



Introduction

1. This note responds to HCC's consultation response dated 17th February 2020 specifically to a number of technical issues raised therein.
2. The note also clarifies the external implications of the internal layout which will influence the routeing of vehicles to the site. Overall the development will result in less traffic during the peak hour periods relative to the baseline position. Internal barriers will however restrict the number of car movements from the East during the AM peak period. As before the majority of HGV movements will travel to and from the site from the West. This will be controlled by management supported by geometric constraints in the proposed layout.
3. HCC have also identified three areas for potential contribution/intervention, the cost of need for which is currently under consideration and will be responded to under separate cover.

Traffic Movements

4. HGV movements through the site are geometrically (physically) constrained such that the existing primarily office buildings (1000 (part), 6000 and 7000) will be served from the East as existing and the new employment buildings and existing buildings 1000 (part) and 5000 will be served from the West. In practical terms there should be no increase in movements to and from the East. The HCC response refers to barriers within the site but to be clear these regulate the car traffic during the peak periods not the HGV movements.
5. So that the routeing is understood by delivery drivers there will ideally be a Brookside postcode and Langstone Road postcode to ensure sat-navs give the correct directions. In addition instructions to drivers will reflect the appropriate routeings. This could be managed through the Travel Plans.
6. As acknowledged in the HCC response the number of HGV movements is low against TRICS due to reduced occupancy (in building 1000) and the use of the main warehouse as a data centre. The intensification in HGV movements will arise from the new employment buildings and/or should the data centre revert to a conventional warehouse. The HCC response states that a reasonable position would be to assume that typical rather than the lower HGV movements in any baseline. It then goes on to compare future forecasts against the lower HGV movements (note the figures cited do not reflect the errata in the DTA Report of October 2019 'Response to consultees on highways and transport matters'). Compared with the current site fully occupied on typical rates the increases are +25% and +96% for the B1c/B2 and B8 scenarios respectively.
7. There will therefore be an increase in HGV movements to and from the West. In absolute terms these changes are small. In the context of the flows on Harts Farm Way, which include traffic from the wider employment areas, the percentage changes will be small too, lower still than the percentage change within the site.



Harts Farm Way Roundabout

8. The revised HCC response queries the potential for unequal lane usage at the Harts Farm Way Roundabout as ARCADY forecasts the capacity for entry arms and not on a lane by lane basis. There are single lane approaches which flare to two lane entries on the Harts Farm Way, Brockhampton Road and Southmoor Road approaches. The flares are relatively short between 2-3 vehicles and these increase the capacity of these approaches by 30-60%. The final slope and intercept values from the model are summarised in **Table 1** below. The flares are nearside flares and can be used only by left turning traffic.

Table 1 Harts Farm Way Roundabout capacities

	Slope	Intercept
Brockhampton Road	0.702	1778
Brookside	0.504	1080
Southmoor Lane	0.645	1694
Harts Farm Way	0.563	1384

9. There is unequal lane usage on Brockhampton Road (15% and 4% in flare in respective peaks) in both peak periods. There is unequal lane usage on Harts Farm Way (20% in flare) in the AM peak only.
10. With respect to Harts Farm Way there is apparent unequal lane usage but there is very limited benefit from the flare in any respect on this approach. The flare only increases the capacity by around 30% and 20% traffic uses the flare. Indeed the capacities would not be out of kilter were the arrangement a single wide lane. No adjustment is considered necessary here.
11. With respect to Brockhampton Road, this is the approach from Havant town centre direction and the flare lane is into the site. An intercept correction is warranted in this location as the majority of the movements are onto the circulatory carriageway rather than left into the site. In effect there is under used capacity into the site. The ARCADY has been re-run. The arm geometry has been updated to reflect only the dimensions of the right turn and ahead lane. A bypass lane has been include effectively taking the left turners out of the assessment (i.e. together with the left turn lane). The amended slope and intercept are summarised in **Table 2** below.

Table 2 Harts Farm Way Roundabout capacities

	Slope	Intercept
Brockhampton Road	0.507	988

12. The revised results are summarised in **Table 3** below. As can be seen from this table even with the more onerous assumptions on Brockhampton Road, the junction will operate within capacity in all scenarios. Full details are attached. Note that the scenarios set out in this Table are unconstrained and do not reflect the internal barriers that will affect the AM peak period. As a result two sensitivity tests have been run for the AM peak period in 2024. Based on a first principles review of the assignment of traffic it has been assumed that up to a maximum of 80 vehicles per hour inbound in the AM peak hour would reassign to Harts Farm Way from Langstone Road as a result



of the barrier control. As can be seen from the table the average queue length will increase by 1 vehicle on Brockhampton Road (due to increased opposing flow on the circulatory).

Table 3 Revised Herts Farm Way Roundabout assessment

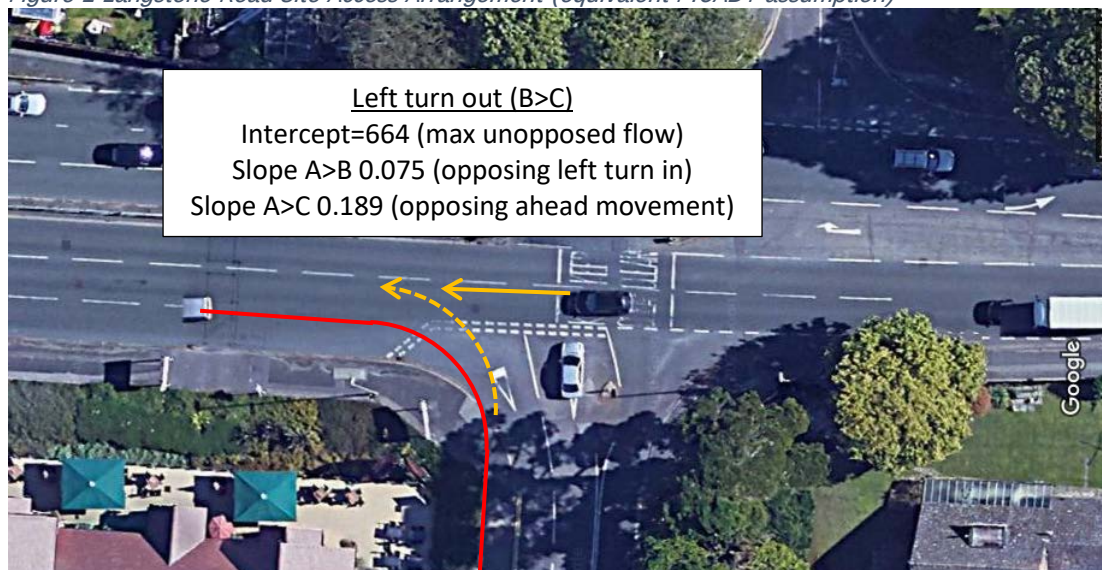
	AM					PM				
	Set ID	Q (PCU)	Delay (s)	RFC	Res Cap	Set ID	Q (PCU)	Delay (s)	RFC	Res Cap
	Existing									
1 - Brockhampton	D1	2.9	22.10	0.75	8 % [1 - Brockhampton]	D2	0.8	6.96	0.43	93 % [1 - Brockhampton]
2 - Brookside		0.1	6.64	0.10			0.2	5.39	0.20	
3 - Southmoor Lane		0.2	3.33	0.15			0.6	4.19	0.36	
4 - Harts Farm Way		1.7	7.43	0.62			0.4	4.06	0.25	
	DO - Minimum									
1 - Brockhampton	D3	2.9	23.47	0.75	7 % [1 - Brockhampton]	D4	0.8	6.96	0.43	83 % [3 - Southmoor Lane]
2 - Brookside		0.2	7.04	0.14			0.4	6.14	0.30	
3 - Southmoor Lane		0.2	3.35	0.15			0.6	4.45	0.37	
4 - Harts Farm Way		2.0	8.50	0.67			0.4	4.13	0.25	
	OPT2 B1c									
1 - Brockhampton	D5	2.7	21.56	0.73	8 % [1 - Brockhampton]	D6	0.8	6.94	0.43	85 % [3 - Southmoor Lane]
2 - Brookside		0.2	7.18	0.14			0.4	6.04	0.28	
3 - Southmoor Lane		0.2	3.33	0.15			0.6	4.41	0.37	
4 - Harts Farm Way		2.0	8.25	0.66			0.4	4.11	0.25	
	OPT2 B8									
1 - Brockhampton	D7	2.3	19.47	0.70	11 % [1 - Brockhampton]	D8	0.7	6.87	0.43	86 % [3 - Southmoor Lane]
2 - Brookside		0.1	6.91	0.11			0.4	6.14	0.28	
3 - Southmoor Lane		0.2	3.20	0.13			0.6	4.37	0.36	
4 - Harts Farm Way		1.8	7.85	0.64			0.4	4.11	0.25	
	2024 OPT2 B1c									
1 - Brockhampton	D9	3.3	25.89	0.77	5 % [1 - Brockhampton]	D10	0.8	7.21	0.45	79 % [3 - Southmoor Lane]
2 - Brookside		0.2	7.44	0.14			0.4	6.15	0.29	
3 - Southmoor Lane		0.2	3.38	0.16			0.6	4.58	0.39	
4 - Harts Farm Way		2.1	8.80	0.68			0.4	4.18	0.26	
	2024 OPT2 B8									
1 - Brockhampton	D11	3.3	25.41	0.77	5 % [1 - Brockhampton]	D12	0.8	7.13	0.45	80 % [3 - Southmoor Lane]
2 - Brookside		0.2	7.61	0.14			0.4	6.25	0.28	
3 - Southmoor Lane		0.2	3.39	0.16			0.6	4.53	0.38	
4 - Harts Farm Way		2.1	8.68	0.67			0.4	4.18	0.26	
	2024 OPT2 B8 SEN									
1 - Brockhampton	D13	4.5	35.63	0.83	0 % [1 - Brockhampton]					
2 - Brookside		0.2	7.61	0.14						
3 - Southmoor Lane		0.2	3.38	0.16						
4 - Harts Farm Way		2.9	10.91	0.74						
	2024 OPT2 B1c SEN									
1 - Brockhampton	D14	4.6	36.52	0.83	-1 % [1 - Brockhampton]					
2 - Brookside		0.2	7.43	0.14						
3 - Southmoor Lane		0.2	3.38	0.16						
4 - Harts Farm Way		2.9	11.09	0.75						

13. Overall, the proposals do not significantly change the pattern or quantum of demand through this junction and this location is not particularly sensitive in capacity terms. Adjustments to the modelling have been made but these do not change the overall conclusions.

Langstone Road Site Access

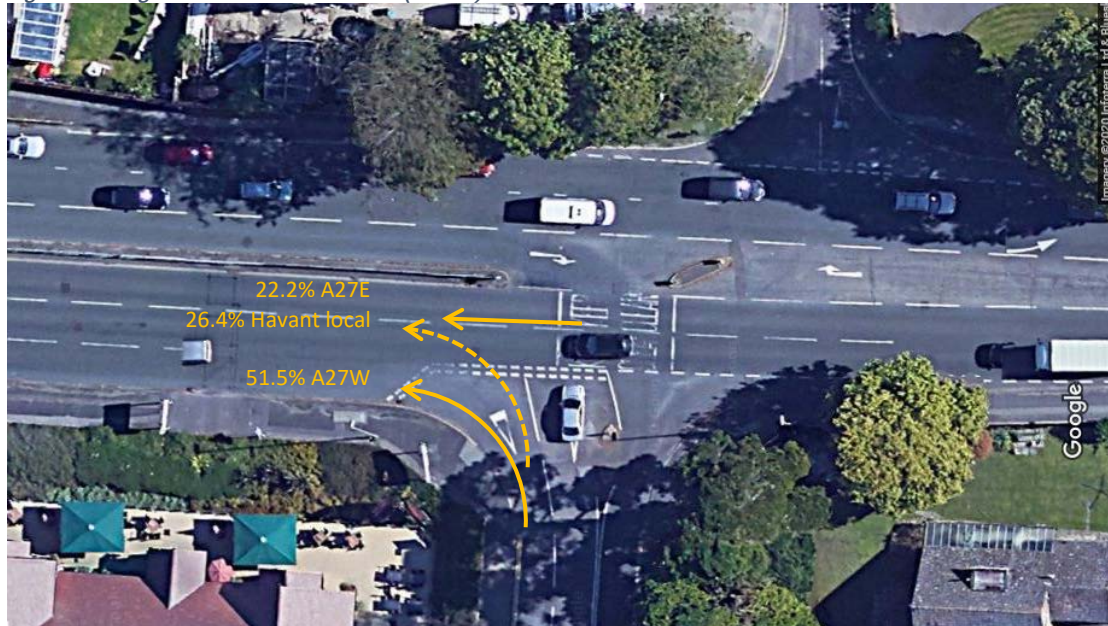
14. The HCC response states that the access will reach its design capacity once the site reaches 100% occupancy. The access is tidal with higher inbound flows in the AM peak and higher outbound flows in the PM peak. The modelling shows it will operate at capacity for periods during the PM peak hour periods if the current site reaches 100% occupancy. With the development proposed the peak hour traffic will be less. With the proposed traffic management it will be further reduced (primarily in the AM peak).
15. As set out in the **DTA report 20428-06e** HCC Response, the modelling requires interpretation as the PICADY model is based on a simple two lane approach to a priority junction on a dual two lane carriageway road. As shown in **Figure 1** below this would normally be as shown by the red mark up such that all left turning traffic will give way to ahead traffic on Langstone Road. The associated intercept, the maximum unopposed flow, and slope, the linear rate of decrease in capacity against opposing flow, from the submitted model are labelled on this diagram.

Figure 1 Langstone Road Site Access Arrangement (equivalent PICADY assumption)



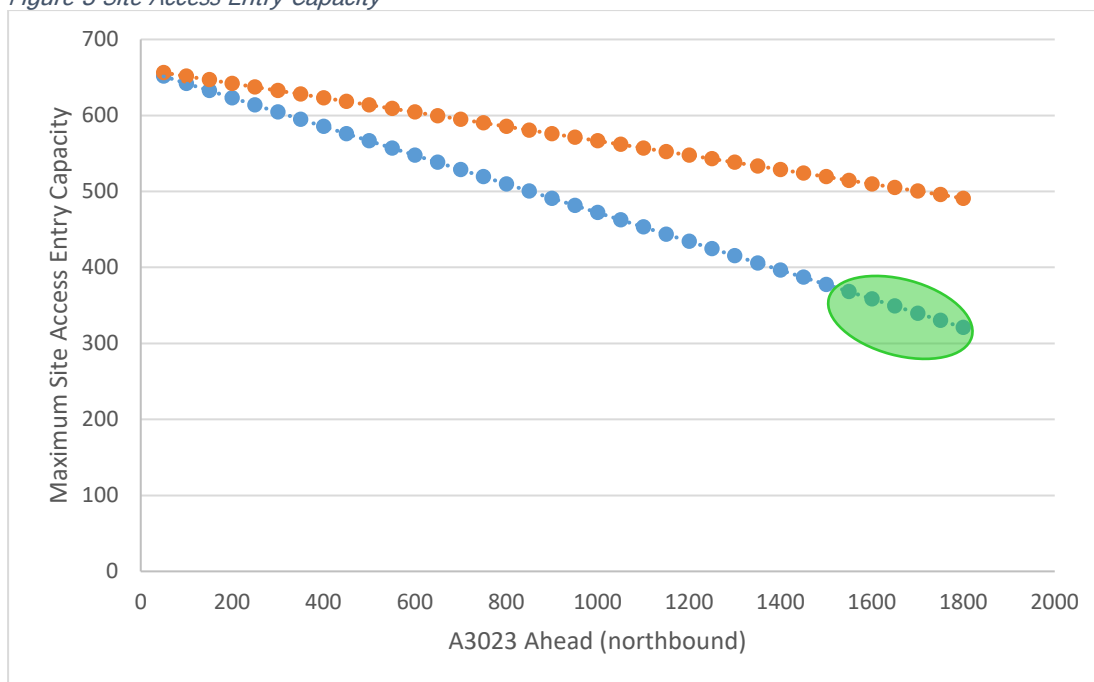
16. In practice there is a nearside lane gain for left turning traffic such that whilst left turning traffic notionally crosses a give-way line they are in effect unopposed or at least the left turning component at the A27 junction is unopposed. The A>B slope therefore should only apply to 48.5% left turning traffic (i.e. Havant Local and A27E bound as per **DTA Report 20428-06e** Figure 1). This would be best represented by adjustment to the slope rather than intercept i.e. the geometric element of vehicles turning through a 10-20m radius is unchanged.

Figure 2 Langstone Road Site Access (actual)



17. This however could underestimate the future queue lengths and the unopposed left turners will still be held up by the opposed left turners. The actual operation of the junction will therefore not be fully replicated by this approach which will fall between assuming that all the left to A27W traffic gives way, as per the blue line in **Figure 3**, and none of it gives way, as per the orange line.
18. In practice assuming that all of the traffic gives way, the junction is operating only slightly over capacity (illustratively shown within the green area in **Figure 3**), i.e. against the blue capacity line. The junction is operating well within capacity assuming that the A27W traffic does not give way, i.e. against the orange capacity line.
19. These are all based on a synthesised OD-TAB profile which assumes that there is a concentration of traffic in the central half hour period. Whilst this is robust, and appropriate for the site traffic, it is likely that there will be flatter on the wider network traffic profile in this location i.e. the ahead traffic on Langstone Road from Hayling Island.

Figure 3 Site Access Entry Capacity



20. With respect to the LINSIG modelling, this was presented to demonstrate that the observed variation in queue lengths can better be explained by upstream modulation of the arrival profile than adjustment of the slope and intercept values (which cannot be altered within PICADY for the right turn in). The modelling has been amended to increase the link length to 150m and the modulation has been amended to two pulses every minute rather than one. The results differ from those originally presented as the shorter pulses are able to dissipate more quickly. In practice however there will be variations in demand and duration between upstream links hence the changes are less conservative to those adopted originally.

Table 4 Revised Site Access LINSIG results

Flow Group	Time	Cycle Time (s)	PRC (%)	Delay (pcuHr)
Existing	› 08:00 - 09:00	60	27.7	2.89
Do-min	› 08:00 - 09:00	60	0.8	6.48
B1C	› 08:00 - 09:00	60	3.1	5.81
B8	› 08:00 - 09:00	60	5.7	5.24
2024 Do-min	› 08:00 - 09:00	60	-3.0	7.71
2024 B1C	› 08:00 - 09:00	60	-0.7	6.76
2024 B8	› 08:00 - 09:00	60	1.9	5.96

21. The revised results are summarised in **Table 4**.

22. As set out in the introduction, these unconstrained scenarios have been superseded by the traffic management proposals which will control the traffic using this access to existing levels during the AM peak period. This represents a betterment relative to the baseline position (i.e. the do-min scenario).



U-turns

23. Amendment to the white lining on the southbound egress from the A27 roundabout as suggested to increase the right turn storage into the site by 15-20m are appropriate and would be compliant with the requirements of CD123 para 6.5 and CD116.
24. Signing within the roundabout splitter/central reserve would aid driver legibility coming from the roundabout.

Conclusions

25. Overall:

- The proposed development will result in a net reduction in the peak hour traffic relative to the baseline scenario at Langstone Road;
- HGV movements at Brookside will increase but in absolute terms the numbers are not large;
- HGV movements through the site are geometrically constrained and are not reliant on barriers (other than the gated emergency vehicles route);
- Langstone Road site access does not have a conventional layout in ARCADY terms and whilst the modelling has been revised in response to feedback the conclusions are unchanged;
- No intervention is required in terms of junction design;
- Improved lining and signing is appropriate to limit u-turn demand.

Junctions 9	
ARCADY 9 - Roundabout Module	
Version: 9.5.1.7462 © Copyright TRL Limited, 2019	
For sales and distribution information, program advice and maintenance, contact TRL: +44 (0)1344 379777 software@trl.co.uk www.trlsoftware.co.uk	
The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution	

Filename: Brookside Roundabout RevB.j9
Path: P:\20000's\20428\Junction Assessments
Report generation date: 02/03/2020 15:32:01

-
- »Existing, AM
 - »Existing, PM
 - »DO - Minimum, AM
 - »DO - Minimum, PM
 - »OPT2 B1c, AM
 - »OPT2 B1c, PM
 - »OPT2 B8, AM
 - »OPT2 B8, PM
 - »2024 OPT2 B1c, AM
 - »2024 OPT2 B1c, PM
 - »2024 OPT2 B8, AM
 - »2024 OPT2 B8, PM
 - »2024 OPT2 B8 SEN, AM
 - »2024 OPT2 B1c SEN, AM

Summary of junction performance

	AM					PM				
	Set ID	Q (PCU)	Delay (s)	RFC	Res Cap	Set ID	Q (PCU)	Delay (s)	RFC	Res Cap
	Existing									
1 - Brockhampton	D1	2.9	22.10	0.75	8 % [1 - Brockhampton]	D2	0.8	6.96	0.43	93 % [1 - Brockhampton]
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1 - Brockhampton	D9	3.3	25.89	0.77	5 % [1 - Brockhampton]	D10	0.8	7.21	0.45	79 % [3 - Southmoor Lane]
2 - Brookside		0.2	7.44	0.14			0.4	6.15	0.29	
3 - Southmoor Lane		0.2	3.38	0.16			0.6	4.58	0.39	
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3 - Southmoor Lane		0.2	3.38	0.16						
4 - Harts Farm Way		2.9	11.09	0.75						

Values shown are the highest values encountered over all time segments. Delay is the maximum value of Av. delay per arriving vehicle. Res Cap indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

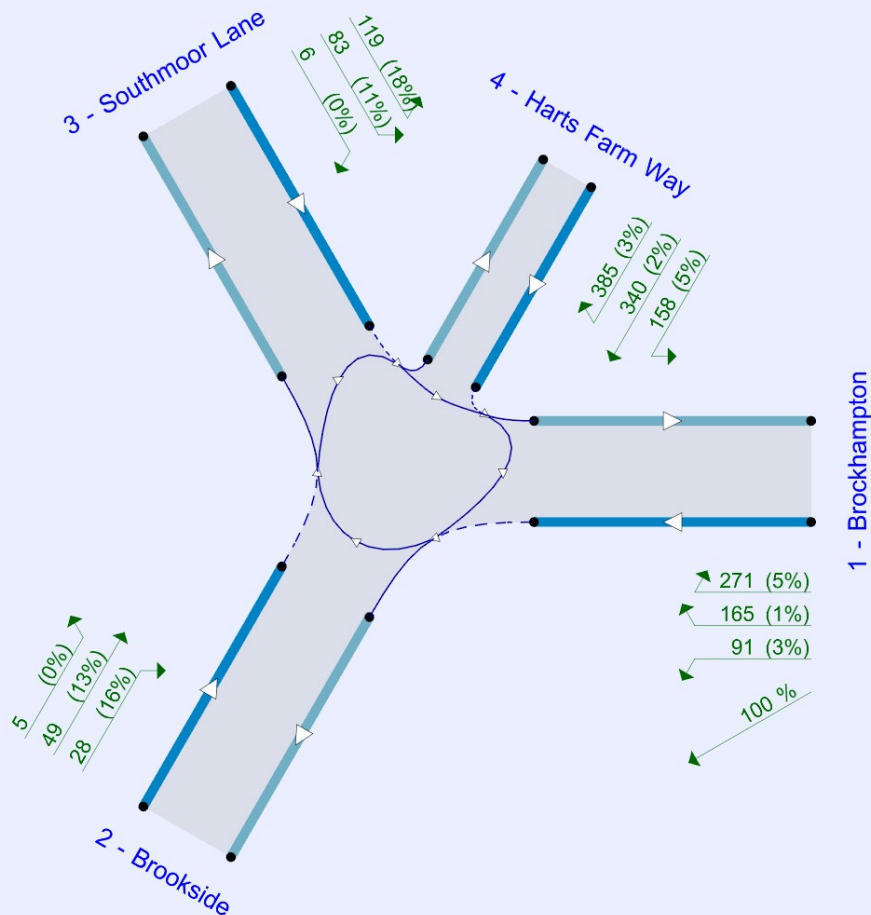
File summary

File Description

Title	Brookside Roundabout
Location	Langstone Technology Park
Site number	
Date	20/06/2019
Version	
Status	(new file)
Identifier	
Client	AG Langstone BV
Jobnumber	20428
Enumerator	DTA\arcady
Description	

Units

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



Flows show original traffic demand (PCU/hr).

The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Q Percentiles	Calculate detailed queueing delay	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Av. Delay threshold (s)	Q threshold (PCU)
5.75			✓	Delay	0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	Existing	AM	ONE HOUR	07:45	09:15	15	✓
D2	Existing	PM	ONE HOUR	16:45	18:15	15	✓
D3	DO - Minimum	AM	ONE HOUR	07:45	09:15	15	✓
D4	DO - Minimum	PM	ONE HOUR	16:45	18:15	15	✓
D5	OPT2 B1c	AM	ONE HOUR	07:45	09:15	15	✓
D6	OPT2 B1c	PM	ONE HOUR	16:45	18:15	15	✓
D7	OPT2 B8	AM	ONE HOUR	07:45	09:15	15	✓
D8	OPT2 B8	PM	ONE HOUR	16:45	18:15	15	✓
D9	2024 OPT2 B1c	AM	ONE HOUR	07:45	09:15	15	✓
D10	2024 OPT2 B1c	PM	ONE HOUR	16:45	18:15	15	✓
D11	2024 OPT2 B8	AM	ONE HOUR	07:45	09:15	15	✓
D12	2024 OPT2 B8	PM	ONE HOUR	16:45	18:15	15	✓
D13	2024 OPT2 B8 SEN	AM	ONE HOUR	07:45	09:15	15	✓
D14	2024 OPT2 B1c SEN	AM	ONE HOUR	07:45	09:15	15	✓

Analysis Set Details

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

Existing, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Brookside Roundabout	Standard Roundabout		1, 2, 3, 4	11.87	B

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	8	1 - Brockhampton

Arms

Arms

Arm	Name	Description
1	Brockhampton	
2	Brookside	
3	Southmoor Lane	
4	Harts Farm Way	

Roundabout Geometry

Arm	V (m)	E (m)	I' (m)	R (m)	D (m)	PHI (deg)	Exit only
1 - Brockhampton	3.10	3.40	5.0	15.0	25.9	33.0	
2 - Brookside	3.13	4.23	9.6	10.0	27.7	43.0	
3 - Southmoor Lane	3.95	6.60	22.8	9.6	25.9	29.0	
4 - Harts Farm Way	3.80	5.50	17.4	9.8	27.7	45.0	

Bypass

Arm	Arm has bypass	Bypass Util (%)
1 - Brockhampton	✓	100
2 - Brookside		
3 - Southmoor Lane		
4 - Harts Farm Way		

Slope / Intercept / Capacity

Arm Intercept Adjustments

Arm	Type	Reason	Direct intercept adjustment (PCU/hr)
1 - Brockhampton	Direct		0
2 - Brookside	None		
3 - Southmoor Lane	None		
4 - Harts Farm Way	None		

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Brockhampton	0.507	988
2 - Brookside	0.504	1080
3 - Southmoor Lane	0.645	1694
4 - Harts Farm Way	0.563	1384

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	Existing	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Brockhampton		ONE HOUR	✓	520	100.000
2 - Brookside		ONE HOUR	✓	59	100.000
3 - Southmoor Lane		ONE HOUR	✓	200	100.000
4 - Harts Farm Way		ONE HOUR	✓	743	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
		1 - Brockhampton	2 - Brookside	3 - Southmoor Lane	4 - Harts Farm Way
From	1 - Brockhampton	1	77	183	259
	2 - Brookside	21	0	6	32
	3 - Southmoor Lane	79	7	0	114
	4 - Harts Farm Way	151	223	369	0

Vehicle Mix

HV %s

	To				
		1 - Brockhampton	2 - Brookside	3 - Southmoor Lane	4 - Harts Farm Way
From	1 - Brockhampton	0	1	1	5
	2 - Brookside	11	0	7	0
	3 - Southmoor Lane	11	40	0	18
	4 - Harts Farm Way	5	2	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Brockhampton	0.75	22.10	2.9	C	477	610
2 - Brookside	0.10	6.64	0.1	A	54	81
3 - Southmoor Lane	0.15	3.33	0.2	A	184	275
4 - Harts Farm Way	0.62	7.43	1.7	A	682	1023

Main Results for each time segment

07:45 - 08:00

Am	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsi le se
1 - Brockhampton	391	334	83	58	0	449	761	0.438	330	189	0.0	0.8	8.571	
2 - Brookside	44	44	11	0	58	607	775	0.057	44	172	0.0	0.1	5.141	
3 - Southmoor Lane	151	151	38	0	0	234	1543	0.098	150	417	0.0	0.1	2.991	
4 - Harts Farm Way	559	559	140	0	0	81	1339	0.418	556	303	0.0	0.7	4.728	

08:00 - 08:15

Am	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsi le s
1 - Brockhampton	467	398	100	69	0	538	716	0.556	396	226	0.8	1.3	11.562	
2 - Brookside	53	53	13	0	69	728	714	0.074	53	206	0.1	0.1	5.684	
3 - Southmoor Lane	180	180	45	0	0	280	1513	0.119	180	500	0.1	0.2	3.124	
4 - Harts Farm Way	668	668	167	0	0	97	1330	0.502	667	363	0.7	1.0	5.588	

08:15 - 08:30

Am	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsi le s
1 - Brockhampton	573	488	122	85	0	658	655	0.744	482	277	1.3	2.8	20.728	
2 - Brookside	65	65	16	0	85	887	634	0.102	65	252	0.1	0.1	6.601	
3 - Southmoor Lane	220	220	55	0	0	341	1474	0.149	220	611	0.2	0.2	3.322	
4 - Harts Farm Way	818	818	205	0	0	119	1317	0.621	816	442	1.0	1.7	7.359	

08:30 - 08:45

Am	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsi le s
1 - Brockhampton	573	488	122	85	0	659	654	0.745	487	277	2.8	2.9	22.096	
2 - Brookside	65	65	16	0	85	894	630	0.103	65	253	0.1	0.1	6.644	
3 - Southmoor Lane	220	220	55	0	0	344	1472	0.150	220	614	0.2	0.2	3.328	
4 - Harts Farm Way	818	818	205	0	0	119	1317	0.621	818	446	1.7	1.7	7.430	

08:45 - 09:00

Am	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsi le s
1 - Brockhampton	467	398	100	69	0	540	715	0.557	404	227	2.9	1.3	12.218	
2 - Brookside	53	53	13	0	69	737	709	0.075	53	208	0.1	0.1	5.729	
3 - Southmoor Lane	180	180	45	0	0	285	1510	0.119	180	505	0.2	0.2	3.132	
4 - Harts Farm Way	668	668	167	0	0	97	1330	0.502	670	368	1.7	1.1	5.651	

09:00 - 09:15

Am	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsi le se
1 - Brockhampton	391	334	83	58	0	452	759	0.439	336	190	1.3	0.8	8.816	
2 - Brookside	44	44	11	0	58	614	771	0.058	45	174	0.1	0.1	5.170	
3 - Southmoor Lane	151	151	38	0	0	237	1541	0.098	151	422	0.2	0.1	2.996	
4 - Harts Farm Way	559	559	140	0	0	81	1338	0.418	561	306	1.1	0.7	4.780	

Existing, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Brookside Roundabout	Standard Roundabout		1, 2, 3, 4	5.13	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	93	1 - Brockhampton

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	Existing	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Brockhampton		ONE HOUR	✓	371	100.000
2 - Brookside		ONE HOUR	✓	151	100.000
3 - Southmoor Lane		ONE HOUR	✓	442	100.000
4 - Harts Farm Way		ONE HOUR	✓	288	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
From		1 - Brockhampton	2 - Brookside	3 - Southmoor Lane	4 - Harts Farm Way
	1 - Brockhampton	2	14	35	320
	2 - Brookside	38	0	0	113
	3 - Southmoor Lane	135	22	0	285
	4 - Harts Farm Way	183	26	77	2

Vehicle Mix

HV %s

	To				
From		1 - Brockhampton	2 - Brookside	3 - Southmoor Lane	4 - Harts Farm Way
	1 - Brockhampton	0	0	6	1
	2 - Brookside	0	0	0	1
	3 - Southmoor Lane	2	0	0	1
	4 - Harts Farm Way	3	0	18	100

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Brockhampton	0.43	6.96	0.8	A	340	491
2 - Brookside	0.20	5.39	0.2	A	139	208
3 - Southmoor Lane	0.36	4.19	0.6	A	406	608
4 - Harts Farm Way	0.25	4.06	0.4	A	264	396

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsi le se
1 - Brockhampton	279	269	67	11	0	95	940	0.286	267	268	0.0	0.4	5.414	
2 - Brookside	114	114	28	0	11	326	916	0.124	113	36	0.0	0.1	4.514	
3 - Southmoor Lane	333	333	83	0	0	356	1465	0.227	332	84	0.0	0.3	3.214	
4 - Harts Farm Way	217	217	54	0	0	148	1301	0.167	216	539	0.0	0.2	3.540	

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsi le se
1 - Brockhampton	334	321	80	13	0	114	931	0.345	320	322	0.4	0.5	5.980	
2 - Brookside	136	136	34	0	13	391	883	0.154	136	43	0.1	0.2	4.849	
3 - Southmoor Lane	397	397	99	0	0	426	1419	0.280	397	101	0.3	0.4	3.566	
4 - Harts Farm Way	259	259	65	0	0	177	1285	0.202	259	646	0.2	0.3	3.743	

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsi le se
1 - Brockhampton	408	393	98	15	0	140	918	0.428	392	394	0.5	0.8	6.940	
2 - Brookside	166	166	42	0	15	479	839	0.198	166	53	0.2	0.2	5.384	
3 - Southmoor Lane	487	487	122	0	0	522	1357	0.359	486	123	0.4	0.6	4.176	
4 - Harts Farm Way	317	317	79	0	0	217	1262	0.251	317	791	0.3	0.4	4.061	

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsi le se
1 - Brockhampton	408	393	98	15	0	140	918	0.428	393	394	0.8	0.8	6.962	
2 - Brookside	166	166	42	0	15	480	839	0.198	166	53	0.2	0.2	5.393	
3 - Southmoor Lane	487	487	122	0	0	523	1357	0.359	487	123	0.6	0.6	4.188	
4 - Harts Farm Way	317	317	79	0	0	217	1262	0.251	317	793	0.4	0.4	4.064	

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsi le se
1 - Brockhampton	334	321	80	13	0	114	931	0.345	322	322	0.8	0.5	6.008	
2 - Brookside	136	136	34	0	13	393	883	0.154	136	43	0.2	0.2	4.861	
3 - Southmoor Lane	397	397	99	0	0	428	1418	0.280	398	101	0.6	0.4	3.575	
4 - Harts Farm Way	259	259	65	0	0	177	1284	0.202	259	649	0.4	0.3	3.747	

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsi le se
1 - Brockhampton	279	269	67	11	0	96	940	0.286	269	270	0.5	0.4	5.450	
2 - Brookside	114	114	28	0	11	329	915	0.124	114	36	0.2	0.1	4.530	
3 - Southmoor Lane	333	333	83	0	0	358	1463	0.227	333	84	0.4	0.3	3.229	
4 - Harts Farm Way	217	217	54	0	0	148	1301	0.167	217	543	0.3	0.2	3.544	

DO - Minimum, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Brookside Roundabout	Standard Roundabout		1, 2, 3, 4	12.65	B

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	7	1 - Brockhampton

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	DO - Minimum	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Brockhampton		ONE HOUR	✓	521	100.000
2 - Brookside		ONE HOUR	✓	84	100.000
3 - Southmoor Lane		ONE HOUR	✓	199	100.000
4 - Harts Farm Way		ONE HOUR	✓	797	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
From		1 - Brockhampton	2 - Brookside	3 - Southmoor Lane	4 - Harts Farm Way
	1 - Brockhampton	1	96	158	266
	2 - Brookside	29	0	6	49
	3 - Southmoor Lane	79	6	0	114
	4 - Harts Farm Way	151	277	369	0

Vehicle Mix

HV %s

	To				
From		1 - Brockhampton	2 - Brookside	3 - Southmoor Lane	4 - Harts Farm Way
	1 - Brockhampton	0	1	1	5
	2 - Brookside	9	0	0	7
	3 - Southmoor Lane	11	0	0	18
	4 - Harts Farm Way	5	1	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Brockhampton	0.75	23.47	2.9	C	478	585
2 - Brookside	0.14	7.04	0.2	A	77	116
3 - Southmoor Lane	0.15	3.35	0.2	A	183	274
4 - Harts Farm Way	0.67	8.50	2.0	A	731	1097

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsi le s
1 - Brockhampton	392	320	80	72	0	488	741	0.432	317	195	0.0	0.8	8.721	
2 - Brookside	63	63	16	0	72	593	782	0.081	63	212	0.0	0.1	5.366	
3 - Southmoor Lane	150	150	37	0	0	257	1528	0.098	149	399	0.0	0.1	2.986	
4 - Harts Farm Way	600	600	150	0	0	86	1336	0.449	597	321	0.0	0.8	4.989	

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsi le s
1 - Brockhampton	468	382	96	86	0	585	692	0.552	380	233	0.8	1.2	11.874	
2 - Brookside	76	76	19	0	86	711	722	0.105	75	254	0.1	0.1	5.967	
3 - Southmoor Lane	179	179	45	0	0	309	1495	0.120	179	478	0.1	0.2	3.128	
4 - Harts Farm Way	716	716	179	0	0	103	1326	0.540	715	384	0.8	1.2	6.045	

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsi le s
1 - Brockhampton	574	468	117	106	0	715	626	0.747	462	285	1.2	2.8	21.868	
2 - Brookside	92	92	23	0	106	866	644	0.144	92	310	0.1	0.2	6.989	
3 - Southmoor Lane	219	219	55	0	0	376	1452	0.151	219	583	0.2	0.2	3.339	
4 - Harts Farm Way	878	878	219	0	0	126	1313	0.668	874	468	1.2	2.0	8.373	

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsi le s
1 - Brockhampton	574	468	117	106	0	718	625	0.749	467	286	2.8	2.9	23.471	
2 - Brookside	92	92	23	0	106	874	640	0.144	92	312	0.2	0.2	7.042	
3 - Southmoor Lane	219	219	55	0	0	380	1449	0.151	219	587	0.2	0.2	3.346	
4 - Harts Farm Way	878	878	219	0	0	127	1313	0.668	877	472	2.0	2.0	8.496	

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsi le s
1 - Brockhampton	468	382	96	86	0	589	690	0.554	389	235	2.9	1.3	12.602	
2 - Brookside	76	76	19	0	86	722	717	0.105	76	256	0.2	0.1	6.022	
3 - Southmoor Lane	179	179	45	0	0	314	1491	0.120	179	483	0.2	0.2	3.137	
4 - Harts Farm Way	716	716	179	0	0	104	1326	0.540	720	390	2.0	1.2	6.140	

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsi le se
1 - Brockhampton	392	320	80	72	0	492	739	0.433	322	196	1.3	0.8	8.976	
2 - Brookside	63	63	16	0	72	601	778	0.081	63	214	0.1	0.1	5.403	
3 - Southmoor Lane	150	150	37	0	0	261	1526	0.098	150	403	0.2	0.1	2.992	
4 - Harts Farm Way	600	600	150	0	0	87	1335	0.449	602	324	1.2	0.8	5.055	

DO - Minimum, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Brookside Roundabout	Standard Roundabout		1, 2, 3, 4	5.37	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	83	3 - Southmoor Lane

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	DO - Minimum	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Brockhampton		ONE HOUR	✓	370	100.000
2 - Brookside		ONE HOUR	✓	225	100.000
3 - Southmoor Lane		ONE HOUR	✓	440	100.000
4 - Harts Farm Way		ONE HOUR	✓	289	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
From		1 - Brockhampton	2 - Brookside	3 - Southmoor Lane	4 - Harts Farm Way
	1 - Brockhampton	2	13	35	320
	2 - Brookside	57	0	0	168
	3 - Southmoor Lane	135	20	0	285
	4 - Harts Farm Way	185	25	77	2

Vehicle Mix

HV %s

	To				
From		1 - Brockhampton	2 - Brookside	3 - Southmoor Lane	4 - Harts Farm Way
	1 - Brockhampton	0	5	6	1
	2 - Brookside	1	0	0	1
	3 - Southmoor Lane	2	0	0	1
	4 - Harts Farm Way	3	4	18	100

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Brockhampton	0.43	6.96	0.8	A	340	491
2 - Brookside	0.30	6.14	0.4	A	206	310
3 - Southmoor Lane	0.37	4.45	0.6	A	404	606
4 - Harts Farm Way	0.25	4.13	0.4	A	265	398

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsi le se
1 - Brockhampton	279	269	67	10	0	93	941	0.286	267	284	0.0	0.4	5.418	
2 - Brookside	169	169	42	0	10	326	916	0.185	168	34	0.0	0.2	4.847	
3 - Southmoor Lane	331	331	83	0	0	411	1429	0.232	330	84	0.0	0.3	3.318	
4 - Harts Farm Way	218	218	54	0	0	160	1294	0.168	217	581	0.0	0.2	3.575	

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsi le se
1 - Brockhampton	333	321	80	12	0	111	932	0.344	320	340	0.4	0.5	5.981	
2 - Brookside	202	202	51	0	12	391	883	0.229	202	40	0.2	0.3	5.323	
3 - Southmoor Lane	396	396	99	0	0	493	1376	0.287	395	101	0.3	0.4	3.717	
4 - Harts Farm Way	260	260	65	0	0	192	1276	0.204	260	696	0.2	0.3	3.792	

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsi le se
1 - Brockhampton	407	393	98	14	0	136	919	0.428	392	417	0.5	0.7	6.934	
2 - Brookside	248	248	62	0	14	479	839	0.295	247	49	0.3	0.4	6.124	
3 - Southmoor Lane	484	484	121	0	0	603	1305	0.371	484	123	0.4	0.6	4.440	
4 - Harts Farm Way	318	318	80	0	0	235	1252	0.254	318	852	0.3	0.4	4.124	

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsi le se
1 - Brockhampton	407	393	98	14	0	137	919	0.428	393	417	0.7	0.8	6.957	
2 - Brookside	248	248	62	0	14	480	839	0.295	248	50	0.4	0.4	6.139	
3 - Southmoor Lane	484	484	121	0	0	604	1304	0.371	484	123	0.6	0.6	4.451	
4 - Harts Farm Way	318	318	80	0	0	236	1252	0.254	318	853	0.4	0.4	4.129	

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsi le se
1 - Brockhampton	333	321	80	12	0	112	932	0.344	322	341	0.8	0.5	6.011	
2 - Brookside	202	202	51	0	12	393	883	0.229	203	41	0.4	0.3	5.340	
3 - Southmoor Lane	396	396	99	0	0	495	1375	0.288	396	101	0.6	0.4	3.734	
4 - Harts Farm Way	260	260	65	0	0	193	1276	0.204	260	698	0.4	0.3	3.796	

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsi le se
1 - Brockhampton	279	269	67	10	0	93	941	0.286	269	286	0.5	0.4	5.456	
2 - Brookside	169	169	42	0	10	329	915	0.185	170	34	0.3	0.2	4.870	
3 - Southmoor Lane	331	331	83	0	0	414	1427	0.232	332	84	0.4	0.3	3.332	
4 - Harts Farm Way	218	218	54	0	0	161	1293	0.168	218	584	0.3	0.2	3.586	

OPT2 B1c, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Brookside Roundabout	Standard Roundabout		1, 2, 3, 4	11.88	B

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	8	1 - Brockhampton

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	OPT2 B1c	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Brockhampton		ONE HOUR	✓	510	100.000
2 - Brookside		ONE HOUR	✓	82	100.000
3 - Southmoor Lane		ONE HOUR	✓	199	100.000
4 - Harts Farm Way		ONE HOUR	✓	785	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
From		1 - Brockhampton	2 - Brookside	3 - Southmoor Lane	4 - Harts Farm Way
	1 - Brockhampton	1	92	158	259
	2 - Brookside	28	0	6	48
	3 - Southmoor Lane	79	6	0	114
	4 - Harts Farm Way	151	265	369	0

Vehicle Mix

HV %s

	To				
From		1 - Brockhampton	2 - Brookside	3 - Southmoor Lane	4 - Harts Farm Way
	1 - Brockhampton	0	2	1	5
	2 - Brookside	13	0	0	11
	3 - Southmoor Lane	11	0	0	18
	4 - Harts Farm Way	5	2	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Brockhampton	0.73	21.56	2.7	C	468	575
2 - Brookside	0.14	7.18	0.2	A	75	113
3 - Southmoor Lane	0.15	3.33	0.2	A	183	274
4 - Harts Farm Way	0.66	8.25	2.0	A	720	1080

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsi le s
1 - Brockhampton	384	315	79	69	0	479	746	0.422	312	194	0.0	0.7	8.527	
2 - Brookside	62	62	15	0	69	588	784	0.079	61	203	0.0	0.1	5.501	
3 - Southmoor Lane	150	150	37	0	0	251	1532	0.098	149	399	0.0	0.1	2.977	
4 - Harts Farm Way	591	591	148	0	0	85	1336	0.442	588	315	0.0	0.8	4.938	

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsi le s
1 - Brockhampton	458	376	94	83	0	574	698	0.539	374	232	0.7	1.2	11.452	
2 - Brookside	74	74	18	0	83	705	725	0.102	74	243	0.1	0.1	6.104	
3 - Southmoor Lane	179	179	45	0	0	301	1500	0.119	179	478	0.1	0.2	3.115	
4 - Harts Farm Way	706	706	176	0	0	102	1327	0.532	704	377	0.8	1.2	5.949	

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsi le s
1 - Brockhampton	562	460	115	101	0	702	633	0.727	455	284	1.2	2.6	20.315	
2 - Brookside	90	90	23	0	101	860	648	0.139	90	297	0.1	0.2	7.136	
3 - Southmoor Lane	219	219	55	0	0	366	1458	0.150	219	583	0.2	0.2	3.323	
4 - Harts Farm Way	864	864	216	0	0	125	1314	0.658	861	460	1.2	1.9	8.143	

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsi le s
1 - Brockhampton	562	460	115	101	0	705	631	0.729	460	285	2.6	2.7	21.559	
2 - Brookside	90	90	23	0	101	866	644	0.140	90	298	0.2	0.2	7.180	
3 - Southmoor Lane	219	219	55	0	0	370	1456	0.151	219	587	0.2	0.2	3.329	
4 - Harts Farm Way	864	864	216	0	0	126	1314	0.658	864	463	1.9	2.0	8.252	

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsi le s
1 - Brockhampton	458	376	94	83	0	578	696	0.540	381	234	2.7	1.2	12.057	
2 - Brookside	74	74	18	0	83	715	721	0.102	74	245	0.2	0.1	6.156	
3 - Southmoor Lane	179	179	45	0	0	306	1497	0.120	179	483	0.2	0.2	3.126	
4 - Harts Farm Way	706	706	176	0	0	103	1326	0.532	709	382	2.0	1.2	6.036	

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsi le se
1 - Brockhampton	384	315	79	69	0	483	744	0.423	317	195	1.2	0.8	8.760	
2 - Brookside	62	62	15	0	69	595	781	0.079	62	205	0.1	0.1	5.534	
3 - Southmoor Lane	150	150	37	0	0	254	1530	0.098	150	403	0.2	0.1	2.983	
4 - Harts Farm Way	591	591	148	0	0	86	1336	0.442	592	318	1.2	0.8	5.000	

OPT2 B1c, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Brookside Roundabout	Standard Roundabout		1, 2, 3, 4	5.33	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	85	3 - Southmoor Lane

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	OPT2 B1c	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Brockhampton		ONE HOUR	✓	370	100.000
2 - Brookside		ONE HOUR	✓	216	100.000
3 - Southmoor Lane		ONE HOUR	✓	439	100.000
4 - Harts Farm Way		ONE HOUR	✓	286	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
		1 - Brockhampton	2 - Brookside	3 - Southmoor Lane	4 - Harts Farm Way
From	1 - Brockhampton	2	13	35	320
	2 - Brookside	55	0	0	161
	3 - Southmoor Lane	135	19	0	285
	4 - Harts Farm Way	183	24	77	2

Vehicle Mix

HV %s

	To				
		1 - Brockhampton	2 - Brookside	3 - Southmoor Lane	4 - Harts Farm Way
From	1 - Brockhampton	0	6	6	1
	2 - Brookside	1	0	0	1
	3 - Southmoor Lane	2	0	0	1
	4 - Harts Farm Way	3	5	18	100

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Brockhampton	0.43	6.94	0.8	A	340	491
2 - Brookside	0.28	6.04	0.4	A	198	297
3 - Southmoor Lane	0.37	4.41	0.6	A	403	604
4 - Harts Farm Way	0.25	4.11	0.4	A	262	394

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsi le se
1 - Brockhampton	279	269	67	10	0	91	942	0.285	267	281	0.0	0.4	5.412	
2 - Brookside	163	163	41	0	10	326	916	0.178	162	32	0.0	0.2	4.807	
3 - Southmoor Lane	331	331	83	0	0	404	1433	0.231	329	84	0.0	0.3	3.303	
4 - Harts Farm Way	215	215	54	0	0	158	1295	0.166	214	575	0.0	0.2	3.563	

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsi le se
1 - Brockhampton	333	321	80	12	0	110	933	0.344	320	337	0.4	0.5	5.973	
2 - Brookside	194	194	49	0	12	391	883	0.220	194	39	0.2	0.3	5.265	
3 - Southmoor Lane	395	395	99	0	0	485	1381	0.286	394	101	0.3	0.4	3.695	
4 - Harts Farm Way	257	257	64	0	0	189	1278	0.201	257	690	0.2	0.3	3.778	

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsi le se
1 - Brockhampton	407	393	98	14	0	134	920	0.427	392	412	0.5	0.7	6.920	
2 - Brookside	238	238	59	0	14	479	839	0.283	237	47	0.3	0.4	6.028	
3 - Southmoor Lane	483	483	121	0	0	593	1311	0.369	483	123	0.4	0.6	4.400	
4 - Harts Farm Way	315	315	79	0	0	232	1254	0.251	315	844	0.3	0.4	4.106	

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsi le se
1 - Brockhampton	407	393	98	14	0	134	920	0.427	393	413	0.7	0.8	6.942	
2 - Brookside	238	238	59	0	14	480	839	0.284	238	47	0.4	0.4	6.040	
3 - Southmoor Lane	483	483	121	0	0	595	1311	0.369	483	123	0.6	0.6	4.411	
4 - Harts Farm Way	315	315	79	0	0	232	1253	0.251	315	846	0.4	0.4	4.109	

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsi le se
1 - Brockhampton	333	321	80	12	0	110	933	0.344	322	338	0.8	0.5	6.000	
2 - Brookside	194	194	49	0	12	393	883	0.220	195	39	0.4	0.3	5.279	
3 - Southmoor Lane	395	395	99	0	0	487	1380	0.286	395	101	0.6	0.4	3.710	
4 - Harts Farm Way	257	257	64	0	0	190	1277	0.201	257	692	0.4	0.3	3.782	

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsi le se
1 - Brockhampton	279	269	67	10	0	92	942	0.285	269	283	0.5	0.4	5.449	
2 - Brookside	163	163	41	0	10	329	915	0.178	163	32	0.3	0.2	4.830	
3 - Southmoor Lane	331	331	83	0	0	407	1431	0.231	331	84	0.4	0.3	3.319	
4 - Harts Farm Way	215	215	54	0	0	159	1295	0.166	216	579	0.3	0.2	3.574	

OPT2 B8, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Brookside Roundabout	Standard Roundabout		1, 2, 3, 4	11.11	B

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	11	1 - Brockhampton

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	OPT2 B8	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Brockhampton		ONE HOUR	✓	498	100.000
2 - Brookside		ONE HOUR	✓	64	100.000
3 - Southmoor Lane		ONE HOUR	✓	174	100.000
4 - Harts Farm Way		ONE HOUR	✓	772	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
From		1 - Brockhampton	2 - Brookside	3 - Southmoor Lane	4 - Harts Farm Way
	1 - Brockhampton	1	94	157	246
	2 - Brookside	22	0	5	37
	3 - Southmoor Lane	71	6	0	97
	4 - Harts Farm Way	144	271	357	0

Vehicle Mix

HV %s

	To				
From		1 - Brockhampton	2 - Brookside	3 - Southmoor Lane	4 - Harts Farm Way
	1 - Brockhampton	0	3	1	5
	2 - Brookside	16	0	0	13
	3 - Southmoor Lane	11	0	0	18
	4 - Harts Farm Way	5	2	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Brockhampton	0.70	19.47	2.3	C	457	556
2 - Brookside	0.11	6.91	0.1	A	59	88
3 - Southmoor Lane	0.13	3.20	0.2	A	160	239
4 - Harts Farm Way	0.64	7.85	1.8	A	708	1063

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsi le s
1 - Brockhampton	375	304	76	71	0	475	748	0.407	301	178	0.0	0.7	8.286	
2 - Brookside	48	48	12	0	71	569	794	0.061	48	207	0.0	0.1	5.445	
3 - Southmoor Lane	131	131	33	0	0	228	1547	0.085	131	388	0.0	0.1	2.907	
4 - Harts Farm Way	581	581	145	0	0	75	1342	0.433	578	284	0.0	0.8	4.835	

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsi le s
1 - Brockhampton	448	363	91	85	0	569	700	0.519	362	214	0.7	1.1	10.942	
2 - Brookside	58	58	14	0	85	682	737	0.078	57	249	0.1	0.1	5.979	
3 - Southmoor Lane	156	156	39	0	0	274	1517	0.103	156	465	0.1	0.1	3.024	
4 - Harts Farm Way	694	694	174	0	0	90	1334	0.520	693	341	0.8	1.1	5.774	

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsi le s
1 - Brockhampton	548	445	111	103	0	696	636	0.699	440	261	1.1	2.3	18.574	
2 - Brookside	70	70	18	0	103	832	661	0.107	70	304	0.1	0.1	6.870	
3 - Southmoor Lane	192	192	48	0	0	334	1479	0.130	191	568	0.1	0.2	3.197	
4 - Harts Farm Way	850	850	212	0	0	110	1322	0.643	847	415	1.1	1.8	7.757	

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsi le s
1 - Brockhampton	548	445	111	103	0	698	635	0.701	444	262	2.3	2.3	19.474	
2 - Brookside	70	70	18	0	103	838	659	0.107	70	305	0.1	0.1	6.906	
3 - Southmoor Lane	192	192	48	0	0	337	1477	0.130	192	571	0.2	0.2	3.202	
4 - Harts Farm Way	850	850	212	0	0	110	1322	0.643	850	418	1.8	1.8	7.847	

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsi le s
1 - Brockhampton	448	363	91	85	0	572	699	0.520	368	215	2.3	1.1	11.414	
2 - Brookside	58	58	14	0	85	690	733	0.079	58	250	0.1	0.1	6.018	
3 - Southmoor Lane	156	156	39	0	0	278	1515	0.103	157	470	0.2	0.1	3.030	
4 - Harts Farm Way	694	694	174	0	0	90	1334	0.520	697	345	1.8	1.1	5.850	

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsi le se
1 - Brockhampton	375	304	76	71	0	478	746	0.408	306	180	1.1	0.7	8.487	
2 - Brookside	48	48	12	0	71	575	791	0.061	48	209	0.1	0.1	5.472	
3 - Southmoor Lane	131	131	33	0	0	231	1545	0.085	131	392	0.1	0.1	2.914	
4 - Harts Farm Way	581	581	145	0	0	75	1342	0.433	583	287	1.1	0.8	4.894	

OPT2 B8, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Brookside Roundabout	Standard Roundabout		1, 2, 3, 4	5.31	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	86	3 - Southmoor Lane

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	OPT2 B8	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Brockhampton		ONE HOUR	✓	368	100.000
2 - Brookside		ONE HOUR	✓	213	100.000
3 - Southmoor Lane		ONE HOUR	✓	435	100.000
4 - Harts Farm Way		ONE HOUR	✓	283	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
		1 - Brockhampton	2 - Brookside	3 - Southmoor Lane	4 - Harts Farm Way
From	1 - Brockhampton	2	11	35	320
	2 - Brookside	54	0	0	159
	3 - Southmoor Lane	135	15	0	285
	4 - Harts Farm Way	183	21	77	2

Vehicle Mix

HV %s

	To				
		1 - Brockhampton	2 - Brookside	3 - Southmoor Lane	4 - Harts Farm Way
From	1 - Brockhampton	0	19	6	1
	2 - Brookside	3	0	0	3
	3 - Southmoor Lane	2	0	0	1
	4 - Harts Farm Way	3	16	18	100

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Brockhampton	0.43	6.87	0.7	A	338	491
2 - Brookside	0.28	6.14	0.4	A	195	293
3 - Southmoor Lane	0.36	4.37	0.6	A	399	599
4 - Harts Farm Way	0.25	4.11	0.4	A	260	390

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsi le se
1 - Brockhampton	277	269	67	8	0	86	945	0.284	267	280	0.0	0.4	5.382	
2 - Brookside	160	160	40	0	8	326	916	0.175	159	27	0.0	0.2	4.897	
3 - Southmoor Lane	327	327	82	0	0	402	1435	0.228	326	84	0.0	0.3	3.286	
4 - Harts Farm Way	213	213	53	0	0	154	1297	0.164	212	574	0.0	0.2	3.583	

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsi le se
1 - Brockhampton	331	321	80	10	0	103	936	0.343	320	336	0.4	0.5	5.927	
2 - Brookside	191	191	48	0	10	391	883	0.217	191	32	0.2	0.3	5.358	
3 - Southmoor Lane	391	391	98	0	0	482	1383	0.283	391	101	0.3	0.4	3.671	
4 - Harts Farm Way	254	254	64	0	0	185	1280	0.199	254	688	0.2	0.3	3.789	

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsi le se
1 - Brockhampton	405	393	98	12	0	126	924	0.425	392	411	0.5	0.7	6.852	
2 - Brookside	235	235	59	0	12	479	839	0.279	234	40	0.3	0.4	6.125	
3 - Southmoor Lane	479	479	120	0	0	590	1314	0.365	478	123	0.4	0.6	4.361	
4 - Harts Farm Way	312	312	78	0	0	226	1257	0.248	311	842	0.3	0.4	4.111	

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsi le se
1 - Brockhampton	405	393	98	12	0	127	924	0.425	393	412	0.7	0.7	6.875	
2 - Brookside	235	235	59	0	12	480	839	0.280	235	40	0.4	0.4	6.137	
3 - Southmoor Lane	479	479	120	0	0	591	1313	0.365	479	123	0.6	0.6	4.372	
4 - Harts Farm Way	312	312	78	0	0	227	1257	0.248	312	843	0.4	0.4	4.114	

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsi le se
1 - Brockhampton	331	321	80	10	0	104	936	0.343	322	337	0.7	0.5	5.956	
2 - Brookside	191	191	48	0	10	393	883	0.217	192	32	0.4	0.3	5.374	
3 - Southmoor Lane	391	391	98	0	0	484	1382	0.283	392	101	0.6	0.4	3.683	
4 - Harts Farm Way	254	254	64	0	0	186	1280	0.199	255	690	0.4	0.3	3.796	

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsi le se
1 - Brockhampton	277	269	67	8	0	87	945	0.285	269	282	0.5	0.4	5.413	
2 - Brookside	160	160	40	0	8	329	915	0.175	161	27	0.3	0.2	4.919	
3 - Southmoor Lane	327	327	82	0	0	405	1433	0.229	328	84	0.4	0.3	3.302	
4 - Harts Farm Way	213	213	53	0	0	155	1297	0.164	213	578	0.3	0.2	3.588	

2024 OPT2 B1c, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Brookside Roundabout	Standard Roundabout		1, 2, 3, 4	13.59	B

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	5	1 - Brockhampton

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2024 OPT2 B1c	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Brockhampton		ONE HOUR	✓	529	100.000
2 - Brookside		ONE HOUR	✓	82	100.000
3 - Southmoor Lane		ONE HOUR	✓	208	100.000
4 - Harts Farm Way		ONE HOUR	✓	808	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
From		1 - Brockhampton	2 - Brookside	3 - Southmoor Lane	4 - Harts Farm Way
	1 - Brockhampton	1	92	165	271
	2 - Brookside	28	0	6	48
	3 - Southmoor Lane	83	6	0	119
	4 - Harts Farm Way	158	265	385	0

Vehicle Mix

HV %s

	To				
From		1 - Brockhampton	2 - Brookside	3 - Southmoor Lane	4 - Harts Farm Way
	1 - Brockhampton	0	2	1	5
	2 - Brookside	13	0	0	11
	3 - Southmoor Lane	11	0	0	18
	4 - Harts Farm Way	5	2	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Brockhampton	0.77	25.89	3.3	D	485	601
2 - Brookside	0.14	7.44	0.2	A	75	113
3 - Southmoor Lane	0.16	3.38	0.2	A	191	286
4 - Harts Farm Way	0.68	8.80	2.1	A	741	1112

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsi le s
1 - Brockhampton	398	329	82	69	0	491	740	0.445	326	202	0.0	0.8	8.932	
2 - Brookside	62	62	15	0	69	614	771	0.080	61	203	0.0	0.1	5.602	
3 - Southmoor Lane	157	157	39	0	0	260	1527	0.103	156	416	0.0	0.1	3.005	
4 - Harts Farm Way	608	608	152	0	0	88	1334	0.456	605	327	0.0	0.9	5.064	

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsi le s
1 - Brockhampton	476	393	98	83	0	589	690	0.569	391	242	0.8	1.3	12.352	
2 - Brookside	74	74	18	0	83	736	710	0.104	74	243	0.1	0.1	6.252	
3 - Southmoor Lane	187	187	47	0	0	311	1493	0.125	187	498	0.1	0.2	3.151	
4 - Harts Farm Way	726	726	182	0	0	106	1325	0.548	725	392	0.9	1.2	6.171	

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsi le s
1 - Brockhampton	582	481	120	101	0	719	624	0.771	474	296	1.3	3.1	23.751	
2 - Brookside	90	90	23	0	101	896	629	0.144	90	297	0.1	0.2	7.376	
3 - Southmoor Lane	229	229	57	0	0	378	1450	0.158	229	608	0.2	0.2	3.371	
4 - Harts Farm Way	890	890	222	0	0	130	1311	0.678	886	478	1.2	2.1	8.658	

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsi le s
1 - Brockhampton	582	481	120	101	0	722	623	0.773	480	297	3.1	3.3	25.890	
2 - Brookside	90	90	23	0	101	904	625	0.144	90	298	0.2	0.2	7.438	
3 - Southmoor Lane	229	229	57	0	0	383	1447	0.158	229	612	0.2	0.2	3.379	
4 - Harts Farm Way	890	890	222	0	0	130	1311	0.679	890	482	2.1	2.1	8.796	

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsi le s
1 - Brockhampton	476	393	98	83	0	593	688	0.571	400	244	3.3	1.4	13.260	
2 - Brookside	74	74	18	0	83	748	704	0.105	74	245	0.2	0.1	6.319	
3 - Southmoor Lane	187	187	47	0	0	318	1489	0.126	187	504	0.2	0.2	3.162	
4 - Harts Farm Way	726	726	182	0	0	106	1324	0.548	730	399	2.1	1.3	6.280	

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsi le se
1 - Brockhampton	398	329	82	69	0	495	738	0.446	331	204	1.4	0.8	9.220	
2 - Brookside	62	62	15	0	69	622	767	0.080	62	205	0.1	0.1	5.643	
3 - Southmoor Lane	157	157	39	0	0	264	1524	0.103	157	420	0.2	0.1	3.013	
4 - Harts Farm Way	608	608	152	0	0	89	1334	0.456	610	331	1.3	0.9	5.134	

2024 OPT2 B1c, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Brookside Roundabout	Standard Roundabout		1, 2, 3, 4	5.49	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	79	3 - Southmoor Lane

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2024 OPT2 B1c	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Brockhampton		ONE HOUR	✓	386	100.000
2 - Brookside		ONE HOUR	✓	216	100.000
3 - Southmoor Lane		ONE HOUR	✓	457	100.000
4 - Harts Farm Way		ONE HOUR	✓	297	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
From		1 - Brockhampton	2 - Brookside	3 - Southmoor Lane	4 - Harts Farm Way
	1 - Brockhampton	2	13	37	334
	2 - Brookside	55	0	0	161
	3 - Southmoor Lane	141	19	0	297
	4 - Harts Farm Way	191	24	80	2

Vehicle Mix

HV %s

	To				
From		1 - Brockhampton	2 - Brookside	3 - Southmoor Lane	4 - Harts Farm Way
	1 - Brockhampton	0	6	6	1
	2 - Brookside	1	0	0	1
	3 - Southmoor Lane	2	0	0	1
	4 - Harts Farm Way	3	5	18	100

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Brockhampton	0.45	7.21	0.8	A	354	513
2 - Brookside	0.29	6.15	0.4	A	198	297
3 - Southmoor Lane	0.39	4.58	0.6	A	419	629
4 - Harts Farm Way	0.26	4.18	0.4	A	273	409

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsi le se
1 - Brockhampton	291	281	70	10	0	94	941	0.298	279	292	0.0	0.4	5.518	
2 - Brookside	163	163	41	0	10	341	909	0.179	162	32	0.0	0.2	4.853	
3 - Southmoor Lane	344	344	86	0	0	415	1427	0.241	343	88	0.0	0.3	3.362	
4 - Harts Farm Way	224	224	56	0	0	163	1293	0.173	223	595	0.0	0.2	3.600	

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsi le se
1 - Brockhampton	347	335	84	12	0	112	932	0.360	335	349	0.4	0.6	6.131	
2 - Brookside	194	194	49	0	12	408	875	0.222	194	39	0.2	0.3	5.328	
3 - Southmoor Lane	411	411	103	0	0	497	1373	0.299	410	105	0.3	0.4	3.788	
4 - Harts Farm Way	267	267	67	0	0	195	1275	0.209	267	713	0.2	0.3	3.826	

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsi le se
1 - Brockhampton	425	411	103	14	0	137	919	0.447	410	428	0.6	0.8	7.181	
2 - Brookside	238	238	59	0	14	500	829	0.287	237	47	0.3	0.4	6.132	
3 - Southmoor Lane	503	503	126	0	0	609	1302	0.387	502	129	0.4	0.6	4.562	
4 - Harts Farm Way	327	327	82	0	0	239	1250	0.262	327	872	0.3	0.4	4.174	

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsi le se
1 - Brockhampton	425	411	103	14	0	138	919	0.447	411	428	0.8	0.8	7.206	
2 - Brookside	238	238	59	0	14	501	828	0.287	238	47	0.4	0.4	6.147	
3 - Southmoor Lane	503	503	126	0	0	610	1301	0.387	503	129	0.6	0.6	4.576	
4 - Harts Farm Way	327	327	82	0	0	239	1250	0.262	327	874	0.4	0.4	4.179	

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsi le se
1 - Brockhampton	347	335	84	12	0	113	931	0.360	336	350	0.8	0.6	6.161	
2 - Brookside	194	194	49	0	12	410	874	0.222	195	39	0.4	0.3	5.346	
3 - Southmoor Lane	411	411	103	0	0	499	1372	0.299	412	105	0.6	0.4	3.802	
4 - Harts Farm Way	267	267	67	0	0	195	1274	0.210	267	716	0.4	0.3	3.830	

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsi le se
1 - Brockhampton	291	281	70	10	0	94	941	0.299	281	293	0.6	0.4	5.558	
2 - Brookside	163	163	41	0	10	343	908	0.179	163	32	0.3	0.2	4.877	
3 - Southmoor Lane	344	344	86	0	0	418	1425	0.242	344	88	0.4	0.3	3.382	
4 - Harts Farm Way	224	224	56	0	0	164	1292	0.173	224	599	0.3	0.2	3.609	

2024 OPT2 B8, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Brookside Roundabout	Standard Roundabout		1, 2, 3, 4	13.40	B

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	5	1 - Brockhampton

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2024 OPT2 B8	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Brockhampton		ONE HOUR	✓	528	100.000
2 - Brookside		ONE HOUR	✓	82	100.000
3 - Southmoor Lane		ONE HOUR	✓	208	100.000
4 - Harts Farm Way		ONE HOUR	✓	803	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
From		1 - Brockhampton	2 - Brookside	3 - Southmoor Lane	4 - Harts Farm Way
	1 - Brockhampton	1	91	165	271
	2 - Brookside	28	0	5	49
	3 - Southmoor Lane	83	6	0	119
	4 - Harts Farm Way	158	260	385	0

Vehicle Mix

HV %s

	To				
From		1 - Brockhampton	2 - Brookside	3 - Southmoor Lane	4 - Harts Farm Way
	1 - Brockhampton	0	3	1	5
	2 - Brookside	16	0	0	13
	3 - Southmoor Lane	11	0	0	18
	4 - Harts Farm Way	5	2	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Brockhampton	0.77	25.41	3.3	D	485	601
2 - Brookside	0.14	7.61	0.2	A	75	113
3 - Southmoor Lane	0.16	3.39	0.2	A	191	286
4 - Harts Farm Way	0.67	8.68	2.1	A	737	1105

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsi le s
1 - Brockhampton	398	329	82	69	0	487	742	0.444	326	202	0.0	0.8	8.891	
2 - Brookside	62	62	15	0	69	614	771	0.080	61	199	0.0	0.1	5.734	
3 - Southmoor Lane	157	157	39	0	0	260	1526	0.103	156	415	0.0	0.1	3.009	
4 - Harts Farm Way	605	605	151	0	0	88	1334	0.453	601	328	0.0	0.8	5.036	

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsi le s
1 - Brockhampton	475	393	98	82	0	584	693	0.567	391	242	0.8	1.3	12.257	
2 - Brookside	74	74	18	0	82	736	710	0.104	74	239	0.1	0.1	6.399	
3 - Southmoor Lane	187	187	47	0	0	312	1493	0.125	187	497	0.1	0.2	3.157	
4 - Harts Farm Way	722	722	180	0	0	106	1325	0.545	720	393	0.8	1.2	6.126	

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsi le s
1 - Brockhampton	581	481	120	100	0	714	627	0.768	474	296	1.3	3.1	23.382	
2 - Brookside	90	90	23	0	100	896	629	0.144	90	292	0.1	0.2	7.550	
3 - Southmoor Lane	229	229	57	0	0	380	1449	0.158	229	607	0.2	0.2	3.378	
4 - Harts Farm Way	884	884	221	0	0	130	1311	0.674	881	479	1.2	2.1	8.549	

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsi le s
1 - Brockhampton	581	481	120	100	0	717	625	0.769	480	297	3.1	3.3	25.409	
2 - Brookside	90	90	23	0	100	904	625	0.144	90	293	0.2	0.2	7.613	
3 - Southmoor Lane	229	229	57	0	0	384	1446	0.158	229	611	0.2	0.2	3.385	
4 - Harts Farm Way	884	884	221	0	0	130	1311	0.674	884	483	2.1	2.1	8.680	

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsi le s
1 - Brockhampton	475	393	98	82	0	588	691	0.569	400	244	3.3	1.4	13.135	
2 - Brookside	74	74	18	0	82	748	704	0.105	74	240	0.2	0.1	6.469	
3 - Southmoor Lane	187	187	47	0	0	319	1489	0.126	187	503	0.2	0.2	3.167	
4 - Harts Farm Way	722	722	180	0	0	106	1324	0.545	725	399	2.1	1.3	6.228	

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsi le se
1 - Brockhampton	398	329	82	69	0	491	739	0.445	331	204	1.4	0.8	9.171	
2 - Brookside	62	62	15	0	69	622	767	0.080	62	201	0.1	0.1	5.775	
3 - Southmoor Lane	157	157	39	0	0	264	1524	0.103	157	419	0.2	0.1	3.016	
4 - Harts Farm Way	605	605	151	0	0	89	1334	0.453	606	332	1.3	0.9	5.108	

2024 OPT2 B8, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Brookside Roundabout	Standard Roundabout		1, 2, 3, 4	5.47	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	80	3 - Southmoor Lane

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2024 OPT2 B8	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Brockhampton		ONE HOUR	✓	384	100.000
2 - Brookside		ONE HOUR	✓	213	100.000
3 - Southmoor Lane		ONE HOUR	✓	453	100.000
4 - Harts Farm Way		ONE HOUR	✓	294	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
		1 - Brockhampton	2 - Brookside	3 - Southmoor Lane	4 - Harts Farm Way
From	1 - Brockhampton	2	11	37	334
	2 - Brookside	54	0	0	159
	3 - Southmoor Lane	141	15	0	297
	4 - Harts Farm Way	191	21	80	2

Vehicle Mix

HV %s

	To				
		1 - Brockhampton	2 - Brookside	3 - Southmoor Lane	4 - Harts Farm Way
From	1 - Brockhampton	0	19	6	1
	2 - Brookside	3	0	0	3
	3 - Southmoor Lane	2	0	0	1
	4 - Harts Farm Way	3	16	18	100

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Brockhampton	0.45	7.13	0.8	A	352	513
2 - Brookside	0.28	6.25	0.4	A	195	293
3 - Southmoor Lane	0.38	4.53	0.6	A	416	624
4 - Harts Farm Way	0.26	4.18	0.4	A	270	405

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsi le se
1 - Brockhampton	289	281	70	8	0	88	944	0.298	279	291	0.0	0.4	5.484	
2 - Brookside	160	160	40	0	8	341	909	0.176	159	27	0.0	0.2	4.943	
3 - Southmoor Lane	341	341	85	0	0	412	1428	0.239	340	88	0.0	0.3	3.348	
4 - Harts Farm Way	221	221	55	0	0	159	1295	0.171	220	593	0.0	0.2	3.613	

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsi le se
1 - Brockhampton	345	335	84	10	0	106	935	0.359	335	348	0.4	0.6	6.083	
2 - Brookside	191	191	48	0	10	408	875	0.219	191	32	0.2	0.3	5.422	
3 - Southmoor Lane	407	407	102	0	0	495	1375	0.296	407	105	0.3	0.4	3.763	
4 - Harts Farm Way	264	264	66	0	0	190	1277	0.207	264	711	0.2	0.3	3.836	

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsi le se
1 - Brockhampton	423	411	103	12	0	130	923	0.445	410	427	0.6	0.8	7.108	
2 - Brookside	235	235	59	0	12	500	829	0.283	234	40	0.3	0.4	6.230	
3 - Southmoor Lane	499	499	125	0	0	605	1304	0.383	498	129	0.4	0.6	4.520	
4 - Harts Farm Way	324	324	81	0	0	233	1253	0.258	323	870	0.3	0.4	4.178	

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsi le se
1 - Brockhampton	423	411	103	12	0	130	923	0.445	411	427	0.8	0.8	7.134	
2 - Brookside	235	235	59	0	12	501	828	0.283	235	40	0.4	0.4	6.245	
3 - Southmoor Lane	499	499	125	0	0	607	1303	0.383	499	129	0.6	0.6	4.533	
4 - Harts Farm Way	324	324	81	0	0	233	1253	0.258	324	872	0.4	0.4	4.182	

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsi le se
1 - Brockhampton	345	335	84	10	0	106	935	0.359	336	349	0.8	0.6	6.113	
2 - Brookside	191	191	48	0	10	410	874	0.219	192	32	0.4	0.3	5.440	
3 - Southmoor Lane	407	407	102	0	0	497	1374	0.296	408	105	0.6	0.4	3.780	
4 - Harts Farm Way	264	264	66	0	0	191	1277	0.207	265	714	0.4	0.3	3.841	

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsi le se
1 - Brockhampton	289	281	70	8	0	89	943	0.298	281	292	0.6	0.4	5.524	
2 - Brookside	160	160	40	0	8	343	908	0.177	161	27	0.3	0.2	4.965	
3 - Southmoor Lane	341	341	85	0	0	416	1426	0.239	341	88	0.4	0.3	3.362	
4 - Harts Farm Way	221	221	55	0	0	160	1294	0.171	222	597	0.3	0.2	3.622	

2024 OPT2 B8 SEN, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Brookside Roundabout	Standard Roundabout		1, 2, 3, 4	17.50	C

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	0	1 - Brockhampton

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2024 OPT2 B8 SEN	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Brockhampton		ONE HOUR	✓	528	100.000
2 - Brookside		ONE HOUR	✓	82	100.000
3 - Southmoor Lane		ONE HOUR	✓	208	100.000
4 - Harts Farm Way		ONE HOUR	✓	883	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
From		1 - Brockhampton	2 - Brookside	3 - Southmoor Lane	4 - Harts Farm Way
	1 - Brockhampton	1	91	165	271
	2 - Brookside	28	0	5	49
	3 - Southmoor Lane	83	6	0	119
	4 - Harts Farm Way	158	340	385	0

Vehicle Mix

HV %s

	To				
From		1 - Brockhampton	2 - Brookside	3 - Southmoor Lane	4 - Harts Farm Way
	1 - Brockhampton	0	3	1	5
	2 - Brookside	16	0	0	13
	3 - Southmoor Lane	11	0	0	18
	4 - Harts Farm Way	5	2	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Brockhampton	0.83	35.63	4.5	E	485	601
2 - Brookside	0.14	7.61	0.2	A	75	113
3 - Southmoor Lane	0.16	3.38	0.2	A	191	286
4 - Harts Farm Way	0.74	10.91	2.9	B	810	1215

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsi le s
1 - Brockhampton	398	329	82	69	0	547	711	0.463	326	202	0.0	0.9	9.569	
2 - Brookside	62	62	15	0	69	614	771	0.080	61	259	0.0	0.1	5.732	
3 - Southmoor Lane	157	157	39	0	0	260	1526	0.103	156	415	0.0	0.1	3.009	
4 - Harts Farm Way	665	665	166	0	0	88	1334	0.498	661	328	0.0	1.0	5.469	

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsi le s
1 - Brockhampton	475	393	98	82	0	656	656	0.599	390	242	0.9	1.5	13.873	
2 - Brookside	74	74	18	0	82	736	710	0.104	74	310	0.1	0.1	6.396	
3 - Southmoor Lane	187	187	47	0	0	312	1493	0.125	187	497	0.1	0.2	3.156	
4 - Harts Farm Way	794	794	198	0	0	106	1325	0.599	792	393	1.0	1.5	6.930	

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsi le s
1 - Brockhampton	581	481	120	100	0	801	583	0.825	471	296	1.5	4.1	30.699	
2 - Brookside	90	90	23	0	100	892	631	0.143	90	379	0.1	0.2	7.522	
3 - Southmoor Lane	229	229	57	0	0	378	1451	0.158	229	605	0.2	0.2	3.374	
4 - Harts Farm Way	972	972	243	0	0	130	1311	0.741	967	477	1.5	2.8	10.604	

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsi le s
1 - Brockhampton	581	481	120	100	0	805	581	0.828	480	297	4.1	4.5	35.626	
2 - Brookside	90	90	23	0	100	903	625	0.144	90	381	0.2	0.2	7.607	
3 - Southmoor Lane	229	229	57	0	0	383	1447	0.158	229	610	0.2	0.2	3.384	
4 - Harts Farm Way	972	972	243	0	0	130	1311	0.742	972	482	2.8	2.9	10.908	

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsi le s
1 - Brockhampton	475	393	98	82	0	661	653	0.601	404	244	4.5	1.6	15.587	
2 - Brookside	74	74	18	0	82	753	701	0.105	74	313	0.2	0.1	6.491	
3 - Southmoor Lane	187	187	47	0	0	321	1487	0.126	187	506	0.2	0.2	3.171	
4 - Harts Farm Way	794	794	198	0	0	106	1324	0.599	799	402	2.9	1.6	7.126	

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsi le se
1 - Brockhampton	398	329	82	69	0	552	709	0.464	332	204	1.6	0.9	9.954	
2 - Brookside	62	62	15	0	69	623	767	0.081	62	261	0.1	0.1	5.776	
3 - Southmoor Lane	157	157	39	0	0	265	1523	0.103	157	420	0.2	0.1	3.018	
4 - Harts Farm Way	665	665	166	0	0	89	1334	0.498	667	332	1.6	1.0	5.572	

2024 OPT2 B1c SEN, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Brookside Roundabout	Standard Roundabout		1, 2, 3, 4	17.85	C

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	-1	1 - Brockhampton

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2024 OPT2 B1c SEN	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Brockhampton		ONE HOUR	✓	529	100.000
2 - Brookside		ONE HOUR	✓	82	100.000
3 - Southmoor Lane		ONE HOUR	✓	208	100.000
4 - Harts Farm Way		ONE HOUR	✓	888	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
		1 - Brockhampton	2 - Brookside	3 - Southmoor Lane	4 - Harts Farm Way
From	1 - Brockhampton	1	92	165	271
	2 - Brookside	28	0	6	48
	3 - Southmoor Lane	83	6	0	119
	4 - Harts Farm Way	158	345	385	0

Vehicle Mix

HV %s

	To				
		1 - Brockhampton	2 - Brookside	3 - Southmoor Lane	4 - Harts Farm Way
From	1 - Brockhampton	0	2	1	5
	2 - Brookside	13	0	0	11
	3 - Southmoor Lane	11	0	0	18
	4 - Harts Farm Way	5	2	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Brockhampton	0.83	36.52	4.6	E	485	601
2 - Brookside	0.14	7.43	0.2	A	75	113
3 - Southmoor Lane	0.16	3.38	0.2	A	191	286
4 - Harts Farm Way	0.75	11.09	2.9	B	815	1222

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsi le s
1 - Brockhampton	398	329	82	69	0	551	709	0.464	325	202	0.0	0.9	9.617	
2 - Brookside	62	62	15	0	69	614	771	0.080	61	263	0.0	0.1	5.601	
3 - Southmoor Lane	157	157	39	0	0	259	1527	0.103	156	415	0.0	0.1	3.004	
4 - Harts Farm Way	669	669	167	0	0	88	1334	0.501	664	327	0.0	1.0	5.500	

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsi le s
1 - Brockhampton	476	393	98	83	0	660	654	0.601	390	242	0.9	1.5	13.991	
2 - Brookside	74	74	18	0	83	736	710	0.104	74	315	0.1	0.1	6.249	
3 - Southmoor Lane	187	187	47	0	0	311	1493	0.125	187	498	0.1	0.2	3.151	
4 - Harts Farm Way	798	798	200	0	0	106	1325	0.603	796	392	1.0	1.5	6.987	

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsi le s
1 - Brockhampton	582	481	120	101	0	806	580	0.829	470	296	1.5	4.2	31.289	
2 - Brookside	90	90	23	0	101	892	631	0.143	90	384	0.1	0.2	7.347	
3 - Southmoor Lane	229	229	57	0	0	376	1451	0.158	229	606	0.2	0.2	3.367	
4 - Harts Farm Way	978	978	244	0	0	130	1311	0.746	972	475	1.5	2.9	10.764	

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsi le s
1 - Brockhampton	582	481	120	101	0	810	578	0.832	480	297	4.2	4.6	36.524	
2 - Brookside	90	90	23	0	101	903	626	0.144	90	386	0.2	0.2	7.432	
3 - Southmoor Lane	229	229	57	0	0	382	1448	0.158	229	611	0.2	0.2	3.378	
4 - Harts Farm Way	978	978	244	0	0	130	1311	0.746	977	481	2.9	2.9	11.086	

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsi le s
1 - Brockhampton	476	393	98	83	0	666	651	0.604	405	244	4.6	1.6	15.787	
2 - Brookside	74	74	18	0	83	753	701	0.105	74	318	0.2	0.1	6.344	
3 - Southmoor Lane	187	187	47	0	0	320	1487	0.126	187	507	0.2	0.2	3.166	
4 - Harts Farm Way	798	798	200	0	0	106	1324	0.603	804	401	2.9	1.6	7.190	

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsatisfied
1 - Brockhampton	398	329	82	69	0	556	707	0.465	332	204	1.6	0.9	10.010	
2 - Brookside	62	62	15	0	69	623	767	0.081	62	265	0.1	0.1	5.646	
3 - Southmoor Lane	157	157	39	0	0	264	1524	0.103	157	421	0.2	0.1	3.011	
4 - Harts Farm Way	669	669	167	0	0	89	1334	0.501	671	332	1.6	1.0	5.604	



User and Project Details

Project:	Langstone Technology Park
Title:	Langstone Road Site Access
Location:	
Additional detail:	Test of modulated arrival profile on right turn lane queuing
File name:	Right Turn appraisal RevB.lsg3x
Author:	
Company:	David Tucker Associates
Address:	

Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		7	7
B	Dummy		7	7

Phase Intergreens Matrix

	Starting Phase		
Terminating Phase		A	B
	A		-
	B	-	

Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Prohibited Stage Change

	To Stage		
From Stage		1	2
	1		0
	2	2	

Phases in Stage

Stage No.	Phases in Stage
1	A
2	B

Give-Way Lane Input Data

Junction: Unnamed Junction											
Lane	Movement	Max Flow when Giving Way (PCU/Hr)	Min Flow when Giving Way (PCU/Hr)	Opposing Lane	Opp. Lane Coeff.	Opp. Mvmnts.	Right Turn Storage (PCU)	Non-Blocking Storage (PCU)	RTF	Right Turn Move up (s)	Max Turns in Intergreen (PCU)
2/1	3/1 (Right)	762	0	4/1	0.22	All	-	-	-	-	-

Lane Input Data

Junction: Unnamed Junction												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
1/1	U	A	2	3	60.0	User	1900	-	-	-	-	-
2/1	O		2	3	26.1	Inf	-	-	-	-	-	-
3/1	U		2	3	60.0	Inf	-	-	-	-	-	-
4/1	U		2	3	60.0	Inf	-	-	-	-	-	-
5/1	U		2	3	60.0	Inf	-	-	-	-	-	-

Lane Saturation Flows

Scenario 1: '2019Ex' (FG1: 'Existing', Plan 1: 'Network Control Plan 1')

Junction: Unnamed Junction								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1	This lane uses a directly entered Saturation Flow						1900	1900
2/1	Infinite Saturation Flow						Inf	Inf
3/1	Infinite Saturation Flow						Inf	Inf
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf

Scenario 2: '2019Ex100' (FG2: 'Do-min', Plan 1: 'Network Control Plan 1')

Junction: Unnamed Junction								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1	This lane uses a directly entered Saturation Flow						1900	1900
2/1	Infinite Saturation Flow						Inf	Inf
3/1	Infinite Saturation Flow						Inf	Inf
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf

Scenario 3: '2019B1CB2' (FG3: 'B1C', Plan 1: 'Network Control Plan 1')

Junction: Unnamed Junction								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1	This lane uses a directly entered Saturation Flow						1900	1900
2/1	Infinite Saturation Flow						Inf	Inf
3/1	Infinite Saturation Flow						Inf	Inf
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf

Scenario 4: '2019B8' (FG4: 'B8', Plan 1: 'Network Control Plan 1')

Junction: Unnamed Junction								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1	This lane uses a directly entered Saturation Flow						1900	1900
2/1	Infinite Saturation Flow						Inf	Inf
3/1	Infinite Saturation Flow						Inf	Inf
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf

Scenario 5: 'New Scenario' (FG5: '2024 Do-min', Plan 1: 'Network Control Plan 1')

Junction: Unnamed Junction								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1	This lane uses a directly entered Saturation Flow						1900	1900
2/1	Infinite Saturation Flow						Inf	Inf
3/1	Infinite Saturation Flow						Inf	Inf
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf

Scenario 6: 'New Scenario' (FG6: '2024 B1C', Plan 1: 'Network Control Plan 1')

Junction: Unnamed Junction								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1	This lane uses a directly entered Saturation Flow						1900	1900
2/1	Infinite Saturation Flow						Inf	Inf
3/1	Infinite Saturation Flow						Inf	Inf
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf

Scenario 7: 'New Scenario' (FG7: '2024 B8', Plan 1: 'Network Control Plan 1')

Junction: Unnamed Junction								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1	This lane uses a directly entered Saturation Flow						1900	1900
2/1	Infinite Saturation Flow						Inf	Inf
3/1	Infinite Saturation Flow						Inf	Inf
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: 'Existing'	08:00	09:00	01:00	
2: 'Do-min'	08:00	09:00	01:00	
3: 'B1C'	08:00	09:00	01:00	
4: 'B8'	08:00	09:00	01:00	
5: '2024 Do-min'	08:00	09:00	01:00	
6: '2024 B1C'	08:00	09:00	01:00	
7: '2024 B8'	08:00	09:00	01:00	
8: 'Existing 70'	17:00	18:00	01:00	
9: 'Existing 100'	17:00	18:00	01:00	
10: 'B1C'	17:00	18:00	01:00	
11: 'B8'	17:00	18:00	01:00	
12: '2024 B1C'	17:00	18:00	01:00	
13: '2024 B8'	17:00	18:00	01:00	

Traffic Flows, Desired

FG1: 'Existing'

Desired Flow :

	Destination				
		A	B	C	Tot.
Origin	A	0	90	1528	1618
	B	0	0	0	0
	C	0	286	0	286
	Tot.	0	376	1528	1904

FG2: 'Do-min'

Desired Flow :

	Destination				
		A	B	C	Tot.
Origin	A	0	87	1528	1615
	B	0	0	0	0
	C	0	363	0	363
	Tot.	0	450	1528	1978

FG3: 'B1C'

Desired Flow :

	Destination				
		A	B	C	Tot.
Origin	A	0	86	1528	1614
	B	0	0	0	0
	C	0	355	0	355
	Tot.	0	441	1528	1969

FG4: 'B8'

Desired Flow :

	Destination				
		A	B	C	Tot.
Origin	A	0	76	1528	1604
	B	0	0	0	0
	C	0	348	0	348
	Tot.	0	424	1528	1952

FG5: '2024 Do-min'

Desired Flow :

	Destination				
		A	B	C	Tot.
Origin	A	0	87	1596	1683
	B	0	0	0	0
	C	0	363	0	363
	Tot.	0	450	1596	2046

FG6: '2024 B1C'

Desired Flow :

	Destination				
		A	B	C	Tot.
Origin	A	0	86	1596	1682
	B	0	0	0	0
	C	0	355	0	355
	Tot.	0	441	1596	2037

FG7: '2024 B8'

Desired Flow :

	Destination				
		A	B	C	Tot.
Origin	A	0	76	1596	1672
	B	0	0	0	0
	C	0	348	0	348
	Tot.	0	424	1596	2020

FG8: 'Existing 70'

Desired Flow :

	Destination				
		A	B	C	Tot.
Origin	A	0	24	964	988
	B	0	0	0	0
	C	0	62	0	62
	Tot.	0	86	964	1050

FG9: 'Existing 100'

Desired Flow :

	Destination				
		A	B	C	Tot.
Origin	A	0	3	964	967
	B	0	0	0	0
	C	0	45	0	45
	Tot.	0	48	964	1012

FG10: 'B1C'

Desired Flow :

	Destination				
		A	B	C	Tot.
Origin	A	0	9	964	973
	B	0	0	0	0
	C	0	73	0	73
	Tot.	0	82	964	1046

FG11: 'B8'

Desired Flow :

	Destination				
		A	B	C	Tot.
Origin	A	0	9	964	973
	B	0	0	0	0
	C	0	73	0	73
	Tot.	0	82	964	1046

FG12: '2024 B1C'

Desired Flow :

	Destination				
		A	B	C	Tot.
Origin	A	0	9	1006	1015
	B	0	0	0	0
	C	0	73	0	73
	Tot.	0	82	1006	1088

FG13: '2024 B8'

Desired Flow :

	Destination				
		A	B	C	Tot.
Origin	A	0	9	1006	1015
	B	0	0	0	0
	C	0	73	0	73
	Tot.	0	82	1006	1088

Stage Timings

Scenario 1: '2019Ex' (FG1: 'Existing', Plan 1: 'Network Control Plan 1')

Stage	1	2	1	2
Duration	7	21	7	21
Change Point	0	9	30	39

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	70.5%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	70.5%
1/1	Ahead	U	N/A	N/A	A		2	14	-	286	1900	507	56.4%
2/1	Right	O	N/A	N/A	-		-	-	-	286	Inf	406	70.5%
3/1		U	N/A	N/A	-		-	-	-	376	Inf	Inf	0.0%
4/1	Left Ahead	U	N/A	N/A	-		-	-	-	1618	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	1528	Inf	Inf	0.0%
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	286	0	0	1.1	1.8	0.0	2.9	-	-	-	-
Unnamed Junction	-	-	286	0	0	1.1	1.8	0.0	2.9	-	-	-	-
1/1	286	286	-	-	-	0.8	0.6	-	1.4	17.6	2.0	0.6	2.6
2/1	286	286	286	0	0	0.3	1.2	-	1.5	18.8	2.2	1.2	3.4
3/1	376	376	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	1618	1618	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	1528	1528	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): 59.4 PRC Over All Lanes (%): 27.7 Total Delay for Signalled Lanes (pcuHr): 1.40 Total Delay Over All Lanes(pcuHr): 2.89 Cycle Time (s): 60													

Stage Timings

Scenario 2: '2019Ex100' (FG2: 'Do-min', Plan 1: 'Network Control Plan 1')

Stage	1	2	1	2
Duration	7	21	7	21
Change Point	0	9	30	39

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	89.3%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	89.3%
1/1	Ahead	U	N/A	N/A	A		2	14	-	363	1900	507	71.6%
2/1	Right	O	N/A	N/A	-		-	-	-	363	Inf	406	89.3%
3/1		U	N/A	N/A	-		-	-	-	450	Inf	Inf	0.0%
4/1	Left Ahead	U	N/A	N/A	-		-	-	-	1615	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	1528	Inf	Inf	0.0%
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	363	0	0	1.7	4.8	0.0	6.5	-	-	-	-
Unnamed Junction	-	-	363	0	0	1.7	4.8	0.0	6.5	-	-	-	-
1/1	363	363	-	-	-	1.0	1.2	-	2.2	22.3	2.7	1.2	4.0
2/1	363	363	363	0	0	0.6	3.6	-	4.2	41.9	2.9	3.6	6.5
3/1	450	450	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	1615	1615	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	1528	1528	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): 25.6 PRC Over All Lanes (%): 0.8 Total Delay for Signalled Lanes (pcuHr): 2.25 Total Delay Over All Lanes(pcuHr): 6.48 Cycle Time (s): 60													

Stage Timings

Scenario 3: '2019B1CB2' (FG3: 'B1C', Plan 1: 'Network Control Plan 1')

Stage	1	2	1	2
Duration	7	21	7	21
Change Point	0	9	30	39

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	87.3%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	87.3%
1/1	Ahead	U	N/A	N/A	A		2	14	-	355	1900	507	70.1%
2/1	Right	O	N/A	N/A	-		-	-	-	355	Inf	407	87.3%
3/1		U	N/A	N/A	-		-	-	-	441	Inf	Inf	0.0%
4/1	Left Ahead	U	N/A	N/A	-		-	-	-	1614	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	1528	Inf	Inf	0.0%
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	355	0	0	1.6	4.2	0.0	5.8	-	-	-	-
Unnamed Junction	-	-	355	0	0	1.6	4.2	0.0	5.8	-	-	-	-
1/1	355	355	-	-	-	1.0	1.2	-	2.1	21.6	2.7	1.2	3.8
2/1	355	355	355	0	0	0.6	3.1	-	3.7	37.3	2.8	3.1	5.9
3/1	441	441	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	1614	1614	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	1528	1528	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): 28.5 PRC Over All Lanes (%): 3.1 Total Delay for Signalled Lanes (pcuHr): 2.13 Total Delay Over All Lanes(pcuHr): 5.81 Cycle Time (s): 60													

Stage Timings

Scenario 4: '2019B8' (FG4: 'B8', Plan 1: 'Network Control Plan 1')

Stage	1	2	1	2
Duration	7	21	7	21
Change Point	0	9	30	39

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	85.1%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	85.1%
1/1	Ahead	U	N/A	N/A	A		2	14	-	348	1900	507	68.7%
2/1	Right	O	N/A	N/A	-		-	-	-	348	Inf	409	85.1%
3/1		U	N/A	N/A	-		-	-	-	424	Inf	Inf	0.0%
4/1	Left Ahead	U	N/A	N/A	-		-	-	-	1604	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	1528	Inf	Inf	0.0%
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	348	0	0	1.5	3.7	0.0	5.2	-	-	-	-
Unnamed Junction	-	-	348	0	0	1.5	3.7	0.0	5.2	-	-	-	-
1/1	348	348	-	-	-	1.0	1.1	-	2.0	21.1	2.5	1.1	3.6
2/1	348	348	348	0	0	0.6	2.6	-	3.2	33.1	2.8	2.6	5.4
3/1	424	424	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	1604	1604	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	1528	1528	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): 31.0 PRC Over All Lanes (%): 5.7 Total Delay for Signalled Lanes (pcuHr): 2.04 Total Delay Over All Lanes(pcuHr): 5.24 Cycle Time (s): 60													

Stage Timings

Scenario 5: 'New Scenario' (FG5: '2024 Do-min', Plan 1: 'Network Control Plan 1')

Stage	1	2	1	2
Duration	7	21	7	21
Change Point	0	9	30	39

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	92.7%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	92.7%
1/1	Ahead	U	N/A	N/A	A		2	14	-	363	1900	507	71.6%
2/1	Right	O	N/A	N/A	-		-	-	-	363	Inf	392	92.7%
3/1		U	N/A	N/A	-		-	-	-	450	Inf	Inf	0.0%
4/1	Left Ahead	U	N/A	N/A	-		-	-	-	1683	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	1596	Inf	Inf	0.0%
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	363	0	0	1.7	6.0	0.0	7.7	-	-	-	-
Unnamed Junction	-	-	363	0	0	1.7	6.0	0.0	7.7	-	-	-	-
1/1	363	363	-	-	-	1.0	1.2	-	2.2	22.3	2.7	1.2	4.0
2/1	363	363	363	0	0	0.7	4.8	-	5.5	54.2	2.9	4.8	7.7
3/1	450	450	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	1683	1683	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	1596	1596	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): 25.6 Total Delay for Signalled Lanes (pcuHr): 2.25 Cycle Time (s): 60 PRC Over All Lanes (%): -3.0 Total Delay Over All Lanes(pcuHr): 7.71													

Stage Timings

Scenario 6: 'New Scenario' (FG6: '2024 B1C', Plan 1: 'Network Control Plan 1')

Stage	1	2	1	2
Duration	7	21	7	21
Change Point	0	9	30	39

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	90.6%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	90.6%
1/1	Ahead	U	N/A	N/A	A		2	14	-	355	1900	507	70.1%
2/1	Right	O	N/A	N/A	-		-	-	-	355	Inf	392	90.6%
3/1		U	N/A	N/A	-		-	-	-	441	Inf	Inf	0.0%
4/1	Left Ahead	U	N/A	N/A	-		-	-	-	1682	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	1596	Inf	Inf	0.0%
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	355	0	0	1.6	5.1	0.0	6.8	-	-	-	-
Unnamed Junction	-	-	355	0	0	1.6	5.1	0.0	6.8	-	-	-	-
1/1	355	355	-	-	-	1.0	1.2	-	2.1	21.6	2.7	1.2	3.8
2/1	355	355	355	0	0	0.7	4.0	-	4.6	46.9	2.8	4.0	6.8
3/1	441	441	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	1682	1682	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	1596	1596	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): 28.5 Total Delay for Signalled Lanes (pcuHr): 2.13 Cycle Time (s): 60 PRC Over All Lanes (%): -0.7 Total Delay Over All Lanes(pcuHr): 6.76													

Stage Timings

Scenario 7: 'New Scenario' (FG7: '2024 B8', Plan 1: 'Network Control Plan 1')

Stage	1	2	1	2
Duration	7	21	7	21
Change Point	0	9	30	39

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	88.3%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	88.3%
1/1	Ahead	U	N/A	N/A	A		2	14	-	348	1900	507	68.7%
2/1	Right	O	N/A	N/A	-		-	-	-	348	Inf	394	88.3%
3/1		U	N/A	N/A	-		-	-	-	424	Inf	Inf	0.0%
4/1	Left Ahead	U	N/A	N/A	-		-	-	-	1672	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	1596	Inf	Inf	0.0%
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	348	0	0	1.6	4.4	0.0	6.0	-	-	-	-
Unnamed Junction	-	-	348	0	0	1.6	4.4	0.0	6.0	-	-	-	-
1/1	348	348	-	-	-	1.0	1.1	-	2.0	21.1	2.5	1.1	3.6
2/1	348	348	348	0	0	0.6	3.3	-	3.9	40.6	2.8	3.3	6.1
3/1	424	424	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	1672	1672	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	1596	1596	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): 31.0 Total Delay for Signalled Lanes (pcuHr): 2.04 Cycle Time (s): 60 PRC Over All Lanes (%): 1.9 Total Delay Over All Lanes(pcuHr): 5.96													