

Signal Timings

Network Default: 100s cycle time; 100 steps

Controller Stream 2

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)	Minimum possible cycle time (s)
2			1	NetworkDefault	100	49

Controller Stream 2 - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
2	Unspecified						Absolute

Controller Stream 2 - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
2	✓	✓	Offsets And Green Splits	✓	

Phases

Controller Stream	Phase	Name	Street minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
2	A	Traffic Phase	7	300	0	0	Unknown
	B	Filter Arrow	4	300	0	0	Unknown
	C	Traffic Phase	7	7	0	0	Unknown
	D	Traffic Phase	7	300	0	0	Unknown
	E	Pedestrian Phase	5	300	0	0	Unknown
	F	Pedestrian Phase	5	300	0	0	Unknown
	G	Pedestrian Phase	5	300	0	0	Unknown

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)	Run every N cycles	Probability of running (%)
2	1	D, B	1	1	100
	2	C, B, G	1	1	100
	3	A, F	1	1	100
	4	E	1	1	100

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends	Minimum possible cycle time (s)	Exclude from analysis
2	1	(untitled)	Single	1, 2, 3, 4	67, 79, 93, 3	49	

Intergreen Matrix for Controller Stream 2

	To							
From		A	B	C	D	E	F	G
	A		6	5	6	5		8
	B	5					5	
	C	5			6	8	5	
	D	5		5		7		7
	E	8		8	8			
	F		7	7				
	G	5			5			

Banned Stage transitions for Controller Stream 2

	To				
	1	2	3	4	
From	1				
	2				
	3				
	4				

Link Results

Link Results: Vehicle summary

Time Segment	Link	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)
16:30-17:30	200	46	94	91	1959	9	59.52	2.81	7.62	21.36	1.42	22.78
	210	25	264	313	1642	76	5.16	2.34	28.48	6.38	1.20	7.58
	211	4	2157	6	1881	7	55.23	0.17	1.85	1.31	0.09	1.40
	212	18	395	319	1754	100	1.25	0.11	0.34	1.58	0.00	1.58
	220	38	136	395	1817	56	7.19	3.92	49.05	11.22	1.29	12.50
	290	3	3497	45	1800	100	1.03	0.01	0.04	0.18	0.00	0.18
	291	21	330	376	1800	100	1.26	0.13	0.39	1.88	0.00	1.88
	300	5	1645	98	1903	100	1.00	0.03	0.16	0.39	0.00	0.39
	310	18	396	105	578	100	3.80	0.11	0.32	1.57	0.00	1.57
	320	0	Unrestricted	0	766	100	0.00	0.00	0.00	0.00	0.00	0.00
	390	5	1551	98	1800	100	1.06	0.03	0.09	0.41	0.00	0.41
	391	0	Unrestricted	0	1800	100	0.00	0.00	0.00	0.00	0.00	0.00
	392	3	3341	53	2007	100	0.92	0.01	0.05	0.19	0.00	0.19
	393	2	3574	53	2143	100	0.86	0.01	0.07	0.18	0.00	0.18
	500	15	517	265	1817	100	1.16	0.09	0.57	1.21	0.00	1.21
	501	50	81	119	2179	10	57.19	3.60	24.82	26.84	1.77	28.61
	510	38	135	175	1989	22	38.89	4.26	68.31	26.91	2.18	29.10
	511	7	1272	33	2159	22	34.03	1.84	26.91	4.37	0.38	4.75
	512	7	1260	33	2147	22	34.12	1.83	11.40	4.38	0.38	4.76
	513	51	75	253	2141	22	41.13	6.37	40.91	41.12	3.27	44.39
	514	10	796	208	2071	100	0.97	0.06	0.17	0.79	0.00	0.79
	515	13	597	286	2215	100	0.93	0.07	0.28	1.05	0.00	1.05
	520	20	350	143	1934	36	22.92	2.08	36.02	12.93	1.07	13.99
	521	50	81	340	1850	36	26.43	5.13	93.73	35.44	2.63	38.07
	522	35	161	483	1803	100	5.14	4.29	12.65	9.79	2.03	11.81
	530	27	230	54	1981	9	54.14	1.57	5.11	11.53	0.79	12.32
	531	18	406	38	2138	9	51.52	1.89	31.11	7.72	0.54	8.26
	532	7	1245	13	1943	9	50.87	0.36	6.51	2.61	0.18	2.79
	533	3	3338	51	1948	100	0.95	0.01	0.09	0.19	0.00	0.19
	590	15	511	265	1800	100	1.17	0.09	0.26	1.23	0.00	1.23
	591	2	4163	38	1800	100	1.02	0.01	0.03	0.15	0.00	0.15
	592	21	329	378	1800	100	1.27	0.13	0.39	1.89	0.00	1.89
	593	16	456	291	1800	100	1.19	0.10	0.29	1.37	0.00	1.37
	594	3	3223	49	1812	100	1.02	0.01	0.05	0.20	0.00	0.20
	595	2	3531	49	1979	100	0.93	0.01	0.04	0.18	0.00	0.18

Link Results: Flows and signals

Time Segment	Link	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Calculated sat flow (PCU/hr)	Calculated capacity (PCU/hr)	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Mean modulus of error	Actual green (s (per cycle))	Effective green (s (per cycle))
16:30-17:30	200	91	91	0		1959	196	46		94	0.00	9	10
	210	313	313	0		1642	1264	25		264	0.00	76	77
	211	6	6	0		1881	150	4		2157	0.00	7	8
	212	319	319	0		1754	1754	18		395	0.00	100	100
	220	395	395	0		1817	1036	38		136	0.96	56	57
	280	10	10	0		10000	600	2		5300	0.00	5	6
	281	10	10	0		10000	600	2		5300	0.00	5	6
	290	45	45	0		1800	1800	3		3497	0.72	100	100
	291	376	376	0		1800	1800	21		330	0.78	100	100
	300	98	98	0		1903	1903	5		1645	0.87	100	100
	310	105	105	0		578	578	18		396	0.00	100	100
	320	0	0	0		766	766	0		Unrestricted	0.00	100	100
	390	98	98	0		1800	1800	5		1551	0.73	100	100
	391	0	0	0		1800	1800	0		Unrestricted	0.00	100	100
	392	53	53	0	✓	2007	2007	3		3341	0.00	100	100
	393	53	53	0	✓	2143	2143	2		3574	0.00	100	100
	500	265	265	0		1817	1817	15		517	0.42	100	100
	501	119	119	0		2179	240	50		81	0.45	10	11
	510	175	175	0		1989	457	38		135	0.00	22	23
	511	33	33	0	✓	2159	497	7		1272	0.00	22	23
	512	33	33	0	✓	2147	492	7		1260	0.00	22	23
	513	253	253	0		2141	492	51		75	0.00	22	23
	514	208	208	-1		2071	2071	10		796	0.00	100	100
	515	286	286	-1		2215	2215	13		597	0.00	100	100
	520	143	143	0		1934	716	20		350	0.40	36	37
	521	340	340	0		1850	685	50		81	0.40	36	37
	522	483	483	0		1803	1399	35		161	0.00	100	100
	530	54	54	0		1981	198	27		230	0.00	9	10
	531	38	38	0		2138	214	18		406	0.00	9	10
	532	13	13	0		1943	194	7		1245	0.00	9	10
	533	51	51	0		1948	1948	3		3338	0.00	100	100
	580	10	10	0		10000	6800	0		61100	0.00	67	68
	581	10	10	0		10000	2100	0		18800	0.00	20	21
	582	10	10	0		10000	2900	0		26000	0.00	28	29
	583	10	10	0		10000	1700	1		15200	0.00	16	17
	584	10	10	0		10000	600	2		5300	0.00	5	6
	590	265	265	0		1800	1800	15		511	0.26	100	100
	591	38	38	0		1800	1800	2		4163	1.47	100	100
	592	378	378	0		1800	1800	21		329	0.97	100	100
	593	291	291	0		1800	1800	16		456	1.01	100	100
	594	49	49	0		1812	1812	3		3223	0.89	100	100
	595	49	49	0		1979	1979	2		3531	1.30	100	100
	596	10	10	0		Unrestricted	Unrestricted	0		Unrestricted	0.00	9	10

Link Results: Stops and delays

Time Segment	Link	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Unweighted cost of delay (£ per hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Uniform stops (Stops per hr)	Random stops (Stops per hr)	Unweighted cost of stops (£ per hr)	Weighted cost of stops (£ per hr)
16:30-17:30	200	22.50	59.52	1.07	0.43	21.36	21.36	109.03	84.37	14.85	1.42	1.42
	210	5.98	5.16	0.28	0.16	6.38	6.38	26.88	78.24	5.89	1.20	1.20
	211	5.98	55.23	0.07	0.02	1.31	1.31	104.08	5.52	0.72	0.09	0.09
	212	22.50	1.25	0.00	0.11	1.58	1.58	0.00	0.00	0.00	0.00	0.00
	220	8.32	7.19	0.48	0.31	11.22	11.22	22.83	68.39	21.90	1.29	1.29
	280	7.30	47.70	0.12	0.01	1.88	1.88	0.00	0.00	0.00	0.00	0.00
	281	3.15	47.70	0.12	0.01	1.88	1.88	0.00	0.00	0.00	0.00	0.00
	290	22.50	1.03	0.00	0.01	0.18	0.18	0.00	0.00	0.00	0.00	0.00
	291	22.50	1.26	0.00	0.13	1.88	1.88	0.00	0.00	0.00	0.00	0.00
	300	10.39	1.00	0.00	0.03	0.39	0.39	0.00	0.00	0.00	0.00	0.00
	310	22.50	3.80	0.00	0.11	1.57	1.57	0.00	0.00	0.00	0.00	0.00
	320	22.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	390	22.50	1.06	0.00	0.03	0.41	0.41	0.00	0.00	0.00	0.00	0.00
	391	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	392	15.07	0.92	0.00	0.01	0.19	0.19	0.00	0.00	0.00	0.00	0.00
	393	11.09	0.86	0.00	0.01	0.18	0.18	0.00	0.00	0.00	0.00	0.00
	500	9.80	1.16	0.00	0.09	1.21	1.21	0.00	0.00	0.00	0.00	0.00
	501	7.96	57.19	1.40	0.49	26.84	26.84	104.00	106.79	16.97	1.77	1.77
	510	3.75	38.89	1.58	0.31	26.91	26.91	87.27	142.09	10.99	2.18	2.18
	511	3.79	34.03	0.27	0.04	4.37	4.37	80.84	25.09	1.25	0.38	0.38
	512	8.94	34.12	0.27	0.04	4.38	4.38	80.88	25.07	1.26	0.38	0.38
	513	8.71	41.13	2.37	0.53	41.12	41.12	90.35	210.32	18.65	3.27	3.27
	514	19.20	0.97	0.00	0.06	0.79	0.79	0.00	0.00	0.00	0.00	0.00
	515	14.40	0.93	0.00	0.07	1.05	1.05	0.00	0.00	0.00	0.00	0.00
	520	3.57	22.92	0.79	0.12	12.93	12.93	52.22	70.22	4.46	1.07	1.07
	521	3.54	26.43	2.00	0.49	35.44	35.44	54.25	166.96	17.49	2.63	2.63
	522	22.50	5.14	0.43	0.26	9.79	9.79	29.43	132.71	9.44	2.03	2.03
	530	18.53	54.14	0.63	0.19	11.53	11.53	102.81	48.99	6.52	0.79	0.79
	531	3.41	51.52	0.44	0.11	7.72	7.72	99.97	34.20	3.79	0.54	0.54
	532	3.41	50.87	0.15	0.04	2.61	2.61	99.68	11.70	1.26	0.18	0.18
	533	9.43	0.95	0.00	0.01	0.19	0.19	0.00	0.00	0.00	0.00	0.00
	580	3.60	5.55	0.01	0.00	0.22	0.22	0.00	0.00	0.00	0.00	0.00
	581	7.48	32.46	0.09	0.00	1.28	1.28	0.00	0.00	0.00	0.00	0.00
	582	3.60	26.18	0.07	0.00	1.03	1.03	0.00	0.00	0.00	0.00	0.00
	583	9.06	35.93	0.10	0.00	1.42	1.42	0.00	0.00	0.00	0.00	0.00
	584	5.86	47.70	0.12	0.01	1.88	1.88	0.00	0.00	0.00	0.00	0.00
	590	22.50	1.17	0.00	0.09	1.23	1.23	0.00	0.00	0.00	0.00	0.00
	591	22.50	1.02	0.00	0.01	0.15	0.15	0.00	0.00	0.00	0.00	0.00
	592	22.50	1.27	0.00	0.13	1.89	1.89	0.00	0.00	0.00	0.00	0.00
	593	22.50	1.19	0.00	0.10	1.37	1.37	0.00	0.00	0.00	0.00	0.00
	594	17.57	1.02	0.00	0.01	0.20	0.20	0.00	0.00	0.00	0.00	0.00
	595	17.57	0.93	0.00	0.01	0.18	0.18	0.00	0.00	0.00	0.00	0.00
	596	5.40	40.95	0.11	0.00	1.62	1.62	0.00	0.00	0.00	0.00	0.00

Link Results: Queues and blocking

Time Segment	Link	Initial queue (PCU)	Mean max queue (PCU)	Max queue storage (PCU)	Utilised storage (%)	Average storage excess queue (PCU)	Average limit excess queue (PCU)	Excess queue penalty (£ per hr)	Mean end of green queue (PCU)	Mean end of red queue (PCU)	Wasted time starvation (s (per cycle))	Wasted time blocking back (s (per cycle))	Wasted time total (s (per cycle))	Estimated blocking
16:30-17:30	200	0.00	2.81	36.83	7.62	0.00	0.00	0.00	0.43	2.71	0.00	0.00	0.00	
	210	0.00	2.34	8.21	28.48	0.00	0.00	0.00	0.16	2.25	0.00	0.00	0.00	
	211	0.00	0.17	9.41	1.85	0.00	0.00	0.00	0.02	0.17	7.00	0.00	7.00	
	212	0.00	0.11	32.98	0.34	0.00	0.00	0.00			0.00	0.00	0.00	
	220	0.00	3.92	8.00	49.05	0.00	0.00	0.00	0.31	1.68	7.00	0.00	7.00	
	280	0.00	0.27	10.00	2.70	0.00	0.00	0.00	0.01	0.27	0.00	0.00	0.00	
	281	0.00	0.27	10.00	2.70	0.00	0.00	0.00	0.01	0.27	0.00	0.00	0.00	
	290	0.00	0.01	33.84	0.04	0.00	0.00	0.00			73.00	0.00	73.00	
	291	0.00	0.13	33.84	0.39	0.00	0.00	0.00			17.00	0.00	17.00	
	300	0.00	0.03	16.52	0.16	0.00	0.00	0.00			56.00	0.00	56.00	
	310	0.00	0.11	34.78	0.32	0.00	0.00	0.00			0.00	0.00	0.00	
	320	0.00	0.00	34.78	0.00	0.00	0.00	0.00			100.00	0.00	100.00	
	390	0.00	0.03	33.84	0.09	0.00	0.00	0.00			57.00	0.00	57.00	
	391	0.00	0.00	33.84	0.00	0.00	0.00	0.00			100.00	0.00	100.00	
	392	0.00	0.01	25.27	0.05	0.00	0.00	0.00			100.00	0.00	100.00	
	393	0.00	0.01	18.62	0.07	0.00	0.00	0.00			100.00	0.00	100.00	
	500	0.00	0.09	14.89	0.57	0.00	0.00	0.00			6.00	0.00	6.00	
	501	0.00	3.60	14.49	24.82	0.00	0.00	0.00	0.49	3.20	1.00	0.00	1.00	
	510	0.00	4.26	6.23	68.31	0.00	0.00	0.00	0.31	4.16	0.00	0.00	0.00	
	511	0.00	1.84	6.83	26.91	0.00	0.00	0.00	0.04	0.73	21.00	0.00	21.00	
	512	0.00	1.83	16.05	11.40	0.00	0.00	0.00	0.04	0.73	21.00	0.08	21.08	
	513	0.00	6.37	15.58	40.91	0.00	0.00	0.00	0.53	6.16	0.00	0.00	0.00	
	514	0.00	0.06	33.22	0.17	0.00	0.00	0.00			0.00	0.00	0.00	
	515	0.00	0.07	26.66	0.28	0.00	0.00	0.00			0.00	0.00	0.00	
	520	0.00	2.08	5.76	36.02	0.00	0.00	0.00	0.12	2.08	2.00	0.00	2.00	
	521	0.00	5.13	5.47	93.73	0.00	0.00	0.00	0.49	5.13	0.00	0.00	0.00	
	522	0.00	4.29	33.90	12.65	0.00	0.00	0.00			0.00	22.40	22.40	
	530	0.00	1.57	30.68	5.11	0.00	0.00	0.00	0.19	1.54	7.00	0.00	7.00	
	531	0.00	1.89	6.09	31.11	0.00	0.00	0.00	0.11	1.06	8.00	0.00	8.00	
	532	0.00	0.36	5.54	6.51	0.00	0.00	0.00	0.04	0.36	9.00	0.00	9.00	
	533	0.00	0.01	15.35	0.09	0.00	0.00	0.00			100.00	0.00	100.00	
	580	0.00	0.09	10.00	0.90	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.00	
	581	0.00	0.22	10.00	2.22	0.00	0.00	0.00	0.00	0.22	0.00	0.00	0.00	
	582	0.00	0.20	10.00	1.99	0.00	0.00	0.00	0.00	0.20	0.00	0.00	0.00	
	583	0.00	0.23	10.00	2.34	0.00	0.00	0.00	0.00	0.23	0.00	0.00	0.00	
	584	0.00	0.27	10.00	2.70	0.00	0.00	0.00	0.01	0.27	0.00	0.00	0.00	
	590	0.00	0.09	33.84	0.26	0.00	0.00	0.00			0.00	0.00	0.00	
	591	0.00	0.01	33.84	0.03	0.00	0.00	0.00			83.00	0.00	83.00	
	592	0.00	0.13	33.84	0.39	0.00	0.00	0.00			37.00	0.00	37.00	
	593	0.00	0.10	33.84	0.29	0.00	0.00	0.00			44.00	0.00	44.00	
	594	0.00	0.01	26.60	0.05	0.00	0.00	0.00			80.00	0.00	80.00	
	595	0.00	0.01	29.05	0.04	0.00	0.00	0.00			89.00	0.00	89.00	
	596	0.00	0.25	10.00	2.50	0.00	0.00	0.00	0.00	0.25	0.00	0.00	0.00	

Link Results: Journey times

Time Segment	Link	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	JourneyTime (s)
16:30-17:30	200	18.20	2.07	8.78	82.02
	210	16.65	0.97	17.18	11.15
	211	0.32	0.10	3.13	61.22
	212	63.80	2.10	30.31	23.75
	220	29.26	1.70	17.17	15.51
	280	0.08	0.15	0.53	55.00
	281	0.04	0.14	0.25	50.85
	290	9.01	0.29	30.60	23.53
	291	75.28	2.48	30.30	23.76
	300	9.06	0.31	29.20	11.38
	310	21.00	0.77	27.38	26.30
	320	0.00	0.00	0.00	0.00
	390	19.63	0.64	30.56	23.56
	391	0.00	0.00	0.00	0.00
	392	7.03	0.23	30.16	15.99
	393	4.85	0.17	27.84	11.95
	500	23.09	0.81	28.62	10.96
	501	8.42	2.15	3.91	65.15
	510	5.85	2.08	2.81	42.64
	511	1.10	0.34	3.21	37.81
	512	2.59	0.39	6.65	43.06
	513	19.61	3.51	5.59	49.84
	514	35.50	1.17	30.47	20.16
	515	36.62	1.22	30.05	15.34
	520	4.53	1.05	4.31	26.48
	521	10.70	2.83	3.78	29.97
	522	96.60	3.71	26.05	27.64
	530	8.90	1.09	8.16	72.67
	531	1.15	0.58	1.99	54.93
	532	0.39	0.20	2.01	54.29
	533	4.28	0.15	29.07	10.38
	580	0.04	0.03	1.57	9.15
	581	0.08	0.11	0.75	39.94
	582	0.04	0.08	0.48	29.78
	583	0.10	0.12	0.81	44.99
	584	0.07	0.15	0.44	53.56
	590	53.00	1.74	30.42	23.67
	591	7.60	0.25	30.61	23.52
	592	75.60	2.50	30.30	23.77
	593	58.28	1.92	30.39	23.69
	594	7.66	0.25	30.24	18.59
	595	7.66	0.25	30.39	18.50
	596	0.06	0.13	0.47	46.35

Link Results: Advanced

Time Segment	Link	Degree of saturation penalty (£ per hr)	Ped gap accepting penalty (£ per hr)	Warmed up	Mean Max Queue EoTS (PCU)	Mean End of Green Queue EoTS (PCU)	Mean End of Red Queue EoTS (PCU)	PCU Factor	Cost of traffic penalties (£ per hr)	Unweighted performance index (£ per hr)	Performance Index (£ per hr)
16:30-17:30	200	0.00	0.00	✓	2.81	0.43	2.71	1.00	0.00	22.78	22.78
	210	0.00	0.00	✓	2.34	0.16	2.25	1.00	0.00	7.58	7.58
	211	0.00	0.00	✓	0.17	0.02	0.17	1.00	0.00	1.40	1.40
	212	0.00	0.00	✓	0.11			1.00	0.00	1.58	1.58
	220	0.00	0.00	✓	3.92	0.31	1.68	1.00	0.00	12.50	12.50
	280	0.00	0.00	✓	0.27	0.01	0.27	1.00	0.00	0.00	0.00
	281	0.00	0.00	✓	0.27	0.01	0.27	1.00	0.00	0.00	0.00
	290	0.00	0.00	✓	0.01			1.00	0.00	0.18	0.18
	291	0.00	0.00	✓	0.13			1.00	0.00	1.88	1.88
	300	0.00	0.00	✓	0.03			1.00	0.00	0.39	0.39
	310	0.00	0.00	✓	0.11			1.00	0.00	1.57	1.57
	320	0.00	0.00	✓	0.00			1.00	0.00	0.00	0.00
	390	0.00	0.00	✓	0.03			1.00	0.00	0.41	0.41
	391	0.00	0.00	✓	0.00			1.00	0.00	0.00	0.00
	392	0.00	0.00	✓	0.01			1.00	0.00	0.19	0.19
	393	0.00	0.00	✓	0.01			1.00	0.00	0.18	0.18
	500	0.00	0.00	✓	0.09			1.00	0.00	1.21	1.21
	501	0.00	0.00	✓	3.60	0.49	3.20	1.00	0.00	28.61	28.61
	510	0.00	0.00	✓	4.26	0.31	4.16	1.00	0.00	29.10	29.10
	511	0.00	0.00	✓	1.84	0.04	0.73	1.00	0.00	4.75	4.75
	512	0.00	0.00	✓	1.83	0.04	0.73	1.00	0.00	4.76	4.76
	513	0.00	0.00	✓	6.37	0.53	6.16	1.00	0.00	44.39	44.39
	514	0.00	0.00	✓	0.06			1.00	0.00	0.79	0.79
	515	0.00	0.00	✓	0.07			1.00	0.00	1.05	1.05
	520	0.00	0.00	✓	2.08	0.12	2.08	1.00	0.00	13.99	13.99
	521	0.00	0.00	✓	5.13	0.49	5.13	1.00	0.00	38.07	38.07
	522	0.00	0.00	✓	4.29			1.00	0.00	11.81	11.81
	530	0.00	0.00	✓	1.57	0.19	1.54	1.00	0.00	12.32	12.32
	531	0.00	0.00	✓	1.89	0.11	1.06	1.00	0.00	8.26	8.26
	532	0.00	0.00	✓	0.36	0.04	0.36	1.00	0.00	2.79	2.79
	533	0.00	0.00	✓	0.01			1.00	0.00	0.19	0.19
	580	0.00	0.00	✓	0.09	0.00	0.09	1.00	0.00	0.00	0.00
	581	0.00	0.00	✓	0.22	0.00	0.22	1.00	0.00	0.00	0.00
	582	0.00	0.00	✓	0.20	0.00	0.20	1.00	0.00	0.00	0.00
	583	0.00	0.00	✓	0.23	0.00	0.23	1.00	0.00	0.00	0.00
	584	0.00	0.00	✓	0.27	0.01	0.27	1.00	0.00	0.00	0.00
	590	0.00	0.00	✓	0.09			1.00	0.00	1.23	1.23
	591	0.00	0.00	✓	0.01			1.00	0.00	0.15	0.15
	592	0.00	0.00	✓	0.13			1.00	0.00	1.89	1.89
	593	0.00	0.00	✓	0.10			1.00	0.00	1.37	1.37
	594	0.00	0.00	✓	0.01			1.00	0.00	0.20	0.20
	595	0.00	0.00	✓	0.01			1.00	0.00	0.18	0.18
	596	0.00	0.00	✓	0.25	0.00	0.25	1.00	0.00	0.00	0.00



Collections

Point to Point Journey Time

Average Journey Time (s) for Local Matrix: 3

	To			
		A	B	C
From	A	0.0	34.9	0.0
	B	40.3	0.0	0.0
	C	0.0	0.0	0.0

Path Journey Time

Path	From Location	To Location	Normal Calculated Flow (PCU/hr)	Normal journey time (s)	Normal journey dist (m)	Bus journey dist (m)	Tram journey dist (m)	Pedestrian journey dist (m)	Calculated Total Flow (PCU/hr)	Avg journey time (s)	Avg journey dist (m)
1	B	C	0	26.30	400.00	400.00	400.00	400.00	0	0.00	1600.00
2	C	B	0	23.56	400.00	400.00	400.00	400.00	0	0.00	1600.00
3	B	A	53	38.25	292.42	292.42	292.42	292.42	53	38.25	292.42
4	C	A	0	11.95	292.42	292.42	292.42	292.42	0	0.00	1169.68
5	B	A	53	42.29	333.93	333.93	333.93	333.93	53	42.29	333.93
6	C	A	0	15.99	333.93	333.93	333.93	333.93	0	0.00	1335.72
7	A	B	98	34.94	292.33	292.33	292.33	292.33	98	34.94	292.33
8	A	C	0	11.38	292.33	292.33	292.33	292.33	0	0.00	1169.32

Average Journey Time (s) for Local Matrix: 5

	To					
		A	B	C	D	E
From	A	0.0	105.8	116.7	170.9	165.7
	B	108.5	0.0	69.5	123.7	118.6
	C	104.2	104.5	0.0	86.5	76.7
	D	93.2	93.4	81.4	0.0	72.7
	E	111.7	112.0	92.6	88.4	0.0

Path Journey Time

Path	From Location	To Location	Normal Calculated Flow (PCU/hr)	Normal journey time (s)	Normal journey dist (m)	Bus journeydist (m)	Tram journey dist (m)	Pedestrian journey dist (m)	Calculated Total Flow (PCU/hr)	Avg journey time (s)	Avg journey dist (m)
1	A	E	2	165.66	426.90	426.90	426.90	426.90	2	165.66	426.90
2	A	E	2	165.75	426.90	426.90	426.90	426.90	2	165.75	426.90
3	E	A	2	111.71	438.73	438.73	438.73	438.73	2	111.71	438.73
4	A	B	20	105.78	400.00	400.00	400.00	400.00	20	105.78	400.00
5	E	B	14	111.95	438.73	438.73	438.73	438.73	14	111.95	438.73
6	B	E	7	118.55	480.09	480.09	480.09	480.09	7	118.55	480.09
7	B	E	7	118.64	480.09	480.09	480.09	480.09	7	118.64	480.09
8	B	A	6	108.50	453.19	453.19	453.19	453.19	6	108.50	453.19
9	E	C	38	89.08	314.13	314.13	314.13	314.13	38	89.08	314.13
10	E	C	38	96.19	364.74	364.74	364.74	364.74	38	96.19	364.74
11	A	C	49	116.65	487.15	487.15	487.15	487.15	49	116.65	487.15
12	B	C	216	69.54	540.34	540.34	540.34	540.34	216	69.54	540.34
13	C	E	33	76.57	360.47	360.47	360.47	360.47	33	76.57	360.47
14	C	E	33	76.90	363.70	363.70	363.70	363.70	33	76.90	363.70
16	C	B	228	104.46	479.42	479.42	479.42	479.42	228	104.46	479.42
17	C	A	25	104.22	479.42	479.42	479.42	479.42	25	104.22	479.42
18	D	C	340	81.37	431.47	431.47	431.47	431.47	340	81.37	431.47
19	D	B	114	93.40	505.68	505.68	505.68	505.68	114	93.40	505.68
20	D	A	12	93.16	505.68	505.68	505.68	505.68	12	93.16	505.68
22	D	E	9	72.62	387.84	387.84	387.84	387.84	9	72.62	387.84
23	D	E	9	72.71	387.84	387.84	387.84	387.84	9	72.71	387.84
24	A	D	19	170.86	470.75	470.75	470.75	470.75	19	170.86	470.75
25	B	D	84	123.74	523.94	523.94	523.94	523.94	84	123.74	523.94
26	C	D	175	86.50	403.98	403.98	403.98	403.98	175	86.50	403.98
27	E	D	13	88.36	314.18	314.18	314.18	314.18	13	88.36	314.18

Final Prediction Table

Link Results

			SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES		
Link	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)	Mean end of red queue (PCU)	we
200		2	2	A	91	1959	9	0.00	46	94	82.02	59.52	109.03	2.81	2.71	
210		2	2	B	313	1642	76	0.00	25	264	11.15	5.16	26.88	2.34	2.25	
211		2	2	C	6	1881	7	7.00	4	2157	61.22	55.23	104.08	0.17	0.17	
212		2			319	1754	100	0.00	18	395	23.75	1.25	0.00	0.11		
220		2	2	D	395	1817	56	7.00	38	136	15.51	7.19	22.83	3.92	1.68	
280 P		2	2	E	10	10000	5	0.00	1.667	5300	55.00	47.70	0.00	0.27	0.27	
281 P		2	2	G	10	10000	5	0.00	1.667	5300	50.85	47.70	0.00	0.27	0.27	
290		2			45	1800	100	73.00	3	3497	23.53	1.03	0.00	0.01		
291		2			376	1800	100	17.00	21	330	23.76	1.26	0.00	0.13		
300	(untitled)	3			98	1903	100	56.00	5	1645	11.38	1.00	0.00	0.03		
310	(untitled)	3			105	578	100	0.00	18	396	26.30	3.80	0.00	0.11		
320		3			0	766	100	100.00	0	Unrestricted	0.00	0.00	0.00	0.00		
390	(untitled)	3			98	1800	100	57.00	5	1551	23.56	1.06	0.00	0.03		
391	(untitled)	3			0	1800	100	100.00	0	Unrestricted	0.00	0.00	0.00	0.00		
392	(untitled)	3			53	2007	100	100.00	3	3341	15.99	0.92	0.00	0.01		
393	(untitled)	3			53	2143	100	100.00	2	3574	11.95	0.86	0.00	0.01		
500		5			265	1817	100	6.00	15	517	10.96	1.16	0.00	0.09		
501		5	5	A	119	2179	10	1.00	50	81	65.15	57.19	104.00	3.60	3.20	
510		5	5	B	175	1989	22	0.00	38	135	42.64	38.89	87.27	4.26	4.16	
511		5	5	B	33	2159	22	21.00	7	1272	37.81	34.03	80.84	1.84	0.73	
512		5	5	B	33	2147	22	21.08	7	1260	43.06	34.12	80.88	1.83	0.73	
513		5	5	C	253	2141	22	0.00	51	75	49.84	41.13	90.35	6.37	6.16	
514		5			208	2071	100	0.00	10	796	20.16	0.97	0.00	0.06		
515		5			286	2215	100	0.00	13	597	15.34	0.93	0.00	0.07		
520		5	5	D	143	1934	36	2.00	20	350	26.48	22.92	52.22	2.08	2.08	
521		5	5	D	340	1850	36	0.00	50	81	29.97	26.43	54.25	5.13	5.13	
522		5			483	1803	100	22.40	35	161	27.64	5.14	29.43	4.29		
530		5	5	E	54	1981	9	7.00	27	230	72.67	54.14	102.81	1.57	1.54	
531		5	5	E	38	2138	9	8.00	18	406	54.93	51.52	99.97	1.89	1.06	
532		5	5	F	13	1943	9	9.00	7	1245	54.29	50.87	99.68	0.36	0.36	
533		5			51	1948	100	100.00	3	3338	10.38	0.95	0.00	0.01		
580 P		5	5	G	10	10000	67	0.00	0.147	61100	9.15	5.55	0.00	0.09	0.09	
581 P		5	5	K	10	10000	20	0.00	0.476	18800	39.94	32.46	0.00	0.22	0.22	
582 P		5	5	H	10	10000	28	0.00	0.345	26000	29.78	26.18	0.00	0.20	0.20	
583 P		5	5	I	10	10000	16	0.00	0.588	15200	44.99	35.93	0.00	0.23	0.23	
584 P		5	5	J	10	10000	5	0.00	1.667	5300	53.56	47.70	0.00	0.27	0.27	
590		5			265	1800	100	0.00	15	511	23.67	1.17	0.00	0.09		
591		5			38	1800	100	83.00	2	4163	23.52	1.02	0.00	0.01		
592		5			378	1800	100	37.00	21	329	23.77	1.27	0.00	0.13		
593		5			291	1800	100	44.00	16	456	23.69	1.19	0.00	0.10		
594		5			49	1812	100	80.00	3	3223	18.59	1.02	0.00	0.01		
595		5			49	1979	100	89.00	2	3531	18.50	0.93	0.00	0.01		
596 P			2	F	10	999999999	9	0.00	0	Unrestricted	46.35	40.95	0.00	0.25	0.25	

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	743.22	40.03	18.56	12.24	4.56	238.55	19.20	0.00	257.75
Bus									
Tram									
Pedestrians									
TOTAL	743.72	40.95	18.16	12.99	4.60	249.75	19.20	0.00	257.75

- | P = link is a pedestrian link
- | < = 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

A3 - 2026 Base + HG(140) AM D3 - 2026 Base + HG(140), AM

Summary

Data Errors and Warnings

Severity	Area	Item	Description
Info	Link Data	Link 596 (Pedestrian)	Link 596 is not connected to any other Links or Traffic Streams

Run Summary

Analysis set used	Run start time	Run finish time	Run duration (s)	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 unsignal PRC
3	09/11/2021 23:46:34	09/11/2021 23:46:34	0.34	07:45	90	262.89	17.71	56.86	510	0	0	510	310

Analysis Set Details

Name	Use Simulation	Description	Use specific Demand Set(s)	Specific Demand Set (s)	Optimise specific Demand Set(s)	Include in report	Locked
2026 Base + HG(140) AM			✓	D3		✓	

Demand Set Details

Scenario name	Time Period name	Description	Composite	Demand sets	Start time (HH:mm)	Locked	Run automatically
2026 Base + HG(140)	AM	2026 Base + Heritage Gate (140 dwellings)			07:45		✓

Network Options

Network timings

Network cycle time (s)	Minimum possible cycle time (s)	Absolute minimum possible cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
90	53	53		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)	Missing stage transition options
10000.00	10000.00	10000.00	2	Assume banned

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from traffic model	Exclude pedestrians from results calculation	Random delay mode	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		✓	Simplified (TRANSYT 12)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms ² [-2])	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms ² [-2])	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Offsets And Green Splits	✓

Advanced

Optimisation type	OUTProfile accuracy (%)	SASart temperature	SACooling factor	Random seed	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Simulated Annealing	10, 10, 1, 1, 0.1, 0.1, 0.01, 0.01	300.00	100.00	1		✓	2, 5			Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Traffic Nodes

Traffic Nodes

Traffic node	Name	Description
2		
3	(untitled)	
5		

Links

Links

Link	Name	Description	Traffic node	Length (m)	Has Saturation Flow	Use RR67	Saturation flow (PCU/hr)	Cell saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Is minor shared	Allow Nearside Turn On Red
200			2	200.00	✓		1959		✓		Normal		
210			2	53.19	✓		1642	1642	✓		Normal		
211			2	53.19	✓		1881	1881	✓		Normal		
212			2	200.00	✓		1754				Normal		
220			2	73.99	✓		1817		✓		Normal		
280			2	8.11	✓		10000		✓		Pedestrian		
281			2	3.50	✓		10000		✓		Pedestrian		
290			2	200.00	✓		1800				Normal		
291			2	200.00	✓		1800				Normal		
300	(untitled)		3	92.33	✓		1903				Normal		
310	(untitled)		3	200.00						✓	Normal		
320			3	200.00						✓	Normal		
390	(untitled)		3	200.00	✓		1800				Normal		
391	(untitled)		3	200.00	✓		1800				Normal		
392	(untitled)		3	133.93	✓		2007				Normal		
393	(untitled)		3	92.42	✓		2143				Normal		
500			5	87.15	✓		1817				Normal		
501			5	70.75	✓		2179		✓		Normal		
510			5	33.33	✓		1989	1989	✓	✓	Normal		
511			5	33.67	✓		2159	2159	✓		Normal		
512			5	79.51	✓		2147	2147	✓		Normal		
513			5	77.39	✓		2141	2141	✓		Normal		
514			5	170.65	✓		2071				Normal		
515			5	128.04	✓		2215				Normal		
520			5	31.69	✓		1934	1934	✓		Normal		
521			5	31.47	✓		1850	1850	✓		Normal		
522			5	200.00	✓		1803				Normal		
530			5	164.74	✓		1981		✓		Normal		
531			5	30.30	✓		2138	2138	✓		Normal		
532			5	30.35	✓		1943	1943	✓		Normal		
533			5	83.83	✓		1948	1948			Normal		
580			5	4.00	✓		10000		✓		Pedestrian		
581			5	8.31	✓		10000		✓		Pedestrian		
582			5	4.00	✓		10000		✓		Pedestrian		
583			5	10.07	✓		10000		✓		Pedestrian		
584			5	6.51	✓		10000		✓		Pedestrian		
590			5	200.00	✓		1800				Normal		
591			5	200.00	✓		1800				Normal		
592			5	200.00	✓		1800				Normal		
593			5	200.00	✓		1800				Normal		
594			5	156.15	✓		1812				Normal		
595			5	156.15	✓		1979	1979			Normal		
596				6.00					✓		Pedestrian		

Modelling

Link	Traffic model	Stop weighting (%)	Delay weighting (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Queue limit (PCU)	Excess queue penalty (£)	Has degree of saturation limit
200	NetworkDefault	100	100	100		0.00				
210	CTM	100	100	100		0.00				
211	CTM	100	100	100		0.00				
212	NetworkDefault	100	100	100		0.00				
220	NetworkDefault	100	100	100		8.00	✓	6.00	1000.00	
280	NetworkDefault	100	100	100		0.00				
281	NetworkDefault	100	100	100		0.00				
290	NetworkDefault	100	100	100		0.00				
291	NetworkDefault	100	100	100		0.00				
300	NetworkDefault	100	100	100		0.00				
310	NetworkDefault	100	100	100		0.00				
320	NetworkDefault	100	100	100		0.00				
390	NetworkDefault	100	100	100		0.00				
391	NetworkDefault	100	100	100		0.00				
392	NetworkDefault	100	100	100		0.00				
393	NetworkDefault	100	100	100		0.00				
500	NetworkDefault	100	100	100		0.00				
501	NetworkDefault	100	100	100		0.00	✓	6.00	1000.00	
510	CTM	100	100	100		0.00				
511	CTM	100	100	100		0.00				
512	CTM	100	100	100		0.00				
513	CTM	100	100	100		0.00				
514	NetworkDefault	100	100	100		0.00				
515	NetworkDefault	100	100	100		0.00				
520	CTM	100	100	100		0.00				
521	CTM	100	100	100		0.00				
522	NetworkDefault	100	100	100		0.00				
530	NetworkDefault	100	100	100		0.00				
531	CTM	100	100	100		0.00	✓	4.00	1000.00	
532	CTM	100	100	100		0.00				
533	CTM	100	100	100		0.00				
580	NetworkDefault	100	100	100		0.00				
581	NetworkDefault	100	100	100		0.00				
582	NetworkDefault	100	100	100		0.00				
583	NetworkDefault	100	100	100		0.00				
584	NetworkDefault	100	100	100		0.00				
590	NetworkDefault	100	100	100		0.00				
591	NetworkDefault	100	100	100		0.00				
592	NetworkDefault	100	100	100		0.00				
593	NetworkDefault	100	100	100		0.00				
594	NetworkDefault	100	100	100		0.00				
595	CTM	100	100	100		0.00				
596	NetworkDefault	100	100	100		0.00				

Modelling - Normal traffic - Advanced

Link	Dispersion type for Normal Traffic	Initial queue (PCU)	Auto cycle time	Cycle time
(ALL)	NetworkDefault	0.00	✓	90

Flows

Link	Total flow (PCU/hr)	PCU Factor
200	47	1.00
210	438	1.00
211	22	1.00
212	460	1.00
220	323	1.00
280	10	1.00
281	10	1.00
290	117	1.00
291	232	1.00
300	71	1.00
310	180	1.00
320	0	1.00
390	71	1.00
391	0	1.00
392	90	1.00
393	90	1.00
500	360	1.00
501	121	1.00
510	276	1.00
511	23	1.00
512	23	1.00
513	220	1.00
514	299	1.00
515	243	1.00
520	90	1.00
521	319	1.00
522	409	1.00
530	84	1.00
531	63	1.00
532	33	1.00
533	96	1.00
580	10	1.00
581	10	1.00
582	10	1.00
583	10	1.00
584	10	1.00
590	360	1.00
591	63	1.00
592	382	1.00
593	412	1.00
594	36	1.00
595	36	1.00
596	10	1.00

Flows - Advanced

Link	Detectors
(ALL)	

Signals

Link	Controller stream	Phase	Second phase enabled
200	2	A	
210	2	B	
211	2	C	
220	2	D	
280	2	E	
281	2	G	
501	5	A	
510	5	B	
511	5	B	
512	5	B	
513	5	C	
520	5	D	
521	5	D	
530	5	E	
531	5	E	
532	5	F	
580	5	G	
581	5	K	
582	5	H	
583	5	I	
584	5	J	
596	2	F	

Entry Sources

Link	Cruise time (seconds)	Cruise speed (kph)
200	22.50	32.00
212	22.50	32.00
280	7.30	4.00
281	3.15	4.00
310	22.50	32.00
320	22.50	32.00
514	19.20	32.00
515	14.40	32.00
522	22.50	32.00
580	3.60	4.00
581	7.48	4.00
582	3.60	4.00
583	9.06	4.00
584	5.86	4.00
596	5.40	4.00

Sources

Link	Source	Source type	Source link	Destination link	Cruise time (seconds)	Cruise speed (kph)	Total flow (PCU/hr)
210	1	Link	212	210	5.98	32.00	438
211	1	Link	212	211	5.98	32.00	22
220	1	Link	520	220	8.32	32.00	82
290	1	Link	220	290	22.50	32.00	95
291	1	Link	220	291	22.50	32.00	228
300	1	Link	594	300	10.39	32.00	36
390	1	Link	300	390	22.50	32.00	71
391	1	Link	310	391	22.50	32.00	0
392	1	Link	320	392	15.07	32.00	0
393	1	Link	320	393	10.40	32.00	0
500	1	Link	210	500	9.80	32.00	328
501	1	Link	200	501	7.96	32.00	11
510	1	Link	514	510	3.75	32.00	276
511	1	Link	514	511	3.79	32.00	23
512	1	Link	515	512	8.94	32.00	23
513	1	Link	515	513	8.71	32.00	220
520	1	Link	522	520	3.57	32.00	90
521	1	Link	522	521	3.54	32.00	319
530	1	Link	392	530	18.53	32.00	90
531	1	Link	533	531	3.41	32.00	63
532	1	Link	533	532	3.41	32.00	33
533	1	Link	393	533	9.43	32.00	90
590	1	Link	500	590	22.50	32.00	360
591	1	Link	530	591	22.50	32.00	63
592	1	Link	531	592	22.50	32.00	63
593	1	Link	510	593	22.50	32.00	276
594	1	Link	501	594	17.57	32.00	9
595	1	Link	501	595	17.57	32.00	9
220	2	Link	530	220	8.32	32.00	21
290	2	Link	211	290	22.50	32.00	22
291	2	Link	200	291	22.50	32.00	4
300	2	Link	595	300	10.39	32.00	36
390	2	Link	320	390	24.00	30.00	0
391	2	Link	300	391	22.50	32.00	0
392	2	Link	310	392	15.07	32.00	90
393	2	Link	310	393	11.09	30.00	90
500	2	Link	200	500	9.80	32.00	32
501	2	Link	210	501	7.96	32.00	110
592	2	Link	521	592	22.50	32.00	319
593	2	Link	532	593	22.50	32.00	33
594	2	Link	520	594	17.57	32.00	4
595	2	Link	520	595	17.57	32.00	4
220	3	Link	513	220	8.32	32.00	220
593	3	Link	501	593	22.50	32.00	103
594	3	Link	511	594	17.57	32.00	23
595	3	Link	512	595	17.57	32.00	23

Give way data

Link	Same as major link	Percentage opposed (%)	Opposed By Conflict 1 Only (%)	Max Flow (Opposed) (PCU/hr)	Max Flow (Unopposed) (PCU/hr)	Max congested capacity (PCU/hr)	Use Step-wise Opposed Turn Model	Visibility restricted
310	✓	100	61	600	600			
320	✓	100	1	800	800			
510	✓	100	100	715	1989	0		

Give Way Data - Conflicts

Link	Conflict	Description	Controlling type	Controlling link	Percentage opposing (%)	Slope coefficient	Upstream signals visible
310	1		Link	300	100	0.22	
	2		Link	320	100	0.19	
320	1		Link	300	100	0.35	

Local OD Matrix - Local Matrix: 3

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	Limit paths by flow	Low path flow threshold
3	(untitled)	✓	✓	Path Equalisation			✓			✓	1.25				

Normal Input Flows (PCU/hr)

	To			
	A	B	C	
From	A	0	71	0
	B	180	0	0
	C	0	0	0

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
3	A	(untitled)	300	393, 392	#0000FF
	B	(untitled)	310	390	#FF0000
	C	(untitled)	320	391	#00FF00

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
3	1		B	C	310, 391	Normal	0
	2		C	B	320, 390	Normal	0
	3		B	A	310, 393	Normal	90
	4		C	A	320, 393	Normal	0
	5		B	A	310, 392	Normal	90
	6		C	A	320, 392	Normal	0
	7		A	B	300, 390	Normal	71
	8		A	C	300, 391	Normal	0

Local OD Matrix - Local Matrix: 5

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	Limit paths by flow	Low path flow threshold
5	(untitled)	✓	✓	Path Equalisation			✓			✓	1.25				

Normal Input Flows (PCU/hr)

	To					
		A	B	C	D	E
From	A	0	4	32	9	2
	B	22	0	328	94	16
	C	65	155	0	276	45
	D	24	58	319	0	8
	E	6	15	126	33	0

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
5	A	(untitled)	200	290	#FFFF00
	B	(untitled)	212	291	#00FFFF
	C	(untitled)	514, 515	592, 591, 590	#FF00FF
	D	(untitled)	522	593	#008000
	E	(untitled)	533, 530	595, 594	#FFA500

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
5	1		A	E	200, 501, 595	Normal	1
	2		A	E	200, 501, 594	Normal	1
	3		E	A	530, 220, 290	Normal	6
	4		A	B	200, 291	Normal	4
	5		E	B	530, 220, 291	Normal	15
	6		B	E	212, 210, 501, 595	Normal	8
	7		B	E	212, 210, 501, 594	Normal	8
	8		B	A	212, 211, 290	Normal	22
	9		E	C	533, 531, 592	Normal	63
	10		E	C	530, 591	Normal	63
	11		A	C	200, 500, 590	Normal	32
	12		B	C	212, 210, 500, 590	Normal	328
	13		C	E	514, 511, 594	Normal	23
	14		C	E	515, 512, 595	Normal	23
	16		C	B	515, 513, 220, 291	Normal	155
	17		C	A	515, 513, 220, 290	Normal	65
	18		D	C	522, 521, 592	Normal	319
	19		D	B	522, 520, 220, 291	Normal	58
	20		D	A	522, 520, 220, 290	Normal	24
	22		D	E	522, 520, 595	Normal	4
	23		D	E	522, 520, 594	Normal	4
	24		A	D	200, 501, 593	Normal	9
	25		B	D	212, 210, 501, 593	Normal	94
	26		C	D	514, 510, 593	Normal	276
	27		E	D	533, 532, 593	Normal	33

Signal Timings

Network Default: 90s cycle time; 90 steps

Controller Stream 2

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)	Minimum possible cycle time (s)
2			1	NetworkDefault	90	49

Controller Stream 2 - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
2	Unspecified						Absolute

Controller Stream 2 - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
2	✓	✓	Offsets And Green Splits	✓	

Phases

Controller Stream	Phase	Name	Street minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
2	A	Traffic Phase	7	300	0	0	Unknown
	B	Filter Arrow	4	300	0	0	Unknown
	C	Traffic Phase	7	7	0	0	Unknown
	D	Traffic Phase	7	300	0	0	Unknown
	E	Pedestrian Phase	5	300	0	0	Unknown
	F	Pedestrian Phase	5	300	0	0	Unknown
	G	Pedestrian Phase	5	300	0	0	Unknown

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)	Run every N cycles	Probability of running (%)
2	1	D, B	1	1	100
	2	C, B, G	1	1	100
	3	A, F	1	1	100
	4	E	1	1	100

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends	Minimum possible cycle time (s)	Exclude from analysis
2	1	(untitled)	Single	1, 2, 3, 4	33, 45, 57, 67	49	

Intergreen Matrix for Controller Stream 2

	To							
From		A	B	C	D	E	F	G
	A		6	5	6	5		8
	B	5					5	
	C	5			6	8	5	
	D	5		5		7		7
	E	8		8	8			
	F		7	7				
	G	5			5			

Banned Stage transitions for Controller Stream 2

	To				
	1	2	3	4	
From	1				
	2				
	3				
	4				

Link Results

Link Results: Vehicle summary

Time Segment	Link	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)
07:45-08:45	200	27	233	47	1959	7	52.39	1.28	3.48	9.71	0.71	10.43
	210	35	159	438	1642	68	5.54	3.32	40.47	9.56	1.87	11.43
	211	13	584	22	1881	7	50.19	0.58	6.13	4.36	0.33	4.68
	212	26	243	460	1754	90	1.39	0.18	0.54	2.52	0.00	2.52
	220	33	175	323	1817	48	9.70	2.91	36.37	12.37	1.83	14.20
	290	7	1283	117	1800	90	1.07	0.03	0.10	0.49	0.00	0.49
	291	13	597	232	1800	90	1.15	0.07	0.22	1.05	0.00	1.05
	300	4	2309	71	1903	90	0.98	0.02	0.12	0.28	0.00	0.28
	310	31	192	180	584	90	4.45	0.22	0.64	3.16	0.00	3.16
	320	0	Unrestricted	0	775	90	0.00	0.00	0.00	0.00	0.00	0.00
	390	4	2179	71	1800	90	1.04	0.02	0.06	0.29	0.00	0.29
	391	0	Unrestricted	0	1800	90	0.00	0.00	0.00	0.00	0.00	0.00
	392	4	1907	90	2007	90	0.94	0.02	0.09	0.33	0.00	0.33
	393	4	2043	90	2143	90	0.88	0.02	0.12	0.31	0.00	0.31
	500	20	354	360	1817	90	1.24	0.12	0.83	1.75	0.00	1.75
	501	50	80	121	2179	9	48.25	3.31	22.81	23.03	1.83	24.86
	510	57	58	276	1989	21	37.58	5.64	90.51	40.98	3.21	44.19
	511	4	2007	23	2159	21	29.55	0.43	6.27	2.63	0.24	2.87
	512	4	1995	23	2147	21	29.65	0.45	2.79	2.64	0.26	2.89
	513	42	114	220	2141	21	34.57	4.77	30.64	30.06	2.72	32.78
	514	17	433	299	2071	90	2.01	1.35	4.06	2.37	0.61	2.99
	515	11	720	243	2215	90	0.91	0.06	0.23	0.87	0.00	0.87
	520	14	523	90	1934	28	24.36	1.70	29.51	8.65	0.79	9.44
	521	54	68	319	1850	28	29.50	5.21	95.21	37.12	2.97	40.09
	522	28	219	409	1803	90	3.68	2.70	7.95	5.94	1.38	7.31
	530	38	136	84	1981	9	50.33	2.24	7.31	16.67	1.26	17.93
	531	27	239	63	2138	9	46.97	1.97	32.29	11.67	0.90	12.57
	532	15	489	33	1943	9	46.08	1.71	30.91	6.00	0.47	6.47
	533	5	1726	96	1948	90	0.97	0.03	0.17	0.37	0.00	0.37
	590	20	350	360	1800	90	1.25	0.12	0.37	1.77	0.00	1.77
	591	4	2471	63	1800	90	1.04	0.02	0.05	0.26	0.00	0.26
	592	21	324	382	1800	90	1.27	0.13	0.40	1.91	0.00	1.91
	593	23	293	412	1800	90	1.30	0.15	0.44	2.11	0.00	2.11
	594	2	4489	36	1812	90	1.01	0.01	0.04	0.14	0.00	0.14
	595	2	4911	36	1979	90	0.93	0.01	0.03	0.13	0.00	0.13

Link Results: Flows and signals

Time Segment	Link	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Calculated sat flow (PCU/hr)	Calculated capacity (PCU/hr)	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Mean modulus of error	Actual green (s (per cycle))	Effective green (s (per cycle))
07:45-08:45	200	47	47	0		1959	174	27		233	0.00	7	8
	210	438	438	0		1642	1259	35		159	0.00	68	69
	211	22	22	0		1881	167	13		584	0.00	7	8
	212	460	460	0		1754	1754	26		243	0.00	90	90
	220	323	323	0		1817	989	33		175	0.99	48	49
	280	10	10	0		10000	667	2		5900	0.00	5	6
	281	10	10	0		10000	667	2		5900	0.00	5	6
	290	117	117	0		1800	1800	7		1283	0.76	90	90
	291	232	232	0		1800	1800	13		597	0.90	90	90
	300	71	71	0		1903	1903	4		2309	0.90	90	90
	310	180	180	0		584	584	31		192	0.00	90	90
	320	0	0	0		775	775	0		Unrestricted	0.00	90	90
	390	71	71	0		1800	1800	4		2179	0.75	90	90
	391	0	0	0		1800	1800	0		Unrestricted	0.00	90	90
	392	90	90	0		2007	2007	4		1907	0.00	90	90
	393	90	90	0		2143	2143	4		2043	0.00	90	90
	500	360	360	0		1817	1817	20		354	0.36	90	90
	501	121	121	0		2179	242	50		80	0.39	9	10
	510	276	276	0		1989	486	57		58	0.20	21	22
	511	23	23	0	✓	2159	528	4		2007	0.20	21	22
	512	23	23	0	✓	2147	525	4		1995	0.00	21	22
	513	220	220	0		2141	523	42		114	0.00	21	22
	514	299	299	-1	✓	2071	1770	17		433	0.00	90	90
	515	243	243	-1	✓	2215	2215	11		720	0.00	90	90
	520	90	90	0		1934	623	14		523	0.33	28	29
	521	319	319	0		1850	596	54		68	0.33	28	29
	522	409	409	0		1803	1450	28		219	0.00	90	90
	530	84	84	0		1981	220	38		136	0.00	9	10
	531	63	63	0		2138	238	27		239	0.00	9	10
	532	33	33	0		1943	216	15		489	0.00	9	10
	533	96	96	0		1948	1948	5		1726	0.00	90	90
	580	10	10	0		10000	6556	0		58900	0.00	58	59
	581	10	10	0		10000	2222	0		19900	0.00	19	20
	582	10	10	0		10000	3111	0		27900	0.00	27	28
	583	10	10	0		10000	1778	1		15900	0.00	15	16
	584	10	10	0		10000	667	2		5900	0.00	5	6
	590	360	360	0		1800	1800	20		350	0.24	90	90
	591	63	63	0		1800	1800	4		2471	1.42	90	90
	592	382	382	0		1800	1800	21		324	0.96	90	90
	593	412	412	0		1800	1800	23		293	0.88	90	90
	594	36	36	0		1812	1812	2		4489	0.91	90	90
	595	36	36	0		1979	1979	2		4911	1.38	90	90
	596	10	10	0		Unrestricted	Unrestricted	0		Unrestricted	0.00	7	8

Link Results: Stops and delays

Time Segment	Link	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Unweighted cost of delay (£ per hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Uniform stops (Stops per hr)	Random stops (Stops per hr)	Unweighted cost of stops (£ per hr)	Weighted cost of stops (£ per hr)
07:45-08:45	200	22.50	52.39	0.50	0.18	9.71	9.71	106.27	42.86	7.09	0.71	0.71
	210	5.98	5.54	0.41	0.27	9.56	9.56	29.89	120.34	10.60	1.87	1.87
	211	5.98	50.19	0.23	0.08	4.36	4.36	104.41	20.04	2.93	0.33	0.33
	212	22.50	1.39	0.00	0.18	2.52	2.52	0.00	0.00	0.00	0.00	0.00
	220	8.32	9.70	0.63	0.24	12.37	12.37	39.60	108.96	19.13	1.83	1.83
	280	7.30	42.41	0.11	0.01	1.67	1.67	0.00	0.00	0.00	0.00	0.00
	281	3.15	42.41	0.11	0.01	1.67	1.67	0.00	0.00	0.00	0.00	0.00
	290	22.50	1.07	0.00	0.03	0.49	0.49	0.00	0.00	0.00	0.00	0.00
	291	22.50	1.15	0.00	0.07	1.05	1.05	0.00	0.00	0.00	0.00	0.00
	300	10.39	0.98	0.00	0.02	0.28	0.28	0.00	0.00	0.00	0.00	0.00
	310	22.50	4.45	0.00	0.22	3.16	3.16	0.00	0.00	0.00	0.00	0.00
	320	22.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	390	22.50	1.04	0.00	0.02	0.29	0.29	0.00	0.00	0.00	0.00	0.00
	391	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	392	15.07	0.94	0.00	0.02	0.33	0.33	0.00	0.00	0.00	0.00	0.00
	393	11.09	0.88	0.00	0.02	0.31	0.31	0.00	0.00	0.00	0.00	0.00
	500	9.80	1.24	0.00	0.12	1.75	1.75	0.00	0.00	0.00	0.00	0.00
	501	7.96	48.25	1.13	0.50	23.03	23.03	105.84	109.04	19.03	1.83	1.83
	510	3.75	37.58	2.23	0.65	40.98	40.98	81.39	199.43	25.59	3.21	3.21
	511	3.79	29.55	0.16	0.02	2.63	2.63	75.99	16.24	0.88	0.24	0.24
	512	8.94	29.65	0.16	0.02	2.64	2.64	79.50	17.04	0.89	0.26	0.26
	513	8.71	34.57	1.75	0.36	30.06	30.06	86.48	176.36	14.28	2.72	2.72
	514	19.20	2.01	0.07	0.10	2.37	2.37	14.36	38.89	4.05	0.61	0.61
	515	14.40	0.91	0.00	0.06	0.87	0.87	0.00	0.00	0.00	0.00	0.00
	520	3.57	24.36	0.52	0.08	8.65	8.65	61.87	52.34	3.34	0.79	0.79
	521	3.54	29.50	2.04	0.57	37.12	37.12	65.21	185.51	22.52	2.97	2.97
	522	22.50	3.68	0.22	0.20	5.94	5.94	23.59	88.65	7.82	1.38	1.38
	530	18.53	50.33	0.87	0.31	16.67	16.67	104.91	76.28	11.85	1.26	1.26
	531	3.41	46.97	0.64	0.18	11.67	11.67	100.00	56.00	7.00	0.90	0.90
	532	3.41	46.08	0.33	0.09	6.00	6.00	99.52	29.33	3.51	0.47	0.47
	533	9.43	0.97	0.00	0.03	0.37	0.37	0.00	0.00	0.00	0.00	0.00
	580	3.60	5.79	0.02	0.00	0.23	0.23	0.00	0.00	0.00	0.00	0.00
	581	7.48	28.42	0.08	0.00	1.12	1.12	0.00	0.00	0.00	0.00	0.00
	582	3.60	22.28	0.06	0.00	0.88	0.88	0.00	0.00	0.00	0.00	0.00
	583	9.06	31.85	0.09	0.00	1.26	1.26	0.00	0.00	0.00	0.00	0.00
	584	5.86	42.41	0.11	0.01	1.67	1.67	0.00	0.00	0.00	0.00	0.00
	590	22.50	1.25	0.00	0.12	1.77	1.77	0.00	0.00	0.00	0.00	0.00
	591	22.50	1.04	0.00	0.02	0.26	0.26	0.00	0.00	0.00	0.00	0.00
	592	22.50	1.27	0.00	0.13	1.91	1.91	0.00	0.00	0.00	0.00	0.00
	593	22.50	1.30	0.00	0.15	2.11	2.11	0.00	0.00	0.00	0.00	0.00
	594	17.57	1.01	0.00	0.01	0.14	0.14	0.00	0.00	0.00	0.00	0.00
	595	17.57	0.93	0.00	0.01	0.13	0.13	0.00	0.00	0.00	0.00	0.00
	596	5.40	37.81	0.11	0.00	1.49	1.49	0.00	0.00	0.00	0.00	0.00

Link Results: Queues and blocking

Time Segment	Link	Initial queue (PCU)	Mean max queue (PCU)	Max queue storage (PCU)	Utilised storage (%)	Average storage excess queue (PCU)	Average limit excess queue (PCU)	Excess queue penalty (£ per hr)	Mean end of green queue (PCU)	Mean end of red queue (PCU)	Wasted time starvation (s (per cycle))	Wasted time blocking back (s (per cycle))	Wasted time total (s (per cycle))	Estimated blocking
07:45-08:45	200	0.00	1.28	36.83	3.48	0.00	0.00	0.00	0.18	1.25	5.00	0.00	5.00	
	210	0.00	3.32	8.21	40.47	0.00	0.00	0.00	0.27	3.02	0.00	0.00	0.00	
	211	0.00	0.58	9.41	6.13	0.00	0.00	0.00	0.08	0.58	7.00	0.00	7.00	
	212	0.00	0.18	32.98	0.54	0.00	0.00	0.00			0.00	0.00	0.00	
	220	0.00	2.91	8.00	36.37	0.00	0.00	0.00	0.24	2.79	20.00	0.00	20.00	
	280	0.00	0.24	10.00	2.41	0.00	0.00	0.00	0.01	0.24	0.00	0.00	0.00	
	281	0.00	0.24	10.00	2.41	0.00	0.00	0.00	0.01	0.24	0.00	0.00	0.00	
	290	0.00	0.03	33.84	0.10	0.00	0.00	0.00			37.00	0.00	37.00	
	291	0.00	0.07	33.84	0.22	0.00	0.00	0.00			35.00	0.00	35.00	
	300	0.00	0.02	16.52	0.12	0.00	0.00	0.00			58.00	0.00	58.00	
	310	0.00	0.22	34.78	0.64	0.00	0.00	0.00			0.00	0.00	0.00	
	320	0.00	0.00	34.78	0.00	0.00	0.00	0.00			90.00	0.00	90.00	
	390	0.00	0.02	33.84	0.06	0.00	0.00	0.00			52.00	0.00	52.00	
	391	0.00	0.00	33.84	0.00	0.00	0.00	0.00			90.00	0.00	90.00	
	392	0.00	0.02	25.27	0.09	0.00	0.00	0.00			0.00	0.00	0.00	
	393	0.00	0.02	18.62	0.12	0.00	0.00	0.00			0.00	0.00	0.00	
	500	0.00	0.12	14.89	0.83	0.00	0.00	0.00			7.00	0.00	7.00	
	501	0.00	3.31	14.49	22.81	0.00	0.00	0.00	0.50	3.07	0.00	0.00	0.00	
	510	0.00	5.64	6.23	90.51	0.00	0.00	0.00	0.65	5.64	0.00	0.00	0.00	
	511	0.00	0.43	6.83	6.27	0.00	0.00	0.00	0.02	0.43	18.00	0.00	18.00	
	512	0.00	0.45	16.05	2.79	0.00	0.00	0.00	0.02	0.45	21.00	0.00	21.00	
	513	0.00	4.77	15.58	30.64	0.00	0.00	0.00	0.36	4.65	0.00	0.00	0.00	
	514	0.00	1.35	33.22	4.06	0.00	0.00	0.00			0.00	13.08	13.08	
	515	0.00	0.06	26.66	0.23	0.00	0.00	0.00			0.00	0.00	0.00	
	520	0.00	1.70	5.76	29.51	0.00	0.00	0.00	0.08	1.39	3.00	0.00	3.00	
	521	0.00	5.21	5.47	95.21	0.00	0.00	0.00	0.57	5.21	0.00	0.00	0.00	
	522	0.00	2.70	33.90	7.95	0.00	0.00	0.00			0.00	17.62	17.62	
	530	0.00	2.24	30.68	7.31	0.00	0.00	0.00	0.31	2.17	0.00	0.00	0.00	
	531	0.00	1.97	6.09	32.29	0.00	0.00	0.00	0.18	1.58	0.00	0.00	0.00	
	532	0.00	1.71	5.54	30.91	0.00	0.00	0.00	0.09	0.82	8.00	0.00	8.00	
	533	0.00	0.03	15.35	0.17	0.00	0.00	0.00			0.00	0.00	0.00	
	580	0.00	0.09	10.00	0.87	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.00	
	581	0.00	0.20	10.00	1.97	0.00	0.00	0.00	0.00	0.20	0.00	0.00	0.00	
	582	0.00	0.17	10.00	1.74	0.00	0.00	0.00	0.00	0.17	0.00	0.00	0.00	
	583	0.00	0.21	10.00	2.08	0.00	0.00	0.00	0.00	0.21	0.00	0.00	0.00	
	584	0.00	0.24	10.00	2.41	0.00	0.00	0.00	0.01	0.24	0.00	0.00	0.00	
	590	0.00	0.12	33.84	0.37	0.00	0.00	0.00			0.00	0.00	0.00	
	591	0.00	0.02	33.84	0.05	0.00	0.00	0.00			70.00	0.00	70.00	
	592	0.00	0.13	33.84	0.40	0.00	0.00	0.00			34.00	0.00	34.00	
	593	0.00	0.15	33.84	0.44	0.00	0.00	0.00			31.00	0.00	31.00	
	594	0.00	0.01	26.60	0.04	0.00	0.00	0.00			72.00	0.00	72.00	
	595	0.00	0.01	29.05	0.03	0.00	0.00	0.00			82.00	0.00	82.00	
	596	0.00	0.23	10.00	2.28	0.00	0.00	0.00	0.00	0.23	0.00	0.00	0.00	

Link Results: Journey times

Time Segment	Link	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	JourneyTime (s)
07:45-08:45	200	9.40	0.98	9.61	74.89
	210	23.30	1.40	16.62	11.52
	211	1.17	0.34	3.41	56.18
	212	92.00	3.05	30.14	23.89
	220	23.93	1.62	14.78	18.02
	280	0.08	0.14	0.59	49.71
	281	0.04	0.13	0.28	45.56
	290	23.43	0.77	30.55	23.57
	291	46.46	1.53	30.45	23.65
	300	6.56	0.22	29.23	11.37
	310	36.00	1.35	26.72	26.95
	320	0.00	0.00	0.00	0.00
	390	14.22	0.46	30.58	23.54
	391	0.00	0.00	0.00	0.00
	392	12.05	0.40	30.12	16.01
	393	8.32	0.30	27.80	11.97
	500	31.37	1.10	28.42	11.04
	501	8.56	1.89	4.53	56.21
	510	9.21	3.17	2.90	41.33
	511	0.76	0.21	3.64	33.34
	512	1.79	0.24	7.42	38.59
	513	17.06	2.65	6.44	43.28
	514	51.02	1.76	28.96	21.21
	515	31.11	1.03	30.09	15.32
	520	2.85	0.70	4.09	27.92
	521	10.04	2.93	3.43	33.04
	522	81.80	2.97	27.50	26.18
	530	13.84	1.61	8.61	68.86
	531	1.91	0.88	2.17	50.38
	532	1.00	0.45	2.21	49.49
	533	8.05	0.28	29.01	10.40
	580	0.04	0.03	1.53	9.39
	581	0.08	0.10	0.83	35.90
	582	0.04	0.07	0.56	25.88
	583	0.10	0.11	0.89	40.91
	584	0.07	0.13	0.49	48.27
	590	72.00	2.37	30.32	23.75
	591	12.60	0.41	30.59	23.54
	592	76.40	2.52	30.29	23.77
	593	82.49	2.73	30.26	23.80
	594	5.55	0.18	30.25	18.58
	595	5.55	0.18	30.40	18.49
	596	0.06	0.12	0.50	43.21

Link Results: Advanced

Time Segment	Link	Degree of saturation penalty (£ per hr)	Ped gap accepting penalty (£ per hr)	Warmed up	Mean Max Queue EoTS (PCU)	Mean End of Green Queue EoTS (PCU)	Mean End of Red Queue EoTS (PCU)	PCU Factor	Cost of traffic penalties (£ per hr)	Unweighted performance index (£ per hr)	Performance Index (£ per hr)
07:45-08:45	200	0.00	0.00	✓	1.28	0.18	1.26	1.00	0.00	10.43	10.43
	210	0.00	0.00	✓	3.32	0.27	3.02	1.00	0.00	11.43	11.43
	211	0.00	0.00	✓	0.58	0.08	0.58	1.00	0.00	4.68	4.68
	212	0.00	0.00	✓	0.18			1.00	0.00	2.52	2.52
	220	0.00	0.00	✓	2.91	0.24	2.79	1.00	0.00	14.20	14.20
	280	0.00	0.00	✓	0.24	0.01	0.24	1.00	0.00	0.00	0.00
	281	0.00	0.00	✓	0.24	0.01	0.24	1.00	0.00	0.00	0.00
	290	0.00	0.00	✓	0.03			1.00	0.00	0.49	0.49
	291	0.00	0.00	✓	0.07			1.00	0.00	1.05	1.05
	300	0.00	0.00	✓	0.02			1.00	0.00	0.28	0.28
	310	0.00	0.00	✓	0.22			1.00	0.00	3.16	3.16
	320	0.00	0.00	✓	0.00			1.00	0.00	0.00	0.00
	390	0.00	0.00	✓	0.02			1.00	0.00	0.29	0.29
	391	0.00	0.00	✓	0.00			1.00	0.00	0.00	0.00
	392	0.00	0.00	✓	0.02			1.00	0.00	0.33	0.33
	393	0.00	0.00	✓	0.02			1.00	0.00	0.31	0.31
	500	0.00	0.00	✓	0.12			1.00	0.00	1.75	1.75
	501	0.00	0.00	✓	3.31	0.50	3.07	1.00	0.00	24.86	24.86
	510	0.00	0.00	✓	5.64	0.66	5.64	1.00	0.00	44.19	44.19
	511	0.00	0.00	✓	0.43	0.02	0.43	1.00	0.00	2.87	2.87
	512	0.00	0.00	✓	0.45	0.02	0.45	1.00	0.00	2.89	2.89
	513	0.00	0.00	✓	4.77	0.36	4.65	1.00	0.00	32.78	32.78
	514	0.00	0.00	✓	1.35			1.00	0.00	2.99	2.99
	515	0.00	0.00	✓	0.06			1.00	0.00	0.87	0.87
	520	0.00	0.00	✓	1.70	0.08	1.39	1.00	0.00	9.44	9.44
	521	0.00	0.00	✓	5.21	0.57	5.21	1.00	0.00	40.09	40.09
	522	0.00	0.00	✓	2.70			1.00	0.00	7.31	7.31
	530	0.00	0.00	✓	2.24	0.31	2.17	1.00	0.00	17.93	17.93
	531	0.00	0.00	✓	1.97	0.18	1.58	1.00	0.00	12.57	12.57
	532	0.00	0.00	✓	1.71	0.09	0.82	1.00	0.00	6.47	6.47
	533	0.00	0.00	✓	0.03			1.00	0.00	0.37	0.37
	580	0.00	0.00	✓	0.09	0.00	0.09	1.00	0.00	0.00	0.00
	581	0.00	0.00	✓	0.20	0.00	0.20	1.00	0.00	0.00	0.00
	582	0.00	0.00	✓	0.17	0.00	0.17	1.00	0.00	0.00	0.00
	583	0.00	0.00	✓	0.21	0.00	0.21	1.00	0.00	0.00	0.00
	584	0.00	0.00	✓	0.24	0.01	0.24	1.00	0.00	0.00	0.00
	590	0.00	0.00	✓	0.12			1.00	0.00	1.77	1.77
	591	0.00	0.00	✓	0.02			1.00	0.00	0.26	0.26
	592	0.00	0.00	✓	0.13			1.00	0.00	1.91	1.91
	593	0.00	0.00	✓	0.15			1.00	0.00	2.11	2.11
	594	0.00	0.00	✓	0.01			1.00	0.00	0.14	0.14
	595	0.00	0.00	✓	0.01			1.00	0.00	0.13	0.13
	596	0.00	0.00	✓	0.23	0.00	0.23	1.00	0.00	0.00	0.00

Collections

Point to Point Journey Time

Average Journey Time (s) for Local Matrix: 3

From	To			
		A	B	C
	A	0.0	34.9	0.0
	B	40.9	0.0	0.0
	C	0.0	0.0	0.0

Path Journey Time

Path	From Location	To Location	Normal Calculated Flow (PCU/hr)	Normal journey time (s)	Normal journey dist (m)	Bus journeydist (m)	Tram journey dist (m)	Pedestrian journey dist (m)	Calculated Total Flow (PCU/hr)	Avg journey time (s)	Avg journey dist (m)
1	B	C	0	26.95	400.00	400.00	400.00	400.00	0	0.00	1600.00
2	C	B	0	23.54	400.00	400.00	400.00	400.00	0	0.00	1600.00
3	B	A	90	38.91	292.42	292.42	292.42	292.42	90	38.91	292.42
4	C	A	0	11.97	292.42	292.42	292.42	292.42	0	0.00	1169.68
5	B	A	90	42.95	333.93	333.93	333.93	333.93	90	42.95	333.93
6	C	A	0	16.01	333.93	333.93	333.93	333.93	0	0.00	1335.72
7	A	B	71	34.91	292.33	292.33	292.33	292.33	71	34.91	292.33
8	A	C	0	11.37	292.33	292.33	292.33	292.33	0	0.00	1169.32

Average Journey Time (s) for Local Matrix: 5

From	To					
		A	B	C	D	E
	A	0.0	98.5	109.7	154.9	149.6
	B	103.6	0.0	70.2	115.4	110.2
	C	100.2	100.3	0.0	86.3	72.8
	D	95.7	95.8	83.0	0.0	72.6
	E	110.4	110.5	88.5	83.7	0.0

Path Journey Time

Path	From Location	To Location	Normal Calculated Flow (PCU/hr)	Normal journey time (s)	Normal journey dist (m)	Bus journeydist (m)	Tram journey dist (m)	Pedestrian journey dist (m)	Calculated Total Flow (PCU/hr)	Avg journey time (s)	Avg journey dist (m)
1	A	E	1	149.60	426.90	426.90	426.90	426.90	1	149.60	426.90
2	A	E	1	149.69	426.90	426.90	426.90	426.90	1	149.69	426.90
3	E	A	6	110.45	438.73	438.73	438.73	438.73	6	110.45	438.73
4	A	B	4	98.54	400.00	400.00	400.00	400.00	4	98.54	400.00
5	E	B	15	110.53	438.73	438.73	438.73	438.73	15	110.53	438.73
6	B	E	8	110.11	480.09	480.09	480.09	480.09	8	110.11	480.09
7	B	E	8	110.20	480.09	480.09	480.09	480.09	8	110.20	480.09
8	B	A	22	103.64	453.19	453.19	453.19	453.19	22	103.64	453.19
9	E	C	63	84.55	314.13	314.13	314.13	314.13	63	84.55	314.13
10	E	C	63	92.40	364.74	364.74	364.74	364.74	63	92.40	364.74
11	A	C	32	109.68	487.15	487.15	487.15	487.15	32	109.68	487.15
12	B	C	328	70.20	540.34	540.34	540.34	540.34	328	70.20	540.34
13	C	E	23	73.13	360.47	360.47	360.47	360.47	23	73.13	360.47
14	C	E	23	72.41	363.70	363.70	363.70	363.70	23	72.41	363.70
16	C	B	155	100.27	479.42	479.42	479.42	479.42	155	100.27	479.42
17	C	A	65	100.19	479.42	479.42	479.42	479.42	65	100.19	479.42
18	D	C	319	82.99	431.47	431.47	431.47	431.47	319	82.99	431.47
19	D	B	58	95.77	505.68	505.68	505.68	505.68	58	95.77	505.68
20	D	A	24	95.69	505.68	505.68	505.68	505.68	24	95.69	505.68
22	D	E	4	72.59	387.84	387.84	387.84	387.84	4	72.59	387.84
23	D	E	4	72.68	387.84	387.84	387.84	387.84	4	72.68	387.84
24	A	D	9	154.90	470.75	470.75	470.75	470.75	9	154.90	470.75
25	B	D	94	115.42	523.94	523.94	523.94	523.94	94	115.42	523.94
26	C	D	276	86.33	403.98	403.98	403.98	403.98	276	86.33	403.98
27	E	D	33	83.69	314.18	314.18	314.18	314.18	33	83.69	314.18

Final Prediction Table

Link Results

			SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES		
Link	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)	Mean end of red queue (PCU)	we
200		2	2	A	47	1959	7	5.00	27	233	74.89	52.39	106.27	1.28	1.25	
210		2	2	B	438	1642	68	0.00	35	159	11.52	5.54	29.89	3.32	3.02	
211		2	2	C	22	1881	7	7.00	13	584	56.18	50.19	104.41	0.58	0.58	
212		2			460	1754	90	0.00	26	243	23.89	1.39	0.00	0.18		
220		2	2	D	323	1817	48	20.00	33	175	18.02	9.70	39.60	2.91	2.79	
280 P		2	2	E	10	10000	5	0.00	1.5	5900	49.71	42.41	0.00	0.24	0.24	
281 P		2	2	G	10	10000	5	0.00	1.5	5900	45.56	42.41	0.00	0.24	0.24	
290		2			117	1800	90	37.00	7	1283	23.57	1.07	0.00	0.03		
291		2			232	1800	90	35.00	13	597	23.65	1.15	0.00	0.07		
300	(untitled)	3			71	1903	90	58.00	4	2309	11.37	0.98	0.00	0.02		
310	(untitled)	3			180	584	90	0.00	31	192	26.95	4.45	0.00	0.22		
320		3			0	775	90	90.00	0	Unrestricted	0.00	0.00	0.00	0.00		
390	(untitled)	3			71	1800	90	52.00	4	2179	23.54	1.04	0.00	0.02		
391	(untitled)	3			0	1800	90	90.00	0	Unrestricted	0.00	0.00	0.00	0.00		
392	(untitled)	3			90	2007	90	0.00	4	1907	16.01	0.94	0.00	0.02		
393	(untitled)	3			90	2143	90	0.00	4	2043	11.97	0.88	0.00	0.02		
500		5			360	1817	90	7.00	20	354	11.04	1.24	0.00	0.12		
501		5	5	A	121	2179	9	0.00	50	80	56.21	48.25	105.84	3.31	3.07	
510		5	5	B	276	1989	21	0.00	57	58	41.33	37.58	81.39	5.64	5.64	
511		5	5	B	23	2159	21	18.00	4	2007	33.34	29.55	75.99	0.43	0.43	
512		5	5	B	23	2147	21	21.00	4	1995	38.59	29.65	79.50	0.45	0.45	
513		5	5	C	220	2141	21	0.00	42	114	43.28	34.57	86.48	4.77	4.65	
514		5			299	2071	90	13.08	17	433	21.21	2.01	14.36	1.35		
515		5			243	2215	90	0.00	11	720	15.32	0.91	0.00	0.06		
520		5	5	D	90	1934	28	3.00	14	523	27.92	24.36	61.87	1.70	1.39	
521		5	5	D	319	1850	28	0.00	54	68	33.04	29.50	65.21	5.21	5.21	
522		5			409	1803	90	17.62	28	219	26.18	3.68	23.59	2.70		
530		5	5	E	84	1981	9	0.00	38	136	68.86	50.33	104.91	2.24	2.17	
531		5	5	E	63	2138	9	0.00	27	239	50.38	46.97	100.00	1.97	1.58	
532		5	5	F	33	1943	9	8.00	15	489	49.49	46.08	99.52	1.71	0.82	
533		5			96	1948	90	0.00	5	1726	10.40	0.97	0.00	0.03		
580 P		5	5	G	10	10000	58	0.00	0.153	58900	9.39	5.79	0.00	0.09	0.09	
581 P		5	5	K	10	10000	19	0.00	0.45	19900	35.90	28.42	0.00	0.20	0.20	
582 P		5	5	H	10	10000	27	0.00	0.321	27900	25.88	22.28	0.00	0.17	0.17	
583 P		5	5	I	10	10000	15	0.00	0.562	15900	40.91	31.85	0.00	0.21	0.21	
584 P		5	5	J	10	10000	5	0.00	1.5	5900	48.27	42.41	0.00	0.24	0.24	
590		5			360	1800	90	0.00	20	350	23.75	1.25	0.00	0.12		
591		5			63	1800	90	70.00	4	2471	23.54	1.04	0.00	0.02		
592		5			382	1800	90	34.00	21	324	23.77	1.27	0.00	0.13		
593		5			412	1800	90	31.00	23	293	23.80	1.30	0.00	0.15		
594		5			36	1812	90	72.00	2	4489	18.58	1.01	0.00	0.01		
595		5			36	1979	90	82.00	2	4911	18.49	0.93	0.00	0.01		
596 P			2	F	10	999999999	7	0.00	0	Unrestricted	43.21	37.81	0.00	0.23	0.23	

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	821.82	42.71	19.24	11.90	5.11	241.52	21.37	0.00	262.89
Bus									
Tram									
Pedestrians									
TOTAL	822.33	43.54	18.89	12.57	5.14	251.52	21.37	0.00	262.89

- | P = link is a pedestrian link
- | < = 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 - 2026 Base + HG(140) PM

D4 - 2026 Base + HG(140), PM

Summary

Data Errors and Warnings

Severity	Area	Item	Description
Info	Link Data	Link 596 (Pedestrian)	Link 596 is not connected to any other Links or Traffic Streams

Run Summary

Analysis set used	Run start time	Run finish time	Run duration (s)	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 unsignal PRC
4	09/11/2021 23:46:34	09/11/2021 23:46:34	0.64	16:30	100	284.17	19.33	55.29	513	0	0	513	522

Analysis Set Details

Name	Use Simulation	Description	Use specific Demand Set(s)	Specific Demand Set (s)	Optimise specific Demand Set(s)	Include in report	Locked
2026 Base + HG(140) PM			✓	D4		✓	

Demand Set Details

Scenario name	Time Period name	Description	Composite	Demand sets	Start time (HH:mm)	Locked	Run automatically
2026 Base + HG(140)	PM	2026 Base + Heritage Gate (140 dwellings)			16:30		✓

Network Options

Network timings

Network cycle time (s)	Minimum possible cycle time (s)	Absolute minimum possible cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
100	53	53		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)	Missing stage transition options
10000.00	10000.00	10000.00	2	Assume banned

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from traffic model	Exclude pedestrians from results calculation	Random delay mode	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		✓	Simplified (TRANSYT 12)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms ² [-2])	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms ² [-2])	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Offsets And Green Splits	✓

Advanced

Optimisation type	OUTProfile accuracy (%)	SASart temperature	SACooling factor	Random seed	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Simulated Annealing	10, 10, 1, 1, 0.1, 0.1, 0.01, 0.01	300.00	100.00	1		✓	2, 5			Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Traffic Nodes

Traffic Nodes

Traffic node	Name	Description
2		
3	(untitled)	
5		

Links

Links

Link	Name	Description	Traffic node	Length (m)	Has Saturation Flow	Use RR67	Saturation flow (PCU/hr)	Cell saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Is minor shared	Allow Nearside Turn On Red
200			2	200.00	✓		1959		✓		Normal		
210			2	53.19	✓		1642	1642	✓		Normal		
211			2	53.19	✓		1881	1881	✓		Normal		
212			2	200.00	✓		1754				Normal		
220			2	73.99	✓		1817		✓		Normal		
280			2	8.11	✓		10000		✓		Pedestrian		
281			2	3.50	✓		10000		✓		Pedestrian		
290			2	200.00	✓		1800				Normal		
291			2	200.00	✓		1800				Normal		
300	(untitled)		3	92.33	✓		1903				Normal		
310	(untitled)		3	200.00						✓	Normal		
320			3	200.00						✓	Normal		
390	(untitled)		3	200.00	✓		1800				Normal		
391	(untitled)		3	200.00	✓		1800				Normal		
392	(untitled)		3	133.93	✓		2007				Normal		
393	(untitled)		3	92.42	✓		2143				Normal		
500			5	87.15	✓		1817				Normal		
501			5	70.75	✓		2179		✓		Normal		
510			5	33.33	✓		1989	1989	✓	✓	Normal		
511			5	33.67	✓		2159	2159	✓		Normal		
512			5	79.51	✓		2147	2147	✓		Normal		
513			5	77.39	✓		2141	2141	✓		Normal		
514			5	170.65	✓		2071				Normal		
515			5	128.04	✓		2215				Normal		
520			5	31.69	✓		1934	1934	✓		Normal		
521			5	31.47	✓		1850	1850	✓		Normal		
522			5	200.00	✓		1803				Normal		
530			5	164.74	✓		1981		✓		Normal		
531			5	30.30	✓		2138	2138	✓		Normal		
532			5	30.35	✓		1943	1943	✓		Normal		
533			5	83.83	✓		1948	1948			Normal		
580			5	4.00	✓		10000		✓		Pedestrian		
581			5	8.31	✓		10000		✓		Pedestrian		
582			5	4.00	✓		10000		✓		Pedestrian		
583			5	10.07	✓		10000		✓		Pedestrian		
584			5	6.51	✓		10000		✓		Pedestrian		
590			5	200.00	✓		1800				Normal		
591			5	200.00	✓		1800				Normal		
592			5	200.00	✓		1800				Normal		
593			5	200.00	✓		1800				Normal		
594			5	156.15	✓		1812				Normal		
595			5	156.15	✓		1979	1979			Normal		
596				6.00					✓		Pedestrian		

Modelling

Link	Traffic model	Stop weighting (%)	Delay weighting (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Queue limit (PCU)	Excess queue penalty (£)	Has degree of saturation limit
200	NetworkDefault	100	100	100		0.00				
210	CTM	100	100	100		0.00				
211	CTM	100	100	100		0.00				
212	NetworkDefault	100	100	100		0.00				
220	NetworkDefault	100	100	100		8.00	✓	6.00	1000.00	
280	NetworkDefault	100	100	100		0.00				
281	NetworkDefault	100	100	100		0.00				
290	NetworkDefault	100	100	100		0.00				
291	NetworkDefault	100	100	100		0.00				
300	NetworkDefault	100	100	100		0.00				
310	NetworkDefault	100	100	100		0.00				
320	NetworkDefault	100	100	100		0.00				
390	NetworkDefault	100	100	100		0.00				
391	NetworkDefault	100	100	100		0.00				
392	NetworkDefault	100	100	100		0.00				
393	NetworkDefault	100	100	100		0.00				
500	NetworkDefault	100	100	100		0.00				
501	NetworkDefault	100	100	100		0.00	✓	6.00	1000.00	
510	CTM	100	100	100		0.00				
511	CTM	100	100	100		0.00				
512	CTM	100	100	100		0.00				
513	CTM	100	100	100		0.00				
514	NetworkDefault	100	100	100		0.00				
515	NetworkDefault	100	100	100		0.00				
520	CTM	100	100	100		0.00				
521	CTM	100	100	100		0.00				
522	NetworkDefault	100	100	100		0.00				
530	NetworkDefault	100	100	100		0.00				
531	CTM	100	100	100		0.00	✓	4.00	1000.00	
532	CTM	100	100	100		0.00				
533	CTM	100	100	100		0.00				
580	NetworkDefault	100	100	100		0.00				
581	NetworkDefault	100	100	100		0.00				
582	NetworkDefault	100	100	100		0.00				
583	NetworkDefault	100	100	100		0.00				
584	NetworkDefault	100	100	100		0.00				
590	NetworkDefault	100	100	100		0.00				
591	NetworkDefault	100	100	100		0.00				
592	NetworkDefault	100	100	100		0.00				
593	NetworkDefault	100	100	100		0.00				
594	NetworkDefault	100	100	100		0.00				
595	CTM	100	100	100		0.00				
596	NetworkDefault	100	100	100		0.00				

Modelling - Normal traffic - Advanced

Link	Dispersion type for Normal Traffic	Initial queue (PCU)	Auto cycle time	Cycle time
(ALL)	NetworkDefault	0.00	✓	100

Flows

Link	Total flow (PCU/hr)	PCU Factor
200	91	1.00
210	327	1.00
211	6	1.00
212	333	1.00
220	408	1.00
280	10	1.00
281	10	1.00
290	46	1.00
291	388	1.00
300	98	1.00
310	105	1.00
320	0	1.00
390	98	1.00
391	0	1.00
392	53	1.00
393	53	1.00
500	271	1.00
501	127	1.00
510	225	1.00
511	33	1.00
512	33	1.00
513	260	1.00
514	258	1.00
515	293	1.00
520	149	1.00
521	371	1.00
522	520	1.00
530	54	1.00
531	38	1.00
532	13	1.00
533	51	1.00
580	10	1.00
581	10	1.00
582	10	1.00
583	10	1.00
584	10	1.00
590	271	1.00
591	38	1.00
592	409	1.00
593	349	1.00
594	49	1.00
595	49	1.00
596	10	1.00

Flows - Advanced

Link	Detectors
(ALL)	

Signals

Link	Controller stream	Phase	Second phase enabled
200	2	A	
210	2	B	
211	2	C	
220	2	D	
280	2	E	
281	2	G	
501	5	A	
510	5	B	
511	5	B	
512	5	B	
513	5	C	
520	5	D	
521	5	D	
530	5	E	
531	5	E	
532	5	F	
580	5	G	
581	5	K	
582	5	H	
583	5	I	
584	5	J	
596	2	F	

Entry Sources

Link	Cruise time (seconds)	Cruise speed (kph)
200	22.50	32.00
212	22.50	32.00
280	7.30	4.00
281	3.15	4.00
310	22.50	32.00
320	22.50	32.00
514	19.20	32.00
515	14.40	32.00
522	22.50	32.00
580	3.60	4.00
581	7.48	4.00
582	3.60	4.00
583	9.06	4.00
584	5.86	4.00
596	5.40	4.00

Sources

Link	Source	Source type	Source link	Destination link	Cruise time (seconds)	Cruise speed (kph)	Total flow (PCU/hr)
210	1	Link	212	210	5.98	32.00	327
211	1	Link	212	211	5.98	32.00	6
220	1	Link	520	220	8.32	32.00	132
290	1	Link	220	290	22.50	32.00	40
291	1	Link	220	291	22.50	32.00	368
300	1	Link	594	300	10.39	32.00	49
390	1	Link	300	390	22.50	32.00	98
391	1	Link	310	391	22.50	32.00	0
392	1	Link	320	392	15.07	32.00	0
393	1	Link	320	393	10.40	32.00	0
500	1	Link	210	500	9.80	32.00	223
501	1	Link	200	501	7.96	32.00	23
510	1	Link	514	510	3.75	32.00	225
511	1	Link	514	511	3.79	32.00	33
512	1	Link	515	512	8.94	32.00	33
513	1	Link	515	513	8.71	32.00	260
520	1	Link	522	520	3.57	32.00	149
521	1	Link	522	521	3.54	32.00	371
530	1	Link	392	530	18.53	32.00	53
531	1	Link	533	531	3.41	32.00	38
532	1	Link	533	532	3.41	32.00	13
533	1	Link	393	533	9.43	32.00	53
590	1	Link	500	590	22.50	32.00	271
591	1	Link	530	591	22.50	32.00	38
592	1	Link	531	592	22.50	32.00	38
593	1	Link	510	593	22.50	32.00	225
594	1	Link	501	594	17.57	32.00	8
595	1	Link	501	595	17.57	32.00	8
220	2	Link	530	220	8.32	32.00	16
290	2	Link	211	290	22.50	32.00	6
291	2	Link	200	291	22.50	32.00	20
300	2	Link	595	300	10.39	32.00	49
390	2	Link	320	390	24.00	30.00	0
391	2	Link	300	391	22.50	32.00	0
392	2	Link	310	392	15.07	32.00	53
393	2	Link	310	393	11.09	30.00	53
500	2	Link	200	500	9.80	32.00	48
501	2	Link	210	501	7.96	32.00	104
592	2	Link	521	592	22.50	32.00	371
593	2	Link	532	593	22.50	32.00	13
594	2	Link	520	594	17.57	32.00	9
595	2	Link	520	595	17.57	32.00	9
220	3	Link	513	220	8.32	32.00	260
593	3	Link	501	593	22.50	32.00	111
594	3	Link	511	594	17.57	32.00	33
595	3	Link	512	595	17.57	32.00	33

Give way data

Link	Same as major link	Percentage opposed (%)	Opposed By Conflict 1 Only (%)	Max Flow (Opposed) (PCU/hr)	Max Flow (Unopposed) (PCU/hr)	Max congested capacity (PCU/hr)	Use Step-wise Opposed Turn Model	Visibility restricted
310	✓	100	61	600	600			
320	✓	100	1	800	800			
510	✓	100	100	715	1989	0		

Give Way Data - Conflicts

Link	Conflict	Description	Controlling type	Controlling link	Percentage opposing (%)	Slope coefficient	Upstream signals visible
310	1		Link	300	100	0.22	
	2		Link	320	100	0.19	
320	1		Link	300	100	0.35	

Local OD Matrix - Local Matrix: 3

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	Limit paths by flow	Low path flow threshold
3	(untitled)	✓	✓	Path Equalisation			✓			✓	1.25				

Normal Input Flows (PCU/hr)

	To			
	A	B	C	
From	A	0	98	0
	B	105	0	0
	C	0	0	0

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
3	A	(untitled)	300	393, 392	#0000FF
	B	(untitled)	310	390	#FF0000
	C	(untitled)	320	391	#00FF00

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
3	1		B	C	310, 391	Normal	0
	2		C	B	320, 390	Normal	0
	3		B	A	310, 393	Normal	53
	4		C	A	320, 393	Normal	0
	5		B	A	310, 392	Normal	53
	6		C	A	320, 392	Normal	0
	7		A	B	300, 390	Normal	98
	8		A	C	300, 391	Normal	0

Local OD Matrix - Local Matrix: 5

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	Limit paths by flow	Low path flow threshold
5	(untitled)	✓	✓	Path Equalisation			✓			✓	1.25				

Normal Input Flows (PCU/hr)

	To					
		A	B	C	D	E
From	A	0	20	48	20	3
	B	6	0	223	91	13
	C	25	235	0	225	65
	D	13	119	371	0	17
	E	2	14	76	13	0

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
5	A	(untitled)	200	290	#FFFF00
	B	(untitled)	212	291	#00FFFF
	C	(untitled)	514, 515	592, 591, 590	#FF00FF
	D	(untitled)	522	593	#008000
	E	(untitled)	533, 530	595, 594	#FFA500

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
5	1		A	E	200, 501, 595	Normal	2
	2		A	E	200, 501, 594	Normal	2
	3		E	A	530, 220, 290	Normal	2
	4		A	B	200, 291	Normal	20
	5		E	B	530, 220, 291	Normal	14
	6		B	E	212, 210, 501, 595	Normal	7
	7		B	E	212, 210, 501, 594	Normal	7
	8		B	A	212, 211, 290	Normal	6
	9		E	C	533, 531, 592	Normal	38
	10		E	C	530, 591	Normal	38
	11		A	C	200, 500, 590	Normal	48
	12		B	C	212, 210, 500, 590	Normal	223
	13		C	E	514, 511, 594	Normal	33
	14		C	E	515, 512, 595	Normal	33
	16		C	B	515, 513, 220, 291	Normal	235
	17		C	A	515, 513, 220, 290	Normal	25
	18		D	C	522, 521, 592	Normal	371
	19		D	B	522, 520, 220, 291	Normal	119
	20		D	A	522, 520, 220, 290	Normal	13
	22		D	E	522, 520, 595	Normal	9
	23		D	E	522, 520, 594	Normal	9
	24		A	D	200, 501, 593	Normal	20
	25		B	D	212, 210, 501, 593	Normal	91
	26		C	D	514, 510, 593	Normal	225
	27		E	D	533, 532, 593	Normal	13

Signal Timings

Network Default: 100s cycle time; 100 steps

Controller Stream 2

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)	Minimum possible cycle time (s)
2			1	NetworkDefault	100	49

Controller Stream 2 - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
2	Unspecified						Absolute

Controller Stream 2 - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
2	✓	✓	Offsets And Green Splits	✓	

Phases

Controller Stream	Phase	Name	Street minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
2	A	Traffic Phase	7	300	0	0	Unknown
	B	Filter Arrow	4	300	0	0	Unknown
	C	Traffic Phase	7	7	0	0	Unknown
	D	Traffic Phase	7	300	0	0	Unknown
	E	Pedestrian Phase	5	300	0	0	Unknown
	F	Pedestrian Phase	5	300	0	0	Unknown
	G	Pedestrian Phase	5	300	0	0	Unknown

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)	Run every N cycles	Probability of running (%)
2	1	D, B	1	1	100
	2	C, B, G	1	1	100
	3	A, F	1	1	100
	4	E	1	1	100

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends	Minimum possible cycle time (s)	Exclude from analysis
2	1	(untitled)	Single	1, 2, 3, 4	68, 80, 93, 3	49	

Intergreen Matrix for Controller Stream 2

		To						
From		A	B	C	D	E	F	G
	A		6	5	6	5		8
	B	5					5	
	C	5			6	8	5	
	D	5		5		7		7
	E	8		8	8			
	F		7	7				
	G	5			5			

Banned Stage transitions for Controller Stream 2

	To				
	1	2	3	4	
From	1				
	2				
	3				
	4				

Link Results

Link Results: Vehicle summary

Time Segment	Link	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)
16:30-17:30	200	52	74	91	1959	8	64.29	2.93	7.95	23.08	1.47	24.55
	210	26	253	327	1642	77	4.91	2.35	28.64	6.34	1.21	7.54
	211	4	2157	6	1881	7	55.23	0.17	1.85	1.31	0.09	1.40
	212	19	374	333	1754	100	1.27	0.12	0.36	1.66	0.00	1.66
	220	39	132	408	1817	57	6.98	4.36	54.54	11.24	1.36	12.60
	290	3	3418	46	1800	100	1.03	0.01	0.04	0.19	0.00	0.19
	291	22	317	388	1800	100	1.27	0.14	0.41	1.95	0.00	1.95
	300	5	1646	98	1903	100	1.00	0.03	0.16	0.39	0.00	0.39
	310	18	396	105	578	100	3.80	0.11	0.32	1.57	0.00	1.57
	320	0	Unrestricted	0	766	100	0.00	0.00	0.00	0.00	0.00	0.00
	390	5	1551	98	1800	100	1.06	0.03	0.09	0.41	0.00	0.41
	391	0	Unrestricted	0	1800	100	0.00	0.00	0.00	0.00	0.00	0.00
	392	3	3341	53	2007	100	0.92	0.01	0.05	0.19	0.00	0.19
	393	2	3574	53	2143	100	0.86	0.01	0.07	0.18	0.00	0.18
	500	15	503	271	1817	100	1.16	0.09	0.59	1.24	0.00	1.24
	501	53	70	127	2179	10	58.09	3.80	26.20	29.10	1.88	30.98
	510	52	75	225	1989	21	42.56	5.51	88.39	37.84	2.82	40.66
	511	7	1213	33	2159	21	35.00	1.84	26.94	4.50	0.38	4.88
	512	7	1201	33	2147	21	35.10	1.83	11.41	4.51	0.38	4.89
	513	55	63	260	2141	21	43.14	6.69	42.96	44.32	3.43	47.75
	514	13	570	258	2071	100	1.28	0.65	1.96	1.30	0.23	1.54
	515	13	580	293	2215	100	0.94	0.08	0.29	1.08	0.00	1.08
	520	20	344	149	1934	37	21.63	1.99	34.53	12.71	1.02	13.74
	521	53	71	371	1850	37	25.32	5.19	94.91	37.05	2.66	39.72
	522	39	130	520	1803	100	6.50	5.38	15.86	13.33	2.58	15.91
	530	27	230	54	1981	9	54.14	1.57	5.11	11.53	0.79	12.32
	531	18	406	38	2138	9	51.52	1.89	31.11	7.72	0.54	8.26
	532	7	1245	13	1943	9	50.87	0.36	6.51	2.61	0.18	2.79
	533	3	3338	51	1948	100	0.95	0.01	0.09	0.19	0.00	0.19
	590	15	498	271	1800	100	1.18	0.09	0.26	1.26	0.00	1.26
	591	2	4163	38	1800	100	1.02	0.01	0.03	0.15	0.00	0.15
	592	23	296	409	1800	100	1.29	0.15	0.43	2.09	0.00	2.09
	593	19	364	349	1800	100	1.24	0.12	0.36	1.71	0.00	1.71
	594	3	3224	49	1812	100	1.02	0.01	0.05	0.20	0.00	0.20
	595	2	3531	49	1979	100	0.93	0.01	0.04	0.18	0.00	0.18

Link Results: Flows and signals

Time Segment	Link	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Calculated sat flow (PCU/hr)	Calculated capacity (PCU/hr)	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Mean modulus of error	Actual green (s (per cycle))	Effective green (s (per cycle))
16:30-17:30	200	91	91	0		1959	176	52		74	0.00	8	9
	210	327	327	0		1642	1281	26		253	0.00	77	78
	211	6	6	0		1881	150	4		2157	0.00	7	8
	212	333	333	0		1754	1754	19		374	0.00	100	100
	220	408	408	0		1817	1054	39		132	0.94	57	58
	280	10	10	0		10000	600	2		5300	0.00	5	6
	281	10	10	0		10000	600	2		5300	0.00	5	6
	290	46	46	0		1800	1800	3		3418	0.71	100	100
	291	388	388	0		1800	1800	22		317	0.76	100	100
	300	98	98	0		1903	1903	5		1646	0.87	100	100
	310	105	105	0		578	578	18		396	0.00	100	100
	320	0	0	0		766	766	0		Unrestricted	0.00	100	100
	390	98	98	0		1800	1800	5		1551	0.74	100	100
	391	0	0	0		1800	1800	0		Unrestricted	0.00	100	100
	392	53	53	0	✓	2007	2007	3		3341	0.00	100	100
	393	53	53	0	✓	2143	2143	2		3574	0.00	100	100
	500	271	271	0		1817	1817	15		503	0.40	100	100
	501	127	127	0		2179	240	53		70	0.43	10	11
	510	225	225	0		1989	438	52		75	0.09	21	22
	511	33	33	0	✓	2159	475	7		1213	0.09	21	22
	512	33	33	0	✓	2147	471	7		1201	0.00	21	22
	513	260	260	0		2141	471	55		63	0.00	21	22
	514	258	258	-1		2071	1919	13		570	0.00	100	100
	515	293	293	-1	✓	2215	2215	13		580	0.00	100	100
	520	149	149	0		1934	735	20		344	0.47	37	38
	521	371	371	0		1850	703	53		71	0.47	37	38
	522	520	520	0		1803	1332	39		130	0.00	100	100
	530	54	54	0		1981	198	27		230	0.00	9	10
	531	38	38	0		2138	214	18		406	0.00	9	10
	532	13	13	0		1943	194	7		1245	0.00	9	10
	533	51	51	0		1948	1948	3		3338	0.00	100	100
	580	10	10	0		10000	6900	0		62000	0.00	68	69
	581	10	10	0		10000	2000	1		17900	0.00	19	20
	582	10	10	0		10000	2800	0		25100	0.00	27	28
	583	10	10	0		10000	1700	1		15200	0.00	16	17
	584	10	10	0		10000	600	2		5300	0.00	5	6
	590	271	271	0		1800	1800	15		498	0.25	100	100
	591	38	38	0		1800	1800	2		4163	1.47	100	100
	592	409	409	0		1800	1800	23		296	0.96	100	100
	593	349	349	0		1800	1800	19		364	1.02	100	100
	594	49	49	0		1812	1812	3		3224	0.89	100	100
	595	49	49	0		1979	1979	2		3531	1.29	100	100
	596	10	10	0		Unrestricted	Unrestricted	0		Unrestricted	0.00	8	9

Link Results: Stops and delays

Time Segment	Link	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Unweighted cost of delay (£ per hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Uniform stops (Stops per hr)	Random stops (Stops per hr)	Unweighted cost of stops (£ per hr)	Weighted cost of stops (£ per hr)
16:30-17:30	200	22.50	64.29	1.10	0.53	23.08	23.08	113.52	85.29	18.01	1.47	1.47
	210	5.98	4.91	0.27	0.17	6.34	6.34	25.87	78.47	6.14	1.21	1.21
	211	5.98	55.23	0.07	0.02	1.31	1.31	104.08	5.52	0.72	0.09	0.09
	212	22.50	1.27	0.00	0.12	1.66	1.66	0.00	0.00	0.00	0.00	0.00
	220	8.32	6.98	0.48	0.32	11.24	11.24	23.29	72.68	22.45	1.36	1.36
	280	7.30	47.70	0.12	0.01	1.88	1.88	0.00	0.00	0.00	0.00	0.00
	281	3.15	47.70	0.12	0.01	1.88	1.88	0.00	0.00	0.00	0.00	0.00
	290	22.50	1.03	0.00	0.01	0.19	0.19	0.00	0.00	0.00	0.00	0.00
	291	22.50	1.27	0.00	0.14	1.95	1.95	0.00	0.00	0.00	0.00	0.00
	300	10.39	1.00	0.00	0.03	0.39	0.39	0.00	0.00	0.00	0.00	0.00
	310	22.50	3.80	0.00	0.11	1.57	1.57	0.00	0.00	0.00	0.00	0.00
	320	22.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	390	22.50	1.06	0.00	0.03	0.41	0.41	0.00	0.00	0.00	0.00	0.00
	391	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	392	15.07	0.92	0.00	0.01	0.19	0.19	0.00	0.00	0.00	0.00	0.00
	393	11.09	0.86	0.00	0.01	0.18	0.18	0.00	0.00	0.00	0.00	0.00
	500	9.80	1.16	0.00	0.09	1.24	1.24	0.00	0.00	0.00	0.00	0.00
	501	7.96	58.09	1.49	0.56	29.10	29.10	103.82	112.54	19.31	1.88	1.88
	510	3.75	42.56	2.14	0.53	37.84	37.84	87.79	179.27	18.64	2.82	2.82
	511	3.79	35.00	0.28	0.04	4.50	4.50	82.03	25.40	1.31	0.38	0.38
	512	8.94	35.10	0.28	0.04	4.51	4.51	82.07	25.39	1.32	0.38	0.38
	513	8.71	43.14	2.51	0.61	44.32	44.32	92.32	218.77	21.67	3.43	3.43
	514	19.20	1.28	0.01	0.08	1.30	1.30	6.33	13.54	2.79	0.23	0.23
	515	14.40	0.94	0.00	0.08	1.08	1.08	0.00	0.00	0.00	0.00	0.00
	520	3.57	21.63	0.77	0.13	12.71	12.71	48.05	67.05	4.54	1.02	1.02
	521	3.54	25.32	2.05	0.56	37.05	37.05	50.33	166.96	19.78	2.66	2.66
	522	22.50	6.50	0.62	0.32	13.33	13.33	34.78	169.42	11.46	2.58	2.58
	530	18.53	54.14	0.63	0.19	11.53	11.53	102.81	48.99	6.52	0.79	0.79
	531	3.41	51.52	0.44	0.11	7.72	7.72	99.97	34.20	3.79	0.54	0.54
	532	3.41	50.87	0.15	0.04	2.61	2.61	99.68	11.70	1.26	0.18	0.18
	533	9.43	0.95	0.00	0.01	0.19	0.19	0.00	0.00	0.00	0.00	0.00
	580	3.60	5.22	0.01	0.00	0.21	0.21	0.00	0.00	0.00	0.00	0.00
	581	7.48	33.30	0.09	0.00	1.31	1.31	0.00	0.00	0.00	0.00	0.00
	582	3.60	26.93	0.07	0.00	1.06	1.06	0.00	0.00	0.00	0.00	0.00
	583	9.06	35.93	0.10	0.00	1.42	1.42	0.00	0.00	0.00	0.00	0.00
	584	5.86	47.70	0.12	0.01	1.88	1.88	0.00	0.00	0.00	0.00	0.00
	590	22.50	1.18	0.00	0.09	1.26	1.26	0.00	0.00	0.00	0.00	0.00
	591	22.50	1.02	0.00	0.01	0.15	0.15	0.00	0.00	0.00	0.00	0.00
	592	22.50	1.29	0.00	0.15	2.09	2.09	0.00	0.00	0.00	0.00	0.00
	593	22.50	1.24	0.00	0.12	1.71	1.71	0.00	0.00	0.00	0.00	0.00
	594	17.57	1.02	0.00	0.01	0.20	0.20	0.00	0.00	0.00	0.00	0.00
	595	17.57	0.93	0.00	0.01	0.18	0.18	0.00	0.00	0.00	0.00	0.00
	596	5.40	41.86	0.12	0.00	1.65	1.65	0.00	0.00	0.00	0.00	0.00

Link Results: Queues and blocking

Time Segment	Link	Initial queue (PCU)	Mean max queue (PCU)	Max queue storage (PCU)	Utilised storage (%)	Average storage excess queue (PCU)	Average limit excess queue (PCU)	Excess queue penalty (£ per hr)	Mean end of green queue (PCU)	Mean end of red queue (PCU)	Wasted time starvation (s (per cycle))	Wasted time blocking back (s (per cycle))	Wasted time total (s (per cycle))	Estimated blocking
16:30-17:30	200	0.00	2.93	36.83	7.95	0.00	0.00	0.00	0.53	2.83	0.00	0.00	0.00	
	210	0.00	2.35	8.21	28.64	0.00	0.00	0.00	0.17	2.26	0.00	0.00	0.00	
	211	0.00	0.17	9.41	1.85	0.00	0.00	0.00	0.02	0.17	7.00	0.00	7.00	
	212	0.00	0.12	32.98	0.36	0.00	0.00	0.00			0.00	0.00	0.00	
	220	0.00	4.36	8.00	54.54	0.00	0.00	0.00	0.32	1.69	7.00	0.00	7.00	
	280	0.00	0.27	10.00	2.70	0.00	0.00	0.00	0.01	0.27	0.00	0.00	0.00	
	281	0.00	0.27	10.00	2.70	0.00	0.00	0.00	0.01	0.27	0.00	0.00	0.00	
	290	0.00	0.01	33.84	0.04	0.00	0.00	0.00			73.00	0.00	73.00	
	291	0.00	0.14	33.84	0.41	0.00	0.00	0.00			16.00	0.00	16.00	
	300	0.00	0.03	16.52	0.16	0.00	0.00	0.00			59.00	0.00	59.00	
	310	0.00	0.11	34.78	0.32	0.00	0.00	0.00			0.00	0.00	0.00	
	320	0.00	0.00	34.78	0.00	0.00	0.00	0.00			100.00	0.00	100.00	
	390	0.00	0.03	33.84	0.09	0.00	0.00	0.00			57.00	0.00	57.00	
	391	0.00	0.00	33.84	0.00	0.00	0.00	0.00			100.00	0.00	100.00	
	392	0.00	0.01	25.27	0.05	0.00	0.00	0.00			100.00	0.00	100.00	
	393	0.00	0.01	18.62	0.07	0.00	0.00	0.00			100.00	0.00	100.00	
	500	0.00	0.09	14.89	0.59	0.00	0.00	0.00			5.00	0.00	5.00	
	501	0.00	3.80	14.49	26.20	0.00	0.00	0.00	0.56	3.47	0.00	0.00	0.00	
	510	0.00	5.51	6.23	88.39	0.00	0.00	0.00	0.53	5.49	0.00	0.00	0.00	
	511	0.00	1.84	6.83	26.94	0.00	0.00	0.00	0.04	0.74	18.00	0.00	18.00	
	512	0.00	1.83	16.05	11.41	0.00	0.00	0.00	0.04	0.74	20.00	0.08	20.08	
	513	0.00	6.69	15.58	42.96	0.00	0.00	0.00	0.61	6.47	0.00	0.00	0.00	
	514	0.00	0.65	33.22	1.96	0.00	0.00	0.00			0.00	7.32	7.32	
	515	0.00	0.08	26.66	0.29	0.00	0.00	0.00			0.00	0.00	0.00	
	520	0.00	1.99	5.76	34.53	0.00	0.00	0.00	0.13	1.99	2.00	0.00	2.00	
	521	0.00	5.19	5.47	94.91	0.00	0.00	0.00	0.56	5.19	0.00	0.00	0.00	
	522	0.00	5.38	33.90	15.86	0.00	0.00	0.00			0.00	26.15	26.15	
	530	0.00	1.57	30.68	5.11	0.00	0.00	0.00	0.19	1.54	7.00	0.00	7.00	
	531	0.00	1.89	6.09	31.11	0.00	0.00	0.00	0.11	1.06	8.00	0.00	8.00	
	532	0.00	0.36	5.54	6.51	0.00	0.00	0.00	0.04	0.36	9.00	0.00	9.00	
	533	0.00	0.01	15.35	0.09	0.00	0.00	0.00			100.00	0.00	100.00	
	580	0.00	0.09	10.00	0.87	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.00	
	581	0.00	0.22	10.00	2.25	0.00	0.00	0.00	0.00	0.22	0.00	0.00	0.00	
	582	0.00	0.20	10.00	2.02	0.00	0.00	0.00	0.00	0.20	0.00	0.00	0.00	
	583	0.00	0.23	10.00	2.34	0.00	0.00	0.00	0.00	0.23	0.00	0.00	0.00	
	584	0.00	0.27	10.00	2.70	0.00	0.00	0.00	0.01	0.27	0.00	0.00	0.00	
	590	0.00	0.09	33.84	0.26	0.00	0.00	0.00			0.00	0.00	0.00	
	591	0.00	0.01	33.84	0.03	0.00	0.00	0.00			83.00	0.00	83.00	
	592	0.00	0.15	33.84	0.43	0.00	0.00	0.00			35.00	0.00	35.00	
	593	0.00	0.12	33.84	0.36	0.00	0.00	0.00			44.00	0.00	44.00	
	594	0.00	0.01	26.60	0.05	0.00	0.00	0.00			78.00	0.00	78.00	
	595	0.00	0.01	29.05	0.04	0.00	0.00	0.00			89.00	0.00	89.00	
	596	0.00	0.25	10.00	2.53	0.00	0.00	0.00	0.00	0.25	0.00	0.00	0.00	

Link Results: Journey times

Time Segment	Link	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	JourneyTime (s)
16:30-17:30	200	18.20	2.19	8.30	86.79
	210	17.39	0.99	17.57	10.90
	211	0.32	0.10	3.13	61.22
	212	66.60	2.20	30.29	23.77
	220	30.22	1.74	17.41	15.30
	280	0.08	0.15	0.53	55.00
	281	0.04	0.14	0.25	50.85
	290	9.21	0.30	30.60	23.53
	291	77.68	2.57	30.28	23.77
	300	9.06	0.31	29.20	11.38
	310	21.00	0.77	27.38	26.30
	320	0.00	0.00	0.00	0.00
	390	19.62	0.64	30.56	23.56
	391	0.00	0.00	0.00	0.00
	392	7.03	0.23	30.16	15.99
	393	4.85	0.17	27.84	11.95
	500	23.62	0.83	28.60	10.97
	501	8.99	2.33	3.86	66.05
	510	7.51	2.90	2.59	46.30
	511	1.10	0.35	3.12	38.79
	512	2.59	0.40	6.50	44.04
	513	20.16	3.75	5.37	51.84
	514	44.03	1.47	30.00	20.48
	515	37.52	1.25	30.05	15.34
	520	4.72	1.04	4.53	25.20
	521	11.68	2.97	3.93	28.86
	522	104.00	4.19	24.83	29.00
	530	8.90	1.09	8.16	72.67
	531	1.15	0.58	1.99	54.93
	532	0.39	0.20	2.01	54.29
	533	4.28	0.15	29.07	10.38
	580	0.04	0.02	1.63	8.82
	581	0.08	0.11	0.73	40.78
	582	0.04	0.08	0.47	30.53
	583	0.10	0.12	0.81	44.99
	584	0.07	0.15	0.44	53.56
	590	54.20	1.78	30.41	23.68
	591	7.60	0.25	30.61	23.52
	592	81.80	2.70	30.26	23.79
	593	69.89	2.30	30.33	23.74
	594	7.66	0.25	30.24	18.59
	595	7.66	0.25	30.39	18.50
	596	0.06	0.13	0.46	47.26

Link Results: Advanced

Time Segment	Link	Degree of saturation penalty (£ per hr)	Ped gap accepting penalty (£ per hr)	Warmed up	Mean Max Queue EoTS (PCU)	Mean End of Green Queue EoTS (PCU)	Mean End of Red Queue EoTS (PCU)	PCU Factor	Cost of traffic penalties (£ per hr)	Unweighted performance index (£ per hr)	Performance Index (£ per hr)
16:30-17:30	200	0.00	0.00	✓	2.93	0.53	2.83	1.00	0.00	24.55	24.55
	210	0.00	0.00	✓	2.35	0.17	2.26	1.00	0.00	7.54	7.54
	211	0.00	0.00	✓	0.17	0.02	0.17	1.00	0.00	1.40	1.40
	212	0.00	0.00	✓	0.12			1.00	0.00	1.66	1.66
	220	0.00	0.00	✓	4.36	0.32	1.69	1.00	0.00	12.60	12.60
	280	0.00	0.00	✓	0.27	0.01	0.27	1.00	0.00	0.00	0.00
	281	0.00	0.00	✓	0.27	0.01	0.27	1.00	0.00	0.00	0.00
	290	0.00	0.00	✓	0.01			1.00	0.00	0.19	0.19
	291	0.00	0.00	✓	0.14			1.00	0.00	1.95	1.95
	300	0.00	0.00	✓	0.03			1.00	0.00	0.39	0.39
	310	0.00	0.00	✓	0.11			1.00	0.00	1.57	1.57
	320	0.00	0.00	✓	0.00			1.00	0.00	0.00	0.00
	390	0.00	0.00	✓	0.03			1.00	0.00	0.41	0.41
	391	0.00	0.00	✓	0.00			1.00	0.00	0.00	0.00
	392	0.00	0.00	✓	0.01			1.00	0.00	0.19	0.19
	393	0.00	0.00	✓	0.01			1.00	0.00	0.18	0.18
	500	0.00	0.00	✓	0.09			1.00	0.00	1.24	1.24
	501	0.00	0.00	✓	3.80	0.56	3.47	1.00	0.00	30.98	30.98
	510	0.00	0.00	✓	5.51	0.53	5.49	1.00	0.00	40.66	40.66
	511	0.00	0.00	✓	1.84	0.04	0.74	1.00	0.00	4.88	4.88
	512	0.00	0.00	✓	1.83	0.04	0.74	1.00	0.00	4.89	4.89
	513	0.00	0.00	✓	6.69	0.62	6.48	1.00	0.00	47.75	47.75
	514	0.00	0.00	✓	0.65			1.00	0.00	1.54	1.54
	515	0.00	0.00	✓	0.08			1.00	0.00	1.08	1.08
	520	0.00	0.00	✓	1.99	0.13	1.99	1.00	0.00	13.74	13.74
	521	0.00	0.00	✓	5.20	0.56	5.20	1.00	0.00	39.72	39.72
	522	0.00	0.00	✓	5.38			1.00	0.00	15.91	15.91
	530	0.00	0.00	✓	1.57	0.19	1.54	1.00	0.00	12.32	12.32
	531	0.00	0.00	✓	1.89	0.11	1.06	1.00	0.00	8.26	8.26
	532	0.00	0.00	✓	0.36	0.04	0.36	1.00	0.00	2.79	2.79
	533	0.00	0.00	✓	0.01			1.00	0.00	0.19	0.19
	580	0.00	0.00	✓	0.09	0.00	0.09	1.00	0.00	0.00	0.00
	581	0.00	0.00	✓	0.22	0.00	0.22	1.00	0.00	0.00	0.00
	582	0.00	0.00	✓	0.20	0.00	0.20	1.00	0.00	0.00	0.00
	583	0.00	0.00	✓	0.23	0.00	0.23	1.00	0.00	0.00	0.00
	584	0.00	0.00	✓	0.27	0.01	0.27	1.00	0.00	0.00	0.00
	590	0.00	0.00	✓	0.09			1.00	0.00	1.26	1.26
	591	0.00	0.00	✓	0.01			1.00	0.00	0.15	0.15
	592	0.00	0.00	✓	0.15			1.00	0.00	2.09	2.09
	593	0.00	0.00	✓	0.12			1.00	0.00	1.71	1.71
	594	0.00	0.00	✓	0.01			1.00	0.00	0.20	0.20
	595	0.00	0.00	✓	0.01			1.00	0.00	0.18	0.18
	596	0.00	0.00	✓	0.25	0.00	0.25	1.00	0.00	0.00	0.00

Collections

Point to Point Journey Time

Average Journey Time (s) for Local Matrix: 3

	To			
		A	B	C
From	A	0.0	34.9	0.0
	B	40.3	0.0	0.0

Path Journey Time

Path	From Location	To Location	Normal Calculated Flow (PCU/hr)	Normal journey time (s)	Normal journey dist (m)	Bus journeydist (m)	Tram journey dist (m)	Pedestrian journey dist (m)	Calculated Total Flow (PCU/hr)	Avg journey time (s)	Avg journey dist (m)
1	B	C	0	26.30	400.00	400.00	400.00	400.00	0	0.00	1600.00
2	C	B	0	23.56	400.00	400.00	400.00	400.00	0	0.00	1600.00
3	B	A	53	38.25	292.42	292.42	292.42	292.42	53	38.25	292.42
4	C	A	0	11.95	292.42	292.42	292.42	292.42	0	0.00	1169.68
5	B	A	53	42.29	333.93	333.93	333.93	333.93	53	42.29	333.93
6	C	A	0	15.99	333.93	333.93	333.93	333.93	0	0.00	1335.72
7	A	B	98	34.94	292.33	292.33	292.33	292.33	98	34.94	292.33
8	A	C	0	11.38	292.33	292.33	292.33	292.33	0	0.00	1169.32

Average Journey Time (s) for Local Matrix: 5

	To					
		A	B	C	D	E
From	A	0.0	110.6	121.4	176.6	171.4
	B	108.5	0.0	69.3	124.5	119.3
	C	106.0	106.3	0.0	90.5	77.9
	D	93.0	93.3	81.7	0.0	72.7
	E	111.5	111.7	92.6	88.4	0.0

Path Journey Time

Path	From Location	To Location	Normal Calculated Flow (PCU/hr)	Normal journey time (s)	Normal journey dist (m)	Bus journeydist (m)	Tram journey dist (m)	Pedestrian journey dist (m)	Calculated Total Flow (PCU/hr)	Avg journey time (s)	Avg journey dist (m)
1	A	E	2	171.34	426.90	426.90	426.90	426.90	2	171.34	426.90
2	A	E	2	171.43	426.90	426.90	426.90	426.90	2	171.43	426.90
3	E	A	2	111.50	438.73	438.73	438.73	438.73	2	111.50	438.73
4	A	B	20	110.56	400.00	400.00	400.00	400.00	20	110.56	400.00
5	E	B	14	111.75	438.73	438.73	438.73	438.73	14	111.75	438.73
6	B	E	7	119.21	480.09	480.09	480.09	480.09	7	119.21	480.09
7	B	E	7	119.30	480.09	480.09	480.09	480.09	7	119.30	480.09
8	B	A	6	108.51	453.19	453.19	453.19	453.19	6	108.51	453.19
9	E	C	38	89.11	314.13	314.13	314.13	314.13	38	89.11	314.13
10	E	C	38	96.19	364.74	364.74	364.74	364.74	38	96.19	364.74
11	A	C	48	121.43	487.15	487.15	487.15	487.15	48	121.43	487.15
12	B	C	223	69.31	540.34	540.34	540.34	540.34	223	69.31	540.34
13	C	E	33	77.86	360.47	360.47	360.47	360.47	33	77.86	360.47
14	C	E	33	77.89	363.70	363.70	363.70	363.70	33	77.89	363.70
16	C	B	235	106.26	479.42	479.42	479.42	479.42	235	106.26	479.42
17	C	A	25	106.01	479.42	479.42	479.42	479.42	25	106.01	479.42
18	D	C	371	81.65	431.47	431.47	431.47	431.47	371	81.65	431.47
19	D	B	119	93.27	505.68	505.68	505.68	505.68	119	93.27	505.68
20	D	A	13	93.03	505.68	505.68	505.68	505.68	13	93.03	505.68
22	D	E	9	72.70	387.84	387.84	387.84	387.84	9	72.70	387.84
23	D	E	9	72.79	387.84	387.84	387.84	387.84	9	72.79	387.84
24	A	D	20	176.58	470.75	470.75	470.75	470.75	20	176.58	470.75
25	B	D	91	124.45	523.94	523.94	523.94	523.94	91	124.45	523.94
26	C	D	225	90.52	403.98	403.98	403.98	403.98	225	90.52	403.98
27	E	D	13	88.41	314.18	314.18	314.18	314.18	13	88.41	314.18

Final Prediction Table

Link Results

			SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES		
Link	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)	Mean end of red queue (PCU)	we
200		2	2	A	91	1959	8	0.00	52	74	86.79	64.29	113.52	2.93	2.83	
210		2	2	B	327	1642	77	0.00	26	253	10.90	4.91	25.87	2.35	2.26	
211		2	2	C	6	1881	7	7.00	4	2157	61.22	55.23	104.08	0.17	0.17	
212		2			333	1754	100	0.00	19	374	23.77	1.27	0.00	0.12		
220		2	2	D	408	1817	57	7.00	39	132	15.30	6.98	23.29	4.36	1.69	
280 P		2	2	E	10	10000	5	0.00	1.667	5300	55.00	47.70	0.00	0.27	0.27	
281 P		2	2	G	10	10000	5	0.00	1.667	5300	50.85	47.70	0.00	0.27	0.27	
290		2			46	1800	100	73.00	3	3418	23.53	1.03	0.00	0.01		
291		2			388	1800	100	16.00	22	317	23.77	1.27	0.00	0.14		
300	(untitled)	3			98	1903	100	59.00	5	1646	11.38	1.00	0.00	0.03		
310	(untitled)	3			105	578	100	0.00	18	396	26.30	3.80	0.00	0.11		
320		3			0	766	100	100.00	0	Unrestricted	0.00	0.00	0.00	0.00		
390	(untitled)	3			98	1800	100	57.00	5	1551	23.56	1.06	0.00	0.03		
391	(untitled)	3			0	1800	100	100.00	0	Unrestricted	0.00	0.00	0.00	0.00		
392	(untitled)	3			53	2007	100	100.00	3	3341	15.99	0.92	0.00	0.01		
393	(untitled)	3			53	2143	100	100.00	2	3574	11.95	0.86	0.00	0.01		
500		5			271	1817	100	5.00	15	503	10.97	1.16	0.00	0.09		
501		5	5	A	127	2179	10	0.00	53	70	66.05	58.09	103.82	3.80	3.47	
510		5	5	B	225	1989	21	0.00	52	75	46.30	42.56	87.79	5.51	5.49	
511		5	5	B	33	2159	21	18.00	7	1213	38.79	35.00	82.03	1.84	0.74	
512		5	5	B	33	2147	21	20.08	7	1201	44.04	35.10	82.07	1.83	0.74	
513		5	5	C	260	2141	21	0.00	55	63	51.84	43.14	92.32	6.69	6.47	
514		5			258	2071	100	7.32	13	570	20.48	1.28	6.33	0.65		
515		5			293	2215	100	0.00	13	580	15.34	0.94	0.00	0.08		
520		5	5	D	149	1934	37	2.00	20	344	25.20	21.63	48.05	1.99	1.99	
521		5	5	D	371	1850	37	0.00	53	71	28.86	25.32	50.33	5.19	5.19	
522		5			520	1803	100	26.15	39	130	29.00	6.50	34.78	5.38		
530		5	5	E	54	1981	9	7.00	27	230	72.67	54.14	102.81	1.57	1.54	
531		5	5	E	38	2138	9	8.00	18	406	54.93	51.52	99.97	1.89	1.06	
532		5	5	F	13	1943	9	9.00	7	1245	54.29	50.87	99.68	0.36	0.36	
533		5			51	1948	100	100.00	3	3338	10.38	0.95	0.00	0.01		
580 P		5	5	G	10	10000	68	0.00	0.145	62000	8.82	5.22	0.00	0.09	0.09	
581 P		5	5	K	10	10000	19	0.00	0.5	17900	40.78	33.30	0.00	0.22	0.22	
582 P		5	5	H	10	10000	27	0.00	0.357	25100	30.53	26.93	0.00	0.20	0.20	
583 P		5	5	I	10	10000	16	0.00	0.588	15200	44.99	35.93	0.00	0.23	0.23	
584 P		5	5	J	10	10000	5	0.00	1.667	5300	53.56	47.70	0.00	0.27	0.27	
590		5			271	1800	100	0.00	15	498	23.68	1.18	0.00	0.09		
591		5			38	1800	100	83.00	2	4163	23.52	1.02	0.00	0.01		
592		5			409	1800	100	35.00	23	296	23.79	1.29	0.00	0.15		
593		5			349	1800	100	44.00	19	364	23.74	1.24	0.00	0.12		
594		5			49	1812	100	78.00	3	3224	18.59	1.02	0.00	0.01		
595		5			49	1979	100	89.00	2	3531	18.50	0.93	0.00	0.01		
596 P			2	F	10	999999999	8	0.00	0	Unrestricted	47.26	41.86	0.00	0.25	0.25	

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	790.61	43.25	18.28	13.28	5.25	263.13	21.04	0.00	284.17
Bus									
Tram									
Pedestrians									
TOTAL	791.12	44.17	17.91	14.04	5.29	274.43	21.04	0.00	284.17

- | P = link is a pedestrian link
- | < = 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 - 2026 Base + HG(140) + Coed Darcy AM

D5 - 2026 Base + HG(140) + Coed Darcy, AM

Summary

Data Errors and Warnings

Severity	Area	Item	Description
Info	Link Data	Link 596 (Pedestrian)	Link 596 is not connected to any other Links or Traffic Streams

Run Summary

Analysis set used	Run start time	Run finish time	Run duration (s)	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 unsignal PRC
5	09/11/2021 23:46:34	09/11/2021 23:46:34	0.93	07:45	90	829.88	34.41	75.47	530	0	0	530	320

Analysis Set Details

Name	Use Simulation	Description	Use specific Demand Set(s)	Specific Demand Set(s)	Optimise specific Demand Set(s)	Include in report	Locked
2026 Base + HG(140) + Coed Darcy AM			✓	D5		✓	

Demand Set Details

Scenario name	Time Period name	Description	Composite	Demand sets	Start time (HH:mm)	Locked	Run automatically
2026 Base + HG(140) + Coed Darcy	AM	2026 Base + Heritage Gate (140 dwellings) + Coed Darcy (2,000 dwellings) + Commercial (3600m2)			07:45		✓

Network Options

Network timings

Network cycle time (s)	Minimum possible cycle time (s)	Absolute minimum possible cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
90	53	53		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)	Missing stage transition options
10000.00	10000.00	10000.00	2	Assume banned

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from traffic model	Exclude pedestrians from results calculation	Random delay mode	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		✓	Simplified (TRANSYT 12)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms ² [-2])	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms ² [-2])	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Offsets And Green Splits	✓

Advanced

Optimisation type	OUTProfile accuracy (%)	SASart temperature	SACooling factor	Random seed	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Simulated Annealing	10, 10, 1, 1, 0.1, 0.1, 0.01, 0.01	300.00	100.00	1		✓	2, 5			Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Traffic Nodes

Traffic Nodes

Traffic node	Name	Description
2		
3	(untitled)	
5		

Links

Links

Link	Name	Description	Traffic node	Length (m)	Has Saturation Flow	Use RR67	Saturation flow (PCU/hr)	Cell saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Is minor shared	Allow Nearside Turn On Red
200			2	200.00	✓		1959		✓		Normal		
210			2	53.19	✓		1642	1642	✓		Normal		
211			2	53.19	✓		1881	1881	✓		Normal		
212			2	200.00	✓		1754				Normal		
220			2	73.99	✓		1817		✓		Normal		
280			2	8.11	✓		10000		✓		Pedestrian		
281			2	3.50	✓		10000		✓		Pedestrian		
290			2	200.00	✓		1800				Normal		
291			2	200.00	✓		1800				Normal		
300	(untitled)		3	92.33	✓		1903				Normal		
310	(untitled)		3	200.00						✓	Normal		
320			3	200.00						✓	Normal		
390	(untitled)		3	200.00	✓		1800				Normal		
391	(untitled)		3	200.00	✓		1800				Normal		
392	(untitled)		3	133.93	✓		2007				Normal		
393	(untitled)		3	92.42	✓		2143				Normal		
500			5	87.15	✓		1817				Normal		
501			5	70.75	✓		2179		✓		Normal		
510			5	33.33	✓		1989	1989	✓	✓	Normal		
511			5	33.67	✓		2159	2159	✓		Normal		
512			5	79.51	✓		2147	2147	✓		Normal		
513			5	77.39	✓		2141	2141	✓		Normal		
514			5	170.65	✓		2071				Normal		
515			5	128.04	✓		2215				Normal		
520			5	31.69	✓		1934	1934	✓		Normal		
521			5	31.47	✓		1850	1850	✓		Normal		
522			5	200.00	✓		1803				Normal		
530			5	164.74	✓		1981		✓		Normal		
531			5	30.30	✓		2138	2138	✓		Normal		
532			5	30.35	✓		1943	1943	✓		Normal		
533			5	83.83	✓		1948	1948			Normal		
580			5	4.00	✓		10000		✓		Pedestrian		
581			5	8.31	✓		10000		✓		Pedestrian		
582			5	4.00	✓		10000		✓		Pedestrian		
583			5	10.07	✓		10000		✓		Pedestrian		
584			5	6.51	✓		10000		✓		Pedestrian		
590			5	200.00	✓		1800				Normal		
591			5	200.00	✓		1800				Normal		
592			5	200.00	✓		1800				Normal		
593			5	200.00	✓		1800				Normal		
594			5	156.15	✓		1812				Normal		
595			5	156.15	✓		1979	1979			Normal		
596				6.00					✓		Pedestrian		

Modelling

Link	Traffic model	Stop weighting (%)	Delay weighting (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Queue limit (PCU)	Excess queue penalty (£)	Has degree of saturation limit
200	NetworkDefault	100	100	100		0.00				
210	CTM	100	100	100		0.00				
211	CTM	100	100	100		0.00				
212	NetworkDefault	100	100	100		0.00				
220	NetworkDefault	100	100	100		8.00	✓	6.00	1000.00	
280	NetworkDefault	100	100	100		0.00				
281	NetworkDefault	100	100	100		0.00				
290	NetworkDefault	100	100	100		0.00				
291	NetworkDefault	100	100	100		0.00				
300	NetworkDefault	100	100	100		0.00				
310	NetworkDefault	100	100	100		0.00				
320	NetworkDefault	100	100	100		0.00				
390	NetworkDefault	100	100	100		0.00				
391	NetworkDefault	100	100	100		0.00				
392	NetworkDefault	100	100	100		0.00				
393	NetworkDefault	100	100	100		0.00				
500	NetworkDefault	100	100	100		0.00				
501	NetworkDefault	100	100	100		0.00	✓	6.00	1000.00	
510	CTM	100	100	100		0.00				
511	CTM	100	100	100		0.00				
512	CTM	100	100	100		0.00				
513	CTM	100	100	100		0.00				
514	NetworkDefault	100	100	100		0.00				
515	NetworkDefault	100	100	100		0.00				
520	CTM	100	100	100		0.00				
521	CTM	100	100	100		0.00				
522	NetworkDefault	100	100	100		0.00				
530	NetworkDefault	100	100	100		0.00				
531	CTM	100	100	100		0.00	✓	4.00	1000.00	
532	CTM	100	100	100		0.00				
533	CTM	100	100	100		0.00				
580	NetworkDefault	100	100	100		0.00				
581	NetworkDefault	100	100	100		0.00				
582	NetworkDefault	100	100	100		0.00				
583	NetworkDefault	100	100	100		0.00				
584	NetworkDefault	100	100	100		0.00				
590	NetworkDefault	100	100	100		0.00				
591	NetworkDefault	100	100	100		0.00				
592	NetworkDefault	100	100	100		0.00				
593	NetworkDefault	100	100	100		0.00				
594	NetworkDefault	100	100	100		0.00				
595	CTM	100	100	100		0.00				
596	NetworkDefault	100	100	100		0.00				

Modelling - Normal traffic - Advanced

Link	Dispersion type for Normal Traffic	Initial queue (PCU)	Auto cycle time	Cycle time
(ALL)	NetworkDefault	0.00	✓	90

Flows

Link	Total flow (PCU/hr)	PCU Factor
200	136	1.00
210	626	1.00
211	26	1.00
212	652	1.00
220	479	1.00
280	10	1.00
281	10	1.00
290	174	1.00
291	342	1.00
300	246	1.00
310	180	1.00
320	457	1.00
390	71	1.00
391	175	1.00
392	319	1.00
393	319	1.00
500	577	1.00
501	174	1.00
510	276	1.00
511	91	1.00
512	91	1.00
513	321	1.00
514	367	1.00
515	412	1.00
520	132	1.00
521	319	1.00
522	451	1.00
530	299	1.00
531	241	1.00
532	97	1.00
533	338	1.00
580	10	1.00
581	10	1.00
582	10	1.00
583	10	1.00
584	10	1.00
590	577	1.00
591	241	1.00
592	560	1.00
593	515	1.00
594	123	1.00
595	123	1.00
596	10	1.00

Flows - Advanced

Link	Detectors
(ALL)	

Signals

Link	Controller stream	Phase	Second phase enabled
200	2	A	
210	2	B	
211	2	C	
220	2	D	
280	2	E	
281	2	G	
501	5	A	
510	5	B	
511	5	B	
512	5	B	
513	5	C	
520	5	D	
521	5	D	
530	5	E	
531	5	E	
532	5	F	
580	5	G	
581	5	K	
582	5	H	
583	5	I	
584	5	J	
596	2	F	

Entry Sources

Link	Cruise time (seconds)	Cruise speed (kph)
200	22.50	32.00
212	22.50	32.00
280	7.30	4.00
281	3.15	4.00
310	22.50	32.00
320	22.50	32.00
514	19.20	32.00
515	14.40	32.00
522	22.50	32.00
580	3.60	4.00
581	7.48	4.00
582	3.60	4.00
583	9.06	4.00
584	5.86	4.00
596	5.40	4.00

Sources

Link	Source	Source type	Source link	Destination link	Cruise time (seconds)	Cruise speed (kph)	Total flow (PCU/hr)
210	1	Link	212	210	5.98	32.00	626
211	1	Link	212	211	5.98	32.00	26
220	1	Link	520	220	8.32	32.00	100
290	1	Link	220	290	22.50	32.00	148
291	1	Link	220	291	22.50	32.00	331
300	1	Link	594	300	10.39	32.00	123
390	1	Link	300	390	22.50	32.00	71
391	1	Link	310	391	22.50	32.00	0
392	1	Link	320	392	15.07	32.00	229
393	1	Link	320	393	10.40	32.00	229
500	1	Link	210	500	9.80	32.00	481
501	1	Link	200	501	7.96	32.00	29
510	1	Link	514	510	3.75	32.00	276
511	1	Link	514	511	3.79	32.00	91
512	1	Link	515	512	8.94	32.00	91
513	1	Link	515	513	8.71	32.00	321
520	1	Link	522	520	3.57	32.00	132
521	1	Link	522	521	3.54	32.00	319
530	1	Link	392	530	18.53	32.00	319
531	1	Link	533	531	3.41	32.00	241
532	1	Link	533	532	3.41	32.00	97
533	1	Link	393	533	9.43	32.00	319
590	1	Link	500	590	22.50	32.00	577
591	1	Link	530	591	22.50	32.00	241
592	1	Link	531	592	22.50	32.00	241
593	1	Link	510	593	22.50	32.00	276
594	1	Link	501	594	17.57	32.00	16
595	1	Link	501	595	17.57	32.00	16
220	2	Link	530	220	8.32	32.00	58
290	2	Link	211	290	22.50	32.00	26
291	2	Link	200	291	22.50	32.00	11
300	2	Link	595	300	10.39	32.00	123
390	2	Link	320	390	24.00	30.00	0
391	2	Link	300	391	22.50	32.00	175
392	2	Link	310	392	15.07	32.00	90
393	2	Link	310	393	11.09	30.00	90
500	2	Link	200	500	9.80	32.00	96
501	2	Link	210	501	7.96	32.00	145
592	2	Link	521	592	22.50	32.00	319
593	2	Link	532	593	22.50	32.00	97
594	2	Link	520	594	17.57	32.00	16
595	2	Link	520	595	17.57	32.00	16
220	3	Link	513	220	8.32	32.00	321
593	3	Link	501	593	22.50	32.00	142
594	3	Link	511	594	17.57	32.00	91
595	3	Link	512	595	17.57	32.00	91

Give way data

Link	Same as major link	Percentage opposed (%)	Opposed By Conflict 1 Only (%)	Max Flow (Opposed) (PCU/hr)	Max Flow (Unopposed) (PCU/hr)	Max congested capacity (PCU/hr)	Use Step-wise Opposed Turn Model	Visibility restricted
310	✓	100	61	600	600			
320	✓	100	1	800	800			
510	✓	100	100	715	1989	0		

Give Way Data - Conflicts

Link	Conflict	Description	Controlling type	Controlling link	Percentage opposing (%)	Slope coefficient	Upstream signals visible
310	1		Link	300	100	0.22	
	2		Link	320	100	0.19	
320	1		Link	300	100	0.35	

Local OD Matrix - Local Matrix: 3

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	Limit paths by flow	Low path flow threshold
3	(untitled)	✓	✓	Path Equalisation			✓			✓	1.25				

Normal Input Flows (PCU/hr)

	To			
	A	B	C	
From	A	0	71	175
	B	180	0	0
	C	457	0	0

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
3	A	(untitled)	300	393, 392	#0000FF
	B	(untitled)	310	390	#FF0000
	C	(untitled)	320	391	#00FF00

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
3	1		B	C	310, 391	Normal	0
	2		C	B	320, 390	Normal	0
	3		B	A	310, 393	Normal	90
	4		C	A	320, 393	Normal	229
	5		B	A	310, 392	Normal	90
	6		C	A	320, 392	Normal	229
	7		A	B	300, 390	Normal	71
	8		A	C	300, 391	Normal	175

Local OD Matrix - Local Matrix: 5

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	Limit paths by flow	Low path flow threshold
5	(untitled)	✓	✓	Path Equalisation			✓			✓	1.25				

Normal Input Flows (PCU/hr)

	To					
		A	B	C	D	E
From	A	0	11	96	24	5
	B	26	0	481	118	27
	C	99	222	0	276	181
	D	31	69	319	0	32
	E	18	40	482	97	0

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
5	A	(untitled)	200	290	#FFFF00
	B	(untitled)	212	291	#00FFFF
	C	(untitled)	514, 515	592, 591, 590	#FF00FF
	D	(untitled)	522	593	#008000
	E	(untitled)	533, 530	595, 594	#FFA500

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
5	1		A	E	200, 501, 595	Normal	3
	2		A	E	200, 501, 594	Normal	3
	3		E	A	530, 220, 290	Normal	18
	4		A	B	200, 291	Normal	11
	5		E	B	530, 220, 291	Normal	40
	6		B	E	212, 210, 501, 595	Normal	14
	7		B	E	212, 210, 501, 594	Normal	14
	8		B	A	212, 211, 290	Normal	26
	9		E	C	533, 531, 592	Normal	241
	10		E	C	530, 591	Normal	241
	11		A	C	200, 500, 590	Normal	96
	12		B	C	212, 210, 500, 590	Normal	481
	13		C	E	514, 511, 594	Normal	91
	14		C	E	515, 512, 595	Normal	91
	16		C	B	515, 513, 220, 291	Normal	222
	17		C	A	515, 513, 220, 290	Normal	99
	18		D	C	522, 521, 592	Normal	319
	19		D	B	522, 520, 220, 291	Normal	69
	20		D	A	522, 520, 220, 290	Normal	31
	22		D	E	522, 520, 595	Normal	16
	23		D	E	522, 520, 594	Normal	16
	24		A	D	200, 501, 593	Normal	24
	25		B	D	212, 210, 501, 593	Normal	118
	26		C	D	514, 510, 593	Normal	276
	27		E	D	533, 532, 593	Normal	97

Signal Timings

Network Default: 90s cycle time; 90 steps

Controller Stream 2

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)	Minimum possible cycle time (s)
2			1	NetworkDefault	90	49

Controller Stream 2 - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
2	Unspecified						Absolute

Controller Stream 2 - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
2	✓	✓	Offsets And Green Splits	✓	

Phases

Controller Stream	Phase	Name	Street minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
2	A	Traffic Phase	7	300	0	0	Unknown
	B	Filter Arrow	4	300	0	0	Unknown
	C	Traffic Phase	7	7	0	0	Unknown
	D	Traffic Phase	7	300	0	0	Unknown
	E	Pedestrian Phase	5	300	0	0	Unknown
	F	Pedestrian Phase	5	300	0	0	Unknown
	G	Pedestrian Phase	5	300	0	0	Unknown

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)	Run every N cycles	Probability of running (%)
2	1	D, B	1	1	100
	2	C, B, G	1	1	100
	3	A, F	1	1	100
	4	E	1	1	100

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends	Minimum possible cycle time (s)	Exclude from analysis
2	1	(untitled)	Single	1, 2, 3, 4	31, 43, 58, 68	49	

Intergreen Matrix for Controller Stream 2

	To							
From		A	B	C	D	E	F	G
	A		6	5	6	5		8
	B	5					5	
	C	5			6	8	5	
	D	5		5		7		7
	E	8		8	8			
	F		7	7				
	G	5			5			

Banned Stage transitions for Controller Stream 2

	To				
	1	2	3	4	
From	1				
	2				
	3				
	4				

Link Results

Link Results: Vehicle summary

Time Segment	Link	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)
07:45-08:45	200	57	58	136	1959	10	54.45	3.82	10.38	29.21	2.14	31.35
	210	52	73	626	1642	65	8.28	6.37	77.56	20.45	3.52	23.97
	211	16	479	26	1881	7	50.66	1.66	17.69	5.20	0.39	5.58
	212	37	142	652	1754	90	1.63	0.30	0.90	4.20	0.00	4.20
	220	52	74	479	1817	45	12.15	5.63	70.40	22.97	3.68	26.66
	290	10	830	174	1800	90	1.11	0.05	0.16	0.76	0.00	0.76
	291	19	373	342	1800	90	1.23	0.12	0.35	1.67	0.00	1.67
	300	13	596	246	1903	90	1.09	0.07	0.45	1.06	0.00	1.06
	310	35	154	180	508	90	5.47	0.27	0.79	3.89	0.00	3.89
	320	64	41	457	714	90	7.09	2.41	6.92	12.79	0.88	13.67
	390	4	2180	71	1800	90	1.04	0.02	0.06	0.29	0.00	0.29
	391	10	825	175	1800	90	1.11	0.05	0.16	0.77	0.00	0.77
	392	16	467	319	2007	90	1.07	0.09	0.37	1.34	0.00	1.34
	393	15	506	319	2143	90	0.99	0.09	0.47	1.24	0.00	1.24
	500	32	183	577	1817	90	1.45	0.23	1.56	3.30	0.00	3.30
	501	65	38	174	2179	10	51.66	4.81	33.20	35.45	2.63	38.08
	510	63	44	276	1989	19	41.27	5.81	93.26	45.00	3.30	48.30
	511	19	376	91	2159	19	32.70	1.92	28.10	11.69	1.00	12.69
	512	19	368	91	2147	19	33.28	1.94	12.08	11.89	1.09	12.98
	513	68	33	321	2141	19	43.54	7.83	50.26	55.20	4.45	59.65
	514	21	325	367	2071	90	2.42	1.87	5.62	3.51	0.89	4.40
	515	19	384	412	2215	90	1.00	0.11	0.43	1.62	0.00	1.62
	520	28	222	132	1934	21	30.65	2.11	36.67	15.96	1.20	17.16
	521	71	28	319	1850	21	40.37	5.81	106.23	50.80	3.29	54.09
	522	34	162	451	1803	90	6.12	4.27	12.60	10.88	2.24	13.12
	530	75	19	299	1981	17	51.80	8.47	27.60	61.09	4.73	65.81
	531	56	60	241	2138	17	41.95	5.73	94.08	39.88	3.26	354.12
	532	25	261	97	1943	17	36.40	2.16	38.96	13.93	1.23	15.16
	533	17	419	338	1948	90	1.12	0.10	0.68	1.49	0.00	1.49
	590	32	181	577	1800	90	1.47	0.24	0.70	3.35	0.00	3.35
	591	13	572	241	1800	90	1.15	0.08	0.23	1.10	0.00	1.10
	592	31	189	560	1800	90	1.45	0.23	0.67	3.21	0.00	3.21
	593	29	214	515	1800	90	1.40	0.20	0.59	2.85	0.00	2.85
	594	7	1230	123	1812	90	1.07	0.04	0.14	0.52	0.00	0.52
	595	6	1353	123	1979	90	0.97	0.03	0.11	0.47	0.00	0.47

Link Results: Flows and signals

Time Segment	Link	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Calculated sat flow (PCU/hr)	Calculated capacity (PCU/hr)	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Mean modulus of error	Actual green (s (per cycle))	Effective green (s (per cycle))
07:45-08:45	200	136	136	0		1959	239	57		58	0.00	10	11
	210	626	626	0		1642	1204	52		73	0.00	65	66
	211	26	26	0		1881	167	16		479	0.00	7	8
	212	652	652	0		1754	1754	37		142	0.00	90	90
	220	479	479	0		1817	929	52		74	0.92	45	46
	280	10	10	0		10000	667	2		5900	0.00	5	6
	281	10	10	0		10000	667	2		5900	0.00	5	6
	290	174	174	0		1800	1800	10		830	0.77	90	90
	291	342	342	0		1800	1800	19		373	0.83	90	90
	300	246	246	0		1903	1903	13		596	0.92	90	90
	310	180	180	0		508	508	35		154	0.00	90	90
	320	457	457	0		714	714	64		41	0.00	90	90
	390	71	71	0		1800	1800	4		2180	0.80	90	90
	391	175	175	0		1800	1800	10		825	0.80	90	90
	392	319	319	0	✓	2007	2007	16		467	0.02	90	90
	393	319	319	0	✓	2143	2143	15		506	0.02	90	90
	500	577	577	0		1817	1817	32		183	0.41	90	90
	501	174	174	0		2179	266	65		38	0.43	10	11
	510	276	276	0		1989	442	63		44	0.25	19	20
	511	91	91	0	✓	2159	480	19		376	0.25	19	20
	512	91	91	0	✓	2147	472	19		368	0.00	19	20
	513	321	321	0		2141	476	68		33	0.00	19	20
	514	367	367	-1	✓	2071	1734	21		325	0.00	90	90
	515	412	412	-1		2215	2215	19		384	0.00	90	90
	520	132	132	0		1934	473	28		222	0.49	21	22
	521	319	319	0		1850	452	71		28	0.49	21	22
	522	451	451	0		1803	1315	34		162	0.00	90	90
	530	299	299	0		1981	396	75		19	0.01	17	18
	531	241	241	0		2138	428	56		60	0.02	17	18
	532	97	97	0		1943	389	25		261	0.02	17	18
	533	338	338	0		1948	1948	17		419	0.02	90	90
	580	10	10	0		10000	6778	0		60900	0.00	60	61
	581	10	10	0		10000	2000	1		17900	0.00	17	18
	582	10	10	0		10000	2889	0		25900	0.00	25	26
	583	10	10	0		10000	1889	1		16900	0.00	16	17
	584	10	10	0		10000	1556	1		13900	0.00	13	14
	590	577	577	0		1800	1800	32		181	0.26	90	90
	591	241	241	0		1800	1800	13		572	1.29	90	90
	592	560	560	0		1800	1800	31		189	0.87	90	90
	593	515	515	0		1800	1800	29		214	0.76	90	90
	594	123	123	0	✓	1812	1812	7		1230	0.94	90	90
	595	123	123	0	✓	1979	1979	6		1353	1.27	90	90
	596	10	10	0		Unrestricted	Unrestricted	0		Unrestricted	0.00	10	11

Link Results: Stops and delays

Time Segment	Link	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Unweighted cost of delay (£ per hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Uniform stops (Stops per hr)	Random stops (Stops per hr)	Unweighted cost of stops (£ per hr)	Weighted cost of stops (£ per hr)
07:45-08:45	200	22.50	54.45	1.41	0.65	29.21	29.21	110.13	125.01	24.77	2.14	2.14
	210	5.98	8.28	0.90	0.54	20.45	20.45	39.39	225.18	21.43	3.52	3.52
	211	5.98	50.66	0.27	0.09	5.20	5.20	104.77	23.69	3.55	0.39	0.39
	212	22.50	1.63	0.00	0.30	4.20	4.20	0.00	0.00	0.00	0.00	0.00
	220	8.32	12.15	1.09	0.53	22.97	22.97	53.83	216.43	41.65	3.68	3.68
	280	7.30	42.41	0.11	0.01	1.67	1.67	0.00	0.00	0.00	0.00	0.00
	281	3.15	42.41	0.11	0.01	1.67	1.67	0.00	0.00	0.00	0.00	0.00
	290	22.50	1.11	0.00	0.05	0.76	0.76	0.00	0.00	0.00	0.00	0.00
	291	22.50	1.23	0.00	0.12	1.67	1.67	0.00	0.00	0.00	0.00	0.00
	300	10.39	1.09	0.00	0.07	1.06	1.06	0.00	0.00	0.00	0.00	0.00
	310	22.50	5.47	0.00	0.27	3.89	3.89	0.00	0.00	0.00	0.00	0.00
	320	22.50	7.09	0.02	0.88	12.79	12.79	13.55	27.24	34.67	0.88	0.88
	390	22.50	1.04	0.00	0.02	0.29	0.29	0.00	0.00	0.00	0.00	0.00
	391	22.50	1.11	0.00	0.05	0.77	0.77	0.00	0.00	0.00	0.00	0.00
	392	15.07	1.07	0.00	0.09	1.34	1.34	0.00	0.00	0.00	0.00	0.00
	393	10.59	0.99	0.00	0.09	1.24	1.24	0.00	0.00	0.00	0.00	0.00
	500	9.80	1.45	0.00	0.23	3.30	3.30	0.00	0.00	0.00	0.00	0.00
	501	7.96	51.66	1.57	0.92	35.45	35.45	105.91	149.23	35.06	2.63	2.63
	510	3.75	41.27	2.34	0.83	45.00	45.00	83.77	199.44	32.08	3.30	3.30
	511	3.79	32.70	0.71	0.12	11.69	11.69	77.22	65.38	4.60	1.00	1.00
	512	8.94	33.28	0.72	0.12	11.89	11.89	84.12	71.52	4.69	1.09	1.09
	513	8.71	43.54	2.86	1.03	55.20	55.20	97.03	272.03	39.80	4.45	4.45
	514	19.20	2.42	0.11	0.13	3.51	3.51	16.95	56.86	5.35	0.89	0.89
	515	14.40	1.00	0.00	0.11	1.62	1.62	0.00	0.00	0.00	0.00	0.00
	520	3.57	30.65	0.93	0.19	15.96	15.96	63.93	76.76	7.63	1.20	1.20
	521	3.54	40.37	2.40	1.18	50.80	50.80	72.37	185.51	45.37	3.29	3.29
	522	22.50	6.12	0.51	0.26	10.88	10.88	34.84	146.73	10.38	2.24	2.24
	530	18.53	51.80	2.81	1.49	61.09	61.09	110.80	274.48	56.81	4.73	4.73
	531	3.41	41.95	2.17	0.64	39.88	39.88	94.81	203.51	24.98	3.26	3.26
	532	3.41	36.40	0.81	0.17	13.93	13.93	88.96	79.76	6.53	1.23	1.23
	533	9.43	1.12	0.00	0.10	1.49	1.49	0.00	0.00	0.00	0.00	0.00
	580	3.60	5.10	0.01	0.00	0.20	0.20	0.00	0.00	0.00	0.00	0.00
	581	7.48	30.10	0.08	0.00	1.19	1.19	0.00	0.00	0.00	0.00	0.00
	582	3.60	23.74	0.06	0.00	0.94	0.94	0.00	0.00	0.00	0.00	0.00
	583	9.06	30.97	0.08	0.00	1.22	1.22	0.00	0.00	0.00	0.00	0.00
	584	5.86	33.68	0.09	0.00	1.33	1.33	0.00	0.00	0.00	0.00	0.00
	590	22.50	1.47	0.00	0.24	3.35	3.35	0.00	0.00	0.00	0.00	0.00
	591	22.50	1.15	0.00	0.08	1.10	1.10	0.00	0.00	0.00	0.00	0.00
	592	22.50	1.45	0.00	0.23	3.21	3.21	0.00	0.00	0.00	0.00	0.00
	593	22.50	1.40	0.00	0.20	2.85	2.85	0.00	0.00	0.00	0.00	0.00
	594	17.57	1.07	0.00	0.04	0.52	0.52	0.00	0.00	0.00	0.00	0.00
	595	17.57	0.97	0.00	0.03	0.47	0.47	0.00	0.00	0.00	0.00	0.00
	596	5.40	35.11	0.10	0.00	1.38	1.38	0.00	0.00	0.00	0.00	0.00

Link Results: Queues and blocking

Time Segment	Link	Initial queue (PCU)	Mean max queue (PCU)	Max queue storage (PCU)	Utilised storage (%)	Average storage excess queue (PCU)	Average limit excess queue (PCU)	Excess queue penalty (£ per hr)	Mean end of green queue (PCU)	Mean end of red queue (PCU)	Wasted time starvation (s (per cycle))	Wasted time blocking back (s (per cycle))	Wasted time total (s (per cycle))	Estimated blocking
07:45-08:45	200	0.00	3.82	36.83	10.38	0.00	0.00	0.00	0.65	3.63	0.00	0.00	0.00	
	210	0.00	6.37	8.21	77.56	0.00	0.00	0.00	0.54	5.23	0.00	0.00	0.00	
	211	0.00	1.66	9.41	17.69	0.00	0.00	0.00	0.09	0.68	6.00	0.00	6.00	
	212	0.00	0.30	32.98	0.90	0.00	0.00	0.00			0.00	0.00	0.00	
	220	0.00	5.63	8.00	70.40	0.00	0.00	0.00	0.53	4.50	18.00	0.00	18.00	
	280	0.00	0.24	10.00	2.41	0.00	0.00	0.00	0.01	0.24	0.00	0.00	0.00	
	281	0.00	0.24	10.00	2.41	0.00	0.00	0.00	0.01	0.24	0.00	0.00	0.00	
	290	0.00	0.05	33.84	0.16	0.00	0.00	0.00			32.00	0.00	32.00	
	291	0.00	0.12	33.84	0.35	0.00	0.00	0.00			17.00	0.00	17.00	
	300	0.00	0.07	16.52	0.45	0.00	0.00	0.00			27.00	0.00	27.00	
	310	0.00	0.27	34.78	0.79	0.00	0.00	0.00			0.00	0.00	0.00	
	320	0.00	2.41	34.78	6.92	0.00	0.00	0.00			0.00	0.00	0.00	
	390	0.00	0.02	33.84	0.06	0.00	0.00	0.00			62.00	0.00	62.00	
	391	0.00	0.05	33.84	0.16	0.00	0.00	0.00			21.00	0.00	21.00	
	392	0.00	0.09	25.27	0.37	0.00	0.00	0.00			0.00	0.00	0.00	
	393	0.00	0.09	18.62	0.47	0.00	0.00	0.00			0.00	0.00	0.00	
	500	0.00	0.23	14.89	1.56	0.00	0.00	0.00			4.00	0.00	4.00	
	501	0.00	4.81	14.49	33.20	0.00	0.00	0.00	0.92	4.20	0.00	0.00	0.00	
	510	0.00	5.81	6.23	93.26	0.00	0.00	0.00	0.83	5.81	0.00	0.00	0.00	
	511	0.00	1.92	6.83	28.10	0.00	0.00	0.00	0.12	1.75	3.00	0.00	3.00	
	512	0.00	1.94	16.05	12.08	0.00	0.00	0.00	0.12	1.89	0.00	0.23	0.23	
	513	0.00	7.83	15.58	50.26	0.00	0.00	0.00	1.03	7.54	0.00	0.00	0.00	
	514	0.00	1.87	33.22	5.62	0.00	0.00	0.00			0.00	14.64	14.64	
	515	0.00	0.11	26.66	0.43	0.00	0.00	0.00			0.00	0.00	0.00	
	520	0.00	2.11	5.76	36.67	0.00	0.00	0.00	0.19	2.11	2.00	0.00	2.00	
	521	0.00	5.81	5.47	106.23	0.09	0.00	0.00	1.18	5.81	0.00	0.00	0.00	
	522	0.00	4.27	33.90	12.60	0.00	0.00	0.00			0.00	24.37	24.37	
	530	0.00	8.47	30.68	27.60	0.00	0.00	0.00	1.49	7.47	0.00	0.00	0.00	
	531	0.00	5.73	6.09	94.08	0.00	0.31	310.98	0.64	5.60	0.00	0.00	0.00	
	532	0.00	2.16	5.54	38.96	0.00	0.00	0.00	0.17	2.13	0.00	0.00	0.00	
	533	0.00	0.10	15.35	0.68	0.00	0.00	0.00			0.00	0.00	0.00	
	580	0.00	0.08	10.00	0.81	0.00	0.00	0.00	0.00	0.08	0.00	0.00	0.00	
	581	0.00	0.20	10.00	2.03	0.00	0.00	0.00	0.00	0.20	0.00	0.00	0.00	
	582	0.00	0.18	10.00	1.80	0.00	0.00	0.00	0.00	0.18	0.00	0.00	0.00	
	583	0.00	0.21	10.00	2.05	0.00	0.00	0.00	0.00	0.21	0.00	0.00	0.00	
	584	0.00	0.21	10.00	2.14	0.00	0.00	0.00	0.00	0.21	0.00	0.00	0.00	
	590	0.00	0.24	33.84	0.70	0.00	0.00	0.00			0.00	0.00	0.00	
	591	0.00	0.08	33.84	0.23	0.00	0.00	0.00			55.00	0.00	55.00	
	592	0.00	0.23	33.84	0.67	0.00	0.00	0.00			29.00	0.00	29.00	
	593	0.00	0.20	33.84	0.59	0.00	0.00	0.00			23.00	0.00	23.00	
	594	0.00	0.04	26.60	0.14	0.00	0.00	0.00			47.00	0.00	47.00	
	595	0.00	0.03	29.05	0.11	0.00	0.00	0.00			53.00	0.00	53.00	
	596	0.00	0.22	10.00	2.19	0.00	0.00	0.00	0.00	0.22	0.00	0.00	0.00	

Link Results: Journey times

Time Segment	Link	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	JourneyTime (s)
07:45-08:45	200	27.20	2.91	9.36	76.95
	210	33.30	2.48	13.42	14.26
	211	1.38	0.41	3.38	56.64
	212	130.40	4.37	29.84	24.13
	220	35.47	2.73	13.01	20.47
	280	0.08	0.14	0.59	49.71
	281	0.04	0.13	0.28	45.56
	290	34.82	1.14	30.50	23.61
	291	68.45	2.26	30.34	23.73
	300	22.73	0.78	28.97	11.47
	310	36.00	1.40	25.74	27.97
	320	91.40	3.76	24.33	29.59
	390	14.21	0.46	30.58	23.54
	391	35.03	1.15	30.50	23.61
	392	42.66	1.43	29.89	16.13
	393	29.44	1.02	28.73	11.58
	500	50.29	1.80	27.87	11.26
	501	12.31	2.88	4.27	59.62
	510	9.21	3.46	2.66	45.02
	511	3.05	0.92	3.32	36.49
	512	7.20	1.06	6.78	42.22
	513	24.87	4.66	5.33	52.25
	514	62.63	2.20	28.41	21.62
	515	52.75	1.76	29.93	15.40
	520	4.18	1.25	3.33	34.21
	521	10.04	3.89	2.58	43.91
	522	90.20	3.58	25.16	28.62
	530	49.26	5.84	8.43	70.33
	531	7.30	3.04	2.40	45.36
	532	2.94	1.07	2.74	39.82
	533	28.33	0.99	28.61	10.55
	580	0.04	0.02	1.66	8.70
	581	0.08	0.10	0.80	37.58
	582	0.04	0.08	0.53	27.34
	583	0.10	0.11	0.91	40.03
	584	0.07	0.11	0.59	39.53
	590	115.40	3.84	30.04	23.97
	591	48.20	1.58	30.44	23.65
	592	112.00	3.73	30.06	23.95
	593	103.08	3.42	30.12	23.90
	594	19.15	0.63	30.17	18.63
	595	19.15	0.63	30.33	18.54
	596	0.06	0.11	0.53	40.51

Link Results: Advanced

Time Segment	Link	Degree of saturation penalty (£ per hr)	Ped gap accepting penalty (£ per hr)	Warmed up	Mean Max Queue EoTS (PCU)	Mean End of Green Queue EoTS (PCU)	Mean End of Red Queue EoTS (PCU)	PCU Factor	Cost of traffic penalties (£ per hr)	Unweighted performance index (£ per hr)	Performance Index (£ per hr)
07:45-08:45	200	0.00	0.00	✓	3.83	0.65	3.64	1.00	0.00	31.35	31.35
	210	0.00	0.00	✓	6.37	0.54	5.23	1.00	0.00	23.97	23.97
	211	0.00	0.00	✓	1.66	0.09	0.68	1.00	0.00	5.58	5.58
	212	0.00	0.00	✓	0.30			1.00	0.00	4.20	4.20
	220	0.00	0.00	✓	5.63	0.53	4.50	1.00	0.00	26.66	26.66
	280	0.00	0.00	✓	0.24	0.01	0.24	1.00	0.00	0.00	0.00
	281	0.00	0.00	✓	0.24	0.01	0.24	1.00	0.00	0.00	0.00
	290	0.00	0.00	✓	0.05			1.00	0.00	0.76	0.76
	291	0.00	0.00	✓	0.12			1.00	0.00	1.67	1.67
	300	0.00	0.00	✓	0.07			1.00	0.00	1.06	1.06
	310	0.00	0.00	✓	0.27			1.00	0.00	3.89	3.89
	320	0.00	0.00	✓	2.41			1.00	0.00	13.67	13.67
	390	0.00	0.00	✓	0.02			1.00	0.00	0.29	0.29
	391	0.00	0.00	✓	0.05			1.00	0.00	0.77	0.77
	392	0.00	0.00	✓	0.09			1.00	0.00	1.34	1.34
	393	0.00	0.00	✓	0.09			1.00	0.00	1.24	1.24
	500	0.00	0.00	✓	0.23			1.00	0.00	3.30	3.30
	501	0.00	0.00	✓	4.82	0.93	4.21	1.00	0.00	38.08	38.08
	510	0.00	0.00	✓	5.82	0.83	5.82	1.00	0.00	48.30	48.30
	511	0.00	0.00	✓	1.92	0.12	1.75	1.00	0.00	12.69	12.69
	512	0.00	0.00	✓	1.94	0.12	1.89	1.00	0.00	12.98	12.98
	513	0.00	0.00	✓	7.83	1.03	7.55	1.00	0.00	59.65	59.65
	514	0.00	0.00	✓	1.87			1.00	0.00	4.40	4.40
	515	0.00	0.00	✓	0.11			1.00	0.00	1.62	1.62
	520	0.00	0.00	✓	2.11	0.19	2.11	1.00	0.00	17.16	17.16
	521	0.00	0.00	✓	5.82	1.19	5.82	1.00	0.00	54.09	54.09
	522	0.00	0.00	✓	4.27			1.00	0.00	13.12	13.12
	530	0.00	0.00	✓	8.49	1.51	7.49	1.00	0.00	65.81	65.81
	531	0.00	0.00	✓	5.73	0.64	5.60	1.00	310.98	43.14	354.12
	532	0.00	0.00	✓	2.16	0.17	2.13	1.00	0.00	15.16	15.16
	533	0.00	0.00	✓	0.10			1.00	0.00	1.49	1.49
	580	0.00	0.00	✓	0.08	0.00	0.08	1.00	0.00	0.00	0.00
	581	0.00	0.00	✓	0.20	0.00	0.20	1.00	0.00	0.00	0.00
	582	0.00	0.00	✓	0.18	0.00	0.18	1.00	0.00	0.00	0.00
	583	0.00	0.00	✓	0.21	0.00	0.21	1.00	0.00	0.00	0.00
	584	0.00	0.00	✓	0.21	0.00	0.21	1.00	0.00	0.00	0.00
	590	0.00	0.00	✓	0.24			1.00	0.00	3.35	3.35
	591	0.00	0.00	✓	0.08			1.00	0.00	1.10	1.10
	592	0.00	0.00	✓	0.23			1.00	0.00	3.21	3.21
	593	0.00	0.00	✓	0.20			1.00	0.00	2.85	2.85
	594	0.00	0.00	✓	0.04			1.00	0.00	0.52	0.52
	595	0.00	0.00	✓	0.03			1.00	0.00	0.47	0.47
	596	0.00	0.00	✓	0.22	0.00	0.22	1.00	0.00	0.00	0.00

Collections

Point to Point Journey Time

Average Journey Time (s) for Local Matrix: 3

From	To			
		A	B	C
	A	0.0	35.0	35.1
	B	41.8	0.0	0.0
	C	43.5	0.0	0.0

Path Journey Time

Path	From Location	To Location	Normal Calculated Flow (PCU/hr)	Normal journey time (s)	Normal journey dist (m)	Bus journeydist (m)	Tram journey dist (m)	Pedestrian journey dist (m)	Calculated Total Flow (PCU/hr)	Avg journey time (s)	Avg journey dist (m)
1	B	C	0	51.58	400.00	400.00	400.00	400.00	0	0.00	1600.00
2	C	B	0	53.14	400.00	400.00	400.00	400.00	0	0.00	1600.00
3	B	A	90	39.55	292.42	292.42	292.42	292.42	90	39.55	292.42
4	C	A	229	41.17	292.42	292.42	292.42	292.42	229	41.17	292.42
5	B	A	90	44.11	333.93	333.93	333.93	333.93	90	44.11	333.93
6	C	A	229	45.73	333.93	333.93	333.93	333.93	229	45.73	333.93
7	A	B	71	35.01	292.33	292.33	292.33	292.33	71	35.01	292.33
8	A	C	175	35.08	292.33	292.33	292.33	292.33	175	35.08	292.33

Average Journey Time (s) for Local Matrix: 5

From	To					
		A	B	C	D	E
	A	0.0	100.7	112.2	160.5	155.2
	B	104.4	0.0	73.6	121.9	116.6
	C	111.7	111.9	0.0	90.5	76.5
	D	106.9	107.0	96.5	0.0	81.4
	E	114.4	114.5	86.9	74.3	0.0

Path Journey Time

Path	From Location	To Location	Normal Calculated Flow (PCU/hr)	Normal journey time (s)	Normal journey dist (m)	Bus journeydist (m)	Tram journey dist (m)	Pedestrian journey dist (m)	Calculated Total Flow (PCU/hr)	Avg journey time (s)	Avg journey dist (m)
1	A	E	3	155.10	426.90	426.90	426.90	426.90	3	155.10	426.90
2	A	E	3	155.20	426.90	426.90	426.90	426.90	3	155.20	426.90
3	E	A	18	114.41	438.73	438.73	438.73	438.73	18	114.41	438.73
4	A	B	11	100.69	400.00	400.00	400.00	400.00	11	100.69	400.00
5	E	B	40	114.54	438.73	438.73	438.73	438.73	40	114.54	438.73
6	B	E	14	116.55	480.09	480.09	480.09	480.09	14	116.55	480.09
7	B	E	14	116.64	480.09	480.09	480.09	480.09	14	116.64	480.09
8	B	A	26	104.38	453.19	453.19	453.19	453.19	26	104.38	453.19
9	E	C	241	79.86	314.13	314.13	314.13	314.13	241	79.86	314.13
10	E	C	241	93.98	364.74	364.74	364.74	364.74	241	93.98	364.74
11	A	C	96	112.18	487.15	487.15	487.15	487.15	96	112.18	487.15
12	B	C	481	73.62	540.34	540.34	540.34	540.34	481	73.62	540.34
13	C	E	91	76.74	360.47	360.47	360.47	360.47	91	76.74	360.47
14	C	E	91	76.16	363.70	363.70	363.70	363.70	91	76.16	363.70
16	C	B	222	111.86	479.42	479.42	479.42	479.42	222	111.86	479.42
17	C	A	99	111.73	479.42	479.42	479.42	479.42	99	111.73	479.42
18	D	C	319	96.48	431.47	431.47	431.47	431.47	319	96.48	431.47
19	D	B	69	107.04	505.68	505.68	505.68	505.68	69	107.04	505.68
20	D	A	31	106.91	505.68	505.68	505.68	505.68	31	106.91	505.68
22	D	E	16	81.37	387.84	387.84	387.84	387.84	16	81.37	387.84
23	D	E	16	81.46	387.84	387.84	387.84	387.84	16	81.46	387.84
24	A	D	24	160.47	470.75	470.75	470.75	470.75	24	160.47	470.75
25	B	D	118	121.91	523.94	523.94	523.94	523.94	118	121.91	523.94
26	C	D	276	90.55	403.98	403.98	403.98	403.98	276	90.55	403.98
27	E	D	97	74.27	314.18	314.18	314.18	314.18	97	74.27	314.18

Final Prediction Table

Link Results

			SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES		
Link	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)	Mean end of red queue (PCU)	we
200		2	2	A	136	1959	10	0.00	57	58	76.95	54.45	110.13	3.82	3.63	
210		2	2	B	626	1642	65	0.00	52	73	14.26	8.28	39.39	6.37	5.23	
211		2	2	C	26	1881	7	6.00	16	479	56.64	50.66	104.77	1.66	0.68	
212		2			652	1754	90	0.00	37	142	24.13	1.63	0.00	0.30		
220		2	2	D	479	1817	45	18.00	52	74	20.47	12.15	53.83	5.63	4.50	
280 P		2	2	E	10	10000	5	0.00	1.5	5900	49.71	42.41	0.00	0.24	0.24	
281 P		2	2	G	10	10000	5	0.00	1.5	5900	45.56	42.41	0.00	0.24	0.24	
290		2			174	1800	90	32.00	10	830	23.61	1.11	0.00	0.05		
291		2			342	1800	90	17.00	19	373	23.73	1.23	0.00	0.12		
300	(untitled)	3			246	1903	90	27.00	13	596	11.47	1.09	0.00	0.07		
310	(untitled)	3			180	508	90	0.00	35	154	27.97	5.47	0.00	0.27		
320		3			457	714	90	0.00	64	41	29.59	7.09	13.55	2.41		
390	(untitled)	3			71	1800	90	62.00	4	2180	23.54	1.04	0.00	0.02		
391	(untitled)	3			175	1800	90	21.00	10	825	23.61	1.11	0.00	0.05		
392	(untitled)	3			319	2007	90	0.00	16	467	16.13	1.07	0.00	0.09		
393	(untitled)	3			319	2143	90	0.00	15	506	11.58	0.99	0.00	0.09		
500		5			577	1817	90	4.00	32	183	11.26	1.45	0.00	0.23		
501		5	5	A	174	2179	10	0.00	65	38	59.62	51.66	105.91	4.81	4.20	
510		5	5	B	276	1989	19	0.00	63	44	45.02	41.27	83.77	5.81	5.81	
511		5	5	B	91	2159	19	3.00	19	376	36.49	32.70	77.22	1.92	1.75	
512		5	5	B	91	2147	19	0.23	19	368	42.22	33.28	84.12	1.94	1.89	
513		5	5	C	321	2141	19	0.00	68	33	52.25	43.54	97.03	7.83	7.54	
514		5			367	2071	90	14.64	21	325	21.62	2.42	16.95	1.87		
515		5			412	2215	90	0.00	19	384	15.40	1.00	0.00	0.11		
520		5	5	D	132	1934	21	2.00	28	222	34.21	30.65	63.93	2.11	2.11	
521		5	5	D	319 <	1850	21	0.00	71	28	43.91	40.37	72.37	5.81 +	5.81	
522		5			451	1803	90	24.37	34	162	28.62	6.12	34.84	4.27		
530		5	5	E	299	1981	17	0.00	75	19	70.33	51.80	110.80	8.47	7.47	
531		5	5	E	241	2138	17	0.00	56	60	45.36	41.95	94.81	5.73	5.60	
532		5	5	F	97	1943	17	0.00	25	261	39.82	36.40	88.96	2.16	2.13	
533		5			338	1948	90	0.00	17	419	10.55	1.12	0.00	0.10		
580 P		5	5	G	10	10000	60	0.00	0.148	60900	8.70	5.10	0.00	0.08	0.08	
581 P		5	5	K	10	10000	17	0.00	0.5	17900	37.58	30.10	0.00	0.20	0.20	
582 P		5	5	H	10	10000	25	0.00	0.346	25900	27.34	23.74	0.00	0.18	0.18	
583 P		5	5	I	10	10000	16	0.00	0.529	16900	40.03	30.97	0.00	0.21	0.21	
584 P		5	5	J	10	10000	13	0.00	0.643	13900	39.53	33.68	0.00	0.21	0.21	
590		5			577	1800	90	0.00	32	181	23.97	1.47	0.00	0.24		
591		5			241	1800	90	55.00	13	572	23.65	1.15	0.00	0.08		
592		5			560	1800	90	29.00	31	189	23.95	1.45	0.00	0.23		
593		5			515	1800	90	23.00	29	214	23.90	1.40	0.00	0.20		
594		5			123	1812	90	47.00	7	1230	18.63	1.07	0.00	0.04		
595		5			123	1979	90	53.00	6	1353	18.54	0.97	0.00	0.03		
596 P			2	F	10	999999999	10	0.00	0	Unrestricted	40.51	35.11	0.00	0.22	0.22	

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	1434.05	78.56	18.25	21.63	12.11	478.98	39.92	310.98	829.88
Bus									
Tram									
Pedestrians									
TOTAL	1434.55	79.37	18.08	22.28	12.13	488.59	39.92	310.98	829.88

- | *P = link is a pedestrian link*
- | *< = 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 - 2026 Base + HG(140) + Coed Darcy PM

D6 - 2026 Base + HG(140) + Coed Darcy, PM

Summary

Data Errors and Warnings

Severity	Area	Item	Description
Info	Link Data	Link 596 (Pedestrian)	Link 596 is not connected to any other Links or Traffic Streams

Run Summary

Analysis set used	Run start time	Run finish time	Run duration (s)	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
6	09/11/2021 23:46:35	09/11/2021 23:46:35	0.25	16:30	100	1861.46	37.83	80.79	513	0	0	513	522

Analysis Set Details

Name	Use Simulation	Description	Use specific Demand Set(s)	Specific Demand Set(s)	Optimise specific Demand Set(s)	Include in report	Locked
2026 Base + HG(140) + Coed Darcy PM			✓	D6		✓	

Demand Set Details

Scenario name	Time Period name	Description	Composite	Demand sets	Start time (HH:mm)	Locked	Run automatically
2026 Base + HG(140) + Coed Darcy	PM	2026 Base + Heritage Gate (140 dwellings) + Coed Darcy (2,000 dwellings) + Commercial (3600m2)			16:30		✓

Network Options

Network timings

Network cycle time (s)	Minimum possible cycle time (s)	Absolute minimum possible cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
100	53	53		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)	Missing stage transition options
10000.00	10000.00	10000.00	2	Assume banned

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from traffic model	Exclude pedestrians from results calculation	Random delay mode	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		✓	Simplified (TRANSYT 12)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms ² [-2])	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms ² [-2])	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Offsets And Green Splits	✓

Advanced

Optimisation type	OUTProfile accuracy (%)	SASart temperature	SACooling factor	Random seed	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Simulated Annealing	10, 10, 1, 1, 0.1, 0.1, 0.01, 0.01	300.00	100.00	1		✓	2, 5			Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Traffic Nodes

Traffic Nodes

Traffic node	Name	Description
2		
3	(untitled)	
5		

Links

Links

Link	Name	Description	Traffic node	Length (m)	Has Saturation Flow	Use RR67	Saturation flow (PCU/hr)	Cell saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Is minor shared	Allow Nearside Turn On Red
200			2	200.00	✓		1959		✓		Normal		
210			2	53.19	✓		1642	1642	✓		Normal		
211			2	53.19	✓		1881	1881	✓		Normal		
212			2	200.00	✓		1754				Normal		
220			2	73.99	✓		1817		✓		Normal		
280			2	8.11	✓		10000		✓		Pedestrian		
281			2	3.50	✓		10000		✓		Pedestrian		
290			2	200.00	✓		1800				Normal		
291			2	200.00	✓		1800				Normal		
300	(untitled)		3	92.33	✓		1903				Normal		
310	(untitled)		3	200.00						✓	Normal		
320			3	200.00						✓	Normal		
390	(untitled)		3	200.00	✓		1800				Normal		
391	(untitled)		3	200.00	✓		1800				Normal		
392	(untitled)		3	133.93	✓		2007				Normal		
393	(untitled)		3	92.42	✓		2143				Normal		
500			5	87.15	✓		1817				Normal		
501			5	70.75	✓		2179		✓		Normal		
510			5	33.33	✓		1989	1989	✓	✓	Normal		
511			5	33.67	✓		2159	2159	✓		Normal		
512			5	79.51	✓		2147	2147	✓		Normal		
513			5	77.39	✓		2141	2141	✓		Normal		
514			5	170.65	✓		2071				Normal		
515			5	128.04	✓		2215				Normal		
520			5	31.69	✓		1934	1934	✓		Normal		
521			5	31.47	✓		1850	1850	✓		Normal		
522			5	200.00	✓		1803				Normal		
530			5	164.74	✓		1981		✓		Normal		
531			5	30.30	✓		2138	2138	✓		Normal		
532			5	30.35	✓		1943	1943	✓		Normal		
533			5	83.83	✓		1948	1948			Normal		
580			5	4.00	✓		10000		✓		Pedestrian		
581			5	8.31	✓		10000		✓		Pedestrian		
582			5	4.00	✓		10000		✓		Pedestrian		
583			5	10.07	✓		10000		✓		Pedestrian		
584			5	6.51	✓		10000		✓		Pedestrian		
590			5	200.00	✓		1800				Normal		
591			5	200.00	✓		1800				Normal		
592			5	200.00	✓		1800				Normal		
593			5	200.00	✓		1800				Normal		
594			5	156.15	✓		1812				Normal		
595			5	156.15	✓		1979	1979			Normal		
596				6.00					✓		Pedestrian		

Modelling

Link	Traffic model	Stop weighting (%)	Delay weighting (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Queue limit (PCU)	Excess queue penalty (£)	Has degree of saturation limit
200	NetworkDefault	100	100	100		0.00				
210	CTM	100	100	100		0.00				
211	CTM	100	100	100		0.00				
212	NetworkDefault	100	100	100		0.00				
220	NetworkDefault	100	100	100		8.00	✓	6.00	1000.00	
280	NetworkDefault	100	100	100		0.00				
281	NetworkDefault	100	100	100		0.00				
290	NetworkDefault	100	100	100		0.00				
291	NetworkDefault	100	100	100		0.00				
300	NetworkDefault	100	100	100		0.00				
310	NetworkDefault	100	100	100		0.00				
320	NetworkDefault	100	100	100		0.00				
390	NetworkDefault	100	100	100		0.00				
391	NetworkDefault	100	100	100		0.00				
392	NetworkDefault	100	100	100		0.00				
393	NetworkDefault	100	100	100		0.00				
500	NetworkDefault	100	100	100		0.00				
501	NetworkDefault	100	100	100		0.00	✓	6.00	1000.00	
510	CTM	100	100	100		0.00				
511	CTM	100	100	100		0.00				
512	CTM	100	100	100		0.00				
513	CTM	100	100	100		0.00				
514	NetworkDefault	100	100	100		0.00				
515	NetworkDefault	100	100	100		0.00				
520	CTM	100	100	100		0.00				
521	CTM	100	100	100		0.00				
522	NetworkDefault	100	100	100		0.00				
530	NetworkDefault	100	100	100		0.00				
531	CTM	100	100	100		0.00	✓	4.00	1000.00	
532	CTM	100	100	100		0.00				
533	CTM	100	100	100		0.00				
580	NetworkDefault	100	100	100		0.00				
581	NetworkDefault	100	100	100		0.00				
582	NetworkDefault	100	100	100		0.00				
583	NetworkDefault	100	100	100		0.00				
584	NetworkDefault	100	100	100		0.00				
590	NetworkDefault	100	100	100		0.00				
591	NetworkDefault	100	100	100		0.00				
592	NetworkDefault	100	100	100		0.00				
593	NetworkDefault	100	100	100		0.00				
594	NetworkDefault	100	100	100		0.00				
595	CTM	100	100	100		0.00				
596	NetworkDefault	100	100	100		0.00				

Modelling - Normal traffic - Advanced

Link	Dispersion type for Normal Traffic	Initial queue (PCU)	Auto cycle time	Cycle time
(ALL)	NetworkDefault	0.00	✓	100

Flows

Link	Total flow (PCU/hr)	PCU Factor
200	149	1.00
210	434	1.00
211	12	1.00
212	446	1.00
220	668	1.00
280	10	1.00
281	10	1.00
290	130	1.00
291	574	1.00
300	533	1.00
310	105	1.00
320	191	1.00
390	98	1.00
391	435	1.00
392	148	1.00
393	148	1.00
500	380	1.00
501	179	1.00
510	225	1.00
511	202	1.00
512	202	1.00
513	467	1.00
514	427	1.00
515	669	1.00
520	247	1.00
521	371	1.00
522	618	1.00
530	145	1.00
531	113	1.00
532	40	1.00
533	153	1.00
580	10	1.00
581	10	1.00
582	10	1.00
583	10	1.00
584	10	1.00
590	380	1.00
591	113	1.00
592	484	1.00
593	394	1.00
594	266	1.00
595	266	1.00
596	10	1.00

Flows - Advanced

Link	Detectors
(ALL)	

Signals

Link	Controller stream	Phase	Second phase enabled
200	2	A	
210	2	B	
211	2	C	
220	2	D	
280	2	E	
281	2	G	
501	5	A	
510	5	B	
511	5	B	
512	5	B	
513	5	C	
520	5	D	
521	5	D	
530	5	E	
531	5	E	
532	5	F	
580	5	G	
581	5	K	
582	5	H	
583	5	I	
584	5	J	
596	2	F	

Entry Sources

Link	Cruise time (seconds)	Cruise speed (kph)
200	22.50	32.00
212	22.50	32.00
280	7.30	4.00
281	3.15	4.00
310	22.50	32.00
320	22.50	32.00
514	19.20	32.00
515	14.40	32.00
522	22.50	32.00
580	3.60	4.00
581	7.48	4.00
582	3.60	4.00
583	9.06	4.00
584	5.86	4.00
596	5.40	4.00

Sources

Link	Source	Source type	Source link	Destination link	Cruise time (seconds)	Cruise speed (kph)	Total flow (PCU/hr)
210	1	Link	212	210	5.98	32.00	434
211	1	Link	212	211	5.98	32.00	12
220	1	Link	520	220	8.32	32.00	169
290	1	Link	220	290	22.50	32.00	118
291	1	Link	220	291	22.50	32.00	550
300	1	Link	594	300	10.39	32.00	266
390	1	Link	300	390	22.50	32.00	98
391	1	Link	310	391	22.50	32.00	0
392	1	Link	320	392	15.07	32.00	96
393	1	Link	320	393	10.40	32.00	96
500	1	Link	210	500	9.80	32.00	295
501	1	Link	200	501	7.96	32.00	40
510	1	Link	514	510	3.75	32.00	225
511	1	Link	514	511	3.79	32.00	202
512	1	Link	515	512	8.94	32.00	202
513	1	Link	515	513	8.71	32.00	467
520	1	Link	522	520	3.57	32.00	247
521	1	Link	522	521	3.54	32.00	371
530	1	Link	392	530	18.53	32.00	148
531	1	Link	533	531	3.41	32.00	113
532	1	Link	533	532	3.41	32.00	40
533	1	Link	393	533	9.43	32.00	148
590	1	Link	500	590	22.50	32.00	380
591	1	Link	530	591	22.50	32.00	113
592	1	Link	531	592	22.50	32.00	113
593	1	Link	510	593	22.50	32.00	225
594	1	Link	501	594	17.57	32.00	25
595	1	Link	501	595	17.57	32.00	25
220	2	Link	530	220	8.32	32.00	32
290	2	Link	211	290	22.50	32.00	12
291	2	Link	200	291	22.50	32.00	24
300	2	Link	595	300	10.39	32.00	266
390	2	Link	320	390	24.00	30.00	0
391	2	Link	300	391	22.50	32.00	435
392	2	Link	310	392	15.07	32.00	53
393	2	Link	310	393	11.09	30.00	53
500	2	Link	200	500	9.80	32.00	85
501	2	Link	210	501	7.96	32.00	139
592	2	Link	521	592	22.50	32.00	371
593	2	Link	532	593	22.50	32.00	40
594	2	Link	520	594	17.57	32.00	39
595	2	Link	520	595	17.57	32.00	39
220	3	Link	513	220	8.32	32.00	467
593	3	Link	501	593	22.50	32.00	129
594	3	Link	511	594	17.57	32.00	202
595	3	Link	512	595	17.57	32.00	202

Give way data

Link	Same as major link	Percentage opposed (%)	Opposed By Conflict 1 Only (%)	Max Flow (Opposed) (PCU/hr)	Max Flow (Unopposed) (PCU/hr)	Max congested capacity (PCU/hr)	Use Step-wise Opposed Turn Model	Visibility restricted
310	✓	100	61	600	600			
320	✓	100	1	800	800			
510	✓	100	100	715	1989	0		

Give Way Data - Conflicts

Link	Conflict	Description	Controlling type	Controlling link	Percentage opposing (%)	Slope coefficient	Upstream signals visible
310	1		Link	300	100	0.22	
	2		Link	320	100	0.19	
320	1		Link	300	100	0.35	

Local OD Matrix - Local Matrix: 3

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	Limit paths by flow	Low path flow threshold
3	(untitled)	✓	✓	Path Equalisation			✓			✓	1.25				

Normal Input Flows (PCU/hr)

	To			
	A	B	C	
From	A	0	98	435
	B	105	0	0
	C	191	0	0

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
3	A	(untitled)	300	393, 392	#0000FF
	B	(untitled)	310	390	#FF0000
	C	(untitled)	320	391	#00FF00

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
3	1		B	C	310, 391	Normal	0
	2		C	B	320, 390	Normal	0
	3		B	A	310, 393	Normal	53
	4		C	A	320, 393	Normal	96
	5		B	A	310, 392	Normal	53
	6		C	A	320, 392	Normal	96
	7		A	B	300, 390	Normal	98
	8		A	C	300, 391	Normal	435

Local OD Matrix - Local Matrix: 5

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	Limit paths by flow	Low path flow threshold
5	(untitled)	✓	✓	Path Equalisation			✓			✓	1.25				

Normal Input Flows (PCU/hr)

	To					
		A	B	C	D	E
From	A	0	24	85	29	11
	B	12	0	295	100	39
	C	82	385	0	225	404
	D	30	139	371	0	78
	E	6	26	225	40	0

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
5	A	(untitled)	200	290	#FFFF00
	B	(untitled)	212	291	#00FFFF
	C	(untitled)	514, 515	592, 591, 590	#FF00FF
	D	(untitled)	522	593	#008000
	E	(untitled)	533, 530	595, 594	#FFA500

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
5	1		A	E	200, 501, 595	Normal	6
	2		A	E	200, 501, 594	Normal	6
	3		E	A	530, 220, 290	Normal	6
	4		A	B	200, 291	Normal	24
	5		E	B	530, 220, 291	Normal	26
	6		B	E	212, 210, 501, 595	Normal	20
	7		B	E	212, 210, 501, 594	Normal	20
	8		B	A	212, 211, 290	Normal	12
	9		E	C	533, 531, 592	Normal	113
	10		E	C	530, 591	Normal	113
	11		A	C	200, 500, 590	Normal	85
	12		B	C	212, 210, 500, 590	Normal	295
	13		C	E	514, 511, 594	Normal	202
	14		C	E	515, 512, 595	Normal	202
	16		C	B	515, 513, 220, 291	Normal	385
	17		C	A	515, 513, 220, 290	Normal	82
	18		D	C	522, 521, 592	Normal	371
	19		D	B	522, 520, 220, 291	Normal	139
	20		D	A	522, 520, 220, 290	Normal	30
	22		D	E	522, 520, 595	Normal	39
	23		D	E	522, 520, 594	Normal	39
	24		A	D	200, 501, 593	Normal	29
	25		B	D	212, 210, 501, 593	Normal	100
	26		C	D	514, 510, 593	Normal	225
	27		E	D	533, 532, 593	Normal	40

Signal Timings

Network Default: 100s cycle time; 100 steps

Controller Stream 2

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)	Minimum possible cycle time (s)
2			1	NetworkDefault	100	49

Controller Stream 2 - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
2	Unspecified						Absolute

Controller Stream 2 - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
2	✓	✓	Offsets And Green Splits	✓	

Phases

Controller Stream	Phase	Name	Street minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
2	A	Traffic Phase	7	300	0	0	Unknown
	B	Filter Arrow	4	300	0	0	Unknown
	C	Traffic Phase	7	7	0	0	Unknown
	D	Traffic Phase	7	300	0	0	Unknown
	E	Pedestrian Phase	5	300	0	0	Unknown
	F	Pedestrian Phase	5	300	0	0	Unknown
	G	Pedestrian Phase	5	300	0	0	Unknown

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)	Run every N cycles	Probability of running (%)
2	1	D, B	1	1	100
	2	C, B, G	1	1	100
	3	A, F	1	1	100
	4	E	1	1	100

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends	Minimum possible cycle time (s)	Exclude from analysis
2	1	(untitled)	Single	1, 2, 3, 4	64, 76, 90, 0	49	

Intergreen Matrix for Controller Stream 2

	To							
From		A	B	C	D	E	F	G
	A		6	5	6	5		8
	B	5					5	
	C	5			6	8	5	
	D	5		5		7		7
	E	8		8	8			
	F		7	7				
	G	5			5			

Banned Stage transitions for Controller Stream 2

From	To				
	1	2	3	4	
	1				
	2				
	3				
	4				

Link Results

Link Results: Vehicle summary

Time Segment	Link	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)
16:30-17:30	200	76	18	149	1959	9	79.93	5.51	14.95	46.98	2.73	49.71
	210	34	162	434	1642	76	5.76	3.53	42.94	9.87	1.80	11.67
	211	8	1029	12	1881	7	55.77	0.35	3.72	2.64	0.18	2.82
	212	25	254	446	1754	100	1.38	0.17	0.52	2.42	0.00	2.42
	220	64	40	668	1817	56	11.73	16.57	207.16	30.91	4.91	1317.99
	290	7	1146	130	1800	100	1.08	0.04	0.12	0.55	0.00	0.55
	291	32	182	574	1800	100	1.47	0.23	0.69	3.32	0.00	3.32
	300	28	221	533	1903	100	2.30	8.45	51.17	4.84	2.57	7.41
	310	22	301	105	468	100	4.96	0.14	0.42	2.05	0.00	2.05
	320	31	189	191	613	100	4.70	1.18	3.39	3.54	0.45	3.99
	390	5	1553	98	1800	100	1.06	0.03	0.09	0.41	0.00	0.41
	391	24	272	435	1800	100	1.32	0.16	0.47	2.26	0.00	2.26
	392	7	1120	148	2007	100	0.97	0.04	0.16	0.57	0.00	0.57
	393	7	1203	148	2143	100	0.90	0.04	0.20	0.53	0.00	0.53
	500	21	330	380	1817	100	1.25	0.13	0.89	1.88	0.00	1.88
	501	75	21	179	2179	10	72.13	6.32	43.60	50.93	3.13	63.76
	510	42	115	225	1989	26	35.81	5.17	82.99	31.78	2.65	34.43
	511	35	160	202	2159	26	34.12	4.59	67.10	27.19	2.35	29.54
	512	36	152	202	2147	26	34.62	4.60	28.65	27.58	2.36	29.94
	513	81	11	467	2141	26	49.72	13.32	85.49	91.58	6.77	98.36
	514	21	333	427	2071	100	1.11	0.25	0.75	1.86	0.07	1.94
	515	30	198	669	2215	100	1.16	0.22	0.81	3.07	0.00	3.07
	520	39	133	247	1934	32	25.91	3.40	59.06	25.24	1.75	26.99
	521	61	48	371	1850	32	29.62	5.41	98.80	43.35	2.77	46.12
	522	49	82	618	1803	100	9.43	8.21	24.23	22.98	3.99	26.96
	530	73	23	145	1981	9	75.45	5.18	16.88	43.00	2.57	45.58
	531	53	71	113	2138	9	60.04	3.42	56.23	26.64	1.75	28.39
	532	21	337	40	1943	9	52.73	1.75	31.62	8.32	0.58	8.90
	533	8	1050	153	1948	100	1.00	0.04	0.28	0.60	0.00	0.60
	590	21	326	380	1800	100	1.27	0.13	0.40	1.90	0.00	1.90
	591	6	1340	113	1800	100	1.07	0.03	0.10	0.47	0.00	0.47
	592	27	235	484	1800	100	1.37	0.18	0.54	2.61	0.00	2.61
	593	22	311	394	1800	100	1.28	0.14	0.41	1.99	0.00	1.99
	594	15	513	266	1812	100	1.16	0.09	0.32	1.22	0.00	1.22
	595	13	570	266	1979	100	1.05	0.08	0.27	1.10	0.00	1.10

Link Results: Flows and signals

Time Segment	Link	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Calculated sat flow (PCU/hr)	Calculated capacity (PCU/hr)	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Mean modulus of error	Actual green (s (per cycle))	Effective green (s (per cycle))
16:30-17:30	200	149	149	0		1959	196	76		18	0.00	9	10
	210	434	434	0		1642	1264	34		162	0.00	76	77
	211	12	12	0		1881	150	8		1029	0.00	7	8
	212	446	446	0		1754	1754	25		254	0.00	100	100
	220	668	668	0		1817	1036	64		40	0.86	56	57
	280	10	10	0		10000	600	2		5300	0.00	5	6
	281	10	10	0		10000	600	2		5300	0.00	5	6
	290	130	130	0		1800	1800	7		1146	0.74	100	100
	291	574	574	0		1800	1800	32		182	0.79	100	100
	300	533	533	0		1903	1903	28		221	0.90	100	100
	310	105	105	0		468	468	22		301	0.00	100	100
	320	191	191	0		613	613	31		189	0.00	100	100
	390	98	98	0		1800	1800	5		1553	0.79	100	100
	391	435	435	0		1800	1800	24		272	0.79	100	100
	392	148	148	0		2007	2007	7		1120	0.05	100	100
	393	148	148	0		2143	2143	7		1203	0.05	100	100
	500	380	380	0		1817	1817	21		330	0.43	100	100
	501	179	179	0		2179	240	75		21	0.45	10	11
	510	225	225	0		1989	537	42		115	0.00	26	27
	511	202	202	0		2159	583	35		160	0.00	26	27
	512	202	202	0		2147	566	36		152	0.00	26	27
	513	467	467	0		2141	578	81		11	0.00	26	27
	514	427	427	0		2071	2054	21		333	0.00	100	100
	515	669	669	0		2215	2215	30		198	0.00	100	100
	520	247	247	0		1934	638	39		133	0.57	32	33
	521	371	371	0		1850	611	61		48	0.57	32	33
	522	618	618	0		1803	1249	49		82	0.00	100	100
	530	145	145	0		1981	198	73		23	0.03	9	10
	531	113	113	0		2138	214	53		71	0.05	9	10
	532	40	40	0		1943	194	21		337	0.05	9	10
	533	153	153	0		1948	1948	8		1050	0.05	100	100
	580	10	10	0		10000	6400	0		57500	0.00	63	64
	581	10	10	0		10000	2500	0		22400	0.00	24	25
	582	10	10	0		10000	3300	0		29600	0.00	32	33
	583	10	10	0		10000	1700	1		15200	0.00	16	17
	584	10	10	0		10000	600	2		5300	0.00	5	6
	590	380	380	0		1800	1800	21		326	0.28	100	100
	591	113	113	0		1800	1800	6		1340	1.43	100	100
	592	484	484	0	✓	1800	1800	27		235	0.94	100	100
	593	394	394	0		1800	1800	22		311	0.87	100	100
	594	266	266	0		1812	1812	15		513	0.91	100	100
	595	266	266	0		1979	1979	13		570	1.10	100	100
	596	10	10	0		Unrestricted	Unrestricted	0		Unrestricted	0.00	9	10

Link Results: Stops and delays

Time Segment	Link	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Unweighted cost of delay (£ per hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Uniform stops (Stops per hr)	Random stops (Stops per hr)	Unweighted cost of stops (£ per hr)	Weighted cost of stops (£ per hr)
16:30-17:30	200	22.50	79.93	1.81	1.49	46.98	46.98	128.66	142.51	49.19	2.73	2.73
	210	5.98	5.76	0.43	0.26	9.87	9.87	29.12	117.02	9.35	1.80	1.80
	211	5.98	55.77	0.14	0.04	2.64	2.64	104.58	11.04	1.51	0.18	0.18
	212	22.50	1.38	0.00	0.17	2.42	2.42	0.00	0.00	0.00	0.00	0.00
	220	8.32	11.73	1.27	0.90	30.91	30.91	51.54	312.15	32.15	4.91	4.91
	280	7.30	47.70	0.12	0.01	1.88	1.88	0.00	0.00	0.00	0.00	0.00
	281	3.15	47.70	0.12	0.01	1.88	1.88	0.00	0.00	0.00	0.00	0.00
	290	22.50	1.08	0.00	0.04	0.55	0.55	0.00	0.00	0.00	0.00	0.00
	291	22.50	1.47	0.00	0.23	3.32	3.32	0.00	0.00	0.00	0.00	0.00
	300	10.39	2.30	0.15	0.19	4.84	4.84	33.75	172.88	6.98	2.57	2.57
	310	22.50	4.96	0.00	0.14	2.05	2.05	0.00	0.00	0.00	0.00	0.00
	320	22.50	4.70	0.02	0.23	3.54	3.54	16.45	23.38	8.04	0.45	0.45
	390	22.50	1.06	0.00	0.03	0.41	0.41	0.00	0.00	0.00	0.00	0.00
	391	22.50	1.32	0.00	0.16	2.26	2.26	0.00	0.00	0.00	0.00	0.00
	392	15.07	0.97	0.00	0.04	0.57	0.57	0.00	0.00	0.00	0.00	0.00
	393	10.64	0.90	0.00	0.04	0.53	0.53	0.00	0.00	0.00	0.00	0.00
	500	9.80	1.25	0.00	0.13	1.88	1.88	0.00	0.00	0.00	0.00	0.00
	501	7.96	72.13	2.18	1.41	50.93	50.93	122.44	171.87	47.30	3.13	3.13
	510	3.75	35.81	1.88	0.36	31.78	31.78	82.67	173.25	12.77	2.65	2.65
	511	3.79	34.12	1.65	0.26	27.19	27.19	81.66	155.54	9.42	2.35	2.35
	512	8.94	34.62	1.67	0.28	27.58	27.58	81.87	155.54	9.85	2.36	2.36
	513	8.71	49.72	4.42	2.03	91.58	91.58	101.69	404.66	70.23	6.77	6.77
	514	19.20	1.11	0.00	0.13	1.86	1.86	1.16	0.26	4.71	0.07	0.07
	515	14.40	1.16	0.00	0.22	3.07	3.07	0.00	0.00	0.00	0.00	0.00
	520	3.57	25.91	1.46	0.32	25.24	25.24	49.54	111.15	11.22	1.75	1.75
	521	3.54	29.62	2.28	0.77	43.35	43.35	52.33	166.96	27.19	2.77	2.77
	522	22.50	9.43	1.13	0.49	22.98	22.98	45.22	261.97	17.48	3.99	3.99
	530	18.53	75.45	1.74	1.29	43.00	43.00	124.88	137.66	42.78	2.57	2.57
	531	3.41	60.04	1.33	0.55	26.64	26.64	108.83	103.50	18.93	1.75	1.75
	532	3.41	52.73	0.46	0.13	8.32	8.32	101.31	36.00	4.53	0.58	0.58
	533	9.43	1.00	0.00	0.04	0.60	0.60	0.00	0.00	0.00	0.00	0.00
	580	3.60	6.94	0.02	0.00	0.27	0.27	0.00	0.00	0.00	0.00	0.00
	581	7.48	29.22	0.08	0.00	1.15	1.15	0.00	0.00	0.00	0.00	0.00
	582	3.60	23.33	0.06	0.00	0.92	0.92	0.00	0.00	0.00	0.00	0.00
	583	9.06	35.93	0.10	0.00	1.42	1.42	0.00	0.00	0.00	0.00	0.00
	584	5.86	47.70	0.12	0.01	1.88	1.88	0.00	0.00	0.00	0.00	0.00
	590	22.50	1.27	0.00	0.13	1.90	1.90	0.00	0.00	0.00	0.00	0.00
	591	22.50	1.07	0.00	0.03	0.47	0.47	0.00	0.00	0.00	0.00	0.00
	592	22.50	1.37	0.00	0.18	2.61	2.61	0.00	0.00	0.00	0.00	0.00
	593	22.50	1.28	0.00	0.14	1.99	1.99	0.00	0.00	0.00	0.00	0.00
	594	17.57	1.16	0.00	0.09	1.22	1.22	0.00	0.00	0.00	0.00	0.00
	595	17.57	1.05	0.00	0.08	1.10	1.10	0.00	0.00	0.00	0.00	0.00
	596	5.40	40.95	0.11	0.00	1.62	1.62	0.00	0.00	0.00	0.00	0.00

Link Results: Queues and blocking

Time Segment	Link	Initial queue (PCU)	Mean max queue (PCU)	Max queue storage (PCU)	Utilised storage (%)	Average storage excess queue (PCU)	Average limit excess queue (PCU)	Excess queue penalty (£ per hr)	Mean end of green queue (PCU)	Mean end of red queue (PCU)	Wasted time starvation (s (per cycle))	Wasted time blocking back (s (per cycle))	Wasted time total (s (per cycle))	Estimated blocking
16:30-17:30	200	0.00	5.51	36.83	14.95	0.00	0.00	0.00	1.49	5.22	0.00	0.00	0.00	
	210	0.00	3.53	8.21	42.94	0.00	0.00	0.00	0.26	3.26	0.00	0.00	0.00	
	211	0.00	0.35	9.41	3.72	0.00	0.00	0.00	0.04	0.35	7.00	0.00	7.00	
	212	0.00	0.17	32.98	0.52	0.00	0.00	0.00			0.00	0.00	0.00	
	220	0.00	16.57	8.00	207.16	0.89	1.28	1282.17	0.90	4.18	2.00	0.00	2.00	
	280	0.00	0.27	10.00	2.70	0.00	0.00	0.00	0.01	0.27	0.00	0.00	0.00	
	281	0.00	0.27	10.00	2.70	0.00	0.00	0.00	0.01	0.27	0.00	0.00	0.00	
	290	0.00	0.04	33.84	0.12	0.00	0.00	0.00			33.00	0.00	33.00	
	291	0.00	0.23	33.84	0.69	0.00	0.00	0.00			13.00	0.00	13.00	
	300	0.00	8.45	16.52	51.17	0.00	0.00	0.00			10.00	0.00	10.00	
	310	0.00	0.14	34.78	0.42	0.00	0.00	0.00			0.00	0.00	0.00	
	320	0.00	1.18	34.78	3.39	0.00	0.00	0.00			0.00	0.00	0.00	
	390	0.00	0.03	33.84	0.09	0.00	0.00	0.00			64.00	0.00	64.00	
	391	0.00	0.16	33.84	0.47	0.00	0.00	0.00			0.00	0.00	0.00	
	392	0.00	0.04	25.27	0.16	0.00	0.00	0.00			0.00	0.00	0.00	
	393	0.00	0.04	18.62	0.20	0.00	0.00	0.00			0.00	0.00	0.00	
	500	0.00	0.13	14.89	0.89	0.00	0.00	0.00			3.00	0.00	3.00	
	501	0.00	6.32	14.49	43.60	0.00	0.01	9.70	1.41	5.51	1.00	0.00	1.00	
	510	0.00	5.17	6.23	82.99	0.00	0.00	0.00	0.36	5.05	0.00	0.00	0.00	
	511	0.00	4.59	6.83	67.10	0.00	0.00	0.00	0.26	4.47	0.00	0.00	0.00	
	512	0.00	4.60	16.05	28.65	0.00	0.00	0.00	0.28	4.49	0.00	0.63	0.63	
	513	0.00	13.32	15.58	85.49	0.00	0.00	0.00	2.03	12.15	0.00	12.00	12.00	✓
	514	0.00	0.25	33.22	0.75	0.00	0.00	0.00			0.00	0.82	0.82	
	515	0.00	0.22	26.66	0.81	0.00	0.00	0.00			0.00	0.00	0.00	
	520	0.00	3.40	5.76	59.06	0.00	0.00	0.00	0.32	3.40	0.00	0.00	0.00	
	521	0.00	5.41	5.47	98.80	0.00	0.00	0.00	0.77	5.41	0.00	0.00	0.00	
	522	0.00	8.21	33.90	24.23	0.00	0.00	0.00			0.00	30.73	30.73	
	530	0.00	5.18	30.68	16.88	0.00	0.00	0.00	1.29	4.90	0.00	1.00	1.00	✓
	531	0.00	3.42	6.09	56.23	0.00	0.00	0.00	0.55	3.39	0.00	0.00	0.00	
	532	0.00	1.75	5.54	31.62	0.00	0.00	0.00	0.13	1.13	8.00	0.00	8.00	
	533	0.00	0.04	15.35	0.28	0.00	0.00	0.00			0.00	0.00	0.00	
	580	0.00	0.10	10.00	1.01	0.00	0.00	0.00	0.00	0.10	0.00	0.00	0.00	
	581	0.00	0.21	10.00	2.10	0.00	0.00	0.00	0.00	0.21	0.00	0.00	0.00	
	582	0.00	0.19	10.00	1.88	0.00	0.00	0.00	0.00	0.19	0.00	0.00	0.00	
	583	0.00	0.23	10.00	2.34	0.00	0.00	0.00	0.00	0.23	0.00	0.00	0.00	
	584	0.00	0.27	10.00	2.70	0.00	0.00	0.00	0.01	0.27	0.00	0.00	0.00	
	590	0.00	0.13	33.84	0.40	0.00	0.00	0.00			0.00	0.00	0.00	
	591	0.00	0.03	33.84	0.10	0.00	0.00	0.00			74.00	0.00	74.00	
	592	0.00	0.18	33.84	0.54	0.00	0.00	0.00			38.00	0.00	38.00	
	593	0.00	0.14	33.84	0.41	0.00	0.00	0.00			34.00	0.00	34.00	
	594	0.00	0.09	26.60	0.32	0.00	0.00	0.00			23.00	0.00	23.00	
	595	0.00	0.08	29.05	0.27	0.00	0.00	0.00			43.00	0.00	43.00	
	596	0.00	0.25	10.00	2.50	0.00	0.00	0.00	0.00	0.25	0.00	0.00	0.00	

Link Results: Journey times

Time Segment	Link	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	JourneyTime (s)
16:30-17:30	200	29.80	4.24	7.03	102.43
	210	23.08	1.42	16.30	11.75
	211	0.64	0.21	3.10	61.75
	212	89.20	2.96	30.16	23.88
	220	49.43	3.72	13.28	20.06
	280	0.08	0.15	0.53	55.00
	281	0.04	0.14	0.25	50.85
	290	26.00	0.85	30.54	23.58
	291	114.80	3.82	30.04	23.97
	300	49.21	1.88	26.19	12.69
	310	21.00	0.80	26.22	27.46
	320	38.20	1.44	26.47	27.20
	390	19.60	0.64	30.56	23.56
	391	87.00	2.88	30.23	23.82
	392	19.82	0.66	30.07	16.04
	393	13.68	0.47	28.82	11.55
	500	33.12	1.17	28.38	11.06
	501	12.66	3.98	3.18	80.09
	510	7.50	2.47	3.03	39.56
	511	6.80	2.13	3.20	37.91
	512	16.06	2.44	6.57	43.56
	513	36.14	7.58	4.77	58.42
	514	72.87	2.41	30.26	20.31
	515	85.66	2.89	29.61	15.57
	520	7.83	2.02	3.87	29.47
	521	11.68	3.42	3.42	33.16
	522	123.60	5.48	22.55	31.93
	530	23.80	3.77	6.31	93.98
	531	3.41	1.98	1.72	63.45
	532	1.21	0.62	1.95	56.15
	533	12.78	0.44	28.93	10.43
	580	0.04	0.03	1.37	10.54
	581	0.08	0.10	0.82	36.70
	582	0.04	0.07	0.53	26.93
	583	0.10	0.12	0.81	44.99
	584	0.07	0.15	0.44	53.56
	590	76.00	2.51	30.29	23.77
	591	22.50	0.74	30.55	23.57
	592	96.70	3.21	30.17	23.87
	593	78.80	2.60	30.28	23.78
	594	41.54	1.38	30.01	18.73
	595	41.54	1.38	30.19	18.62
	596	0.06	0.13	0.47	46.35

Link Results: Advanced

Time Segment	Link	Degree of saturation penalty (£ per hr)	Ped gap accepting penalty (£ per hr)	Warmed up	Mean Max Queue EoTS (PCU)	Mean End of Green Queue EoTS (PCU)	Mean End of Red Queue EoTS (PCU)	PCU Factor	Cost of traffic penalties (£ per hr)	Unweighted performance index (£ per hr)	Performance Index (£ per hr)
16:30-17:30	200	0.00	0.00	✓	5.55	1.54	5.26	1.00	0.00	49.71	49.71
	210	0.00	0.00	✓	3.53	0.26	3.26	1.00	0.00	11.67	11.67
	211	0.00	0.00	✓	0.35	0.04	0.35	1.00	0.00	2.82	2.82
	212	0.00	0.00	✓	0.17			1.00	0.00	2.42	2.42
	220	0.00	0.00	✓	16.58	0.91	4.18	1.00	1282.17	35.83	1317.99
	280	0.00	0.00	✓	0.27	0.01	0.27	1.00	0.00	0.00	0.00
	281	0.00	0.00	✓	0.27	0.01	0.27	1.00	0.00	0.00	0.00
	290	0.00	0.00	✓	0.04			1.00	0.00	0.55	0.55
	291	0.00	0.00	✓	0.23			1.00	0.00	3.32	3.32
	300	0.00	0.00	✓	8.45			1.00	0.00	7.41	7.41
	310	0.00	0.00	✓	0.14			1.00	0.00	2.05	2.05
	320	0.00	0.00	✓	1.18			1.00	0.00	3.99	3.99
	390	0.00	0.00	✓	0.03			1.00	0.00	0.41	0.41
	391	0.00	0.00	✓	0.16			1.00	0.00	2.26	2.26
	392	0.00	0.00	✓	0.04			1.00	0.00	0.57	0.57
	393	0.00	0.00	✓	0.04			1.00	0.00	0.53	0.53
	500	0.00	0.00	✓	0.13			1.00	0.00	1.88	1.88
	501	0.00	0.00	✓	6.35	1.44	5.55	1.00	9.70	54.06	63.76
	510	0.00	0.00	✓	5.17	0.36	5.05	1.00	0.00	34.43	34.43
	511	0.00	0.00	✓	4.59	0.26	4.47	1.00	0.00	29.54	29.54
	512	0.00	0.00	✓	4.60	0.28	4.49	1.00	0.00	29.94	29.94
	513	0.00	0.00	✓	13.35	2.06	12.18	1.00	0.00	98.36	98.36
	514	0.00	0.00	✓	0.25			1.00	0.00	1.94	1.94
	515	0.00	0.00	✓	0.22			1.00	0.00	3.07	3.07
	520	0.00	0.00	✓	3.40	0.32	3.40	1.00	0.00	26.99	26.99
	521	0.00	0.00	✓	5.41	0.77	5.41	1.00	0.00	46.12	46.12
	522	0.00	0.00	✓	8.21			1.00	0.00	26.96	26.96
	530	0.00	0.00	✓	5.21	1.32	4.93	1.00	0.00	45.58	45.58
	531	0.00	0.00	✓	3.43	0.55	3.40	1.00	0.00	28.39	28.39
	532	0.00	0.00	✓	1.75	0.13	1.13	1.00	0.00	8.90	8.90
	533	0.00	0.00	✓	0.04			1.00	0.00	0.60	0.60
	580	0.00	0.00	✓	0.10	0.00	0.10	1.00	0.00	0.00	0.00
	581	0.00	0.00	✓	0.21	0.00	0.21	1.00	0.00	0.00	0.00
	582	0.00	0.00	✓	0.19	0.00	0.19	1.00	0.00	0.00	0.00
	583	0.00	0.00	✓	0.23	0.00	0.23	1.00	0.00	0.00	0.00
	584	0.00	0.00	✓	0.27	0.01	0.27	1.00	0.00	0.00	0.00
	590	0.00	0.00	✓	0.13			1.00	0.00	1.90	1.90
	591	0.00	0.00	✓	0.03			1.00	0.00	0.47	0.47
	592	0.00	0.00	✓	0.18			1.00	0.00	2.61	2.61
	593	0.00	0.00	✓	0.14			1.00	0.00	1.99	1.99
	594	0.00	0.00	✓	0.09			1.00	0.00	1.22	1.22
	595	0.00	0.00	✓	0.08			1.00	0.00	1.10	1.10
	596	0.00	0.00	✓	0.25	0.00	0.25	1.00	0.00	0.00	0.00

Collections

Point to Point Journey Time

Average Journey Time (s) for Local Matrix: 3

From	To			
		A	B	C
	A	0.0	36.2	36.5
	B	41.2	0.0	0.0
	C	41.0	0.0	0.0

Path Journey Time

Path	From Location	To Location	Normal Calculated Flow (PCU/hr)	Normal journey time (s)	Normal journey dist (m)	Bus journeydist (m)	Tram journey dist (m)	Pedestrian journey dist (m)	Calculated Total Flow (PCU/hr)	Avg journey time (s)	Avg journey dist (m)
1	B	C	0	51.28	400.00	400.00	400.00	400.00	0	0.00	1600.00
2	C	B	0	50.76	400.00	400.00	400.00	400.00	0	0.00	1600.00
3	B	A	53	39.00	292.42	292.42	292.42	292.42	53	39.00	292.42
5	B	A	53	43.49	333.93	333.93	333.93	333.93	53	43.49	333.93
6	C	A	96	43.24	333.93	333.93	333.93	333.93	96	43.24	333.93
7	A	B	98	36.25	292.33	292.33	292.33	292.33	98	36.25	292.33
8	A	C	435	36.51	292.33	292.33	292.33	292.33	435	36.51	292.33

Average Journey Time (s) for Local Matrix: 5

From	To					
		A	B	C	D	E
	A	0.0	126.4	137.3	206.3	201.2
	B	109.2	0.0	70.4	139.5	134.4
	C	117.6	118.0	0.0	83.6	77.3
	D	105.0	105.4	89.0	0.0	80.1
	E	137.6	138.0	107.6	90.4	0.0

Path Journey Time

Path	From Location	To Location	Normal Calculated Flow (PCU/hr)	Normal journey time (s)	Normal journey dist (m)	Bus journeydist (m)	Tram journey dist (m)	Pedestrian journey dist (m)	Calculated Total Flow (PCU/hr)	Avg journey time (s)	Avg journey dist (m)
1	A	E	6	201.14	426.90	426.90	426.90	426.90	6	201.14	426.90
2	A	E	6	201.25	426.90	426.90	426.90	426.90	6	201.25	426.90
3	E	A	6	137.62	438.73	438.73	438.73	438.73	6	137.62	438.73
4	A	B	24	126.40	400.00	400.00	400.00	400.00	24	126.40	400.00
5	E	B	26	138.01	438.73	438.73	438.73	438.73	26	138.01	438.73
6	B	E	20	134.33	480.09	480.09	480.09	480.09	20	134.33	480.09
7	B	E	20	134.45	480.09	480.09	480.09	480.09	20	134.45	480.09
8	B	A	12	109.21	453.19	453.19	453.19	453.19	12	109.21	453.19
9	E	C	113	97.75	314.13	314.13	314.13	314.13	113	97.75	314.13
10	E	C	113	117.55	364.74	364.74	364.74	364.74	113	117.55	364.74
11	A	C	85	137.25	487.15	487.15	487.15	487.15	85	137.25	487.15
12	B	C	295	70.45	540.34	540.34	540.34	540.34	295	70.45	540.34
13	C	E	202	76.95	360.47	360.47	360.47	360.47	202	76.95	360.47
14	C	E	202	77.75	363.70	363.70	363.70	363.70	202	77.75	363.70
16	C	B	385	118.02	479.42	479.42	479.42	479.42	385	118.02	479.42
17	C	A	82	117.63	479.42	479.42	479.42	479.42	82	117.63	479.42
18	D	C	371	88.95	431.47	431.47	431.47	431.47	371	88.95	431.47
19	D	B	139	105.42	505.68	505.68	505.68	505.68	139	105.42	505.68
20	D	A	30	105.04	505.68	505.68	505.68	505.68	30	105.04	505.68
22	D	E	39	80.02	387.84	387.84	387.84	387.84	39	80.02	387.84
23	D	E	39	80.13	387.84	387.84	387.84	387.84	39	80.13	387.84
24	A	D	29	206.30	470.75	470.75	470.75	470.75	29	206.30	470.75
25	B	D	100	139.50	523.94	523.94	523.94	523.94	100	139.50	523.94
26	C	D	225	83.64	403.98	403.98	403.98	403.98	225	83.64	403.98
27	E	D	40	90.36	314.18	314.18	314.18	314.18	40	90.36	314.18

Final Prediction Table

Link Results

			SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES		
Link	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)	Mean end of red queue (PCU)	we
200		2	2	A	149	1959	9	0.00	76	18	102.43	79.93	128.66	5.51	5.22	
210		2	2	B	434	1642	76	0.00	34	162	11.75	5.76	29.12	3.53	3.26	
211		2	2	C	12	1881	7	7.00	8	1029	61.75	55.77	104.58	0.35	0.35	
212		2			446	1754	100	0.00	25	254	23.88	1.38	0.00	0.17		
220		2	2	D	668 <	1817	56	2.00	64	40	20.06	11.73	51.54	16.57 +	4.18	
280 P		2	2	E	10	10000	5	0.00	1.667	5300	55.00	47.70	0.00	0.27	0.27	
281 P		2	2	G	10	10000	5	0.00	1.667	5300	50.85	47.70	0.00	0.27	0.27	
290		2			130	1800	100	33.00	7	1146	23.58	1.08	0.00	0.04		
291		2			574	1800	100	13.00	32	182	23.97	1.47	0.00	0.23		
300	(untitled)	3			533	1903	100	10.00	28	221	12.69	2.30	33.75	8.45		
310	(untitled)	3			105	468	100	0.00	22	301	27.46	4.96	0.00	0.14		
320		3			191	613	100	0.00	31	189	27.20	4.70	16.45	1.18		
390	(untitled)	3			98	1800	100	64.00	5	1553	23.56	1.06	0.00	0.03		
391	(untitled)	3			435	1800	100	0.00	24	272	23.82	1.32	0.00	0.16		
392	(untitled)	3			148	2007	100	0.00	7	1120	16.04	0.97	0.00	0.04		
393	(untitled)	3			148	2143	100	0.00	7	1203	11.55	0.90	0.00	0.04		
500		5			380	1817	100	3.00	21	330	11.06	1.25	0.00	0.13		
501		5	5	A	179	2179	10	1.00	75	21	80.09	72.13	122.44	6.32	5.51	
510		5	5	B	225	1989	26	0.00	42	115	39.56	35.81	82.67	5.17	5.05	
511		5	5	B	202	2159	26	0.00	35	160	37.91	34.12	81.66	4.59	4.47	
512		5	5	B	202	2147	26	0.63	36	152	43.56	34.62	81.87	4.60	4.49	
513		5	5	C	467	2141	26	12.00	81	11	58.42	49.72	101.69	13.32	12.15	
514		5			427	2071	100	0.82	21	333	20.31	1.11	1.16	0.25		
515		5			669	2215	100	0.00	30	198	15.57	1.16	0.00	0.22		
520		5	5	D	247	1934	32	0.00	39	133	29.47	25.91	49.54	3.40	3.40	
521		5	5	D	371	1850	32	0.00	61	48	33.16	29.62	52.33	5.41	5.41	
522		5			618	1803	100	30.73	49	82	31.93	9.43	45.22	8.21		
530		5	5	E	145	1981	9	1.00	73	23	93.98	75.45	124.88	5.18	4.90	
531		5	5	E	113	2138	9	0.00	53	71	63.45	60.04	108.83	3.42	3.39	
532		5	5	F	40	1943	9	8.00	21	337	56.15	52.73	101.31	1.75	1.13	
533		5			153	1948	100	0.00	8	1050	10.43	1.00	0.00	0.04		
580 P		5	5	G	10	10000	63	0.00	0.156	57500	10.54	6.94	0.00	0.10	0.10	
581 P		5	5	K	10	10000	24	0.00	0.4	22400	36.70	29.22	0.00	0.21	0.21	
582 P		5	5	H	10	10000	32	0.00	0.303	29600	26.93	23.33	0.00	0.19	0.19	
583 P		5	5	I	10	10000	16	0.00	0.588	15200	44.99	35.93	0.00	0.23	0.23	
584 P		5	5	J	10	10000	5	0.00	1.667	5300	53.56	47.70	0.00	0.27	0.27	
590		5			380	1800	100	0.00	21	326	23.77	1.27	0.00	0.13		
591		5			113	1800	100	74.00	6	1340	23.57	1.07	0.00	0.03		
592		5			484	1800	100	38.00	27	235	23.87	1.37	0.00	0.18		
593		5			394	1800	100	34.00	22	311	23.78	1.28	0.00	0.14		
594		5			266	1812	100	23.00	15	513	18.73	1.16	0.00	0.09		
595		5			266	1979	100	43.00	13	570	18.62	1.05	0.00	0.08		
596 P			2	F	10	9999999999	9	0.00	0	Unrestricted	46.35	40.95	0.00	0.25	0.25	

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	1393.66	80.62	17.29	24.03	13.03	526.20	43.38	1291.87	1861.46
Bus									
Tram									
Pedestrians									
TOTAL	1394.16	81.52	17.10	24.77	13.06	537.23	43.38	1291.87	1861.46

- | P = link is a pedestrian link
- | < = 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



H.2. Northern Access Road (NAR) Queue Validation

Northern Access Road (NAR) 2021 Baseline vs 2021 Survey Queue Validation

Link ID	Jct No.	Link Name	2021 Baseline							
			AM PEAK (07:45-08:45)				PM PEAK (16:30-17:30)			
			DoS (%)	MMQ (PCUs)	Storage Capacity (PCUs)	Surveyed Queue (PCUs)	DoS (%)	MMQ (PCUs)	Storage Capacity (PCUs)	Surveyed Queue (PCUs)
200	2	NE Junction - Darcy Business Park	27	1.28	36.83	0.50	46	2.81	36.83	1.08
210	2	NE Junction - B4290 Pen-y-Heol - Lane 1	34	3.22	8.21	0.50	25	2.34	8.21	1.33
211	2	NE Junction - B4290 Pen-y-Heol - Lane 2 (Flare)	13	0.58	9.41	0.00	4	0.17	9.41	0.00
212	2	NE Junction - B4290 Pen-y-Heol - Approach	25	0.17	32.98		18	0.11	32.98	
220	2	NE Junction - B4290 (south)	31	2.76	8	0.67	38	3.92	8	1.00
300	3	Ffordd Coed Darcy (east) - Lane 1	4	0.02	16.52		5	0.03	16.52	
310	3	Heathland Way	31	0.22	34.78		18	0.11	34.78	
320	3	Ffordd Coed Darcy (west) - Lane 1	0	0	34.78		0	0	34.78	
391	3	Ffordd Coed Darcy (west) - Lane 1	0	0	33.84		0	0	33.84	
392	3	Ffordd Coed Darcy (west)- Lane 2	4	0.02	25.27		3	0.01	25.27	
500	5	SE Junction - B4290 (north) - Segregated Left	19	0.12	14.89	0.00	15	0.09	14.89	0.00
501	5	SE Junction - B4290 (north)	44	3.05	14.49	2.00	50	3.6	14.49	2.50
510	5	SE Junction - B4290 (east) - Lane 1 (Flare)	50	5.48	6.23	1.83	38	4.26	6.23	1.58
511	5	SE Junction - B4290 (east) - Lane 2	4	0.44	6.83	0.33	7	1.84	6.83	0.50
512	5	SE Junction - B4290 (east) - Lane 3	4	0.44	16.05	0.50	7	1.83	16.05	0.75
513	5	SE Junction - B4290 (east) - Lane 4 (Flare)	39	4.55	15.58	4.25	51	6.37	15.58	4.17
514	5	SE Junction - B4290 (east) - Approach - Lane 1	14	0.55	33.22		10	0.06	33.22	
515	5	SE Junction - B4290 (east) - Approach - Lane 2	11	0.06	26.66		13	0.07	26.66	
520	5	SE Junction - B4290 (south) - Lane 1 (Flare)	14	1.7	5.76	1.25	20	2.08	5.76	1.58
521	5	SE Junction - B4290 (south) - Lane 2	47	5.08	5.47	4.42	50	5.13	5.47	5.67
522	5	SE Junction - B4290 (south) - Approach	21	1.09	33.9		35	4.29	33.9	
530	5	SE Junction – Ffordd Coed Darcy (west) - Lane 1	38	2.24	30.68	1.33	27	1.57	30.68	1.33
531	5	SE Junction – Ffordd Coed Darcy (west) - Lane 2	27	1.97	6.09	0.83	18	1.89	6.09	0.50
532	5	SE Junction – Ffordd Coed Darcy (west) - Lane 3 (Flare)	15	1.71	5.54	0.75	7	0.36	5.54	0.50
533	5	SE Junction – Ffordd Coed Darcy (west) - Approach	5	0.03	15.35		3	0.01	15.35	

H.3. M4 Junction 43 – Existing Junction Layout

TRANSYT 16	
Version: 16.0.1.8473 © Copyright TRL Limited, 2019	
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Filename: Coed Darcy - M4 J43 Existing Base_v1.t15
Path: C:\Data\PATE2211\Coed Darcy\M4 J43 Existing
Report generation date: 10/11/2021 16:46:06

»A1 - 2021 Base AM : D1 - 2021 Base, AM :
 »A2 - 2021 Base PM : D2 - 2021 Base, PM :
 »A3 - 2026 Base + HG(140) AM : D3 - 2026 Base + HG(140), AM :
 »A4 - 2026 Base + HG(140) PM : D4 - 2026 Base + HG(140), PM :
 »A5 - 2026 Base + HG(140) + Coed Darcy AM : D5 - 2026 Base + HG(140) + Coed Darcy, AM :
 »A6 - 2026 Base + HG(140) + Coed Darcy PM : D6 - 2026 Base + HG(140) + Coed Darcy, PM :

Summary of network performance

	AM				
	Set ID	PI (£ per hr)	Total delay (PCU-hr/hr)	Highest DOS	Number oversaturated
	2021 Base AM - 2021 Base				
Network	A1 D1	613.92	73.08	96% (L 800)	5 (14%)

	PM				
	Set ID	PI (£ per hr)	Total delay (PCU-hr/hr)	Highest DOS	Number oversaturated
	2021 Base PM - 2021 Base				
Network	A2 D2	492.42	59.41	89% (L 900)	0 (0%)

	AM				
	Set ID	PI (£ per hr)	Total delay (PCU-hr/hr)	Highest DOS	Number oversaturated
	2026 Base + HG(140) AM - 2026 Base + HG(140)				
Network	A3 D3	904.21	143.78	107% (L 1000)	5 (14%)

	PM				
	Set ID	PI (£ per hr)	Total delay (PCU-hr/hr)	Highest DOS	Number oversaturated
	2026 Base + HG(140) PM - 2026 Base + HG(140)				
Network	A4 D4	577.38	69.60	93% (L 901)	4 (11%)

	AM				
	Set ID	PI (£ per hr)	Total delay (PCU-hr/hr)	Highest DOS	Number oversaturated
	2026 Base + HG(140) + Coed Darcy AM - 2026 Base + HG(140) + Coed Darcy				
Network	A5 D5	2038.32	461.89	182% (L 1000)	5 (14%)

	PM				
	Set ID	PI (£ per hr)	Total delay (PCU-hr/hr)	Highest DOS	Number oversaturated
	2026 Base + HG(140) + Coed Darcy PM - 2026 Base + HG(140) + Coed Darcy				
Network	A6 D6	1772.94	197.84	108% (L 1000)	7 (19%)

File summary

File description

File title	Coed Darcy Off Site Highways Mitigation
Location	M4 J43
Site number	
UTCRegion	
Driving side	Left
Date	29/05/2019
Version	v1
Status	Updated Phasing Strategy (May 2019)
Identifier	
Client	St. Modwen Developments
Jobnumber	5104234.175
Enumerator	Hitav Patel / Liam Hartas
Description	Assess revised phasing strategy.

Model and Results

Enable controller offsets	Enable fuel consumption	Enable quick flares	Display journey time results	Display OD matrix distances	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	c m
			✓			✓	✓	✓	✓	✓	✓	✓			

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

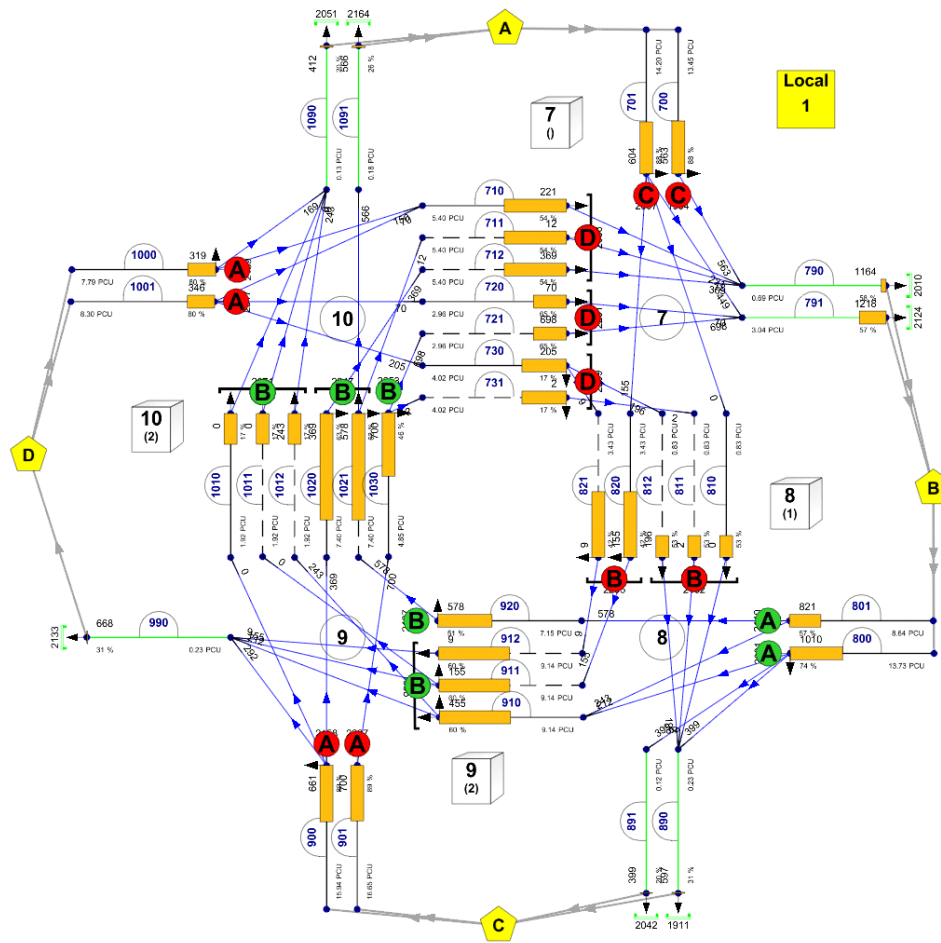
Sorting

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	✓

Simulation options

Criteria type	Stop criteria (%)	Stop criteria time (s)	Stop criteria number of trials	Random seed	Results refresh speed (s)	Average animation capture interval (s)	Use quick response	Do flow sampling	Uniform vehicle generation	Last run random seed	Last run number of trials	Last run time taken (s)
Delay	3.00	999	200	-1	3	60	✓			0	0	0.00

Network Diagrams



Coed Darcy Off Site Highways Mitigation
Cycletime 0s / 70s
Timesteps 69 / 70
2. 2
Diagram produced using TRANSYT 16.0.1.8473

A1 - 2021 Base AM

D1 - 2021 Base, AM

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Run duration (s)	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
1	10/11/2021 16:38:15	10/11/2021 16:38:16	1.14	07:45	70	613.92	73.08	95.84	800	5	14	800	790

Analysis Set Details

Name	Use Simulation	Description	Use specific Demand Set (s)	Specific Demand Set (s)	Optimise specific Demand Set (s)	Include in report	Locked
2021 Base AM			✓	D1		✓	

Demand Set Details

Scenario name	Time Period name	Description	Composite	Demand sets	Start time (HH:mm)	Locked	Run automatically
2021 Base	AM				07:45		✓

Network Options

Network timings

Network cycle time (s)	Minimum possible cycle time (s)	Absolute minimum possible cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
70	26	26		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)	Missing stage transition options
10000.00	10000.00	10000.00	2	Assume banned

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from traffic model	Exclude pedestrians from results calculation	Random delay mode	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓			Simplified (TRANSYT 12)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms ² [-2])	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms ² [-2])	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Offsets And Green Splits	✓

Advanced

Optimisation type	OUTProfile accuracy (%)	SASart temperature	SACooling factor	Random seed	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Simulated Annealing	10, 10, 1, 1, 0.1, 0.1, 0.01, 0.01	300.00	100.00	1	✓	✓	7, 8, 9, 10			Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Traffic Nodes

Traffic Nodes

Traffic node	Name	Description
(ALL)		

Links

Links

Link	Name	Description	Traffic node	Length (m)	Has Saturation Flow	Use RR67	Saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Is minor shared	Major link	Allow Nearside Turn On Red
700			7	200.00	✓		1954	✓		Normal			
701			7	200.00	✓		2097	✓		Normal			
710			7	109.89	✓		2088	✓		Normal			
711				109.89						Normal	✓	710	
712				109.89						Normal	✓	710	
720			7	107.01	✓		2231	✓		Normal			
721				107.01						Normal	✓	720	
730			7	104.31	✓		2299	✓		Normal			
731				104.31						Normal	✓	730	
790			7	106.14	✓		2010			Normal			
791			7	82.17	✓		2124			Normal			
800			8	200.00	✓		2001	✓		Normal			
801			8	200.00	✓		2110	✓		Normal			
810			8	83.00	✓		2182	✓		Normal			
811				83.14						Normal	✓	810	
812				83.14						Normal	✓	810	
820			8	80.23	✓		2295	✓		Normal			
821				80.23						Normal	✓	820	
890			8	200.00	✓		1911			Normal			
891			8	200.00	✓		2042			Normal			
900			9	200.00	✓		2158	✓		Normal			
901			9	200.00	✓		2287	✓		Normal			
910			9	162.90	✓		1995	✓		Normal			
911				162.90						Normal	✓	910	
912				162.90						Normal	✓	910	
920			9	158.76	✓		2187	✓		Normal			
990			9	200.00	✓		2133			Normal			
1000			10	200.00	✓		2139	✓		Normal			
1001			10	200.00	✓		2317	✓		Normal			
1010			10	95.68	✓		2071	✓		Normal			
1011				95.68						Normal	✓	1010	
1012				95.68						Normal	✓	1010	
1020			10	90.73	✓		2247	✓		Normal			
1021				90.73						Normal	✓	1020	
1030			10	85.01	✓		2253	✓		Normal			
1090			10	63.28	✓		2051			Normal			
1091			10	63.07	✓		2164			Normal			

Modelling

Link	Traffic model	Stop weighting (%)	Delay weighting (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Queue limit (PCU)	Excess queue penalty (£)	Has degree of saturation limit
700	NetworkDefault	0	20	100		0.00				
701	NetworkDefault	0	20	100		0.00				
710	NetworkDefault	500	100	100		12.50	✓	10.00	1000.00	
711	NetworkDefault	500	100	100					0.00	
712	NetworkDefault	500	100	100					0.00	
720	NetworkDefault	500	100	100		13.00	✓	10.00	1000.00	
721	NetworkDefault	500	100	100					0.00	
730	NetworkDefault	500	100	100		13.00	✓	11.00	1000.00	
731	NetworkDefault	500	100	100					0.00	
790	NetworkDefault	100	100	100		0.00				
791	NetworkDefault	100	100	100		0.00				
800	NetworkDefault	0	20	100		0.00				
801	NetworkDefault	20	0	100		0.00				
810	NetworkDefault	500	100	100		5.50	✓	4.00	1000.00	
811	NetworkDefault	500	100	100					0.00	
812	NetworkDefault	500	100	100					0.00	
820	NetworkDefault	500	100	100		7.50	✓	5.00	1000.00	
821	NetworkDefault	500	100	100					0.00	
890	NetworkDefault	100	100	100		0.00				
891	NetworkDefault	100	100	100		0.00				
900	NetworkDefault	0	20	100		0.00				
901	NetworkDefault	0	20	100		0.00				
910	NetworkDefault	500	100	100		18.50	✓	16.00	1000.00	
911	NetworkDefault	500	100	100					0.00	
912	NetworkDefault	500	100	100					0.00	
920	NetworkDefault	500	100	100		19.00	✓	18.00	1000.00	
990	NetworkDefault	100	100	100		0.00				
1000	NetworkDefault	0	20	100		0.00				
1001	NetworkDefault	0	20	100		0.00				
1010	NetworkDefault	500	100	100		9.00	✓	7.00	1000.00	
1011	NetworkDefault	500	100	100					0.00	
1012	NetworkDefault	500	100	100					0.00	
1020	NetworkDefault	500	100	100		10.00	✓	8.00	1000.00	
1021	NetworkDefault	500	100	100					0.00	
1030	NetworkDefault	500	100	100		11.00	✓	8.00	1000.00	
1090	NetworkDefault	100	100	100		0.00				
1091	NetworkDefault	100	100	100		0.00				

Modelling - Normal traffic - Advanced

Link	Dispersion type for Normal Traffic	Initial queue (PCU)	Auto cycle time	Cycle time
700	NetworkDefault	0.00	✓	70
701	NetworkDefault	0.00	✓	70
710	NetworkDefault	0.00	✓	70
711	NetworkDefault			
712	NetworkDefault			
720	NetworkDefault	0.00	✓	70
721	NetworkDefault			
730	NetworkDefault	0.00	✓	70
731	NetworkDefault			
790	NetworkDefault	0.00	✓	70
791	NetworkDefault	0.00	✓	70
800	NetworkDefault	0.00	✓	70
801	NetworkDefault	0.00	✓	70
810	NetworkDefault	0.00	✓	70
811	NetworkDefault			
812	NetworkDefault			
820	NetworkDefault	0.00	✓	70
821	NetworkDefault			
890	NetworkDefault	0.00	✓	70
891	NetworkDefault	0.00	✓	70
900	NetworkDefault	0.00	✓	70
901	NetworkDefault	0.00	✓	70
910	NetworkDefault	0.00	✓	70
911	NetworkDefault			
912	NetworkDefault			
920	NetworkDefault	0.00	✓	70
990	NetworkDefault	0.00	✓	70
1000	NetworkDefault	0.00	✓	70
1001	NetworkDefault	0.00	✓	70
1010	NetworkDefault	0.00	✓	70
1011	NetworkDefault			
1012	NetworkDefault			
1020	NetworkDefault	0.00	✓	70
1021	NetworkDefault			
1030	NetworkDefault	0.00	✓	70
1090	NetworkDefault	0.00	✓	70
1091	NetworkDefault	0.00	✓	70

Flows

Link	Total flow (PCU/hr)	PCU Factor
700	477	1.00
701	512	1.00
710	215	1.00
711	12	1.00
712	325	1.00
720	31	1.00
721	534	1.00
730	326	1.00
731	2	1.00
790	1029	1.00
791	908	1.00
800	1315	1.00
801	1061	1.00
810	0	1.00
811	2	1.00
812	318	1.00
820	169	1.00
821	8	1.00
890	872	1.00
891	552	1.00
900	506	1.00
901	536	1.00
910	526	1.00
911	169	1.00
912	8	1.00
920	746	1.00
990	567	1.00
1000	359	1.00
1001	388	1.00
1010	0	1.00
1011	2	1.00
1012	315	1.00
1020	325	1.00
1021	746	1.00
1030	536	1.00
1090	492	1.00
1091	734	1.00

Flows - Advanced

Link	Detectors
(ALL)	

Signals

Link	Controller stream	Phase	Second phase enabled
700	7	C	
701	7	C	
710	7	D	
711			
712			
720	7	D	
721			
730	7	D	
731			
800	8	A	
801	8	A	
810	8	B	
811			
812			
820	8	B	
821			
900	9	A	
901	9	A	
910	9	B	
911			
912			
920	9	B	
1000	10	A	
1001	10	A	
1010	10	B	
1011			
1012			
1020	10	B	
1021			
1030	10	B	

Entry Sources

Link	Cruise time (seconds)	Cruise speed (kph)
700	18.41	39.10
701	18.41	39.10
800	24.83	29.00
801	24.83	29.00
900	24.91	28.90
901	24.91	28.90
1000	48.00	15.00
1001	48.00	15.00

Sources

Link	Source	Source type	Source link	Destination link	Cruise time (seconds)	Cruise speed (kph)	Total flow (PCU/hr)
710	1	Link	1000	710	12.36	32.00	184
711	1	Link	1021	711	12.36	32.00	12
712	1	Link	1020	712	12.36	32.00	325
720	1	Link	1001	720	12.04	32.00	31
721	1	Link	1030	721	12.04	32.00	534
730	1	Link	1001	730	11.73	32.00	326
731	1	Link	1030	731	11.73	32.00	2
790	1	Link	710	790	11.94	32.00	215
791	1	Link	720	791	9.24	32.00	31
810	1	Link	701	810	9.34	32.00	0
811	1	Link	731	811	9.35	32.00	2
812	1	Link	730	812	9.35	32.00	318
820	1	Link	701	820	9.03	32.00	169
821	1	Link	730	821	9.03	32.00	8
890	1	Link	810	890	22.50	32.00	0
891	1	Link	800	891	22.50	32.00	552
910	1	Link	800	910	18.33	32.00	211
911	1	Link	820	911	18.33	32.00	169
912	1	Link	821	912	18.33	32.00	8
920	1	Link	801	920	17.86	32.00	746
990	1	Link	910	990	22.50	32.00	211
1010	1	Link	900	1010	10.76	32.00	0
1011	1	Link	911	1011	10.76	32.00	2
1012	1	Link	910	1012	10.76	32.00	315
1020	1	Link	900	1020	10.21	32.00	325
1021	1	Link	920	1021	10.21	32.00	746
1030	1	Link	901	1030	9.56	32.00	536
1090	1	Link	1000	1090	7.12	32.00	175
1091	1	Link	1021	1091	7.10	32.00	734
710	2	Link	1001	710	12.36	32.00	31
790	2	Link	711	790	11.94	32.00	12
791	2	Link	721	791	9.24	32.00	534
890	2	Link	800	890	22.50	32.00	552
910	2	Link	801	910	18.33	32.00	315
990	2	Link	900	990	22.50	32.00	181
1090	2	Link	1010	1090	7.12	32.00	0
790	3	Link	700	790	11.94	32.00	477
791	3	Link	701	791	9.24	32.00	343
890	3	Link	812	890	22.50	32.00	318
990	3	Link	911	990	22.50	32.00	167
1090	3	Link	1011	1090	7.12	32.00	2
790	4	Link	712	790	11.94	32.00	325
890	4	Link	811	890	22.50	32.00	2
990	4	Link	912	990	22.50	32.00	8
1090	4	Link	1012	1090	7.12	32.00	315

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	Limit paths by flow	Low path flow threshold
1	(untitled)	✓	✓	Lane Balancing			✓			✓	1.25				

Normal Input Flows (PCU/hr)

	To				
	A	B	C	D	
From	A	2	820	0	167
	B	1049	12	1104	211
	C	0	859	2	181
	D	175	246	318	8

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	A	(untitled)	701, 700	1090, 1091	#0000FF
	B	(untitled)	801, 800	791, 790	#FF0000
	C	(untitled)	900, 901	891, 890	#00FF00
	D	(untitled)	1000, 1001	990	#FFFF00

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	1		A	A	701, 820, 911, 1011, 1090	Normal	2
	2		B	A	801, 910, 1012, 1090	Percentage	315
	3		B	A	801, 920, 1021, 1091	Normal	734
	5		B	A	800, 910, 1012, 1090	Normal	0
	6		A	B	701, 791	Normal	343
	7		A	B	700, 790	Normal	477
	8		B	B	801, 920, 1021, 711, 790	Normal	12
	9		C	A	900, 1010, 1090	Normal	0
	10		C	B	900, 1020, 712, 790	Normal	325
	11		C	B	901, 1030, 721, 791	Normal	534
	13		B	C	800, 891	Normal	552
	14		A	C	701, 810, 890	Normal	0
	15		B	C	800, 890	Normal	552
	16		C	C	901, 1030, 731, 811, 890	Normal	2
	17		D	B	1000, 710, 790	Normal	184
	18		D	A	1000, 1090	Normal	175
	19		D	B	1001, 710, 790	Normal	31
	20		D	B	1001, 720, 791	Normal	31
	21		D	C	1001, 730, 812, 890	Normal	318
	22		A	D	701, 820, 911, 990	Normal	167
	23		B	D	801, 910, 990	Disabled	0
	24		B	D	800, 910, 990	Normal	211
	25		C	D	900, 990	Normal	181
	26		D	D	1001, 730, 821, 912, 990	Normal	8

Link Results

Link Results: Vehicle summary

Time Segment	Link	Major link	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)
07:45-08:45	700		78	16	477	1954	21	34.59	10.04	27.34	13.02	0.00	13.02
	701		78	16	512	2097	21	33.74	10.66	27.04	13.63	0.00	13.63
	710		49	85	215	2088	37	10.89	4.77	38.13	9.24	14.97	24.21
	711	710			12			16.45			0.78	0.52	1.30
	712	710			325			3.65			4.68	1.47	6.15
	720		47	93	31	2231	37	7.81	1.12	8.62	0.96	1.74	2.70
	721	720			534			3.25			6.85	2.13	8.98
	730		26	243	326	2299	37	11.79	6.42	49.42	15.15	23.33	38.48
	731	730			2			2.35			0.02	0.01	0.03
	790		51	76	1029	2010	70	1.83	0.52	2.61	7.44	0.00	7.44
	791		43	110	908	2124	70	1.48	0.37	2.27	5.30	0.00	5.30
	800		96	-6	1315	2001	47	34.18	32.18	85.53	35.45	0.00	35.45
	801		73	23	1061	2110	47	11.59	14.33	36.13	0.00	1.62	1.62
	810		85	5	0	2182	11	0.00	5.13	93.21	0.00	0.00	27.55
	811	810			2			73.89			0.58	0.19	0.77
	812	810			318			35.75			44.80	12.91	57.71
	820		45	100	169	2295	11	27.60	3.76	50.19	18.40	13.41	31.81
	821	820			8			14.58			0.46	0.28	0.74
	890		46	97	872	1911	70	1.73	0.42	1.17	5.95	0.00	5.95
	891		27	233	552	2042	70	1.21	0.19	0.48	2.63	0.00	2.63
	900		91	-1	506	2158	17	56.44	13.80	34.02	22.53	0.00	22.53
	901		91	-1	536	2287	17	54.79	14.38	33.44	23.17	0.00	23.17
	910		59	53	526	1995	41	16.73	9.63	52.07	34.69	29.40	64.09
	911	910			169			4.08			2.72	2.36	5.08
	912	910			8			4.01			0.13	0.05	0.18
	920		57	58	746	2187	41	17.23	10.77	56.70	50.72	39.30	90.02
	990		27	239	567	2133	70	1.15	0.18	0.45	2.57	0.00	2.57
	1000		90	0	359	2139	12	66.99	10.68	26.56	18.97	0.00	18.97
	1001		90	0	388	2317	12	63.85	11.20	25.72	19.54	0.00	19.54
	1010		23	295	0	2071	46	0.00	1.69	18.74	0.00	0.00	0.00
	1011	1010			2			9.73			0.08	0.07	0.14
	1012	1010			315			3.80			4.72	5.76	10.48
	1020		71	27	325	2247	46	4.91	8.32	83.25	6.29	7.22	18.16
	1021	1020			746			7.73			22.75	19.98	42.73
	1030		35	154	536	2253	46	1.84	1.53	13.93	3.90	1.02	4.91
	1090		24	275	492	2051	70	1.15	0.16	1.29	2.24	0.00	2.24
	1091		34	165	734	2164	70	1.26	0.26	2.00	3.65	0.00	3.65

Link Results: Flows and signals

Time Segment	Link	Major link	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Calculated sat flow (PCU/hr)	Calculated capacity (PCU/hr)	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Mean modulus of error	Actual green (s (per cycle))	Effective green (s (per cycle))
07:45-08:45	700		477	477	0		1954	614	78		16	0.00	21	22
	701		512	512	0		2097	659	78		16	0.00	21	22
	710		215	215	0		2088	1133	49		85	1.37	37	38
	711	710	12	12	0						85	0.86		
	712	710	325	325	0						85	1.28		
	720		31	31	0		2231	1211	47		93	1.38	37	38
	721	720	534	534	0						93	1.18		
	730		326	326	0		2299	1248	26		243	1.38	37	38
	731	730	2	2	0						243	1.19		
	790		1029	1029	0		2010	2010	51		76	0.43	70	70
	791		908	908	0		2124	2124	43		110	0.57	70	70
	800		1315	1315	0		2001	1372	96	✓	-6	0.00	47	48
	801		1061	1061	0		2110	1447	73		23	0.00	47	48
	810		0	0	0		2182	374	85		5	0.00	11	12
	811	810	2	2	0						5	1.14		
	812	810	318	318	0						5	1.47		
	820		169	169	0		2295	393	45		100	1.27	11	12
	821	820	8	8	0						100	1.47		
	890		872	872	0		1911	1911	46		97	0.19	70	70
	891		552	552	0		2042	2042	27		233	0.49	70	70
	900		506	506	0		2158	555	91	✓	-1	0.00	17	18
	901		536	536	0		2287	588	91	✓	-1	0.00	17	18
	910		526	526	0		1995	1197	59		53	0.51	41	42
	911	910	169	169	0						53	1.37		
	912	910	8	8	0						53	1.29		
	920		746	746	0		2187	1312	57		58	0.52	41	42
	990		567	567	0		2133	2133	27		239	0.33	70	70
	1000		359	359	0		2139	397	90	✓	0	0.00	12	13
	1001		388	388	0		2317	430	90	✓	0	0.00	12	13
	1010		0	0	0		2071	1391	23		295	0.00	46	47
	1011	1010	2	2	0						295	1.30		
	1012	1010	315	315	0						295	0.95		
	1020		325	325	0		2247	1509	71		27	1.31	46	47
	1021	1020	746	746	0						27	0.87		
	1030		536	536	0		2253	1513	35		154	1.32	46	47
	1090		492	492	0		2051	2051	24		275	0.76	70	70
	1091		734	734	0		2164	2164	34		165	0.98	70	70

Link Results: Stops and delays

Time Segment	Link	Major link	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Unweighted cost of delay (£ per hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Uniform stops (Stops per hr)	Random stops (Stops per hr)	Unweighted cost of stops (£ per hr)	Weighted cost of stops (£ per hr)
07:45-08:45	700		18.41	34.59	2.89	1.70	65.08	13.02	104.36	414.38	83.42	10.60	0.00
	701		18.41	33.74	3.10	1.70	68.14	13.63	103.26	444.81	83.87	11.26	0.00
	710		12.36	10.89	0.47	0.18	9.24	9.24	97.64	200.52	9.39	2.99	14.97
	711	710	12.36	16.45	0.04	0.01	0.78	0.78	60.86	6.78	0.52	0.10	0.52
	712	710	12.36	3.65	0.05	0.28	4.68	4.68	6.35	6.44	14.19	0.29	1.47
	720		12.04	7.81	0.04	0.02	0.96	0.96	78.41	23.22	1.23	0.35	1.74
	721	720	12.04	3.25	0.07	0.41	6.85	6.85	5.59	8.81	21.02	0.43	2.13
	730		11.73	11.79	0.89	0.18	15.15	15.15	100.43	318.01	9.03	4.67	23.33
	731	730	11.73	2.35	0.00	0.00	0.02	0.02	5.83	0.06	0.06	0.00	0.01
	790		11.94	1.83	0.00	0.52	7.44	7.44	0.00	0.00	0.00	0.00	0.00
	791		9.24	1.48	0.00	0.37	5.30	5.30	0.00	0.00	0.00	0.00	0.00
	800		24.83	34.18	3.68	8.80	177.27	35.45	116.45	1115.59	415.78	17.94	0.00
	801		24.83	11.59	2.05	1.37	48.49	0.00	65.02	620.83	69.06	8.08	1.62
	810		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	811	810	9.35	73.89	0.02	0.02	0.58	0.58	129.71	1.82	0.77	0.04	0.19
	812	810	9.35	35.75	0.50	2.66	44.80	44.80	56.98	58.00	123.00	2.58	12.91
	820		9.03	27.60	0.91	0.39	18.40	18.40	111.25	168.61	19.43	2.68	13.41
	821	820	9.03	14.58	0.01	0.02	0.46	0.46	49.84	3.06	0.92	0.06	0.28
	890		22.50	1.73	0.00	0.42	5.95	5.95	0.00	0.00	0.00	0.00	0.00
	891		22.50	1.21	0.00	0.19	2.63	2.63	0.00	0.00	0.00	0.00	0.00
	900		24.91	56.44	3.55	4.39	112.64	22.53	133.76	474.63	202.19	7.88	0.00
	901		24.91	54.79	3.76	4.40	115.84	23.17	131.87	502.75	204.06	8.22	0.00
	910		18.33	16.73	1.91	0.53	34.69	34.69	78.41	385.26	26.92	5.88	29.40
	911	910	18.33	4.08	0.02	0.17	2.72	2.72	19.58	24.44	8.65	0.47	2.36
	912	910	18.33	4.01	0.00	0.01	0.13	0.13	9.10	0.32	0.41	0.01	0.05
	920		17.86	17.23	2.91	0.66	50.72	50.72	73.83	517.56	33.45	7.86	39.30
	990		22.50	1.15	0.00	0.18	2.57	2.57	0.00	0.00	0.00	0.00	0.00
	1000		48.00	66.99	2.78	3.90	94.87	18.97	144.97	345.51	174.94	1.63	0.00
	1001		48.00	63.85	3.01	3.88	97.71	19.54	141.53	373.35	175.79	1.72	0.00
	1010		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1011	1010	10.76	9.73	0.00	0.00	0.08	0.08	47.66	0.91	0.05	0.01	0.07
	1012	1010	10.76	3.80	0.19	0.15	4.72	4.72	25.67	73.29	7.49	1.15	5.76
	1020		10.21	4.91	0.07	0.37	6.29	6.29	31.15	82.50	18.72	1.44	7.22
	1021	1020	10.21	7.73	0.75	0.85	22.75	22.75	37.54	237.14	43.00	4.00	19.98
	1030		9.56	1.84	0.00	0.27	3.90	3.90	2.66	0.24	14.01	0.20	1.02
	1090		7.12	1.15	0.00	0.16	2.24	2.24	0.00	0.00	0.00	0.00	0.00
	1091		7.10	1.26	0.00	0.26	3.65	3.65	0.00	0.00	0.00	0.00	0.00

Link Results: Queues and blocking

Time Segment	Link	Major link	Initial queue (PCU)	Mean max queue (PCU)	Max queue storage (PCU)	Utilised storage (%)	Average storage excess queue (PCU)	Average limit excess queue (PCU)	Excess queue penalty (£ per hr)	Mean end of green queue (PCU)	Mean end of red queue (PCU)	Wasted time starvation (s (per cycle))	Wasted time blocking back (s (per cycle))	Wasted time total (s (per cycle))	Estimated blocking
07:45-08:45	700		0.00	10.04	36.74	27.34	0.00	0.00	0.00	1.70	8.06	0.00	0.00	0.00	
	701		0.00	10.66	39.43	27.04	0.00	0.00	0.00	1.70	8.53	0.00	0.00	0.00	
	710		0.00	4.77	12.50	38.13	0.00	0.00	0.00	0.47	4.04	0.00	0.00	0.00	
	711	710							0.00						
	712	710							0.00						
	720		0.00	1.12	13.00	8.62	0.00	0.00	0.00	0.44	1.09	5.00	0.00	5.00	
	721	720							0.00						
	730		0.00	6.42	13.00	49.42	0.00	0.00	0.00	0.18	5.56	28.00	0.00	28.00	
	731	730							0.00						
	790		0.00	0.52	20.06	2.61	0.00	0.00	0.00			0.00	0.00	0.00	
	791		0.00	0.37	16.41	2.27	0.00	0.00	0.00			0.00	0.00	0.00	
	800		0.00	32.18	37.62	85.53	0.00	0.00	0.00	8.80	16.84	0.00	0.00	0.00	
	801		0.00	14.33	39.67	36.13	0.00	0.00	0.00	1.37	7.85	0.00	0.00	0.00	
	810		0.00	5.13	5.50	93.21	0.00	0.03	27.55	2.67	3.49	0.00	0.00	0.00	
	811	810							0.00						
	812	810							0.00						
	820		0.00	3.76	7.50	50.19	0.00	0.00	0.00	0.41	3.69	6.00	0.00	6.00	
	821	820							0.00						
	890		0.00	0.42	35.93	1.17	0.00	0.00	0.00			0.00	0.00	0.00	
	891		0.00	0.19	38.39	0.48	0.00	0.00	0.00			6.00	0.00	6.00	
	900		0.00	13.80	40.57	34.02	0.00	0.00	0.00	4.39	11.69	0.00	0.00	0.00	
	901		0.00	14.38	43.00	33.44	0.00	0.00	0.00	4.40	12.14	0.00	0.00	0.00	
	910		0.00	9.63	18.50	52.07	0.00	0.00	0.00	0.71	6.71	0.00	0.00	0.00	
	911	910							0.00						
	912	910							0.00						
	920		0.00	10.77	19.00	56.70	0.00	0.00	0.00	0.66	8.82	9.00	0.00	9.00	
	990		0.00	0.18	40.10	0.45	0.00	0.00	0.00			0.00	0.00	0.00	
	1000		0.00	10.68	40.22	26.56	0.00	0.00	0.00	3.90	9.58	0.00	0.00	0.00	
	1001		0.00	11.20	43.56	25.72	0.00	0.00	0.00	3.88	10.02	0.00	0.00	0.00	
	1010		0.00	1.69	9.00	18.74	0.00	0.00	0.00	0.15	1.59	21.00	0.00	21.00	
	1011	1010							0.00						
	1012	1010							0.00						
	1020		0.00	8.32	10.00	83.25	0.00	0.00	4.64	1.22	5.49	0.00	0.00	0.00	
	1021	1020							0.00						
	1030		0.00	1.53	11.00	13.93	0.00	0.00	0.00	0.27	0.27	19.00	0.00	19.00	
	1090		0.00	0.16	12.20	1.29	0.00	0.00	0.00			16.00	0.00	16.00	
	1091		0.00	0.26	12.83	2.00	0.00	0.00	0.00			26.00	0.00	26.00	

Link Results: Journey times

Time Segment	Link	Major link	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	JourneyTime (s)
07:45-08:45	700		95.40	7.02	13.58	53.00
	701		102.40	7.42	13.80	52.16
	710		23.62	1.39	17.01	23.26
	711	710	1.32	0.10	13.73	28.82
	712	710	35.71	1.45	24.71	16.01
	720		3.34	0.17	19.41	19.85
	721	720	57.14	2.27	25.20	15.29
	730		33.97	2.13	15.96	23.53
	731	730	0.21	0.01	26.66	14.08
	790		109.21	3.94	27.74	13.77
	791		74.62	2.71	27.58	10.72
	800		263.00	21.55	12.20	59.00
	801		212.20	10.73	19.77	36.41
	810		0.00	0.00	0.00	0.00
	811	810	0.17	0.05	3.60	83.24
	812	810	26.41	3.98	6.64	45.10
	820		13.56	1.72	7.89	36.63
	821	820	0.64	0.05	12.24	23.60
	890		174.33	5.87	29.71	24.23
	891		110.40	3.64	30.37	23.71
	900		101.20	11.43	8.85	81.35
	901		107.20	11.87	9.03	79.70
	910		85.64	5.12	16.73	35.06
	911	910	27.53	1.05	26.17	22.41
	912	910	1.30	0.05	26.26	22.33
	920		118.48	7.27	16.29	35.09
	990		113.41	3.73	30.45	23.65
	1000		71.80	11.47	6.26	114.99
	1001		77.60	12.05	6.44	111.85
	1010		0.00	0.00	0.00	0.00
	1011	1010	0.19	0.01	16.81	20.49
	1012	1010	30.11	1.27	23.65	14.57
	1020		29.48	1.36	21.61	15.12
	1021	1020	67.71	3.72	18.21	17.94
	1030		45.57	1.70	26.83	11.41
	1090		31.13	1.13	27.54	8.27
	1091		46.31	1.70	27.18	8.35

Link Results: Advanced

Time Segment	Link	Major link	Degree of saturation penalty (£ per hr)	Ped gap accepting penalty (£ per hr)	Warmed up	Mean Max Queue EoTS (PCU)	Mean End of Green Queue EoTS (PCU)	Mean End of Red Queue EoTS (PCU)	PCU Factor	Cost of traffic penalties (£ per hr)	Unweighted performance index (£ per hr)	Performance Index (£ per hr)
07:45-08:45	700		0.00	0.00	✓	10.07	1.72	8.08	1.00	0.00	75.68	13.02
	701		0.00	0.00	✓	10.68	1.72	8.55	1.00	0.00	79.40	13.63
	710		0.00	0.00	✓	4.77	0.47	4.04	1.00	0.00	12.23	24.21
	711	710	0.00	0.00					1.00	0.00	0.88	1.30
	712	710	0.00	0.00					1.00	0.00	4.97	6.15
	720		0.00	0.00	✓	1.12	0.44	1.09	1.00	0.00	1.31	2.70
	721	720	0.00	0.00					1.00	0.00	7.27	8.98
	730		0.00	0.00	✓	6.42	0.18	5.57	1.00	0.00	19.81	38.48
	731	730	0.00	0.00					1.00	0.00	0.02	0.03
	790		0.00	0.00	✓	0.52			1.00	0.00	7.44	7.44
	791		0.00	0.00	✓	0.37			1.00	0.00	5.30	5.30
	800		0.00	0.00	✓	33.20	9.82	17.86	1.00	0.00	195.21	35.45
	801		0.00	0.00	✓	14.34	1.37	7.85	1.00	0.00	56.58	1.62
	810		0.00	0.00	✓	5.25	2.79	3.61	1.00	27.55	0.00	27.55
	811	810	0.00	0.00					1.00	0.00	0.62	0.77
	812	810	0.00	0.00					1.00	0.00	47.38	57.71
	820		0.00	0.00	✓	3.77	0.41	3.69	1.00	0.00	21.08	31.81
	821	820	0.00	0.00					1.00	0.00	0.52	0.74
	890		0.00	0.00	✓	0.42			1.00	0.00	5.95	5.95
	891		0.00	0.00	✓	0.19			1.00	0.00	2.63	2.63
	900		0.00	0.00	✓	14.13	4.72	12.03	1.00	0.00	120.51	22.53
	901		0.00	0.00	✓	14.69	4.72	12.46	1.00	0.00	124.06	23.17
	910		0.00	0.00	✓	9.63	0.71	6.71	1.00	0.00	40.57	64.09
	911	910	0.00	0.00					1.00	0.00	3.19	5.08
	912	910	0.00	0.00					1.00	0.00	0.14	0.18
	920		0.00	0.00	✓	10.77	0.66	8.82	1.00	0.00	58.58	90.02
	990		0.00	0.00	✓	0.18			1.00	0.00	2.57	2.57
	1000		0.00	0.00	✓	11.01	4.23	9.91	1.00	0.00	96.50	18.97
	1001		0.00	0.00	✓	11.50	4.17	10.32	1.00	0.00	99.43	19.54
	1010		0.00	0.00	✓	1.69	0.15	1.59	1.00	0.00	0.00	0.00
	1011	1010	0.00	0.00					1.00	0.00	0.09	0.14
	1012	1010	0.00	0.00					1.00	0.00	5.87	10.48
	1020		0.00	0.00	✓	8.33	1.22	5.49	1.00	4.64	7.74	18.16
	1021	1020	0.00	0.00					1.00	0.00	26.75	42.73
	1030		0.00	0.00	✓	1.53	0.27	0.27	1.00	0.00	4.10	4.91
	1090		0.00	0.00	✓	0.16			1.00	0.00	2.24	2.24
	1091		0.00	0.00	✓	0.26			1.00	0.00	3.65	3.65

Network Results

Run Summary

Analysis set used	Run start time	Run finish time	Run duration (s)	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 unsignal PRC
1	10/11/2021 16:38:15	10/11/2021 16:38:16	1.14	07:45	70	613.92	73.08	95.84	800	5	14	800	790

Network Results: Vehicle summary

Time Segment	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Actual green (s per cycle)	Mean Delay per Veh (s)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
07:45-08:45	96	-6	15622	1438	16.84	403.98	177.75	613.92

Network Results: Flows and signals

Time Segment	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Actual green (s (per cycle))	Effective green (s (per cycle))
07:45-08:45	15622	15622	1		96	✓	-6	1438	1468

Network Results: Stops and delays

Time Segment	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Unweighted cost of delay (£ per hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Uniform stops (Stops per hr)	Random stops (Stops per hr)	Unweighted cost of stops (£ per hr)	Weighted cost of stops (£ per hr)
07:45-08:45	17.98	16.84	33.68	39.40	1037.71	403.98	52.30	6408.84	1761.36	102.57	177.75

Network Results: Queues and blocking

Time Segment	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time starvation (s (per cycle))	Wasted time blocking back (s (per cycle))	Wasted time total (s (per cycle))
07:45-08:45	93.21	32.19	217.00	0.00	217.00

Network Results: Journey times

Time Segment	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)
07:45-08:45	2292.32	151.12	15.17

Network Results: Advanced

Time Segment	Degree of saturation penalty (£ per hr)	Ped gap accepting penalty (£ per hr)	Warmed up	PCU Factor	Cost of traffic penalties (£ per hr)	Controller stream penalties (£ per hr)	Unweighted performance index (£ per hr)	Performance Index (£ per hr)
07:45-08:45	0.00	0.00	✓	1.00	32.19	0.00	1140.28	613.92

Point to Point Journey Time

Average Journey Time (s) for Local Matrix: 1

	To				
	A	B	C	D	
From	A	140.0	65.1	0.0	134.8
	B	96.7	132.0	83.0	117.7
	C	0.0	120.6	212.7	105.0
	D	123.3	150.4	204.7	205.0

Path Journey Time

Path	From Location	To Location	Normal Calculated Flow (PCU/hr)	Normal journey time (s)	Normal journey dist (m)	Bus journey dist (m)	Tram journey dist (m)	Pedestrian journey dist (m)	Calculated Total Flow (PCU/hr)	Avg journey time (s)	Avg journey dist (m)
1	A	A	2	139.96	602.09	602.09	602.09	602.09	2	139.96	602.09
2	B	A	315	94.31	521.86	521.86	521.86	521.86	315	94.31	521.86
3	B	A	734	97.79	512.56	512.56	512.56	512.56	734	97.79	512.56
5	B	A	0	116.90	521.86	521.86	521.86	521.86	0	0.00	2087.44
6	A	B	343	62.88	282.17	282.17	282.17	282.17	343	62.88	282.17
7	A	B	477	66.78	306.14	306.14	306.14	306.14	477	66.78	306.14
8	B	B	12	132.03	665.52	665.52	665.52	665.52	12	132.03	665.52
9	C	A	0	89.62	358.96	358.96	358.96	358.96	0	0.00	1435.84
10	C	B	325	126.25	506.76	506.76	506.76	506.76	325	126.25	506.76
11	C	B	534	117.12	474.19	474.19	474.19	474.19	534	117.12	474.19
13	B	C	552	82.71	400.00	400.00	400.00	400.00	552	82.71	400.00
14	A	C	0	76.39	483.00	483.00	483.00	483.00	0	0.00	1932.00
15	B	C	552	83.23	400.00	400.00	400.00	400.00	552	83.23	400.00
16	C	C	2	212.67	672.46	672.46	672.46	672.46	2	212.67	672.46
17	D	B	184	152.02	416.03	416.03	416.03	416.03	184	152.02	416.03
18	D	A	175	123.27	263.28	263.28	263.28	263.28	175	123.27	263.28
19	D	B	31	148.88	416.03	416.03	416.03	416.03	31	148.88	416.03
20	D	B	31	142.42	389.18	389.18	389.18	389.18	31	142.42	389.18
21	D	C	318	204.71	587.45	587.45	587.45	587.45	318	204.71	587.45
22	A	D	167	134.84	643.13	643.13	643.13	643.13	167	134.84	643.13
23	B	D	0	95.12	562.90	562.90	562.90	562.90	0	0.00	2251.60
24	B	D	211	117.71	562.90	562.90	562.90	562.90	211	117.71	562.90
25	C	D	181	105.00	400.00	400.00	400.00	400.00	181	105.00	400.00
26	D	D	8	204.96	747.44	747.44	747.44	747.44	8	204.96	747.44

Final Prediction Table

Link Results

				SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES	
Link	Name	Major link	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)	Mean end of red queue (PCU)
700			7	7	C	477	1954	21	0.00	78	16	53.00	34.59	104.36	10.04	8.06
701			7	7	C	512	2097	21	0.00	78	16	52.16	33.74	103.26	10.66	8.53
710		(710)	7	7	D	215	2088	37	0.00	49	85	23.26	10.89	97.64	4.77	4.04
711		710				12						28.82	16.45	60.86		
712		710				325						16.01	3.65	6.35		
720		(720)	7	7	D	31	2231	37	5.00	47	93	19.85	7.81	78.41	1.12	1.09
721		720				534						15.29	3.25	5.59		
730		(730)	7	7	D	326	2299	37	28.00	26	243	23.53	11.79	100.43	6.42	5.56
731		730				2						14.08	2.35	5.83		
790			7			1029	2010	70	0.00	51	76	13.77	1.83	0.00	0.52	
791			7			908	2124	70	0.00	43	110	10.72	1.48	0.00	0.37	
800			8	8	A	1315	2001	47	0.00	96	-6	59.00	34.18	116.45	32.18	16.84
801			8	8	A	1061	2110	47	0.00	73	23	36.41	11.59	65.02	14.33	7.85
810		(810)	8	8	B	0	2182	11	0.00	85	5	0.00	0.00	0.00	5.13	3.49
811		810				2						83.24	73.89	129.71		
812		810				318						45.10	35.75	56.98		
820		(820)	8	8	B	169	2295	11	6.00	45	100	36.63	27.60	111.25	3.76	3.69
821		820				8						23.60	14.58	49.84		
890			8			872	1911	70	0.00	46	97	24.23	1.73	0.00	0.42	
891			8			552	2042	70	6.00	27	233	23.71	1.21	0.00	0.19	
900			9	9	A	506	2158	17	0.00	91	-1	81.35	56.44	133.76	13.80	11.69
901			9	9	A	536	2287	17	0.00	91	-1	79.70	54.79	131.87	14.38	12.14
910		(910)	9	9	B	526	1995	41	0.00	59	53	35.06	16.73	78.41	9.63	6.71
911		910				169						22.41	4.08	19.58		
912		910				8						22.33	4.01	9.10		
920			9	9	B	746	2187	41	9.00	57	58	35.09	17.23	73.83	10.77	8.82
990			9			567	2133	70	0.00	27	239	23.65	1.15	0.00	0.18	
1000			10	10	A	359	2139	12	0.00	90	0	114.99	66.99	144.97	10.68	9.58
1001			10	10	A	388	2317	12	0.00	90	0	111.85	63.85	141.53	11.20	10.02
1010		(1010)	10	10	B	0	2071	46	21.00	23	295	0.00	0.00	0.00	1.69	1.59
1011		1010				2						20.49	9.73	47.66		
1012		1010				315						14.57	3.80	25.67		
1020		(1020)	10	10	B	325	2247	46	0.00	71	27	15.12	4.91	31.15	8.32	5.49
1021		1020				746						17.94	7.73	37.54		
1030			10	10	B	536	2253	46	19.00	35	154	11.41	1.84	2.66	1.53	0.27
1090			10			492	2051	70	16.00	24	275	8.27	1.15	0.00	0.16	
1091			10			734	2164	70	26.00	34	165	8.35	1.26	0.00	0.26	

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	2292.32	151.12	15.17	33.68	39.40	403.98	177.75	32.19	613.92
Bus									
Tram									
Pedestrians									
TOTAL	2292.32	151.12	15.17	33.68	39.40	403.98	177.75	32.19	613.92

- | < = 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**

A2 - 2021 Base PM

D2 - 2021 Base, PM

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Run duration (s)	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
2	10/11/2021 16:38:16	10/11/2021 16:38:16	0.42	16:30	70	492.42	59.41	89.34	900	0	0	900	790

Analysis Set Details

Name	Use Simulation	Description	Use specific Demand Set (s)	Specific Demand Set (s)	Optimise specific Demand Set (s)	Include in report	Locked
2021 Base PM			✓	D2		✓	

Demand Set Details

Scenario name	Time Period name	Description	Composite	Demand sets	Start time (HH:mm)	Locked	Run automatically
2021 Base	PM				16:30		✓

Network Options

Network timings

Network cycle time (s)	Minimum possible cycle time (s)	Absolute minimum possible cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
70	26	26		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)	Missing stage transition options
10000.00	10000.00	10000.00	2	Assume banned

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from traffic model	Exclude pedestrians from results calculation	Random delay mode	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓			Simplified (TRANSYT 12)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms ² [-2])	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms ² [-2])	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Offsets And Green Splits	✓

Advanced

Optimisation type	OUTProfile accuracy (%)	SASart temperature	SACooling factor	Random seed	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Simulated Annealing	10, 10, 1, 1, 0.1, 0.1, 0.01, 0.01	300.00	100.00	1	✓	✓	7, 8, 9, 10			Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Traffic Nodes

Traffic Nodes

Traffic node	Name	Description
(ALL)		

Links

Links

Link	Name	Description	Traffic node	Length (m)	Has Saturation Flow	Use RR67	Saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Is minor shared	Major link	Allow Nearside Turn On Red
700			7	200.00	✓		1954	✓		Normal			
701			7	200.00	✓		2097	✓		Normal			
710			7	109.89	✓		2088	✓		Normal			
711				109.89						Normal	✓	710	
712				109.89						Normal	✓	710	
720			7	107.01	✓		2231	✓		Normal			
721				107.01						Normal	✓	720	
730			7	104.31	✓		2299	✓		Normal			
731				104.31						Normal	✓	730	
790			7	106.14	✓		2010			Normal			
791			7	82.17	✓		2124			Normal			
800			8	200.00	✓		2001	✓		Normal			
801			8	200.00	✓		2110	✓		Normal			
810			8	83.00	✓		2182	✓		Normal			
811				83.14						Normal	✓	810	
812				83.14						Normal	✓	810	
820			8	80.23	✓		2295	✓		Normal			
821				80.23						Normal	✓	820	
890			8	200.00	✓		1911			Normal			
891			8	200.00	✓		2042			Normal			
900			9	200.00	✓		2158	✓		Normal			
901			9	200.00	✓		2287	✓		Normal			
910			9	162.90	✓		1995	✓		Normal			
911				162.90						Normal	✓	910	
912				162.90						Normal	✓	910	
920			9	158.76	✓		2187	✓		Normal			
990			9	200.00	✓		2133			Normal			
1000			10	200.00	✓		2139	✓		Normal			
1001			10	200.00	✓		2317	✓		Normal			
1010			10	95.68	✓		2071	✓		Normal			
1011				95.68						Normal	✓	1010	
1012				95.68						Normal	✓	1010	
1020			10	90.73	✓		2247	✓		Normal			
1021				90.73						Normal	✓	1020	
1030			10	85.01	✓		2253	✓		Normal			
1090			10	63.28	✓		2051			Normal			
1091			10	63.07	✓		2164			Normal			

Modelling

Link	Traffic model	Stop weighting (%)	Delay weighting (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Queue limit (PCU)	Excess queue penalty (£)	Has degree of saturation limit
700	NetworkDefault	0	20	100		0.00				
701	NetworkDefault	0	20	100		0.00				
710	NetworkDefault	500	100	100		12.50	✓	10.00	1000.00	
711	NetworkDefault	500	100	100					0.00	
712	NetworkDefault	500	100	100					0.00	
720	NetworkDefault	500	100	100		13.00	✓	10.00	1000.00	
721	NetworkDefault	500	100	100					0.00	
730	NetworkDefault	500	100	100		13.00	✓	11.00	1000.00	
731	NetworkDefault	500	100	100					0.00	
790	NetworkDefault	100	100	100		0.00				
791	NetworkDefault	100	100	100		0.00				
800	NetworkDefault	0	20	100		0.00				
801	NetworkDefault	20	0	100		0.00				
810	NetworkDefault	500	100	100		5.50	✓	4.00	1000.00	
811	NetworkDefault	500	100	100					0.00	
812	NetworkDefault	500	100	100					0.00	
820	NetworkDefault	500	100	100		7.50	✓	5.00	1000.00	
821	NetworkDefault	500	100	100					0.00	
890	NetworkDefault	100	100	100		0.00				
891	NetworkDefault	100	100	100		0.00				
900	NetworkDefault	0	20	100		0.00				
901	NetworkDefault	0	20	100		0.00				
910	NetworkDefault	500	100	100		18.50				
911	NetworkDefault	500	100	100						
912	NetworkDefault	500	100	100						
920	NetworkDefault	500	100	100		19.00				
990	NetworkDefault	100	100	100		0.00				
1000	NetworkDefault	0	20	100		0.00				
1001	NetworkDefault	0	20	100		0.00				
1010	NetworkDefault	500	100	100		9.00	✓	7.00	1000.00	
1011	NetworkDefault	500	100	100					0.00	
1012	NetworkDefault	500	100	100					0.00	
1020	NetworkDefault	500	100	100		10.00	✓	8.00	1000.00	
1021	NetworkDefault	500	100	100					0.00	
1030	NetworkDefault	500	100	100		11.00	✓	8.00	1000.00	
1090	NetworkDefault	100	100	100		0.00				
1091	NetworkDefault	100	100	100		0.00				

Modelling - Normal traffic - Advanced

Link	Dispersion type for Normal Traffic	Initial queue (PCU)	Auto cycle time	Cycle time
700	NetworkDefault	0.00	✓	70
701	NetworkDefault	0.00	✓	70
710	NetworkDefault	0.00	✓	70
711	NetworkDefault			
712	NetworkDefault			
720	NetworkDefault	0.00	✓	70
721	NetworkDefault			
730	NetworkDefault	0.00	✓	70
731	NetworkDefault			
790	NetworkDefault	0.00	✓	70
791	NetworkDefault	0.00	✓	70
800	NetworkDefault	0.00	✓	70
801	NetworkDefault	0.00	✓	70
810	NetworkDefault	0.00	✓	70
811	NetworkDefault			
812	NetworkDefault			
820	NetworkDefault	0.00	✓	70
821	NetworkDefault			
890	NetworkDefault	0.00	✓	70
891	NetworkDefault	0.00	✓	70
900	NetworkDefault	0.00	✓	70
901	NetworkDefault	0.00	✓	70
910	NetworkDefault	0.00	✓	70
911	NetworkDefault			
912	NetworkDefault			
920	NetworkDefault	0.00	✓	70
990	NetworkDefault	0.00	✓	70
1000	NetworkDefault	0.00	✓	70
1001	NetworkDefault	0.00	✓	70
1010	NetworkDefault	0.00	✓	70
1011	NetworkDefault			
1012	NetworkDefault			
1020	NetworkDefault	0.00	✓	70
1021	NetworkDefault			
1030	NetworkDefault	0.00	✓	70
1090	NetworkDefault	0.00	✓	70
1091	NetworkDefault	0.00	✓	70

Flows

Link	Total flow (PCU/hr)	PCU Factor
700	563	1.00
701	604	1.00
710	221	1.00
711	12	1.00
712	369	1.00
720	70	1.00
721	698	1.00
730	205	1.00
731	2	1.00
790	1164	1.00
791	1218	1.00
800	1010	1.00
801	821	1.00
810	0	1.00
811	2	1.00
812	196	1.00
820	155	1.00
821	9	1.00
890	597	1.00
891	399	1.00
900	661	1.00
901	700	1.00
910	455	1.00
911	155	1.00
912	9	1.00
920	578	1.00
990	668	1.00
1000	319	1.00
1001	346	1.00
1010	0	1.00
1011	0	1.00
1012	243	1.00
1020	369	1.00
1021	578	1.00
1030	700	1.00
1090	412	1.00
1091	566	1.00

Flows - Advanced

Link	Detectors
(ALL)	

Signals

Link	Controller stream	Phase	Second phase enabled
700	7	C	
701	7	C	
710	7	D	
711			
712			
720	7	D	
721			
730	7	D	
731			
800	8	A	
801	8	A	
810	8	B	
811			
812			
820	8	B	
821			
900	9	A	
901	9	A	
910	9	B	
911			
912			
920	9	B	
1000	10	A	
1001	10	A	
1010	10	B	
1011			
1012			
1020	10	B	
1021			
1030	10	B	

Entry Sources

Link	Cruise time (seconds)	Cruise speed (kph)
700	18.41	39.10
701	18.41	39.10
800	24.83	29.00
801	24.83	29.00
900	24.91	28.90
901	24.91	28.90
1000	48.00	15.00
1001	48.00	15.00

Sources

Link	Source	Source type	Source link	Destination link	Cruise time (seconds)	Cruise speed (kph)	Total flow (PCU/hr)
710	1	Link	1000	710	12.36	32.00	150
711	1	Link	1021	711	12.36	32.00	12
712	1	Link	1020	712	12.36	32.00	369
720	1	Link	1001	720	12.04	32.00	70
721	1	Link	1030	721	12.04	32.00	698
730	1	Link	1001	730	11.73	32.00	205
731	1	Link	1030	731	11.73	32.00	2
790	1	Link	710	790	11.94	32.00	221
791	1	Link	720	791	9.24	32.00	70
810	1	Link	701	810	9.34	32.00	0
811	1	Link	731	811	9.35	32.00	2
812	1	Link	730	812	9.35	32.00	196
820	1	Link	701	820	9.03	32.00	155
821	1	Link	730	821	9.03	32.00	9
890	1	Link	810	890	22.50	32.00	0
891	1	Link	800	891	22.50	32.00	399
910	1	Link	800	910	18.33	32.00	212
911	1	Link	820	911	18.33	32.00	155
912	1	Link	821	912	18.33	32.00	9
920	1	Link	801	920	17.86	32.00	578
990	1	Link	910	990	22.50	32.00	212
1010	1	Link	900	1010	10.76	32.00	0
1011	1	Link	911	1011	10.76	32.00	0
1012	1	Link	910	1012	10.76	32.00	243
1020	1	Link	900	1020	10.21	32.00	369
1021	1	Link	920	1021	10.21	32.00	578
1030	1	Link	901	1030	9.56	32.00	700
1090	1	Link	1000	1090	7.12	32.00	169
1091	1	Link	1021	1091	7.10	32.00	566
710	2	Link	1001	710	12.36	32.00	70
790	2	Link	711	790	11.94	32.00	12
791	2	Link	721	791	9.24	32.00	698
890	2	Link	800	890	22.50	32.00	399
910	2	Link	801	910	18.33	32.00	243
990	2	Link	900	990	22.50	32.00	292
1090	2	Link	1010	1090	7.12	32.00	0
790	3	Link	700	790	11.94	32.00	563
791	3	Link	701	791	9.24	32.00	449
890	3	Link	812	890	22.50	32.00	196
990	3	Link	911	990	22.50	32.00	155
1090	3	Link	1011	1090	7.12	32.00	0
790	4	Link	712	790	11.94	32.00	369
890	4	Link	811	890	22.50	32.00	2
990	4	Link	912	990	22.50	32.00	9
1090	4	Link	1012	1090	7.12	32.00	243

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	Limit paths by flow	Low path flow threshold
1	(untitled)	✓	✓	Lane Balancing			✓			✓	1.25				

Normal Input Flows (PCU/hr)

	To				
	A	B	C	D	
From	A	0	1012	0	155
	B	809	12	798	212
	C	0	1067	2	292
	D	169	291	196	9

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	A	(untitled)	701, 700	1090, 1091	#0000FF
	B	(untitled)	801, 800	791, 790	#FF0000
	C	(untitled)	900, 901	891, 890	#00FF00
	D	(untitled)	1000, 1001	990	#FFFF00

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	1		A	A	701, 820, 911, 1011, 1090	Normal	0
	2		B	A	801, 910, 1012, 1090	Percentage	243
	3		B	A	801, 920, 1021, 1091	Normal	566
	5		B	A	800, 910, 1012, 1090	Normal	0
	6		A	B	701, 791	Normal	449
	7		A	B	700, 790	Normal	563
	8		B	B	801, 920, 1021, 711, 790	Normal	12
	9		C	A	900, 1010, 1090	Normal	0
	10		C	B	900, 1020, 712, 790	Normal	369
	11		C	B	901, 1030, 721, 791	Normal	698
	13		B	C	800, 891	Normal	399
	14		A	C	701, 810, 890	Normal	0
	15		B	C	800, 890	Normal	399
	16		C	C	901, 1030, 731, 811, 890	Normal	2
	17		D	B	1000, 710, 790	Normal	150
	18		D	A	1000, 1090	Normal	169
	19		D	B	1001, 710, 790	Normal	70
	20		D	B	1001, 720, 791	Normal	70
	21		D	C	1001, 730, 812, 890	Normal	196
	22		A	D	701, 820, 911, 990	Normal	155
	23		B	D	801, 910, 990	Disabled	0
	24		B	D	800, 910, 990	Normal	212
	25		C	D	900, 990	Normal	292
	26		D	D	1001, 730, 821, 912, 990	Normal	9

Link Results

Link Results: Vehicle summary

Time Segment	Link	Major link	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)
16:30-17:30	700		88	3	563	1954	22	43.19	13.45	36.62	19.18	0.00	19.18
	701		88	3	604	2097	22	41.81	14.20	36.02	19.92	0.00	19.92
	710		54	65	221	2088	36	13.57	5.40	43.19	11.81	16.05	27.85
	711	710			12			16.63			0.79	0.57	1.36
	712	710			369			5.34			7.77	2.93	10.69
	720		65	38	70	2231	36	12.22	2.96	22.76	3.39	4.83	8.22
	721	720			698			5.96			16.40	5.76	22.16
	730		17	428	205	2299	36	11.42	4.02	30.89	9.24	14.47	23.71
	731	730			2			3.01			0.02	0.01	0.03
	790		58	55	1164	2010	70	2.13	0.69	3.43	9.76	0.00	9.76
	791		57	57	1217	2124	70	1.98	3.04	18.50	9.53	0.51	10.04
	800		74	22	1010	2001	47	11.92	13.73	36.49	9.49	0.00	9.49
	801		57	59	821	2110	47	8.53	8.64	21.77	0.00	0.99	0.99
	810		53	70	0	2182	11	0.00	0.83	15.17	0.00	0.00	0.00
	811	810			2			51.46			0.41	0.15	0.56
	812	810			196			13.63			10.55	2.84	13.38
	820		42	116	155	2295	11	25.55	3.43	45.75	15.62	12.19	27.81
	821	820			9			11.77			0.42	0.26	0.68
	890		31	188	597	1911	70	1.37	0.23	0.63	3.23	0.00	3.23
	891		20	361	399	2042	70	1.10	0.12	0.32	1.72	0.00	1.72
	900		89	1	661	2158	23	42.59	15.94	39.28	22.21	0.00	22.21
	901		89	1	700	2287	23	41.40	16.65	38.72	22.86	0.00	22.86
	910		60	49	455	1995	35	19.27	9.14	49.39	34.56	23.35	57.91
	911	910			155			7.31			4.47	7.74	12.21
	912	910			9			6.27			0.22	0.33	0.55
	920		51	75	578	2187	35	16.55	7.15	37.62	37.74	26.09	63.83
	990		31	187	668	2133	70	1.23	0.23	0.57	3.24	0.00	3.24
	1000		80	12	319	2139	12	49.19	7.79	19.37	12.38	0.00	12.38
	1001		80	12	346	2317	12	47.68	8.30	19.06	13.02	0.00	13.02
	1010		17	416	0	2071	46	0.00	1.92	21.37	0.00	0.00	0.00
	1011	1010			0			0.00			0.00	0.00	0.00
	1012	1010			243			5.23			5.01	6.60	11.61
	1020		63	43	369	2247	46	3.65	7.40	74.00	5.30	4.96	10.26
	1021	1020			578			8.37			19.08	20.18	39.27
	1030		46	94	700	2253	46	2.22	4.85	44.11	6.14	1.84	7.98
	1090		20	348	412	2051	70	1.10	0.13	1.03	1.78	0.00	1.78
	1091		26	244	566	2164	70	1.13	0.18	1.38	2.52	0.00	2.52

Link Results: Flows and signals

Time Segment	Link	Major link	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Calculated sat flow (PCU/hr)	Calculated capacity (PCU/hr)	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Mean modulus of error	Actual green (s (per cycle))	Effective green (s (per cycle))
16:30-17:30	700		563	563	0		1954	642	88		3	0.00	22	23
	701		604	604	0		2097	689	88		3	0.00	22	23
	710		221	221	0		2088	1104	54		65	1.39	36	37
	711	710	12	12	0						65	0.95		
	712	710	369	369	0						65	1.16		
	720		70	70	0		2231	1179	65		38	1.40	36	37
	721	720	698	698	0						38	1.08		
	730		205	205	0		2299	1215	17		428	1.41	36	37
	731	730	2	2	0						428	1.08		
	790		1164	1164	0		2010	2010	58		55	0.34	70	70
	791		1217	1217	0	✓	2124	2124	57		57	0.40	70	70
	800		1010	1010	0		2001	1372	74		22	0.00	47	48
	801		821	821	0		2110	1447	57		59	0.00	47	48
	810		0	0	0		2182	374	53		70	0.00	11	12
	811	810	2	2	0						70	1.02		
	812	810	196	196	0						70	1.54		
	820		155	155	0		2295	393	42		116	1.23	11	12
	821	820	9	9	0						116	1.54		
	890		597	597	0		1911	1911	31		188	0.28	70	70
	891		399	399	0		2042	2042	20		361	0.50	70	70
	900		661	661	0		2158	740	89		1	0.00	23	24
	901		700	700	0		2287	784	89		1	0.00	23	24
	910		455	455	0		1995	1026	60		49	0.51	35	36
	911	910	155	155	0						49	1.38		
	912	910	9	9	0						49	1.33		
	920		578	578	0		2187	1125	51		75	0.51	35	36
	990		668	668	0		2133	2133	31		187	0.31	70	70
	1000		319	319	0		2139	397	80		12	0.00	12	13
	1001		346	346	0		2317	430	80		12	0.00	12	13
	1010		0	0	0		2071	1391	17		416	0.00	46	47
	1011	1010	0	0	0						416	0.00		
	1012	1010	243	243	0						416	0.96		
	1020		369	369	0		2247	1509	63		43	1.18	46	47
	1021	1020	578	578	0						43	0.94		
	1030		700	700	0		2253	1513	46		94	1.19	46	47
	1090		412	412	0		2051	2051	20		348	0.88	70	70
	1091		566	566	0		2164	2164	26		244	1.11	70	70

Link Results: Stops and delays

Time Segment	Link	Major link	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Unweighted cost of delay (£ per hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Uniform stops (Stops per hr)	Random stops (Stops per hr)	Unweighted cost of stops (£ per hr)	Weighted cost of stops (£ per hr)
16:30-17:30	700		18.41	43.19	3.47	3.29	95.92	19.18	117.85	506.45	157.03	14.13	0.00
	701		18.41	41.81	3.72	3.30	99.61	19.92	116.12	543.21	158.18	14.94	0.00
	710		12.36	13.57	0.61	0.22	11.81	11.81	101.99	213.82	11.12	3.21	16.05
	711	710	12.36	16.63	0.04	0.01	0.79	0.79	66.35	7.36	0.61	0.11	0.57
	712	710	12.36	5.34	0.18	0.37	7.77	7.77	11.12	22.42	18.60	0.59	2.93
	720		12.04	12.22	0.15	0.09	3.39	3.39	96.09	63.36	4.32	0.97	4.83
	721	720	12.04	5.96	0.31	0.85	16.40	16.40	11.57	37.93	42.82	1.15	5.76
	730		11.73	11.42	0.55	0.10	9.24	9.24	98.91	197.69	5.20	2.89	14.47
	731	730	11.73	3.01	0.00	0.00	0.02	0.02	6.71	0.08	0.05	0.00	0.01
	790		11.94	2.13	0.00	0.69	9.76	9.76	0.00	0.00	0.00	0.00	0.00
	791		9.24	1.98	0.00	0.67	9.53	9.53	2.92	1.32	34.24	0.51	0.51
	800		24.83	11.92	1.96	1.38	47.47	9.49	65.66	593.25	69.94	7.77	0.00
	801		24.83	8.53	1.29	0.65	27.62	0.00	51.55	389.89	33.32	4.96	0.99
	810		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	811	810	9.35	51.46	0.02	0.01	0.41	0.41	105.33	1.83	0.28	0.03	0.15
	812	810	9.35	13.63	0.19	0.55	10.55	10.55	20.29	12.31	27.47	0.57	2.84
	820		9.03	25.55	0.76	0.34	15.62	15.62	110.29	154.08	16.84	2.44	12.19
	821	820	9.03	11.77	0.01	0.02	0.42	0.42	40.19	2.64	0.98	0.05	0.26
	890		22.50	1.37	0.00	0.23	3.23	3.23	0.00	0.00	0.00	0.00	0.00
	891		22.50	1.10	0.00	0.12	1.72	1.72	0.00	0.00	0.00	0.00	0.00
	900		24.91	42.59	4.00	3.82	111.06	22.21	119.06	604.42	182.54	9.16	0.00
	901		24.91	41.40	4.24	3.81	114.32	22.86	117.55	639.75	183.07	9.57	0.00
	910		18.33	19.27	1.88	0.56	34.56	34.56	72.00	299.22	28.15	4.67	23.35
	911	910	18.33	7.31	0.13	0.19	4.47	4.47	70.00	98.89	9.60	1.55	7.74
	912	910	18.33	6.27	0.00	0.01	0.22	0.22	50.65	4.00	0.56	0.07	0.33
	920		17.86	16.55	2.13	0.53	37.74	37.74	63.24	338.85	26.84	5.22	26.09
	990		22.50	1.23	0.00	0.23	3.24	3.24	0.00	0.00	0.00	0.00	0.00
	1000		48.00	49.19	2.42	1.94	61.90	12.38	122.51	298.37	92.45	1.23	0.00
	1001		48.00	47.68	2.62	1.96	65.08	13.02	120.69	323.74	93.85	1.31	0.00
	1010		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1011	1010	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1012	1010	10.76	5.23	0.25	0.11	5.01	5.01	38.15	87.19	5.41	1.32	6.60
	1020		10.21	3.65	0.05	0.33	5.30	5.30	18.84	52.87	16.65	0.99	4.96
	1021	1020	10.21	8.37	0.83	0.51	19.08	19.08	48.93	256.85	26.10	4.04	20.18
	1030		9.56	2.22	0.00	0.43	6.14	6.14	3.69	3.87	21.95	0.37	1.84
	1090		7.12	1.10	0.00	0.13	1.78	1.78	0.00	0.00	0.00	0.00	0.00
	1091		7.10	1.13	0.00	0.18	2.52	2.52	0.00	0.00	0.00	0.00	0.00

Link Results: Queues and blocking

Time Segment	Link	Major link	Initial queue (PCU)	Mean max queue (PCU)	Max queue storage (PCU)	Utilised storage (%)	Average storage excess queue (PCU)	Average limit excess queue (PCU)	Excess queue penalty (£ per hr)	Mean end of green queue (PCU)	Mean end of red queue (PCU)	Wasted time starvation (s (per cycle))	Wasted time blocking back (s (per cycle))	Wasted time total (s (per cycle))	Estimated blocking
16:30-17:30	700		0.00	13.45	36.74	36.62	0.00	0.00	0.00	3.29	10.64	0.00	0.00	0.00	
	701		0.00	14.20	39.43	36.02	0.00	0.00	0.00	3.30	11.18	0.00	0.00	0.00	
	710		0.00	5.40	12.50	43.19	0.00	0.00	0.00	0.60	4.89	0.00	0.00	0.00	
	711	710							0.00						
	712	710							0.00						
	720		0.00	2.96	13.00	22.76	0.00	0.00	0.00	0.93	2.87	3.00	0.00	3.00	
	721	720							0.00						
	730		0.00	4.02	13.00	30.89	0.00	0.00	0.00	0.10	3.72	30.00	0.00	30.00	
	731	730							0.00						
	790		0.00	0.69	20.06	3.43	0.00	0.00	0.00			0.00	0.00	0.00	
	791		0.00	3.04	16.41	18.50	0.00	0.00	0.00			0.00	0.00	0.00	
	800		0.00	13.73	37.62	36.49	0.00	0.00	0.00	1.38	7.56	0.00	0.00	0.00	
	801		0.00	8.64	39.67	21.77	0.00	0.00	0.00	0.65	5.67	0.00	0.00	0.00	
	810		0.00	0.83	5.50	15.17	0.00	0.00	0.00	0.56	0.83	0.00	0.00	0.00	
	811	810							0.00						
	812	810							0.00						
	820		0.00	3.43	7.50	45.75	0.00	0.00	0.00	0.36	3.35	5.00	0.00	5.00	
	821	820							0.00						
	890		0.00	0.23	35.93	0.63	0.00	0.00	0.00			0.00	0.00	0.00	
	891		0.00	0.12	38.39	0.32	0.00	0.00	0.00			9.00	0.00	9.00	
	900		0.00	15.94	40.57	39.28	0.00	0.00	0.00	3.82	12.27	0.00	0.00	0.00	
	901		0.00	16.65	43.00	38.72	0.00	0.00	0.00	3.81	12.76	0.00	0.00	0.00	
	910		0.00	9.14	18.50	49.39	0.00	0.00	0.00	0.76	6.12	0.00	0.00	0.00	
	911	910							0.00						
	912	910							0.00						
	920		0.00	7.15	19.00	37.62	0.00	0.00	0.00	0.53	6.68	9.00	0.00	9.00	
	990		0.00	0.23	40.10	0.57	0.00	0.00	0.00			0.00	0.00	0.00	
	1000		0.00	7.79	40.22	19.37	0.00	0.00	0.00	1.94	6.99	0.00	0.00	0.00	
	1001		0.00	8.30	43.56	19.06	0.00	0.00	0.00	1.96	7.44	0.00	0.00	0.00	
	1010		0.00	1.92	9.00	21.37	0.00	0.00	0.00	0.11	1.75	27.00	0.00	27.00	
	1011	1010							0.00						
	1012	1010							0.00						
	1020		0.00	7.40	10.00	74.00	0.00	0.00	0.00	0.84	5.39	0.00	0.00	0.00	
	1021	1020							0.00						
	1030		0.00	4.85	11.00	44.11	0.00	0.00	0.00	0.43	0.43	14.00	0.00	14.00	
	1090		0.00	0.13	12.20	1.03	0.00	0.00	0.00			22.00	0.00	22.00	
	1091		0.00	0.18	12.83	1.38	0.00	0.00	0.00			31.00	0.00	31.00	

Link Results: Journey times

Time Segment	Link	Major link	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	JourneyTime (s)
16:30-17:30	700		112.60	9.63	11.69	61.61
	701		120.80	10.10	11.96	60.23
	710		24.24	1.59	15.25	25.93
	711	710	1.32	0.10	13.64	28.99
	712	710	40.54	1.81	22.35	17.70
	720		7.54	0.47	15.88	24.26
	721	720	74.69	3.49	21.41	18.00
	730		21.40	1.32	16.22	23.16
	731	730	0.21	0.01	25.47	14.74
	790		123.59	4.55	27.16	14.07
	791		100.04	3.80	26.34	11.23
	800		202.00	10.31	19.60	36.74
	801		164.20	7.61	21.58	33.36
	810		0.00	0.00	0.00	0.00
	811	810	0.17	0.03	4.92	60.81
	812	810	16.31	1.25	13.02	22.98
	820		12.43	1.49	8.35	34.57
	821	820	0.72	0.05	13.89	20.80
	890		119.42	3.96	30.16	23.87
	891		79.80	2.62	30.51	23.60
	900		132.20	12.40	10.67	67.51
	901		140.00	12.90	10.86	66.32
	910		74.07	4.75	15.60	37.60
	911	910	25.25	1.10	22.88	25.64
	912	910	1.47	0.06	23.85	24.59
	920		91.81	5.53	16.61	34.41
	990		133.62	4.40	30.34	23.73
	1000		63.80	8.61	7.41	97.19
	1001		69.20	9.20	7.52	95.68
	1010		0.00	0.00	0.00	0.00
	1011	1010	0.00	0.00	0.00	0.00
	1012	1010	23.22	1.08	21.54	15.99
	1020		33.47	1.42	23.58	13.85
	1021	1020	52.47	2.98	17.59	18.57
	1030		59.51	2.29	25.96	11.79
	1090		26.05	0.94	27.72	8.22
	1091		35.72	1.29	27.62	8.22

Link Results: Advanced

Time Segment	Link	Major link	Degree of saturation penalty (£ per hr)	Ped gap accepting penalty (£ per hr)	Warmed up	Mean Max Queue EoTS (PCU)	Mean End of Green Queue EoTS (PCU)	Mean End of Red Queue EoTS (PCU)	PCU Factor	Cost of traffic penalties (£ per hr)	Unweighted performance index (£ per hr)	Performance Index (£ per hr)
16:30-17:30	700		0.00	0.00	✓	13.58	3.41	10.76	1.00	0.00	110.05	19.18
	701		0.00	0.00	✓	14.32	3.42	11.30	1.00	0.00	114.55	19.92
	710		0.00	0.00	✓	5.40	0.60	4.89	1.00	0.00	15.02	27.85
	711	710	0.00	0.00					1.00	0.00	0.90	1.36
	712	710	0.00	0.00					1.00	0.00	8.35	10.69
	720		0.00	0.00	✓	2.96	0.93	2.87	1.00	0.00	4.36	8.22
	721	720	0.00	0.00					1.00	0.00	17.55	22.16
	730		0.00	0.00	✓	4.02	0.10	3.72	1.00	0.00	12.13	23.71
	731	730	0.00	0.00					1.00	0.00	0.03	0.03
	790		0.00	0.00	✓	0.69			1.00	0.00	9.76	9.76
	791		0.00	0.00	✓	3.04			1.00	0.00	10.04	10.04
	800		0.00	0.00	✓	13.73	1.39	7.56	1.00	0.00	55.24	9.49
	801		0.00	0.00	✓	8.64	0.66	5.67	1.00	0.00	32.58	0.99
	810		0.00	0.00	✓	0.84	0.56	0.84	1.00	0.00	0.00	0.00
	811	810	0.00	0.00					1.00	0.00	0.44	0.56
	812	810	0.00	0.00					1.00	0.00	11.11	13.38
	820		0.00	0.00	✓	3.43	0.36	3.35	1.00	0.00	18.06	27.81
	821	820	0.00	0.00					1.00	0.00	0.47	0.68
	890		0.00	0.00	✓	0.23			1.00	0.00	3.23	3.23
	891		0.00	0.00	✓	0.12			1.00	0.00	1.72	1.72
	900		0.00	0.00	✓	16.11	3.99	12.43	1.00	0.00	120.21	22.21
	901		0.00	0.00	✓	16.81	3.97	12.92	1.00	0.00	123.90	22.86
	910		0.00	0.00	✓	9.14	0.76	6.12	1.00	0.00	39.23	57.91
	911	910	0.00	0.00					1.00	0.00	6.02	12.21
	912	910	0.00	0.00					1.00	0.00	0.29	0.55
	920		0.00	0.00	✓	7.15	0.53	6.68	1.00	0.00	42.96	63.83
	990		0.00	0.00	✓	0.23			1.00	0.00	3.24	3.24
	1000		0.00	0.00	✓	7.84	1.99	7.04	1.00	0.00	63.12	12.38
	1001		0.00	0.00	✓	8.35	2.00	7.48	1.00	0.00	66.39	13.02
	1010		0.00	0.00	✓	1.92	0.11	1.75	1.00	0.00	0.00	0.00
	1011	1010	0.00	0.00					1.00	0.00	0.00	0.00
	1012	1010	0.00	0.00					1.00	0.00	6.33	11.61
	1020		0.00	0.00	✓	7.40	0.84	5.39	1.00	0.00	6.30	10.26
	1021	1020	0.00	0.00					1.00	0.00	23.12	39.27
	1030		0.00	0.00	✓	4.85	0.43	0.43	1.00	0.00	6.51	7.98
	1090		0.00	0.00	✓	0.13			1.00	0.00	1.78	1.78
	1091		0.00	0.00	✓	0.18			1.00	0.00	2.52	2.52

Network Results

Run Summary

Analysis set used	Run start time	Run finish time	Run duration (s)	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 unsignal PRC
2	10/11/2021 16:38:16	10/11/2021 16:38:16	0.42	16:30	70	492.42	59.41	89.34	900	0	0	900	790

Network Results: Vehicle summary

Time Segment	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Actual green (s per cycle)	Mean Delay per Veh (s)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
16:30-17:30	89	1	15074	1421	14.19	339.79	152.64	492.42

Network Results: Flows and signals

Time Segment	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Actual green (s (per cycle))	Effective green (s (per cycle))
16:30-17:30	15074	15074	0	✓	89		1	1421	1451

Network Results: Stops and delays

Time Segment	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Unweighted cost of delay (£ per hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Uniform stops (Stops per hr)	Random stops (Stops per hr)	Unweighted cost of stops (£ per hr)	Weighted cost of stops (£ per hr)
16:30-17:30	17.61	14.19	31.81	27.61	843.69	339.79	46.60	5755.64	1268.18	93.80	152.64

Network Results: Queues and blocking

Time Segment	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time starvation (s (per cycle))	Wasted time blocking back (s (per cycle))	Wasted time total (s (per cycle))
16:30-17:30	74.00	0.00	242.00	0.00	242.00

Network Results: Journey times

Time Segment	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)
16:30-17:30	2183.85	133.14	16.40

Network Results: Advanced

Time Segment	Degree of saturation penalty (£ per hr)	Ped gap accepting penalty (£ per hr)	Warmed up	PCU Factor	Cost of traffic penalties (£ per hr)	Controller stream penalties (£ per hr)	Unweighted performance index (£ per hr)	Performance Index (£ per hr)
16:30-17:30	0.00	0.00	✓	1.00	0.00	0.00	937.49	492.42

Point to Point Journey Time

Average Journey Time (s) for Local Matrix: 1

	To				
From		A	B	C	D
	A	0.0	73.8	0.0	144.2
	B	94.7	129.4	60.5	98.1
	C	0.0	109.3	177.5	91.2
	D	105.4	135.4	165.7	188.0

Path Journey Time

Path	From Location	To Location	Normal Calculated Flow (PCU/hr)	Normal journey time (s)	Normal journey dist (m)	Bus journeydist (m)	Tram journey dist (m)	Pedestrian journey dist (m)	Calculated Total Flow (PCU/hr)	Avg journey time (s)	Avg journey dist (m)
1	A	A	0	128.65	602.09	602.09	602.09	602.09	0	0.00	2408.36
2	B	A	243	95.16	521.86	521.86	521.86	521.86	243	95.16	521.86
3	B	A	566	94.56	512.56	512.56	512.56	512.56	566	94.56	512.56
5	B	A	0	98.55	521.86	521.86	521.86	521.86	0	0.00	2087.44
6	A	B	449	71.45	282.17	282.17	282.17	282.17	449	71.45	282.17
7	A	B	563	75.67	306.14	306.14	306.14	306.14	563	75.67	306.14
8	B	B	12	129.40	665.52	665.52	665.52	665.52	12	129.40	665.52
9	C	A	0	75.72	358.96	358.96	358.96	358.96	0	0.00	1435.84
10	C	B	369	113.13	506.76	506.76	506.76	506.76	369	113.13	506.76
11	C	B	698	107.33	474.19	474.19	474.19	474.19	698	107.33	474.19
13	B	C	399	60.34	400.00	400.00	400.00	400.00	399	60.34	400.00
14	A	C	0	84.09	483.00	483.00	483.00	483.00	0	0.00	1932.00
15	B	C	399	60.61	400.00	400.00	400.00	400.00	399	60.61	400.00
16	C	C	2	177.53	672.46	672.46	672.46	672.46	2	177.53	672.46
17	D	B	150	137.19	416.03	416.03	416.03	416.03	150	137.19	416.03
18	D	A	169	105.41	263.28	263.28	263.28	263.28	169	105.41	263.28
19	D	B	70	135.69	416.03	416.03	416.03	416.03	70	135.69	416.03
20	D	B	70	131.17	389.18	389.18	389.18	389.18	70	131.17	389.18
21	D	C	196	165.69	587.45	587.45	587.45	587.45	196	165.69	587.45
22	A	D	155	144.16	643.13	643.13	643.13	643.13	155	144.16	643.13
23	B	D	0	94.68	562.90	562.90	562.90	562.90	0	0.00	2251.60
24	B	D	212	98.07	562.90	562.90	562.90	562.90	212	98.07	562.90
25	C	D	292	91.24	400.00	400.00	400.00	400.00	292	91.24	400.00
26	D	D	9	187.96	747.44	747.44	747.44	747.44	9	187.96	747.44

Final Prediction Table

Link Results

				SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES	
Link	Name	Major link	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)	Mean end of red queue (PCU)
700			7	7	C	563	1954	22	0.00	88	3	61.61	43.19	117.85	13.45	10.64
701			7	7	C	604	2097	22	0.00	88	3	60.23	41.81	116.12	14.20	11.18
710		(710)	7	7	D	221	2088	36	0.00	54	65	25.93	13.57	101.99	5.40	4.89
711		710				12						28.99	16.63	66.35		
712		710				369						17.70	5.34	11.12		
720		(720)	7	7	D	70	2231	36	3.00	65	38	24.26	12.22	96.09	2.96	2.87
721		720				698						18.00	5.96	11.57		
730		(730)	7	7	D	205	2299	36	30.00	17	428	23.16	11.42	98.91	4.02	3.72
731		730				2						14.74	3.01	6.71		
790			7			1164	2010	70	0.00	58	55	14.07	2.13	0.00	0.69	
791			7			1217	2124	70	0.00	57	57	11.23	1.98	2.92	3.04	
800			8	8	A	1010	2001	47	0.00	74	22	36.74	11.92	65.66	13.73	7.56
801			8	8	A	821	2110	47	0.00	57	59	33.36	8.53	51.55	8.64	5.67
810		(810)	8	8	B	0	2182	11	0.00	53	70	0.00	0.00	0.00	0.83	0.83
811		810				2						60.81	51.46	105.33		
812		810				196						22.98	13.63	20.29		
820		(820)	8	8	B	155	2295	11	5.00	42	116	34.57	25.55	110.29	3.43	3.35
821		820				9						20.80	11.77	40.19		
890			8			597	1911	70	0.00	31	188	23.87	1.37	0.00	0.23	
891			8			399	2042	70	9.00	20	361	23.60	1.10	0.00	0.12	
900			9	9	A	661	2158	23	0.00	89	1	67.51	42.59	119.06	15.94	12.27
901			9	9	A	700	2287	23	0.00	89	1	66.32	41.40	117.55	16.65	12.76
910		(910)	9	9	B	455	1995	35	0.00	60	49	37.60	19.27	72.00	9.14	6.12
911		910				155						25.64	7.31	70.00		
912		910				9						24.59	6.27	50.65		
920			9	9	B	578	2187	35	9.00	51	75	34.41	16.55	63.24	7.15	6.68
990			9			668	2133	70	0.00	31	187	23.73	1.23	0.00	0.23	
1000			10	10	A	319	2139	12	0.00	80	12	97.19	49.19	122.51	7.79	6.99
1001			10	10	A	346	2317	12	0.00	80	12	95.68	47.68	120.69	8.30	7.44
1010		(1010)	10	10	B	0	2071	46	27.00	17	416	0.00	0.00	0.00	1.92	1.75
1011		1010				0						0.00	0.00	0.00		
1012		1010				243						15.99	5.23	38.15		
1020		(1020)	10	10	B	369	2247	46	0.00	63	43	13.85	3.65	18.84	7.40	5.39
1021		1020				578						18.57	8.37	48.93		
1030			10	10	B	700	2253	46	14.00	46	94	11.79	2.22	3.69	4.85	0.43
1090			10			412	2051	70	22.00	20	348	8.22	1.10	0.00	0.13	
1091			10			566	2164	70	31.00	26	244	8.22	1.13	0.00	0.18	

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	2183.85	133.14	16.40	31.81	27.61	339.79	152.64	0.00	492.42
Bus									
Tram									
Pedestrians									
TOTAL	2183.85	133.14	16.40	31.81	27.61	339.79	152.64	0.00	492.42

- | < = 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**

A3 - 2026 Base + HG(140) AM D3 - 2026 Base + HG(140), AM

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Run duration (s)	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
3	10/11/2021 16:38:16	10/11/2021 16:38:16	0.67	07:45	70	904.21	143.78	107.18	1000	5	14	1000	790

Analysis Set Details

Name	Use Simulation	Description	Use specific Demand Set(s)	Specific Demand Set (s)	Optimise specific Demand Set(s)	Include in report	Locked
2026 Base + HG(140) AM			✓	D3		✓	

Demand Set Details

Scenario name	Time Period name	Description	Composite	Demand sets	Start time (HH:mm)	Locked	Run automatically
2026 Base + HG(140)	AM				07:45		✓

Network Options

Network timings

Network cycle time (s)	Minimum possible cycle time (s)	Absolute minimum possible cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
70	26	26		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)	Missing stage transition options
10000.00	10000.00	10000.00	2	Assume banned

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from traffic model	Exclude pedestrians from results calculation	Random delay mode	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓			Simplified (TRANSYT 12)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms ² [-2])	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms ² [-2])	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Offsets And Green Splits	✓

Advanced

Optimisation type	OUTProfile accuracy (%)	SASart temperature	SACooling factor	Random seed	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Simulated Annealing	10, 10, 1, 1, 0.1, 0.1, 0.01, 0.01	300.00	100.00	1	✓	✓	7, 8, 9, 10			Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Traffic Nodes

Traffic Nodes

Traffic node	Name	Description
(ALL)		

Links

Link	Name	Description	Traffic node	Length (m)	Has Saturation Flow	Use RR67	Saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Is minor shared	Major link	Allow Nearside Turn On Red
700			7	200.00	✓		1954	✓		Normal			
701			7	200.00	✓		2097	✓		Normal			
710			7	109.89	✓		2088	✓		Normal			
711				109.89						Normal	✓	710	
712				109.89						Normal	✓	710	
720			7	107.01	✓		2231	✓		Normal			
721				107.01						Normal	✓	720	
730			7	104.31	✓		2299	✓		Normal			
731				104.31						Normal	✓	730	
790			7	106.14	✓		2010			Normal			
791			7	82.17	✓		2124			Normal			
800			8	200.00	✓		2001	✓		Normal			
801			8	200.00	✓		2110	✓		Normal			
810			8	83.00	✓		2182	✓		Normal			
811				83.14						Normal	✓	810	
812				83.14						Normal	✓	810	
820			8	80.23	✓		2295	✓		Normal			
821				80.23						Normal	✓	820	
890			8	200.00	✓		1911			Normal			
891			8	200.00	✓		2042			Normal			
900			9	200.00	✓		2158	✓		Normal			
901			9	200.00	✓		2287	✓		Normal			
910			9	162.90	✓		1995	✓		Normal			
911				162.90						Normal	✓	910	
912				162.90						Normal	✓	910	
920			9	158.76	✓		2187	✓		Normal			
990			9	200.00	✓		2133			Normal			
1000			10	200.00	✓		2139	✓		Normal			
1001			10	200.00	✓		2317	✓		Normal			
1010			10	95.68	✓		2071	✓		Normal			
1011				95.68						Normal	✓	1010	
1012				95.68						Normal	✓	1010	
1020			10	90.73	✓		2247	✓		Normal			
1021				90.73						Normal	✓	1020	
1030			10	85.01	✓		2253	✓		Normal			
1090			10	63.28	✓		2051			Normal			
1091			10	63.07	✓		2164			Normal			

Modelling

Link	Traffic model	Stop weighting (%)	Delay weighting (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Queue limit (PCU)	Excess queue penalty (£)	Has degree of saturation limit
700	NetworkDefault	0	20	100		0.00				
701	NetworkDefault	0	20	100		0.00				
710	NetworkDefault	500	100	100		12.50	✓	10.00	1000.00	
711	NetworkDefault	500	100	100					0.00	
712	NetworkDefault	500	100	100					0.00	
720	NetworkDefault	500	100	100		13.00	✓	10.00	1000.00	
721	NetworkDefault	500	100	100					0.00	
730	NetworkDefault	500	100	100		13.00	✓	11.00	1000.00	
731	NetworkDefault	500	100	100					0.00	
790	NetworkDefault	100	100	100		0.00				
791	NetworkDefault	100	100	100		0.00				
800	NetworkDefault	0	20	100		0.00				
801	NetworkDefault	20	0	100		0.00				
810	NetworkDefault	500	100	100		5.50	✓	4.00	1000.00	
811	NetworkDefault	500	100	100					0.00	
812	NetworkDefault	500	100	100					0.00	
820	NetworkDefault	500	100	100		7.50	✓	5.00	1000.00	
821	NetworkDefault	500	100	100					0.00	
890	NetworkDefault	100	100	100		0.00				
891	NetworkDefault	100	100	100		0.00				
900	NetworkDefault	0	20	100		0.00				
901	NetworkDefault	0	20	100		0.00				
910	NetworkDefault	500	100	100		18.50				
911	NetworkDefault	500	100	100						
912	NetworkDefault	500	100	100						
920	NetworkDefault	500	100	100		19.00				
990	NetworkDefault	100	100	100		0.00				
1000	NetworkDefault	0	20	100		0.00				
1001	NetworkDefault	0	20	100		0.00				
1010	NetworkDefault	500	100	100		9.00	✓	7.00	1000.00	
1011	NetworkDefault	500	100	100					0.00	
1012	NetworkDefault	500	100	100					0.00	
1020	NetworkDefault	500	100	100		10.00	✓	8.00	1000.00	
1021	NetworkDefault	500	100	100					0.00	
1030	NetworkDefault	500	100	100		11.00	✓	8.00	1000.00	
1090	NetworkDefault	100	100	100		0.00				
1091	NetworkDefault	100	100	100		0.00				

Modelling - Normal traffic - Advanced

Link	Dispersion type for Normal Traffic	Initial queue (PCU)	Auto cycle time	Cycle time
700	NetworkDefault	0.00	✓	70
701	NetworkDefault	0.00	✓	70
710	NetworkDefault	0.00	✓	70
711	NetworkDefault			
712	NetworkDefault			
720	NetworkDefault	0.00	✓	70
721	NetworkDefault			
730	NetworkDefault	0.00	✓	70
731	NetworkDefault			
790	NetworkDefault	0.00	✓	70
791	NetworkDefault	0.00	✓	70
800	NetworkDefault	0.00	✓	70
801	NetworkDefault	0.00	✓	70
810	NetworkDefault	0.00	✓	70
811	NetworkDefault			
812	NetworkDefault			
820	NetworkDefault	0.00	✓	70
821	NetworkDefault			
890	NetworkDefault	0.00	✓	70
891	NetworkDefault	0.00	✓	70
900	NetworkDefault	0.00	✓	70
901	NetworkDefault	0.00	✓	70
910	NetworkDefault	0.00	✓	70
911	NetworkDefault			
912	NetworkDefault			
920	NetworkDefault	0.00	✓	70
990	NetworkDefault	0.00	✓	70
1000	NetworkDefault	0.00	✓	70
1001	NetworkDefault	0.00	✓	70
1010	NetworkDefault	0.00	✓	70
1011	NetworkDefault			
1012	NetworkDefault			
1020	NetworkDefault	0.00	✓	70
1021	NetworkDefault			
1030	NetworkDefault	0.00	✓	70
1090	NetworkDefault	0.00	✓	70
1091	NetworkDefault	0.00	✓	70

Flows

Link	Total flow (PCU/hr)	PCU Factor
700	511	1.00
701	549	1.00
710	227	1.00
711	12	1.00
712	343	1.00
720	34	1.00
721	573	1.00
730	357	1.00
731	2	1.00
790	1093	1.00
791	971	1.00
800	1361	1.00
801	1096	1.00
810	0	1.00
811	2	1.00
812	349	1.00
820	185	1.00
821	8	1.00
890	922	1.00
891	571	1.00
900	542	1.00
901	575	1.00
910	599	1.00
911	185	1.00
912	8	1.00
920	717	1.00
990	610	1.00
1000	393	1.00
1001	425	1.00
1010	0	1.00
1011	2	1.00
1012	379	1.00
1020	343	1.00
1021	717	1.00
1030	575	1.00
1090	581	1.00
1091	705	1.00

Flows - Advanced

Link	Detectors
(ALL)	

Signals

Link	Controller stream	Phase	Second phase enabled
700	7	C	
701	7	C	
710	7	D	
711			
712			
720	7	D	
721			
730	7	D	
731			
800	8	A	
801	8	A	
810	8	B	
811			
812			
820	8	B	
821			
900	9	A	
901	9	A	
910	9	B	
911			
912			
920	9	B	
1000	10	A	
1001	10	A	
1010	10	B	
1011			
1012			
1020	10	B	
1021			
1030	10	B	

Entry Sources

Link	Cruise time (seconds)	Cruise speed (kph)
700	18.41	39.10
701	18.41	39.10
800	24.83	29.00
801	24.83	29.00
900	24.91	28.90
901	24.91	28.90
1000	48.00	15.00
1001	48.00	15.00

Sources

Link	Source	Source type	Source link	Destination link	Cruise time (seconds)	Cruise speed (kph)	Total flow (PCU/hr)
710	1	Link	1000	710	12.36	32.00	193
711	1	Link	1021	711	12.36	32.00	12
712	1	Link	1020	712	12.36	32.00	343
720	1	Link	1001	720	12.04	32.00	34
721	1	Link	1030	721	12.04	32.00	573
730	1	Link	1001	730	11.73	32.00	357
731	1	Link	1030	731	11.73	32.00	2
790	1	Link	710	790	11.94	32.00	227
791	1	Link	720	791	9.24	32.00	34
810	1	Link	701	810	9.34	32.00	0
811	1	Link	731	811	9.35	32.00	2
812	1	Link	730	812	9.35	32.00	349
820	1	Link	701	820	9.03	32.00	185
821	1	Link	730	821	9.03	32.00	8
890	1	Link	810	890	22.50	32.00	0
891	1	Link	800	891	22.50	32.00	571
910	1	Link	800	910	18.33	32.00	220
911	1	Link	820	911	18.33	32.00	185
912	1	Link	821	912	18.33	32.00	8
920	1	Link	801	920	17.86	32.00	717
990	1	Link	910	990	22.50	32.00	220
1010	1	Link	900	1010	10.76	32.00	0
1011	1	Link	911	1011	10.76	32.00	2
1012	1	Link	910	1012	10.76	32.00	379
1020	1	Link	900	1020	10.21	32.00	343
1021	1	Link	920	1021	10.21	32.00	717
1030	1	Link	901	1030	9.56	32.00	575
1090	1	Link	1000	1090	7.12	32.00	200
1091	1	Link	1021	1091	7.10	32.00	705
710	2	Link	1001	710	12.36	32.00	34
790	2	Link	711	790	11.94	32.00	12
791	2	Link	721	791	9.24	32.00	573
890	2	Link	800	890	22.50	32.00	571
910	2	Link	801	910	18.33	32.00	379
990	2	Link	900	990	22.50	32.00	199
1090	2	Link	1010	1090	7.12	32.00	0
790	3	Link	700	790	11.94	32.00	511
791	3	Link	701	791	9.24	32.00	364
890	3	Link	812	890	22.50	32.00	349
990	3	Link	911	990	22.50	32.00	183
1090	3	Link	1011	1090	7.12	32.00	2
790	4	Link	712	790	11.94	32.00	343
890	4	Link	811	890	22.50	32.00	2
990	4	Link	912	990	22.50	32.00	8
1090	4	Link	1012	1090	7.12	32.00	379

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	Limit paths by flow	Low path flow threshold
1	(untitled)	✓	✓	Lane Balancing			✓			✓	1.25				

Normal Input Flows (PCU/hr)

	To				
	A	B	C	D	
From	A	2	875	0	183
	B	1084	12	1141	220
	C	0	916	2	199
	D	200	261	349	8

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	A	(untitled)	701, 700	1090, 1091	#0000FF
	B	(untitled)	801, 800	791, 790	#FF0000
	C	(untitled)	900, 901	891, 890	#00FF00
	D	(untitled)	1000, 1001	990	#FFFF00

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	1		A	A	701, 820, 911, 1011, 1090	Normal	2
	2		B	A	801, 910, 1012, 1090	Percentage	379
	3		B	A	801, 920, 1021, 1091	Normal	705
	5		B	A	800, 910, 1012, 1090	Normal	0
	6		A	B	701, 791	Normal	364
	7		A	B	700, 790	Normal	511
	8		B	B	801, 920, 1021, 711, 790	Normal	12
	9		C	A	900, 1010, 1090	Normal	0
	10		C	B	900, 1020, 712, 790	Normal	343
	11		C	B	901, 1030, 721, 791	Normal	573
	13		B	C	800, 891	Normal	571
	14		A	C	701, 810, 890	Normal	0
	15		B	C	800, 890	Normal	571
	16		C	C	901, 1030, 731, 811, 890	Normal	2
	17		D	B	1000, 710, 790	Normal	193
	18		D	A	1000, 1090	Normal	200
	19		D	B	1001, 710, 790	Normal	34
	20		D	B	1001, 720, 791	Normal	34
	21		D	C	1001, 730, 812, 890	Normal	349
	22		A	D	701, 820, 911, 990	Normal	183
	23		B	D	801, 910, 990	Disabled	0
	24		B	D	800, 910, 990	Normal	220
	25		C	D	900, 990	Normal	199
	26		D	D	1001, 730, 821, 912, 990	Normal	8

Link Results

Link Results: Vehicle summary

Time Segment	Link	Major link	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)
07:45-08:45	700		65	38	511	1954	27	23.67	8.89	24.19	9.54	0.00	9.54
	701		65	38	549	2097	27	23.24	9.48	24.05	10.07	0.00	10.07
	710		59	52	212	2088	31	14.22	6.77	54.17	11.88	15.52	27.39
	711	710			12			16.77			0.79	0.53	1.32
	712	710			343			14.36			19.43	8.47	27.90
	720		59	52	32	2231	31	12.51	4.28	32.93	1.57	2.15	3.72
	721	720			573			13.83			31.26	13.42	44.68
	730		32	182	333	2299	31	11.37	6.63	51.03	14.95	23.87	38.82
	731	730			2			9.92			0.08	0.04	0.11
	790		54	68	1078	2010	70	1.93	0.58	2.88	8.20	0.00	8.20
	791		46	97	969	2124	70	1.56	0.42	2.55	5.95	0.00	5.95
	800		106	-15	1361	2001	44	130.58	69.55	184.88	140.20	0.00	140.20
	801		81	11	1096	2110	44	16.09	17.60	44.36	0.00	2.03	2.03
	810		70	28	0	2182	14	0.00	2.41	43.91	0.00	0.00	0.00
	811	810			2			45.47			0.36	0.14	0.50
	812	810			326			22.91			29.45	8.54	37.99
	820		39	130	185	2295	14	25.31	3.93	52.45	18.48	14.18	32.66
	821	820			7			15.79			0.47	0.15	0.62
	890		45	98	867	1911	70	1.72	0.42	1.16	5.89	0.00	5.89
	891		26	241	539	2042	70	1.20	0.18	0.47	2.55	0.00	2.55
	900		93	-3	542	2158	18	58.26	15.27	37.64	24.91	0.00	24.91
	901		93	-3	575	2287	18	56.95	15.99	37.19	25.83	0.00	25.83
	910		67	35	587	1995	40	16.79	10.92	59.01	38.89	26.30	65.18
	911	910			185			12.60			9.20	12.87	22.08
	912	910			7			9.62			0.28	0.42	0.70
	920		56	61	717	2187	40	14.54	7.60	40.01	41.10	27.81	68.91
	990		28	217	605	2133	70	1.18	0.20	0.49	2.81	0.00	2.81
	1000		107	-16	393	2139	11	196.30	25.50	63.42	60.86	0.00	60.86
	1001		107	-16	425	2317	11	191.28	26.99	61.97	64.13	0.00	64.13
	1010		26	242	0	2071	47	0.00	3.42	38.00	0.00	0.00	0.00
	1011	1010			2			15.11			0.12	0.11	0.23
	1012	1010			372			5.63			8.25	11.45	19.70
	1020		69	31	343	2247	47	3.98	9.49	94.88	5.38	3.64	81.22
	1021	1020			717			9.45			26.71	29.15	55.85
	1030		37	142	575	2253	47	1.86	2.82	25.61	4.22	1.16	5.38
	1090		27	229	561	2051	70	1.21	0.19	1.54	2.67	0.00	2.67
	1091		33	176	705	2164	70	1.23	1.45	11.31	3.43	0.18	3.61

Link Results: Flows and signals

Time Segment	Link	Major link	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Calculated sat flow (PCU/hr)	Calculated capacity (PCU/hr)	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Mean modulus of error	Actual green (s (per cycle))	Effective green (s (per cycle))
07:45-08:45	700		511	511	0		1954	782	65		38	0.00	27	28
	701		549	549	0		2097	839	65		38	0.00	27	28
	710		212	212	15	✓	2088	955	59		52	1.37	31	32
	711	710	12	12	0						52	0.88		
	712	710	343	343	0						52	1.21		
	720		32	32	2	✓	2231	1020	59		52	1.37	31	32
	721	720	573	573	0						52	1.16		
	730		333	333	24	✓	2299	1051	32		182	1.38	31	32
	731	730	2	2	0						182	1.17		
	790		1078	1078	15	✓	2010	2010	54		68	0.41	70	70
	791		969	969	2	✓	2124	2124	46		97	0.51	70	70
	800		1361	1286	0		2001	1286	106	✓	-15	0.00	44	45
	801		1096	1096	0		2110	1356	81		11	0.00	44	45
	810		0	0	0		2182	468	70		28	0.00	14	15
	811	810	2	2	0						28	1.09		
	812	810	326	326	23	✓					28	1.46		
	820		185	185	0		2295	492	39		130	1.13	14	15
	821	820	7	7	1	✓					130	1.47		
	890		867	867	54	✓	1911	1911	45		98	0.15	70	70
	891		539	539	31	✓	2042	2042	26		241	0.52	70	70
	900		542	542	0		2158	586	93	✓	-3	0.00	18	19
	901		575	575	0		2287	621	93	✓	-3	0.00	18	19
	910		587	587	12	✓	1995	1169	67		35	0.58	40	41
	911	910	185	185	0						35	1.36		
	912	910	7	7	1	✓					35	1.17		
	920		717	717	0		2187	1281	56		61	0.60	40	41
	990		605	605	5	✓	2133	2133	28		217	0.33	70	70
	1000		393	367	0		2139	367	107	✓	-16	0.00	11	12
	1001		425	397	0		2317	397	107	✓	-16	0.00	11	12
	1010		0	0	0		2071	1420	26		242	0.00	47	48
	1011	1010	2	2	0						242	1.45		
	1012	1010	372	372	8	✓					242	0.79		
	1020		343	343	0		2247	1541	69		31	1.28	47	48
	1021	1020	717	717	0						31	0.79		
	1030		575	575	0		2253	1545	37		142	1.29	47	48
	1090		561	561	21	✓	2051	2051	27		229	0.78	70	70
	1091		705	705	0		2164	2164	33		176	1.01	70	70

Link Results: Stops and delays

Time Segment	Link	Major link	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Unweighted cost of delay (£ per hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Uniform stops (Stops per hr)	Random stops (Stops per hr)	Unweighted cost of stops (£ per hr)	Weighted cost of stops (£ per hr)
07:45-08:45	700		18.41	23.67	2.42	0.94	47.71	9.54	86.31	393.95	47.10	9.39	0.00
	701		18.41	23.24	2.60	0.94	50.33	10.07	85.73	423.31	47.35	10.02	0.00
	710		12.36	14.22	0.56	0.27	11.88	11.88	102.69	203.75	13.77	3.10	15.52
	711	710	12.36	16.77	0.04	0.02	0.79	0.79	61.88	6.65	0.78	0.11	0.53
	712	710	12.36	14.36	0.93	0.44	19.43	19.43	34.63	96.50	22.31	1.69	8.47
	720		12.04	12.51	0.07	0.04	1.57	1.57	94.34	28.16	1.94	0.43	2.15
	721	720	12.04	13.83	1.51	0.69	31.26	31.26	32.83	153.26	34.84	2.68	13.42
	730		11.73	11.37	0.82	0.23	14.95	14.95	100.38	322.78	11.87	4.77	23.87
	731	730	11.73	9.92	0.00	0.00	0.08	0.08	25.46	0.44	0.07	0.01	0.04
	790		11.94	1.93	0.00	0.58	8.20	8.20	0.00	0.00	0.00	0.00	0.00
	791		9.24	1.56	0.00	0.42	5.95	5.95	0.00	0.00	0.00	0.00	0.00
	800		24.83	130.58	4.47	44.90	701.00	140.20	220.08	1274.41	1556.62	33.17	0.00
	801		24.83	16.09	2.83	2.07	69.57	0.00	78.91	760.86	103.98	10.13	2.03
	810		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	811	810	9.35	45.47	0.02	0.01	0.36	0.36	96.04	1.58	0.35	0.03	0.14
	812	810	9.35	22.91	0.93	1.15	29.45	29.45	36.72	63.23	56.44	1.71	8.54
	820		9.03	25.31	0.99	0.31	18.48	18.48	107.41	183.27	15.54	2.84	14.18
	821	820	9.03	15.79	0.02	0.01	0.47	0.47	28.53	1.50	0.63	0.03	0.15
	890		22.50	1.72	0.00	0.42	5.89	5.89	0.00	0.00	0.00	0.00	0.00
	891		22.50	1.20	0.00	0.18	2.55	2.55	0.00	0.00	0.00	0.00	0.00
	900		24.91	58.26	3.74	5.04	124.55	24.91	136.58	509.88	230.37	8.61	0.00
	901		24.91	56.95	3.96	5.13	129.17	25.83	135.15	541.30	235.83	9.04	0.00
	910		18.33	16.79	1.99	0.75	38.89	38.89	62.77	330.63	38.04	5.26	26.30
	911	910	18.33	12.60	0.41	0.24	9.20	9.20	97.51	168.51	11.99	2.57	12.87
	912	910	18.33	9.62	0.01	0.01	0.28	0.28	77.94	5.34	0.48	0.08	0.42
	920		17.86	14.54	2.26	0.63	41.10	41.10	54.41	357.70	32.21	5.56	27.81
	990		22.50	1.18	0.00	0.20	2.81	2.81	0.00	0.00	0.00	0.00	0.00
	1000		48.00	196.30	2.95	18.48	304.29	60.86	250.35	366.66	551.34	2.88	0.00
	1001		48.00	191.28	3.20	19.38	320.66	64.13	247.75	397.16	586.90	3.08	0.00
	1010		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1011	1010	10.76	15.11	0.01	0.00	0.12	0.12	76.05	1.47	0.05	0.02	0.11
	1012	1010	10.76	5.63	0.40	0.18	8.25	8.25	43.17	151.41	9.08	2.29	11.45
	1020		10.21	3.98	0.02	0.35	5.38	5.38	14.86	32.96	18.02	0.73	3.64
	1021	1020	10.21	9.45	1.14	0.74	26.71	26.71	57.02	370.98	37.63	5.83	29.15
	1030		9.56	1.86	0.00	0.30	4.22	4.22	2.82	1.10	15.13	0.23	1.16
	1090		7.12	1.21	0.00	0.19	2.67	2.67	0.00	0.00	0.00	0.00	0.00
	1091		7.10	1.23	0.00	0.24	3.43	3.43	1.79	0.28	12.36	0.18	0.18

Link Results: Queues and blocking

Time Segment	Link	Major link	Initial queue (PCU)	Mean max queue (PCU)	Max queue storage (PCU)	Utilised storage (%)	Average storage excess queue (PCU)	Average limit excess queue (PCU)	Excess queue penalty (£ per hr)	Mean end of green queue (PCU)	Mean end of red queue (PCU)	Wasted time starvation (s (per cycle))	Wasted time blocking back (s (per cycle))	Wasted time total (s (per cycle))	Estimated blocking
07:45-08:45	700		0.00	8.89	36.74	24.19	0.00	0.00	0.00	0.94	6.90	0.00	0.00	0.00	
	701		0.00	9.48	39.43	24.05	0.00	0.00	0.00	0.94	7.35	0.00	0.00	0.00	
	710		0.00	6.77	12.50	54.17	0.00	0.00	0.00	0.73	5.70	1.00	0.00	1.00	
	711	710							0.00						
	712	710							0.00						
	720		0.00	4.28	13.00	32.93	0.00	0.00	0.00	0.73	4.16	7.00	0.00	7.00	
	721	720							0.00						
	730		0.00	6.63	13.00	51.03	0.00	0.00	0.00	0.23	5.42	21.00	0.00	21.00	
	731	730							0.00						
	790		0.00	0.58	20.06	2.88	0.00	0.00	0.00			0.00	0.00	0.00	
	791		0.00	0.42	16.41	2.55	0.00	0.00	0.00			0.00	0.00	0.00	
	800		0.00	69.55	37.62	184.88	19.61	0.00	0.00	44.90	53.83	0.00	0.00	0.00	
	801		0.00	17.60	39.67	44.36	0.00	0.00	0.00	2.07	9.68	0.00	0.00	0.00	
	810		0.00	2.41	5.50	43.91	0.00	0.00	0.00	1.15	2.41	1.00	0.00	1.00	
	811	810							0.00						
	812	810							0.00						
	820		0.00	3.93	7.50	52.45	0.00	0.00	0.00	0.32	3.85	9.00	0.00	9.00	
	821	820							0.00						
	890		0.00	0.42	35.93	1.16	0.00	0.00	0.00			0.00	0.00	0.00	
	891		0.00	0.18	38.39	0.47	0.00	0.00	0.00			8.00	0.00	8.00	
	900		0.00	15.27	40.57	37.64	0.00	0.00	0.00	5.04	12.71	0.00	0.00	0.00	
	901		0.00	15.99	43.00	37.19	0.00	0.00	0.00	5.13	13.28	0.00	0.00	0.00	
	910		0.00	10.92	18.50	59.01	0.00	0.00	0.00	1.00	7.21	0.00	0.00	0.00	
	911	910							0.00						
	912	910							0.00						
	920		0.00	7.60	19.00	40.01	0.00	0.00	0.00	0.63	7.35	6.00	0.00	6.00	
	990		0.00	0.20	40.10	0.49	0.00	0.00	0.00			0.00	0.00	0.00	
	1000		0.00	25.50	40.22	63.42	0.00	0.00	0.00	18.48	24.38	0.00	0.00	0.00	
	1001		0.00	26.99	43.56	61.97	0.00	0.00	0.00	19.38	25.78	0.00	0.00	0.00	
	1010		0.00	3.42	9.00	38.00	0.00	0.00	0.00	0.18	2.59	21.00	0.00	21.00	
	1011	1010							0.00						
	1012	1010							0.00						
	1020		0.00	9.49	10.00	94.88	0.00	0.07	72.20	1.10	6.32	0.00	0.00	0.00	
	1021	1020							0.00						
	1030		0.00	2.82	11.00	25.61	0.00	0.00	0.00	0.30	0.30	19.00	0.00	19.00	
	1090		0.00	0.19	12.20	1.54	0.00	0.00	0.00			17.00	0.00	17.00	
	1091		0.00	1.45	12.83	11.31	0.00	0.00	0.00			27.00	0.00	27.00	

Link Results: Journey times

Time Segment	Link	Major link	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	JourneyTime (s)
07:45-08:45	700		102.20	5.97	17.11	42.08
	701		109.80	6.35	17.28	41.66
	710		23.28	1.56	14.88	26.58
	711	710	1.32	0.10	13.58	29.13
	712	710	37.70	2.55	14.81	26.72
	720		3.41	0.22	15.69	24.55
	721	720	61.32	4.12	14.89	25.87
	730		34.78	2.14	16.25	23.11
	731	730	0.21	0.01	17.34	21.66
	790		114.41	4.15	27.55	13.87
	791		79.61	2.91	27.39	10.80
	800		272.20	58.75	4.63	155.41
	801		219.20	12.46	17.59	40.92
	810		0.00	0.00	0.00	0.00
	811	810	0.17	0.03	5.46	54.82
	812	810	27.10	2.92	9.28	32.26
	820		14.85	1.77	8.41	34.33
	821	820	0.60	0.05	11.64	24.82
	890		173.42	5.83	29.72	24.22
	891		107.84	3.55	30.38	23.70
	900		108.40	12.52	8.66	83.17
	901		115.00	13.08	8.79	81.87
	910		95.68	5.73	16.70	35.11
	911	910	30.15	1.59	18.96	30.93
	912	910	1.22	0.06	20.98	27.95
	920		113.77	6.45	17.64	32.40
	990		121.01	3.98	30.41	23.68
	1000		78.60	26.67	2.95	244.30
	1001		85.00	28.25	3.01	239.28
	1010		0.00	0.00	0.00	0.00
	1011	1010	0.19	0.01	13.31	25.87
	1012	1010	35.57	1.69	21.02	16.39
	1020		31.13	1.35	23.03	14.18
	1021	1020	65.02	3.91	16.62	19.66
	1030		48.88	1.82	26.79	11.42
	1090		35.47	1.30	27.36	8.33
	1091		44.44	1.63	27.26	8.33

Link Results: Advanced

Time Segment	Link	Major link	Degree of saturation penalty (£ per hr)	Ped gap accepting penalty (£ per hr)	Warmed up	Mean Max Queue EoTS (PCU)	Mean End of Green Queue EoTS (PCU)	Mean End of Red Queue EoTS (PCU)	PCU Factor	Cost of traffic penalties (£ per hr)	Unweighted performance index (£ per hr)	Performance Index (£ per hr)
07:45-08:45	700		0.00	0.00	✓	8.89	0.94	6.90	1.00	0.00	57.10	9.54
	701		0.00	0.00	✓	9.48	0.94	7.35	1.00	0.00	60.35	10.07
	710		0.00	0.00	✓	6.77	0.73	5.70	1.00	0.00	14.98	27.39
	711	710	0.00	0.00					1.00	0.00	0.90	1.32
	712	710	0.00	0.00					1.00	0.00	21.12	27.90
	720		0.00	0.00	✓	4.28	0.73	4.16	1.00	0.00	2.00	3.72
	721	720	0.00	0.00					1.00	0.00	33.94	44.68
	730		0.00	0.00	✓	6.63	0.23	5.42	1.00	0.00	19.73	38.82
	731	730	0.00	0.00					1.00	0.00	0.09	0.11
	790		0.00	0.00	✓	0.58			1.00	0.00	8.20	8.20
	791		0.00	0.00	✓	0.42			1.00	0.00	5.95	5.95
	800		0.00	0.00	✓	107.51	82.86	91.79	1.00	0.00	734.17	140.20
	801		0.00	0.00	✓	17.61	2.09	9.70	1.00	0.00	79.71	2.03
	810		0.00	0.00	✓	2.42	1.16	2.42	1.00	0.00	0.00	0.00
	811	810	0.00	0.00					1.00	0.00	0.39	0.50
	812	810	0.00	0.00					1.00	0.00	31.16	37.99
	820		0.00	0.00	✓	3.93	0.32	3.85	1.00	0.00	21.31	32.66
	821	820	0.00	0.00					1.00	0.00	0.50	0.62
	890		0.00	0.00	✓	0.42			1.00	0.00	5.89	5.89
	891		0.00	0.00	✓	0.18			1.00	0.00	2.55	2.55
	900		0.00	0.00	✓	15.74	5.50	13.18	1.00	0.00	133.17	24.91
	901		0.00	0.00	✓	16.46	5.60	13.74	1.00	0.00	138.21	25.83
	910		0.00	0.00	✓	10.92	1.00	7.21	1.00	0.00	44.15	65.18
	911	910	0.00	0.00					1.00	0.00	11.78	22.08
	912	910	0.00	0.00					1.00	0.00	0.37	0.70
	920		0.00	0.00	✓	7.60	0.63	7.35	1.00	0.00	46.66	68.91
	990		0.00	0.00	✓	0.20			1.00	0.00	2.81	2.81
	1000		0.00	0.00	✓	39.41	32.38	38.29	1.00	0.00	307.17	60.86
	1001		0.00	0.00	✓	41.66	34.04	40.44	1.00	0.00	323.74	64.13
	1010		0.00	0.00	✓	3.42	0.18	2.59	1.00	0.00	0.00	0.00
	1011	1010	0.00	0.00					1.00	0.00	0.14	0.23
	1012	1010	0.00	0.00					1.00	0.00	10.54	19.70
	1020		0.00	0.00	✓	9.49	1.10	6.33	1.00	72.20	6.11	81.22
	1021	1020	0.00	0.00					1.00	0.00	32.54	55.85
	1030		0.00	0.00	✓	2.82	0.30	0.30	1.00	0.00	4.45	5.38
	1090		0.00	0.00	✓	0.19			1.00	0.00	2.67	2.67
	1091		0.00	0.00	✓	1.45			1.00	0.00	3.61	3.61

Network Results

Run Summary

Analysis set used	Run start time	Run finish time	Run duration (s)	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 unsignal PRC
3	10/11/2021 16:38:16	10/11/2021 16:38:16	0.67	07:45	70	904.21	143.78	107.18	1000	5	14	1000	790

Network Results: Vehicle summary

Time Segment	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Actual green (s per cycle)	Mean Delay per Veh (s)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
07:45-08:45	107	-16	16308	1419	31.74	629.91	202.10	904.21

Network Results: Flows and signals

Time Segment	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Actual green (s (per cycle))	Effective green (s (per cycle))
07:45-08:45	16308	16179	213	✓	107	✓	-16	1419	1449

Network Results: Stops and delays

Time Segment	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Unweighted cost of delay (£ per hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Uniform stops (Stops per hr)	Random stops (Stops per hr)	Unweighted cost of stops (£ per hr)	Weighted cost of stops (£ per hr)
07:45-08:45	18.04	31.74	38.32	105.46	2041.65	629.91	68.32	7149.01	3692.99	126.50	202.10

Network Results: Queues and blocking

Time Segment	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time starvation (s (per cycle))	Wasted time blocking back (s (per cycle))	Wasted time total (s (per cycle))
07:45-08:45	184.88	72.20	220.00	0.00	220.00

Network Results: Journey times

Time Segment	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)
07:45-08:45	2392.93	225.49	10.61

Network Results: Advanced

Time Segment	Degree of saturation penalty (£ per hr)	Ped gap accepting penalty (£ per hr)	Warmed up	PCU Factor	Cost of traffic penalties (£ per hr)	Controller stream penalties (£ per hr)	Unweighted performance index (£ per hr)	Performance Index (£ per hr)
07:45-08:45	0.00	0.00	✓	1.00	72.20	0.00	2168.15	904.21

Point to Point Journey Time

Average Journey Time (s) for Local Matrix: 1

	To				
From		A	B	C	D
	A	141.1	54.5	0.0	130.6
	B	101.1	136.0	179.4	214.2
	C	0.0	133.0	194.0	106.9
	D	252.6	282.8	318.9	338.8

Path Journey Time

Path	From Location	To Location	Normal Calculated Flow (PCU/hr)	Normal journey time (s)	Normal journey dist (m)	Bus journeydist (m)	Tram journey dist (m)	Pedestrian journey dist (m)	Calculated Total Flow (PCU/hr)	Avg journey time (s)	Avg journey dist (m)
1	A	A	2	141.12	602.09	602.09	602.09	602.09	2	141.12	602.09
2	B	A	379	100.75	521.86	521.86	521.86	521.86	379	100.75	521.86
3	B	A	705	101.31	512.56	512.56	512.56	512.56	705	101.31	512.56
5	B	A	0	215.23	521.86	521.86	521.86	521.86	0	0.00	2087.44
6	A	B	364	52.46	282.17	282.17	282.17	282.17	364	52.46	282.17
7	A	B	511	55.95	306.14	306.14	306.14	306.14	511	55.95	306.14
8	B	B	12	135.97	665.52	665.52	665.52	665.52	12	135.97	665.52
9	C	A	0	91.50	358.96	358.96	358.96	358.96	0	0.00	1435.84
10	C	B	343	137.94	506.76	506.76	506.76	506.76	343	137.94	506.76
11	C	B	573	129.96	474.19	474.19	474.19	474.19	573	129.96	474.19
13	B	C	571	179.10	400.00	400.00	400.00	400.00	571	179.10	400.00
14	A	C	0	65.88	483.00	483.00	483.00	483.00	0	0.00	1932.00
15	B	C	571	179.63	400.00	400.00	400.00	400.00	571	179.63	400.00
16	C	C	2	193.99	672.46	672.46	672.46	672.46	2	193.99	672.46
17	D	B	193	284.74	416.03	416.03	416.03	416.03	193	284.74	416.03
18	D	A	200	252.62	263.28	263.28	263.28	263.28	200	252.62	263.28
19	D	B	34	279.73	416.03	416.03	416.03	416.03	34	279.73	416.03
20	D	B	34	274.63	389.18	389.18	389.18	389.18	34	274.63	389.18
21	D	C	349	318.87	587.45	587.45	587.45	587.45	349	318.87	587.45
22	A	D	183	130.60	643.13	643.13	643.13	643.13	183	130.60	643.13
23	B	D	0	99.71	562.90	562.90	562.90	562.90	0	0.00	2251.60
24	B	D	220	214.20	562.90	562.90	562.90	562.90	220	214.20	562.90
25	C	D	199	106.85	400.00	400.00	400.00	400.00	199	106.85	400.00
26	D	D	8	338.82	747.44	747.44	747.44	747.44	8	338.82	747.44

Final Prediction Table

Link Results

				SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES	
Link	Name	Major link	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)	Mean end of red queue (PCU)
700			7	7	C	511	1954	27	0.00	65	38	42.08	23.67	86.31	8.89	6.90
701			7	7	C	549	2097	27	0.00	65	38	41.66	23.24	85.73	9.48	7.35
710		(710)	7	7	D	212	2088	31	1.00	59	52	26.58	14.22	102.69	6.77	5.70
711		710				12						29.13	16.77	61.88		
712		710				343						26.72	14.36	34.63		
720		(720)	7	7	D	32	2231	31	7.00	59	52	24.55	12.51	94.34	4.28	4.16
721		720				573						25.87	13.83	32.83		
730		(730)	7	7	D	333	2299	31	21.00	32	182	23.11	11.37	100.38	6.63	5.42
731		730				2						21.66	9.92	25.46		
790			7			1078	2010	70	0.00	54	68	13.87	1.93	0.00	0.58	
791			7			969	2124	70	0.00	46	97	10.80	1.56	0.00	0.42	
800			8	8	A	1361 <	2001	44	0.00	106	-15	155.41	130.58	220.08	69.55 +	53.83
801			8	8	A	1096	2110	44	0.00	81	11	40.92	16.09	78.91	17.60	9.68
810		(810)	8	8	B	0	2182	14	1.00	70	28	0.00	0.00	0.00	2.41	2.41
811		810				2						54.82	45.47	96.04		
812		810				326						32.26	22.91	36.72		
820		(820)	8	8	B	185	2295	14	9.00	39	130	34.33	25.31	107.41	3.93	3.85
821		820				7						24.82	15.79	28.53		
890			8			867	1911	70	0.00	45	98	24.22	1.72	0.00	0.42	
891			8			539	2042	70	8.00	26	241	23.70	1.20	0.00	0.18	
900			9	9	A	542	2158	18	0.00	93	-3	83.17	58.26	136.58	15.27	12.71
901			9	9	A	575	2287	18	0.00	93	-3	81.87	56.95	135.15	15.99	13.28
910		(910)	9	9	B	587	1995	40	0.00	67	35	35.11	16.79	62.77	10.92	7.21
911		910				185						30.93	12.60	97.51		
912		910				7						27.95	9.62	77.94		
920			9	9	B	717	2187	40	6.00	56	61	32.40	14.54	54.41	7.60	7.35
990			9			605	2133	70	0.00	28	217	23.68	1.18	0.00	0.20	
1000			10	10	A	393	2139	11	0.00	107	-16	244.30	196.30	250.35	25.50	24.38
1001			10	10	A	425	2317	11	0.00	107	-16	239.28	191.28	247.75	26.99	25.78
1010		(1010)	10	10	B	0	2071	47	21.00	26	242	0.00	0.00	0.00	3.42	2.59
1011		1010				2						25.87	15.11	76.05		
1012		1010				372						16.39	5.63	43.17		
1020		(1020)	10	10	B	343	2247	47	0.00	69	31	14.18	3.98	14.86	9.49	6.32
1021		1020				717						19.66	9.45	57.02		
1030			10	10	B	575	2253	47	19.00	37	142	11.42	1.86	2.82	2.82	0.30
1090			10			561	2051	70	17.00	27	229	8.33	1.21	0.00	0.19	
1091			10			705	2164	70	27.00	33	176	8.33	1.23	1.79	1.45	

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	2392.93	225.49	10.61	38.32	105.46	629.91	202.10	72.20	904.21
Bus									
Tram									
Pedestrians									
TOTAL	2392.93	225.49	10.61	38.32	105.46	629.91	202.10	72.20	904.21

- | < = 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 - 2026 Base + HG(140) PM D4 - 2026 Base + HG(140), PM

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Run duration (s)	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
4	10/11/2021 16:38:16	10/11/2021 16:38:17	1.02	16:30	70	577.38	69.60	92.80	901	4	11	901	790

Analysis Set Details

Name	Use Simulation	Description	Use specific Demand Set(s)	Specific Demand Set (s)	Optimise specific Demand Set(s)	Include in report	Locked
2026 Base + HG(140) PM			✓	D4		✓	

Demand Set Details

Scenario name	Time Period name	Description	Composite	Demand sets	Start time (HH:mm)	Locked	Run automatically
2026 Base + HG(140)	PM				16:30		✓

Network Options

Network timings

Network cycle time (s)	Minimum possible cycle time (s)	Absolute minimum possible cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
70	26	26		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)	Missing stage transition options
10000.00	10000.00	10000.00	2	Assume banned

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from traffic model	Exclude pedestrians from results calculation	Random delay mode	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓			Simplified (TRANSYT 12)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms ² [-2])	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms ² [-2])	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Offsets And Green Splits	✓

Advanced

Optimisation type	OUTProfile accuracy (%)	SASart temperature	SACooling factor	Random seed	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Simulated Annealing	10, 10, 1, 1, 0.1, 0.1, 0.01, 0.01	300.00	100.00	1	✓	✓	7, 8, 9, 10			Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Traffic Nodes

Traffic Nodes

Traffic node	Name	Description
(ALL)		

Links

Links

Link	Name	Description	Traffic node	Length (m)	Has Saturation Flow	Use RR67	Saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Is minor shared	Major link	Allow Nearside Turn On Red
700			7	200.00	✓		1954	✓		Normal			
701			7	200.00	✓		2097	✓		Normal			
710			7	109.89	✓		2088	✓		Normal			
711				109.89						Normal	✓	710	
712				109.89						Normal	✓	710	
720			7	107.01	✓		2231	✓		Normal			
721				107.01						Normal	✓	720	
730			7	104.31	✓		2299	✓		Normal			
731				104.31						Normal	✓	730	
790			7	106.14	✓		2010			Normal			
791			7	82.17	✓		2124			Normal			
800			8	200.00	✓		2001	✓		Normal			
801			8	200.00	✓		2110	✓		Normal			
810			8	83.00	✓		2182	✓		Normal			
811				83.14						Normal	✓	810	
812				83.14						Normal	✓	810	
820			8	80.23	✓		2295	✓		Normal			
821				80.23						Normal	✓	820	
890			8	200.00	✓		1911			Normal			
891			8	200.00	✓		2042			Normal			
900			9	200.00	✓		2158	✓		Normal			
901			9	200.00	✓		2287	✓		Normal			
910			9	162.90	✓		1995	✓		Normal			
911				162.90						Normal	✓	910	
912				162.90						Normal	✓	910	
920			9	158.76	✓		2187	✓		Normal			
990			9	200.00	✓		2133			Normal			
1000			10	200.00	✓		2139	✓		Normal			
1001			10	200.00	✓		2317	✓		Normal			
1010			10	95.68	✓		2071	✓		Normal			
1011				95.68						Normal	✓	1010	
1012				95.68						Normal	✓	1010	
1020			10	90.73	✓		2247	✓		Normal			
1021				90.73						Normal	✓	1020	
1030			10	85.01	✓		2253	✓		Normal			
1090			10	63.28	✓		2051			Normal			
1091			10	63.07	✓		2164			Normal			

Modelling

Link	Traffic model	Stop weighting (%)	Delay weighting (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Queue limit (PCU)	Excess queue penalty (£)	Has degree of saturation limit
700	NetworkDefault	0	20	100		0.00				
701	NetworkDefault	0	20	100		0.00				
710	NetworkDefault	500	100	100		12.50	✓	10.00	1000.00	
711	NetworkDefault	500	100	100					0.00	
712	NetworkDefault	500	100	100					0.00	
720	NetworkDefault	500	100	100		13.00	✓	10.00	1000.00	
721	NetworkDefault	500	100	100					0.00	
730	NetworkDefault	500	100	100		13.00	✓	11.00	1000.00	
731	NetworkDefault	500	100	100					0.00	
790	NetworkDefault	100	100	100		0.00				
791	NetworkDefault	100	100	100		0.00				
800	NetworkDefault	0	20	100		0.00				
801	NetworkDefault	20	0	100		0.00				
810	NetworkDefault	500	100	100		5.50	✓	4.00	1000.00	
811	NetworkDefault	500	100	100					0.00	
812	NetworkDefault	500	100	100					0.00	
820	NetworkDefault	500	100	100		7.50	✓	5.00	1000.00	
821	NetworkDefault	500	100	100					0.00	
890	NetworkDefault	100	100	100		0.00				
891	NetworkDefault	100	100	100		0.00				
900	NetworkDefault	0	20	100		0.00				
901	NetworkDefault	0	20	100		0.00				
910	NetworkDefault	500	100	100		18.50				
911	NetworkDefault	500	100	100						
912	NetworkDefault	500	100	100						
920	NetworkDefault	500	100	100		19.00				
990	NetworkDefault	100	100	100		0.00				
1000	NetworkDefault	0	20	100		0.00				
1001	NetworkDefault	0	20	100		0.00				
1010	NetworkDefault	500	100	100		9.00	✓	7.00	1000.00	
1011	NetworkDefault	500	100	100					0.00	
1012	NetworkDefault	500	100	100					0.00	
1020	NetworkDefault	500	100	100		10.00	✓	8.00	1000.00	
1021	NetworkDefault	500	100	100					0.00	
1030	NetworkDefault	500	100	100		11.00	✓	8.00	1000.00	
1090	NetworkDefault	100	100	100		0.00				
1091	NetworkDefault	100	100	100		0.00				

Modelling - Normal traffic - Advanced

Link	Dispersion type for Normal Traffic	Initial queue (PCU)	Auto cycle time	Cycle time
700	NetworkDefault	0.00	✓	70
701	NetworkDefault	0.00	✓	70
710	NetworkDefault	0.00	✓	70
711	NetworkDefault			
712	NetworkDefault			
720	NetworkDefault	0.00	✓	70
721	NetworkDefault			
730	NetworkDefault	0.00	✓	70
731	NetworkDefault			
790	NetworkDefault	0.00	✓	70
791	NetworkDefault	0.00	✓	70
800	NetworkDefault	0.00	✓	70
801	NetworkDefault	0.00	✓	70
810	NetworkDefault	0.00	✓	70
811	NetworkDefault			
812	NetworkDefault			
820	NetworkDefault	0.00	✓	70
821	NetworkDefault			
890	NetworkDefault	0.00	✓	70
891	NetworkDefault	0.00	✓	70
900	NetworkDefault	0.00	✓	70
901	NetworkDefault	0.00	✓	70
910	NetworkDefault	0.00	✓	70
911	NetworkDefault			
912	NetworkDefault			
920	NetworkDefault	0.00	✓	70
990	NetworkDefault	0.00	✓	70
1000	NetworkDefault	0.00	✓	70
1001	NetworkDefault	0.00	✓	70
1010	NetworkDefault	0.00	✓	70
1011	NetworkDefault			
1012	NetworkDefault			
1020	NetworkDefault	0.00	✓	70
1021	NetworkDefault			
1030	NetworkDefault	0.00	✓	70
1090	NetworkDefault	0.00	✓	70
1091	NetworkDefault	0.00	✓	70

Flows

Link	Total flow (PCU/hr)	PCU Factor
700	609	1.00
701	654	1.00
710	230	1.00
711	12	1.00
712	383	1.00
720	73	1.00
721	756	1.00
730	220	1.00
731	2	1.00
790	1234	1.00
791	1300	1.00
800	1051	1.00
801	848	1.00
810	0	1.00
811	2	1.00
812	211	1.00
820	183	1.00
821	9	1.00
890	626	1.00
891	413	1.00
900	715	1.00
901	758	1.00
910	477	1.00
911	183	1.00
912	9	1.00
920	597	1.00
990	750	1.00
1000	338	1.00
1001	367	1.00
1010	0	1.00
1011	0	1.00
1012	251	1.00
1020	383	1.00
1021	597	1.00
1030	758	1.00
1090	433	1.00
1091	585	1.00

Flows - Advanced

Link	Detectors
(ALL)	

Signals

Link	Controller stream	Phase	Second phase enabled
700	7	C	
701	7	C	
710	7	D	
711			
712			
720	7	D	
721			
730	7	D	
731			
800	8	A	
801	8	A	
810	8	B	
811			
812			
820	8	B	
821			
900	9	A	
901	9	A	
910	9	B	
911			
912			
920	9	B	
1000	10	A	
1001	10	A	
1010	10	B	
1011			
1012			
1020	10	B	
1021			
1030	10	B	

Entry Sources

Link	Cruise time (seconds)	Cruise speed (kph)
700	18.41	39.10
701	18.41	39.10
800	24.83	29.00
801	24.83	29.00
900	24.91	28.90
901	24.91	28.90
1000	48.00	15.00
1001	48.00	15.00

Sources

Link	Source	Source type	Source link	Destination link	Cruise time (seconds)	Cruise speed (kph)	Total flow (PCU/hr)
710	1	Link	1000	710	12.36	32.00	156
711	1	Link	1021	711	12.36	32.00	12
712	1	Link	1020	712	12.36	32.00	383
720	1	Link	1001	720	12.04	32.00	73
721	1	Link	1030	721	12.04	32.00	756
730	1	Link	1001	730	11.73	32.00	220
731	1	Link	1030	731	11.73	32.00	2
790	1	Link	710	790	11.94	32.00	230
791	1	Link	720	791	9.24	32.00	73
810	1	Link	701	810	9.34	32.00	0
811	1	Link	731	811	9.35	32.00	2
812	1	Link	730	812	9.35	32.00	211
820	1	Link	701	820	9.03	32.00	183
821	1	Link	730	821	9.03	32.00	9
890	1	Link	810	890	22.50	32.00	0
891	1	Link	800	891	22.50	32.00	413
910	1	Link	800	910	18.33	32.00	226
911	1	Link	820	911	18.33	32.00	183
912	1	Link	821	912	18.33	32.00	9
920	1	Link	801	920	17.86	32.00	597
990	1	Link	910	990	22.50	32.00	226
1010	1	Link	900	1010	10.76	32.00	0
1011	1	Link	911	1011	10.76	32.00	0
1012	1	Link	910	1012	10.76	32.00	251
1020	1	Link	900	1020	10.21	32.00	383
1021	1	Link	920	1021	10.21	32.00	597
1030	1	Link	901	1030	9.56	32.00	758
1090	1	Link	1000	1090	7.12	32.00	182
1091	1	Link	1021	1091	7.10	32.00	585
710	2	Link	1001	710	12.36	32.00	73
790	2	Link	711	790	11.94	32.00	12
791	2	Link	721	791	9.24	32.00	756
890	2	Link	800	890	22.50	32.00	413
910	2	Link	801	910	18.33	32.00	251
990	2	Link	900	990	22.50	32.00	332
1090	2	Link	1010	1090	7.12	32.00	0
790	3	Link	700	790	11.94	32.00	609
791	3	Link	701	791	9.24	32.00	471
890	3	Link	812	890	22.50	32.00	211
990	3	Link	911	990	22.50	32.00	183
1090	3	Link	1011	1090	7.12	32.00	0
790	4	Link	712	790	11.94	32.00	383
890	4	Link	811	890	22.50	32.00	2
990	4	Link	912	990	22.50	32.00	9
1090	4	Link	1012	1090	7.12	32.00	251

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	Limit paths by flow	Low path flow threshold
1	(untitled)	✓	✓	Lane Balancing			✓			✓	1.25				

Normal Input Flows (PCU/hr)

	To				
	A	B	C	D	
From	A	0	1080	0	183
	B	836	12	825	226
	C	0	1139	2	332
	D	182	303	211	9

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	A	(untitled)	701, 700	1090, 1091	#0000FF
	B	(untitled)	801, 800	791, 790	#FF0000
	C	(untitled)	900, 901	891, 890	#00FF00
	D	(untitled)	1000, 1001	990	#FFFF00

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	1		A	A	701, 820, 911, 1011, 1090	Normal	0
	2		B	A	801, 910, 1012, 1090	Percentage	251
	3		B	A	801, 920, 1021, 1091	Normal	585
	5		B	A	800, 910, 1012, 1090	Normal	0
	6		A	B	701, 791	Normal	471
	7		A	B	700, 790	Normal	609
	8		B	B	801, 920, 1021, 711, 790	Normal	12
	9		C	A	900, 1010, 1090	Normal	0
	10		C	B	900, 1020, 712, 790	Normal	383
	11		C	B	901, 1030, 721, 791	Normal	756
	13		B	C	800, 891	Normal	413
	14		A	C	701, 810, 890	Normal	0
	15		B	C	800, 890	Normal	413
	16		C	C	901, 1030, 731, 811, 890	Normal	2
	17		D	B	1000, 710, 790	Normal	156
	18		D	A	1000, 1090	Normal	182
	19		D	B	1001, 710, 790	Normal	73
	20		D	B	1001, 720, 791	Normal	73
	21		D	C	1001, 730, 812, 890	Normal	211
	22		A	D	701, 820, 911, 990	Normal	183
	23		B	D	801, 910, 990	Disabled	0
	24		B	D	800, 910, 990	Normal	226
	25		C	D	900, 990	Normal	332
	26		D	D	1001, 730, 821, 912, 990	Normal	9

Link Results

Link Results: Vehicle summary

Time Segment	Link	Major link	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)
16:30-17:30	700		91	-1	609	1954	23	47.79	15.53	42.29	22.96	0.00	22.96
	701		91	-1	654	2097	23	46.35	16.42	41.64	23.91	0.00	23.91
	710		58	55	230	2088	35	14.74	5.64	45.15	13.35	16.88	30.23
	711	710			12			19.35			0.92	0.63	1.55
	712	710			383			5.56			8.40	2.96	11.36
	720		72	25	73	2231	35	14.07	3.33	25.60	4.07	5.18	9.26
	721	720			756			7.02			20.93	6.74	27.67
	730		19	379	220	2299	35	12.39	4.33	33.29	10.76	15.68	26.44
	731	730			2			2.98			0.02	0.01	0.03
	790		61	47	1234	2010	70	2.31	0.79	3.95	11.26	0.00	11.26
	791		61	47	1300	2124	70	2.19	4.95	30.15	11.25	0.69	11.93
	800		77	17	1051	2001	47	12.83	15.05	40.00	10.64	0.00	10.64
	801		59	54	848	2110	47	8.78	9.19	23.16	0.00	1.05	1.05
	810		57	58	0	2182	11	0.00	0.97	17.65	0.00	0.00	0.00
	811	810			2			50.93			0.40	0.14	0.55
	812	810			211			14.86			12.38	3.32	15.71
	820		49	84	183	2295	11	27.25	4.11	54.87	19.68	14.61	34.29
	821	820			9			13.52			0.48	0.32	0.80
	890		33	175	626	1911	70	1.40	0.24	0.68	3.46	0.00	3.46
	891		20	346	413	2042	70	1.10	0.13	0.33	1.80	0.00	1.80
	900		93	-3	715	2158	24	48.71	18.69	46.05	27.48	0.00	27.48
	901		93	-3	758	2287	24	47.48	19.55	45.46	28.39	0.00	28.39
	910		67	34	477	1995	34	23.44	11.11	60.04	44.08	28.32	72.41
	911	910			183			8.63			6.23	9.74	15.97
	912	910			9			7.72			0.27	0.37	0.64
	920		55	65	597	2187	34	20.44	8.64	45.48	48.14	31.56	79.70
	990		35	156	750	2133	70	1.30	0.27	0.68	3.85	0.00	3.85
	1000		79	14	338	2139	13	45.88	8.01	19.91	12.23	0.00	12.23
	1001		79	14	367	2317	13	44.61	8.56	19.65	12.92	0.00	12.92
	1010		18	388	0	2071	45	0.00	1.71	18.97	0.00	0.00	0.00
	1011	1010			0			0.00			0.00	0.00	0.00
	1012	1010			251			5.62			5.56	6.08	11.64
	1020		66	36	383	2247	45	4.53	7.93	79.32	6.85	7.99	14.84
	1021	1020			597			8.57			20.18	17.83	38.01
	1030		51	76	758	2253	45	2.51	6.22	56.50	7.49	2.39	9.89
	1090		21	327	433	2051	70	1.11	0.13	1.10	1.90	0.00	1.90
	1091		27	233	585	2164	70	1.14	0.19	1.44	2.63	0.00	2.63

Link Results: Flows and signals

Time Segment	Link	Major link	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Calculated sat flow (PCU/hr)	Calculated capacity (PCU/hr)	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Mean modulus of error	Actual green (s (per cycle))	Effective green (s (per cycle))
16:30-17:30	700		609	609	0		1954	670	91	✓	-1	0.00	23	24
	701		654	654	0		2097	719	91	✓	-1	0.00	23	24
	710		230	230	0		2088	1074	58		55	1.38	35	36
	711	710	12	12	0						55	0.95		
	712	710	383	383	0						55	1.17		
	720		73	73	0		2231	1147	72		25	1.38	35	36
	721	720	756	756	0						25	1.04		
	730		220	220	0		2299	1182	19		379	1.39	35	36
	731	730	2	2	0						379	1.05		
	790		1234	1234	0		2010	2010	61		47	0.32	70	70
	791		1300	1300	0		2124	2124	61		47	0.35	70	70
	800		1051	1051	0		2001	1372	77		17	0.00	47	48
	801		848	848	0		2110	1447	59		54	0.00	47	48
	810		0	0	0		2182	374	57		58	0.00	11	12
	811	810	2	2	0						58	1.00		
	812	810	211	211	0						58	1.53		
	820		183	183	0		2295	393	49		84	1.20	11	12
	821	820	9	9	0						84	1.54		
	890		626	626	0		1911	1911	33		175	0.27	70	70
	891		413	413	0		2042	2042	20		346	0.50	70	70
	900		715	715	0		2158	771	93	✓	-3	0.00	24	25
	901		758	758	0		2287	817	93	✓	-3	0.00	24	25
	910		477	477	0		1995	998	67		34	0.51	34	35
	911	910	183	183	0						34	1.36		
	912	910	9	9	0						34	1.33		
	920		597	597	0		2187	1094	55		65	0.51	34	35
	990		750	750	0		2133	2133	35		156	0.29	70	70
	1000		338	338	0		2139	428	79		14	0.00	13	14
	1001		367	367	0		2317	463	79		14	0.00	13	14
	1010		0	0	0		2071	1361	18		388	0.00	45	46
	1011	1010	0	0	0						388	0.00		
	1012	1010	251	251	0						388	1.00		
	1020		383	383	0		2247	1477	66		36	1.15	45	46
	1021	1020	597	597	0						36	0.97		
	1030		758	758	0		2253	1481	51		76	1.16	45	46
	1090		433	433	0		2051	2051	21		327	0.86	70	70
	1091		585	585	0		2164	2164	27		233	1.10	70	70

Link Results: Stops and delays

Time Segment	Link	Major link	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Unweighted cost of delay (£ per hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Uniform stops (Stops per hr)	Random stops (Stops per hr)	Unweighted cost of stops (£ per hr)	Weighted cost of stops (£ per hr)
16:30-17:30	700		18.41	47.79	3.71	4.37	114.80	22.96	124.78	554.69	205.22	16.19	0.00
	701		18.41	46.35	3.99	4.43	119.56	23.91	123.06	595.78	209.05	17.14	0.00
	710		12.36	14.74	0.69	0.25	13.35	13.35	103.07	223.74	12.92	3.38	16.88
	711	710	12.36	19.35	0.05	0.01	0.92	0.92	74.06	8.21	0.68	0.13	0.63
	712	710	12.36	5.56	0.17	0.43	8.40	8.40	10.83	19.95	21.55	0.59	2.96
	720		12.04	14.07	0.17	0.11	4.07	4.07	99.00	66.87	5.77	1.04	5.18
	721	720	12.04	7.02	0.30	1.18	20.93	20.93	12.50	35.05	59.44	1.35	6.74
	730		11.73	12.39	0.64	0.11	10.76	10.76	99.80	213.95	5.86	3.14	15.68
	731	730	11.73	2.98	0.00	0.00	0.02	0.02	7.51	0.10	0.05	0.00	0.01
	790		11.94	2.31	0.00	0.79	11.26	11.26	0.00	0.00	0.00	0.00	0.00
	791		9.24	2.19	0.00	0.79	11.25	11.25	3.71	7.98	40.20	0.69	0.69
	800		24.83	12.83	2.13	1.62	53.20	10.64	69.06	644.18	81.69	8.50	0.00
	801		24.83	8.78	1.36	0.71	29.37	0.00	52.90	412.63	35.94	5.26	1.05
	810		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	811	810	9.35	50.93	0.02	0.01	0.40	0.40	101.18	1.72	0.31	0.03	0.14
	812	810	9.35	14.86	0.22	0.65	12.38	12.38	22.06	14.38	32.21	0.66	3.32
	820		9.03	27.25	0.93	0.45	19.68	19.68	111.88	182.26	22.54	2.92	14.61
	821	820	9.03	13.52	0.01	0.02	0.48	0.48	50.44	3.44	1.11	0.06	0.32
	890		22.50	1.40	0.00	0.24	3.46	3.46	0.00	0.00	0.00	0.00	0.00
	891		22.50	1.10	0.00	0.13	1.80	1.80	0.00	0.00	0.00	0.00	0.00
	900		24.91	48.71	4.30	5.38	137.39	27.48	127.85	662.67	251.49	10.64	0.00
	901		24.91	47.48	4.56	5.44	141.95	28.39	126.41	702.70	255.48	11.15	0.00
	910		18.33	23.44	2.38	0.72	44.08	44.08	83.27	360.67	36.37	5.66	28.32
	911	910	18.33	8.63	0.16	0.28	6.23	6.23	74.56	122.53	13.96	1.95	9.74
	912	910	18.33	7.72	0.01	0.01	0.27	0.27	57.09	4.46	0.69	0.07	0.37
	920		17.86	20.44	2.79	0.60	48.14	48.14	74.09	411.97	30.47	6.31	31.56
	990		22.50	1.30	0.00	0.27	3.85	3.85	0.00	0.00	0.00	0.00	0.00
	1000		48.00	45.88	2.50	1.81	61.17	12.23	119.13	315.75	86.92	1.26	0.00
	1001		48.00	44.61	2.71	1.83	64.58	12.92	117.55	342.90	88.50	1.35	0.00
	1010		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1011	1010	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1012	1010	10.76	5.62	0.28	0.11	5.56	5.56	34.00	79.49	5.77	1.22	6.08
	1020		10.21	4.53	0.10	0.38	6.85	6.85	29.24	92.48	19.51	1.60	7.99
	1021	1020	10.21	8.57	0.82	0.60	20.18	20.18	41.85	219.48	30.42	3.57	17.83
	1030		9.56	2.51	0.00	0.52	7.49	7.49	4.43	6.86	26.70	0.48	2.39
	1090		7.12	1.11	0.00	0.13	1.90	1.90	0.00	0.00	0.00	0.00	0.00
	1091		7.10	1.14	0.00	0.19	2.63	2.63	0.00	0.00	0.00	0.00	0.00

Link Results: Queues and blocking

Time Segment	Link	Major link	Initial queue (PCU)	Mean max queue (PCU)	Max queue storage (PCU)	Utilised storage (%)	Average storage excess queue (PCU)	Average limit excess queue (PCU)	Excess queue penalty (£ per hr)	Mean end of green queue (PCU)	Mean end of red queue (PCU)	Wasted time starvation (s (per cycle))	Wasted time blocking back (s (per cycle))	Wasted time total (s (per cycle))	Estimated blocking
16:30-17:30	700		0.00	15.53	36.74	42.29	0.00	0.00	0.00	4.37	12.15	0.00	0.00	0.00	
	701		0.00	16.42	39.43	41.64	0.00	0.00	0.00	4.43	12.79	0.00	0.00	0.00	
	710		0.00	5.64	12.50	45.15	0.00	0.00	0.00	0.69	5.17	0.00	0.00	0.00	
	711	710							0.00						
	712	710							0.00						
	720		0.00	3.33	13.00	25.60	0.00	0.00	0.00	1.29	3.24	0.00	0.00	0.00	
	721	720							0.00						
	730		0.00	4.33	13.00	33.29	0.00	0.00	0.00	0.12	4.05	29.00	0.00	29.00	
	731	730							0.00						
	790		0.00	0.79	20.06	3.95	0.00	0.00	0.00			0.00	0.00	0.00	
	791		0.00	4.95	16.41	30.15	0.00	0.00	0.00			0.00	0.00	0.00	
	800		0.00	15.05	37.62	40.00	0.00	0.00	0.00	1.62	8.04	0.00	0.00	0.00	
	801		0.00	9.19	39.67	23.16	0.00	0.00	0.00	0.71	5.89	0.00	0.00	0.00	
	810		0.00	0.97	5.50	17.65	0.00	0.00	0.00	0.66	0.97	0.00	0.00	0.00	
	811	810							0.00						
	812	810							0.00						
	820		0.00	4.11	7.50	54.87	0.00	0.00	0.00	0.47	4.00	5.00	0.00	5.00	
	821	820							0.00						
	890		0.00	0.24	35.93	0.68	0.00	0.00	0.00			0.00	0.00	0.00	
	891		0.00	0.13	38.39	0.33	0.00	0.00	0.00			9.00	0.00	9.00	
	900		0.00	18.69	40.57	46.05	0.00	0.00	0.00	5.38	14.32	0.00	0.00	0.00	
	901		0.00	19.55	43.00	45.46	0.00	0.00	0.00	5.44	14.92	0.00	0.00	0.00	
	910		0.00	11.11	18.50	60.04	0.00	0.00	0.00	1.01	7.31	0.00	0.00	0.00	
	911	910							0.00						
	912	910							0.00						
	920		0.00	8.64	19.00	45.48	0.00	0.00	0.00	0.60	7.89	8.00	0.00	8.00	
	990		0.00	0.27	40.10	0.68	0.00	0.00	0.00			0.00	0.00	0.00	
	1000		0.00	8.01	40.22	19.91	0.00	0.00	0.00	1.81	7.07	0.00	0.00	0.00	
	1001		0.00	8.56	43.56	19.65	0.00	0.00	0.00	1.83	7.54	0.00	0.00	0.00	
	1010		0.00	1.71	9.00	18.97	0.00	0.00	0.00	0.11	1.66	28.00	0.00	28.00	
	1011	1010							0.00						
	1012	1010							0.00						
	1020		0.00	7.93	10.00	79.32	0.00	0.00	0.00	0.98	5.08	0.00	0.00	0.00	
	1021	1020							0.00						
	1030		0.00	6.22	11.00	56.50	0.00	0.00	0.00	0.52	0.52	12.00	0.00	12.00	
	1090		0.00	0.13	12.20	1.10	0.00	0.00	0.00			21.00	0.00	21.00	
	1091		0.00	0.19	12.83	1.44	0.00	0.00	0.00			32.00	0.00	32.00	

Link Results: Journey times

Time Segment	Link	Major link	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	JourneyTime (s)
16:30-17:30	700		121.80	11.20	10.88	66.21
	701		130.80	11.76	11.12	64.76
	710		25.23	1.73	14.60	27.10
	711	710	1.32	0.11	12.47	31.71
	712	710	42.09	1.91	22.07	17.92
	720		7.85	0.53	14.75	26.11
	721	720	80.90	4.00	20.21	19.06
	730		22.97	1.48	15.57	24.12
	731	730	0.21	0.01	25.51	14.72
	790		130.94	4.88	26.81	14.25
	791		106.85	4.13	25.87	11.44
	800		210.20	10.99	19.12	37.66
	801		169.60	7.92	21.42	33.61
	810		0.00	0.00	0.00	0.00
	811	810	0.17	0.03	4.96	60.29
	812	810	17.56	1.42	12.36	24.22
	820		14.69	1.84	7.96	36.28
	821	820	0.72	0.06	12.81	22.55
	890		125.15	4.15	30.13	23.90
	891		82.50	2.70	30.50	23.60
	900		143.00	14.62	9.78	73.63
	901		151.60	15.24	9.95	72.39
	910		77.67	5.53	14.04	41.77
	911	910	29.82	1.37	21.76	26.95
	912	910	1.47	0.07	22.51	26.05
	920		94.81	6.35	14.92	38.30
	990		150.00	4.96	30.25	23.80
	1000		67.60	8.81	7.67	93.88
	1001		73.40	9.44	7.77	92.61
	1010		0.00	0.00	0.00	0.00
	1011	1010	0.00	0.00	0.00	0.00
	1012	1010	24.00	1.14	21.03	16.38
	1020		34.75	1.57	22.16	14.74
	1021	1020	54.18	3.11	17.40	18.77
	1030		64.44	2.54	25.36	12.07
	1090		27.37	0.99	27.68	8.23
	1091		36.91	1.34	27.57	8.24

Link Results: Advanced

Time Segment	Link	Major link	Degree of saturation penalty (£ per hr)	Ped gap accepting penalty (£ per hr)	Warmed up	Mean Max Queue EoTS (PCU)	Mean End of Green Queue EoTS (PCU)	Mean End of Red Queue EoTS (PCU)	PCU Factor	Cost of traffic penalties (£ per hr)	Unweighted performance index (£ per hr)	Performance Index (£ per hr)
16:30-17:30	700		0.00	0.00	✓	15.81	4.64	12.42	1.00	0.00	130.99	22.96
	701		0.00	0.00	✓	16.68	4.69	13.05	1.00	0.00	136.70	23.91
	710		0.00	0.00	✓	5.65	0.69	5.17	1.00	0.00	16.73	30.23
	711	710	0.00	0.00					1.00	0.00	1.04	1.55
	712	710	0.00	0.00					1.00	0.00	8.99	11.36
	720		0.00	0.00	✓	3.33	1.30	3.25	1.00	0.00	5.11	9.26
	721	720	0.00	0.00					1.00	0.00	22.28	27.67
	730		0.00	0.00	✓	4.33	0.12	4.05	1.00	0.00	13.90	26.44
	731	730	0.00	0.00					1.00	0.00	0.03	0.03
	790		0.00	0.00	✓	0.79			1.00	0.00	11.26	11.26
	791		0.00	0.00	✓	4.95			1.00	0.00	11.93	11.93
	800		0.00	0.00	✓	15.06	1.63	8.05	1.00	0.00	61.70	10.64
	801		0.00	0.00	✓	9.19	0.71	5.89	1.00	0.00	34.63	1.05
	810		0.00	0.00	✓	0.97	0.66	0.97	1.00	0.00	0.00	0.00
	811	810	0.00	0.00					1.00	0.00	0.43	0.55
	812	810	0.00	0.00					1.00	0.00	13.05	15.71
	820		0.00	0.00	✓	4.12	0.48	4.00	1.00	0.00	22.60	34.29
	821	820	0.00	0.00					1.00	0.00	0.55	0.80
	890		0.00	0.00	✓	0.24			1.00	0.00	3.46	3.46
	891		0.00	0.00	✓	0.13			1.00	0.00	1.80	1.80
	900		0.00	0.00	✓	19.12	5.81	14.75	1.00	0.00	148.02	27.48
	901		0.00	0.00	✓	19.97	5.86	15.34	1.00	0.00	153.10	28.39
	910		0.00	0.00	✓	11.11	1.01	7.31	1.00	0.00	49.75	72.41
	911	910	0.00	0.00					1.00	0.00	8.18	15.97
	912	910	0.00	0.00					1.00	0.00	0.35	0.64
	920		0.00	0.00	✓	8.64	0.60	7.89	1.00	0.00	54.46	79.70
	990		0.00	0.00	✓	0.27			1.00	0.00	3.85	3.85
	1000		0.00	0.00	✓	8.04	1.84	7.10	1.00	0.00	62.43	12.23
	1001		0.00	0.00	✓	8.60	1.87	7.58	1.00	0.00	65.93	12.92
	1010		0.00	0.00	✓	1.71	0.11	1.66	1.00	0.00	0.00	0.00
	1011	1010	0.00	0.00					1.00	0.00	0.00	0.00
	1012	1010	0.00	0.00					1.00	0.00	6.77	11.64
	1020		0.00	0.00	✓	7.93	0.99	5.08	1.00	0.00	8.45	14.84
	1021	1020	0.00	0.00					1.00	0.00	23.74	38.01
	1030		0.00	0.00	✓	6.22	0.52	0.52	1.00	0.00	7.97	9.89
	1090		0.00	0.00	✓	0.13			1.00	0.00	1.90	1.90
	1091		0.00	0.00	✓	0.19			1.00	0.00	2.63	2.63

Network Results

Run Summary

Analysis set used	Run start time	Run finish time	Run duration (s)	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 unsignal PRC
4	10/11/2021 16:38:16	10/11/2021 16:38:17	1.02	16:30	70	577.38	69.60	92.80	901	4	11	901	790

Network Results: Vehicle summary

Time Segment	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Actual green (s per cycle)	Mean Delay per Veh (s)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
16:30-17:30	93	-3	16017	1410	15.64	404.88	172.50	577.38

Network Results: Flows and signals

Time Segment	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Actual green (s (per cycle))	Effective green (s (per cycle))
16:30-17:30	16017	16017	-1		93	✓	-3	1410	1440

Network Results: Stops and delays

Time Segment	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Unweighted cost of delay (£ per hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Uniform stops (Stops per hr)	Random stops (Stops per hr)	Unweighted cost of stops (£ per hr)	Weighted cost of stops (£ per hr)
16:30-17:30	17.61	15.64	35.01	34.59	988.37	404.88	49.25	6306.89	1580.84	106.33	172.50

Network Results: Queues and blocking

Time Segment	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time starvation (s (per cycle))	Wasted time blocking back (s (per cycle))	Wasted time total (s (per cycle))
16:30-17:30	79.32	0.00	234.00	0.00	234.00

Network Results: Journey times

Time Segment	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)
16:30-17:30	2322.58	147.96	15.70

Network Results: Advanced

Time Segment	Degree of saturation penalty (£ per hr)	Ped gap accepting penalty (£ per hr)	Warmed up	PCU Factor	Cost of traffic penalties (£ per hr)	Controller stream penalties (£ per hr)	Unweighted performance index (£ per hr)	Performance Index (£ per hr)
16:30-17:30	0.00	0.00	✓	1.00	0.00	0.00	1094.70	577.38

Point to Point Journey Time

Average Journey Time (s) for Local Matrix: 1

	To				
	A	B	C	D	
From	A	0.0	78.6	0.0	151.8
	B	99.2	136.6	61.4	103.2
	C	0.0	116.8	183.4	97.4
	D	102.1	133.7	164.9	189.1

Path Journey Time

Path	From Location	To Location	Normal Calculated Flow (PCU/hr)	Normal journey time (s)	Normal journey dist (m)	Bus journey dist (m)	Tram journey dist (m)	Pedestrian journey dist (m)	Calculated Total Flow (PCU/hr)	Avg journey time (s)	Avg journey dist (m)
1	A	A	0	136.22	602.09	602.09	602.09	602.09	0	0.00	2408.36
2	B	A	251	99.99	521.86	521.86	521.86	521.86	251	99.99	521.86
3	B	A	585	98.92	512.56	512.56	512.56	512.56	585	98.92	512.56
5	B	A	0	104.04	521.86	521.86	521.86	521.86	0	0.00	2087.44
6	A	B	471	76.20	282.17	282.17	282.17	282.17	471	76.20	282.17
7	A	B	609	80.46	306.14	306.14	306.14	306.14	609	80.46	306.14
8	B	B	12	136.65	665.52	665.52	665.52	665.52	12	136.65	665.52
9	C	A	0	81.86	358.96	358.96	358.96	358.96	0	0.00	1435.84
10	C	B	383	120.54	506.76	506.76	506.76	506.76	383	120.54	506.76
11	C	B	756	114.95	474.19	474.19	474.19	474.19	756	114.95	474.19
13	B	C	413	61.26	400.00	400.00	400.00	400.00	413	61.26	400.00
14	A	C	0	88.66	483.00	483.00	483.00	483.00	0	0.00	1932.00
15	B	C	413	61.56	400.00	400.00	400.00	400.00	413	61.56	400.00
16	C	C	2	183.36	672.46	672.46	672.46	672.46	2	183.36	672.46
17	D	B	156	135.24	416.03	416.03	416.03	416.03	156	135.24	416.03
18	D	A	182	102.11	263.28	263.28	263.28	263.28	182	102.11	263.28
19	D	B	73	133.97	416.03	416.03	416.03	416.03	73	133.97	416.03
20	D	B	73	130.16	389.18	389.18	389.18	389.18	73	130.16	389.18
21	D	C	211	164.85	587.45	587.45	587.45	587.45	211	164.85	587.45
22	A	D	183	151.79	643.13	643.13	643.13	643.13	183	151.79	643.13
23	B	D	0	99.18	562.90	562.90	562.90	562.90	0	0.00	2251.60
24	B	D	226	103.23	562.90	562.90	562.90	562.90	226	103.23	562.90
25	C	D	332	97.43	400.00	400.00	400.00	400.00	332	97.43	400.00
26	D	D	9	189.13	747.44	747.44	747.44	747.44	9	189.13	747.44

Final Prediction Table

Link Results

				SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES	
Link	Name	Major link	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)	Mean end of red queue (PCU)
700			7	7	C	609	1954	23	0.00	91	-1	66.21	47.79	124.78	15.53	12.15
701			7	7	C	654	2097	23	0.00	91	-1	64.76	46.35	123.06	16.42	12.79
710		(710)	7	7	D	230	2088	35	0.00	58	55	27.10	14.74	103.07	5.64	5.17
711		710				12						31.71	19.35	74.06		
712		710				383						17.92	5.56	10.83		
720		(720)	7	7	D	73	2231	35	0.00	72	25	26.11	14.07	99.00	3.33	3.24
721		720				756						19.06	7.02	12.50		
730		(730)	7	7	D	220	2299	35	29.00	19	379	24.12	12.39	99.80	4.33	4.05
731		730				2						14.72	2.98	7.51		
790			7			1234	2010	70	0.00	61	47	14.25	2.31	0.00	0.79	
791			7			1300	2124	70	0.00	61	47	11.44	2.19	3.71	4.95	
800			8	8	A	1051	2001	47	0.00	77	17	37.66	12.83	69.06	15.05	8.04
801			8	8	A	848	2110	47	0.00	59	54	33.61	8.78	52.90	9.19	5.89
810		(810)	8	8	B	0	2182	11	0.00	57	58	0.00	0.00	0.00	0.97	0.97
811		810				2						60.29	50.93	101.18		
812		810				211						24.22	14.86	22.06		
820		(820)	8	8	B	183	2295	11	5.00	49	84	36.28	27.25	111.88	4.11	4.00
821		820				9						22.55	13.52	50.44		
890			8			626	1911	70	0.00	33	175	23.90	1.40	0.00	0.24	
891			8			413	2042	70	9.00	20	346	23.60	1.10	0.00	0.13	
900			9	9	A	715	2158	24	0.00	93	-3	73.63	48.71	127.85	18.69	14.32
901			9	9	A	758	2287	24	0.00	93	-3	72.39	47.48	126.41	19.55	14.92
910		(910)	9	9	B	477	1995	34	0.00	67	34	41.77	23.44	83.27	11.11	7.31
911		910				183						26.95	8.63	74.56		
912		910				9						26.05	7.72	57.09		
920			9	9	B	597	2187	34	8.00	55	65	38.30	20.44	74.09	8.64	7.89
990			9			750	2133	70	0.00	35	156	23.80	1.30	0.00	0.27	
1000			10	10	A	338	2139	13	0.00	79	14	93.88	45.88	119.13	8.01	7.07
1001			10	10	A	367	2317	13	0.00	79	14	92.61	44.61	117.55	8.56	7.54
1010		(1010)	10	10	B	0	2071	45	28.00	18	388	0.00	0.00	0.00	1.71	1.66
1011		1010				0						0.00	0.00	0.00		
1012		1010				251						16.38	5.62	34.00		
1020		(1020)	10	10	B	383	2247	45	0.00	66	36	14.74	4.53	29.24	7.93	5.08
1021		1020				597						18.77	8.57	41.85		
1030			10	10	B	758	2253	45	12.00	51	76	12.07	2.51	4.43	6.22	0.52
1090			10			433	2051	70	21.00	21	327	8.23	1.11	0.00	0.13	
1091			10			585	2164	70	32.00	27	233	8.24	1.14	0.00	0.19	

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	2322.58	147.96	15.70	35.01	34.59	404.88	172.50	0.00	577.38
Bus									
Tram									
Pedestrians									
TOTAL	2322.58	147.96	15.70	35.01	34.59	404.88	172.50	0.00	577.38

- | < = 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 - 2026 Base + HG(140) + Coed Darcy AM

D5 - 2026 Base + HG(140) + Coed Darcy, AM

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Run duration (s)	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
5	10/11/2021 16:38:17	10/11/2021 16:38:17	0.26	07:45	70	2038.32	461.89	182.17	1000	5	14	1000	790

Analysis Set Details

Name	Use Simulation	Description	Use specific Demand Set(s)	Specific Demand Set(s)	Optimise specific Demand Set(s)	Include in report	Locked
2026 Base + HG(140) + Coed Darcy AM			✓	D5		✓	

Demand Set Details

Scenario name	Time Period name	Description	Composite	Demand sets	Start time (HH:mm)	Locked	Run automatically
2026 Base + HG(140) + Coed Darcy	AM				07:45		✓

Network Options

Network timings

Network cycle time (s)	Minimum possible cycle time (s)	Absolute minimum possible cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
70	26	26		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)	Missing stage transition options
10000.00	10000.00	10000.00	2	Assume banned

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from traffic model	Exclude pedestrians from results calculation	Random delay mode	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓			Simplified (TRANSYT 12)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms ⁻²)	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms ⁻²)	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Offsets And Green Splits	✓

Advanced

Optimisation type	OUTProfile accuracy (%)	SASart temperature	SACooling factor	Random seed	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Simulated Annealing	10, 10, 1, 1, 0.1, 0.1, 0.01, 0.01	300.00	100.00	1	✓	✓	10			Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Traffic Nodes

Traffic Nodes

Traffic node	Name	Description
(ALL)		

Links

Links

Link	Name	Description	Traffic node	Length (m)	Has Saturation Flow	Use RR67	Saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Is minor shared	Major link	Allow Nearside Turn On Red
700			7	200.00	✓		1954	✓		Normal			
701			7	200.00	✓		2097	✓		Normal			
710			7	109.89	✓		2088	✓		Normal			
711				109.89						Normal	✓	710	
712				109.89						Normal	✓	710	
720			7	107.01	✓		2231	✓		Normal			
721				107.01						Normal	✓	720	
730			7	104.31	✓		2299	✓		Normal			
731				104.31						Normal	✓	730	
790			7	106.14	✓		2010			Normal			
791			7	82.17	✓		2124			Normal			
800			8	200.00	✓		2001	✓		Normal			
801			8	200.00	✓		2110	✓		Normal			
810			8	83.00	✓		2182	✓		Normal			
811				83.14						Normal	✓	810	
812				83.14						Normal	✓	810	
820			8	80.23	✓		2295	✓		Normal			
821				80.23						Normal	✓	820	
890			8	200.00	✓		1911			Normal			
891			8	200.00	✓		2042			Normal			
900			9	200.00	✓		2158	✓		Normal			
901			9	200.00	✓		2287	✓		Normal			
910			9	162.90	✓		1995	✓		Normal			
911				162.90						Normal	✓	910	
912				162.90						Normal	✓	910	
920			9	158.76	✓		2187	✓		Normal			
990			9	200.00	✓		2133			Normal			
1000			10	200.00	✓		2139	✓		Normal			
1001			10	200.00	✓		2317	✓		Normal			
1010			10	95.68	✓		2071	✓		Normal			
1011				95.68						Normal	✓	1010	
1012				95.68						Normal	✓	1010	
1020			10	90.73	✓		2247	✓		Normal			
1021				90.73						Normal	✓	1020	
1030			10	85.01	✓		2253	✓		Normal			
1090			10	63.28	✓		2051			Normal			
1091			10	63.07	✓		2164			Normal			

Modelling

Link	Traffic model	Stop weighting (%)	Delay weighting (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Queue limit (PCU)	Excess queue penalty (£)	Has degree of saturation limit
700	NetworkDefault	0	20	100		0.00				
701	NetworkDefault	0	20	100		0.00				
710	NetworkDefault	500	100	100		12.50	✓	10.00	1000.00	
711	NetworkDefault	500	100	100					0.00	
712	NetworkDefault	500	100	100					0.00	
720	NetworkDefault	500	100	100		13.00	✓	10.00	1000.00	
721	NetworkDefault	500	100	100					0.00	
730	NetworkDefault	500	100	100		13.00	✓	11.00	1000.00	
731	NetworkDefault	500	100	100					0.00	
790	NetworkDefault	100	100	100		0.00				
791	NetworkDefault	100	100	100		0.00				
800	NetworkDefault	0	20	100		0.00				
801	NetworkDefault	20	0	100		0.00				
810	NetworkDefault	500	100	100		5.50	✓	4.00	1000.00	
811	NetworkDefault	500	100	100					0.00	
812	NetworkDefault	500	100	100					0.00	
820	NetworkDefault	500	100	100		7.50	✓	5.00	1000.00	
821	NetworkDefault	500	100	100					0.00	
890	NetworkDefault	100	100	100		0.00				
891	NetworkDefault	100	100	100		0.00				
900	NetworkDefault	0	20	100		0.00				
901	NetworkDefault	0	20	100		0.00				
910	NetworkDefault	500	100	100		18.50				
911	NetworkDefault	500	100	100						
912	NetworkDefault	500	100	100						
920	NetworkDefault	500	100	100		19.00				
990	NetworkDefault	100	100	100		0.00				
1000	NetworkDefault	0	20	100		0.00				
1001	NetworkDefault	0	20	100		0.00				
1010	NetworkDefault	500	100	100		9.00	✓	7.00	1000.00	
1011	NetworkDefault	500	100	100					0.00	
1012	NetworkDefault	500	100	100					0.00	
1020	NetworkDefault	500	100	100		10.00	✓	8.00	1000.00	
1021	NetworkDefault	500	100	100					0.00	
1030	NetworkDefault	500	100	100		11.00	✓	8.00	1000.00	
1090	NetworkDefault	100	100	100		0.00				
1091	NetworkDefault	100	100	100		0.00				

Modelling - Normal traffic - Advanced

Link	Dispersion type for Normal Traffic	Initial queue (PCU)	Auto cycle time	Cycle time
700	NetworkDefault	0.00	✓	70
701	NetworkDefault	0.00	✓	70
710	NetworkDefault	0.00	✓	70
711	NetworkDefault			
712	NetworkDefault			
720	NetworkDefault	0.00	✓	70
721	NetworkDefault			
730	NetworkDefault	0.00	✓	70
731	NetworkDefault			
790	NetworkDefault	0.00	✓	70
791	NetworkDefault	0.00	✓	70
800	NetworkDefault	0.00	✓	70
801	NetworkDefault	0.00	✓	70
810	NetworkDefault	0.00	✓	70
811	NetworkDefault			
812	NetworkDefault			
820	NetworkDefault	0.00	✓	70
821	NetworkDefault			
890	NetworkDefault	0.00	✓	70
891	NetworkDefault	0.00	✓	70
900	NetworkDefault	0.00	✓	70
901	NetworkDefault	0.00	✓	70
910	NetworkDefault	0.00	✓	70
911	NetworkDefault			
912	NetworkDefault			
920	NetworkDefault	0.00	✓	70
990	NetworkDefault	0.00	✓	70
1000	NetworkDefault	0.00	✓	70
1001	NetworkDefault	0.00	✓	70
1010	NetworkDefault	0.00	✓	70
1011	NetworkDefault			
1012	NetworkDefault			
1020	NetworkDefault	0.00	✓	70
1021	NetworkDefault			
1030	NetworkDefault	0.00	✓	70
1090	NetworkDefault	0.00	✓	70
1091	NetworkDefault	0.00	✓	70

Flows

Link	Total flow (PCU/hr)	PCU Factor
700	557	1.00
701	598	1.00
710	295	1.00
711	12	1.00
712	290	1.00
720	55	1.00
721	626	1.00
730	613	1.00
731	2	1.00
790	1154	1.00
791	999	1.00
800	1400	1.00
801	1096	1.00
810	0	1.00
811	2	1.00
812	605	1.00
820	280	1.00
821	8	1.00
890	1178	1.00
891	571	1.00
900	593	1.00
901	628	1.00
910	638	1.00
911	280	1.00
912	8	1.00
920	717	1.00
990	848	1.00
1000	668	1.00
1001	723	1.00
1010	0	1.00
1011	2	1.00
1012	379	1.00
1020	290	1.00
1021	717	1.00
1030	628	1.00
1090	809	1.00
1091	705	1.00

Flows - Advanced

Link	Detectors
(ALL)	

Signals

Link	Controller stream	Phase	Second phase enabled
700	7	C	
701	7	C	
710	7	D	
711			
712			
720	7	D	
721			
730	7	D	
731			
800	8	A	
801	8	A	
810	8	B	
811			
812			
820	8	B	
821			
900	9	A	
901	9	A	
910	9	B	
911			
912			
920	9	B	
1000	10	A	
1001	10	A	
1010	10	B	
1011			
1012			
1020	10	B	
1021			
1030	10	B	

Entry Sources

Link	Cruise time (seconds)	Cruise speed (kph)
700	18.41	39.10
701	18.41	39.10
800	24.83	29.00
801	24.83	29.00
900	24.91	28.90
901	24.91	28.90
1000	48.00	15.00
1001	48.00	15.00

Sources

Link	Source	Source type	Source link	Destination link	Cruise time (seconds)	Cruise speed (kph)	Total flow (PCU/hr)
710	1	Link	1000	710	12.36	32.00	240
711	1	Link	1021	711	12.36	32.00	12
712	1	Link	1020	712	12.36	32.00	290
720	1	Link	1001	720	12.04	32.00	55
721	1	Link	1030	721	12.04	32.00	626
730	1	Link	1001	730	11.73	32.00	613
731	1	Link	1030	731	11.73	32.00	2
790	1	Link	710	790	11.94	32.00	295
791	1	Link	720	791	9.24	32.00	55
810	1	Link	701	810	9.34	32.00	0
811	1	Link	731	811	9.35	32.00	2
812	1	Link	730	812	9.35	32.00	605
820	1	Link	701	820	9.03	32.00	280
821	1	Link	730	821	9.03	32.00	8
890	1	Link	810	890	22.50	32.00	0
891	1	Link	800	891	22.50	32.00	571
910	1	Link	800	910	18.33	32.00	259
911	1	Link	820	911	18.33	32.00	280
912	1	Link	821	912	18.33	32.00	8
920	1	Link	801	920	17.86	32.00	717
990	1	Link	910	990	22.50	32.00	259
1010	1	Link	900	1010	10.76	32.00	0
1011	1	Link	911	1011	10.76	32.00	2
1012	1	Link	910	1012	10.76	32.00	379
1020	1	Link	900	1020	10.21	32.00	290
1021	1	Link	920	1021	10.21	32.00	717
1030	1	Link	901	1030	9.56	32.00	628
1090	1	Link	1000	1090	7.12	32.00	428
1091	1	Link	1021	1091	7.10	32.00	705
710	2	Link	1001	710	12.36	32.00	55
790	2	Link	711	790	11.94	32.00	12
791	2	Link	721	791	9.24	32.00	626
890	2	Link	800	890	22.50	32.00	571
910	2	Link	801	910	18.33	32.00	379
990	2	Link	900	990	22.50	32.00	303
1090	2	Link	1010	1090	7.12	32.00	0
790	3	Link	700	790	11.94	32.00	557
791	3	Link	701	791	9.24	32.00	318
890	3	Link	812	890	22.50	32.00	605
990	3	Link	911	990	22.50	32.00	278
1090	3	Link	1011	1090	7.12	32.00	2
790	4	Link	712	790	11.94	32.00	290
890	4	Link	811	890	22.50	32.00	2
990	4	Link	912	990	22.50	32.00	8
1090	4	Link	1012	1090	7.12	32.00	379



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	Limit paths by flow	Low path flow threshold
1	(untitled)	✓	✓	Lane Balancing			✓			✓	1.25				

Normal Input Flows (PCU/hr)

	To				
	A	B	C	D	
From	A	2	875	0	278
	B	1084	12	1141	259
	C	0	916	2	303
	D	428	350	605	8

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	A	(untitled)	701, 700	1090, 1091	#0000FF
	B	(untitled)	801, 800	791, 790	#FF0000
	C	(untitled)	900, 901	891, 890	#00FF00
	D	(untitled)	1000, 1001	990	#FFFF00

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	1		A	A	701, 820, 911, 1011, 1090	Normal	2
	2		B	A	801, 910, 1012, 1090	Percentage	379
	3		B	A	801, 920, 1021, 1091	Normal	705
	5		B	A	800, 910, 1012, 1090	Normal	0
	6		A	B	701, 791	Normal	318
	7		A	B	700, 790	Normal	557
	8		B	B	801, 920, 1021, 711, 790	Normal	12
	9		C	A	900, 1010, 1090	Normal	0
	10		C	B	900, 1020, 712, 790	Normal	290
	11		C	B	901, 1030, 721, 791	Normal	626
	13		B	C	800, 891	Normal	571
	14		A	C	701, 810, 890	Normal	0
	15		B	C	800, 890	Normal	571
	16		C	C	901, 1030, 731, 811, 890	Normal	2
	17		D	B	1000, 710, 790	Normal	240
	18		D	A	1000, 1090	Normal	428
	19		D	B	1001, 710, 790	Normal	55
	20		D	B	1001, 720, 791	Normal	55
	21		D	C	1001, 730, 812, 890	Normal	605
	22		A	D	701, 820, 911, 990	Normal	278
	23		B	D	801, 910, 990	Disabled	0
	24		B	D	800, 910, 990	Normal	259
	25		C	D	900, 990	Normal	303
	26		D	D	1001, 730, 821, 912, 990	Normal	8

Link Results

Link Results: Vehicle summary

Time Segment	Link	Major link	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)
07:45-08:45	700		71	26	557	1954	27	25.55	10.20	27.77	11.23	0.00	11.23
	701		71	26	598	2097	27	25.03	10.86	27.55	11.81	0.00	11.81
	710		48	87	162	2088	31	12.34	5.44	43.55	7.88	11.42	19.30
	711	710			12			15.52			0.73	0.48	1.21
	712	710			286			14.87			16.80	7.73	24.53
	720		64	41	30	2231	31	14.17	5.22	40.16	1.69	2.13	3.82
	721	720			619			16.16			39.45	16.88	56.33
	730		32	179	337	2299	31	11.44	6.70	51.55	15.19	24.17	39.36
	731	730			2			11.35			0.09	0.04	0.13
	790		51	78	1017	2010	70	1.81	0.51	2.55	7.27	0.00	7.27
	791		46	98	967	2124	70	1.55	0.42	2.55	5.93	0.00	5.93
	800		109	-17	1400	2001	44	172.01	87.08	231.47	189.98	0.00	189.98
	801		81	11	1096	2110	44	16.09	17.60	44.36	0.00	2.03	2.03
	810		71	26	0	2182	14	0.00	2.55	46.30	0.00	0.00	0.00
	811	810			2			44.35			0.35	0.13	0.48
	812	810			332			23.78			31.16	9.00	40.17
	820		58	56	280	2295	14	28.79	6.15	82.02	31.81	22.29	268.63
	821	820			4			19.11			0.33	0.14	0.47
	890		45	100	858	1911	70	1.71	0.41	1.13	5.79	0.00	5.79
	891		26	251	524	2042	70	1.19	0.17	0.45	2.45	0.00	2.45
	900		101	-11	593	2158	18	110.94	25.35	62.48	51.90	0.00	51.90
	901		101	-11	628	2287	18	108.16	26.37	61.32	53.58	0.00	53.58
	910		77	17	617	1995	40	19.10	14.08	76.11	46.52	29.63	76.15
	911	910			280			15.50			17.13	20.74	37.87
	912	910			4			13.61			0.24	0.30	0.53
	920		56	61	717	2187	40	14.54	7.60	40.01	41.10	27.81	68.91
	990		39	131	832	2133	70	1.38	0.32	0.80	4.54	0.00	4.54
	1000		182	-51	668	2139	11	833.77	158.79	394.83	439.38	0.00	439.38
	1001		182	-51	723	2317	11	832.54	171.62	393.95	474.85	0.00	474.85
	1010		26	246	0	2071	47	0.00	3.43	38.07	0.00	0.00	0.00
	1011	1010			2			16.11			0.13	0.13	0.25
	1012	1010			367			5.75			8.32	11.48	19.80
	1020		65	38	286	2247	47	3.53	9.08	90.81	3.99	2.43	52.41
	1021	1020			717			9.06			25.60	28.84	54.44
	1030		40	124	621	2253	47	1.96	4.12	37.49	4.79	1.42	6.21
	1090		29	206	604	2051	70	1.24	0.21	1.71	2.96	0.00	2.96
	1091		33	176	705	2164	70	1.23	1.45	11.31	3.43	0.18	3.61

Link Results: Flows and signals

Time Segment	Link	Major link	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Calculated sat flow (PCU/hr)	Calculated capacity (PCU/hr)	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Mean modulus of error	Actual green (s (per cycle))	Effective green (s (per cycle))
07:45-08:45	700		557	557	0		1954	782	71		26	0.00	27	28
	701		598	598	0		2097	839	71		26	0.00	27	28
	710		162	162	133	✓	2088	955	48		87	1.37	31	32
	711	710	12	12	0						87	0.88		
	712	710	286	286	3	✓					87	1.18		
	720		30	30	25	✓	2231	1020	64		41	1.37	31	32
	721	720	619	619	7	✓					41	1.14		
	730		337	337	276	✓	2299	1051	32		179	1.38	31	32
	731	730	2	2	0						179	1.14		
	790		1017	1017	136	✓	2010	2010	51		78	0.45	70	70
	791		967	967	32	✓	2124	2124	46		98	0.48	70	70
	800		1400	1286	0		2001	1286	109	✓	-17	0.00	44	45
	801		1096	1096	0		2110	1356	81		11	0.00	44	45
	810		0	0	0		2182	468	71		26	0.00	14	15
	811	810	2	2	0						26	1.08		
	812	810	332	332	273	✓					26	1.46		
	820		280	280	0		2295	492	58		56	1.12	14	15
	821	820	4	4	4	✓					56	1.46		
	890		858	858	319	✓	1911	1911	45		100	0.16	70	70
	891		524	524	46	✓	2042	2042	26		251	0.52	70	70
	900		593	586	0		2158	586	101	✓	-11	0.00	18	19
	901		628	621	0		2287	621	101	✓	-11	0.00	18	19
	910		617	617	21	✓	1995	1169	77		17	0.58	40	41
	911	910	280	280	0						17	1.31		
	912	910	4	4	4	✓					17	1.18		
	920		717	717	0		2187	1281	56		61	0.60	40	41
	990		832	832	16	✓	2133	2133	39		131	0.32	70	70
	1000		668	367	0		2139	367	182	✓	-51	0.00	11	12
	1001		723	397	0		2317	397	182	✓	-51	0.00	11	12
	1010		0	0	0		2071	1420	26		246	0.00	47	48
	1011	1010	2	2	0						246	1.39		
	1012	1010	367	367	12	✓					246	0.78		
	1020		286	286	3	✓	2247	1541	65		38	1.25	47	48
	1021	1020	717	717	0						38	0.79		
	1030		621	621	7	✓	2253	1545	40		124	1.26	47	48
	1090		604	604	205	✓	2051	2051	29		206	0.79	70	70
	1091		705	705	0		2164	2164	33		176	1.01	70	70

Link Results: Stops and delays

Time Segment	Link	Major link	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Unweighted cost of delay (£ per hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Uniform stops (Stops per hr)	Random stops (Stops per hr)	Unweighted cost of stops (£ per hr)	Weighted cost of stops (£ per hr)
07:45-08:45	700		18.41	25.55	2.73	1.23	56.15	11.23	90.75	444.14	61.33	10.77	0.00
	701		18.41	25.03	2.93	1.23	59.04	11.81	90.04	476.88	61.57	11.47	0.00
	710		12.36	12.34	0.39	0.16	7.88	7.88	98.85	151.77	8.30	2.28	11.42
	711	710	12.36	15.52	0.04	0.01	0.73	0.73	55.74	6.07	0.62	0.10	0.48
	712	710	12.36	14.87	0.89	0.29	16.80	16.80	37.84	93.68	14.68	1.55	7.73
	720		12.04	14.17	0.08	0.04	1.69	1.69	98.44	27.76	2.05	0.43	2.13
	721	720	12.04	16.16	1.95	0.83	39.45	39.45	38.25	194.71	41.98	3.38	16.88
	730		11.73	11.44	0.83	0.24	15.19	15.19	100.66	326.82	12.03	4.83	24.17
	731	730	11.73	11.35	0.00	0.00	0.09	0.09	29.78	0.52	0.07	0.01	0.04
	790		11.94	1.81	0.00	0.51	7.27	7.27	0.00	0.00	0.00	0.00	0.00
	791		9.24	1.55	0.00	0.42	5.93	5.93	0.00	0.00	0.00	0.00	0.00
	800		24.83	172.01	4.47	62.43	949.90	189.98	248.26	1283.06	1910.43	37.42	0.00
	801		24.83	16.09	2.83	2.07	69.57	0.00	78.91	760.86	103.98	10.13	2.03
	810		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	811	810	9.35	44.35	0.02	0.01	0.35	0.35	92.61	1.47	0.36	0.03	0.13
	812	810	9.35	23.78	0.97	1.22	31.16	31.16	38.00	66.22	60.02	1.80	9.00
	820		9.03	28.79	1.57	0.67	31.81	31.81	111.59	279.04	33.46	4.46	22.29
	821	820	9.03	19.11	0.01	0.01	0.33	0.33	45.39	1.47	0.52	0.03	0.14
	890		22.50	1.71	0.00	0.41	5.79	5.79	0.00	0.00	0.00	0.00	0.00
	891		22.50	1.19	0.00	0.17	2.45	2.45	0.00	0.00	0.00	0.00	0.00
	900		24.91	110.94	4.15	14.12	259.48	51.90	190.63	573.42	543.18	12.99	0.00
	901		24.91	108.16	4.40	14.47	267.92	53.58	188.28	607.22	561.52	13.60	0.00
	910		18.33	19.10	2.13	1.14	46.52	46.52	67.29	358.03	57.42	5.93	29.63
	911	910	18.33	15.50	0.69	0.52	17.13	17.13	103.84	264.76	26.05	4.15	20.74
	912	910	18.33	13.61	0.01	0.01	0.24	0.24	95.39	3.78	0.41	0.06	0.30
	920		17.86	14.54	2.26	0.63	41.10	41.10	54.41	357.70	32.21	5.56	27.81
	990		22.50	1.38	0.00	0.32	4.54	4.54	0.00	0.00	0.00	0.00	0.00
	1000		48.00	833.77	2.95	151.76	2196.90	439.38	463.29	366.69	1332.12	5.33	0.00
	1001		48.00	832.54	3.20	164.00	2374.27	474.85	462.98	397.20	1441.76	5.76	0.00
	1010		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1011	1010	10.76	16.11	0.01	0.00	0.13	0.13	88.60	1.72	0.05	0.03	0.13
	1012	1010	10.76	5.75	0.41	0.17	8.32	8.32	43.88	152.08	8.92	2.30	11.48
	1020		10.21	3.53	0.02	0.27	3.99	3.99	11.90	20.60	13.48	0.49	2.43
	1021	1020	10.21	9.06	1.14	0.66	25.60	25.60	56.42	370.54	33.74	5.77	28.84
	1030		9.56	1.96	0.00	0.34	4.79	4.79	3.20	2.75	17.14	0.28	1.42
	1090		7.12	1.24	0.00	0.21	2.96	2.96	0.00	0.00	0.00	0.00	0.00
	1091		7.10	1.23	0.00	0.24	3.43	3.43	1.79	0.28	12.36	0.18	0.18

Link Results: Queues and blocking

Time Segment	Link	Major link	Initial queue (PCU)	Mean max queue (PCU)	Max queue storage (PCU)	Utilised storage (%)	Average storage excess queue (PCU)	Average limit excess queue (PCU)	Excess queue penalty (£ per hr)	Mean end of green queue (PCU)	Mean end of red queue (PCU)	Wasted time starvation (s (per cycle))	Wasted time blocking back (s (per cycle))	Wasted time total (s (per cycle))	Estimated blocking
07:45-08:45	700		0.00	10.20	36.74	27.77	0.00	0.00	0.00	1.23	7.72	0.00	0.00	0.00	
	701		0.00	10.86	39.43	27.55	0.00	0.00	0.00	1.23	8.21	0.00	0.00	0.00	
	710		0.00	5.44	12.50	43.55	0.00	0.00	0.00	0.46	4.68	3.00	0.00	3.00	
	711	710							0.00						
	712	710							0.00						
	720		0.00	5.22	13.00	40.16	0.00	0.00	0.00	0.87	5.09	5.00	0.00	5.00	
	721	720							0.00						
	730		0.00	6.70	13.00	51.55	0.00	0.00	0.00	0.24	5.48	21.00	0.00	21.00	
	731	730							0.00						
	790		0.00	0.51	20.06	2.55	0.00	0.00	0.00			0.00	0.00	0.00	
	791		0.00	0.42	16.41	2.55	0.00	0.00	0.00			0.00	0.00	0.00	
	800		0.00	87.08	37.62	231.47	37.13	0.00	0.00	62.43	71.36	0.00	0.00	0.00	
	801		0.00	17.60	39.67	44.36	0.00	0.00	0.00	2.07	9.68	0.00	0.00	0.00	
	810		0.00	2.55	5.50	46.30	0.00	0.00	0.00	1.23	2.55	1.00	0.00	1.00	
	811	810							0.00						
	812	810							0.00						
	820		0.00	6.15	7.50	82.02	0.00	0.21	214.53	0.68	6.00	6.00	0.00	6.00	
	821	820							0.00						
	890		0.00	0.41	35.93	1.13	0.00	0.00	0.00			0.00	0.00	0.00	
	891		0.00	0.17	38.39	0.45	0.00	0.00	0.00			8.00	0.00	8.00	
	900		0.00	25.35	40.57	62.48	0.00	0.00	0.00	14.12	22.42	0.00	0.00	0.00	
	901		0.00	26.37	43.00	61.32	0.00	0.00	0.00	14.47	23.26	0.00	0.00	0.00	
	910		0.00	14.08	18.50	76.11	0.00	0.00	0.00	1.67	8.22	0.00	0.00	0.00	
	911	910							0.00						
	912	910							0.00						
	920		0.00	7.60	19.00	40.01	0.00	0.00	0.00	0.63	7.35	6.00	0.00	6.00	
	990		0.00	0.32	40.10	0.80	0.00	0.00	0.00			0.00	0.00	0.00	
	1000		0.00	158.79	40.22	394.83	115.06	0.00	0.00	151.76	157.67	0.00	0.00	0.00	
	1001		0.00	171.62	43.56	393.95	124.25	0.00	0.00	164.00	170.40	0.00	0.00	0.00	
	1010		0.00	3.43	9.00	38.07	0.00	0.00	0.00	0.18	2.61	21.00	0.00	21.00	
	1011	1010							0.00						
	1012	1010							0.00						
	1020		0.00	9.08	10.00	90.81	0.00	0.05	46.00	0.93	6.16	0.00	0.00	0.00	
	1021	1020							0.00						
	1030		0.00	4.12	11.00	37.49	0.00	0.00	0.00	0.34	0.34	18.00	0.00	18.00	
	1090		0.00	0.21	12.20	1.71	0.00	0.00	0.00			17.00	0.00	17.00	
	1091		0.00	1.45	12.83	11.31	0.00	0.00	0.00			27.00	0.00	27.00	

Link Results: Journey times

Time Segment	Link	Major link	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	JourneyTime (s)
07:45-08:45	700		111.40	6.80	16.38	43.97
	701		119.60	7.22	16.57	43.44
	710		17.79	1.11	16.01	24.70
	711	710	1.32	0.09	14.19	27.89
	712	710	31.47	2.17	14.52	27.24
	720		3.24	0.22	14.70	26.21
	721	720	66.22	4.85	13.66	28.20
	730		35.11	2.17	16.21	23.17
	731	730	0.21	0.01	16.27	23.08
	790		107.97	3.89	27.79	13.75
	791		79.46	2.90	27.39	10.80
	800		280.00	76.55	3.66	196.84
	801		219.20	12.46	17.59	40.92
	810		0.00	0.00	0.00	0.00
	811	810	0.16	0.03	5.57	53.70
	812	810	27.62	3.06	9.03	33.13
	820		22.47	2.94	7.64	37.82
	821	820	0.35	0.03	10.27	28.13
	890		171.68	5.77	29.74	24.21
	891		104.84	3.45	30.40	23.69
	900		118.60	22.38	5.30	135.85
	901		125.60	23.21	5.41	133.07
	910		100.57	6.42	15.67	37.43
	911	910	45.62	2.63	17.33	33.83
	912	910	0.72	0.04	18.36	31.93
	920		113.77	6.45	17.64	32.40
	990		166.46	5.52	30.15	23.88
	1000		133.60	163.62	0.82	881.77
	1001		144.60	176.84	0.82	880.54
	1010		0.00	0.00	0.00	0.00
	1011	1010	0.19	0.01	12.81	26.88
	1012	1010	35.11	1.68	20.86	16.51
	1020		25.98	1.09	23.78	13.74
	1021	1020	65.02	3.83	16.95	19.26
	1030		52.77	1.99	26.56	11.52
	1090		38.22	1.40	27.24	8.36
	1091		44.44	1.63	27.26	8.33

Link Results: Advanced

Time Segment	Link	Major link	Degree of saturation penalty (£ per hr)	Ped gap accepting penalty (£ per hr)	Warmed up	Mean Max Queue EoTS (PCU)	Mean End of Green Queue EoTS (PCU)	Mean End of Red Queue EoTS (PCU)	PCU Factor	Cost of traffic penalties (£ per hr)	Unweighted performance index (£ per hr)	Performance Index (£ per hr)
07:45-08:45	700		0.00	0.00	✓	10.21	1.23	7.73	1.00	0.00	66.91	11.23
	701		0.00	0.00	✓	10.87	1.24	8.21	1.00	0.00	70.51	11.81
	710		0.00	0.00	✓	5.44	0.47	4.68	1.00	0.00	10.17	19.30
	711	710	0.00	0.00					1.00	0.00	0.83	1.21
	712	710	0.00	0.00					1.00	0.00	18.35	24.53
	720		0.00	0.00	✓	5.22	0.87	5.09	1.00	0.00	2.12	3.82
	721	720	0.00	0.00					1.00	0.00	42.82	56.33
	730		0.00	0.00	✓	6.70	0.24	5.48	1.00	0.00	20.02	39.36
	731	730	0.00	0.00					1.00	0.00	0.10	0.13
	790		0.00	0.00	✓	0.51			1.00	0.00	7.27	7.27
	791		0.00	0.00	✓	0.42			1.00	0.00	5.93	5.93
	800		0.00	0.00	✓	144.16	119.50	128.43	1.00	0.00	987.32	189.98
	801		0.00	0.00	✓	17.61	2.09	9.70	1.00	0.00	79.71	2.03
	810		0.00	0.00	✓	2.56	1.24	2.56	1.00	0.00	0.00	0.00
	811	810	0.00	0.00					1.00	0.00	0.37	0.48
	812	810	0.00	0.00					1.00	0.00	32.96	40.17
	820		0.00	0.00	✓	6.15	0.68	6.00	1.00	214.53	36.26	268.63
	821	820	0.00	0.00					1.00	0.00	0.36	0.47
	890		0.00	0.00	✓	0.41			1.00	0.00	5.79	5.79
	891		0.00	0.00	✓	0.17			1.00	0.00	2.45	2.45
	900		0.00	0.00	✓	32.45	21.23	29.52	1.00	0.00	272.48	51.90
	901		0.00	0.00	✓	33.61	21.71	30.50	1.00	0.00	281.52	53.58
	910		0.00	0.00	✓	14.09	1.68	8.23	1.00	0.00	52.45	76.15
	911	910	0.00	0.00					1.00	0.00	21.28	37.87
	912	910	0.00	0.00					1.00	0.00	0.30	0.53
	920		0.00	0.00	✓	7.60	0.63	7.35	1.00	0.00	46.66	68.91
	990		0.00	0.00	✓	0.32			1.00	0.00	4.54	4.54
	1000		0.00	0.00	✓	309.45	302.42	308.33	1.00	0.00	2202.23	439.38
	1001		0.00	0.00	✓	334.52	326.91	333.31	1.00	0.00	2380.03	474.85
	1010		0.00	0.00	✓	3.43	0.18	2.61	1.00	0.00	0.00	0.00
	1011	1010	0.00	0.00					1.00	0.00	0.15	0.25
	1012	1010	0.00	0.00					1.00	0.00	10.61	19.80
	1020		0.00	0.00	✓	9.08	0.93	6.16	1.00	46.00	4.47	52.41
	1021	1020	0.00	0.00					1.00	0.00	31.37	54.44
	1030		0.00	0.00	✓	4.12	0.34	0.34	1.00	0.00	5.08	6.21
	1090		0.00	0.00	✓	0.21			1.00	0.00	2.96	2.96
	1091		0.00	0.00	✓	1.45			1.00	0.00	3.61	3.61

Network Results

Run Summary

Analysis set used	Run start time	Run finish time	Run duration (s)	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 unsignal PRC
5	10/11/2021 16:38:17	10/11/2021 16:38:17	0.26	07:45	70	2038.32	461.89	182.17	1000	5	14	1000	790

Network Results: Vehicle summary

Time Segment	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Actual green (s per cycle)	Mean Delay per Veh (s)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
07:45-08:45	182	-51	17448	1419	95.30	1558.38	219.41	2038.32

Network Results: Flows and signals

Time Segment	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Actual green (s (per cycle))	Effective green (s (per cycle))
07:45-08:45	17448	16693	1525	✓	182	✓	-51	1419	1449

Network Results: Stops and delays

Time Segment	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Unweighted cost of delay (£ per hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Uniform stops (Stops per hr)	Random stops (Stops per hr)	Unweighted cost of stops (£ per hr)	Weighted cost of stops (£ per hr)
07:45-08:45	19.10	95.30	41.08	420.82	6558.88	1558.38	98.56	7591.22	6391.76	151.09	219.41

Network Results: Queues and blocking

Time Segment	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time starvation (s (per cycle))	Wasted time blocking back (s (per cycle))	Wasted time total (s (per cycle))
07:45-08:45	394.83	260.53	215.00	0.00	215.00

Network Results: Journey times

Time Segment	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)
07:45-08:45	2611.38	554.47	4.71

Network Results: Advanced

Time Segment	Degree of saturation penalty (£ per hr)	Ped gap accepting penalty (£ per hr)	Warmed up	PCU Factor	Cost of traffic penalties (£ per hr)	Controller stream penalties (£ per hr)	Unweighted performance index (£ per hr)	Performance Index (£ per hr)
07:45-08:45	0.00	0.00	✓	1.00	260.53	0.00	6709.97	2038.32

Point to Point Journey Time

Average Journey Time (s) for Local Matrix: 1

	To				
From		A	B	C	D
	A	150.3	56.5	0.0	139.0
	B	101.7	134.2	220.8	258.2
	C	0.0	185.8	245.6	159.7
	D	890.1	919.6	961.1	987.7

Path Journey Time

Path	From Location	To Location	Normal Calculated Flow (PCU/hr)	Normal journey time (s)	Normal journey dist (m)	Bus journeydist (m)	Tram journey dist (m)	Pedestrian journey dist (m)	Calculated Total Flow (PCU/hr)	Avg journey time (s)	Avg journey dist (m)
1	A	A	2	150.33	602.09	602.09	602.09	602.09	2	150.33	602.09
2	B	A	379	103.22	521.86	521.86	521.86	521.86	379	103.22	521.86
3	B	A	705	100.91	512.56	512.56	512.56	512.56	705	100.91	512.56
5	B	A	0	259.15	521.86	521.86	521.86	521.86	0	0.00	2087.44
6	A	B	318	54.24	282.17	282.17	282.17	282.17	318	54.24	282.17
7	A	B	557	57.72	306.14	306.14	306.14	306.14	557	57.72	306.14
8	B	B	12	134.23	665.52	665.52	665.52	665.52	12	134.23	665.52
9	C	A	0	144.21	358.96	358.96	358.96	358.96	0	0.00	1435.84
10	C	B	290	190.58	506.76	506.76	506.76	506.76	290	190.58	506.76
11	C	B	626	183.59	474.19	474.19	474.19	474.19	626	183.59	474.19
13	B	C	571	220.53	400.00	400.00	400.00	400.00	571	220.53	400.00
14	A	C	0	67.65	483.00	483.00	483.00	483.00	0	0.00	1932.00
15	B	C	571	221.05	400.00	400.00	400.00	400.00	571	221.05	400.00
16	C	C	2	245.59	672.46	672.46	672.46	672.46	2	245.59	672.46
17	D	B	240	920.23	416.03	416.03	416.03	416.03	240	920.23	416.03
18	D	A	428	890.14	263.28	263.28	263.28	263.28	428	890.14	263.28
19	D	B	55	918.99	416.03	416.03	416.03	416.03	55	918.99	416.03
20	D	B	55	917.55	389.18	389.18	389.18	389.18	55	917.55	389.18
21	D	C	605	961.05	587.45	587.45	587.45	587.45	605	961.05	587.45
22	A	D	278	138.98	643.13	643.13	643.13	643.13	278	138.98	643.13
23	B	D	0	102.23	562.90	562.90	562.90	562.90	0	0.00	2251.60
24	B	D	259	258.15	562.90	562.90	562.90	562.90	259	258.15	562.90
25	C	D	303	159.73	400.00	400.00	400.00	400.00	303	159.73	400.00
26	D	D	8	987.66	747.44	747.44	747.44	747.44	8	987.66	747.44

Final Prediction Table

Link Results

				SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES	
Link	Name	Major link	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)	Mean end of red queue (PCU)
700			7	7	C	557	1954	27	0.00	71	26	43.97	25.55	90.75	10.20	7.72
701			7	7	C	598	2097	27	0.00	71	26	43.44	25.03	90.04	10.86	8.21
710		(710)	7	7	D	162	2088	31	3.00	48	87	24.70	12.34	98.85	5.44	4.68
711		710				12						27.89	15.52	55.74		
712		710				286						27.24	14.87	37.84		
720		(720)	7	7	D	30	2231	31	5.00	64	41	26.21	14.17	98.44	5.22	5.09
721		720				619						28.20	16.16	38.25		
730		(730)	7	7	D	337	2299	31	21.00	32	179	23.17	11.44	100.66	6.70	5.48
731		730				2						23.08	11.35	29.78		
790			7			1017	2010	70	0.00	51	78	13.75	1.81	0.00	0.51	
791			7			967	2124	70	0.00	46	98	10.80	1.55	0.00	0.42	
800			8	8	A	1400 <	2001	44	0.00	109	-17	196.84	172.01	248.26	87.08 +	71.36
801			8	8	A	1096	2110	44	0.00	81	11	40.92	16.09	78.91	17.60	9.68
810		(810)	8	8	B	0	2182	14	1.00	71	26	0.00	0.00	0.00	2.55	2.55
811		810				2						53.70	44.35	92.61		
812		810				332						33.13	23.78	38.00		
820		(820)	8	8	B	280	2295	14	6.00	58	56	37.82	28.79	111.59	6.15	6.00
821		820				4						28.13	19.11	45.39		
890			8			858	1911	70	0.00	45	100	24.21	1.71	0.00	0.41	
891			8			524	2042	70	8.00	26	251	23.69	1.19	0.00	0.17	
900			9	9	A	593	2158	18	0.00	101	-11	135.85	110.94	190.63	25.35	22.42
901			9	9	A	628	2287	18	0.00	101	-11	133.07	108.16	188.28	26.37	23.26
910		(910)	9	9	B	617	1995	40	0.00	77	17	37.43	19.10	67.29	14.08	8.22
911		910				280						33.83	15.50	103.84		
912		910				4						31.93	13.61	95.39		
920			9	9	B	717	2187	40	6.00	56	61	32.40	14.54	54.41	7.60	7.35
990			9			832	2133	70	0.00	39	131	23.88	1.38	0.00	0.32	
1000			10	10	A	668 <	2139	11	0.00	182	-51	881.77	833.77	463.29	158.79 +	157.67
1001			10	10	A	723 <	2317	11	0.00	182	-51	880.54	832.54	462.98	171.62 +	170.40
1010		(1010)	10	10	B	0	2071	47	21.00	26	246	0.00	0.00	0.00	3.43	2.61
1011		1010				2						26.88	16.11	88.60		
1012		1010				367						16.51	5.75	43.88		
1020		(1020)	10	10	B	286	2247	47	0.00	65	38	13.74	3.53	11.90	9.08	6.16
1021		1020				717						19.26	9.06	56.42		
1030			10	10	B	621	2253	47	18.00	40	124	11.52	1.96	3.20	4.12	0.34
1090			10			604	2051	70	17.00	29	206	8.36	1.24	0.00	0.21	
1091			10			705	2164	70	27.00	33	176	8.33	1.23	1.79	1.45	

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	2611.38	554.47	4.71	41.08	420.82	1558.38	219.41	260.53	2038.32
Bus									
Tram									
Pedestrians									
TOTAL	2611.38	554.47	4.71	41.08	420.82	1558.38	219.41	260.53	2038.32

- | < = 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 - 2026 Base + HG(140) + Coed Darcy PM

D6 - 2026 Base + HG(140) + Coed Darcy, PM

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Run duration (s)	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
6	10/11/2021 16:38:17	10/11/2021 16:38:17	0.54	16:30	70	1772.94	197.84	107.99	1000	7	19	1000	791

Analysis Set Details

Name	Use Simulation	Description	Use specific Demand Set(s)	Specific Demand Set(s)	Optimise specific Demand Set(s)	Include in report	Locked
2026 Base + HG(140) + Coed Darcy PM			✓	D6		✓	

Demand Set Details

Scenario name	Time Period name	Description	Composite	Demand sets	Start time (HH:mm)	Locked	Run automatically
2026 Base + HG(140) + Coed Darcy	PM				16:30		✓

Network Options

Network timings

Network cycle time (s)	Minimum possible cycle time (s)	Absolute minimum possible cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
70	26	26		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)	Missing stage transition options
10000.00	10000.00	10000.00	2	Assume banned

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from traffic model	Exclude pedestrians from results calculation	Random delay mode	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓			Simplified (TRANSYT 12)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms ² [-2])	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms ² [-2])	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Offsets And Green Splits	✓

Advanced

Optimisation type	OUTProfile accuracy (%)	SASart temperature	SACooling factor	Random seed	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Simulated Annealing	10, 10, 1, 1, 0.1, 0.1, 0.01, 0.01	300.00	100.00	1	✓	✓	7, 8, 9, 10			Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Traffic Nodes

Traffic Nodes

Traffic node	Name	Description
(ALL)		

Links

Links

Link	Name	Description	Traffic node	Length (m)	Has Saturation Flow	Use RR67	Saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Is minor shared	Major link	Allow Nearside Turn On Red
700			7	200.00	✓		1954	✓		Normal			
701			7	200.00	✓		2097	✓		Normal			
710			7	109.89	✓		2088	✓		Normal			
711				109.89						Normal	✓	710	
712				109.89						Normal	✓	710	
720			7	107.01	✓		2231	✓		Normal			
721				107.01						Normal	✓	720	
730			7	104.31	✓		2299	✓		Normal			
731				104.31						Normal	✓	730	
790			7	106.14	✓		2010			Normal			
791			7	82.17	✓		2124			Normal			
800			8	200.00	✓		2001	✓		Normal			
801			8	200.00	✓		2110	✓		Normal			
810			8	83.00	✓		2182	✓		Normal			
811				83.14						Normal	✓	810	
812				83.14						Normal	✓	810	
820			8	80.23	✓		2295	✓		Normal			
821				80.23						Normal	✓	820	
890			8	200.00	✓		1911			Normal			
891			8	200.00	✓		2042			Normal			
900			9	200.00	✓		2158	✓		Normal			
901			9	200.00	✓		2287	✓		Normal			
910			9	162.90	✓		1995	✓		Normal			
911				162.90						Normal	✓	910	
912				162.90						Normal	✓	910	
920			9	158.76	✓		2187	✓		Normal			
990			9	200.00	✓		2133			Normal			
1000			10	200.00	✓		2139	✓		Normal			
1001			10	200.00	✓		2317	✓		Normal			
1010			10	95.68	✓		2071	✓		Normal			
1011				95.68						Normal	✓	1010	
1012				95.68						Normal	✓	1010	
1020			10	90.73	✓		2247	✓		Normal			
1021				90.73						Normal	✓	1020	
1030			10	85.01	✓		2253	✓		Normal			
1090			10	63.28	✓		2051			Normal			
1091			10	63.07	✓		2164			Normal			

Modelling

Link	Traffic model	Stop weighting (%)	Delay weighting (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Queue limit (PCU)	Excess queue penalty (£)	Has degree of saturation limit
700	NetworkDefault	0	20	100		0.00				
701	NetworkDefault	0	20	100		0.00				
710	NetworkDefault	500	100	100		12.50	✓	10.00	1000.00	
711	NetworkDefault	500	100	100					0.00	
712	NetworkDefault	500	100	100					0.00	
720	NetworkDefault	500	100	100		13.00	✓	10.00	1000.00	
721	NetworkDefault	500	100	100					0.00	
730	NetworkDefault	500	100	100		13.00	✓	11.00	1000.00	
731	NetworkDefault	500	100	100					0.00	
790	NetworkDefault	100	100	100		0.00				
791	NetworkDefault	100	100	100		0.00				
800	NetworkDefault	0	20	100		0.00				
801	NetworkDefault	20	0	100		0.00				
810	NetworkDefault	500	100	100		5.50	✓	4.00	1000.00	
811	NetworkDefault	500	100	100					0.00	
812	NetworkDefault	500	100	100					0.00	
820	NetworkDefault	500	100	100		7.50	✓	5.00	1000.00	
821	NetworkDefault	500	100	100					0.00	
890	NetworkDefault	100	100	100		0.00				
891	NetworkDefault	100	100	100		0.00				
900	NetworkDefault	0	20	100		0.00				
901	NetworkDefault	0	20	100		0.00				
910	NetworkDefault	500	100	100		18.50				
911	NetworkDefault	500	100	100						
912	NetworkDefault	500	100	100						
920	NetworkDefault	500	100	100		19.00				
990	NetworkDefault	100	100	100		0.00				
1000	NetworkDefault	0	20	100		0.00				
1001	NetworkDefault	0	20	100		0.00				
1010	NetworkDefault	500	100	100		9.00	✓	7.00	1000.00	
1011	NetworkDefault	500	100	100					0.00	
1012	NetworkDefault	500	100	100					0.00	
1020	NetworkDefault	500	100	100		10.00	✓	8.00	1000.00	
1021	NetworkDefault	500	100	100					0.00	
1030	NetworkDefault	500	100	100		11.00	✓	8.00	1000.00	
1090	NetworkDefault	100	100	100		0.00				
1091	NetworkDefault	100	100	100		0.00				

Modelling - Normal traffic - Advanced

Link	Dispersion type for Normal Traffic	Initial queue (PCU)	Auto cycle time	Cycle time
700	NetworkDefault	0.00	✓	70
701	NetworkDefault	0.00	✓	70
710	NetworkDefault	0.00	✓	70
711	NetworkDefault			
712	NetworkDefault			
720	NetworkDefault	0.00	✓	70
721	NetworkDefault			
730	NetworkDefault	0.00	✓	70
731	NetworkDefault			
790	NetworkDefault	0.00	✓	70
791	NetworkDefault	0.00	✓	70
800	NetworkDefault	0.00	✓	70
801	NetworkDefault	0.00	✓	70
810	NetworkDefault	0.00	✓	70
811	NetworkDefault			
812	NetworkDefault			
820	NetworkDefault	0.00	✓	70
821	NetworkDefault			
890	NetworkDefault	0.00	✓	70
891	NetworkDefault	0.00	✓	70
900	NetworkDefault	0.00	✓	70
901	NetworkDefault	0.00	✓	70
910	NetworkDefault	0.00	✓	70
911	NetworkDefault			
912	NetworkDefault			
920	NetworkDefault	0.00	✓	70
990	NetworkDefault	0.00	✓	70
1000	NetworkDefault	0.00	✓	70
1001	NetworkDefault	0.00	✓	70
1010	NetworkDefault	0.00	✓	70
1011	NetworkDefault			
1012	NetworkDefault			
1020	NetworkDefault	0.00	✓	70
1021	NetworkDefault			
1030	NetworkDefault	0.00	✓	70
1090	NetworkDefault	0.00	✓	70
1091	NetworkDefault	0.00	✓	70

Flows

Link	Total flow (PCU/hr)	PCU Factor
700	714	1.00
701	767	1.00
710	261	1.00
711	12	1.00
712	258	1.00
720	84	1.00
721	881	1.00
730	333	1.00
731	2	1.00
790	1246	1.00
791	1330	1.00
800	1137	1.00
801	848	1.00
810	0	1.00
811	2	1.00
812	324	1.00
820	401	1.00
821	9	1.00
890	739	1.00
891	413	1.00
900	833	1.00
901	883	1.00
910	437	1.00
911	401	1.00
912	9	1.00
920	723	1.00
990	1297	1.00
1000	462	1.00
1001	500	1.00
1010	0	1.00
1011	0	1.00
1012	125	1.00
1020	258	1.00
1021	723	1.00
1030	883	1.00
1090	409	1.00
1091	711	1.00

Flows - Advanced

Link	Detectors
(ALL)	

Signals

Link	Controller stream	Phase	Second phase enabled
700	7	C	
701	7	C	
710	7	D	
711			
712			
720	7	D	
721			
730	7	D	
731			
800	8	A	
801	8	A	
810	8	B	
811			
812			
820	8	B	
821			
900	9	A	
901	9	A	
910	9	B	
911			
912			
920	9	B	
1000	10	A	
1001	10	A	
1010	10	B	
1011			
1012			
1020	10	B	
1021			
1030	10	B	

Entry Sources

Link	Cruise time (seconds)	Cruise speed (kph)
700	18.41	39.10
701	18.41	39.10
800	24.83	29.00
801	24.83	29.00
900	24.91	28.90
901	24.91	28.90
1000	48.00	15.00
1001	48.00	15.00

Sources

Link	Source	Source type	Source link	Destination link	Cruise time (seconds)	Cruise speed (kph)	Total flow (PCU/hr)
710	1	Link	1000	710	12.36	32.00	178
711	1	Link	1021	711	12.36	32.00	12
712	1	Link	1020	712	12.36	32.00	258
720	1	Link	1001	720	12.04	32.00	84
721	1	Link	1030	721	12.04	32.00	881
730	1	Link	1001	730	11.73	32.00	333
731	1	Link	1030	731	11.73	32.00	2
790	1	Link	710	790	11.94	32.00	261
791	1	Link	720	791	9.24	32.00	84
810	1	Link	701	810	9.34	32.00	0
811	1	Link	731	811	9.35	32.00	2
812	1	Link	730	812	9.35	32.00	324
820	1	Link	701	820	9.03	32.00	401
821	1	Link	730	821	9.03	32.00	9
890	1	Link	810	890	22.50	32.00	0
891	1	Link	800	891	22.50	32.00	413
910	1	Link	800	910	18.33	32.00	312
911	1	Link	820	911	18.33	32.00	401
912	1	Link	821	912	18.33	32.00	9
920	1	Link	801	920	17.86	32.00	723
990	1	Link	910	990	22.50	32.00	312
1010	1	Link	900	1010	10.76	32.00	0
1011	1	Link	911	1011	10.76	32.00	0
1012	1	Link	910	1012	10.76	32.00	125
1020	1	Link	900	1020	10.21	32.00	258
1021	1	Link	920	1021	10.21	32.00	723
1030	1	Link	901	1030	9.56	32.00	883
1090	1	Link	1000	1090	7.12	32.00	284
1091	1	Link	1021	1091	7.10	32.00	711
710	2	Link	1001	710	12.36	32.00	84
790	2	Link	711	790	11.94	32.00	12
791	2	Link	721	791	9.24	32.00	881
890	2	Link	800	890	22.50	32.00	413
910	2	Link	801	910	18.33	32.00	125
990	2	Link	900	990	22.50	32.00	575
1090	2	Link	1010	1090	7.12	32.00	0
790	3	Link	700	790	11.94	32.00	714
791	3	Link	701	791	9.24	32.00	366
890	3	Link	812	890	22.50	32.00	324
990	3	Link	911	990	22.50	32.00	401
1090	3	Link	1011	1090	7.12	32.00	0
790	4	Link	712	790	11.94	32.00	258
890	4	Link	811	890	22.50	32.00	2
990	4	Link	912	990	22.50	32.00	9
1090	4	Link	1012	1090	7.12	32.00	125

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	Limit paths by flow	Low path flow threshold
1	(untitled)	✓	✓	Lane Balancing			✓			✓	1.25				

Normal Input Flows (PCU/hr)

	To				
	A	B	C	D	
From A	0	1080	0	401	
From B	836	12	825	312	
From C	0	1139	2	575	
From D	284	345	324	9	

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	A	(untitled)	701, 700	1090, 1091	#0000FF
	B	(untitled)	801, 800	791, 790	#FF0000
	C	(untitled)	900, 901	891, 890	#00FF00
	D	(untitled)	1000, 1001	990	#FFFF00

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	1		A	A	701, 820, 911, 1011, 1090	Normal	0
	2		B	A	801, 910, 1012, 1090	Percentage	125
	3		B	A	801, 920, 1021, 1091	Normal	711
	5		B	A	800, 910, 1012, 1090	Normal	0
	6		A	B	701, 791	Normal	366
	7		A	B	700, 790	Normal	714
	8		B	B	801, 920, 1021, 711, 790	Normal	12
	9		C	A	900, 1010, 1090	Normal	0
	10		C	B	900, 1020, 712, 790	Normal	258
	11		C	B	901, 1030, 721, 791	Normal	881
	13		B	C	800, 891	Normal	413
	14		A	C	701, 810, 890	Normal	0
	15		B	C	800, 890	Normal	413
	16		C	C	901, 1030, 731, 811, 890	Normal	2
	17		D	B	1000, 710, 790	Normal	178
	18		D	A	1000, 1090	Normal	284
	19		D	B	1001, 710, 790	Normal	84
	20		D	B	1001, 720, 791	Normal	84
	21		D	C	1001, 730, 812, 890	Normal	324
	22		A	D	701, 820, 911, 990	Normal	401
	23		B	D	801, 910, 990	Disabled	0
	24		B	D	800, 910, 990	Normal	312
	25		C	D	900, 990	Normal	575
	26		D	D	1001, 730, 821, 912, 990	Normal	9

Link Results

Link Results: Vehicle summary

Time Segment	Link	Major link	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)
16:30-17:30	700		98	-9	714	1954	25	75.93	24.42	66.48	42.77	0.00	42.77
	701		98	-9	767	2097	25	74.33	25.89	65.67	44.98	0.00	44.98
	710		50	78	242	2088	33	15.87	5.59	44.74	15.16	17.83	32.99
	711	710			12			18.51			0.88	0.62	1.50
	712	710			258			5.25			5.34	1.89	7.22
	720		88	2	77	2231	33	23.78	7.38	56.75	7.26	7.17	14.43
	721	720			880			15.08			52.37	27.20	79.57
	730		28	224	308	2299	33	15.68	6.17	47.43	19.07	22.49	41.57
	731	730			2			4.23			0.03	0.03	0.07
	790		61	48	1226	2010	70	2.29	0.78	3.89	11.08	0.00	11.08
	791		62	44	1323	2124	70	2.31	9.69	59.09	12.05	1.25	13.29
	800		105	-14	1137	2001	37	122.26	54.60	145.14	109.66	0.00	109.66
	801		74	22	848	2110	37	18.23	13.90	35.03	0.00	1.61	1.61
	810		44	104	0	2182	21	0.00	4.47	81.19	0.00	0.00	282.82
	811	810			2			42.43			0.33	0.15	0.48
	812	810			300			37.20			44.04	16.21	60.25
	820		57	59	401	2295	21	11.17	7.33	97.76	17.67	23.64	186.09
	821	820			8			36.12			1.19	0.46	1.64
	890		36	147	696	1911	70	1.48	0.29	0.80	4.07	0.00	4.07
	891		19	366	394	2042	70	1.09	0.12	0.31	1.70	0.00	1.70
	900		100	-10	833	2158	26	84.53	30.54	75.28	55.55	0.00	55.55
	901		100	-10	883	2287	26	82.95	31.98	74.38	57.78	0.00	57.78
	910		89	2	423	1995	32	36.54	18.35	99.18	61.03	30.56	91.59
	911	910			401			30.11			47.65	34.35	82.01
	912	910			8			29.39			0.97	0.70	1.67
	920		70	28	723	2187	32	26.38	10.05	52.90	75.18	36.78	111.96
	990		60	49	1286	2133	70	2.12	0.76	1.89	10.76	0.00	10.76
	1000		108	-17	462	2139	13	199.56	30.48	75.80	72.73	0.00	72.73
	1001		108	-17	500	2317	13	195.85	32.48	74.56	77.25	0.00	77.25
	1010		9	909	0	2071	45	0.00	0.84	9.29	0.00	0.00	0.00
	1011	1010			0			0.00			0.00	0.00	0.00
	1012	1010			121			5.31			2.54	3.00	5.54
	1020		66	36	258	2247	45	6.04	9.74	97.38	6.14	8.18	144.61
	1021	1020			723			11.36			32.38	25.75	58.13
	1030		60	51	882	2253	45	3.10	9.60	87.29	10.78	8.25	60.47
	1090		19	380	385	2051	70	1.08	0.12	0.95	1.64	0.00	1.64
	1091		33	174	711	2164	70	1.24	0.24	1.90	3.47	0.00	3.47

Link Results: Flows and signals

Time Segment	Link	Major link	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Calculated sat flow (PCU/hr)	Calculated capacity (PCU/hr)	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Mean modulus of error	Actual green (s (per cycle))	Effective green (s (per cycle))
16:30-17:30	700		714	714	0		1954	726	98	✓	-9	0.00	25	26
	701		767	767	0		2097	779	98	✓	-9	0.00	25	26
	710		242	242	19	✓	2088	1014	50		78	1.32	33	34
	711	710	12	12	0						78	0.89		
	712	710	258	258	0						78	1.23		
	720		77	77	6	✓	2231	1084	88		2	1.33	33	34
	721	720	880	880	1	✓					2	0.98		
	730		308	308	25	✓	2299	1117	28		224	1.34	33	34
	731	730	2	2	0						224	0.99		
	790		1226	1226	20	✓	2010	2010	61		48	0.40	70	70
	791		1323	1323	7	✓	2124	2124	62		44	0.44	70	70
	800		1137	1086	0		2001	1086	105	✓	-14	0.00	37	38
	801		848	848	0		2110	1145	74		22	0.00	37	38
	810		0	0	0		2182	686	44		104	0.00	21	22
	811	810	2	2	0						104	1.13		
	812	810	300	300	24	✓					104	1.48		
	820		401	401	0		2295	721	57		59	1.12	21	22
	821	820	8	8	1	✓					59	1.49		
	890		696	696	42	✓	1911	1911	36		147	0.21	70	70
	891		394	394	18	✓	2042	2042	19		366	0.67	70	70
	900		833	832	0		2158	832	100	✓	-10	0.00	26	27
	901		883	882	0		2287	882	100	✓	-10	0.00	26	27
	910		423	423	14	✓	1995	941	89		2	0.73	32	33
	911	910	401	401	0						2	1.22		
	912	910	8	8	1	✓					2	1.11		
	920		723	723	0		2187	1031	70		28	0.79	32	33
	990		1286	1286	11	✓	2133	2133	60		49	0.22	70	70
	1000		462	428	0		2139	428	108	✓	-17	0.00	13	14
	1001		500	463	0		2317	463	108	✓	-17	0.00	13	14
	1010		0	0	0		2071	1361	9		909	0.00	45	46
	1011	1010	0	0	0						909	0.00		
	1012	1010	121	121	4	✓					909	1.06		
	1020		258	258	0		2247	1477	66		36	1.07	45	46
	1021	1020	723	723	0						36	0.92		
	1030		882	882	1	✓	2253	1481	60		51	1.07	45	46
	1090		385	385	25	✓	2051	2051	19		380	0.94	70	70
	1091		711	711	0		2164	2164	33		174	1.02	70	70

Link Results: Stops and delays

Time Segment	Link	Major link	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Unweighted cost of delay (£ per hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Uniform stops (Stops per hr)	Random stops (Stops per hr)	Unweighted cost of stops (£ per hr)	Weighted cost of stops (£ per hr)
16:30-17:30	700		18.41	75.93	4.32	10.74	213.86	42.77	158.52	673.83	457.98	24.11	0.00
	701		18.41	74.33	4.65	11.19	224.89	44.98	157.01	724.36	479.90	25.65	0.00
	710		12.36	15.87	0.83	0.24	15.16	15.16	103.20	237.69	12.22	3.57	17.83
	711	710	12.36	18.51	0.05	0.01	0.88	0.88	72.44	8.09	0.61	0.12	0.62
	712	710	12.36	5.25	0.12	0.26	5.34	5.34	10.26	13.44	13.01	0.38	1.89
	720		12.04	23.78	0.22	0.29	7.26	7.26	129.70	73.27	27.19	1.43	7.17
	721	720	12.04	15.08	0.38	3.30	52.37	52.37	43.33	72.37	308.96	5.44	27.20
	730		11.73	15.68	1.15	0.19	19.07	19.07	102.23	305.60	9.76	4.50	22.49
	731	730	11.73	4.23	0.00	0.00	0.03	0.03	23.71	0.41	0.06	0.01	0.03
	790		11.94	2.29	0.00	0.78	11.08	11.08	0.00	0.00	0.00	0.00	0.00
	791		9.24	2.31	0.02	0.82	12.05	12.05	6.60	45.26	42.08	1.25	1.25
	800		24.83	122.26	4.83	33.78	548.30	109.66	210.79	1074.86	1214.85	26.83	0.00
	801		24.83	18.23	2.88	1.41	60.97	0.00	80.96	615.47	71.09	8.04	1.61
	810		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	811	810	9.35	42.43	0.02	0.00	0.33	0.33	103.75	1.94	0.13	0.03	0.15
	812	810	9.35	37.20	2.71	0.39	44.04	44.04	75.71	207.51	19.75	3.24	16.21
	820		9.03	11.17	0.60	0.64	17.67	17.67	82.61	299.15	32.28	4.73	23.64
	821	820	9.03	36.12	0.07	0.01	1.19	1.19	76.66	5.72	0.67	0.09	0.46
	890		22.50	1.48	0.00	0.29	4.07	4.07	0.00	0.00	0.00	0.00	0.00
	891		22.50	1.09	0.00	0.12	1.70	1.70	0.00	0.00	0.00	0.00	0.00
	900		24.91	84.53	4.97	14.59	277.75	55.55	168.73	800.40	604.08	16.34	0.00
	901		24.91	82.95	5.27	15.08	288.90	57.78	167.33	848.51	627.57	17.18	0.00
	910		18.33	36.54	2.45	1.85	61.03	61.03	101.17	338.67	89.77	6.11	30.56
	911	910	18.33	30.11	1.61	1.75	47.65	47.65	120.05	396.58	85.04	6.87	34.35
	912	910	18.33	29.39	0.03	0.04	0.97	0.97	117.98	8.07	1.77	0.14	0.70
	920		17.86	26.38	4.13	1.16	75.18	75.18	71.35	456.99	58.58	7.36	36.78
	990		22.50	2.12	0.00	0.76	10.76	10.76	0.00	0.00	0.00	0.00	0.00
	1000		48.00	199.56	3.33	22.28	363.67	72.73	253.50	427.80	656.68	3.40	0.00
	1001		48.00	195.85	3.60	23.60	386.26	77.25	251.68	463.40	702.87	3.66	0.00
	1010		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1011	1010	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1012	1010	10.76	5.31	0.13	0.05	2.54	2.54	34.59	39.49	2.51	0.60	3.00
	1020		10.21	6.04	0.17	0.26	6.14	6.14	44.50	101.60	13.14	1.64	8.18
	1021	1020	10.21	11.36	1.56	0.73	32.38	32.38	49.95	324.14	36.83	5.15	25.75
	1030		9.56	3.10	0.02	0.74	10.78	10.78	13.11	41.63	74.03	1.65	8.25
	1090		7.12	1.08	0.00	0.12	1.64	1.64	0.00	0.00	0.00	0.00	0.00
	1091		7.10	1.24	0.00	0.24	3.47	3.47	0.00	0.00	0.00	0.00	0.00

Link Results: Queues and blocking

Time Segment	Link	Major link	Initial queue (PCU)	Mean max queue (PCU)	Max queue storage (PCU)	Utilised storage (%)	Average storage excess queue (PCU)	Average limit excess queue (PCU)	Excess queue penalty (£ per hr)	Mean end of green queue (PCU)	Mean end of red queue (PCU)	Wasted time starvation (s (per cycle))	Wasted time blocking back (s (per cycle))	Wasted time total (s (per cycle))	Estimated blocking
16:30-17:30	700		0.00	24.42	36.74	66.48	0.00	0.00	0.00	10.74	19.46	0.00	0.00	0.00	
	701		0.00	25.89	39.43	65.67	0.00	0.00	0.00	11.19	20.57	0.00	0.00	0.00	
	710		0.00	5.59	12.50	44.74	0.00	0.00	0.00	0.51	5.19	0.00	0.00	0.00	
	711	710							0.00						
	712	710							0.00						
	720		0.00	7.38	13.00	56.75	0.00	0.00	0.00	3.59	5.76	0.00	0.00	0.00	
	721	720							0.00						
	730		0.00	6.17	13.00	47.43	0.00	0.00	0.00	0.19	5.83	24.00	0.00	24.00	
	731	730							0.00						
	790		0.00	0.78	20.06	3.89	0.00	0.00	0.00			0.00	0.00	0.00	
	791		0.00	9.69	16.41	59.09	0.00	0.00	0.00			0.00	0.00	0.00	
	800		0.00	54.60	37.62	145.14	6.95	0.00	0.00	33.78	43.44	0.00	0.00	0.00	
	801		0.00	13.90	39.67	35.03	0.00	0.00	0.00	1.41	8.95	0.00	0.00	0.00	
	810		0.00	4.47	5.50	81.19	0.00	0.28	282.82	0.39	4.47	10.00	0.00	10.00	
	811	810							0.00						
	812	810							0.00						
	820		0.00	7.33	7.50	97.76	0.00	0.14	144.77	0.65	4.29	0.00	0.00	0.00	
	821	820							0.00						
	890		0.00	0.29	35.93	0.80	0.00	0.00	0.00			0.00	0.00	0.00	
	891		0.00	0.12	38.39	0.31	0.00	0.00	0.00			16.00	0.00	16.00	
	900		0.00	30.54	40.57	75.28	0.00	0.00	0.00	14.59	24.53	0.00	0.00	0.00	
	901		0.00	31.98	43.00	74.38	0.00	0.00	0.00	15.08	25.61	0.00	0.00	0.00	
	910		0.00	18.35	18.50	99.18	0.00	0.00	0.00	3.63	12.18	0.00	0.00	0.00	
	911	910							0.00						
	912	910							0.00						
	920		0.00	10.05	19.00	52.90	0.00	0.00	0.00	1.16	9.97	3.00	0.00	3.00	
	990		0.00	0.76	40.10	1.89	0.00	0.00	0.00			0.00	0.00	0.00	
	1000		0.00	30.48	40.22	75.80	0.00	0.00	0.00	22.28	28.94	0.00	0.00	0.00	
	1001		0.00	32.48	43.56	74.56	0.00	0.00	0.00	23.60	30.81	0.00	0.00	0.00	
	1010		0.00	0.84	9.00	9.29	0.00	0.00	0.00	0.05	0.83	29.00	0.00	29.00	
	1011	1010							0.00						
	1012	1010							0.00						
	1020		0.00	9.74	10.00	97.38	0.00	0.13	130.29	0.98	7.28	0.00	0.00	0.00	
	1021	1020							0.00						
	1030		0.00	9.60	11.00	87.29	0.00	0.04	41.44	0.74	1.21	10.00	0.00	10.00	
	1090		0.00	0.12	12.20	0.95	0.00	0.00	0.00			26.00	0.00	26.00	
	1091		0.00	0.24	12.83	1.90	0.00	0.00	0.00			27.00	0.00	27.00	

Link Results: Journey times

Time Segment	Link	Major link	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	JourneyTime (s)
16:30-17:30	700		142.80	18.71	7.63	94.35
	701		153.40	19.76	7.76	92.75
	710		26.61	1.90	14.01	28.23
	711	710	1.32	0.10	12.81	30.87
	712	710	28.34	1.26	22.47	17.61
	720		8.29	0.77	10.76	35.82
	721	720	94.18	6.63	14.20	27.12
	730		32.18	2.35	13.70	27.41
	731	730	0.21	0.01	23.51	15.97
	790		130.13	4.85	26.85	14.23
	791		108.74	4.25	25.61	11.55
	800		227.40	46.45	4.90	147.08
	801		169.60	10.14	16.72	43.05
	810		0.00	0.00	0.00	0.00
	811	810	0.17	0.03	5.78	51.78
	812	810	24.95	3.88	6.43	46.55
	820		32.19	2.25	14.30	20.19
	821	820	0.67	0.10	6.40	45.15
	890		139.25	4.64	30.02	23.98
	891		78.82	2.58	30.52	23.59
	900		166.60	25.32	6.58	109.45
	901		176.60	26.46	6.68	107.86
	910		68.98	6.45	10.69	54.86
	911	910	65.35	5.40	12.11	48.44
	912	910	1.36	0.11	12.29	47.72
	920		114.72	8.88	12.92	44.24
	990		257.22	8.80	29.24	24.62
	1000		92.40	31.77	2.91	247.56
	1001		100.00	33.87	2.95	243.85
	1010		0.00	0.00	0.00	0.00
	1011	1010	0.00	0.00	0.00	0.00
	1012	1010	11.62	0.54	21.42	16.08
	1020		23.40	1.16	20.11	16.24
	1021	1020	65.56	4.33	15.14	21.57
	1030		74.99	3.10	24.17	12.66
	1090		24.33	0.88	27.78	8.20
	1091		44.82	1.64	27.25	8.33

Link Results: Advanced

Time Segment	Link	Major link	Degree of saturation penalty (£ per hr)	Ped gap accepting penalty (£ per hr)	Warmed up	Mean Max Queue EoTS (PCU)	Mean End of Green Queue EoTS (PCU)	Mean End of Red Queue EoTS (PCU)	PCU Factor	Cost of traffic penalties (£ per hr)	Unweighted performance index (£ per hr)	Performance Index (£ per hr)
16:30-17:30	700		0.00	0.00	✓	27.59	13.90	22.63	1.00	0.00	237.96	42.77
	701		0.00	0.00	✓	29.22	14.52	23.90	1.00	0.00	250.54	44.98
	710		0.00	0.00	✓	5.59	0.51	5.19	1.00	0.00	18.73	32.99
	711	710	0.00	0.00					1.00	0.00	1.00	1.50
	712	710	0.00	0.00					1.00	0.00	5.71	7.22
	720		0.00	0.00	✓	7.47	3.69	5.86	1.00	0.00	8.70	14.43
	721	720	0.00	0.00					1.00	0.00	57.81	79.57
	730		0.00	0.00	✓	6.17	0.19	5.83	1.00	0.00	23.57	41.57
	731	730	0.00	0.00					1.00	0.00	0.04	0.07
	790		0.00	0.00	✓	0.78			1.00	0.00	11.08	11.08
	791		0.00	0.00	✓	9.70			1.00	0.00	13.29	13.29
	800		0.00	0.00	✓	81.01	60.19	69.84	1.00	0.00	575.13	109.66
	801		0.00	0.00	✓	13.90	1.42	8.96	1.00	0.00	69.01	1.61
	810		0.00	0.00	✓	4.47	0.39	4.47	1.00	282.82	0.00	282.82
	811	810	0.00	0.00					1.00	0.00	0.36	0.48
	812	810	0.00	0.00					1.00	0.00	47.29	60.25
	820		0.00	0.00	✓	7.33	0.66	4.29	1.00	144.77	22.40	186.09
	821	820	0.00	0.00					1.00	0.00	1.28	1.64
	890		0.00	0.00	✓	0.29			1.00	0.00	4.07	4.07
	891		0.00	0.00	✓	0.12			1.00	0.00	1.70	1.70
	900		0.00	0.00	✓	36.68	20.73	30.67	1.00	0.00	294.09	55.55
	901		0.00	0.00	✓	38.36	21.45	31.99	1.00	0.00	306.08	57.78
	910		0.00	0.00	✓	18.46	3.74	12.30	1.00	0.00	67.14	91.59
	911	910	0.00	0.00					1.00	0.00	54.52	82.01
	912	910	0.00	0.00					1.00	0.00	1.11	1.67
	920		0.00	0.00	✓	10.06	1.17	9.98	1.00	0.00	82.54	111.96
	990		0.00	0.00	✓	0.76			1.00	0.00	10.76	10.76
	1000		0.00	0.00	✓	48.18	39.98	46.63	1.00	0.00	367.07	72.73
	1001		0.00	0.00	✓	51.37	42.48	49.69	1.00	0.00	389.92	77.25
	1010		0.00	0.00	✓	0.84	0.05	0.83	1.00	0.00	0.00	0.00
	1011	1010	0.00	0.00					1.00	0.00	0.00	0.00
	1012	1010	0.00	0.00					1.00	0.00	3.14	5.54
	1020		0.00	0.00	✓	9.74	0.99	7.28	1.00	130.29	7.78	144.61
	1021	1020	0.00	0.00					1.00	0.00	37.53	58.13
	1030		0.00	0.00	✓	9.60	0.74	1.21	1.00	41.44	12.43	60.47
	1090		0.00	0.00	✓	0.12			1.00	0.00	1.64	1.64
	1091		0.00	0.00	✓	0.24			1.00	0.00	3.47	3.47

Network Results

Run Summary

Analysis set used	Run start time	Run finish time	Run duration (s)	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 unsignal PRC
6	10/11/2021 16:38:17	10/11/2021 16:38:17	0.54	16:30	70	1772.94	197.84	107.99	1000	7	19	1000	791

Network Results: Vehicle summary

Time Segment	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Actual green (s per cycle)	Mean Delay per Veh (s)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
16:30-17:30	108	-17	18196	1426	39.14	905.52	268.11	1772.94

Network Results: Flows and signals

Time Segment	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Actual green (s (per cycle))	Effective green (s (per cycle))
16:30-17:30	18196	18073	218	✓	108	✓	-17	1426	1456

Network Results: Stops and delays

Time Segment	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Unweighted cost of delay (£ per hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Uniform stops (Stops per hr)	Random stops (Stops per hr)	Unweighted cost of stops (£ per hr)	Weighted cost of stops (£ per hr)
16:30-17:30	18.11	39.14	50.14	147.70	2809.40	905.52	79.89	8606.22	5643.41	179.50	268.11

Network Results: Queues and blocking

Time Segment	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time starvation (s (per cycle))	Wasted time blocking back (s (per cycle))	Wasted time total (s (per cycle))
16:30-17:30	145.14	599.31	247.00	0.00	247.00

Network Results: Journey times

Time Segment	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)
16:30-17:30	2687.19	289.39	9.29

Network Results: Advanced

Time Segment	Degree of saturation penalty (£ per hr)	Ped gap accepting penalty (£ per hr)	Warmed up	PCU Factor	Cost of traffic penalties (£ per hr)	Controller stream penalties (£ per hr)	Unweighted performance index (£ per hr)	Performance Index (£ per hr)
16:30-17:30	0.00	0.00	✓	1.00	599.31	0.00	2988.89	1772.94

Point to Point Journey Time

Average Journey Time (s) for Local Matrix: 1

	To				
	A	B	C	D	
From	A	0.0	107.1	0.0	186.0
	B	117.9	154.0	170.9	226.6
	C	0.0	158.8	212.3	134.1
	D	255.8	289.4	341.8	388.7