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
A	3.19	?	?	?	?			N/A	N/A
B	0.07	~1	~1	~1	~1			N/A	N/A
C	37.64	?	?	?	?			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
A	3.21	?	?	?	?			N/A	N/A
B	0.07	~1	~1	~1	~1			N/A	N/A
C	44.69	?	?	?	?			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
A	3.22	?	?	?	?			N/A	N/A
B	0.07	~1	~1	~1	~1			N/A	N/A
C	51.17	?	?	?	?			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
A	3.22	?	?	?	?			N/A	N/A
B	0.07	~1	~1	~1	~1			N/A	N/A
C	57.27	?	?	?	?			N/A	N/A

2024 DS1 Base + Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Flow Arm A	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm B	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm C	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
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	Newgate Lane BP / Old Newgate Ln	Standard Roundabout		A, B, C	1177.19	F

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 period length (min)	Time segment length (min)	Run automatically
D5	2024 DS1 Base + Dev	AM	Base (no Stubbington bypass) to 2024 growth with Development	FLAT	07:45	09:15	90	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		FLAT	✓	1631	100.000
B		FLAT	✓	126	100.000
C		FLAT	✓	831	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	29	1602
	B	80	0	46
	C	785	46	0

Proportions

		To		
		A	B	C
From	A	0.00	0.02	0.98
	B	0.63	0.00	0.37
	C	0.94	0.06	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	4	3
	B	0	0	5
	C	7	2	0

Average PCU Per Veh

		To		
		A	B	C
From	A	1.000	1.035	1.030
	B	1.000	1.000	1.045
	C	1.067	1.023	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
07:45-08:00	A	1631	1680
	B	126	128
	C	831	885
08:00-08:15	A	1631	1680
	B	126	128
	C	831	885
08:15-08:30	A	1631	1680
	B	126	128
	C	831	885
08:30-08:45	A	1631	1680
	B	126	128
	C	831	885
08:45-09:00	A	1631	1680
	B	126	128
	C	831	885
09:00-09:15	A	1631	1680
	B	126	128
	C	831	885

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)
A	1.38	1881.53	693.6	?	F	1680	2520
B	0.20	7.32	0.3	~1	A	128	191
C	0.66	8.45	2.1	?	A	885	1327

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
A	1680	420	47	1220	1.378	1209	909	0.0	117.7	180.507	F
B	128	32	1187	633	0.202	127	69	0.0	0.3	7.213	A
C	885	221	79	1339	0.661	877	1235	0.0	2.0	8.163	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
A	1680	420	47	1219	1.378	1219	917	117.7	232.9	523.272	F
B	128	32	1197	628	0.203	128	69	0.3	0.3	7.317	A
C	885	221	80	1338	0.661	885	1245	2.0	2.0	8.445	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
A	1680	420	47	1219	1.378	1219	917	232.9	348.1	862.352	F
B	128	32	1197	628	0.203	128	69	0.3	0.3	7.318	A
C	885	221	80	1338	0.661	885	1245	2.0	2.1	8.448	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
A	1680	420	47	1219	1.378	1219	917	348.1	463.3	1201.932	F
B	128	32	1197	628	0.203	128	69	0.3	0.3	7.318	A
C	885	221	80	1338	0.661	885	1245	2.1	2.1	8.450	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
A	1680	420	47	1219	1.378	1219	917	463.3	578.4	1541.690	F
B	128	32	1197	628	0.203	128	69	0.3	0.3	7.319	A
C	885	221	80	1338	0.661	885	1245	2.1	2.1	8.450	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
A	1680	420	47	1219	1.378	1219	917	578.4	693.6	1881.527	F
B	128	32	1197	628	0.203	128	69	0.3	0.3	7.319	A
C	885	221	80	1338	0.661	885	1245	2.1	2.1	8.452	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
A	117.74	?	?	?	?			N/A	N/A
B	0.25	~1	~1	~1	~1			N/A	N/A
C	2.02	?	?	?	?			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
A	232.93	?	?	?	?			N/A	N/A
B	0.26	~1	~1	~1	~1			N/A	N/A
C	2.05	?	?	?	?			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
A	348.10	?	?	?	?			N/A	N/A
B	0.26	~1	~1	~1	~1			N/A	N/A
C	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
A	463.26	?	?	?	?			N/A	N/A
B	0.26	~1	~1	~1	~1			N/A	N/A
C	2.06	?	?	?	?			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
A	578.41	?	?	?	?			N/A	N/A
B	0.26	~1	~1	~1	~1			N/A	N/A
C	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
A	693.57	?	?	?	?			N/A	N/A
B	0.26	~1	~1	~1	~1			N/A	N/A
C	2.07	?	?	?	?			N/A	N/A

2024 DS1 Base + Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Flow Arm A	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm B	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm C	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
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	Newgate Lane BP / Old Newgate Ln	Standard Roundabout		A, B, C	155.90	F

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 period length (min)	Time segment length (min)	Run automatically
D6	2024 DS1 Base + Dev	PM	Base (no Stubbington bypass) growth to 2024 + Development	FLAT	16:45	18:15	90	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		FLAT	✓	978	100.000
B		FLAT	✓	102	100.000
C		FLAT	✓	1400	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	63	914
	B	49	0	53
	C	1345	55	0

Proportions

		To		
		A	B	C
From	A	0.00	0.06	0.94
	B	0.48	0.00	0.52
	C	0.96	0.04	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	1
	B	0	0	0
	C	1	0	0

Average PCU Per Veh

		To		
		A	B	C
From	A	1.000	1.000	1.009
	B	1.000	1.000	1.000
	C	1.009	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
16:45-17:00	A	978	986
	B	102	102
	C	1400	1412
17:00-17:15	A	978	986
	B	102	102
	C	1400	1412
17:15-17:30	A	978	986
	B	102	102
	C	1400	1412
17:30-17:45	A	978	986
	B	102	102
	C	1400	1412
17:45-18:00	A	978	986
	B	102	102
	C	1400	1412
18:00-18:15	A	978	986
	B	102	102
	C	1400	1412

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)
A	0.81	15.74	4.3	?	C	986	1479
B	0.13	5.37	0.2	~1	A	102	153
C	1.04	264.64	104.6	?	F	1412	2118

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
A	986	247	51	1217	0.810	970	1304	0.0	4.0	13.928	B
B	102	25	908	780	0.131	101	113	0.0	0.1	5.297	A
C	1412	353	49	1356	1.042	1306	961	0.0	26.6	47.092	E

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
A	986	247	52	1216	0.811	986	1340	4.0	4.1	15.604	C
B	102	25	922	773	0.132	102	116	0.1	0.2	5.364	A
C	1412	353	49	1355	1.042	1344	975	26.6	43.7	103.723	F

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
A	986	247	53	1216	0.811	986	1345	4.1	4.2	15.687	C
B	102	25	923	773	0.132	102	116	0.2	0.2	5.366	A
C	1412	353	49	1355	1.042	1349	976	43.7	59.5	145.817	F

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
A	986	247	53	1216	0.811	986	1347	4.2	4.2	15.717	C
B	102	25	923	773	0.132	102	116	0.2	0.2	5.367	A
C	1412	353	49	1355	1.042	1351	976	59.5	74.8	186.120	F

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
A	986	247	53	1216	0.811	986	1348	4.2	4.2	15.733	C
B	102	25	923	773	0.132	102	116	0.2	0.2	5.367	A
C	1412	353	49	1355	1.042	1352	976	74.8	89.8	225.612	F

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
A	986	247	53	1216	0.811	986	1349	4.2	4.3	15.743	C
B	102	25	923	773	0.132	102	116	0.2	0.2	5.367	A
C	1412	353	49	1355	1.042	1353	976	89.8	104.6	264.640	F

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
A	3.96	?	?	?	?			N/A	N/A
B	0.15	~1	~1	~1	~1			N/A	N/A
C	26.56	?	?	?	?			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
A	4.13	?	?	?	?			N/A	N/A
B	0.15	~1	~1	~1	~1			N/A	N/A
C	43.67	?	?	?	?			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
A	4.19	?	?	?	?			N/A	N/A
B	0.15	~1	~1	~1	~1			N/A	N/A
C	59.52	?	?	?	?			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
A	4.22	?	?	?	?			N/A	N/A
B	0.15	~1	~1	~1	~1			N/A	N/A
C	74.82	?	?	?	?			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
A	4.24	?	?	?	?			N/A	N/A
B	0.15	~1	~1	~1	~1			N/A	N/A
C	89.81	?	?	?	?			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
A	4.26	?	?	?	?			N/A	N/A
B	0.15	~1	~1	~1	~1			N/A	N/A
C	104.61	?	?	?	?			N/A	N/A

2019 DS2 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Flow Arm A	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm B	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm C	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
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	Newgate Lane BP / Old Newgate Ln	Standard Roundabout		A, B, C	1134.11	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D7	2019 DS2 Base	AM	FLAT	07:45	09:15	90	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		FLAT	✓	1571	100.000
B		FLAT	✓	44	100.000
C		FLAT	✓	523	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	22	1549
	B	20	0	24
	C	504	19	0

Proportions

		To		
		A	B	C
From	A	0.00	0.01	0.99
	B	0.46	0.00	0.54
	C	0.96	0.04	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	6	3
	B	0	0	11
	C	7	4	0

Average PCU Per Veh

		To		
		A	B	C
From	A	1.000	1.056	1.030
	B	1.000	1.000	1.105
	C	1.067	1.043	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
07:45-08:00	A	1571	1618
	B	44	46
	C	523	557
08:00-08:15	A	1571	1618
	B	44	46
	C	523	557
08:15-08:30	A	1571	1618
	B	44	46
	C	523	557
08:30-08:45	A	1571	1618
	B	44	46
	C	523	557
08:45-09:00	A	1571	1618
	B	44	46
	C	523	557
09:00-09:15	A	1571	1618
	B	44	46
	C	523	557

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)
A	1.31	1555.44	579.7	?	F	1618	2427
B	0.08	6.66	0.1	~1	A	46	70
C	0.41	4.71	0.7	~1	A	557	836

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
A	1618	404	20	1234	1.311	1221	554	0.0	99.2	152.062	F
B	46	12	1204	624	0.074	46	37	0.0	0.1	6.582	A
C	557	139	20	1372	0.406	554	1230	0.0	0.7	4.682	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
A	1618	404	20	1234	1.312	1233	557	99.2	195.4	435.875	F
B	46	12	1216	618	0.075	46	37	0.1	0.1	6.662	A
C	557	139	20	1372	0.406	557	1242	0.7	0.7	4.714	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
A	1618	404	20	1234	1.312	1234	557	195.4	291.5	715.229	F
B	46	12	1216	618	0.075	46	37	0.1	0.1	6.663	A
C	557	139	20	1372	0.406	557	1242	0.7	0.7	4.714	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
A	1618	404	20	1234	1.312	1234	557	291.5	387.6	995.137	F
B	46	12	1216	618	0.075	46	37	0.1	0.1	6.663	A
C	557	139	20	1372	0.406	557	1242	0.7	0.7	4.714	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
A	1618	404	20	1234	1.312	1234	557	387.6	483.7	1275.245	F
B	46	12	1216	618	0.075	46	37	0.1	0.1	6.663	A
C	557	139	20	1372	0.406	557	1242	0.7	0.7	4.714	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
A	1618	404	20	1234	1.312	1234	557	483.7	579.7	1555.444	F
B	46	12	1216	618	0.075	46	37	0.1	0.1	6.663	A
C	557	139	20	1372	0.406	557	1242	0.7	0.7	4.714	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
A	99.23	?	?	?	?			N/A	N/A
B	0.08	~1	~1	~1	~1			N/A	N/A
C	0.72	~1	~1	~1	~1			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
A	195.38	?	?	?	?			N/A	N/A
B	0.09	~1	~1	~1	~1			N/A	N/A
C	0.73	~1	~1	~1	~1			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
A	291.48	?	?	?	?			N/A	N/A
B	0.09	~1	~1	~1	~1			N/A	N/A
C	0.73	~1	~1	~1	~1			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
A	387.57	?	?	?	?			N/A	N/A
B	0.09	~1	~1	~1	~1			N/A	N/A
C	0.73	~1	~1	~1	~1			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
A	483.65	?	?	?	?			N/A	N/A
B	0.09	~1	~1	~1	~1			N/A	N/A
C	0.73	~1	~1	~1	~1			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
A	579.74	?	?	?	?			N/A	N/A
B	0.09	~1	~1	~1	~1			N/A	N/A
C	0.73	~1	~1	~1	~1			N/A	N/A

2019 DS2 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Flow Arm A	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm B	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm C	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
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	Newgate Lane BP / Old Newgate Ln	Standard Roundabout		A, B, C	8.54	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D8	2019 DS2 Base	PM	FLAT	16:45	18:15	90	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		FLAT	✓	883	100.000
B		FLAT	✓	54	100.000
C		FLAT	✓	809	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	23	860
	B	23	0	31
	C	790	19	0

Proportions

		To		
		A	B	C
From	A	0.00	0.03	0.97
	B	0.43	0.00	0.57
	C	0.98	0.02	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	1
	B	0	0	0
	C	1	0	0

Average PCU Per Veh

		To		
		A	B	C
From	A	1.000	1.000	1.009
	B	1.000	1.000	1.000
	C	1.009	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
16:45-17:00	A	883	891
	B	54	54
	C	809	816
17:00-17:15	A	883	891
	B	54	54
	C	809	816
17:15-17:30	A	883	891
	B	54	54
	C	809	816
17:30-17:45	A	883	891
	B	54	54
	C	809	816
17:45-18:00	A	883	891
	B	54	54
	C	809	816
18:00-18:15	A	883	891
	B	54	54
	C	809	816

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)
A	0.72	10.58	2.6	?	B	891	1336
B	0.07	4.82	0.1	~1	A	54	81
C	0.60	6.56	1.5	?	A	816	1224

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
A	891	223	19	1234	0.722	881	814	0.0	2.5	10.018	B
B	54	14	858	806	0.067	54	42	0.0	0.1	4.783	A
C	816	204	23	1370	0.596	810	889	0.0	1.5	6.427	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
A	891	223	19	1234	0.722	891	820	2.5	2.6	10.564	B
B	54	14	868	801	0.068	54	42	0.1	0.1	4.818	A
C	816	204	23	1370	0.596	816	899	1.5	1.5	6.561	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
A	891	223	19	1234	0.722	891	820	2.6	2.6	10.576	B
B	54	14	868	801	0.068	54	42	0.1	0.1	4.818	A
C	816	204	23	1370	0.596	816	899	1.5	1.5	6.561	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
A	891	223	19	1234	0.722	891	820	2.6	2.6	10.583	B
B	54	14	868	801	0.068	54	42	0.1	0.1	4.818	A
C	816	204	23	1370	0.596	816	899	1.5	1.5	6.561	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
A	891	223	19	1234	0.722	891	820	2.6	2.6	10.582	B
B	54	14	868	801	0.068	54	42	0.1	0.1	4.818	A
C	816	204	23	1370	0.596	816	899	1.5	1.5	6.561	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
A	891	223	19	1234	0.722	891	820	2.6	2.6	10.582	B
B	54	14	868	801	0.068	54	42	0.1	0.1	4.818	A
C	816	204	23	1370	0.596	816	899	1.5	1.5	6.561	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
A	2.52	?	?	?	?			N/A	N/A
B	0.07	~1	~1	~1	~1			N/A	N/A
C	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
A	2.57	?	?	?	?			N/A	N/A
B	0.07	~1	~1	~1	~1			N/A	N/A
C	1.47	?	?	?	?			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
A	2.58	?	?	?	?			N/A	N/A
B	0.07	~1	~1	~1	~1			N/A	N/A
C	1.48	?	?	?	?			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
A	2.59	?	?	?	?			N/A	N/A
B	0.07	~1	~1	~1	~1			N/A	N/A
C	1.48	?	?	?	?			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
A	2.60	?	?	?	?			N/A	N/A
B	0.07	~1	~1	~1	~1			N/A	N/A
C	1.48	?	?	?	?			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
A	2.60	?	?	?	?			N/A	N/A
B	0.07	~1	~1	~1	~1			N/A	N/A
C	1.48	?	?	?	?			N/A	N/A

2024 DS2 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Flow Arm A	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm B	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm C	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
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	Newgate Lane BP / Old Newgate Ln	Standard Roundabout		A, B, C	1302.00	F

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 period length (min)	Time segment length (min)	Run automatically
D9	2024 DS2 Base	AM	Base to 2024 growth	FLAT	07:45	09:15	90	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		FLAT	✓	1626	100.000
B		FLAT	✓	45	100.000
C		FLAT	✓	541	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	23	1604
	B	21	0	25
	C	521	20	0

Proportions

		To		
		A	B	C
From	A	0.00	0.01	0.99
	B	0.46	0.00	0.54
	C	0.96	0.04	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	6	3
	B	0	0	11
	C	7	4	0

Average PCU Per Veh

		To		
		A	B	C
From	A	1.000	1.056	1.030
	B	1.000	1.000	1.105
	C	1.067	1.043	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
07:45-08:00	A	1626	1675
	B	45	48
	C	541	577
08:00-08:15	A	1626	1675
	B	45	48
	C	541	577
08:15-08:30	A	1626	1675
	B	45	48
	C	541	577
08:30-08:45	A	1626	1675
	B	45	48
	C	541	577
08:45-09:00	A	1626	1675
	B	45	48
	C	541	577
09:00-09:15	A	1626	1675
	B	45	48
	C	541	577

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)
A	1.36	1785.95	665.8	?	F	1675	2513
B	0.08	6.68	0.1	~1	A	48	72
C	0.42	4.83	0.8	~1	A	577	865

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
A	1675	419	20	1233	1.358	1222	574	0.0	113.3	172.104	F
B	48	12	1205	624	0.077	48	38	0.0	0.1	6.606	A
C	577	144	21	1371	0.421	574	1232	0.0	0.8	4.797	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
A	1675	419	21	1233	1.358	1233	577	113.3	223.8	497.585	F
B	48	12	1215	618	0.078	48	38	0.1	0.1	6.679	A
C	577	144	21	1371	0.421	577	1243	0.8	0.8	4.833	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
A	1675	419	21	1233	1.358	1233	577	223.8	334.3	819.179	F
B	48	12	1216	618	0.078	48	38	0.1	0.1	6.680	A
C	577	144	21	1371	0.421	577	1243	0.8	0.8	4.833	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
A	1675	419	21	1233	1.358	1233	577	334.3	444.8	1141.282	F
B	48	12	1216	618	0.078	48	38	0.1	0.1	6.680	A
C	577	144	21	1371	0.421	577	1243	0.8	0.8	4.833	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
A	1675	419	21	1233	1.358	1233	577	444.8	555.3	1463.572	F
B	48	12	1216	618	0.078	48	38	0.1	0.1	6.680	A
C	577	144	21	1371	0.421	577	1243	0.8	0.8	4.833	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
A	1675	419	21	1233	1.358	1233	577	555.3	665.8	1785.945	F
B	48	12	1216	618	0.078	48	38	0.1	0.1	6.680	A
C	577	144	21	1371	0.421	577	1243	0.8	0.8	4.833	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
A	113.25	?	?	?	?			N/A	N/A
B	0.09	~1	~1	~1	~1			N/A	N/A
C	0.77	~1	~1	~1	~1			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
A	223.79	?	?	?	?			N/A	N/A
B	0.09	~1	~1	~1	~1			N/A	N/A
C	0.77	~1	~1	~1	~1			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
A	334.30	?	?	?	?			N/A	N/A
B	0.09	~1	~1	~1	~1			N/A	N/A
C	0.77	~1	~1	~1	~1			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
A	444.79	?	?	?	?			N/A	N/A
B	0.09	~1	~1	~1	~1			N/A	N/A
C	0.77	~1	~1	~1	~1			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
A	555.29	?	?	?	?			N/A	N/A
B	0.09	~1	~1	~1	~1			N/A	N/A
C	0.77	~1	~1	~1	~1			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
A	665.78	?	?	?	?			N/A	N/A
B	0.09	~1	~1	~1	~1			N/A	N/A
C	0.77	~1	~1	~1	~1			N/A	N/A

2024 DS2 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Flow Arm A	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm B	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm C	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
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	Newgate Lane BP / Old Newgate Ln	Standard Roundabout		A, B, C	9.29	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 period length (min)	Time segment length (min)	Run automatically
D10	2024 DS2 Base	PM	Base growth to 2024	FLAT	16:45	18:15	90	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		FLAT	✓	916	100.000
B		FLAT	✓	56	100.000
C		FLAT	✓	839	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	24	892
	B	24	0	32
	C	819	20	0

Proportions

		To		
		A	B	C
From	A	0.00	0.03	0.97
	B	0.43	0.00	0.57
	C	0.98	0.02	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	1
	B	0	0	0
	C	1	0	0

Average PCU Per Veh

		To		
		A	B	C
From	A	1.000	1.000	1.009
	B	1.000	1.000	1.000
	C	1.009	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
16:45-17:00	A	916	924
	B	56	56
	C	839	846
17:00-17:15	A	916	924
	B	56	56
	C	839	846
17:15-17:30	A	916	924
	B	56	56
	C	839	846
17:30-17:45	A	916	924
	B	56	56
	C	839	846
17:45-18:00	A	916	924
	B	56	56
	C	839	846
18:00-18:15	A	916	924
	B	56	56
	C	839	846

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)
A	0.75	11.71	3.0	?	B	924	1386
B	0.07	4.94	0.1	~1	A	56	84
C	0.62	6.94	1.6	?	A	846	1269

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
A	924	231	20	1234	0.749	912	844	0.0	2.9	10.943	B
B	56	14	889	790	0.071	56	43	0.0	0.1	4.900	A
C	846	212	24	1369	0.618	840	921	0.0	1.6	6.780	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	924	231	20	1234	0.749	923	850	2.9	2.9	11.680	B
B	56	14	900	785	0.072	56	43	0.1	0.1	4.943	A
C	846	212	24	1369	0.618	846	932	1.6	1.6	6.941	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
A	924	231	20	1234	0.749	924	850	2.9	3.0	11.701	B
B	56	14	900	784	0.072	56	43	0.1	0.1	4.943	A
C	846	212	24	1369	0.618	846	932	1.6	1.6	6.944	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
A	924	231	20	1234	0.749	924	850	3.0	3.0	11.706	B
B	56	14	900	784	0.072	56	43	0.1	0.1	4.943	A
C	846	212	24	1369	0.618	846	932	1.6	1.6	6.944	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
A	924	231	20	1234	0.749	924	850	3.0	3.0	11.710	B
B	56	14	900	784	0.072	56	43	0.1	0.1	4.943	A
C	846	212	24	1369	0.618	846	932	1.6	1.6	6.944	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
A	924	231	20	1234	0.749	924	850	3.0	3.0	11.712	B
B	56	14	900	784	0.072	56	43	0.1	0.1	4.943	A
C	846	212	24	1369	0.618	846	932	1.6	1.6	6.944	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
A	2.86	?	?	?	?			N/A	N/A
B	0.08	~1	~1	~1	~1			N/A	N/A
C	1.60	?	?	?	?			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
A	2.93	?	?	?	?			N/A	N/A
B	0.08	~1	~1	~1	~1			N/A	N/A
C	1.62	?	?	?	?			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
A	2.96	?	?	?	?			N/A	N/A
B	0.08	~1	~1	~1	~1			N/A	N/A
C	1.62	?	?	?	?			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
A	2.97	?	?	?	?			N/A	N/A
B	0.08	~1	~1	~1	~1			N/A	N/A
C	1.62	?	?	?	?			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
A	2.98	?	?	?	?			N/A	N/A
B	0.08	~1	~1	~1	~1			N/A	N/A
C	1.63	?	?	?	?			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
A	2.98	?	?	?	?			N/A	N/A
B	0.08	~1	~1	~1	~1			N/A	N/A
C	1.63	?	?	?	?			N/A	N/A

2024 DS2 Base + Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Flow Arm A	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm B	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm C	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
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	Newgate Lane BP / Old Newgate Ln	Standard Roundabout		A, B, C	1312.84	F

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 period length (min)	Time segment length (min)	Run automatically
D11	2024 DS2 Base + Dev	AM	Base to 2024 growth with Development	FLAT	07:45	09:15	90	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		FLAT	✓	1634	100.000
B		FLAT	✓	132	100.000
C		FLAT	✓	563	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	31	1604
	B	81	0	51
	C	521	42	0

Proportions

		To		
		A	B	C
From	A	0.00	0.02	0.98
	B	0.61	0.00	0.39
	C	0.93	0.07	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	4	3
	B	0	0	5
	C	7	2	0

Average PCU Per Veh

		To		
		A	B	C
From	A	1.000	1.041	1.030
	B	1.000	1.000	1.051
	C	1.067	1.020	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
07:45-08:00	A	1634	1683
	B	132	135
	C	563	599
08:00-08:15	A	1634	1683
	B	132	135
	C	563	599
08:15-08:30	A	1634	1683
	B	132	135
	C	563	599
08:30-08:45	A	1634	1683
	B	132	135
	C	563	599
08:45-09:00	A	1634	1683
	B	132	135
	C	563	599
09:00-09:15	A	1634	1683
	B	132	135
	C	563	599

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)
A	1.38	1882.76	695.3	?	F	1683	2525
B	0.21	7.46	0.3	~1	A	135	202
C	0.45	5.19	0.9	~1	A	599	899

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
A	1683	421	42	1222	1.378	1211	634	0.0	118.0	180.638	F
B	135	34	1188	632	0.213	134	66	0.0	0.3	7.345	A
C	599	150	80	1338	0.448	596	1241	0.0	0.9	5.138	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
A	1683	421	43	1222	1.378	1221	637	118.0	233.5	523.639	F
B	135	34	1198	627	0.215	135	66	0.3	0.3	7.456	A
C	599	150	81	1337	0.448	599	1252	0.9	0.9	5.187	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
A	1683	421	43	1222	1.378	1222	637	233.5	349.0	862.937	F
B	135	34	1198	627	0.215	135	66	0.3	0.3	7.457	A
C	599	150	81	1337	0.448	599	1252	0.9	0.9	5.187	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
A	1683	421	43	1222	1.378	1222	637	349.0	464.4	1202.732	F
B	135	34	1198	627	0.215	135	66	0.3	0.3	7.457	A
C	599	150	81	1337	0.448	599	1252	0.9	0.9	5.187	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
A	1683	421	43	1222	1.378	1222	637	464.4	579.9	1542.708	F
B	135	34	1198	627	0.215	135	66	0.3	0.3	7.458	A
C	599	150	81	1337	0.448	599	1252	0.9	0.9	5.187	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
A	1683	421	43	1222	1.378	1222	637	579.9	695.3	1882.761	F
B	135	34	1198	627	0.215	135	66	0.3	0.3	7.458	A
C	599	150	81	1337	0.448	599	1252	0.9	0.9	5.187	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
A	118.05	?	?	?	?			N/A	N/A
B	0.27	~1	~1	~1	~1			N/A	N/A
C	0.85	~1	~1	~1	~1			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
A	233.53	?	?	?	?			N/A	N/A
B	0.28	~1	~1	~1	~1			N/A	N/A
C	0.86	~1	~1	~1	~1			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
A	348.98	?	?	?	?			N/A	N/A
B	0.28	~1	~1	~1	~1			N/A	N/A
C	0.86	~1	~1	~1	~1			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
A	464.43	?	?	?	?			N/A	N/A
B	0.28	~1	~1	~1	~1			N/A	N/A
C	0.86	~1	~1	~1	~1			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
A	579.87	?	?	?	?			N/A	N/A
B	0.28	~1	~1	~1	~1			N/A	N/A
C	0.86	~1	~1	~1	~1			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
A	695.32	?	?	?	?			N/A	N/A
B	0.28	~1	~1	~1	~1			N/A	N/A
C	0.86	~1	~1	~1	~1			N/A	N/A

2024 DS2 Base + Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Flow Arm A	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm B	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm C	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
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	Newgate Lane BP / Old Newgate Ln	Standard Roundabout		A, B, C	10.95	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 period length (min)	Time segment length (min)	Run automatically
D12	2024 DS2 Base + Dev	PM	Base growth to 2024 + Development	FLAT	16:45	18:15	90	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		FLAT	✓	961	100.000
B		FLAT	✓	105	100.000
C		FLAT	✓	870	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	69	892
	B	44	0	61
	C	819	51	0

Proportions

		To		
		A	B	C
From	A	0.00	0.07	0.93
	B	0.42	0.00	0.58
	C	0.94	0.06	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	1
	B	0	0	0
	C	1	0	0

Average PCU Per Veh

		To		
		A	B	C
From	A	1.000	1.000	1.009
	B	1.000	1.000	1.000
	C	1.009	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
16:45-17:00	A	961	970
	B	105	105
	C	870	877
17:00-17:15	A	961	970
	B	105	105
	C	870	877
17:15-17:30	A	961	970
	B	105	105
	C	870	877
17:30-17:45	A	961	970
	B	105	105
	C	870	877
17:45-18:00	A	961	970
	B	105	105
	C	870	877
18:00-18:15	A	961	970
	B	105	105
	C	870	877

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)
A	0.80	14.64	3.9	?	B	970	1454
B	0.13	5.30	0.2	~1	A	105	158
C	0.65	7.55	1.8	?	A	877	1316

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
A	970	242	51	1217	0.796	955	863	0.0	3.7	13.181	B
B	105	26	887	792	0.133	105	119	0.0	0.2	5.236	A
C	877	219	44	1358	0.646	870	948	0.0	1.8	7.337	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
A	970	242	51	1217	0.797	969	870	3.7	3.8	14.551	B
B	105	26	900	785	0.134	105	120	0.2	0.2	5.298	A
C	877	219	44	1358	0.646	877	961	1.8	1.8	7.549	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
A	970	242	51	1217	0.797	969	870	3.8	3.8	14.602	B
B	105	26	900	785	0.134	105	120	0.2	0.2	5.299	A
C	877	219	44	1358	0.646	877	961	1.8	1.8	7.552	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
A	970	242	51	1217	0.797	969	870	3.8	3.9	14.622	B
B	105	26	900	784	0.134	105	120	0.2	0.2	5.300	A
C	877	219	44	1358	0.646	877	962	1.8	1.8	7.552	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
A	970	242	51	1217	0.797	969	870	3.9	3.9	14.634	B
B	105	26	900	784	0.134	105	120	0.2	0.2	5.300	A
C	877	219	44	1358	0.646	877	962	1.8	1.8	7.552	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
A	970	242	51	1217	0.797	970	870	3.9	3.9	14.640	B
B	105	26	900	784	0.134	105	120	0.2	0.2	5.300	A
C	877	219	44	1358	0.646	877	962	1.8	1.8	7.552	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
A	3.67	?	?	?	?			N/A	N/A
B	0.15	~1	~1	~1	~1			N/A	N/A
C	1.80	?	?	?	?			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
A	3.80	?	?	?	?			N/A	N/A
B	0.15	~1	~1	~1	~1			N/A	N/A
C	1.82	?	?	?	?			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
A	3.85	?	?	?	?			N/A	N/A
B	0.15	~1	~1	~1	~1			N/A	N/A
C	1.83	?	?	?	?			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
A	3.87	?	?	?	?			N/A	N/A
B	0.15	~1	~1	~1	~1			N/A	N/A
C	1.83	?	?	?	?			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
A	3.89	?	?	?	?			N/A	N/A
B	0.15	~1	~1	~1	~1			N/A	N/A
C	1.83	?	?	?	?			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
A	3.90	?	?	?	?			N/A	N/A
B	0.15	~1	~1	~1	~1			N/A	N/A
C	1.83	?	?	?	?			N/A	N/A

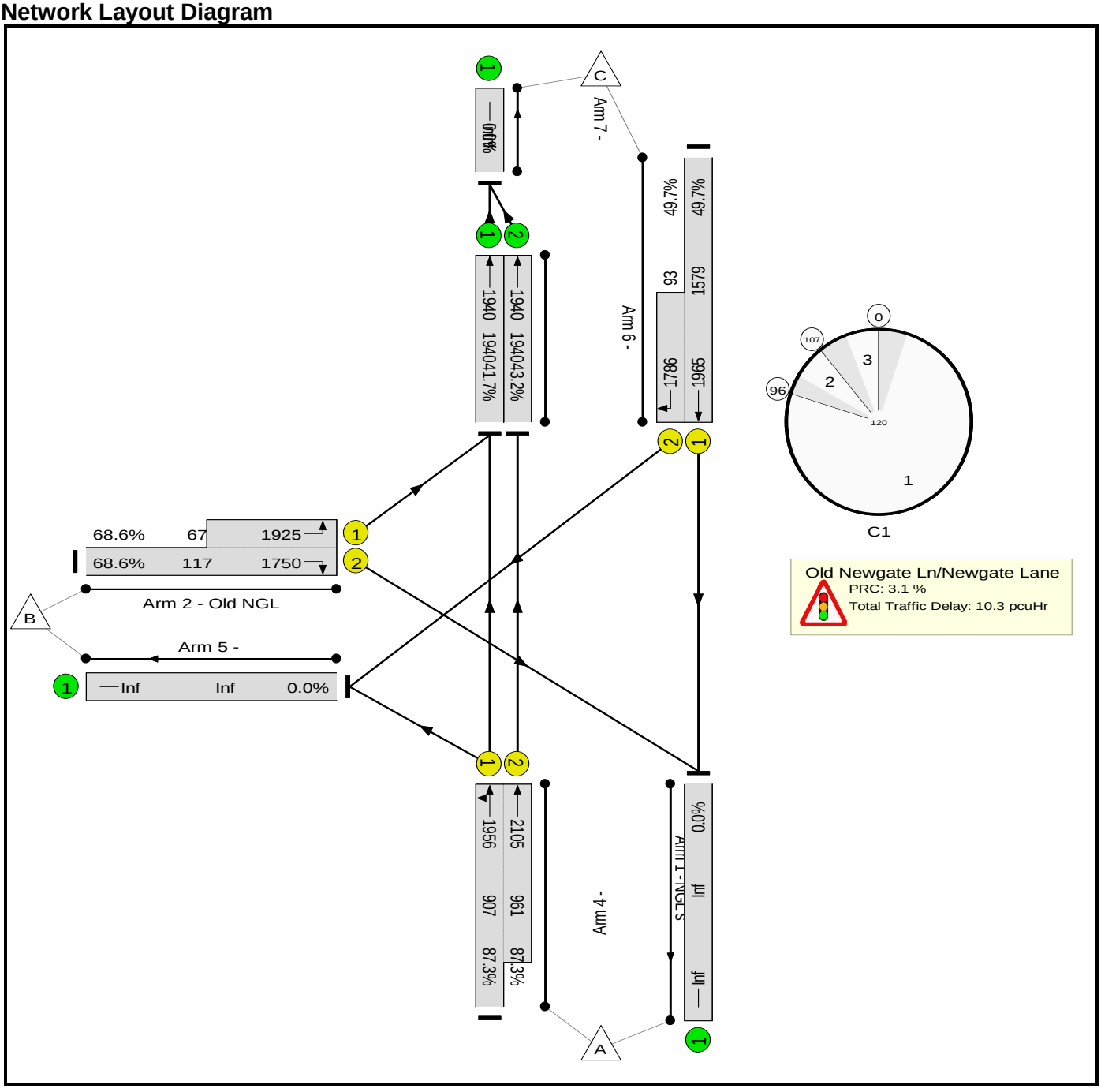
Basic Results Summary

User and Project Details

Project:	
Title:	
Location:	
Additional detail:	
File name:	NGL Sig jctn3.lsg3x
Author:	
Company:	
Address:	

Scenario 1: '2024 Base + Dev AM DS1' (FG1: '2024 Base + Dev AM DS1', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Basic Results Summary

Network Results

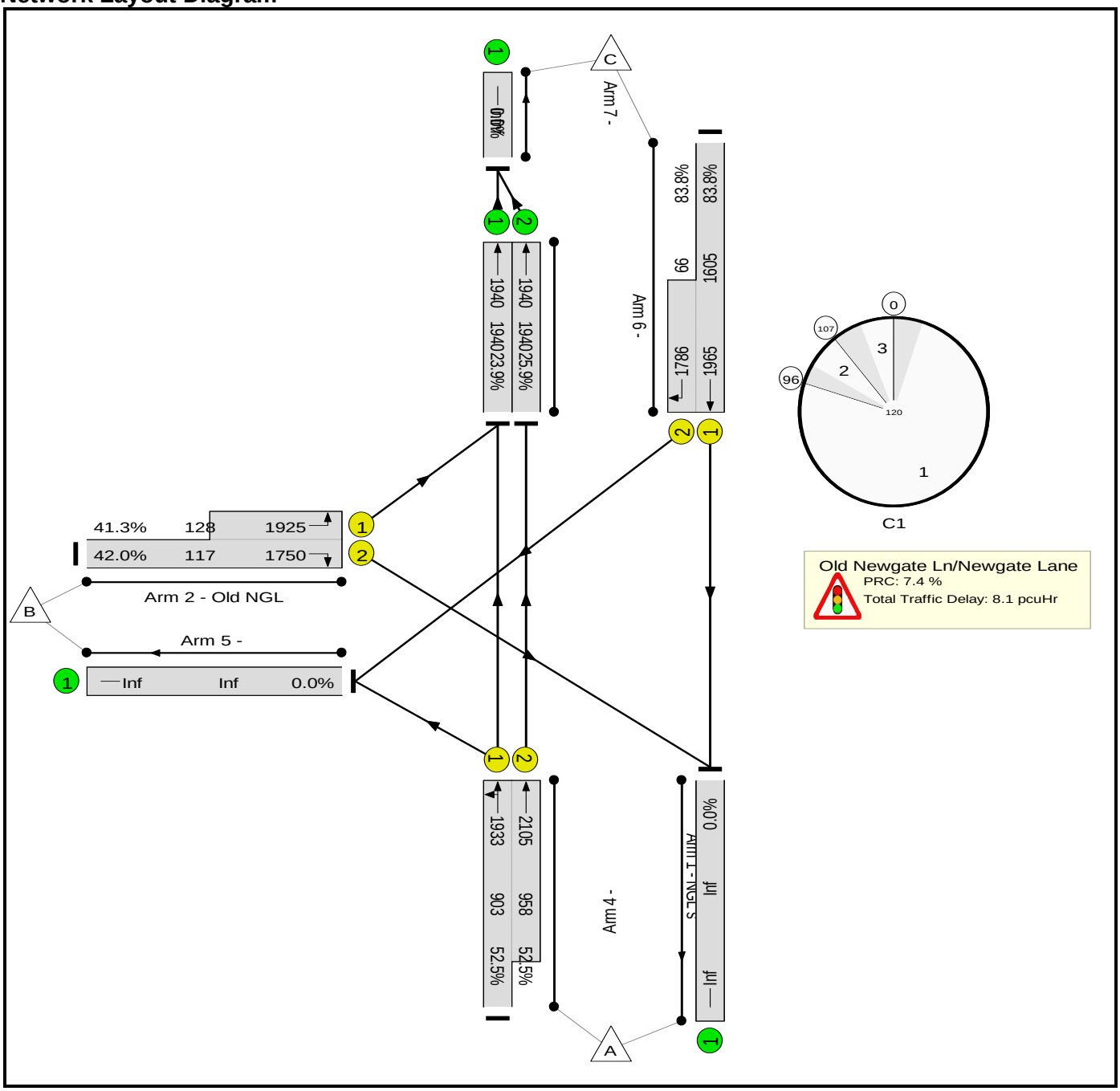
Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)	Back of Uniform Q At End of Red(pcu)
Network	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**87.3%**	**0**	**0**	**0**	**10.3**	**-**	**-**	**-**
Old Newgate Ln/Newgate Lane	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**87.3%**	**0**	**0**	**0**	**10.3**	**-**	**-**	**-**
1/1+1/2	NGL s Left Ahead	U	A		1	92	-	1631	1956:2105	907+961	87.3 : 87.3%	-	-	-	5.6	12.5	16.1	5.8
2/2+2/1	Old NGL Right Left	U	C		1	7	-	126	1750:1925	117+67	68.6 : 68.6%	-	-	-	3.0	84.4	3.7	2.4
3/1+3/2	NGL N Ahead Right	U	B		1	101	-	831	1965:1786	1579+93	49.7 : 49.7%	-	-	-	1.0	4.3	6.8	3.5
6/1	Ahead	U	-		-	-	-	809	1940	1940	41.7%	-	-	-	0.4	1.6	0.4	-
6/2	Ahead	U	-		-	-	-	839	1940	1940	43.2%	-	-	-	0.4	1.6	4.7	-

C1 PRC for Signalled Lanes (%): 3.1 Total Delay for Signalled Lanes (pcuHr): 9.60 Cycle Time (s): 120
PRC Over All Lanes (%): 3.1 Total Delay Over All Lanes(pcuHr): 10.34

Basic Results Summary

Scenario 2: '2024 Base + Dev PM DS1' (FG2: '2024 Base + Dev PM DS1', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

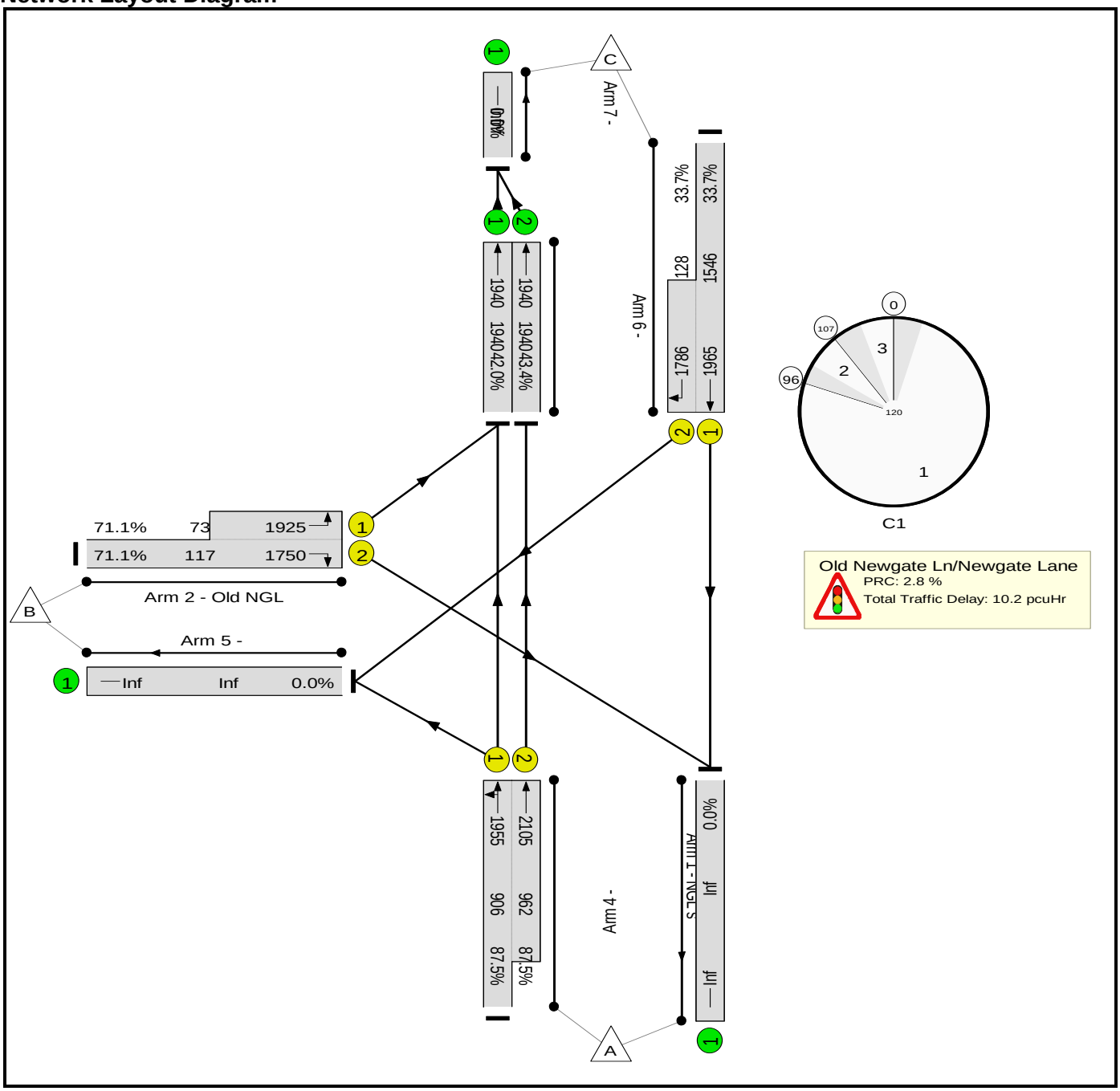
Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)	Back of Uniform Q At End of Red(pcu)
Network	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**83.8%**	**0**	**0**	**0**	**8.1**	**-**	**-**	**-**
Old Newgate Ln/Newgate Lane	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**83.8%**	**0**	**0**	**0**	**8.1**	**-**	**-**	**-**
1/1+1/2	NGL s Left Ahead	U	A		1	92	-	977	1933:2105	903+958	52.5 : 52.5%	-	-	-	1.6	6.0	5.4	3.5
2/2+2/1	Old NGL Right Left	U	C		1	7	-	102	1750:1925	117+128	42.0 : 41.3%	-	-	-	1.9	66.3	2.0	1.6
3/1+3/2	NGL N Ahead Right	U	B		1	101	-	1400	1965:1786	1605+66	83.8 : 83.8%	-	-	-	4.3	11.1	26.0	6.0
6/1	Ahead	U	-		-	-	-	464	1940	1940	23.9%	-	-	-	0.2	1.2	0.2	-
6/2	Ahead	U	-		-	-	-	503	1940	1940	25.9%	-	-	-	0.2	1.3	0.2	-

C1 PRC for Signalled Lanes (%): 7.4 Total Delay for Signalled Lanes (pcuHr): 7.82 Cycle Time (s): 120
PRC Over All Lanes (%): 7.4 Total Delay Over All Lanes(pcuHr): 8.15

Basic Results Summary

Scenario 3: '2024 Base + Dev AM DS2' (FG3: '2024 Base + Dev AM DS2', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

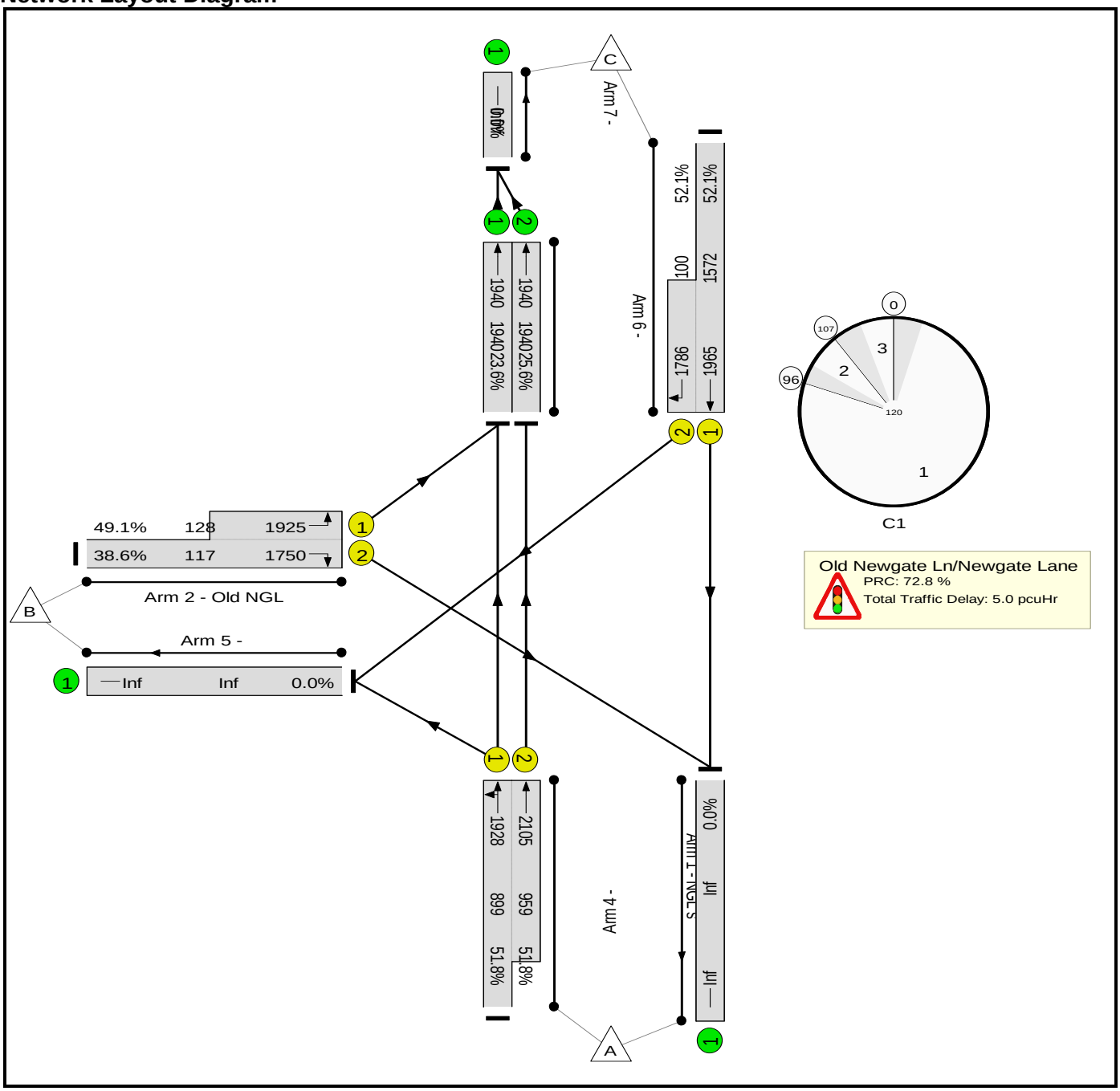
Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)	Back of Uniform Q At End of Red(pcu)
Network	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**87.5%**	**0**	**0**	**0**	**10.2**	**-**	**-**	**-**
Old Newgate Ln/Newgate Lane	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**87.5%**	**0**	**0**	**0**	**10.2**	**-**	**-**	**-**
1/1+1/2	NGL s Left Ahead	U	A		1	92	-	1635	1955:2105	906+962	87.5 : 87.5%	-	-	-	5.7	12.6	16.1	5.8
2/2+2/1	Old NGL Right Left	U	C		1	7	-	135	1750:1925	117+73	71.1 : 71.1%	-	-	-	3.2	86.0	3.9	2.5
3/1+3/2	NGL N Ahead Right	U	B		1	101	-	564	1965:1786	1546+128	33.7 : 33.7%	-	-	-	0.5	3.4	3.7	2.3
6/1	Ahead	U	-		-	-	-	814	1940	1940	42.0%	-	-	-	0.4	1.6	0.4	-
6/2	Ahead	U	-		-	-	-	842	1940	1940	43.4%	-	-	-	0.4	1.7	4.7	-

C1 PRC for Signalled Lanes (%): 2.8 Total Delay for Signalled Lanes (pcuHr): 9.49 Cycle Time (s): 120
PRC Over All Lanes (%): 2.8 Total Delay Over All Lanes(pcuHr): 10.24

Basic Results Summary

Scenario 4: '2024 Base + Dev PM DS2' (FG4: '2024 Base + Dev PM DS2', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

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)	Mean Max Queue (pcu)	Back of Uniform Q At End of Red(pcu)
Network	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**52.1%**	**0**	**0**	**0**	**5.0**	**-**	**-**	**-**
Old Newgate Ln/Newgate Lane	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**52.1%**	**0**	**0**	**0**	**5.0**	**-**	**-**	**-**
1/1+1/2	NGL s Left Ahead	U	A		1	92	-	963	1928:2105	899+959	51.8 : 51.8%	-	-	-	1.6	6.0	5.4	3.5
2/2+2/1	Old NGL Right Left	U	C		1	7	-	108	1750:1925	117+128	38.6 : 49.1%	-	-	-	2.0	67.0	2.4	1.9
3/1+3/2	NGL N Ahead Right	U	B		1	101	-	871	1965:1786	1572+100	52.1 : 52.1%	-	-	-	1.1	4.5	7.4	3.6
6/1	Ahead	U	-		-	-	-	458	1940	1940	23.6%	-	-	-	0.2	1.2	0.2	-
6/2	Ahead	U	-		-	-	-	497	1940	1940	25.6%	-	-	-	0.2	1.2	0.2	-

C1 PRC for Signalled Lanes (%): 72.8 Total Delay for Signalled Lanes (pcuHr): 4.70 Cycle Time (s): 120
PRC Over All Lanes (%): 72.8 Total Delay Over All Lanes(pcuHr): 5.03

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.5.0.6896

For sales and distribution information, program advice and maintenance, contact TRL:
+44 (0)1344 379777 software@trl.co.uk www.trlsoftware.co.uk

Filename: NGL-Longfield Ave.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\19
Report generation date: 26/02/2019 14:36:11

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	10.24	0.14	B	A	0.6	21.29	0.36	C	A
Arm 2	3.4	7.40	0.77	A		1.6	4.32	0.61	A	
Arm 3	0.8	4.55	0.45	A		1.1	4.46	0.51	A	
Arm 4	2.2	7.63	0.68	A		3.5	11.70	0.78	B	
	2024 Base + Dev DS1									
Arm 1	0.2	10.53	0.14	B	A	0.6	23.20	0.38	C	A
Arm 2	3.6	7.74	0.78	A		1.6	4.46	0.62	A	
Arm 3	0.8	4.66	0.46	A		1.1	4.61	0.53	A	
Arm 4	2.3	7.94	0.69	A		3.8	12.68	0.80	B	
	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	0.1	7.43	0.11	A	A	0.2	7.53	0.17	A	A
Arm 2	2.7	6.27	0.73	A		1.5	4.11	0.59	A	
Arm 3	0.3	3.42	0.22	A		0.2	2.80	0.20	A	
Arm 4	1.5	5.40	0.59	A		1.3	4.79	0.56	A	
	2024 Base + Dev DS2									
Arm 1	0.1	7.59	0.11	A	A	0.2	7.76	0.17	A	A
Arm 2	2.8	6.45	0.73	A		1.5	4.24	0.60	A	
Arm 3	0.3	3.46	0.23	A		0.3	2.86	0.21	A	
Arm 4	1.6	5.57	0.60	A		1.4	4.94	0.58	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.

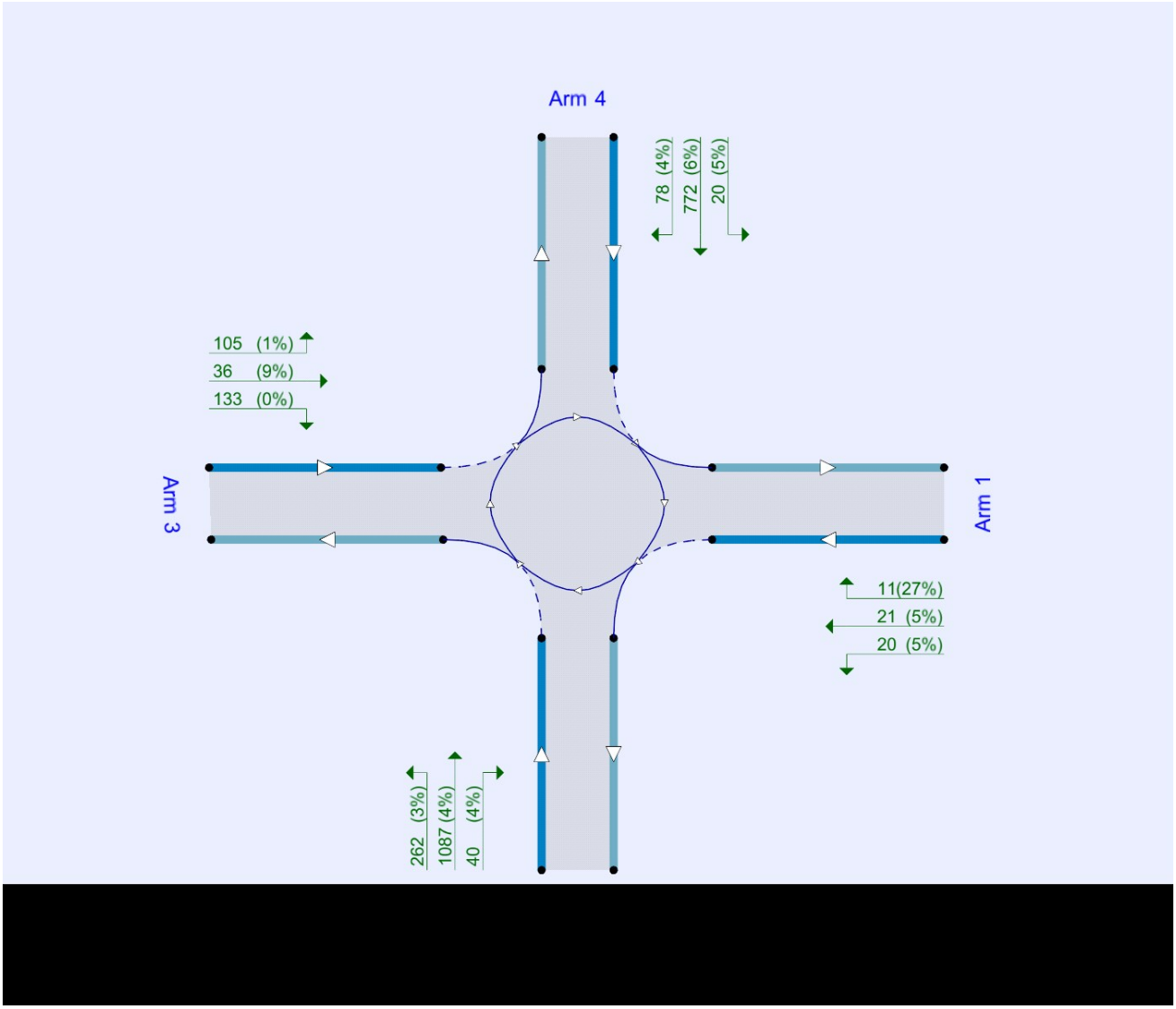
File summary

File Description

Title	(untitled)
Location	
Site number	
Date	20/04/2018
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	PEGASUSGROUP\Philip.Wragg
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	Veh	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	✓
D3	2024 Base DS1	AM	without Stubbington Bypass	ONE HOUR	07:45	09:15	15	✓
D4	2024 Base DS1	PM	without Stubbington Bypass	ONE HOUR	16:45	18:15	15	✓
D5	2024 Base + Dev DS1	AM	without Stubbington Bypass	ONE HOUR	07:45	09:15	15	✓
D6	2024 Base + Dev DS1	PM	without 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	without Stubbington Bypass	ONE HOUR	16:45	18:15	15	✓
D12	2024 Base DS2	AM	without Stubbington Bypass	ONE HOUR	07:45	09:15	15	✓
D13	2024 Base DS2	PM	without Stubbington Bypass	ONE HOUR	16:45	18:15	15	✓
D14	2024 Base + Dev DS2	AM	without Stubbington Bypass	ONE HOUR	07:45	09:15	15	✓
D15	2024 Base + Dev DS2	PM	without 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)	l' - 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 (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	50	100.000
2		ONE HOUR	✓	1407	100.000
3		ONE HOUR	✓	560	100.000
4		ONE HOUR	✓	865	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	19	20	11
	2	50	0	391	966
	3	35	372	0	153
	4	19	753	93	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	7.298	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	4.885	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	3.974	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 (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	83	100.000
2		ONE HOUR	✓	1128	100.000
3		ONE HOUR	✓	747	100.000
4		ONE HOUR	✓	960	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	21	29	33
	2	4	0	352	772
	3	4	638	0	105
	4	3	866	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	9.830	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	5.799	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	2.684	A
4	730	183	487	1569	0.465	732	696	1.4	0.9	4.357	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	6.99	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
D3	2024 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 (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	52	100.000
2		ONE HOUR	✓	1457	100.000
3		ONE HOUR	✓	580	100.000
4		ONE HOUR	✓	896	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	20	21	11
	2	52	0	405	1000
	3	36	385	0	158
	4	20	780	96	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	0.14	10.24	0.2	0.5	B	52	78
2	0.77	7.40	3.4	8.7	A	1388	2082
3	0.45	4.55	0.8	3.0	A	536	804
4	0.68	7.63	2.2	3.4	A	871	1307

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	43	11	985	668	0.064	43	85	0.0	0.1	6.324	A
2	1139	285	102	2206	0.516	1134	925	0.0	1.1	3.475	A
3	440	110	833	1740	0.253	438	404	0.0	0.3	2.783	A
4	715	179	359	1647	0.434	712	912	0.0	0.8	4.067	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	51	13	1179	576	0.089	51	102	0.1	0.1	7.538	A
2	1360	340	123	2191	0.621	1358	1108	1.1	1.7	4.474	A
3	525	131	997	1614	0.325	524	483	0.3	0.5	3.326	A
4	854	213	430	1604	0.532	852	1092	0.8	1.2	5.065	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	63	16	1442	451	0.139	62	125	0.1	0.2	10.173	B
2	1666	416	150	2170	0.767	1659	1355	1.7	3.3	7.219	A
3	643	161	1218	1443	0.445	642	590	0.5	0.8	4.514	A
4	1045	261	526	1546	0.676	1041	1335	1.2	2.2	7.513	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	63	16	1447	449	0.140	63	125	0.2	0.2	10.243	B
2	1666	416	150	2170	0.768	1665	1359	3.3	3.4	7.399	A
3	643	161	1223	1440	0.447	643	593	0.8	0.8	4.549	A
4	1045	261	527	1545	0.677	1045	1339	2.2	2.2	7.633	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	51	13	1186	573	0.089	51	103	0.2	0.1	7.594	A
2	1360	340	123	2190	0.621	1366	1114	3.4	1.7	4.574	A
3	525	131	1004	1609	0.326	526	486	0.8	0.5	3.352	A
4	854	213	431	1603	0.533	857	1099	2.2	1.2	5.147	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	43	11	991	666	0.064	43	86	0.1	0.1	6.361	A
2	1139	285	103	2205	0.516	1141	931	1.7	1.1	3.520	A
3	440	110	838	1736	0.253	440	406	0.5	0.3	2.800	A
4	715	179	361	1646	0.434	716	918	1.2	0.8	4.114	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	1.10	0.57	1.04	1.45	1.51			N/A	N/A
3	0.34	0.00	0.00	0.34	0.34			N/A	N/A
4	0.81	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	0.11	0.00	0.00	0.11	0.11			N/A	N/A
2	1.68	0.05	0.47	4.41	7.12			N/A	N/A
3	0.48	0.00	0.00	0.48	0.48			N/A	N/A
4	1.19	0.07	0.83	2.46	3.43			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	0.18	0.03	0.29	0.51	0.54			N/A	N/A
2	3.31	0.03	0.29	3.31	8.69			N/A	N/A
3	0.80	0.03	0.26	0.80	0.80			N/A	N/A
4	2.16	0.03	0.29	2.16	2.90			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	0.18	0.03	0.28	0.50	0.52			N/A	N/A
2	3.37	0.03	0.28	3.37	3.37			N/A	N/A
3	0.81	0.03	0.28	0.86	3.04			N/A	N/A
4	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	0.11	0.00	0.00	0.11	0.11			N/A	N/A
2	1.72	0.08	1.10	3.86	5.37			N/A	N/A
3	0.49	0.00	0.00	0.49	0.49			N/A	N/A
4	1.22	0.10	1.07	2.04	2.76			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	0.08	0.00	0.00	0.08	0.08			N/A	N/A
2	1.12	0.05	0.46	2.72	4.19			N/A	N/A
3	0.34	0.00	0.00	0.34	0.34			N/A	N/A
4	0.82	0.05	0.54	1.57	2.08			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	7.27	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
D4	2024 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 (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	86	100.000
2		ONE HOUR	✓	1170	100.000
3		ONE HOUR	✓	774	100.000
4		ONE HOUR	✓	995	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	22	30	34
	2	4	0	365	800
	3	4	661	0	109
	4	3	898	94	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	0.36	21.29	0.6	2.1	C	80	120
2	0.61	4.32	1.6	2.5	A	1089	1634
3	0.51	4.46	1.1	1.6	A	711	1066
4	0.78	11.70	3.5	15.0	B	923	1384

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	66	16	1247	544	0.120	65	9	0.0	0.1	7.596	A
2	894	223	119	2194	0.407	891	1193	0.0	0.7	2.799	A
3	583	146	639	1889	0.309	581	370	0.0	0.4	2.749	A
4	757	189	503	1559	0.486	753	718	0.0	0.9	4.492	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	78	20	1492	428	0.183	78	11	0.1	0.2	10.409	B
2	1067	267	142	2176	0.490	1066	1428	0.7	1.0	3.289	A
3	696	174	765	1792	0.388	696	443	0.4	0.6	3.281	A
4	904	226	601	1499	0.603	902	859	0.9	1.5	6.064	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	96	24	1822	271	0.354	95	14	0.2	0.5	20.529	C
2	1307	327	173	2153	0.607	1305	1744	1.0	1.5	4.295	A
3	853	213	936	1661	0.513	851	542	0.6	1.0	4.438	A
4	1107	277	736	1418	0.781	1100	1051	1.5	3.4	11.179	B

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	96	24	1831	267	0.359	96	14	0.5	0.6	21.286	C
2	1307	327	175	2152	0.607	1307	1752	1.5	1.6	4.325	A
3	853	213	938	1659	0.514	853	543	1.0	1.1	4.464	A
4	1107	277	737	1417	0.782	1107	1054	3.4	3.5	11.701	B

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	78	20	1504	422	0.186	80	11	0.6	0.2	10.684	B
2	1067	267	144	2175	0.491	1070	1439	1.6	1.0	3.315	A
3	696	174	768	1790	0.389	698	446	1.1	0.6	3.303	A
4	904	226	604	1498	0.603	912	863	3.5	1.6	6.286	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	66	16	1255	540	0.121	66	9	0.2	0.1	7.687	A
2	894	223	120	2193	0.408	895	1201	1.0	0.7	2.817	A
3	583	146	643	1887	0.309	584	372	0.6	0.4	2.764	A
4	757	189	505	1558	0.486	760	721	1.6	1.0	4.568	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	0.14	0.00	0.00	0.14	0.14			N/A	N/A
2	0.69	0.56	1.02	1.42	1.47			N/A	N/A
3	0.44	0.00	0.00	0.44	0.44			N/A	N/A
4	0.94	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	0.22	0.00	0.00	0.22	0.22			N/A	N/A
2	0.97	0.06	0.78	1.81	2.46			N/A	N/A
3	0.63	0.08	0.76	1.36	1.43			N/A	N/A
4	1.51	0.05	0.52	3.79	5.82			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	0.54	0.03	0.27	0.54	0.54			N/A	N/A
2	1.55	0.03	0.26	1.55	1.55			N/A	N/A
3	1.05	0.03	0.26	1.05	1.05			N/A	N/A
4	3.42	0.03	0.30	3.42	15.03			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	0.56	0.03	0.34	1.16	2.11			N/A	N/A
2	1.56	0.03	0.27	1.56	1.56			N/A	N/A
3	1.05	0.03	0.27	1.05	1.63			N/A	N/A
4	3.51	0.03	0.28	3.51	7.27			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	0.23	0.00	0.00	0.23	0.23			N/A	N/A
2	0.99	0.45	1.02	1.34	1.34			N/A	N/A
3	0.64	0.55	1.00	1.40	1.45			N/A	N/A
4	1.56	0.06	0.74	3.80	5.64			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	0.14	0.03	0.25	0.46	0.48			N/A	N/A
2	0.70	0.08	0.81	1.40	1.47			N/A	N/A
3	0.45	0.03	0.34	1.13	1.31			N/A	N/A
4	0.96	0.04	0.38	2.39	4.16			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	7.27	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 + Dev 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 (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	52	100.000
2		ONE HOUR	✓	1477	100.000
3		ONE HOUR	✓	586	100.000
4		ONE HOUR	✓	909	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	20	21	11
	2	52	0	410	1014
	3	36	392	0	158
	4	20	793	96	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	0.14	10.53	0.2	0.5	B	53	79
2	0.78	7.74	3.6	10.4	A	1407	2110
3	0.46	4.66	0.8	3.0	A	542	813
4	0.69	7.94	2.3	3.8	A	884	1325

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	43	11	1000	661	0.065	43	86	0.0	0.1	6.396	A
2	1154	289	102	2206	0.523	1150	941	0.0	1.1	3.524	A
3	445	111	844	1732	0.257	443	408	0.0	0.3	2.812	A
4	725	181	365	1643	0.441	722	923	0.0	0.8	4.122	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	52	13	1197	568	0.091	51	103	0.1	0.1	7.664	A
2	1378	345	123	2191	0.629	1376	1126	1.1	1.7	4.571	A
3	531	133	1010	1604	0.331	530	488	0.3	0.5	3.375	A
4	866	216	436	1600	0.541	864	1104	0.8	1.2	5.171	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	63	16	1464	441	0.143	63	126	0.1	0.2	10.456	B
2	1688	422	150	2170	0.778	1681	1377	1.7	3.5	7.525	A
3	650	163	1234	1431	0.454	649	597	0.5	0.8	4.627	A
4	1060	265	534	1541	0.688	1056	1350	1.2	2.3	7.802	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	63	16	1469	439	0.144	63	126	0.2	0.2	10.535	B
2	1688	422	150	2170	0.778	1688	1381	3.5	3.6	7.736	A
3	650	163	1239	1427	0.456	650	599	0.8	0.8	4.664	A
4	1060	265	535	1540	0.689	1060	1355	2.3	2.3	7.941	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	52	13	1204	564	0.091	52	103	0.2	0.1	7.725	A
2	1378	345	123	2190	0.629	1385	1133	3.6	1.8	4.684	A
3	531	133	1017	1598	0.332	532	492	0.8	0.5	3.404	A
4	866	216	438	1599	0.541	870	1112	2.3	1.3	5.260	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	43	11	1006	658	0.066	43	86	0.1	0.1	6.435	A
2	1154	289	103	2205	0.523	1157	947	1.8	1.1	3.571	A
3	445	111	849	1728	0.257	445	411	0.5	0.4	2.828	A
4	725	181	366	1642	0.441	727	928	1.3	0.8	4.171	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	1.13	0.57	1.04	1.45	1.50			N/A	N/A
3	0.35	0.00	0.00	0.35	0.35			N/A	N/A
4	0.83	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	0.11	0.00	0.00	0.11	0.11			N/A	N/A
2	1.74	0.05	0.47	4.61	7.51			N/A	N/A
3	0.50	0.05	0.45	1.28	1.40			N/A	N/A
4	1.23	0.06	0.80	2.65	3.74			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	0.18	0.03	0.29	0.51	0.54			N/A	N/A
2	3.50	0.03	0.29	3.50	10.38			N/A	N/A
3	0.83	0.03	0.26	0.83	0.83			N/A	N/A
4	2.28	0.03	0.29	2.28	3.79			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	0.18	0.03	0.28	0.50	0.52			N/A	N/A
2	3.57	0.03	0.28	3.57	3.57			N/A	N/A
3	0.84	0.03	0.28	0.84	3.00			N/A	N/A
4	2.31	0.03	0.28	2.31	2.31			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	0.11	0.00	0.00	0.11	0.11			N/A	N/A
2	1.79	0.07	1.06	4.10	5.87			N/A	N/A
3	0.50	0.50	1.01	1.41	1.46			N/A	N/A
4	1.27	0.09	1.07	2.21	2.99			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	0.08	0.00	0.00	0.08	0.08			N/A	N/A
2	1.15	0.04	0.45	2.84	4.56			N/A	N/A
3	0.35	0.00	0.00	0.35	0.35			N/A	N/A
4	0.84	0.05	0.52	1.70	2.36			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	7.73	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
D6	2024 Base + Dev 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 (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	86	100.000
2		ONE HOUR	✓	1193	100.000
3		ONE HOUR	✓	786	100.000
4		ONE HOUR	✓	1011	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	22	30	34
	2	4	0	372	817
	3	4	673	0	109
	4	3	913	94	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	0.38	23.20	0.6	2.5	C	80	120
2	0.62	4.46	1.6	2.7	A	1111	1667
3	0.53	4.61	1.1	1.5	A	721	1081
4	0.80	12.68	3.8	17.7	B	937	1405

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	66	16	1266	535	0.123	65	9	0.0	0.1	7.750	A
2	912	228	119	2194	0.416	909	1213	0.0	0.7	2.838	A
3	592	148	652	1880	0.315	590	376	0.0	0.5	2.787	A
4	769	192	511	1554	0.495	765	730	0.0	1.0	4.583	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	79	20	1516	416	0.189	78	11	0.1	0.2	10.761	B
2	1089	272	142	2176	0.500	1088	1452	0.7	1.0	3.353	A
3	706	177	780	1781	0.397	706	450	0.5	0.7	3.346	A
4	918	229	612	1493	0.615	915	874	1.0	1.6	6.267	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	96	24	1850	258	0.374	95	14	0.2	0.6	22.207	C
2	1333	333	173	2153	0.619	1331	1772	1.0	1.6	4.430	A
3	865	216	954	1647	0.525	863	550	0.7	1.1	4.584	A
4	1124	281	748	1410	0.797	1115	1069	1.6	3.7	12.005	B

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	96	24	1860	253	0.381	96	14	0.6	0.6	23.197	C
2	1333	333	175	2152	0.620	1333	1781	1.6	1.6	4.463	A
3	865	216	956	1645	0.526	865	552	1.1	1.1	4.614	A
4	1124	281	750	1409	0.798	1124	1072	3.7	3.8	12.677	B

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	79	20	1529	410	0.192	80	11	0.6	0.2	11.086	B
2	1089	272	144	2174	0.501	1091	1465	1.6	1.0	3.382	A
3	706	177	783	1778	0.397	708	452	1.1	0.7	3.368	A
4	918	229	614	1492	0.615	927	878	3.8	1.6	6.530	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	66	16	1275	531	0.124	66	9	0.2	0.1	7.852	A
2	912	228	120	2193	0.416	913	1221	1.0	0.7	2.856	A
3	592	148	655	1877	0.315	592	378	0.7	0.5	2.803	A
4	769	192	513	1553	0.495	771	734	1.6	1.0	4.667	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	0.14	0.00	0.00	0.14	0.14			N/A	N/A
2	0.72	0.56	1.01	1.42	1.47			N/A	N/A
3	0.46	0.00	0.00	0.46	0.46			N/A	N/A
4	0.98	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	0.23	0.00	0.00	0.23	0.23			N/A	N/A
2	1.01	0.06	0.76	1.92	2.72			N/A	N/A
3	0.65	0.08	0.76	1.36	1.44			N/A	N/A
4	1.58	0.05	0.50	4.01	6.26			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	0.58	0.03	0.27	0.58	0.61			N/A	N/A
2	1.63	0.03	0.26	1.63	1.63			N/A	N/A
3	1.10	0.03	0.26	1.10	1.10			N/A	N/A
4	3.73	0.03	0.31	4.40	17.67			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	0.61	0.03	0.35	1.35	2.48			N/A	N/A
2	1.64	0.03	0.27	1.64	1.64			N/A	N/A
3	1.10	0.03	0.27	1.10	1.49			N/A	N/A
4	3.85	0.03	0.28	3.85	9.70			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	0.24	0.03	0.25	0.46	0.48			N/A	N/A
2	1.03	0.36	1.04	1.14	1.60			N/A	N/A
3	0.66	0.55	1.00	1.40	1.45			N/A	N/A
4	1.64	0.05	0.64	4.10	6.24			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	0.14	0.03	0.25	0.46	0.48			N/A	N/A
2	0.73	0.08	0.80	1.42	1.50			N/A	N/A
3	0.46	0.04	0.38	1.20	1.35			N/A	N/A
4	1.00	0.04	0.37	2.48	4.56			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 (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	50	100.000
2		ONE HOUR	✓	1341	100.000
3		ONE HOUR	✓	265	100.000
4		ONE HOUR	✓	840	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	19	20	11
	2	38	0	253	1050
	3	35	128	0	101
	4	19	746	75	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	6.008	A
2	1254	313	102	2206	0.568	1258	847	2.4	1.4	3.965	A
3	241	60	1036	1584	0.152	241	324	0.3	0.2	2.721	A
4	800	200	186	1752	0.457	802	1092	1.4	0.9	4.028	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	5.370	A
2	1050	262	85	2219	0.473	1052	709	1.4	0.9	3.211	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	3.475	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	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 (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	83	100.000
2		ONE HOUR	✓	1104	100.000
3		ONE HOUR	✓	279	100.000
4		ONE HOUR	✓	850	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	21	29	33
	2	4	0	266	834
	3	4	172	0	104
	4	3	775	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	3.098	A
3	251	63	798	1767	0.142	251	333	0.2	0.2	2.376	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	3.209	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	5.70	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	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 (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	52	100.000
2		ONE HOUR	✓	1389	100.000
3		ONE HOUR	✓	274	100.000
4		ONE HOUR	✓	869	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	20	21	11
	2	40	0	262	1087
	3	36	133	0	105
	4	20	772	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	0.11	7.43	0.1	0.5	A	52	78
2	0.73	6.27	2.7	5.8	A	1325	1987
3	0.22	3.42	0.3	1.2	A	255	382
4	0.59	5.40	1.5	1.9	A	846	1269

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	43	11	775	768	0.056	43	76	0.0	0.1	5.457	A
2	1087	272	88	2217	0.490	1083	730	0.0	1.0	3.291	A
3	209	52	892	1695	0.123	208	279	0.0	0.1	2.456	A
4	694	174	160	1768	0.393	691	940	0.0	0.7	3.538	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	51	13	928	695	0.074	51	91	0.1	0.1	6.145	A
2	1298	325	105	2204	0.589	1296	874	1.0	1.5	4.116	A
3	250	62	1068	1560	0.160	249	334	0.1	0.2	2.785	A
4	829	207	192	1749	0.474	828	1125	0.7	0.9	4.143	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	63	16	1136	597	0.105	63	111	0.1	0.1	7.410	A
2	1590	397	129	2186	0.727	1585	1070	1.5	2.7	6.175	A
3	306	76	1305	1376	0.222	305	408	0.2	0.3	3.407	A
4	1015	254	235	1722	0.589	1013	1376	0.9	1.5	5.362	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	63	16	1138	596	0.105	63	112	0.1	0.1	7.428	A
2	1590	397	129	2186	0.727	1590	1072	2.7	2.7	6.272	A
3	306	76	1309	1373	0.223	306	409	0.3	0.3	3.417	A
4	1015	254	235	1722	0.589	1015	1380	1.5	1.5	5.398	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	51	13	932	694	0.074	51	91	0.1	0.1	6.167	A
2	1298	325	106	2203	0.589	1303	877	2.7	1.5	4.179	A
3	250	62	1073	1555	0.161	250	335	0.3	0.2	2.796	A
4	829	207	192	1748	0.474	831	1131	1.5	1.0	4.173	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	43	11	779	766	0.056	43	77	0.1	0.1	5.478	A
2	1087	272	88	2216	0.491	1089	734	1.5	1.0	3.328	A
3	209	52	897	1691	0.124	209	280	0.2	0.1	2.465	A
4	694	174	161	1767	0.393	695	945	1.0	0.7	3.566	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	0.99	0.57	1.04	1.46	1.51			N/A	N/A
3	0.14	0.00	0.00	0.14	0.14			N/A	N/A
4	0.68	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	0.09	0.03	0.29	0.52	0.55			N/A	N/A
2	1.47	0.05	0.50	3.72	5.78			N/A	N/A
3	0.19	0.00	0.00	0.19	0.19			N/A	N/A
4	0.95	0.08	0.89	1.54	1.95			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	0.13	0.03	0.29	0.51	0.54			N/A	N/A
2	2.71	0.03	0.28	2.71	3.66			N/A	N/A
3	0.29	0.03	0.26	0.46	0.49			N/A	N/A
4	1.50	0.03	0.28	1.50	1.50			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	0.13	0.03	0.28	0.50	0.52			N/A	N/A
2	2.74	0.03	0.27	2.74	2.74			N/A	N/A
3	0.29	0.03	0.29	0.79	1.16			N/A	N/A
4	1.51	0.03	0.28	1.51	1.51			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	0.09	0.00	0.00	0.09	0.09			N/A	N/A
2	1.51	0.10	1.18	2.90	3.86			N/A	N/A
3	0.19	0.00	0.00	0.19	0.19			N/A	N/A
4	0.96	0.27	1.04	1.25	1.25			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	1.01	0.05	0.57	2.07	3.05			N/A	N/A
3	0.14	0.00	0.00	0.14	0.14			N/A	N/A
4	0.69	0.07	0.77	1.45	1.53			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	4.33	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
D13	2024 Base DS2	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 (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	86	100.000
2		ONE HOUR	✓	1145	100.000
3		ONE HOUR	✓	289	100.000
4		ONE HOUR	✓	881	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	22	30	34
	2	4	0	276	865
	3	4	178	0	107
	4	3	804	74	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	0.17	7.53	0.2	0.5	A	80	120
2	0.59	4.11	1.5	2.0	A	1067	1600
3	0.20	2.80	0.2	0.5	A	265	398
4	0.56	4.79	1.3	1.6	A	817	1226

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	66	16	798	757	0.087	65	9	0.0	0.1	5.264	A
2	875	219	104	2205	0.397	873	760	0.0	0.7	2.738	A
3	218	54	689	1851	0.118	217	287	0.0	0.1	2.203	A
4	670	168	140	1780	0.377	668	766	0.0	0.6	3.265	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	78	20	956	682	0.115	78	11	0.1	0.1	6.028	A
2	1045	261	124	2189	0.477	1044	909	0.7	0.9	3.189	A
3	260	65	824	1747	0.149	260	344	0.1	0.2	2.421	A
4	801	200	167	1763	0.454	800	917	0.6	0.8	3.772	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	96	24	1170	581	0.165	96	14	0.1	0.2	7.508	A
2	1280	320	152	2169	0.590	1278	1113	0.9	1.4	4.094	A
3	319	80	1009	1605	0.199	318	421	0.2	0.2	2.798	A
4	981	245	205	1741	0.563	979	1123	0.8	1.3	4.764	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	96	24	1172	580	0.165	96	14	0.2	0.2	7.528	A
2	1280	320	153	2168	0.590	1280	1115	1.4	1.5	4.114	A
3	319	80	1011	1603	0.199	319	422	0.2	0.2	2.801	A
4	981	245	205	1740	0.563	981	1124	1.3	1.3	4.787	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	78	20	959	681	0.115	79	11	0.2	0.1	6.052	A
2	1045	261	125	2189	0.477	1047	912	1.5	0.9	3.206	A
3	260	65	827	1745	0.149	260	345	0.2	0.2	2.425	A
4	801	200	168	1763	0.454	802	920	1.3	0.8	3.796	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	66	16	802	755	0.087	66	9	0.1	0.1	5.286	A
2	875	219	105	2204	0.397	876	763	0.9	0.7	2.754	A
3	218	54	692	1849	0.118	218	289	0.2	0.1	2.209	A
4	670	168	140	1780	0.377	671	770	0.8	0.6	3.287	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	0.67	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	0.61	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	0.13	0.00	0.00	0.13	0.13			N/A	N/A
2	0.92	0.07	0.79	1.64	2.02			N/A	N/A
3	0.17	0.00	0.00	0.17	0.17			N/A	N/A
4	0.83	0.08	0.84	1.09	1.61			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	0.20	0.03	0.26	0.47	0.49			N/A	N/A
2	1.45	0.03	0.26	1.45	1.45			N/A	N/A
3	0.25	0.03	0.25	0.46	0.48			N/A	N/A
4	1.29	0.03	0.26	1.29	1.29			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	0.20	0.03	0.26	0.46	0.49			N/A	N/A
2	1.45	0.03	0.27	1.45	1.45			N/A	N/A
3	0.25	0.03	0.26	0.47	0.49			N/A	N/A
4	1.30	0.03	0.27	1.30	1.30			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	0.13	0.00	0.00	0.13	0.13			N/A	N/A
2	0.93	0.52	1.01	1.45	1.50			N/A	N/A
3	0.18	0.00	0.00	0.18	0.18			N/A	N/A
4	0.85	0.44	0.98	1.42	1.47			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	0.10	0.00	0.00	0.10	0.10			N/A	N/A
2	0.67	0.09	0.82	1.39	1.46			N/A	N/A
3	0.13	0.00	0.00	0.13	0.13			N/A	N/A
4	0.61	0.07	0.75	1.36	1.44			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	5.87	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	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 (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	52	100.000
2		ONE HOUR	✓	1404	100.000
3		ONE HOUR	✓	277	100.000
4		ONE HOUR	✓	888	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	20	21	11
	2	40	0	265	1099
	3	36	136	0	105
	4	20	791	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	0.11	7.59	0.1	0.5	A	53	79
2	0.73	6.45	2.8	6.0	A	1339	2008
3	0.23	3.46	0.3	1.2	A	258	387
4	0.60	5.57	1.6	2.1	A	863	1294

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	43	11	792	760	0.057	43	76	0.0	0.1	5.514	A
2	1099	275	88	2217	0.496	1094	747	0.0	1.0	3.321	A
3	211	53	901	1688	0.125	211	281	0.0	0.1	2.469	A
4	708	177	163	1766	0.401	705	949	0.0	0.7	3.586	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	52	13	948	686	0.075	52	92	0.1	0.1	6.234	A
2	1312	328	105	2204	0.595	1310	894	1.0	1.5	4.176	A
3	252	63	1079	1551	0.163	252	336	0.1	0.2	2.809	A
4	845	211	195	1747	0.484	844	1136	0.7	1.0	4.221	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	63	16	1160	586	0.108	63	112	0.1	0.1	7.571	A
2	1607	402	129	2186	0.735	1601	1094	1.5	2.8	6.340	A
3	309	77	1319	1366	0.226	309	411	0.2	0.3	3.451	A
4	1035	259	238	1720	0.602	1033	1389	1.0	1.6	5.532	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	63	16	1162	584	0.108	63	112	0.1	0.1	7.591	A
2	1607	402	129	2186	0.735	1606	1096	2.8	2.8	6.451	A
3	309	77	1323	1363	0.227	309	412	0.3	0.3	3.462	A
4	1035	259	239	1720	0.602	1035	1393	1.6	1.6	5.571	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	52	13	951	684	0.075	52	92	0.1	0.1	6.257	A
2	1312	328	106	2203	0.595	1317	898	2.8	1.5	4.246	A
3	252	63	1085	1546	0.163	253	338	0.3	0.2	2.823	A
4	845	211	195	1746	0.484	848	1142	1.6	1.0	4.256	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	43	11	796	758	0.057	43	77	0.1	0.1	5.534	A
2	1099	275	88	2216	0.496	1101	751	1.5	1.0	3.361	A
3	211	53	906	1684	0.126	212	283	0.2	0.1	2.479	A
4	708	177	164	1766	0.401	709	954	1.0	0.7	3.612	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	1.01	0.57	1.04	1.45	1.51			N/A	N/A
3	0.14	0.00	0.00	0.14	0.14			N/A	N/A
4	0.70	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	0.09	0.03	0.29	0.51	0.54			N/A	N/A
2	1.51	0.05	0.49	3.85	6.02			N/A	N/A
3	0.20	0.00	0.00	0.20	0.20			N/A	N/A
4	0.99	0.08	0.89	1.69	2.07			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	0.13	0.03	0.29	0.51	0.54			N/A	N/A
2	2.81	0.03	0.28	2.81	4.39			N/A	N/A
3	0.30	0.03	0.26	0.46	0.49			N/A	N/A
4	1.58	0.03	0.28	1.58	1.58			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	0.13	0.03	0.27	0.49	0.52			N/A	N/A
2	2.84	0.03	0.27	2.84	2.84			N/A	N/A
3	0.30	0.03	0.30	0.87	1.20			N/A	N/A
4	1.59	0.03	0.28	1.59	1.59			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	0.09	0.00	0.00	0.09	0.09			N/A	N/A
2	1.55	0.09	1.17	3.04	4.08			N/A	N/A
3	0.20	0.00	0.00	0.20	0.20			N/A	N/A
4	1.00	0.23	1.05	1.58	1.58			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	1.03	0.05	0.52	2.21	3.27			N/A	N/A
3	0.15	0.00	0.00	0.15	0.15			N/A	N/A
4	0.71	0.07	0.76	1.47	1.56			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	4.45	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	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 (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	86	100.000
2		ONE HOUR	✓	1169	100.000
3		ONE HOUR	✓	301	100.000
4		ONE HOUR	✓	896	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	22	30	34
	2	4	0	283	882
	3	4	189	0	107
	4	3	819	74	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	0.17	7.76	0.2	0.5	A	80	120
2	0.60	4.24	1.5	2.4	A	1089	1633
3	0.21	2.86	0.3	0.8	A	276	414
4	0.58	4.94	1.4	1.7	A	831	1247

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	66	16	818	748	0.088	65	9	0.0	0.1	5.338	A
2	893	223	104	2205	0.405	891	780	0.0	0.7	2.775	A
3	226	57	701	1841	0.123	226	293	0.0	0.1	2.228	A
4	682	170	148	1775	0.384	679	779	0.0	0.6	3.314	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	79	20	979	671	0.117	78	11	0.1	0.1	6.145	A
2	1067	267	124	2189	0.487	1066	934	0.7	1.0	3.249	A
3	270	68	839	1735	0.156	270	351	0.1	0.2	2.456	A
4	814	204	177	1757	0.463	813	932	0.6	0.9	3.850	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	96	24	1199	567	0.170	96	14	0.1	0.2	7.731	A
2	1306	327	152	2169	0.602	1304	1143	1.0	1.5	4.216	A
3	331	83	1027	1591	0.208	331	429	0.2	0.3	2.857	A
4	997	249	217	1733	0.575	995	1141	0.9	1.4	4.918	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	96	24	1201	566	0.170	96	14	0.2	0.2	7.756	A
2	1306	327	153	2168	0.602	1306	1145	1.5	1.5	4.239	A
3	331	83	1029	1589	0.208	331	430	0.3	0.3	2.860	A
4	997	249	217	1733	0.576	997	1142	1.4	1.4	4.944	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	79	20	983	670	0.117	79	11	0.2	0.1	6.172	A
2	1067	267	125	2189	0.487	1069	937	1.5	1.0	3.268	A
3	270	68	842	1733	0.156	270	352	0.3	0.2	2.463	A
4	814	204	178	1757	0.463	816	935	1.4	0.9	3.874	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	66	16	822	746	0.088	66	9	0.1	0.1	5.359	A
2	893	223	105	2204	0.405	894	784	1.0	0.7	2.794	A
3	226	57	704	1839	0.123	226	294	0.2	0.1	2.232	A
4	682	170	149	1775	0.384	683	782	0.9	0.6	3.334	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	0.14	0.00	0.00	0.14	0.14			N/A	N/A
4	0.63	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	0.13	0.00	0.00	0.13	0.13			N/A	N/A
2	0.96	0.07	0.78	1.77	2.36			N/A	N/A
3	0.18	0.00	0.00	0.18	0.18			N/A	N/A
4	0.87	0.08	0.84	1.31	1.75			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	0.20	0.03	0.26	0.47	0.49			N/A	N/A
2	1.52	0.03	0.26	1.52	1.52			N/A	N/A
3	0.26	0.03	0.25	0.46	0.48			N/A	N/A
4	1.35	0.03	0.26	1.35	1.35			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	0.21	0.03	0.26	0.47	0.49			N/A	N/A
2	1.53	0.03	0.27	1.53	1.53			N/A	N/A
3	0.26	0.03	0.27	0.49	0.82			N/A	N/A
4	1.36	0.03	0.27	1.36	1.36			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	0.14	0.00	0.00	0.14	0.14			N/A	N/A
2	0.97	0.51	1.02	1.17	1.17			N/A	N/A
3	0.19	0.00	0.00	0.19	0.19			N/A	N/A
4	0.88	0.36	0.99	1.43	1.49			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	0.10	0.00	0.00	0.10	0.10			N/A	N/A
2	0.70	0.09	0.81	1.40	1.47			N/A	N/A
3	0.14	0.00	0.00	0.14	0.14			N/A	N/A
4	0.63	0.07	0.75	1.37	1.45			N/A	N/A

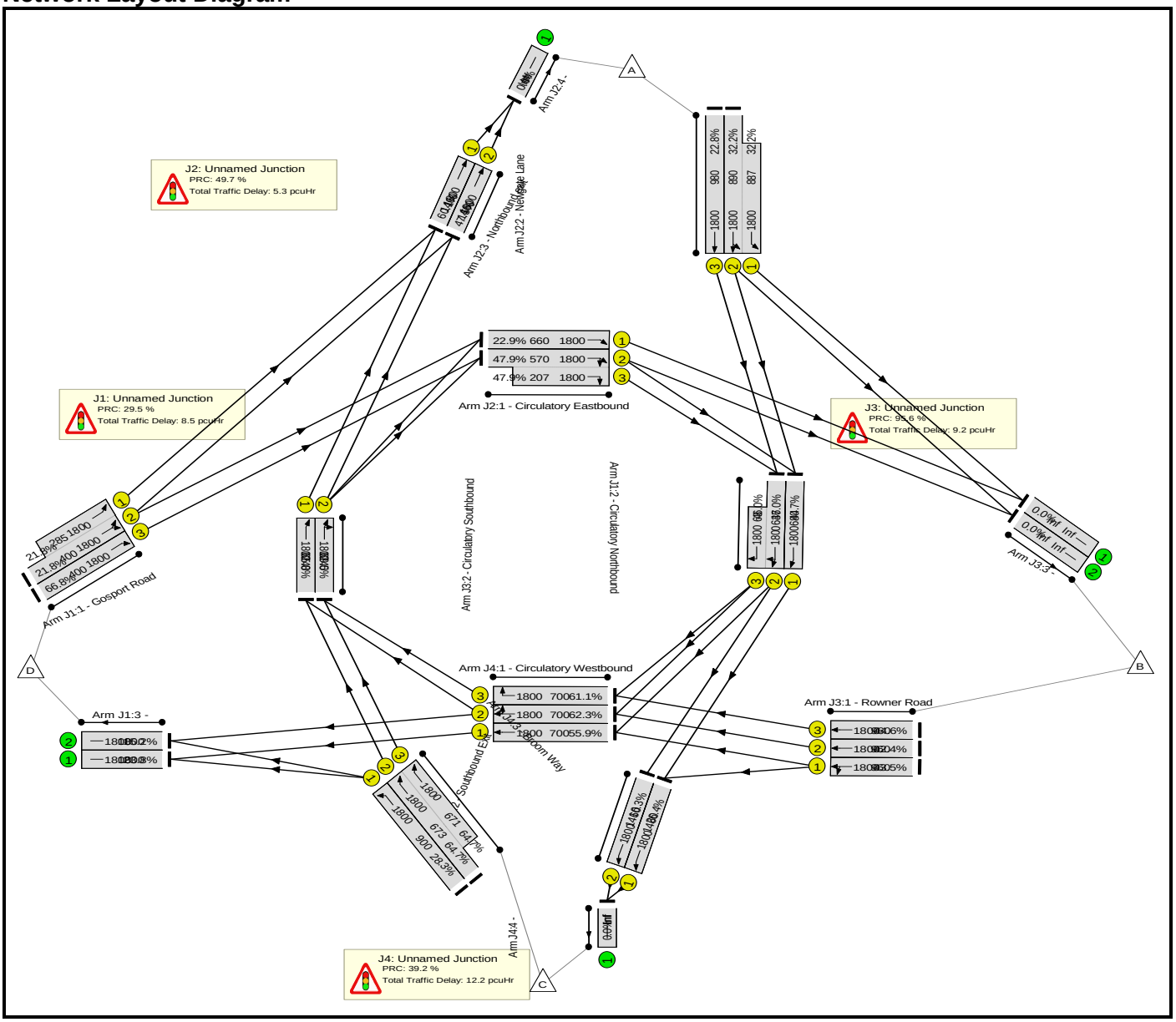
Basic Results Summary

User and Project Details

Project:	**Gosport Western Access**
Title:	**Stubbington Bypass - Red Route**
Location:	Peel Common Roundabout
Additional detail:	
File name:	PCR Phase 3.lsg3x
Author:	K McDonald
Company:	Hampshire County Council
Address:	

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

Network Layout Diagram



Basic Results Summary

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)	Mean Max Queue (pcu)
Network: Stubbington Bypass - Red Route	-	-	-		-	-	-	-	-	-	**69.5%**	**0**	**0**	**0**	**35.1**	-	-
J1: Unnamed Junction	-	-	-		-	-	-	-	-	-	**69.5%**	**0**	**0**	**0**	**8.5**	-	-
1/2+1/1	Gosport Road Ahead Ahead2	U	B		1	19	-	149	1800:1800	400+285	21.8 : 21.8%	-	-	-	1.3	31.8	1.9
1/3	Gosport Road Ahead	U	B		1	19	-	267	1800	400	66.8%	-	-	-	3.4	45.3	7.1
2/1	Circulatory Northbound Ahead	U	A		1	61	-	816	1800	1240	65.8%	-	-	-	1.7	7.5	5.1
2/2	Circulatory Northbound Right Ahead	U	A		1	61	-	862	1800	1240	69.5%	-	-	-	1.9	7.8	5.3
3/1		U	-		-	-	-	428	1800	1800	23.8%	-	-	-	0.2	1.3	0.2
3/2		U	-		-	-	-	273	1800	1800	15.2%	-	-	-	0.1	1.2	0.1
J2: Unnamed Junction	-	-	-		-	-	-	-	-	-	**60.1%**	**0**	**0**	**0**	**5.3**	-	-
1/1	Circulatory Eastbound Ahead	U	C		1	32	-	151	1800	660	22.9%	-	-	-	0.5	11.3	2.8
1/2+1/3	Circulatory Eastbound Right Ahead	U	C		1	32	-	372	1800:1800	570+207	47.9 : 47.9%	-	-	-	0.7	6.9	4.0
2/2+2/1	Newgate Lane Ahead Left	U	D		1	48	-	573	1800:1800	890+887	32.2 : 32.2%	-	-	-	2.0	12.6	4.1
2/3	Newgate Lane Ahead	U	D		1	48	-	223	1800	980	22.8%	-	-	-	0.8	13.0	3.0
3/1	Northbound exit Ahead	U	J		1	72	-	878	1800	1460	60.1%	-	-	-	0.8	3.2	1.3
3/2	Northbound exit Ahead	U	J		1	72	-	693	1800	1460	47.5%	-	-	-	0.5	2.5	0.6

Basic Results Summary

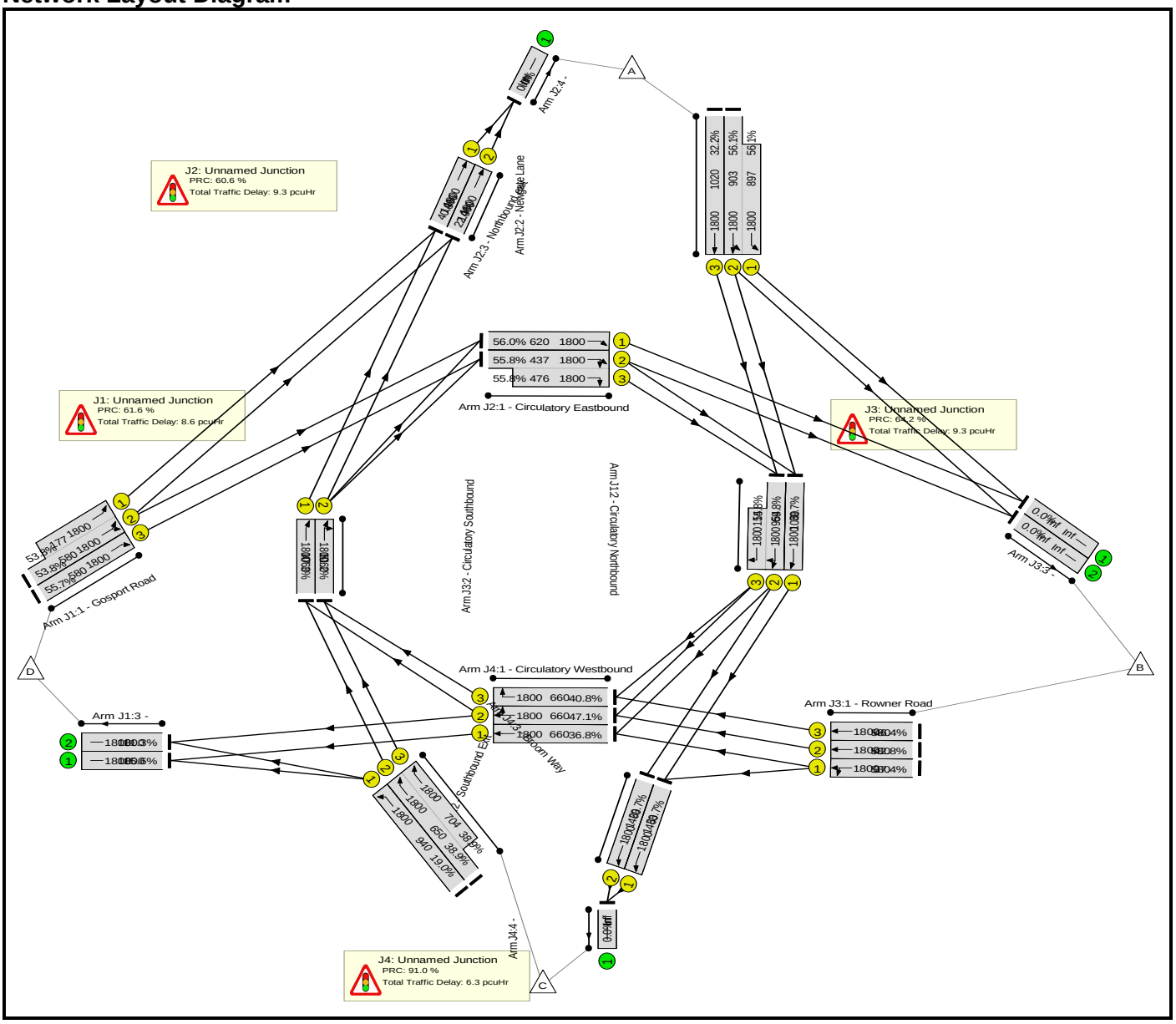
J3: Unnamed Junction	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**46.0%**	**0**	**0**	**0**	**9.2**	**-**	**-**
1/1	Rowner Road Ahead Left	U	F		1	47	-	418	1800	960	43.5%	-	-	-	1.9	16.1	6.7
1/2	Rowner Road Ahead	U	F		1	47	-	407	1800	960	42.4%	-	-	-	1.8	15.9	6.5
1/3	Rowner Road Ahead	U	F		1	47	-	428	1800	960	44.6%	-	-	-	1.9	16.2	6.9
2/1	Circulatory Southbound Ahead	U	E		1	33	-	304	1800	680	44.7%	-	-	-	1.6	19.0	4.1
2/2+2/3	Circulatory Southbound Right Ahead	U	E		1	33	-	322	1800:1800	637+63	46.0 : 46.0%	-	-	-	2.0	22.0	5.1
J4: Unnamed Junction	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**64.7%**	**0**	**0**	**0**	**12.2**	**-**	**-**
1/1	Circulatory Westbound Ahead	U	G		1	34	-	391	1800	700	55.9%	-	-	-	2.1	19.1	3.9
1/2	Circulatory Westbound Right Ahead	U	G		1	34	-	436	1800	700	62.3%	-	-	-	2.3	19.0	3.9
1/3	Circulatory Westbound Right	U	G		1	34	-	428	1800	700	61.1%	-	-	-	2.1	17.3	3.2
2/1	Southbound Exit Ahead	U	K		1	72	-	386	1800	1460	26.4%	-	-	-	0.2	2.0	0.5
2/2	Southbound Exit Ahead	U	K		1	72	-	238	1800	1460	16.3%	-	-	-	0.1	1.5	0.1
3/1	Broom Way Left	U	I		1	44	-	255	1800	900	28.3%	-	-	-	1.1	15.9	3.9
3/2+3/3	Broom Way Ahead	U	H		1	45	-	869	1800:1800	673+671	64.7 : 64.7%	-	-	-	4.3	18.0	7.9

C1	Stream: 1 PRC for Signalled Lanes (%):	29.5	Total Delay for Signalled Lanes (pcuHr):	8.26	Cycle Time (s):	90
C1	Stream: 2 PRC for Signalled Lanes (%):	87.8	Total Delay for Signalled Lanes (pcuHr):	4.01	Cycle Time (s):	90
C1	Stream: 3 PRC for Signalled Lanes (%):	95.6	Total Delay for Signalled Lanes (pcuHr):	9.17	Cycle Time (s):	90
C1	Stream: 4 PRC for Signalled Lanes (%):	39.2	Total Delay for Signalled Lanes (pcuHr):	11.89	Cycle Time (s):	90
C1	Stream: 5 PRC for Signalled Lanes (%):	240.4	Total Delay for Signalled Lanes (pcuHr):	0.31	Cycle Time (s):	90
C1	Stream: 6 PRC for Signalled Lanes (%):	49.7	Total Delay for Signalled Lanes (pcuHr):	1.26	Cycle Time (s):	90
	PRC Over All Lanes (%):	29.5	Total Delay Over All Lanes(pcuHr):	35.15		

Basic Results Summary

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

Network Layout Diagram



Basic Results Summary

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)	Mean Max Queue (pcu)
Network: Stubbington Bypass - Red Route	-	-	-		-	-	-	-	-	-	**56.1%**	**0**	**0**	**0**	**33.6**	-	-
J1: Unnamed Junction	-	-	-		-	-	-	-	-	-	**55.7%**	**0**	**0**	**0**	**8.6**	-	-
1/2+1/1	Gosport Road Ahead Ahead2	U	B		1	28	-	407	1800:1800	580+177	53.8 : 53.8%	-	-	-	3.3	29.4	6.9
1/3	Gosport Road Ahead	U	B		1	28	-	323	1800	580	55.7%	-	-	-	2.9	32.2	7.3
2/1	Circulatory Northbound Ahead	U	A		1	52	-	501	1800	1060	47.3%	-	-	-	1.0	7.5	3.0
2/2	Circulatory Northbound Right Ahead	U	A		1	52	-	543	1800	1060	51.2%	-	-	-	1.2	7.8	3.2
3/1		U	-		-	-	-	281	1800	1800	15.6%	-	-	-	0.1	1.2	0.1
3/2		U	-		-	-	-	204	1800	1800	11.3%	-	-	-	0.1	1.1	0.1
J2: Unnamed Junction	-	-	-		-	-	-	-	-	-	**56.1%**	**0**	**0**	**0**	**9.3**	-	-
1/1	Circulatory Eastbound Ahead	U	C		1	30	-	347	1800	620	56.0%	-	-	-	1.2	12.6	8.2
1/2+1/3	Circulatory Eastbound Right Ahead	U	C		1	30	-	510	1800:1800	437+476	55.8 : 55.8%	-	-	-	2.4	17.1	6.3
2/2+2/1	Newgate Lane Ahead Left	U	D		1	50	-	1009	1800:1800	903+897	56.1 : 56.1%	-	-	-	3.9	14.0	8.2
2/3	Newgate Lane Ahead	U	D		1	50	-	328	1800	1020	32.2%	-	-	-	1.2	12.9	4.5
3/1	Northbound exit Ahead	U	J		1	72	-	596	1800	1460	40.8%	-	-	-	0.4	2.3	0.7
3/2	Northbound exit Ahead	U	J		1	72	-	321	1800	1460	22.0%	-	-	-	0.1	1.6	0.1

Basic Results Summary

J3: Unnamed Junction	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**54.8%**	**0**	**0**	**0**	**9.3**	**-**	**-**
1/1	Rowner Road Ahead Left	U	F		1	28	-	217	1800	580	37.4%	-	-	-	1.7	28.5	4.5
1/2	Rowner Road Ahead	U	F		1	28	-	248	1800	580	42.8%	-	-	-	2.0	29.4	5.2
1/3	Rowner Road Ahead	U	F		1	28	-	269	1800	580	46.4%	-	-	-	2.2	30.1	5.7
2/1	Circulatory Southbound Ahead	U	E		1	52	-	421	1800	1060	39.7%	-	-	-	1.4	11.8	7.9
2/2+2/3	Circulatory Southbound Right Ahead	U	E		1	52	-	594	1800:1800	969+115	54.8 : 54.8%	-	-	-	2.0	11.9	7.1
J4: Unnamed Junction	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**47.1%**	**0**	**0**	**0**	**6.3**	**-**	**-**
1/1	Circulatory Westbound Ahead	U	G		1	32	-	243	1800	660	36.8%	-	-	-	1.5	21.7	2.9
1/2	Circulatory Westbound Right Ahead	U	G		1	32	-	311	1800	660	47.1%	-	-	-	1.3	14.8	2.1
1/3	Circulatory Westbound Right	U	G		1	32	-	269	1800	660	40.8%	-	-	-	0.4	5.5	0.4
2/1	Southbound Exit Ahead	U	K		1	72	-	492	1800	1460	33.7%	-	-	-	0.3	2.1	0.6
2/2	Southbound Exit Ahead	U	K		1	72	-	434	1800	1460	29.7%	-	-	-	0.2	1.8	0.2
3/1	Broom Way Left	U	I		1	46	-	179	1800	940	19.0%	-	-	-	0.7	13.8	2.5
3/2+3/3	Broom Way Ahead	U	H		1	47	-	527	1800:1800	650+704	38.9 : 38.9%	-	-	-	2.0	13.7	4.0

C1	Stream: 1 PRC for Signalled Lanes (%):	61.6	Total Delay for Signalled Lanes (pcuHr):	8.44	Cycle Time (s): 90
C1	Stream: 2 PRC for Signalled Lanes (%):	60.6	Total Delay for Signalled Lanes (pcuHr):	8.75	Cycle Time (s): 90
C1	Stream: 3 PRC for Signalled Lanes (%):	64.2	Total Delay for Signalled Lanes (pcuHr):	9.33	Cycle Time (s): 90
C1	Stream: 4 PRC for Signalled Lanes (%):	91.0	Total Delay for Signalled Lanes (pcuHr):	5.84	Cycle Time (s): 90
C1	Stream: 5 PRC for Signalled Lanes (%):	167.1	Total Delay for Signalled Lanes (pcuHr):	0.50	Cycle Time (s): 90
C1	Stream: 6 PRC for Signalled Lanes (%):	120.5	Total Delay for Signalled Lanes (pcuHr):	0.53	Cycle Time (s): 90
	PRC Over All Lanes (%):	60.6	Total Delay Over All Lanes(pcuHr):	33.55	

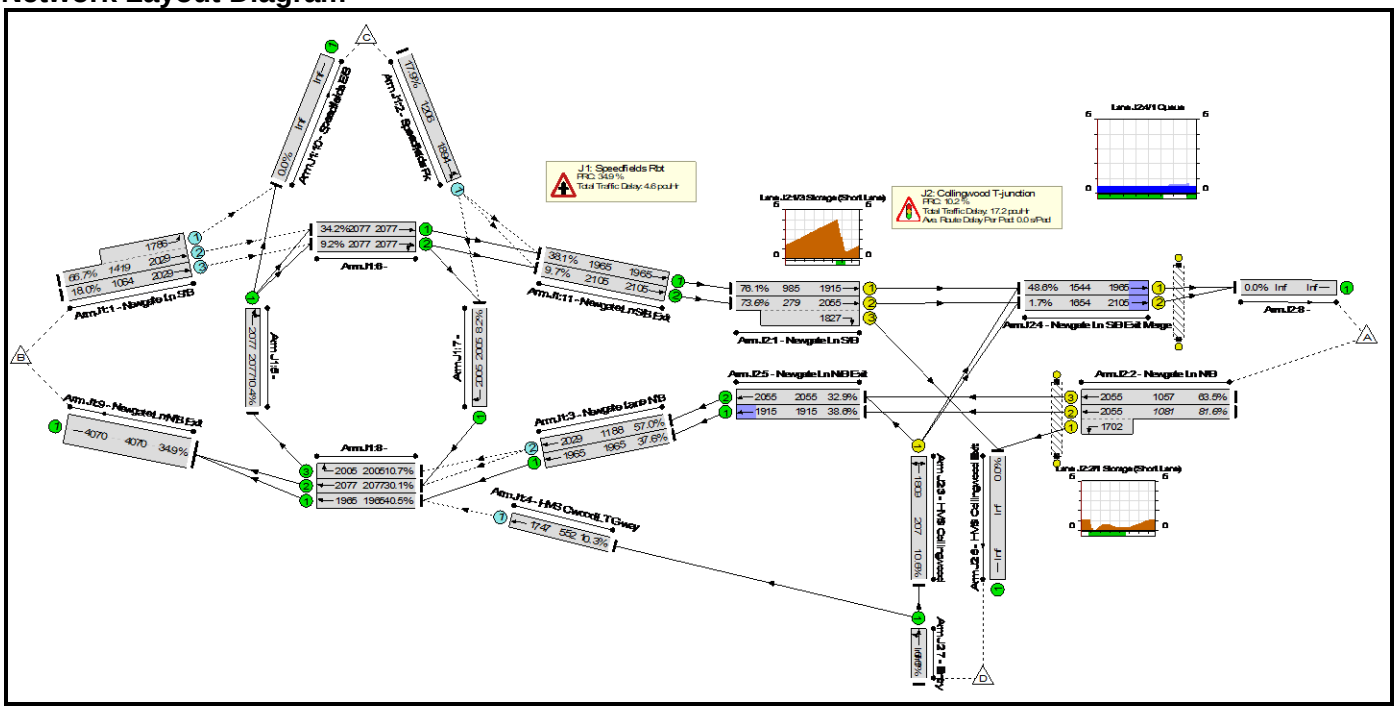
Basic Results Summary

User and Project Details

Project:	
Title:	
Location:	
Additional detail:	
File name:	Newgate Lane collingwood.lsg3x
Author:	
Company:	
Address:	

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

Network Layout Diagram



Traffic Flows, Actual

Actual Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	1201	209	144	1554
	B	720	0	237	182	1139
	C	42	164	0	10	216
	D	16	57	6	0	79
	Tot.	778	1422	452	336	2988

Basic Results Summary

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)	Mean Max Queue (pcu)	Back of Uniform Q At End of Red(pcu)
Network	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**81.6%**	**3036**	**0**	**0**	**21.8**	**-**	**-**	**-**
J1: Speedfields Rbt	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**66.7%**	**3036**	**0**	**0**	**4.6**	**-**	**-**	**-**
1/2+1/1	Newgate Ln S/B Ahead Left	O	-		-	-	-	947	2029:1786	1419	66.7%	1894	0	0	1.0	3.8	1.0	-
1/3	Newgate Ln S/B Ahead	O	-		-	-	-	192	2029	1064	18.0%	192	0	0	0.1	2.1	0.1	-
2/1	Speedfields Pk Ahead Left	O	-		-	-	-	216	1894	1206	17.9%	216	0	0	0.1	1.8	0.1	-
3/1	Newgate Lane N/B Ahead	U	-		-	-	-	739	1965	1965	37.6%	-	-	-	0.3	1.5	0.3	-
3/2	Newgate Lane N/B Ahead	O	-		-	-	-	677	2029	1188	57.0%	677	0	0	1.4	7.4	12.6	-
4/1	HMS C'wood LT G-way Ahead	O	-		-	-	-	57	1747	552	10.3%	57	0	0	0.1	3.6	0.1	-
5/1	Right Ahead	U	-		-	-	-	215	2077	2077	10.4%	-	-	-	0.1	1.0	0.1	-
6/1	Ahead	U	-		-	-	-	710	2077	2077	34.2%	-	-	-	0.3	1.3	0.3	-
6/2	Right Ahead	U	-		-	-	-	192	2077	2077	9.2%	-	-	-	0.1	1.0	0.1	-
7/1	Right	U	-		-	-	-	164	2005	2005	8.2%	-	-	-	0.0	1.0	0.0	-
8/1	Ahead	U	-		-	-	-	796	1965	1965	40.5%	-	-	-	0.3	1.5	0.3	-
8/2	Ahead	U	-		-	-	-	626	2077	2077	30.1%	-	-	-	0.2	1.2	0.2	-
8/3	Right	U	-		-	-	-	215	2005	2005	10.7%	-	-	-	0.1	1.0	0.1	-
9/1	Newgate Ln N/B Exit	U	-		-	-	-	1422	4070	4070	34.9%	-	-	-	0.3	0.7	0.1	-
11/1	Newgate Ln S/B Exit Ahead	U	-		-	-	-	749	1965	1965	38.1%	-	-	-	0.3	1.5	0.3	-

Basic Results Summary

11/2	Newgate Ln S/B Exit Ahead	U	-		-	-	-	205	2105	2105	9.7%	-	-	-	0.1	0.9	0.1	-
J2: Collingwood T-junction	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**81.6%**	**0**	**0**	**0**	**17.2**	**-**	**-**	**-**
1/1	Newgate Ln S/B Ahead	U	A		1	35	-	749	1915	985	76.1%	-	-	-	4.4	21.1	13.0	6.7
1/2+1/3	Newgate Ln S/B Ahead Right	U	A C		1	35:9	-	205	2055:1827	279	73.6%	-	-	-	2.9	51.0	4.9	0.9
2/2+2/1	Newgate Ln N/B Ahead Left	U	B		1	35	-	883	2055:1702	1081	81.6%	-	-	-	5.4	22.2	15.1	6.8
2/3	Newgate Ln N/B Ahead	U	B		1	35	-	671	2055	1057	63.5%	-	-	-	3.2	16.9	10.2	6.0
3/1	HMS Collingwood Right Left	U	D		1	7	-	22	1809	207	10.6%	-	-	-	0.2	37.6	0.4	0.4
4/1	Newgate Ln S/B Exit Merge Ahead	U	G		1	54	-	750	1965	1544	48.6%	-	-	-	0.5	2.4	0.6	0.2
4/2	Newgate Ln S/B Exit Merge Ahead	U	G		1	54	-	28	2105	1654	1.7%	-	-	-	0.0	1.2	0.0	0.0
5/1	Newgate Ln N/B Exit Ahead	U	-		-	-	-	739	1915	1915	38.6%	-	-	-	0.3	1.6	0.5	-
5/2	Newgate Ln N/B Exit Ahead	U	-		-	-	-	677	2055	2055	32.9%	-	-	-	0.2	1.3	0.2	-
Ped Link: P1	Newgate Ln S/B	-	E		1	5	-	0	-	0	0.0%	-	-	-	-	-	-	-
Ped Link: P2	Newgate Ln N/B	-	F		1	23	-	0	-	0	0.0%	-	-	-	-	-	-	-

C1 - Collingwood T-Junction

PRC for Signalled Lanes (%): 10.2
PRC Over All Lanes (%): 10.2

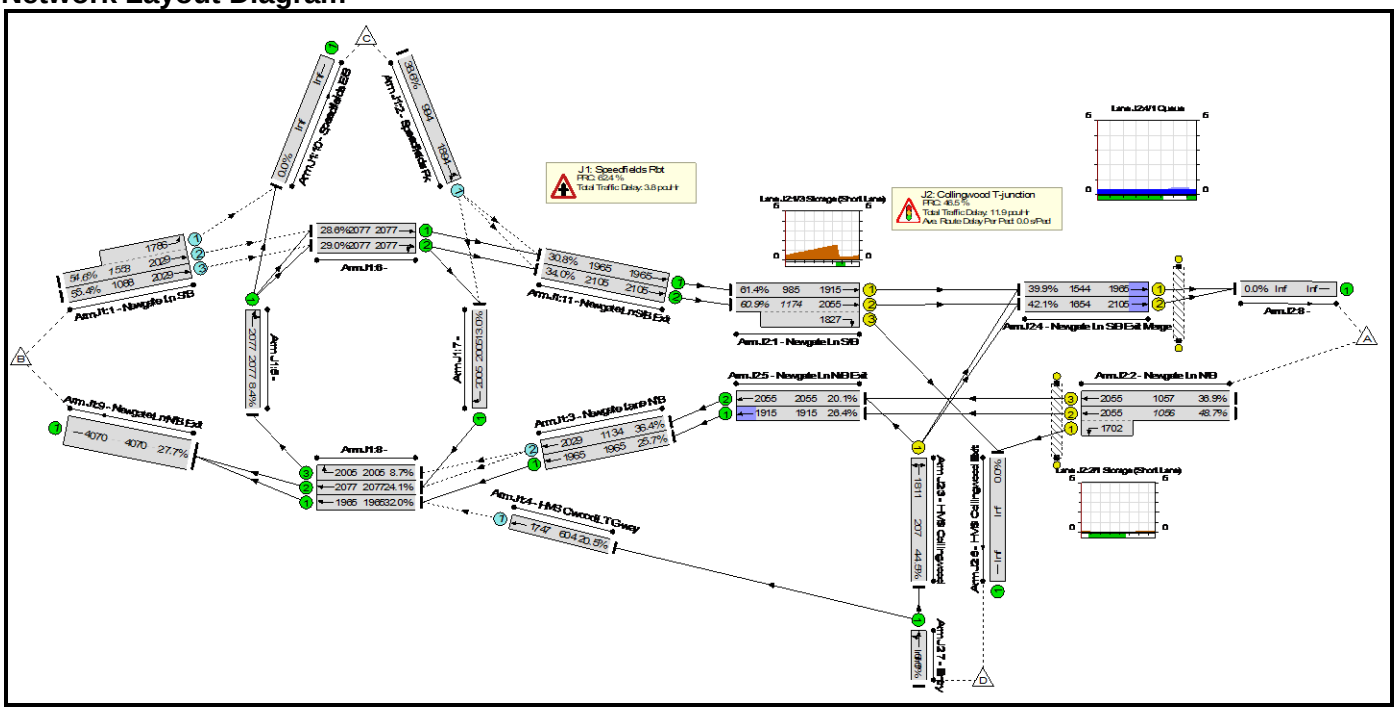
Total Delay for Signalled Lanes (pcuHr): 16.63
Total Delay Over All Lanes(pcuHr): 21.84

Cycle Time (s): 70

Basic Results Summary

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

Network Layout Diagram



Traffic Flows, Actual

Actual Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	744	151	10	905
	B	1128	0	254	69	1451
	C	116	261	0	7	384
	D	69	124	23	0	216
	Tot.	1313	1129	428	86	2956

Basic Results Summary

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)	Mean Max Queue (pcu)	Back of Uniform Q At End of Red(pcu)
Network	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**61.4%**	**3220**	**0**	**0**	**15.8**	**-**	**-**	**-**
J1: Speedfields Rbt	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**55.4%**	**3220**	**0**	**0**	**3.8**	**-**	**-**	**-**
1/2+1/1	Newgate Ln S/B Ahead Left	O	-		-	-	-	848	2029:1786	1553	54.6%	1696	0	0	0.6	2.5	0.6	-
1/3	Newgate Ln S/B Ahead	O	-		-	-	-	603	2029	1088	55.4%	603	0	0	0.6	3.7	0.6	-
2/1	Speedfields Pk Ahead Left	O	-		-	-	-	384	1894	994	38.6%	384	0	0	0.3	2.9	0.3	-
3/1	Newgate Lane N/B Ahead	U	-		-	-	-	505	1965	1965	25.7%	-	-	-	0.2	1.2	0.2	-
3/2	Newgate Lane N/B Ahead	O	-		-	-	-	413	2029	1134	36.4%	413	0	0	0.4	3.1	4.7	-
4/1	HMS C'wood LT G-way Ahead	O	-		-	-	-	124	1747	604	20.5%	124	0	0	0.1	3.7	0.1	-
5/1	Right Ahead	U	-		-	-	-	174	2077	2077	8.4%	-	-	-	0.0	0.9	0.0	-
6/1	Ahead	U	-		-	-	-	594	2077	2077	28.6%	-	-	-	0.2	1.2	0.2	-
6/2	Right Ahead	U	-		-	-	-	603	2077	2077	29.0%	-	-	-	0.2	1.2	0.2	-
7/1	Right	U	-		-	-	-	261	2005	2005	13.0%	-	-	-	0.1	1.0	0.1	-
8/1	Ahead	U	-		-	-	-	629	1965	1965	32.0%	-	-	-	0.2	1.3	0.2	-
8/2	Ahead	U	-		-	-	-	500	2077	2077	24.1%	-	-	-	0.2	1.1	0.2	-
8/3	Right	U	-		-	-	-	174	2005	2005	8.7%	-	-	-	0.0	1.0	0.0	-
9/1	Newgate Ln N/B Exit	U	-		-	-	-	1129	4070	4070	27.7%	-	-	-	0.2	0.6	0.1	-
11/1	Newgate Ln S/B Exit Ahead	U	-		-	-	-	605	1965	1965	30.8%	-	-	-	0.2	1.3	0.2	-

Basic Results Summary

11/2	Newgate Ln S/B Exit Ahead	U	-		-	-	-	715	2105	2105	34.0%	-	-	-	0.3	1.3	0.3	-
J2: Collingwood T-junction	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**61.4%**	**0**	**0**	**0**	**11.9**	**-**	**-**	**-**
1/1	Newgate Ln S/B Ahead	U	A		1	35	-	605	1915	985	61.4%	-	-	-	2.8	16.8	9.0	5.4
1/2+1/3	Newgate Ln S/B Ahead Right	U	A C		1	35:9	-	715	2055:1827	1174	60.9%	-	-	-	3.5	17.5	9.5	5.7
2/2+2/1	Newgate Ln N/B Ahead Left	U	B		1	35	-	515	2055:1702	1056	48.7%	-	-	-	2.0	14.2	6.8	4.5
2/3	Newgate Ln N/B Ahead	U	B		1	35	-	390	2055	1057	36.9%	-	-	-	1.4	12.9	4.7	3.5
3/1	HMS Collingwood Right Left	U	D		1	7	-	92	1811	207	44.5%	-	-	-	1.1	44.5	2.1	1.5
4/1	Newgate Ln S/B Exit Merge Ahead	U	G		1	54	-	616	1965	1544	39.9%	-	-	-	0.4	2.1	0.5	0.1
4/2	Newgate Ln S/B Exit Merge Ahead	U	G		1	54	-	697	2105	1654	42.1%	-	-	-	0.4	2.0	0.5	0.1
5/1	Newgate Ln N/B Exit Ahead	U	-		-	-	-	505	1915	1915	26.4%	-	-	-	0.2	1.4	0.4	-
5/2	Newgate Ln N/B Exit Ahead	U	-		-	-	-	413	2055	2055	20.1%	-	-	-	0.1	1.1	0.1	-
Ped Link: P1	Newgate Ln S/B	-	E		1	5	-	0	-	0	0.0%	-	-	-	-	-	-	-
Ped Link: P2	Newgate Ln N/B	-	F		1	23	-	0	-	0	0.0%	-	-	-	-	-	-	-

C1 - Collingwood T-Junction

PRC for Signalled Lanes (%): 46.5
PRC Over All Lanes (%): 46.5

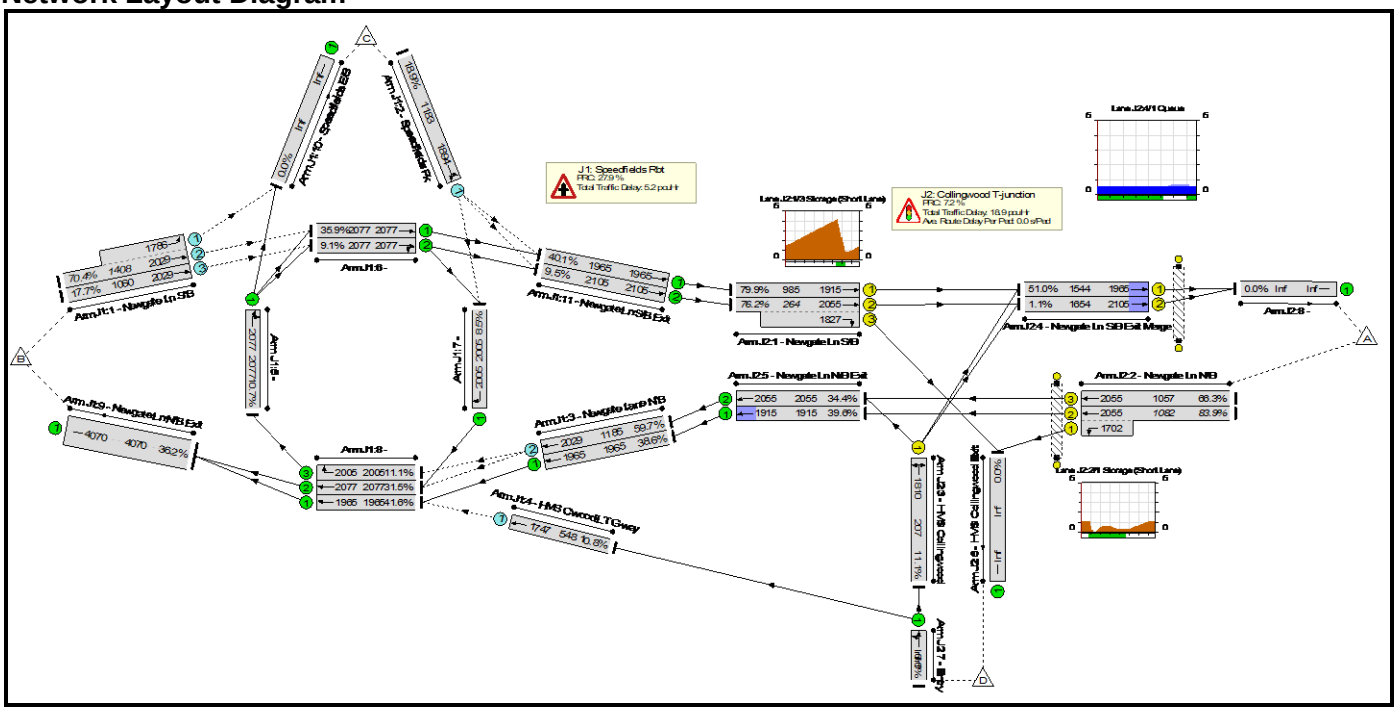
Total Delay for Signalled Lanes (pcuHr): 11.62
Total Delay Over All Lanes(pcuHr): 15.77

Cycle Time (s): 70

Basic Results Summary

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

Network Layout Diagram



Traffic Flows, Actual

Actual Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	1244	216	149	1609
	B	746	0	245	188	1179
	C	43	170	0	11	224
	D	17	59	6	0	82
	Tot.	806	1473	467	348	3094

Basic Results Summary

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)	Mean Max Queue (pcu)	Back of Uniform Q At End of Red(pcu)
Network	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**83.9%**	**3160**	**0**	**0**	**24.1**	**-**	**-**	**-**
J1: Speedfields Rbt	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**70.4%**	**3160**	**0**	**0**	**5.2**	**-**	**-**	**-**
1/2+1/1	Newgate Ln S/B Ahead Left	O	-		-	-	-	991	2029:1786	1408	70.4%	1982	0	0	1.2	4.3	1.2	-
1/3	Newgate Ln S/B Ahead	O	-		-	-	-	188	2029	1060	17.7%	188	0	0	0.1	2.1	0.1	-
2/1	Speedfields Pk Ahead Left	O	-		-	-	-	224	1894	1183	18.9%	224	0	0	0.1	1.9	0.1	-
3/1	Newgate Lane N/B Ahead	U	-		-	-	-	759	1965	1965	38.6%	-	-	-	0.3	1.5	0.3	-
3/2	Newgate Lane N/B Ahead	O	-		-	-	-	707	2029	1185	59.7%	707	0	0	1.6	8.3	13.4	-
4/1	HMS C'wood LT G-way Ahead	O	-		-	-	-	59	1747	548	10.8%	59	0	0	0.1	3.7	0.1	-
5/1	Right Ahead	U	-		-	-	-	222	2077	2077	10.7%	-	-	-	0.1	1.0	0.1	-
6/1	Ahead	U	-		-	-	-	746	2077	2077	35.9%	-	-	-	0.3	1.4	0.3	-
6/2	Right Ahead	U	-		-	-	-	188	2077	2077	9.1%	-	-	-	0.0	1.0	0.0	-
7/1	Right	U	-		-	-	-	170	2005	2005	8.5%	-	-	-	0.0	1.0	0.0	-
8/1	Ahead	U	-		-	-	-	818	1965	1965	41.6%	-	-	-	0.4	1.6	0.4	-
8/2	Ahead	U	-		-	-	-	655	2077	2077	31.5%	-	-	-	0.2	1.3	0.2	-
8/3	Right	U	-		-	-	-	222	2005	2005	11.1%	-	-	-	0.1	1.0	0.1	-
9/1	Newgate Ln N/B Exit	U	-		-	-	-	1473	4070	4070	36.2%	-	-	-	0.3	0.7	0.1	-
11/1	Newgate Ln S/B Exit Ahead	U	-		-	-	-	787	1965	1965	40.1%	-	-	-	0.3	1.5	0.3	-

Basic Results Summary

11/2	Newgate Ln S/B Exit Ahead	U	-		-	-	-	201	2105	2105	9.5%	-	-	-	0.1	0.9	0.1	-
J2: Collingwood T-junction	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**83.9%**	**0**	**0**	**0**	**18.9**	**-**	**-**	**-**
1/1	Newgate Ln S/B Ahead	U	A		1	35	-	787	1915	985	79.9%	-	-	-	5.0	22.9	14.4	7.0
1/2+1/3	Newgate Ln S/B Ahead Right	U	A C		1	35:9	-	201	2055:1827	264	76.2%	-	-	-	3.1	56.1	5.2	0.9
2/2+2/1	Newgate Ln N/B Ahead Left	U	B		1	35	-	908	2055:1702	1082	83.9%	-	-	-	6.0	23.7	16.1	7.1
2/3	Newgate Ln N/B Ahead	U	B		1	35	-	701	2055	1057	66.3%	-	-	-	3.4	17.6	10.9	6.2
3/1	HMS Collingwood Right Left	U	D		1	7	-	23	1810	207	11.1%	-	-	-	0.2	37.7	0.5	0.4
4/1	Newgate Ln S/B Exit Merge Ahead	U	G		1	54	-	788	1965	1544	51.0%	-	-	-	0.6	2.5	0.7	0.2
4/2	Newgate Ln S/B Exit Merge Ahead	U	G		1	54	-	18	2105	1654	1.1%	-	-	-	0.0	1.1	0.0	0.0
5/1	Newgate Ln N/B Exit Ahead	U	-		-	-	-	759	1915	1915	39.6%	-	-	-	0.3	1.6	0.5	-
5/2	Newgate Ln N/B Exit Ahead	U	-		-	-	-	707	2055	2055	34.4%	-	-	-	0.3	1.3	0.3	-
Ped Link: P1	Newgate Ln S/B	-	E		1	5	-	0	-	0	0.0%	-	-	-	-	-	-	-
Ped Link: P2	Newgate Ln N/B	-	F		1	23	-	0	-	0	0.0%	-	-	-	-	-	-	-

C1 - Collingwood T-Junction

PRC for Signalled Lanes (%): 7.2
PRC Over All Lanes (%): 7.2

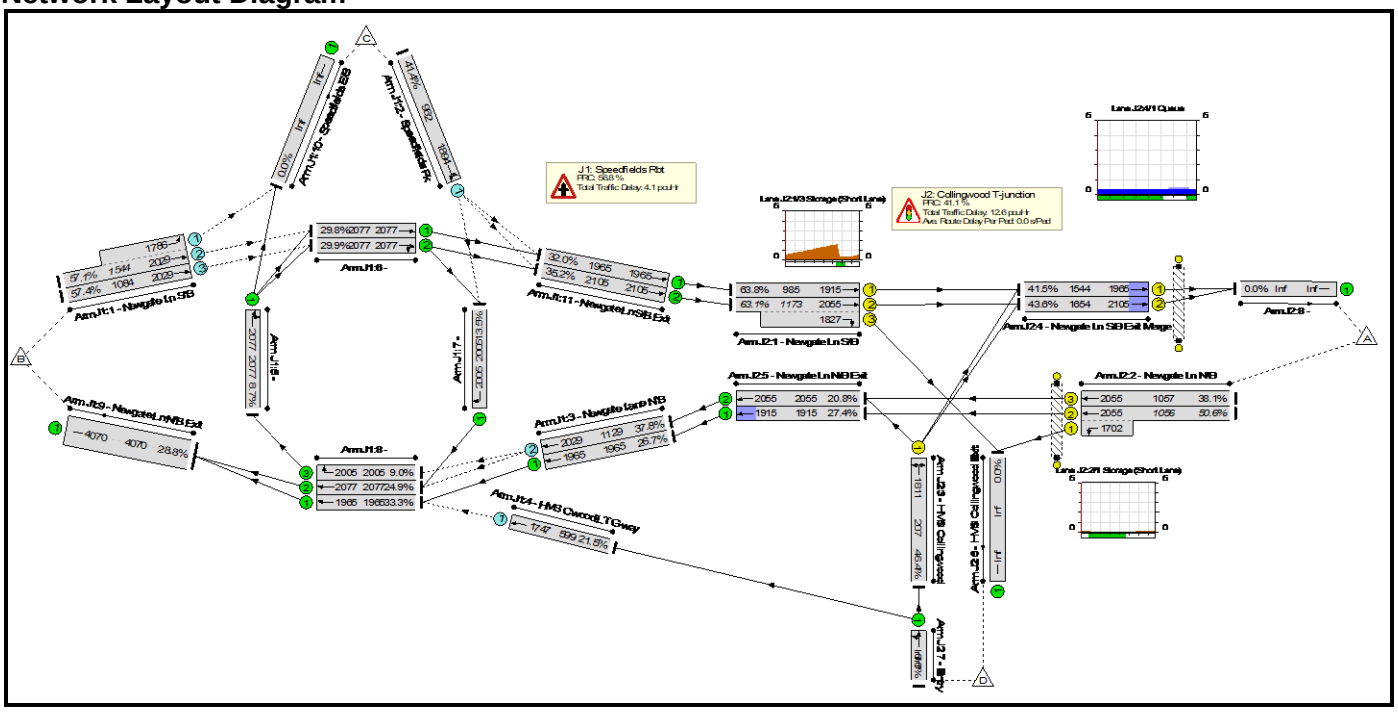
Total Delay for Signalled Lanes (pcuHr): 18.34
Total Delay Over All Lanes(pcuHr): 24.11

Cycle Time (s): 70

Basic Results Summary

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

Network Layout Diagram



Traffic Flows, Actual

Actual Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	771	157	10	938
	B	1170	0	263	71	1504
	C	120	271	0	7	398
	D	72	129	24	0	225
	Tot.	1362	1171	444	88	3065

Basic Results Summary

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)	Mean Max Queue (pcu)	Back of Uniform Q At End of Red(pcu)
Network	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**63.8%**	**3340**	**0**	**0**	**16.8**	**-**	**-**	**-**
J1: Speedfields Rbt	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**57.4%**	**3340**	**0**	**0**	**4.1**	**-**	**-**	**-**
1/2+1/1	Newgate Ln S/B Ahead Left	O	-		-	-	-	882	2029:1786	1544	57.1%	1764	0	0	0.7	2.7	0.7	-
1/3	Newgate Ln S/B Ahead	O	-		-	-	-	622	2029	1084	57.4%	622	0	0	0.7	3.9	0.7	-
2/1	Speedfields Pk Ahead Left	O	-		-	-	-	398	1894	962	41.4%	398	0	0	0.4	3.2	0.4	-
3/1	Newgate Lane N/B Ahead	U	-		-	-	-	525	1965	1965	26.7%	-	-	-	0.2	1.2	0.2	-
3/2	Newgate Lane N/B Ahead	O	-		-	-	-	427	2029	1129	37.8%	427	0	0	0.4	3.3	5.0	-
4/1	HMS C'wood LT G-way Ahead	O	-		-	-	-	129	1747	599	21.5%	129	0	0	0.1	3.8	0.1	-
5/1	Right Ahead	U	-		-	-	-	181	2077	2077	8.7%	-	-	-	0.0	0.9	0.0	-
6/1	Ahead	U	-		-	-	-	619	2077	2077	29.8%	-	-	-	0.2	1.2	0.2	-
6/2	Right Ahead	U	-		-	-	-	622	2077	2077	29.9%	-	-	-	0.2	1.2	0.2	-
7/1	Right	U	-		-	-	-	271	2005	2005	13.5%	-	-	-	0.1	1.0	0.1	-
8/1	Ahead	U	-		-	-	-	654	1965	1965	33.3%	-	-	-	0.2	1.4	0.2	-
8/2	Ahead	U	-		-	-	-	517	2077	2077	24.9%	-	-	-	0.2	1.2	0.2	-
8/3	Right	U	-		-	-	-	181	2005	2005	9.0%	-	-	-	0.0	1.0	0.0	-
9/1	Newgate Ln N/B Exit	U	-		-	-	-	1171	4070	4070	28.8%	-	-	-	0.2	0.6	0.1	-
11/1	Newgate Ln S/B Exit Ahead	U	-		-	-	-	628	1965	1965	32.0%	-	-	-	0.2	1.3	0.2	-

Basic Results Summary

11/2	Newgate Ln S/B Exit Ahead	U	-		-	-	-	740	2105	2105	35.2%	-	-	-	0.3	1.3	0.3	-
J2: Collingwood T-junction	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**63.8%**	**0**	**0**	**0**	**12.6**	**-**	**-**	**-**
1/1	Newgate Ln S/B Ahead	U	A		1	35	-	628	1915	985	63.8%	-	-	-	3.0	17.3	9.6	5.6
1/2+1/3	Newgate Ln S/B Ahead Right	U	A C		1	35:9	-	740	2055:1827	1173	63.1%	-	-	-	3.7	17.9	10.0	5.9
2/2+2/1	Newgate Ln N/B Ahead Left	U	B		1	35	-	535	2055:1702	1056	50.6%	-	-	-	2.2	14.5	7.1	4.7
2/3	Newgate Ln N/B Ahead	U	B		1	35	-	403	2055	1057	38.1%	-	-	-	1.5	13.0	5.0	3.6
3/1	HMS Collingwood Right Left	U	D		1	7	-	96	1811	207	46.4%	-	-	-	1.2	45.1	2.2	1.6
4/1	Newgate Ln S/B Exit Merge Ahead	U	G		1	54	-	641	1965	1544	41.5%	-	-	-	0.4	2.1	0.5	0.1
4/2	Newgate Ln S/B Exit Merge Ahead	U	G		1	54	-	721	2105	1654	43.6%	-	-	-	0.4	2.1	0.5	0.2
5/1	Newgate Ln N/B Exit Ahead	U	-		-	-	-	525	1915	1915	27.4%	-	-	-	0.2	1.4	0.4	-
5/2	Newgate Ln N/B Exit Ahead	U	-		-	-	-	427	2055	2055	20.8%	-	-	-	0.1	1.1	0.1	-
Ped Link: P1	Newgate Ln S/B	-	E		1	5	-	0	-	0	0.0%	-	-	-	-	-	-	-
Ped Link: P2	Newgate Ln N/B	-	F		1	23	-	0	-	0	0.0%	-	-	-	-	-	-	-

C1 - Collingwood T-Junction

PRC for Signalled Lanes (%): 41.1
PRC Over All Lanes (%): 41.1

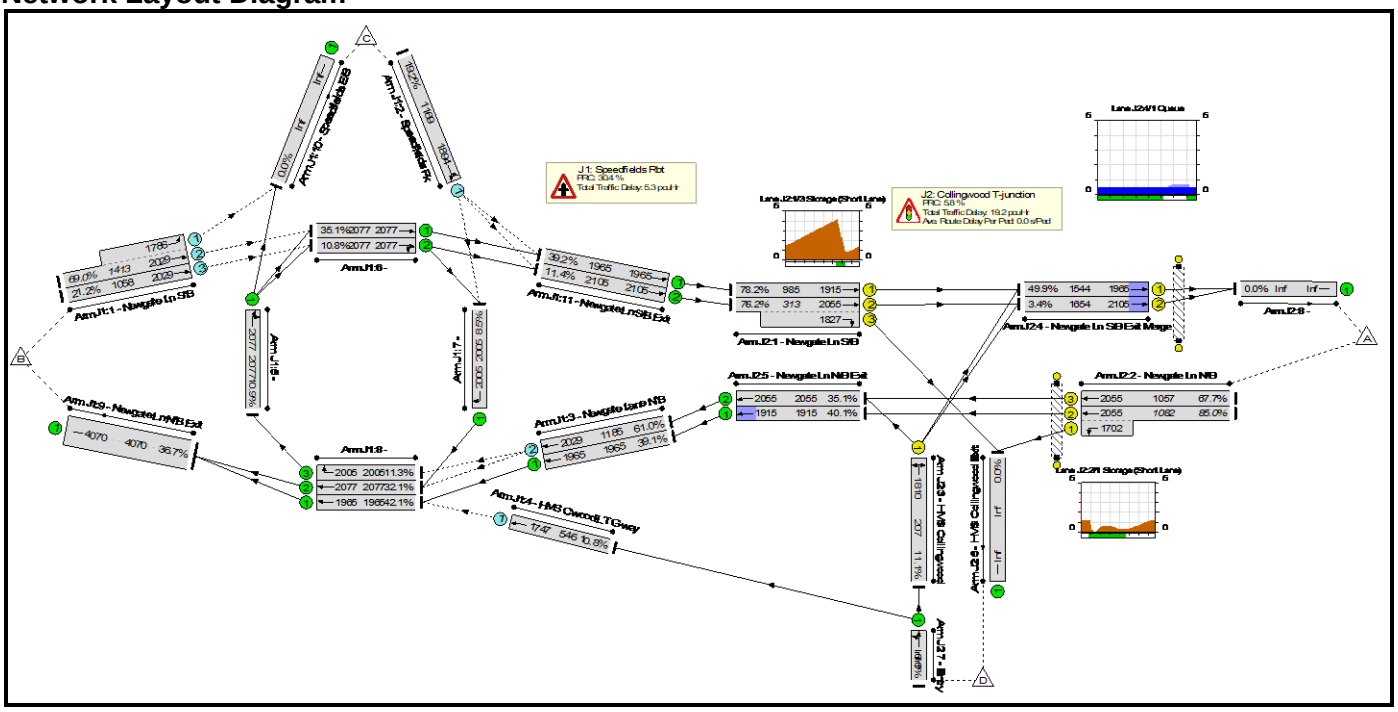
Total Delay for Signalled Lanes (pcuHr): 12.31
Total Delay Over All Lanes(pcuHr): 16.77

Cycle Time (s): 70

Basic Results Summary

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

Network Layout Diagram



Traffic Flows, Actual

Actual Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	1264	220	152	1636
	B	766	0	245	188	1199
	C	44	170	0	11	225
	D	17	59	6	0	82
	Tot.	827	1493	471	351	3142

Basic Results Summary

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)	Mean Max Queue (pcu)	Back of Uniform Q At End of Red(pcu)
Network	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**85.0%**	**3180**	**0**	**0**	**24.5**	**-**	**-**	**-**
J1: Speedfields Rbt	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**69.0%**	**3180**	**0**	**0**	**5.3**	**-**	**-**	**-**
1/2+1/1	Newgate Ln S/B Ahead Left	O	-		-	-	-	975	2029:1786	1413	69.0%	1950	0	0	1.1	4.1	1.1	-
1/3	Newgate Ln S/B Ahead	O	-		-	-	-	224	2029	1058	21.2%	224	0	0	0.1	2.2	0.1	-
2/1	Speedfields Pk Ahead Left	O	-		-	-	-	225	1894	1169	19.2%	225	0	0	0.1	1.9	0.1	-
3/1	Newgate Lane N/B Ahead	U	-		-	-	-	768	1965	1965	39.1%	-	-	-	0.3	1.5	0.3	-
3/2	Newgate Lane N/B Ahead	O	-		-	-	-	722	2029	1185	61.0%	722	0	0	1.8	8.7	13.8	-
4/1	HMS C'wood LT G-way Ahead	O	-		-	-	-	59	1747	546	10.8%	59	0	0	0.1	3.7	0.1	-
5/1	Right Ahead	U	-		-	-	-	226	2077	2077	10.9%	-	-	-	0.1	1.0	0.1	-
6/1	Ahead	U	-		-	-	-	730	2077	2077	35.1%	-	-	-	0.3	1.3	0.3	-
6/2	Right Ahead	U	-		-	-	-	224	2077	2077	10.8%	-	-	-	0.1	1.0	0.1	-
7/1	Right	U	-		-	-	-	170	2005	2005	8.5%	-	-	-	0.0	1.0	0.0	-
8/1	Ahead	U	-		-	-	-	827	1965	1965	42.1%	-	-	-	0.4	1.6	0.4	-
8/2	Ahead	U	-		-	-	-	666	2077	2077	32.1%	-	-	-	0.2	1.3	0.2	-
8/3	Right	U	-		-	-	-	226	2005	2005	11.3%	-	-	-	0.1	1.0	0.1	-
9/1	Newgate Ln N/B Exit	U	-		-	-	-	1493	4070	4070	36.7%	-	-	-	0.3	0.7	0.1	-
11/1	Newgate Ln S/B Exit Ahead	U	-		-	-	-	770	1965	1965	39.2%	-	-	-	0.3	1.5	0.3	-

Basic Results Summary

11/2	Newgate Ln S/B Exit Ahead	U	-		-	-	-	239	2105	2105	11.4%	-	-	-	0.1	1.0	0.1	-
J2: Collingwood T-junction	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**85.0%**	**0**	**0**	**0**	**19.2**	**-**	**-**	**-**
1/1	Newgate Ln S/B Ahead	U	A		1	35	-	770	1915	985	78.2%	-	-	-	4.7	22.1	13.7	6.8
1/2+1/3	Newgate Ln S/B Ahead Right	U	A C		1	35:9	-	239	2055:1827	313	76.2%	-	-	-	3.2	48.7	5.2	0.9
2/2+2/1	Newgate Ln N/B Ahead Left	U	B		1	35	-	920	2055:1702	1082	85.0%	-	-	-	6.3	24.5	16.8	7.1
2/3	Newgate Ln N/B Ahead	U	B		1	35	-	716	2055	1057	67.7%	-	-	-	3.6	17.9	11.4	6.4
3/1	HMS Collingwood Right Left	U	D		1	7	-	23	1810	207	11.1%	-	-	-	0.2	37.7	0.5	0.4
4/1	Newgate Ln S/B Exit Merge Ahead	U	G		1	54	-	771	1965	1544	49.9%	-	-	-	0.5	2.5	0.7	0.2
4/2	Newgate Ln S/B Exit Merge Ahead	U	G		1	54	-	56	2105	1654	3.4%	-	-	-	0.0	1.2	0.0	0.0
5/1	Newgate Ln N/B Exit Ahead	U	-		-	-	-	768	1915	1915	40.1%	-	-	-	0.3	1.6	0.5	-
5/2	Newgate Ln N/B Exit Ahead	U	-		-	-	-	722	2055	2055	35.1%	-	-	-	0.3	1.3	0.3	-
Ped Link: P1	Newgate Ln S/B	-	E		1	5	-	0	-	0	0.0%	-	-	-	-	-	-	-
Ped Link: P2	Newgate Ln N/B	-	F		1	23	-	0	-	0	0.0%	-	-	-	-	-	-	-

C1 - Collingwood T-Junction

PRC for Signalled Lanes (%): 5.8
PRC Over All Lanes (%): 5.8

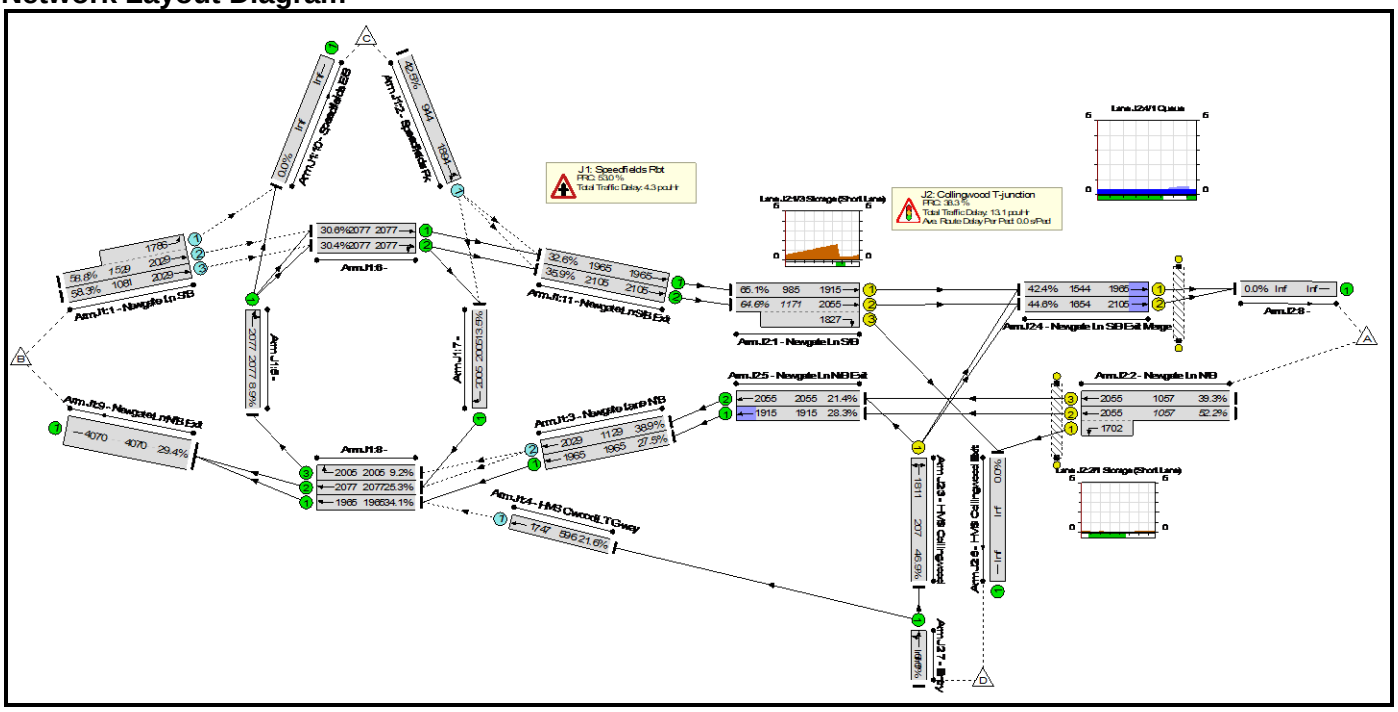
Total Delay for Signalled Lanes (pcuHr): 18.56
Total Delay Over All Lanes(pcuHr): 24.45

Cycle Time (s): 70

Basic Results Summary

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

Network Layout Diagram



Traffic Flows, Actual

Actual Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	795	161	11	967
	B	1196	0	263	71	1530
	C	123	271	0	7	401
	D	73	129	24	0	226
	Tot.	1392	1195	448	89	3124

Basic Results Summary

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)	Mean Max Queue (pcu)	Back of Uniform Q At End of Red(pcu)
Network	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**65.1%**	**3398**	**0**	**0**	**17.4**	**-**	**-**	**-**
J1: Speedfields Rbt	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**58.8%**	**3398**	**0**	**0**	**4.3**	**-**	**-**	**-**
1/2+1/1	Newgate Ln S/B Ahead Left	O	-		-	-	-	899	2029:1786	1529	58.8%	1798	0	0	0.7	2.9	0.7	-
1/3	Newgate Ln S/B Ahead	O	-		-	-	-	631	2029	1081	58.3%	631	0	0	0.7	4.0	0.7	-
2/1	Speedfields Pk Ahead Left	O	-		-	-	-	401	1894	944	42.5%	401	0	0	0.4	3.3	0.4	-
3/1	Newgate Lane N/B Ahead	U	-		-	-	-	541	1965	1965	27.5%	-	-	-	0.2	1.3	0.2	-
3/2	Newgate Lane N/B Ahead	O	-		-	-	-	439	2029	1129	38.9%	439	0	0	0.4	3.4	5.3	-
4/1	HMS C'wood LT G-way Ahead	O	-		-	-	-	129	1747	596	21.6%	129	0	0	0.1	3.9	0.1	-
5/1	Right Ahead	U	-		-	-	-	185	2077	2077	8.9%	-	-	-	0.0	1.0	0.0	-
6/1	Ahead	U	-		-	-	-	636	2077	2077	30.6%	-	-	-	0.2	1.2	0.2	-
6/2	Right Ahead	U	-		-	-	-	631	2077	2077	30.4%	-	-	-	0.2	1.2	0.2	-
7/1	Right	U	-		-	-	-	271	2005	2005	13.5%	-	-	-	0.1	1.0	0.1	-
8/1	Ahead	U	-		-	-	-	670	1965	1965	34.1%	-	-	-	0.3	1.4	0.3	-
8/2	Ahead	U	-		-	-	-	525	2077	2077	25.3%	-	-	-	0.2	1.2	0.2	-
8/3	Right	U	-		-	-	-	185	2005	2005	9.2%	-	-	-	0.1	1.0	0.1	-
9/1	Newgate Ln N/B Exit	U	-		-	-	-	1195	4070	4070	29.4%	-	-	-	0.2	0.6	0.1	-
11/1	Newgate Ln S/B Exit Ahead	U	-		-	-	-	641	1965	1965	32.6%	-	-	-	0.2	1.4	0.2	-

Basic Results Summary

11/2	Newgate Ln S/B Exit Ahead	U	-		-	-	-	756	2105	2105	35.9%	-	-	-	0.3	1.3	0.3	-
J2: Collingwood T-junction	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**65.1%**	**0**	**0**	**0**	**13.1**	**-**	**-**	**-**
1/1	Newgate Ln S/B Ahead	U	A		1	35	-	641	1915	985	65.1%	-	-	-	3.1	17.6	10.0	5.7
1/2+1/3	Newgate Ln S/B Ahead Right	U	A C		1	35:9	-	756	2055:1827	1171	64.6%	-	-	-	3.8	18.2	10.3	6.0
2/2+2/1	Newgate Ln N/B Ahead Left	U	B		1	35	-	552	2055:1702	1057	52.2%	-	-	-	2.3	14.8	7.5	4.8
2/3	Newgate Ln N/B Ahead	U	B		1	35	-	415	2055	1057	39.3%	-	-	-	1.5	13.2	5.2	3.7
3/1	HMS Collingwood Right Left	U	D		1	7	-	97	1811	207	46.9%	-	-	-	1.2	45.3	2.2	1.6
4/1	Newgate Ln S/B Exit Merge Ahead	U	G		1	54	-	655	1965	1544	42.4%	-	-	-	0.4	2.2	0.5	0.1
4/2	Newgate Ln S/B Exit Merge Ahead	U	G		1	54	-	737	2105	1654	44.6%	-	-	-	0.4	2.1	0.6	0.2
5/1	Newgate Ln N/B Exit Ahead	U	-		-	-	-	541	1915	1915	28.3%	-	-	-	0.2	1.4	0.4	-
5/2	Newgate Ln N/B Exit Ahead	U	-		-	-	-	439	2055	2055	21.4%	-	-	-	0.1	1.1	0.1	-
Ped Link: P1	Newgate Ln S/B	-	E		1	5	-	0	-	0	0.0%	-	-	-	-	-	-	-
Ped Link: P2	Newgate Ln N/B	-	F		1	23	-	0	-	0	0.0%	-	-	-	-	-	-	-

C1 - Collingwood T-Junction

PRC for Signalled Lanes (%): 38.3
PRC Over All Lanes (%): 38.3

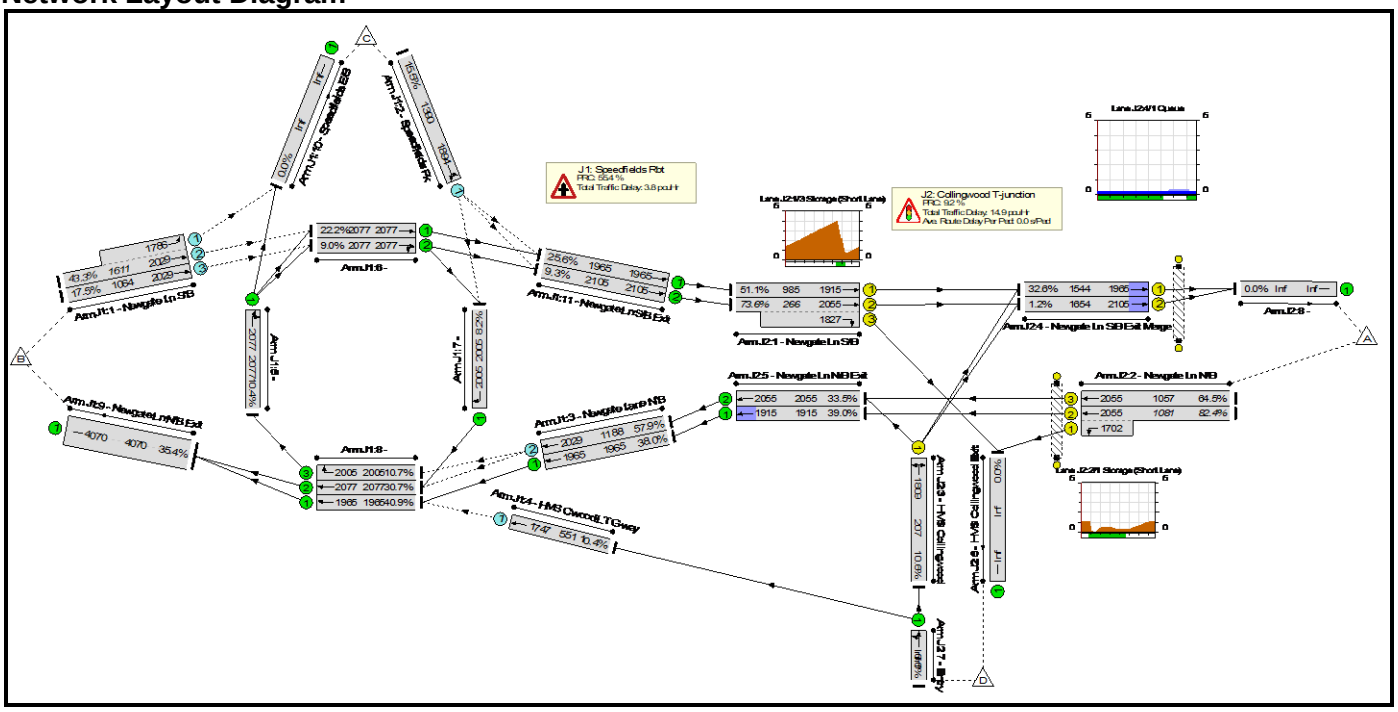
Total Delay for Signalled Lanes (pcuHr): 12.78
Total Delay Over All Lanes(pcuHr): 17.43

Cycle Time (s): 70

Basic Results Summary

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

Network Layout Diagram



Traffic Flows, Actual

Actual Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	1220	209	144	1573
	B	465	0	237	182	884
	C	42	164	0	10	216
	D	16	57	6	0	79
	Tot.	523	1441	452	336	2752

Basic Results Summary

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)	Mean Max Queue (pcu)	Back of Uniform Q At End of Red(pcu)
Network	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**82.4%**	**2543**	**0**	**0**	**18.7**	**-**	**-**	**-**
J1: Speedfields Rbt	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**57.9%**	**2543**	**0**	**0**	**3.8**	**-**	**-**	**-**
1/2+1/1	Newgate Ln S/B Ahead Left	O	-		-	-	-	698	2029:1786	1611	43.3%	1396	0	0	0.4	2.0	0.4	-
1/3	Newgate Ln S/B Ahead	O	-		-	-	-	186	2029	1064	17.5%	186	0	0	0.1	2.0	0.1	-
2/1	Speedfields Pk Ahead Left	O	-		-	-	-	216	1894	1390	15.5%	216	0	0	0.1	1.5	0.1	-
3/1	Newgate Lane N/B Ahead	U	-		-	-	-	747	1965	1965	38.0%	-	-	-	0.3	1.5	0.3	-
3/2	Newgate Lane N/B Ahead	O	-		-	-	-	688	2029	1188	57.9%	688	0	0	1.5	7.7	12.9	-
4/1	HMS C'wood LT G-way Ahead	O	-		-	-	-	57	1747	551	10.4%	57	0	0	0.1	3.6	0.1	-
5/1	Right Ahead	U	-		-	-	-	215	2077	2077	10.4%	-	-	-	0.1	1.0	0.1	-
6/1	Ahead	U	-		-	-	-	461	2077	2077	22.2%	-	-	-	0.1	1.1	0.1	-
6/2	Right Ahead	U	-		-	-	-	186	2077	2077	9.0%	-	-	-	0.0	1.0	0.0	-
7/1	Right	U	-		-	-	-	164	2005	2005	8.2%	-	-	-	0.0	1.0	0.0	-
8/1	Ahead	U	-		-	-	-	804	1965	1965	40.9%	-	-	-	0.3	1.5	0.3	-
8/2	Ahead	U	-		-	-	-	637	2077	2077	30.7%	-	-	-	0.2	1.2	0.2	-
8/3	Right	U	-		-	-	-	215	2005	2005	10.7%	-	-	-	0.1	1.0	0.1	-
9/1	Newgate Ln N/B Exit	U	-		-	-	-	1441	4070	4070	35.4%	-	-	-	0.3	0.7	0.1	-
11/1	Newgate Ln S/B Exit Ahead	U	-		-	-	-	503	1965	1965	25.6%	-	-	-	0.2	1.2	0.2	-

Basic Results Summary

11/2	Newgate Ln S/B Exit Ahead	U	-		-	-	-	196	2105	2105	9.3%	-	-	-	0.1	0.9	0.1	-
J2: Collingwood T-junction	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**82.4%**	**0**	**0**	**0**	**14.9**	**-**	**-**	**-**
1/1	Newgate Ln S/B Ahead	U	A		1	35	-	503	1915	985	51.1%	-	-	-	2.1	14.9	6.9	4.5
1/2+1/3	Newgate Ln S/B Ahead Right	U	A C		1	35:9	-	196	2055:1827	266	73.6%	-	-	-	2.9	52.9	4.9	0.9
2/2+2/1	Newgate Ln N/B Ahead Left	U	B		1	35	-	891	2055:1702	1081	82.4%	-	-	-	5.6	22.7	15.4	6.9
2/3	Newgate Ln N/B Ahead	U	B		1	35	-	682	2055	1057	64.5%	-	-	-	3.2	17.1	10.4	6.1
3/1	HMS Collingwood Right Left	U	D		1	7	-	22	1809	207	10.6%	-	-	-	0.2	37.6	0.4	0.4
4/1	Newgate Ln S/B Exit Merge Ahead	U	G		1	54	-	503	1965	1544	32.6%	-	-	-	0.3	1.9	0.4	0.1
4/2	Newgate Ln S/B Exit Merge Ahead	U	G		1	54	-	20	2105	1654	1.2%	-	-	-	0.0	1.1	0.0	0.0
5/1	Newgate Ln N/B Exit Ahead	U	-		-	-	-	747	1915	1915	39.0%	-	-	-	0.3	1.6	0.5	-
5/2	Newgate Ln N/B Exit Ahead	U	-		-	-	-	688	2055	2055	33.5%	-	-	-	0.3	1.3	0.3	-
Ped Link: P1	Newgate Ln S/B	-	E		1	5	-	0	-	0	0.0%	-	-	-	-	-	-	-
Ped Link: P2	Newgate Ln N/B	-	F		1	23	-	0	-	0	0.0%	-	-	-	-	-	-	-

C1 - Collingwood T-Junction

PRC for Signalled Lanes (%): 9.2
PRC Over All Lanes (%): 9.2

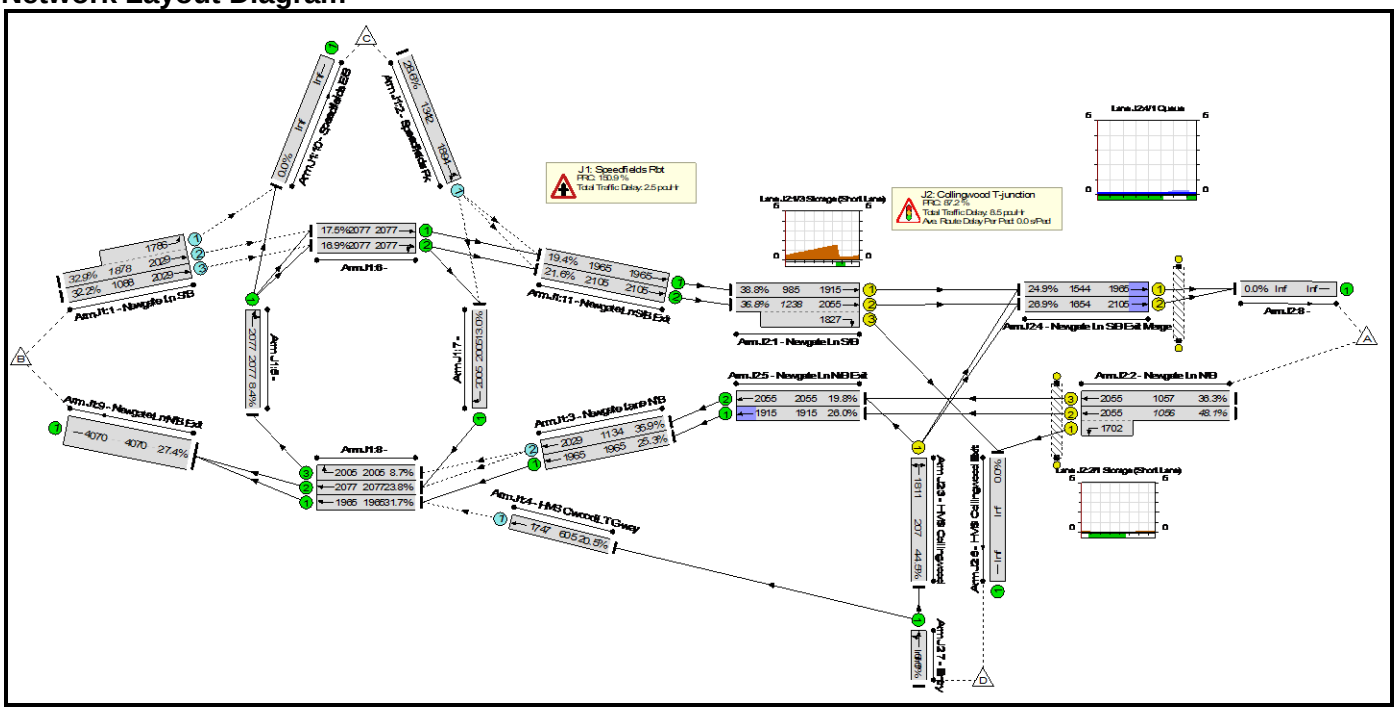
Total Delay for Signalled Lanes (pcuHr): 14.32
Total Delay Over All Lanes(pcuHr): 18.75

Cycle Time (s): 70

Basic Results Summary

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

Network Layout Diagram



Traffic Flows, Actual

Actual Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	731	151	10	892
	B	645	0	254	69	968
	C	116	261	0	7	384
	D	69	124	23	0	216
	Tot.	830	1116	428	86	2460

Basic Results Summary

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)	Mean Max Queue (pcu)	Back of Uniform Q At End of Red(pcu)
Network	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**48.1%**	**2501**	**0**	**0**	**11.1**	**-**	**-**	**-**
J1: Speedfields Rbt	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**35.9%**	**2501**	**0**	**0**	**2.5**	**-**	**-**	**-**
1/2+1/1	Newgate Ln S/B Ahead Left	O	-		-	-	-	618	2029:1786	1878	32.9%	1236	0	0	0.2	1.4	0.2	-
1/3	Newgate Ln S/B Ahead	O	-		-	-	-	350	2029	1088	32.2%	350	0	0	0.2	2.4	0.2	-
2/1	Speedfields Pk Ahead Left	O	-		-	-	-	384	1894	1342	28.6%	384	0	0	0.2	1.9	0.2	-
3/1	Newgate Lane N/B Ahead	U	-		-	-	-	498	1965	1965	25.3%	-	-	-	0.2	1.2	0.2	-
3/2	Newgate Lane N/B Ahead	O	-		-	-	-	407	2029	1134	35.9%	407	0	0	0.3	3.0	4.5	-
4/1	HMS C'wood LT G-way Ahead	O	-		-	-	-	124	1747	605	20.5%	124	0	0	0.1	3.7	0.1	-
5/1	Right Ahead	U	-		-	-	-	174	2077	2077	8.4%	-	-	-	0.0	0.9	0.0	-
6/1	Ahead	U	-		-	-	-	364	2077	2077	17.5%	-	-	-	0.1	1.1	0.1	-
6/2	Right Ahead	U	-		-	-	-	350	2077	2077	16.9%	-	-	-	0.1	1.0	0.1	-
7/1	Right	U	-		-	-	-	261	2005	2005	13.0%	-	-	-	0.1	1.0	0.1	-
8/1	Ahead	U	-		-	-	-	622	1965	1965	31.7%	-	-	-	0.2	1.3	0.2	-
8/2	Ahead	U	-		-	-	-	494	2077	2077	23.8%	-	-	-	0.2	1.1	0.2	-
8/3	Right	U	-		-	-	-	174	2005	2005	8.7%	-	-	-	0.0	1.0	0.0	-
9/1	Newgate Ln N/B Exit	U	-		-	-	-	1116	4070	4070	27.4%	-	-	-	0.2	0.6	0.1	-
11/1	Newgate Ln S/B Exit Ahead	U	-		-	-	-	382	1965	1965	19.4%	-	-	-	0.1	1.1	0.1	-

Basic Results Summary

11/2	Newgate Ln S/B Exit Ahead	U	-		-	-	-	455	2105	2105	21.6%	-	-	-	0.1	1.1	0.1	-
J2: Collingwood T-junction	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**48.1%**	**0**	**0**	**0**	**8.5**	**-**	**-**	**-**
1/1	Newgate Ln S/B Ahead	U	A		1	35	-	382	1915	985	38.8%	-	-	-	1.4	13.3	4.8	3.4
1/2+1/3	Newgate Ln S/B Ahead Right	U	A C		1	35:9	-	455	2055:1827	1238	36.8%	-	-	-	1.9	15.2	4.6	3.4
2/2+2/1	Newgate Ln N/B Ahead Left	U	B		1	35	-	508	2055:1702	1056	48.1%	-	-	-	2.0	14.1	6.7	4.4
2/3	Newgate Ln N/B Ahead	U	B		1	35	-	384	2055	1057	36.3%	-	-	-	1.4	12.8	4.7	3.4
3/1	HMS Collingwood Right Left	U	D		1	7	-	92	1811	207	44.5%	-	-	-	1.1	44.5	2.1	1.5
4/1	Newgate Ln S/B Exit Merge Ahead	U	G		1	54	-	385	1965	1544	24.9%	-	-	-	0.2	1.7	0.3	0.1
4/2	Newgate Ln S/B Exit Merge Ahead	U	G		1	54	-	445	2105	1654	26.9%	-	-	-	0.2	1.6	0.3	0.1
5/1	Newgate Ln N/B Exit Ahead	U	-		-	-	-	498	1915	1915	26.0%	-	-	-	0.2	1.4	0.4	-
5/2	Newgate Ln N/B Exit Ahead	U	-		-	-	-	407	2055	2055	19.8%	-	-	-	0.1	1.1	0.1	-
Ped Link: P1	Newgate Ln S/B	-	E		1	5	-	0	-	0	0.0%	-	-	-	-	-	-	-
Ped Link: P2	Newgate Ln N/B	-	F		1	23	-	0	-	0	0.0%	-	-	-	-	-	-	-

C1 - Collingwood T-Junction

PRC for Signalled Lanes (%): 87.2
PRC Over All Lanes (%): 87.2

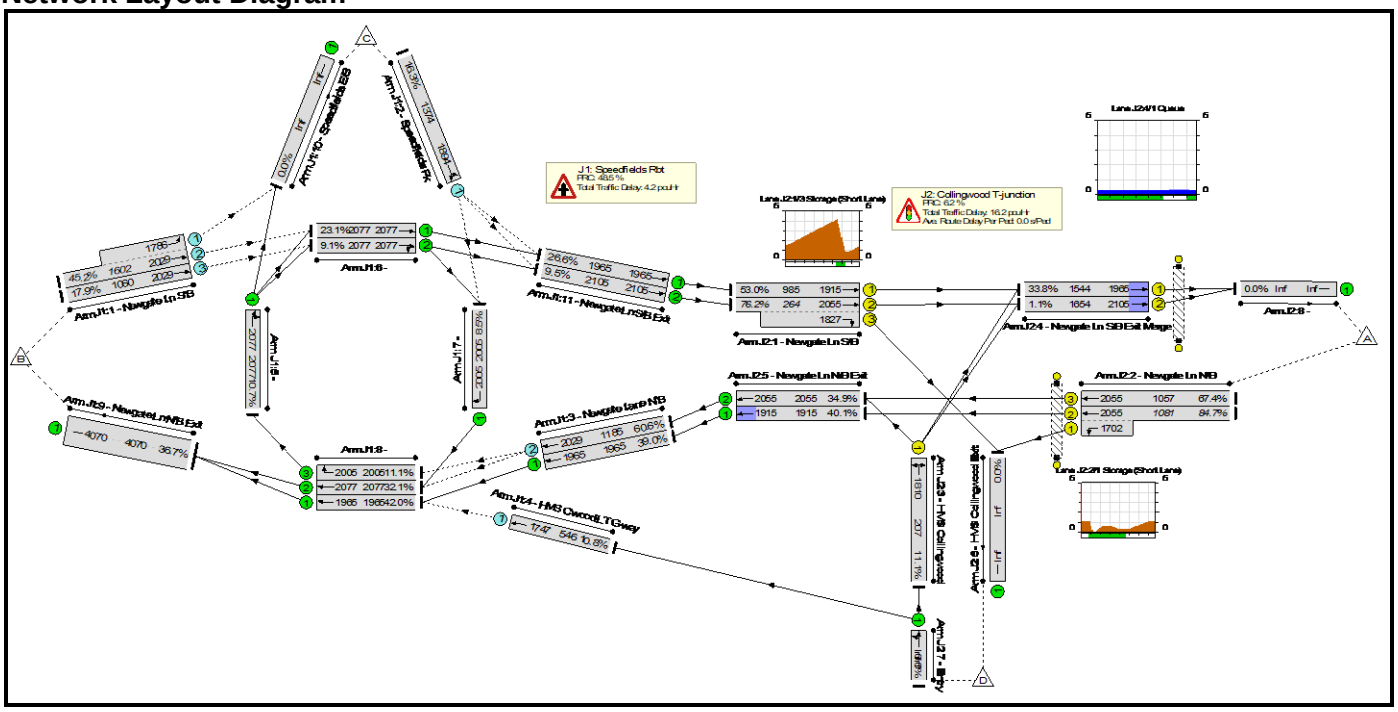
Total Delay for Signalled Lanes (pcuHr): 8.22
Total Delay Over All Lanes(pcuHr): 11.07

Cycle Time (s): 70

Basic Results Summary

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

Network Layout Diagram



Traffic Flows, Actual

Actual Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	1263	216	149	1628
	B	481	0	245	188	914
	C	43	170	0	11	224
	D	17	59	6	0	82
	Tot.	541	1492	467	348	2848

Basic Results Summary

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)	Mean Max Queue (pcu)	Back of Uniform Q At End of Red(pcu)
Network	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**84.7%**	**2639**	**0**	**0**	**20.4**	**-**	**-**	**-**
J1: Speedfields Rbt	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**60.6%**	**2639**	**0**	**0**	**4.2**	**-**	**-**	**-**
1/2+1/1	Newgate Ln S/B Ahead Left	O	-		-	-	-	724	2029:1786	1602	45.2%	1448	0	0	0.4	2.0	0.4	-
1/3	Newgate Ln S/B Ahead	O	-		-	-	-	190	2029	1060	17.9%	190	0	0	0.1	2.1	0.1	-
2/1	Speedfields Pk Ahead Left	O	-		-	-	-	224	1894	1374	16.3%	224	0	0	0.1	1.6	0.1	-
3/1	Newgate Lane N/B Ahead	U	-		-	-	-	767	1965	1965	39.0%	-	-	-	0.3	1.5	0.3	-
3/2	Newgate Lane N/B Ahead	O	-		-	-	-	718	2029	1185	60.6%	718	0	0	1.7	8.6	13.7	-
4/1	HMS C'wood LT G-way Ahead	O	-		-	-	-	59	1747	546	10.8%	59	0	0	0.1	3.7	0.1	-
5/1	Right Ahead	U	-		-	-	-	222	2077	2077	10.7%	-	-	-	0.1	1.0	0.1	-
6/1	Ahead	U	-		-	-	-	479	2077	2077	23.1%	-	-	-	0.1	1.1	0.1	-
6/2	Right Ahead	U	-		-	-	-	190	2077	2077	9.1%	-	-	-	0.1	1.0	0.1	-
7/1	Right	U	-		-	-	-	170	2005	2005	8.5%	-	-	-	0.0	1.0	0.0	-
8/1	Ahead	U	-		-	-	-	826	1965	1965	42.0%	-	-	-	0.4	1.6	0.4	-
8/2	Ahead	U	-		-	-	-	666	2077	2077	32.1%	-	-	-	0.2	1.3	0.2	-
8/3	Right	U	-		-	-	-	222	2005	2005	11.1%	-	-	-	0.1	1.0	0.1	-
9/1	Newgate Ln N/B Exit	U	-		-	-	-	1492	4070	4070	36.7%	-	-	-	0.3	0.7	0.1	-
11/1	Newgate Ln S/B Exit Ahead	U	-		-	-	-	522	1965	1965	26.6%	-	-	-	0.2	1.2	0.2	-

Basic Results Summary

11/2	Newgate Ln S/B Exit Ahead	U	-		-	-	-	201	2105	2105	9.5%	-	-	-	0.1	0.9	0.1	-
J2: Collingwood T-junction	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**84.7%**	**0**	**0**	**0**	**16.2**	**-**	**-**	**-**
1/1	Newgate Ln S/B Ahead	U	A		1	35	-	522	1915	985	53.0%	-	-	-	2.2	15.2	7.2	4.6
1/2+1/3	Newgate Ln S/B Ahead Right	U	A C		1	35:9	-	201	2055:1827	264	76.2%	-	-	-	3.1	56.1	5.2	0.9
2/2+2/1	Newgate Ln N/B Ahead Left	U	B		1	35	-	916	2055:1702	1081	84.7%	-	-	-	6.2	24.2	16.7	7.1
2/3	Newgate Ln N/B Ahead	U	B		1	35	-	712	2055	1057	67.4%	-	-	-	3.5	17.8	11.3	6.3
3/1	HMS Collingwood Right Left	U	D		1	7	-	23	1810	207	11.1%	-	-	-	0.2	37.7	0.5	0.4
4/1	Newgate Ln S/B Exit Merge Ahead	U	G		1	54	-	522	1965	1544	33.8%	-	-	-	0.3	1.9	0.4	0.1
4/2	Newgate Ln S/B Exit Merge Ahead	U	G		1	54	-	19	2105	1654	1.1%	-	-	-	0.0	1.1	0.0	0.0
5/1	Newgate Ln N/B Exit Ahead	U	-		-	-	-	767	1915	1915	40.1%	-	-	-	0.3	1.6	0.5	-
5/2	Newgate Ln N/B Exit Ahead	U	-		-	-	-	718	2055	2055	34.9%	-	-	-	0.3	1.3	0.3	-
Ped Link: P1	Newgate Ln S/B	-	E		1	5	-	0	-	0	0.0%	-	-	-	-	-	-	-
Ped Link: P2	Newgate Ln N/B	-	F		1	23	-	0	-	0	0.0%	-	-	-	-	-	-	-

C1 - Collingwood T-Junction

PRC for Signalled Lanes (%): 6.2
PRC Over All Lanes (%): 6.2

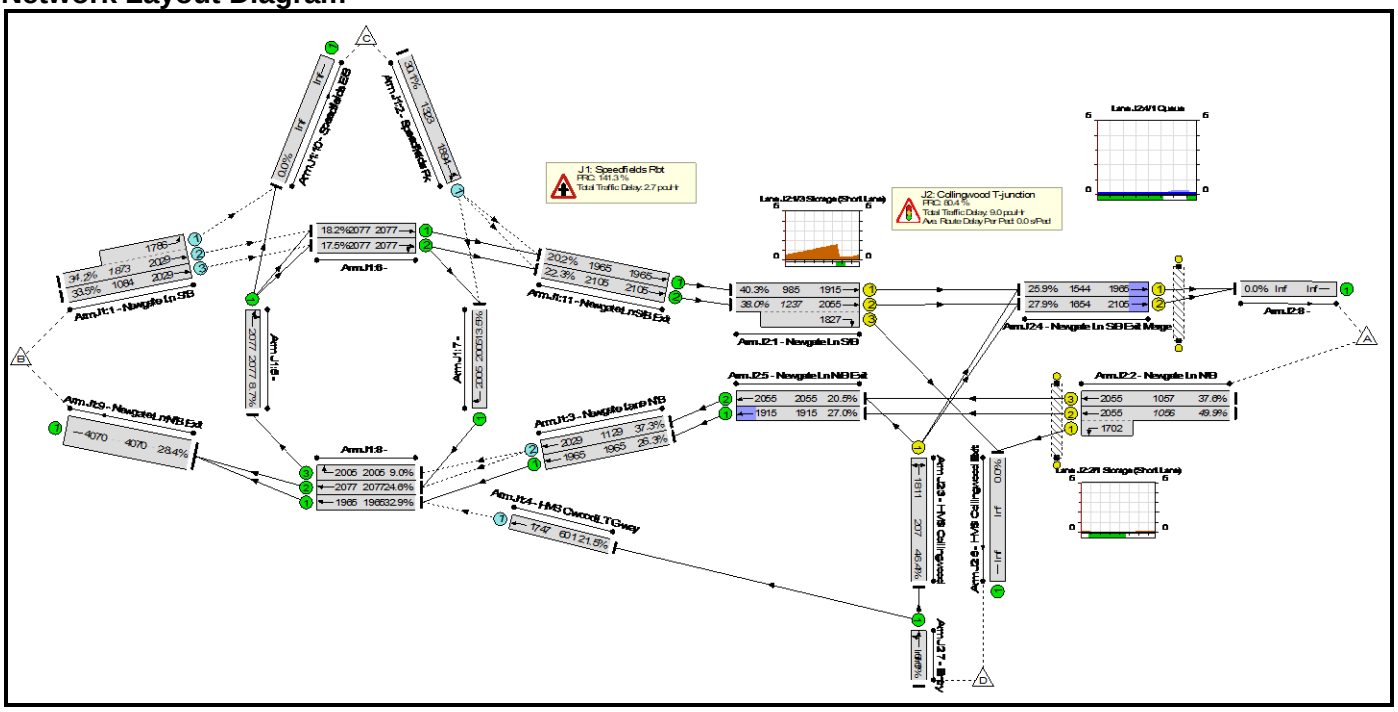
Total Delay for Signalled Lanes (pcuHr): 15.56
Total Delay Over All Lanes(pcuHr): 20.38

Cycle Time (s): 70

Basic Results Summary

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

Network Layout Diagram



Traffic Flows, Actual

Actual Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	757	157	10	924
	B	669	0	263	71	1003
	C	120	271	0	7	398
	D	72	129	24	0	225
	Tot.	861	1157	444	88	2550

Basic Results Summary

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)	Mean Max Queue (pcu)	Back of Uniform Q At End of Red(pcu)
Network	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**49.9%**	**2591**	**0**	**0**	**11.6**	**-**	**-**	**-**
J1: Speedfields Rbt	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**37.3%**	**2591**	**0**	**0**	**2.7**	**-**	**-**	**-**
1/2+1/1	Newgate Ln S/B Ahead Left	O	-		-	-	-	640	2029:1786	1873	34.2%	1280	0	0	0.3	1.5	0.3	-
1/3	Newgate Ln S/B Ahead	O	-		-	-	-	363	2029	1084	33.5%	363	0	0	0.3	2.5	0.3	-
2/1	Speedfields Pk Ahead Left	O	-		-	-	-	398	1894	1323	30.1%	398	0	0	0.2	1.9	0.2	-
3/1	Newgate Lane N/B Ahead	U	-		-	-	-	517	1965	1965	26.3%	-	-	-	0.2	1.2	0.2	-
3/2	Newgate Lane N/B Ahead	O	-		-	-	-	421	2029	1129	37.3%	421	0	0	0.4	3.2	4.8	-
4/1	HMS C'wood LT G-way Ahead	O	-		-	-	-	129	1747	601	21.5%	129	0	0	0.1	3.8	0.1	-
5/1	Right Ahead	U	-		-	-	-	181	2077	2077	8.7%	-	-	-	0.0	0.9	0.0	-
6/1	Ahead	U	-		-	-	-	377	2077	2077	18.2%	-	-	-	0.1	1.1	0.1	-
6/2	Right Ahead	U	-		-	-	-	363	2077	2077	17.5%	-	-	-	0.1	1.1	0.1	-
7/1	Right	U	-		-	-	-	271	2005	2005	13.5%	-	-	-	0.1	1.0	0.1	-
8/1	Ahead	U	-		-	-	-	646	1965	1965	32.9%	-	-	-	0.2	1.4	0.2	-
8/2	Ahead	U	-		-	-	-	511	2077	2077	24.6%	-	-	-	0.2	1.1	0.2	-
8/3	Right	U	-		-	-	-	181	2005	2005	9.0%	-	-	-	0.0	1.0	0.0	-
9/1	Newgate Ln N/B Exit	U	-		-	-	-	1157	4070	4070	28.4%	-	-	-	0.2	0.6	0.1	-
11/1	Newgate Ln S/B Exit Ahead	U	-		-	-	-	397	1965	1965	20.2%	-	-	-	0.1	1.1	0.1	-

Basic Results Summary

11/2	Newgate Ln S/B Exit Ahead	U	-		-	-	-	470	2105	2105	22.3%	-	-	-	0.1	1.1	0.1	-
J2: Collingwood T-junction	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**49.9%**	**0**	**0**	**0**	**9.0**	**-**	**-**	**-**
1/1	Newgate Ln S/B Ahead	U	A		1	35	-	397	1915	985	40.3%	-	-	-	1.5	13.5	5.0	3.5
1/2+1/3	Newgate Ln S/B Ahead Right	U	A C		1	35:9	-	470	2055:1827	1237	38.0%	-	-	-	2.0	15.3	4.9	3.5
2/2+2/1	Newgate Ln N/B Ahead Left	U	B		1	35	-	527	2055:1702	1056	49.9%	-	-	-	2.1	14.4	7.0	4.6
2/3	Newgate Ln N/B Ahead	U	B		1	35	-	397	2055	1057	37.6%	-	-	-	1.4	13.0	4.9	3.5
3/1	HMS Collingwood Right Left	U	D		1	7	-	96	1811	207	46.4%	-	-	-	1.2	45.1	2.2	1.6
4/1	Newgate Ln S/B Exit Merge Ahead	U	G		1	54	-	400	1965	1544	25.9%	-	-	-	0.2	1.7	0.3	0.1
4/2	Newgate Ln S/B Exit Merge Ahead	U	G		1	54	-	461	2105	1654	27.9%	-	-	-	0.2	1.6	0.3	0.1
5/1	Newgate Ln N/B Exit Ahead	U	-		-	-	-	517	1915	1915	27.0%	-	-	-	0.2	1.4	0.4	-
5/2	Newgate Ln N/B Exit Ahead	U	-		-	-	-	421	2055	2055	20.5%	-	-	-	0.1	1.1	0.1	-
Ped Link: P1	Newgate Ln S/B	-	E		1	5	-	0	-	0	0.0%	-	-	-	-	-	-	-
Ped Link: P2	Newgate Ln N/B	-	F		1	23	-	0	-	0	0.0%	-	-	-	-	-	-	-

C1 - Collingwood T-Junction

PRC for Signalled Lanes (%): 80.4
PRC Over All Lanes (%): 80.4

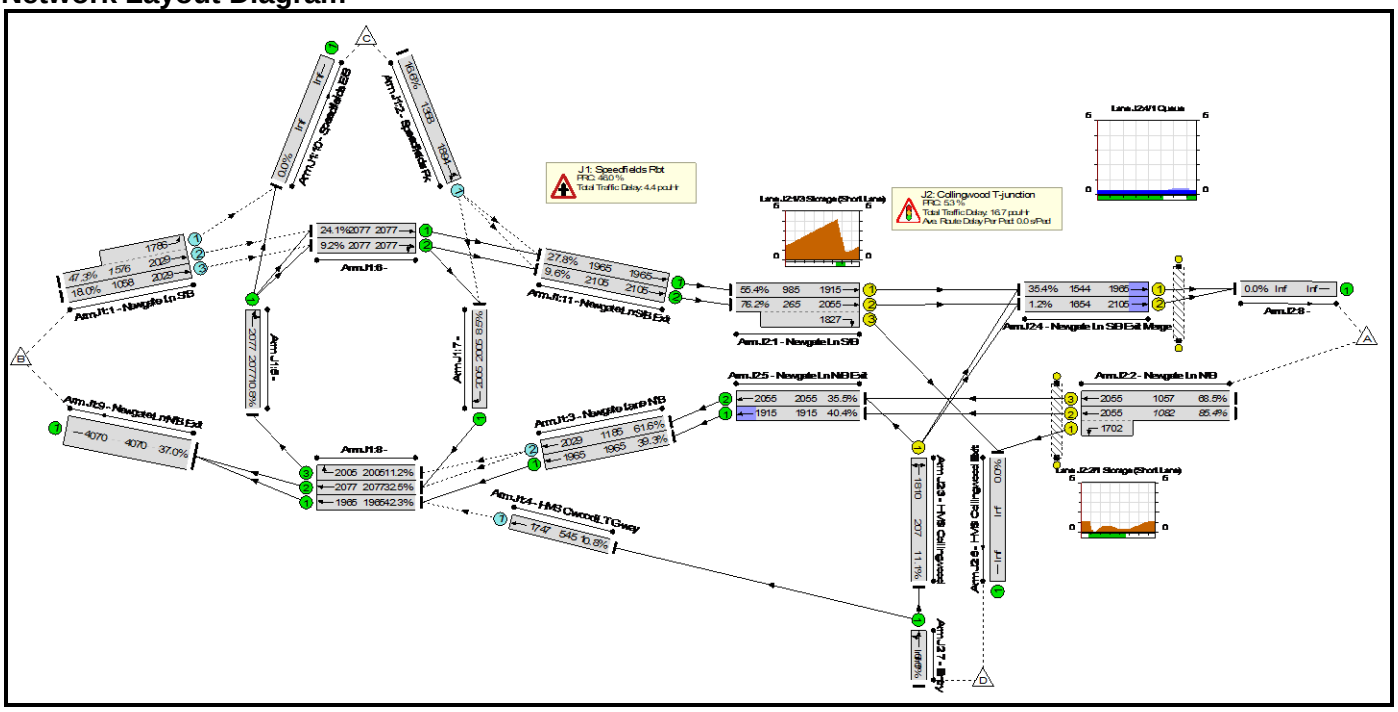
Total Delay for Signalled Lanes (pcuHr): 8.63
Total Delay Over All Lanes(pcuHr): 11.65

Cycle Time (s): 70

Basic Results Summary

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

Network Layout Diagram



Traffic Flows, Actual

Actual Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	1278	219	151	1648
	B	504	0	245	188	937
	C	45	170	0	11	226
	D	17	59	6	0	82
	Tot.	566	1507	470	350	2893

Basic Results Summary

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)	Mean Max Queue (pcu)	Back of Uniform Q At End of Red(pcu)
Network	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**85.4%**	**2698**	**0**	**0**	**21.1**	**-**	**-**	**-**
J1: Speedfields Rbt	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**61.6%**	**2698**	**0**	**0**	**4.4**	**-**	**-**	**-**
1/2+1/1	Newgate Ln S/B Ahead Left	O	-		-	-	-	746	2029:1786	1576	47.3%	1492	0	0	0.4	2.2	0.4	-
1/3	Newgate Ln S/B Ahead	O	-		-	-	-	191	2029	1058	18.0%	191	0	0	0.1	2.1	0.1	-
2/1	Speedfields Pk Ahead Left	O	-		-	-	-	226	1894	1358	16.6%	226	0	0	0.1	1.6	0.1	-
3/1	Newgate Lane N/B Ahead	U	-		-	-	-	773	1965	1965	39.3%	-	-	-	0.3	1.5	0.3	-
3/2	Newgate Lane N/B Ahead	O	-		-	-	-	730	2029	1185	61.6%	730	0	0	1.8	8.9	14.0	-
4/1	HMS C'wood LT G-way Ahead	O	-		-	-	-	59	1747	545	10.8%	59	0	0	0.1	3.7	0.1	-
5/1	Right Ahead	U	-		-	-	-	225	2077	2077	10.8%	-	-	-	0.1	1.0	0.1	-
6/1	Ahead	U	-		-	-	-	501	2077	2077	24.1%	-	-	-	0.2	1.1	0.2	-
6/2	Right Ahead	U	-		-	-	-	191	2077	2077	9.2%	-	-	-	0.1	1.0	0.1	-
7/1	Right	U	-		-	-	-	170	2005	2005	8.5%	-	-	-	0.0	1.0	0.0	-
8/1	Ahead	U	-		-	-	-	832	1965	1965	42.3%	-	-	-	0.4	1.6	0.4	-
8/2	Ahead	U	-		-	-	-	675	2077	2077	32.5%	-	-	-	0.2	1.3	0.2	-
8/3	Right	U	-		-	-	-	225	2005	2005	11.2%	-	-	-	0.1	1.0	0.1	-
9/1	Newgate Ln N/B Exit	U	-		-	-	-	1507	4070	4070	37.0%	-	-	-	0.3	0.7	0.1	-
11/1	Newgate Ln S/B Exit Ahead	U	-		-	-	-	546	1965	1965	27.8%	-	-	-	0.2	1.3	0.2	-

Basic Results Summary

11/2	Newgate Ln S/B Exit Ahead	U	-		-	-	-	202	2105	2105	9.6%	-	-	-	0.1	0.9	0.1	-
J2: Collingwood T-junction	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**85.4%**	**0**	**0**	**0**	**16.7**	**-**	**-**	**-**
1/1	Newgate Ln S/B Ahead	U	A		1	35	-	546	1915	985	55.4%	-	-	-	2.4	15.6	7.7	4.9
1/2+1/3	Newgate Ln S/B Ahead Right	U	A C		1	35:9	-	202	2055:1827	265	76.2%	-	-	-	3.1	55.8	5.2	0.9
2/2+2/1	Newgate Ln N/B Ahead Left	U	B		1	35	-	924	2055:1702	1082	85.4%	-	-	-	6.4	24.8	17.0	7.2
2/3	Newgate Ln N/B Ahead	U	B		1	35	-	724	2055	1057	68.5%	-	-	-	3.6	18.1	11.5	6.4
3/1	HMS Collingwood Right Left	U	D		1	7	-	23	1810	207	11.1%	-	-	-	0.2	37.7	0.5	0.4
4/1	Newgate Ln S/B Exit Merge Ahead	U	G		1	54	-	546	1965	1544	35.4%	-	-	-	0.3	2.0	0.4	0.1
4/2	Newgate Ln S/B Exit Merge Ahead	U	G		1	54	-	20	2105	1654	1.2%	-	-	-	0.0	1.1	0.0	0.0
5/1	Newgate Ln N/B Exit Ahead	U	-		-	-	-	773	1915	1915	40.4%	-	-	-	0.4	1.6	0.5	-
5/2	Newgate Ln N/B Exit Ahead	U	-		-	-	-	730	2055	2055	35.5%	-	-	-	0.3	1.4	0.3	-
Ped Link: P1	Newgate Ln S/B	-	E		1	5	-	0	-	0	0.0%	-	-	-	-	-	-	-
Ped Link: P2	Newgate Ln N/B	-	F		1	23	-	0	-	0	0.0%	-	-	-	-	-	-	-

C1 - Collingwood T-Junction

PRC for Signalled Lanes (%): 5.3
PRC Over All Lanes (%): 5.3

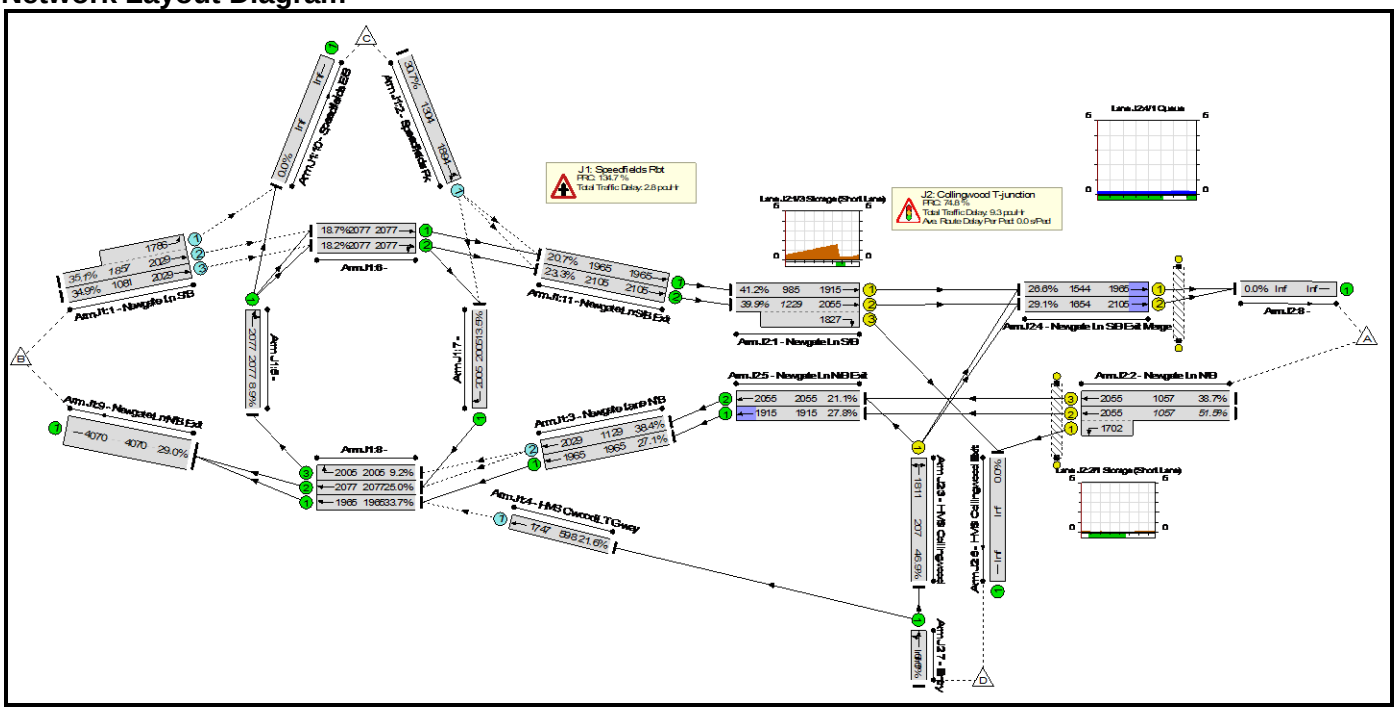
Total Delay for Signalled Lanes (pcuHr): 16.07
Total Delay Over All Lanes(pcuHr): 21.08

Cycle Time (s): 70

Basic Results Summary

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

Network Layout Diagram



Traffic Flows, Actual

Actual Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	781	161	11	953
	B	695	0	263	71	1029
	C	123	271	0	7	401
	D	73	129	24	0	226
	Tot.	891	1181	448	89	2609

Basic Results Summary

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)	Mean Max Queue (pcu)	Back of Uniform Q At End of Red(pcu)
Network	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**51.5%**	**2644**	**0**	**0**	**12.1**	**-**	**-**	**-**
J1: Speedfields Rbt	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**38.4%**	**2644**	**0**	**0**	**2.8**	**-**	**-**	**-**
1/2+1/1	Newgate Ln S/B Ahead Left	O	-		-	-	-	652	2029:1786	1857	35.1%	1304	0	0	0.3	1.5	0.3	-
1/3	Newgate Ln S/B Ahead	O	-		-	-	-	377	2029	1081	34.9%	377	0	0	0.3	2.6	0.3	-
2/1	Speedfields Pk Ahead Left	O	-		-	-	-	401	1894	1304	30.7%	401	0	0	0.2	2.0	0.2	-
3/1	Newgate Lane N/B Ahead	U	-		-	-	-	533	1965	1965	27.1%	-	-	-	0.2	1.3	0.2	-
3/2	Newgate Lane N/B Ahead	O	-		-	-	-	433	2029	1129	38.4%	433	0	0	0.4	3.4	5.1	-
4/1	HMS C'wood LT G-way Ahead	O	-		-	-	-	129	1747	598	21.6%	129	0	0	0.1	3.8	0.1	-
5/1	Right Ahead	U	-		-	-	-	185	2077	2077	8.9%	-	-	-	0.0	1.0	0.0	-
6/1	Ahead	U	-		-	-	-	389	2077	2077	18.7%	-	-	-	0.1	1.1	0.1	-
6/2	Right Ahead	U	-		-	-	-	377	2077	2077	18.2%	-	-	-	0.1	1.1	0.1	-
7/1	Right	U	-		-	-	-	271	2005	2005	13.5%	-	-	-	0.1	1.0	0.1	-
8/1	Ahead	U	-		-	-	-	662	1965	1965	33.7%	-	-	-	0.3	1.4	0.3	-
8/2	Ahead	U	-		-	-	-	519	2077	2077	25.0%	-	-	-	0.2	1.2	0.2	-
8/3	Right	U	-		-	-	-	185	2005	2005	9.2%	-	-	-	0.1	1.0	0.1	-
9/1	Newgate Ln N/B Exit	U	-		-	-	-	1181	4070	4070	29.0%	-	-	-	0.2	0.6	0.1	-
11/1	Newgate Ln S/B Exit Ahead	U	-		-	-	-	406	1965	1965	20.7%	-	-	-	0.1	1.2	0.1	-

Basic Results Summary

11/2	Newgate Ln S/B Exit Ahead	U	-		-	-	-	490	2105	2105	23.3%	-	-	-	0.2	1.1	0.2	-
J2: Collingwood T-junction	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**51.5%**	**0**	**0**	**0**	**9.3**	**-**	**-**	**-**
1/1	Newgate Ln S/B Ahead	U	A		1	35	-	406	1915	985	41.2%	-	-	-	1.5	13.6	5.2	3.6
1/2+1/3	Newgate Ln S/B Ahead Right	U	A C		1	35:9	-	490	2055:1827	1229	39.9%	-	-	-	2.1	15.4	5.1	3.7
2/2+2/1	Newgate Ln N/B Ahead Left	U	B		1	35	-	544	2055:1702	1057	51.5%	-	-	-	2.2	14.6	7.4	4.7
2/3	Newgate Ln N/B Ahead	U	B		1	35	-	409	2055	1057	38.7%	-	-	-	1.5	13.1	5.1	3.6
3/1	HMS Collingwood Right Left	U	D		1	7	-	97	1811	207	46.9%	-	-	-	1.2	45.3	2.2	1.6
4/1	Newgate Ln S/B Exit Merge Ahead	U	G		1	54	-	410	1965	1544	26.6%	-	-	-	0.2	1.7	0.3	0.1
4/2	Newgate Ln S/B Exit Merge Ahead	U	G		1	54	-	481	2105	1654	29.1%	-	-	-	0.2	1.7	0.3	0.1
5/1	Newgate Ln N/B Exit Ahead	U	-		-	-	-	533	1915	1915	27.8%	-	-	-	0.2	1.4	0.4	-
5/2	Newgate Ln N/B Exit Ahead	U	-		-	-	-	433	2055	2055	21.1%	-	-	-	0.1	1.1	0.1	-
Ped Link: P1	Newgate Ln S/B	-	E		1	5	-	0	-	0	0.0%	-	-	-	-	-	-	-
Ped Link: P2	Newgate Ln N/B	-	F		1	23	-	0	-	0	0.0%	-	-	-	-	-	-	-

C1 - Collingwood T-Junction

PRC for Signalled Lanes (%): 74.8
PRC Over All Lanes (%): 74.8

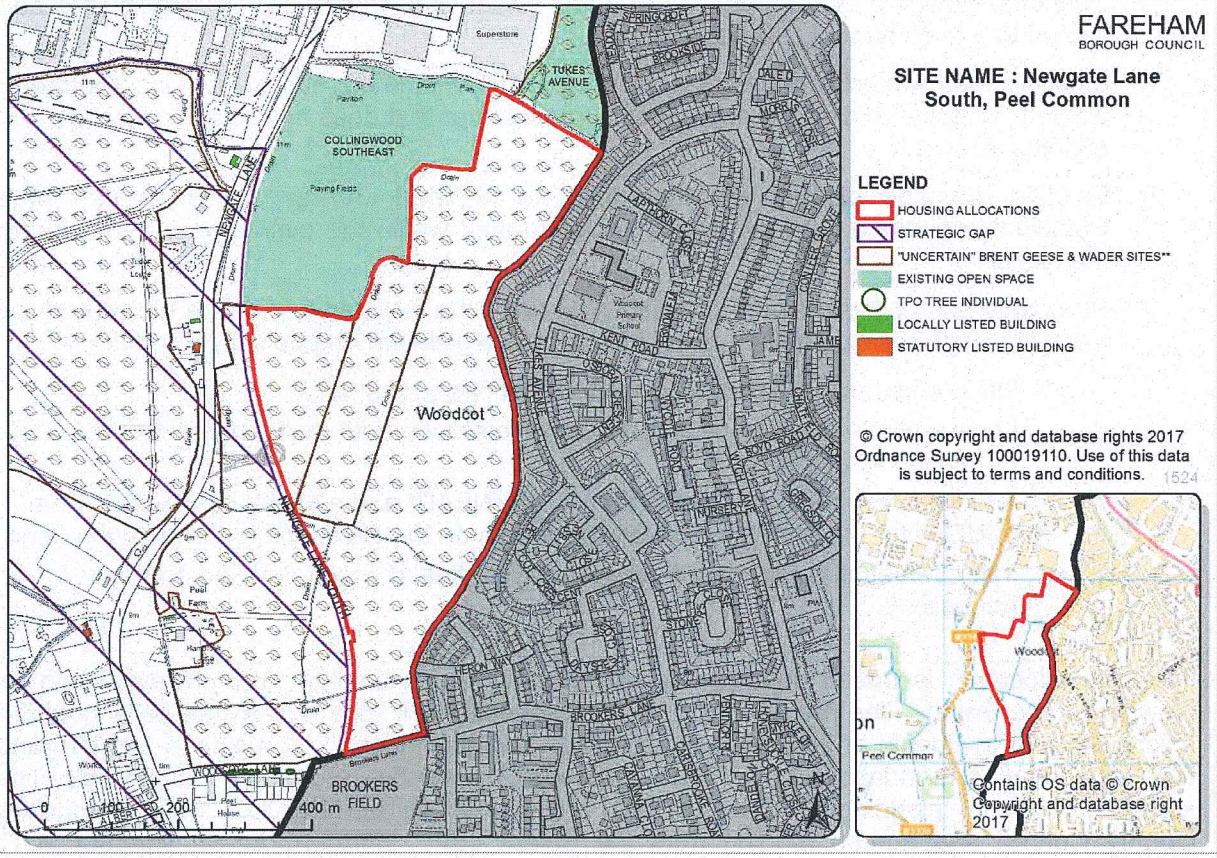
Total Delay for Signalled Lanes (pcuHr): 8.97
Total Delay Over All Lanes(pcuHr): 12.11

Cycle Time (s): 70

APPENDIX 11

'HA2' DRAFT LOCAL PLAN ALLOCATED SITE DETAILS

Housing Site: HA2	**SHLAA Reference:** 3133 (incorporating 3002, 3028 and 3057)
Name: Newgate Lane South	**Proposed Use:** Residential
Location: Peel Common	**Indicative Capacity:** 475 dwellings
Size: 22.4ha	**Planning Status:** None



Planning permission will be granted provided that detailed proposals accord with the policies in the Local Plan and meet the following site specific requirements:

a) The design and layout of proposals shall be informed by and be consistent with the Development Framework in Appendix D; and

b) The quantum of housing proposed shall be broadly consistent with the indicative site capacity; and

c) Primary highway access shall be focused on Newgate Lane South in the first instance, with Brookers Lane having the potential to provide secondary access for a limited number of dwellings; and

d) The provision of a north-south natural greenspace buffer of 25 metres minimum width between proposed development and both the boundary of the Newgate Lane South highway and HMS Collingwood playing fields, in accordance with the Development Framework in Appendix D; and

e) The provision of pedestrian and cycle connectivity between adjoining parcels as

identified by the Development Framework, as well as safe pedestrian/ cycle crossing points of Newgate Lane South, safe and accessible walking/ cycling routes to local schools, open spaces and nearby facilities in Woodcot/Bridgemary.

f) The provision of vehicular highway access between individual development parcels, as identified by the Development Framework, without prejudice to adjacent land in accordance with Policy D4; and

g) Building heights shall be limited to a maximum of 2.5 storeys, except for buildings which front onto Newgate Lane South and Bridgmary/Woodcot where building heights shall be limited to a maximum of 2 storeys; and

h) Existing trees subject to a Tree Preservation Order should be retained and incorporated within the design and layout of proposals in a manner that does not impact on living conditions; and

i) Existing drainage ditches on-site should be retained and enhanced as part of a Sustainable Drainage System (SuDS) incorporated within the overall green network for the site; and

j) Proposals shall either provide directly, or provide the mechanism for the delivery of the following infrastructure, having regard to national legislation on pooling contributions:

- Off-site highway improvement and mitigations works; and
- Local schools and early-years childcare improvements (as identified by the Local Education Authority); and
- A Neighbourhood Equipped Area of Play (NEAP) and a Multi-Use Games Area (MUGA) for older children on-site as shown on the Development Framework; and
- Improvements to existing off-site sports facilities at Brookers Field and Tukes Avenue.

This site allocation is based around the delivery of the new section of highway known as Newgate Lane South. The road scheme is third stage of work on the Newgate Lane corridor, linking the improvements at the northern section of Newgate Lane, undertaken in 2014/15 and the Peel Common roundabout, in 2015/16. It replaces the existing route for through traffic. The scheme has both planning consent (P/15/0717/CC and 15/00382/HCC3) from Hampshire County Council and agreed funding from the Solent LEP. Furthermore, in summer 2017 construction of the new road commenced, with the works estimated to take approximately 12 months to complete. Once completed, the new road will form the western boundary of this site allocation.

The allocated land comprises a number of different site promoters. As such, the Council has composed a Development Framework (Appendix D) for the site which sets out the rationale and approach for achieving a comprehensive and coordinated development that allows for excellent connectivity throughout the site and to the surrounding area, whilst allowing for development to come forward on a phased basis.

The open space and equipped play space need has been derived when considering the overall quantum of development and how and where this can be best achieved within the overall comprehensive development.

APPENDIX 12

2036 TRAFFIC FLOW AND DISTRIBUTION DIAGRAMS

2036 Base "DS1"

AM - 0800 - 0900

Pegasus Group

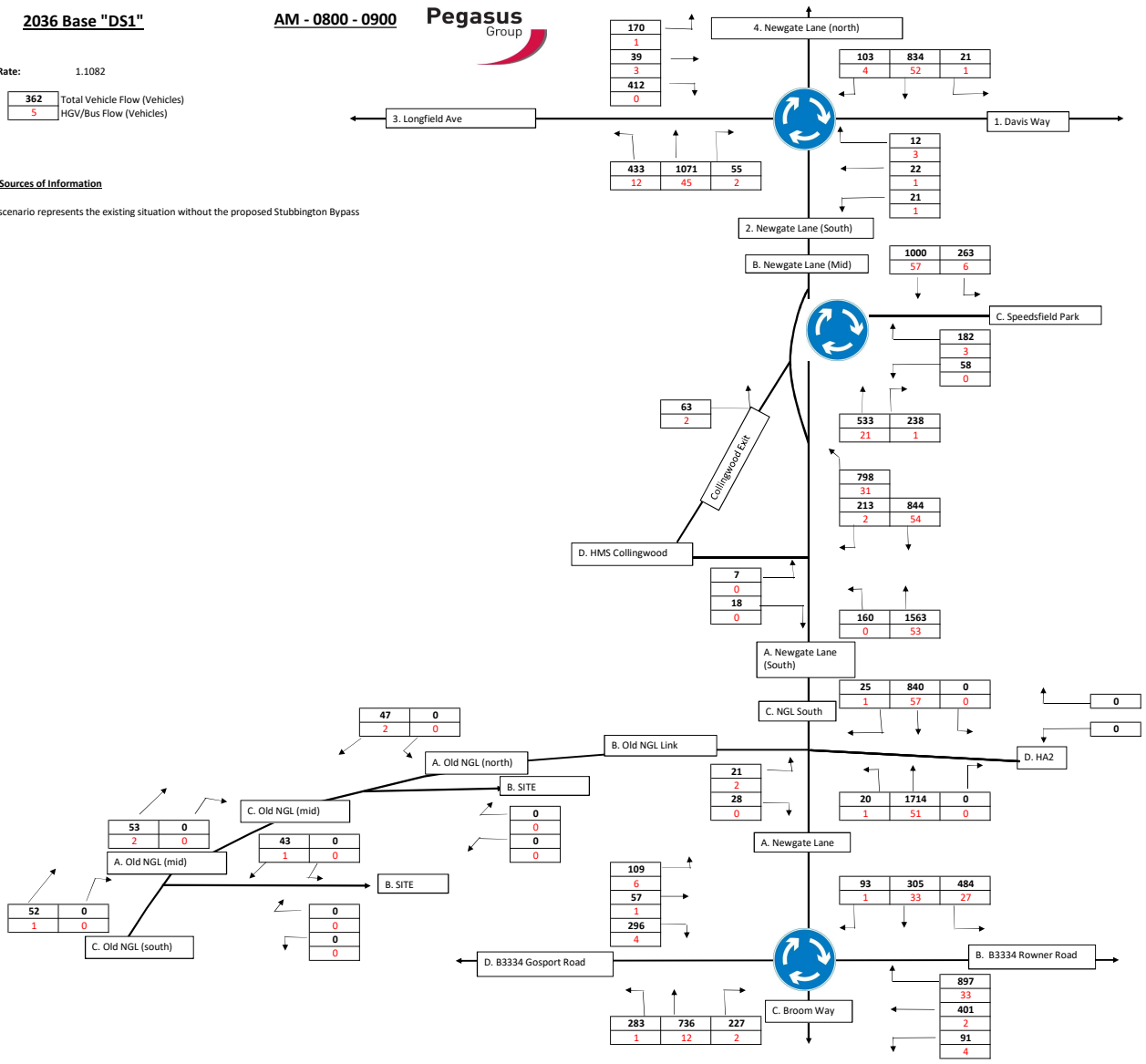
Growth Rate: 1.1082

Key:

362	Total Vehicle Flow (Vehicles)
5	HGV/Bus Flow (Vehicles)

Notes & Sources of Information

The DS1 scenario represents the existing situation without the proposed Stubbington Bypass



2036 Base "DS1"

PM - 1700 - 1800

Pegasus Group

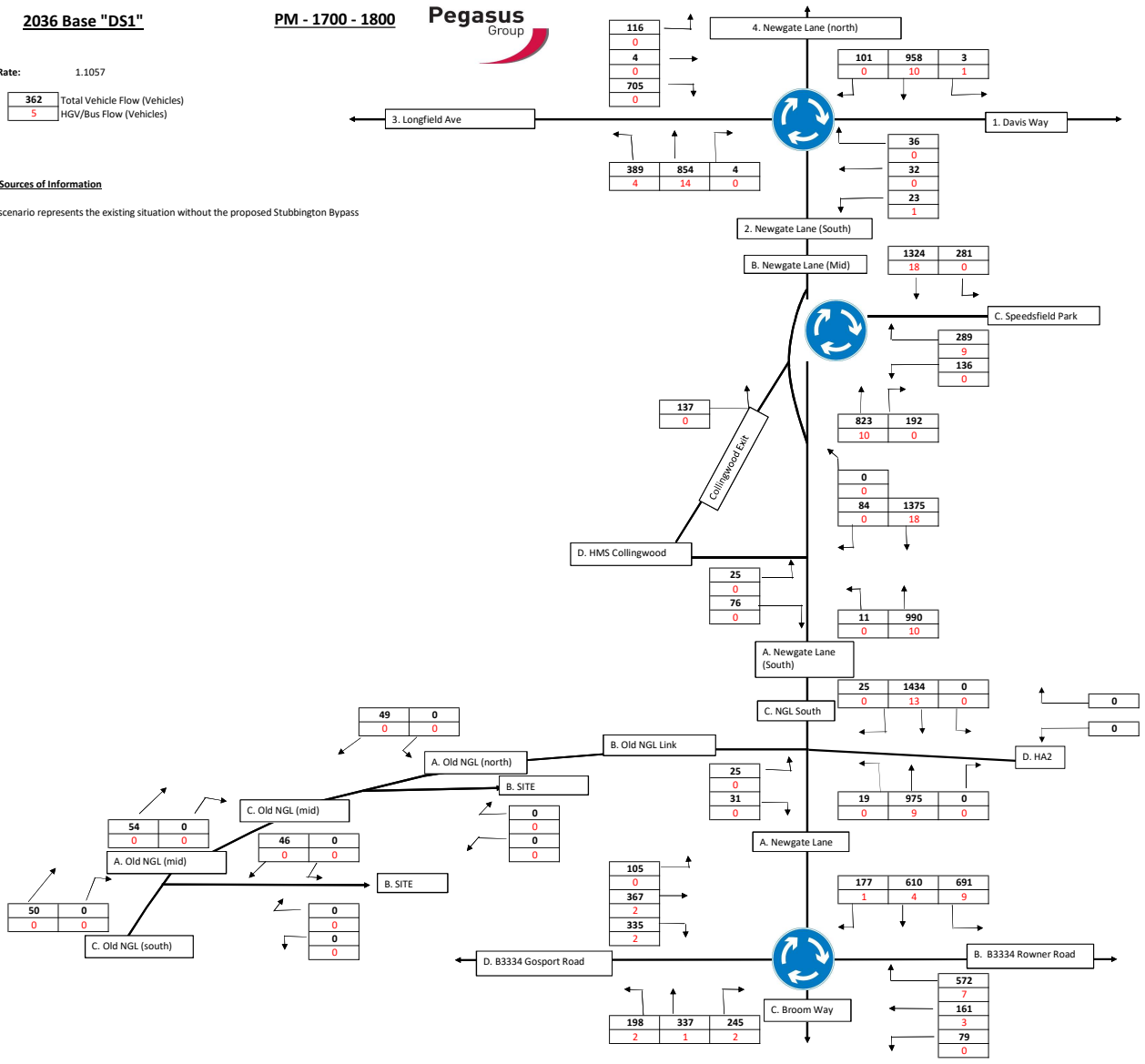
Growth Rate: 1.1057

Key:

362	Total Vehicle Flow (Vehicles)
5	HGV/Bus Flow (Vehicles)

Notes & Sources of Information

The DS1 scenario represents the existing situation without the proposed Stubbington Bypass



2036 Base + Development "DS1"

AM - 0800 - 0900

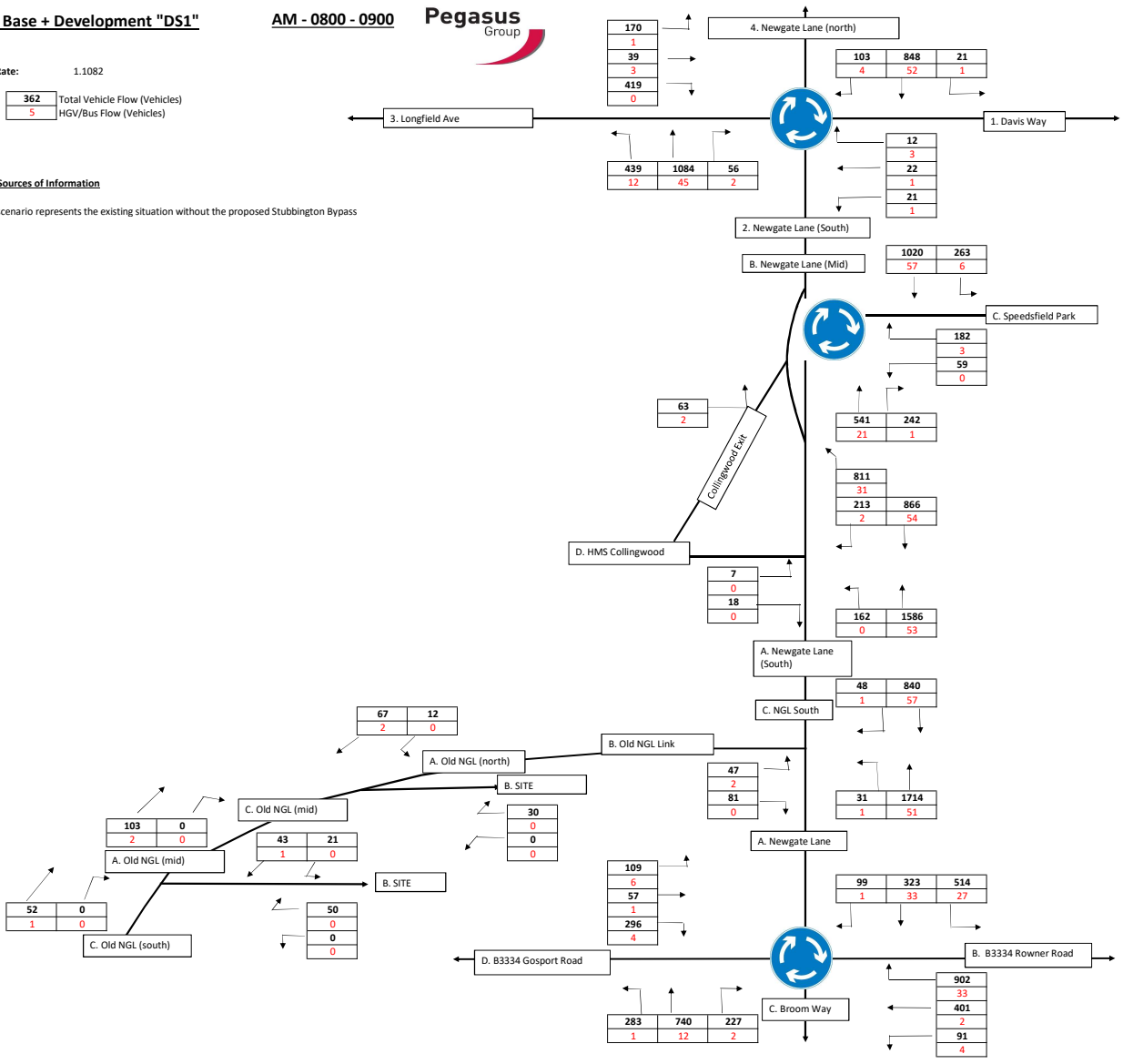
Growth Rate: 1.1082

Key:

362	Total Vehicle Flow (Vehicles)
5	HGV/Bus Flow (Vehicles)

Notes & Sources of Information

The DS1 scenario represents the existing situation without the proposed Stubbington Bypass



2036 Base + Development "DS1"

PM - 1700 - 1800

Pegasus Group

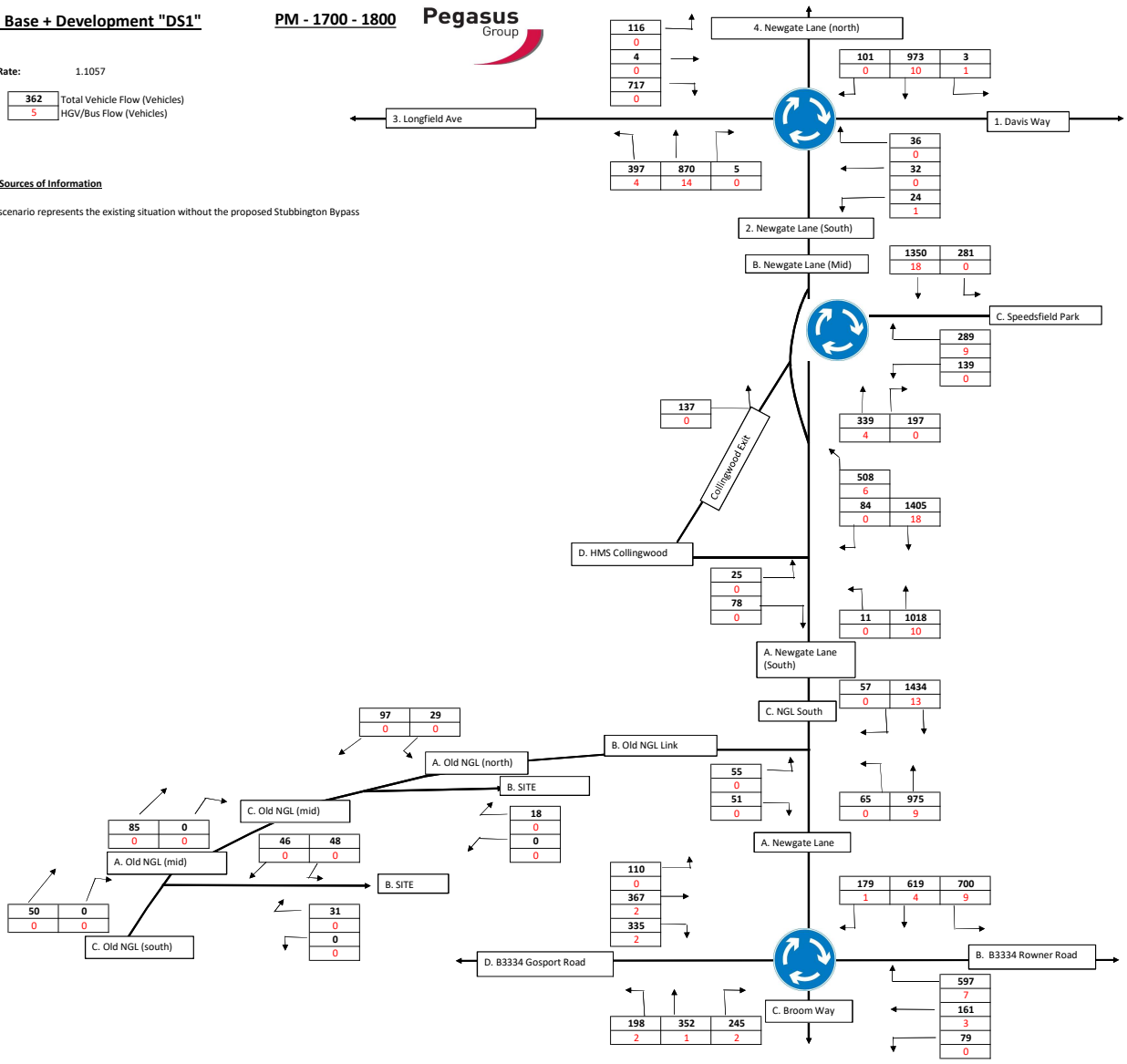
Growth Rate: 1.1057

Key:

362	Total Vehicle Flow (Vehicles)
5	HGV/Bus Flow (Vehicles)

Notes & Sources of Information

The DS1 scenario represents the existing situation without the proposed Stubbington Bypass



2036 Base "DS2"

AM - 0800 - 0900

Pegasus Group

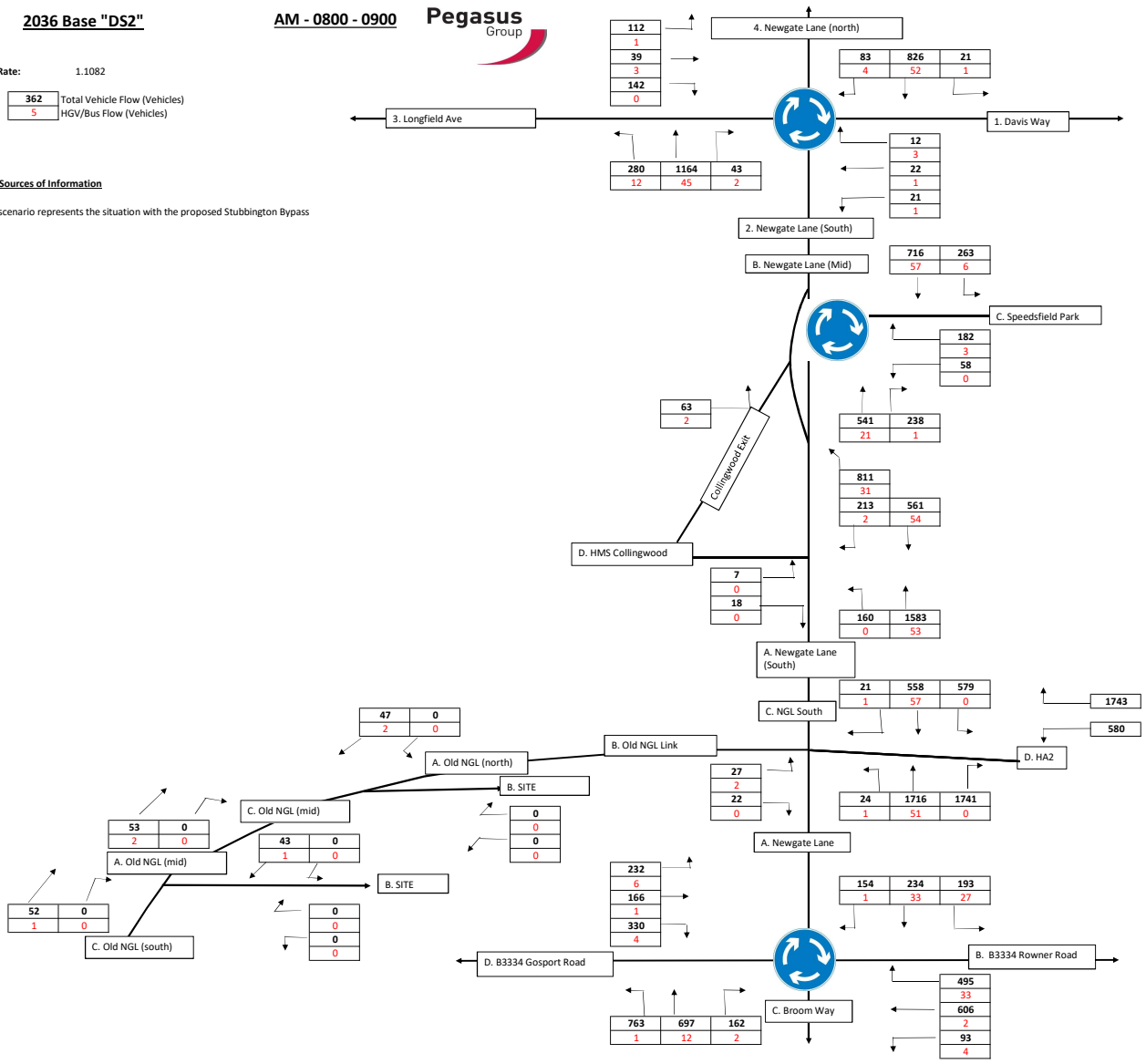
Growth Rate: 1.1082

Key:

362	Total Vehicle Flow (Vehicles)
5	HGV/Bus Flow (Vehicles)

Notes & Sources of Information

The DS2 scenario represents the situation with the proposed Stubbington Bypass



2036 Base "DS2"

PM - 1700 - 1800

Pegasus Group

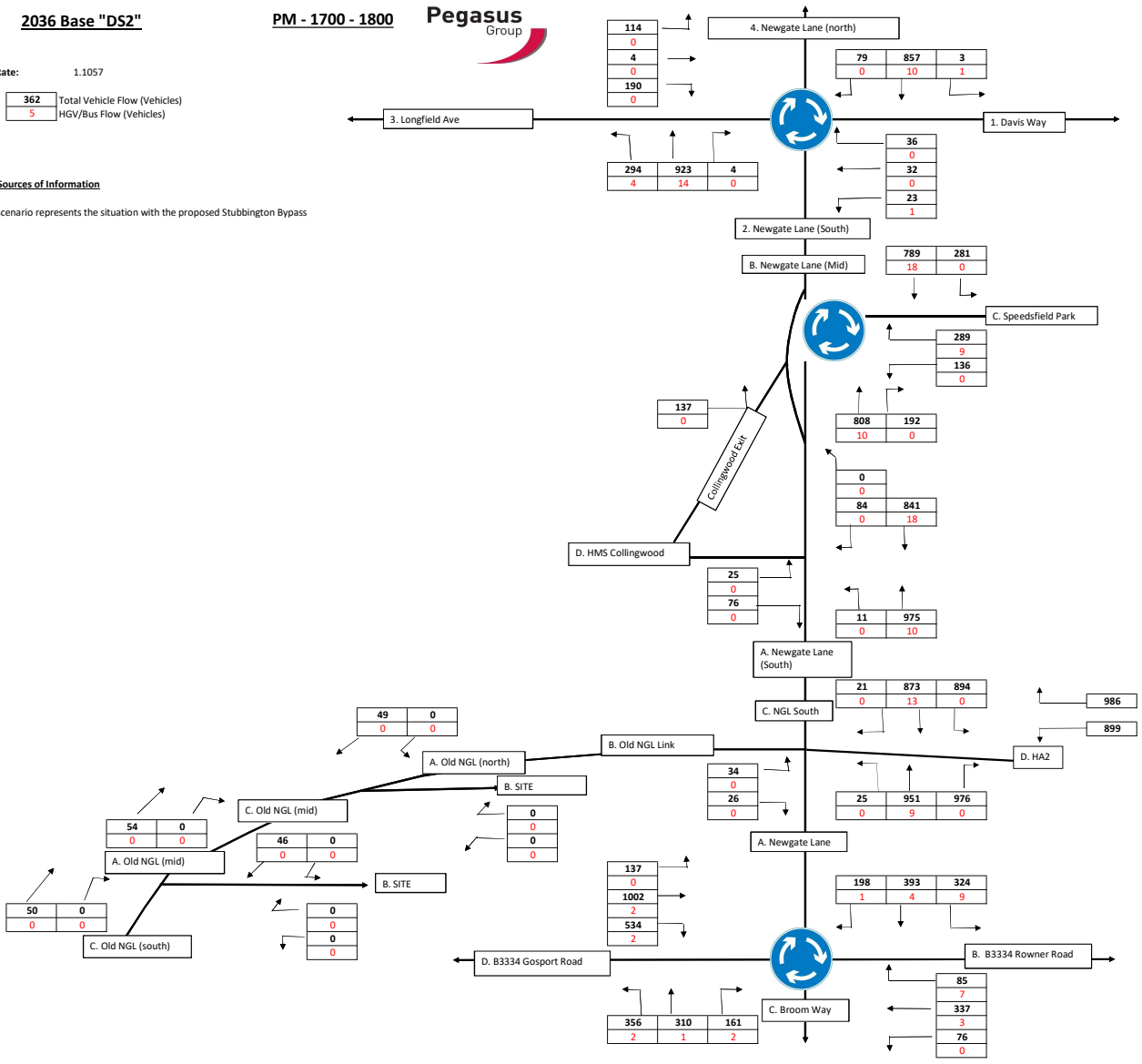
Growth Rate: 1.1057

Key:

362	Total Vehicle Flow (Vehicles)
5	HGV/Bus Flow (Vehicles)

Notes & Sources of Information

The DS2 scenario represents the situation with the proposed Stubbington Bypass



2036 Base + Development "DS2"

AM - 0800 - 0900

Pegasus Group

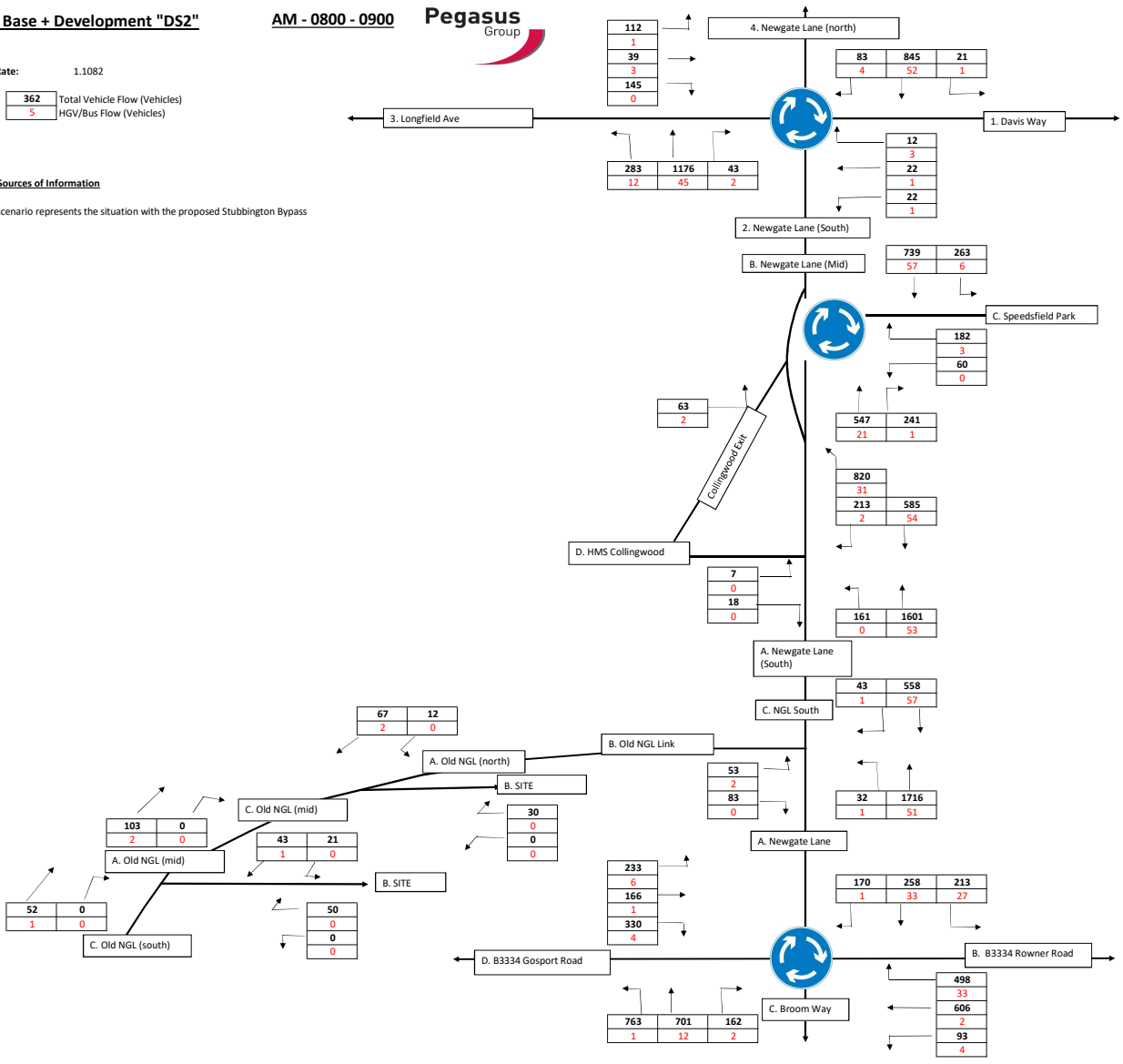
Growth Rate: 1.1082

Key:

362	Total Vehicle Flow (Vehicles)
5	HGV/Bus Flow (Vehicles)

Notes & Sources of Information

The DS2 scenario represents the situation with the proposed Stubbington Bypass



2036 Base + Development "DS2"

PM - 1700 - 1800

Pegasus Group

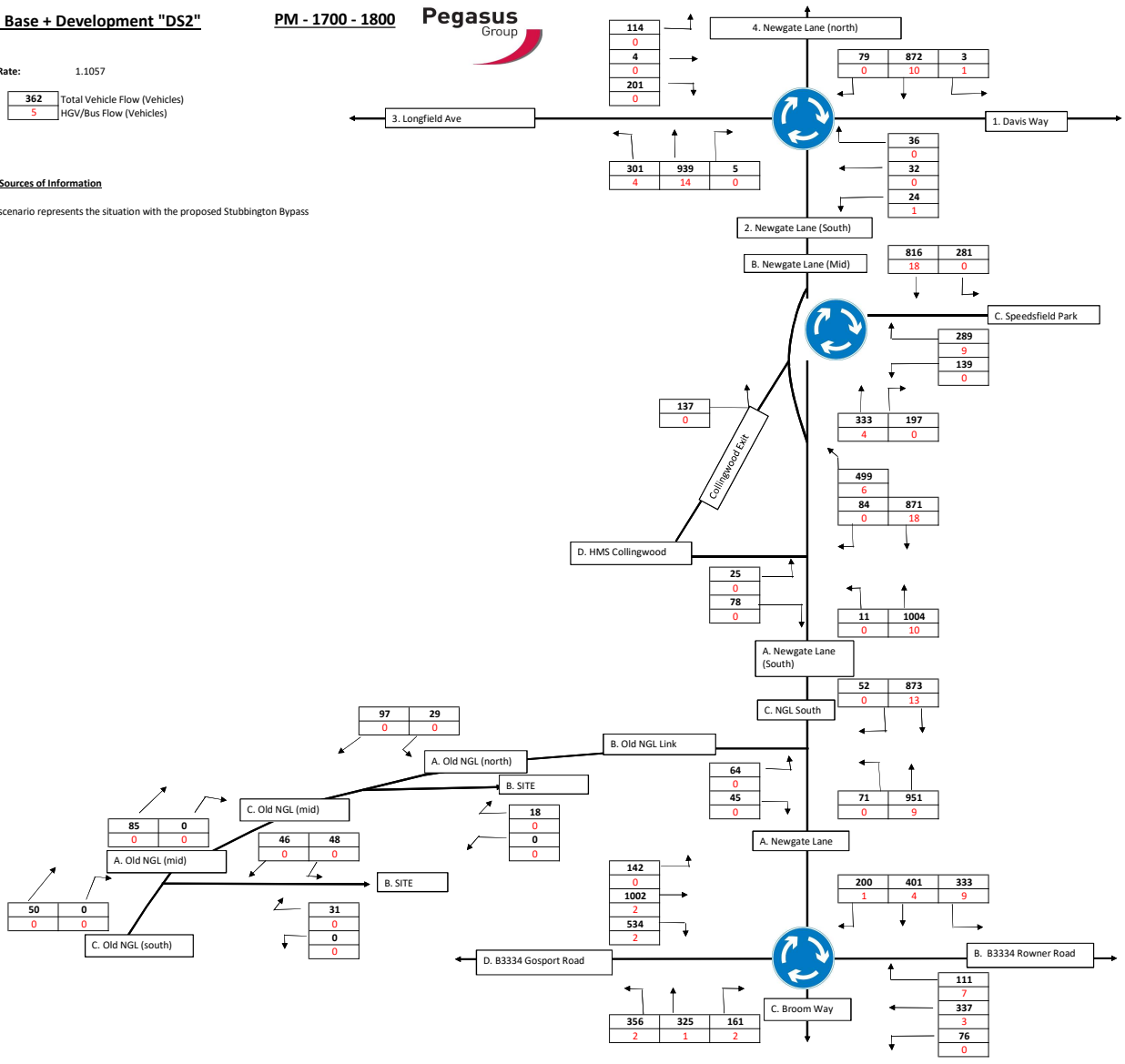
Growth Rate: 1.1057

Key:

362	Total Vehicle Flow (Vehicles)
5	HGV/Bus Flow (Vehicles)

Notes & Sources of Information

The DS2 scenario represents the situation with the proposed Stubbington Bypass



"DS1" HA2 Trip Distribution

AM - 0800 - 0900

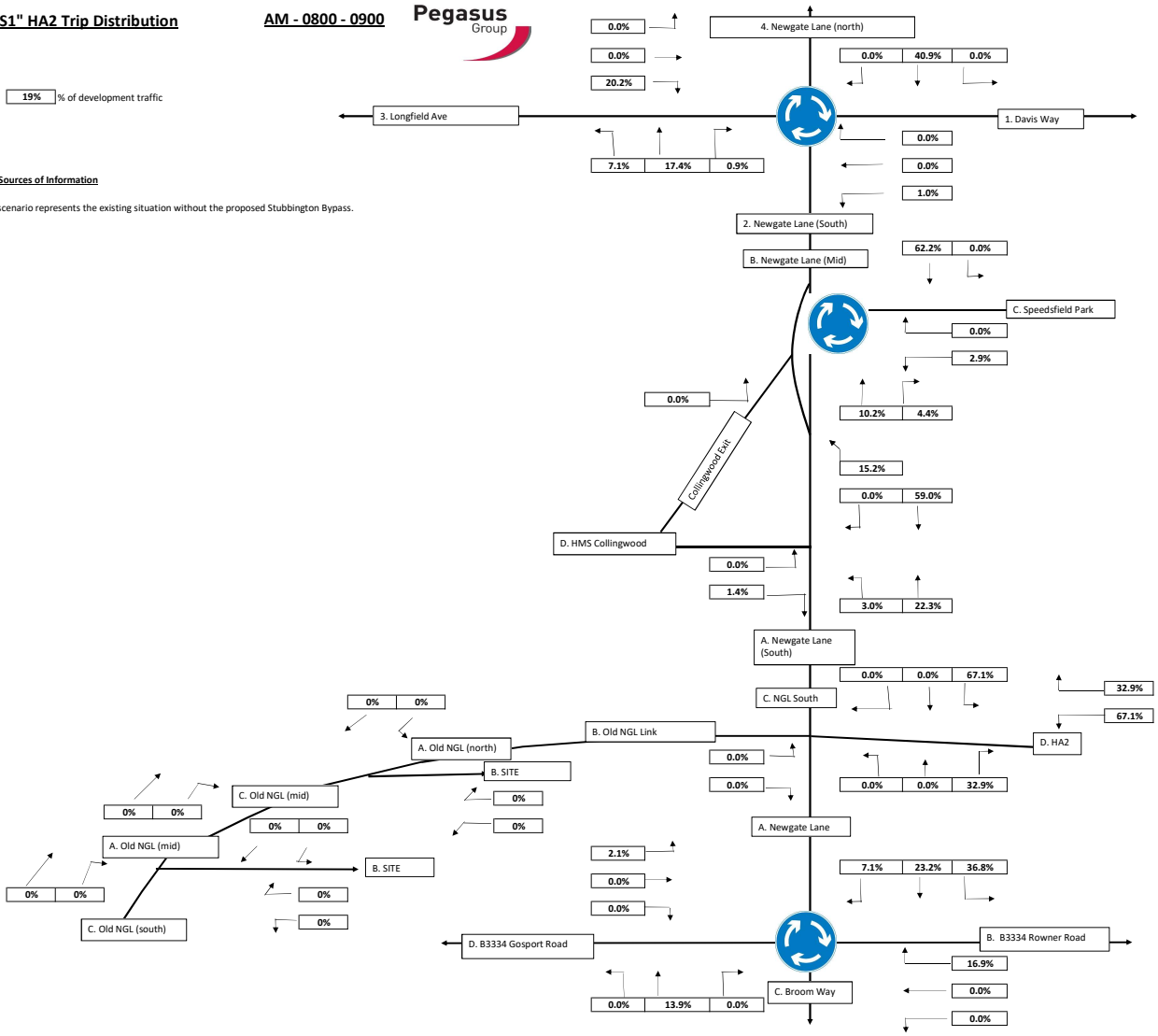
Pegasus Group

Key:

19% % of development traffic

Notes & Sources of Information

The DS1 scenario represents the existing situation without the proposed Stubbington Bypass.



"DS1" HA2 Trip Distribution

PM - 1700 - 1800

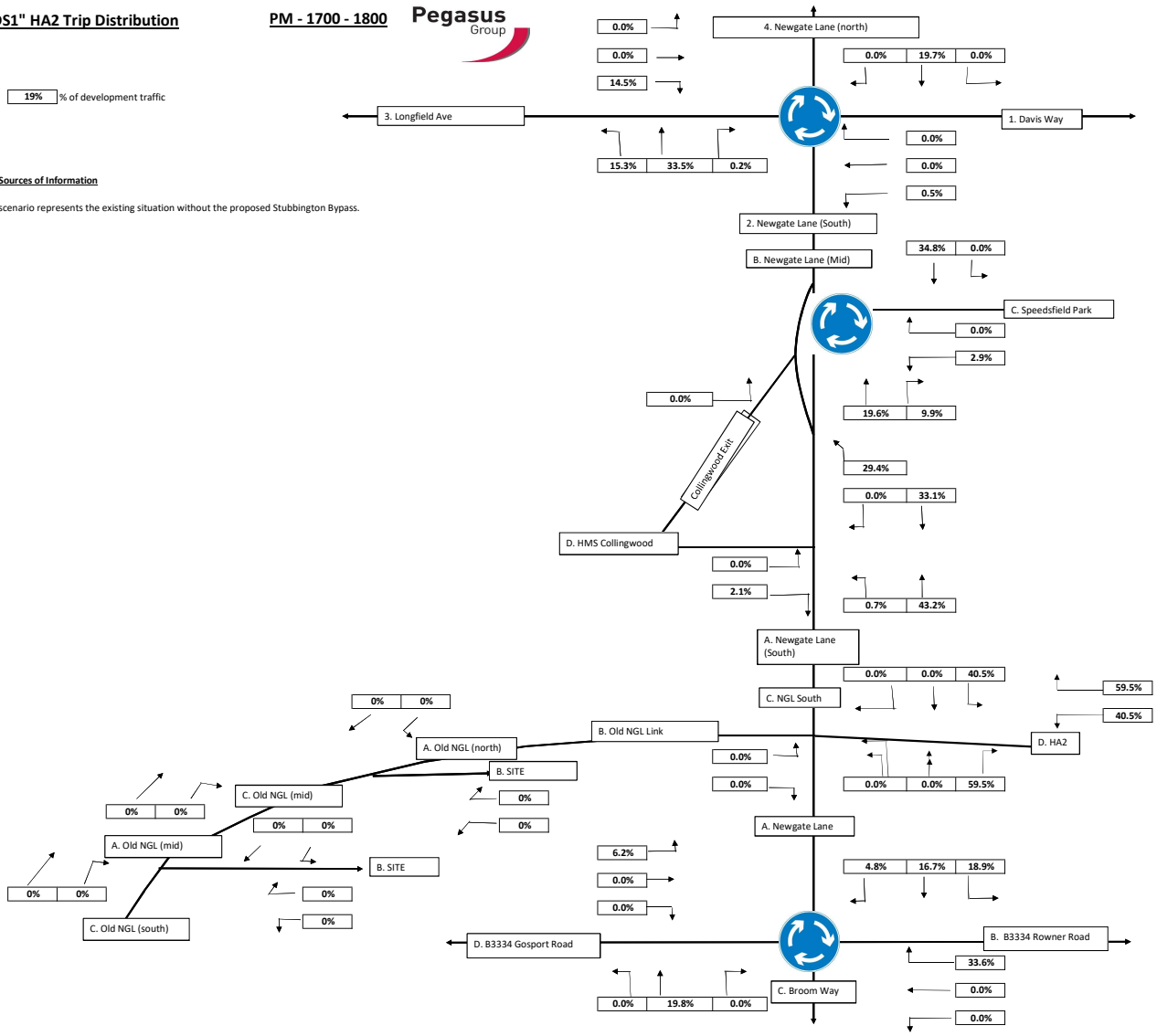
Pegasus Group

Key:

19% % of development traffic

Notes & Sources of Information

The DS1 scenario represents the existing situation without the proposed Stubbington Bypass.



"DS1" Development Trips

AM - 0800 - 0900

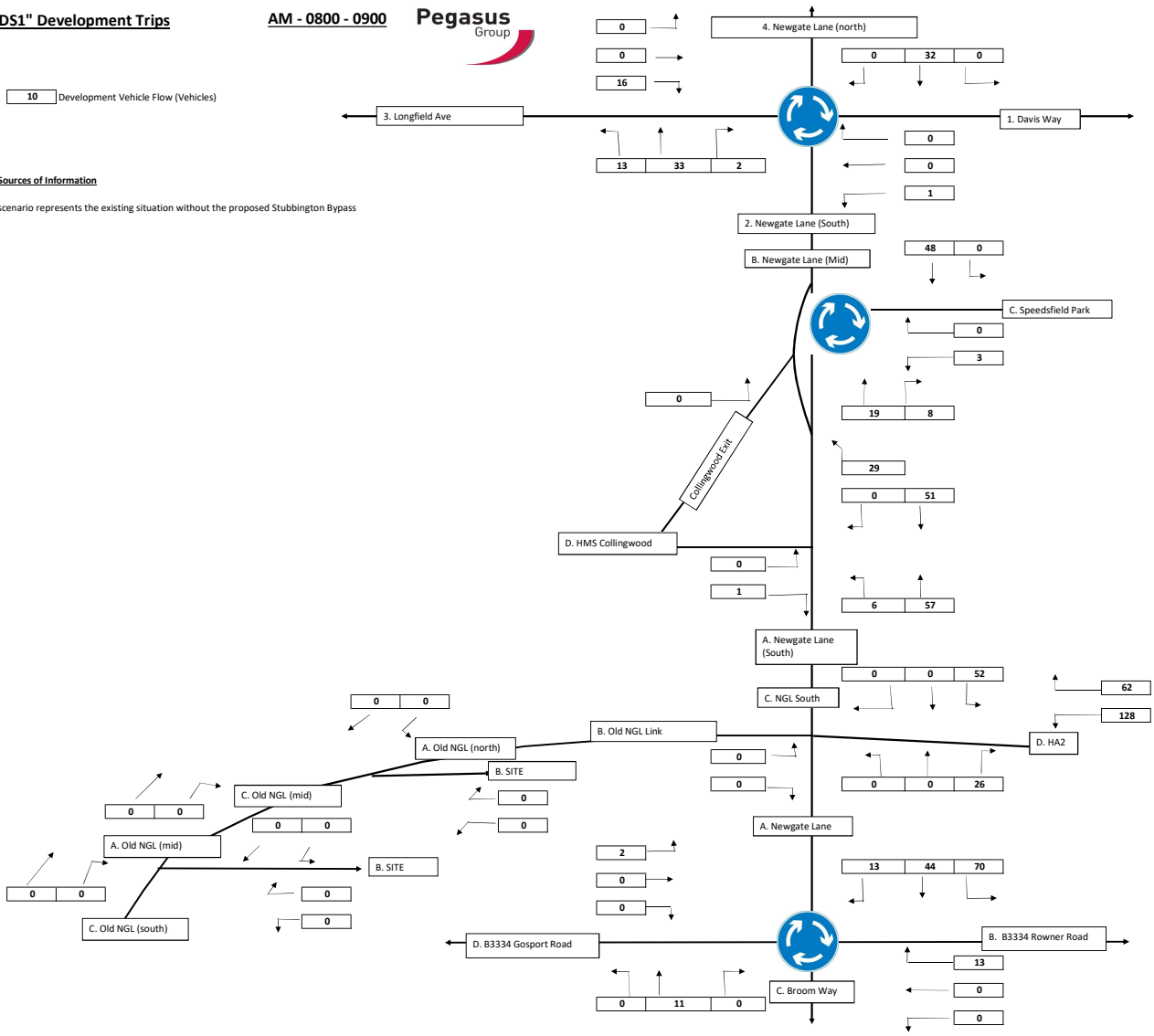
Pegasus Group

Key:

10 Development Vehicle Flow (Vehicles)

Notes & Sources of Information

The DS1 scenario represents the existing situation without the proposed Stubbington Bypass



"DS1" HA2 Trips

PM - 1700 - 1800

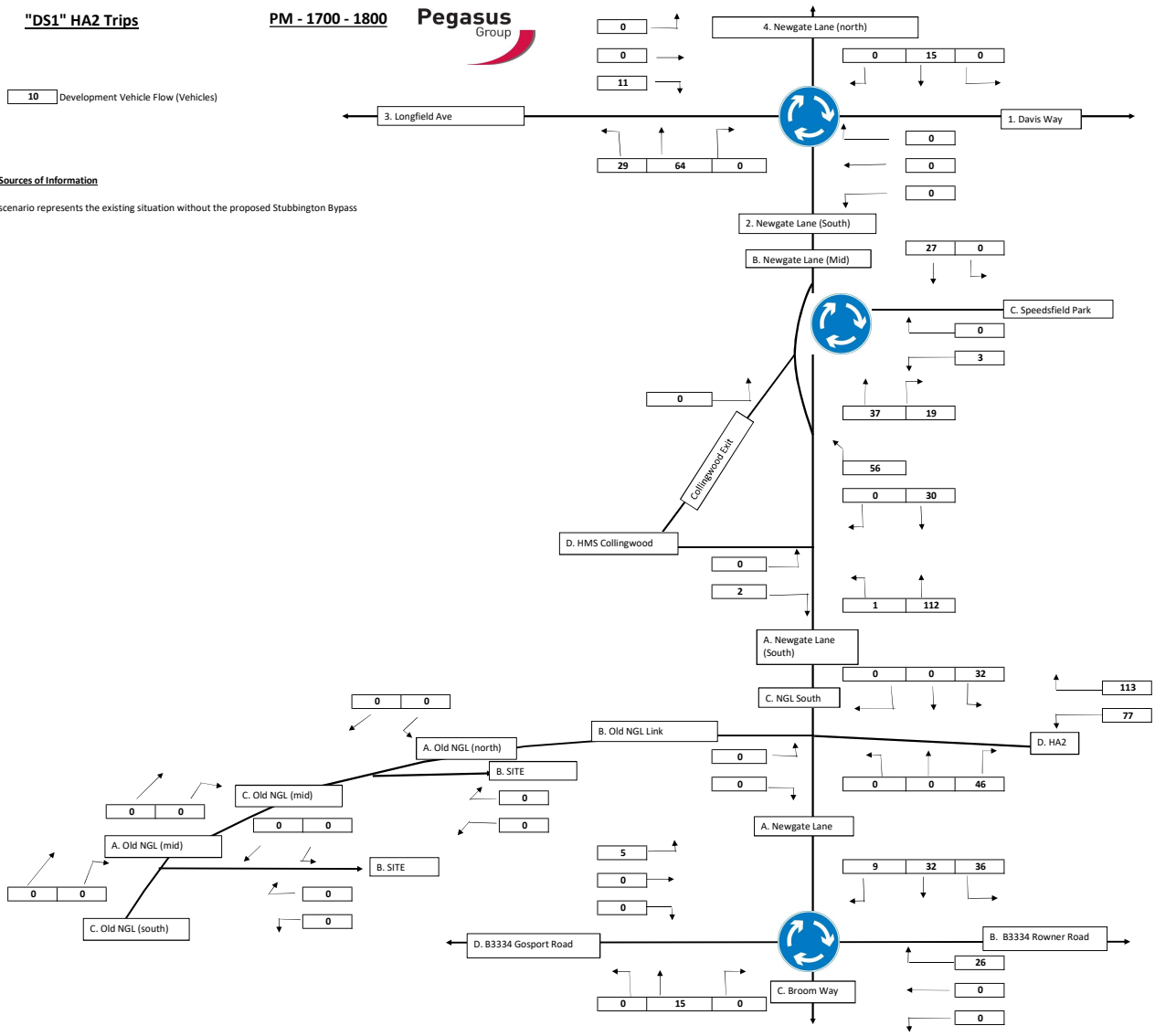
Pegasus Group

Key:

10 Development Vehicle Flow (Vehicles)

Notes & Sources of Information

The DS1 scenario represents the existing situation without the proposed Stubbington Bypass



2036 Base + Dev + HA2 "DS1"

AM - 0800 - 0900

Pegasus Group

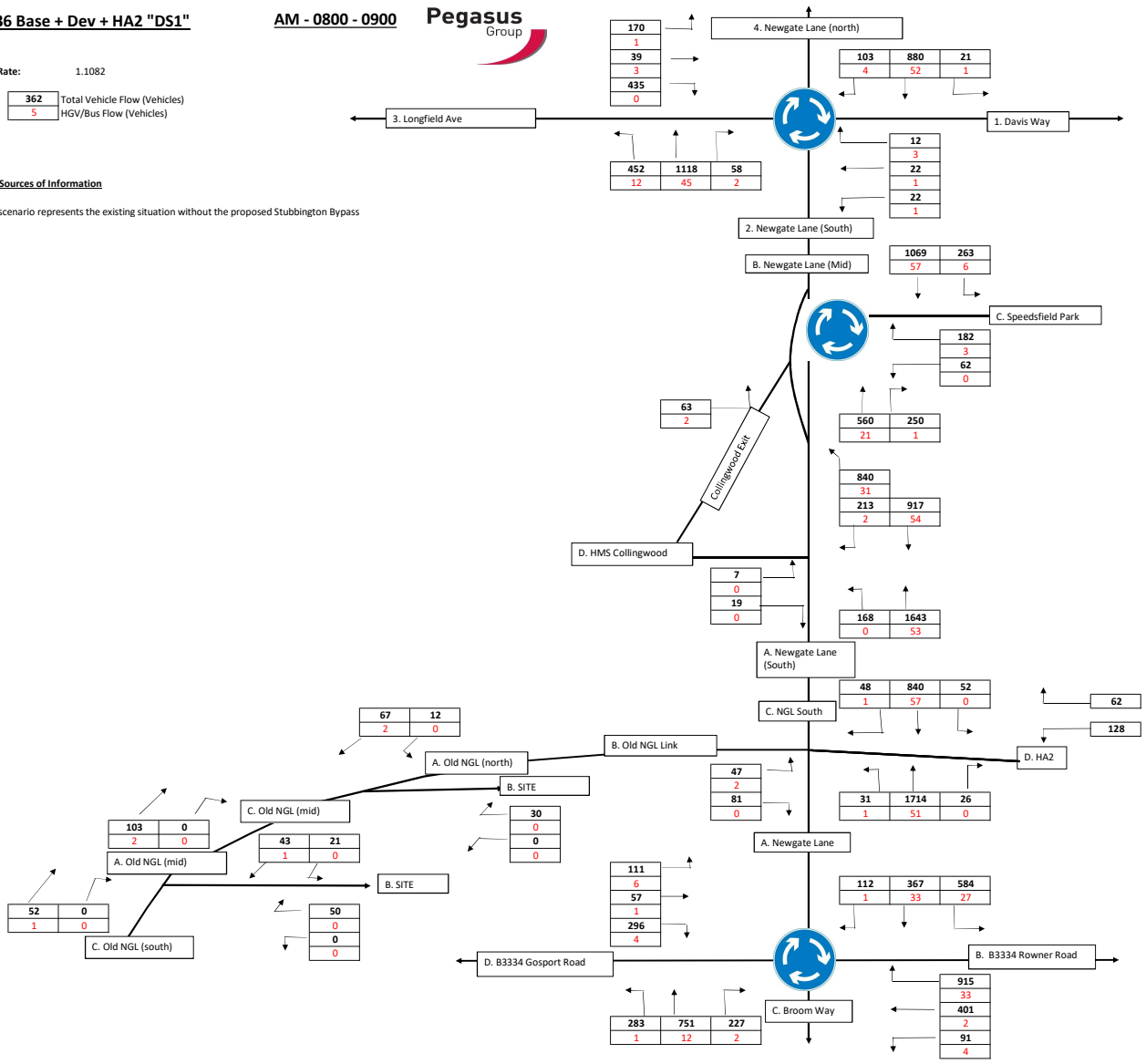
Growth Rate: 1.1082

Key:

362	Total Vehicle Flow (Vehicles)
5	HGV/Bus Flow (Vehicles)

Notes & Sources of Information

The DS1 scenario represents the existing situation without the proposed Stubbington Bypass



2036 Base + Dev + HA2 "DS1"

AM - 0800 - 0900

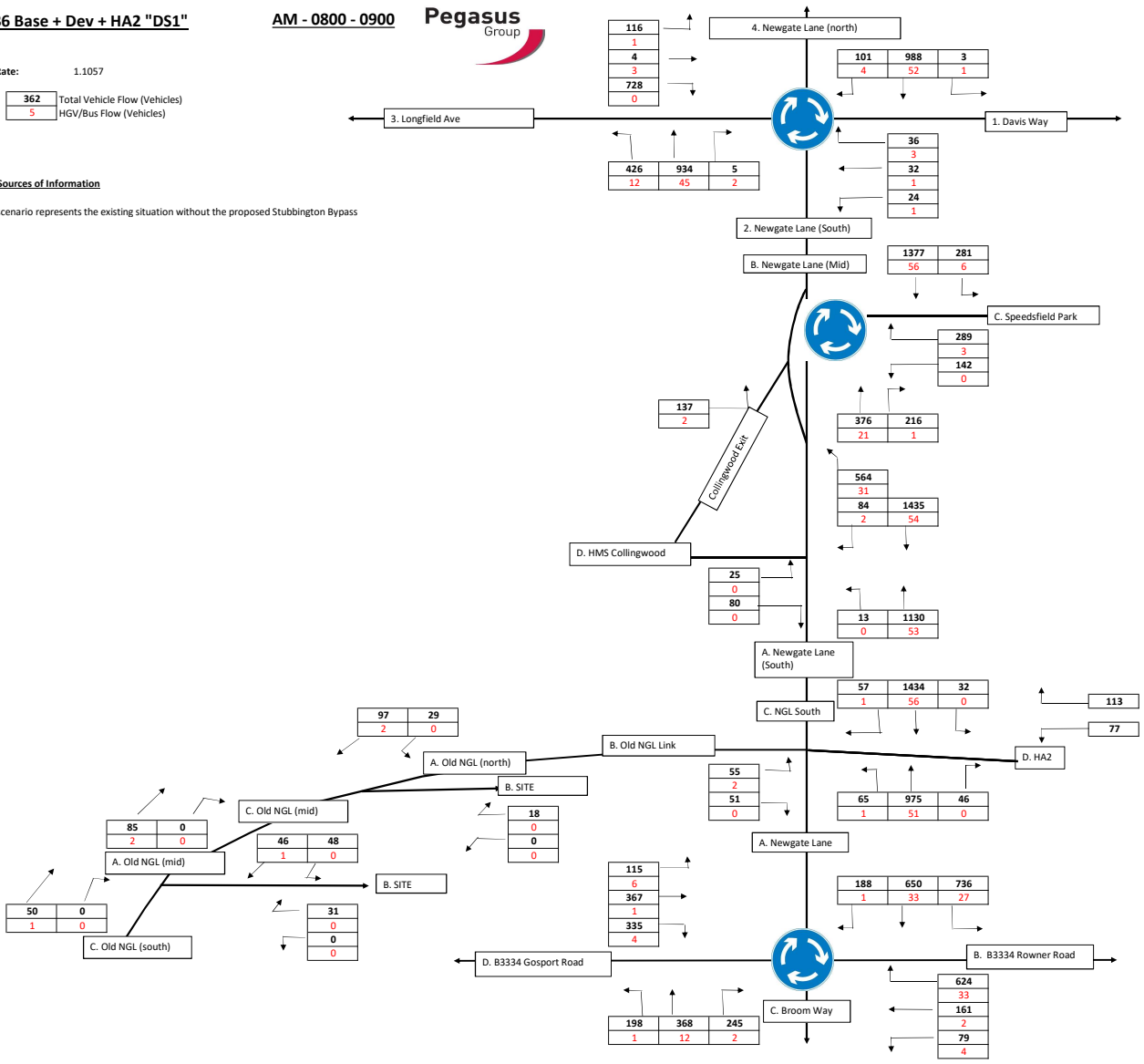
Growth Rate: 1.1057

Key:

362	Total Vehicle Flow (Vehicles)
5	HGV/Bus Flow (Vehicles)

Notes & Sources of Information

The DS1 scenario represents the existing situation without the proposed Stubbington Bypass



"DS2" HA2 Trip Distribution

AM - 0800 - 0900

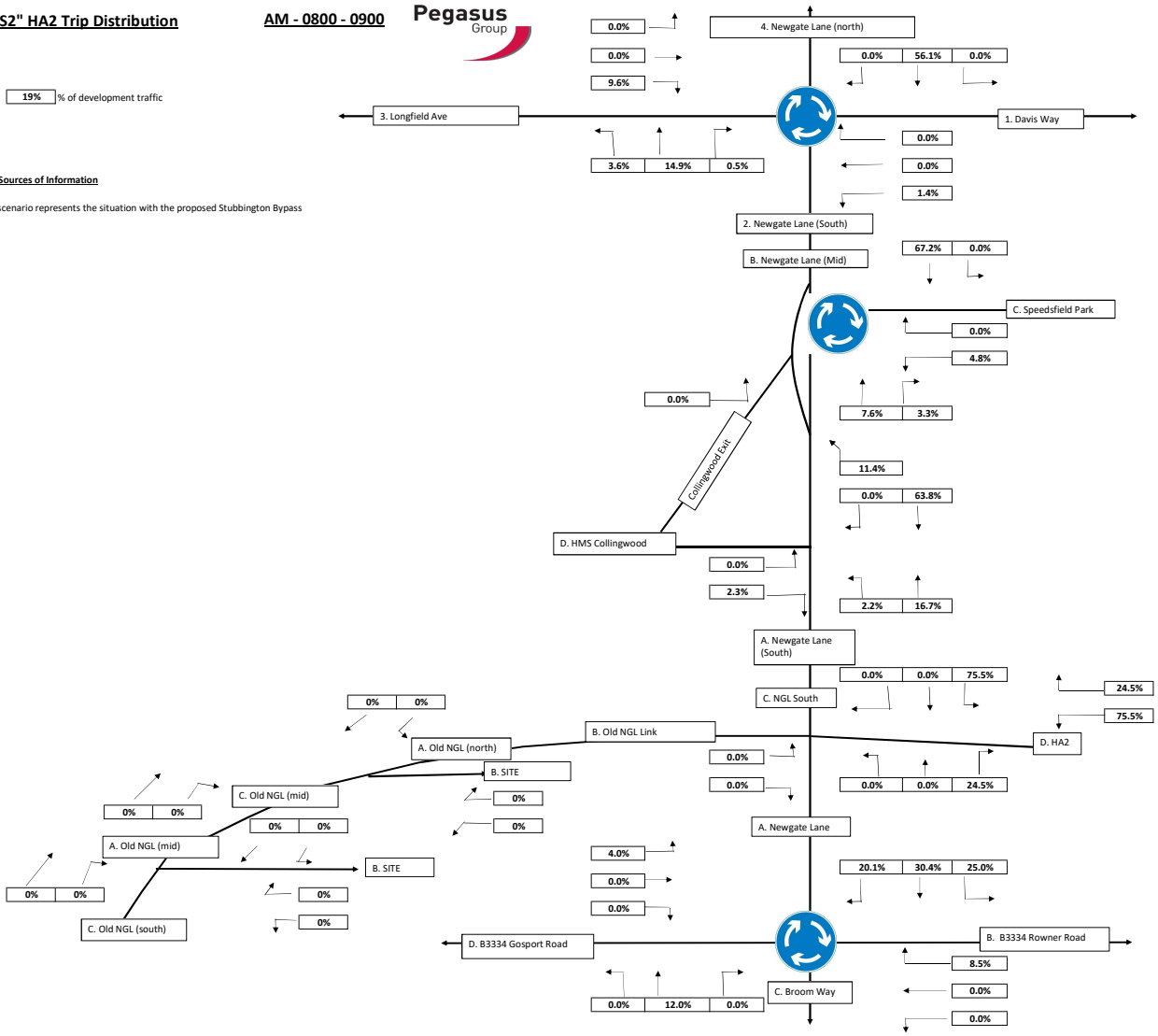
Pegasus Group

Key:

19% % of development traffic

Notes & Sources of Information

The DS2 scenario represents the situation with the proposed Stubbington Bypass



"DS2" HA2 Trip Distribution

PM - 1700 - 1800

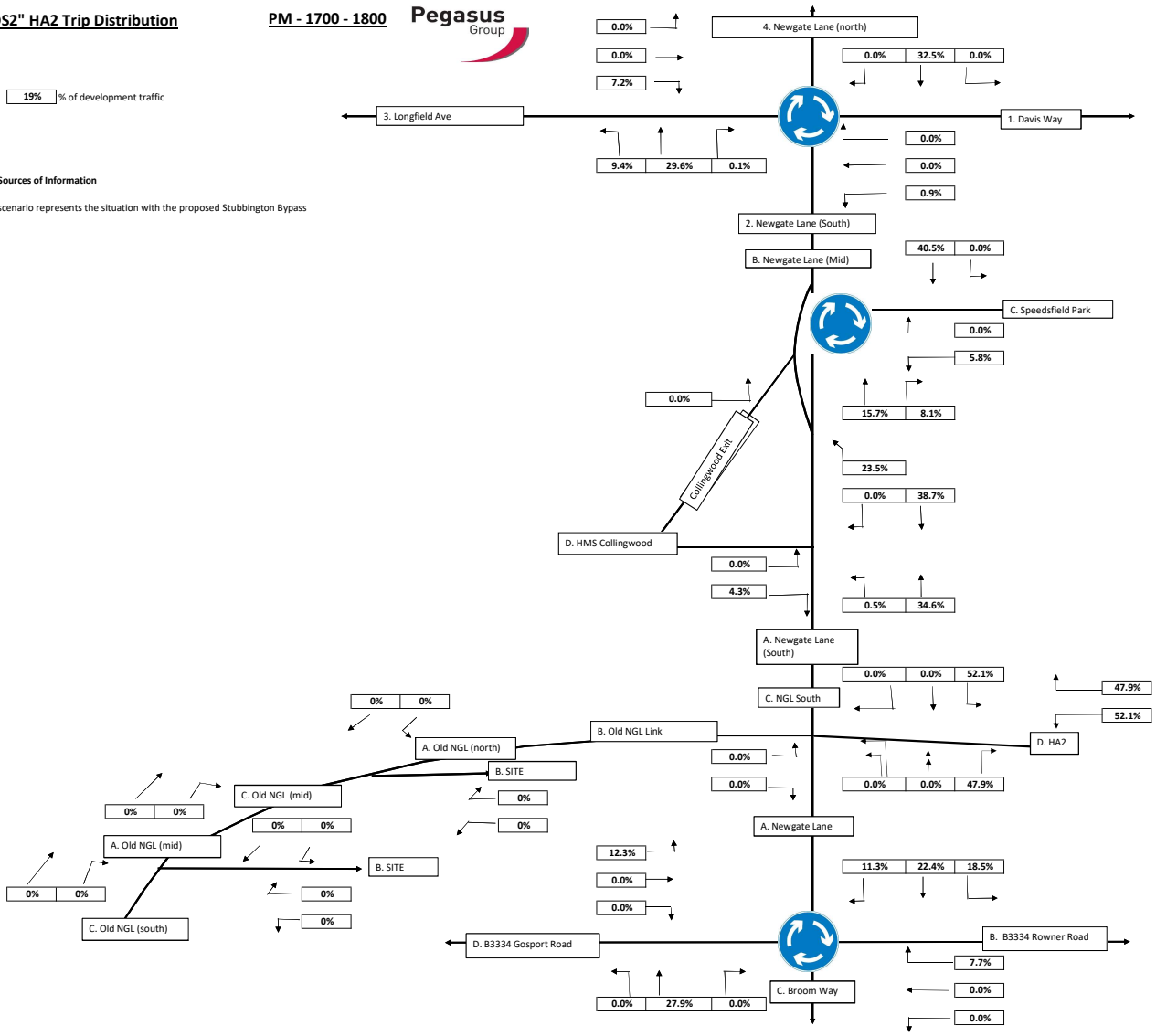
Pegasus Group

Key:

19% % of development traffic

Notes & Sources of Information

The DS2 scenario represents the situation with the proposed Stubbington Bypass



"DS2" HA2 Trips

AM - 0800 - 0900

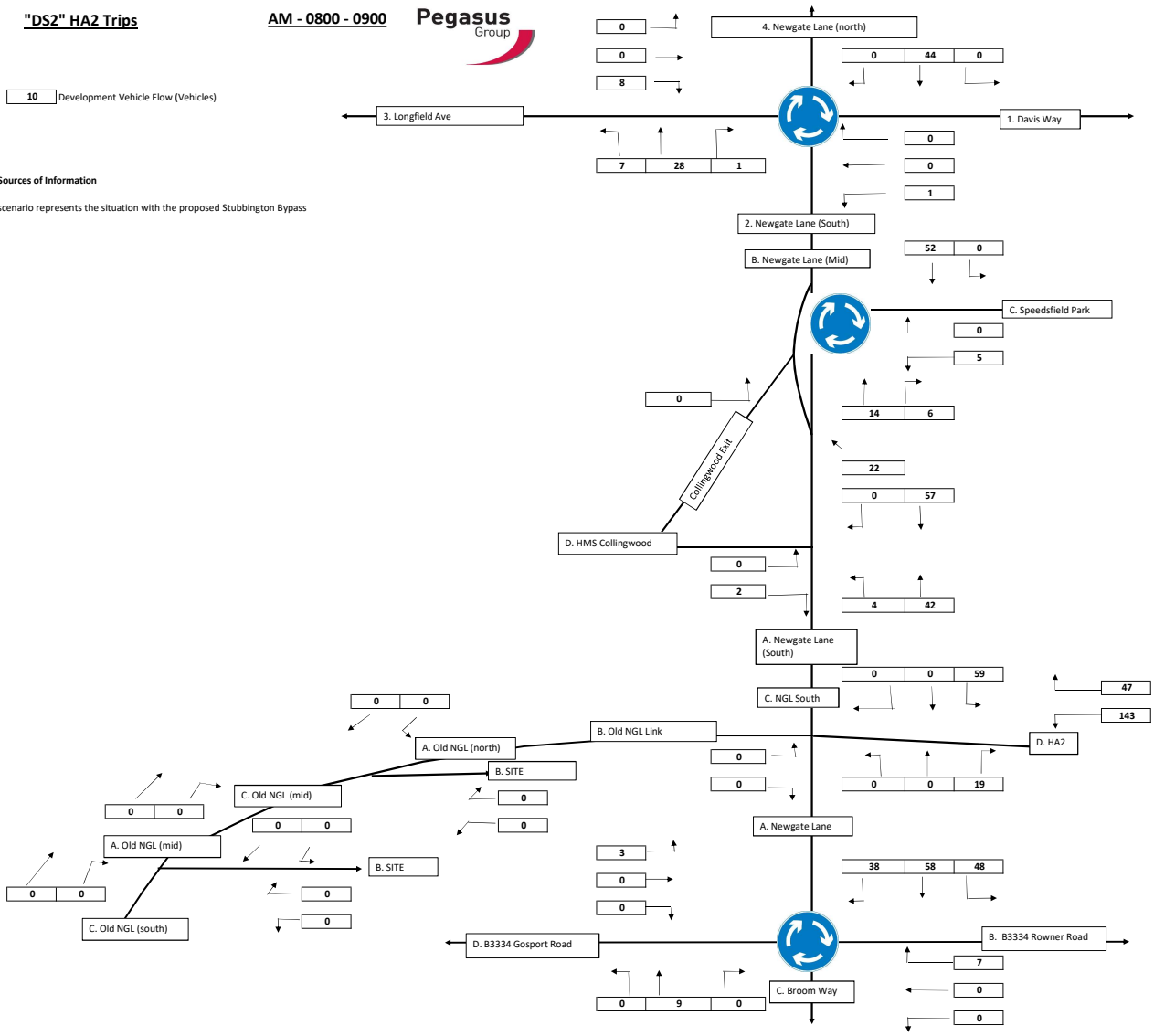
Pegasus Group

Key:

10 Development Vehicle Flow (Vehicles)

Notes & Sources of Information

The DS2 scenario represents the situation with the proposed Stubbington Bypass



"DS2" HA2 Trips

PM - 1700 - 1800

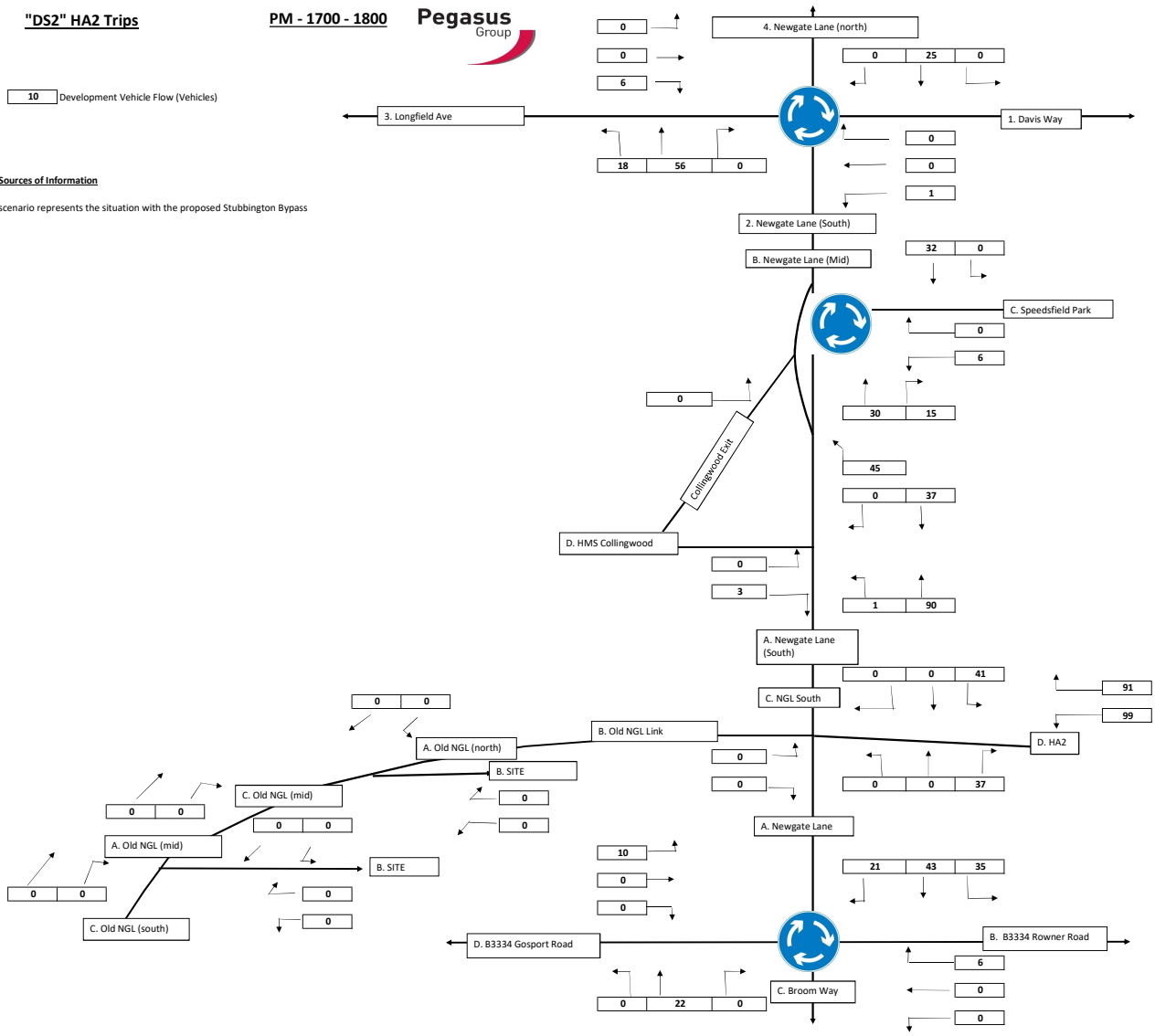
Pegasus Group

Key:

10 Development Vehicle Flow (Vehicles)

Notes & Sources of Information

The DS2 scenario represents the situation with the proposed Stubbington Bypass



2036 Base + Dev + HA2 "DS2"

AM - 0800 - 0900

Pegasus Group

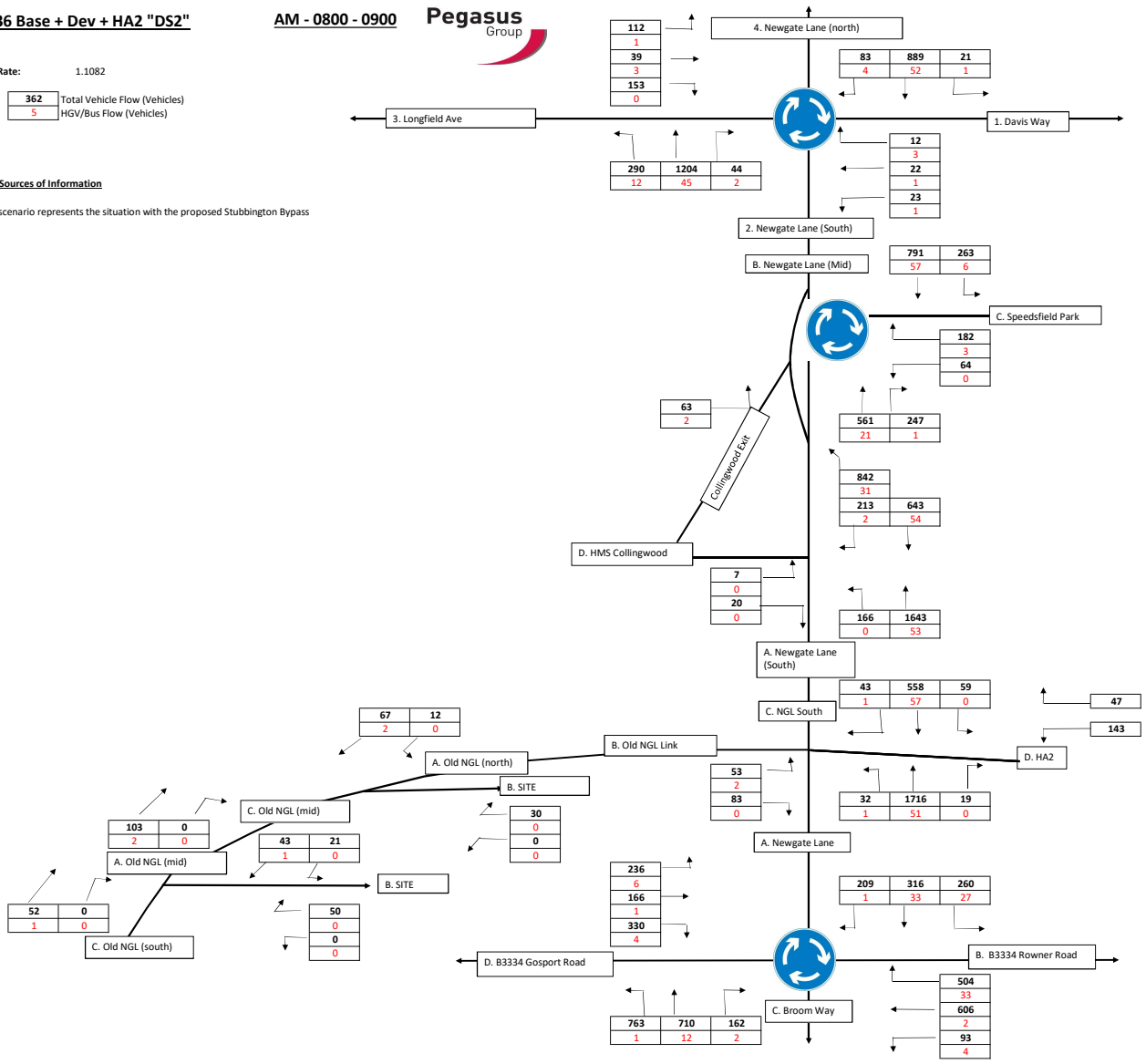
Growth Rate: 1.1082

Key:

362	Total Vehicle Flow (Vehicles)
5	HGV/Bus Flow (Vehicles)

Notes & Sources of Information

The DS2 scenario represents the situation with the proposed Stubbington Bypass



2036 Base + Dev + HA2 "DS2"

AM - 0800 - 0900

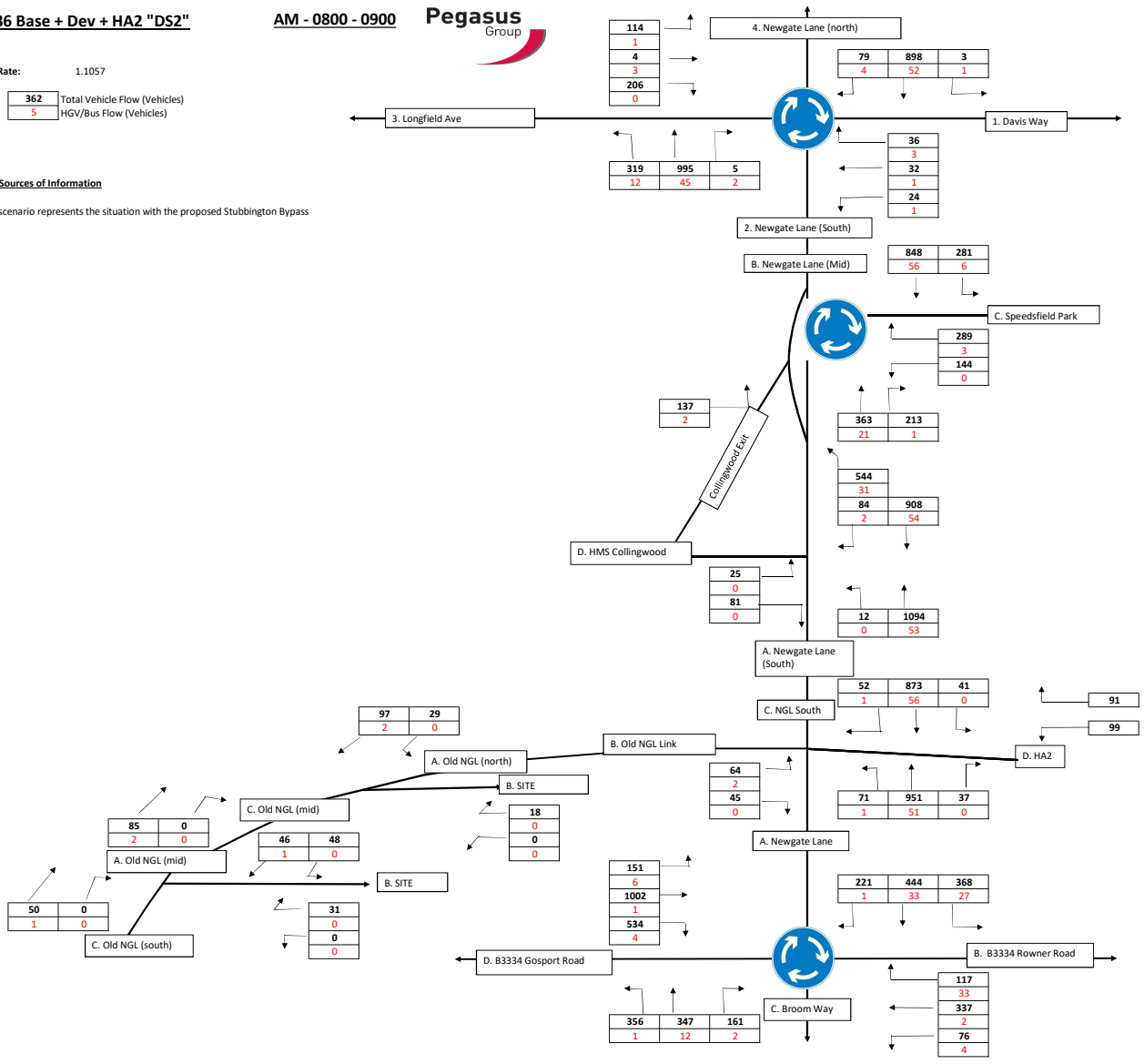
Growth Rate: 1.1057

Key:

362	Total Vehicle Flow (Vehicles)
5	HGV/Bus Flow (Vehicles)

Notes & Sources of Information

The DS2 scenario represents the situation with the proposed Stubbington Bypass



APPENDIX 13

2036 MODELLING OUTPUTS

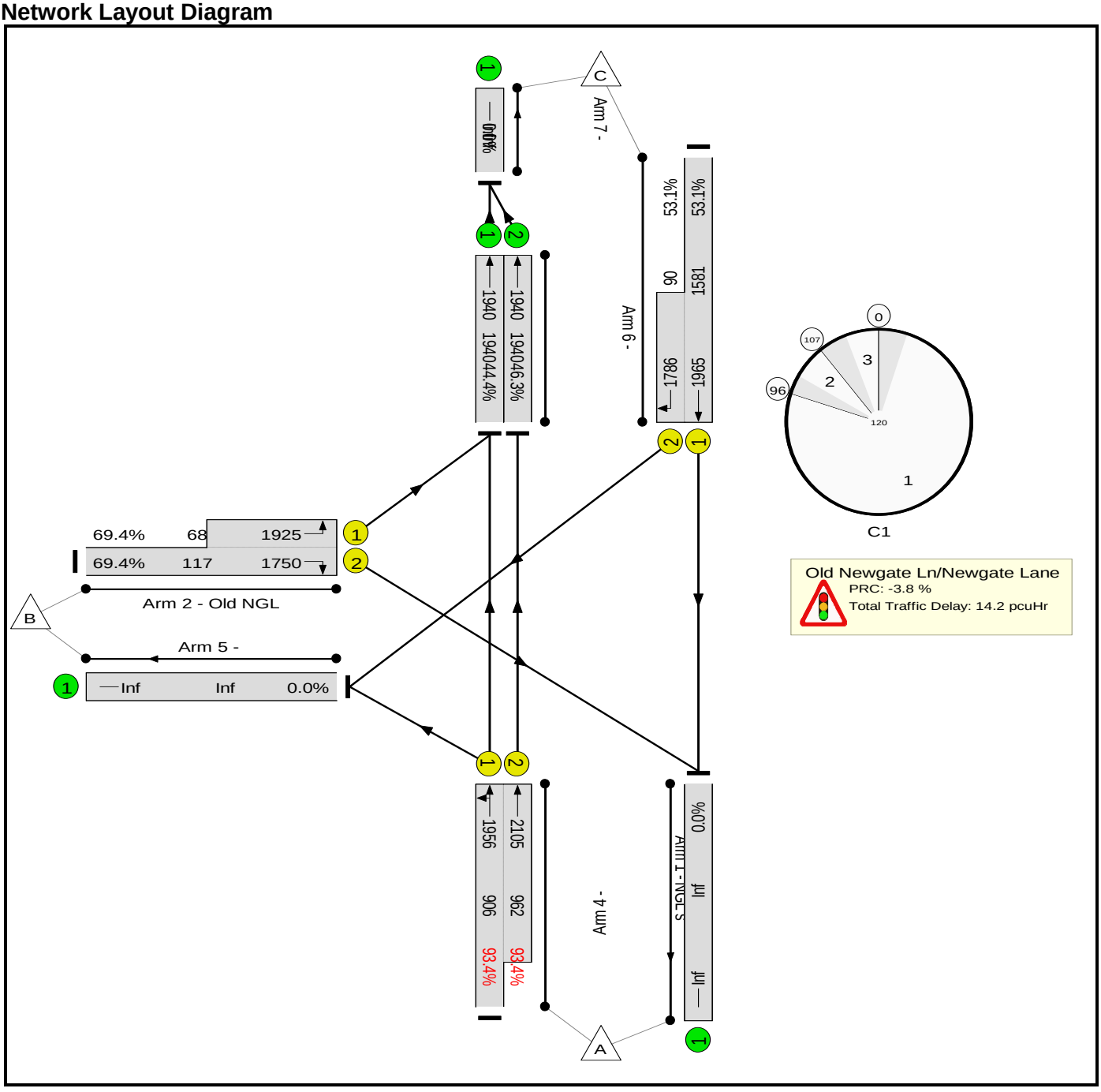
Basic Results Summary

User and Project Details

Project:	
Title:	
Location:	
Additional detail:	
File name:	NGL Sig jctn2036.lsg3x
Author:	
Company:	
Address:	

Scenario 1: '2036 Base + Dev AM DS1' (FG1: '2036 Base + Dev AM DS1', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Basic Results Summary

Network Results

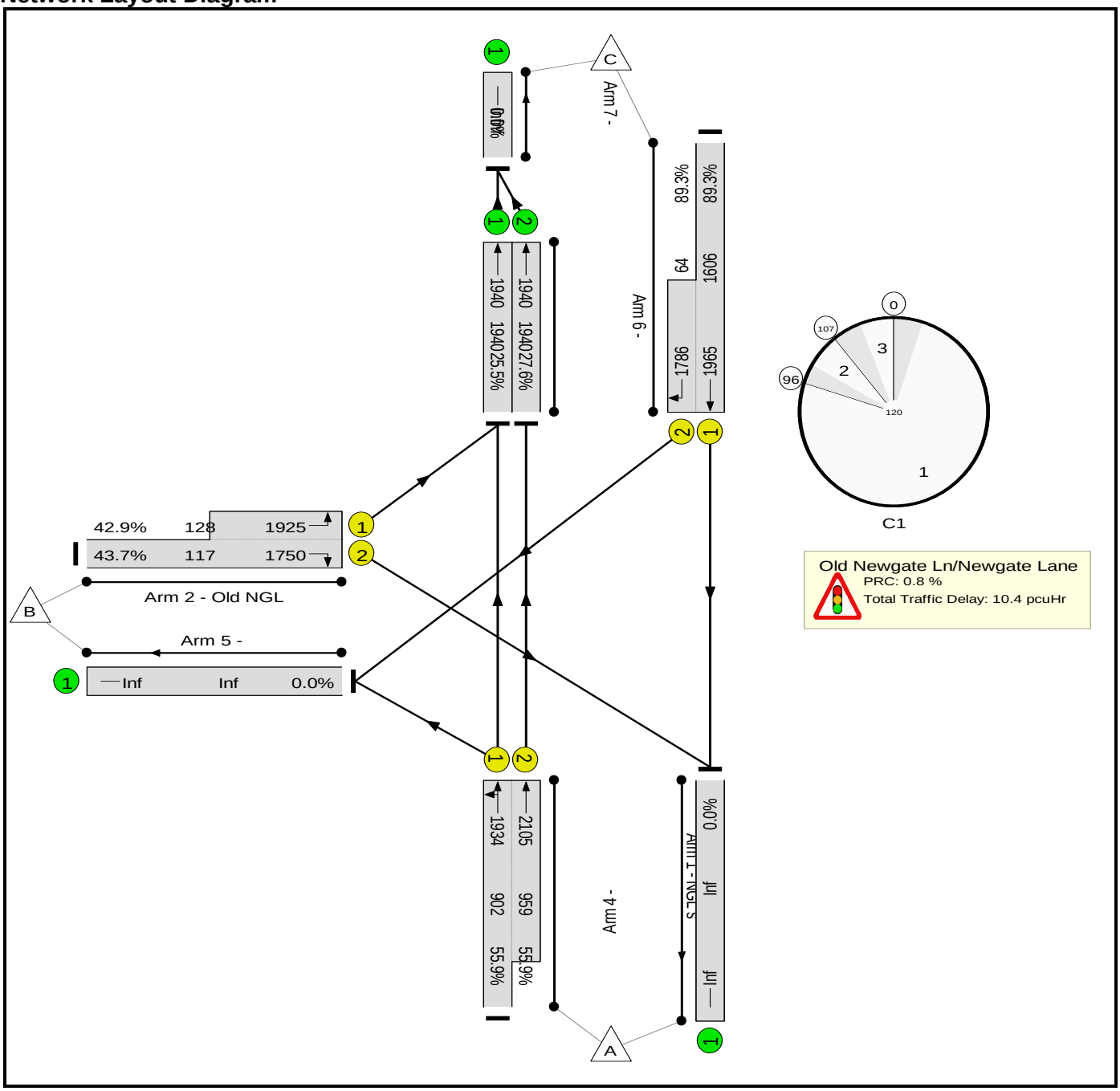
Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)	Back of Uniform Q At End of Red(pcu)
Network	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**93.4%**	**0**	**0**	**0**	**14.2**	**-**	**-**	**-**
Old Newgate Ln/Newgate Lane	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**93.4%**	**0**	**0**	**0**	**14.2**	**-**	**-**	**-**
1/1+1/2	NGL s Left Ahead	U	A		1	92	-	1745	1956:2105	906+962	93.4 : 93.4%	-	-	-	9.2	18.9	30.5	6.2
2/2+2/1	Old NGL Right Left	U	C		1	7	-	128	1750:1925	117+68	69.4 : 69.4%	-	-	-	3.0	85.1	3.7	2.5
3/1+3/2	NGL N Ahead Right	U	B		1	101	-	888	1965:1786	1581+90	53.1 : 53.1%	-	-	-	1.1	4.6	8.1	3.7
6/1	Ahead	U	-		-	-	-	862	1940	1940	44.4%	-	-	-	0.4	1.7	0.4	-
6/2	Ahead	U	-		-	-	-	899	1940	1940	46.3%	-	-	-	0.4	1.7	4.8	-

C1 PRC for Signalled Lanes (%): -3.8 Total Delay for Signalled Lanes (pcuHr): 13.34 Cycle Time (s): 120
PRC Over All Lanes (%): -3.8 Total Delay Over All Lanes(pcuHr): 14.17

Basic Results Summary

Scenario 2: '2036 Base + Dev PM DS1' (FG2: '2036 Base + Dev PM DS1', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

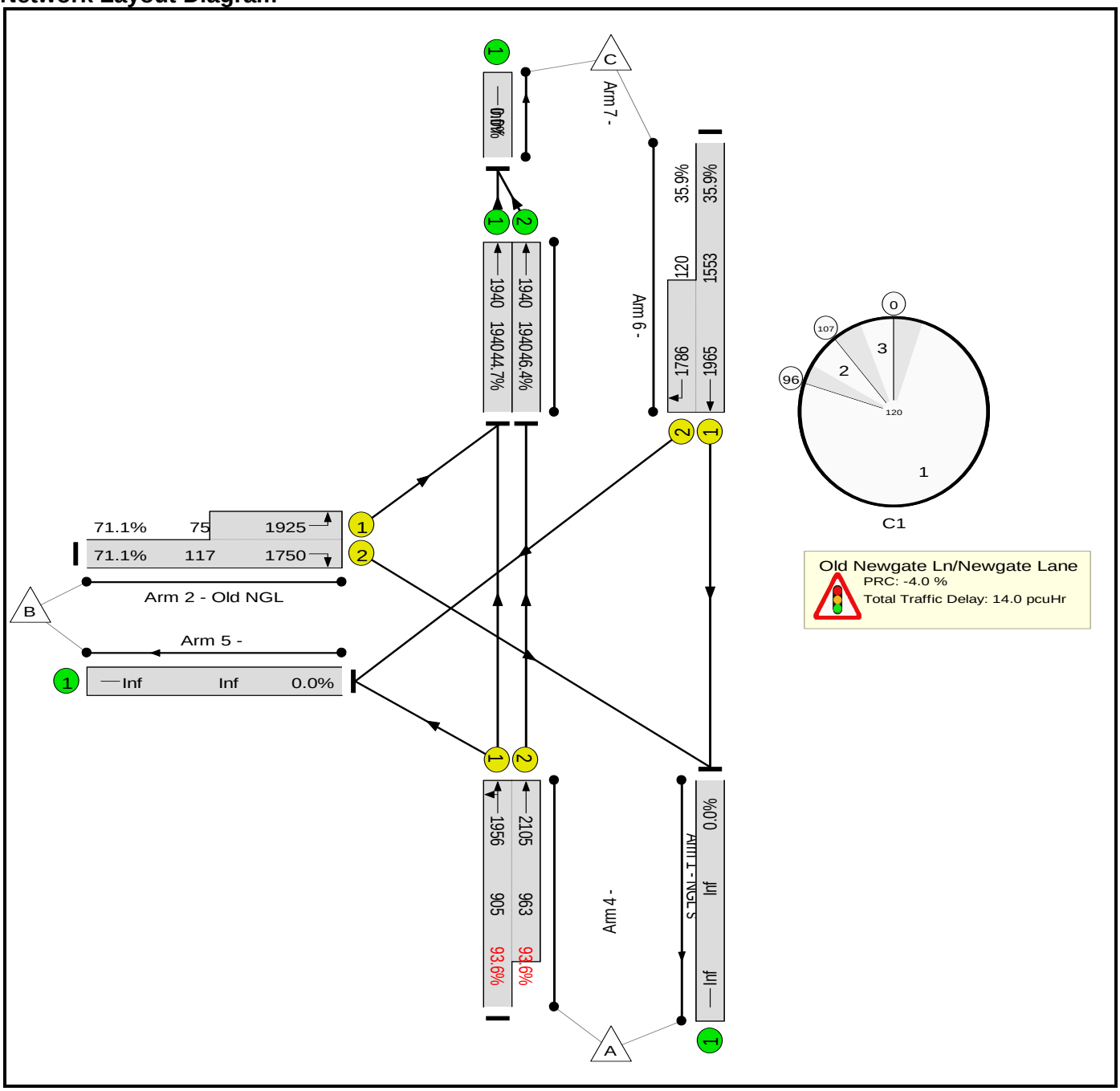
Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)	Back of Uniform Q At End of Red(pcu)
Network	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**89.3%**	**0**	**0**	**0**	**10.4**	**-**	**-**	**-**
Old Newgate Ln/Newgate Lane	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**89.3%**	**0**	**0**	**0**	**10.4**	**-**	**-**	**-**
1/1+1/2	NGL s Left Ahead	U	A		1	92	-	1040	1934:2105	902+959	55.9 : 55.9%	-	-	-	1.8	6.3	6.0	3.7
2/2+2/1	Old NGL Right Left	U	C		1	7	-	106	1750:1925	117+128	43.7 : 42.9%	-	-	-	2.0	66.7	2.1	1.7
3/1+3/2	NGL N Ahead Right	U	B		1	101	-	1491	1965:1786	1606+64	89.3 : 89.3%	-	-	-	6.2	15.0	33.9	6.4
6/1	Ahead	U	-		-	-	-	494	1940	1940	25.5%	-	-	-	0.2	1.2	0.2	-
6/2	Ahead	U	-		-	-	-	536	1940	1940	27.6%	-	-	-	0.2	1.3	0.2	-

C1 PRC for Signalled Lanes (%): 0.8 Total Delay for Signalled Lanes (pcuHr): 10.00 Cycle Time (s): 120
PRC Over All Lanes (%): 0.8 Total Delay Over All Lanes(pcuHr): 10.37

Basic Results Summary

Scenario 3: '2036 Base + Dev AM DS2' (FG3: '2036 Base + Dev AM DS2', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

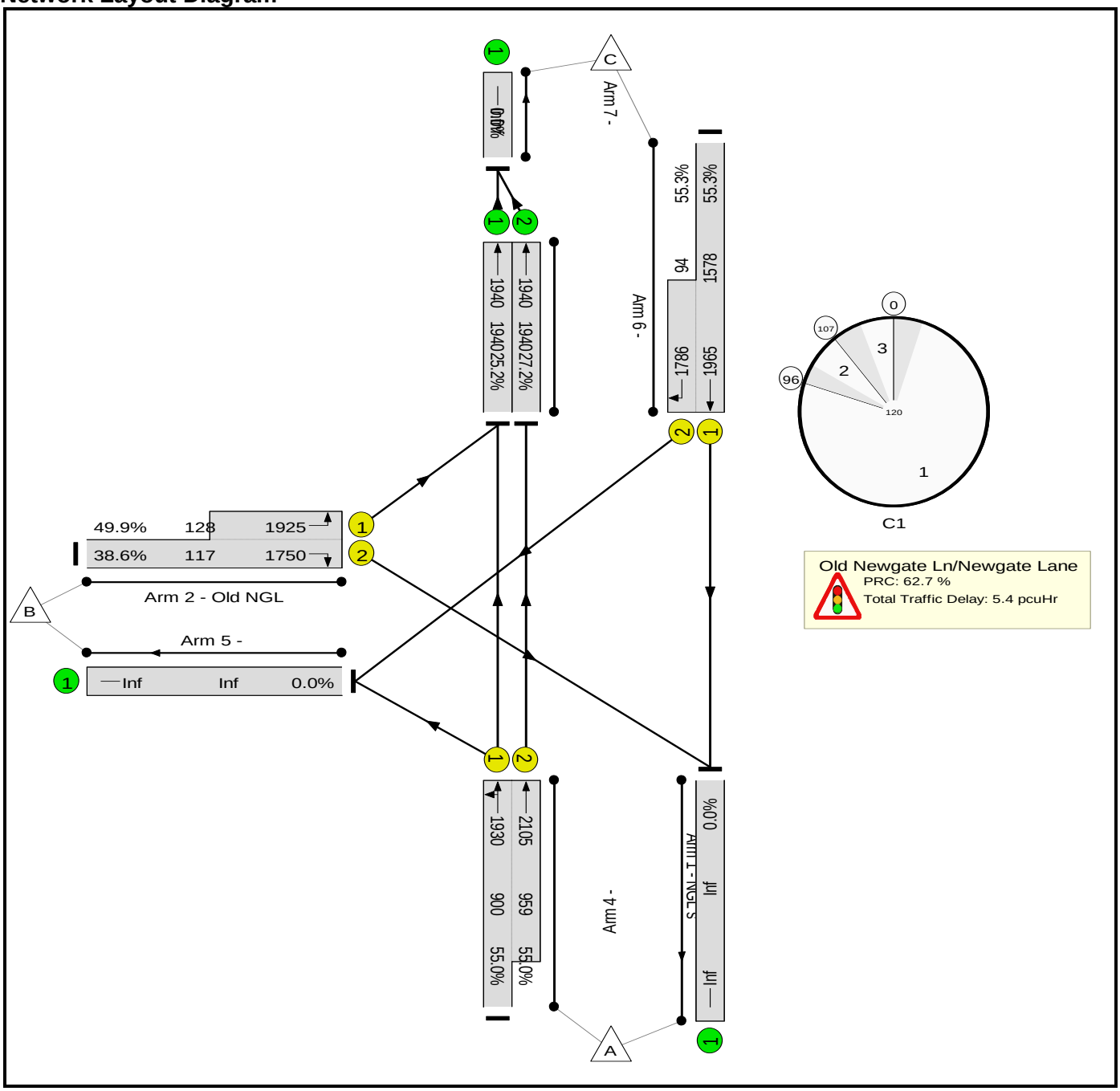
Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)	Back of Uniform Q At End of Red(pcu)
Network	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**93.6%**	**0**	**0**	**0**	**14.0**	**-**	**-**	**-**
Old Newgate Ln/Newgate Lane	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**93.6%**	**0**	**0**	**0**	**14.0**	**-**	**-**	**-**
1/1+1/2	NGL s Left Ahead	U	A		1	92	-	1748	1956:2105	905+963	93.6 : 93.6%	-	-	-	9.3	19.3	31.1	6.3
2/2+2/1	Old NGL Right Left	U	C		1	7	-	136	1750:1925	117+75	71.1 : 71.1%	-	-	-	3.2	85.7	3.9	2.5
3/1+3/2	NGL N Ahead Right	U	B		1	101	-	601	1965:1786	1553+120	35.9 : 35.9%	-	-	-	0.6	3.5	4.2	2.5
6/1	Ahead	U	-		-	-	-	868	1940	1940	44.7%	-	-	-	0.4	1.7	0.4	-
6/2	Ahead	U	-		-	-	-	901	1940	1940	46.4%	-	-	-	0.4	1.7	4.8	-

C1 PRC for Signalled Lanes (%): -4.0 Total Delay for Signalled Lanes (pcuHr): 13.18 Cycle Time (s): 120
PRC Over All Lanes (%): -4.0 Total Delay Over All Lanes(pcuHr): 14.02

Basic Results Summary

Scenario 4: '2036 Base + Dev PM DS2' (FG4: '2036 Base + Dev PM DS2', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

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)	Mean Max Queue (pcu)	Back of Uniform Q At End of Red(pcu)
Network	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**55.3%**	**0**	**0**	**0**	**5.4**	**-**	**-**	**-**
Old Newgate Ln/Newgate Lane	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**55.3%**	**0**	**0**	**0**	**5.4**	**-**	**-**	**-**
1/1+1/2	NGL s Left Ahead	U	A		1	92	-	1022	1930:2105	900+959	55.0 : 55.0%	-	-	-	1.8	6.2	5.9	3.7
2/2+2/1	Old NGL Right Left	U	C		1	7	-	109	1750:1925	117+128	38.6 : 49.9%	-	-	-	2.0	67.1	2.4	2.0
3/1+3/2	NGL N Ahead Right	U	B		1	101	-	925	1965:1786	1578+94	55.3 : 55.3%	-	-	-	1.2	4.8	8.6	3.9
6/1	Ahead	U	-		-	-	-	488	1940	1940	25.2%	-	-	-	0.2	1.2	0.2	-
6/2	Ahead	U	-		-	-	-	527	1940	1940	27.2%	-	-	-	0.2	1.3	0.2	-

C1 PRC for Signalled Lanes (%): 62.7 Total Delay for Signalled Lanes (pcuHr): 5.03 Cycle Time (s): 120
PRC Over All Lanes (%): 62.7 Total Delay Over All Lanes(pcuHr): 5.38