Rother District Council

A259 JUNCTION ANALYSIS

to support the Development and Site Allocations (DaSA) Local Plan allocations

Peter Davidson Consultancy September 2019

1. INTRODUCTION

1.1.Background

The proposed Development and Site Allocations (DaSA) Local Plan allocates sites for particular uses in Rother District Council. The DaSA implements the development strategy and core policies of RDC's Core Strategy, a key planning policy document. Highways England (HE) has requested additional analysis on specific junctions to assess the impact of proposed development (DaSA) on strategic road network. RDC commissioned Peter Davidson Consultancy (PDC) to conduct this analysis and prepare a technical note summarizing the traffic analysis results. This traffic analysis incorporates a revised study methodology, and a revised list of study intersections.

The extent of the study area for the traffic analysis and the study junctions are graphically presented in **Figure 1**.



1.2. Study scope of work

The methodology for traffic analysis has been prepared in response to the additional analysis request from HE, and teleconference held between HE, RDC, East Sussex County Council (ESCC), and PDC staff.

The traffic impact assessment incudes a quantitative operational analysis for junctions during weekday AM and PM peak hours. The following intersections were analyzed during the AM and PM peak hour weekday traffic conditions:

- Glyne Gap rroundabout;
- A 259 / Dorset Road (signalized);
- A 259 / A269 London Road (signalized); and
- Little Common roundabout.

The 12-hour classified turning movement counts for junctions have been provided by East Sussex County Council. This data included the AM and PM peak hours and count of number of vehicles making each turning movement, by vehicle type, in 15 minute intervals. The surveys of the turning movement counts provided by ESCC are as follows:

- Glyne Gap roundabout June 2016;
- Dorset Road September 2016;
- A269 London Road June 2017; and
- Little Common roundabout September 2018.

The above counts were conducted at least 6 months after the opening of Bexhill-Hastings Link Road in 2015, and were agreed for use by Highways England by teleconference on 8 April 2019

It was agreed with the client to perform the analysis using industry-approved software products ARCADY for roundabouts and LinSig 3 for signalized intersections. The vehicular units from existing counts were converted to Passenger Car Units (PCU) using Transport for London (TfL) guidance for their inputs into ARCADY and LinSIG. The TfL guidance for PCU values is shown in **Figure 2**.

Vehicle Type	PCU Value
Pedal Cycle	0.2
Motor Cycle	0.4
Passenger Car	1.0
Light Goods Vehicle (LGV)	1.0
Medium Goods Vehicle (MGV)	1.5
Buses & Coaches	2.0
Heavy Goods Vehicle (HGV)	2.3
Articulated Buses	3.2*

Figure 2: TfL PCU guidelines

PDC staff were advised by the client (RDC and ESCC) to use the relevant signal timing information from the SATURN model for the two signalized intersections. Due to unavailability of signal timing plans for the days when counts were conducted, PDC was advised to use the cycle lengths,

phasing plans, and inter-green values from SATURN model and optimize the green splits for each phase for respective scenarios. Based on the information extracted from SATURN model, the A 269 intersections operates on a 79 second cycle lengths as a three-phase and Dorset Road intersection operates on a 110 seconds cycle lengths on a two-phase. Relevant correspondence regarding the signal timing has been attached in **Appendix A: Correspondence**.

Given the spread-out timeframe of the traffic counts, there has been some network improvements that were carried out at Little Common roundabout. The client provided drawings regarding the geometric elements such as number of lanes, lane configurations, sight lines, etc. for coding and relevancy.

This note summarizes the traffic analysis results under the following development scenarios:

- Existing traffic conditions;
- 2028 Do-nothing without DaSA traffic conditions; and
- 2028 Do-something with DaSA traffic conditions.

The existing traffic conditions modelled the current queues and delays based on the observed turning counts. The 2028 Do-nothing without DaSA traffic conditions was assessed on the existing counts that were factored up to 2028 forecast year relevant to TEMPro forecasts and SATURN modelling work. The DaSA project trips, obtained from SATURN model, were then added to 2028 Do-nothing scenario to derive the 2028 Do-something scenario.

The procedures used to derive forecast volumes will be discussed in detail under relevant sections.

1.3. Evaluation Criteria for junction operating conditions

Factors that may affect traffic flow conditions on roadway segments include intersection spacing, intersection channelization design, type of traffic control devices, bicycle and pedestrian volume, driveway activities, and on-street parking activities. For a minor street approach along priority junctions, the vehicle delay for side street traffic is based on the distribution of gaps in the major street traffic stream and judgment in selecting gaps.

The roundabout operational analysis included deriving and coding the following geometrical elements in ARCADY:

- Approach half width (m);
- Entry width (m);
- Effective flare length (l');
- Entry radius (r);
- Inscribed diameter (D); and
- PHI Conflict angle (φ).

The signalized operational analysis includes coding the signal timing plan, staging plan, phasing plan, stage sequence, inter-greens, and cycle lengths in LINSIG. This information allows a specific green time for each non-conflicting movements from which the green capacities are calculated.

Queue lengths and delay are the two principal components in the determination of the operating conditions at intersections. These components are reliant on capacity of the urban street and intersection configuration is determined by the number of lanes, the saturation flow rate per lane and geometrical elements such as flare length, approach width etc. for roundabouts and the green time

per cycle for movements (g/C ratio), phasing plans etc. for signalized intersections.

Highway Capacity Manual outlines a Level of Service (LOS) standard that is a quantitative description of an intersection operation. Level of service A represents free-flow un-congested traffic conditions. Level of service F represents highly congested traffic conditions with unacceptable delay to vehicles at the intersections. The intermediate levels of service represent incremental levels of congestion and delay between these two extremes. Under most conditions, LOS D is considered to represent a traffic condition when the intersection/junction is operating at capacity; i.e. saturated conditions.

Intersection operations are based upon the average vehicular delay at the intersection. The average delay is then correlated to a level of service.

1.4. Significance Impact Criteria for operating conditions

The specific traffic criteria are generally considered significant if the intersection/junction operates at an over-saturation levels i.e. LOS F.

2. EXISTING TRAFFIC CONDITIONS

2.1.2.1. Existing Traffic Conditions – Analysis Results

Weekday morning and evening peak hour turning volumes for the four intersections were collated from the data provided by ESCC. The intersection peak hour volumes were identified and used in the traffic analysis calculation at each intersection. The peak hour volumes were then converted to passenger car units based on **Figure 2: TfL guidance** for their input into respective software programs.

Important streets in the study area include A259 corridor, A2036, A269 London Road, and Dorset Road. Discussed below is a brief description of four study intersections:

A. <u>Glyne Gap roundabout</u>: This junction is a 5-arm roundabout connecting three major roads namely; A259 (E) Hastings Road; A259 (W) De La Warr Road; and A2036. Lewis Avenue and road leading to a retail park form the other two arms of this roundabout. The major flow direction/s is between A259 and A2036 corridors. The existing roundabout volumes for the AM and PM peak hours are presented in Figure 3.

The AM peak hour and PM peak hours occur between 07:15-8:15, and 17:00-18:00, respectively, with the highest peak observed during the AM peak hour. A2036 is the critical arm of the junction, operating at 13.84, and 10.71 seconds delay during AM and PM peak hour respectively. The overall junction delay is the highest in AM peak hour with 5.61 seconds.

The junction operates at an overall LOS A and the critical arm at LOS B during both peak hours.



B. <u>A259 Dorset Road intersection</u>: This intersection is a 4-arm intersection. This intersection connects the Dorset Road with A259 corridor. The A259 corridor runs in an east west direction and is the major flow contributor at this intersection. East of this intersection, A259 is named De La Warr Road. West of the intersection, A 259 is named King Offa Way. This intersection is signal controlled operating as a 3-phase signal with 110 seconds cycle length. The existing intersection volumes for the AM and PM peak hours are presented in **Figure 4**.

The AM peak hour and PM peak hours occur between 08:00-09:00, and 16:30-17:30, respectively, with the highest peak observed during the AM peak hour. Dorset Road (N) is the critical arm of the intersection, operating at 5.0 seconds, and 4.5 seconds delay during AM and PM peak hour respectively.

The overall junction delay is the highest in AM peak hour with 17.6 seconds. The junction operates at an overall LOS B during both peak hours.



C. <u>A259 Little Common Road/ A269 London Road intersection</u>: This intersection is a 4-arm intersection. This intersection connects the A269 London Road with A259 corridor. The A259 corridor runs in an east west direction and is the major flow contributor at this intersection. East of this intersection, A259 is named Belle Hill Road. West of the intersection, A259 is named Little Common Road. This intersection is signal controlled operating as a 3-phase signal with 79 seconds cycle length. The existing intersection volumes for the AM and PM peak hours are presented in **Figure 5**.

The AM peak hour and PM peak hours occur between 08:15-09:15, and 16:45-17:45, respectively, with the highest peak observed during the AM peak hour. A259 Little Common Road is the critical arm of the junction, operating at 79.7, and 82.7 seconds delay during AM and PM peak hour respectively.



The overall junction delay is the highest in PM peak hour with 82.7 seconds. The junction operates at an overall LOS F during both peak hours.

Little Common Roundabout: This junction is a 5-arm roundabout connecting three major roads namely; A259 (E) Little Common Road; A259 (W) Barnhorn Road; and Cooden Sea Road. Chestnut Walk and Peartree Lane form the other two arms of this roundabout. The major flow direction/s is between A259 corridor and Cooden Sea Road. The existing roundabout volumes for the AM and PM peak hours are presented in Figure 6.

The AM peak hour and PM peak hours occur between 07:15-8:15, and 17:00-18:00, respectively, with the highest peak observed during the AM peak hour. Cooden Sea Road is the critical arm of the junction during the AM peak hour with 26.66 seconds delay and Chestnut Walk is the critical arm during the PM peak hour with 29.06 seconds delay. The overall junction delay is the highest in AM peak hour with 17.42 seconds. The junction operates at an overall LOS C and the critical arms at LOS D during both peak hours.



Table 1 summarizes the results of traffic analysis during AM and PM peak hours under existing conditions. The detailed worksheets of the intersection analysis under Existing conditions are included as **Appendix B: Existing traffic conditions analysis worksheets**.

			e dateta a	Exisiting	Conditions	
			AM Peal	k Hour	PM Pea	k Hour
ndex	Junction	Arms	Queue (PCU)	Delay (s)	Queue (PCU)	Delay (s)
		A259 (E) Hastings Road	0.9	3.17	0.6	2.53
		Retail park	0.4	4.92	0.8	5.88
1	Glyne Gap Roundbaout	A 259 (W) De La Warr Road	1	4.11	0.7	3.36
	3% U.S.	A2036	1.9	13.84	1.2	10.71
		Lewis Avenue	0	7.5	0	7.35
		Overall junction		5.61		4.75
		A259 (E) De La Warr Road	5.3	1.5	5.9	1.6
2		Dorset Road (S)	4.5	2.3	4.9	2.4
	A 259/Dorset Road (Signal)	A 259 (W) King Offa Way	5.7	2.6	7.5	2.1
		Dorset Road (N)	10.5	5	9.2	4.5
		Overall junction		17.6		17.3
	A 250 Little Common Dood /	A259 (E) Belle Hill Road	7	2.8	7.4	3.6
3	A 259 Little Common Road /	A 269 London Road	9.7	3.9	11	4.3
	A 209 LOHOOH KOAU (Sighal)	A 259 (W) Little Common Road	66.2	59.1	25.2	19.1
		Overall junction	84.4	160.6	87.5	128.3
		4250 (5) 1991 Common David	7.4	26.66	2.2	14.05
	the second second second second	A259 (E) LITTLE COMMON ROad	1.4	20.00	3.3	14.25
4	Little Common Road	A 250 (W/) Barphore Boad	2.5	10.55	1.0	16 65
4	Roundabout	A 209 (W) Barmorn Road	0.5	22.30	4.5	20.05
		Deartree Lane	0.9	13 72	0.0	12 74
		Overall junction	0.5	17.42	0.0	14.57

2.2. Existing Traffic Conditions – Mitigation measures

Excepting A259/A269 London Road intersection, all the study intersections are operating at or under saturated conditions in existing conditions, meaning that the delays are acceptable at the study junction. It is our understanding that A259 falls under the HE jurisdiction and improvements have been sought to improve the capacity along this corridor.

3. 2028 Do-nothing (DN) without DaSA development

3.1. Deriving TEMPro growth rates for 2028 forecast year

The 2028 forecast year (without DaSA) would experience an increase in traffic consistent with the region's background growth. The growth in traffic needs to be representative of Hastings and Bexhill as the A259 corridor connects both these towns. As it was evident that the study corridor would cater to traffic from both these towns, a combined growth factor for car driver mode between existing and 2028 year was obtained from TEMPro. As shown in Table 2, TEMPro provided slightly different factors for AM and PM peak periods. Hence, a combined growth factor averaged across both time periods was used to derive the 2028 DN without DaSA peak hour demand.

TEMPro growth factors were obtained for three different base years; 2016, 2017, and 2018 to account for the survey conduct of provided existing turning counts. 2016 growth factors to Glyne Gap roundabout and A259 Dorset Road intersections; 2017 growth factors to A259 A269 London Road intersection; and 2018 growth factors to Little Common roundabout were applied to obtain the 2028 DN without DaSA development forecast volumes for respective intersections.

Base year	2016								
Future year	2028								
Bexhill project study area or	verall GF								
			Growth I	Factor					
Mode		AM Peak Peri	od		PM Peak Period				
	Origin	Destination	Average	Origin	Destination	Average			
Car Driver	1.1172	1.1280	1.1226	1.1233	1.1152	1.1193	1.1209		
All Modes	1.0726	1.0801	1.0764	1.0847	1.0767	1.0807			
					•				
Base year	2017								
Future year	2028								
Bexhill project study area or	verall GF								
	Growth Factor								
Mode		AM Peak Perio	bd		PM Peak Period				
	Origin	Destination	Average	Origin	Destination	Average			
Car Driver	1.1039	1.1123	1.1081	1.1087	1.1024	1.1056	1.1068		
All Modes	1.0644	1.0702	1.0673	1.0748	1.0684	1.0716			
	•				•				
Base year	2018								
Future year	2028								
Bexhill project study area or	verall GF								
			Growth F	actor					
Mode		AM Peak Period PM Peak Period							
	Origin	Destination	Average	Origin	Destination	Average			
Car Driver	1.0910	1.0970	1.0940	1.0944	1.0898	1.0921	1.0931		
All Modes	1.0562	1.0604	1.0583	1.0651	1.0601	1.0626			

The TEMPro growth rates obtained for both towns are tabulated in **Table 2**.

 Table 2: TEMPro growth factors

3.2. 2028 DN without DaSA development Traffic Conditions – Analysis Results

A. <u>Glyne Gap roundabout</u>: As the turning movement counts for Glyne Gap roundabout were conducted in June 2016, a growth factor of 1.1209 was used to derive the AM and PM peak hour flows. The 2028 DN AM and PM peak hour flows at Glyne Gap roundabout are illustrated in **Figure 7**.



A2036 is the critical arm of the junction, operating at 20.09, and 14.34 seconds delay during AM and PM peak hours respectively. The overall junction delay is the highest in AM peak hour with 7.17 seconds. The junction continue to operate at an overall LOS A, with the critical arm operating at LOS C and LOS B during AM and PM peak hours respectively.

B. <u>A259 Dorset Road intersection</u>: As the turning movement counts for A259 Dorset Road intersection were conducted in June 2016, a growth factor of 1.1209 was used to derive the AM and PM peak hour flows. The 2028 DN AM and PM peak hour flows at A259 Dorset Road intersection are illustrated in Figure 8. This intersection is signal controlled operating as a 3-phase signal with 110 seconds cycle length.

Dorset Road (N) is the critical arm of the junction, operating at 5.70, and 4.9 seconds delay during AM and PM peak hour respectively. The overall junction delay is the highest in AM peak hour with 21.0 seconds. The junction operates at an overall LOS C during both peak hours.



C. <u>A259 Little Common Road / A 269 London Road intersection</u>: As the turning movement counts for A259 Dorset Road intersection were conducted in June 2017, a growth factor of 1.1068 was used to derive the AM and PM peak hour flows. The 2028 DN AM and PM peak hour flows at A259 / A269 London Road intersection are illustrated in **Figure 9**.

Both A259 Little Common Road and A269 (N) are critical arms of the junction, operating at 121.1, and 195 seconds delay during AM and PM peak hour respectively. The overall junction delay is the highest in PM peak hour with 195 seconds.

The overall junction delay is the highest in PM peak hour with 195 seconds. The junction operates at an overall LOS F during both peak hours.



D. <u>Little Common Roundabout</u>: As the turning movement counts for Little Common roundabout were conducted in September 2018, a growth factor of 1.0931 was used to derive the AM and PM peak hour flows. The 2028 DN AM and PM peak hour flows at Little Common roundabout are illustrated in **Figure 10**.

Cooden Sea Road is the critical arm of the junction during the AM peak hour with 68.28 seconds delay and Chestnut Walk is the critical arm during the PM peak hour with 52.93 seconds delay. The overall junction delay is the highest in AM peak hour with 35.39 seconds.

The junction operates at an overall LOS C and the critical arms at LOS D during both peak hours.



Table 3 summarizes the results of traffic analysis during AM and PM peak hours under 2028 DN without DaSA development conditions. The detailed worksheets of the intersection analysis under 2028 DN without DaSA development conditions are included as **Appendix C: 2028 DN without DaSA development traffic conditions analysis worksheets**.

				Exisiting	Conditions	100011		2028 DN w	ithout DaSA	P. con
			AM Pea	k Hour	PM Pea	k Hour	AM Pe	ak Hour	PM Pea	k Hour
Index	Junction	Arms	Queue (PCU)	Delay (s)	Queue (PCU)	Delay (s)	Queue (PCU)	Delay (s)	Queue (PCU)	Delay (s)
						Las LeSti.		and the second		Contraction of the
		A259 (E) Hastings Road	0.9	3.17	0.6	2.53	1.2	3.57	0.8	2.77
		Retail park	0.4	4.92	0.8	5.88	0.5	5.66	1.1	7.21
1	Glyne Gap Roundbaout	A 259 (W) De La Warr Road	1	4.11	0.7	3.36	1.2	4.71	0.8	3.79
		A2036	1.9	13.84	1.2	10.71	3	20.09	1.8	14.34
		Lewis Avenue	0	7.5	0	7.35	0	8.68	0	8.47
		Overall junction		5.61		4.75		7.17		5.79
с.	0									
2	A 259/Dorset Road (Signal)	A259 (E) De La Warr Road	5.3	1.5	5.9	1.6	63	1.8	6.6	1.9
		Dorset Road (S)	4.5	2.3	4.9	2.4	5.2	2.7	6.4	2.2
2		A 259 (W) King Offa Way	5.7	2.6	7.5	2.1	12.3	3.7	8.4	2.5
		Dorset Road (N)	10.5	5	9.2	4.5	12.1	5.7	10.2	4.9
		Overall junction		17.6		17.3		21		19.7
2										
		A259 (E) Belle Hill Road	7	2.8	7.4	3.6	8.3	3.4	7.8	3.6
2	A 259 Little Common Road /	A 269 London Road	9.7	3.9	11	4.3	10.8	4.2	28.5	18.5
	A 269 London Road (Signal)	A 259 (W) Little Common Road	66.2	59.1	25.2	19.1	127.1	121.1	24.1	17.1
		A 269	84.4	79.7	87.5	82.7	106	100.9	199.9	195
		Overall junction		160.6		128.3		249.5		252.3
22									and the second second	
		A259 (E) Little Common Road	7.4	26.66	3.3	14.25	25.2	68.28	5.5	21.76
	Little Common Road	Cooden Sea Road	1.3	10.33	1.6	10	1.8	13.59	2.4	13.55
4	Roundahout	A 259 (W) Barnhorn Road	3.6	12.38	4.9	16.65	5.9	18.34	10.5	31.13
	Noundbout	Chestnut Walk	0.5	22.2	0.6	29.06	0.8	33.08	1.3	52.93
		Peartree Lane	0.9	13.72	0.8	12.74	1.4	18.46	1.1	16.68
		Overall junction		17.42		14.57		35.39		24.08

Table 3: 2028 Do-nothing without DaSA analysis results

3.3. 2028 DN without DaSA development Traffic Conditions – Mitigation measures

Excepting A259/A269 London Road and Little Common Roundabout, all the study intersections are operating at or under saturated conditions in 2028 DN without DaSA development conditions.

4. 2028 Do-something (DS) with DaSA development

4.1.Deriving 2028 DS forecast year volumes

The 2028 forecast year (with DaSA) demand consisted of assigning the project trips to 2028 DN without DaSA demand. The client has advised PDC to use the DaSA trips obtained from the earlier SATURN modelling work i.e. flow difference between with and without DaSA, as these trips would have accounted for distribution and routeing patterns. The project trips were added to the trips from 2028 DN without DaSA demand to obtain the future year (2028) with DaSA.

4.2.2028 DN without DaSA development Traffic Conditions – Analysis Results

A. <u>Glyne Gap roundabout</u>: The 2028 DS AM and PM peak hour flows at Glyne Gap roundabout are illustrated in **Figure 11**.



Figure 11: 2028 Do-something with DaSA development Traffic conditions – Glyne Gap roundabout 2028 DS traffic volumes

A2036 is the critical arm of the junction, operating at 64.67, and 20.75 seconds delay during AM and PM peak hours respectively. The overall junction delay is the highest in AM peak hour with 17.33 seconds.

The junction operates at an overall LOS C in AM peak hour and LOS A in PM Peak hour, with the critical arm operating at LOS F and LOS C during AM and PM peak hours respectively.

B. <u>A259 Dorset Road intersection:</u> The 2028 DS AM and PM peak hour flows at A259 Dorset Road intersection are illustrated in Figure **12**. This intersection is signal controlled operating as a 3-phase signal with 110 seconds cycle length.



Dorset Road (N) is the critical arm of the junction, operating at 5.80, and 4.9 seconds delay during AM and PM peak hour respectively. The overall junction delay is the highest in AM peak hour with 21.3 seconds. The junction operates at an overall LOS C during both peak hours.

C. <u>A259 Little Common Road/ A 269 London Road intersection</u>: The 2028 DS AM and PM peak hour flows at A 259 / A 269 London Road intersection are illustrated in **Figure 13**.

Both A259 Little Common Road and A269 (N) are critical arms of the junction, operating at 133.2, and 210 seconds delay during AM and PM peak hour respectively. The overall junction delay is the highest in PM peak hour with 210 seconds. The junction operates at an overall LOS F during both peak hours.



D. Little Common Roundabout: The 2028 DS AM and PM peak hour flows at Little

Common roundabout are illustrated in **Figure 14**. Cooden Sea Road is the critical arm of the junction during the AM peak hour with 151.92 seconds delay and Chestnut Walk is the critical arm during the PM peak hour with 127.04 seconds delay. The overall junction delay is the highest in AM peak hour with 74.66 seconds.

Little Common Roundabout 14/38 47/26 6/6 30/24 85/139 140/64 11/17 37 34 15/22 69/77 A 259 Little Common Road 933/894 239/244 14/32 5/17 A 259 Barnhorn Road 1060/837 30/50 28*5*3 75*1*30 83*1*131 303 Å22 **Cooden Sea Road** Project: Bexhill - Additional response to HE 2028 DS with DaSA AM / PM Peak hour: XXXX/YYYY All volumes are in PCU/hr Figure 14: 2028 Do-something with DaSA development Traffic conditions –Little Common Roundabout 2028 DS traffic volumes

The junction operates at an overall LOS F in AM peak hour and LOS E in PM Peak hour, with the critical arm/s operating at LOS F in both peak hours.

Table 4 summarizes the results of traffic analysis during AM and PM peak hours under 2028 DS with DaSA development conditions. The detailed worksheets of the intersection analysis under 2028 DS with DaSA development conditions are included as **Appendix D: 2028 DS** with **DaSA development traffic conditions analysis worksheets**.

5				Exisiting	Conditions	200210		2028 DN w	ithout DaSA	Prove and a second	2028 DS with DaSA			
			AM Pea	k Hour	PM Pea	k Hour	AM Pe	ak Hour	PM Pea	k Hour	AM Pe	ak Hour	PM Peak	Hour
Index	Junction	Arms	Queue (PCU)	Delay (s)	Queue (PCU)	Delay (s)	Queue (PCU)	Delay (s)						
						CL 6501				1.000				1
		A259 (E) Hastings Road	0.9	3.17	0.6	2.53	1.2	3.57	0.8	2.77	1.2	3.68	0.9	2.96
		Retail park	0.4	4.92	0.8	5.88	0.5	5.66	1.1	7.21	0.5	5.83	1.1	7.96
1	Glyne Gap Roundbaout	A 259 (W) De La Warr Road	1	4.11	0.7	3.36	1.2	4.71	0.8	3.79	1.4	5.01	0.9	3.94
		A2036	1.9	13.84	1.2	10.71	3	20.09	1.8	14.34	14.1	64.67	3	20.74
		Lewis Avenue	0	7.5	0	7.35	0	8.68	0	8.47	0.1	10.62	0	9.46
		Overall junction		5.61		4.75		7.17		5.79		17.33		7.08
<i></i>	8													
		A259 (E) De La Warr Road	5.3	1.5	5.9	1.6	63	1.8	6.6	1.9	6.3	1.8	7.4	2
2	A 259/Dorset Road (Signal)	Dorset Road (S	4.5	2.3	4.9	2.4	5.2	2.7	6.4	2.2	5.2	2.7	6.4	3.1
2		A 259 (W) King Offa Way	5.7	2.6	7.5	2.1	12.3	3.7	8.4	2.5	13.3	4	9.5	2.9
		Dorset Road (N	10.5	5	9.2	4.5	12.1	5.7	10.2	4.9	12.3	5.8	10.3	4.9
		Overall junction		17.6		17.3		21		19.7		21.3		20.2
2	8	Construction and a start store												
		A259 (E) Belle Hill Road	7	2.8	7.4	3.6	8.3	3.4	7.8	3.6	10	4.2	8	3.6
2	A 259 Little Common Road /	A 269 London Road	9.7	3.9	11	4.3	10.8	4.2	28.5	18.5	10.7	4.1	28.5	18.5
3	A 269 London Road (Signal)	A 259 (W) Little Common Road	66.2	59.1	25.2	19.1	127.1	121.1	24.1	17.1	138.61	133.2	30.7	23.3
		A 269	84.4	79.7	87.5	82.7	106	100.9	199.9	195	101.3	96.2	215.2	210
		Overall junction		160.6		128.3		249.5		252.3		256.3		274.2
	6													
		A259 (E) Little Common Road	7.4	26.66	3.3	14.25	25.2	68.28	5.5	21.76	75.7	151.92	7.8	28.64
	Little Common Road	Cooden Sea Road	1.3	10.33	1.6	10	1.8	13.59	2.4	13.55	2.1	15.08	2.8	15.77
4	Roundabout	A 259 (W) Barnhorn Road	3.6	12.38	4.9	16.65	5.9	18.34	10.5	31.13	16.1	40.87	39.8	82.19
	nounuabout	Chestnut Walk	0.5	22.2	0.6	29.06	0.8	33.08	1.3	52.93	1.9	68.95	3.5	127.04
		Peartree Lane	0.9	13.72	0.8	12.74	1.4	18.46	1.1	16.68	2	25.91	1.5	21.57
		Overall junction		17.42		14.57		35.39		24.08		74.66		49.39

Table 4: 2028 Do-something with DaSA analysis results

4.3.2028 DS with DaSA development Traffic Conditions – Mitigation measures

Further to those intersections which require mitigation in 2028 DN without DaSA scenario, which indicate that the overall intersection operational standard is at or under saturated conditions. The 2028 DS with DaSA scenario indicates that in addition the A2036 arm of Glyne Gap roundabout is operating at over saturated conditions. Further information on the specific mitigation at each of the junctions is set out below.

Little Common roundabout

Highways England have indicated that they are satisfied that appropriate mitigation measures can be achieved on the A259 approaches to the Little Common roundabout to mitigate the impact of development and ensure that the junction works at acceptable operating conditions. HE have indicated an estimate of £300,000 for the cost of these mitigation measures.

A259/A269 London Road traffic signal junction

As part of the planning application for the Drill Hall site, near the A259/A269 London Road junction, Highways England has agreed with the developer that appropriate mitigation measures can be made to the existing traffic signal controlled junction to ensure that it works at acceptable operating conditions taking account of all development in the Bexhill area. It is understood that the developer of the Drill Hall site will be required to provide this mitigation.

A259 Glyne Gap roundabout

Mitigations such as minimal physical improvements will need to be considered on the A2036 arm of the junction in order to ensure that the overall roundabout operates satisfactorily. This could include softening the flare on the approach to the roundabout and/or lengthening the two lane entry to the roundabout. Any mitigations will need to be within the highway boundary. This work will be commissioned by East Sussex County Council.

Appendix A

Correspondence



FW: Notes from 1 May telecon with HE



Sasa,

Sorry for the delay in responding. I have annotated the responses below.

Regards Jon

Jon Wheeler

Team Manager, Strategic Economic Infrastructure Economic Development, Skills and Infrastructure Service

Communities, Economy and Transport

eastsussex.gov.uk



ЯY

From: Sasi Karavadi Sent: 07 May 2019 4:01 PM To: Jon Wheeler; Adam Thomas Cc: Nichola Watters; Peter Davidson Subject: [Sender Unverified]Re: Notes from 1 May telecon with HE

Thanks Jon,

A couple of questions.

- 1. What about the cycle lengths? Currently, they are 79 and 110 seconds for A269 London Road and Dorset Road, respectively. Should we retain them? Yes
- 2. Dorset Road current operates as a three stage signal; and London Road as two stage. Should we retain both of the intersections to operate with same number of stages. Yes

Kind Regards

Sasi

Sasidhar Karavadi | Senior Transport Modeller

Peter Davidson Consultancy Ltd

Transportation Planning, Railways, Research, Modelling & Software

Suites S2-S4 Audley House, Northbridge Road, Berkhamsted, Herts, HP4 1EH, UK Tel +44 (0) 1442 879075 | Fax +44 (0) 1442 874834 | www.peter-davidson.com On Tue, 7 May 2019 at 15:43, Jon Wheeler

wrote:

Sasi,

Further to Nichola's email, from our telecon with David Bowie at HE this afternoon, he advised that he has asked for the current signal timings but they have not been forthcoming as yet

Therefore in lieu of these he suggested that rather than using the signal timings within the Saturn model, which may be a little out of date, to instead feed in the existing traffic flows and geometry of the junction into the junction model, then let the model identify the optimum signal timings for the junction, and then assess against the forecast flows.

Hope that makes sense - if not please let me know.

Regards Jon

Jon Wheeler

Team Manager, Strategic Economic Infrastructure

Economic Development, Skills and Infrastructure Service

Communities, Economy and Transport

eastsussex.gov.uk



ЯУ

From: Nichola Watters
Sent: 07 May 2019 3:03 PM
To: 'Sasi Karavadi'
Cc: Peter Davidson ; Jon Wheeler
Subject: RE: Notes from 1 May telecon with HE

Sorry, we did go ahead. We discussed the questions regarding the signalised junction timings set out in your latest email and they clarified what we should be using.

Jon or myself will be sending a further email later today to confirm what we need to use.

Thanks

Nichola

Nichola Watters BSc (Hons), MA, MRTPI Planning Policy Manager

Appendix B

Existing Analysis Roundabouts

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.5.0.6896 © Copyright TRL Limited, 2018

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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: GlyneGapRA_existing.j9 Path: C:\aWork\SK\BEX255\Existing conditions\Arcady Report generation date: 30/04/2019 12:08:37

»Existing conditions - 2016, AM »Existing conditions - 2016, PM

Summary of junction performance

	AM							PM								
	Queue (PCU)	95% Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (PCU)	95% Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
	Existing conditions - 2016															
Arm 1	0.9	~1	3.17	0.44	Α				0.6	~1	2.53	0.37	Α			
Arm 2	0.4	~1	4.92	0.27	Α			24 %	0.8	~1	5.88	0.45	Α			33 %
Arm 3	1.0	~1	4.11	0.45	Α	5.61	A		0.7	~1	3.36	0.39	Α	4.75	A	
Arm 4	1.9	?	13.84	0.62	В			[Arm 4]	1.2	?	10.71	0.53	В			[Arm 4]
Arm 5	0.0	~1	7.50	0.04	A				0.0	~1	7.35	0.01	Α			

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

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Title	
Location	
Site number	
Date	25/04/2019
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	XEON4\Sasi
Description	

Units

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



The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle	Calculate Queue	Calculate detailed	Calculate residual	Residual capacity	RFC	Average Delay	Queue
length (m)	Percentiles	queueing delay	capacity	criteria type	Threshold	threshold (s)	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 period length (min)	Time segment length (min)	Run automatically
D1	2016	AM	LEVELS	08:30	09:30	60	60	✓
D2	2016	PM	LEVELS	17:00	18:00	60	60	✓

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set (s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Existing conditions	~	~	D1,D2	100.000	100.000

Existing conditions - 2016, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 1 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Flow Arm 1	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm 2	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm 3	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm 4	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm 5	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Glyne Gap Roundabout	Standard Roundabout		1, 2, 3, 4, 5	5.61	А

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	24	Arm 4

Arms

Arms

Arm	Name	Description
1	Hasting Road	
2	Retail park	
3	De La Warr Road	
4	A 2036	
5	Lewis Road	

Roundabout Geometry

4	Arm	V - Approach road half- width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
	1	4.64	11.27	41.4	25.9	51.1	54.1	
Г	2	3.31	8.03	16.9	13.0	51.1	57.8	
	3	5.40	8.09	26.2	30.1	51.1	44.4	
Г	4	3.64	14.00	3.4	10.0	51.1	80.0	
	5	2.31	6.39	7.7	10.0	51.1	45.4	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm Final slope		Final intercept (PCU/hr)
1	0.740	2536
2	0.539	1542
3	0.683	2173
4	0.425	1085
5	0.450	1038

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 period length (min)	Time segment length (min)	Run automatically
D1	2016	AM	LEVELS	08:30	09:30	60	60	~

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		FLAT	✓	1042	100.000
2		FLAT	1	265	100.000
3		FLAT	~	850	100.000
4		FLAT	~	481	100.000
5		FLAT	✓	18	100.000

Origin-Destination Data

Demand (PCU/hr)

		То					
		1	2	3	4	5	
	1	0	215	604	220	3	
From	2	96	0	76	91	2	
From	3	565	64	0	220	1	
	4	294	1	183	0	3	
	5	9	3	2	4	0	

Vehicle Mix

Heavy Vehicle Percentages

		То				
		1	2	3	4	5
	1	0	0	17	28	0
Erom	2	0	0	0	0	0
FIOII	3	18	0	0	28	0
	4	23	0	3	0	0
	5	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.44	3.17	0.9	~1	A	1042	1042
2	0.27	4.92	0.4	~1	A	265	265
3	0.45	4.11	1.0	~1	A	850	850
4	0.62	13.84	1.9	?	В	481	481
5	0.04	7.50	0.0	~1	A	18	18

Main Results for each time segment

08:30 - 09:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1042	1042	256	2347	0.444	1041	962	0.0	0.9	3.170	A
2	265	265	1015	996	0.266	265	283	0.0	0.4	4.923	A
3	850	850	416	1890	0.450	849	864	0.0	1.0	4.107	A
4	481	481	730	775	0.621	479	534	0.0	1.9	13.842	В
5	18	18	1200	498	0.036	18	9	0.0	0.0	7.498	A

Queue Variation Results for each time segment

08:30 - 09:30

Arm Mean (PCU) Q05 (PCU) Q50 (PCU) Q90 (PCU) Q95 (PCU) Percentile (PCU) Marker message Probability of reaching or message Probability of reaching or exceeding marker Probability of reaching marker
--

1	0.92	~1	~1	~1	~1	N/A	N/A
2	0.36	~1	~1	~1	~1	N/A	N/A
3	0.97	~1	~1	~1	~1	N/A	N/A
4	1.85	?	?	?	?	N/A	N/A
5	0.04	~1	~1	~1	~1	N/A	N/A

Existing conditions - 2016, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 1 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Flow Arm 1	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm 2	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm 3	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm 4	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm 5	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Glyne Gap Roundabout	Standard Roundabout		1, 2, 3, 4, 5	4.75	А

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	33	Arm 4

Traffic Demand

Demand Set Details

ID	Scenario	Time Period	Traffic profile	Start time	Finish time	Time period length	Time segment length	Run
	name	name	type	(HH:mm)	(HH:mm)	(min)	(min)	automatically
D2	2016	PM	LEVELS	17:00	18:00	60	60	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		FLAT	✓	871	100.000
2		FLAT	✓	496	100.000
3		FLAT	✓	720	100.000
4		FLAT	~	393	100.000
5		FLAT	✓	7	100.000

Origin-Destination Data

Demand (PCU/hr)

		То							
		1	2	3	4	5			
	1	0	237	533	101	0			
Erom	2	201	0	114	181	0			
From	3	543	76	0	101	0			
	4	213	0	172	0	8			
	5	1	2	0	4	0			

Vehicle Mix

Heavy Vehicle Percentages

			Т	o		
		1	2	3	4	5
Erom	1	0	0	4	13	0
FIOIII	2	0	0	0	0	0

3	4	0	0	13	0
4	6	0	0	0	0
5	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.37	2.53	0.6	~1	A	871	871
2	0.45	5.88	0.8	~1	A	496	496
3	0.39	3.36	0.7	~1	A	720	720
4	0.53	10.71	1.2	?	В	393	393
5	0.01	7.35	0.0	~1	A	7	7

Main Results for each time segment

17:00 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	871	871	253	2349	0.371	870	957	0.0	0.6	2.530	А
2	496	496	809	1106	0.448	495	315	0.0	0.8	5.884	А
3	720	720	486	1841	0.391	719	818	0.0	0.7	3.362	A
4	393	393	819	737	0.533	392	387	0.0	1.2	10.712	В
5	7	7	1203	497	0.014	7	8	0.0	0.0	7.348	A

Queue Variation Results for each time segment

17:00 - 18:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.61	~1	~1	~1	~1			N/A	N/A
2	0.81	~1	~1	~1	~1			N/A	N/A
3	0.67	~1	~1	~1	~1			N/A	N/A
4	1.17	?	?	?	?			N/A	N/A
5	0.01	~1	~1	~1	~1			N/A	N/A

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.5.0.6896 © Copyright TRL Limited, 2018

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Filename: LittlecommonsRA_existing.j9 **Path:** C:\aWork\SK\BEX255\Existing conditions\Arcady\Existing conditions **Report generation date:** 30/04/2019 12:37:58

»Existing conditions - 2018, AM »Existing conditions - 2018, PM

Summary of junction performance

	AM								РМ							
	Queue (PCU)	95% Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (PCU)	95% Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
	Existing conditions - 2018															
Arm 1	7.4	?	26.66	0.88	D				3.3	?	14.25	0.76	В			
Arm 2	1.3	?	10.33	0.55	В			3%	1.6	?	10.00	0.62	В			3 %
Arm 3	3.6	?	12.38	0.77	В	17.42	С		4.9	?	16.65	0.83	С	14.57	В	
Arm 4	0.5	~1	22.20	0.33	С			[Arm 1]	0.6	~1	29.06	0.38	D			[Arm 4]
Arm 5	0.9	~1	13.72	0.48	В				0.8	~1	12.74	0.44	В			

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

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Title	
Location	
Site number	
Date	25/04/2019
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	XEON4\Sasi
Description	

Units

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



The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle	Calculate Queue	Calculate detailed	Calculate residual	Residual capacity	RFC	Average Delay	Queue
length (m)	Percentiles	queueing delay	capacity	criteria type	Threshold	threshold (s)	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 period length (min)	Time segment length (min)	Run automatically
D1	2018	AM	LEVELS	07:15	08:15	60	60	✓
D2	2018	PM	DIRECT	17:00	18:00	60	60	✓

Analysis Set Details

	····· · · · · · · · · · · · · · · · ·									
ID	Name	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)						
A1	Existing conditions	~	100.000	100.000						
Existing conditions - 2018, AM

Data Errors and Warnings

Severity	Area	Item	Description		
Warning	Flow Arm 1	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.		
Warning	Warning Flow Arm 2 Analysis Options Queue percentiles cannot be calculated for the selected traffic profile type.				
Warning	Flow Arm 3	Analysis Options Queue percentiles cannot be calculated for the selected traffic profile type.			
Warning	Flow Arm 4	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.		
Warning	Flow Arm 5	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.		
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.		

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
4	Little Commons Roundabout	Standard Roundabout		1, 2, 3, 4, 5	17.42	С

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	3	Arm 1

Arms

Arms

Arm	Name	Description
1	Little Commons Road	
2	Cooden Sea Road	
3	Barnhorn Road	
4	Chestnut Walk	
5	Peartree Lane	

Roundabout Geometry

Arm	V - Approach road half- width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1	4.10	6.33	4.7	16.0	36.1	59.8	
2	3.77	8.43	6.0	16.0	35.1	50.3	
3	4.02	6.57	5.3	16.0	35.1	40.2	
4	2.05	4.82	2.6	16.0	35.1	38.9	
5	3.30	6.53	3.1	16.0	35.1	69.4	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope Final intercept (PCU/h			
1 0.541		1334		
2 0.569		1420		
3	0.586	1450		
4 0.452		779		
5 0.472		1041		

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

Traffic Demand

Demand Set Details

ID	Scenario	Time Period	Traffic profile	Start time	Finish time	Time period length	Time segment length	Run
	name	name	type	(HH:mm)	(HH:mm)	(min)	(min)	automatically
D1	2018	AM	LEVELS	07:15	08:15	60	60	✓

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

\checkmark	✓	HV Percentages	2.00
--------------	---	----------------	------

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		FLAT	✓	955	100.000
2		FLAT	✓	439	100.000
3		FLAT	~	1030	100.000
4		FLAT	✓	81	100.000
5		FLAT	~	244	100.000

Origin-Destination Data

Demand (PCU/hr)

	То						
		1	2	3	4	5	
	1	0	27	910	5	13	
Erom	2	76	0	268	26 0	69	
FIOII	3	775	200	0	7	48	
	4	24	12	39	0	6	
	5	31	78	124	11	0	

Vehicle Mix

Heavy Vehicle Percentages

	То					
		1	2	3	4	5
	1	0	11	6	33	12
From	2	4	0	5	0	0
From	3	8	3	0	43	0
	4	6	0	0	0	27
	5	0	6	0	14	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.88	26.66	7.4	?	D	955	955
2	0.55	10.33	1.3	?	В	439	439
3	0.77	12.38	3.6	?	В	1030	1030
4	0.33	22.20	0.5	~1	С	81	81
5	0.48	13.72	0.9	~1	В	244	244

Main Results for each time segment

07:15 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	955	955	462	1085	0.881	948	903	0.0	7.4	26.657	D
2	439	439	1094	797	0.551	438	316	0.0	1.3	10.331	В
3	1030	1030	199	1333	0.773	1026	1333	0.0	3.6	12.376	В
4	81	81	1177	248	0.327	81	49	0.0	0.5	22.200	С
5	244	244	1122	511	0.478	243	135	0.0	0.9	13.722	В

Queue Variation Results for each time segment

07:15 - 08:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	7.35	?	?	?	?			N/A	N/A
2	1.26	?	?	?	?			N/A	N/A
3	3.57	?	?	?	?			N/A	N/A
			l						

4	0.50	~1	~1	~1	~1	N/A	N/A
5	0.93	~1	~1	~1	~1	N/A	N/A

Existing conditions - 2018, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Flow Arm 1	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm 2	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm 3	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm 4	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm 5	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
4	Little Commons Roundabout	Standard Roundabout		1, 2, 3, 4, 5	14.57	В

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	3	Arm 4

Traffic Demand

Demand Set Details

ID	Scenario	Time Period	Traffic profile	Start time	Finish time	Time period length	Time segment length	Run
	name	name	type	(HH:mm)	(HH:mm)	(min)	(min)	automatically
D2	2018	PM	DIRECT	17:00	18:00	60	60	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		FLAT	✓	821	100.000
2		FLAT	✓	572	100.000
3		FLAT	✓	1035	100.000
4		FLAT	~	78	100.000
5		FLAT	✓	224	100.000

Origin-Destination Data

Demand (PCU/hr)

	То						
		1	2	3	4	5	
	1	0	45	730	16	30	
Erom	2	116	0	289	48	119	
FIOII	3	731	216	0	18	70	
	4	20	35	18	0	5	
	5	27	127	54	16	0	

Vehicle Mix

Heavy Vehicle Percentages

		То					
		1	2	3	4	5	
	1	0	0	7	10	5	
From	2	0	0	1	0	0	
	3	4	1	0	0	2	
	4	8	0	0	0	0	



Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.76	14.25	3.3	?	В	821	821
2	0.62	10.00	1.6	?	В	572	572
3	0.83	16.65	4.9	?	С	1035	1035
4	0.38	29.06	0.6	~1	D	78	78
5	0.44	12.74	0.8	~1	В	224	224

Main Results for each time segment

17:00 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	821	821	464	1084	0.758	818	890	0.0	3.3	14.246	В
2	572	572	861	930	0.615	570	421	0.0	1.6	10.003	В
3	1035	1035	344	1248	0.829	1030	1087	0.0	4.9	16.651	С
4	78	78	1276	203	0.384	77	98	0.0	0.6	29.060	D
5	224	224	1131	507	0.442	223	223	0.0	0.8	12.741	В

Queue Variation Results for each time segment

17:00 - 18:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	3.27	?	?	?	?			N/A	N/A
2	1.59	?	?	?	?			N/A	N/A
3	4.87	?	?	?	?			N/A	N/A
4	0.63	~1	~1	~1	~1			N/A	N/A
5	0.79	~1	~1	~1	~1			N/A	N/A

Appendix C

2028 DN analysis Roundabouts

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.5.0.6896 © Copyright TRL Limited, 2018

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Filename: GlyneGapRA_2028 DN.j9 Path: C:\aWork\SK\BEX255\Existing conditions\Arcady\2028 DN without DaSA Report generation date: 30/04/2019 12:26:08

»2028 DN without DaSA - 2028, AM »2028 DN without DaSA - 2028, PM

Summary of junction performance

	AM							PM								
	Queue (PCU)	95% Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (PCU)	95% Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
	2028 DN without DaSA - 2028															
Arm 1	1.2	?	3.57	0.50	Α				0.8	~1	2.77	0.42	Α			
Arm 2	0.5	~1	5.66	0.32	Α			10 %	1.1	?	7.21	0.53	Α			19 %
Arm 3	1.2	?	4.71	0.51	A	7.17	A		0.8	~1	3.79	0.45	Α	5.79	A	
Arm 4	3.0	?	20.09	0.73	С			[Arm 4]	1.8	?	14.34	0.63	В			[Arm 4]
Arm 5	0.0	~1	8.68	0.04	Α				0.0	~1	8.47	0.02	Α			

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File	Des	scri	pti	on
				••••

·	
Title	
Location	
Site number	
Date	25/04/2019
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	XEON4\Sasi
Description	

Units

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



The junction diagram reflects the last run of Junctions.

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D1	2028	AM	Do nothing without DaSA	LEVELS	08:30	09:30	60	60	✓
D2	2028	PM	Do nothing without DaSA	LEVELS	17:00	18:00	60	60	✓

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set (s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	2028 DN without DaSA	~	1	D1,D2	100.000	100.000

2028 DN without DaSA - 2028, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 1 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Flow Arm 1	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm 2	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm 3	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm 4	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm 5	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Glyne Gap Roundabout	Standard Roundabout		1, 2, 3, 4, 5	7.17	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	
Left	Normal/unknown	10	Arm 4	

Arms

Arms

Arm	Name	Description
1	Hasting Road	
2	Retail park	
3	De La Warr Road	
4	A 2036	
5	Lewis Road	

Roundabout Geometry

4	Arm	V - Approach road half- width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
	1	4.64	11.27	41.4	25.9	51.1	54.1	
Г	2	3.31	8.03	16.9	13.0	51.1	57.8	
	3	5.40	8.09	26.2	30.1	51.1	44.4	
Г	4	3.64	14.00	3.4	10.0	51.1	80.0	
	5	2.31	6.39	7.7	10.0	51.1	45.4	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm Final slope		Final intercept (PCU/hr)				
1	0.740	2536				
2	0.539	1542				
3	0.683	2173				
4	0.425	1085				
5	0.450	1038				

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D1	2028	AM	Do nothing without DaSA	LEVELS	08:30	09:30	60	60	~

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

Demand overview (Traffic)

Arm Linked arm		Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		FLAT	✓	1167	100.000
2		FLAT	1	296	100.000
3		FLAT	~	952	100.000
4		FLAT	~	539	100.000
5		FLAT	✓	19	100.000

Origin-Destination Data

Demand (PCU/hr)

	То							
		1	2	3	4	5		
	1	0	241	677	246	3		
From	2	107	0	85	102	2		
From	3	634	71	0	246	1		
	4	330	1	205	0	3		
	5	10	3	2	4	0		

Vehicle Mix

Heavy Vehicle Percentages

		То							
		1	2	3	4	5			
	1	0	0	17	28	0			
Erom	2	0	0	0	0	0			
FIOIII	3	18	0	0	28	0			
	4	23	0	3	0	0			
	5	0	0	0	0	0			

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Queue (PCU) Max 95th percentile Queue Max LOS (PCU) A A A A A A A A A A A A A A A A A A A		Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.50	3.57	1.2	?	A	1167	1167
2	0.32	5.66	0.5	~1	A	296	296
3	0.51	4.71	1.2	?	A	952	952
4	0.73	20.09	3.0	?	С	539	539
5	0.04	8.68	0.0	~1	A	19	19

Main Results for each time segment

08:30 - 09:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1167	1167	285	2326	0.502	1166	1078	0.0	1.2	3.567	A
2	296	296	1135	931	0.318	296	316	0.0	0.5	5.664	A
3	952	952	463	1857	0.513	951	967	0.0	1.2	4.713	A
4	539	539	817	738	0.730	536	597	0.0	3.0	20.092	С
5	19	19	1344	433	0.044	19	9	0.0	0.0	8.685	A

Queue Variation Results for each time segment

08:30 - 09:30

Arm	Mean	Q05	Q50	Q90	Q95	Percentile	Marker	Probability of reaching or	Probability of exactly
	(PCU)	(PCU)	(PCU)	(PCU)	(PCU)	message	message	exceeding marker	reaching marker

1	1.16	?	?	?	?	N/A	N/A
2	0.47	~1	~1	~1	~1	N/A	N/A
3	1.25	?	?	?	?	N/A	N/A
4	3.03	?	?	?	?	N/A	N/A
5	0.05	~1	~1	~1	~1	N/A	N/A

2028 DN without DaSA - 2028, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 1 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Flow Arm 1	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm 2	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm 3	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm 4	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm 5	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Glyne Gap Roundabout	Standard Roundabout		1, 2, 3, 4, 5	5.79	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold		
Left	Normal/unknown	19	Arm 4		

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D2	2028	PM	Do nothing without DaSA	LEVELS	17:00	18:00	60	60	~

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		FLAT	✓	976	100.000
2		FLAT	√	557	100.000
3		FLAT	✓	806	100.000
4		FLAT	✓	440	100.000
5		FLAT	√	7	100.000

Origin-Destination Data

Demand (PCU/hr)

	То								
		1	2	3	4	5			
	1	0	266	597	113	0			
Erom	2	226	0	128 203		0			
FIOIII	3	608	85	0	113	0			
	4	238	0	193	0	9			
	5	1	2	0	4	0			

Vehicle Mix

Heavy Vehicle Percentages

	10							
	1	2	3	4	5			
1	0	0	4	13	0			
2	0	0	0	0	0			

	3	4	0	0	13	0
From	4	6	0	0	0	0
	5	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Delay (s) Max Queue (PCU)		Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	
1	0.42	2.77	0.8	~1	A	976	976	
2	0.53	7.21	1.1	?	A	557	557	
3	0.45	3.79	0.8	~1	A	806	806	
4	0.63	14.34	1.8	?	В	440	440	
5	0.02	8.47	0.0	~1	A	7	7	

Main Results for each time segment

17:00 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	976	976	283	2327	0.419	975	1071	0.0	0.8	2.768	A
2	557	557	906	1054	0.528	556	353	0.0	1.1	7.208	A
3	806	806	545	1801	0.447	805	917	0.0	0.8	3.785	A
4	440	440	918	695	0.633	438	432	0.0	1.8	14.344	В
5	7	7	1347	432	0.016	7	9	0.0	0.0	8.471	A

Queue Variation Results for each time segment

17:00 - 18:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.75	~1	~1	~1	~1			N/A	N/A
2	1.12	?	?	?	?			N/A	N/A
3	0.85	~1	~1	~1	~1			N/A	N/A
4	1.76	?	?	?	?			N/A	N/A
5	0.02	~1	~1	~1	~1			N/A	N/A

Junctions 9

ARCADY 9 - Roundabout Module

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Filename: LittlecommonsRA_2028 DN.j9 Path: C:\aWork\SK\BEX255\Existing conditions\Arcady\2028 DN without DaSA Report generation date: 30/04/2019 12:35:25

»2028 DN without DaSA - 2028, AM »2028 DN without DaSA - 2028, PM

Summary of junction performance

	AM									PM						
	Queue (PCU)	95% Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (PCU)	95% Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
	2028 DN without DaSA - 2028															
Arm 1	25.2	?	68.28	0.98	F				5.5	?	21.76	0.84	С			
Arm 2	1.8	?	13.59	0.64	В			-6 %	2.4	?	13.55	0.70	В			-5 %
Arm 3	5.9	?	18.34	0.85	С	35.39	E		10.5	?	31.13	0.92	D	24.08	С	
Arm 4	0.8	~1	33.08	0.45	D			[Arm 1]	1.3	?	52.98	0.56	F			[Arm 4]
Arm 5	1.4	?	18.46	0.57	С				1.1	?	16.68	0.53	С			

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

Eile.	Dee		-	
гпе	Des	SCL	μ	on

Title	
Location	
Site number	
Date	25/04/2019
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	XEON4\Sasi
Description	

Units

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



Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D1	2028	AM	Do Nothing without DaSA	LEVELS	07:15	08:15	60	60	✓
D2	2028	РМ	Do nothing without DaSA	DIRECT	17:00	18:00	60	60	✓

Analysis Set Details

ID	Name	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	2028 DN without DaSA	✓	100.000	100.000

2028 DN without DaSA - 2028, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Flow Arm 1	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm 2	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm 3	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm 4	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm 5	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
4	Little Commons Roundabout	Standard Roundabout		1, 2, 3, 4, 5	35.39	E

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-6	Arm 1

Arms

Arms

Arm	Name	Description
1	Little Commons Road	
2	Cooden Sea Road	
3	Barnhorn Road	
4	Chestnut Walk	
5	Peartree Lane	

Roundabout Geometry

Arm	V - Approach road half- width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1	4.10	6.33	4.7	16.0	36.1	59.8	
2	3.77	8.43	6.0	16.0	35.1	50.3	
3	4.02	6.57	5.3	16.0	35.1	40.2	
4	2.05	4.82	2.6	16.0	35.1	38.9	
5	3.30	6.53	3.1	16.0	35.1	69.4	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope Final intercept (PCU/h	
1	0.541	1334
2	0.569	1420
3	0.586	1450
4	0.452	779
5	0.472	1041

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D1	2028	AM	Do Nothing without DaSA	LEVELS	07:15	08:15	60	60	~

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

✓ ✓ HV Percentages 2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		FLAT	~	1044	100.000
2		FLAT	✓	479	100.000
3		FLAT	✓	1126	100.000
4		FLAT	✓	89	100.000
5		FLAT	~	265	100.000

Origin-Destination Data

Demand (PCU/hr)

		То								
		1	2	3	4	5				
	1	0	30	995	5	14				
F	2	83	0	293	28	75				
From	3	847	219	0	8	52				
	4	26	14	43	0	6				
	5	34	85	135	11	0				

Vehicle Mix

Heavy Vehicle Percentages

То							
		1	2	3	4	5	
	1	0	11	6	33	12	
From	2	4	0	5	0	0	
FIOII	3	8	3	0	43	0	
	4	6	0	0	0	27	
	5	0	6	0	14	0	

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.98	68.28	25.2	?	F	1044	1044
2	0.64	13.59	1.8	?	В	479	479
3	0.85	18.34	5.9	?	С	1126	1126
4	0.45	33.08	0.8	~1	D	89	89
5	0.57	18.46	1.4	?	С	265	265

Main Results for each time segment

07:15 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1044	1044	504	1062	0.983	1019	985	0.0	25.2	68.280	F
2	479	479	1177	749	0.639	477	346	0.0	1.8	13.587	В
3	1126	1126	215	1324	0.851	1120	1440	0.0	5.9	18.339	С
4	89	89	1283	200	0.445	88	52	0.0	0.8	33.078	D
5	265	265	1225	462	0.574	264	146	0.0	1.4	18.456	С

Queue Variation Results for each time segment

07:15 - 08:15

Arm	Mean	Q05	Q50	Q90	Q95	Percentile	Marker	Probability of reaching or	Probability of exactly
	(PCU)	(PCU)	(PCU)	(PCU)	(PCU)	message	message	exceeding marker	reaching marker
1	25.16	?	?	?	?			N/A	N/A

2	1.81	?	?	?	2	N/A	N/A
3	5.86	?	?	?	?	N/A	N/A
4	0.82	~1	~1	~1	~1	N/A	N/A
5	1.36	?	?	?	?	N/A	N/A

2028 DN without DaSA - 2028, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Flow Arm 1	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm 2	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm 3	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm 4	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm 5	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Γ	Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
	4	Little Commons Roundabout	Standard Roundabout		1, 2, 3, 4, 5	24.08	С

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-5	Arm 4

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D2	2028	PM	Do nothing without DaSA	DIRECT	17:00	18:00	60	60	~

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		FLAT	✓	896	100.000
2		FLAT	✓	625	100.000
3		FLAT	~	1131	100.000
4		FLAT	✓	86	100.000
5		FLAT	✓	245	100.000

Origin-Destination Data

Demand (PCU/hr)

			т	0		
		1	2	3	4	5
	1	0	50	797	17	32
From	2	126	0	316	53	130
From	3	799	236	0	20	76
	4	22	38	20	0	6
	5	30	139	59	17	0

Vehicle Mix

Heavy Vehicle Percentages

		т	o		
	1	2	3	4	5
1	0	0	7	10	5
2	0	0	1	0	0
3	4	1	0	0	2
4	8	0	0	0	0
	1 2 3 4	1 1 0 2 0 3 4 4 8	1 2 1 0 0 2 0 0 3 4 1 4 8 0	I 2 3 1 0 0 7 2 0 0 1 3 4 1 0 4 8 0 0	To 1 2 3 4 1 0 0 7 10 2 0 0 1 0 3 4 1 0 0 4 8 0 0 0



Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.84	21.76	5.5	?	С	896	896
2	0.70	13.55	2.4	?	В	625	625
3	0.92	31.13	10.5	?	D	1131	1131
4	0.56	52.98	1.3	?	F	86	86
5	0.53	16.68	1.1	?	С	245	245

Main Results for each time segment

17:00 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	896	896	505	1061	0.844	890	969	0.0	5.5	21.764	С
2	625	625	936	887	0.705	623	459	0.0	2.4	13.552	В
3	1131	1131	373	1231	0.919	1121	1185	0.0	10.5	31.132	D
4	86	86	1388	153	0.563	85	106	0.0	1.3	52.980	F
5	245	245	1230	460	0.533	244	243	0.0	1.1	16.678	С

Queue Variation Results for each time segment

17:00 - 18:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	5.55	?	?	?	?			N/A	N/A
2	2.36	?	?	?	?			N/A	N/A
3	10.46	?	?	?	?			N/A	N/A
4	1.27	?	?	?	?			N/A	N/A
5	1.14	?	?	?	?			N/A	N/A

Appendix D

2028 DS analysis Roundabouts

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.5.0.6896 © Copyright TRL Limited, 2018

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Filename: GlyneGapRA_2028 DS.j9 Path: C:\aWork\SK\BEX255\Existing conditions\Arcady\2028 DS with DaSA Report generation date: 30/04/2019 13:16:57

»2028 DS with DaSA - 2028, AM »2028 DS with DaSA - 2028, PM

Summary of junction performance

	AM									PM						
	Queue (PCU)	95% Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (PCU)	95% Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
	2028 DS with DaSA - 2028															
Arm 1	1.2	?	3.68	0.52	Α				0.9	~1	2.95	0.46	Α			
Arm 2	0.5	~1	5.83	0.32	Α			-6 %	1.1	?	7.22	0.53	Α			8%
Arm 3	1.4	?	5.01	0.54	Α	17.33	С		0.9	~1	3.94	0.47	Α	7.08	A	
Arm 4	14.1	?	64.67	0.94	F			[Arm 4]	3.0	?	20.75	0.75	С			[Arm 4]
Arm 5	0.1	~1	10.62	0.05	В				0.0	~1	9.46	0.02	Α			

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

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			••••			••

Title	
Location	
Site number	
Date	25/04/2019
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	XEON4\Sasi
Description	

Units

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



The junction diagram reflects the last run of Junctions.

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D1	2028	AM	Do something with DaSA	LEVELS	08:30	09:30	60	60	✓
D2	2028	PM	Do something with DaSA	LEVELS	17:00	18:00	60	60	✓

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set (s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	2028 DS with DaSA	~	✓	D1,D2	100.000	100.000

2028 DS with DaSA - 2028, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Warning Geometry Arm 1 - Roundabout Geometry		Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Warning Flow Arm 1 Analysis Options		Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm 2	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm 3	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm 4	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm 5	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Glyne Gap Roundabout	Standard Roundabout		1, 2, 3, 4, 5	17.33	С

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-6	Arm 4

Arms

Arms

Arm	Name	Description
1	Hasting Road	
2	Retail park	
3	De La Warr Road	
4	A 2036	
5	Lewis Road	

Roundabout Geometry

4	Arm	V - Approach road half- width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
	1	4.64	11.27	41.4	25.9	51.1	54.1	
Г	2	3.31	8.03	16.9	13.0	51.1	57.8	
	3	5.40	8.09	26.2	30.1	51.1	44.4	
Г	4	3.64	14.00	3.4	10.0	51.1	80.0	
	5	2.31	6.39	7.7	10.0	51.1	45.4	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.740	2536
2	0.539	1542
3	0.683 2173	
4	0.425	1085
5	0.450	1038

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D1	2028	AM	Do something with DaSA	LEVELS	08:30	09:30	60	60	~

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	nked arm Profile type		Average Demand (PCU/hr)	Scaling Factor (%)
1		FLAT	✓	1204	100.000
2		FLAT	1	296	100.000
3		FLAT	~	1000	100.000
4		FLAT	~	682	100.000
5		FLAT	✓	19	100.000

Origin-Destination Data

Demand (PCU/hr)

	То								
		1	2	3	4	5			
	1	0	241	707	253	3			
From	2	107	0	85	102	2			
	3	670	71	0	258	1			
	4	473	1	205	0	3			
	5	10	3	2	4	0			

Vehicle Mix

Heavy Vehicle Percentages

	То							
		1	2	3	4	5		
	1	0	0	17	28	0		
Erom	2	0	0	0	0	0		
FIOII	3	18	0	0	28	0		
	4	23	0	3	0	0		
	5	0	0	0	0	0		

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.52	3.68	1.2	?	A	1204	1204
2	0.32	5.83	0.5	~1	A	296	296
3	0.54	5.01	1.4	?	A	1000	1000
4	0.94	64.67	14.1	?	F	682	682
5	0.05	10.62	0.1	~1	В	19	19

Main Results for each time segment

08:30 - 09:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1204	1204	282	2328	0.517	1203	1249	0.0	1.2	3.680	A
2	296	296	1169	912	0.324	296	316	0.0	0.5	5.832	A
3	1000	1000	470	1852	0.540	999	994	0.0	1.4	5.006	A
4	682	682	853	723	0.943	668	616	0.0	14.1	64.667	F
5	19	19	1512	358	0.053	19	9	0.0	0.1	10.622	В

Queue Variation Results for each time segment

08:30 - 09:30

Arm Mean (PCU) Q05 (PCU) Q50 (PCU) Q90 (PCU) Q95 (PCU) Percentile (PCU) Marker message Probability of reaching or message Probability of reaching or exceeding marker Probability of reaching marker
--

1	1.23	?	?	?	?	N/A	N/A
2	0.48	~1	~1	~1	~1	N/A	N/A
3	1.39	?	?	?	?	N/A	N/A
4	14.08	?	?	?	?	N/A	N/A
5	0.06	~1	~1	~1	~1	N/A	N/A

2028 DS with DaSA - 2028, PM

Data Errors and Warnings

Severity	Area	Item	Description			
Warning	Geometry	Arm 1 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.			
Warning	Flow Arm 1	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.			
Warning	Flow Arm 2	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.			
Warning	Flow Arm 3	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.			
Warning	Flow Arm 4	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.			
Warning	Flow Arm 5	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.			
Warning	Warning Queue variations Analysis Options		Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.			

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Glyne Gap Roundabout	Standard Roundabout		1, 2, 3, 4, 5	7.08	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	
Left	Normal/unknown	8	Arm 4	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D2	2028	PM	Do something with DaSA	LEVELS	17:00	18:00	60	60	~

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)	
1		FLAT	✓	1064	100.000	
2		FLAT	✓	557	100.000	
3		FLAT	1	843	100.000	
4		FLAT	~	508	100.000	
5		FLAT	1	7	100.000	

Origin-Destination Data

Demand (PCU/hr)

		1	2	3	4	5
	1	0	352	597	115	0
Erom	2	226	0	128	203	0
FIOII	3	640	85	0	118	0
	4	306	0	193	0	9
	5	1	2	0	4	0

Vehicle Mix

Heavy Vehicle Percentages

	10										
	1	2	3	4	5						
1	0	0	4	13	0						
2	0	0	0	0	0						

	3	4	0	0	13	0
From	4	6	0	0	0	0
	5	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.46	2.95	0.9	~1	A	1064	1064
2	0.53	7.22	1.1	?	A	557	557
3	0.47	3.94	0.9	~1	A	843	843
4	0.75	20.75	3.0	?	С	508	508
5	0.02	9.46	0.0	~1	A	7	7

Main Results for each time segment

17:00 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1064	1064	283	2327	0.457	1063	1170	0.0	0.9	2.951	A
2	557	557	907	1053	0.529	556	439	0.0	1.1	7.220	A
3	843	843	547	1800	0.468	842	916	0.0	0.9	3.938	A
4	508	508	950	682	0.745	505	439	0.0	3.0	20.747	С
5	7	7	1446	388	0.018	7	9	0.0	0.0	9.460	A

Queue Variation Results for each time segment

17:00 - 18:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	ercentile Marker Probability of reaching or nessage message exceeding marker		Probability of exactly reaching marker
1	0.87	~1	~1	~1	~1			N/A	N/A
2	1.12	?	?	?	?			N/A	N/A
3	0.92	~1	~1	~1	~1			N/A	N/A
4	2.96	?	?	?	?			N/A	N/A
5	0.02	~1	~1	~1	~1			N/A	N/A

Junctions 9

ARCADY 9 - Roundabout Module

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Filename: LittlecommonsRA_2028 DN.j9 Path: C:\aWork\SK\BEX255\Existing conditions\Arcady\2028 DS with DaSA Report generation date: 30/04/2019 13:03:39

»2028 DS with DaSA - 2028, AM »2028 DS with DaSA - 2028, PM

Summary of junction performance

	AM										PM					
	Queue (PCU)	95% Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (PCU)	95% Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
	2028 DS with DaSA - 2028															
Arm 1	75.7	?	151.92	1.06	F				7.8	?	28.64	0.89	D			
Arm 2	2.1	?	15.08	0.67	С			-11 %	2.8	?	15.77	0.74	С			-12 %
Arm 3	16.1	?	40.87	0.95	E	74.66	F		39.8	?	82.19	1.01	F	49.39	Е	
Arm 4	1.9	?	68.95	0.66	F			[Arm 1]	3.5	?	127.04	0.81	F			[Arm 4]
Arm 5	2.0	?	25.91	0.66	D				1.5	?	21.57	0.61	С			

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

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Title	
Location	
Site number	
Date	25/04/2019
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	XEON4\Sasi
Description	

Units

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



Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D1	2028	АМ	Do Something with DaSA	LEVELS	07:15	08:15	60	60	✓
D2	2028	РМ	Do Something with DaSA	DIRECT	17:00	18:00	60	60	✓

Analysis Set Details

ID	Name	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	2028 DS with DaSA	✓	100.000	100.000

2028 DS with DaSA - 2028, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Flow Arm 1	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm 2	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm 3	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm 4	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm 5	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
4	Little Commons Roundabout	Standard Roundabout		1, 2, 3, 4, 5	74.66	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-11	Arm 1

Arms

Arms

Arm	Name	Description
1	Little Commons Road	
2	Cooden Sea Road	
3	Barnhorn Road	
4	Chestnut Walk	
5	Peartree Lane	

Roundabout Geometry

Arm	V - Approach road half- width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1	4.10	6.33	4.7	16.0	36.1	59.8	
2	3.77	8.43	6.0	16.0	35.1	50.3	
3	4.02	6.57	5.3	16.0	35.1	40.2	
4	2.05	4.82	2.6	16.0	35.1	38.9	
5	3.30	6.53	3.1	16.0	35.1	69.4	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.541	1334
2	0.569	1420
3	0.586	1450
4	0.452	779
5	0.472	1041

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D1	2028	AM	Do Something with DaSA	LEVELS	07:15	08:15	60	60	~

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

|--|

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		FLAT	✓	1109	100.000
2		FLAT	√	493	100.000
3		FLAT	✓	1256	100.000
4		FLAT	√	97	100.000
5		FLAT	✓	273	100.000

Origin-Destination Data

Demand (PCU/hr)

	То									
		1	2	3	4	5				
	1	0	30	1060	5	14				
From	2	87	0	303	28	75				
From	3	933	239	0	15	69				
	4	30	14	47	0	6				
	5	37	85	140	11	0				

Vehicle Mix

Heavy Vehicle Percentages

		То							
		1	2	3	4	5			
	1	0	11	6	33	12			
Erom	2	4	0	5	0	0			
FIOIII	3	8	3	0	43	0			
	4	6	0	0	0	27			
	5	0	6	0	14	0			

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	1.06	151.92	75.7	?	F	1109	1109
2	0.67	15.08	2.1	?	С	493	493
3	0.95	40.87	16.1	?	E	1256	1256
4	0.66	68.95	1.9	?	F	97	97
5	0.66	25.91	2.0	?	D	273	273

Main Results for each time segment

07:15 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1109	1109	530	1048	1.058	1033	1074	0.0	75.7	151.918	F
2	493	493	1201	736	0.670	491	362	0.0	2.1	15.085	С
3	1256	1256	218	1322	0.950	1240	1474	0.0	16.1	40.866	E
4	97	97	1399	147	0.658	95	58	0.0	1.9	68.949	F
5	273	273	1333	411	0.664	271	162	0.0	2.0	25.907	D

Queue Variation Results for each time segment

07:15 - 08:15

Arm	Mean	Q05	Q50	Q90	Q95	Percentile	Marker	Probability of reaching or	Probability of exactly
	(PCU)	(PCU)	(PCU)	(PCU)	(PCU)	message	message	exceeding marker	reaching marker
1	75.65	?	?	?	?			N/A	N/A

2	2.07	?	?	?	?	N/A	N/A
3	16.10	?	?	?	?	N/A	N/A
4	1.88	?	?	?	?	N/A	N/A
5	1.98	?	?	?	?	N/A	N/A

2028 DS with DaSA - 2028, PM

Data Errors and Warnings

Severity	verity Area Item		Description
Warning	Flow Arm 1	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm 2	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm 3	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm 4	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm 5	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Jun	ction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
	4	Little Commons Roundabout	Standard Roundabout		1, 2, 3, 4, 5	49.39	E

Junction Network Options

Driving side Lighting		Network residual capacity (%)	First arm reaching threshold	
Left	Normal/unknown	-12	Arm 4	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D2	2028	PM	Do Something with DaSA	DIRECT	17:00	18:00	60	60	~

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		FLAT	√	936	100.000
2		FLAT	✓	636	100.000
3		FLAT	✓	1237	100.000
4		FLAT	✓	94	100.000
5		FLAT	✓	254	100.000

Origin-Destination Data

Demand (PCU/hr)

	То							
		1	2	3	4	5		
	1	0	50	837	17	32		
From	2	131	0	322	53	130		
From	3	894	244	0	22	77		
	4	24	38	26	0	6		
	5	34	139	64	17	0		

Vehicle Mix

Heavy Vehicle Percentages

То							
	1	2	3	4	5		
1	0	0	7	10	5		
2	0	0	1	0	0		
3	4	1	0	0	2		
4	8	0	0	0	0		
	1 2 3 4	1 1 0 2 0 3 4 4 8	1 2 1 0 0 2 0 0 3 4 1 4 8 0	I 2 3 1 0 0 7 2 0 0 1 3 4 1 0 4 8 0 0	To 1 2 3 4 1 0 0 7 10 2 0 0 1 0 3 4 1 0 0 4 8 0 0 0		



Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.89	28.64	7.8	?	D	936	936
2	0.74	15.77	2.8	?	С	636	636
3	1.01	82.19	39.8	?	F	1237	1237
4	0.81	127.04	3.5	?	F	94	94
5	0.61	21.57	1.5	?	С	254	254

Main Results for each time segment

17:00 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	936	936	516	1055	0.887	928	1053	0.0	7.8	28.635	D
2	636	636	984	859	0.740	633	460	0.0	2.8	15.771	С
3	1237	1237	378	1228	1.007	1197	1239	0.0	39.8	82.188	F
4	94	94	1467	117	0.806	90	108	0.0	3.5	127.038	F
5	254	254	1316	419	0.606	252	241	0.0	1.5	21.566	С

Queue Variation Results for each time segment

17:00 - 18:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	7.78	?	?	?	?			N/A	N/A
2	2.81	?	?	?	?			N/A	N/A
3	39.84	?	?	?	?			N/A	N/A
4	3.52	?	?	?	?			N/A	N/A
5	1.53	?	?	?	?			N/A	N/A

A259 Dorset Road all scenarios
LinSig V1 style report LinSig V1 style report

User and Project Details

Project:	
Title:	
Location:	
Additional detail:	
File name:	A259 Dorset Road.lsg3x
Author:	
Company:	
Address:	

Phase Input Data

Phase Name	Phase Type	Stage Stream	Assoc. Phase	Street Min	Cont Min
А	Traffic	1		7	7
В	Traffic	1		7	7
С	Traffic	1		7	7
D	Traffic	1		7	7

Phase Intergreens Matrix



Phase Delays Stage Stream: 1

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

Prohibited Stage Change Stage Stream: 1



Phases in Stage

Stream	Stage No.	Phases in Stage
1	1	AB
1	2	С
1	3	D

LinSig V1 style report Give-Way Lane Input Data

Junction: A259 /	Junction: A259 / Dorset Road intersection												
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)		
1/3	9/1 (Pight)	1/20	0	5/1	1.09	All	2.00	2.00	0.50	2	2.00		
(A259 east leg)	o/ i (Rigili)	1439	0	5/2	1.09	All	2.00	2.00	0.50	2	2.00		
3/3 (A259 West leg)	6/1 (Right)	1439	0	1/2	1.09	To 7/1 (Ahead)	2.00	-	0.50	2	2.00		

LinSig V1 style report Lane Input Data Junction: A259 / Dorset Road intersection

	50136										I	
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 (A259 east leg)	U		2	3	7.0	User	1800	-	-	-	-	-
1/2 (A259 east leg)	U	A	2	3	7.0	User	2000	-	-	-	-	-
1/3 (A259 east leg)	ο	A	2	3	7.0	User	1786	-	-	-	-	-
2/1 (Dorset Road leg)	U	С	2	3	6.1	User	1915	-	-	-	-	-
2/2 (Dorset Road leg)	U	С	2	3	6.1	User	1950	-	-	-	-	-
2/3 (Dorset Road leg)	U	С	2	3	6.1	User	1950	-	-	-	-	-
3/1 (A259 West leg)	U	В	2	3	13.9	User	2000	-	-	-	-	-
3/2 (A259 West leg)	U	В	2	3	13.9	User	2000	-	-	-	-	-
3/3 (A259 West leg)	ο	В	2	3	13.9	User	1834	-	-	-	-	-
4/1 (Dorset Road north arm)	U	D	2	3	87.0	User	2500	-	-	-	-	-
5/1 (A259 east exit arm)	U		2	3	60.0	Inf	-	-	-	-	-	-
5/2 (A259 east exit arm)	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1 (Dorset Road south exit arm)	U		2	3	60.0	Inf	-	-	-	-	-	-
7/1 (A259 west exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
7/2 (A259 west exit)	U		2	3	14.9	Inf	- -	-	-	-	-	-
8/1 (Dorset Road north exit arm)	U		2	3	60.0	Inf	-	-	-	-	-	-

Lane Saturation Flows Scenario 1: 'Existing AM' (FG1: 'Existing AM peak hour', Plan 1: 'Network Control Plan 1')

Junction: A259 / Dorset Road intersection

Sunction. A2337 Dorset Road Inter	Section							
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 (A259 east leg Lane 1)	Т	his lane use	es a directly	low	1800	1800		
1/2 (A259 east leg Lane 2)	Т	his lane use	es a directly	low	3600	3600		
1/3 (A259 east leg Lane 3)	Т	his lane use	es a directly	entered S	aturation F	low	1786	1786
2/1 (Dorset Road leg Lane 1)	Т	his lane use	es a directly	entered S	aturation F	low	1915	1915
2/2 (Dorset Road leg Lane 2)	т	his lane use	es a directly	1950	1950			
2/3 (Dorset Road leg Lane 3)	т	his lane use	es a directly	entered S	aturation F	low	1950	1950
3/1 (A259 West leg Lane 1)	т	his lane use	es a directly	entered S	aturation F	low	2000	2000
3/2 (A259 West leg Lane 2)	т	his lane use	es a directly	2000	2000			
3/3 (A259 West leg Lane 3)	т	his lane use	es a directly	entered S	aturation F	low	1834	1834
4/1 (Dorset Road north arm Lane 1)	т	his lane use	es a directly	entered S	aturation F	low	2500	2500
5/1 (A259 east exit arm Lane 1)			Infinite Sate	uration Flov	N		Inf	Inf
5/2 (A259 east exit arm Lane 2)			Infinite Sate	uration Flov	N		Inf	Inf
6/1 (Dorset Road south exit arm Lane 1)			Infinite Sate	uration Flov	N		Inf	Inf
7/1 (A259 west exit Lane 1)			Infinite Sate	uration Flov	N		Inf	Inf
7/2 (A259 west exit Lane 2)			Infinite Sate	uration Flov	N		Inf	Inf
8/1 (Dorset Road north exit arm Lane 1)			Infinite Sate	uration Flow	N		Inf	Inf

Scenario 2: 'Existing PM' (FG2: 'Existing PM peak hour', Plan 1: 'Network Control Plan 1')

Junction: A259 / Dorset Road inter	section							
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 (A259 east leg Lane 1)	т	his lane us	es a directly	low	1800	1800		
1/2 (A259 east leg Lane 2)	т	his lane us	es a directly	entered S	aturation F	low	3600	3600
1/3 (A259 east leg Lane 3)	Т	his lane us	es a directly	low	1786	1786		
2/1 (Dorset Road leg Lane 1)	Т	his lane us	es a directly	low	1915	1915		
2/2 (Dorset Road leg Lane 2)	Т	his lane us	es a directly	1950	1950			
2/3 (Dorset Road leg Lane 3)	т	his lane us	es a directly	entered S	aturation F	low	1950	1950
3/1 (A259 West leg Lane 1)	т	his lane us	es a directly	entered S	aturation F	low	2000	2000
3/2 (A259 West leg Lane 2)	т	his lane us	es a directly	2000	2000			
3/3 (A259 West leg Lane 3)	т	his lane us	es a directly	entered S	aturation F	low	1834	1834
4/1 (Dorset Road north arm Lane 1)	Т	his lane us	es a directly	entered S	aturation F	low	2500	2500
5/1 (A259 east exit arm Lane 1)			Infinite Sate	uration Flov	W		Inf	Inf
5/2 (A259 east exit arm Lane 2)			Infinite Sate	uration Flov	w		Inf	Inf
6/1 (Dorset Road south exit arm Lane 1)			Infinite Sate	uration Flov	W		Inf	Inf
7/1 (A259 west exit Lane 1)			Infinite Sate	Inf	Inf			
7/2 (A259 west exit Lane 2)			Infinite Sate	uration Flov	W		Inf	Inf
8/1 (Dorset Road north exit arm Lane 1)			Infinite Sate	uration Flov	w		Inf	Inf

Scenario 3: '2028 DN without DaSA AM' (FG3: '2028 Do nothing without DaSA AM peak', Plan 1: 'Network Control Plan 1')

Junction: A259 / Dorset Road intersection											
Lane	Lane Width (m)	Gradient	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)							
1/1 (A259 east leg Lane 1)	т	his lane use	es a directly	entered S	aturation F	low	1800	1800			
1/2 (A259 east leg Lane 2)	т	his lane use	es a directly	entered S	aturation F	low	3600	3600			
1/3 (A259 east leg Lane 3)	т	his lane us	es a directly	entered S	aturation F	low	1786	1786			
2/1 (Dorset Road leg Lane 1)	т	his lane use	es a directly	entered S	aturation F	low	1915	1915			
2/2 (Dorset Road leg Lane 2)	т	his lane use	1950	1950							
2/3 (Dorset Road leg Lane 3)	т	This lane uses a directly entered Saturation Flow 1950									
3/1 (A259 West leg Lane 1)	т	This lane uses a directly entered Saturation Flow 2000 2000									
3/2 (A259 West leg Lane 2)	т	his lane use	es a directly	entered S	aturation F	low	2000	2000			
3/3 (A259 West leg Lane 3)	т	his lane use	es a directly	entered S	aturation F	low	1834	1834			
4/1 (Dorset Road north arm Lane 1)	т	his lane use	es a directly	entered S	aturation F	low	2500	2500			
5/1 (A259 east exit arm Lane 1)			Infinite Sate	uration Flov	N		Inf	Inf			
5/2 (A259 east exit arm Lane 2)			Infinite Sate	uration Flov	N		Inf	Inf			
6/1 (Dorset Road south exit arm Lane 1)			Infinite Sate	uration Flov	N		Inf	Inf			
7/1 (A259 west exit Lane 1)		Infinite Saturation Flow Inf Inf									
7/2 (A259 west exit Lane 2)			Infinite Sate	uration Flo	N		Inf	Inf			
8/1 (Dorset Road north exit arm Lane 1)			Infinite Sate	uration Flov	N		Inf	Inf			

Scenario 4: '2028 DN without DaSA PM' (FG4: '2028 Do nothing without DaSA PM peak', Plan 1: 'Network Control Plan 1')

Junction: A259 / Dorset Road intersection											
Lane	Lane Width (m)	Gradient	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)							
1/1 (A259 east leg Lane 1)	Т	his lane use	es a directly	entered S	aturation F	low	1800	1800			
1/2 (A259 east leg Lane 2)	т	his lane use	es a directly	entered S	aturation F	low	3600	3600			
1/3 (A259 east leg Lane 3)	т	his lane use	es a directly	entered S	aturation F	low	1786	1786			
2/1 (Dorset Road leg Lane 1)	т	This lane uses a directly entered Saturation Flow 1915 1915									
2/2 (Dorset Road leg Lane 2)	т	his lane use	1950	1950							
2/3 (Dorset Road leg Lane 3)	т	his lane use	1950	1950							
3/1 (A259 West leg Lane 1)	т	This lane uses a directly entered Saturation Flow 2000									
3/2 (A259 West leg Lane 2)	т	his lane use	es a directly	entered S	aturation F	low	2000	2000			
3/3 (A259 West leg Lane 3)	т	his lane use	es a directly	entered S	aturation F	low	1834	1834			
4/1 (Dorset Road north arm Lane 1)	т	his lane use	es a directly	entered S	aturation F	low	2500	2500			
5/1 (A259 east exit arm Lane 1)			Infinite Sate	uration Flov	N		Inf	Inf			
5/2 (A259 east exit arm Lane 2)			Infinite Sate	uration Flov	N		Inf	Inf			
6/1 (Dorset Road south exit arm Lane 1)			Infinite Sate	uration Flov	N		Inf	Inf			
7/1 (A259 west exit Lane 1)		Infinite Saturation Flow Inf Inf									
7/2 (A259 west exit Lane 2)			Infinite Sate	uration Flo	N		Inf	Inf			
8/1 (Dorset Road north exit arm Lane 1)			Infinite Sate	uration Flov	N		Inf	Inf			

Scenario 5: '2028 DS with DaSA AM' (FG5: '2028 Do something with DaSA AM peak', Plan 1: 'Network Control Plan 1')

Junction: A259 / Dorset Road intersection											
Lane	Lane Width (m)	Gradient	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)							
1/1 (A259 east leg Lane 1)	т	his lane us	es a directly	1800	1800						
1/2 (A259 east leg Lane 2)	т	his lane us	3600	3600							
1/3 (A259 east leg Lane 3)	т	his lane us	1786	1786							
2/1 (Dorset Road leg Lane 1)	т	his lane us	es a directly	low	1915	1915					
2/2 (Dorset Road leg Lane 2)	т	his lane us	es a directly	low	1950	1950					
2/3 (Dorset Road leg Lane 3)	т	his lane us	es a directly	low	1950	1950					
3/1 (A259 West leg Lane 1)	т	his lane us	es a directly	2000	2000						
3/2 (A259 West leg Lane 2)	т	his lane us	es a directly	entered S	aturation F	low	2000	2000			
3/3 (A259 West leg Lane 3)	т	his lane us	es a directly	entered S	aturation F	low	1834	1834			
4/1 (Dorset Road north arm Lane 1)	Т	his lane us	es a directly	entered S	aturation F	low	2500	2500			
5/1 (A259 east exit arm Lane 1)			Infinite Sate	uration Flo	w		Inf	Inf			
5/2 (A259 east exit arm Lane 2)			Infinite Sate	uration Flo	w		Inf	Inf			
6/1 (Dorset Road south exit arm Lane 1)			Inf	Inf							
7/1 (A259 west exit Lane 1)		Infinite Saturation Flow Inf Inf									
7/2 (A259 west exit Lane 2)			Infinite Sate	uration Flo	w		Inf	Inf			
8/1 (Dorset Road north exit arm Lane 1)			Infinite Sate	uration Flo	w		Inf	Inf			

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 (A259 east leg Lane 1)	т	his lane use	es a directly	low	1800	1800					
1/2 (A259 east leg Lane 2)	Т	his lane use	es a directly	low	3600	3600					
1/3 (A259 east leg Lane 3)	Т	his lane use	es a directly	low	1786	1786					
2/1 (Dorset Road leg Lane 1)	т	his lane use	es a directly	low	1915	1915					
2/2 (Dorset Road leg Lane 2)	Т	his lane use	es a directly	low	1950	1950					
2/3 (Dorset Road leg Lane 3)	Т	his lane use	es a directly	1950	1950						
3/1 (A259 West leg Lane 1)	Т	his lane use	es a directly	2000	2000						
3/2 (A259 West leg Lane 2)	т	his lane use	es a directly	low	2000	2000					
3/3 (A259 West leg Lane 3)	т	his lane use	es a directly	entered S	aturation F	low	1834	1834			
4/1 (Dorset Road north arm Lane 1)	т	his lane use	es a directly	entered S	aturation F	low	2500	2500			
5/1 (A259 east exit arm Lane 1)			Infinite Satu	uration Flov	N		Inf	Inf			
5/2 (A259 east exit arm Lane 2)			Infinite Satu	uration Flov	N		Inf	Inf			
6/1 (Dorset Road south exit arm Lane 1)			Infinite Satu	uration Flov	N		Inf	Inf			
7/1 (A259 west exit Lane 1)			Infinite Satu	uration Flov	N		Inf	Inf			
7/2 (A259 west exit Lane 2)			Infinite Satu	uration Flow	N		Inf	Inf			
8/1 (Dorset Road north exit arm Lane 1)			Infinite Satu	uration Flow	N		Inf	Inf			

Scenario 6: '2028 DS with DaSA PM' (FG6: '2028 Do something with DaSA PM peak', Plan 1: 'Network Control Plan 1')

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: 'Existing AM peak hour'	08:15	09:15	01:00	
2: 'Existing PM peak hour'	08:00	09:00	01:00	
3: '2028 Do nothing without DaSA AM peak'	08:00	09:00	01:00	
4: '2028 Do nothing without DaSA PM peak'	08:00	09:00	01:00	
5: '2028 Do something with DaSA AM peak'	08:00	09:00	01:00	
6: '2028 Do something with DaSA PM peak'	08:00	09:00	01:00	

Traffic Flows, Desired FG1: 'Existing AM peak hour' Desired Flow :

	Destination					
Origin		Tot.				
Origin	Tot.	-				

FG2: 'Existing PM peak hour' Desired Flow :

	Destination					
Origin		Tot.				
Origin	Tot.	-				

FG3: '2028 Do nothing without DaSA AM peak' Desired Flow :

	Destination						
Origin		Tot.					
Ongin	Tot.	-					

FG4: '2028 Do nothing without DaSA PM peak' Desired Flow :

	Destination					
Origin		Tot.				
	Tot.	-				

FG5: '2028 Do something with DaSA AM peak' Desired Flow :

	Destination					
Origin		Tot.				
Origin	Tot.	-				

FG6: '2028 Do something with DaSA PM peak' Desired Flow :

	Destination							
Origin		Tot.						
Origin	Tot.	-						

Stage Timings Scenario 1: 'Existing AM' (FG1: 'Existing AM peak hour', Plan 1: 'Network Control Plan 1') Stage Stream: 1

Stage	1	2	3
Duration	53	14	20
Change Point	0	68	88

LinSig V1 style report 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	-	-		-	-	-	-	-	-	69.6%
A259 / Dorset Road intersection	-	-	N/A	-	-		-	-	-	-	-	-	69.6%
1/1	A259 east leg Left	U	N/A	N/A	-		-	-	-	297	1800	1800	16.5%
1/2	A259 east leg Ahead	U	1	N/A	А		1	55	-	257	3600	1833	14.0%
1/3	A259 east leg Ahead Right	0	1	N/A	А		1	55	-	310	1786	909	34.1%
2/1	Dorset Road leg Ahead	U	1	N/A	С		1	14	-	139	1915	261	53.2%
2/2	Dorset Road leg Right	U	1	N/A	С		1	14	-	108	1950	266	40.6%
2/3	Dorset Road leg Right	U	1	N/A	С		1	14	-	109	1950	266	41.0%
3/1	A259 West leg Ahead Left	U	1	N/A	В		1	53	-	465	2000	982	47.4%
3/2+3/3	A259 West leg Ahead Right	U+O	1	N/A	В		1	53	-	318	2000:1834	939+112	30.2 : 30.2%
4/1	Dorset Road north arm Left Ahead Right	U	1	N/A	D		1	20	-	332	2500	477	69.6%
5/1	A259 east exit arm	U	N/A	N/A	-		-	-	-	415	Inf	Inf	0.0%
5/2	A259 east exit arm	U	N/A	N/A	-		-	-	-	393	Inf	Inf	0.0%
6/1	Dorset Road south exit arm	U	N/A	N/A	-		-	-	-	467	Inf	Inf	0.0%
7/1	A259 west exit	U	N/A	N/A	-		-	-	-	257	Inf	Inf	0.0%
7/2	A259 west exit	U	N/A	N/A	-		-	-	-	464	Inf	Inf	0.0%
8/1	Dorset Road north exit arm	U	N/A	N/A	-		-	-	-	339	Inf	Inf	0.0%

ltem	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	-	-	34	10	0	14.4	3.5	0.0	17.9	-	-	-	-
A259 / Dorset Road intersection	-	-	34	10	0	14.4	3.5	0.0	17.9	-	-	-	-
1/1	297	297	-	-	-	0.0	0.1	-	0.1	1.2	0.0	0.1	0.1
1/2	257	257	-	-	-	1.0	0.1	-	1.1	15.4	4.1	0.1	4.2
1/3	310	310	0	10	0	1.4	0.3	0.0	1.6	19.0	5.6	0.3	5.9
2/1	139	139	-	-	-	1.7	0.6	-	2.3	58.9	3.9	0.6	4.5
2/2	108	108	-	-	-	1.3	0.3	-	1.6	54.8	3.0	0.3	3.3
2/3	109	109	-	-	-	1.3	0.3	-	1.7	54.9	3.0	0.3	3.4
3/1	465	465	-	-	-	2.4	0.4	-	2.8	22.1	9.3	0.4	9.7
3/2+3/3	318	318	34	0	0	1.4	0.2	0.0	1.7	19.0	5.1	0.2	5.3
4/1	332	332	-	-	-	3.8	1.1	-	5.0	53.7	9.4	1.1	10.5
5/1	415	415	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	393	393	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	467	467	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	257	257	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	464	464	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	339	339	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
	C1 - A259 London R	oad Stream	m: 1 PRC for Sign PRC Ove	nalled Lanes (%): r All Lanes (%):	29.4 1 29.4	Fotal Delay for S Total Delay	Signalled Lanes (p Over All Lanes(p	pcuHr): 17.80 pcuHr): 17.90	Cycle	Гіте (s): 110			

LinSig V1 style report **Stage Timings Scenario 2: 'Existing PM'** (FG2: 'Existing PM peak hour', Plan 1: 'Network Control Plan 1') **Stage Stream: 1**

Stage	1	2	3
Duration	54	16	17
Change Point	0	69	91

LinSig V1 style report 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	-	-		-	-	-	-	-	-	69.4%
A259 / Dorset Road intersection	-	-	N/A	-	-		-	-	-	-	-	-	69.4%
1/1	A259 east leg Left	U	N/A	N/A	-		-	-	-	287	1800	1800	15.9%
1/2	A259 east leg Ahead	U	1	N/A	А		1	56	-	308	3600	1865	16.5%
1/3	A259 east leg Ahead Right	0	1	N/A	А		1	56	-	316	1786	925	34.1%
2/1	Dorset Road leg Ahead	U	1	N/A	С		1	16	-	104	1915	296	35.1%
2/2	Dorset Road leg Right	U	1	N/A	С		1	16	-	155	1950	301	51.4%
2/3	Dorset Road leg Right	U	1	N/A	С		1	16	-	155	1950	301	51.4%
3/1	A259 West leg Ahead Left	U	1	N/A	В		1	54	-	383	2000	1000	38.3%
3/2+3/3	A259 West leg Ahead Right	U+O	1	N/A	В		1	54	-	286	2000:1834	969+89	27.0 : 27.0%
4/1	Dorset Road north arm Left Ahead Right	U	1	N/A	D		1	17	-	284	2500	409	69.4%
5/1	A259 east exit arm	U	N/A	N/A	-		-	-	-	444	Inf	Inf	0.0%
5/2	A259 east exit arm	U	N/A	N/A	-		-	-	-	417	Inf	Inf	0.0%
6/1	Dorset Road south exit arm	U	N/A	N/A	-		-	-	-	403	Inf	Inf	0.0%
7/1	A259 west exit	U	N/A	N/A	-		-	-	-	308	Inf	Inf	0.0%
7/2	A259 west exit	U	N/A	N/A	-		-	-	-	466	Inf	Inf	0.0%
8/1	Dorset Road north exit arm	U	N/A	N/A	-		-	-	-	240	Inf	Inf	0.0%

ltem	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	-	-	24	8	0	13.9	3.4	0.0	17.3	-	-	-	-
A259 / Dorset Road intersection	-	-	24	8	0	13.9	3.4	0.0	17.3	-	-	-	-
1/1	287	287	-	-	-	0.0	0.1	-	0.1	1.2	0.0	0.1	0.1
1/2	308	308	-	-	-	1.2	0.1	-	1.3	15.1	4.9	0.1	5.0
1/3	316	316	0	8	0	1.4	0.3	0.0	1.6	18.5	5.6	0.3	5.9
2/1	104	104	-	-	-	1.2	0.3	-	1.5	50.9	2.8	0.3	3.1
2/2	155	155	-	-	-	1.8	0.5	-	2.4	54.9	4.3	0.5	4.9
2/3	155	155	-	-	-	1.8	0.5	-	2.4	54.9	4.3	0.5	4.9
3/1	383	383	-	-	-	1.8	0.3	-	2.1	19.9	7.2	0.3	7.5
3/2+3/3	286	286	24	0	0	1.2	0.2	0.0	1.4	18.1	4.6	0.2	4.8
4/1	284	284	-	-	-	3.4	1.1	-	4.5	57.5	8.1	1.1	9.2
5/1	444	444	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	417	417	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	403	403	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	308	308	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	466	466	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	240	240	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
	C1 - A259 London R	oad Stream	m: 1 PRC for Sigr PRC Ove	nalled Lanes (%): r All Lanes (%):	29.6 29.6	Fotal Delay for S Total Delay	Signalled Lanes (p Over All Lanes(p	pcuHr): 17.22 pcuHr): 17.31	Cycle	Гіте (s): 110			

LinSig V1 style report Stage Timings

Scenario 3: '2028 DN without DaSA AM' (FG3: '2028 Do nothing without DaSA AM peak', Plan 1: 'Network Control Plan 1')

Stage Stream: 1

Stage	1	2	3
Duration	52	14	21
Change Point	0	67	87

LinSig V1 style report 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	-	-		-	-	-	-	-	-	74.6%
A259 / Dorset Road intersection	-	-	N/A	-	-		-	-	-	-	-	-	74.6%
1/1	A259 east leg Left	U	N/A	N/A	-		-	-	-	333	1800	1800	18.5%
1/2	A259 east leg Ahead	U	1	N/A	А		1	54	-	312	3600	1800	17.3%
1/3	A259 east leg Ahead Right	0	1	N/A	А		1	54	-	323	1786	893	36.2%
2/1	Dorset Road leg Ahead	U	1	N/A	С		1	14	-	156	1915	261	59.7%
2/2	Dorset Road leg Right	U	1	N/A	С		1	14	-	123	1950	266	46.3%
2/3	Dorset Road leg Right	U	1	N/A	С		1	14	-	120	1950	266	45.1%
3/1	A259 West leg Ahead Left	U	1	N/A	В		1	52	-	540	2000	964	56.0%
3/2+3/3	A259 West leg Ahead Right	U+O	1	N/A	В		1	52	-	338	2000:1834	920+117	32.6 : 32.6%
4/1	Dorset Road north arm Left Ahead Right	U	1	N/A	D		1	21	-	373	2500	500	74.6%
5/1	A259 east exit arm	U	N/A	N/A	-		-	-	-	486	Inf	Inf	0.0%
5/2	A259 east exit arm	U	N/A	N/A	-		-	-	-	420	Inf	Inf	0.0%
6/1	Dorset Road south exit arm	U	N/A	N/A	-		-	-	-	524	Inf	Inf	0.0%
7/1	A259 west exit	U	N/A	N/A	-		-	-	-	312	Inf	Inf	0.0%
7/2	A259 west exit	U	N/A	N/A	-		-	-	-	496	Inf	Inf	0.0%
8/1	Dorset Road north exit arm	U	N/A	N/A	-		-	-	-	380	Inf	Inf	0.0%

ltem	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	-	-	38	11	0	16.6	4.4	0.0	21.0	-	-	-	-
A259 / Dorset Road intersection	-	-	38	11	0	16.6	4.4	0.0	21.0	-	-	-	-
1/1	333	333	-	-	-	0.0	0.1	-	0.1	1.2	0.0	0.1	0.1
1/2	312	312	-	-	-	1.3	0.1	-	1.4	16.3	5.2	0.1	5.3
1/3	323	323	0	11	0	1.5	0.3	0.0	1.8	19.9	6.0	0.3	6.3
2/1	156	156	-	-	-	1.9	0.7	-	2.7	61.6	4.5	0.7	5.2
2/2	123	123	-	-	-	1.5	0.4	-	1.9	56.3	3.5	0.4	3.9
2/3	120	120	-	-	-	1.5	0.4	-	1.9	56.0	3.4	0.4	3.8
3/1	540	540	-	-	-	3.0	0.6	-	3.7	24.5	11.7	0.6	12.3
3/2+3/3	338	338	38	0	0	1.6	0.2	0.0	1.9	19.9	5.6	0.2	5.8
4/1	373	373	-	-	-	4.3	1.4	-	5.7	55.2	10.7	1.4	12.1
5/1	486	486	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	420	420	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	524	524	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	312	312	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	496	496	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	380	380	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
	C1 - A259 London R	oad Stream	m: 1 PRC for Sigr PRC Ove	nalled Lanes (%): r All Lanes (%):	20.6 T 20.6	otal Delay for S Total Delay	Signalled Lanes (p v Over All Lanes(p	cuHr): 20.92 cuHr): 21.04	Cycle T	ime (s): 110			

LinSig V1 style report Stage Timings

Scenario 4: '2028 DN without DaSA PM' (FG4: '2028 Do nothing without DaSA PM peak', Plan 1: 'Network Control Plan 1')

Stage Stream: 1

Stage	1	2	3
Duration	51	17	19
Change Point	0	66	89

LinSig V1 style report 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	-	-		-	-	-	-	-	-	70.0%
A259 / Dorset Road intersection	-	-	N/A	-	-		-	-	-	-	-	-	70.0%
1/1	A259 east leg Left	U	N/A	N/A	-		-	-	-	322	1800	1800	17.9%
1/2	A259 east leg Ahead	U	1	N/A	А		1	53	-	365	3600	1767	20.7%
1/3	A259 east leg Ahead Right	0	1	N/A	А		1	53	-	334	1786	877	38.1%
2/1	Dorset Road leg Ahead	U	1	N/A	С		1	17	-	117	1915	313	37.3%
2/2	Dorset Road leg Right	U	1	N/A	С		1	17	-	150	1950	319	47.0%
2/3	Dorset Road leg Right	U	1	N/A	С		1	17	-	197	1950	319	61.7%
3/1	A259 West leg Ahead Left	U	1	N/A	В		1	51	-	433	2000	945	45.8%
3/2+3/3	A259 West leg Ahead Right	U+O	1	N/A	В		1	51	-	317	2000:1834	919+86	31.6 : 31.6%
4/1	Dorset Road north arm Left Ahead Right	U	1	N/A	D		1	19	-	318	2500	455	70.0%
5/1	A259 east exit arm	U	N/A	N/A	-		-	-	-	478	Inf	Inf	0.0%
5/2	A259 east exit arm	U	N/A	N/A	-		-	-	-	487	Inf	Inf	0.0%
6/1	Dorset Road south exit arm	U	N/A	N/A	-		-	-	-	452	Inf	Inf	0.0%
7/1	A259 west exit	U	N/A	N/A	-		-	-	-	365	Inf	Inf	0.0%
7/2	A259 west exit	U	N/A	N/A	-		-	-	-	502	Inf	Inf	0.0%
8/1	Dorset Road north exit arm	U	N/A	N/A	-		-	-	-	269	Inf	Inf	0.0%

ltem	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	-	-	27	9	0	16.3	3.9	0.0	20.2	-	-	-	-
A259 / Dorset Road intersection	-	-	27	9	0	16.3	3.9	0.0	20.2	-	-	-	-
1/1	322	322	-	-	-	0.0	0.1	-	0.1	1.2	0.0	0.1	0.1
1/2	365	365	-	-	-	1.6	0.1	-	1.7	17.2	6.3	0.1	6.4
1/3	334	334	0	9	0	1.6	0.3	0.0	1.9	20.8	6.3	0.3	6.6
2/1	117	117	-	-	-	1.3	0.3	-	1.6	50.1	3.2	0.3	3.4
2/2	150	150	-	-	-	1.7	0.4	-	2.2	52.3	4.1	0.4	4.6
2/3	197	197	-	-	-	2.3	0.8	-	3.1	57.4	5.6	0.8	6.4
3/1	433	433	-	-	-	2.3	0.4	-	2.8	23.0	8.9	0.4	9.3
3/2+3/3	317	317	27	0	0	1.6	0.2	0.0	1.8	20.6	5.4	0.2	5.6
4/1	318	318	-	-	-	3.7	1.1	-	4.9	55.2	9.1	1.1	10.2
5/1	478	478	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	487	487	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	452	452	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	365	365	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	502	502	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	269	269	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
	C1 - A259 London R	oad Stream	m: 1 PRC for Sign PRC Ove	nalled Lanes (%): r All Lanes (%):	28.6 1 28.6	Total Delay for S Total Delay	ignalled Lanes (p Over All Lanes(p	ocuHr): 20.07 ocuHr): 20.18	Cycle	Гіте (s): 110			

LinSig V1 style report **Stage Timings Scenario 5: '2028 DS with DaSA AM'** (FG5: '2028 Do something with DaSA AM peak', Plan 1: 'Network Control Plan 1')

Stage Stream: 1

Stage	1	2	3
Duration	52	14	21
Change Point	0	67	87

LinSig V1 style report 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	-	-		-	-	-	-	-	-	75.4%
A259 / Dorset Road intersection	-	-	N/A	-	-		-	-	-	-	-	-	75.4%
1/1	A259 east leg Left	U	N/A	N/A	-		-	-	-	333	1800	1800	18.5%
1/2	A259 east leg Ahead	U	1	N/A	А		1	54	-	332	3600	1800	18.4%
1/3	A259 east leg Ahead Right	Ο	1	N/A	А		1	54	-	323	1786	893	36.2%
2/1	Dorset Road leg Ahead	U	1	N/A	С		1	14	-	156	1915	261	59.7%
2/2	Dorset Road leg Right	U	1	N/A	С		1	14	-	128	1950	266	48.1%
2/3	Dorset Road leg Right	U	1	N/A	С		1	14	-	125	1950	266	47.0%
3/1	A259 West leg Ahead Left	U	1	N/A	В		1	52	-	574	2000	964	59.6%
3/2+3/3	A259 West leg Ahead Right	U+O	1	N/A	В		1	52	-	346	2000:1834	908+139	33.0 : 33.0%
4/1	Dorset Road north arm Left Ahead Right	U	1	N/A	D		1	21	-	377	2500	500	75.4%
5/1	A259 east exit arm	U	N/A	N/A	-		-	-	-	672	Inf	Inf	0.0%
5/2	A259 east exit arm	U	N/A	N/A	-		-	-	-	425	Inf	Inf	0.0%
6/1	Dorset Road south exit arm	U	N/A	N/A	-		-	-	-	532	Inf	Inf	0.0%
7/1	A259 west exit	U	N/A	N/A	-		-	-	-	332	Inf	Inf	0.0%
7/2	A259 west exit	U	N/A	N/A	-		-	-	-	350	Inf	Inf	0.0%
8/1	Dorset Road north exit arm	U	N/A	N/A	-		-	-	-	383	Inf	Inf	0.0%

ltem	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	-	-	46	11	0	17.2	4.6	0.0	21.9	-	-	-	-
A259 / Dorset Road intersection	-	-	46	11	0	17.2	4.6	0.0	21.9	-	-	-	-
1/1	333	333	-	-	-	0.0	0.1	-	0.1	1.2	0.0	0.1	0.1
1/2	332	332	-	-	-	1.4	0.1	-	1.5	16.4	5.5	0.1	5.6
1/3	323	323	0	11	0	1.5	0.3	0.0	1.8	19.9	6.0	0.3	6.3
2/1	156	156	-	-	-	1.9	0.7	-	2.7	61.6	4.5	0.7	5.2
2/2	128	128	-	-	-	1.6	0.5	-	2.0	56.9	3.6	0.5	4.1
2/3	125	125	-	-	-	1.5	0.4	-	2.0	56.5	3.5	0.4	3.9
3/1	574	574	-	-	-	3.3	0.7	-	4.0	25.3	12.6	0.7	13.3
3/2+3/3	346	346	46	0	0	1.6	0.2	0.0	1.9	20.0	5.6	0.2	5.8
4/1	377	377	-	-	-	4.3	1.5	-	5.8	55.7	10.8	1.5	12.3
5/1	672	672	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	425	425	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	532	532	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	332	332	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	350	350	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	383	383	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
	C1 - A259 London R	oad Stream	m: 1 PRC for Sigr PRC Ove	nalled Lanes (%): r All Lanes (%):	19.4 1 19.4	Fotal Delay for S Total Delay	Signalled Lanes (p Over All Lanes(p	pcuHr): 21.75 pcuHr): 21.86	Cycle	Гіте (s): 110			

LinSig V1 style report **Stage Timings Scenario 6: '2028 DS with DaSA PM'** (FG6: '2028 Do something with DaSA PM peak', Plan 1: 'Network Control Plan 1') **Stage Stream: 1**

Stage	1	2	3
Duration	51	17	19
Change Point	0	66	89

LinSig V1 style report 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	-	-		-	-	-	-	-	-	70.4%
A259 / Dorset Road intersection	-	-	N/A	-	-		-	-	-	-	-	-	70.4%
1/1	A259 east leg Left	U	N/A	N/A	-		-	-	-	322	1800	1800	17.9%
1/2	A259 east leg Ahead	U	1	N/A	А		1	53	-	413	3600	1767	23.4%
1/3	A259 east leg Ahead Right	0	1	N/A	А		1	53	-	334	1786	877	38.1%
2/1	Dorset Road leg Ahead	U	1	N/A	С		1	17	-	117	1915	313	37.3%
2/2	Dorset Road leg Right	U	1	N/A	С		1	17	-	150	1950	319	47.0%
2/3	Dorset Road leg Right	U	1	N/A	С		1	17	-	197	1950	319	61.7%
3/1	A259 West leg Ahead Left	U	1	N/A	В		1	51	-	443	2000	945	46.9%
3/2+3/3	A259 West leg Ahead Right	U+O	1	N/A	В		1	51	-	345	2000:1834	923+78	34.5 : 34.5%
4/1	Dorset Road north arm Left Ahead Right	U	1	N/A	D		1	19	-	320	2500	455	70.4%
5/1	A259 east exit arm	U	N/A	N/A	-		-	-	-	448	Inf	Inf	0.0%
5/2	A259 east exit arm	U	N/A	N/A	-		-	-	-	515	Inf	Inf	0.0%
6/1	Dorset Road south exit arm	U	N/A	N/A	-		-	-	-	452	Inf	Inf	0.0%
7/1	A259 west exit	U	N/A	N/A	-		-	-	-	413	Inf	Inf	0.0%
7/2	A259 west exit	U	N/A	N/A	-		-	-	-	504	Inf	Inf	0.0%
8/1	Dorset Road north exit arm	U	N/A	N/A	-		-	-	-	269	Inf	Inf	0.0%

ltem	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	-	-	27	9	0	16.8	4.0	0.0	20.8	-	-	-	-
A259 / Dorset Road intersection	-	-	27	9	0	16.8	4.0	0.0	20.8	-	-	-	-
1/1	322	322	-	-	-	0.0	0.1	-	0.1	1.2	0.0	0.1	0.1
1/2	413	413	-	-	-	1.8	0.2	-	2.0	17.4	7.2	0.2	7.4
1/3	334	334	0	9	0	1.6	0.3	0.0	1.9	20.8	6.3	0.3	6.6
2/1	117	117	-	-	-	1.3	0.3	-	1.6	50.1	3.2	0.3	3.4
2/2	150	150	-	-	-	1.7	0.4	-	2.2	52.3	4.1	0.4	4.6
2/3	197	197	-	-	-	2.3	0.8	-	3.1	57.4	5.6	0.8	6.4
3/1	443	443	-	-	-	2.4	0.4	-	2.9	23.2	9.1	0.4	9.5
3/2+3/3	345	345	27	0	0	1.7	0.3	0.0	2.0	21.0	6.0	0.3	6.3
4/1	320	320	-	-	-	3.8	1.2	-	4.9	55.4	9.2	1.2	10.3
5/1	448	448	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	515	515	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	452	452	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	413	413	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	504	504	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	269	269	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
	C1 - A259 London R	oad Stream	m: 1 PRC for Sigr PRC Ove	nalled Lanes (%): r All Lanes (%):	27.8 27.8	Fotal Delay for S Total Delay	Signalled Lanes (p Over All Lanes(p	pcuHr): 20.67 pcuHr): 20.78	Cycle	Гіте (s): 110			

A259 London Road all scenarios

LinSig V1 style report LinSig V1 style report

User and Project Details

Project:	
Title:	
Location:	
Additional detail:	
File name:	A259 London Road.lsg3x
Author:	
Company:	
Address:	

Phase Input Data

Phase Name	Phase Type	Stage Stream	Assoc. Phase	Street Min	Cont Min
А	Traffic	1		7	7
В	Traffic	1		7	7
С	Traffic	1		7	7
D	Traffic	1		7	7

Phase Intergreens Matrix



Phase Delays Stage Stream: 1

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

Prohibited Stage Change Stage Stream: 1



Phases in Stage

Stream	Stage No.	Phases in Stage
1	1	AB
1	2	CD

LinSig V1 style report Give-Way Lane Input Data

Junction: A259 /	Junction: A259 / A269 intersection													
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)			
1/3	1/3 0/4 (Dista) 1/20		abt) 1420 0		1.09	To 8/1 (Left)	2.00		0.50	2	2.00			
(A259 east leg)		1439	0	3/2	1.09 To 5/1 (Ahead) To 5/2 (Ahe		2.00	-	0.50	Z	2.00			
2/2 (A269 South leg)	5/1 (Right)	1439	0	4/1	1.09	To 5/1 (Left) To 6/1 (Ahead)	2.00	-	0.50	2	2.00			
3/3 (A259 West leg)	6/1 (Right)	1439	0	1/1	1.09	To 6/1 (Left) To 7/1 (Ahead)	2.00	-	0.50	2	2.00			
4/2 (A 269 North leg)	7/2 (Right)	1439	0	2/1	1.09	To 8/1 (Ahead)	2.00	-	0.50	2	2.00			

LinSig V1 style report Lane Input Data Junction: A259 / A269 intersection

Lane	Lane	Phases	Start	End	Physical Length	Sat Flow	Def User Saturation	Lane Width	Gradient	Nearside	Turns	Turning Radius
	Туре	. naoco	Disp.	Disp.	(PCU)	Туре	Flow (PCU/Hr)	(m)	Cradione	Lane	. unic	(m)
1/1 (A259 east leg)	U	А	2	3	173.9	User	3600	-	-	-	-	-
1/2 (A259 east leg)	U	А	2	3	173.9	User	1800	-	-	-	-	-
1/3 (A259 east leg)	0	А	2	3	6.1	User	1619	-	-	-	-	-
2/1 (A269 South leg)	U	С	2	3	10.4	User	2000	-	-	-	-	-
2/2 (A269 South leg)	ο	С	2	3	3.5	User	2000	-	-	-	-	-
3/1 (A259 West leg)	U	В	2	3	61.7	User	1800	-	-	-	-	-
3/2 (A259 West leg)	U	В	2	3	61.7	User	1800	-	-	-	-	-
3/3 (A259 West leg)	ο	В	2	3	4.6	User	1637	-	-	-	-	-
4/1 (A 269 North leg)	U	D	2	3	60.0	User	1550	-	-	-	-	-
4/2 (A 269 North leg)	ο	D	2	3	85.2	User	1665	-	-	-	-	-
5/1 (A259 east exit arm)	U		2	3	60.0	Inf	-	-	-	-	-	-
5/2 (A259 east exit arm)	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1 (A269 south exit arm)	U		2	3	60.0	Inf	-	-	-	-	-	-
7/1 (A259 west exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
7/2 (A259 west exit)	U		2	3	14.9	Inf	-	-	-	-	-	-
8/1 (A269 north exit)	U		2	3	60.0	Inf	-	-	-	-	-	-

Lane Saturation Flows Scenario 1: 'Existing AM' (FG1: 'Existing AM peak hour', Plan 1: 'Network Control Plan 1')

Junction: A259 / A269 intersection

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 (A259 east leg Lane 1)	т	his lane us	3600	3600								
1/2 (A259 east leg Lane 2)	т	his lane us	1800	1800								
1/3 (A259 east leg Lane 3)	т	his lane us	es a directly	entered S	aturation F	low	1619	1619				
2/1 (A269 South leg Lane 1)	Т	his lane us	es a directly	entered S	aturation F	low	2000	2000				
2/2 (A269 South leg Lane 2)	Т	his lane us	es a directly	entered S	aturation F	low	2000	2000				
3/1 (A259 West leg Lane 1)	Т	his lane us	es a directly	entered S	aturation F	low	1800	1800				
3/2 (A259 West leg Lane 2)	т	his lane us	es a directly	entered S	aturation F	low	1800	1800				
3/3 (A259 West leg Lane 3)	т	his lane us	1637	1637								
4/1 (A 269 North leg Lane 1)	Т	his lane us	es a directly	entered S	aturation F	low	1550	1550				
4/2 (A 269 North leg Lane 2)	т	his lane us	es a directly	entered S	aturation F	low	1665	1665				
5/1 (A259 east exit arm Lane 1)			Infinite Sat	uration Flov	N		Inf	Inf				
5/2 (A259 east exit arm Lane 2)			Infinite Sat	uration Flov	N		Inf	Inf				
6/1 (A269 south exit arm Lane 1)			Infinite Sat	uration Flov	N		Inf	Inf				
7/1 (A259 west exit Lane 1)			Infinite Sat	uration Flov	N		Inf	Inf				
7/2 (A259 west exit Lane 2)			Infinite Sat	uration Flov	N		Inf	Inf				
8/1 (A269 north exit Lane 1)			Infinite Sat	uration Flov	N		Inf	Inf				

Scenario 2: 'Existing PM' (FG2: 'Existing PM peak hour', Plan 1: 'Network Control Plan 1')

Junction: A259 / A269 Intersection											
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 (A259 east leg Lane 1)	Т	his lane us	3600	3600							
1/2 (A259 east leg Lane 2)	Т	his lane us	es a directly	1800	1800						
1/3 (A259 east leg Lane 3)	т	his lane us	es a directly	entered S	aturation F	low	1619	1619			
2/1 (A269 South leg Lane 1)	Т	his lane us	es a directly	entered S	aturation F	low	2000	2000			
2/2 (A269 South leg Lane 2)	Т	his lane us	es a directly	2000	2000						
3/1 (A259 West leg Lane 1)	Т	his lane us	es a directly	entered S	aturation F	low	1800	1800			
3/2 (A259 West leg Lane 2)	Т	his lane us	es a directly	entered S	aturation F	low	1800	1800			
3/3 (A259 West leg Lane 3)	Т	his lane us	1637	1637							
4/1 (A 269 North leg Lane 1)	Т	his lane us	es a directly	entered S	aturation F	low	1550	1550			
4/2 (A 269 North leg Lane 2)	Т	his lane us	es a directly	entered S	aturation F	low	1665	1665			
5/1 (A259 east exit arm Lane 1)			Infinite Satu	uration Flov	N		Inf	Inf			
5/2 (A259 east exit arm Lane 2)			Infinite Satu	uration Flow	N		Inf	Inf			
6/1 (A269 south exit arm Lane 1)			Infinite Satu	uration Flow	N		Inf	Inf			
7/1 (A259 west exit Lane 1)			Infinite Satu	uration Flov	N		Inf	Inf			
7/2 (A259 west exit Lane 2)		Infinite Saturation Flow				Inf	Inf				
8/1 (A269 north exit Lane 1)			Infinite Satu	uration Flow	N		Inf	Inf			
Scenario 3: '2028 DN without DaSA AM' (FG3: '2028 Do nothing without DaSA AM peak', Plan 1: 'Network Control Plan 1')

Junction: A259 / A269 intersection								
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 (A259 east leg Lane 1)	Т	his lane us	es a directly	entered S	aturation F	low	3600	3600
1/2 (A259 east leg Lane 2)	Т	his lane us	es a directly	entered S	aturation F	low	1800	1800
1/3 (A259 east leg Lane 3)	Т	his lane us	es a directly	entered S	aturation F	low	1619	1619
2/1 (A269 South leg Lane 1)	Т	his lane us	es a directly	entered S	aturation F	low	2000	2000
2/2 (A269 South leg Lane 2)	Т	his lane us	es a directly	entered S	aturation F	low	2000	2000
3/1 (A259 West leg Lane 1)	Т	his lane us	es a directly	entered S	aturation F	low	1800	1800
3/2 (A259 West leg Lane 2)	Т	his lane us	es a directly	entered S	aturation F	low	1800	1800
3/3 (A259 West leg Lane 3)	т	his lane us	es a directly	entered S	aturation F	low	1637	1637
4/1 (A 269 North leg Lane 1)	т	his lane us	es a directly	entered S	aturation F	low	1550	1550
4/2 (A 269 North leg Lane 2)	Т	This lane uses a directly entered Saturation Flow				1665	1665	
5/1 (A259 east exit arm Lane 1)		Infinite Saturation Flow			Inf	Inf		
5/2 (A259 east exit arm Lane 2)		Infinite Saturation Flow		Inf	Inf			
6/1 (A269 south exit arm Lane 1)			Infinite Satu	uration Flov	w		Inf	Inf
7/1 (A259 west exit Lane 1)		Infinite Saturation Flow				Inf	Inf	
7/2 (A259 west exit Lane 2)			Infinite Satu	uration Flov	N		Inf	Inf
8/1 (A269 north exit Lane 1)			Infinite Satu	uration Flow	N		Inf	Inf

Scenario 4: '2028 DN without DaSA PM' (FG4: '2028 Do nothing without DaSA PM peak', Plan 1: 'Network Control Plan 1')

Junction: A259 / A269 intersection								
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 (A259 east leg Lane 1)	Т	his lane use	es a directly	entered S	aturation F	low	3600	3600
1/2 (A259 east leg Lane 2)	Т	his lane use	es a directly	entered S	aturation F	low	1800	1800
1/3 (A259 east leg Lane 3)	Т	his lane use	es a directly	entered S	aturation F	low	1619	1619
2/1 (A269 South leg Lane 1)	Т	his lane use	es a directly	entered S	aturation F	low	2000	2000
2/2 (A269 South leg Lane 2)	Т	his lane use	es a directly	entered S	aturation F	low	2000	2000
3/1 (A259 West leg Lane 1)	Т	his lane use	es a directly	entered S	aturation F	low	1800	1800
3/2 (A259 West leg Lane 2)	Т	his lane use	es a directly	entered S	aturation F	low	1800	1800
3/3 (A259 West leg Lane 3)	т	his lane use	es a directly	entered S	aturation F	low	1637	1637
4/1 (A 269 North leg Lane 1)	т	his lane use	es a directly	entered S	aturation F	low	1550	1550
4/2 (A 269 North leg Lane 2)	Т	This lane uses a directly entered Saturation Flow				1665	1665	
5/1 (A259 east exit arm Lane 1)		Infinite Saturation Flow			Inf	Inf		
5/2 (A259 east exit arm Lane 2)			Infinite Satu	uration Flov	N		Inf	Inf
6/1 (A269 south exit arm Lane 1)			Infinite Satu	uration Flov	N		Inf	Inf
7/1 (A259 west exit Lane 1)			Infinite Satu	uration Flov	N		Inf	Inf
7/2 (A259 west exit Lane 2)			Infinite Satu	uration Flov	N		Inf	Inf
8/1 (A269 north exit Lane 1)			Infinite Satu	uration Flov	N		Inf	Inf

Scenario 5: '2028 DS with DaSA AM' (FG5: '2028 Do something with DaSA AM peak', Plan 1: 'Network Control Plan 1')

Junction: A259 / A269 intersection								
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 (A259 east leg Lane 1)	Т	his lane us	es a directly	entered S	aturation F	low	3600	3600
1/2 (A259 east leg Lane 2)	т	his lane us	es a directly	entered S	aturation F	low	1800	1800
1/3 (A259 east leg Lane 3)	Т	his lane us	es a directly	entered S	aturation F	low	1619	1619
2/1 (A269 South leg Lane 1)	Т	his lane us	es a directly	entered S	aturation F	low	2000	2000
2/2 (A269 South leg Lane 2)	т	his lane us	es a directly	entered S	aturation F	low	2000	2000
3/1 (A259 West leg Lane 1)	т	his lane us	es a directly	entered S	aturation F	low	1800	1800
3/2 (A259 West leg Lane 2)	т	his lane us	es a directly	entered S	aturation F	low	1800	1800
3/3 (A259 West leg Lane 3)	т	his lane us	es a directly	entered S	aturation F	low	1637	1637
4/1 (A 269 North leg Lane 1)	т	his lane us	es a directly	entered S	aturation F	low	1550	1550
4/2 (A 269 North leg Lane 2)	Т	his lane us	es a directly	entered S	aturation F	low	1665	1665
5/1 (A259 east exit arm Lane 1)			Infinite Satu	uration Flov	N		Inf	Inf
5/2 (A259 east exit arm Lane 2)			Infinite Satu	uration Flov	N		Inf	Inf
6/1 (A269 south exit arm Lane 1)			Infinite Satu	uration Flov	w		Inf	Inf
7/1 (A259 west exit Lane 1)			Infinite Satu	uration Flov	N		Inf	Inf
7/2 (A259 west exit Lane 2)			Infinite Satu	uration Flov	N		Inf	Inf
8/1 (A269 north exit Lane 1)			Infinite Satu	uration Flow	N		Inf	Inf

Scenario 6: '2028 DS with DaSA PM' (FG6: '2028 Do something with DaSA PM peak', Plan 1: 'Network Contr	ol Plan 1')
lunction: A250 / A250 intersection	1

Junction: A259 / A269 intersection								
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 (A259 east leg Lane 1)	Т	his lane us	es a directly	entered S	aturation F	low	3600	3600
1/2 (A259 east leg Lane 2)	т	his lane us	es a directly	entered S	aturation F	low	1800	1800
1/3 (A259 east leg Lane 3)	т	his lane us	es a directly	entered S	aturation F	low	1619	1619
2/1 (A269 South leg Lane 1)	т	his lane us	es a directly	entered S	aturation F	low	2000	2000
2/2 (A269 South leg Lane 2)	т	his lane us	es a directly	entered S	aturation F	low	2000	2000
3/1 (A259 West leg Lane 1)	т	his lane us	es a directly	entered S	aturation F	low	1800	1800
3/2 (A259 West leg Lane 2)	т	his lane us	es a directly	entered S	aturation F	low	1800	1800
3/3 (A259 West leg Lane 3)	т	his lane us	es a directly	entered S	aturation F	low	1637	1637
4/1 (A 269 North leg Lane 1)	т	his lane us	es a directly	entered S	aturation F	low	1550	1550
4/2 (A 269 North leg Lane 2)	т	his lane us	es a directly	entered S	aturation F	low	1665	1665
5/1 (A259 east exit arm Lane 1)			Infinite Satu	uration Flov	N		Inf	Inf
5/2 (A259 east exit arm Lane 2)			Infinite Satu	uration Flow	N		Inf	Inf
6/1 (A269 south exit arm Lane 1)			Infinite Satu	uration Flow	N		Inf	Inf
7/1 (A259 west exit Lane 1)			Infinite Satu	uration Flov	N		Inf	Inf
7/2 (A259 west exit Lane 2)			Infinite Satu	uration Flov	N		Inf	Inf
8/1 (A269 north exit Lane 1)			Infinite Satu	uration Flov	N		Inf	Inf

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: 'Existing AM peak hour'	08:15	09:15	01:00	
2: 'Existing PM peak hour'	08:00	09:00	01:00	
3: '2028 Do nothing without DaSA AM peak'	08:00	09:00	01:00	
4: '2028 Do nothing without DaSA PM peak'	08:00	09:00	01:00	
5: '2028 Do something with DaSA AM peak'	08:00	09:00	01:00	
6: '2028 Do something with DaSA PM peak'	08:00	09:00	01:00	

Traffic Flows, Desired FG1: 'Existing AM peak hour' Desired Flow :

	Destination			
Origin	Tot.			
	Tot.	-		

FG2: 'Existing PM peak hour' Desired Flow :

	Desti	nation
Origin		Tot.
	Tot.	-

FG3: '2028 Do nothing without DaSA AM peak' Desired Flow :

	Destination			
Origin		Tot.		
Origin	Tot.	-		

FG4: '2028 Do nothing without DaSA PM peak' Desired Flow :

	Destination			
Origin		Tot.		
Origin	Tot.	-		

FG5: '2028 Do something with DaSA AM peak' Desired Flow :

	Destination			
Origin		Tot.		
Origin	Tot.	-		

FG6: '2028 Do something with DaSA PM peak' Desired Flow :

	Destination			
Origin		Tot.		
	Tot.	-		

Stage Timings Scenario 1: 'Existing AM' (FG1: 'Existing AM peak hour', Plan 1: 'Network Control Plan 1') Stage Stream: 1

Stage	1	2
Duration	21	27
Change Point	0	28

ltem	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	-	-		-	-	-	-	-	-	151.2%
A259 / A269 intersection	-	-	N/A	-	-		-	-	-	-	-	-	151.2%
1/1	A259 east leg Left Ahead	U	1	N/A	А		1	21	-	383	3600	1003	38.2%
1/2+1/3	A259 east leg Ahead Right	U+O	1	N/A	А		1	21	-	298	1800:1619	476+59	55.6 : 55.6%
2/1+2/2	A269 South leg Right Left Ahead	U+O	1	N/A	С		1	27	-	478	2000:2000	709+3	67.2 : 67.2%
3/1	A259 West leg Left	U	1	N/A	В		1	21	-	322	1800	501	64.2%
3/2+3/3	A259 West leg Ahead Right	U+O	1	N/A	В		1	21	-	662	1800:1637	445+124	116.5 : 116.5%
4/1	A 269 North leg Left Ahead	U	1	N/A	D		1	27	-	516	1550	549	93.9%
4/2	A 269 North leg Right	0	1	N/A	D		1	27	-	404	1665	267	151.2%
5/1	A259 east exit arm	U	N/A	N/A	-		-	-	-	331	Inf	Inf	0.0%
5/2	A259 east exit arm	U	N/A	N/A	-		-	-	-	259	Inf	Inf	0.0%
6/1	A269 south exit arm	U	N/A	N/A	-		-	-	-	706	Inf	Inf	0.0%
7/1	A259 west exit	U	N/A	N/A	-		-	-	-	463	Inf	Inf	0.0%
7/2	A259 west exit	U	N/A	N/A	-		-	-	-	669	Inf	Inf	0.0%
8/1	A269 north exit	U	N/A	N/A	-		-	-	-	635	Inf	Inf	0.0%

ltem	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	-	-	330	0	95	31.1	128.6	0.9	160.6	-	-	-	-
A259 / A269 intersection	-	-	330	0	95	31.1	128.6	0.9	160.6	-	-	-	-
1/1	383	383	-	-	-	2.4	0.3	-	2.8	25.9	6.7	0.3	7.0
1/2+1/3	298	298	0	0	33	2.0	0.6	0.2	2.8	33.5	4.9	0.6	5.5
2/1+2/2	478	478	2	0	0	2.9	1.0	0.0	3.9	29.3	8.7	1.0	9.7
3/1	322	322	-	-	-	2.2	0.9	-	3.1	35.0	6.2	0.9	7.1
3/2+3/3	662	568	124	0	0	8.7	50.2	0.1	59.1	321.3	16.0	50.2	66.2
4/1	516	516	-	-	-	3.5	5.8	-	9.3	64.8	10.9	5.8	16.6
4/2	404	267	205	0	62	9.3	69.8	0.6	79.7	710.5	14.5	69.8	84.4
5/1	294	294	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	222	222	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	686	686	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	463	463	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	532	532	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	635	635	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
	C1 - A259 Londor	n Road Str	eam: 1 PRC for S PRC C	Signalled Lanes (%): Over All Lanes (%):	-68.0 -68.0	Total Delay for Total Del	r Signalled Lanes ay Over All Lanes	(pcuHr): 160.65 s(pcuHr): 160.65	5 Cycle	Time (s): 79			

LinSig V1 style report **Stage Timings Scenario 2: 'Existing PM'** (FG2: 'Existing PM peak hour', Plan 1: 'Network Control Plan 1') **Stage Stream: 1**

Stage	1	2
Duration	19	29
Change Point	0	26

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	-	-		-	-	-	-	-	-	152.3%
A259 / A269 intersection	-	-	N/A	-	-		-	-	-	-	-	-	152.3%
1/1	A259 east leg Left Ahead	U	1	N/A	А		1	19	-	382	3600	911	41.9%
1/2+1/3	A259 east leg Ahead Right	U+O	1	N/A	А		1	19	-	332	1800:1619	440+44	68.6 : 68.6%
2/1+2/2	A269 South leg Right Left Ahead	U+O	1	N/A	С		1	29	-	538	2000:2000	759+1	70.7 : 70.7%
3/1	A259 West leg Left	U	1	N/A	В		1	19	-	446	1800	456	97.9%
3/2+3/3	A259 West leg Ahead Right	U+O	1	N/A	В		1	19	-	529	1800:1637	414+105	102.0 : 102.0%
4/1	A 269 North leg Left Ahead	U	1	N/A	D		1	29	-	408	1550	589	69.3%
4/2	A 269 North leg Right	0	1	N/A	D		1	29	-	414	1665	272	152.3%
5/1	A259 east exit arm	U	N/A	N/A	-		-	-	-	229	Inf	Inf	0.0%
5/2	A259 east exit arm	U	N/A	N/A	-		-	-	-	211	Inf	Inf	0.0%
6/1	A269 south exit arm	U	N/A	N/A	-		-	-	-	578	Inf	Inf	0.0%
7/1	A259 west exit	U	N/A	N/A	-		-	-	-	529	Inf	Inf	0.0%
7/2	A259 west exit	U	N/A	N/A	-		-	-	-	716	Inf	Inf	0.0%
8/1	A269 north exit	U	N/A	N/A	-		-	-	-	786	Inf	Inf	0.0%

LinSig V1 style report

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	-	-	314	0	93	28.3	99.0	0.9	128.3	-	-	-	-
A259 / A269 intersection	-	-	314	0	93	28.3	99.0	0.9	128.3	-	-	-	-
1/1	382	382	-	-	-	2.6	0.4	-	3.0	28.0	7.0	0.4	7.4
1/2+1/3	332	332	0	0	30	2.4	1.1	0.1	3.6	39.4	5.9	1.1	6.9
2/1+2/2	538	538	1	0	0	3.1	1.2	0.0	4.3	28.8	9.8	1.2	11.0
3/1	446	446	-	-	-	3.6	8.4	-	12.0	97.2	9.7	8.4	18.1
3/2+3/3	529	519	105	0	0	4.7	14.3	0.1	19.1	130.2	10.8	14.3	25.2
4/1	408	408	-	-	-	2.3	1.1	-	3.5	30.5	7.5	1.1	8.6
4/2	414	272	209	0	63	9.6	72.5	0.6	82.7	719.3	15.0	72.5	87.5
5/1	225	225	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	207	207	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	576	576	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	529	529	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	574	574	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	786	786	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
	C1 - A259 Londo	n Road Str	eam: 1 PRC for S PRC C	Signalled Lanes (%): Over All Lanes (%):	-69.2 -69.2	Total Delay for Total Del	r Signalled Lanes ay Over All Lanes	(pcuHr): 128.27 s(pcuHr): 128.27	7 Cycle 7	e Time (s): 79			

LinSig V1 style report **Stage Timings Scenario 3: '2028 DN without DaSA AM'** (FG3: '2028 Do nothing without DaSA AM peak', Plan 1: 'Network Control Plan 1') **Stage Stream: 1**

, in the second se		
Stage	1	2
Duration	19	29
Change Point	0	26

ltem	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	-	-		-	-	-	-	-	-	164.5%
A259 / A269 intersection	-	-	N/A	-	-		-	-	-	-	-	-	164.5%
1/1	A259 east leg Left Ahead	U	1	N/A	А		1	19	-	428	3600	911	47.0%
1/2+1/3	A259 east leg Ahead Right	U+O	1	N/A	А		1	19	-	320	1800:1619	435+57	65.0 : 65.0%
2/1+2/2	A269 South leg Right Left Ahead	U+O	1	N/A	С		1	29	-	529	2000:2000	759+3	69.4 : 69.4%
3/1	A259 West leg Left	U	1	N/A	В		1	19	-	356	1800	456	78.1%
3/2+3/3	A259 West leg Ahead Right	U+O	1	N/A	В		1	19	-	734	1800:1637	410+114	140.1 : 140.1%
4/1	A 269 North leg Left Ahead	U	1	N/A	D		1	29	-	571	1550	589	97.0%
4/2	A 269 North leg Right	ο	1	N/A	D		1	29	-	447	1665	272	164.5%
5/1	A259 east exit arm	U	N/A	N/A	-		-	-	-	353	Inf	Inf	0.0%
5/2	A259 east exit arm	U	N/A	N/A	-		-	-	-	300	Inf	Inf	0.0%
6/1	A269 south exit arm	U	N/A	N/A	-		-	-	-	782	Inf	Inf	0.0%
7/1	A259 west exit	U	N/A	N/A	-		-	-	-	517	Inf	Inf	0.0%
7/2	A259 west exit	U	N/A	N/A	-		-	-	-	730	Inf	Inf	0.0%
8/1	A269 north exit	U	N/A	N/A	-		-	-	-	703	Inf	Inf	0.0%

LinSig V1 style report

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	-	-	325	0	100	40.3	208.2	1.0	249.5	-	-	-	-
A259 / A269 intersection	-	-	325	0	100	40.3	208.2	1.0	249.5	-	-	-	-
1/1	428	428	-	-	-	3.0	0.4	-	3.4	28.7	7.8	0.4	8.3
1/2+1/3	320	320	0	0	37	2.3	0.9	0.2	3.4	38.1	5.5	0.9	6.4
2/1+2/2	529	529	2	0	0	3.0	1.1	0.0	4.2	28.3	9.7	1.1	10.8
3/1	356	356	-	-	-	2.7	1.7	-	4.4	44.9	7.2	1.7	8.9
3/2+3/3	734	524	114	0	0	14.1	106.8	0.2	121.1	593.9	20.3	106.8	127.1
4/1	571	571	-	-	-	3.8	8.3	-	12.1	76.6	12.2	8.3	20.5
4/2	447	272	209	0	63	11.4	88.9	0.6	100.9	812.3	17.1	88.9	106.0
5/1	275	275	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	214	214	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	736	736	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	517	517	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	555	555	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	703	703	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
	C1 - A259 Londo	n Road Str	eam: 1 PRC for S PRC C	Signalled Lanes (%): Over All Lanes (%):	-82.7 -82.7	Total Delay fo Total Del	r Signalled Lanes ay Over All Lanes	(pcuHr): 249.50 s(pcuHr): 249.50) Cycle	Time (s): 79			

LinSig V1 style report **Stage Timings Scenario 4: '2028 DN without DaSA PM'** (FG4: '2028 Do nothing without DaSA PM peak', Plan 1: 'Network Control Plan 1') **Stage Stream: 1**

Stage	1	2
Duration	22	26
Change Point	0	29

ltem	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	-	-		-	-	-	-	-	-	418.6%
A259 / A269 intersection	-	-	N/A	-	-		-	-	-	-	-	-	418.6%
1/1	A259 east leg Left Ahead	U	1	N/A	А		1	22	-	427	3600	1048	40.7%
1/2+1/3	A259 east leg Ahead Right	U+O	1	N/A	А		1	22	-	363	1800:1619	502+50	65.8 : 65.8%
2/1+2/2	A269 South leg Right Left Ahead	U+O	1	N/A	С		1	26	-	685	2000:2000	684+0	100.2 : 0.0%
3/1	A259 West leg Left	U	1	N/A	В		1	22	-	493	1800	524	94.1%
3/2+3/3	A259 West leg Ahead Right	U+O	1	N/A	В		1	22	-	587	1800:1637	467+119	100.2 : 100.2%
4/1	A 269 North leg Left Ahead	U	1	N/A	D		1	26	-	451	1550	530	85.1%
4/2	A 269 North leg Right	О	1	N/A	D		1	26	-	458	1665	109	418.6%
5/1	A259 east exit arm	U	N/A	N/A	-		-	-	-	253	Inf	Inf	0.0%
5/2	A259 east exit arm	U	N/A	N/A	-		-	-	-	234	Inf	Inf	0.0%
6/1	A269 south exit arm	U	N/A	N/A	-		-	-	-	639	Inf	Inf	0.0%
7/1	A259 west exit	U	N/A	N/A	-		-	-	-	590	Inf	Inf	0.0%
7/2	A259 west exit	U	N/A	N/A	-		-	-	-	788	Inf	Inf	0.0%
8/1	A269 north exit	U	N/A	N/A	-		-	-	-	960	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	-	-	139	0	123	40.8	210.6	1.0	252.3	-	-	-	-
A259 / A269 intersection	-	-	139	0	123	40.8	210.6	1.0	252.3	-	-	-	-
1/1	427	427	-	-	-	2.7	0.3	-	3.0	25.4	7.5	0.3	7.8
1/2+1/3	363	363	0	0	33	2.4	1.0	0.2	3.6	35.2	6.3	1.0	7.3
2/1+2/2	685	684	0	0	0	5.0	13.5	0.0	18.5	97.1	15.1	13.5	28.5
3/1	493	493	-	-	-	3.7	5.8	-	9.5	69.6	10.5	5.8	16.3
3/2+3/3	587	586	119	0	0	4.5	12.4	0.2	17.1	104.6	11.7	12.4	24.1
4/1	451	451	-	-	-	3.0	2.7	-	5.7	45.5	9.1	2.7	11.8
4/2	458	109	20	0	90	19.4	175.0	0.7	195.0	1532.9	25.0	175.0	199.9
5/1	253	253	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	234	234	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	639	639	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	589	589	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	439	439	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	959	959	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
	C1 - A259 Londor	n Road Str	eam: 1 PRC for S PRC C	Signalled Lanes (%): Over All Lanes (%):	-365.1 -365.1	Total Delay for Total Del	r Signalled Lanes ay Over All Lanes	(pcuHr): 252.34 s(pcuHr): 252.34	4 Cycle	Time (s): 79			

LinSig V1 style report **Stage Timings Scenario 5: '2028 DS with DaSA AM'** (FG5: '2028 Do something with DaSA AM peak', Plan 1: 'Network Control Plan 1')

Stage Stream: 1

Stage	1	2
Duration	18	30
Change Point	0	25

ltem	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	-	-		-	-	-	-	-	-	159.4%
A259 / A269 intersection	-	-	N/A	-	-		-	-	-	-	-	-	159.4%
1/1	A259 east leg Left Ahead	U	1	N/A	А		1	18	-	488	3600	866	56.4%
1/2+1/3	A259 east leg Ahead Right	U+O	1	N/A	А		1	18	-	320	1800:1619	415+54	68.1 : 68.1%
2/1+2/2	A269 South leg Right Left Ahead	U+O	1	N/A	С		1	30	-	544	2000:2000	785+12	68.3 : 68.3%
3/1	A259 West leg Left	U	1	N/A	В		1	18	-	356	1800	433	82.2%
3/2+3/3	A259 West leg Ahead Right	U+O	1	N/A	В		1	18	-	734	1800:1637	392+109	146.4: 146.4%
4/1	A 269 North leg Left Ahead	U	1	N/A	D		1	30	-	575	1550	608	94.5%
4/2	A 269 North leg Right	О	1	N/A	D		1	30	-	447	1665	280	159.4%
5/1	A259 east exit arm	U	N/A	N/A	-		-	-	-	363	Inf	Inf	0.0%
5/2	A259 east exit arm	U	N/A	N/A	-		-	-	-	300	Inf	Inf	0.0%
6/1	A269 south exit arm	U	N/A	N/A	-		-	-	-	782	Inf	Inf	0.0%
7/1	A259 west exit	U	N/A	N/A	-		-	-	-	577	Inf	Inf	0.0%
7/2	A259 west exit	U	N/A	N/A	-		-	-	-	730	Inf	Inf	0.0%
8/1	A269 north exit	U	N/A	N/A	-		-	-	-	712	Inf	Inf	0.0%

ltem	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	-	-	328	0	106	41.5	213.7	1.1	256.3	-	-	-	-
A259 / A269 intersection	-	-	328	0	106	41.5	213.7	1.1	256.3	-	-	-	-
1/1	488	488	-	-	-	3.6	0.6	-	4.2	31.1	9.4	0.6	10.0
1/2+1/3	320	320	0	0	37	2.4	1.1	0.2	3.6	40.4	5.6	1.1	6.6
2/1+2/2	544	544	8	0	0	3.0	1.1	0.0	4.1	27.2	9.7	1.1	10.7
3/1	356	356	-	-	-	2.8	2.2	-	5.0	50.5	7.3	2.2	9.5
3/2+3/3	734	501	103	0	6	15.1	117.8	0.2	133.2	653.1	20.7	117.8	138.6
4/1	575	575	-	-	-	3.7	6.3	-	10.0	62.5	12.1	6.3	18.4
4/2	447	280	217	0	64	10.9	84.6	0.6	96.2	774.6	16.7	84.6	101.3
5/1	276	276	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	205	205	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	731	731	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	577	577	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	563	563	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	712	712	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
	C1 - A259 London Road Stream: 1 PRC for Signalled Lanes (%): -77.1 Total Delay for Signalled Lanes (pcuHr): 256.25 Cycle Time (s): 79 PRC Over All Lanes (%): -77.1 Total Delay Over All Lanes (pcuHr): 256.25												

LinSig V1 style report **Stage Timings Scenario 6: '2028 DS with DaSA PM'** (FG6: '2028 Do something with DaSA PM peak', Plan 1: 'Network Control Plan 1') **Stage Stream: 1**

Stage	1	2
Duration	22	26
Change Point	0	29

ltem	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	-	-		-	-	-	-	-	-	443.3%
A259 / A269 intersection	-	-	N/A	-	-		-	-	-	-	-	-	443.3%
1/1	A259 east leg Left Ahead	U	1	N/A	А		1	22	-	435	3600	1048	41.5%
1/2+1/3	A259 east leg Ahead Right	U+O	1	N/A	А		1	22	-	363	1800:1619	502+50	65.8 : 65.8%
2/1+2/2	A269 South leg Right Left Ahead	U+O	1	N/A	С		1	26	-	685	2000:2000	684+0	100.2 : 0.0%
3/1	A259 West leg Left	U	1	N/A	В		1	22	-	493	1800	524	94.1%
3/2+3/3	A259 West leg Ahead Right	U+O	1	N/A	В		1	22	-	603	1800:1637	469+115	103.2 : 103.2%
4/1	A 269 North leg Left Ahead	U	1	N/A	D		1	26	-	464	1550	530	87.6%
4/2	A 269 North leg Right	0	1	N/A	D		1	26	-	485	1665	109	443.3%
5/1	A259 east exit arm	U	N/A	N/A	-		-	-	-	266	Inf	Inf	0.0%
5/2	A259 east exit arm	U	N/A	N/A	-		-	-	-	250	Inf	Inf	0.0%
6/1	A269 south exit arm	U	N/A	N/A	-		-	-	-	639	Inf	Inf	0.0%
7/1	A259 west exit	U	N/A	N/A	-		-	-	-	598	Inf	Inf	0.0%
7/2	A259 west exit	U	N/A	N/A	-		-	-	-	815	Inf	Inf	0.0%
8/1	A269 north exit	U	N/A	N/A	-		-	-	-	960	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	-	-	135	0	123	43.2	230.0	1.0	274.2	-	-	-	-
A259 / A269 intersection	-	-	135	0	123	43.2	230.0	1.0	274.2	-	-	-	-
1/1	435	435	-	-	-	2.7	0.4	-	3.1	25.5	7.6	0.4	8.0
1/2+1/3	363	363	0	0	33	2.4	1.0	0.2	3.6	35.2	6.3	1.0	7.3
2/1+2/2	685	684	0	0	0	5.0	13.5	0.0	18.5	97.1	15.1	13.5	28.5
3/1	493	493	-	-	-	3.7	5.8	-	9.5	69.6	10.5	5.8	16.3
3/2+3/3	603	584	115	0	0	5.3	17.8	0.1	23.3	139.0	12.8	17.8	30.7
4/1	464	464	-	-	-	3.1	3.2	-	6.4	49.4	9.5	3.2	12.8
4/2	485	109	20	0	90	20.9	188.4	0.7	210.0	1558.5	26.7	188.4	215.2
5/1	259	259	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	242	242	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	635	635	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	597	597	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	439	439	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	959	959	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
	C1 - A259 London Road Stream: 1 PRC for Signalled Lanes (%): -392.6 Total Delay for Signalled Lanes (pcuHr): 274.24 Cycle Time (s): 79 PRC Over All Lanes (%): -392.6 Total Delay Over All Lanes(pcuHr): 274.24												