	0.00	Y	Arm J2:4 Ahead	Inf
J2:2/1 (Gosport Rd W/B Ped)	U	B	2	3	60.0	Geom	-	4.00	0.00	Y	Arm J2:3 Ahead	Inf
J2:3/1 (Gosport Rd W/B Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
J2:4/1 (Gosport Rd E/B Exit)	U		2	3	60.0	Geom	-	4.00	0.00	Y	Arm J1:12 Ahead	Inf

Give-Way Lane Input Data

Junction: J1: Peel Common Rbt												
Lane	Movement	Max Flow when Giving Way (PCU/Hr)	Min Flow when Giving Way (PCU/Hr)	Opposing Lane	Opp. Lane Coeff.	Opp. Mvmnts.	Right Turn Storage (PCU)	Non-Blocking Storage (PCU)	RTF	Right Turn Move up (s)	Max Turns in Intergreen (PCU)	
J1:12/1 (Gosport Rd Entry)	J1:3/1 (Left)	1439	0	J1:13/1	0.22	All	-	-	-	-	-	
J1:12/2 (Gosport Rd Entry)	J1:2/1 (Ahead)	1439	0	J1:13/1	1.09	All	-	-	-	-	-	
				J1:13/2	1.09	All						
	J1:2/2 (Ahead)	1900	0	J1:13/1	0.22	All						
				J1:13/2	0.22	All						

Junction: J2: Gosport Rd Ped.

There are no Opposed Lanes in this Junction

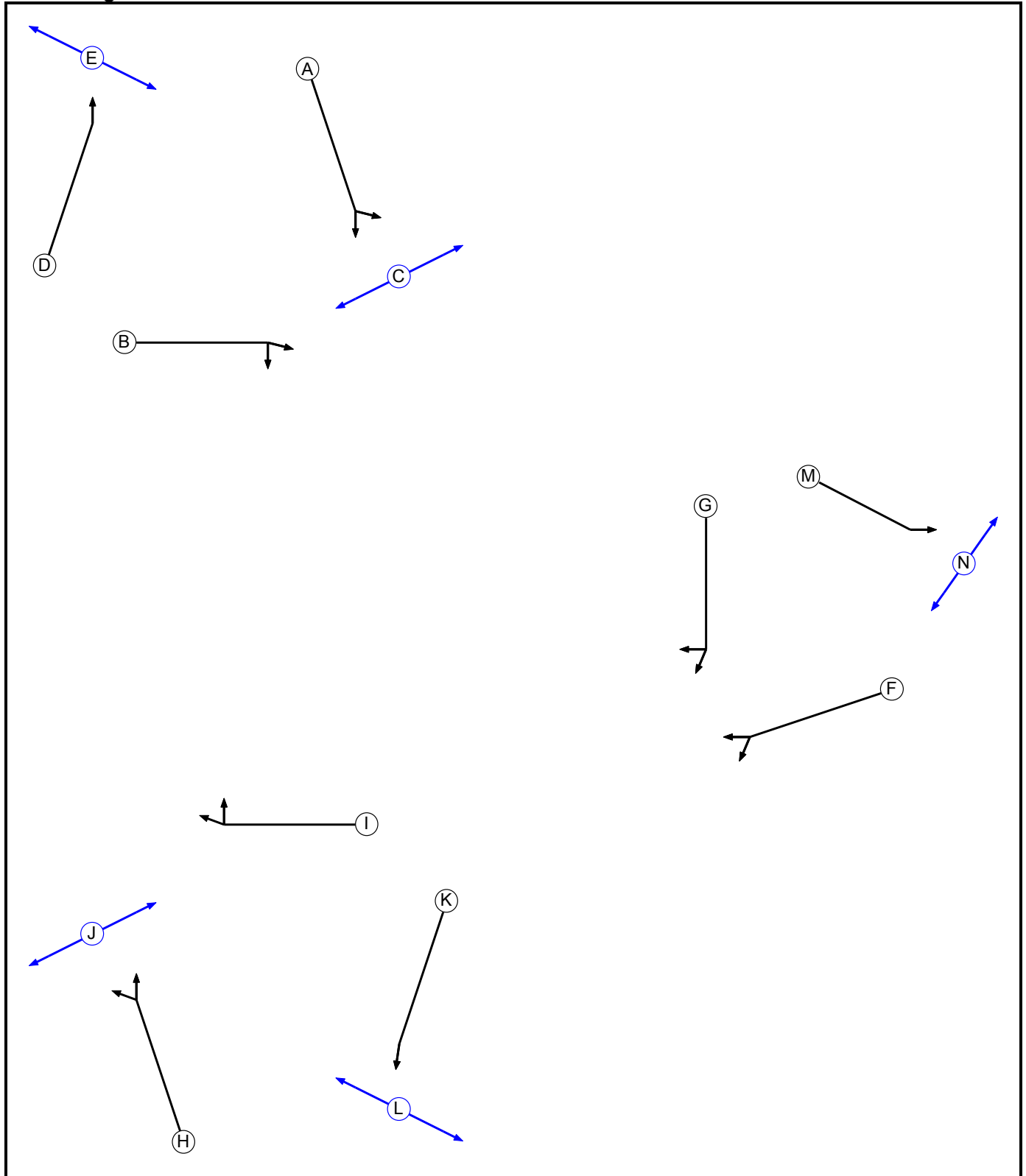
Lane Connector Input Data

Junction: J1: Peel Common Rbt				
Org Lane	Dest Lane	Junction	Mean Cruise Time	Platoon Dispersion
J1:1/1	J1:7/1	Internal	11	35
J1:1/2	J1:6/1	Internal	10	35
J1:1/2	J1:7/2	Internal	10	35
J1:1/3	J1:6/2	Internal	7	35
J1:2/1	J1:7/1	Internal	10	35
J1:2/2	J1:7/2	Internal	11	35
J1:2/3	J1:6/1	Internal	7	35
J1:2/3	J1:6/2	Internal	7	35
J1:3/1	J1:4/1	Internal	5	35
J1:3/2	J1:4/1	Internal	8	35
J1:5/1	J1:9/1	Internal	5	35
J1:5/1	J1:10/1	Internal	16	35
J1:5/1	J1:10/2	Internal	16	35
J1:5/2	J1:9/2	Internal	5	35
J1:5/3	J1:9/3	Internal	5	35
J1:6/1	J1:10/1	Internal	16	35
J1:6/2	J1:9/1	Internal	10	35
J1:6/2	J1:9/2	Internal	10	35
J1:6/2	J1:10/2	Internal	16	35
J1:7/1	J1:15/1	Internal	5	35
J1:7/2	J1:15/2	Internal	5	35
J1:8/1	J1:13/1	Internal	4	35
J1:8/1	J1:14/1	Internal	3	35
J1:8/2	J1:13/2	Internal	4	35
J1:9/1	J1:14/1	Internal	4	35
J1:9/2	J1:13/1	Internal	10	35
J1:9/3	J1:13/2	Internal	10	35
J1:10/1	J1:11/1	Internal	5	35
J1:10/2	J1:11/2	Internal	5	35
J1:12/1	J1:3/1	Internal	8	35
J1:12/2	J1:2/1	Internal	10	35
J1:12/2	J1:2/2	Internal	5	35
J1:13/1	J1:3/1	Internal	8	35
J1:13/2	J1:2/1	Internal	5	35
J1:13/2	J1:2/2	Internal	5	35
J1:13/2	J1:3/2	Internal	5	35
J1:14/1	J2:2/1	Leaving	2	35

J2:4/1	J1:12/1	Entering	10	35
J2:4/1	J1:12/2	Entering	2	35

Junction: J2: Gosport Rd Ped.				
Org Lane	Dest Lane	Junction	Mean Cruise Time	Platoon Dispersion
J1:14/1	J2:2/1	Entering	2	35
J2:1/1	J2:4/1	Internal	1	35
J2:2/1	J2:3/1	Internal	10	35
J2:4/1	J1:12/1	Leaving	10	35
J2:4/1	J1:12/2	Leaving	2	35

C1 - Peel Common Rbt
Phase Diagram



Phase Input Data

Phase Name	Phase Type	Stage Stream	Assoc. Phase	Street Min	Cont Min
A	Traffic	1		7	7
B	Traffic	1		7	4
C	Pedestrian	1		5	5
D	Traffic	2		7	7
E	Pedestrian	2		5	5
F	Traffic	3		7	7
G	Traffic	3		7	4
H	Traffic	4		7	7
I	Traffic	4		7	4
J	Pedestrian	4		5	5
K	Traffic	5		7	7
L	Pedestrian	5		5	5
M	Traffic	6		7	7
N	Pedestrian	6		7	7

Phase Intergreens Matrix

		Starting Phase													
		A	B	C	D	E	F	G	H	I	J	K	L	M	N
Terminating Phase	A		5	5	-	-	-	-	-	-	-	-	-	-	-
	B	5		-	-	-	-	-	-	-	-	-	-	-	-
	C	8	-		-	-	-	-	-	-	-	-	-	-	-
	D	-	-	-		5	-	-	-	-	-	-	-	-	-
	E	-	-	-	6		-	-	-	-	-	-	-	-	-
	F	-	-	-	-	-		5	-	-	-	-	-	-	-
	G	-	-	-	-	-	5		-	-	-	-	-	-	-
	H	-	-	-	-	-	-	-		5	5	-	-	-	-
	I	-	-	-	-	-	-	-	5		-	-	-	-	-
	J	-	-	-	-	-	-	-	8	-		-	-	-	-
	K	-	-	-	-	-	-	-	-	-	-		5	-	-
	L	-	-	-	-	-	-	-	-	-	-	8		-	-
	M	-	-	-	-	-	-	-	-	-	-	-	-		5
	N	-	-	-	-	-	-	-	-	-	-	-	-	8	

Phases in Stage

Stream	Stage No.	Phases in Stage
1	1	A
1	2	B C
2	1	D
2	2	E
3	1	F
3	2	G
4	1	H
4	2	I J
5	1	K
5	2	L
6	1	M
6	2	N

Phase Delays

Stage Stream: 1

Term. Stage	Start Stage	Phase	Type	Value	Cont value
2	1	B	Losing	3	3

Stage Stream: 2

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Stage Stream: 3

Term. Stage	Start Stage	Phase	Type	Value	Cont value
2	1	G	Losing	3	3

Stage Stream: 4

Term. Stage	Start Stage	Phase	Type	Value	Cont value
2	1	I	Losing	3	3

Stage Stream: 5

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Stage Stream: 6

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Prohibited Stage Change

Stage Stream: 1

	To Stage	
From Stage	1	2
	1	5
	2	8

Stage Stream: 2

	To Stage	
From Stage	1	2
	1	5
	2	6

Stage Stream: 3

	To Stage	
From Stage	1	2
	1	5
	2	8

Stage Stream: 4

	To Stage	
From Stage	1	2
	1	5
	2	8

Stage Stream: 5

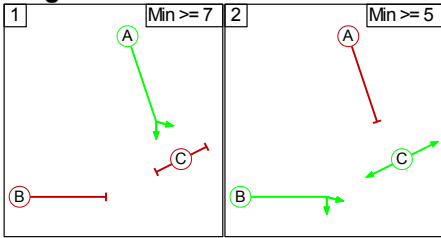
	To Stage	
From Stage	1	2
	1	5
	2	8

Stage Stream: 6

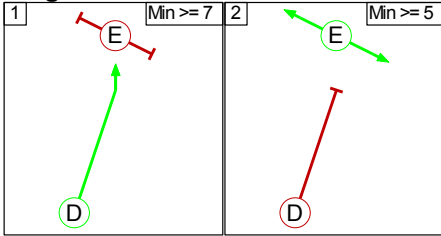
		To Stage	
		1	2
From Stage	1		5
	2	8	

Stage Diagram

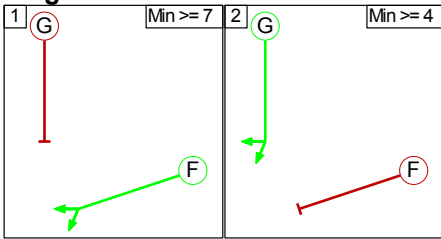
Stage Stream: 1



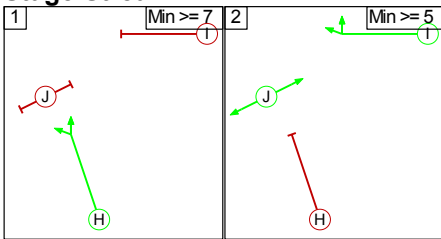
Stage Stream: 2



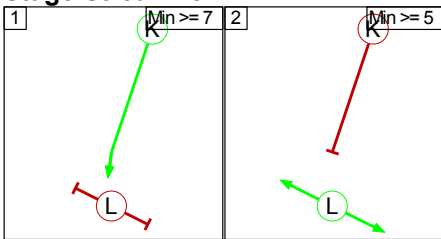
Stage Stream: 3



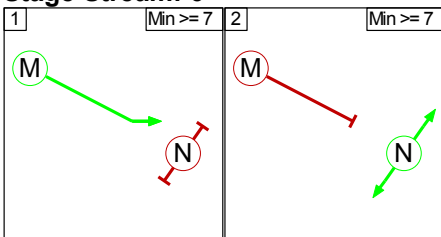
Stage Stream: 4



Stage Stream: 5



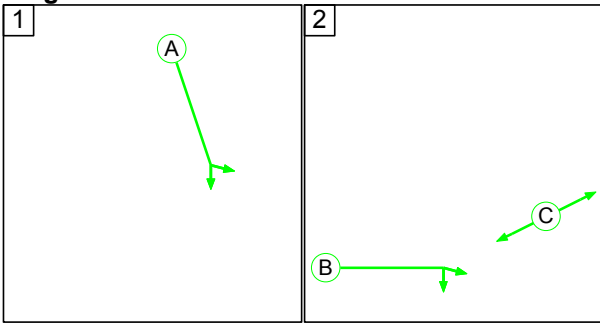
Stage Stream: 6



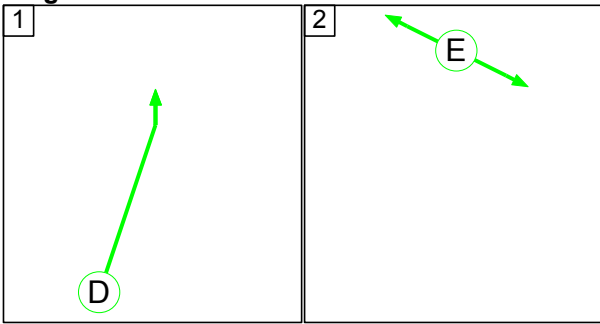
Stage Sequence Summary

Stage Sequence: Staging Plan No. 1

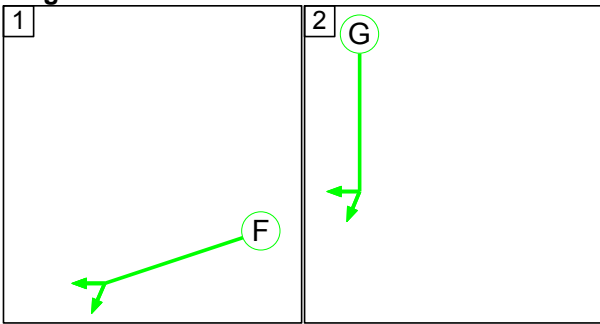
Stage Stream: 1



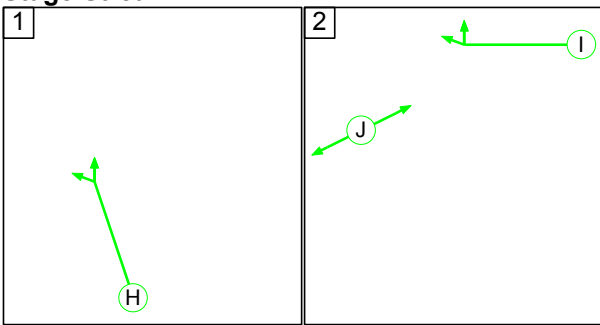
Stage Stream: 2



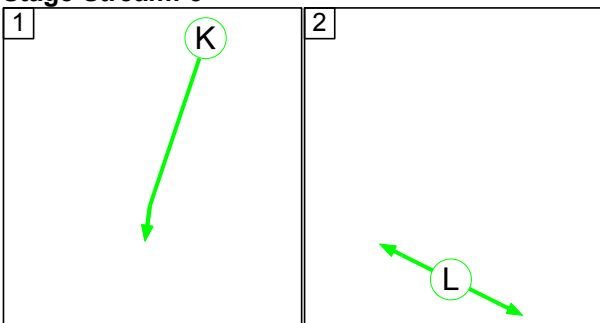
Stage Stream: 3



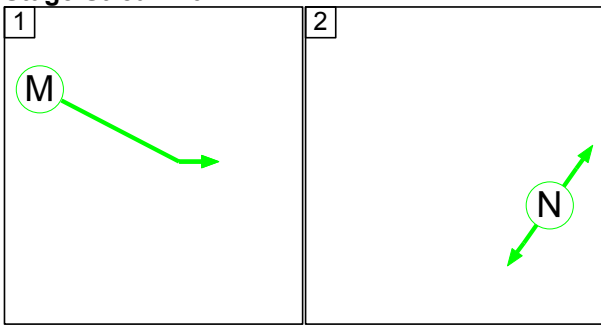
Stage Stream: 4



Stage Stream: 5



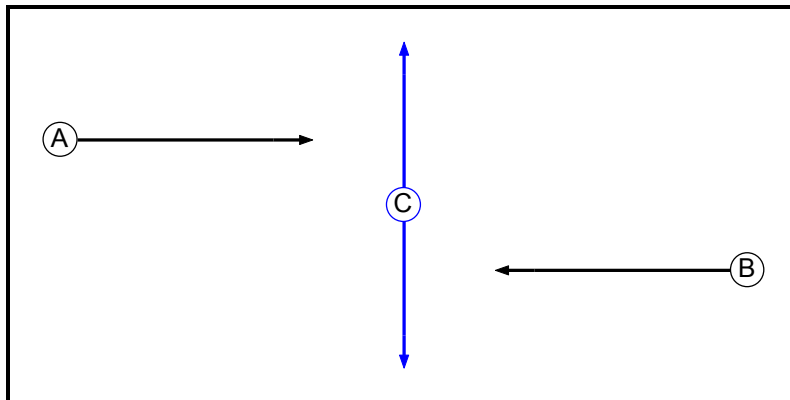
Stage Stream: 6



Network Control Plans

Plan	Controller	Sequence Name	Sequence
Stage Plan 1	C1 - Peel Common Rbt	Staging Plan No. 1	Stream 1: 1,2 Stream 2: 1,2 Stream 3: 1,2 Stream 4: 1,2 Stream 5: 1,2 Stream 6: 1,2
	C2 - Gosport Rd Ped.	Stage Sequence No. 1	1,2

**C2 - Gosport Rd Ped.
Phase Diagram**



Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		7	7
B	Traffic		7	7
C	Pedestrian		5	5

Phase Intergreens Matrix

Terminating Phase	Starting Phase			
		A	B	C
	A		-	5
	B	-		5
	C	10	10	

Phases in Stage

Stage No.	Phases in Stage
1	A B
2	C

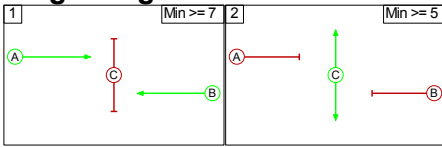
Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Prohibited Stage Change

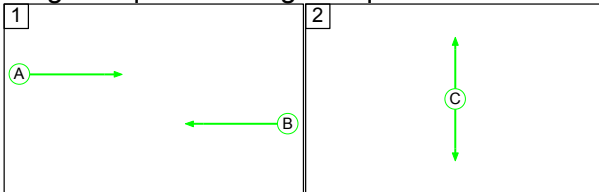
From Stage	To Stage	
	1	2
	1	5
	2	10

Stage Diagram



Stage Sequence Summary

Stage Sequence: Stage Sequence No. 1



Network Control Plans

Plan	Controller	Sequence Name	Sequence
Stage Plan 1	C1 - Peel Common Rbt	Staging Plan No. 1	Stream 1: 1,2 Stream 2: 1,2 Stream 3: 1,2 Stream 4: 1,2 Stream 5: 1,2 Stream 6: 1,2
	C2 - Gosport Rd Ped.	Stage Sequence No. 1	1,2

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2019 DS1 BASE AM'	08:00	09:00	01:00	
2: '2019 DS1 BASE PM'	17:00	18:00	01:00	
3: '2024 DS1 BASE AM'	08:00	09:00	01:00	
4: '2024 DS1 BASE PM'	17:00	18:00	01:00	
5: '2024 DS1 BASE + DEV AM'	08:00	09:00	01:00	
6: '2024 DS1 BASE + DEV PM'	17:00	18:00	01:00	
7: '2019 DS2 BASE AM'	08:00	09:00	01:00	
8: '2019 DS2 BASE PM'	17:00	18:00	01:00	
9: '2024 DS2 BASE AM'	08:00	09:00	01:00	
10: '2024 DS2 BASE PM'	17:00	18:00	01:00	
11: '2024 DS2 BASE + DEV AM'	08:00	09:00	01:00	
12: '2024 DS2 BASE + DEV PM'	17:00	18:00	01:00	

Scenario 1: '2019 DS1 BASE AM' (FG1: '2019 DS1 BASE AM', Plan 1: 'Stage Plan 1')

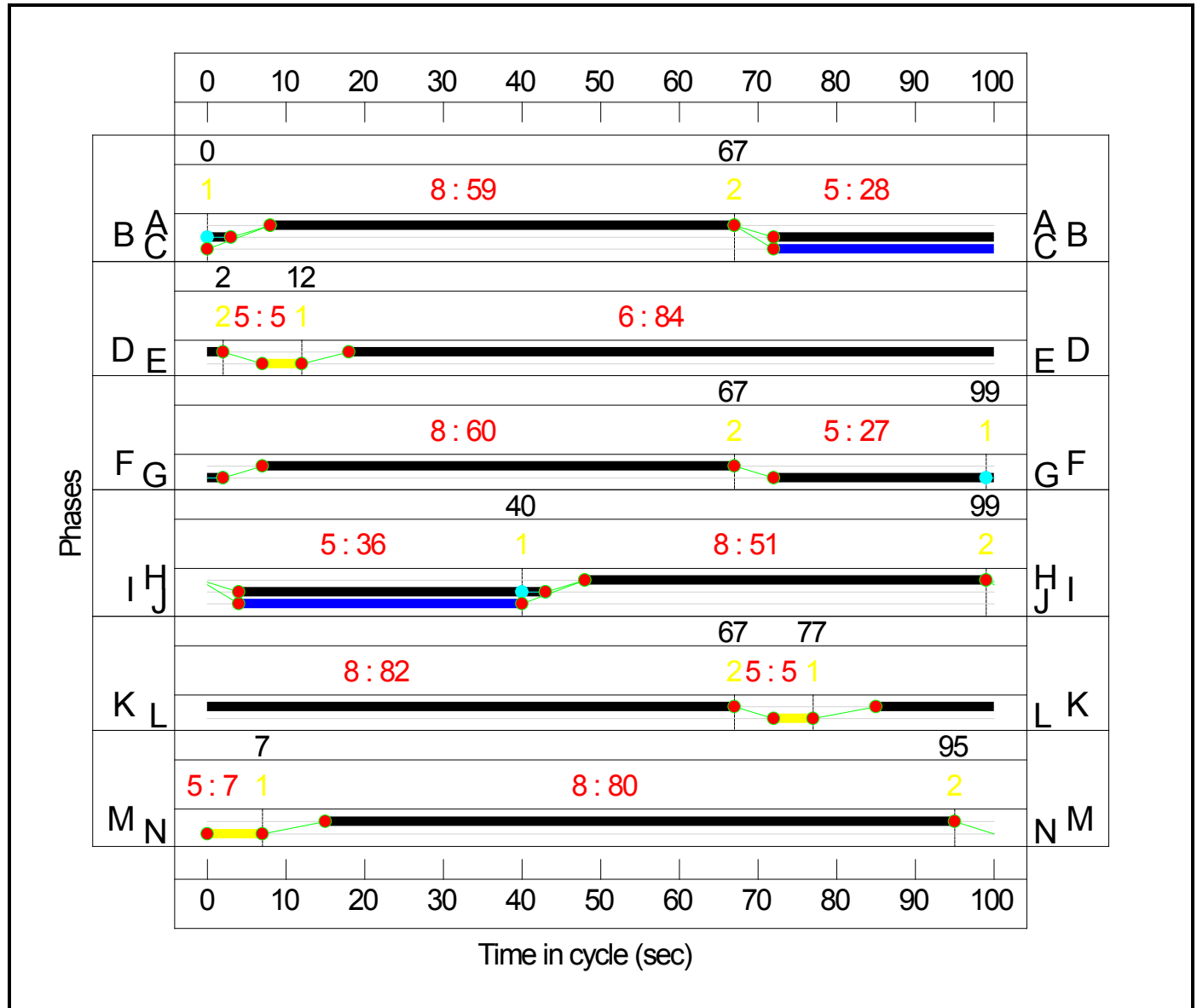
Traffic Flows, Actual

Actual Flow :

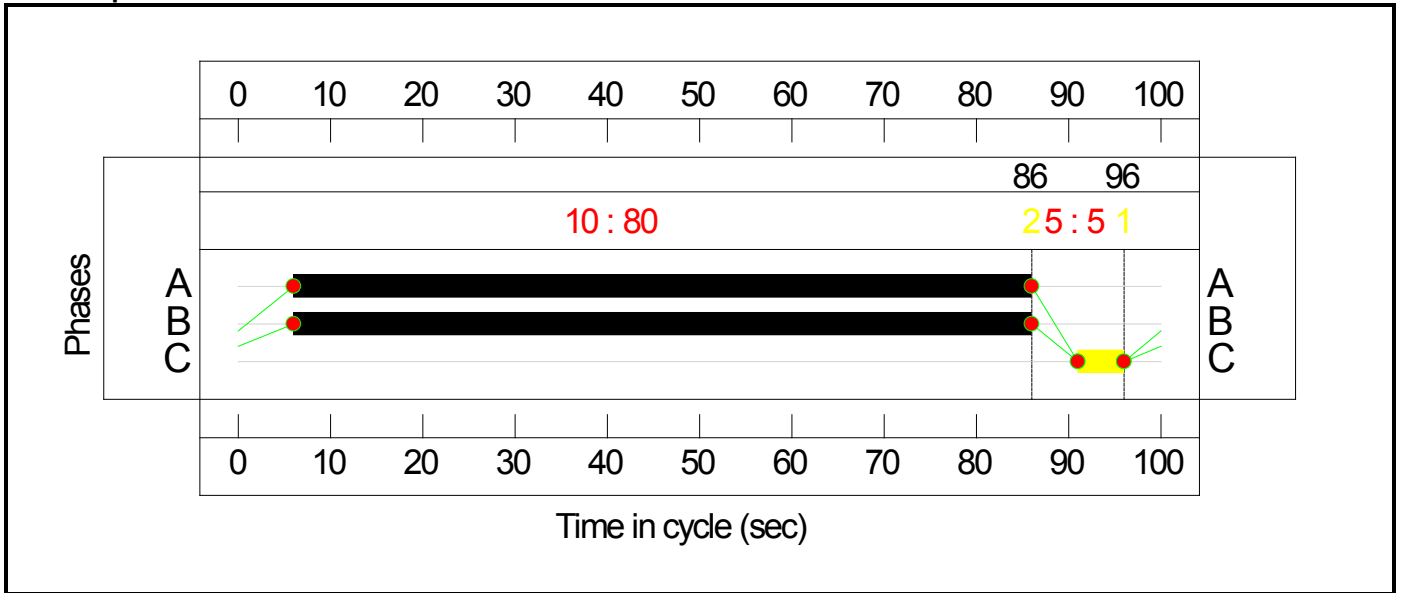
		Destination				
		A	B	C	D	Tot.
Origin	A	0	461	305	85	851
	B	839	0	86	364	1289
	C	675	207	0	256	1138
	D	103	52	271	0	426
	Tot.	1617	720	662	705	3704

Signal Timings Diagram

C1 - Peel Common Rbt



C2 - Gosport Rd Ped.



Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Mean Max Queue (pcu)
J1:1/2+J1:1/1	Newgate Ln Entry Ahead Left	U	C1:A		1	59	-	739	2060:1868	1481	49.9%	-	-	-	2.6	12.6	7.6	8.0
J1:1/3	Newgate Ln Entry Ahead	U	C1:A		1	59	-	112	1800	1080	10.4%	-	-	-	0.3	10.4	1.3	1.4
J1:2/1	Newgate Ln Internal Ahead	U	C1:B		1	31	-	234	1800	576	40.6%	-	-	-	1.1	16.4	4.9	5.2
J1:2/2+J1:2/3	Newgate Ln Internal Right Ahead	U	C1:B		1	31	-	296	1965:1800	595	49.7%	-	-	-	2.4	29.6	4.7	5.2
J1:3/1	Newgate Ln N/B Ped Ahead	U	C1:D		1	84	-	761	1800	1530	49.7%	-	-	-	0.6	2.8	4.1	4.6
J1:3/2	Newgate Ln N/B Ped Ahead	U	C1:D		1	84	-	856	3600	3060	28.0%	-	-	-	0.3	1.2	1.2	1.4
J1:5/2+J1:5/1	Rowner Rd Entry Ahead Left	U	C1:F		1	60	-	870	2105:1951	1500	58.0%	-	-	-	3.0	12.6	6.3	6.9
J1:5/3	Rowner Rd Entry Ahead	U	C1:F		1	60	-	419	2105	1284	32.6%	-	-	-	1.3	11.6	5.6	5.8
J1:6/1	Rowner Rd Internal Ahead	U	C1:G		1	30	-	307	1991	617	49.7%	-	-	-	3.6	41.9	8.0	8.5
J1:6/2	Rowner Rd Internal Right Ahead	U	C1:G		1	30	-	354	2255	699	50.6%	-	-	-	1.8	18.7	3.2	3.7
J1:7/1	Rowner Rd Exit Ahead	U	C1:M		1	80	-	460	1800	1458	31.6%	-	-	-	0.4	3.2	1.6	1.8
J1:7/2	Rowner Rd Exit Ahead	U	C1:M		1	80	-	260	1965	1592	16.3%	-	-	-	0.1	1.7	0.2	0.3
J1:8/1	Broom Way Entry Ahead Left	U	C1:H		1	51	-	494	1928	1003	49.3%	-	-	-	2.6	19.0	8.8	9.3

J1:8/2	Broom Way Entry Ahead	U	C1:H		1	51	-	644	2105	1095	58.8%	-	-	-	3.7	20.6	12.3	13.1
J1:9/1	Broom Way Internal Ahead	U	C1:I		1	39	-	449	2155	862	52.1%	-	-	-	2.6	20.6	6.2	6.7
J1:9/2	Broom Way Internal Right	U	C1:I		1	39	-	420	2092	837	50.2%	-	-	-	2.2	18.5	3.4	3.9
J1:9/3	Broom Way Internal Right	U	C1:I		1	39	-	419	1800	720	58.2%	-	-	-	2.4	20.4	4.2	4.9
J1:10/1	Broom Way S/B Ped Ahead	U	C1:K		1	82	-	308	1965	1631	18.9%	-	-	-	0.1	1.4	0.0	0.1
J1:10/2	Broom Way S/B Ped Ahead	U	C1:K		1	82	-	354	2105	1747	20.3%	-	-	-	0.2	1.7	0.4	0.5
J1:11/1	Broom Way Exit	U	-		-	-	-	308	2000	2000	15.4%	-	-	-	0.1	1.1	0.0	0.1
J1:11/2	Broom Way Exit	U	-		-	-	-	354	2000	2000	17.7%	-	-	-	0.1	1.1	0.0	0.1
J1:12/1	Gosport Rd Entry Left	O	-		-	-	-	103	1940	1294	8.0%	103	0	0	0.0	1.5	0.0	0.0
J1:12/2	Gosport Rd Entry Ahead	O	-		-	-	-	323	2500	760	42.5%	323	0	0	1.1	12.3	3.1	3.5
J1:13/1	Gosport Rd Internal Ahead	U	-		-	-	-	658	1896	1896	34.7%	-	-	-	0.3	1.5	1.1	1.3
J1:13/2	Gosport Rd Internal Right Ahead	U	-		-	-	-	1063	2124	2124	50.0%	-	-	-	0.5	1.7	10.0	10.5
J1:14/1	Gosport Rd Exit Ahead	U	-		-	-	-	705	2015	2015	35.0%	-	-	-	0.3	1.4	5.1	5.4
J2:1/1	Gosport Rd E/B Ped Ahead	U	C2:A		1	80	-	426	2015	1632	26.1%	-	-	-	0.4	3.8	2.8	3.0
J2:2/1	Gosport Rd W/B Ped Ahead	U	C2:B		1	80	-	705	2015	1632	43.2%	-	-	-	0.5	2.7	1.3	1.7
J2:4/1	Gosport Rd E/B Exit Ahead	U	-		-	-	-	426	2015	2015	21.1%	-	-	-	0.1	1.1	0.0	0.1

J2:P1	Unnamed Ped Link	-	C2:C		1	5	-	0	-	1000	0.0%	-	-	-	0.0	0.0	-	0.0
J1:P1	Unnamed Ped Link	-	C1:C		1	28	-	0	-	0	0.0%	-	-	-	-	-	-	-
J1:P2	Unnamed Ped Link	-	C1:E		1	5	-	0	-	0	0.0%	-	-	-	-	-	-	-
J1:P3	Unnamed Ped Link	-	C1:J		1	36	-	0	-	0	0.0%	-	-	-	-	-	-	-
J1:P4	Unnamed Ped Link	-	C1:L		1	5	-	0	-	0	0.0%	-	-	-	-	-	-	-

C1 - Peel Common Rbt	Stream: 1 PRC for Signalled Lanes (%)	80.4	Total Delay for Signalled Lanes (pcuHr)	6.41	Cycle Time (s)	100
C1 - Peel Common Rbt	Stream: 2 PRC for Signalled Lanes (%)	80.9	Total Delay for Signalled Lanes (pcuHr)	0.87	Cycle Time (s)	100
C1 - Peel Common Rbt	Stream: 3 PRC for Signalled Lanes (%)	55.2	Total Delay for Signalled Lanes (pcuHr)	9.79	Cycle Time (s)	100
C1 - Peel Common Rbt	Stream: 4 PRC for Signalled Lanes (%)	53.0	Total Delay for Signalled Lanes (pcuHr)	13.39	Cycle Time (s)	100
C1 - Peel Common Rbt	Stream: 5 PRC for Signalled Lanes (%)	344.2	Total Delay for Signalled Lanes (pcuHr)	0.28	Cycle Time (s)	100
C1 - Peel Common Rbt	Stream: 6 PRC for Signalled Lanes (%)	185.3	Total Delay for Signalled Lanes (pcuHr)	0.54	Cycle Time (s)	100
C2 - Gosport Rd Ped.	PRC for Signalled Lanes (%)	108.4	Total Delay for Signalled Lanes (pcuHr)	0.97	Cycle Time (s)	100
	PRC Over All Lanes (%)	53.0	Total Delay Over All Lanes(pcuHr)	34.79		

Scenario 2: '2019 DS1 BASE PM' (FG2: '2019 DS1 BASE PM', Plan 1: 'Stage Plan 1')

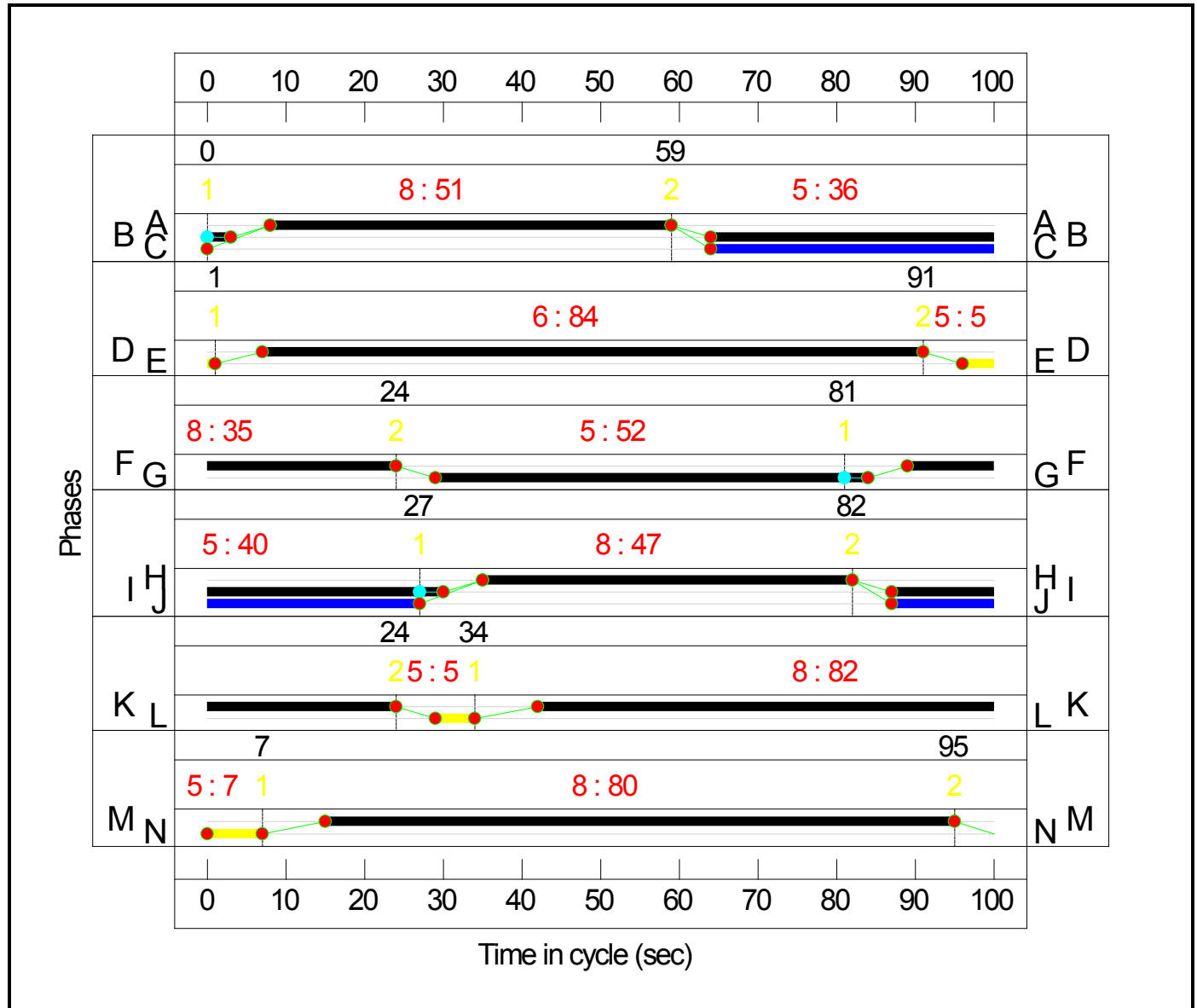
Traffic Flows, Actual

Actual Flow :

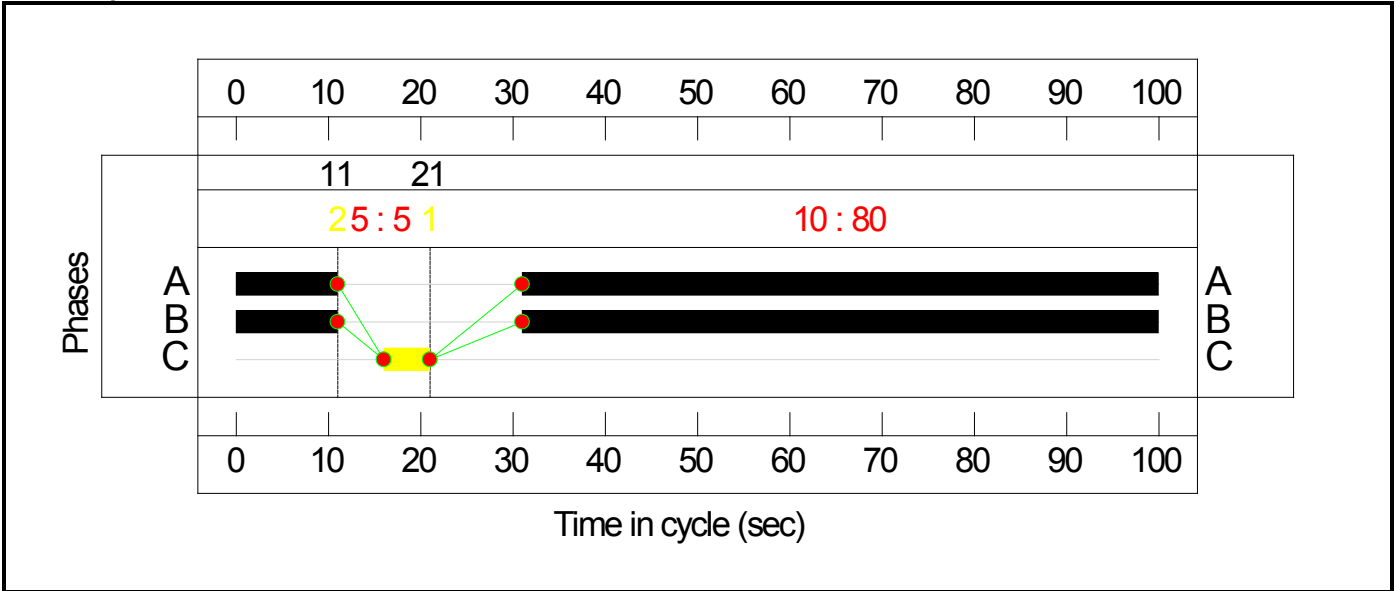
		Destination				
		A	B	C	D	Tot.
Origin	A	0	633	556	161	1350
	B	523	0	71	149	743
	C	306	224	0	181	711
	D	95	334	305	0	734
	Tot.	924	1191	932	491	3538

Signal Timings Diagram

C1 - Peel Common Rbt



C2 - Gosport Rd Ped.



Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Mean Max Queue (pcu)
J1:1/2+J1:1/1	Newgate Ln Entry Ahead Left	U	C1:A		1	51	-	942	2063:1868	1394	67.6%	-	-	-	5.1	19.4	11.1	12.2
J1:1/3	Newgate Ln Entry Ahead	U	C1:A		1	51	-	408	1800	936	43.6%	-	-	-	2.1	18.3	7.0	7.4
J1:2/1	Newgate Ln Internal Ahead	U	C1:B		1	39	-	243	1800	720	33.8%	-	-	-	1.1	16.4	5.4	5.6
J1:2/2+J1:2/3	Newgate Ln Internal Right Ahead	U	C1:B		1	39	-	620	1965:1800	930	66.7%	-	-	-	3.4	19.6	8.3	9.3
J1:3/1	Newgate Ln N/B Ped Ahead	U	C1:D		1	84	-	461	1800	1530	30.1%	-	-	-	0.3	2.0	0.6	0.8
J1:3/2	Newgate Ln N/B Ped Ahead	U	C1:D		1	84	-	463	3600	3060	15.1%	-	-	-	0.1	0.8	0.2	0.3
J1:5/2+J1:5/1	Rowner Rd Entry Ahead Left	U	C1:F		1	35	-	484	2105:1942	988	49.0%	-	-	-	3.6	26.8	5.4	5.8
J1:5/3	Rowner Rd Entry Ahead	U	C1:F		1	35	-	259	2105	758	34.2%	-	-	-	1.9	27.0	5.2	5.4
J1:6/1	Rowner Rd Internal Ahead	U	C1:G		1	55	-	465	1991	1115	41.7%	-	-	-	1.3	10.4	7.5	7.8
J1:6/2	Rowner Rd Internal Right Ahead	U	C1:G		1	55	-	557	2255	1263	44.1%	-	-	-	1.9	12.5	10.1	10.5
J1:7/1	Rowner Rd Exit Ahead	U	C1:M		1	80	-	586	1800	1458	40.2%	-	-	-	0.4	2.6	0.6	0.9
J1:7/2	Rowner Rd Exit Ahead	U	C1:M		1	80	-	605	1965	1592	38.0%	-	-	-	0.5	3.0	2.0	2.3
J1:8/1	Broom Way Entry Ahead Left	U	C1:H		1	47	-	283	1919	921	30.7%	-	-	-	1.5	18.7	4.7	4.9

J1:8/2	Broom Way Entry Ahead	U	C1:H		1	47	-	428	2105	1010	42.4%	-	-	-	2.4	20.1	7.7	8.1
J1:9/1	Broom Way Internal Ahead	U	C1:I		1	43	-	310	2155	948	32.7%	-	-	-	1.9	22.5	4.9	5.1
J1:9/2	Broom Way Internal Right	U	C1:I		1	43	-	264	2092	920	28.7%	-	-	-	0.2	3.0	0.0	0.2
J1:9/3	Broom Way Internal Right	U	C1:I		1	43	-	259	1800	792	32.7%	-	-	-	0.3	3.8	3.7	4.0
J1:10/1	Broom Way S/B Ped Ahead	U	C1:K		1	82	-	468	1965	1631	28.7%	-	-	-	0.2	1.6	0.0	0.2
J1:10/2	Broom Way S/B Ped Ahead	U	C1:K		1	82	-	464	2105	1747	26.6%	-	-	-	0.2	1.7	0.3	0.5
J1:11/1	Brrom Way Exit	U	-		-	-	-	468	2000	2000	23.4%	-	-	-	0.2	1.2	0.0	0.2
J1:11/2	Brrom Way Exit	U	-		-	-	-	464	2000	2000	23.2%	-	-	-	0.2	1.2	0.0	0.2
J1:12/1	Gosport Rd Entry Left	O	-		-	-	-	95	1940	1358	7.0%	95	0	0	0.0	1.4	0.0	0.0
J1:12/2	Gosport Rd Entry Ahead	O	-		-	-	-	639	2500	1247	51.2%	639	0	0	1.4	8.1	6.8	7.3
J1:13/1	Gosport Rd Internal Ahead	U	-		-	-	-	366	1896	1896	19.3%	-	-	-	0.1	1.2	0.0	0.1
J1:13/2	Gosport Rd Internal Right Ahead	U	-		-	-	-	687	2104	2104	32.7%	-	-	-	0.2	1.3	4.7	4.9
J1:14/1	Gosport Rd Exit Ahead	U	-		-	-	-	491	2015	2015	24.4%	-	-	-	0.2	1.2	2.8	3.0
J2:1/1	Gosport Rd E/B Ped Ahead	U	C2:A		1	80	-	734	2015	1632	45.0%	-	-	-	1.0	4.8	5.9	6.3
J2:2/1	Gosport Rd W/B Ped Ahead	U	C2:B		1	80	-	491	2015	1632	30.1%	-	-	-	0.3	2.3	0.9	1.1
J2:4/1	Gosport Rd E/B Exit Ahead	U	-		-	-	-	734	2015	2015	36.4%	-	-	-	0.3	1.4	0.0	0.3

J2:P1	Unnamed Ped Link	-	C2:C		1	5	-	0	-	1000	0.0%	-	-	-	0.0	0.0	-	0.0
J1:P1	Unnamed Ped Link	-	C1:C		1	36	-	0	-	0	0.0%	-	-	-	-	-	-	-
J1:P2	Unnamed Ped Link	-	C1:E		1	5	-	0	-	0	0.0%	-	-	-	-	-	-	-
J1:P3	Unnamed Ped Link	-	C1:J		1	40	-	0	-	0	0.0%	-	-	-	-	-	-	-
J1:P4	Unnamed Ped Link	-	C1:L		1	5	-	0	-	0	0.0%	-	-	-	-	-	-	-
				C1 - Peel Common Rbt	Stream: 1	PRC for Signalled Lanes (%)	33.2	Total Delay for Signalled Lanes (pcuHr):				11.64	Cycle Time (s):				100	
				C1 - Peel Common Rbt	Stream: 2	PRC for Signalled Lanes (%)	198.7	Total Delay for Signalled Lanes (pcuHr):				0.36	Cycle Time (s):				100	
				C1 - Peel Common Rbt	Stream: 3	PRC for Signalled Lanes (%)	83.7	Total Delay for Signalled Lanes (pcuHr):				8.82	Cycle Time (s):				100	
				C1 - Peel Common Rbt	Stream: 4	PRC for Signalled Lanes (%)	112.5	Total Delay for Signalled Lanes (pcuHr):				6.28	Cycle Time (s):				100	
				C1 - Peel Common Rbt	Stream: 5	PRC for Signalled Lanes (%)	213.6	Total Delay for Signalled Lanes (pcuHr):				0.42	Cycle Time (s):				100	
				C1 - Peel Common Rbt	Stream: 6	PRC for Signalled Lanes (%)	123.9	Total Delay for Signalled Lanes (pcuHr):				0.92	Cycle Time (s):				100	
				C2 - Gosport Rd Ped.		PRC for Signalled Lanes (%)	100.1	Total Delay for Signalled Lanes (pcuHr):				1.30	Cycle Time (s):				100	
						PRC Over All Lanes (%)	33.2	Total Delay Over All Lanes(pcuHr):				32.33						

Scenario 3: '2024 DS1 BASE AM' (FG3: '2024 DS1 BASE AM', Plan 1: 'Stage Plan 1')

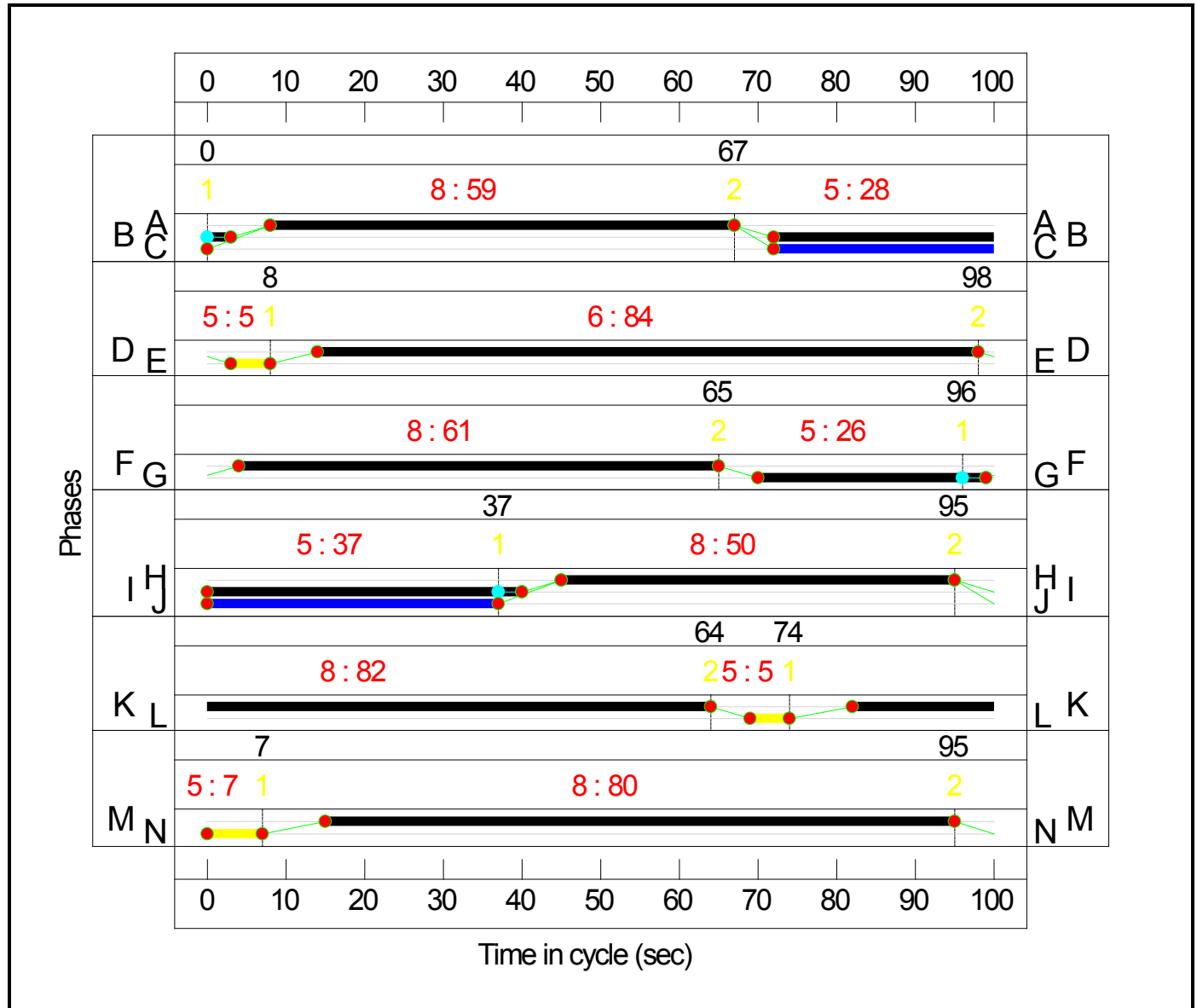
Traffic Flows, Actual

Actual Flow :

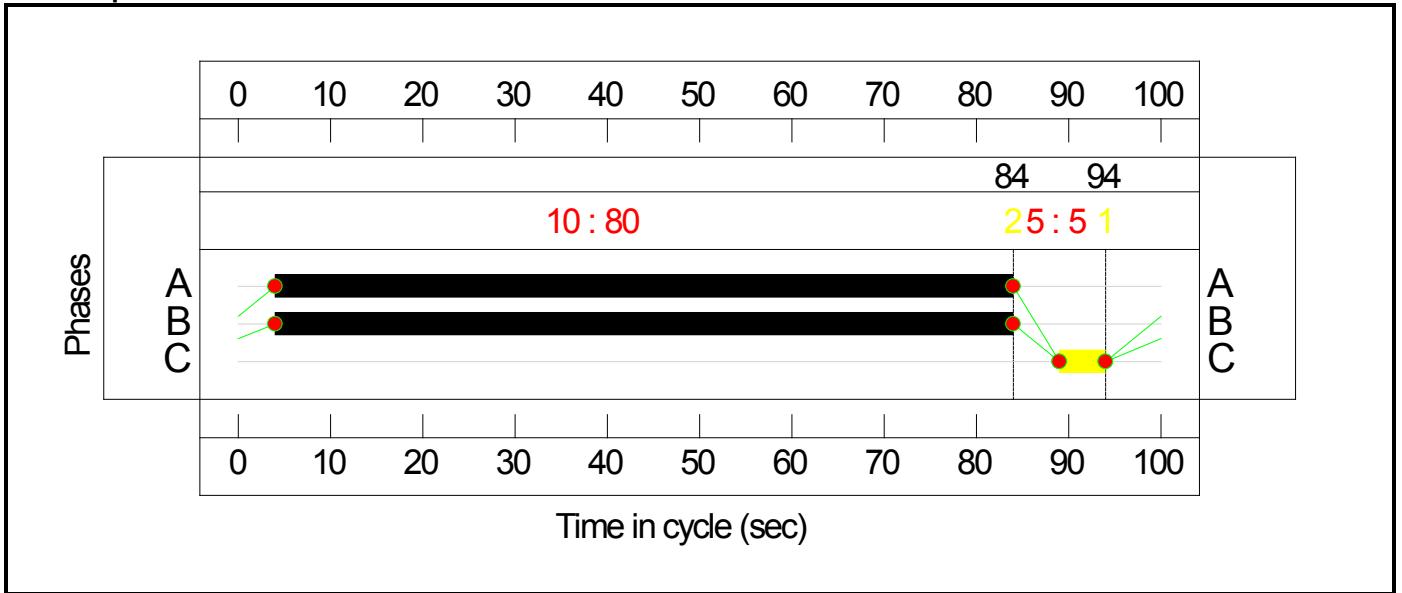
		Destination				
		A	B	C	D	Tot.
Origin	A	0	476	454	110	1040
	B	867	0	172	395	1434
	C	718	300	0	276	1294
	D	121	66	283	0	470
	Tot.	1706	842	909	781	4238

Signal Timings Diagram

C1 - Peel Common Rbt



C2 - Gosport Rd Ped.



Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Mean Max Queue (pcu)
J1:1/2+J1:1/1	Newgate Ln Entry Ahead Left	U	C1:A		1	59	-	792	2057:1868	1480	53.5%	-	-	-	2.9	13.0	8.3	8.8
J1:1/3	Newgate Ln Entry Ahead	U	C1:A		1	59	-	248	1800	1080	23.0%	-	-	-	0.8	11.4	3.2	3.3
J1:2/1	Newgate Ln Internal Ahead	U	C1:B		1	31	-	301	1800	576	52.3%	-	-	-	1.4	16.2	6.8	7.3
J1:2/2+J1:2/3	Newgate Ln Internal Right Ahead	U	C1:B		1	31	-	348	1965:1800	624	55.8%	-	-	-	2.7	28.3	4.8	5.4
J1:3/1	Newgate Ln N/B Ped Ahead	U	C1:D		1	84	-	832	1800	1530	54.4%	-	-	-	0.7	3.1	3.6	4.2
J1:3/2	Newgate Ln N/B Ped Ahead	U	C1:D		1	84	-	874	3600	3060	28.6%	-	-	-	0.3	1.2	1.1	1.3
J1:5/2+J1:5/1	Rowner Rd Entry Ahead Left	U	C1:F		1	61	-	978	2105:1943	1454	67.3%	-	-	-	3.7	13.5	8.9	9.9
J1:5/3	Rowner Rd Entry Ahead	U	C1:F		1	61	-	456	2105	1305	34.9%	-	-	-	1.4	11.3	6.1	6.3
J1:6/1	Rowner Rd Internal Ahead	U	C1:G		1	29	-	394	1991	597	66.0%	-	-	-	4.4	40.4	9.8	10.8
J1:6/2	Rowner Rd Internal Right Ahead	U	C1:G		1	29	-	453	2255	677	67.0%	-	-	-	3.9	31.4	8.3	9.3
J1:7/1	Rowner Rd Exit Ahead	U	C1:M		1	80	-	543	1800	1458	37.2%	-	-	-	0.6	3.9	3.1	3.4
J1:7/2	Rowner Rd Exit Ahead	U	C1:M		1	80	-	299	1965	1592	18.8%	-	-	-	0.2	2.3	0.5	0.6
J1:8/1	Broom Way Entry Ahead Left	U	C1:H		1	50	-	576	1930	984	58.5%	-	-	-	3.4	21.5	11.0	11.7

J1:8/2	Broom Way Entry Ahead	U	C1:H		1	50	-	718	2105	1074	66.9%	-	-	-	4.6	23.3	14.8	15.8
J1:9/1	Broom Way Internal Ahead	U	C1:I		1	40	-	505	2155	884	57.2%	-	-	-	2.9	20.6	7.4	8.1
J1:9/2	Broom Way Internal Right	U	C1:I		1	40	-	411	2092	858	47.9%	-	-	-	2.1	18.2	3.5	3.9
J1:9/3	Broom Way Internal Right	U	C1:I		1	40	-	456	1800	738	61.8%	-	-	-	2.7	21.0	5.0	5.8
J1:10/1	Broom Way S/B Ped Ahead	U	C1:K		1	82	-	421	1965	1631	25.8%	-	-	-	0.2	1.6	0.1	0.3
J1:10/2	Broom Way S/B Ped Ahead	U	C1:K		1	82	-	488	2105	1747	27.9%	-	-	-	0.3	1.9	0.7	0.9
J1:11/1	Broom Way Exit	U	-		-	-	-	421	2000	2000	21.1%	-	-	-	0.1	1.1	0.0	0.1
J1:11/2	Broom Way Exit	U	-		-	-	-	488	2000	2000	24.4%	-	-	-	0.2	1.2	0.0	0.2
J1:12/1	Gosport Rd Entry Left	O	-		-	-	-	121	1940	1282	9.4%	121	0	0	0.1	1.5	0.0	0.1
J1:12/2	Gosport Rd Entry Ahead	O	-		-	-	-	349	2500	797	43.8%	349	0	0	1.5	16.0	4.3	4.7
J1:13/1	Gosport Rd Internal Ahead	U	-		-	-	-	711	1896	1896	37.5%	-	-	-	0.3	1.5	0.5	0.8
J1:13/2	Gosport Rd Internal Right Ahead	U	-		-	-	-	1174	2114	2114	55.5%	-	-	-	0.6	2.0	13.0	13.6
J1:14/1	Gosport Rd Exit Ahead	U	-		-	-	-	781	2015	2015	38.8%	-	-	-	0.3	1.5	6.3	6.6
J2:1/1	Gosport Rd E/B Ped Ahead	U	C2:A		1	80	-	470	2015	1632	28.8%	-	-	-	0.5	3.9	3.1	3.3
J2:2/1	Gosport Rd W/B Ped Ahead	U	C2:B		1	80	-	781	2015	1632	47.9%	-	-	-	0.6	2.8	1.8	2.2
J2:4/1	Gosport Rd E/B Exit Ahead	U	-		-	-	-	470	2015	2015	23.3%	-	-	-	0.2	1.2	0.0	0.2

J2:P1	Unnamed Ped Link	-	C2:C		1	5	-	0	-	1000	0.0%	-	-	-	0.0	0.0	-	0.0
J1:P1	Unnamed Ped Link	-	C1:C		1	28	-	0	-	0	0.0%	-	-	-	-	-	-	-
J1:P2	Unnamed Ped Link	-	C1:E		1	5	-	0	-	0	0.0%	-	-	-	-	-	-	-
J1:P3	Unnamed Ped Link	-	C1:J		1	37	-	0	-	0	0.0%	-	-	-	-	-	-	-
J1:P4	Unnamed Ped Link	-	C1:L		1	5	-	0	-	0	0.0%	-	-	-	-	-	-	-

C1 - Peel Common Rbt	Stream: 1 PRC for Signalled Lanes (%)	61.3	Total Delay for Signalled Lanes (pcuHr)	7.74	Cycle Time (s)	100
C1 - Peel Common Rbt	Stream: 2 PRC for Signalled Lanes (%)	65.5	Total Delay for Signalled Lanes (pcuHr)	1.00	Cycle Time (s)	100
C1 - Peel Common Rbt	Stream: 3 PRC for Signalled Lanes (%)	33.8	Total Delay for Signalled Lanes (pcuHr)	13.46	Cycle Time (s)	100
C1 - Peel Common Rbt	Stream: 4 PRC for Signalled Lanes (%)	34.6	Total Delay for Signalled Lanes (pcuHr)	15.71	Cycle Time (s)	100
C1 - Peel Common Rbt	Stream: 5 PRC for Signalled Lanes (%)	222.2	Total Delay for Signalled Lanes (pcuHr)	0.44	Cycle Time (s)	100
C1 - Peel Common Rbt	Stream: 6 PRC for Signalled Lanes (%)	141.7	Total Delay for Signalled Lanes (pcuHr)	0.78	Cycle Time (s)	100
C2 - Gosport Rd Ped.	PRC for Signalled Lanes (%)	88.1	Total Delay for Signalled Lanes (pcuHr)	1.12	Cycle Time (s)	100
	PRC Over All Lanes (%)	33.8	Total Delay Over All Lanes(pcuHr)	43.56		

Scenario 4: '2024 DS1 BASE PM' (FG4: '2024 DS1 BASE PM', Plan 1: 'Stage Plan 1')

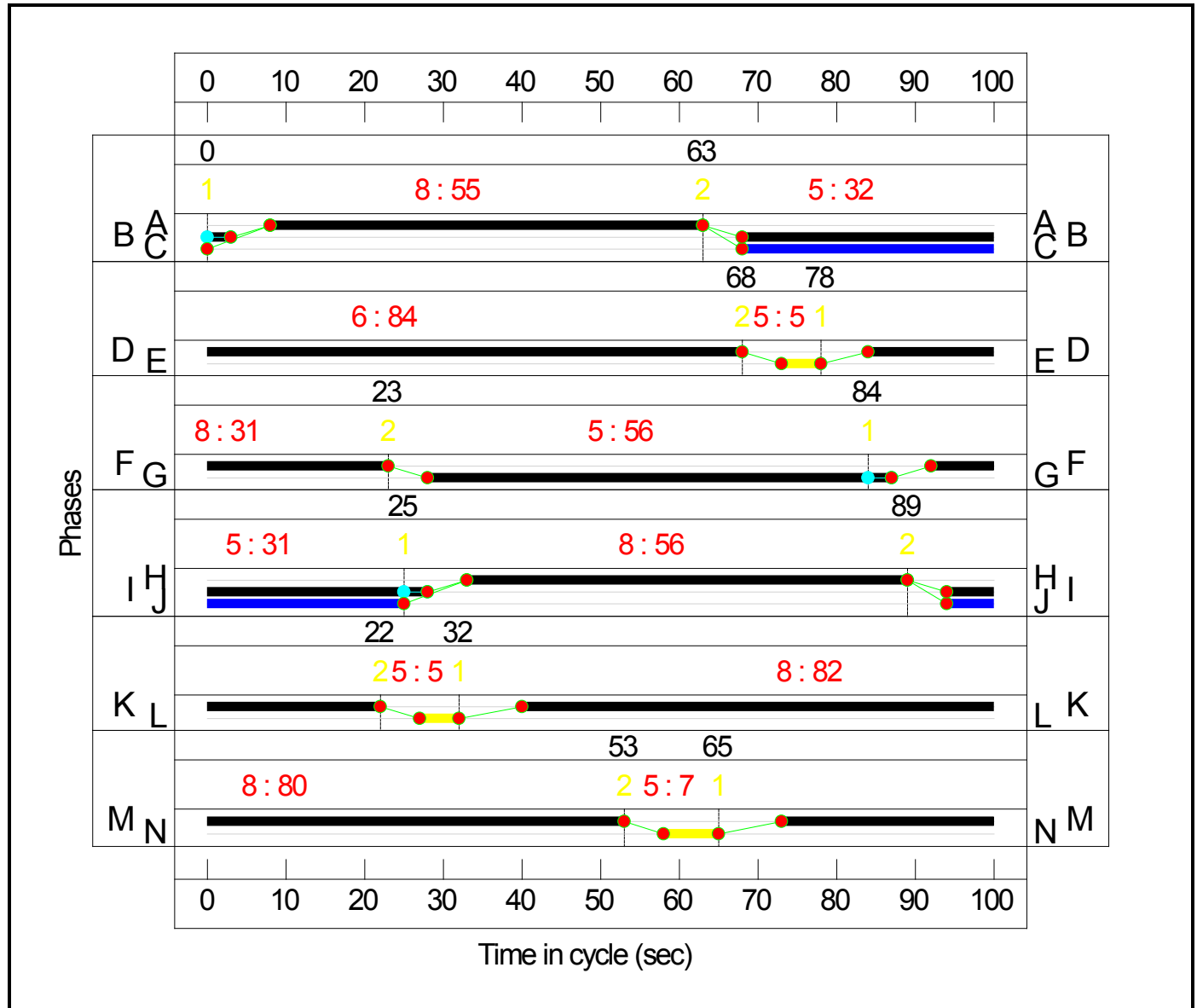
Traffic Flows, Actual

Actual Flow :

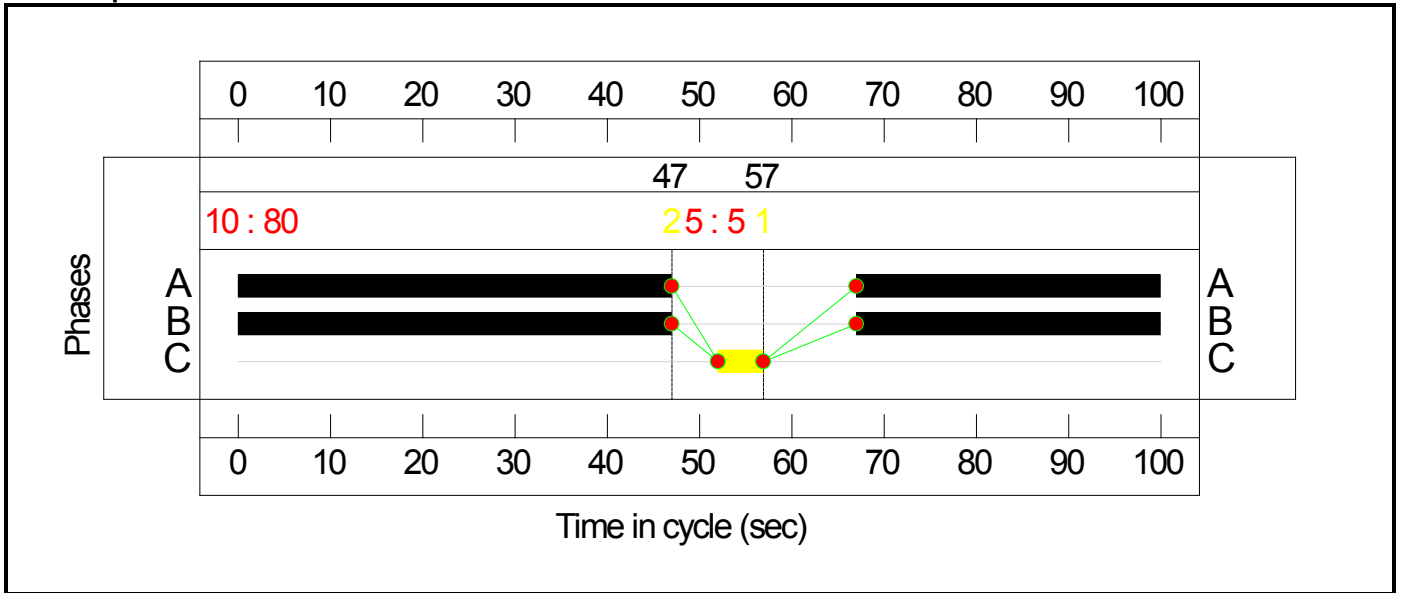
		Destination				
		A	B	C	D	Tot.
Origin	A	0	655	714	189	1558
	B	541	0	156	173	870
	C	338	318	0	198	854
	D	113	358	319	0	790
	Tot.	992	1331	1189	560	4072

Signal Timings Diagram

C1 - Peel Common Rbt



C2 - Gosport Rd Ped.



Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Mean Max Queue (pcu)
J1:1/2+J1:1/1	Newgate Ln Entry Ahead Left	U	C1:A		1	55	-	1030	2059:1868	1441	71.5%	-	-	-	5.1	17.9	12.3	13.5
J1:1/3	Newgate Ln Entry Ahead	U	C1:A		1	55	-	528	1800	1008	52.4%	-	-	-	2.6	17.4	9.1	9.6
J1:2/1	Newgate Ln Internal Ahead	U	C1:B		1	35	-	405	1800	648	62.5%	-	-	-	2.9	26.1	9.3	10.1
J1:2/2+J1:2/3	Newgate Ln Internal Right Ahead	U	C1:B		1	35	-	590	1965:1800	820	72.0%	-	-	-	4.3	26.0	5.7	6.9
J1:3/1	Newgate Ln N/B Ped Ahead	U	C1:D		1	84	-	533	1800	1530	34.8%	-	-	-	0.3	2.2	0.8	1.1
J1:3/2	Newgate Ln N/B Ped Ahead	U	C1:D		1	84	-	459	3600	3060	15.0%	-	-	-	0.1	1.2	0.8	0.8
J1:5/2+J1:5/1	Rowner Rd Entry Ahead Left	U	C1:F		1	31	-	591	2105:1931	871	67.8%	-	-	-	5.5	33.6	7.4	8.4
J1:5/3	Rowner Rd Entry Ahead	U	C1:F		1	31	-	279	2105	674	41.4%	-	-	-	2.4	31.2	6.0	6.4
J1:6/1	Rowner Rd Internal Ahead	U	C1:G		1	59	-	562	1991	1195	47.0%	-	-	-	1.7	10.8	9.2	9.6
J1:6/2	Rowner Rd Internal Right Ahead	U	C1:G		1	59	-	660	2255	1353	48.8%	-	-	-	2.2	11.9	12.6	13.1
J1:7/1	Rowner Rd Exit Ahead	U	C1:M		1	80	-	755	1800	1458	51.8%	-	-	-	0.8	3.6	2.2	2.7
J1:7/2	Rowner Rd Exit Ahead	U	C1:M		1	80	-	576	1965	1592	36.2%	-	-	-	0.5	2.9	1.7	2.0
J1:8/1	Broom Way Entry Ahead Left	U	C1:H		1	56	-	356	1925	1097	32.4%	-	-	-	1.4	13.8	5.1	5.4

J1:8/2	Broom Way Entry Ahead	U	C1:H		1	56	-	498	2105	1200	41.5%	-	-	-	2.0	14.7	7.7	8.1
J1:9/1	Broom Way Internal Ahead	U	C1:I		1	34	-	362	2155	754	48.0%	-	-	-	2.8	28.3	8.0	8.5
J1:9/2	Broom Way Internal Right	U	C1:I		1	34	-	262	2092	732	35.8%	-	-	-	0.3	4.3	0.1	0.3
J1:9/3	Broom Way Internal Right	U	C1:I		1	34	-	279	1800	630	44.3%	-	-	-	0.5	5.9	4.7	5.1
J1:10/1	Broom Way S/B Ped Ahead	U	C1:K		1	82	-	588	1965	1631	36.1%	-	-	-	0.3	1.9	0.2	0.5
J1:10/2	Broom Way S/B Ped Ahead	U	C1:K		1	82	-	601	2105	1747	34.4%	-	-	-	0.4	2.2	0.9	1.2
J1:11/1	Broom Way Exit	U	-		-	-	-	588	2000	2000	29.4%	-	-	-	0.2	1.3	0.0	0.2
J1:11/2	Broom Way Exit	U	-		-	-	-	601	2000	2000	30.1%	-	-	-	0.2	1.3	0.0	0.2
J1:12/1	Gosport Rd Entry Left	O	-		-	-	-	113	1940	1347	8.4%	113	0	0	0.0	1.5	0.0	0.0
J1:12/2	Gosport Rd Entry Ahead	O	-		-	-	-	677	2500	1050	64.5%	677	0	0	1.7	8.9	5.8	6.7
J1:13/1	Gosport Rd Internal Ahead	U	-		-	-	-	420	1896	1896	22.2%	-	-	-	0.1	1.2	0.0	0.1
J1:13/2	Gosport Rd Internal Right Ahead	U	-		-	-	-	777	2091	2091	37.2%	-	-	-	0.3	1.4	5.3	5.6
J1:14/1	Gosport Rd Exit Ahead	U	-		-	-	-	560	2015	2015	27.8%	-	-	-	0.2	1.4	6.3	6.5
J2:1/1	Gosport Rd E/B Ped Ahead	U	C2:A		1	80	-	790	2015	1632	48.4%	-	-	-	1.1	5.1	6.8	7.3
J2:2/1	Gosport Rd W/B Ped Ahead	U	C2:B		1	80	-	560	2015	1632	34.3%	-	-	-	0.4	2.6	1.3	1.6
J2:4/1	Gosport Rd E/B Exit Ahead	U	-		-	-	-	790	2015	2015	39.2%	-	-	-	0.3	1.5	0.0	0.3

J2:P1	Unnamed Ped Link	-	C2:C		1	5	-	0	-	1000	0.0%	-	-	-	0.0	0.0	-	0.0
J1:P1	Unnamed Ped Link	-	C1:C		1	32	-	0	-	0	0.0%	-	-	-	-	-	-	-
J1:P2	Unnamed Ped Link	-	C1:E		1	5	-	0	-	0	0.0%	-	-	-	-	-	-	-
J1:P3	Unnamed Ped Link	-	C1:J		1	31	-	0	-	0	0.0%	-	-	-	-	-	-	-
J1:P4	Unnamed Ped Link	-	C1:L		1	5	-	0	-	0	0.0%	-	-	-	-	-	-	-

C1 - Peel Common Rbt	Stream: 1 PRC for Signalled Lanes (%)	25.0	Total Delay for Signalled Lanes (pcuHr)	14.89	Cycle Time (s)	100
C1 - Peel Common Rbt	Stream: 2 PRC for Signalled Lanes (%)	158.3	Total Delay for Signalled Lanes (pcuHr)	0.48	Cycle Time (s)	100
C1 - Peel Common Rbt	Stream: 3 PRC for Signalled Lanes (%)	32.7	Total Delay for Signalled Lanes (pcuHr)	11.80	Cycle Time (s)	100
C1 - Peel Common Rbt	Stream: 4 PRC for Signalled Lanes (%)	87.5	Total Delay for Signalled Lanes (pcuHr)	7.01	Cycle Time (s)	100
C1 - Peel Common Rbt	Stream: 5 PRC for Signalled Lanes (%)	149.6	Total Delay for Signalled Lanes (pcuHr)	0.67	Cycle Time (s)	100
C1 - Peel Common Rbt	Stream: 6 PRC for Signalled Lanes (%)	73.8	Total Delay for Signalled Lanes (pcuHr)	1.21	Cycle Time (s)	100
C2 - Gosport Rd Ped.	PRC for Signalled Lanes (%)	85.9	Total Delay for Signalled Lanes (pcuHr)	1.52	Cycle Time (s)	100
	PRC Over All Lanes (%)	25.0	Total Delay Over All Lanes(pcuHr)	40.70		

Scenario 5: '2024 DS1 BASE + DEV AM' (FG5: '2024 DS1 BASE + DEV AM', Plan 1: 'Stage Plan 1')

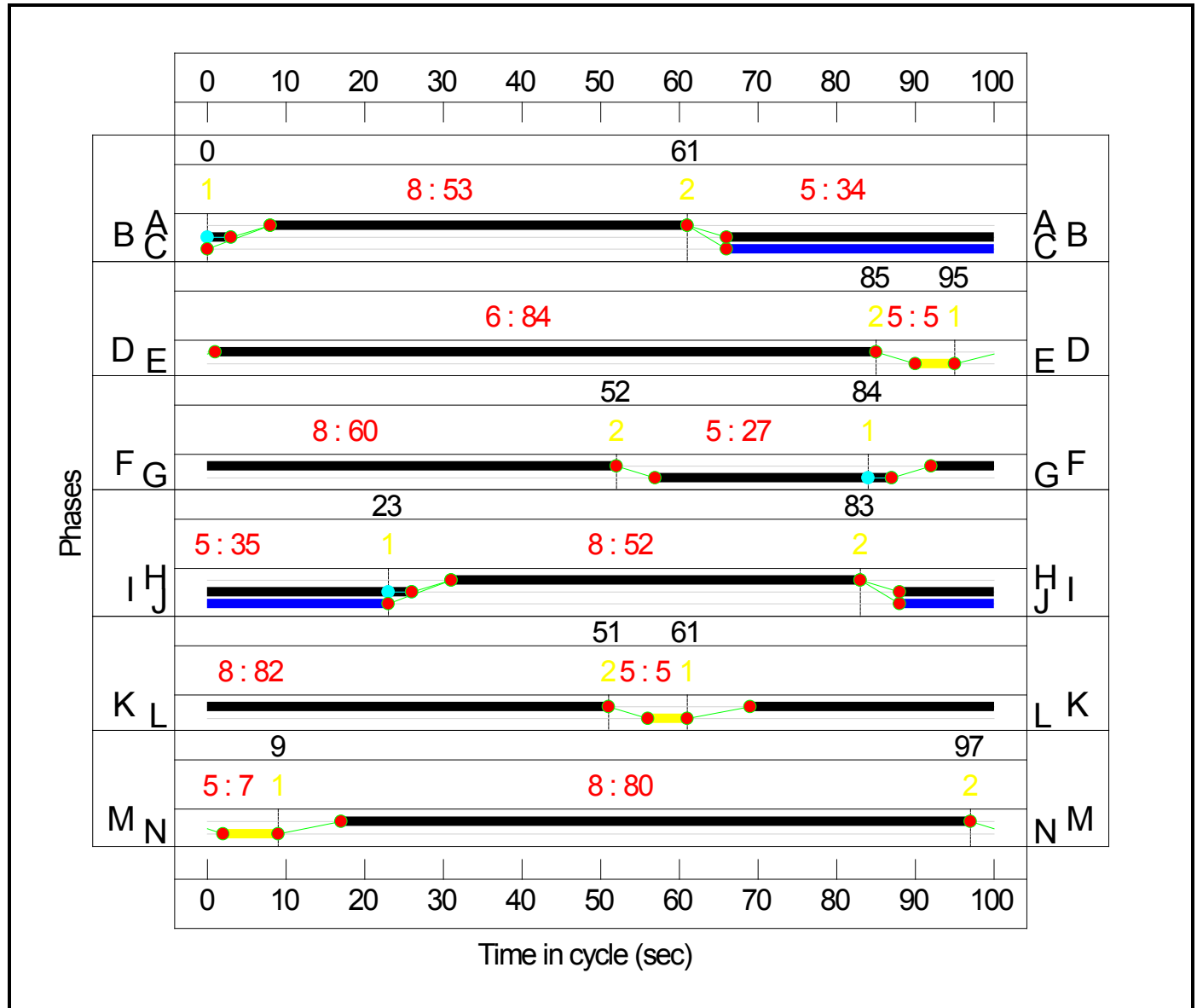
Traffic Flows, Actual

Actual Flow :

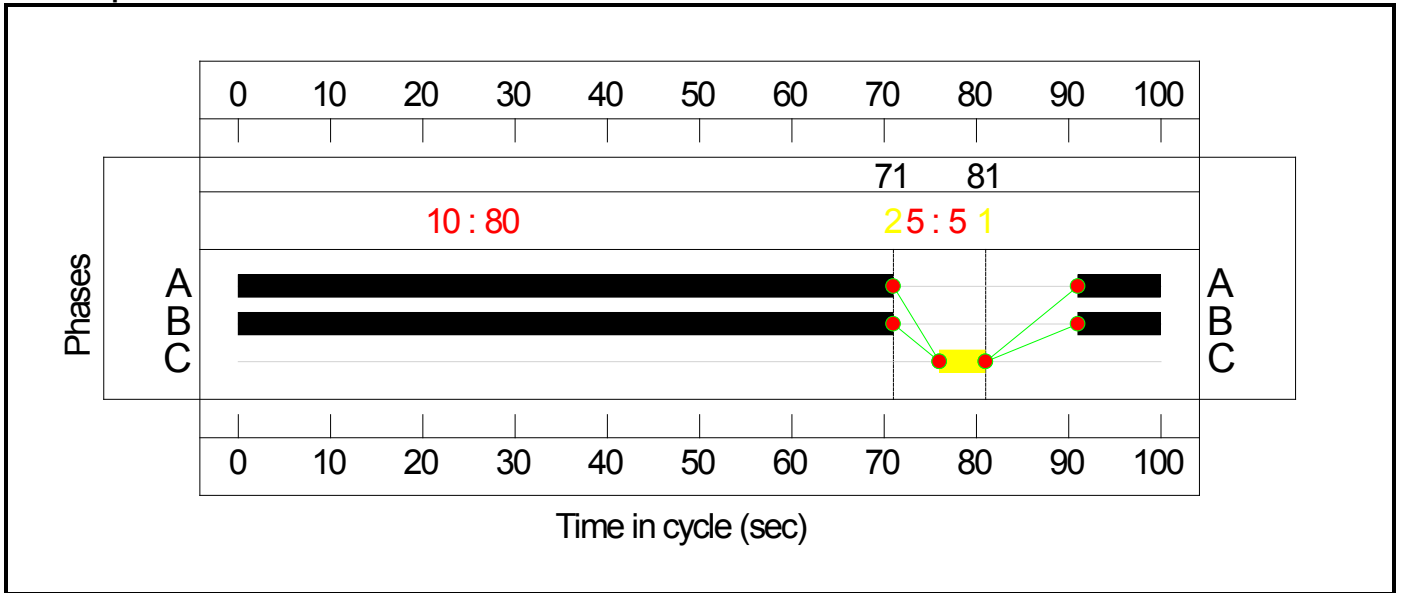
		Destination				
		A	B	C	D	Tot.
Origin	A	0	504	472	115	1091
	B	872	0	172	395	1439
	C	723	300	0	276	1299
	D	122	66	283	0	471
	Tot.	1717	870	927	786	4300

Signal Timings Diagram

C1 - Peel Common Rbt



C2 - Gosport Rd Ped.



Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Mean Max Queue (pcu)
J1:1/2+J1:1/1	Newgate Ln Entry Ahead Left	U	C1:A		1	53	-	819	2058:1868	1370	59.8%	-	-	-	3.9	17.1	9.8	10.6
J1:1/3	Newgate Ln Entry Ahead	U	C1:A		1	53	-	272	1800	972	28.0%	-	-	-	1.1	15.0	4.1	4.3
J1:2/1	Newgate Ln Internal Ahead	U	C1:B		1	37	-	301	1800	684	44.0%	-	-	-	1.6	19.5	7.2	7.6
J1:2/2+J1:2/3	Newgate Ln Internal Right Ahead	U	C1:B		1	37	-	348	1965:1800	733	47.5%	-	-	-	2.0	21.0	7.0	7.5
J1:3/1	Newgate Ln N/B Ped Ahead	U	C1:D		1	84	-	838	1800	1530	54.8%	-	-	-	0.7	3.1	3.6	4.2
J1:3/2	Newgate Ln N/B Ped Ahead	U	C1:D		1	84	-	879	3600	3060	28.7%	-	-	-	0.3	1.2	1.1	1.3
J1:5/2+J1:5/1	Rowner Rd Entry Ahead Left	U	C1:F		1	60	-	981	2105:1943	1436	68.3%	-	-	-	3.9	14.2	9.4	10.5
J1:5/3	Rowner Rd Entry Ahead	U	C1:F		1	60	-	458	2105	1284	35.7%	-	-	-	1.5	11.9	6.2	6.5
J1:6/1	Rowner Rd Internal Ahead	U	C1:G		1	30	-	394	1991	617	63.8%	-	-	-	3.6	33.1	9.2	10.1
J1:6/2	Rowner Rd Internal Right Ahead	U	C1:G		1	30	-	476	2255	699	68.1%	-	-	-	4.2	31.5	8.7	9.8
J1:7/1	Rowner Rd Exit Ahead	U	C1:M		1	80	-	558	1800	1458	38.3%	-	-	-	0.4	2.6	0.7	1.0
J1:7/2	Rowner Rd Exit Ahead	U	C1:M		1	80	-	312	1965	1592	19.6%	-	-	-	0.1	1.6	0.3	0.4
J1:8/1	Broom Way Entry Ahead Left	U	C1:H		1	52	-	578	1930	1023	56.5%	-	-	-	3.2	19.8	10.8	11.4

J1:8/2	Broom Way Entry Ahead	U	C1:H		1	52	-	721	2105	1116	64.6%	-	-	-	4.3	21.3	14.2	15.1
J1:9/1	Broom Way Internal Ahead	U	C1:I		1	38	-	510	2155	840	60.7%	-	-	-	3.1	21.9	8.4	9.2
J1:9/2	Broom Way Internal Right	U	C1:I		1	38	-	414	2092	816	50.7%	-	-	-	2.3	19.7	3.6	4.1
J1:9/3	Broom Way Internal Right	U	C1:I		1	38	-	458	1800	702	65.2%	-	-	-	2.9	23.0	5.1	6.1
J1:10/1	Broom Way S/B Ped Ahead	U	C1:K		1	82	-	426	1965	1631	26.1%	-	-	-	0.2	1.6	0.1	0.3
J1:10/2	Broom Way S/B Ped Ahead	U	C1:K		1	82	-	501	2105	1747	28.7%	-	-	-	0.3	1.9	0.6	0.8
J1:11/1	Broom Way Exit	U	-		-	-	-	426	2000	2000	21.3%	-	-	-	0.1	1.1	0.0	0.1
J1:11/2	Broom Way Exit	U	-		-	-	-	501	2000	2000	25.1%	-	-	-	0.2	1.2	0.0	0.2
J1:12/1	Gosport Rd Entry Left	O	-		-	-	-	122	1940	1281	9.5%	122	0	0	0.1	1.6	0.0	0.1
J1:12/2	Gosport Rd Entry Ahead	O	-		-	-	-	349	2500	808	43.2%	349	0	0	1.4	14.6	3.9	4.3
J1:13/1	Gosport Rd Internal Ahead	U	-		-	-	-	716	1896	1896	37.8%	-	-	-	0.3	1.5	0.5	0.8
J1:13/2	Gosport Rd Internal Right Ahead	U	-		-	-	-	1179	2115	2115	55.7%	-	-	-	0.6	2.0	12.4	13.0
J1:14/1	Gosport Rd Exit Ahead	U	-		-	-	-	786	2015	2015	39.0%	-	-	-	0.3	1.6	6.9	7.2
J2:1/1	Gosport Rd E/B Ped Ahead	U	C2:A		1	80	-	471	2015	1632	28.9%	-	-	-	0.5	3.9	3.1	3.3
J2:2/1	Gosport Rd W/B Ped Ahead	U	C2:B		1	80	-	786	2015	1632	48.2%	-	-	-	0.6	2.8	1.3	1.8
J2:4/1	Gosport Rd E/B Exit Ahead	U	-		-	-	-	471	2015	2015	23.4%	-	-	-	0.2	1.2	0.0	0.2

J2:P1	Unnamed Ped Link	-	C2:C		1	5	-	0	-	1000	0.0%	-	-	-	0.0	0.0	-	0.0
J1:P1	Unnamed Ped Link	-	C1:C		1	34	-	0	-	0	0.0%	-	-	-	-	-	-	-
J1:P2	Unnamed Ped Link	-	C1:E		1	5	-	0	-	0	0.0%	-	-	-	-	-	-	-
J1:P3	Unnamed Ped Link	-	C1:J		1	35	-	0	-	0	0.0%	-	-	-	-	-	-	-
J1:P4	Unnamed Ped Link	-	C1:L		1	5	-	0	-	0	0.0%	-	-	-	-	-	-	-

C1 - Peel Common Rbt	Stream: 1 PRC for Signalled Lanes (%)	50.5	Total Delay for Signalled Lanes (pcuHr)	8.69	Cycle Time (s)	100
C1 - Peel Common Rbt	Stream: 2 PRC for Signalled Lanes (%)	64.3	Total Delay for Signalled Lanes (pcuHr)	1.03	Cycle Time (s)	100
C1 - Peel Common Rbt	Stream: 3 PRC for Signalled Lanes (%)	31.7	Total Delay for Signalled Lanes (pcuHr)	13.17	Cycle Time (s)	100
C1 - Peel Common Rbt	Stream: 4 PRC for Signalled Lanes (%)	37.9	Total Delay for Signalled Lanes (pcuHr)	15.74	Cycle Time (s)	100
C1 - Peel Common Rbt	Stream: 5 PRC for Signalled Lanes (%)	213.9	Total Delay for Signalled Lanes (pcuHr)	0.45	Cycle Time (s)	100
C1 - Peel Common Rbt	Stream: 6 PRC for Signalled Lanes (%)	135.2	Total Delay for Signalled Lanes (pcuHr)	0.54	Cycle Time (s)	100
C2 - Gosport Rd Ped.	PRC for Signalled Lanes (%)	86.9	Total Delay for Signalled Lanes (pcuHr)	1.13	Cycle Time (s)	100
	PRC Over All Lanes (%)	31.7	Total Delay Over All Lanes(pcuHr)	43.95		

Scenario 6: '2024 DS1 BASE + DEV PM' (FG6: '2024 DS1 BASE + DEV PM', Plan 1: 'Stage Plan 1')

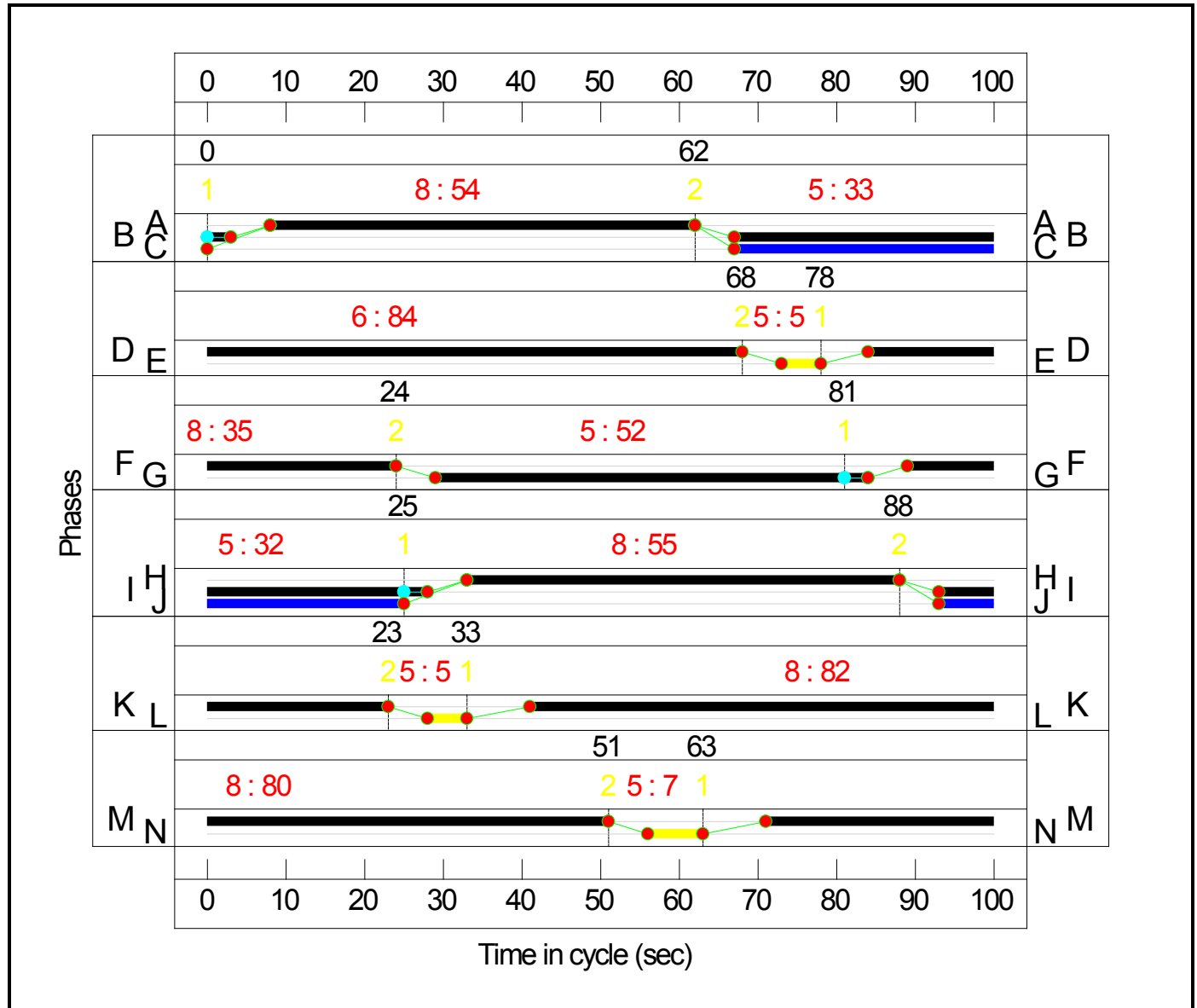
Traffic Flows, Actual

Actual Flow :

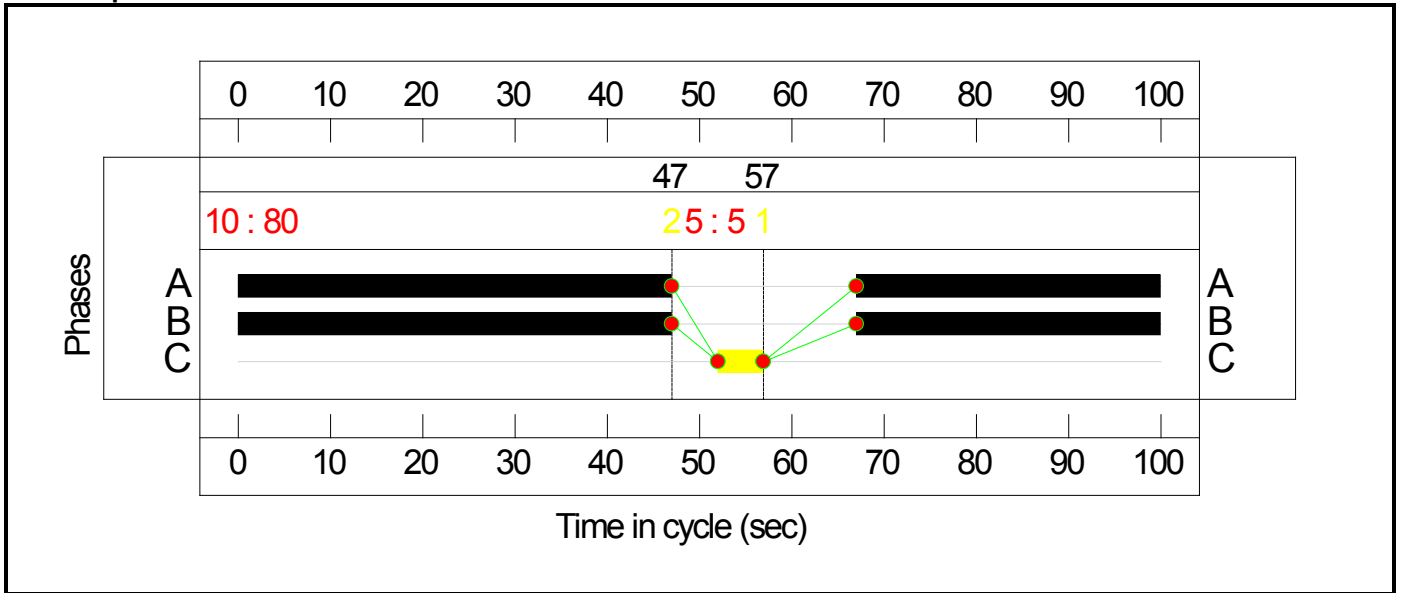
		Destination				
		A	B	C	D	Tot.
Origin	A	0	664	722	191	1577
	B	566	0	156	173	895
	C	352	318	0	198	868
	D	118	358	319	0	795
	Tot.	1036	1340	1197	562	4135

Signal Timings Diagram

C1 - Peel Common Rbt



C2 - Gosport Rd Ped.



Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Mean Max Queue (pcu)
J1:1/2+J1:1/1	Newgate Ln Entry Ahead Left	U	C1:A		1	54	-	1043	2059:1868	1430	72.9%	-	-	-	5.5	18.9	12.7	14.0
J1:1/3	Newgate Ln Entry Ahead	U	C1:A		1	54	-	534	1800	990	53.9%	-	-	-	2.7	18.3	9.3	9.9
J1:2/1	Newgate Ln Internal Ahead	U	C1:B		1	36	-	381	1800	666	57.2%	-	-	-	2.5	23.7	8.7	9.4
J1:2/2+J1:2/3	Newgate Ln Internal Right Ahead	U	C1:B		1	36	-	614	1965:1800	853	72.0%	-	-	-	4.3	25.3	4.8	6.1
J1:3/1	Newgate Ln N/B Ped Ahead	U	C1:D		1	84	-	558	1800	1530	36.5%	-	-	-	0.4	2.3	0.8	1.1
J1:3/2	Newgate Ln N/B Ped Ahead	U	C1:D		1	84	-	478	3600	3060	15.6%	-	-	-	0.2	1.2	0.8	0.9
J1:5/2+J1:5/1	Rowner Rd Entry Ahead Left	U	C1:F		1	35	-	605	2105:1931	964	62.8%	-	-	-	4.9	29.2	7.0	7.9
J1:5/3	Rowner Rd Entry Ahead	U	C1:F		1	35	-	290	2105	758	38.3%	-	-	-	2.2	27.6	6.0	6.3
J1:6/1	Rowner Rd Internal Ahead	U	C1:G		1	55	-	567	1991	1115	50.9%	-	-	-	2.1	13.5	10.1	10.7
J1:6/2	Rowner Rd Internal Right Ahead	U	C1:G		1	55	-	665	2255	1263	52.7%	-	-	-	2.6	14.1	13.4	14.0
J1:7/1	Rowner Rd Exit Ahead	U	C1:M		1	80	-	743	1800	1458	51.0%	-	-	-	0.7	3.6	2.2	2.7
J1:7/2	Rowner Rd Exit Ahead	U	C1:M		1	80	-	597	1965	1592	37.5%	-	-	-	0.5	2.9	1.7	2.0
J1:8/1	Broom Way Entry Ahead Left	U	C1:H		1	55	-	362	1926	1079	33.6%	-	-	-	1.5	14.4	5.4	5.7

J1:8/2	Broom Way Entry Ahead	U	C1:H		1	55	-	506	2105	1179	42.9%	-	-	-	2.2	15.4	8.0	8.4
J1:9/1	Broom Way Internal Ahead	U	C1:I		1	35	-	364	2155	776	46.9%	-	-	-	2.8	28.1	8.8	9.3
J1:9/2	Broom Way Internal Right	U	C1:I		1	35	-	276	2092	753	36.6%	-	-	-	0.4	4.6	0.1	0.4
J1:9/3	Broom Way Internal Right	U	C1:I		1	35	-	290	1800	648	44.8%	-	-	-	0.5	6.1	4.6	5.0
J1:10/1	Broom Way S/B Ped Ahead	U	C1:K		1	82	-	593	1965	1631	36.4%	-	-	-	0.3	1.8	0.1	0.4
J1:10/2	Broom Way S/B Ped Ahead	U	C1:K		1	82	-	604	2105	1747	34.6%	-	-	-	0.3	2.0	0.7	1.0
J1:11/1	Broom Way Exit	U	-		-	-	-	593	2000	2000	29.7%	-	-	-	0.2	1.3	0.0	0.2
J1:11/2	Broom Way Exit	U	-		-	-	-	604	2000	2000	30.2%	-	-	-	0.2	1.3	0.0	0.2
J1:12/1	Gosport Rd Entry Left	O	-		-	-	-	118	1940	1342	8.8%	118	0	0	0.0	1.5	0.0	0.0
J1:12/2	Gosport Rd Entry Ahead	O	-		-	-	-	677	2500	1075	63.0%	677	0	0	1.6	8.5	5.5	6.3
J1:13/1	Gosport Rd Internal Ahead	U	-		-	-	-	440	1896	1896	23.2%	-	-	-	0.2	1.2	0.0	0.2
J1:13/2	Gosport Rd Internal Right Ahead	U	-		-	-	-	796	2092	2092	38.0%	-	-	-	0.3	1.4	5.9	6.2
J1:14/1	Gosport Rd Exit Ahead	U	-		-	-	-	562	2015	2015	27.9%	-	-	-	0.2	1.4	6.9	7.1
J2:1/1	Gosport Rd E/B Ped Ahead	U	C2:A		1	80	-	795	2015	1632	48.7%	-	-	-	1.1	5.1	6.8	7.3
J2:2/1	Gosport Rd W/B Ped Ahead	U	C2:B		1	80	-	562	2015	1632	34.4%	-	-	-	0.4	2.7	1.4	1.6
J2:4/1	Gosport Rd E/B Exit Ahead	U	-		-	-	-	795	2015	2015	39.5%	-	-	-	0.3	1.5	0.0	0.3

J2:P1	Unnamed Ped Link	-	C2:C		1	5	-	0	-	1000	0.0%	-	-	-	0.0	0.0	-	0.0
J1:P1	Unnamed Ped Link	-	C1:C		1	33	-	0	-	0	0.0%	-	-	-	-	-	-	-
J1:P2	Unnamed Ped Link	-	C1:E		1	5	-	0	-	0	0.0%	-	-	-	-	-	-	-
J1:P3	Unnamed Ped Link	-	C1:J		1	32	-	0	-	0	0.0%	-	-	-	-	-	-	-
J1:P4	Unnamed Ped Link	-	C1:L		1	5	-	0	-	0	0.0%	-	-	-	-	-	-	-
				C1 - Peel Common Rbt	Stream: 1	PRC for Signalled Lanes (%)	23.4	Total Delay for Signalled Lanes (pcuHr):	15.01	Cycle Time (s):	100							
				C1 - Peel Common Rbt	Stream: 2	PRC for Signalled Lanes (%)	146.8	Total Delay for Signalled Lanes (pcuHr):	0.51	Cycle Time (s):	100							
				C1 - Peel Common Rbt	Stream: 3	PRC for Signalled Lanes (%)	43.4	Total Delay for Signalled Lanes (pcuHr):	11.85	Cycle Time (s):	100							
				C1 - Peel Common Rbt	Stream: 4	PRC for Signalled Lanes (%)	91.8	Total Delay for Signalled Lanes (pcuHr):	7.31	Cycle Time (s):	100							
				C1 - Peel Common Rbt	Stream: 5	PRC for Signalled Lanes (%)	147.5	Total Delay for Signalled Lanes (pcuHr):	0.64	Cycle Time (s):	100							
				C1 - Peel Common Rbt	Stream: 6	PRC for Signalled Lanes (%)	76.6	Total Delay for Signalled Lanes (pcuHr):	1.22	Cycle Time (s):	100							
				C2 - Gosport Rd Ped.		PRC for Signalled Lanes (%)	84.8	Total Delay for Signalled Lanes (pcuHr):	1.55	Cycle Time (s):	100							
						PRC Over All Lanes (%)	23.4	Total Delay Over All Lanes(pcuHr):	41.16									

Scenario 7: '2019 DS2 BASE AM' (FG7: '2019 DS2 BASE AM', Plan 1: 'Stage Plan 1')

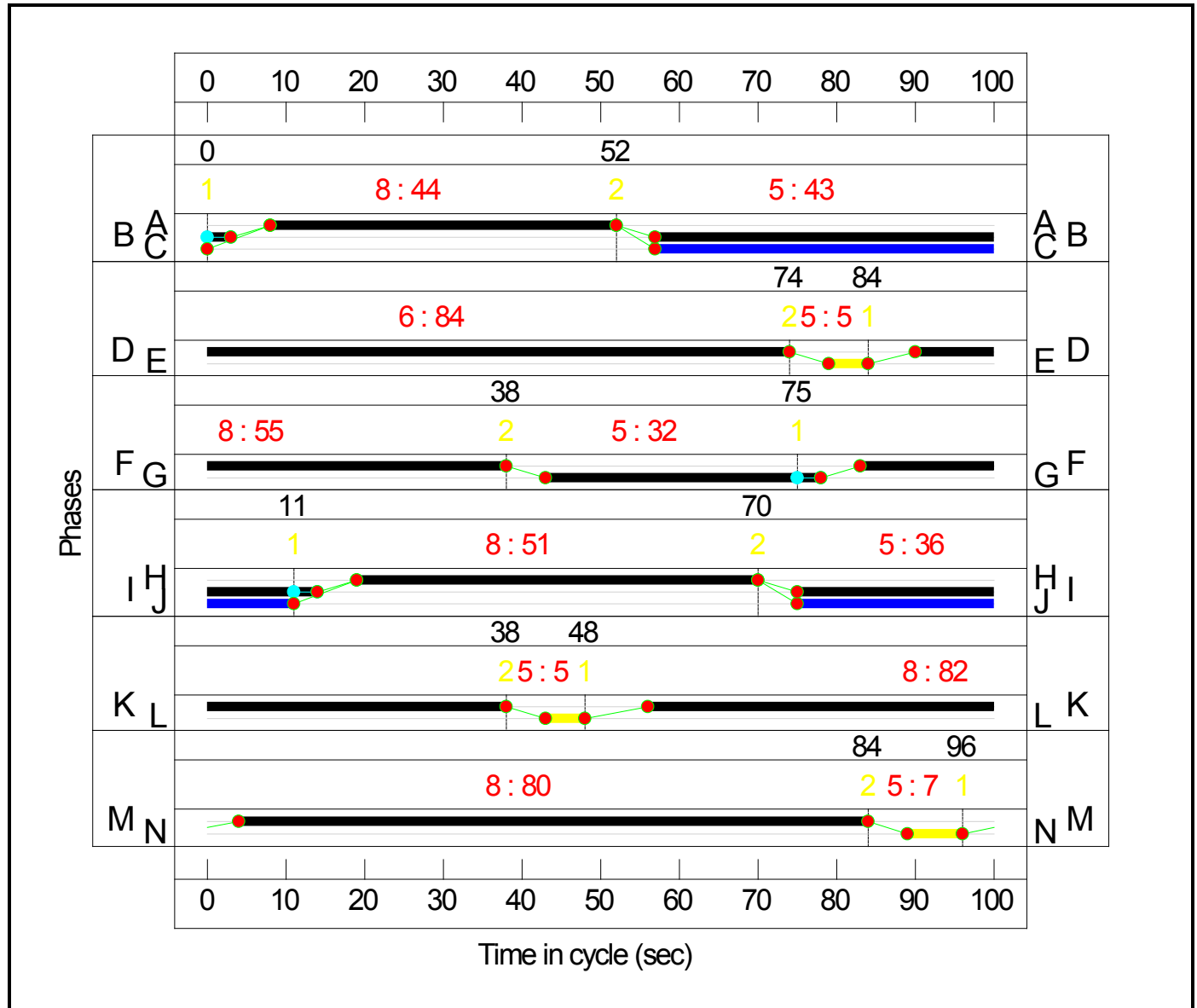
Traffic Flows, Actual

Actual Flow :

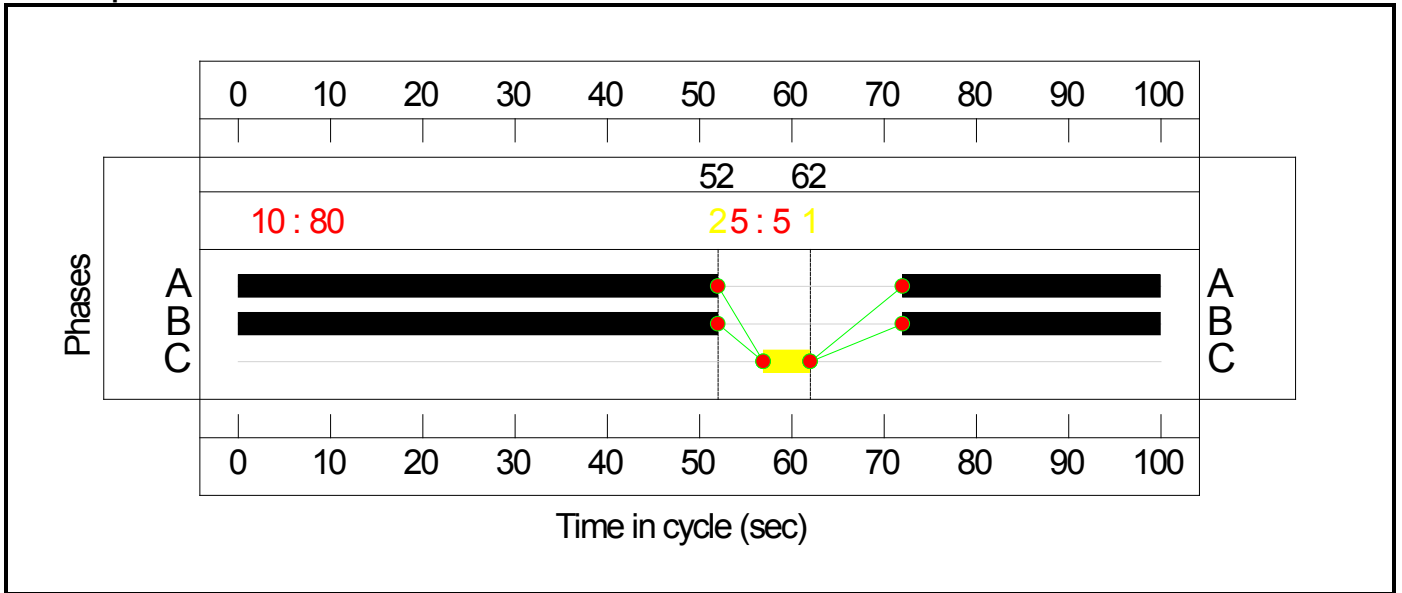
		Destination				
		A	B	C	D	Tot.
Origin	A	0	183	234	141	558
	B	463	0	88	550	1101
	C	639	148	0	692	1479
	D	220	152	302	0	674
	Tot.	1322	483	624	1383	3812

Signal Timings Diagram

C1 - Peel Common Rbt



C2 - Gosport Rd Ped.



Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Mean Max Queue (pcu)
J1:1/2+J1:1/1	Newgate Ln Entry Ahead Left	U	C1:A		1	44	-	417	2044:1868	1068	39.1%	-	-	-	2.4	20.4	6.1	6.4
J1:1/3	Newgate Ln Entry Ahead	U	C1:A		1	44	-	141	1800	810	17.4%	-	-	-	0.7	19.1	2.3	2.4
J1:2/1	Newgate Ln Internal Ahead	U	C1:B		1	46	-	188	1800	846	22.2%	-	-	-	0.9	16.4	3.8	4.0
J1:2/2+J1:2/3	Newgate Ln Internal Right Ahead	U	C1:B		1	46	-	414	1965:1800	928	44.6%	-	-	-	1.6	13.6	3.1	3.5
J1:3/1	Newgate Ln N/B Ped Ahead	U	C1:D		1	84	-	391	1800	1530	25.6%	-	-	-	0.2	1.7	0.2	0.4
J1:3/2	Newgate Ln N/B Ped Ahead	U	C1:D		1	84	-	931	3600	3060	30.4%	-	-	-	0.3	1.3	1.6	1.8
J1:5/2+J1:5/1	Rowner Rd Entry Ahead Left	U	C1:F		1	55	-	806	2105:1955	1193	67.6%	-	-	-	4.2	18.6	12.9	14.0
J1:5/3	Rowner Rd Entry Ahead	U	C1:F		1	55	-	295	2105	1179	25.0%	-	-	-	1.1	13.3	4.2	4.3
J1:6/1	Rowner Rd Internal Ahead	U	C1:G		1	35	-	283	1991	717	39.5%	-	-	-	1.8	22.9	6.5	6.8
J1:6/2	Rowner Rd Internal Right Ahead	U	C1:G		1	35	-	394	2255	812	48.5%	-	-	-	2.9	26.3	6.7	7.1
J1:7/1	Rowner Rd Exit Ahead	U	C1:M		1	80	-	268	1800	1458	18.4%	-	-	-	0.2	2.4	0.6	0.7
J1:7/2	Rowner Rd Exit Ahead	U	C1:M		1	80	-	215	1965	1592	13.5%	-	-	-	0.1	2.5	0.9	0.9
J1:8/1	Broom Way Entry Ahead Left	U	C1:H		1	51	-	695	1894	985	70.6%	-	-	-	4.7	24.4	14.5	15.7

J1:8/2	Broom Way Entry Ahead	U	C1:H		1	51	-	784	2105	1095	71.6%	-	-	-	5.3	24.1	16.6	17.8
J1:9/1	Broom Way Internal Ahead	U	C1:I		1	39	-	691	2155	862	80.2%	-	-	-	5.1	26.7	9.7	11.7
J1:9/2	Broom Way Internal Right	U	C1:I		1	39	-	168	2092	837	20.1%	-	-	-	0.8	16.4	1.4	1.5
J1:9/3	Broom Way Internal Right	U	C1:I		1	39	-	295	1800	720	41.0%	-	-	-	1.5	18.3	2.6	2.9
J1:10/1	Broom Way S/B Ped Ahead	U	C1:K		1	82	-	285	1965	1631	17.5%	-	-	-	0.1	1.3	0.0	0.1
J1:10/2	Broom Way S/B Ped Ahead	U	C1:K		1	82	-	339	2105	1747	19.4%	-	-	-	0.2	1.7	0.4	0.5
J1:11/1	Brrom Way Exit	U	-		-	-	-	285	2000	2000	14.3%	-	-	-	0.1	1.0	0.0	0.1
J1:11/2	Brrom Way Exit	U	-		-	-	-	339	2000	2000	17.0%	-	-	-	0.1	1.1	0.0	0.1
J1:12/1	Gosport Rd Entry Left	O	-		-	-	-	220	1940	1401	15.7%	220	0	0	0.1	1.5	0.0	0.1
J1:12/2	Gosport Rd Entry Ahead	O	-		-	-	-	454	2500	856	53.0%	454	0	0	1.5	11.5	4.2	4.7
J1:13/1	Gosport Rd Internal Ahead	U	-		-	-	-	171	1896	1896	9.0%	-	-	-	0.0	1.0	0.0	0.0
J1:13/2	Gosport Rd Internal Right Ahead	U	-		-	-	-	1079	2133	2133	50.6%	-	-	-	0.5	1.7	0.6	1.1
J1:14/1	Gosport Rd Exit Ahead	U	-		-	-	-	1383	2015	2015	68.6%	-	-	-	1.1	3.0	10.2	11.3
J2:1/1	Gosport Rd E/B Ped Ahead	U	C2:A		1	80	-	674	2015	1632	41.3%	-	-	-	0.9	4.6	5.2	5.6
J2:2/1	Gosport Rd W/B Ped Ahead	U	C2:B		1	80	-	1383	2015	1632	84.7%	-	-	-	3.3	8.5	4.6	7.3
J2:4/1	Gosport Rd E/B Exit Ahead	U	-		-	-	-	674	2015	2015	33.4%	-	-	-	0.3	1.3	0.0	0.3

J2:P1	Unnamed Ped Link	-	C2:C		1	5	-	0	-	1000	0.0%	-	-	-	0.0	0.0	-	0.0
J1:P1	Unnamed Ped Link	-	C1:C		1	43	-	0	-	0	0.0%	-	-	-	-	-	-	-
J1:P2	Unnamed Ped Link	-	C1:E		1	5	-	0	-	0	0.0%	-	-	-	-	-	-	-
J1:P3	Unnamed Ped Link	-	C1:J		1	36	-	0	-	0	0.0%	-	-	-	-	-	-	-
J1:P4	Unnamed Ped Link	-	C1:L		1	5	-	0	-	0	0.0%	-	-	-	-	-	-	-
C1 - Peel Common Rbt		Stream: 1 PRC for Signalled Lanes (%)		101.8		Total Delay for Signalled Lanes (pcuHr):		5.53		Cycle Time (s):		100						
C1 - Peel Common Rbt		Stream: 2 PRC for Signalled Lanes (%)		195.8		Total Delay for Signalled Lanes (pcuHr):		0.53		Cycle Time (s):		100						
C1 - Peel Common Rbt		Stream: 3 PRC for Signalled Lanes (%)		33.2		Total Delay for Signalled Lanes (pcuHr):		9.93		Cycle Time (s):		100						
C1 - Peel Common Rbt		Stream: 4 PRC for Signalled Lanes (%)		12.3		Total Delay for Signalled Lanes (pcuHr):		17.35		Cycle Time (s):		100						
C1 - Peel Common Rbt		Stream: 5 PRC for Signalled Lanes (%)		363.8		Total Delay for Signalled Lanes (pcuHr):		0.26		Cycle Time (s):		100						
C1 - Peel Common Rbt		Stream: 6 PRC for Signalled Lanes (%)		389.6		Total Delay for Signalled Lanes (pcuHr):		0.33		Cycle Time (s):		100						
C2 - Gosport Rd Ped.		PRC for Signalled Lanes (%)		6.2		Total Delay for Signalled Lanes (pcuHr):		4.11		Cycle Time (s):		100						
		PRC Over All Lanes (%)		6.2		Total Delay Over All Lanes(pcuHr):		41.72										

Scenario 8: '2019 DS2 BASE PM' (FG8: '2019 DS2 BASE PM', Plan 1: 'Stage Plan 1')

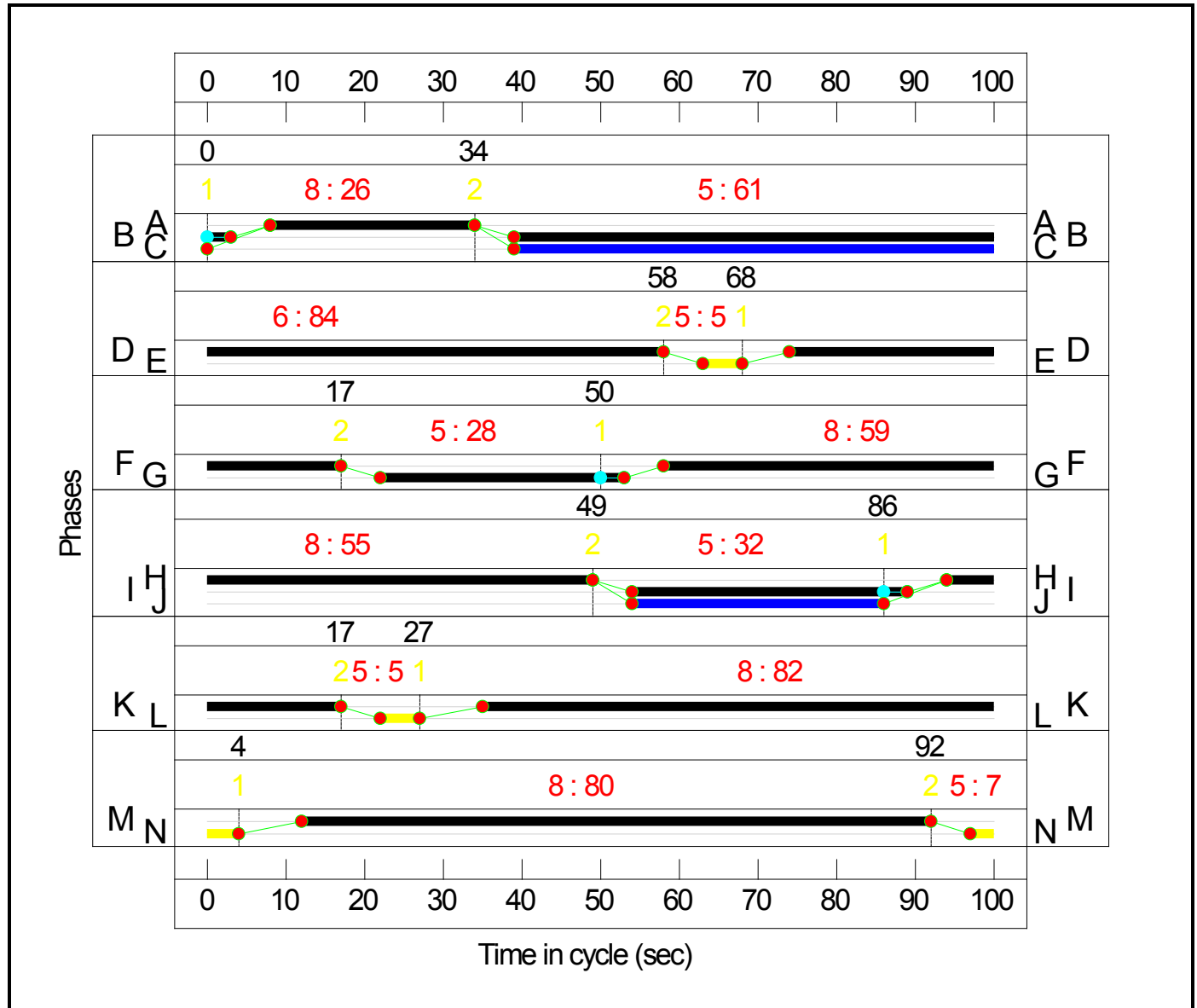
Traffic Flows, Actual

Actual Flow :

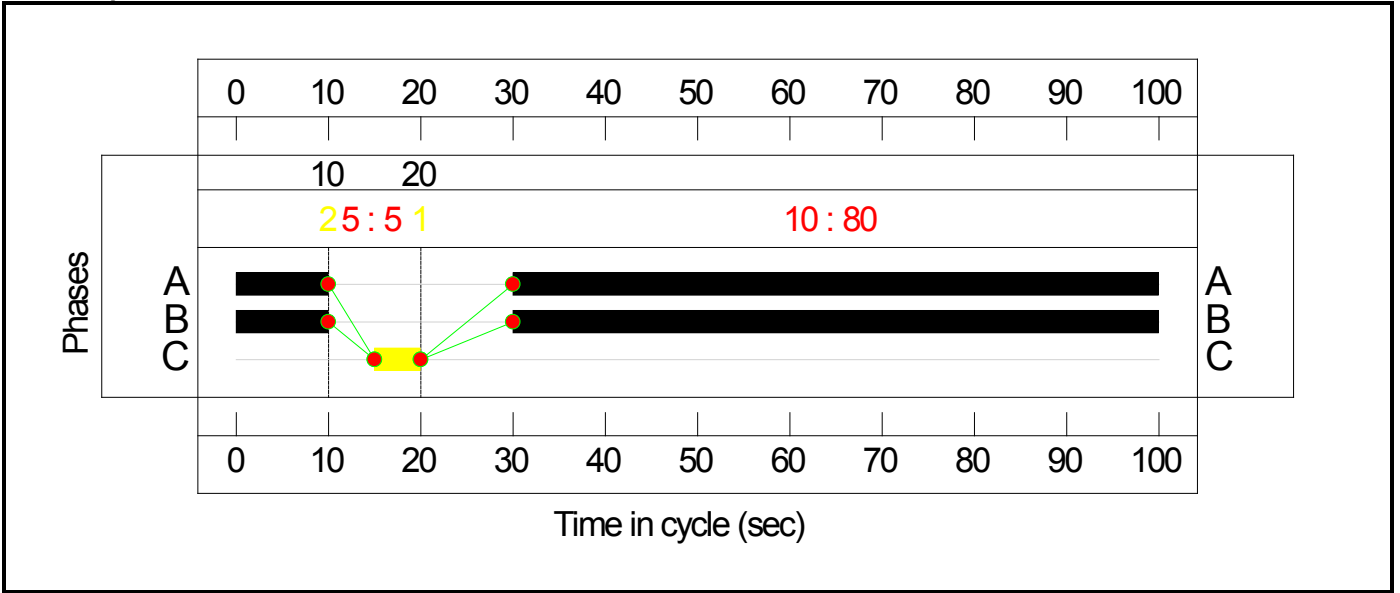
		Destination				
		A	B	C	D	Tot.
Origin	A	0	297	358	180	835
	B	78	0	69	311	458
	C	281	147	0	326	754
	D	124	911	486	0	1521
	Tot.	483	1355	913	817	3568

Signal Timings Diagram

C1 - Peel Common Rbt



C2 - Gosport Rd Ped.



Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Mean Max Queue (pcu)
J1:1/2+J1:1/1	Newgate Ln Entry Ahead Left	U	C1:A		1	26	-	625	2030:1868	865	72.2%	-	-	-	6.9	39.5	9.9	11.2
J1:1/3	Newgate Ln Entry Ahead	U	C1:A		1	26	-	210	1800	486	43.2%	-	-	-	2.1	36.7	4.8	5.2
J1:2/1	Newgate Ln Internal Ahead	U	C1:B		1	64	-	524	1800	1170	44.2%	-	-	-	2.0	13.8	8.1	8.5
J1:2/2+J1:2/3	Newgate Ln Internal Right Ahead	U	C1:B		1	64	-	1020	1965:1800	1398	71.6%	-	-	-	2.4	8.7	5.3	6.5
J1:3/1	Newgate Ln N/B Ped Ahead	U	C1:D		1	84	-	154	1800	1530	10.1%	-	-	-	0.1	2.7	0.7	0.8
J1:3/2	Newgate Ln N/B Ped Ahead	U	C1:D		1	84	-	329	3600	3060	10.8%	-	-	-	0.1	1.1	0.7	0.7
J1:5/2+J1:5/1	Rowner Rd Entry Ahead Left	U	C1:F		1	59	-	380	2105:1952	1171	32.4%	-	-	-	1.3	12.2	5.2	5.4
J1:5/3	Rowner Rd Entry Ahead	U	C1:F		1	59	-	78	2105	1263	6.2%	-	-	-	0.2	9.9	0.9	0.9
J1:6/1	Rowner Rd Internal Ahead	U	C1:G		1	31	-	477	1991	637	74.4%	-	-	-	3.4	25.5	11.8	13.2
J1:6/2	Rowner Rd Internal Right Ahead	U	C1:G		1	31	-	547	2255	722	74.9%	-	-	-	5.4	36.0	12.5	14.0
J1:7/1	Rowner Rd Exit Ahead	U	C1:M		1	80	-	753	1800	1458	51.2%	-	-	-	0.8	3.9	2.8	3.3
J1:7/2	Rowner Rd Exit Ahead	U	C1:M		1	80	-	602	1965	1592	37.2%	-	-	-	0.7	4.5	4.1	4.4
J1:8/1	Broom Way Entry Ahead Left	U	C1:H		1	55	-	356	1900	1064	33.5%	-	-	-	1.4	14.5	5.3	5.6

J1:8/2	Broom Way Entry Ahead	U	C1:H		1	55	-	398	2105	1179	33.8%	-	-	-	1.6	14.2	6.0	6.2
J1:9/1	Broom Way Internal Ahead	U	C1:I		1	35	-	491	2155	776	63.3%	-	-	-	3.1	23.0	12.1	13.0
J1:9/2	Broom Way Internal Right	U	C1:I		1	35	-	0	2155	776	0.0%	-	-	-	0.0	0.0	0.0	0.0
J1:9/3	Broom Way Internal Right	U	C1:I		1	35	-	78	1800	648	12.0%	-	-	-	0.4	19.2	0.7	0.8
J1:10/1	Broom Way S/B Ped Ahead	U	C1:K		1	82	-	478	1965	1631	29.1%	-	-	-	0.2	1.6	0.0	0.2
J1:10/2	Broom Way S/B Ped Ahead	U	C1:K		1	82	-	435	2105	1747	24.5%	-	-	-	0.2	1.6	0.3	0.5
J1:11/1	Brrom Way Exit	U	-		-	-	-	478	2000	2000	23.8%	-	-	-	0.2	1.2	0.0	0.2
J1:11/2	Brrom Way Exit	U	-		-	-	-	435	2000	2000	21.4%	-	-	-	0.1	1.1	0.0	0.1
J1:12/1	Gosport Rd Entry Left	O	-		-	-	-	124	1940	1432	8.7%	124	0	0	0.0	1.4	0.0	0.0
J1:12/2	Gosport Rd Entry Ahead	O	-		-	-	-	1397	2500	1371	101.9%	1371	0	0	31.1	80.1	109.2	135.5
J1:13/1	Gosport Rd Internal Ahead	U	-		-	-	-	30	1896	1896	1.6%	-	-	-	0.0	1.0	0.0	0.0
J1:13/2	Gosport Rd Internal Right Ahead	U	-		-	-	-	476	2106	2106	22.6%	-	-	-	0.1	1.1	1.2	1.3
J1:14/1	Gosport Rd Exit Ahead	U	-		-	-	-	817	2015	2015	40.5%	-	-	-	0.4	1.7	10.3	10.6
J2:1/1	Gosport Rd E/B Ped Ahead	U	C2:A		1	80	-	1521	2015	1632	93.2%	-	-	-	9.3	21.9	32.5	38.7
J2:2/1	Gosport Rd W/B Ped Ahead	U	C2:B		1	80	-	817	2015	1632	50.1%	-	-	-	0.7	3.1	2.1	2.6
J2:4/1	Gosport Rd E/B Exit Ahead	U	-		-	-	-	1521	2015	2015	75.5%	-	-	-	1.5	3.6	0.0	1.5

J2:P1	Unnamed Ped Link	-	C2:C		1	5	-	0	-	1000	0.0%	-	-	-	0.0	0.0	-	0.0
J1:P1	Unnamed Ped Link	-	C1:C		1	61	-	0	-	0	0.0%	-	-	-	-	-	-	-
J1:P2	Unnamed Ped Link	-	C1:E		1	5	-	0	-	0	0.0%	-	-	-	-	-	-	-
J1:P3	Unnamed Ped Link	-	C1:J		1	32	-	0	-	0	0.0%	-	-	-	-	-	-	-
J1:P4	Unnamed Ped Link	-	C1:L		1	5	-	0	-	0	0.0%	-	-	-	-	-	-	-

C1 - Peel Common Rbt	Stream: 1 PRC for Signalled Lanes (%)	24.6	Total Delay for Signalled Lanes (pcuHr)	13.40	Cycle Time (s)	100
C1 - Peel Common Rbt	Stream: 2 PRC for Signalled Lanes (%)	737.1	Total Delay for Signalled Lanes (pcuHr)	0.21	Cycle Time (s)	100
C1 - Peel Common Rbt	Stream: 3 PRC for Signalled Lanes (%)	20.1	Total Delay for Signalled Lanes (pcuHr)	10.27	Cycle Time (s)	100
C1 - Peel Common Rbt	Stream: 4 PRC for Signalled Lanes (%)	42.2	Total Delay for Signalled Lanes (pcuHr)	6.56	Cycle Time (s)	100
C1 - Peel Common Rbt	Stream: 5 PRC for Signalled Lanes (%)	208.9	Total Delay for Signalled Lanes (pcuHr)	0.40	Cycle Time (s)	100
C1 - Peel Common Rbt	Stream: 6 PRC for Signalled Lanes (%)	75.9	Total Delay for Signalled Lanes (pcuHr)	1.54	Cycle Time (s)	100
C2 - Gosport Rd Ped.	PRC for Signalled Lanes (%)	-3.5	Total Delay for Signalled Lanes (pcuHr)	9.98	Cycle Time (s)	100
	PRC Over All Lanes (%)	-13.2	Total Delay Over All Lanes(pcuHr)	75.85		

Scenario 9: '2024 DS2 BASE AM' (FG9: '2024 DS2 BASE AM', Plan 1: 'Stage Plan 1')

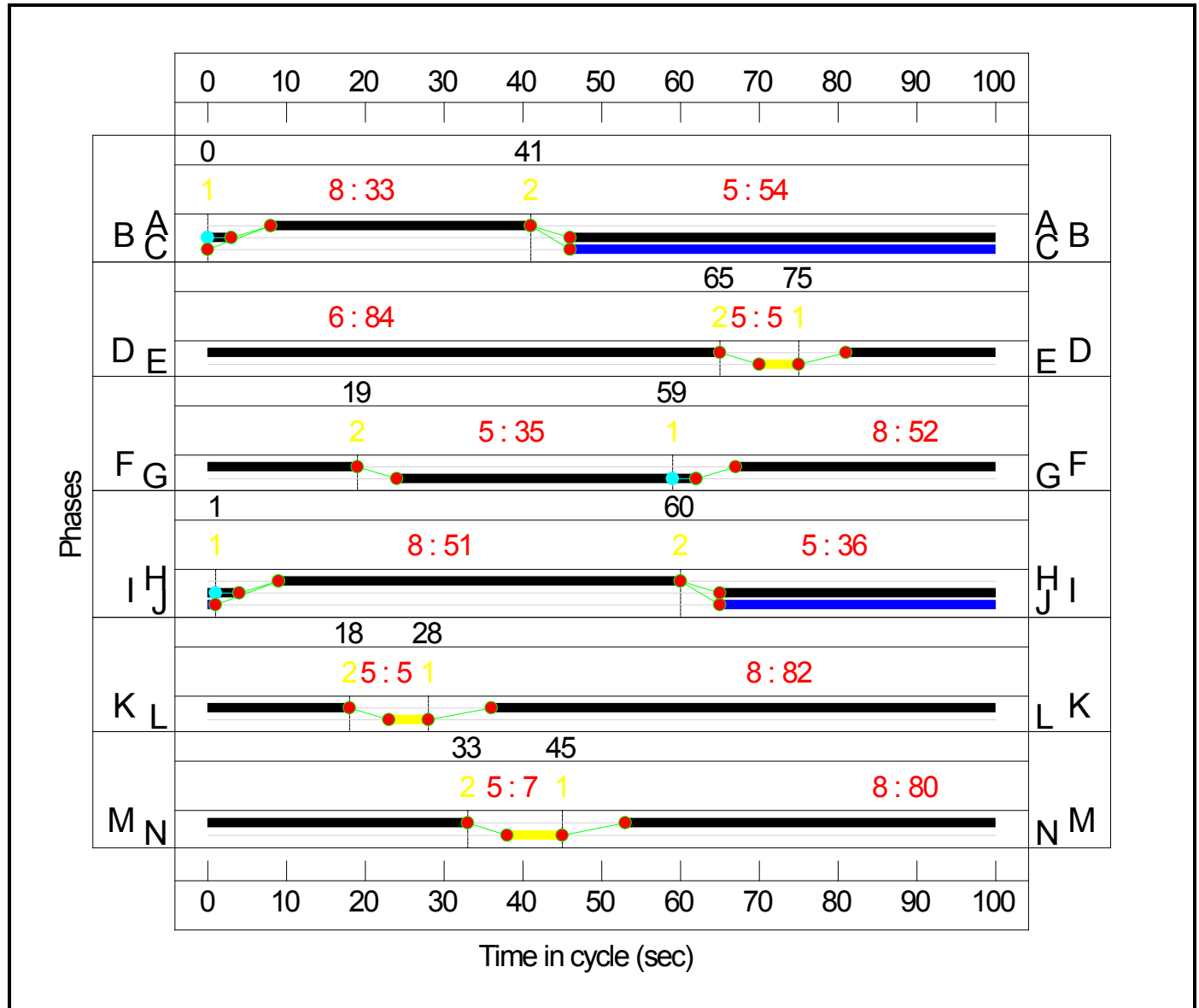
Traffic Flows, Actual

Actual Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	190	381	168	739
	B	478	0	174	587	1239
	C	681	239	0	726	1646
	D	242	170	316	0	728
	Tot.	1401	599	871	1481	4352

Signal Timings Diagram

C1 - Peel Common Rbt



C2 - Gosport Rd Ped.

