

Full Input Data And Results

Lane Saturation Flows

Junction: A611 Derby Rd/A608 Annesley Rd Gyratory								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A611 (N))	3.50	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1965	1965
1/2 (A611 (N))	3.50	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1965	1965
1/3 (A611 (N))	3.50	0.00	Y	Arm 3 Ahead	Inf	100.0 %	1965	1965
1/4 (A611 (N))	3.50	0.00	Y	Arm 3 Ahead	Inf	100.0 %	1965	1965
2/1 (Circ (N))	4.00	0.00	Y	Arm 4 Right	Inf	100.0 %	2015	2015
2/2 (Circ (N))	4.00	0.00	Y	Arm 3 Right	Inf	0.0 %	2015	2015
				Arm 4 Right	Inf	100.0 %		
3/1	4.00	0.00	Y	Arm 5 Right	Inf	100.0 %	2015	2015
3/2	4.00	0.00	Y	Arm 5 Right	Inf	100.0 %	2015	2015
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1 (Circ (S))	4.00	0.00	Y	Arm 7 Ahead	Inf	100.0 %	2015	2015
5/2 (Circ (S))	4.00	0.00	Y	Arm 7 Ahead	Inf	100.0 %	2015	2015
				Arm 8 Right	Inf	0.0 %		
6/1 (A611 (S))	3.50	0.00	Y	Arm 7 Left	Inf	100.0 %	1965	1965
6/2 (A611 (S))	3.50	0.00	Y	Arm 7 Left	Inf	100.0 %	1965	1965
6/3 (A611 (S))	3.50	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1965	1965
6/4 (A611 (S))	3.50	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1965	1965
7/1	Infinite Saturation Flow						Inf	Inf
7/2	Infinite Saturation Flow						Inf	Inf
8/1 (Circ (W))	4.00	0.00	Y	Arm 10 Ahead	Inf	100.0 %	2015	2015
8/2 (Circ (W))	4.00	0.00	Y	Arm 2 Right	Inf	0.0 %	2015	2015
				Arm 10 Ahead	Inf	100.0 %		
9/1 (A608 Annesley Rd)	3.50	0.00	Y	Arm 10 Left	Inf	100.0 %	1965	1965
9/2 (A608 Annesley Rd)	3.50	0.00	Y	Arm 10 Left	Inf	100.0 %	1965	1965
9/3 (A608 Annesley Rd)	3.50	0.00	N	Arm 2 Ahead	Inf	100.0 %	2105	2105
9/4 (A608 Annesley Rd)	3.50	0.00	Y	Arm 2 Ahead	Inf	100.0 %	1965	1965
10/1	Infinite Saturation Flow						Inf	Inf

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10/2	Infinite Saturation Flow	Inf	Inf
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Scenario 6: '2032 WD PM' (FG6: '2032 WD PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired**Desired Flow :**

	Destination				
		A	B	C	Tot.
Origin	A	7	688	309	1004
	B	1240	10	812	2062
	C	413	748	0	1161
	Tot.	1660	1446	1121	4227

Traffic Lane Flows

Lane	Scenario 6: 2032 WD PM
Junction: A611 Derby Rd/A608 Annesley Rd Gyratory	
1/1 (short)	207
1/2 (with short)	413(In) 206(Out)
1/3 (with short)	748(In) 374(Out)
1/4 (short)	374
2/1	646
2/2	594
3/1	374
3/2	374
4/1	853
4/2	800
5/1	374
5/2	374
6/1 (short)	344
6/2 (with short)	688(In) 344(Out)
6/3	155
6/4	154
7/1	718
7/2	718
8/1	155
8/2	154
9/1 (short)	406
9/2 (with short)	812(In) 406(Out)
9/3 (with short)	1240(In) 646(Out)
9/4 (short)	594
10/1	561
10/2	560

Full Input Data And Results

Lane Saturation Flows

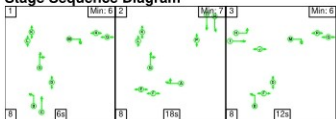
Junction: A611 Derby Rd/A608 Annesley Rd Gyratory								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A611 (N))	3.50	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1965	1965
1/2 (A611 (N))	3.50	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1965	1965
1/3 (A611 (N))	3.50	0.00	Y	Arm 3 Ahead	Inf	100.0 %	1965	1965
1/4 (A611 (N))	3.50	0.00	Y	Arm 3 Ahead	Inf	100.0 %	1965	1965
2/1 (Circ (N))	4.00	0.00	Y	Arm 4 Right	Inf	100.0 %	2015	2015
2/2 (Circ (N))	4.00	0.00	Y	Arm 3 Right	Inf	0.0 %	2015	2015
				Arm 4 Right	Inf	100.0 %		
3/1	4.00	0.00	Y	Arm 5 Right	Inf	100.0 %	2015	2015
3/2	4.00	0.00	Y	Arm 5 Right	Inf	100.0 %	2015	2015
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1 (Circ (S))	4.00	0.00	Y	Arm 7 Ahead	Inf	100.0 %	2015	2015
5/2 (Circ (S))	4.00	0.00	Y	Arm 7 Ahead	Inf	100.0 %	2015	2015
				Arm 8 Right	Inf	0.0 %		
6/1 (A611 (S))	3.50	0.00	Y	Arm 7 Left	Inf	100.0 %	1965	1965
6/2 (A611 (S))	3.50	0.00	Y	Arm 7 Left	Inf	100.0 %	1965	1965
6/3 (A611 (S))	3.50	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1965	1965
6/4 (A611 (S))	3.50	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1965	1965
7/1	Infinite Saturation Flow						Inf	Inf
7/2	Infinite Saturation Flow						Inf	Inf
8/1 (Circ (W))	4.00	0.00	Y	Arm 10 Ahead	Inf	100.0 %	2015	2015
8/2 (Circ (W))	4.00	0.00	Y	Arm 2 Right	Inf	0.0 %	2015	2015
				Arm 10 Ahead	Inf	100.0 %		
9/1 (A608 Annesley Rd)	3.50	0.00	Y	Arm 10 Left	Inf	100.0 %	1965	1965
9/2 (A608 Annesley Rd)	3.50	0.00	Y	Arm 10 Left	Inf	100.0 %	1965	1965
9/3 (A608 Annesley Rd)	3.50	0.00	N	Arm 2 Ahead	Inf	100.0 %	2105	2105
9/4 (A608 Annesley Rd)	3.50	0.00	Y	Arm 2 Ahead	Inf	100.0 %	1965	1965
10/1	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

10/2	Infinite Saturation Flow	Inf	Inf
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Scenario 1: '2022 Observed AM' (FG1: '2022 Observed AM', Plan 1: 'Network Control Plan 1')

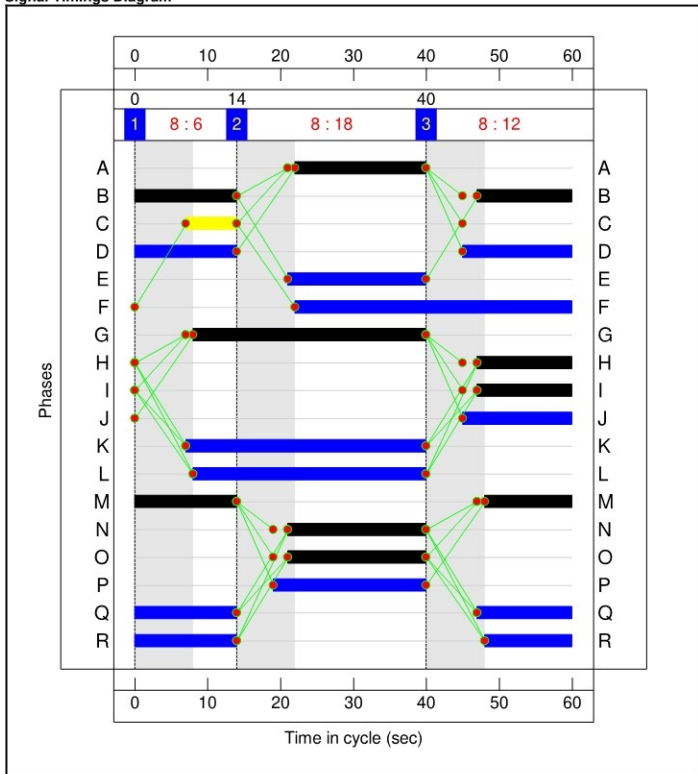
Stage Sequence Diagram



Stage Timings

Stage	1	2	3
Duration	6	18	12
Change Point	0	14	40

Signal Timings Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A611 Derby Road/A608 Annesley Road Gyratory	-	-	N/A	-	-		-	-	-	-	-	-	78.5%
A611 Derby Rd/A608 Annesley Rd Gyratory	-	-	N/A	-	-		-	-	-	-	-	-	78.5%
1/2+1/1	A611 (N) Ahead	U	N/A	N/A	N		1	19	-	382	1965:1965	655+655	29.2 : 29.2%
1/3+1/4	A611 (N) Ahead	U	N/A	N/A	O		1	19	-	988	1965:1965	655+655	75.4 : 75.4%
2/1	Circ (N) Right	U	N/A	N/A	M		1	26	-	346	2015	907	38.2%
2/2	Circ (N) Right Right2	U	N/A	N/A	M		1	26	-	340	2015	907	37.5%
3/1	Right	U	N/A	N/A	-		-	-	-	494	2015	2015	24.5%
3/2	Right	U	N/A	N/A	-		-	-	-	494	2015	2015	24.5%
4/1		U	N/A	N/A	-		-	-	-	537	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	531	Inf	Inf	0.0%
5/1	Circ (S) Ahead	U	N/A	N/A	A		1	18	-	494	2015	638	77.4%
5/2	Circ (S) Ahead Right	U	N/A	N/A	A		1	18	-	494	2015	638	77.4%
6/2+6/1	A611 (S) Left	U	N/A	N/A	B		1	27	-	1136	1965:1965	723+723	78.5 : 78.5%
6/3	A611 (S) Ahead	U	N/A	N/A	C		1	7	-	171	1965	262	65.3%
6/4	A611 (S) Ahead	U	N/A	N/A	C		1	7	-	170	1965	262	64.9%
7/1		U	N/A	N/A	-		-	-	-	1062	Inf	Inf	0.0%
7/2		U	N/A	N/A	-		-	-	-	1062	Inf	Inf	0.0%
8/1	Circ (W) Ahead	U	N/A	N/A	G		1	32	-	171	2015	1108	15.4%
8/2	Circ (W) Right Ahead	U	N/A	N/A	G		1	32	-	170	2015	1108	15.3%

Full Input Data And Results

9/2+9/1	A608 Annesley Rd Left	U	N/A	N/A	H		1	13	-	586	1965:1965	458+458	63.9 : 63.9%
9/3+9/4	A608 Annesley Rd Ahead	U	N/A	N/A	I		1	13	-	686	2105:1965	475+458	72.8 : 74.2%
10/1		U	N/A	N/A	-		-	-	-	464	Inf	Inf	0.0%
10/2		U	N/A	N/A	-		-	-	-	463	Inf	Inf	0.0%

Full Input Data And Results

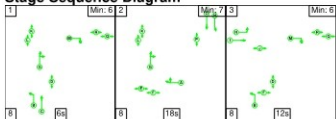
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A611 Derby Road/A608 Annesley Road Gyratory	-	-	0	0	0	22.3	12.1	0.0	34.3	-	-	-	-
A611 Derby Rd/A608 Annesley Rd Gyratory	-	-	0	0	0	22.3	12.1	0.0	34.3	-	-	-	-
1/2+1/1	382	382	-	-	-	1.6	0.2	-	1.8	16.7	2.3	0.2	2.5
1/3+1/4	988	988	-	-	-	4.9	1.5	-	6.4	23.4	7.3	1.5	8.8
2/1	346	346	-	-	-	0.0	0.3	-	0.3	3.4	5.3	0.3	5.6
2/2	340	340	-	-	-	0.0	0.3	-	0.3	3.2	0.0	0.3	0.3
3/1	494	494	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2
3/2	494	494	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2
4/1	537	537	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	531	531	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	494	494	-	-	-	1.1	1.7	-	2.8	20.4	1.7	1.7	3.4
5/2	494	494	-	-	-	1.1	1.7	-	2.8	20.4	1.7	1.7	3.4
6/2+6/1	1136	1136	-	-	-	3.8	1.8	-	5.6	17.7	7.1	1.8	8.9
6/3	171	171	-	-	-	1.2	0.9	-	2.1	44.1	2.7	0.9	3.6
6/4	170	170	-	-	-	1.2	0.9	-	2.1	43.9	2.6	0.9	3.6
7/1	1062	1062	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	1062	1062	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	171	171	-	-	-	0.0	0.1	-	0.1	1.9	0.0	0.1	0.1
8/2	170	170	-	-	-	0.0	0.1	-	0.1	1.9	0.0	0.1	0.1
9/2+9/1	586	586	-	-	-	3.4	0.9	-	4.3	26.1	4.4	0.9	5.3
9/3+9/4	686	686	-	-	-	4.0	1.4	-	5.4	28.4	5.3	1.4	6.7
10/1	464	464	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/2	463	463	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1			PRC for Signalled Lanes (%):		14.6	Total Delay for Signalled Lanes (pcuHr):		34.01	Cycle Time (s): 60				
			PRC Over All Lanes (%):		14.6	Total Delay Over All Lanes (pcuHr):		34.34					

Full Input Data And Results

Full Input Data And Results

Scenario 2: '2032 Bkg AM' (FG3: '2032 Bkg AM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram



Stage Timings

Stage	1	2	3
Duration	6	18	12
Change Point	0	14	40

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A611 Derby Road/A608 Annesley Road Gyrotary	-	-	N/A	-	-		-	-	-	-	-	-	85.4%
A611 Derby Rd/A608 Annesley Rd Gyrotary	-	-	N/A	-	-		-	-	-	-	-	-	85.4%
1/2+1/1	A611 (N) Ahead	U	N/A	N/A	N		1	19	-	415	1965:1965	655+655	31.6 : 31.8%
1/3+1/4	A611 (N) Ahead	U	N/A	N/A	O		1	19	-	1075	1965:1965	655+655	82.0 : 82.1%
2/1	Circ (N) Right	U	N/A	N/A	M		1	26	-	376	2015	907	41.5%
2/2	Circ (N) Right Right2	U	N/A	N/A	M		1	26	-	370	2015	907	40.8%
3/1	Right	U	N/A	N/A	-		-	-	-	537	2015	2015	26.7%
3/2	Right	U	N/A	N/A	-		-	-	-	538	2015	2015	26.7%
4/1		U	N/A	N/A	-		-	-	-	584	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	577	Inf	Inf	0.0%
5/1	Circ (S) Ahead	U	N/A	N/A	A		1	18	-	537	2015	638	84.2%
5/2	Circ (S) Ahead Right	U	N/A	N/A	A		1	18	-	538	2015	638	84.3%
6/2+6/1	A611 (S) Left	U	N/A	N/A	B		1	27	-	1235	1965:1965	724+723	85.4 : 85.4%
6/3	A611 (S) Ahead	U	N/A	N/A	C		1	7	-	186	1965	262	71.0%
6/4	A611 (S) Ahead	U	N/A	N/A	C		1	7	-	185	1965	262	70.6%
7/1		U	N/A	N/A	-		-	-	-	1154	Inf	Inf	0.0%
7/2		U	N/A	N/A	-		-	-	-	1156	Inf	Inf	0.0%
8/1	Circ (W) Ahead	U	N/A	N/A	G		1	32	-	186	2015	1108	16.8%
8/2	Circ (W) Right Ahead	U	N/A	N/A	G		1	32	-	185	2015	1108	16.7%

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9/2+9/1	A608 Annesley Rd Left	U	N/A	N/A	H		1	13	-	637	1965:1965	458+458	69.4 : 69.6%
9/3+9/4	A608 Annesley Rd Ahead	U	N/A	N/A	I		1	13	-	746	2105:1965	474+458	79.3 : 80.7%
10/1		U	N/A	N/A	-		-	-	-	505	Inf	Inf	0.0%
10/2		U	N/A	N/A	-		-	-	-	503	Inf	Inf	0.0%

Full Input Data And Results

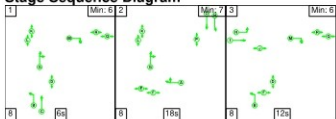
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A611 Derby Road/A608 Annesley Road Gyratory	-	-	0	0	0	25.5	17.1	0.0	42.6	-	-	-	-
A611 Derby Rd/A608 Annesley Rd Gyratory	-	-	0	0	0	25.5	17.1	0.0	42.6	-	-	-	-
1/2+1/1	415	415	-	-	-	1.7	0.2	-	2.0	16.9	2.5	0.2	2.8
1/3+1/4	1075	1075	-	-	-	5.5	2.2	-	7.7	25.9	8.2	2.2	10.5
2/1	376	376	-	-	-	0.0	0.4	-	0.4	3.6	5.8	0.4	6.2
2/2	370	370	-	-	-	0.0	0.3	-	0.3	3.3	0.0	0.3	0.3
3/1	537	537	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2
3/2	538	538	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2
4/1	584	584	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	577	577	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	537	537	-	-	-	1.6	2.5	-	4.2	27.9	2.4	2.5	5.0
5/2	538	538	-	-	-	1.6	2.6	-	4.2	28.1	2.4	2.6	5.0
6/2+6/1	1235	1235	-	-	-	4.3	2.8	-	7.1	20.7	7.9	2.8	10.7
6/3	186	186	-	-	-	1.3	1.2	-	2.5	47.9	2.9	1.2	4.1
6/4	185	185	-	-	-	1.3	1.2	-	2.4	47.6	2.9	1.2	4.1
7/1	1154	1154	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	1156	1156	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	186	186	-	-	-	0.0	0.1	-	0.1	2.0	0.0	0.1	0.1
8/2	185	185	-	-	-	0.0	0.1	-	0.1	1.9	0.0	0.1	0.1
9/2+9/1	637	637	-	-	-	3.7	1.1	-	4.9	27.4	4.8	1.1	5.9
9/3+9/4	746	746	-	-	-	4.5	2.0	-	6.4	31.1	5.8	2.0	7.8
10/1	505	505	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/2	503	503	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1			PRC for Signalled Lanes (%):		5.4	Total Delay for Signalled Lanes (pcuHr):		42.27	Cycle Time (s):		60		
			PRC Over All Lanes (%):		5.4	Total Delay Over All Lanes (pcuHr):		42.63					

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Scenario 3: '2032 WD AM' (FG5: '2032 WD AM', Plan 1: 'Network Control Plan 1')

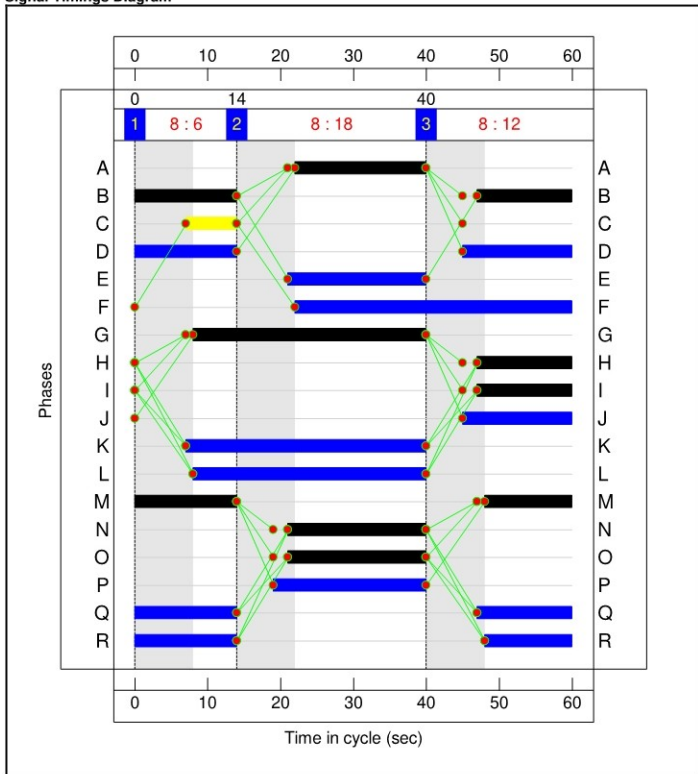
Stage Sequence Diagram



Stage Timings

Stage	1	2	3
Duration	6	18	12
Change Point	0	14	40

Signal Timings Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A611 Derby Road/A608 Annesley Road Gyratory	-	-	N/A	-	-		-	-	-	-	-	-	85.4%
A611 Derby Rd/A608 Annesley Rd Gyratory	-	-	N/A	-	-		-	-	-	-	-	-	85.4%
1/2+1/1	A611 (N) Ahead	U	N/A	N/A	N		1	19	-	416	1965:1965	655+655	31.8 : 31.8%
1/3+1/4	A611 (N) Ahead	U	N/A	N/A	O		1	19	-	1079	1965:1965	655+655	82.4 : 82.3%
2/1	Circ (N) Right	U	N/A	N/A	M		1	26	-	381	2015	907	42.0%
2/2	Circ (N) Right Right2	U	N/A	N/A	M		1	26	-	377	2015	907	41.6%
3/1	Right	U	N/A	N/A	-		-	-	-	544	2015	2015	27.0%
3/2	Right	U	N/A	N/A	-		-	-	-	543	2015	2015	26.9%
4/1		U	N/A	N/A	-		-	-	-	589	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	577	Inf	Inf	0.0%
5/1	Circ (S) Ahead	U	N/A	N/A	A		1	18	-	544	2015	638	85.3%
5/2	Circ (S) Ahead Right	U	N/A	N/A	A		1	18	-	543	2015	638	85.1%
6/2+6/1	A611 (S) Left	U	N/A	N/A	B		1	27	-	1235	1965:1965	724+723	85.4 : 85.4%
6/3	A611 (S) Ahead	U	N/A	N/A	C		1	7	-	188	1965	262	71.8%
6/4	A611 (S) Ahead	U	N/A	N/A	C		1	7	-	188	1965	262	71.8%
7/1		U	N/A	N/A	-		-	-	-	1161	Inf	Inf	0.0%
7/2		U	N/A	N/A	-		-	-	-	1161	Inf	Inf	0.0%
8/1	Circ (W) Ahead	U	N/A	N/A	G		1	32	-	188	2015	1108	17.0%
8/2	Circ (W) Right Ahead	U	N/A	N/A	G		1	32	-	188	2015	1108	17.0%

Full Input Data And Results

9/2+9/1	A608 Annesley Rd Left	U	N/A	N/A	H		1	13	-	639	1965:1965	458+458	69.6 : 69.8%
9/3+9/4	A608 Annesley Rd Ahead	U	N/A	N/A	I		1	13	-	754	2105:1965	478+458	79.7 : 81.4%
10/1		U	N/A	N/A	-		-	-	-	508	Inf	Inf	0.0%
10/2		U	N/A	N/A	-		-	-	-	503	Inf	Inf	0.0%

Full Input Data And Results

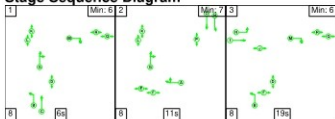
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A611 Derby Road/A608 Annesley Road Gyratory	-	-	0	0	0	25.8	17.7	0.0	43.5	-	-	-	-
A611 Derby Rd/A608 Annesley Rd Gyratory	-	-	0	0	0	25.8	17.7	0.0	43.5	-	-	-	-
1/2+1/1	416	416	-	-	-	1.7	0.2	-	2.0	16.9	2.5	0.2	2.8
1/3+1/4	1079	1079	-	-	-	5.5	2.3	-	7.8	26.0	8.3	2.3	10.5
2/1	381	381	-	-	-	0.0	0.4	-	0.4	3.6	5.8	0.4	6.2
2/2	377	377	-	-	-	0.0	0.4	-	0.4	3.7	0.1	0.4	0.4
3/1	544	544	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2
3/2	543	543	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2
4/1	589	589	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	577	577	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	544	544	-	-	-	1.7	2.7	-	4.4	29.2	2.5	2.7	5.3
5/2	543	543	-	-	-	1.7	2.7	-	4.4	29.0	2.5	2.7	5.2
6/2+6/1	1235	1235	-	-	-	4.3	2.8	-	7.1	20.7	7.9	2.8	10.7
6/3	188	188	-	-	-	1.3	1.2	-	2.5	48.5	3.0	1.2	4.2
6/4	188	188	-	-	-	1.3	1.2	-	2.5	48.5	3.0	1.2	4.2
7/1	1161	1161	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	1161	1161	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	188	188	-	-	-	0.0	0.1	-	0.1	2.0	0.0	0.1	0.1
8/2	188	188	-	-	-	0.0	0.1	-	0.1	2.0	0.0	0.1	0.1
9/2+9/1	639	639	-	-	-	3.7	1.1	-	4.9	27.5	4.8	1.1	5.9
9/3+9/4	754	754	-	-	-	4.5	2.0	-	6.6	31.3	5.9	2.0	7.9
10/1	508	508	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/2	503	503	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1			PRC for Signalled Lanes (%):		5.4	Total Delay for Signalled Lanes (pcuHr):		43.13	Cycle Time (s):		60		
			PRC Over All Lanes (%):		5.4	Total Delay Over All Lanes (pcuHr):		43.50					

Full Input Data And Results

Full Input Data And Results

Scenario 4: '2022 Observed PM' (FG2: '2022 Observed PM', Plan 1: 'Network Control Plan 1')

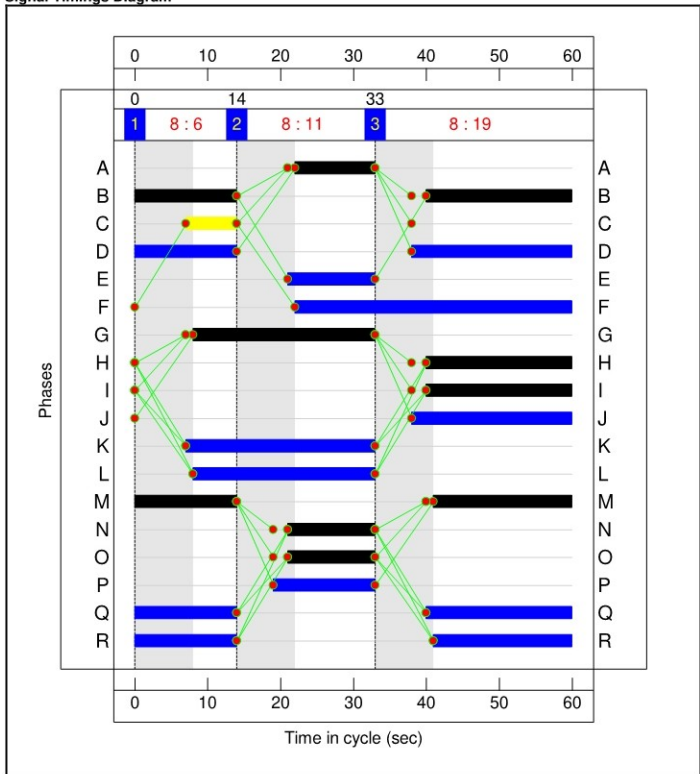
Stage Sequence Diagram



Stage Timings

Stage	1	2	3
Duration	6	11	19
Change Point	0	14	33

Signal Timings Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A611 Derby Road/A608 Annesley Road Gyratory	-	-	N/A	-	-		-	-	-	-	-	-	96.3%
A611 Derby Rd/A608 Annesley Rd Gyratory	-	-	N/A	-	-		-	-	-	-	-	-	96.3%
1/2+1/1	A611 (N) Ahead	U	N/A	N/A	N		1	12	-	379	1965:1965	426+426	44.4 : 44.6%
1/3+1/4	A611 (N) Ahead	U	N/A	N/A	O		1	12	-	687	1965:1965	426+426	80.6 : 80.8%
2/1	Circ (N) Right	U	N/A	N/A	M		1	33	-	577	2015	1142	50.5%
2/2	Circ (N) Right Right2	U	N/A	N/A	M		1	33	-	564	2015	1142	49.4%
3/1	Right	U	N/A	N/A	-		-	-	-	343	2015	2015	17.0%
3/2	Right	U	N/A	N/A	-		-	-	-	344	2015	2015	17.1%
4/1		U	N/A	N/A	-		-	-	-	767	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	753	Inf	Inf	0.0%
5/1	Circ (S) Ahead	U	N/A	N/A	A		1	11	-	343	2015	403	85.1%
5/2	Circ (S) Ahead Right	U	N/A	N/A	A		1	11	-	344	2015	403	85.4%
6/2+6/1	A611 (S) Left	U	N/A	N/A	B		1	34	-	633	1965:1965	839+836	37.8 : 37.8%
6/3	A611 (S) Ahead	U	N/A	N/A	C		1	7	-	142	1965	262	54.2%
6/4	A611 (S) Ahead	U	N/A	N/A	C		1	7	-	142	1965	262	54.2%
7/1		U	N/A	N/A	-		-	-	-	659	Inf	Inf	0.0%
7/2		U	N/A	N/A	-		-	-	-	661	Inf	Inf	0.0%
8/1	Circ (W) Ahead	U	N/A	N/A	G		1	25	-	142	2015	873	16.3%
8/2	Circ (W) Right Ahead	U	N/A	N/A	G		1	25	-	142	2015	873	16.3%

Full Input Data And Results

9/2+9/1	A608 Annesley Rd Left	U	N/A	N/A	H		1	20	-	743	1965:1965	581+582	63.9 : 63.9%
9/3+9/4	A608 Annesley Rd Ahead	U	N/A	N/A	I		1	20	-	1141	2105:1965	599+586	96.3 : 96.3%
10/1		U	N/A	N/A	-		-	-	-	514	Inf	Inf	0.0%
10/2		U	N/A	N/A	-		-	-	-	513	Inf	Inf	0.0%

Full Input Data And Results

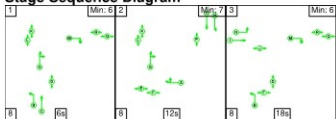
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A611 Derby Road/A608 Annesley Road Gyratory	-	-	0	0	0	23.1	20.6	0.0	43.7	-	-	-	-
A611 Derby Rd/A608 Annesley Rd Gyratory	-	-	0	0	0	23.1	20.6	0.0	43.7	-	-	-	-
1/2+1/1	379	379	-	-	-	2.1	0.4	-	2.5	24.2	2.7	0.4	3.1
1/3+1/4	687	687	-	-	-	4.3	2.0	-	6.3	33.0	5.4	2.0	7.4
2/1	577	577	-	-	-	0.0	0.5	-	0.6	3.4	8.1	0.5	8.6
2/2	564	564	-	-	-	0.0	0.5	-	0.5	3.1	0.0	0.5	0.5
3/1	343	343	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
3/2	344	344	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
4/1	767	767	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	753	753	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	343	343	-	-	-	2.4	2.6	-	5.0	52.6	3.0	2.6	5.6
5/2	344	344	-	-	-	2.4	2.7	-	5.1	53.1	3.0	2.7	5.7
6/2+6/1	633	633	-	-	-	1.1	0.3	-	1.4	7.9	2.6	0.3	2.9
6/3	142	142	-	-	-	1.0	0.6	-	1.5	39.1	2.2	0.6	2.8
6/4	142	142	-	-	-	1.0	0.6	-	1.5	39.1	2.2	0.6	2.8
7/1	659	659	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	661	661	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	142	142	-	-	-	0.0	0.1	-	0.1	2.5	0.0	0.1	0.1
8/2	142	142	-	-	-	0.0	0.1	-	0.1	2.5	0.0	0.1	0.1
9/2+9/1	743	743	-	-	-	3.2	0.9	-	4.1	19.9	5.0	0.9	5.8
9/3+9/4	1141	1141	-	-	-	5.6	9.1	-	14.7	46.5	10.6	9.1	19.7
10/1	514	514	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/2	513	513	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1			PRC for Signalled Lanes (%): -7.0		PRC Over All Lanes (%): -7.0		Total Delay for Signalled Lanes (pcuHr): 43.48		Total Delay Over All Lanes (pcuHr): 43.68		Cycle Time (s): 60		

Full Input Data And Results

Full Input Data And Results

Scenario 5: '2032 Bkg PM' (FG4: '2032 Bkg PM', Plan 1: 'Network Control Plan 1')

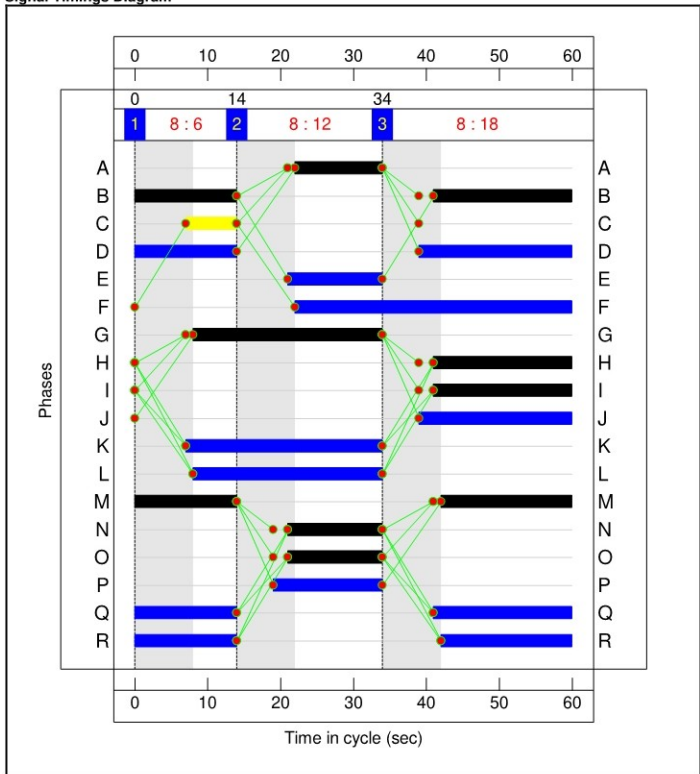
Stage Sequence Diagram



Stage Timings

Stage	1	2	3
Duration	6	12	18
Change Point	0	14	34

Signal Timings Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A611 Derby Road/A608 Annesley Road Gyrotary	-	-	N/A	-	-		-	-	-	-	-	-	108.8%
A611 Derby Rd/A608 Annesley Rd Gyrotary	-	-	N/A	-	-		-	-	-	-	-	-	108.8%
1/2+1/1	A611 (N) Ahead	U	N/A	N/A	N		1	13	-	412	1965:1965	458+458	44.9 : 44.9%
1/3+1/4	A611 (N) Ahead	U	N/A	N/A	O		1	13	-	746	1965:1965	458+458	81.4 : 81.4%
2/1	Circ (N) Right	U	N/A	N/A	M		1	32	-	646	2015	1108	53.6%
2/2	Circ (N) Right Right2	U	N/A	N/A	M		1	32	-	594	2015	1108	49.3%
3/1	Right	U	N/A	N/A	-		-	-	-	373	2015	2015	18.5%
3/2	Right	U	N/A	N/A	-		-	-	-	373	2015	2015	18.5%
4/1		U	N/A	N/A	-		-	-	-	852	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	800	Inf	Inf	0.0%
5/1	Circ (S) Ahead	U	N/A	N/A	A		1	12	-	373	2015	437	85.4%
5/2	Circ (S) Ahead Right	U	N/A	N/A	A		1	12	-	373	2015	437	85.4%
6/2+6/1	A611 (S) Left	U	N/A	N/A	B		1	33	-	688	1965:1965	822+822	41.9 : 41.9%
6/3	A611 (S) Ahead	U	N/A	N/A	C		1	7	-	154	1965	262	58.8%
6/4	A611 (S) Ahead	U	N/A	N/A	C		1	7	-	154	1965	262	58.8%
7/1		U	N/A	N/A	-		-	-	-	717	Inf	Inf	0.0%
7/2		U	N/A	N/A	-		-	-	-	717	Inf	Inf	0.0%
8/1	Circ (W) Ahead	U	N/A	N/A	G		1	26	-	154	2015	907	17.0%
8/2	Circ (W) Right Ahead	U	N/A	N/A	G		1	26	-	154	2015	907	17.0%

Full Input Data And Results

9/2+9/1	A608 Annesley Rd Left	U	N/A	N/A	H		1	19	-	807	1965:1965	564+566	71.4 : 71.4%
9/3+9/4	A608 Annesley Rd Ahead	U	N/A	N/A	I		1	19	-	1240	2105:1965	594+546	108.8 : 108.8%
10/1		U	N/A	N/A	-		-	-	-	558	Inf	Inf	0.0%
10/2		U	N/A	N/A	-		-	-	-	557	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A611 Derby Road/A608 Annesley Road Gyratory	-	-	0	0	0	28.0	68.1	0.0	96.1	-	-	-	-
A611 Derby Rd/A608 Annesley Rd Gyratory	-	-	0	0	0	28.0	68.1	0.0	96.1	-	-	-	-
1/2+1/1	412	412	-	-	-	2.3	0.4	-	2.7	23.3	2.9	0.4	3.3
1/3+1/4	746	746	-	-	-	4.5	2.1	-	6.6	32.0	5.8	2.1	7.9
2/1	594	594	-	-	-	0.0	0.6	-	0.6	3.8	8.4	0.6	9.0
2/2	546	546	-	-	-	0.0	0.5	-	0.5	3.2	0.0	0.5	0.5
3/1	373	373	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
3/2	373	373	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
4/1	800	800	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	752	752	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	373	373	-	-	-	2.3	2.7	-	5.0	48.3	3.0	2.7	5.7
5/2	373	373	-	-	-	2.3	2.7	-	5.0	48.3	3.0	2.7	5.7
6/2+6/1	688	688	-	-	-	1.3	0.4	-	1.7	8.7	3.0	0.4	3.3
6/3	154	154	-	-	-	1.0	0.7	-	1.8	40.9	2.4	0.7	3.1
6/4	154	154	-	-	-	1.0	0.7	-	1.8	40.9	2.4	0.7	3.1
7/1	717	717	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	717	717	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	154	154	-	-	-	0.0	0.1	-	0.1	2.4	0.0	0.1	0.1
8/2	154	154	-	-	-	0.0	0.1	-	0.1	2.4	0.0	0.1	0.1
9/2+9/1	807	807	-	-	-	3.8	1.2	-	5.0	22.3	5.6	1.2	6.9
9/3+9/4	1240	1140	-	-	-	9.4	55.6	-	65.1	188.9	16.3	55.6	71.9
10/1	558	558	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/2	557	557	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

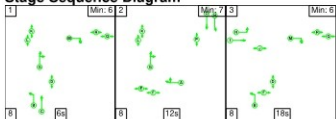
Full Input Data And Results

C1	PRC for Signalled Lanes (%):	-20.9	Total Delay for Signalled Lanes (pcuHr):	95.87	Cycle Time (s):	60
	PRC Over All Lanes (%):	-20.9	Total Delay Over All Lanes(pcuHr):	96.09		

Full Input Data And Results

Scenario 6: '2032 WD PM' (FG6: '2032 WD PM', Plan 1: 'Network Control Plan 1')

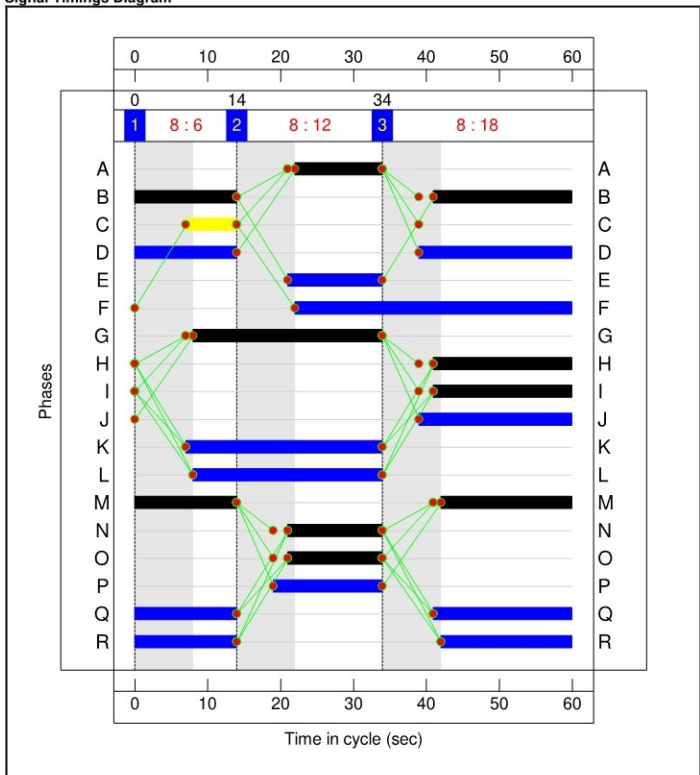
Stage Sequence Diagram



Stage Timings

Stage	1	2	3
Duration	6	12	18
Change Point	0	14	34

Signal Timings Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A611 Derby Road/A608 Annesley Road Gyratory	-	-	N/A	-	-		-	-	-	-	-	-	108.8%
A611 Derby Rd/A608 Annesley Rd Gyratory	-	-	N/A	-	-		-	-	-	-	-	-	108.8%
1/2+1/1	A611 (N) Ahead	U	N/A	N/A	N		1	13	-	413	1965:1965	458+458	44.9 : 45.1%
1/3+1/4	A611 (N) Ahead	U	N/A	N/A	O		1	13	-	748	1965:1965	458+458	81.6 : 81.6%
2/1	Circ (N) Right	U	N/A	N/A	M		1	32	-	646	2015	1108	53.6%
2/2	Circ (N) Right Right2	U	N/A	N/A	M		1	32	-	594	2015	1108	49.3%
3/1	Right	U	N/A	N/A	-		-	-	-	374	2015	2015	18.6%
3/2	Right	U	N/A	N/A	-		-	-	-	374	2015	2015	18.6%
4/1		U	N/A	N/A	-		-	-	-	853	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	800	Inf	Inf	0.0%
5/1	Circ (S) Ahead	U	N/A	N/A	A		1	12	-	374	2015	437	85.7%
5/2	Circ (S) Ahead Right	U	N/A	N/A	A		1	12	-	374	2015	437	85.7%
6/2+6/1	A611 (S) Left	U	N/A	N/A	B		1	33	-	688	1965:1965	822+822	41.9 : 41.9%
6/3	A611 (S) Ahead	U	N/A	N/A	C		1	7	-	155	1965	262	59.2%
6/4	A611 (S) Ahead	U	N/A	N/A	C		1	7	-	154	1965	262	58.8%
7/1		U	N/A	N/A	-		-	-	-	718	Inf	Inf	0.0%
7/2		U	N/A	N/A	-		-	-	-	718	Inf	Inf	0.0%
8/1	Circ (W) Ahead	U	N/A	N/A	G		1	26	-	155	2015	907	17.1%
8/2	Circ (W) Right Ahead	U	N/A	N/A	G		1	26	-	154	2015	907	17.0%

Full Input Data And Results

9/2+9/1	A608 Annesley Rd Left	U	N/A	N/A	H		1	19	-	812	1965:1965	565+565	71.8 : 71.8%
9/3+9/4	A608 Annesley Rd Ahead	U	N/A	N/A	I		1	19	-	1240	2105:1965	594+546	108.8 : 108.8%
10/1		U	N/A	N/A	-		-	-	-	561	Inf	Inf	0.0%
10/2		U	N/A	N/A	-		-	-	-	560	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A611 Derby Road/A608 Annesley Road Gyratory	-	-	0	0	0	28.1	68.2	0.0	96.3	-	-	-	-
A611 Derby Rd/A608 Annesley Rd Gyratory	-	-	0	0	0	28.1	68.2	0.0	96.3	-	-	-	-
1/2+1/1	413	413	-	-	-	2.3	0.4	-	2.7	23.3	2.9	0.4	3.3
1/3+1/4	748	748	-	-	-	4.5	2.2	-	6.7	32.2	5.8	2.2	8.0
2/1	594	594	-	-	-	0.0	0.6	-	0.6	3.8	8.4	0.6	9.0
2/2	546	546	-	-	-	0.0	0.5	-	0.5	3.2	0.0	0.5	0.5
3/1	374	374	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
3/2	374	374	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
4/1	801	801	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	752	752	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	374	374	-	-	-	2.3	2.7	-	5.1	48.7	3.0	2.7	5.7
5/2	374	374	-	-	-	2.3	2.7	-	5.1	48.7	3.0	2.7	5.7
6/2+6/1	688	688	-	-	-	1.3	0.4	-	1.7	8.7	3.0	0.4	3.3
6/3	155	155	-	-	-	1.1	0.7	-	1.8	41.1	2.4	0.7	3.1
6/4	154	154	-	-	-	1.0	0.7	-	1.8	40.9	2.4	0.7	3.1
7/1	718	718	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	718	718	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	155	155	-	-	-	0.0	0.1	-	0.1	2.4	0.0	0.1	0.1
8/2	154	154	-	-	-	0.0	0.1	-	0.1	2.4	0.0	0.1	0.1
9/2+9/1	812	812	-	-	-	3.8	1.3	-	5.1	22.4	5.6	1.3	6.9
9/3+9/4	1240	1140	-	-	-	9.4	55.6	-	65.1	188.9	16.3	55.6	71.9
10/1	561	561	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/2	560	560	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

C1	PRC for Signalled Lanes (%):	-20.9	Total Delay for Signalled Lanes (pcuHr):	96.11	Cycle Time (s):	60
	PRC Over All Lanes (%):	-20.9	Total Delay Over All Lanes(pcuHr):	96.33		

APPENDIX W

JUNCTION 10: A611/FOREST ROAD TRAFFIC SIGNAL
CONTROLLED T-JUNCTION

Full Input Data And Results
Full Input Data And Results

User and Project Details

Project:	Newark Road, Sutton in Ashfield
Title:	Jct 10 - A611 Derby Road-Forest Road-School Lane
Location:	
Additional detail:	
File name:	Jct 10 - Derby Road-Forest Road Existing LinSig Model.lsg3x
Author:	
Company:	ADC Infrastructure Limited
Address:	

Network Layout Diagram

