

TRANSYT 15
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Filename: M23 J10 Reference Year Layout v04.t15

Path: J:\48559 Crawley Transport Study\Transport\Working Documents\Junction Modelling\HE SRN Junction Data\M23 J10 Model

Report generation date: 19/10/2021 17:23:49

- »A3 - 2035 Reference Case AM : D3 - 2035 Reference Case AM* :
- »A4 - 2035 Reference Case PM : D4 - 2035 Reference Case PM* :
- »A5 - LP Scenario 2 With Mit AM : D5 - LP Scenario 2 With Mit AM* :
- »A6 - LP Scenario 2 With Mit PM : D6 - LP Scenario 2 With Mit PM* :

File summary

File description

File title	M23 J10 Reference Layout
Location	Crawley
Site number	1
UTCRegion	UTC +1
Driving side	Left
Date	08/09/2021
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	330610079
Enumerator	CORP\dansmith
Description	

Model and Results

Enable controller offsets	Enable fuel consumption	Enable quick flares	Display journey time results	Display level of service results	Display blocking and starvation results	Display end of red and green queue results	Display excess queue results	Display separate uniform and random results	Display unweighted results	Display TRANSYT 12 style timings	Display effective greens in results	Display Red-With-Amber	Display End-Of-Green Amber
			✓		✓	✓	✓	✓	✓	✓	✓		

Units

Cost units	Speed units	Distance units	Fuel economy units	Fuel rate units	Mass units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
£	kph	m	mpg	l/h	kg	PCU	PCU	perHour	s	-Hour	perHour

Sorting

Show names instead of IDs	Sorting direction	Sorting type	Ignore prefixes when sorting	Analysis/demand set sorting	Link grouping	Source grouping	Colour Analysis/Demand Sets
	Ascending	Numerical		ID	Normal	Normal	✓

Network Diagrams



M23 J10 Reference Layout
Cyclotime 0s / 60s , Timesteps 59 / 60
6, 6
Diagram produced using TRANSYT 15.5.3.7

A3 - 2035 Reference Case AM

D3 - 2035 Reference Case AM*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst over PR
3	19/10/2021 17:00:59	19/10/2021 17:01:00	08:00	60	1300.45	81.83	94.14	411/2	2	5	411/2	201/1	411

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
2035 Reference Case AM		D3	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
2035 Reference Case AM				08:00	

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit
1		✓	✓	Lane Balancing			✓						

Normal Input Flows (PCU/hr)

		To			
		1	2	3	4
From	1	0	995	78	267
	2	1128	0	481	0
	3	253	616	0	578
	4	1062	0	513	71

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1		101/1, 101/2	121/1, 121/2	#0000FF
	2		201/1, 201/2	221/1, 221/2	#FF0000
	3		17/1, 17/2	322/1	#00FF00
	4		401/1, 401/2	421/1, 421/2	#FFFF00

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	11		2	3	201/1, 202/1, 321/1, 322/1	Normal	481
	12		3	4	17/1, 302/1, 421/1	Normal	399
	13		3	1	17/1, 302/2, 411/1, 121/1	Normal	253
	14		3	4	17/1, 302/2, 421/2	Normal	179
	15		3	2	17/2, 302/3, 411/2, 111/1, 221/1	Normal	616
	18		1	3	101/1, 102/2, 211/1, 321/1, 322/1	Normal	0
	19		1	4	101/2, 102/3, 211/2, 311/1, 421/1	Normal	134
	20		2	4	201/1, 202/2, 311/1, 421/1	Normal	0
	22		1	3	101/2, 102/3, 211/2, 321/2, 322/1	Normal	78
	23		1	4	101/2, 102/3, 211/2, 311/2, 421/2	Normal	134
	24		2	4	201/1, 202/2, 311/2, 421/2	Normal	0
	26		1	2	101/1, 102/2, 221/2	Normal	509
	27		1	1	101/2, 102/3, 211/2, 311/2, 411/1, 121/1	Normal	0
	28		2	1	201/1, 202/2, 311/2, 411/1, 121/1	Percentage	677
	29		4	4	401/2, 402/3, 111/2, 211/2, 311/1, 421/1	Normal	36
	30		1	2	101/2, 102/3, 211/2, 311/3, 411/2, 111/1, 221/1	Disabled	0
	31		1	1	101/2, 102/3, 211/2, 311/3, 411/2, 121/2	Normal	0
	32		2	2	201/2, 202/3, 311/3, 411/2, 111/1, 221/1	Normal	0
	33		3	4	17/2, 302/3, 411/2, 111/2, 211/2, 311/1, 421/1	Disabled	0
	34		3	4	17/2, 302/3, 411/2, 111/2, 211/2, 311/2, 421/2	Disabled	0
	35		2	1	201/2, 202/3, 311/3, 411/2, 121/2	Normal	451
	36		4	1	401/1, 402/1, 121/1	Normal	511
	37		1	2	101/1, 102/1, 221/1	Normal	486
	39		2	3	201/1, 202/2, 321/2, 322/1	Normal	0
	42		3	3	17/2, 302/3, 411/2, 111/2, 211/1, 321/1, 322/1	Normal	0
	43		3	3	17/2, 302/3, 411/2, 111/2, 211/2, 321/2, 322/1	Normal	0
	44		3	1	17/2, 302/3, 411/2, 121/2	Normal	0
	48		4	3	401/2, 402/3, 111/2, 211/1, 321/1, 322/1	Normal	257
	50		4	4	401/2, 402/3, 111/2, 211/2, 311/2, 421/2	Normal	36
	52		4	3	401/2, 402/3, 111/2, 211/2, 321/2, 322/1	Normal	257
	53		4	2	401/1, 402/2, 111/1, 221/1	Normal	0
	54		4	1	401/1, 402/2, 121/2	Normal	551
55		2	3	201/2, 202/3, 311/3, 411/2, 111/2, 211/1, 321/1, 322/1	Disabled	0	
56		2	3	201/2, 202/3, 311/3, 411/2, 111/2, 211/2, 321/2, 322/1	Disabled	0	
57		4	1	401/2, 402/3, 111/2, 211/2, 311/2, 411/1, 121/1	Disabled	0	
58		4	1	401/2, 402/3, 111/2, 211/2, 311/3, 411/2, 121/2	Disabled	0	

Signal Timings

Network Default: 60s cycle time; 60 steps

Intergreen Matrix for Controller Stream 1

		To	
		A	B
From	A		5
	B	5	

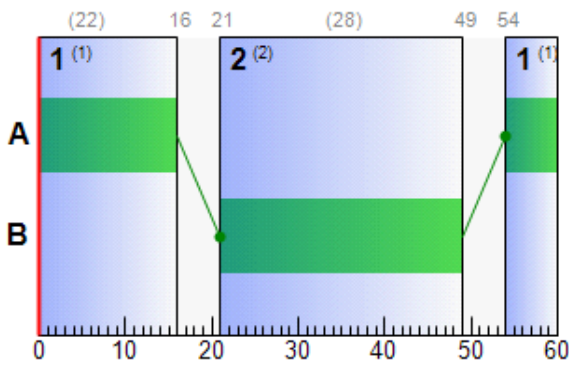
Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A	54	16	22	1	7
	2	✓	2	B	21	49	28	1	7

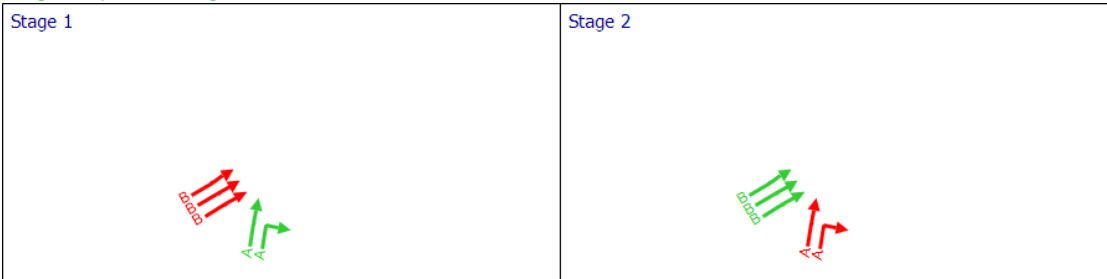
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
102	1	1	1	B	21	49	28
102	2	1	1	B	21	49	28
102	3	1	1	B	21	49	28
111	1	1	1	A	54	16	22
111	2	1	1	A	54	16	22

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



Intergreen Matrix for Controller Stream 2

		To	
		A	B
From	A		5
	B	5	

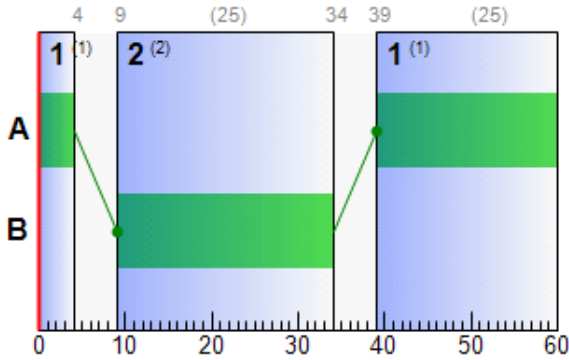
Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
2	1	✓	1	A	39	4	25	1	7
	2	✓	2	B	9	34	25	1	7

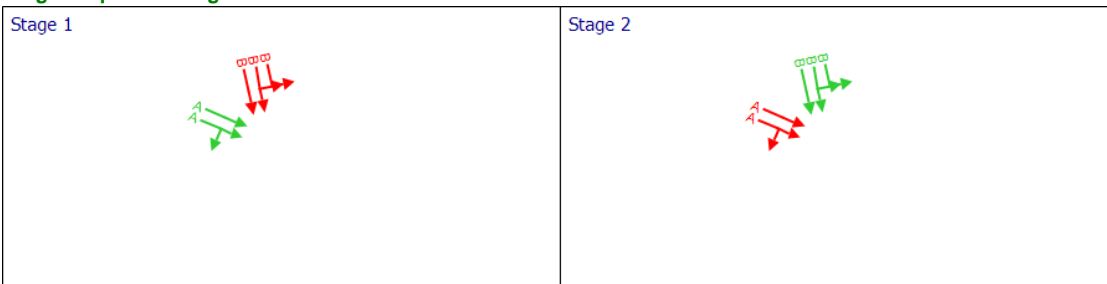
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
202	1	2	2	B	9	34	25
202	2	2	2	B	9	34	25
202	3	2	2	B	9	34	25
211	1	2	2	A	39	4	25
211	2	2	2	A	39	4	25

Phase Timings Diagram for Controller Stream 2



Stage Sequence Diagram for Controller Stream 2



Intergreen Matrix for Controller Stream 3

		To	
		A	B
From	A		6
	B	6	

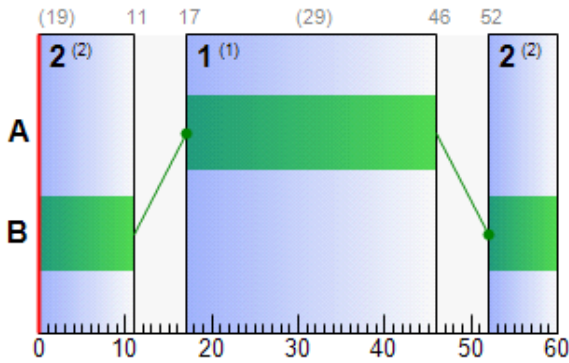
Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
3	1	✓	1	A	17	46	29	1	7
	2	✓	2	B	52	11	19	1	7

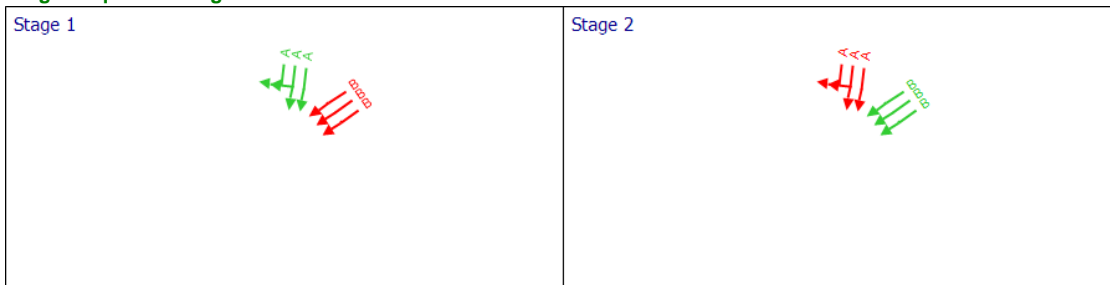
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
302	1	3	3	B	52	11	19
302	2	3	3	B	52	11	19
302	3	3	3	B	52	11	19
311	1	3	3	A	17	46	29
311	2	3	3	A	17	46	29
311	3	3	3	A	17	46	29

Phase Timings Diagram for Controller Stream 3



Stage Sequence Diagram for Controller Stream 3



Intergreen Matrix for Controller Stream 4

		To	
		A	B
From	A		5
	B	5	

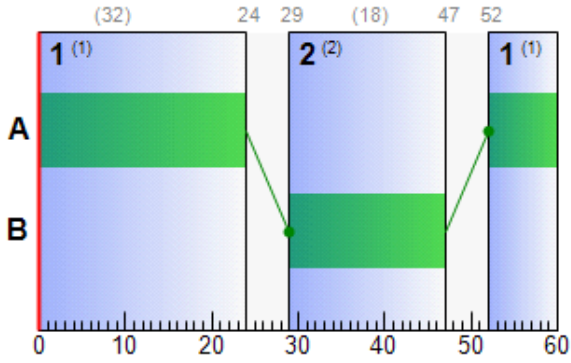
Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
4	1	✓	1	A	52	24	32	1	7
	2	✓	2	B	29	47	18	1	7

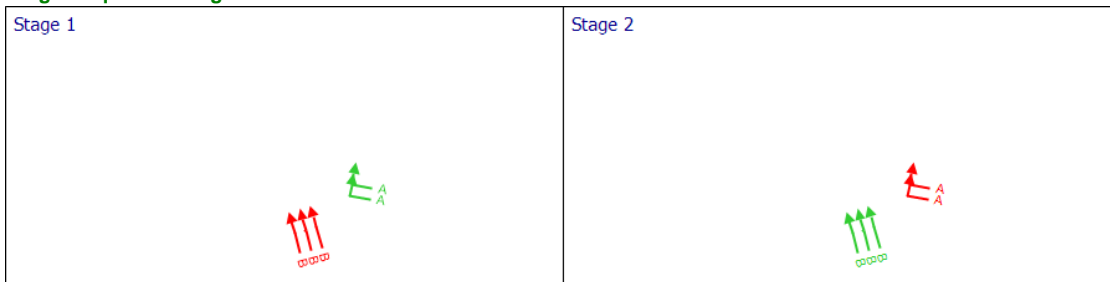
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
402	1	4	4	B	29	47	18
402	2	4	4	B	29	47	18
402	3	4	4	B	29	47	18
411	1	4	4	A	52	24	32
411	2	4	4	A	52	24	32

Phase Timings Diagram for Controller Stream 4



Stage Sequence Diagram for Controller Stream 4



Traffic Stream Results

Traffic Stream Results: Vehicle summary

Time Segment	Arm	Traffic Stream	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)	
08:00-09:00	17	1	44	107	831	1910	60	0.72	0.17	0.71	2.38	0.00	2.38	
		2	30	203	616	2073	60	0.37	0.06	0.26	0.89	0.00	0.89	
	101	1	50	81	995	2005	60	0.88	0.24	0.93	3.47	0.00	3.47	
		2	16	455	346	2133	60	0.16	0.02	0.06	0.22	0.00	0.22	
	102	1	51	78	486	1989	28	12.68	5.31	27.79	24.31	3.99	28.30	
		2	51	78	509	2079	28	12.75	5.55	28.62	25.59	4.17	29.77	
		3	34	161	346	2079	28	10.65	3.46	17.54	14.53	2.60	17.13	
	111	1	81	12	612	1981	22	26.45	8.33	46.61	63.88	6.22	70.10	
		2	74	22	581	2060	22	15.35	10.69	58.67	35.17	8.02	43.19	
	121	1	0	Unrestricted	1441	Unrestricted	60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		2	0	Unrestricted	1002	Unrestricted	60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	201	1	59	54	1158	1978	60	1.28	0.41	5.50	5.86	0.00	5.86	
		2	21	324	451	2123	60	0.23	0.03	0.38	0.41	0.00	0.41	
	202	1	58	55	481	2012	25	16.13	5.80	36.63	30.60	4.36	34.97	
		2	72	25	677	2187	25	19.92	9.98	62.57	53.20	7.33	60.52	
		3	48	88	451	2187	25	14.35	5.27	32.80	25.53	3.96	29.49	
	211	1	31	195	255	1980	25	20.75	4.31	18.25	20.85	3.24	24.09	
		2	73	23	672	2118	25	20.17	11.55	46.90	53.47	8.43	61.90	
	221	1	0	Unrestricted	1098	Unrestricted	60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		2	0	Unrestricted	509	Unrestricted	60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	302	1	60	50	399	1997	19	20.98	5.77	32.03	33.01	4.33	37.34	
		2	60	50	432	2159	19	20.91	6.32	29.56	35.63	4.56	40.20	
		3	86	5	616	2159	19	56.43	17.25	79.50	137.12	12.70	149.82	
	311	1	17	427	170	1987	29	15.83	3.33	22.41	10.60	2.14	12.74	
		2	83	9	847	2082	29	11.64	7.66	50.53	38.89	5.22	44.11	
		3	44	106	451	2069	29	1.34	0.17	1.14	2.39	0.00	2.39	
	321	1	38	134	736	1915	60	0.59	0.12	0.52	1.70	0.00	1.70	
		2	16	456	333	2055	60	0.17	0.02	0.07	0.22	0.00	0.22	
	322	1	0	Unrestricted	1069	Unrestricted	60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	401	1	55	62	1062	1917	60	1.16	0.34	2.88	4.88	0.00	4.88	
		2	28	218	586	2070	60	0.34	0.06	0.16	0.79	0.00	0.79	
	402	1	86	5	511	1886	18	36.02	9.81	53.86	72.61	7.12	79.72	
2		86	5	551	2030	18	35.55	10.41	56.83	77.27	7.71	84.98		
3		91	-2	586	2023	18	76.94	20.28	109.78	177.85	14.84	192.69		
411	1	88	3	930	1931	32	19.39	15.79	69.07	71.14	11.28	82.42		
	2	94	-4	1063	2085	32	32.80	17.23	71.67	137.54	16.24	153.78		
421	1	0	Unrestricted	569	Unrestricted	60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	2	0	Unrestricted	349	Unrestricted	60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

Final Prediction Table

Traffic Stream Results

				SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES	
Arm	Traffic Stream	Name	Traffic node	Controller stream	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Wasted time total (s (per cycle))	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)	Max end of queue (PCU)
17	1		3			831	1910	60	0.00	44	107	17.10	0.72	0.00	0.17	
	2		3			616	2073	60	0.00	30	203	16.72	0.37	0.00	0.06	
101	1		1			995	2005	60	0.00	50	81	18.91	0.88	0.00	0.24	
	2		1			346	2133	60	0.00	16	455	18.17	0.16	0.00	0.02	
102	1		1	1	B	486	1989	28	0.00	51	78	25.86	12.68	65.40	5.31	4.83
	2		1	1	B	509	2079	28	0.00	51	78	26.12	12.75	65.34	5.55	5.06
	3		1	1	B	346	2079	28	0.00	34	161	24.24	10.65	59.82	3.46	3.26
111	1		1	1	A	612	1981	22	2.00	81	12	42.69	26.45	80.99	8.33	8.33
	2		1	1	A	581	2060	22	6.00	74	22	31.27	15.35	110.13	10.69	9.71
121	1					1441	Unrestricted	60	0.00	0	Unrestricted	40.68	0.00	0.00	0.00	
	2					1002	Unrestricted	60	0.00	0	Unrestricted	41.09	0.00	0.00	0.00	
201	1		2			1158	1978	60	0.00	59	54	6.46	1.28	0.00	0.41	
	2		2			451	2123	60	0.00	21	324	5.41	0.23	0.00	0.03	
202	1		2	2	B	481	2012	25	1.26	58	55	27.06	16.13	72.31	5.80	5.34
	2		2	2	B	677	2187	25	0.15	72	25	30.92	19.92	86.29	9.98	8.17
	3		2	2	B	451	2187	25	0.16	48	88	25.44	14.35	70.05	5.27	4.84
211	1		2	2	A	255	1980	25	17.73	31	195	42.23	20.75	101.57	4.31	4.31
	2		2	2	A	672	2118	25	0.00	73	23	41.15	20.17	100.05	11.55	9.51
221	1					1098	Unrestricted	60	0.00	0	Unrestricted	22.49	0.00	0.00	0.00	
	2					509	Unrestricted	60	16.00	0	Unrestricted	22.68	0.00	0.00	0.00	
302	1		3	3	B	399	1997	19	0.00	60	50	35.50	20.98	86.46	5.77	5.21
	2		3	3	B	432	2159	19	0.00	60	50	35.65	20.91	84.23	6.32	5.61
	3		3	3	B	616	2159	19	0.10	86	5	71.40	56.43	165.41	17.25	14.4
311	1		3	3	A	170	1987	29	24.00	17	427	29.29	15.83	100.62	3.33	2.85
	2		3	3	A	847	2082	29	0.44	83	9	24.78	11.64	49.18	7.66	4.91
	3		3	3	A	451	2069	29	4.00	44	106	14.16	1.34	0.00	0.17	0.17
321	1		3			736	1915	60	25.00	38	134	16.39	0.59	0.00	0.12	
	2		3			333	2055	60	34.00	16	456	16.30	0.17	0.00	0.02	
322	1					1069	Unrestricted	60	0.00	0	Unrestricted	22.13	0.00	0.00	0.00	
401	1		4			1062	1917	60	0.00	55	62	9.40	1.16	0.00	0.34	
	2		4			586	2070	60	0.00	28	218	24.34	0.34	0.00	0.06	
402	1		4	4	B	511	1886	18	0.00	86	5	48.58	36.02	111.07	9.81	8.74
	2		4	4	B	551	2030	18	0.00	86	5	48.20	35.55	111.53	10.41	9.29
	3		4	4	B	586 <	2023	18	0.00	91	-2	89.69	76.94	203.68	20.28 +	17.2
411	1		4	4	A	930	1931	32	0.00	88	3	40.70	19.39	96.76	15.79	12.6
	2		4	4	A	1063	2085	32	0.50	94	-4	53.55	32.80	121.84	17.23	16.3
421	1					569	Unrestricted	60	4.00	0	Unrestricted	30.16	0.00	0.00	0.00	
	2					349	Unrestricted	60	5.00	0	Unrestricted	30.35	0.00	0.00	0.00	

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	3842.49	209.91	18.31	51.06	30.77	1162.01	138.44	0.00	1300.45
Bus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians									
TOTAL	3842.49	209.91	18.31	51.06	30.77	1162.01	138.44	0.00	1300.45

- | < = adjusted flow warning (upstream links/traffic streams are over-saturated)
- | * = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%
- | ^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%
- | + = average link/traffic stream excess queue is greater than 0
- | **P.I. = PERFORMANCE INDEX**

A4 - 2035 Reference Case PM

D4 - 2035 Reference Case PM*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst over PR
4	19/10/2021 17:01:00	19/10/2021 17:01:00	17:00	60	1115.58	69.41	92.68	202/1	1	3	202/1	101/1	202

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
2035 Reference Case PM		D4	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
2035 Reference Case PM				17:00	

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit
1		✓	✓	Lane Balancing			✓						

Normal Input Flows (PCU/hr)

		To			
		1	2	3	4
From	1	0	1113	42	682
	2	890	0	523	0
	3	266	505	0	566
	4	229	0	536	104

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1		101/1, 101/2	121/1, 121/2	#0000FF
	2		201/1, 201/2	221/1, 221/2	#FF0000
	3		17/1, 17/2	322/1	#00FF00
	4		401/1, 401/2	421/1, 421/2	#FFFF00

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	11		2	3	201/1, 202/1, 321/1, 322/1	Normal	507
	12		3	4	17/1, 302/1, 421/1	Normal	400
	13		3	1	17/1, 302/2, 411/1, 121/1	Normal	266
	14		3	4	17/1, 302/2, 421/2	Normal	166
	15		3	2	17/2, 302/3, 411/2, 111/1, 221/1	Normal	505
	18		1	3	101/1, 102/2, 211/1, 321/1, 322/1	Normal	42
	19		1	4	101/2, 102/3, 211/2, 311/1, 421/1	Normal	341
	20		2	4	201/1, 202/2, 311/1, 421/1	Normal	0
	22		1	3	101/2, 102/3, 211/2, 321/2, 322/1	Normal	0
	23		1	4	101/2, 102/3, 211/2, 311/2, 421/2	Normal	341
	24		2	4	201/1, 202/2, 311/2, 421/2	Normal	0
	26		1	2	101/1, 102/2, 221/2	Normal	548
	27		1	1	101/2, 102/3, 211/2, 311/2, 411/1, 121/1	Normal	0
	28		2	1	201/1, 202/2, 311/2, 411/1, 121/1	Percentage	534
	29		4	4	401/2, 402/3, 111/2, 211/2, 311/1, 421/1	Normal	52
	30		1	2	101/2, 102/3, 211/2, 311/3, 411/2, 111/1, 221/1	Disabled	0
	31		1	1	101/2, 102/3, 211/2, 311/3, 411/2, 121/2	Normal	0
	32		2	2	201/2, 202/3, 311/3, 411/2, 111/1, 221/1	Normal	0
	33		3	4	17/2, 302/3, 411/2, 111/2, 211/2, 311/1, 421/1	Disabled	0
	34		3	4	17/2, 302/3, 411/2, 111/2, 211/2, 311/2, 421/2	Disabled	0
	35		2	1	201/2, 202/3, 311/3, 411/2, 121/2	Normal	356
	36		4	1	401/1, 402/1, 121/1	Normal	110
	37		1	2	101/1, 102/1, 221/1	Normal	565
	39		2	3	201/1, 202/2, 321/2, 322/1	Normal	16
	42		3	3	17/2, 302/3, 411/2, 111/2, 211/1, 321/1, 322/1	Normal	0
	43		3	3	17/2, 302/3, 411/2, 111/2, 211/2, 321/2, 322/1	Normal	0
	44		3	1	17/2, 302/3, 411/2, 121/2	Normal	0
	48		4	3	401/2, 402/3, 111/2, 211/1, 321/1, 322/1	Normal	268
	50		4	4	401/2, 402/3, 111/2, 211/2, 311/2, 421/2	Normal	52
	52		4	3	401/2, 402/3, 111/2, 211/2, 321/2, 322/1	Normal	268
	53		4	2	401/1, 402/2, 111/1, 221/1	Normal	0
	54		4	1	401/1, 402/2, 121/2	Normal	119
55		2	3	201/2, 202/3, 311/3, 411/2, 111/2, 211/1, 321/1, 322/1	Disabled	0	
56		2	3	201/2, 202/3, 311/3, 411/2, 111/2, 211/2, 321/2, 322/1	Disabled	0	
57		4	1	401/2, 402/3, 111/2, 211/2, 311/2, 411/1, 121/1	Disabled	0	
58		4	1	401/2, 402/3, 111/2, 211/2, 311/3, 411/2, 121/2	Disabled	0	

Signal Timings

Network Default: 60s cycle time; 60 steps

Intergreen Matrix for Controller Stream 1

		To	
		A	B
From	A		5
	B	5	

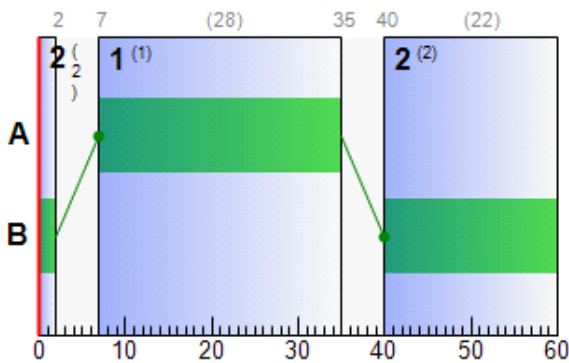
Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A	7	35	28	1	7
	2	✓	2	B	40	2	22	1	7

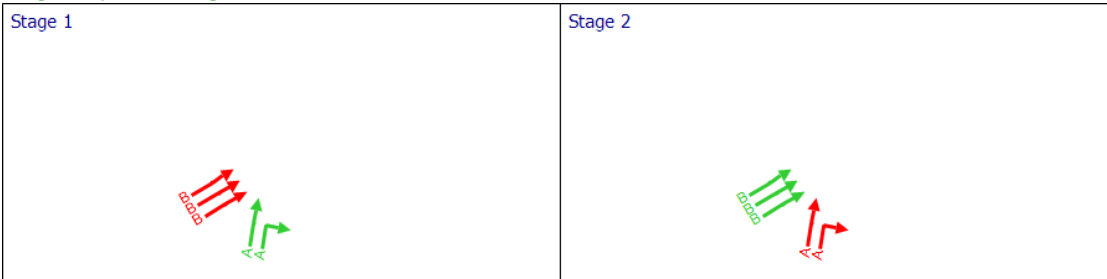
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
102	1	1	1	B	40	2	22
102	2	1	1	B	40	2	22
102	3	1	1	B	40	2	22
111	1	1	1	A	7	35	28
111	2	1	1	A	7	35	28

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



Intergreen Matrix for Controller Stream 2

		To	
		A	B
From	A		5
	B	5	

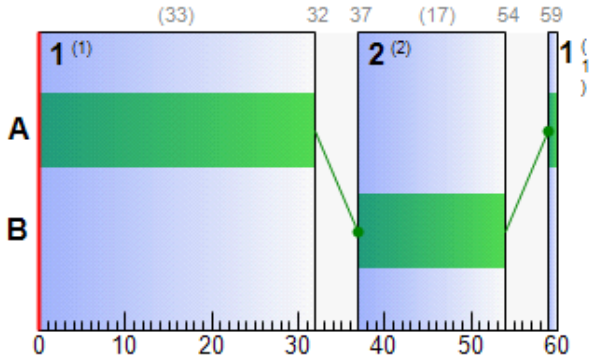
Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
2	1	✓	1	A	59	32	33	1	7
	2	✓	2	B	37	54	17	1	7

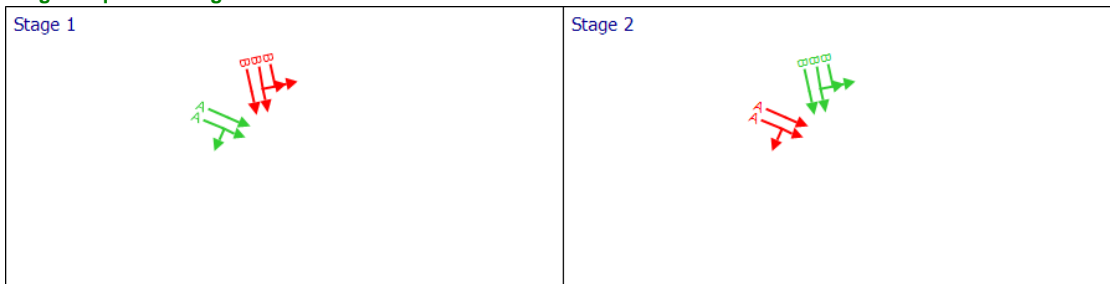
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
202	1	2	2	B	37	54	17
202	2	2	2	B	37	54	17
202	3	2	2	B	37	54	17
211	1	2	2	A	59	32	33
211	2	2	2	A	59	32	33

Phase Timings Diagram for Controller Stream 2



Stage Sequence Diagram for Controller Stream 2



Intergreen Matrix for Controller Stream 3

		To	
		A	B
From	A		6
	B	6	

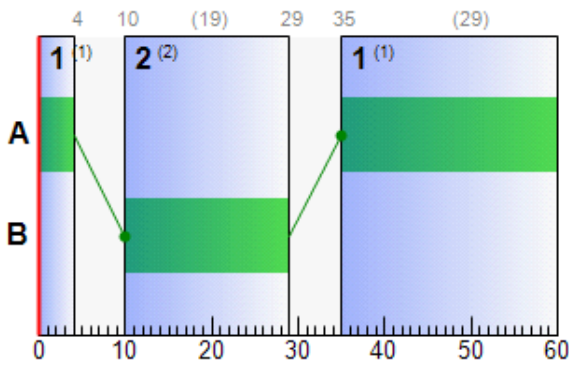
Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
3	1	✓	1	A	35	4	29	1	7
	2	✓	2	B	10	29	19	1	7

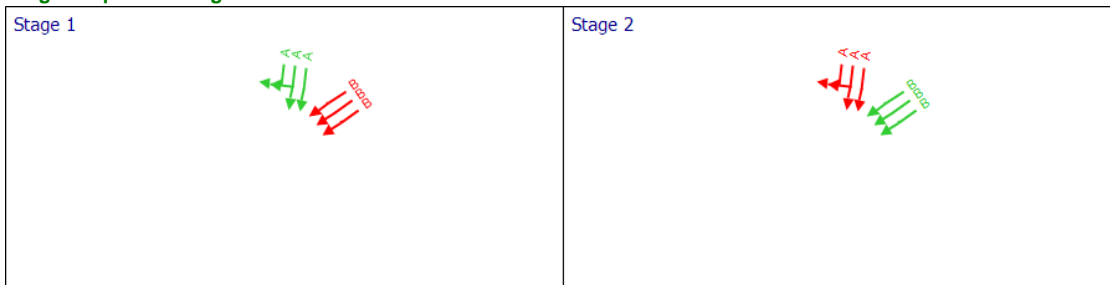
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
302	1	3	3	B	10	29	19
302	2	3	3	B	10	29	19
302	3	3	3	B	10	29	19
311	1	3	3	A	35	4	29
311	2	3	3	A	35	4	29
311	3	3	3	A	35	4	29

Phase Timings Diagram for Controller Stream 3



Stage Sequence Diagram for Controller Stream 3



Intergreen Matrix for Controller Stream 4

		To	
		A	B
From	A		5
	B	5	

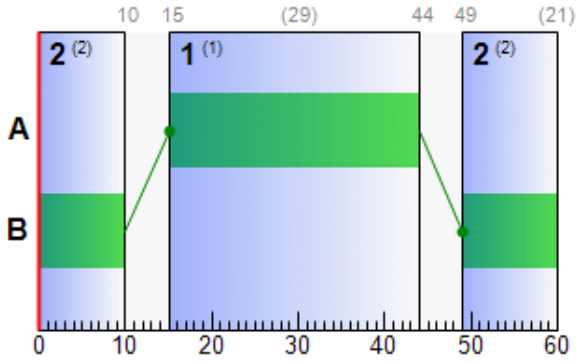
Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
4	1	✓	1	A	15	44	29	1	7
	2	✓	2	B	49	10	21	1	7

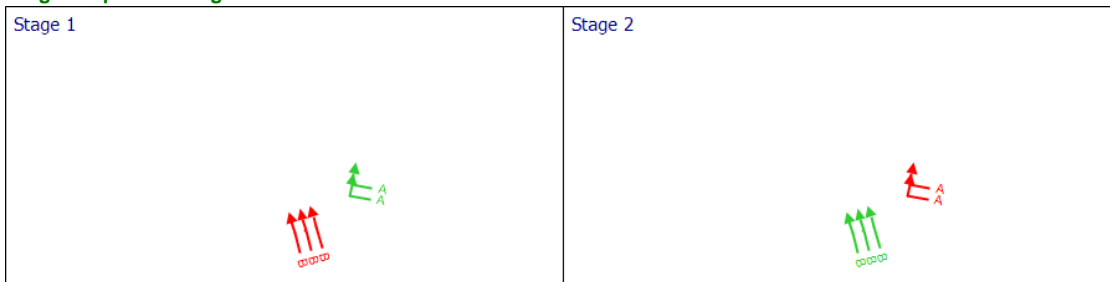
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
402	1	4	4	B	49	10	21
402	2	4	4	B	49	10	21
402	3	4	4	B	49	10	21
411	1	4	4	A	15	44	29
411	2	4	4	A	15	44	29

Phase Timings Diagram for Controller Stream 4



Stage Sequence Diagram for Controller Stream 4



Traffic Stream Results

Traffic Stream Results: Vehicle summary

Time Segment	Arm	Traffic Stream	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)	
17:00-18:00	17	1	44	107	832	1910	60	0.73	0.17	0.71	2.38	0.00	2.38	
		2	24	269	505	2073	60	0.28	0.04	0.17	0.56	0.00	0.56	
	101	1	58	56	1155	2005	60	1.22	0.39	1.49	5.55	0.00	5.55	
		2	32	181	682	2133	60	0.40	0.08	0.29	1.07	0.00	1.07	
	102	1	74	21	565	1989	22	23.01	8.64	45.26	51.27	6.38	57.65	
		2	74	22	590	2079	22	22.97	8.97	46.30	53.45	6.70	60.15	
		3	86	5	682	2079	22	30.68	12.63	64.10	82.53	9.04	91.57	
	111	1	53	71	505	1981	28	20.99	8.00	44.76	41.80	6.01	47.82	
		2	64	40	640	2060	28	5.21	10.87	59.69	13.15	7.08	20.23	
	121	1	0	Unrestricted	910	Unrestricted	60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		2	0	Unrestricted	475	Unrestricted	60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	201	1	53	68	1057	1978	60	1.04	0.31	4.08	4.35	0.00	4.35	
		2	17	437	356	2123	60	0.17	0.02	0.23	0.24	0.00	0.24	
	202	1	93	-3	507	2012	17	53.12	12.12	76.54	106.22	8.59	114.81	
		2	84	7	550	2186	17	34.49	10.24	64.26	74.83	7.61	82.44	
		3	55	64	356	2187	17	21.36	5.09	31.67	30.00	3.82	33.82	
	211	1	28	221	310	1980	33	14.92	3.48	14.73	18.25	2.62	20.86	
		2	88	2	1054	2102	33	19.73	18.78	76.24	82.03	14.02	96.05	
	221	1	0	Unrestricted	1070	Unrestricted	60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		2	0	Unrestricted	548	Unrestricted	60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	302	1	60	50	400	1997	19	21.01	5.78	32.13	33.16	4.34	37.50	
		2	60	50	432	2159	19	20.91	6.32	29.56	35.63	4.56	40.20	
		3	71	28	505	2159	19	24.12	8.08	37.23	48.05	5.76	53.81	
	311	1	40	128	393	1987	29	13.78	6.75	45.46	21.37	4.99	26.36	
		2	90	0	927	2093	29	23.44	11.66	76.86	85.69	11.02	96.71	
		3	34	162	356	2069	29	1.90	0.29	1.95	2.66	0.22	2.88	
	321	1	43	111	817	1915	60	0.70	0.16	0.69	2.25	0.00	2.25	
		2	14	551	284	2055	60	0.14	0.01	0.05	0.16	0.00	0.16	
	322	1	0	Unrestricted	1101	Unrestricted	60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	401	1	12	653	229	1917	60	0.13	0.01	0.07	0.12	0.00	0.12	
		2	31	191	640	2070	60	0.39	0.07	0.20	0.98	0.00	0.98	
	402	1	16	466	110	1886	21	13.30	1.46	8.04	5.77	0.88	6.66	
2		16	463	119	2030	21	13.27	1.46	7.99	6.23	0.96	7.19		
3		86	4	640	2023	21	32.65	11.81	63.93	82.43	8.70	91.13		
411	1	83	9	800	1931	29	15.78	12.67	55.40	49.78	8.76	58.54		
	2	83	8	861	2085	29	12.87	8.65	35.99	43.71	7.89	51.59		
421	1	0	Unrestricted	793	Unrestricted	60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	2	0	Unrestricted	559	Unrestricted	60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

Final Prediction Table

Traffic Stream Results

Arm	Traffic Stream	Name	Traffic node	SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES	
				Controller stream	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Wasted time total (s (per cycle))	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)	Max end of queue (PCU)
17	1		3			832	1910	60	0.00	44	107	17.11	0.73	0.00	0.17	
	2		3			505	2073	60	0.00	24	269	16.63	0.28	0.00	0.04	
101	1		1			1155	2005	60	0.00	58	56	19.24	1.22	0.00	0.39	
	2		1			682	2133	60	0.00	32	181	18.40	0.40	0.00	0.08	
102	1		1	1	B	565	1989	22	0.00	74	21	36.19	23.01	90.12	8.64	7.47
	2		1	1	B	590	2079	22	0.00	74	22	36.34	22.97	90.53	8.97	7.76
	3		1	1	B	682	2079	22	0.00	86	5	44.27	30.68	105.72	12.63	10.3
111	1		1	1	A	505	1981	28	13.00	53	71	37.22	20.99	94.98	8.00	8.00
	2		1	1	A	640	2060	28	10.00	64	40	21.13	5.21	88.19	10.87	3.15
121	1					910	Unrestricted	60	0.00	0	Unrestricted	40.68	0.00	0.00	0.00	
	2					475	Unrestricted	60	0.00	0	Unrestricted	41.09	0.00	0.00	0.00	
201	1		2			1057	1978	60	0.00	53	68	6.22	1.04	0.00	0.31	
	2		2			356	2123	60	0.00	17	437	5.35	0.17	0.00	0.02	
202	1		2	2	B	507	2012	17	1.69	93	-3	64.05	53.12	135.10	12.12	11.0
	2		2	2	B	550	2186	17	0.04	84	7	45.49	34.49	110.37	10.24	9.16
	3		2	2	B	356	2187	17	0.16	55	64	32.45	21.36	85.57	5.09	4.76
211	1		2	2	A	310	1980	33	9.55	28	221	36.40	14.92	67.35	3.48	3.33
	2		2	2	A	1054	2102	33	1.00	88	2	40.71	19.73	106.10	18.78	9.62
221	1					1070	Unrestricted	60	0.00	0	Unrestricted	22.49	0.00	0.00	0.00	
	2					548	Unrestricted	60	18.00	0	Unrestricted	22.68	0.00	0.00	0.00	
302	1		3	3	B	400	1997	19	0.00	60	50	35.53	21.01	86.52	5.78	5.23
	2		3	3	B	432	2159	19	0.00	60	50	35.65	20.91	84.23	6.32	5.61
	3		3	3	B	505	2159	19	0.10	71	28	39.09	24.12	90.90	8.08	6.99
311	1		3	3	A	393	1987	29	18.00	40	128	27.24	13.78	101.25	6.75	6.40
	2		3	3	A	927 <	2093	29	1.46	90	0	36.57	23.44	94.78	11.66 +	11.4
	3		3	3	A	356	2069	29	13.00	34	162	14.71	1.90	4.85	0.29	0.29
321	1		3			817	1915	60	17.00	43	111	16.51	0.70	0.00	0.16	
	2		3			284	2055	60	43.00	14	551	16.27	0.14	0.00	0.01	
322	1					1101	Unrestricted	60	0.00	0	Unrestricted	22.13	0.00	0.00	0.00	
401	1		4			229	1917	60	0.00	12	653	8.37	0.13	0.00	0.01	
	2		4			640	2070	60	0.00	31	191	24.39	0.39	0.00	0.07	
402	1		4	4	B	110	1886	21	0.00	16	466	25.86	13.30	64.15	1.46	1.18
	2		4	4	B	119	2030	21	0.00	16	463	25.92	13.27	64.10	1.46	1.27
	3		4	4	B	640	2023	21	0.00	86	4	45.40	32.65	108.42	11.81	10.1
411	1		4	4	A	800	1931	29	0.00	83	9	37.09	15.78	87.30	12.67	8.85
	2		4	4	A	861	2085	29	3.25	83	8	33.63	12.87	73.04	8.65	8.16
421	1					793	Unrestricted	60	0.00	0	Unrestricted	30.16	0.00	0.00	0.00	
	2					559	Unrestricted	60	0.00	0	Unrestricted	30.35	0.00	0.00	0.00	

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	3586.26	188.95	18.98	40.36	29.06	985.64	129.94	0.00	1115.58
Bus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians									
TOTAL	3586.26	188.95	18.98	40.36	29.06	985.64	129.94	0.00	1115.58

- | < = adjusted flow warning (upstream links/traffic streams are over-saturated)
- | * = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%
- | ^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%
- | + = average link/traffic stream excess queue is greater than 0
- | **P.I. = PERFORMANCE INDEX**

A5 - LP Scenario 2 With Mit AM D5 - LP Scenario 2 With Mit AM*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst over PR
5	19/10/2021 17:07:04	19/10/2021 17:07:05	08:00	60	3178.26	211.58	134.23	17/2	5	13	411/2	17/2	17/

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
LP Scenario 2 With Mit AM		D5	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
LP Scenario 2 With Mit AM				08:00	

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit
1		✓	✓	Lane Balancing			✓						

Normal Input Flows (PCU/hr)

		To			
		1	2	3	4
From	1	0	1073	92	313
	2	1257	0	466	0
	3	307	701	0	564
	4	1065	0	526	70

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1		101/1, 101/2	121/1, 121/2	#0000FF
	2		201/1, 201/2	221/1, 221/2	#FF0000
	3		17/1, 17/2	322/1	#00FF00
	4		401/1, 401/2	421/1, 421/2	#FFFF00

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	11		2	3	201/1, 202/1, 321/1, 322/1	Normal	466
	12		3	4	17/1, 302/1, 421/1	Normal	419
	13		3	1	17/1, 302/2, 411/1, 121/1	Normal	307
	14		3	4	17/1, 302/2, 421/2	Normal	145
	15		3	2	17/2, 302/3, 411/2, 111/1, 221/1	Normal	701
	18		1	3	101/1, 102/2, 211/1, 321/1, 322/1	Normal	0
	19		1	4	101/2, 102/3, 211/2, 311/1, 421/1	Normal	157
	20		2	4	201/1, 202/2, 311/1, 421/1	Normal	0
	22		1	3	101/2, 102/3, 211/2, 321/2, 322/1	Normal	92
	23		1	4	101/2, 102/3, 211/2, 311/2, 421/2	Normal	157
	24		2	4	201/1, 202/2, 311/2, 421/2	Normal	0
	26		1	2	101/1, 102/2, 221/2	Normal	548
	27		1	1	101/2, 102/3, 211/2, 311/2, 411/1, 121/1	Normal	0
	28		2	1	201/1, 202/2, 311/2, 411/1, 121/1	Percentage	691
	29		4	4	401/2, 402/3, 111/2, 211/2, 311/1, 421/1	Normal	35
	30		1	2	101/2, 102/3, 211/2, 311/3, 411/2, 111/1, 221/1	Disabled	0
	31		1	1	101/2, 102/3, 211/2, 311/3, 411/2, 121/2	Normal	0
	32		2	2	201/2, 202/3, 311/3, 411/2, 111/1, 221/1	Normal	0
	33		3	4	17/2, 302/3, 411/2, 111/2, 211/2, 311/1, 421/1	Disabled	0
	34		3	4	17/2, 302/3, 411/2, 111/2, 211/2, 311/2, 421/2	Disabled	0
	35		2	1	201/2, 202/3, 311/3, 411/2, 121/2	Normal	566
	36		4	1	401/1, 402/1, 121/1	Normal	513
	37		1	2	101/1, 102/1, 221/1	Normal	525
	39		2	3	201/1, 202/2, 321/2, 322/1	Normal	0
	42		3	3	17/2, 302/3, 411/2, 111/2, 211/1, 321/1, 322/1	Normal	0
	43		3	3	17/2, 302/3, 411/2, 111/2, 211/2, 321/2, 322/1	Normal	0
	44		3	1	17/2, 302/3, 411/2, 121/2	Normal	0
	48		4	3	401/2, 402/3, 111/2, 211/1, 321/1, 322/1	Normal	263
	50		4	4	401/2, 402/3, 111/2, 211/2, 311/2, 421/2	Normal	35
	52		4	3	401/2, 402/3, 111/2, 211/2, 321/2, 322/1	Normal	263
	53		4	2	401/1, 402/2, 111/1, 221/1	Normal	0
	54		4	1	401/1, 402/2, 121/2	Normal	552
55		2	3	201/2, 202/3, 311/3, 411/2, 111/2, 211/1, 321/1, 322/1	Disabled	0	
56		2	3	201/2, 202/3, 311/3, 411/2, 111/2, 211/2, 321/2, 322/1	Disabled	0	
57		4	1	401/2, 402/3, 111/2, 211/2, 311/2, 411/1, 121/1	Disabled	0	
58		4	1	401/2, 402/3, 111/2, 211/2, 311/3, 411/2, 121/2	Disabled	0	

Signal Timings

Network Default: 60s cycle time; 60 steps

Intergreen Matrix for Controller Stream 1

		To	
		A	B
From	A		5
	B	5	

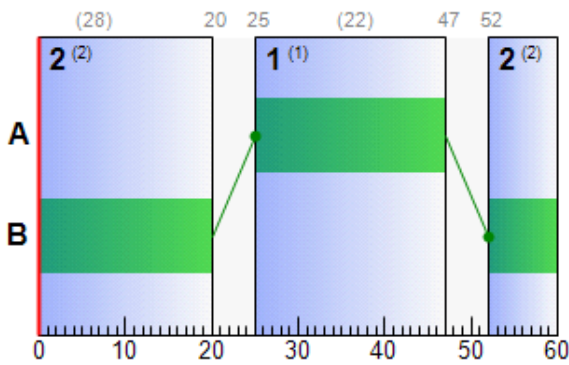
Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A	25	47	22	1	7
	2	✓	2	B	52	20	28	1	7

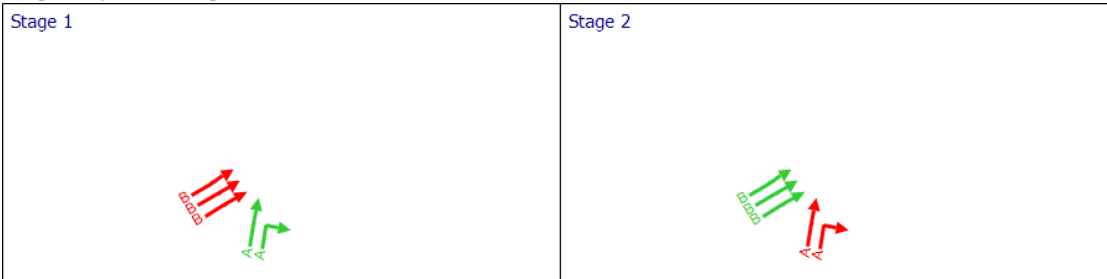
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
102	1	1	1	B	52	20	28
102	2	1	1	B	52	20	28
102	3	1	1	B	52	20	28
111	1	1	1	A	25	47	22
111	2	1	1	A	25	47	22

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



Intergreen Matrix for Controller Stream 2

		To	
		A	B
From	A		5
	B	5	

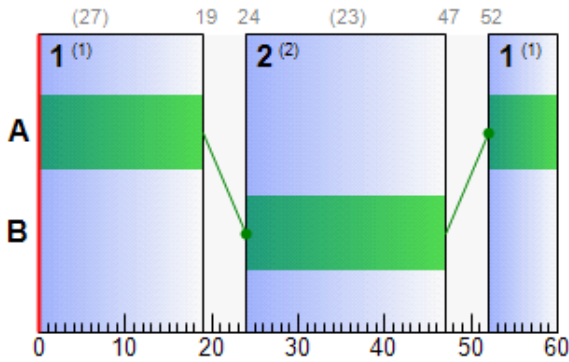
Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
2	1	✓	1	A	52	19	27	1	7
	2	✓	2	B	24	47	23	1	7

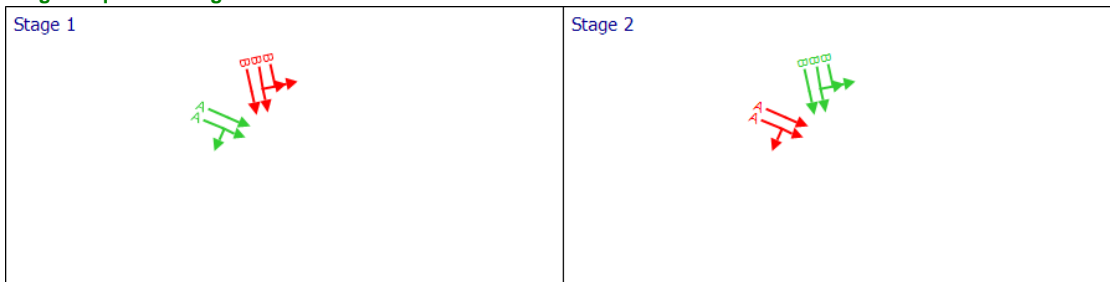
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
202	1	2	2	B	24	47	23
202	2	2	2	B	24	47	23
202	3	2	2	B	24	47	23
211	1	2	2	A	52	19	27
211	2	2	2	A	52	19	27

Phase Timings Diagram for Controller Stream 2



Stage Sequence Diagram for Controller Stream 2



Intergreen Matrix for Controller Stream 3

		To	
		A	B
From	A		6
	B	6	

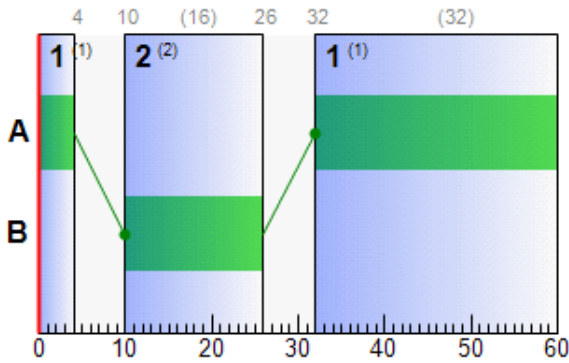
Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
3	1	✓	1	A	32	4	32	1	7
	2	✓	2	B	10	26	16	1	7

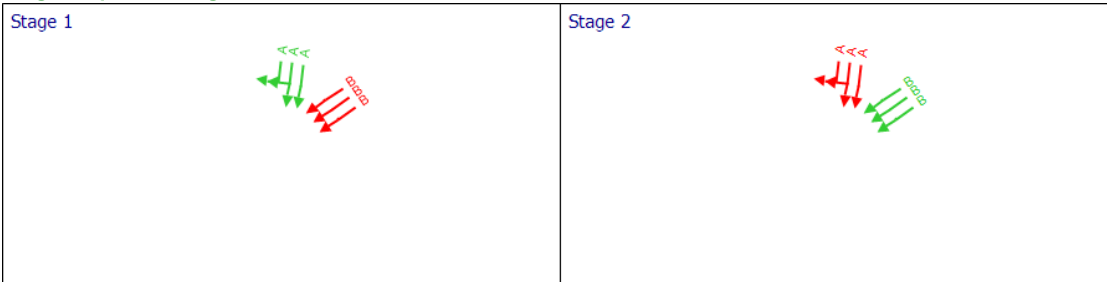
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
302	1	3	3	B	10	26	16
302	2	3	3	B	10	26	16
302	3	3	3	B	10	26	16
311	1	3	3	A	32	4	32
311	2	3	3	A	32	4	32
311	3	3	3	A	32	4	32

Phase Timings Diagram for Controller Stream 3



Stage Sequence Diagram for Controller Stream 3



Intergreen Matrix for Controller Stream 4

		To	
		A	B
From	A		5
	B	5	

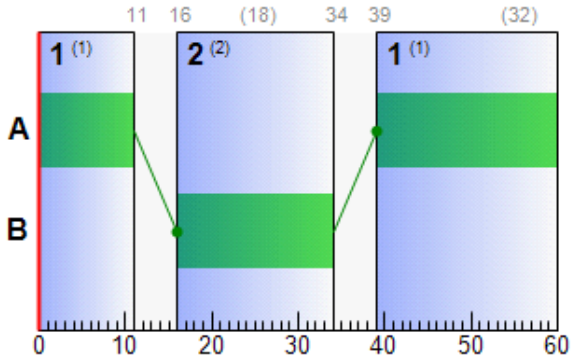
Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
4	1	✓	1	A	39	11	32	1	7
	2	✓	2	B	16	34	18	1	7

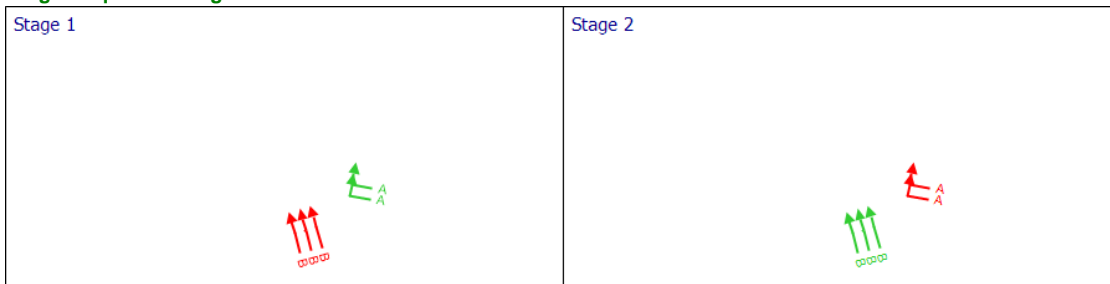
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
402	1	4	4	B	16	34	18
402	2	4	4	B	16	34	18
402	3	4	4	B	16	34	18
411	1	4	4	A	39	11	32
411	2	4	4	A	39	11	32

Phase Timings Diagram for Controller Stream 4



Stage Sequence Diagram for Controller Stream 4



Traffic Stream Results

Traffic Stream Results: Vehicle summary

Time Segment	Arm	Traffic Stream	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)	
08:00-09:00	17	1	46	97	871	1910	60	0.79	0.19	0.80	2.71	0.00	2.71	
		2	134	-33	701	2073	60	477.87	99.37	419.32	1321.35	23.53	1344.88	
	101	1	54	68	1073	2005	60	1.03	0.31	1.18	4.37	0.00	4.37	
		2	19	373	406	2133	60	0.20	0.02	0.09	0.32	0.00	0.32	
	102	1	55	65	525	1989	28	13.35	6.18	32.33	27.64	4.39	32.03	
		2	55	65	548	2079	28	13.39	6.40	33.03	28.94	4.69	33.63	
		3	40	123	406	2079	28	11.33	4.08	20.73	18.15	3.07	21.22	
	111	1	69	31	522	1981	22	33.01	9.55	53.47	68.01	7.10	75.10	
		2	74	22	581	2060	22	10.05	2.15	11.81	23.03	1.49	24.52	
	121	1	0	Unrestricted	1511	Unrestricted	60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		2	0	Unrestricted	1118	Unrestricted	60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	201	1	58	54	1157	1978	60	1.28	0.41	5.48	5.84	0.00	5.84	
		2	27	238	566	2123	60	0.31	0.05	0.65	0.69	0.00	0.69	
	202	1	61	47	466	2012	23	18.26	6.32	39.87	33.57	4.52	38.09	
		2	79	13	691	2187	23	24.99	11.68	73.29	68.11	8.34	76.44	
		3	65	38	566	2187	23	19.28	8.07	50.18	43.04	5.90	48.94	
	211	1	28	223	256	1980	27	1.37	1.15	4.88	1.39	0.37	1.76	
		2	74	22	731	2116	27	11.73	8.08	32.81	33.81	5.40	39.21	
	221	1	0	Unrestricted	1047	Unrestricted	60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		2	0	Unrestricted	548	Unrestricted	60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	302	1	74	22	419	1997	16	28.76	7.25	40.30	47.54	5.23	52.77	
		2	74	22	452	2159	16	28.33	7.51	35.13	50.50	5.62	56.12	
		3	86	5	522	2159	16	116.51	22.72	104.71	240.00	16.51	256.51	
	311	1	17	415	191	1987	32	15.73	3.33	22.42	11.86	2.41	14.27	
		2	79	14	882	2083	32	9.40	8.38	55.23	32.69	4.15	36.84	
		3	50	81	566	2069	32	1.56	0.25	1.67	3.49	0.00	3.49	
	321	1	38	139	722	1915	60	0.57	0.11	0.50	1.62	0.00	1.62	
		2	17	431	348	2055	60	0.18	0.02	0.07	0.25	0.00	0.25	
	322	1	0	Unrestricted	1071	Unrestricted	60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	401	1	56	62	1065	1917	60	1.17	0.35	2.90	4.92	0.00	4.92	
		2	103	-12	596	2070	60	111.86	25.59	73.58	262.97	15.01	277.98	
	402	1	86	5	513	1886	18	36.46	9.90	54.38	73.78	7.20	80.98	
		2	86	5	552	2030	18	35.75	10.46	57.08	77.83	7.74	85.57	
		3	91	-1	581	2023	18	96.65	21.20	114.73	221.45	15.58	237.03	
	411	1	94	-4	998	1931	32	32.81	15.67	68.54	129.15	11.24	140.39	
		2	97	-7	1088	2085	32	38.54	21.13	87.87	165.42	14.36	179.77	
	421	1	0	Unrestricted	610	Unrestricted	60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		2	0	Unrestricted	336	Unrestricted	60	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Final Prediction Table

Traffic Stream Results

Arm	Traffic Stream	Name	Traffic node	SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES	
				Controller stream	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Wasted time total (s (per cycle))	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)	Max of queue (PC)
17	1		3			871	1910	60	0.00	46	97	17.17	0.79	0.00	0.19	
	2		3			701 <	2073	60	44.88	134	-33	494.23	477.87	359.42	99.37 +	
101	1		1			1073	2005	60	0.00	54	68	19.06	1.03	0.00	0.31	
	2		1			406	2133	60	0.00	19	373	18.20	0.20	0.00	0.02	
102	1		1	1	B	525	1989	28	0.00	55	65	26.53	13.35	66.68	6.18	5.2
	2		1	1	B	548	2079	28	0.00	55	65	26.76	13.39	68.28	6.40	5.5
	3		1	1	B	406	2079	28	0.00	40	123	24.93	11.33	60.34	4.08	3.8
111	1		1	1	A	522	1981	22	7.00	69	31	49.25	33.01	108.41	9.55	9.4
	2		1	1	A	581	2060	22	4.00	74	22	25.97	10.05	20.46	2.15	2.0
121	1					1511	Unrestricted	60	0.00	0	Unrestricted	40.68	0.00	0.00	0.00	
	2					1118	Unrestricted	60	0.00	0	Unrestricted	41.09	0.00	0.00	0.00	
201	1		2			1157	1978	60	0.00	58	54	6.46	1.28	0.00	0.41	
	2		2			566	2123	60	0.00	27	238	5.48	0.31	0.00	0.05	
202	1		2	2	B	466	2012	23	1.26	61	47	29.19	18.26	77.30	6.32	5.5
	2		2	2	B	691	2187	23	0.15	79	13	35.99	24.99	96.23	11.68	9.3
	3		2	2	B	566	2187	23	0.16	65	38	30.37	19.28	83.11	8.07	6.8
211	1		2	2	A	256	1980	27	11.09	28	223	22.85	1.37	11.58	1.15	0.4
	2		2	2	A	731	2116	27	4.00	74	22	32.72	11.73	59.00	8.08	5.3
221	1					1047	Unrestricted	60	0.00	0	Unrestricted	22.49	0.00	0.00	0.00	
	2					548	Unrestricted	60	15.00	0	Unrestricted	22.68	0.00	0.00	0.00	
302	1		3	3	B	419	1997	16	0.00	74	22	43.28	28.76	99.59	7.25	6.5
	2		3	3	B	452	2159	16	0.00	74	22	43.07	28.33	99.10	7.51	6.8
	3		3	3	B	522 <	2159	16	0.10	86	5	131.48	116.51	252.12	22.72 +	22.7
311	1		3	3	A	191	1987	32	27.00	17	415	29.19	15.73	100.58	3.33	3.2
	2		3	3	A	882	2083	32	4.80	79	14	22.53	9.40	37.52	8.38	4.6
	3		3	3	A	566	2069	32	9.00	50	81	14.38	1.56	0.00	0.25	0.2
321	1		3			722	1915	60	19.00	38	139	16.38	0.57	0.00	0.11	
	2		3			348	2055	60	36.00	17	431	16.31	0.18	0.00	0.02	
322	1					1071	Unrestricted	60	0.00	0	Unrestricted	22.13	0.00	0.00	0.00	
401	1		4			1065	1917	60	0.00	56	62	9.41	1.17	0.00	0.35	
	2		4			596	2070	60	43.16	103	-12	135.86	111.86	206.15	25.59	
402	1		4	4	B	513	1886	18	0.00	86	5	49.02	36.46	111.92	9.90	8.8
	2		4	4	B	552	2030	18	0.00	86	5	48.39	35.75	111.81	10.46	9.3
	3		4	4	B	581 <	2023	18	0.00	91	-1	109.40	96.65	213.93	21.20 +	21.2
411	1		4	4	A	998	1931	32	1.00	94	-4	54.12	32.81	89.79	15.67	15.3
	2		4	4	A	1088 <	2085	32	0.70	97	-7	59.30	38.54	105.22	21.13 +	19.5
421	1					610	Unrestricted	60	6.00	0	Unrestricted	30.16	0.00	0.00	0.00	
	2					336	Unrestricted	60	7.00	0	Unrestricted	30.35	0.00	0.00	0.00	

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	4008.81	345.21	11.61	66.60	144.98	3004.41	173.85	0.00	3178.26
Bus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians									
TOTAL	4008.81	345.21	11.61	66.60	144.98	3004.41	173.85	0.00	3178.26

- | < = adjusted flow warning (upstream links/traffic streams are over-saturated)
- | * = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%
- | ^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%
- | + = average link/traffic stream excess queue is greater than 0
- | **P.I. = PERFORMANCE INDEX**

A6 - LP Scenario 2 With Mit PM

D6 - LP Scenario 2 With Mit PM*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst over PR
6	19/10/2021 17:17:37	19/10/2021 17:17:37	17:00	60	1239.91	78.39	91.57	211/2	1	3	211/2	101/1	211

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
LP Scenario 2 With Mit PM		D6	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
LP Scenario 2 With Mit PM				17:00	

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit
1		✓	✓	Lane Balancing			✓						

Normal Input Flows (PCU/hr)

		To			
		1	2	3	4
From	1	0	1306	11	660
	2	937	0	517	0
	3	311	510	0	553
	4	301	0	540	88

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1		101/1, 101/2	121/1, 121/2	#0000FF
	2		201/1, 201/2	221/1, 221/2	#FF0000
	3		17/1, 17/2	322/1	#00FF00
	4		401/1, 401/2	421/1, 421/2	#FFFF00

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	11		2	3	201/1, 202/1, 321/1, 322/1	Normal	517
	12		3	4	17/1, 302/1, 421/1	Normal	415
	13		3	1	17/1, 302/2, 411/1, 121/1	Normal	311
	14		3	4	17/1, 302/2, 421/2	Normal	138
	15		3	2	17/2, 302/3, 411/2, 111/1, 221/1	Normal	510
	18		1	3	101/1, 102/2, 211/1, 321/1, 322/1	Normal	2
	19		1	4	101/2, 102/3, 211/2, 311/1, 421/1	Normal	330
	20		2	4	201/1, 202/2, 311/1, 421/1	Normal	0
	22		1	3	101/2, 102/3, 211/2, 321/2, 322/1	Normal	9
	23		1	4	101/2, 102/3, 211/2, 311/2, 421/2	Normal	330
	24		2	4	201/1, 202/2, 311/2, 421/2	Normal	0
	26		1	2	101/1, 102/2, 221/2	Normal	666
	27		1	1	101/2, 102/3, 211/2, 311/2, 411/1, 121/1	Normal	0
	28		2	1	201/1, 202/2, 311/2, 411/1, 121/1	Percentage	562
	29		4	4	401/2, 402/3, 111/2, 211/2, 311/1, 421/1	Normal	44
	30		1	2	101/2, 102/3, 211/2, 311/3, 411/2, 111/1, 221/1	Disabled	0
	31		1	1	101/2, 102/3, 211/2, 311/3, 411/2, 121/2	Normal	0
	32		2	2	201/2, 202/3, 311/3, 411/2, 111/1, 221/1	Normal	0
	33		3	4	17/2, 302/3, 411/2, 111/2, 211/2, 311/1, 421/1	Disabled	0
	34		3	4	17/2, 302/3, 411/2, 111/2, 211/2, 311/2, 421/2	Disabled	0
	35		2	1	201/2, 202/3, 311/3, 411/2, 121/2	Normal	375
	36		4	1	401/1, 402/1, 121/1	Normal	145
	37		1	2	101/1, 102/1, 221/1	Normal	640
	39		2	3	201/1, 202/2, 321/2, 322/1	Normal	0
	42		3	3	17/2, 302/3, 411/2, 111/2, 211/1, 321/1, 322/1	Normal	0
	43		3	3	17/2, 302/3, 411/2, 111/2, 211/2, 321/2, 322/1	Normal	0
	44		3	1	17/2, 302/3, 411/2, 121/2	Normal	0
	48		4	3	401/2, 402/3, 111/2, 211/1, 321/1, 322/1	Normal	270
	50		4	4	401/2, 402/3, 111/2, 211/2, 311/2, 421/2	Normal	44
	52		4	3	401/2, 402/3, 111/2, 211/2, 321/2, 322/1	Normal	270
	53		4	2	401/1, 402/2, 111/1, 221/1	Normal	0
	54		4	1	401/1, 402/2, 121/2	Normal	156
55		2	3	201/2, 202/3, 311/3, 411/2, 111/2, 211/1, 321/1, 322/1	Disabled	0	
56		2	3	201/2, 202/3, 311/3, 411/2, 111/2, 211/2, 321/2, 322/1	Disabled	0	
57		4	1	401/2, 402/3, 111/2, 211/2, 311/2, 411/1, 121/1	Disabled	0	
58		4	1	401/2, 402/3, 111/2, 211/2, 311/3, 411/2, 121/2	Disabled	0	

Signal Timings

Network Default: 60s cycle time; 60 steps

Intergreen Matrix for Controller Stream 1

		To	
		A	B
From	A		5
	B	5	

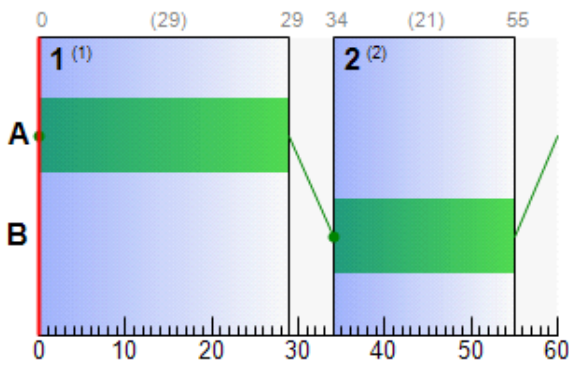
Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A	0	29	29	1	7
	2	✓	2	B	34	55	21	1	7

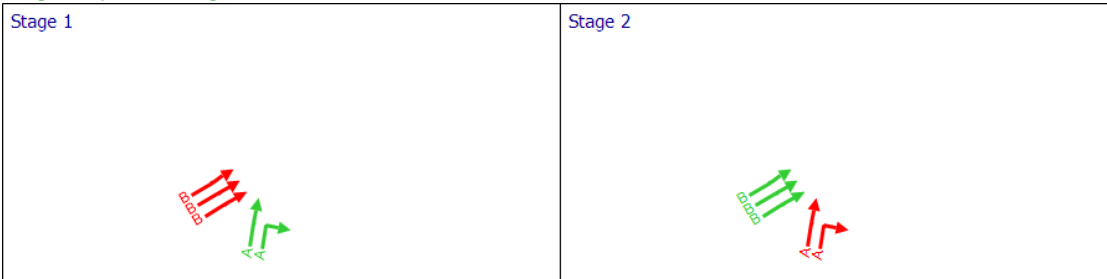
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
102	1	1	1	B	34	55	21
102	2	1	1	B	34	55	21
102	3	1	1	B	34	55	21
111	1	1	1	A	0	29	29
111	2	1	1	A	0	29	29

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



Intergreen Matrix for Controller Stream 2

		To	
		A	B
From	A		5
	B	5	

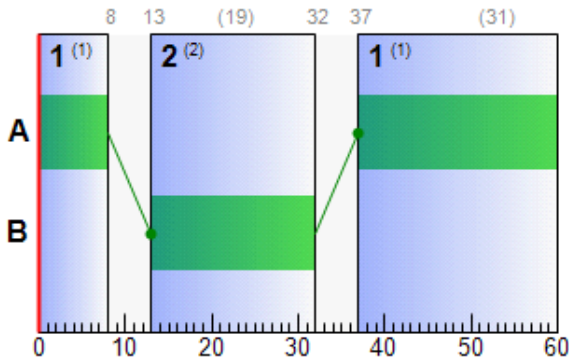
Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
2	1	✓	1	A	37	8	31	1	7
	2	✓	2	B	13	32	19	1	7

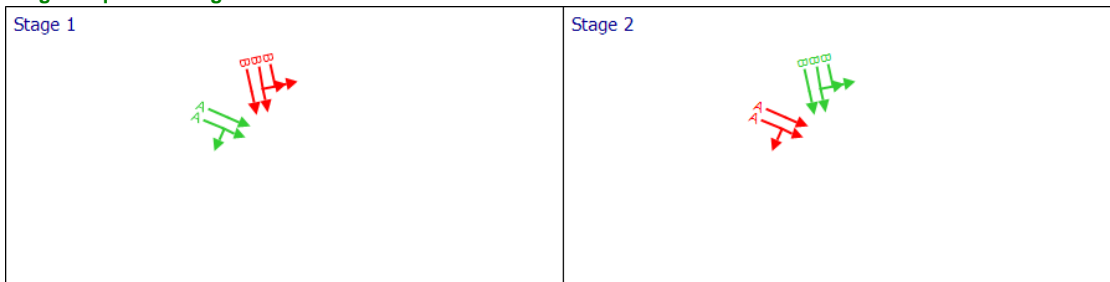
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
202	1	2	2	B	13	32	19
202	2	2	2	B	13	32	19
202	3	2	2	B	13	32	19
211	1	2	2	A	37	8	31
211	2	2	2	A	37	8	31

Phase Timings Diagram for Controller Stream 2



Stage Sequence Diagram for Controller Stream 2



Intergreen Matrix for Controller Stream 3

		To	
		A	B
From	A		6
	B	6	

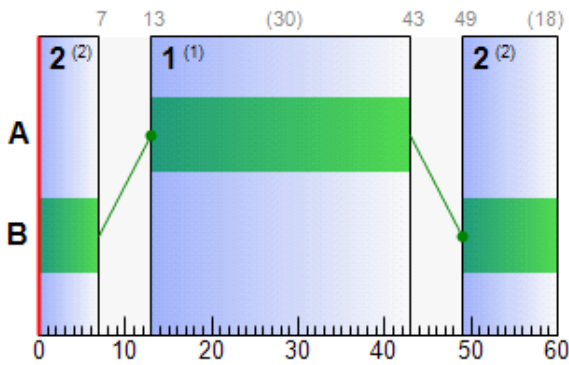
Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
3	1	✓	1	A	13	43	30	1	7
	2	✓	2	B	49	7	18	1	7

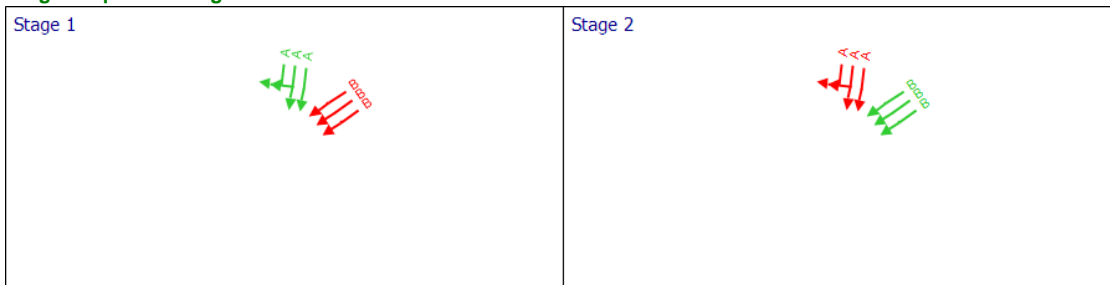
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
302	1	3	3	B	49	7	18
302	2	3	3	B	49	7	18
302	3	3	3	B	49	7	18
311	1	3	3	A	13	43	30
311	2	3	3	A	13	43	30
311	3	3	3	A	13	43	30

Phase Timings Diagram for Controller Stream 3



Stage Sequence Diagram for Controller Stream 3



Intergreen Matrix for Controller Stream 4

		To	
		A	B
From	A		5
	B	5	

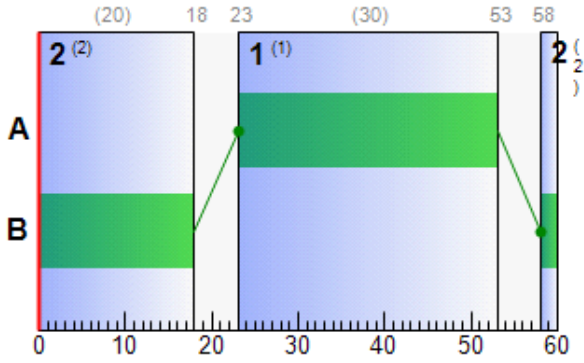
Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
4	1	✓	1	A	23	53	30	1	7
	2	✓	2	B	58	18	20	1	7

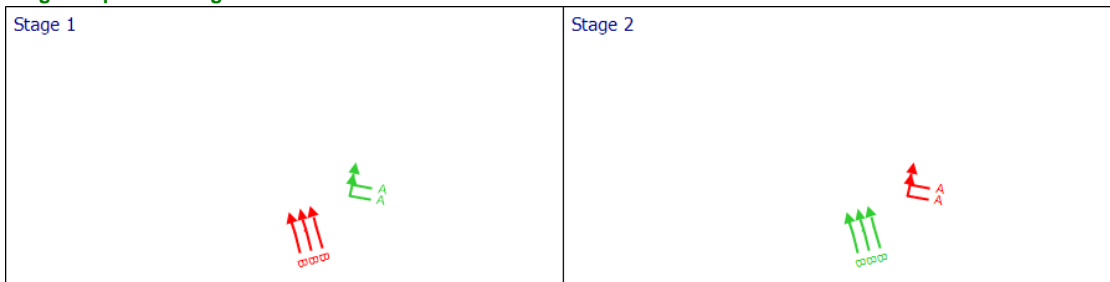
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
402	1	4	4	B	58	18	20
402	2	4	4	B	58	18	20
402	3	4	4	B	58	18	20
411	1	4	4	A	23	53	30
411	2	4	4	A	23	53	30

Phase Timings Diagram for Controller Stream 4



Stage Sequence Diagram for Controller Stream 4



Traffic Stream Results

Traffic Stream Results: Vehicle summary

Time Segment	Arm	Traffic Stream	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)	
17:00-18:00	17	1	45	99	864	1910	60	0.78	0.19	0.79	2.65	0.00	2.65	
		2	25	266	510	2073	60	0.28	0.04	0.17	0.57	0.00	0.57	
	101	1	65	38	1308	2005	60	1.68	0.61	2.33	8.66	0.00	8.66	
		2	31	187	669	2133	60	0.39	0.07	0.27	1.02	0.00	1.02	
	102	1	88	3	640	1989	21	34.69	12.17	63.73	87.58	8.94	96.52	
		2	88	3	668	2079	21	34.25	13.08	67.46	90.25	9.33	99.58	
		3	88	3	669	2079	21	34.44	13.12	66.62	90.87	9.37	100.24	
	111	1	51	75	510	1981	29	20.46	9.08	50.81	41.16	6.60	47.76	
		2	61	48	628	2060	29	7.79	2.76	15.16	19.30	1.70	21.00	
	121	1	0	Unrestricted	1018	Unrestricted	60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		2	0	Unrestricted	531	Unrestricted	60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	201	1	55	65	1079	1978	60	1.09	0.33	4.35	4.64	0.00	4.64	
		2	18	410	375	2123	60	0.18	0.02	0.25	0.27	0.00	0.27	
	202	1	84	7	517	2012	19	33.42	9.51	60.06	68.14	6.88	75.02	
		2	78	16	562	2187	19	27.47	9.33	58.55	60.89	6.97	67.86	
		3	52	74	375	2187	19	19.23	5.09	31.67	28.44	3.82	32.26	
	211	1	26	244	272	1980	31	4.24	2.41	10.19	4.54	1.61	6.15	
		2	92	-2	1027	2103	31	24.68	13.88	56.34	99.99	10.23	110.22	
	221	1	0	Unrestricted	1150	Unrestricted	60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		2	0	Unrestricted	666	Unrestricted	60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	302	1	66	37	415	1997	18	23.40	6.27	34.82	38.30	4.70	43.01	
		2	66	37	449	2159	18	23.27	6.82	31.90	41.21	5.09	46.30	
		3	75	20	510	2159	18	26.97	8.52	39.29	54.26	6.23	60.49	
	311	1	36	147	374	1987	30	12.72	6.73	45.29	18.77	4.77	23.54	
		2	88	3	936	2092	30	16.73	9.88	65.12	61.78	9.06	70.84	
		3	35	157	375	2069	30	1.39	0.20	1.35	2.06	0.15	2.21	
	321	1	41	118	789	1915	60	0.66	0.14	0.63	2.05	0.00	2.05	
		2	14	563	279	2055	60	0.14	0.01	0.05	0.15	0.00	0.15	
	322	1	0	Unrestricted	1068	Unrestricted	60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	401	1	16	473	301	1917	60	0.17	0.01	0.12	0.21	0.00	0.21	
		2	30	197	628	2070	60	0.38	0.07	0.19	0.94	0.00	0.94	
	402	1	22	310	145	1886	20	14.52	1.68	9.24	8.30	1.26	9.57	
2		22	310	156	2030	20	14.46	1.81	9.86	8.90	1.36	10.26		
3		89	1	628	2023	20	37.25	12.42	67.24	92.28	9.10	101.38		
411	1	88	3	873	1931	30	29.94	13.74	60.09	103.11	10.23	113.34		
	2	84	7	885	2085	30	20.57	12.56	52.25	71.82	9.42	81.23		
421	1	0	Unrestricted	789	Unrestricted	60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	2	0	Unrestricted	512	Unrestricted	60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

Final Prediction Table

Traffic Stream Results

Arm	Traffic Stream	Name	Traffic node	SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES	
				Controller stream	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Wasted time total (s (per cycle))	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)	Max end of re queue (PCU)
17	1		3			864	1910	60	0.00	45	99	17.16	0.78	0.00	0.19	
	2		3			510	2073	60	0.00	25	266	16.63	0.28	0.00	0.04	
101	1		1			1308	2005	60	0.00	65	38	19.70	1.68	0.00	0.61	
	2		1			669	2133	60	0.00	31	187	18.39	0.39	0.00	0.07	
102	1		1	1	B	640	1989	21	0.00	88	3	47.87	34.69	111.41	12.17	10.5
	2		1	1	B	668	2079	21	0.00	88	3	47.63	34.25	111.34	13.08	10.8
	3		1	1	B	669	2079	21	0.00	88	3	48.03	34.44	111.70	13.12	10.9
111	1		1	1	A	510	1981	29	14.00	51	75	36.69	20.46	103.18	9.08	8.77
	2		1	1	A	628	2060	29	9.00	61	48	23.71	7.79	21.53	2.76	2.26
121	1					1018	Unrestricted	60	0.00	0	Unrestricted	40.68	0.00	0.00	0.00	
	2					531	Unrestricted	60	0.00	0	Unrestricted	41.09	0.00	0.00	0.00	
201	1		2			1079	1978	60	0.00	55	65	6.27	1.09	0.00	0.33	
	2		2			375	2123	60	0.00	18	410	5.36	0.18	0.00	0.02	
202	1		2	2	B	517	2012	19	1.69	84	7	44.35	33.42	106.08	9.51	8.43
	2		2	2	B	562	2187	19	0.15	78	16	38.47	27.47	98.91	9.33	8.19
	3		2	2	B	375	2187	19	0.16	52	74	30.32	19.23	81.26	5.09	4.74
211	1		2	2	A	272	1980	31	18.45	26	244	25.71	4.24	47.21	2.41	1.76
	2		2	2	A	1027	2103	31	0.00	92	-2	45.67	24.68	79.45	13.88	11.8
221	1					1150	Unrestricted	60	0.00	0	Unrestricted	22.49	0.00	0.00	0.00	
	2					666	Unrestricted	60	16.00	0	Unrestricted	22.68	0.00	0.00	0.00	
302	1		3	3	B	415	1997	18	0.00	66	37	37.92	23.40	90.42	6.27	5.80
	2		3	3	B	449	2159	18	0.00	66	37	38.01	23.27	90.36	6.82	6.11
	3		3	3	B	510	2159	18	0.10	75	20	41.94	26.97	97.43	8.52	7.47
311	1		3	3	A	374	1987	30	19.00	36	147	26.18	12.72	101.67	6.73	5.10
	2		3	3	A	936	2092	30	1.38	88	3	29.87	16.73	77.21	9.88	8.26
	3		3	3	A	375	2069	30	11.00	35	157	14.21	1.39	3.18	0.20	0.20
321	1		3			789	1915	60	26.00	41	118	16.47	0.66	0.00	0.14	
	2		3			279	2055	60	48.00	14	563	16.26	0.14	0.00	0.01	
322	1					1068	Unrestricted	60	0.00	0	Unrestricted	22.13	0.00	0.00	0.00	
401	1		4			301	1917	60	0.00	16	473	8.41	0.17	0.00	0.01	
	2		4			628	2070	60	0.00	30	197	24.38	0.38	0.00	0.07	
402	1		4	4	B	145	1886	20	0.00	22	310	27.08	14.52	69.54	1.68	1.64
	2		4	4	B	156	2030	20	0.00	22	310	27.11	14.46	69.51	1.81	1.76
	3		4	4	B	628	2023	20	0.00	89	1	50.00	37.25	115.60	12.42	10.8
411	1		4	4	A	873	1931	30	3.00	88	3	51.25	29.94	93.46	13.74	13.4
	2		4	4	A	885	2085	30	3.70	84	7	41.33	20.57	84.87	12.56	12.0
421	1					789	Unrestricted	60	0.00	0	Unrestricted	30.16	0.00	0.00	0.00	
	2					512	Unrestricted	60	0.00	0	Unrestricted	30.35	0.00	0.00	0.00	

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	3722.00	202.45	18.38	45.51	32.88	1113.10	126.81	0.00	1239.91
Bus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians									
TOTAL	3722.00	202.45	18.38	45.51	32.88	1113.10	126.81	0.00	1239.91

- | < = adjusted flow warning (upstream links/traffic streams are over-saturated)
- | * = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%
- | ^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%
- | + = average link/traffic stream excess queue is greater than 0
- | **P.I. = PERFORMANCE INDEX**

