Ipsen, Wrexham Industrial Estate

Highways Technical Note 01

Response to Highway Consultation Comments

Prepared for: Ipsen BioPharm Ltd

October 2026

5246-HTN01 - Draft

1.0 INTRODUCTION

1.1 Overview

1.1.1 Axis has been appointed by Lovelock Mitchell Architects, on behalf of Ipsen BioPharm Ltd ('the Applicant'), to provide highways and transport advice in relation to two planning applications at the Ipsen campus on Wrexham Industrial Estate.

1.1.2 The inter-related applications comprise **P/2026/0487**, for the formation of a landscaped and pedestrianised area involving the stopping-up of approximately 90 metres of Ash Road North, and **P/2026/0488**, for a 402-space multi-storey car park (MSCP) and associated access from Ash Road South.

1.1.3 Both applications are supported by a single Axis Transport Assessment (TA), reference **5246-TA-01**, dated June 2026. The TA considers the individual and cumulative effects of the proposals through three scenarios: Scenario 1 - MSCP only; Scenario 2 - MSCP with stopping-up; and Scenario 3 - stopping-up only.

1.1.4 This Highways Technical Note (HTN) supplements the TA and seeks to respond to the recent consultation comments issued by Wrexham County Borough Council (WCBC), in its capacity as Local Highway Authority (LHA), on 9 October 2026 for both applications, as contained in **Appendix A**.

1.2 Highway Consultation Responses

1.2.1 The LHA provided two responses, references **ET/DC/AC/P/2026/0487** and **ET/DC/AC/P/2026/0488**, which are effectively identical, given the inter-relatedness of the two applications and the way they are jointly assessed in the TA. Therefore, to avoid repetition, only one of the responses is reproduced in **Appendix A**.

1.2.2 The LHA accepts that the proposals principally redistribute existing traffic, and accepts the MSCP parking, layout and vehicle tracking in principle, subject to the outstanding access, speed-management and traffic-impact matters.

1.2.3 The access visibility splays are accepted in principle, subject to an acceptable speed management scheme being delivered on Ash Road South. The LHA requires details of the measures and their anticipated effectiveness in encouraging compliance with the 30mph speed limit near the access.

1.2.4 The LHA also requests capacity modelling of the MSCP access and 'Junction D' (the Abenbury Way / Ash Road North / Bryn Lane / Industrial Estate Road roundabout).

1.2.5 This HTN therefore seeks to provide the additional information that has been requested.

1.2.6 **Table 1.1** summarises the response to each matter and the applicable assessment scenarios.

Table 1.1 - Highway Comments and Response Scope

Highway Matter	Response in this HTN	Application / Scenario Scope
Ash Road South speed management scheme	Chapter 2: scheme objectives, proposed measures, drawing and anticipated effectiveness.	Relates to the proposed MSCP access only. Scheme details to be agreed. Scenarios 1 and 2 only.
Junction D roundabout capacity	Chapters 3-4: 2026 ARCADY baseline validation and 2031 comparative assessments.	Both applications: 2031 AM and PM peaks, No Development and Scenarios 1, 2 and 3.
Proposed MSCP access capacity	Chapter 5: 2031 PICADY model based on Axis Drawing 5246-D10.	Relates to the proposed MSCP access only. Scenarios 1 and 2 only.

2.0 ASH ROAD SOUTH SPEED MANAGEMENT

2.1 Context and LHA Requirements

2.1.1 Section 4.4 of the TA describes the proposed priority-controlled MSCP access from Ash Road South. The access arrangement, visibility splays and swept path analysis are shown on **Axis Drawing 5246-D10**, contained in Appendix C of the TA.

2.1.2 The TA provides the results of Automatic Traffic Count surveys carried out on Ash Road South between 15 and 21 April 2026, following the reduction of the speed limit from 40mph to 30mph. The relevant recorded 85th percentile speeds were 34.8mph eastbound and 37.8mph westbound.

2.1.3 **Axis Drawing 5246-D10** shows visibility splays of 2.4m x 50.7m to the west and 2.4m x 58m to the east. The LHA notes that the proposed splays are less than those required by a strict application of TAN 18, based on the recorded speeds, but accepts that the level of visibility is likely to be acceptable in principle in the context of the recently reduced speed limit, and subject to an acceptable speed management scheme being implemented.

2.1.4 The purpose of such a scheme would therefore be to encourage better compliance with the recent 30mph speed limit reduction and to achieve a speed environment consistent with the access design assumptions.

2.2 Proposed Speed Management Scheme

2.2.1 Accordingly, a speed management scheme and supporting drawing has therefore been prepared.

2.2.2 **Axis Drawing 5246-D11** in **Appendix B** to the rear of this HTN illustrates the proposed speed management scheme, which comprises the installation of a 30mph roundel road markings, set against a red-coloured and textured backing surface, ARAF/ SLOW road markings, dragon's teeth road markings and a Vehicle Activated Sign (VAS) to help manage vehicle speeds on the westbound approach to the proposed MSCP access.

2.2.3 These measures are intended to increase driver awareness of the speed limit, reinforce the need to reduce speed and encourage drivers to travel at an appropriate speed through the area.

2.2.4 The 30mph road markings will provide a clear visual reminder of the applicable speed limit, while the ARAF/ SLOW markings and dragon's teeth road markings will provide additional visual signs to encourage drivers to reduce their speed. The VAS will provide a further speed management measure by alerting approaching drivers to their vehicle speed and encouraging compliance with the posted speed limit.

2.2.5 Based on the information contained on page 90 of the DfT's *'LTN1/07 – Traffic Calming'* (2007) document[1], the provision of the VAS alone might be expected to reduce mean vehicle speeds by up to 7mph. This level of reduction would, in this instance, cause the average speed of traffic to fall below or towards the 30mph speed limit, based on the speeds recorded in April 2026.

[1] https://assets.publishing.service.gov.uk/media/5f622dfee90e072bc4ec886c/ltn-1-07_Traffic-calming-guidance.pdf

3.0 JUNCTION CAPACITY ASSESSMENT APPROACH

3.1 Assessment Overview

3.1.1 As requested in the LHA's comments, capacity assessments have been carried out at two junctions; the existing four-arm 'Junction D' roundabout (using ARCADY), and the proposed MSCP access / Ash Road South priority junction (using PICADY). The models have been run using the traffic flow calculations set out in the TA.

3.1.2 The assessments are based on the 2026 base year and 2031 future assessment years adopted in the TA. The weekday peak hours are 07:30-08:30 and 16:30-17:30, as identified on Figures D1 and D2 in Appendix D of the TA. Traffic flows are expressed in Passenger Car Units (PCUs).

3.1.3 The existing roundabout model has been developed using industry-standard ARCADY software using the 2026 observed traffic flows, and checked against observed queues. Lane simulation has been used in the model to represent lane utilisation at the roundabout.

3.1.4 The proposed MSCP access is not yet built, and so there is no existing access operation against which a baseline model can be checked.

3.1.5 The modelling scope is summarised in **Table 3.1**. The No Development scenario retains the existing highway and access arrangements, including the section of Ash Road North proposed to be stopped up, and so without either of the two development proposals.

Table 3.1 - Assessment Scenarios and Model Scope

Year / scenario	Network and parking arrangements	Junction D	MSCP access
2026 Baseline	Existing observed traffic and highway arrangements.	AM / PM validation	Not applicable
2031 No Development	Existing arrangements retained; background traffic growth applied.	AM / PM	Not applicable
2031 Scenario 1	MSCP and new access delivered; Ash Road North remains open.	AM / PM	AM / PM
2031 Scenario 2	MSCP and new access delivered; stopping-up implemented.	AM / PM	AM / PM
2031 Scenario 3	Stopping-up implemented; existing Ipsen parking/accesses retained, with affected trips rerouted. No MSCP.	AM / PM	Not applicable

3.2 Traffic Flows and Future-Year Growth

3.2.1 The 2031 No Development flows are derived from the 2026 observed flows using the TEMPro factors adopted in TA Section 6.3: 1.0442 for the AM peak and 1.0441 for the PM peak, without development-related redistribution. These were not presented in the TA and so are presented to the rear of this report instead, for completeness (**Figures A & B**).

3.2.2 The 2031 with-development diagrams in the TA also incorporate this forecast growth, as well as an allowance for the local reassignment of traffic arising from the proposed stopping-up order and MSCP schemes.

Table 3.2 - Traffic-Flow Sources

Assessment	AM peak source	PM peak source
2026 Baseline	TA Appendix D: Figure D1	TA Appendix D: Figure D2
2031 No Development *	Figure D1 x 1.0442 (**Figure A**)	Figure D2 x 1.0441 (**Figure B**)
2031 Scenario 1	TA Appendix E: Figure E29	TA Appendix E: Figure E30
2031 Scenario 2	TA Appendix F: Figure F37	TA Appendix F: Figure F38
2031 Scenario 3	TA Appendix G: Figure G37	TA Appendix G: Figure G38

** **Figures A and B** were not presented in the TA, and so are presented to the rear of this HTN for completeness.*

3.3 Model Outputs and Reporting

3.3.1 The model results tables report the ratio of flow to capacity (RFC) per movement, the average delay per arriving vehicle (seconds) and forecast traffic queue lengths (in PCUs). RFC is a ratio, not a percentage: values below 0.85 indicate junction operation within practical capacity, whilst 1.00 indicates the theoretical capacity threshold.

3.3.2 The model queue and delay results are based on the busiest 15-minute conditions. Baseline queue comparisons use consistent units, periods and aggregation. The supporting outputs identify these reporting definitions and retain the Junction D lane-level results alongside the arm-level summaries.

3.3.3 At Junction D, each 2031 With Development scenario has been compared with the 2031 No Development scenario to distinguish the development-related changes in queueing, delay and approach demand, as set against the future background conditions.

4.0 JUNCTION D ROUNDABOUT ASSESSMENT

4.1 Junction Configuration and Model Set-Up

4.1.1 Junction D is the existing four-arm roundabout connecting Industrial Estate Road, Bryn Lane, Ash Road North and Abenbury Way. It is identified in both the TA and the LHA responses as a key location for local traffic redistributed by the proposed stopping-up of a section of Ash Road North near Ipsen.

4.1.2 The ARCADY model has been set up to reflect the existing roundabout geometry and approach arrangements. The lane simulation option has been used to account for differential lane utilisation at the roundabout arm entries and to provide a representation of lane use that is consistent with the observed operation of the junction.

4.1.3 The model uses the 2026 AM and PM turning flows shown in Figures D1 and D2 of the TA. The approach descriptions in the tables below follow the road names used on those diagrams, allowing the baseline and future-year results to be compared consistently.

4.2 2026 Baseline Validation

4.2.1 The 2026 AM and PM models have been validated by comparing modelled queues with the queues observed at Junction D from the traffic surveys. The comparison is intended to demonstrate that the model represents the existing queueing conditions before it is used to assess changes in traffic distribution in 2031.

4.2.2 Following the validation reporting approach, average observed queues for the busiest 15-minute periods have been compared with the corresponding modelled queues. The detailed observed queues are contained in **Appendix C**. Note that, when the existing queues are examined over a much shorter and more granular 5 minute period, there were some very brief spikes observed in the queue lengths. For example, a brief queue of 17 PCU was observed on Arm C (Ash Road North) during the 17:10 – 17:15 period. However, from examining the data closely, these infrequent spikes / queue instances are almost all book-ended by queues of zero in the 5 minute periods immediately before and after.

4.2.3 This suggests that queues can form quickly at the junction during very short periods of high demand on one arm or another, but that such queues can and do disperse almost as quickly as they form at this location. This phenomenon may, logically, reflect short instances of a workforce shift simultaneously leaving a particular company within the industrial estate over a short period, leading to a spike in demand at one particular arm or another, and is consistent with the LHA's observations (see **Appendix A**) that there are periods of operational stress at the roundabout, albeit which are shown to be very brief.

4.2.4 The full 2026 ARCADY outputs are attached in **Appendix D**.

4.2.5 The lane simulation model in ARCADY[2] has been used to model the effects of differential lane utilisation at the roundabout. The ARCADY model has been validated against the observed 2026 queue lengths by using the modelled 95th percentile queue for the 15-minute modelled periods. The capacity settings of individual junction arms have been adjusted so that the modelled 95th percentile queues are similar, but (robustly) slightly greater, to the observed queues, for each 15-minute period. A positive direct capacity adjustment correction of +500pcu/hr has been applied to the Industrial Estate Road (Arm A) approach to calibrate and bring the model closer to observed conditions in the AM peak models. Similarly, a positive direct capacity adjustment of +200pcu/hr has been applied to the Abenbury Way (Arm D) approach to make the arm operate closer to observed conditions in the PM peak models. Following validation, the normal 50th percentile queue values have been reported in the future year No Development and With Development assessment scenarios, together with the average delay per PCU.

4.2.6 The results of the ARCADY model calibration assessment for the operation of the roundabout in 2026 are summarised in **Table 4.1**. The table presents the observed average busiest 15-minute queues to enable validation against the modelled queues.

[2] *A component module of TRL's Junctions 10 software*

Table 4.1 - Junction D: 2026 AM Peak Hour Baseline Validation

Approach	Modelled				Observed Queue
	RFC	Delay	50th Percentile Queue (PCU)	95th Percentile Queue (PCU)	
2026 AM Peak Hour					
Industrial Estate Road	0.53	5 secs	3	9	0
Bryn Lane	0.34	12 secs	1	5	2
Ash Road North	0.16	9 secs	1	3	0
Abenbury Way	0.26	6 secs	0	3	0
2026 PM Peak Hour					
Industrial Estate Road	0.22	4 secs	1	5	0
Bryn Lane	0.42	8 secs	1	4	0
Ash Road North	0.58	10 secs	3	9	6
Abenbury Way	0.60	23 secs	2	8	6

4.2.7 The 2026 baseline results indicates that the model validates well against the observed queueing and operation of the roundabout, and in all cases, indicates 95th percentile queue lengths that are robustly above the maximum 15 minute average queues actually observed on each arm. On this basis, the model is therefore considered suitable for use as a basis for the future year assessments.

4.3 2031 Future-Year Assessment

4.3.1 As indicated above, the validated 2026 baseline model forms the basis for the 2031 assessments.

4.3.2 **Table 4.2** compares the four 2031 AM peak assessment scenarios. The No Development results are presented alongside all three With Development scenarios to illustrate the comparative effects of each scenario.

Table 4.2 - Junction D: 2031 AM Peak Hour Results

Approach	Output	No Development	Scenario 1 MSCP only	Scenario 2 MSCP + stopping-up	Scenario 3 Stopping-up only
Industrial Estate Road	**RFC**	0.56	0.56	0.56	0.55
	Delay (s)	5 secs	5 secs	5 secs	5 secs
	Queue (PCU)	3	3	3	3
Bryn Lane	**RFC**	0.43	0.43	0.40	0.41
	Delay (s)	15 secs	15 secs	15 secs	14 secs
	Queue (PCU)	1	1	1	1
Ash Road North	**RFC**	0.16	0.16	0.13	0.13
	Delay (s)	10 secs	10 secs	10 secs	11 secs
	Queue (PCU)	1	1	1	0
Abenbury Way	**RFC**	0.27	0.27	0.31	0.30
	Delay (s)	7 secs	7 secs	7 secs	7 secs
	Queue (PCU)	1	1	1	1

4.3.3 The 2031 AM peak modelling result sindicate that queue lengths would remain generally low across all four arms, and would be largely consistent between the No Development and With Development scenarios. The junction is predicted to operate within the practical 0.85 RFC threshold, and average delays are also low.

4.3.4 Overall, the proposed MSCP access and associated stopping-up arrangements are not therefore anticipated to result in any material change to the queuing or operational performance of Junction D during the AM peak hour.

4.3.5 **Table 4.3** provides the equivalent comparison for the 2031 PM peak. The full future-year ARCADY outputs will be included in **Appendix C**.

Table 4.3 - Junction D: 2031 PM Peak Hour Results

Approach	Output	No Development	Scenario 1 MSCP only	Scenario 2 MSCP + stopping-up	Scenario 3 Stopping-up only
Industrial Estate Road	**RFC**	0.26	0.26	0.25	0.25
	Delay (s)	4 secs	4 secs	4 secs	4 secs
	Queue (PCU)	1	1	1	1
Bryn Lane	**RFC**	0.44	0.44	0.44	0.44
	Delay (s)	8 secs	8 secs	9 secs	8 secs
	Queue (PCU)	1	1	1	1
Ash Road North	**RFC**	0.60	0.60	0.62	0.51
	Delay (s)	11 secs	11 secs	10 secs	8 secs
	Queue (PCU)	3	3	3	2
Abenbury Way	**RFC**	0.65	0.65	0.72	0.84
	Delay (s)	12 secs	12 secs	14 secs	19 secs
	Queue (PCU)	3	3	3	4

4.3.6 The 2031 PM peak modelling results again indicate that queue lengths would remain generally low across all four arms, and would be largely consistent between the No Development and With Development scenarios. The junction is predicted to operate within the practical 0.85 RFC threshold, and average delays are also low.

4.4 Junction D Assessment Findings

4.4.1 The model results show that Junction D would operate within capacity in all the 2031 No Development and With Development scenarios, with low queue lengths and delays.

5.0 PROPOSED MSCP ACCESS ASSESSMENT

5.1 Access Layout and PICADY Model Set-Up

5.1.1 The proposed MSCP access would comprise a new priority-controlled junction on the southern side of Ash Road South, identified as Junction J in the Axis TA. The PICADY capacity assessment model of the junction is based on the proposed junction geometry shown on **Axis Drawing 5246-D10**, titled Proposed MSCP Site Access, dated 23 June 2026 and included in Appendix C of the TA.

5.1.2 The drawing shows a 6.0m-wide two-way access with 6.0m corner radii. Ash Road South forms the major road, and the MSCP access forms the minor arm. The model geometry reflects the arrangement shown on the drawing.

5.1.3 As the access has not been constructed, there is no existing access operation or queue survey against which it can be validated. The assessment therefore uses the proposed geometry and the 2031 forecast traffic flows only.

5.2 2031 Assessment Scenarios

5.2.1 The proposed access is assessed for Scenario 1 (MSCP only) and Scenario 2 (MSCP with stopping-up) in the 2031 AM and PM peaks. Scenario 1 uses the traffic flows shown on TA Figures E29 and E30, whilst Scenario 2 uses the traffic flows shown on TA Figures F37 and F38.

5.2.2 The proposed access does not form part of the No Development scenario or Scenario 3, and so no capacity model of the proposed MSCP access is therefore required for those cases. In Scenario 3, Ipsen traffic would continue to use the existing access points, with affected journeys rerouted around the stopped-up section of Ash Road North.

5.2.3 **Tables 5.1** and **5.2** summarise the 2031 AM and PM peak results, respectively, allowing the operation of the access both with and without the stopping-up to be compared. The full PICADY outputs are in **Appendix E**.

Table 5.1 - Proposed MSCP Access: 2031 AM Peak Hour Results

Movement / stream	Measure	Scenario 1 MSCP only	Scenario 2 MSCP + stopping-up
Ash Road South: right turn into MSCP	**RFC**	0.40	0.36
	Delay (seconds)	8 secs	8 secs
	Queue (PCU)	1	1
MSCP access: shared left / right exit	**RFC**	0.02	0.02
	Delay (seconds)	6 secs	6 secs
	Queue (PCU)	0	0

Table 5.2 - Proposed MSCP Access: 2031 PM Peak Hour Results

Movement / stream	Measure	Scenario 1 MSCP only	Scenario 2 MSCP + stopping-up
Ash Road South: right turn into MSCP	**RFC**	0.02	0.02
	Delay (seconds)	6 secs	6 secs
	Queue (PCU)	0	0
MSCP access: shared left / right exit	**RFC**	0.23	0.22
	Delay (seconds)	8 secs	8 secs
	Queue (PCU)	0	0

5.3 MSCP Access Assessment Findings

5.3.1 The results for Scenario 1 (MSCP only) and Scenario 2 (MSCP with stopping-up) shows that the junction would operate with minimal queues and delays in the 2031 AM and PM peaks.

6.0 SUMMARY AND CONCLUSIONS

6.1 Summary

6.1.1 This HTN has been prepared to respond to the LHA consultation comments, dated 9 October 2026, on applications **P/2026/0487** (landscaped and pedestrianised area / stopping-up) and **P/2026/0488** (MSCP and associated access) on land on and around the Ipsen Biopharm campus in Wrexham Industrial Estate.

6.1.2 This HTN seeks to address the three key matters identified by the LHA;

i) The requirement for a speed management scheme on Ash Road South;

ii) The operational capacity performance of 'Junction D' (the Industrial Estate Road / Ash Road North / Bryn Lane / Abenbury Way roundabout); and

iii) The operational capacity performance of the proposed MSCP access.

6.1.3 The traffic flow calculations set out in the submitted Transport Assessment have been utilised for the purposes of ii) and iii) above.

6.1.4 A speed management scheme has been put forward which comprises the installation of a 30mph roundel road markings, set against a red-coloured and textured backing surface, ARAF/ SLOW road markings, dragon's teeth road markings and a Vehicle Activated Sign (VAS) to help manage vehicle speeds on the westbound approach to the proposed MSCP access.

6.1.5 These measures are intended to increase driver awareness of the speed limit, reinforce the need to reduce speed and encourage drivers to travel at an appropriate speed through the area, and are respectfully put to the Council for their consideration / in-principle approval.

6.1.6 'Junction D' has been assessed using a 2026 ARCADY baseline capacity assessment model, validated against observed queues, with lane simulation used to represent lane utilisation. This model has then been taken forward to assess the 2031 No Development and With Development scenarios. The model results show that Junction D would operate within capacity in all the 2031 No Development and With Development scenarios, with low queue lengths and delays.

6.1.7 Similarly, the proposed MSCP access has been assessed using a PICADY capacity assessment model, which indicates that it would operate well within its practical capacity threshold in 2031 (for the 2 development scenarios in which it would be brought forward).

6.2 Conclusions

6.2.1 **Application P/2026/0488 - MSCP only (Scenario 1)**: The assessment indicates that the proposed MSCP and associated access would operate satisfactorily, with no material impact on Junction D and minimal queues and delays at the new MSCP access. A proportionate speed management scheme, including road markings, dragon's teeth and a westbound Vehicle Activated Sign (VAS), has been to proposed on Ash Road South to encourage compliance with the recent 30mph speed limit reduction.

6.2.2 **Cumulative Proposals (Scenario 2)**: The cumulative assessment indicates satisfactory operation of Junction D and at the proposed MSCP access. Again, the proposed speed management scheme on Ash Road South would be brought forward in this scenario.

6.2.3 **Application P/2026/0487 - Stopping-up only (Scenario 3)**: The assessment indicates that the stopping-up of Ash Road North would have no material impact on Junction D in scenario 3.

6.2.4 Having regard to the additional information and analysis put forward in this HTN, it is therefore concluded that the LHA's comments have been satisfactorily addressed, and the proposed planning application proposals are therefore commended for approval.

Figures A & B – 2031 'No Development' Baseline Flows

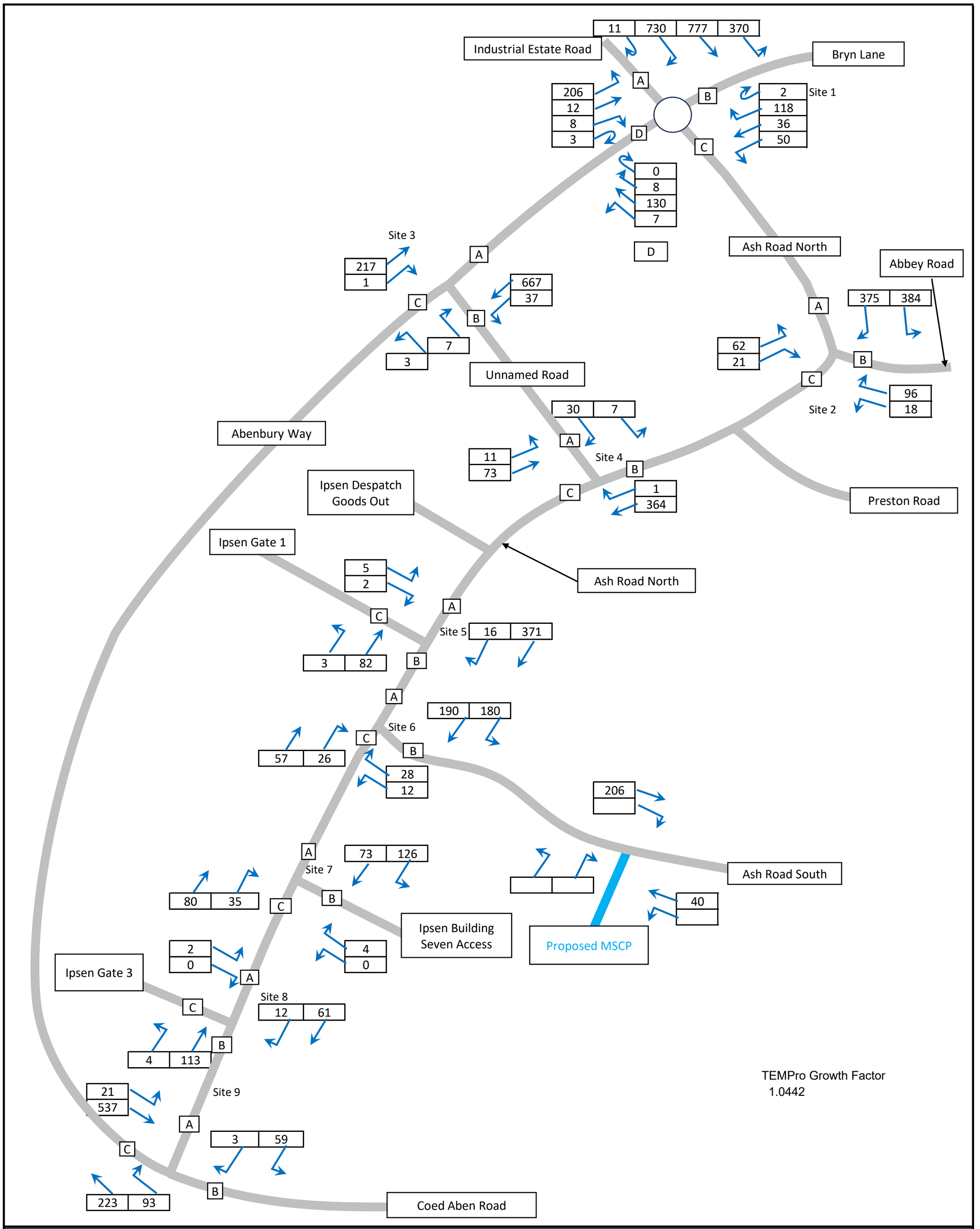


Figure: Figure A
Project Name: Proposed Multi-Storey Car Park, Ipsen BioPharm Ltd - Scenario 1
Project Number: 5246
Description: 2031 No Development
Period: AM Peak Hour (07:30 to 08:30) Traffic Flows (PCU)

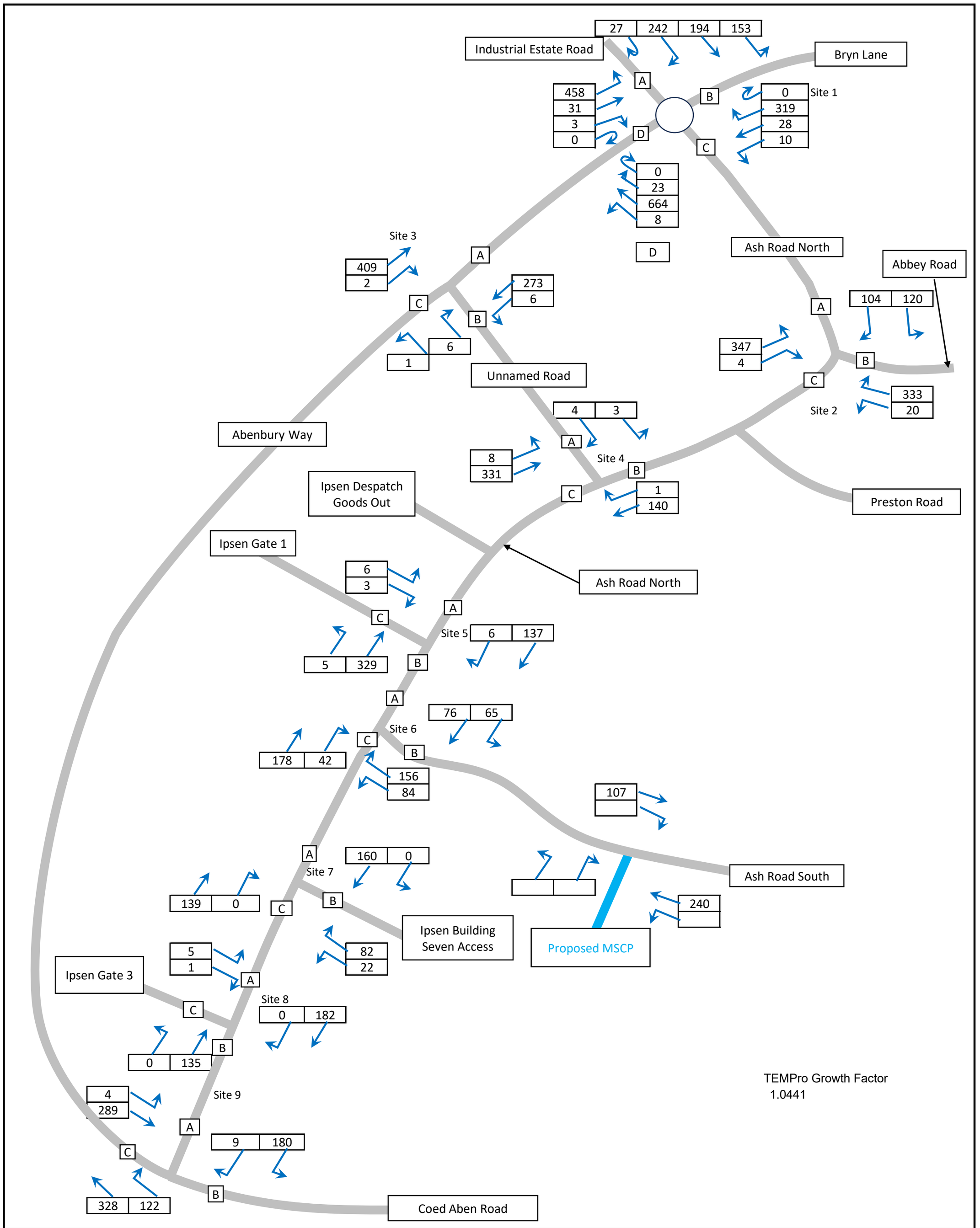


Figure: Figure B
Project Name: Proposed Multi-Storey Car Park, Ipsen BioPharm Ltd - Scenario 1
Project Number: 5246
Description: 2031 No Development
Period: PM Peak Hour (16:30 to 17:30) Traffic Flows (PCU)

Appendix A – WBC Highway Response

MEMORANDUM

From:	Chief Officer, Environment & Technical	**To:**	Chief Officer Economy & Planning
		FAO:	Jenni Perkins
Our Ref:	ET/DC/AC/P/2026/0487	**Your Ref:**	P/2026/0487
Date:	09/10/2026		

TOWN AND COUNTRY PLANNING ACT 1990

FORMATION OF LANDSCAPED AND PEDESTRIANISED AREA WITH ASSOCIATED WORKS / Creu Ardal Wedi'i Thirlunio A'i Gwneud Yn Ardal I Gerddwyr, Ynghyd Â Gweithiau Cysylltiedig

BUILDING 7, IPSEN BIOPHARM LTD, ASH ROAD NORTH, WREXHAM INDUSTRIAL ESTATE, WREXHAM, LL13 9UF

I refer to your consultation / email in respect of the above.

Scheme Overview
The applicant has submitted two related planning applications associated with the ongoing development of the Ipsen BioPharm Ltd campus at Wrexham Industrial Estate. These comprise:

- The construction of a seven-storey split-deck Multi-Storey Car Park (MSCP) providing 402 parking spaces on land to the east of Ash Road North; and
- The stopping-up of an approximately 90m section of Ash Road North located between the eastern and western elements of the Ipsen campus.

The proposed MSCP would be accessed via a new priority-controlled access junction from Ash Road South and would form part of a wider parking strategy intended to consolidate existing staff parking provision associated with the wider Ipsen campus. The Transport Assessment states that the proposal would provide a total of 565 parking spaces on the eastern side of the site and approximately 711 spaces across the wider Ipsen campus.

The stopping-up proposal seeks to remove a section of public highway between the eastern and western campus areas. The applicant states that the purpose of the stopping-up is to improve pedestrian connectivity, remove severance between the two parts of the site, improve site cohesion and rationalise internal circulation arrangements across the wider campus.

Whilst the MSCP and stopping-up proposals have been submitted as separate planning applications and will be determined on their individual merits, the Local Highway Authority (LHA) considers the proposals to be intrinsically linked from both a transport and operational perspective. The submitted Transport Assessment has therefore appropriately considered the individual and cumulative impacts of the two schemes. Accordingly, this consultation response has had regard to both applications and their interaction with one another, whilst identifying application-specific requirements where relevant.

The submitted Transport Assessment considers the transport implications of the proposal both individually and cumulatively, assessing the following scenarios:

- Scenario 1 – MSCP only
- Scenario 2 – MSCP and stopping-up of Ash Road North
- Scenario 3 – Stopping-up of Ash Road North only

The applicant's overarching position is that the proposals do not generate significant new vehicular trips but instead result in the reassignment and redistribution of existing traffic associated with the operation of the wider Ipsen campus and surrounding highway network.

Overview of Highway Network
The application site is located within the Wrexham Industrial Estate. The surrounding highway network is industrial in nature serving a range of employment, manufacturing, distribution and commercial uses. Vehicular access to the wider industrial estate is provided via a network of distributor and local access roads including Ash Road North, Ash Road South, Abenbury Way, Industrial Estate Road and Bryn Lane.

The transport assessment identifies a number of junctions for detailed consideration. These are shown in the table below :

Ref	Junction Description
A	Ash Road North / Unnamed Road
B	Unnamed Road / Abenbury Way
C	Ash Road North / Abenbury Way
D	Abenbury Way / Ash Road North / Bryn Lane / Industrial Estate Road Roundabout
E	Ipsen Despatch Goods Out
F	Ipsen Gate 1
G	Ash Road North / Ash Road South
H	Building 7 Access
I	Ipsen Gate 3
J	Proposed MSCP Access

The key junctions affected by the proposals are considered to be Junction G (Ash Road North / Ash Road South), Junctions B and C (Ash Road North / Abenbury Way), Junction D (Abenbury Way / Ash Road North / Bryn Lane / Industrial Estate Road Roundabout) and the proposed MSCP access. These junctions form the principal routes through which reassigned traffic would be redistributed under the stopping-up scenarios which are discussed later in this response.

Ash Road North
Ash Road North forms one of the principal estate roads within the industrial estate, connecting North Road in the south-west with the Abenbury Way / Bryn Lane / Industrial Estate Road roundabout in the north-east. Within the vicinity of the application site the road comprises a two-way single carriageway approximately 7.5m in width with footways on both sides of the highway. The road is subject to a 30mph speed limit and benefits from a system of street lighting.

The section of Ash Road North proposed to be stopped up lies between the eastern and western elements of the Ipsen campus and currently functions as part of the publicly adopted highway network, accommodating general industrial estate traffic, staff traffic and public transport services.

Ash Road South
Ash Road South is a two-way industrial estate road extending east-west between its junction with Ash Road North and industrial estate roads to the east. The carriageway width is approximately 7.3m and the road is currently subject to a 30mph speed restriction. Footway provision is available on parts of the northern side of the carriageway, although footway provision is more limited on the southern side in the vicinity of the site.

The proposed MSCP access would be formed from Ash Road South and therefore the operational characteristics of this road are of particular relevance to the assessment.

Automatic Traffic Counts (ATCs) were undertaken on Ash Road South between 15 April 2026 and 21 April 2026 to establish existing traffic speeds in the vicinity of the proposed access. The observed 85th percentile speeds recorded were:

- Eastbound – 34.8mph
- Westbound – 37.8mph

Abenbury Way and Industrial Estate Road

Abenbury Way and Industrial Estate Road perform an important distributor function within the industrial estate and provide connections between the various employment areas and strategic routes serving the wider estate. The submitted assessment indicates that these routes would accommodate a significant proportion of reassigned traffic associated with the stopping-up of Ash Road North. In particular, traffic currently passing through the stopped-up section of Ash Road North is forecast to reroute via the Abenbury Way / Ash Road North / Bryn Lane / Industrial Estate Road roundabout.

Public Transport

The assessment identifies that Arriva Service 41 currently operates through the industrial estate using Ash Road North. The proposed stopping-up would necessitate a diversion of the existing bus route and the relocation of existing bus stops. The applicant proposes that the diverted route would operate via Ash Road South and adjacent estate roads, maintaining access to the industrial estate whilst avoiding the stopped-up section of highway.

Initial Highway Context

From a highway perspective, the proposals affect a network of established industrial estate roads operating within a 30mph environment. Whilst the proposed MSCP access is concentrated on Ash Road South, the stopping-up proposal has implications for the wider operation of the highway network, particularly at the Ash Road North / Abenbury Way junctions and the Abenbury Way / Ash Road North / Bryn Lane / Industrial Estate Road roundabout where reassigned traffic is forecast to concentrate. These locations therefore form the primary focus of the subsequent traffic impact assessment.

Access Strategy

The proposed MSCP would be accessed via a new priority-controlled junction on Ash Road South. The applicant has assessed the visibility requirements associated with the proposed access using speed survey data collected on Ash Road South.

The submitted speed surveys recorded 85th percentile vehicle speeds of 34.8mph eastbound and 37.8mph westbound. It should be noted that the surveys were undertaken shortly after the speed limit on Ash Road South was reduced from 40mph to 30mph and therefore represent traffic conditions observed during this transitional period.

The submitted access drawing demonstrates visibility splays of 2.4m x 50.7m to the west and 2.4m x 58m to the east. The LHA notes that these visibility splays have been derived using the applicant's adopted methodology and are less than those which would be required if assessed strictly against the recorded survey speeds in accordance with TAN 18. The applicant has not demonstrated that visibility splays commensurate with the recorded westbound 85th percentile speed of 37.8mph can be achieved in accordance with TAN 18.

Notwithstanding the above, the LHA acknowledges that the speed survey was undertaken shortly after the implementation of the revised 30mph speed limit and therefore during a period in which driver behaviour may not yet have fully adjusted to the lower speed environment. On this basis, and given the recent introduction of the reduced speed limit, the LHA is satisfied that the proposed visibility splays may be accepted in principle.

However, the proposed development would introduce a new access serving a 402-space multi-storey car park and would result in a significant concentration of vehicle movements at this location. In accordance with the principles of TAN 18, the LHA considers it necessary to ensure that vehicle speeds in the vicinity of the proposed access are consistent with the design assumptions adopted within the submitted assessment.

Accordingly, the applicant should provide details of a speed management scheme to encourage compliance with the 30mph speed limit on Ash Road South in the vicinity of the proposed access. The submission should demonstrate how vehicle speeds will be reduced and managed, together with details of the proposed measures and evidence of their anticipated effectiveness.

Subject to the submission and implementation of an acceptable speed management scheme, the LHA raises no objection in principle to the proposed access arrangement.

Parking Provision and Site Layout
The proposed development comprises a seven-storey split-deck multi-storey car park providing 402 parking spaces. The proposal forms part of a wider parking strategy for the Ipsen campus, with the applicant setting out the justification for the proposed level of parking provision within Section 4.2 of the Transport Assessment.

The proposed MSCP would be accessed from Ash Road South and would become the principal parking facility serving the eastern campus. The submitted Transport Assessment states that the development would consolidate existing parking demand currently distributed across a number of accesses including Ipsen Gate 1, Building 7 Access and Ipsen Gate 3. As such, the proposal primarily seeks to rationalise existing parking arrangements rather than create a substantial increase in parking demand.

Site Layout
The submitted drawings indicate that vehicle circulation is provided via a series of internal ramps serving the various parking levels. The layout incorporates standard parking spaces, accessible parking provision, electric vehicle charging facilities, motorcycle parking and associated pedestrian routes.

The LHA is satisfied that, in principle, the proposed layout provides sufficient space for internal vehicle circulation and manoeuvring.

Vehicle Tracking
Swept path drawings have been submitted demonstrating vehicle access to and from the development.

The submitted tracking indicates that vehicles can enter and exit the site safely and manoeuvre within the proposed layout without encroaching onto opposing traffic lanes or conflicting with fixed infrastructure.

The LHA is satisfied that the submitted tracking demonstrates that the proposed access can accommodate the design vehicle identified by the applicant**.**

Pedestrian Environment
The submitted layout includes pedestrian routes between the MSCP and the wider Ipsen campus. The LHA notes that pedestrian movements will occur between the proposed MSCP, surrounding parking areas and the existing site buildings.

The submitted information demonstrates that pedestrian access can be provided throughout the development and the LHA raises no fundamental concerns regarding the proposed internal pedestrian arrangements.

Any assessment of wider pedestrian connectivity benefits associated with the stopping-up of Ash Road North should be considered as part of the separate stopping-up application.

Highway Authority Position
The LHA is satisfied that the proposed parking provision has been considered within the submitted Transport Assessment and that, in principle, the proposed MSCP layout appears capable of operating safely from a highway perspective.

Swept path information has been provided demonstrating that vehicles can safely enter, exit and manoeuvre within the site and no significant concerns are raised regarding the internal layout or parking arrangement.

Subject to the access arrangements, vehicle speed environment and wider traffic impacts discussed elsewhere in this response, no highway concerns are raised in relation to the parking provision, servicing arrangements or internal layout of the proposed MSCP.

Traffic Impact Assessment
The applicant has undertaken a series of junction turning count surveys and applied a traffic reassignment methodology to assess the implications of the proposed development. The assessment is based on the principle that the proposals do not generate significant new vehicular trips but instead redistribute existing traffic associated with the operation of the wider Ipsen campus and surrounding highway network. The LHA agrees with the applicant's conclusion that the proposals are not anticipated to generate a material increase in vehicle trips and instead principally result in the redistribution of existing traffic associated with the Ipsen campus.

The following junctions have been included within the assessment:

Ref	Junction Description
A	Ash Road North / Unnamed Road
B	Unnamed Road / Abenbury Way
C	Ash Road North / Abenbury Way
D	Abenbury Way / Ash Road North / Bryn Lane / Industrial Estate Road Roundabout
E	Ipsen Despatch Goods Out
F	Ipsen Gate 1
G	Ash Road North / Ash Road South
H	Building 7 Access
I	Ipsen Gate 3
J	Proposed MSCP Access

The submitted assessment considers three scenarios:

- Scenario 1 – MSCP Only
- Scenario 2 – MSCP and Stopping-Up of Ash Road North
- Scenario 3 – Stopping-Up of Ash Road North Only

The LHA has reviewed the submitted methodology and acknowledges that the reassignment exercise allows the redistribution of traffic to be understood. However, the assessment does not include operational capacity modelling of the junctions most affected by the redistribution of traffic.

Scenario 1 – MSCP Only
Scenario 1 assesses the impact of the proposed MSCP in isolation, with Ash Road North remaining open to vehicular traffic.

Under this scenario, parking-related traffic currently accessing the site via Ipsen Gate 1 (Junction F), Building 7 Access (Junction H) and Ipsen Gate 3 (Junction I) is reassigned to the proposed MSCP access on Ash Road South. The applicant concludes that there would be limited impact on the wider highway network as the proposals principally consolidate existing staff parking movements.

The submitted assessment indicates that existing parking movements are removed from the current Ipsen access points and reassigned to the proposed MSCP access. The results are shown in the table below.

Junction	Forecast Impact
Junction F – Ipsen Gate 1	Reduction in parking-related traffic
Junction H – Building 7 Access	Significant reduction in parking-related traffic
Junction I – Ipsen Gate 3	Reduction in parking-related traffic
Junction J – Proposed MSCP Access	Significant increase in parking-related traffic
Junctions A, B, C and D	Limited change forecast
Junction G	Limited change forecast

The table below shows the estimated vehicles movements in the AM and PM peak hours extracted from Appendix E or the TA.

Arm	AM	PM
Ash Road South (Right Turn In)	188	11
Ash Road South (Left Turn In)	0	0
MSCP Access (Left Turn Out)	12	115
MSCP Access Right Turn Out	0	0

The submitted assessment demonstrates that the principal impact of Scenario 1 is concentrated at the proposed MSCP access with a high level of traffic accessing the site in the AM peak hour and 115 in the PM peak hour.

Whilst the proposals are presented as a reassignment of existing parking demand, the new access would become the principal point of ingress and egress for a significant proportion of staff parking traffic. The LHA notes that no junction capacity assessment or operational modelling has been provided to demonstrate that the proposed priority junction can accommodate the forecast turning movements during peak periods.

Consequently, whilst no significant concerns are raised regarding the wider highway network under Scenario 1, further assessment of the operation of the proposed MSCP access is considered necessary and junction modelling assessments should be undertaken.

Scenario 2 – MSCP and Stopping-Up of Ash Road North

Scenario 2 assesses the combined impact of the proposed MSCP and the stopping-up of Ash Road North and represents the worst-case traffic scenario considered within the Transport Assessment.

This scenario combines:

- Reassignment of parking demand to the proposed MSCP;
- Redistribution of existing through traffic currently using Ash Road North; and
- Redistribution of turning movements that would no longer be possible following the stopping-up of the highway.

The LHA considers this to be the critical assessment scenario.

The submitted assessment removes a number of existing movements from Junction G (Ash Road North / Ash Road South), including:

- Northbound through movements;
- Southbound through movements;
- Northbound right-turn movements onto Ash Road South; and
- Southbound left-turn movements onto Ash Road South.

The applicant then reassigns these trips through alternative routes within the industrial estate, principally via:

- Junction B: (Unnamed Road / Ash Road North);
- Junction C: (Ash Road North / Abenbury Way); and

- Junction D: (Abenbury Way / Ash Road North / Bryn Lane / Industrial Estate Road Roundabout).

As with Scenario 1, the LHA requests that junction modelling be undertaken at the MSCP access.

The submitted assessment demonstrates marginal changes in junction movements with the greatest changes in traffic flows generally occurring on the principal routes through the industrial estate.

- Junction A: Abenbury Way / Unnamed Road
- Junction B: Unnamed Road / Ash Road North
- Junction C: Ash Road / Coed Aben Road
- Junction G: Ash Road North / Ash Road South

The LHA has reviewed the reassignment figures and notes that, whilst increases in traffic are identified at Junctions A, B and C, together with changes in turning movements at Junction G, these changes are not considered likely to result in significant operational impacts on the surrounding highway network

Junction D – Abenbury Way / Ash Road North / Bryn Lane / Industrial Estate Road Roundabout
The submitted reassignment figures indicate that Junction D experiences the greatest concentration of redistributed traffic within the study area. This junction effectively becomes the principal redistribution point for movements no longer able to travel directly through Ash Road North and therefore represents the most sensitive location within the submitted highway network assessment.

Arm	AM			PM		
	Existing	Proposed	% Increase	Existing	Proposed	% Increase
Industrial Estate Road	1809	1809	0	591	591	0
Bryn Lane	198	198	0	342	342	0
Ash Road North	139	105	-34	666	592	-74
Abenbury Way	220	265	45	471	553	82

The LHA acknowledges that the overall changes in traffic flow across the network are relatively modest when considered at a network-wide level. However, the submitted reassignment exercise identifies changes in the distribution of traffic between individual junction arms and movements. In particular, the reassignment of traffic from Ash Road North results in changes to the balance of traffic flows at Junction D which, as discussed above, is recognised as a sensitive junction and is known to experience periods of operational stress.

The LHA notes that TAN 18 identifies a 5% change in traffic flow as a threshold at which the effects of development traffic may require further consideration. Whilst the overall traffic increase at the roundabout is limited, the submitted reassignment exercise demonstrates material changes in the distribution of traffic between the roundabout arms, particularly between the Ash Road North and Abenbury Way approaches.

Whilst the reassignment exercise demonstrates where traffic is redistributed, no junction capacity assessment or operational modelling has been provided to demonstrate the effect of these changes on the operation of the roundabout. Accordingly, the LHA considers that a junction capacity assessment should be undertaken for Junction D (Abenbury Way / Ash Road North / Bryn Lane / Industrial Estate Road Roundabout) in order to demonstrate that the revised traffic distribution can be accommodated without resulting in unacceptable operational impacts. This information is required before the LHA can support the conclusions of the submitted Transport Assessment.

Scenario 3 – Stopping-Up of Ash Road North Only
Scenario 3 assesses the stopping-up proposal without construction of the proposed MSCP.

Under this scenario, the existing Ipsen access arrangements remain unchanged. However, traffic currently travelling through the section of Ash Road North proposed to be stopped up is diverted onto alternative routes within the industrial estate.

The results of Scenario 3 demonstrate that the principal highway impacts arise from the stopping-up proposal rather than the proposed MSCP itself. Similar to Scenario 2, traffic is reassigned away from Ash Road North and redistributed through Junctions B, C and D, with Junction D acting as the principal redistribution point within the local highway network.
The LHA acknowledges that the overall changes in traffic flow across the network are relatively modest when considered at a network-wide level. However, the submitted reassignment exercise identifies changes in the distribution of traffic between individual junction arms and movements. In particular, the reassignment of traffic from Ash Road North results in changes to the balance of traffic flows at Junction D which as stated above is recognised as a sensitive junction and is known to experience periods of operational stress.

Whilst the submitted assessment quantifies the reassigned traffic movements, no junction capacity assessment or operational modelling has been provided to demonstrate the effect of these changes on the operation of the affected junctions. Consequently, the LHA is unable to determine whether the revised distribution of traffic would result in increased queueing, delay or other operational impacts.

Accordingly, consistent with the conclusions reached for Scenario 2, the LHA considers that a junction capacity assessment should be undertaken for Junction D (Abenbury Way / Ash Road North / Bryn Lane / Industrial Estate Road Roundabout) to demonstrate that the revised traffic distribution can be accommodated without resulting in unacceptable operational impacts. This information is required before the LHA can support the conclusions of the submitted Transport Assessment.

Traffic Impact Summary
The LHA accepts the applicant's conclusion that the proposals are principally redistributive in nature and are not expected to generate a material increase in vehicle trips. The submitted reassignment exercise clearly demonstrates how existing traffic would be redistributed across the local highway network under each scenario.

In respect of Scenario 1, the principal highway impact relates to the concentration of parking-related traffic at the proposed MSCP access. The LHA therefore requires a junction capacity assessment of the proposed access to demonstrate that it can safely and satisfactorily accommodate the forecast turning movements.

In respect of Scenarios 2 and 3, the LHA accepts that the overall increase in traffic across the wider highway network is relatively modest. However, the stopping-up proposals result in a redistribution of traffic, with Junction D (Abenbury Way / Ash Road North / Bryn Lane / Industrial Estate Road Roundabout) becoming the principal redistribution point within the network. Given the sensitivity of this junction and the changes in turning proportions identified within the submitted assessment, the LHA considers that junction capacity modelling should be undertaken to demonstrate that the revised traffic distribution can be accommodated without resulting in unacceptable operational impacts.

Until this information has been provided and assessed, the LHA cannot be satisfied that the submitted Transport Assessment has fully demonstrated the operational impacts of the proposals on the local highway network and therefore cannot support its conclusions.

Summary and Conclusions
Summary
The LHA has reviewed the submitted Transport Assessment and acknowledges that the applicant has undertaken a comprehensive traffic reassignment exercise to assess the impacts of both the proposed MSCP and the stopping-up of Ash Road North. The assessment clearly demonstrates that the proposals are primarily redistributive in nature and are not anticipated to generate a material increase in vehicle trips associated with the wider Ipsen campus.

In respect of the proposed MSCP, the LHA is satisfied that the principle of the proposed parking provision, internal layout and vehicle tracking arrangements are acceptable. The proposed access arrangement is also considered acceptable in principle. Whilst the visibility splays shown are less than those which would be required based on the recorded survey speeds when assessed strictly against TAN 18 standards, it is acknowledged that the speed surveys were undertaken shortly after the reduction in the speed limit on Ash Road South from 40mph to 30mph. Consequently, the LHA is prepared to accept the proposed visibility splays in principle. However, a speed management scheme should be provided to demonstrate how vehicle speeds in the vicinity of the proposed access will be reduced and managed to align with the design assumptions adopted within the submitted assessment.

In respect of traffic impact, the LHA agrees with the applicant's conclusion that the proposals do not generate significant new traffic. However, Scenario 1 results in the concentration of a substantial proportion of existing parking-related traffic at the proposed MSCP access. Given the forecast peak hour turning movements associated with the proposed development, the LHA considers that junction capacity modelling should be undertaken at the proposed MSCP access to demonstrate that it can operate satisfactorily and safely during peak periods.

The LHA also acknowledges that the reassignment of traffic associated with the stopping-up proposal results in relatively modest changes in overall traffic flows when considered across the wider highway network. Nevertheless, the submitted assessment demonstrates material changes in the distribution of traffic between individual junction arms and movements, particularly at Junction D (Abenbury Way / Ash Road North / Bryn Lane / Industrial Estate Road Roundabout), which becomes the principal redistribution point within the network. The LHA is aware that this junction is sensitive to changes in traffic demand and turning proportions and already experiences periods of operational stress. Consequently, even modest changes in the balance of movements may result in changes to queueing, delay and overall junction performance.

Whilst the Transport Assessment successfully identifies where traffic is reassigned throughout the network, it does not include any junction capacity assessment or operational modelling of either the proposed MSCP access or Junction D. In the absence of this information, it has not been demonstrated that the revised traffic distribution can be accommodated without resulting in unacceptable operational impacts on the surrounding highway network.

Conclusion

The LHA therefore requests the following additional information:

- A speed management scheme for Ash Road South in the vicinity of the proposed MSCP access.
- Junction capacity modelling of the proposed MSCP access.
- Junction capacity modelling of Junction D (Abenbury Way / Ash Road North / Bryn Lane / Industrial Estate Road Roundabout).

Until this information has been provided and assessed, the LHA cannot be satisfied that the submitted Transport Assessment has fully demonstrated the operational impacts of the proposals on the local highway network and therefore cannot support the conclusions of the submitted Transport Assessment.

Appendix

Highways Development Control Standard Advisory Note

In the interests of maintaining highway safety, and to avoid obstruction of the public highway (in contravention of the Highways Act), The Applicant is advised to coordinate with the highway authority at highwayroadworks@wrexham.gov.uk in advance of commencement of the development/works with respect to:

1. *Skip, scaffolding, hoarding or A frame/signage (Permit required for these items, if on the public highway);*
2. *Use of a parking space for a set down/delivery area;*
3. *Record a dilapidation survey of the adjacent carriageway prior to commencement (to avoid being ask to repair damage by the Applicant whilst carrying out their works);*
4. *If any lane closure or obstruction of the highway is required for a crane or similar;*
5. *Protection against dust and debris blowing onto the public highway*
6. *Construction traffic parking locally avoiding nuisance to others;*
7. *If the Applicant's scope of work includes new apparatus in the highway, such as new mains services then a Section 50 licence will be required. Insurances and demonstration of competency to carry out works in the public highway will be required.*
8. *Lowering of kerbs or minor pavement alterations require Section 184 agreement. Insurances and demonstration of competency to carry out works in the public highway will be required.*
9. *A section 278 agreement works agreement is required for more significant alterations to the existing highway*
10. *Any temporary works affecting traffic lights, [pedestrian/cycle road crossings, or bus stops require pre-planning and permits;*
11. *For applications with a private driveway (either existing or proposed) connecting onto the public highway, the following conditions of approval apply:*

    - *No surface water from the applicants site should be allowed to drain onto the public highway,*
    - *The first 5m* minimum (for residential property) should be hard paved, avoiding gravel or loose chippings form spreading.*
    - *No gate should be built in a location where it would result in a car obstructing the highway whilst being unlocked, and it should not swing out and over a pavement or any other part of the highway.*

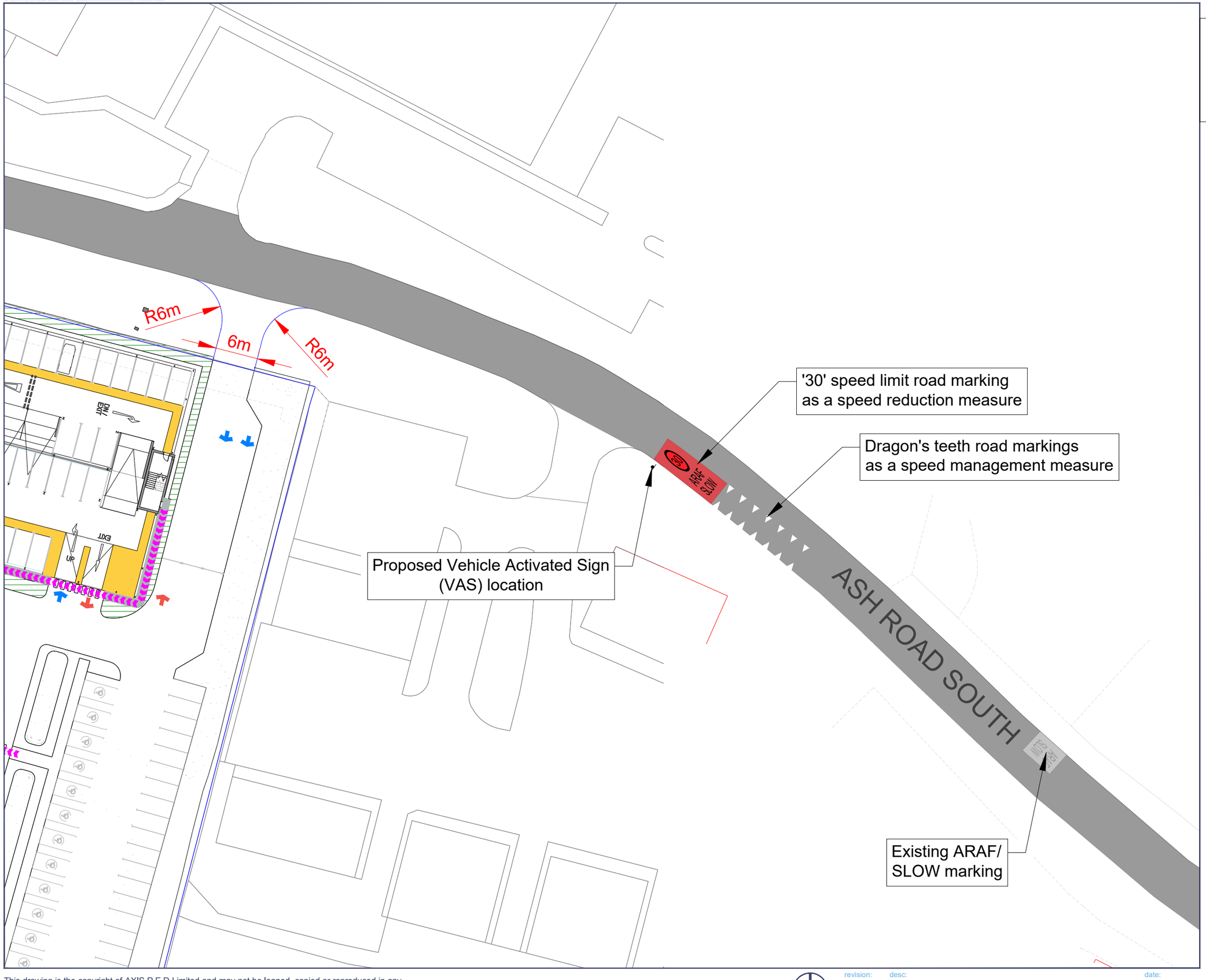
    **The hard paved length and set back if required is subject to the applicants proposed vehicular length*

The applicants should allow a minimum of 4 weeks' notice for any of the above standard requirements, and 6-8 weeks for lane closures & road closures (lead times may change without notice subject to workload and complexity). Any works involving Trunk roads should be coordinated separately and directly with the North & Mid Wales trunk Road Agency. For larger sites with a significant impact upon the highway, a Construction Traffic Management Plan will be required.



Appendix B – Drawing 5246-D11 – Proposed Speed Management Scheme

Q:\5201-525\5246 Ipsen MSCP\Dwgs\CAD\XXXX-XX-X05 - Design.dwg



Key:

- Existing Carriageway
- Coloured Surface Treatment

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2026 Ordnance Survey AC0000808122

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revision: desc: date:

0 10 20 30 40 50m

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Client
Ipsen BioPharm Ltd

Project
Land at Ash Road North, WrexhamIndustrial Estate

Drawing Title
Proposed Speed Management Scheme

Scale	Status
1:500 @A3	Preliminary

Date	Drawn	Checked
26/10/2026	RB	LK

Dwg no **5426-D11** Rev

Appendix C – Observed Queues at Junction D

17990 / WREXHAM INDUSTRIAL ESTATE
APRIL 2026
QUEUE LENGTH SURVEY

SITE: 1 DATE: 15/04/2026

LOCATION: Industrial Estate Road / Bryn Lane / Ash Road North / Abenbury Way DAY: Wednesday

Notes: All queues are measured in vehicle numbers on the 5-minute interval.
Lane numbering is outwards from the kerb in the direction of travel.
When a junction is signalised, queues are taken at the end of the red phase nearest to the time interval.

	ARM A			ARM B			ARM C		ARM D		
TIME	LANE 1	LANE 2	Total Average	LANE 1	LANE 2	Total Average	LANE 1	Total Average	LANE 1	LANE 2	Total Average
06:00	0	0		0	0		0		0	0	
06:05	0	0		0	0		0		0	0	
06:10	0	0		0	0		0		0	0	
06:15	0	0		0	0		0		0	0	
06:20	0	0		0	0		0		0	0	
06:25	0	0		0	0		0		0	0	
06:30	0	0		0	0		0		0	0	
06:35	0	0		0	1		0		0	0	
06:40	0	0		0	0		0		0	0	
06:45	0	0		0	0		0		0	0	
06:50	0	0		0	2		0		0	0	
06:55	0	0		0	0		0		0	0	
07:00	0	0		0	0		0		0	0	
07:05	0	0		0	0		0		0	0	
07:10	0	0		0	0		0		0	0	
07:15	0	0		0	0		0		0	0	
07:20	0	0		0	0		0		0	0	
07:25	0	0		0	0		0		0	0	
07:30	0	0		0	0		0		0	0	
07:35	0	0	**0**	0	0	1	0	0	0	0	0
07:40	0	0		0	2		0		0	0	
07:45	0	0		0	0		0		0	0	
07:50	0	0	**0**	**3**	1	**2**	0	**0**	0	0	0
07:55	0	0		0	**3**		**1**		0	0	
08:00	0	0		2	1		0		0	0	
08:05	0	0	**0**	0	0	1	0	0	0	0	0
08:10	0	0		0	0		0		0	0	
08:15	0	0		0	0		0		0	0	
08:20	0	0	**0**	1	0	0	0	0	0	0	0
08:25	0	0		0	0		0		0	0	
08:30	0	0		0	0		0		0	0	
08:35	0	0		0	0		0		0	0	
08:40	0	0		0	0		0		0	0	
08:45	0	0		0	0		**1**		0	0	
08:50	0	0		0	0		0		0	0	
08:55	0	0		0	0		0		0	0	
09:00	0	0		0	0		0		0	0	
09:05	0	0		0	0		0		0	0	
09:10	0	0		0	1		0		0	0	
09:15	0	0		0	0		0		0	0	
09:20	0	0		0	0		0		0	0	
09:25	0	0		0	0		0		0	0	
09:30	0	0		0	0		0		0	0	
09:35	0	0		0	0		0		0	0	
09:40	0	0		0	0		0		0	0	
09:45	0	0		0	0		0		0	0	
09:50	0	0		0	0		0		0	0	
09:55	0	0		0	0		0		0	0	
10:00	0	0		0	0		0		0	0	
MAX QUEUE	**0**	**0**		**3**	**3**		**1**		**0**	**0**	

	ARM A			ARM B			ARM C		ARM D		
TIME	LANE 1	LANE 2	Total Average	LANE 1	LANE 2	Total Average	LANE 1	Total Average	LANE 1	LANE 2	Total Average
15:00	0	0		0	0		0		2	0	
15:05	0	0		0	0		1		0	0	
15:10	0	0		0	**1**		0		0	0	
15:15	0	0		0	0		0		0	0	
15:20	0	0		0	0		0		0	0	
15:25	0	0		0	0		0		0	0	
15:30	0	0		0	0		0		0	0	
15:35	0	0		0	**1**		3		0	0	
15:40	0	0		0	0		0		0	0	
15:45	0	0		0	0		0		0	0	
15:50	0	0		0	0		0		0	0	
15:55	0	0		0	0		2		0	0	
16:00	0	0		0	0		1		0	0	
16:05	0	0		0	0		3		**17**	0	
16:10	0	0		0	0		2		0	0	
16:15	0	0		0	0		0		0	0	
16:20	0	0		0	0		0		0	0	
16:25	0	0		0	0		1		0	0	
16:30	0	0		0	0		0		0	0	
16:35	0	0		0	0		5		5	0	
16:40	0	0	0	0	0	0	0	2	11	0	5
16:45	0	0		0	0		7		0	0	
16:50	0	0		0	0		2		3	0	
16:55	0	0	0	0	0	0	0	3	0	0	1
17:00	0	0		0	0		0		0	0	
17:05	0	0	0	0	**1**	**0**	0	**6**	5	**2**	**6**
17:10	0	0		0	0		**17**		12	0	
17:15	0	0		0	0		0		1	0	
17:20	0	0		0	0		0		0	0	
17:25	0	0	0	0	0	0	0	0	3	0	1
17:30	0	0		0	0		0		0	0	
17:35	0	0		0	0		0		0	0	
17:40	0	0		0	0		0		0	0	
17:45	0	0		0	0		0		0	0	
17:50	0	0		0	0		0		0	0	
17:55	0	0		0	0		0		0	0	
18:00	0	0		0	0		0		0	0	
18:05	0	0		0	0		0		0	0	
18:10	0	0		0	0		0		9	0	
18:15	0	0		0	0		0		0	0	
18:20	0	0		0	0		0		0	0	
18:25	0	0		0	0		0		0	0	
18:30	0	0		0	0		0		0	0	
18:35	0	0		0	0		0		0	0	
18:40	0	0		0	0		0		0	0	
18:45	0	0		0	0		0		0	0	
18:50	0	0		0	0		0		0	0	
18:55	0	0		0	0		0		0	0	
19:00	0	0		0	0		0		0	0	
MAX QUEUE	**0**	**0**		**0**	**1**		**17**		**17**	**2**	

Appendix D – ARCADY Outputs for Junction D

Junctions 10

ARCADY 10 - Roundabout Module

Version: 10.1.1.1905
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Filename: Ipsen Junction D (Roundabout).j10
Path: Q:\5201-5250\5246 Ipsen MSCP\Documents\Transport\Modelling
Report generation date: 27/10/2026 13:52:32

»AM - 2026, AM
»AM - 2031 No Development, AM
»AM - Scenario 1, AM
»AM - Scenario 2, AM
»AM - Scenario 3, AM
»PM - 2026, PM
»PM - 2031 No Development, PM
»PM - Scenario 1, PM
»PM - Scenario 2, PM
»PM - Scenario 3, PM

Summary of junction performance

	AM					
	Set ID	Q (PCU)	Q95 (PCU)	Delay (s)	RFC	LOS
	AM [Lane Simulation] - 2026					
Arm A	A1 D1	2.8	9.0	4.66	0.53	A
Arm B		1.0	5.0	11.69	0.34	B
Arm C		0.5	3.0	9.27	0.16	A
Arm D		0.4	3.0	6.48	0.26	A
	AM [Lane Simulation] - 2031 No Development					
Arm A	A1 D3	3.2	18.0	5.28	0.56	A
Arm B		0.8	4.0	14.86	0.43	B
Arm C		0.7	5.0	10.49	0.16	B
Arm D		0.8	4.0	6.84	0.27	A
	AM [Lane Simulation] - Scenario 1					
Arm A	A1 D5	3.2	18.0	5.28	0.56	A
Arm B		0.8	4.0	14.86	0.43	B
Arm C		0.7	5.0	10.49	0.16	B
Arm D		0.8	4.0	6.84	0.27	A
	AM [Lane Simulation] - Scenario 2					
Arm A	A1 D7	2.9	10.0	4.94	0.56	A
Arm B		1.3	6.0	14.82	0.40	B
Arm C		0.5	2.0	10.21	0.13	B
Arm D		0.6	8.0	7.48	0.31	A
	AM [Lane Simulation] - Scenario 3					
Arm A	A1 D9	2.6	9.0	4.60	0.55	A
Arm B		1.4	7.0	14.09	0.41	B
Arm C		0.4	3.0	10.55	0.13	B

Arm D		0.9	5.0	6.90	0.30	A

	PM					
	Set ID	Q (PCU)	Q95 (PCU)	Delay (s)	RFC	LOS
	PM [Lane Simulation] - 2026					
Arm A	A2 D2	1.2	5.0	3.86	0.22	A
Arm B		0.9	4.0	8.09	0.42	A
Arm C		2.9	9.0	9.57	0.58	A
Arm D		1.6	8.0	9.68	0.60	A
	PM [Lane Simulation] - 2031 No Development					
Arm A	A2 D4	1.1	8.0	3.89	0.26	A
Arm B		1.0	7.0	8.07	0.44	A
Arm C		2.5	10.0	10.88	0.60	B
Arm D		2.8	14.0	12.08	0.65	B
	PM [Lane Simulation] - Scenario 1					
Arm A	A2 D6	1.1	8.0	3.89	0.26	A
Arm B		1.0	7.0	8.07	0.44	A
Arm C		2.5	10.0	10.88	0.60	B
Arm D		2.8	14.0	12.08	0.65	B
	PM [Lane Simulation] - Scenario 2					
Arm A	A2 D8	1.0	7.0	4.01	0.25	A
Arm B		0.7	4.0	8.58	0.44	A
Arm C		3.2	9.0	9.64	0.62	A
Arm D		3.0	10.0	14.39	0.72	B
	PM [Lane Simulation] - Scenario 3					
Arm A	A2 D10	0.9	5.0	3.91	0.25	A
Arm B		0.7	4.0	8.24	0.44	A
Arm C		1.9	11.0	8.44	0.51	A
Arm D		4.4	21.0	18.99	0.84	C

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 Av. delay per arriving vehicle. Arm and junction delays are Av.s for all movements, including movements with zero delay.

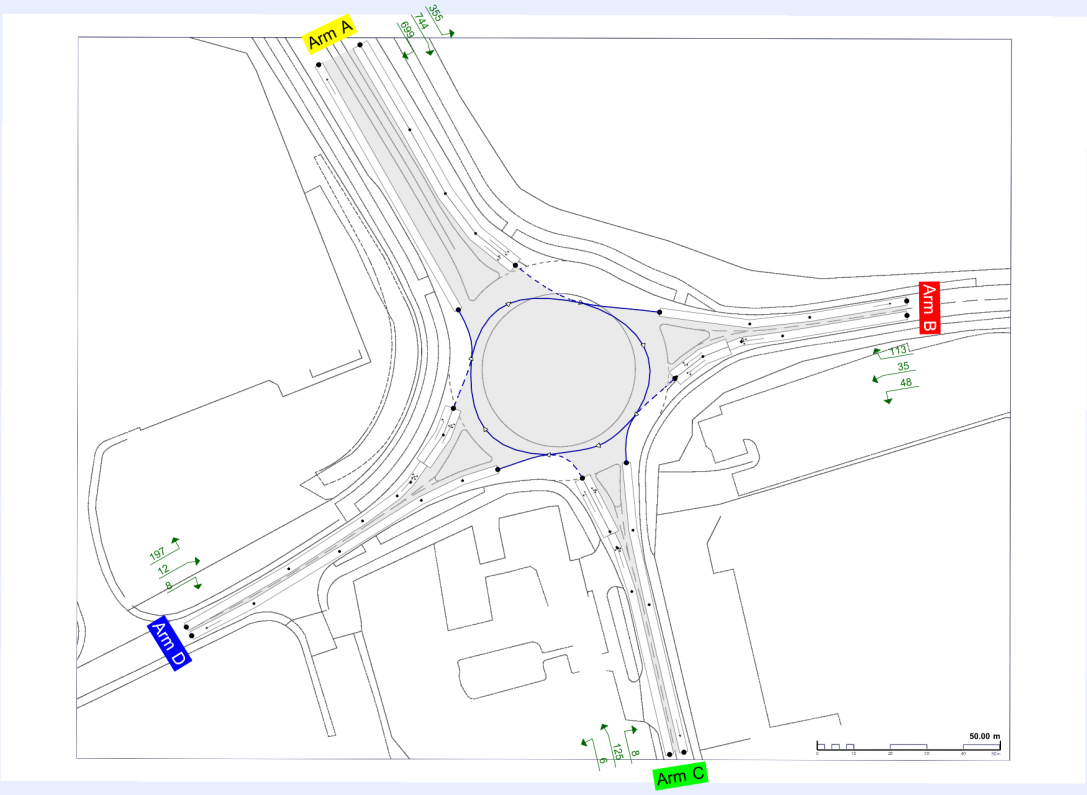
File summary

File Description

Title	Ipsen, Wrexham Indusrial Estate
Location	Wrexham Industrial Estate
Site number	
Date	19/10/2026
Version	
Status	Preliminary
Identifier	RB
Client	Ipsen BioPharm Ltd
Jobnumber	5246
Enumerator	AzureAD\AlexBannister
Description	

Units

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



Flows show original traffic demand (PCU/hr).

Lane simulation visualisation time: 07:15:00

The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Q Percentiles	Calculate detailed queueing delay	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	RFC Threshold	Av. Delay threshold (s)	Q threshold (PCU)	Use simulation for HCM roundabouts	Use iterations for HCM roundabouts
5.75	✓					0.85	36.00	20.00		

Lane Simulation options

Criteria type	Stop criteria (%)	Stop criteria time (s)	Stop criteria number of trials	Calculate RFCs	Relaxation factor for capacity/RFC runs	Random seed	Results refresh speed (s)	Individual vehicle animation number of trials	Av. animation capture interval (s)	Use quick response	Do flow sampling	Suppress automatic lane creation	Last run random seed	Last run number of trials	L r ti ta
Delay	5.00	100000	100000	Calculate for all arms	3.00	1	3	1	60	✓			1	21	1

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2026	AM	ONE HOUR	07:15	08:45	15	✓
D2	2026	PM	ONE HOUR	16:15	17:45	15	✓
D3	2031 No Development	AM	ONE HOUR	07:15	08:45	15	✓
D4	2031 No Development	PM	ONE HOUR	16:15	17:45	15	✓
D5	Scenario 1	AM	ONE HOUR	07:15	08:45	15	✓
D6	Scenario 1	PM	ONE HOUR	16:15	17:45	15	✓
D7	Scenario 2	AM	ONE HOUR	07:15	08:45	15	✓
D8	Scenario 2	PM	ONE HOUR	16:15	17:45	15	✓
D9	Scenario 3	AM	ONE HOUR	07:15	08:45	15	✓
D10	Scenario 3	PM	ONE HOUR	16:15	17:45	15	✓

AM - 2026, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Q percentiles may be unreliable if the mean queue in any time segment is very low or very high.
Info	Simulation	A1 - AM [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Analysis Set Details

ID	Name	Use Lane Simulation	Include in report	Use specific Demand Set(s)	Specific Demand Set (s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	AM	✓	✓	✓	D1,D3,D5,D7,D9	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		A, B, C, D	5.70	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.70	A

Arms

Arms

Arm	Name	Description	No give-way line
A	Industrial Estate Road		
B	Bryn Lane		
C	Ash Road North		
D	Abenbury Way		

Roundabout Geometry

Arm	V (m)	E (m)	l' (m)	R (m)	D (m)	PHI (deg)	Entry only	Exit only
A	8.59	9.82	7.6	38.4	60.0	37.6		
B	3.89	6.96	18.7	49.1	60.0	16.5		
C	3.34	7.53	19.0	11.3	60.0	40.3		
D	3.54	8.21	19.5	40.7	60.0	22.5		

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A	0.754	2840
B	0.616	1924
C	0.525	1628
D	0.617	1968

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

Arm Capacity Adjustments

Arm	Type	Reason	Direct capacity adjustment (PCU/hr)
A	Direct	Queue Observation	500

Lane Simulation: Arm options

Arm	Lane capacity source	Traffic considering secondary lanes (%)
A	Evenly split	10.00
B	Evenly split	10.00
C	Evenly split	10.00
D	Evenly split	10.00

Lanes

Arm	Side	Lane level	Lane	Destination arms	Has limited storage	Storage (PCU)	Has bottleneck	Has obstruction	Min Cap (PCU/hr)	Max Cap (PCU/hr)	Signalised
A	Entry	1	1	B, C		Infinity			0	99999	
			2	A, D		Infinity			0	99999	
	Exit	1	1			Infinity					
B	Entry	1	1	C, D	✓	3.00			0	99999	
			2	A, B	✓	3.00			0	99999	
		2	1	(A, B, C, D)		Infinity					
	Exit	1	1			Infinity					
C	Entry	1	1	A, D	✓	3.00			0	99999	
			2	A, B, C	✓	3.00			0	99999	
		2	1	(B, C, D, A)		Infinity					
	Exit	1	1			Infinity					
D	Entry	1	1	A	✓	3.00			0	99999	
			2	B, C, D	✓	3.00			0	99999	
		2	1	(A, B, C, D)		Infinity					
	Exit	1	1			Infinity					

Entry Lane slope and intercept

Arm	Side	Lane level	Lane	Final slope	Final intercept (PCU/hr)
A	Entry	1	1	0.377	1420
			2	0.377	1420
B	Entry	1	1	0.308	962
			2	0.308	962
C	Entry	1	1	0.263	814
			2	0.263	814
D	Entry	1	1	0.309	984
			2	0.309	984

Summary of Entry Lane allowed movements

Arm	Lane Level	Lane	Destination arm			
			B	C	D	A
B	1	1		✓	✓	
		2	✓			✓
	2	1	✓	✓	✓	✓
C	1	1			✓	✓
		2	✓	✓		✓
	2	1	✓	✓	✓	✓
D	1	1				✓
		2	✓	✓	✓	
	2	1	✓	✓	✓	✓
A	1	1	✓	✓		
		2			✓	✓

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2026	AM	ONE HOUR	07:15	08:45	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	1809	100.000
B		ONE HOUR	✓	198	100.000
C		ONE HOUR	✓	139	100.000
D		ONE HOUR	✓	220	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	11	355	744	699
	B	113	2	48	35
	C	125	8	0	6
	D	197	12	8	3

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To			
		A	B	C	D
From	A	0	8	4	6
	B	22	100	2	6
	C	38	33	0	20
	D	21	9	33	50

Cyclist %

		To			
		A	B	C	D
From	A	0	0	0	0
	B	0	0	0	0
	C	0	0	0	0
	D	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max Q95 (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
A	0.53	4.66	2.8	9.0	A	1639	2459
B	0.34	11.69	1.0	5.0	B	182	273
C	0.16	9.27	0.5	3.0	A	130	194
D	0.26	6.48	0.4	3.0	A	208	313

Main Results for each time segment

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	1356	339	21	3789	0.358	1359	1338	332	0.0	1.2	3.200	A
B	155	39	1086	861	0.180	159	153	294	0.0	0.1	7.489	A
C	95	24	631	1227	0.077	98	102	614	0.0	0.1	8.433	A
D	167	42	183	1014	0.164	169	165	545	0.0	0.1	5.238	A

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	1570	392	30	3812	0.412	1569	1588	435	1.2	1.5	3.789	A
B	202	50	1271	847	0.238	198	174	328	0.1	1.0	9.332	A
C	137	34	775	1188	0.115	137	127	694	0.1	0.3	7.780	A
D	200	50	261	1019	0.196	203	211	650	0.1	0.3	5.925	A

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	1979	495	46	3755	0.527	1980	1975	531	1.5	2.8	4.367	A
B	230	58	1617	674	0.342	234	223	409	1.0	0.5	11.558	B
C	175	44	972	1079	0.163	175	148	878	0.3	0.4	9.275	A
D	259	65	322	992	0.261	254	239	823	0.3	0.4	6.382	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	1995	499	36	3804	0.525	1991	1995	498	2.8	2.0	4.659	A
B	204	51	1606	691	0.295	203	210	421	0.5	0.9	11.686	B
C	151	38	935	1133	0.133	151	150	874	0.4	0.4	8.677	A
D	255	64	278	1037	0.246	256	244	809	0.4	0.3	6.482	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	1583	396	35	3791	0.418	1590	1613	399	2.0	1.4	3.913	A
B	169	42	1289	824	0.205	177	175	335	0.9	0.5	9.212	A
C	122	31	729	1152	0.106	123	129	737	0.4	0.5	7.886	A
D	204	51	230	1006	0.203	203	206	622	0.3	0.4	5.962	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	1353	338	15	3801	0.356	1350	1354	335	1.4	1.3	3.370	A
B	133	33	1087	906	0.146	136	136	278	0.5	0.2	7.114	A
C	97	24	632	1207	0.080	104	107	590	0.5	0.2	7.222	A
D	166	41	187	1059	0.156	164	151	550	0.4	0.3	5.346	A

Q Variation Results for each time segment

07:15 - 07:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	1.19	0.00	0.08	2.90	7.00
B	0.14	0.00	0.00	1.00	1.00
C	0.14	0.00	0.00	-0.10	2.00
D	0.14	0.00	0.00	1.00	1.00

07:30 - 07:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	1.48	0.00	0.44	2.80	6.00
B	1.02	0.00	0.31	3.00	3.00
C	0.33	0.00	0.00	2.00	2.00
D	0.29	0.00	0.00	2.00	2.00

07:45 - 08:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	2.82	0.00	1.75	5.45	9.00
B	0.52	0.00	0.00	2.00	2.00
C	0.43	0.00	0.00	2.00	2.00
D	0.38	0.00	0.00	2.00	2.00

08:00 - 08:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	2.00	0.00	0.70	4.80	8.00
B	0.90	0.00	0.00	3.00	3.00
C	0.38	0.00	0.00	0.90	3.00
D	0.33	0.00	0.00	0.90	3.00

08:15 - 08:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	1.43	0.00	0.83	2.78	4.00
B	0.48	0.00	0.00	0.78	5.00
C	0.52	0.00	0.00	2.00	2.00
D	0.43	0.00	0.00	3.00	3.00

08:30 - 08:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	1.29	0.00	0.64	2.45	4.00
B	0.19	0.00	0.00	1.00	1.00
C	0.19	0.00	0.00	0.45	2.00
D	0.29	0.00	0.00	0.90	3.00

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

07:15 - 07:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	843	1912	0.441	849	808	0.0	0.6	3.487	A
			2	A, D	513	1912	0.268	511	529	0.0	0.6	2.757	A
	Exit	1	1		332			332	333	0.0	0.0	0.000	A
B	Entry	1	1	C, D	73	628	0.117	75	66	0.0	0.0	7.197	A
			2	A, B	82	628	0.131	83	87	0.0	0.1	7.520	A
		2	1	(A, B, C, D)	155			155	153	0.0	0.0	0.119	A
	Exit	1	1		294			294	272	0.0	0.0	0.000	A
C	Entry	1	1	A, D	49	648	0.075	50	50	0.0	0.1	7.811	A
			2	A, B, C	45	648	0.070	47	53	0.0	0.0	9.019	A
		2	1	(B, C, D, A)	95			95	103	0.0	0.0	0.000	A
	Exit	1	1		614			614	596	0.0	0.0	0.000	A
D	Entry	1	1	A	149	927	0.160	151	146	0.0	0.1	5.265	A
			2	B, C, D	18	927	0.019	18	19	0.0	0.0	4.255	A
		2	1	(A, B, C, D)	167			167	165	0.0	0.0	0.078	A
	Exit	1	1		545			545	556	0.0	0.0	0.000	A

07:30 - 07:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	949	1909	0.497	954	966	0.6	0.8	4.221	A
			2	A, D	621	1909	0.325	615	622	0.6	0.7	3.111	A
	Exit	1	1		435			435	420	0.0	0.0	0.000	A
B	Entry	1	1	C, D	76	571	0.133	75	64	0.0	0.2	7.292	A
			2	A, B	124	571	0.217	122	110	0.1	0.8	10.415	B
		2	1	(A, B, C, D)	202			202	178	0.0	0.0	0.200	A
	Exit	1	1		328			328	332	0.0	0.0	0.000	A
C	Entry	1	1	A, D	66	610	0.108	66	65	0.1	0.0	7.557	A
			2	A, B, C	71	610	0.117	70	63	0.0	0.3	8.000	A
		2	1	(B, C, D, A)	137			137	128	0.0	0.0	0.000	A
	Exit	1	1		694			694	700	0.0	0.0	0.000	A
D	Entry	1	1	A	183	904	0.203	186	190	0.1	0.3	5.723	A
			2	B, C, D	17	904	0.019	17	21	0.0	0.0	4.634	A
		2	1	(A, B, C, D)	200			200	212	0.0	0.0	0.310	A
	Exit	1	1		650			650	650	0.0	0.0	0.000	A

07:45 - 08:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	1195	1903	0.628	1193	1195	0.8	1.9	5.144	A
			2	A, D	784	1903	0.412	787	780	0.7	0.9	3.164	A
	Exit	1	1		531			531	488	0.0	0.0	0.000	A
B	Entry	1	1	C, D	86	464	0.185	85	88	0.2	0.2	9.320	A
			2	A, B	143	464	0.309	146	135	0.8	0.3	11.677	B
		2	1	(A, B, C, D)	230			230	221	0.0	0.0	0.915	A
	Exit	1	1		409			409	410	0.0	0.0	0.000	A
C	Entry	1	1	A, D	87	559	0.155	88	71	0.0	0.1	9.129	A
			2	A, B, C	89	559	0.159	87	77	0.3	0.3	9.408	A
		2	1	(B, C, D, A)	175			175	148	0.0	0.0	0.000	A
	Exit	1	1		878			878	872	0.0	0.0	0.000	A
D	Entry	1	1	A	227	884	0.257	224	213	0.3	0.4	6.244	A
			2	B, C, D	29	884	0.033	31	26	0.0	0.0	5.469	A
		2	1	(A, B, C, D)	259			259	240	0.0	0.0	0.225	A
	Exit	1	1		823			823	815	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	1210	1907	0.635	1209	1214	1.9	1.0	5.412	A
			2	A, D	786	1907	0.412	782	781	0.9	1.0	3.478	A
	Exit	1	1		498			498	483	0.0	0.0	0.000	A
B	Entry	1	1	C, D	85	468	0.182	84	89	0.2	0.4	11.492	B
			2	A, B	120	468	0.257	119	121	0.3	0.5	10.989	B
		2	1	(A, B, C, D)	204			205	212	0.0	0.0	0.467	A
	Exit	1	1		421			421	418	0.0	0.0	0.000	A
C	Entry	1	1	A, D	75	568	0.132	77	77	0.1	0.1	8.319	A
			2	A, B, C	76	568	0.134	77	73	0.3	0.3	9.009	A
		2	1	(B, C, D, A)	151			151	150	0.0	0.0	0.026	A
	Exit	1	1		874			874	884	0.0	0.0	0.000	A
D	Entry	1	1	A	227	899	0.253	227	217	0.4	0.3	6.416	A
			2	B, C, D	28	899	0.031	28	27	0.0	0.0	4.929	A
		2	1	(A, B, C, D)	255			255	244	0.0	0.0	0.231	A
	Exit	1	1		809			809	815	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	987	1907	0.518	996	991	1.0	0.9	4.461	A
			2	A, D	596	1907	0.313	593	622	1.0	0.5	3.031	A
	Exit	1	1		399			399	410	0.0	0.0	0.000	A
B	Entry	1	1	C, D	68	565	0.120	75	76	0.4	0.0	7.879	A
			2	A, B	101	565	0.179	103	100	0.5	0.4	10.248	B
		2	1	(A, B, C, D)	169			170	174	0.0	0.0	0.071	A
	Exit	1	1		335			335	346	0.0	0.0	0.000	A
C	Entry	1	1	A, D	66	622	0.106	65	68	0.1	0.1	7.903	A
			2	A, B, C	57	622	0.091	58	61	0.3	0.4	7.850	A
		2	1	(B, C, D, A)	122			122	129	0.0	0.0	0.009	A
	Exit	1	1		737			737	718	0.0	0.0	0.000	A
D	Entry	1	1	A	175	913	0.192	175	183	0.3	0.3	5.827	A
			2	B, C, D	29	913	0.032	27	23	0.0	0.1	4.874	A
		2	1	(A, B, C, D)	204			204	206	0.0	0.0	0.246	A
	Exit	1	1		622			622	649	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	830	1914	0.433	823	824	0.9	1.0	3.714	A
			2	A, D	523	1914	0.273	527	530	0.5	0.3	2.831	A
	Exit	1	1		335			335	317	0.0	0.0	0.000	A
B	Entry	1	1	C, D	58	628	0.093	59	57	0.0	0.1	6.055	A
			2	A, B	74	628	0.118	77	79	0.4	0.1	7.942	A
		2	1	(A, B, C, D)	133			133	135	0.0	0.0	0.045	A
	Exit	1	1		278			278	274	0.0	0.0	0.000	A
C	Entry	1	1	A, D	43	648	0.066	46	51	0.1	0.0	7.048	A
			2	A, B, C	54	648	0.084	58	55	0.4	0.1	7.396	A
		2	1	(B, C, D, A)	97			97	106	0.0	0.0	0.000	A
	Exit	1	1		590			590	606	0.0	0.0	0.000	A
D	Entry	1	1	A	151	927	0.163	152	133	0.3	0.1	5.368	A
			2	B, C, D	14	927	0.015	12	18	0.1	0.2	4.087	A
		2	1	(A, B, C, D)	166			166	151	0.0	0.0	0.133	A
	Exit	1	1		550			550	552	0.0	0.0	0.000	A

Lanes: Q Variation Results for each time segment

07:15 - 07:30

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	Entry	1	1	0.57	0.00	0.00	3.00	3.00
			2	0.62	0.00	0.00	1.90	4.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
B	Entry	1	1	0.00	0.00	0.00	0.00	0.00
			2	0.14	0.00	0.00	1.00	1.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
C	Entry	1	1	0.10	0.00	0.00	0.00	2.00
			2	0.05	0.00	0.00	0.00	1.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
D	Entry	1	1	0.14	0.00	0.00	1.00	1.00
			2	0.00	0.00	0.00	0.00	0.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

07:30 - 07:45

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	Entry	1	1	0.76	0.00	0.00	3.00	3.00
			2	0.71	0.00	0.00	1.80	6.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
B	Entry	1	1	0.24	0.00	0.00	0.63	2.00
			2	0.76	0.00	0.00	3.00	3.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
C	Entry	1	1	0.00	0.00	0.00	0.00	0.00
			2	0.33	0.00	0.00	2.00	2.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
D	Entry	1	1	0.29	0.00	0.00	2.00	2.00
			2	0.00	0.00	0.00	0.00	0.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

07:45 - 08:00

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	Entry	1	1	1.90	0.00	0.64	4.45	8.00
			2	0.92	0.00	0.00	1.80	6.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
B	Entry	1	1	0.19	0.00	0.00	1.00	1.00
			2	0.33	0.00	0.00	2.00	2.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
C	Entry	1	1	0.10	0.00	0.00	0.00	2.00
			2	0.33	0.00	0.00	2.00	2.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
D	Entry	1	1	0.38	0.00	0.00	2.00	2.00
			2	0.00	0.00	0.00	0.00	0.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

08:00 - 08:15

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	Entry	1	1	1.00	0.00	0.00	6.00	6.00
			2	1.00	0.00	0.25	3.00	3.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
B	Entry	1	1	0.38	0.00	0.00	0.90	3.00
			2	0.52	0.00	0.00	1.45	3.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
C	Entry	1	1	0.10	0.00	0.00	1.00	1.00
			2	0.29	0.00	0.00	0.63	3.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
D	Entry	1	1	0.33	0.00	0.00	0.90	3.00
			2	0.00	0.00	0.00	0.00	0.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

08:15 - 08:30

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	Entry	1	1	0.90	0.00	0.00	1.82	4.00
			2	0.52	0.00	0.00	1.45	3.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
B	Entry	1	1	0.05	0.00	0.00	0.00	1.00
			2	0.38	0.00	0.00	0.73	4.00
		2	1	0.05	0.00	0.00	0.00	1.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
C	Entry	1	1	0.14	0.00	0.00	-0.10	2.00
			2	0.38	0.00	0.00	2.00	2.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
D	Entry	1	1	0.33	0.00	0.00	3.00	3.00
			2	0.10	0.00	0.00	0.00	2.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

08:30 - 08:45

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	Entry	1	1	0.95	0.00	0.13	3.00	3.00
			2	0.33	0.00	0.00	1.00	1.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
B	Entry	1	1	0.10	0.00	0.00	1.00	1.00
			2	0.10	0.00	0.00	1.00	1.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
C	Entry	1	1	0.05	0.00	0.00	0.00	1.00
			2	0.14	0.00	0.00	-0.10	2.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
D	Entry	1	1	0.10	0.00	0.00	0.00	2.00
			2	0.19	0.00	0.00	-0.10	3.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

Lane movements: Main Results for each time segment

07:15 - 07:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	279	70	1420	1911	0.146	286	257	0.0	0.1	3.628	A
				C	565	141	1420	1912	0.295	567	551	0.0	0.5	3.424	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	9	2	1149	1545	0.006	9	8	0.0	0.0	2.703	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	504	126	1420	1912	0.264	503	522	0.0	0.6	2.758	A
B	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	42	11	962	629	0.067	43	38	0.0	0.0	7.204	A
				D	31	8	962	638	0.048	32	27	0.0	0.0	7.187	A
			2	A	82	21	962	633	0.130	82	86	0.0	0.1	7.436	A
				B	0	0	137	86	0.000	1	2	0.0	0.0	15.506	C
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	82	21	-	-	-	82	86	0.0	0.0	0.181	A
				B	0	0	-	-	-	0	2	0.0	0.0	0.000	A
				C	42	11	-	-	-	42	38	0.0	0.0	0.015	A
				D	31	8	-	-	-	31	27	0.0	0.0	0.104	A
C	Entry	1	1	A	43	11	814	639	0.068	45	45	0.0	0.1	8.050	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	6	1	388	306	0.019	6	5	0.0	0.0	5.708	A
			2	A	44	11	814	647	0.068	45	49	0.0	0.0	9.322	A
				B	2	0.43	426	332	0.005	2	4	0.0	0.0	5.351	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	87	22	-	-	-	87	94	0.0	0.0	0.000	A
				B	2	0.43	-	-	-	2	4	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	6	1	-	-	-	6	5	0.0	0.0	0.000	A
D	Entry	1	1	A	149	37	984	925	0.161	151	146	0.0	0.1	5.265	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	9	2	797	740	0.012	9	9	0.0	0.0	3.477	A
				C	5	1	750	701	0.007	5	6	0.0	0.0	4.481	A
				D	5	1	375	354	0.013	5	3	0.0	0.0	6.999	A
		2	1	A	149	37	-	-	-	149	146	0.0	0.0	0.079	A
				B	9	2	-	-	-	9	9	0.0	0.0	0.000	A
				C	5	1	-	-	-	5	6	0.0	0.0	0.230	A
				D	5	1	-	-	-	5	3	0.0	0.0	0.000	A

07:30 - 07:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	308	77	1420	1909	0.161	310	313	0.1	0.2	4.422	A
				C	641	160	1420	1909	0.336	645	654	0.5	0.5	4.127	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	8	2	1285	1726	0.005	8	9	0.0	0.0	2.525	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	613	153	1420	1909	0.321	607	613	0.6	0.7	3.121	A
B	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	43	11	962	572	0.076	43	37	0.0	0.2	6.650	A
				D	33	8	962	558	0.058	33	26	0.0	0.0	8.262	A
			2	A	124	31	962	573	0.216	122	109	0.1	0.8	10.434	B
				B	0	0	183	113	0.000	0	2	0.0	0.0	8.291	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	124	31	-	-	-	124	111	0.0	0.0	0.267	A
				B	0	0	-	-	-	0	2	0.0	0.0	0.000	A
				C	43	11	-	-	-	43	38	0.0	0.0	0.112	A
				D	33	8	-	-	-	33	27	0.0	0.0	0.101	A
C	Entry	1	1	A	60	15	814	613	0.098	61	58	0.1	0.0	7.398	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	6	1	698	527	0.011	6	7	0.0	0.0	8.732	A
			2	A	58	15	814	611	0.095	58	55	0.0	0.2	8.309	A
				B	13	3	659	499	0.026	12	8	0.0	0.1	6.208	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	118	30	-	-	-	118	113	0.0	0.0	0.000	A
				B	13	3	-	-	-	13	9	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	6	1	-	-	-	6	7	0.0	0.0	0.000	A
D	Entry	1	1	A	183	46	984	904	0.203	186	190	0.1	0.3	5.723	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	6	2	937	861	0.007	6	9	0.0	0.0	3.157	A
				C	6	2	844	783	0.008	6	9	0.0	0.0	4.740	A
				D	5	1	328	309	0.015	5	3	0.0	0.0	9.875	A
		2	1	A	183	46	-	-	-	183	190	0.0	0.0	0.303	A
				B	6	2	-	-	-	6	9	0.0	0.0	0.000	A
				C	6	2	-	-	-	6	9	0.0	0.0	0.000	A
				D	5	1	-	-	-	5	3	0.0	0.0	2.783	A

07:45 - 08:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	379	95	1420	1903	0.199	378	384	0.2	0.5	5.259	A
				C	815	204	1420	1902	0.429	815	811	0.5	1.4	5.092	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	11	3	1285	1723	0.007	11	13	0.0	0.0	3.027	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	773	193	1420	1903	0.406	776	767	0.7	0.9	3.167	A
B	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	50	13	962	477	0.105	51	51	0.2	0.1	9.424	A
				D	35	9	962	479	0.073	34	37	0.0	0.0	9.177	A
			2	A	141	35	962	469	0.301	143	131	0.8	0.3	11.560	B
				B	2	0.57	321	166	0.014	3	3	0.0	0.0	19.011	C
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	141	35	-	-	-	141	130	0.0	0.0	1.060	A
				B	2	0.57	-	-	-	2	3	0.0	0.0	0.000	A
				C	50	13	-	-	-	50	51	0.0	0.0	1.193	A
				D	35	9	-	-	-	35	37	0.0	0.0	0.143	A
C	Entry	1	1	A	77	19	814	571	0.135	78	63	0.0	0.1	9.377	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	9	2	659	467	0.020	9	8	0.0	0.0	7.225	A
			2	A	76	19	814	566	0.134	75	68	0.2	0.2	8.913	A
				B	13	3	620	428	0.030	12	9	0.1	0.1	13.072	B
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	154	38	-	-	-	154	131	0.0	0.0	0.000	A
				B	13	3	-	-	-	13	9	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	9	2	-	-	-	9	8	0.0	0.0	0.000	A
D	Entry	1	1	A	227	57	984	884	0.257	224	213	0.3	0.4	6.244	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	15	4	890	804	0.018	15	14	0.0	0.0	4.598	A
				C	11	3	797	724	0.016	11	10	0.0	0.0	5.597	A
				D	3	0.86	422	386	0.009	3	3	0.0	0.0	10.716	B
		2	1	A	227	57	-	-	-	227	213	0.0	0.0	0.233	A
				B	15	4	-	-	-	15	14	0.0	0.0	0.000	A
				C	11	3	-	-	-	11	10	0.0	0.0	0.463	A
				D	3	0.86	-	-	-	3	3	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	400	100	1420	1906	0.210	398	391	0.5	0.5	5.504	A
				C	809	202	1420	1907	0.424	811	823	1.4	0.5	5.368	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	16	4	1420	1907	0.008	17	14	0.0	0.0	4.038	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	770	192	1420	1906	0.404	766	766	0.9	1.0	3.467	A
B	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	53	13	962	477	0.110	51	51	0.1	0.4	11.494	B
				D	33	8	962	464	0.070	33	38	0.0	0.0	11.491	B
			2	A	118	29	962	470	0.250	116	116	0.3	0.5	10.859	B
				B	2	0.57	458	223	0.010	2	5	0.0	0.0	15.813	C
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	116	29	-	-	-	118	117	0.0	0.0	0.308	A
				B	2	0.57	-	-	-	2	5	0.0	0.0	2.119	A
				C	53	13	-	-	-	53	52	0.0	0.0	0.661	A
				D	33	8	-	-	-	33	38	0.0	0.0	0.510	A
C	Entry	1	1	A	66	17	814	556	0.119	68	70	0.1	0.1	8.412	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	8	2	698	478	0.017	9	7	0.0	0.0	7.507	A
			2	A	72	18	814	560	0.129	71	66	0.2	0.1	9.174	A
				B	6	1	581	402	0.014	6	7	0.1	0.1	7.520	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	138	35	-	-	-	138	135	0.0	0.0	0.000	A
				B	6	1	-	-	-	6	7	0.0	0.0	0.508	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	8	2	-	-	-	8	7	0.0	0.0	0.028	A
D	Entry	1	1	A	227	57	984	896	0.254	227	217	0.4	0.3	6.416	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	15	4	937	852	0.017	15	14	0.0	0.0	4.645	A
				C	12	3	797	725	0.017	12	10	0.0	0.0	4.464	A
				D	1	0.29	328	296	0.004	1	3	0.0	0.0	9.707	A
		2	1	A	227	57	-	-	-	227	217	0.0	0.0	0.246	A
				B	15	4	-	-	-	15	14	0.0	0.0	0.000	A
				C	12	3	-	-	-	12	10	0.0	0.0	0.305	A
				D	1	0.29	-	-	-	1	3	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	316	79	1420	1907	0.166	318	325	0.5	0.3	4.605	A
				C	670	167	1420	1907	0.351	680	666	0.5	0.6	4.393	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	10	2	1352	1819	0.005	10	11	0.0	0.0	3.439	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	587	147	1420	1907	0.308	583	611	1.0	0.5	3.023	A
B	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	44	11	962	551	0.080	46	45	0.4	0.0	7.526	A
				D	24	6	962	570	0.042	29	30	0.0	0.0	8.413	A
			2	A	101	25	962	566	0.179	103	99	0.5	0.4	10.245	B
				B	0	0	46	25	0.000	0	0.38	0.0	0.0	11.316	B
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	102	26	-	-	-	101	99	0.0	0.0	0.130	A
				B	0	0	-	-	-	0	0.38	0.0	0.0	0.000	A
				C	44	11	-	-	-	44	44	0.0	0.0	0.006	A
				D	24	6	-	-	-	24	30	0.0	0.0	0.000	A
C	Entry	1	1	A	61	15	814	615	0.099	60	63	0.1	0.1	8.011	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	5	1	426	314	0.015	5	4	0.0	0.0	6.508	A
			2	A	50	13	814	614	0.082	51	54	0.1	0.4	7.945	A
				B	7	2	581	435	0.016	7	8	0.1	0.0	7.177	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	110	28	-	-	-	110	118	0.0	0.0	0.000	A
				B	7	2	-	-	-	7	7	0.0	0.0	0.141	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	5	1	-	-	-	5	4	0.0	0.0	0.000	A
D	Entry	1	1	A	175	44	984	915	0.192	175	183	0.3	0.3	5.827	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	11	3	984	913	0.013	11	13	0.0	0.0	4.676	A
				C	11	3	609	569	0.019	11	7	0.0	0.0	4.628	A
				D	7	2	516	478	0.014	5	3	0.0	0.1	6.384	A
		2	1	A	175	44	-	-	-	175	183	0.0	0.0	0.279	A
				B	11	3	-	-	-	11	13	0.0	0.0	0.000	A
				C	11	3	-	-	-	11	7	0.0	0.0	0.000	A
				D	7	2	-	-	-	7	3	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	270	68	1420	1915	0.141	265	260	0.3	0.3	3.699	A
				C	559	140	1420	1914	0.292	556	565	0.6	0.6	3.721	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	8	2	1352	1818	0.004	8	7	0.0	0.0	2.608	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	515	129	1420	1915	0.269	519	523	0.5	0.3	2.834	A
B	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	31	8	962	625	0.050	32	34	0.0	0.1	6.128	A
				D	27	7	962	620	0.043	27	23	0.0	0.0	5.948	A
			2	A	73	18	962	624	0.117	76	78	0.4	0.1	7.925	A
				B	1	0.29	92	66	0.017	1	0.76	0.0	0.0	10.823	B
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	73	18	-	-	-	73	77	0.0	0.0	0.085	A
				B	1	0.29	-	-	-	1	0.76	0.0	0.0	0.000	A
				C	31	8	-	-	-	31	34	0.0	0.0	0.000	A
				D	27	7	-	-	-	27	23	0.0	0.0	0.000	A
C	Entry	1	1	A	40	10	814	649	0.062	43	48	0.1	0.0	6.756	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	3	0.71	504	392	0.007	3	4	0.0	0.0	10.434	B
			2	A	53	13	814	648	0.082	57	51	0.4	0.1	7.622	A
				B	1	0.29	543	429	0.003	1	5	0.0	0.0	5.056	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	92	23	-	-	-	92	97	0.0	0.0	0.000	A
				B	1	0.29	-	-	-	1	5	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	3	0.71	-	-	-	3	4	0.0	0.0	0.000	A
D	Entry	1	1	A	151	38	984	931	0.163	152	133	0.3	0.1	5.368	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	9	2	937	878	0.010	8	9	0.0	0.1	3.242	A
				C	3	0.86	797	750	0.005	2	7	0.0	0.0	4.640	A
				D	2	0.43	328	307	0.006	2	2	0.1	0.0	8.024	A
		2	1	A	151	38	-	-	-	151	132	0.0	0.0	0.152	A
				B	9	2	-	-	-	9	10	0.0	0.0	0.000	A
				C	3	0.86	-	-	-	3	7	0.0	0.0	0.000	A
				D	2	0.43	-	-	-	2	2	0.0	0.0	0.000	A

AM - 2031 No Development, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Q percentiles may be unreliable if the mean queue in any time segment is very low or very high.
Info	Simulation	A1 - AM [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Analysis Set Details

ID	Name	Use Lane Simulation	Include in report	Use specific Demand Set(s)	Specific Demand Set (s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	AM	✓	✓	✓	D1,D3,D5,D7,D9	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		A, B, C, D	6.55	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.55	A

Arms

Arms

Arm	Name	Description	No give-way line
A	Industrial Estate Road		
B	Bryn Lane		
C	Ash Road North		
D	Abenbury Way		

Roundabout Geometry

Arm	V (m)	E (m)	l' (m)	R (m)	D (m)	PHI (deg)	Entry only	Exit only
A	8.59	9.82	7.6	38.4	60.0	37.6		
B	3.89	6.96	18.7	49.1	60.0	16.5		
C	3.34	7.53	19.0	11.3	60.0	40.3		
D	3.54	8.21	19.5	40.7	60.0	22.5		

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A	0.754	2840
B	0.616	1924
C	0.525	1628
D	0.617	1968

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

Arm Capacity Adjustments

Arm	Type	Reason	Direct capacity adjustment (PCU/hr)
A	Direct	Queue Observation	500

Lane Simulation: Arm options

Arm	Lane capacity source	Traffic considering secondary lanes (%)
A	Evenly split	10.00
B	Evenly split	10.00
C	Evenly split	10.00
D	Evenly split	10.00

Lanes

Arm	Side	Lane level	Lane	Destination arms	Has limited storage	Storage (PCU)	Has bottleneck	Has obstruction	Min Cap (PCU/hr)	Max Cap (PCU/hr)	Signalised
A	Entry	1	1	B, C		Infinity			0	99999	
			2	A, D		Infinity			0	99999	
	Exit	1	1			Infinity					
B	Entry	1	1	C, D	✓	3.00			0	99999	
			2	A, B	✓	3.00			0	99999	
		2	1	(A, B, C, D)		Infinity					
	Exit	1	1			Infinity					
C	Entry	1	1	A, D	✓	3.00			0	99999	
			2	A, B, C	✓	3.00			0	99999	
		2	1	(B, C, D, A)		Infinity					
	Exit	1	1			Infinity					
D	Entry	1	1	A	✓	3.00			0	99999	
			2	B, C, D	✓	3.00			0	99999	
		2	1	(A, B, C, D)		Infinity					
	Exit	1	1			Infinity					

Entry Lane slope and intercept

Arm	Side	Lane level	Lane	Final slope	Final intercept (PCU/hr)
A	Entry	1	1	0.377	1420
			2	0.377	1420
B	Entry	1	1	0.308	962
			2	0.308	962
C	Entry	1	1	0.263	814
			2	0.263	814
D	Entry	1	1	0.309	984
			2	0.309	984

Summary of Entry Lane allowed movements

Arm	Lane Level	Lane	Destination arm			
			B	C	D	A
B	1	1		✓	✓	
		2	✓			✓
	2	1	✓	✓	✓	✓
C	1	1			✓	✓
		2	✓	✓		✓
	2	1	✓	✓	✓	✓
D	1	1				✓
		2	✓	✓	✓	
	2	1	✓	✓	✓	✓
A	1	1	✓	✓		
		2			✓	✓

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2031 No Development	AM	ONE HOUR	07:15	08:45	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	1888	100.000
B		ONE HOUR	✓	206	100.000
C		ONE HOUR	✓	145	100.000
D		ONE HOUR	✓	229	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	11	370	777	730
	B	118	2	50	36
	C	130	8	0	7
	D	206	12	8	3

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To			
		A	B	C	D
From	A	0	8	4	6
	B	22	100	2	6
	C	38	33	0	20
	D	21	9	33	50

Cyclist %

		To			
		A	B	C	D
From	A	0	0	0	0
	B	0	0	0	0
	C	0	0	0	0
	D	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max Q95 (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
A	0.56	5.28	3.2	18.0	A	1744	2615
B	0.43	14.86	0.8	4.0	B	198	297
C	0.16	10.49	0.7	5.0	B	124	186
D	0.27	6.84	0.8	4.0	A	214	321

Main Results for each time segment

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	1439	360	27	3871	0.372	1437	1427	383	0.0	1.7	3.360	A
B	143	36	1182	843	0.170	146	154	279	0.0	0.2	7.872	A
C	127	32	677	1238	0.102	128	112	652	0.0	0.1	7.752	A
D	191	48	219	976	0.196	191	177	585	0.0	0.5	6.257	A

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	1695	424	24	3879	0.437	1687	1692	381	1.7	1.8	3.760	A
B	191	48	1363	757	0.253	190	183	347	0.2	0.6	9.529	A
C	116	29	795	1115	0.104	113	124	759	0.1	0.3	10.495	B
D	181	45	224	978	0.185	181	189	684	0.5	0.2	5.633	A

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	2098	524	44	3774	0.556	2100	2075	490	1.8	3.2	4.787	A
B	258	65	1701	600	0.430	256	234	443	0.6	0.8	12.243	B
C	147	37	1006	1094	0.135	142	152	950	0.3	0.7	9.354	A
D	244	61	287	986	0.247	247	244	860	0.2	0.4	5.710	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	2125	531	38	3831	0.555	2126	2045	531	3.2	2.4	5.285	A
B	230	58	1720	675	0.341	238	229	444	0.8	0.7	14.858	B
C	151	38	1001	974	0.155	148	144	956	0.7	0.5	9.490	A
D	270	68	298	1007	0.269	272	262	851	0.4	0.3	6.841	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	1670	418	31	3833	0.436	1662	1676	423	2.4	2.2	3.912	A
B	187	47	1341	819	0.228	185	189	350	0.7	0.6	9.491	A
C	119	30	795	1114	0.107	124	129	730	0.5	0.3	8.533	A
D	223	56	237	997	0.224	217	213	680	0.3	0.8	6.578	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	1435	359	26	3702	0.388	1443	1432	347	2.2	0.8	3.279	A
B	179	45	1161	879	0.204	185	172	308	0.6	0.2	8.201	A
C	83	21	673	1211	0.068	85	104	673	0.3	0.2	7.742	A
D	175	44	202	1024	0.171	171	174	556	0.8	0.5	5.502	A

Q Variation Results for each time segment

07:15 - 07:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	1.71	0.00	0.75	5.00	5.00
B	0.24	0.00	0.00	0.63	2.00
C	0.14	0.00	0.00	1.00	1.00
D	0.48	0.00	0.00	0.90	4.00

07:30 - 07:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	1.76	0.00	0.75	3.63	5.00
B	0.57	0.00	0.00	4.00	4.00
C	0.33	0.00	0.00	0.73	3.00
D	0.19	0.00	0.00	0.45	2.00

07:45 - 08:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	3.16	0.00	2.63	5.90	8.00
B	0.76	0.00	0.06	3.00	3.00
C	0.71	0.00	0.00	1.63	5.00
D	0.38	0.00	0.00	1.45	3.00

08:00 - 08:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	2.38	0.00	0.70	4.45	18.00
B	0.71	0.00	0.00	3.00	3.00
C	0.52	0.00	0.00	1.45	3.00
D	0.33	0.00	0.00	0.90	3.00

08:15 - 08:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	2.19	0.00	0.79	8.00	8.00
B	0.62	0.00	0.00	2.00	2.00
C	0.33	0.00	0.00	2.00	2.00
D	0.78	0.00	0.00	1.90	4.00

08:30 - 08:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	0.81	0.00	0.00	4.00	4.00
B	0.24	0.00	0.00	-0.20	3.00
C	0.19	0.00	0.00	0.45	2.00
D	0.55	0.00	0.00	1.63	3.00

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

07:15 - 07:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	871	1910	0.456	871	862	0.0	1.0	3.609	A
			2	A, D	567	1910	0.297	563	565	0.0	0.8	2.974	A
	Exit	1	1		383			383	356	0.0	0.0	0.000	A
B	Entry	1	1	C, D	59	598	0.098	61	63	0.0	0.1	6.930	A
			2	A, B	85	598	0.141	85	90	0.0	0.1	8.369	A
		2	1	(A, B, C, D)	143			143	155	0.0	0.0	0.153	A
	Exit	1	1		279			279	290	0.0	0.0	0.000	A
C	Entry	1	1	A, D	64	636	0.100	65	57	0.0	0.0	7.995	A
			2	A, B, C	63	636	0.099	63	54	0.0	0.1	7.482	A
		2	1	(B, C, D, A)	127			127	112	0.0	0.0	0.007	A
	Exit	1	1		652			652	636	0.0	0.0	0.000	A
D	Entry	1	1	A	167	917	0.182	167	156	0.0	0.4	6.094	A
			2	B, C, D	24	917	0.026	24	21	0.0	0.1	5.305	A
		2	1	(A, B, C, D)	191			191	179	0.0	0.0	0.255	A
	Exit	1	1		585			585	588	0.0	0.0	0.000	A

07:30 - 07:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	1045	1911	0.547	1042	1033	1.0	1.0	4.132	A
			2	A, D	650	1911	0.340	645	658	0.8	0.7	3.165	A
	Exit	1	1		381			381	398	0.0	0.0	0.000	A
B	Entry	1	1	C, D	88	542	0.162	87	79	0.1	0.2	7.803	A
			2	A, B	103	542	0.191	102	105	0.1	0.3	9.904	A
		2	1	(A, B, C, D)	191			193	185	0.0	0.0	0.609	A
	Exit	1	1		347			347	344	0.0	0.0	0.000	A
C	Entry	1	1	A, D	51	605	0.084	49	60	0.0	0.2	9.331	A
			2	A, B, C	65	605	0.108	65	64	0.1	0.1	9.328	A
		2	1	(B, C, D, A)	116			116	125	0.0	0.0	1.165	A
	Exit	1	1		759			759	752	0.0	0.0	0.000	A
D	Entry	1	1	A	162	915	0.177	162	172	0.4	0.2	5.636	A
			2	B, C, D	18	915	0.020	18	17	0.1	0.0	4.066	A
		2	1	(A, B, C, D)	181			181	188	0.0	0.0	0.136	A
	Exit	1	1		684			684	694	0.0	0.0	0.000	A

07:45 - 08:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	1283	1903	0.674	1286	1272	1.0	2.0	5.674	A
			2	A, D	814	1903	0.428	814	804	0.7	1.1	3.373	A
	Exit	1	1		490			490	501	0.0	0.0	0.000	A
B	Entry	1	1	C, D	113	439	0.257	114	100	0.2	0.2	10.762	B
			2	A, B	146	439	0.332	142	134	0.3	0.6	12.435	B
		2	1	(A, B, C, D)	258			258	235	0.0	0.0	0.590	A
	Exit	1	1		443			443	434	0.0	0.0	0.000	A
C	Entry	1	1	A, D	84	550	0.153	83	80	0.2	0.3	8.636	A
			2	A, B, C	63	550	0.114	60	72	0.1	0.4	10.106	B
		2	1	(B, C, D, A)	147			147	153	0.0	0.0	0.020	A
	Exit	1	1		950			950	929	0.0	0.0	0.000	A
D	Entry	1	1	A	213	896	0.238	215	218	0.2	0.4	5.537	A
			2	B, C, D	31	896	0.035	33	26	0.0	0.0	5.069	A
		2	1	(A, B, C, D)	244			245	245	0.0	0.0	0.222	A
	Exit	1	1		860			860	841	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	1306	1905	0.685	1313	1256	2.0	1.4	6.425	A
			2	A, D	819	1905	0.430	812	789	1.1	1.0	3.453	A
	Exit	1	1		531			531	508	0.0	0.0	0.000	A
B	Entry	1	1	C, D	91	433	0.211	91	97	0.2	0.4	11.030	B
			2	A, B	143	433	0.330	146	131	0.6	0.3	14.338	B
		2	1	(A, B, C, D)	230			234	228	0.0	0.0	2.054	A
	Exit	1	1		444			444	423	0.0	0.0	0.000	A
C	Entry	1	1	A, D	75	551	0.137	76	73	0.3	0.2	9.882	A
			2	A, B, C	76	551	0.138	72	71	0.4	0.3	9.079	A
		2	1	(B, C, D, A)	151			151	144	0.0	0.0	0.008	A
	Exit	1	1		956			956	921	0.0	0.0	0.000	A
D	Entry	1	1	A	243	892	0.272	243	236	0.4	0.3	6.457	A
			2	B, C, D	27	892	0.031	30	26	0.0	0.0	5.181	A
		2	1	(A, B, C, D)	270			270	262	0.0	0.0	0.508	A
	Exit	1	1		851			851	827	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	1019	1908	0.534	1011	1010	1.4	1.3	4.478	A
			2	A, D	651	1908	0.341	650	666	1.0	0.9	3.047	A
	Exit	1	1		423			423	419	0.0	0.0	0.000	A
B	Entry	1	1	C, D	75	549	0.137	73	86	0.4	0.3	8.147	A
			2	A, B	112	549	0.204	111	103	0.3	0.3	10.025	B
		2	1	(A, B, C, D)	187			187	189	0.0	0.0	0.382	A
	Exit	1	1		350			350	354	0.0	0.0	0.000	A
C	Entry	1	1	A, D	66	605	0.109	67	70	0.2	0.2	8.086	A
			2	A, B, C	53	605	0.088	54	59	0.3	0.1	8.998	A
		2	1	(B, C, D, A)	119			119	128	0.0	0.0	0.035	A
	Exit	1	1		730			730	733	0.0	0.0	0.000	A
D	Entry	1	1	A	201	911	0.220	195	190	0.3	0.7	6.429	A
			2	B, C, D	22	911	0.024	22	23	0.0	0.0	5.054	A
		2	1	(A, B, C, D)	223			222	214	0.0	0.0	0.279	A
	Exit	1	1		680			680	700	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	904	1910	0.473	914	887	1.3	0.4	3.476	A
			2	A, D	531	1910	0.278	530	545	0.9	0.4	2.959	A
	Exit	1	1		347			347	353	0.0	0.0	0.000	A
B	Entry	1	1	C, D	68	605	0.112	69	73	0.3	0.1	6.910	A
			2	A, B	112	605	0.185	117	100	0.3	0.1	9.076	A
		2	1	(A, B, C, D)	179			179	171	0.0	0.0	0.125	A
	Exit	1	1		308			308	309	0.0	0.0	0.000	A
C	Entry	1	1	A, D	35	637	0.055	34	52	0.2	0.0	7.752	A
			2	A, B, C	48	637	0.075	50	53	0.1	0.1	7.732	A
		2	1	(B, C, D, A)	83			83	104	0.0	0.0	0.000	A
	Exit	1	1		673			673	646	0.0	0.0	0.000	A
D	Entry	1	1	A	157	922	0.170	155	159	0.7	0.3	5.587	A
			2	B, C, D	18	922	0.019	16	14	0.0	0.1	4.376	A
		2	1	(A, B, C, D)	175			175	173	0.0	0.0	0.046	A
	Exit	1	1		556			556	575	0.0	0.0	0.000	A

Lanes: Q Variation Results for each time segment

07:15 - 07:30

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	Entry	1	1	1.00	0.00	0.00	1.80	5.00
			2	0.81	0.00	0.00	3.00	3.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
B	Entry	1	1	0.10	0.00	0.00	1.00	1.00
			2	0.14	0.00	0.00	-0.10	2.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
C	Entry	1	1	0.05	0.00	0.00	0.00	1.00
			2	0.10	0.00	0.00	1.00	1.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
D	Entry	1	1	0.38	0.00	0.00	2.00	2.00
			2	0.10	0.00	0.00	0.00	2.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

07:30 - 07:45

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	Entry	1	1	1.05	0.00	0.39	1.90	4.00
			2	0.71	0.00	0.00	3.00	3.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
B	Entry	1	1	0.24	0.00	0.00	0.45	3.00
			2	0.33	0.00	0.00	0.90	4.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
C	Entry	1	1	0.19	0.00	0.00	0.45	2.00
			2	0.14	0.00	0.00	1.00	1.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
D	Entry	1	1	0.19	0.00	0.00	0.45	2.00
			2	0.00	0.00	0.00	0.00	0.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

07:45 - 08:00

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	Entry	1	1	2.05	0.00	1.25	6.00	6.00
			2	1.14	0.00	0.13	2.73	4.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
B	Entry	1	1	0.19	0.00	0.00	2.00	2.00
			2	0.57	0.00	0.00	0.88	3.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
C	Entry	1	1	0.29	0.00	0.00	2.00	2.00
			2	0.38	0.00	0.00	1.45	3.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
D	Entry	1	1	0.38	0.00	0.00	1.45	3.00
			2	0.00	0.00	0.00	0.00	0.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

08:00 - 08:15

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	Entry	1	1	1.43	0.00	0.00	4.45	10.00
			2	0.95	0.00	0.00	2.45	8.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
B	Entry	1	1	0.38	0.00	0.00	0.82	2.00
			2	0.33	0.00	0.00	0.78	2.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
C	Entry	1	1	0.19	0.00	0.00	2.00	2.00
			2	0.33	0.00	0.00	2.00	2.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
D	Entry	1	1	0.33	0.00	0.00	0.90	3.00
			2	0.00	0.00	0.00	0.00	0.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

08:15 - 08:30

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	Entry	1	1	1.33	0.00	0.36	5.00	5.00
			2	0.86	0.00	0.00	2.45	8.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
B	Entry	1	1	0.29	0.00	0.00	0.73	2.00
			2	0.33	0.00	0.00	2.00	2.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
C	Entry	1	1	0.19	0.00	0.00	0.45	2.00
			2	0.14	0.00	0.00	-0.10	2.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
D	Entry	1	1	0.73	0.00	0.00	3.00	3.00
			2	0.00	0.00	0.00	0.00	0.00
		2	1	0.05	0.00	0.00	0.00	1.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

08:30 - 08:45

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	Entry	1	1	0.38	0.00	0.00	0.78	3.00
			2	0.43	0.00	0.00	0.78	4.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
B	Entry	1	1	0.10	0.00	0.00	0.00	2.00
			2	0.14	0.00	0.00	-0.10	2.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
C	Entry	1	1	0.05	0.00	0.00	0.00	1.00
			2	0.14	0.00	0.00	-0.10	2.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
D	Entry	1	1	0.35	0.00	0.00	1.45	3.00
			2	0.14	0.00	0.00	-0.10	2.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

Lane movements: Main Results for each time segment

07:15 - 07:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	268	67	1420	1910	0.140	268	273	0.0	0.2	3.766	A
				C	603	151	1420	1909	0.316	603	590	0.0	0.6	3.539	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	9	2	1285	1727	0.005	9	9	0.0	0.0	2.707	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	558	140	1420	1910	0.292	554	556	0.0	0.8	2.979	A
B	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	35	9	962	595	0.059	34	37	0.0	0.1	6.078	A
				D	24	6	962	598	0.040	26	26	0.0	0.0	8.207	A
			2	A	82	21	962	597	0.138	83	88	0.0	0.1	8.330	A
				B	2	0.57	275	175	0.013	2	2	0.0	0.0	10.834	B
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	82	21	-	-	-	82	89	0.0	0.0	0.171	A
				B	2	0.57	-	-	-	2	2	0.0	0.0	0.000	A
				C	35	9	-	-	-	35	38	0.0	0.0	0.171	A
				D	24	6	-	-	-	24	26	0.0	0.0	0.079	A
C	Entry	1	1	A	61	15	814	637	0.095	62	53	0.0	0.0	8.025	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	3	0.86	581	444	0.008	3	4	0.0	0.0	7.742	A
			2	A	62	15	814	640	0.096	62	50	0.0	0.1	7.620	A
				B	1	0.29	426	332	0.003	1	4	0.0	0.0	5.911	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	123	31	-	-	-	123	103	0.0	0.0	0.000	A
				B	1	0.29	-	-	-	1	4	0.0	0.0	0.185	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	3	0.86	-	-	-	3	5	0.0	0.0	0.000	A
D	Entry	1	1	A	167	42	984	921	0.181	167	156	0.0	0.4	6.094	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	6	2	890	832	0.008	7	10	0.0	0.0	5.181	A
				C	15	4	844	791	0.019	15	9	0.0	0.0	4.470	A
				D	3	0.71	328	307	0.009	2	2	0.0	0.1	9.586	A
		2	1	A	167	42	-	-	-	167	157	0.0	0.0	0.289	A
				B	6	2	-	-	-	6	10	0.0	0.0	0.000	A
				C	15	4	-	-	-	15	9	0.0	0.0	0.000	A
				D	3	0.71	-	-	-	3	2	0.0	0.0	0.000	A

07:30 - 07:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	337	84	1420	1910	0.176	336	330	0.2	0.4	4.260	A
				C	708	177	1420	1911	0.371	706	704	0.6	0.7	4.074	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	11	3	1420	1913	0.006	11	10	0.0	0.0	3.437	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	639	160	1420	1911	0.334	634	649	0.8	0.7	3.160	A
B	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	47	12	962	543	0.087	46	44	0.1	0.2	7.861	A
				D	41	10	962	533	0.076	41	35	0.0	0.0	7.729	A
			2	A	103	26	962	540	0.191	102	104	0.1	0.3	9.917	A
				B	0	0	137	82	0.000	0	1	0.0	0.0	7.926	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	103	26	-	-	-	103	104	0.0	0.0	0.593	A
				B	0	0	-	-	-	0	1	0.0	0.0	0.000	A
				C	47	12	-	-	-	47	44	0.0	0.0	0.977	A
				D	41	10	-	-	-	41	35	0.0	0.0	0.181	A
C	Entry	1	1	A	47	12	814	599	0.079	45	54	0.0	0.2	8.696	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	3	0.86	620	458	0.007	3	6	0.0	0.0	14.269	B
			2	A	59	15	814	606	0.098	59	58	0.1	0.1	9.259	A
				B	6	1	581	434	0.013	6	6	0.0	0.0	10.100	B
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	107	27	-	-	-	107	113	0.0	0.0	0.782	A
				B	6	1	-	-	-	6	6	0.0	0.0	4.795	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	3	0.86	-	-	-	3	6	0.0	0.0	4.609	A
D	Entry	1	1	A	162	41	984	916	0.177	162	172	0.4	0.2	5.636	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	5	1	890	823	0.006	5	8	0.0	0.0	3.895	A
				C	7	2	609	570	0.013	7	5	0.0	0.0	2.997	A
				D	6	1	469	430	0.013	6	4	0.1	0.0	6.061	A
		2	1	A	162	41	-	-	-	162	171	0.0	0.0	0.149	A
				B	5	1	-	-	-	5	8	0.0	0.0	0.000	A
				C	7	2	-	-	-	7	5	0.0	0.0	0.000	A
				D	6	1	-	-	-	6	4	0.0	0.0	0.000	A

07:45 - 08:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	411	103	1420	1902	0.216	411	411	0.4	0.6	5.663	A
				C	873	218	1420	1903	0.459	875	860	0.7	1.4	5.679	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	12	3	1420	1904	0.006	12	15	0.0	0.0	3.208	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	802	201	1420	1903	0.422	802	789	0.7	1.1	3.377	A
B	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	67	17	962	432	0.155	66	59	0.2	0.1	10.407	B
				D	46	11	962	438	0.104	47	42	0.0	0.1	11.267	B
			2	A	141	35	962	436	0.323	138	132	0.3	0.6	12.411	B
				B	5	1	229	111	0.041	5	2	0.0	0.0	15.206	C
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	141	35	-	-	-	141	133	0.0	0.0	0.587	A
				B	5	1	-	-	-	5	2	0.0	0.0	0.000	A
				C	67	17	-	-	-	67	58	0.0	0.0	0.704	A
				D	46	11	-	-	-	46	42	0.0	0.0	0.451	A
C	Entry	1	1	A	76	19	814	553	0.138	75	72	0.2	0.2	8.706	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	9	2	659	458	0.019	8	8	0.0	0.0	7.965	A
			2	A	57	14	814	549	0.103	51	64	0.1	0.4	10.270	B
				B	7	2	581	405	0.017	7	7	0.0	0.0	8.853	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	130	33	-	-	-	130	138	0.0	0.0	0.000	A
				B	7	2	-	-	-	7	7	0.0	0.0	0.373	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	9	2	-	-	-	9	8	0.0	0.0	0.000	A
D	Entry	1	1	A	213	53	984	896	0.238	215	218	0.2	0.4	5.537	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	20	5	890	811	0.025	21	14	0.0	0.0	3.880	A
				C	9	2	703	644	0.013	9	10	0.0	0.0	6.130	A
				D	3	0.71	469	429	0.007	3	3	0.0	0.0	8.327	A
		2	1	A	213	53	-	-	-	213	219	0.0	0.0	0.231	A
				B	20	5	-	-	-	20	14	0.0	0.0	0.154	A
				C	9	2	-	-	-	9	10	0.0	0.0	0.183	A
				D	3	0.71	-	-	-	3	3	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	418	104	1420	1906	0.219	421	402	0.6	0.5	6.675	A
				C	888	222	1420	1905	0.466	893	854	1.4	1.0	6.311	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	12	3	1420	1907	0.006	12	12	0.0	0.0	3.705	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	807	202	1420	1905	0.424	799	777	1.1	1.0	3.449	A
B	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	53	13	962	446	0.118	53	57	0.1	0.2	11.097	B
				D	39	10	962	441	0.088	38	40	0.1	0.1	10.928	B
			2	A	141	35	962	434	0.324	143	130	0.6	0.3	14.360	B
				B	2	0.57	137	67	0.034	2	2	0.0	0.0	11.210	B
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	137	34	-	-	-	141	129	0.0	0.0	2.778	A
				B	2	0.57	-	-	-	2	2	0.0	0.0	14.173	B
				C	52	13	-	-	-	53	58	0.0	0.0	1.247	A
				D	39	10	-	-	-	39	40	0.0	0.0	0.932	A
C	Entry	1	1	A	69	17	814	551	0.124	68	66	0.2	0.2	9.932	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	7	2	698	490	0.014	8	7	0.0	0.0	9.507	A
			2	A	69	17	814	550	0.126	65	65	0.4	0.3	9.198	A
				B	7	2	465	315	0.022	7	6	0.0	0.0	7.910	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	138	34	-	-	-	138	130	0.0	0.0	0.000	A
				B	7	2	-	-	-	7	6	0.0	0.0	0.172	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	7	2	-	-	-	7	7	0.0	0.0	0.000	A
D	Entry	1	1	A	243	61	984	894	0.272	243	236	0.4	0.3	6.457	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	14	3	937	862	0.016	14	13	0.0	0.0	4.668	A
				C	9	2	844	771	0.012	9	10	0.0	0.0	5.867	A
				D	5	1	422	384	0.012	6	3	0.0	0.0	5.949	A
		2	1	A	243	61	-	-	-	243	236	0.0	0.0	0.509	A
				B	14	3	-	-	-	14	13	0.0	0.0	0.361	A
				C	9	2	-	-	-	9	10	0.0	0.0	0.868	A
				D	5	1	-	-	-	5	3	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	331	83	1420	1909	0.174	330	333	0.5	0.5	4.471	A
				C	687	172	1420	1908	0.360	682	677	1.0	0.9	4.481	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	9	2	1149	1547	0.006	9	10	0.0	0.0	3.389	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	642	161	1420	1909	0.337	641	655	1.0	0.9	3.041	A
B	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	43	11	962	544	0.080	42	50	0.2	0.2	7.812	A
				D	32	8	962	540	0.059	32	36	0.1	0.1	8.623	A
			2	A	111	28	962	550	0.202	110	103	0.3	0.3	10.059	B
				B	1	0.29	92	52	0.022	1	0.76	0.0	0.0	2.130	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	111	28	-	-	-	111	103	0.0	0.0	0.671	A
				B	1	0.29	-	-	-	1	0.76	0.0	0.0	0.000	A
				C	43	11	-	-	-	43	49	0.0	0.0	0.037	A
				D	32	8	-	-	-	32	36	0.0	0.0	0.146	A
C	Entry	1	1	A	58	15	814	606	0.096	62	64	0.2	0.0	7.987	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	7	2	659	486	0.015	5	6	0.0	0.2	8.938	A
			2	A	46	11	814	599	0.076	48	52	0.3	0.1	9.365	A
				B	7	2	543	401	0.019	7	7	0.0	0.0	6.799	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	106	26	-	-	-	106	115	0.0	0.0	0.011	A
				B	7	2	-	-	-	7	7	0.0	0.0	0.385	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	7	2	-	-	-	7	7	0.0	0.0	0.000	A
D	Entry	1	1	A	201	50	984	912	0.220	195	190	0.3	0.7	6.429	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	11	3	890	829	0.014	11	13	0.0	0.0	4.321	A
				C	7	2	656	610	0.012	7	7	0.0	0.0	5.037	A
				D	2	0.57	422	384	0.006	2	3	0.0	0.0	9.158	A
		2	1	A	201	50	-	-	-	201	192	0.0	0.0	0.299	A
				B	11	3	-	-	-	11	13	0.0	0.0	0.000	A
				C	7	2	-	-	-	7	7	0.0	0.0	0.000	A
				D	2	0.57	-	-	-	2	3	0.0	0.0	1.017	A

08:30 - 08:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	285	71	1420	1911	0.149	290	291	0.5	0.0	3.557	A
				C	619	155	1420	1910	0.324	623	596	0.9	0.3	3.437	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	4	1	1217	1639	0.002	4	7	0.0	0.0	3.090	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	527	132	1420	1910	0.276	526	538	0.9	0.4	2.957	A
B	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	42	11	962	605	0.070	43	44	0.2	0.0	7.014	A
				D	26	6	962	607	0.042	26	29	0.1	0.0	6.746	A
			2	A	108	27	962	608	0.178	113	97	0.3	0.1	9.000	A
				B	3	0.86	321	204	0.017	3	3	0.0	0.0	12.930	B
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	107	27	-	-	-	108	96	0.0	0.0	0.238	A
				B	3	0.86	-	-	-	3	3	0.0	0.0	0.000	A
				C	42	11	-	-	-	42	43	0.0	0.0	0.000	A
				D	26	6	-	-	-	26	28	0.0	0.0	0.000	A
C	Entry	1	1	A	32	8	814	644	0.050	32	45	0.0	0.0	7.744	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	3	0.71	659	508	0.006	3	7	0.2	0.0	7.805	A
			2	A	42	11	814	641	0.066	44	45	0.1	0.1	7.412	A
				B	6	2	698	550	0.011	6	8	0.0	0.0	9.446	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	74	19	-	-	-	74	90	0.0	0.0	0.000	A
				B	6	2	-	-	-	6	8	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	3	0.71	-	-	-	3	6	0.0	0.0	0.000	A
D	Entry	1	1	A	157	39	984	921	0.171	155	159	0.7	0.3	5.587	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	10	2	750	698	0.014	8	7	0.0	0.1	4.551	A
				C	6	2	797	739	0.009	6	6	0.0	0.0	4.248	A
				D	2	0.43	281	265	0.006	2	2	0.0	0.0	3.969	A
		2	1	A	157	39	-	-	-	157	158	0.0	0.0	0.050	A
				B	10	2	-	-	-	10	8	0.0	0.0	0.000	A
				C	6	2	-	-	-	6	6	0.0	0.0	0.000	A
				D	2	0.43	-	-	-	2	2	0.0	0.0	0.000	A

AM - Scenario 1, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Q percentiles may be unreliable if the mean queue in any time segment is very low or very high.
Info	Simulation	A1 - AM [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Analysis Set Details

ID	Name	Use Lane Simulation	Include in report	Use specific Demand Set(s)	Specific Demand Set (s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	AM	✓	✓	✓	D1,D3,D5,D7,D9	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		A, B, C, D	6.55	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.55	A

Arms

Arms

Arm	Name	Description	No give-way line
A	Industrial Estate Road		
B	Bryn Lane		
C	Ash Road North		
D	Abenbury Way		

Roundabout Geometry

Arm	V (m)	E (m)	l' (m)	R (m)	D (m)	PHI (deg)	Entry only	Exit only
A	8.59	9.82	7.6	38.4	60.0	37.6		
B	3.89	6.96	18.7	49.1	60.0	16.5		
C	3.34	7.53	19.0	11.3	60.0	40.3		
D	3.54	8.21	19.5	40.7	60.0	22.5		

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A	0.754	2840
B	0.616	1924
C	0.525	1628
D	0.617	1968

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

Arm Capacity Adjustments

Arm	Type	Reason	Direct capacity adjustment (PCU/hr)
A	Direct	Queue Observation	500

Lane Simulation: Arm options

Arm	Lane capacity source	Traffic considering secondary lanes (%)
A	Evenly split	10.00
B	Evenly split	10.00
C	Evenly split	10.00
D	Evenly split	10.00

Lanes

Arm	Side	Lane level	Lane	Destination arms	Has limited storage	Storage (PCU)	Has bottleneck	Has obstruction	Min Cap (PCU/hr)	Max Cap (PCU/hr)	Signalised
A	Entry	1	1	B, C		Infinity			0	99999	
			2	A, D		Infinity			0	99999	
	Exit	1	1			Infinity					
B	Entry	1	1	C, D	✓	3.00			0	99999	
			2	A, B	✓	3.00			0	99999	
		2	1	(A, B, C, D)		Infinity					
	Exit	1	1			Infinity					
C	Entry	1	1	A, D	✓	3.00			0	99999	
			2	A, B, C	✓	3.00			0	99999	
		2	1	(B, C, D, A)		Infinity					
	Exit	1	1			Infinity					
D	Entry	1	1	A	✓	3.00			0	99999	
			2	B, C, D	✓	3.00			0	99999	
		2	1	(A, B, C, D)		Infinity					
	Exit	1	1			Infinity					

Entry Lane slope and intercept

Arm	Side	Lane level	Lane	Final slope	Final intercept (PCU/hr)
A	Entry	1	1	0.377	1420
			2	0.377	1420
B	Entry	1	1	0.308	962
			2	0.308	962
C	Entry	1	1	0.263	814
			2	0.263	814
D	Entry	1	1	0.309	984
			2	0.309	984

Summary of Entry Lane allowed movements

Arm	Lane Level	Lane	Destination arm			
			B	C	D	A
B	1	1		✓	✓	
		2	✓			✓
	2	1	✓	✓	✓	✓
C	1	1			✓	✓
		2	✓	✓		✓
	2	1	✓	✓	✓	✓
D	1	1				✓
		2	✓	✓	✓	
	2	1	✓	✓	✓	✓
A	1	1	✓	✓		
		2			✓	✓

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	Scenario 1	AM	ONE HOUR	07:15	08:45	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	1888	100.000
B		ONE HOUR	✓	206	100.000
C		ONE HOUR	✓	145	100.000
D		ONE HOUR	✓	229	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	11	370	777	730
	B	118	2	50	36
	C	130	8	0	7
	D	206	12	8	3

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To			
		A	B	C	D
From	B	22	100	2	6
	C	38	33	0	20
	D	21	9	33	50

Cyclist %

		To			
		A	B	C	D
From	B	0	0	0	0
	C	0	0	0	0
	D	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max Q95 (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
A	0.56	5.28	3.2	18.0	A	1744	2615
B	0.43	14.86	0.8	4.0	B	198	297
C	0.16	10.49	0.7	5.0	B	124	186
D	0.27	6.84	0.8	4.0	A	214	321

Main Results for each time segment

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	1439	360	27	3871	0.372	1437	1427	383	0.0	1.7	3.360	A
B	143	36	1182	843	0.170	146	154	279	0.0	0.2	7.872	A
C	127	32	677	1238	0.102	128	112	652	0.0	0.1	7.752	A
D	191	48	219	976	0.196	191	177	585	0.0	0.5	6.257	A

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	1695	424	24	3879	0.437	1687	1692	381	1.7	1.8	3.760	A
B	191	48	1363	757	0.253	190	183	347	0.2	0.6	9.529	A
C	116	29	795	1115	0.104	113	124	759	0.1	0.3	10.495	B
D	181	45	224	978	0.185	181	189	684	0.5	0.2	5.633	A

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	2098	524	44	3774	0.556	2100	2075	490	1.8	3.2	4.787	A
B	258	65	1701	600	0.430	256	234	443	0.6	0.8	12.243	B
C	147	37	1006	1094	0.135	142	152	950	0.3	0.7	9.354	A
D	244	61	287	986	0.247	247	244	860	0.2	0.4	5.710	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	2125	531	38	3831	0.555	2126	2045	531	3.2	2.4	5.285	A
B	230	58	1720	675	0.341	238	229	444	0.8	0.7	14.858	B
C	151	38	1001	974	0.155	148	144	956	0.7	0.5	9.490	A
D	270	68	298	1007	0.269	272	262	851	0.4	0.3	6.841	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	1670	418	31	3833	0.436	1662	1676	423	2.4	2.2	3.912	A
B	187	47	1341	819	0.228	185	189	350	0.7	0.6	9.491	A
C	119	30	795	1114	0.107	124	129	730	0.5	0.3	8.533	A
D	223	56	237	997	0.224	217	213	680	0.3	0.8	6.578	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	1435	359	26	3702	0.388	1443	1432	347	2.2	0.8	3.279	A
B	179	45	1161	879	0.204	185	172	308	0.6	0.2	8.201	A
C	83	21	673	1211	0.068	85	104	673	0.3	0.2	7.742	A
D	175	44	202	1024	0.171	171	174	556	0.8	0.5	5.502	A

Q Variation Results for each time segment

07:15 - 07:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	1.71	0.00	0.75	5.00	5.00
B	0.24	0.00	0.00	0.63	2.00
C	0.14	0.00	0.00	1.00	1.00
D	0.48	0.00	0.00	0.90	4.00

07:30 - 07:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	1.76	0.00	0.75	3.63	5.00
B	0.57	0.00	0.00	4.00	4.00
C	0.33	0.00	0.00	0.73	3.00
D	0.19	0.00	0.00	0.45	2.00

07:45 - 08:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	3.16	0.00	2.63	5.90	8.00
B	0.76	0.00	0.06	3.00	3.00
C	0.71	0.00	0.00	1.63	5.00
D	0.38	0.00	0.00	1.45	3.00

08:00 - 08:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	2.38	0.00	0.70	4.45	18.00
B	0.71	0.00	0.00	3.00	3.00
C	0.52	0.00	0.00	1.45	3.00
D	0.33	0.00	0.00	0.90	3.00

08:15 - 08:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	2.19	0.00	0.79	8.00	8.00
B	0.62	0.00	0.00	2.00	2.00
C	0.33	0.00	0.00	2.00	2.00
D	0.78	0.00	0.00	1.90	4.00

08:30 - 08:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	0.81	0.00	0.00	4.00	4.00
B	0.24	0.00	0.00	-0.20	3.00
C	0.19	0.00	0.00	0.45	2.00
D	0.55	0.00	0.00	1.63	3.00

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

07:15 - 07:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	871	1910	0.456	871	862	0.0	1.0	3.609	A
			2	A, D	567	1910	0.297	563	565	0.0	0.8	2.974	A
	Exit	1	1		383			383	356	0.0	0.0	0.000	A
B	Entry	1	1	C, D	59	598	0.098	61	63	0.0	0.1	6.930	A
			2	A, B	85	598	0.141	85	90	0.0	0.1	8.369	A
		2	1	(A, B, C, D)	143			143	155	0.0	0.0	0.153	A
	Exit	1	1		279			279	290	0.0	0.0	0.000	A
C	Entry	1	1	A, D	64	636	0.100	65	57	0.0	0.0	7.995	A
			2	A, B, C	63	636	0.099	63	54	0.0	0.1	7.482	A
		2	1	(B, C, D, A)	127			127	112	0.0	0.0	0.007	A
	Exit	1	1		652			652	636	0.0	0.0	0.000	A
D	Entry	1	1	A	167	917	0.182	167	156	0.0	0.4	6.094	A
			2	B, C, D	24	917	0.026	24	21	0.0	0.1	5.305	A
		2	1	(A, B, C, D)	191			191	179	0.0	0.0	0.255	A
	Exit	1	1		585			585	588	0.0	0.0	0.000	A

07:30 - 07:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	1045	1911	0.547	1042	1033	1.0	1.0	4.132	A
			2	A, D	650	1911	0.340	645	658	0.8	0.7	3.165	A
	Exit	1	1		381			381	398	0.0	0.0	0.000	A
B	Entry	1	1	C, D	88	542	0.162	87	79	0.1	0.2	7.803	A
			2	A, B	103	542	0.191	102	105	0.1	0.3	9.904	A
		2	1	(A, B, C, D)	191			193	185	0.0	0.0	0.609	A
	Exit	1	1		347			347	344	0.0	0.0	0.000	A
C	Entry	1	1	A, D	51	605	0.084	49	60	0.0	0.2	9.331	A
			2	A, B, C	65	605	0.108	65	64	0.1	0.1	9.328	A
		2	1	(B, C, D, A)	116			116	125	0.0	0.0	1.165	A
	Exit	1	1		759			759	752	0.0	0.0	0.000	A
D	Entry	1	1	A	162	915	0.177	162	172	0.4	0.2	5.636	A
			2	B, C, D	18	915	0.020	18	17	0.1	0.0	4.066	A
		2	1	(A, B, C, D)	181			181	188	0.0	0.0	0.136	A
	Exit	1	1		684			684	694	0.0	0.0	0.000	A

07:45 - 08:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	1283	1903	0.674	1286	1272	1.0	2.0	5.674	A
			2	A, D	814	1903	0.428	814	804	0.7	1.1	3.373	A
	Exit	1	1		490			490	501	0.0	0.0	0.000	A
B	Entry	1	1	C, D	113	439	0.257	114	100	0.2	0.2	10.762	B
			2	A, B	146	439	0.332	142	134	0.3	0.6	12.435	B
		2	1	(A, B, C, D)	258			258	235	0.0	0.0	0.590	A
	Exit	1	1		443			443	434	0.0	0.0	0.000	A
C	Entry	1	1	A, D	84	550	0.153	83	80	0.2	0.3	8.636	A
			2	A, B, C	63	550	0.114	60	72	0.1	0.4	10.106	B
		2	1	(B, C, D, A)	147			147	153	0.0	0.0	0.020	A
	Exit	1	1		950			950	929	0.0	0.0	0.000	A
D	Entry	1	1	A	213	896	0.238	215	218	0.2	0.4	5.537	A
			2	B, C, D	31	896	0.035	33	26	0.0	0.0	5.069	A
		2	1	(A, B, C, D)	244			245	245	0.0	0.0	0.222	A
	Exit	1	1		860			860	841	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	1306	1905	0.685	1313	1256	2.0	1.4	6.425	A
			2	A, D	819	1905	0.430	812	789	1.1	1.0	3.453	A
	Exit	1	1		531			531	508	0.0	0.0	0.000	A
B	Entry	1	1	C, D	91	433	0.211	91	97	0.2	0.4	11.030	B
			2	A, B	143	433	0.330	146	131	0.6	0.3	14.338	B
		2	1	(A, B, C, D)	230			234	228	0.0	0.0	2.054	A
	Exit	1	1		444			444	423	0.0	0.0	0.000	A
C	Entry	1	1	A, D	75	551	0.137	76	73	0.3	0.2	9.882	A
			2	A, B, C	76	551	0.138	72	71	0.4	0.3	9.079	A
		2	1	(B, C, D, A)	151			151	144	0.0	0.0	0.008	A
	Exit	1	1		956			956	921	0.0	0.0	0.000	A
D	Entry	1	1	A	243	892	0.272	243	236	0.4	0.3	6.457	A
			2	B, C, D	27	892	0.031	30	26	0.0	0.0	5.181	A
		2	1	(A, B, C, D)	270			270	262	0.0	0.0	0.508	A
	Exit	1	1		851			851	827	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	1019	1908	0.534	1011	1010	1.4	1.3	4.478	A
			2	A, D	651	1908	0.341	650	666	1.0	0.9	3.047	A
	Exit	1	1		423			423	419	0.0	0.0	0.000	A
B	Entry	1	1	C, D	75	549	0.137	73	86	0.4	0.3	8.147	A
			2	A, B	112	549	0.204	111	103	0.3	0.3	10.025	B
		2	1	(A, B, C, D)	187			187	189	0.0	0.0	0.382	A
	Exit	1	1		350			350	354	0.0	0.0	0.000	A
C	Entry	1	1	A, D	66	605	0.109	67	70	0.2	0.2	8.086	A
			2	A, B, C	53	605	0.088	54	59	0.3	0.1	8.998	A
		2	1	(B, C, D, A)	119			119	128	0.0	0.0	0.035	A
	Exit	1	1		730			730	733	0.0	0.0	0.000	A
D	Entry	1	1	A	201	911	0.220	195	190	0.3	0.7	6.429	A
			2	B, C, D	22	911	0.024	22	23	0.0	0.0	5.054	A
		2	1	(A, B, C, D)	223			222	214	0.0	0.0	0.279	A
	Exit	1	1		680			680	700	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	904	1910	0.473	914	887	1.3	0.4	3.476	A
			2	A, D	531	1910	0.278	530	545	0.9	0.4	2.959	A
	Exit	1	1		347			347	353	0.0	0.0	0.000	A
B	Entry	1	1	C, D	68	605	0.112	69	73	0.3	0.1	6.910	A
			2	A, B	112	605	0.185	117	100	0.3	0.1	9.076	A
		2	1	(A, B, C, D)	179			179	171	0.0	0.0	0.125	A
	Exit	1	1		308			308	309	0.0	0.0	0.000	A
C	Entry	1	1	A, D	35	637	0.055	34	52	0.2	0.0	7.752	A
			2	A, B, C	48	637	0.075	50	53	0.1	0.1	7.732	A
		2	1	(B, C, D, A)	83			83	104	0.0	0.0	0.000	A
	Exit	1	1		673			673	646	0.0	0.0	0.000	A
D	Entry	1	1	A	157	922	0.170	155	159	0.7	0.3	5.587	A
			2	B, C, D	18	922	0.019	16	14	0.0	0.1	4.376	A
		2	1	(A, B, C, D)	175			175	173	0.0	0.0	0.046	A
	Exit	1	1		556			556	575	0.0	0.0	0.000	A

Lanes: Q Variation Results for each time segment

07:15 - 07:30

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	Entry	1	1	1.00	0.00	0.00	1.80	5.00
			2	0.81	0.00	0.00	3.00	3.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
B	Entry	1	1	0.10	0.00	0.00	1.00	1.00
			2	0.14	0.00	0.00	-0.10	2.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
C	Entry	1	1	0.05	0.00	0.00	0.00	1.00
			2	0.10	0.00	0.00	1.00	1.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
D	Entry	1	1	0.38	0.00	0.00	2.00	2.00
			2	0.10	0.00	0.00	0.00	2.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

07:30 - 07:45

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	Entry	1	1	1.05	0.00	0.39	1.90	4.00
			2	0.71	0.00	0.00	3.00	3.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
B	Entry	1	1	0.24	0.00	0.00	0.45	3.00
			2	0.33	0.00	0.00	0.90	4.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
C	Entry	1	1	0.19	0.00	0.00	0.45	2.00
			2	0.14	0.00	0.00	1.00	1.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
D	Entry	1	1	0.19	0.00	0.00	0.45	2.00
			2	0.00	0.00	0.00	0.00	0.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

07:45 - 08:00

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	Entry	1	1	2.05	0.00	1.25	6.00	6.00
			2	1.14	0.00	0.13	2.73	4.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
B	Entry	1	1	0.19	0.00	0.00	2.00	2.00
			2	0.57	0.00	0.00	0.88	3.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
C	Entry	1	1	0.29	0.00	0.00	2.00	2.00
			2	0.38	0.00	0.00	1.45	3.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
D	Entry	1	1	0.38	0.00	0.00	1.45	3.00
			2	0.00	0.00	0.00	0.00	0.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

08:00 - 08:15

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	Entry	1	1	1.43	0.00	0.00	4.45	10.00
			2	0.95	0.00	0.00	2.45	8.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
B	Entry	1	1	0.38	0.00	0.00	0.82	2.00
			2	0.33	0.00	0.00	0.78	2.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
C	Entry	1	1	0.19	0.00	0.00	2.00	2.00
			2	0.33	0.00	0.00	2.00	2.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
D	Entry	1	1	0.33	0.00	0.00	0.90	3.00
			2	0.00	0.00	0.00	0.00	0.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

08:15 - 08:30

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	Entry	1	1	1.33	0.00	0.36	5.00	5.00
			2	0.86	0.00	0.00	2.45	8.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
B	Entry	1	1	0.29	0.00	0.00	0.73	2.00
			2	0.33	0.00	0.00	2.00	2.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
C	Entry	1	1	0.19	0.00	0.00	0.45	2.00
			2	0.14	0.00	0.00	-0.10	2.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
D	Entry	1	1	0.73	0.00	0.00	3.00	3.00
			2	0.00	0.00	0.00	0.00	0.00
		2	1	0.05	0.00	0.00	0.00	1.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

08:30 - 08:45

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	Entry	1	1	0.38	0.00	0.00	0.78	3.00
			2	0.43	0.00	0.00	0.78	4.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
B	Entry	1	1	0.10	0.00	0.00	0.00	2.00
			2	0.14	0.00	0.00	-0.10	2.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
C	Entry	1	1	0.05	0.00	0.00	0.00	1.00
			2	0.14	0.00	0.00	-0.10	2.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
D	Entry	1	1	0.35	0.00	0.00	1.45	3.00
			2	0.14	0.00	0.00	-0.10	2.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

Lane movements: Main Results for each time segment

07:15 - 07:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	268	67	1420	1910	0.140	268	273	0.0	0.2	3.766	A
				C	603	151	1420	1909	0.316	603	590	0.0	0.6	3.539	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	9	2	1285	1727	0.005	9	9	0.0	0.0	2.707	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	558	140	1420	1910	0.292	554	556	0.0	0.8	2.979	A
B	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	35	9	962	595	0.059	34	37	0.0	0.1	6.078	A
				D	24	6	962	598	0.040	26	26	0.0	0.0	8.207	A
			2	A	82	21	962	597	0.138	83	88	0.0	0.1	8.330	A
				B	2	0.57	275	175	0.013	2	2	0.0	0.0	10.834	B
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	82	21	-	-	-	82	89	0.0	0.0	0.171	A
				B	2	0.57	-	-	-	2	2	0.0	0.0	0.000	A
				C	35	9	-	-	-	35	38	0.0	0.0	0.171	A
				D	24	6	-	-	-	24	26	0.0	0.0	0.079	A
C	Entry	1	1	A	61	15	814	637	0.095	62	53	0.0	0.0	8.025	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	3	0.86	581	444	0.008	3	4	0.0	0.0	7.742	A
			2	A	62	15	814	640	0.096	62	50	0.0	0.1	7.620	A
				B	1	0.29	426	332	0.003	1	4	0.0	0.0	5.911	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	123	31	-	-	-	123	103	0.0	0.0	0.000	A
				B	1	0.29	-	-	-	1	4	0.0	0.0	0.185	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	3	0.86	-	-	-	3	5	0.0	0.0	0.000	A
D	Entry	1	1	A	167	42	984	921	0.181	167	156	0.0	0.4	6.094	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	6	2	890	832	0.008	7	10	0.0	0.0	5.181	A
				C	15	4	844	791	0.019	15	9	0.0	0.0	4.470	A
				D	3	0.71	328	307	0.009	2	2	0.0	0.1	9.586	A
		2	1	A	167	42	-	-	-	167	157	0.0	0.0	0.289	A
				B	6	2	-	-	-	6	10	0.0	0.0	0.000	A
				C	15	4	-	-	-	15	9	0.0	0.0	0.000	A
				D	3	0.71	-	-	-	3	2	0.0	0.0	0.000	A

07:30 - 07:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	337	84	1420	1910	0.176	336	330	0.2	0.4	4.260	A
				C	708	177	1420	1911	0.371	706	704	0.6	0.7	4.074	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	11	3	1420	1913	0.006	11	10	0.0	0.0	3.437	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	639	160	1420	1911	0.334	634	649	0.8	0.7	3.160	A
B	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	47	12	962	543	0.087	46	44	0.1	0.2	7.861	A
				D	41	10	962	533	0.076	41	35	0.0	0.0	7.729	A
			2	A	103	26	962	540	0.191	102	104	0.1	0.3	9.917	A
				B	0	0	137	82	0.000	0	1	0.0	0.0	7.926	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	103	26	-	-	-	103	104	0.0	0.0	0.593	A
				B	0	0	-	-	-	0	1	0.0	0.0	0.000	A
				C	47	12	-	-	-	47	44	0.0	0.0	0.977	A
				D	41	10	-	-	-	41	35	0.0	0.0	0.181	A
C	Entry	1	1	A	47	12	814	599	0.079	45	54	0.0	0.2	8.696	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	3	0.86	620	458	0.007	3	6	0.0	0.0	14.269	B
			2	A	59	15	814	606	0.098	59	58	0.1	0.1	9.259	A
				B	6	1	581	434	0.013	6	6	0.0	0.0	10.100	B
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	107	27	-	-	-	107	113	0.0	0.0	0.782	A
				B	6	1	-	-	-	6	6	0.0	0.0	4.795	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	3	0.86	-	-	-	3	6	0.0	0.0	4.609	A
D	Entry	1	1	A	162	41	984	916	0.177	162	172	0.4	0.2	5.636	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	5	1	890	823	0.006	5	8	0.0	0.0	3.895	A
				C	7	2	609	570	0.013	7	5	0.0	0.0	2.997	A
				D	6	1	469	430	0.013	6	4	0.1	0.0	6.061	A
		2	1	A	162	41	-	-	-	162	171	0.0	0.0	0.149	A
				B	5	1	-	-	-	5	8	0.0	0.0	0.000	A
				C	7	2	-	-	-	7	5	0.0	0.0	0.000	A
				D	6	1	-	-	-	6	4	0.0	0.0	0.000	A

07:45 - 08:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	411	103	1420	1902	0.216	411	411	0.4	0.6	5.663	A
				C	873	218	1420	1903	0.459	875	860	0.7	1.4	5.679	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	12	3	1420	1904	0.006	12	15	0.0	0.0	3.208	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	802	201	1420	1903	0.422	802	789	0.7	1.1	3.377	A
B	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	67	17	962	432	0.155	66	59	0.2	0.1	10.407	B
				D	46	11	962	438	0.104	47	42	0.0	0.1	11.267	B
			2	A	141	35	962	436	0.323	138	132	0.3	0.6	12.411	B
				B	5	1	229	111	0.041	5	2	0.0	0.0	15.206	C
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	141	35	-	-	-	141	133	0.0	0.0	0.587	A
				B	5	1	-	-	-	5	2	0.0	0.0	0.000	A
				C	67	17	-	-	-	67	58	0.0	0.0	0.704	A
				D	46	11	-	-	-	46	42	0.0	0.0	0.451	A
C	Entry	1	1	A	76	19	814	553	0.138	75	72	0.2	0.2	8.706	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	9	2	659	458	0.019	8	8	0.0	0.0	7.965	A
			2	A	57	14	814	549	0.103	51	64	0.1	0.4	10.270	B
				B	7	2	581	405	0.017	7	7	0.0	0.0	8.853	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	130	33	-	-	-	130	138	0.0	0.0	0.000	A
				B	7	2	-	-	-	7	7	0.0	0.0	0.373	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	9	2	-	-	-	9	8	0.0	0.0	0.000	A
D	Entry	1	1	A	213	53	984	896	0.238	215	218	0.2	0.4	5.537	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	20	5	890	811	0.025	21	14	0.0	0.0	3.880	A
				C	9	2	703	644	0.013	9	10	0.0	0.0	6.130	A
				D	3	0.71	469	429	0.007	3	3	0.0	0.0	8.327	A
		2	1	A	213	53	-	-	-	213	219	0.0	0.0	0.231	A
				B	20	5	-	-	-	20	14	0.0	0.0	0.154	A
				C	9	2	-	-	-	9	10	0.0	0.0	0.183	A
				D	3	0.71	-	-	-	3	3	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	418	104	1420	1906	0.219	421	402	0.6	0.5	6.675	A
				C	888	222	1420	1905	0.466	893	854	1.4	1.0	6.311	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	12	3	1420	1907	0.006	12	12	0.0	0.0	3.705	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	807	202	1420	1905	0.424	799	777	1.1	1.0	3.449	A
B	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	53	13	962	446	0.118	53	57	0.1	0.2	11.097	B
				D	39	10	962	441	0.088	38	40	0.1	0.1	10.928	B
			2	A	141	35	962	434	0.324	143	130	0.6	0.3	14.360	B
				B	2	0.57	137	67	0.034	2	2	0.0	0.0	11.210	B
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	137	34	-	-	-	141	129	0.0	0.0	2.778	A
				B	2	0.57	-	-	-	2	2	0.0	0.0	14.173	B
				C	52	13	-	-	-	53	58	0.0	0.0	1.247	A
				D	39	10	-	-	-	39	40	0.0	0.0	0.932	A
C	Entry	1	1	A	69	17	814	551	0.124	68	66	0.2	0.2	9.932	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	7	2	698	490	0.014	8	7	0.0	0.0	9.507	A
			2	A	69	17	814	550	0.126	65	65	0.4	0.3	9.198	A
				B	7	2	465	315	0.022	7	6	0.0	0.0	7.910	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	138	34	-	-	-	138	130	0.0	0.0	0.000	A
				B	7	2	-	-	-	7	6	0.0	0.0	0.172	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	7	2	-	-	-	7	7	0.0	0.0	0.000	A
D	Entry	1	1	A	243	61	984	894	0.272	243	236	0.4	0.3	6.457	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	14	3	937	862	0.016	14	13	0.0	0.0	4.668	A
				C	9	2	844	771	0.012	9	10	0.0	0.0	5.867	A
				D	5	1	422	384	0.012	6	3	0.0	0.0	5.949	A
		2	1	A	243	61	-	-	-	243	236	0.0	0.0	0.509	A
				B	14	3	-	-	-	14	13	0.0	0.0	0.361	A
				C	9	2	-	-	-	9	10	0.0	0.0	0.868	A
				D	5	1	-	-	-	5	3	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	331	83	1420	1909	0.174	330	333	0.5	0.5	4.471	A
				C	687	172	1420	1908	0.360	682	677	1.0	0.9	4.481	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	9	2	1149	1547	0.006	9	10	0.0	0.0	3.389	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	642	161	1420	1909	0.337	641	655	1.0	0.9	3.041	A
B	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	43	11	962	544	0.080	42	50	0.2	0.2	7.812	A
				D	32	8	962	540	0.059	32	36	0.1	0.1	8.623	A
			2	A	111	28	962	550	0.202	110	103	0.3	0.3	10.059	B
				B	1	0.29	92	52	0.022	1	0.76	0.0	0.0	2.130	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	111	28	-	-	-	111	103	0.0	0.0	0.671	A
				B	1	0.29	-	-	-	1	0.76	0.0	0.0	0.000	A
				C	43	11	-	-	-	43	49	0.0	0.0	0.037	A
				D	32	8	-	-	-	32	36	0.0	0.0	0.146	A
C	Entry	1	1	A	58	15	814	606	0.096	62	64	0.2	0.0	7.987	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	7	2	659	486	0.015	5	6	0.0	0.2	8.938	A
			2	A	46	11	814	599	0.076	48	52	0.3	0.1	9.365	A
				B	7	2	543	401	0.019	7	7	0.0	0.0	6.799	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	106	26	-	-	-	106	115	0.0	0.0	0.011	A
				B	7	2	-	-	-	7	7	0.0	0.0	0.385	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	7	2	-	-	-	7	7	0.0	0.0	0.000	A
D	Entry	1	1	A	201	50	984	912	0.220	195	190	0.3	0.7	6.429	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	11	3	890	829	0.014	11	13	0.0	0.0	4.321	A
				C	7	2	656	610	0.012	7	7	0.0	0.0	5.037	A
				D	2	0.57	422	384	0.006	2	3	0.0	0.0	9.158	A
		2	1	A	201	50	-	-	-	201	192	0.0	0.0	0.299	A
				B	11	3	-	-	-	11	13	0.0	0.0	0.000	A
				C	7	2	-	-	-	7	7	0.0	0.0	0.000	A
				D	2	0.57	-	-	-	2	3	0.0	0.0	1.017	A

08:30 - 08:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	285	71	1420	1911	0.149	290	291	0.5	0.0	3.557	A
				C	619	155	1420	1910	0.324	623	596	0.9	0.3	3.437	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	4	1	1217	1639	0.002	4	7	0.0	0.0	3.090	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	527	132	1420	1910	0.276	526	538	0.9	0.4	2.957	A
B	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	42	11	962	605	0.070	43	44	0.2	0.0	7.014	A
				D	26	6	962	607	0.042	26	29	0.1	0.0	6.746	A
			2	A	108	27	962	608	0.178	113	97	0.3	0.1	9.000	A
				B	3	0.86	321	204	0.017	3	3	0.0	0.0	12.930	B
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	107	27	-	-	-	108	96	0.0	0.0	0.238	A
				B	3	0.86	-	-	-	3	3	0.0	0.0	0.000	A
				C	42	11	-	-	-	42	43	0.0	0.0	0.000	A
				D	26	6	-	-	-	26	28	0.0	0.0	0.000	A
C	Entry	1	1	A	32	8	814	644	0.050	32	45	0.0	0.0	7.744	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	3	0.71	659	508	0.006	3	7	0.2	0.0	7.805	A
			2	A	42	11	814	641	0.066	44	45	0.1	0.1	7.412	A
				B	6	2	698	550	0.011	6	8	0.0	0.0	9.446	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	74	19	-	-	-	74	90	0.0	0.0	0.000	A
				B	6	2	-	-	-	6	8	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	3	0.71	-	-	-	3	6	0.0	0.0	0.000	A
D	Entry	1	1	A	157	39	984	921	0.171	155	159	0.7	0.3	5.587	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	10	2	750	698	0.014	8	7	0.0	0.1	4.551	A
				C	6	2	797	739	0.009	6	6	0.0	0.0	4.248	A
				D	2	0.43	281	265	0.006	2	2	0.0	0.0	3.969	A
		2	1	A	157	39	-	-	-	157	158	0.0	0.0	0.050	A
				B	10	2	-	-	-	10	8	0.0	0.0	0.000	A
				C	6	2	-	-	-	6	6	0.0	0.0	0.000	A
				D	2	0.43	-	-	-	2	2	0.0	0.0	0.000	A

AM - Scenario 2, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Q percentiles may be unreliable if the mean queue in any time segment is very low or very high.
Info	Simulation	A1 - AM [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Analysis Set Details

ID	Name	Use Lane Simulation	Include in report	Use specific Demand Set(s)	Specific Demand Set (s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	AM	✓	✓	✓	D1,D3,D5,D7,D9	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		A, B, C, D	6.29	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.29	A

Arms

Arms

Arm	Name	Description	No give-way line
A	Industrial Estate Road		
B	Bryn Lane		
C	Ash Road North		
D	Abenbury Way		

Roundabout Geometry

Arm	V (m)	E (m)	l' (m)	R (m)	D (m)	PHI (deg)	Entry only	Exit only
A	8.59	9.82	7.6	38.4	60.0	37.6		
B	3.89	6.96	18.7	49.1	60.0	16.5		
C	3.34	7.53	19.0	11.3	60.0	40.3		
D	3.54	8.21	19.5	40.7	60.0	22.5		

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A	0.754	2840
B	0.616	1924
C	0.525	1628
D	0.617	1968

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

Arm Capacity Adjustments

Arm	Type	Reason	Direct capacity adjustment (PCU/hr)
A	Direct	Queue Observation	500

Lane Simulation: Arm options

Arm	Lane capacity source	Traffic considering secondary lanes (%)
A	Evenly split	10.00
B	Evenly split	10.00
C	Evenly split	10.00
D	Evenly split	10.00

Lanes

Arm	Side	Lane level	Lane	Destination arms	Has limited storage	Storage (PCU)	Has bottleneck	Has obstruction	Min Cap (PCU/hr)	Max Cap (PCU/hr)	Signalised
A	Entry	1	1	B, C		Infinity			0	99999	
			2	A, D		Infinity			0	99999	
	Exit	1	1			Infinity					
B	Entry	1	1	C, D	✓	3.00			0	99999	
			2	A, B	✓	3.00			0	99999	
		2	1	(A, B, C, D)		Infinity					
	Exit	1	1			Infinity					
C	Entry	1	1	A, D	✓	3.00			0	99999	
			2	A, B, C	✓	3.00			0	99999	
		2	1	(B, C, D, A)		Infinity					
	Exit	1	1			Infinity					
D	Entry	1	1	A	✓	3.00			0	99999	
			2	B, C, D	✓	3.00			0	99999	
		2	1	(A, B, C, D)		Infinity					
	Exit	1	1			Infinity					

Entry Lane slope and intercept

Arm	Side	Lane level	Lane	Final slope	Final intercept (PCU/hr)
A	Entry	1	1	0.377	1420
			2	0.377	1420
B	Entry	1	1	0.308	962
			2	0.308	962
C	Entry	1	1	0.263	814
			2	0.263	814
D	Entry	1	1	0.309	984
			2	0.309	984

Summary of Entry Lane allowed movements

Arm	Lane Level	Lane	Destination arm			
			B	C	D	A
B	1	1		✓	✓	
		2	✓			✓
	2	1	✓	✓	✓	✓
C	1	1			✓	✓
		2	✓	✓		✓
	2	1	✓	✓	✓	✓
D	1	1				✓
		2	✓	✓	✓	
	2	1	✓	✓	✓	✓
A	1	1	✓	✓		
		2			✓	✓

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	Scenario 2	AM	ONE HOUR	07:15	08:45	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	1888	100.000
B		ONE HOUR	✓	206	100.000
C		ONE HOUR	✓	110	100.000
D		ONE HOUR	✓	277	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	11	370	732	775
	B	118	2	47	39
	C	94	8	0	8
	D	242	12	20	3

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To			
		A	B	C	D
From	A	0	8	4	6
	B	22	100	2	6
	C	38	33	0	20
	D	21	9	33	50

Cyclist %

		To			
		A	B	C	D
From	A	0	0	0	0
	B	0	0	0	0
	C	0	0	0	0
	D	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max Q95 (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
A	0.56	4.94	2.9	10.0	A	1738	2607
B	0.40	14.82	1.3	6.0	B	191	287
C	0.13	10.21	0.5	2.0	B	103	155
D	0.31	7.48	0.6	8.0	A	256	383

Main Results for each time segment

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	1414	353	31	3883	0.364	1415	1412	330	0.0	1.0	3.258	A
B	134	34	1162	878	0.153	132	147	283	0.0	0.5	7.863	A
C	78	20	681	1158	0.068	79	81	613	0.0	0.1	7.790	A
D	205	51	161	1049	0.195	200	215	601	0.0	0.5	6.202	A

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	1712	428	42	3788	0.452	1710	1720	421	1.0	2.7	3.934	A
B	190	47	1383	831	0.228	190	184	369	0.5	0.4	9.409	A
C	98	24	858	1040	0.094	94	93	713	0.1	0.4	8.372	A
D	258	65	211	1081	0.239	254	255	746	0.5	0.6	6.170	A

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	2057	514	47	3741	0.550	2064	2083	513	2.7	2.0	4.668	A
B	229	57	1674	630	0.363	223	234	437	0.4	1.0	14.819	B
C	118	30	1033	1021	0.116	118	126	866	0.4	0.3	8.779	A
D	303	76	257	992	0.305	303	310	894	0.6	0.4	6.883	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	2124	531	45	3808	0.558	2133	2104	524	2.0	2.9	4.938	A
B	253	63	1741	632	0.401	251	229	438	1.0	1.3	13.662	B
C	131	33	1093	998	0.132	132	123	899	0.3	0.5	10.206	B
D	306	76	263	1057	0.289	306	309	961	0.4	0.5	7.483	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	1702	425	34	3755	0.453	1709	1711	441	2.9	1.4	4.038	A
B	186	46	1393	732	0.254	183	187	349	1.3	0.8	10.429	B
C	110	27	866	1080	0.102	110	107	711	0.5	0.1	8.808	A
D	247	62	228	1081	0.228	249	234	747	0.5	0.5	6.112	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	1419	355	34	3831	0.370	1419	1412	350	1.4	1.2	3.397	A
B	157	39	1138	942	0.167	157	155	314	0.8	0.4	7.558	A
C	84	21	690	1158	0.073	82	83	604	0.1	0.2	8.677	A
D	215	54	168	1124	0.192	215	227	602	0.5	0.5	5.652	A

Q Variation Results for each time segment

07:15 - 07:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	1.00	0.00	0.44	1.78	3.00
B	0.48	0.00	0.00	0.90	3.00
C	0.14	0.00	0.00	-0.10	2.00
D	0.48	0.00	0.00	1.90	5.00

07:30 - 07:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	2.71	0.00	1.75	6.90	9.00
B	0.38	0.00	0.00	2.00	2.00
C	0.38	0.00	0.00	2.00	2.00
D	0.57	0.00	0.00	0.90	8.00

07:45 - 08:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	2.00	0.00	1.25	3.90	6.00
B	1.01	0.00	0.13	3.00	3.00
C	0.33	0.00	0.00	2.00	2.00
D	0.43	0.00	0.00	0.90	3.00

08:00 - 08:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	2.86	0.00	1.25	7.90	10.00
B	1.33	0.00	0.38	3.45	5.00
C	0.48	0.00	0.00	2.00	2.00
D	0.53	0.00	0.00	0.90	3.00

08:15 - 08:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	1.43	0.00	0.58	4.00	4.00
B	0.81	0.00	0.00	1.73	6.00
C	0.10	0.00	0.00	0.00	2.00
D	0.52	0.00	0.00	1.45	3.00

08:30 - 08:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	1.24	0.00	0.00	2.63	10.00
B	0.43	0.00	0.00	2.00	2.00
C	0.19	0.00	0.00	2.00	2.00
D	0.48	0.00	0.00	0.90	4.00

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

07:15 - 07:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	845	1908	0.443	842	816	0.0	0.7	3.565	A
			2	A, D	569	1908	0.298	573	596	0.0	0.3	2.834	A
	Exit	1	1		330			330	351	0.0	0.0	0.000	A
B	Entry	1	1	C, D	57	604	0.095	57	61	0.0	0.2	6.854	A
			2	A, B	77	604	0.127	76	86	0.0	0.3	8.486	A
		2	1	(A, B, C, D)	134			134	149	0.0	0.0	0.112	A
	Exit	1	1		283			283	275	0.0	0.0	0.000	A
C	Entry	1	1	A, D	45	635	0.070	45	45	0.0	0.0	7.649	A
			2	A, B, C	34	635	0.053	34	36	0.0	0.1	7.964	A
		2	1	(B, C, D, A)	78			78	82	0.0	0.0	0.000	A
	Exit	1	1		613			613	604	0.0	0.0	0.000	A
D	Entry	1	1	A	177	934	0.189	173	187	0.0	0.4	6.136	A
			2	B, C, D	25	934	0.026	26	27	0.0	0.0	4.762	A
		2	1	(A, B, C, D)	205			201	216	0.0	0.1	0.252	A
	Exit	1	1		601			601	625	0.0	0.0	0.000	A

07:30 - 07:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	1000	1904	0.525	1003	1010	0.7	1.8	4.370	A
			2	A, D	710	1904	0.373	707	710	0.3	0.9	3.307	A
	Exit	1	1		421			421	418	0.0	0.0	0.000	A
B	Entry	1	1	C, D	79	536	0.148	79	78	0.2	0.2	7.553	A
			2	A, B	111	536	0.206	111	106	0.3	0.1	10.238	B
		2	1	(A, B, C, D)	190			190	184	0.0	0.0	0.406	A
	Exit	1	1		369			369	360	0.0	0.0	0.000	A
C	Entry	1	1	A, D	43	588	0.074	43	49	0.0	0.1	8.380	A
			2	A, B, C	52	588	0.089	51	44	0.1	0.3	8.362	A
		2	1	(B, C, D, A)	98			98	94	0.0	0.0	0.000	A
	Exit	1	1		713			713	728	0.0	0.0	0.000	A
D	Entry	1	1	A	221	920	0.240	219	223	0.4	0.3	5.932	A
			2	B, C, D	37	920	0.040	35	32	0.0	0.1	4.684	A
		2	1	(A, B, C, D)	258			257	255	0.1	0.1	0.385	A
	Exit	1	1		746			746	746	0.0	0.0	0.000	A

07:45 - 08:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	1191	1902	0.626	1202	1208	1.8	0.9	5.290	A
			2	A, D	866	1902	0.455	862	874	0.9	1.1	3.818	A
	Exit	1	1		513			513	529	0.0	0.0	0.000	A
B	Entry	1	1	C, D	102	447	0.228	97	98	0.2	0.6	10.399	B
			2	A, B	129	447	0.289	128	137	0.1	0.4	15.094	C
		2	1	(A, B, C, D)	229			229	237	0.0	0.0	1.890	A
	Exit	1	1		437			437	434	0.0	0.0	0.000	A
C	Entry	1	1	A, D	55	543	0.101	55	62	0.1	0.2	8.480	A
			2	A, B, C	62	543	0.114	62	65	0.3	0.1	9.075	A
		2	1	(B, C, D, A)	118			118	126	0.0	0.0	0.000	A
	Exit	1	1		866			866	878	0.0	0.0	0.000	A
D	Entry	1	1	A	262	905	0.290	261	268	0.3	0.4	6.585	A
			2	B, C, D	41	905	0.045	42	42	0.1	0.0	5.116	A
		2	1	(A, B, C, D)	303			303	309	0.1	0.0	0.495	A
	Exit	1	1		894			894	912	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	1224	1903	0.643	1234	1223	0.9	1.8	5.677	A
			2	A, D	900	1903	0.473	899	881	1.1	1.1	3.887	A
	Exit	1	1		524			524	514	0.0	0.0	0.000	A
B	Entry	1	1	C, D	113	426	0.264	113	100	0.6	0.4	11.742	B
			2	A, B	139	426	0.327	139	129	0.4	0.8	13.417	B
		2	1	(A, B, C, D)	253			252	230	0.0	0.1	1.016	A
	Exit	1	1		438			438	430	0.0	0.0	0.000	A
C	Entry	1	1	A, D	73	527	0.138	73	62	0.2	0.2	9.338	A
			2	A, B, C	59	527	0.113	59	62	0.1	0.3	11.096	B
		2	1	(B, C, D, A)	131			131	124	0.0	0.0	0.000	A
	Exit	1	1		899			899	891	0.0	0.0	0.000	A
D	Entry	1	1	A	279	903	0.309	278	275	0.4	0.5	6.527	A
			2	B, C, D	27	903	0.030	27	34	0.0	0.0	5.157	A
		2	1	(A, B, C, D)	306			306	309	0.0	0.0	1.113	A
	Exit	1	1		961			961	930	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	981	1907	0.514	989	995	1.8	0.7	4.545	A
			2	A, D	721	1907	0.378	720	716	1.1	0.7	3.329	A
	Exit	1	1		441			441	418	0.0	0.0	0.000	A
B	Entry	1	1	C, D	69	533	0.130	68	74	0.4	0.1	8.206	A
			2	A, B	115	533	0.216	114	113	0.8	0.5	11.628	B
		2	1	(A, B, C, D)	186			185	185	0.1	0.1	0.320	A
	Exit	1	1		349			349	353	0.0	0.0	0.000	A
C	Entry	1	1	A, D	53	587	0.091	54	58	0.2	0.0	8.569	A
			2	A, B, C	57	587	0.097	57	49	0.3	0.1	9.105	A
		2	1	(B, C, D, A)	110			110	106	0.0	0.0	0.000	A
	Exit	1	1		711			711	719	0.0	0.0	0.000	A
D	Entry	1	1	A	218	914	0.238	221	206	0.5	0.5	5.980	A
			2	B, C, D	29	914	0.032	29	28	0.0	0.0	5.019	A
		2	1	(A, B, C, D)	247			247	234	0.0	0.0	0.241	A
	Exit	1	1		747			747	749	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	850	1907	0.446	848	836	0.7	1.0	3.824	A
			2	A, D	569	1907	0.298	571	576	0.7	0.2	2.767	A
	Exit	1	1		350			350	367	0.0	0.0	0.000	A
B	Entry	1	1	C, D	71	612	0.117	70	67	0.1	0.2	7.221	A
			2	A, B	85	612	0.138	85	88	0.5	0.2	7.591	A
		2	1	(A, B, C, D)	157			157	154	0.1	0.0	0.161	A
	Exit	1	1		314			314	298	0.0	0.0	0.000	A
C	Entry	1	1	A, D	42	633	0.066	41	43	0.0	0.1	8.428	A
			2	A, B, C	42	633	0.067	42	40	0.1	0.1	8.935	A
		2	1	(B, C, D, A)	84			84	83	0.0	0.0	0.000	A
	Exit	1	1		604			604	606	0.0	0.0	0.000	A
D	Entry	1	1	A	188	932	0.202	188	200	0.5	0.4	5.543	A
			2	B, C, D	27	932	0.029	27	27	0.0	0.0	4.865	A
		2	1	(A, B, C, D)	215			215	227	0.0	0.0	0.190	A
	Exit	1	1		602			602	606	0.0	0.0	0.000	A

Lanes: Q Variation Results for each time segment

07:15 - 07:30

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	Entry	1	1	0.67	0.00	0.00	2.00	2.00
			2	0.33	0.00	0.00	0.78	2.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
B	Entry	1	1	0.19	0.00	0.00	1.00	1.00
			2	0.29	0.00	0.00	0.90	3.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
C	Entry	1	1	0.05	0.00	0.00	0.00	1.00
			2	0.10	0.00	0.00	0.00	2.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
D	Entry	1	1	0.38	0.00	0.00	3.00	3.00
			2	0.00	0.00	0.00	0.00	0.00
		2	1	0.10	0.00	0.00	0.00	2.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

07:30 - 07:45

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	Entry	1	1	1.81	0.00	0.00	4.90	7.00
			2	0.90	0.00	0.00	3.00	3.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
B	Entry	1	1	0.24	0.00	0.00	0.63	2.00
			2	0.14	0.00	0.00	-0.10	2.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
C	Entry	1	1	0.10	0.00	0.00	-0.10	2.00
			2	0.29	0.00	0.00	2.00	2.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
D	Entry	1	1	0.33	0.00	0.00	0.90	4.00
			2	0.14	0.00	0.00	-0.10	2.00
		2	1	0.10	0.00	0.00	0.00	2.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

07:45 - 08:00

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	Entry	1	1	0.86	0.00	0.08	1.73	4.00
			2	1.14	0.00	0.28	2.90	5.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
B	Entry	1	1	0.57	0.00	0.00	2.00	2.00
			2	0.43	0.00	0.00	3.00	3.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
C	Entry	1	1	0.24	0.00	0.00	2.00	2.00
			2	0.10	0.00	0.00	0.00	2.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
D	Entry	1	1	0.43	0.00	0.00	0.90	3.00
			2	0.00	0.00	0.00	0.00	0.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

08:00 - 08:15

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	Entry	1	1	1.76	0.00	0.38	3.70	10.00
			2	1.10	0.00	0.00	2.90	9.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
B	Entry	1	1	0.43	0.00	0.00	2.00	2.00
			2	0.76	0.00	0.00	3.00	3.00
		2	1	0.14	0.00	0.00	-0.10	2.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
C	Entry	1	1	0.19	0.00	0.00	0.45	2.00
			2	0.29	0.00	0.00	2.00	2.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
D	Entry	1	1	0.53	0.00	0.00	0.90	3.00
			2	0.00	0.00	0.00	0.00	0.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

08:15 - 08:30

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	Entry	1	1	0.71	0.00	0.00	1.90	4.00
			2	0.71	0.00	0.00	1.45	4.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
B	Entry	1	1	0.14	0.00	0.00	1.00	1.00
			2	0.52	0.00	0.00	1.45	3.00
		2	1	0.14	0.00	0.00	0.00	3.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
C	Entry	1	1	0.00	0.00	0.00	0.00	0.00
			2	0.10	0.00	0.00	0.00	2.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
D	Entry	1	1	0.48	0.00	0.00	1.45	3.00
			2	0.05	0.00	0.00	0.00	1.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

08:30 - 08:45

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	Entry	1	1	1.00	0.00	0.00	2.27	9.00
			2	0.24	0.00	0.00	0.63	2.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
B	Entry	1	1	0.24	0.00	0.00	0.63	2.00
			2	0.19	0.00	0.00	2.00	2.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
C	Entry	1	1	0.10	0.00	0.00	0.00	2.00
			2	0.10	0.00	0.00	0.00	2.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
D	Entry	1	1	0.43	0.00	0.00	0.90	3.00
			2	0.00	0.00	0.00	0.00	0.00
		2	1	0.05	0.00	0.00	0.00	1.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

Lane movements: Main Results for each time segment

07:15 - 07:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	269	67	1420	1908	0.141	270	259	0.0	0.2	3.734	A
				C	576	144	1420	1908	0.302	572	557	0.0	0.5	3.488	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	9	2	1217	1635	0.006	9	8	0.0	0.0	2.471	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	560	140	1420	1908	0.293	563	589	0.0	0.3	2.839	A
B	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	25	6	962	608	0.041	25	32	0.0	0.1	7.166	A
				D	32	8	962	600	0.053	31	29	0.0	0.1	6.497	A
			2	A	77	19	962	598	0.129	76	84	0.0	0.3	8.466	A
				B	0	0	137	87	0.000	0	2	0.0	0.0	10.377	B
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	77	19	-	-	-	77	85	0.0	0.0	0.206	A
				B	0	0	-	-	-	0	2	0.0	0.0	0.000	A
				C	25	6	-	-	-	25	32	0.0	0.0	0.000	A
				D	32	8	-	-	-	32	30	0.0	0.0	0.000	A
C	Entry	1	1	A	41	10	814	630	0.065	41	41	0.0	0.0	7.517	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	3	0.86	543	424	0.008	4	4	0.0	0.0	8.674	A
			2	A	29	7	814	630	0.045	29	31	0.0	0.1	8.134	A
				B	5	1	504	388	0.013	5	5	0.0	0.0	6.928	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	70	17	-	-	-	70	73	0.0	0.0	0.000	A
				B	5	1	-	-	-	5	5	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	3	0.86	-	-	-	3	4	0.0	0.0	0.000	A
D	Entry	1	1	A	177	44	984	936	0.189	173	187	0.0	0.4	6.136	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	7	2	890	840	0.008	8	9	0.0	0.0	3.406	A
				C	15	4	890	845	0.018	15	15	0.0	0.0	5.201	A
				D	2	0.43	328	304	0.006	2	3	0.0	0.0	8.726	A
		2	1	A	178	44	-	-	-	177	189	0.0	0.1	0.290	A
				B	7	2	-	-	-	7	9	0.0	0.0	0.000	A
				C	15	4	-	-	-	15	15	0.0	0.0	0.000	A
				D	2	0.43	-	-	-	2	3	0.0	0.0	0.000	A

07:30 - 07:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	356	89	1420	1905	0.187	350	342	0.2	1.0	4.376	A
				C	646	162	1420	1904	0.339	653	668	0.5	0.9	4.367	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	9	2	1217	1633	0.006	9	9	0.0	0.0	3.047	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	701	175	1420	1904	0.368	698	701	0.3	0.9	3.310	A
B	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	39	10	962	536	0.073	40	41	0.1	0.1	7.371	A
				D	41	10	962	538	0.075	39	37	0.1	0.1	7.758	A
			2	A	107	27	962	532	0.202	108	105	0.3	0.1	10.172	B
				B	3	0.86	137	80	0.043	3	1	0.0	0.0	20.507	C
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	107	27	-	-	-	107	105	0.0	0.0	0.474	A
				B	3	0.86	-	-	-	3	1	0.0	0.0	0.000	A
				C	39	10	-	-	-	39	41	0.0	0.0	0.511	A
				D	41	10	-	-	-	41	37	0.0	0.0	0.128	A
C	Entry	1	1	A	38	9	814	593	0.064	37	43	0.0	0.1	8.454	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	6	1	581	427	0.013	6	6	0.0	0.0	7.851	A
			2	A	50	12	814	592	0.084	46	38	0.1	0.3	8.394	A
				B	3	0.86	581	430	0.008	4	6	0.0	0.0	8.182	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	88	22	-	-	-	88	82	0.0	0.0	0.000	A
				B	3	0.86	-	-	-	3	6	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	6	1	-	-	-	6	6	0.0	0.0	0.000	A
D	Entry	1	1	A	221	55	984	919	0.240	219	223	0.4	0.3	5.932	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	11	3	937	877	0.013	11	11	0.0	0.0	4.443	A
				C	22	6	937	878	0.025	21	19	0.0	0.1	4.904	A
				D	3	0.71	328	306	0.009	3	2	0.0	0.0	4.085	A
		2	1	A	222	55	-	-	-	221	223	0.1	0.1	0.417	A
				B	11	3	-	-	-	11	11	0.0	0.0	0.000	A
				C	22	6	-	-	-	22	19	0.0	0.0	0.289	A
				D	3	0.71	-	-	-	3	2	0.0	0.0	0.000	A

07:45 - 08:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	414	103	1420	1902	0.218	414	410	1.0	0.4	5.392	A
				C	779	195	1420	1902	0.409	790	798	0.9	0.5	5.239	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	16	4	1420	1900	0.008	16	17	0.0	0.0	4.089	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	850	212	1420	1902	0.447	847	857	0.9	1.1	3.812	A
B	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	59	15	962	443	0.134	57	55	0.1	0.3	10.792	B
				D	42	11	962	442	0.096	41	42	0.1	0.2	9.871	A
			2	A	129	32	962	443	0.292	128	136	0.1	0.4	14.961	B
				B	0	0	92	42	0.000	0	1	0.0	0.0	41.125	E
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	129	32	-	-	-	129	137	0.0	0.0	2.634	A
				B	0	0	-	-	-	0	1	0.0	0.0	0.000	A
				C	59	15	-	-	-	59	56	0.0	0.0	0.807	A
				D	42	11	-	-	-	42	43	0.0	0.0	1.347	A
C	Entry	1	1	A	50	12	814	539	0.092	51	51	0.1	0.2	8.388	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	5	1	736	495	0.010	5	10	0.0	0.0	8.874	A
			2	A	55	14	814	540	0.102	57	57	0.3	0.0	8.957	A
				B	7	2	736	486	0.014	6	7	0.0	0.1	9.844	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	104	26	-	-	-	104	107	0.0	0.0	0.000	A
				B	7	2	-	-	-	7	8	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	5	1	-	-	-	5	10	0.0	0.0	0.000	A
D	Entry	1	1	A	262	66	984	902	0.291	261	268	0.3	0.4	6.585	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	19	5	984	904	0.021	19	15	0.0	0.0	4.348	A
				C	18	4	984	902	0.020	19	25	0.1	0.0	5.676	A
				D	3	0.71	328	307	0.009	3	2	0.0	0.0	4.985	A
		2	1	A	262	66	-	-	-	262	268	0.1	0.0	0.552	A
				B	19	5	-	-	-	19	15	0.0	0.0	0.155	A
				C	18	4	-	-	-	18	24	0.0	0.0	0.100	A
				D	3	0.71	-	-	-	3	2	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	408	102	1420	1903	0.214	411	404	0.4	0.6	5.858	A
				C	816	204	1420	1903	0.429	823	819	0.5	1.2	5.590	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	9	2	1420	1902	0.005	9	12	0.0	0.0	3.253	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	891	223	1420	1903	0.468	890	869	1.1	1.1	3.897	A
B	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	59	15	962	425	0.140	61	53	0.3	0.2	11.478	B
				D	53	13	962	429	0.124	52	47	0.2	0.2	12.053	B
			2	A	136	34	962	427	0.318	134	125	0.4	0.8	13.214	B
				B	3	0.86	367	155	0.022	5	4	0.0	0.0	24.709	C
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	137	34	-	-	-	136	126	0.0	0.1	1.297	A
				B	3	0.86	-	-	-	3	4	0.0	0.0	0.000	A
				C	59	15	-	-	-	59	53	0.0	0.0	0.741	A
				D	53	13	-	-	-	53	47	0.0	0.0	0.710	A
C	Entry	1	1	A	57	14	814	528	0.108	57	51	0.2	0.2	8.603	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	16	4	698	454	0.035	16	11	0.0	0.0	12.593	B
			2	A	45	11	814	527	0.086	48	51	0.0	0.2	11.087	B
				B	13	3	659	433	0.030	12	10	0.1	0.1	11.145	B
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	102	25	-	-	-	102	103	0.0	0.0	0.000	A
				B	13	3	-	-	-	13	10	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	16	4	-	-	-	16	10	0.0	0.0	0.000	A
D	Entry	1	1	A	279	70	984	904	0.308	278	275	0.4	0.5	6.527	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	10	2	984	906	0.011	10	12	0.0	0.0	4.681	A
				C	14	4	937	862	0.016	16	19	0.0	0.0	5.196	A
				D	3	0.71	469	431	0.007	3	3	0.0	0.0	7.327	A
		2	1	A	279	70	-	-	-	279	275	0.0	0.0	1.104	A
				B	10	2	-	-	-	10	12	0.0	0.0	0.060	A
				C	14	4	-	-	-	14	19	0.0	0.0	1.571	A
				D	3	0.71	-	-	-	3	3	0.0	0.0	4.353	A

08:15 - 08:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	331	83	1420	1907	0.174	334	333	0.6	0.2	4.614	A
				C	650	162	1420	1907	0.341	654	662	1.2	0.5	4.512	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	9	2	1285	1723	0.005	9	9	0.0	0.0	3.055	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	713	178	1420	1907	0.374	711	707	1.1	0.7	3.332	A
B	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	41	10	962	528	0.077	41	42	0.2	0.0	8.601	A
				D	29	7	962	537	0.053	27	31	0.2	0.1	7.647	A
			2	A	115	29	962	537	0.215	114	110	0.8	0.5	11.500	B
				B	0	0	321	180	0.000	1	3	0.0	0.0	20.267	C
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	117	29	-	-	-	115	110	0.1	0.1	0.575	A
				B	0	0	-	-	-	0	3	0.0	0.0	0.000	A
				C	41	10	-	-	-	41	42	0.0	0.0	0.000	A
				D	29	7	-	-	-	29	31	0.0	0.0	0.000	A
C	Entry	1	1	A	47	12	814	583	0.081	48	50	0.2	0.0	8.159	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	6	1	620	443	0.013	6	8	0.0	0.0	11.019	B
			2	A	53	13	814	586	0.091	53	43	0.2	0.1	8.931	A
				B	4	1	504	361	0.011	4	6	0.1	0.0	10.297	B
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	101	25	-	-	-	101	92	0.0	0.0	0.000	A
				B	4	1	-	-	-	4	6	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	6	1	-	-	-	6	8	0.0	0.0	0.000	A
D	Entry	1	1	A	218	54	984	914	0.238	221	206	0.5	0.5	5.980	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	10	3	844	787	0.013	10	11	0.0	0.0	4.837	A
				C	16	4	937	868	0.019	16	15	0.0	0.0	4.910	A
				D	2	0.57	375	348	0.007	2	2	0.0	0.0	6.962	A
		2	1	A	218	54	-	-	-	218	206	0.0	0.0	0.236	A
				B	10	3	-	-	-	10	11	0.0	0.0	0.465	A
				C	16	4	-	-	-	16	15	0.0	0.0	0.152	A
				D	2	0.57	-	-	-	2	2	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	295	74	1420	1907	0.155	295	280	0.2	0.3	3.788	A
				C	554	138	1420	1907	0.290	553	556	0.5	0.7	3.841	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	7	2	1082	1453	0.005	7	9	0.0	0.0	2.498	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	562	140	1420	1907	0.295	564	567	0.7	0.2	2.772	A
B	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	41	10	962	608	0.068	41	36	0.0	0.0	6.754	A
				D	30	8	962	602	0.050	29	31	0.1	0.2	7.776	A
			2	A	83	21	962	619	0.135	83	86	0.5	0.2	7.558	A
				B	1	0.29	229	145	0.008	1	2	0.0	0.0	9.995	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	83	21	-	-	-	83	85	0.1	0.0	0.245	A
				B	1	0.29	-	-	-	1	2	0.0	0.0	0.000	A
				C	41	10	-	-	-	41	36	0.0	0.0	0.081	A
				D	30	8	-	-	-	30	31	0.0	0.0	0.064	A
C	Entry	1	1	A	35	9	814	634	0.056	34	37	0.0	0.1	8.629	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	6	2	543	423	0.015	6	6	0.0	0.0	7.290	A
			2	A	37	9	814	640	0.057	35	35	0.1	0.1	9.084	A
				B	6	1	543	410	0.014	6	5	0.0	0.0	8.043	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	72	18	-	-	-	72	72	0.0	0.0	0.000	A
				B	6	1	-	-	-	6	5	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	6	2	-	-	-	6	6	0.0	0.0	0.000	A
D	Entry	1	1	A	188	47	984	932	0.202	188	200	0.5	0.4	5.543	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	14	3	844	792	0.017	14	10	0.0	0.0	4.873	A
				C	10	3	937	886	0.012	10	14	0.0	0.0	4.704	A
				D	3	0.71	375	353	0.008	3	3	0.0	0.0	5.743	A
		2	1	A	189	47	-	-	-	188	200	0.0	0.0	0.177	A
				B	14	3	-	-	-	14	10	0.0	0.0	0.218	A
				C	10	3	-	-	-	10	14	0.0	0.0	0.391	A
				D	3	0.71	-	-	-	3	3	0.0	0.0	0.000	A

AM - Scenario 3, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Q percentiles may be unreliable if the mean queue in any time segment is very low or very high.
Info	Simulation	A1 - AM [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Analysis Set Details

ID	Name	Use Lane Simulation	Include in report	Use specific Demand Set(s)	Specific Demand Set (s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	AM	✓	✓	✓	D1,D3,D5,D7,D9	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		A, B, C, D	5.91	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.91	A

Arms

Arms

Arm	Name	Description	No give-way line
A	Industrial Estate Road		
B	Bryn Lane		
C	Ash Road North		
D	Abenbury Way		

Roundabout Geometry

Arm	V (m)	E (m)	l' (m)	R (m)	D (m)	PHI (deg)	Entry only	Exit only
A	8.59	9.82	7.6	38.4	60.0	37.6		
B	3.89	6.96	18.7	49.1	60.0	16.5		
C	3.34	7.53	19.0	11.3	60.0	40.3		
D	3.54	8.21	19.5	40.7	60.0	22.5		

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A	0.754	2840
B	0.616	1924
C	0.525	1628
D	0.617	1968

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

Arm Capacity Adjustments

Arm	Type	Reason	Direct capacity adjustment (PCU/hr)
A	Direct	Queue Observation	500

Lane Simulation: Arm options

Arm	Lane capacity source	Traffic considering secondary lanes (%)
A	Evenly split	10.00
B	Evenly split	10.00
C	Evenly split	10.00
D	Evenly split	10.00

Lanes

Arm	Side	Lane level	Lane	Destination arms	Has limited storage	Storage (PCU)	Has bottleneck	Has obstruction	Min Cap (PCU/hr)	Max Cap (PCU/hr)	Signalised
A	Entry	1	1	B, C		Infinity			0	99999	
			2	A, D		Infinity			0	99999	
	Exit	1	1			Infinity					
B	Entry	1	1	C, D	✓	3.00			0	99999	
			2	A, B	✓	3.00			0	99999	
		2	1	(A, B, C, D)		Infinity					
	Exit	1	1			Infinity					
C	Entry	1	1	A, D	✓	3.00			0	99999	
			2	A, B, C	✓	3.00			0	99999	
		2	1	(B, C, D, A)		Infinity					
	Exit	1	1			Infinity					
D	Entry	1	1	A	✓	3.00			0	99999	
			2	B, C, D	✓	3.00			0	99999	
		2	1	(A, B, C, D)		Infinity					
	Exit	1	1			Infinity					

Entry Lane slope and intercept

Arm	Side	Lane level	Lane	Final slope	Final intercept (PCU/hr)
A	Entry	1	1	0.377	1420
			2	0.377	1420
B	Entry	1	1	0.308	962
			2	0.308	962
C	Entry	1	1	0.263	814
			2	0.263	814
D	Entry	1	1	0.309	984
			2	0.309	984

Summary of Entry Lane allowed movements

Arm	Lane Level	Lane	Destination arm			
			B	C	D	A
B	1	1		✓	✓	
		2	✓			✓
	2	1	✓	✓	✓	✓
C	1	1			✓	✓
		2	✓	✓		✓
	2	1	✓	✓	✓	✓
D	1	1				✓
		2	✓	✓	✓	
	2	1	✓	✓	✓	✓
A	1	1	✓	✓		
		2			✓	✓

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	Scenario 3	AM	ONE HOUR	07:15	08:45	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	1888	100.000
B		ONE HOUR	✓	206	100.000
C		ONE HOUR	✓	104	100.000
D		ONE HOUR	✓	283	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	11	370	601	906
	B	118	2	38	48
	C	88	8	0	8
	D	248	12	20	3

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To			
		A	B	C	D
From	A	0	8	4	6
	B	22	100	2	6
	C	38	33	0	20
	D	21	9	33	50

Cyclist %

		To			
		A	B	C	D
From	A	0	0	0	0
	B	0	0	0	0
	C	0	0	0	0
	D	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max Q95 (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
A	0.55	4.60	2.6	9.0	A	1744	2616
B	0.41	14.09	1.4	7.0	B	195	292
C	0.13	10.55	0.4	3.0	B	94	142
D	0.30	6.90	0.9	5.0	A	256	384

Main Results for each time segment

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	1470	368	28	3813	0.386	1460	1429	361	0.0	2.3	3.358	A
B	167	42	1182	934	0.179	168	160	306	0.0	0.5	8.191	A
C	69	17	838	1146	0.060	69	78	511	0.0	0.1	6.626	A
D	223	56	167	983	0.227	221	223	739	0.0	0.7	6.101	A

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	1682	420	37	3778	0.445	1691	1732	391	2.3	2.0	3.829	A
B	163	41	1366	765	0.214	161	180	361	0.5	0.5	11.016	B
C	87	22	936	965	0.090	85	94	591	0.1	0.3	9.332	A
D	248	62	182	1015	0.244	246	252	839	0.7	0.5	6.131	A

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	2053	513	54	3789	0.542	2052	2050	509	2.0	2.2	4.518	A
B	266	67	1687	656	0.406	259	238	419	0.5	1.4	12.254	B
C	112	28	1217	1005	0.111	115	115	730	0.3	0.1	10.552	B
D	294	74	274	1082	0.272	289	303	1057	0.5	0.9	6.763	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	2082	521	53	3752	0.555	2078	2058	511	2.2	2.6	4.603	A
B	237	59	1696	699	0.338	241	231	435	1.4	1.0	14.086	B
C	124	31	1218	931	0.133	125	114	719	0.1	0.3	10.141	B
D	302	75	264	1006	0.300	297	327	1075	0.9	0.6	6.895	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	1739	435	43	3762	0.462	1726	1705	411	2.6	2.4	3.703	A
B	190	48	1399	843	0.226	191	180	370	1.0	0.2	10.095	B
C	97	24	993	1038	0.094	94	96	598	0.3	0.4	9.930	A
D	253	63	207	1097	0.231	250	255	882	0.6	0.5	5.879	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	1437	359	33	3901	0.368	1433	1446	341	2.4	1.1	3.225	A
B	145	36	1168	884	0.164	143	146	298	0.2	0.4	8.133	A
C	78	19	798	1065	0.073	79	75	513	0.4	0.3	7.829	A
D	215	54	156	1012	0.212	218	228	721	0.5	0.1	6.016	A

Q Variation Results for each time segment

07:15 - 07:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	2.29	0.00	1.83	6.00	6.00
B	0.48	0.00	0.00	2.00	2.00
C	0.14	0.00	0.00	-0.10	2.00
D	0.67	0.00	0.00	1.90	4.00

07:30 - 07:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	2.05	0.00	1.38	5.00	5.00
B	0.52	0.00	0.00	2.00	2.00
C	0.33	0.00	0.00	2.00	2.00
D	0.52	0.00	0.00	3.00	3.00

07:45 - 08:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	2.24	0.00	0.50	6.35	9.00
B	1.43	0.00	0.63	3.45	5.00
C	0.10	0.00	0.00	1.00	1.00
D	0.90	0.00	0.00	1.90	5.00

08:00 - 08:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	2.61	0.00	1.42	8.00	8.00
B	1.05	0.00	0.00	3.90	7.00
C	0.33	0.00	0.00	2.00	2.00
D	0.62	0.00	0.00	1.45	3.00

08:15 - 08:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	2.38	0.00	1.25	4.90	9.00
B	0.24	0.00	0.00	1.00	1.00
C	0.43	0.00	0.00	3.00	3.00
D	0.48	0.00	0.00	2.00	2.00

08:30 - 08:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	1.10	0.00	0.19	2.45	7.00
B	0.38	0.00	0.00	2.00	2.00
C	0.29	0.00	0.00	2.00	2.00
D	0.14	0.00	0.00	1.00	1.00

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

07:15 - 07:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	764	1909	0.400	756	727	0.0	1.2	3.236	A
			2	A, D	706	1909	0.370	704	702	0.0	1.0	3.485	A
	Exit	1	1		361			361	364	0.0	0.0	0.000	A
B	Entry	1	1	C, D	74	598	0.124	74	70	0.0	0.1	6.591	A
			2	A, B	94	598	0.158	95	90	0.0	0.3	9.171	A
		2	1	(A, B, C, D)	167			167	162	0.0	0.0	0.236	A
	Exit	1	1		306			306	295	0.0	0.0	0.000	A
C	Entry	1	1	A, D	31	594	0.052	31	38	0.0	0.0	6.314	A
			2	A, B, C	37	594	0.063	38	41	0.0	0.1	6.917	A
		2	1	(B, C, D, A)	69			69	79	0.0	0.0	0.000	A
	Exit	1	1		511			511	492	0.0	0.0	0.000	A
D	Entry	1	1	A	202	933	0.216	201	202	0.0	0.6	5.884	A
			2	B, C, D	21	933	0.023	21	21	0.0	0.0	4.946	A
		2	1	(A, B, C, D)	223			223	226	0.0	0.0	0.311	A
	Exit	1	1		739			739	739	0.0	0.0	0.000	A

07:30 - 07:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	877	1906	0.460	888	897	1.2	0.9	3.953	A
			2	A, D	805	1906	0.422	803	835	1.0	1.1	3.695	A
	Exit	1	1		391			391	420	0.0	0.0	0.000	A
B	Entry	1	1	C, D	68	542	0.126	67	70	0.1	0.2	9.496	A
			2	A, B	95	542	0.176	94	111	0.3	0.3	11.097	B
		2	1	(A, B, C, D)	163			163	180	0.0	0.0	0.612	A
	Exit	1	1		361			361	349	0.0	0.0	0.000	A
C	Entry	1	1	A, D	38	568	0.067	39	44	0.0	0.1	10.121	B
			2	A, B, C	49	568	0.087	47	50	0.1	0.2	8.446	A
		2	1	(B, C, D, A)	87			87	94	0.0	0.0	0.072	A
	Exit	1	1		591			591	619	0.0	0.0	0.000	A
D	Entry	1	1	A	220	928	0.237	218	221	0.6	0.5	5.884	A
			2	B, C, D	29	928	0.031	29	32	0.0	0.0	4.185	A
		2	1	(A, B, C, D)	248			248	252	0.0	0.0	0.461	A
	Exit	1	1		839			839	870	0.0	0.0	0.000	A

07:45 - 08:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	1051	1899	0.553	1053	1046	0.9	1.0	4.541	A
			2	A, D	1002	1899	0.528	999	1003	1.1	1.2	4.495	A
	Exit	1	1		509			509	511	0.0	0.0	0.000	A
B	Entry	1	1	C, D	98	443	0.221	99	98	0.2	0.1	10.342	B
			2	A, B	168	443	0.380	161	140	0.3	1.3	12.787	B
		2	1	(A, B, C, D)	266			265	241	0.0	0.1	0.559	A
	Exit	1	1		419			419	412	0.0	0.0	0.000	A
C	Entry	1	1	A, D	53	494	0.106	55	59	0.1	0.0	10.290	B
			2	A, B, C	58	494	0.118	59	56	0.2	0.0	10.836	B
		2	1	(B, C, D, A)	112			112	114	0.0	0.0	0.000	A
	Exit	1	1		730			730	723	0.0	0.0	0.000	A
D	Entry	1	1	A	254	900	0.283	251	267	0.5	0.6	6.491	A
			2	B, C, D	39	900	0.043	38	36	0.0	0.2	5.062	A
		2	1	(A, B, C, D)	294			293	304	0.0	0.1	0.442	A
	Exit	1	1		1057			1057	1060	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	1056	1900	0.556	1059	1056	1.0	0.8	4.912	A
			2	A, D	1027	1900	0.541	1019	1001	1.2	1.8	4.278	A
	Exit	1	1		511			511	522	0.0	0.0	0.000	A
B	Entry	1	1	C, D	103	440	0.235	105	97	0.1	0.2	10.337	B
			2	A, B	134	440	0.305	135	134	1.3	0.8	14.399	B
		2	1	(A, B, C, D)	237			238	229	0.1	0.0	1.559	A
	Exit	1	1		435			435	434	0.0	0.0	0.000	A
C	Entry	1	1	A, D	56	494	0.113	57	52	0.0	0.0	10.503	B
			2	A, B, C	68	494	0.138	67	62	0.0	0.3	9.831	A
		2	1	(B, C, D, A)	124			124	115	0.0	0.0	0.000	A
	Exit	1	1		719			719	717	0.0	0.0	0.000	A
D	Entry	1	1	A	262	902	0.290	257	282	0.6	0.6	6.624	A
			2	B, C, D	41	902	0.045	40	45	0.2	0.0	4.347	A
		2	1	(A, B, C, D)	302			302	326	0.1	0.0	0.573	A
	Exit	1	1		1075			1075	1055	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	897	1903	0.471	895	873	0.8	1.0	3.882	A
			2	A, D	842	1903	0.442	831	832	1.8	1.4	3.517	A
	Exit	1	1		411			411	415	0.0	0.0	0.000	A
B	Entry	1	1	C, D	79	532	0.149	80	75	0.2	0.1	7.303	A
			2	A, B	111	532	0.209	111	105	0.8	0.1	11.202	B
		2	1	(A, B, C, D)	190			190	177	0.0	0.0	0.714	A
	Exit	1	1		370			370	361	0.0	0.0	0.000	A
C	Entry	1	1	A, D	50	553	0.090	50	50	0.0	0.1	10.953	B
			2	A, B, C	46	553	0.084	44	46	0.3	0.3	8.874	A
		2	1	(B, C, D, A)	97			97	97	0.0	0.0	0.000	A
	Exit	1	1		598			598	583	0.0	0.0	0.000	A
D	Entry	1	1	A	221	921	0.240	219	224	0.6	0.4	5.764	A
			2	B, C, D	33	921	0.036	32	31	0.0	0.1	4.844	A
		2	1	(A, B, C, D)	253			253	254	0.0	0.0	0.223	A
	Exit	1	1		882			882	877	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	753	1908	0.395	751	743	1.0	0.6	3.170	A
			2	A, D	681	1908	0.357	682	702	1.4	0.5	3.284	A
	Exit	1	1		341			341	356	0.0	0.0	0.000	A
B	Entry	1	1	C, D	64	603	0.106	66	63	0.1	0.0	6.964	A
			2	A, B	80	603	0.133	77	83	0.1	0.4	8.914	A
		2	1	(A, B, C, D)	145			145	146	0.0	0.0	0.132	A
	Exit	1	1		298			298	296	0.0	0.0	0.000	A
C	Entry	1	1	A, D	35	604	0.059	37	35	0.1	0.0	7.095	A
			2	A, B, C	43	604	0.071	42	40	0.3	0.2	8.499	A
		2	1	(B, C, D, A)	78			78	74	0.0	0.0	0.000	A
	Exit	1	1		513			513	508	0.0	0.0	0.000	A
D	Entry	1	1	A	187	936	0.200	189	199	0.4	0.1	5.834	A
			2	B, C, D	28	936	0.030	29	30	0.1	0.0	4.307	A
		2	1	(A, B, C, D)	215			215	227	0.0	0.0	0.394	A
	Exit	1	1		721			721	735	0.0	0.0	0.000	A

Lanes: Q Variation Results for each time segment

07:15 - 07:30

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	Entry	1	1	1.24	0.00	0.00	2.80	6.00
			2	1.05	0.00	0.13	2.45	4.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
B	Entry	1	1	0.14	0.00	0.00	-0.10	2.00
			2	0.33	0.00	0.00	2.00	2.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
C	Entry	1	1	0.00	0.00	0.00	0.00	0.00
			2	0.14	0.00	0.00	-0.10	2.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
D	Entry	1	1	0.62	0.00	0.00	1.90	4.00
			2	0.05	0.00	0.00	0.00	1.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

07:30 - 07:45

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	Entry	1	1	0.91	0.00	0.00	3.00	3.00
			2	1.14	0.00	0.00	5.00	5.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
B	Entry	1	1	0.19	0.00	0.00	1.00	1.00
			2	0.29	0.00	0.00	2.00	2.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
C	Entry	1	1	0.14	0.00	0.00	-0.10	2.00
			2	0.19	0.00	0.00	2.00	2.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
D	Entry	1	1	0.48	0.00	0.00	3.00	3.00
			2	0.05	0.00	0.00	0.00	1.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

07:45 - 08:00

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	Entry	1	1	1.00	0.00	0.00	3.90	6.00
			2	1.24	0.00	0.00	2.63	8.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
B	Entry	1	1	0.10	0.00	0.00	1.00	1.00
			2	1.29	0.00	0.50	2.73	4.00
		2	1	0.10	0.00	0.00	1.00	1.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
C	Entry	1	1	0.05	0.00	0.00	0.00	1.00
			2	0.05	0.00	0.00	0.00	1.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
D	Entry	1	1	0.62	0.00	0.00	3.00	3.00
			2	0.19	0.00	0.00	0.45	2.00
		2	1	0.10	0.00	0.00	0.00	2.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

08:00 - 08:15

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	Entry	1	1	0.81	0.00	0.00	1.70	6.00
			2	1.76	0.00	0.63	7.00	7.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
B	Entry	1	1	0.24	0.00	0.00	0.45	3.00
			2	0.76	0.00	0.00	4.00	4.00
		2	1	0.05	0.00	0.00	0.00	1.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
C	Entry	1	1	0.05	0.00	0.00	0.00	1.00
			2	0.29	0.00	0.00	2.00	2.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
D	Entry	1	1	0.57	0.00	0.00	1.45	3.00
			2	0.05	0.00	0.00	0.00	1.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

08:15 - 08:30

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	Entry	1	1	0.95	0.00	0.00	5.00	5.00
			2	1.43	0.00	0.00	3.90	7.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
B	Entry	1	1	0.10	0.00	0.00	1.00	1.00
			2	0.14	0.00	0.00	1.00	1.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
C	Entry	1	1	0.14	0.00	0.00	1.00	1.00
			2	0.29	0.00	0.00	2.00	2.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
		1	1	0.38	0.00	0.00	2.00	2.00
			2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

08:30 - 08:45

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	Entry	1	1	0.62	0.00	0.00	0.90	3.00
			2	0.48	0.00	0.00	0.80	4.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
B	Entry	1	1	0.00	0.00	0.00	0.00	0.00
			2	0.38	0.00	0.00	2.00	2.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
C	Entry	1	1	0.05	0.00	0.00	0.00	1.00
			2	0.24	0.00	0.00	2.00	2.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
D	Entry	1	1	0.14	0.00	0.00	1.00	1.00
			2	0.00	0.00	0.00	0.00	0.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

Lane movements: Main Results for each time segment

07:15 - 07:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	292	73	1420	1909	0.153	287	278	0.0	0.6	3.333	A
				C	473	118	1420	1909	0.248	469	448	0.0	0.6	3.178	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	7	2	1082	1455	0.005	7	8	0.0	0.0	3.149	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	699	175	1420	1909	0.366	695	695	0.0	1.0	3.489	A
B	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	36	9	962	603	0.060	36	33	0.0	0.0	6.670	A
				D	37	9	962	604	0.062	37	37	0.0	0.1	6.518	A
			2	A	93	23	962	606	0.154	94	89	0.0	0.3	9.072	A
				B	1	0.29	46	28	0.040	1	0.76	0.0	0.0	28.613	D
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	93	23	-	-	-	93	90	0.0	0.0	0.400	A
				B	1	0.29	-	-	-	1	0.76	0.0	0.0	0.000	A
				C	36	9	-	-	-	36	33	0.0	0.0	0.000	A
				D	37	9	-	-	-	37	38	0.0	0.0	0.103	A
C	Entry	1	1	A	27	7	814	598	0.046	27	32	0.0	0.0	6.432	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	3	0.86	698	511	0.007	3	6	0.0	0.0	5.818	A
			2	A	32	8	814	595	0.054	33	34	0.0	0.1	6.792	A
				B	6	2	659	500	0.013	6	7	0.0	0.0	7.575	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	59	15	-	-	-	59	66	0.0	0.0	0.000	A
				B	6	2	-	-	-	6	7	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	3	0.86	-	-	-	3	6	0.0	0.0	0.000	A
D	Entry	1	1	A	202	50	984	931	0.217	201	202	0.0	0.6	5.884	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	13	3	844	799	0.016	12	9	0.0	0.0	4.661	A
				C	7	2	890	844	0.008	7	11	0.0	0.0	5.279	A
				D	2	0.43	141	133	0.013	2	0.95	0.0	0.0	4.162	A
		2	1	A	202	50	-	-	-	202	205	0.0	0.0	0.271	A
				B	13	3	-	-	-	13	9	0.0	0.0	0.663	A
				C	7	2	-	-	-	7	11	0.0	0.0	0.282	A
				D	2	0.43	-	-	-	2	0.95	0.0	0.0	5.292	A

07:30 - 07:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	329	82	1420	1906	0.173	342	330	0.6	0.2	4.005	A
				C	548	137	1420	1905	0.288	546	567	0.6	0.7	3.924	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	11	3	1285	1721	0.006	11	10	0.0	0.0	3.137	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	794	199	1420	1905	0.417	792	826	1.0	1.1	3.702	A
B	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	27	7	962	530	0.052	28	33	0.0	0.0	9.212	A
				D	41	10	962	533	0.076	39	37	0.1	0.2	9.755	A
			2	A	93	23	962	535	0.174	91	108	0.3	0.3	10.934	B
				B	2	0.57	183	103	0.022	2	2	0.0	0.0	23.722	C
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	93	23	-	-	-	93	108	0.0	0.0	0.508	A
				B	2	0.57	-	-	-	2	2	0.0	0.0	0.000	A
				C	27	7	-	-	-	27	33	0.0	0.0	0.454	A
				D	41	10	-	-	-	41	37	0.0	0.0	1.034	A
C	Entry	1	1	A	30	7	814	555	0.054	30	37	0.0	0.1	10.095	B
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	9	2	620	425	0.020	9	7	0.0	0.0	10.238	B
			2	A	45	11	814	567	0.080	43	44	0.1	0.2	8.122	A
				B	5	1	543	376	0.014	5	6	0.0	0.0	10.727	B
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	73	18	-	-	-	73	82	0.0	0.0	0.034	A
				B	5	1	-	-	-	5	6	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	9	2	-	-	-	9	7	0.0	0.0	0.494	A
D	Entry	1	1	A	220	55	984	928	0.237	218	221	0.6	0.5	5.884	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	12	3	890	835	0.014	12	12	0.0	0.0	3.731	A
				C	16	4	984	924	0.017	17	19	0.0	0.0	4.577	A
				D	0	0	234	217	0.000	0	1	0.0	0.0	2.967	A
		2	1	A	220	55	-	-	-	220	220	0.0	0.0	0.482	A
				B	12	3	-	-	-	12	12	0.0	0.0	0.000	A
				C	16	4	-	-	-	16	19	0.0	0.0	0.562	A
				D	0	0	-	-	-	0	1	0.0	0.0	0.000	A

07:45 - 08:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	393	98	1420	1899	0.207	394	390	0.2	0.5	4.497	A
				C	657	164	1420	1900	0.346	658	657	0.7	0.5	4.566	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	12	3	1352	1811	0.007	12	11	0.0	0.0	4.751	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	990	248	1420	1900	0.521	987	992	1.1	1.2	4.492	A
B	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	47	12	962	438	0.108	47	44	0.0	0.1	10.355	B
				D	50	12	962	439	0.113	51	54	0.2	0.0	10.331	B
			2	A	161	40	962	441	0.365	154	137	0.3	1.3	12.779	B
				B	7	2	229	97	0.070	7	3	0.0	0.0	13.470	B
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	162	41	-	-	-	161	141	0.0	0.1	0.741	A
				B	7	2	-	-	-	7	3	0.0	0.0	0.000	A
				C	47	12	-	-	-	47	45	0.0	0.0	0.330	A
				D	50	12	-	-	-	50	53	0.0	0.0	0.361	A
C	Entry	1	1	A	40	10	814	494	0.081	42	48	0.1	0.0	10.385	B
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	13	3	698	420	0.031	14	10	0.0	0.0	9.914	A
			2	A	49	12	814	496	0.099	50	47	0.2	0.0	10.619	B
				B	9	2	659	413	0.022	9	9	0.0	0.0	11.838	B
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	89	22	-	-	-	89	94	0.0	0.0	0.000	A
				B	9	2	-	-	-	9	9	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	13	3	-	-	-	13	10	0.0	0.0	0.000	A
D	Entry	1	1	A	254	64	984	900	0.282	251	267	0.5	0.6	6.491	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	9	2	984	906	0.009	9	10	0.0	0.0	3.920	A
				C	23	6	984	901	0.026	24	22	0.0	0.1	5.489	A
				D	6	2	422	389	0.016	5	4	0.0	0.1	6.667	A
		2	1	A	255	64	-	-	-	254	268	0.0	0.1	0.460	A
				B	9	2	-	-	-	9	10	0.0	0.0	0.000	A
				C	23	6	-	-	-	23	22	0.0	0.0	0.526	A
				D	6	2	-	-	-	6	4	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	408	102	1420	1901	0.215	411	406	0.5	0.3	5.211	A
				C	647	162	1420	1902	0.340	648	650	0.5	0.5	4.731	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	14	4	1420	1898	0.008	14	13	0.0	0.0	5.141	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	1013	253	1420	1900	0.533	1005	989	1.2	1.8	4.266	A
B	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	43	11	962	440	0.099	45	42	0.1	0.1	8.615	A
				D	61	15	962	430	0.141	62	55	0.0	0.1	11.696	B
			2	A	130	33	962	438	0.297	131	131	1.3	0.8	14.314	B
				B	3	0.86	229	109	0.032	5	2	0.0	0.0	22.309	C
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	130	33	-	-	-	130	129	0.1	0.0	1.897	A
				B	3	0.86	-	-	-	3	2	0.0	0.0	0.000	A
				C	43	11	-	-	-	43	42	0.0	0.0	1.086	A
				D	60	15	-	-	-	61	56	0.0	0.0	1.269	A
C	Entry	1	1	A	50	13	814	489	0.103	51	44	0.0	0.0	10.656	B
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	7	2	659	414	0.017	6	8	0.0	0.0	9.795	A
			2	A	58	15	814	490	0.118	58	53	0.0	0.1	9.665	A
				B	11	3	620	378	0.029	8	9	0.0	0.2	10.671	B
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	107	27	-	-	-	107	97	0.0	0.0	0.000	A
				B	11	3	-	-	-	11	10	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	7	2	-	-	-	7	8	0.0	0.0	0.000	A
D	Entry	1	1	A	262	65	984	902	0.290	257	282	0.6	0.6	6.624	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	11	3	937	859	0.013	11	16	0.0	0.0	3.966	A
				C	26	7	984	908	0.029	26	25	0.1	0.0	4.556	A
				D	2	0.57	328	300	0.008	2	3	0.1	0.0	5.554	A
		2	1	A	261	65	-	-	-	262	282	0.1	0.0	0.643	A
				B	11	3	-	-	-	11	16	0.0	0.0	0.214	A
				C	26	7	-	-	-	26	25	0.0	0.0	0.057	A
				D	2	0.57	-	-	-	2	3	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	350	87	1420	1903	0.184	350	340	0.3	0.5	3.989	A
				C	547	137	1420	1903	0.288	546	533	0.5	0.5	3.816	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	9	2	1217	1632	0.006	9	9	0.0	0.0	4.135	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	833	208	1420	1903	0.437	822	823	1.8	1.4	3.510	A
B	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	37	9	962	524	0.070	37	34	0.1	0.0	7.628	A
				D	43	11	962	523	0.082	43	41	0.1	0.1	7.034	A
			2	A	106	27	962	534	0.199	107	103	0.8	0.1	11.125	B
				B	5	1	275	150	0.031	5	2	0.0	0.0	16.767	C
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	106	27	-	-	-	106	100	0.0	0.0	0.765	A
				B	5	1	-	-	-	5	2	0.0	0.0	0.000	A
				C	37	9	-	-	-	37	33	0.0	0.0	0.674	A
				D	43	11	-	-	-	43	41	0.0	0.0	0.660	A
C	Entry	1	1	A	41	10	814	554	0.073	40	42	0.0	0.1	11.755	B
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	9	2	659	448	0.020	10	8	0.0	0.0	7.137	A
			2	A	41	10	814	564	0.072	37	38	0.1	0.3	8.761	A
				B	7	2	659	450	0.015	7	9	0.2	0.0	9.370	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	81	20	-	-	-	81	82	0.0	0.0	0.000	A
				B	7	2	-	-	-	7	8	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	9	2	-	-	-	9	7	0.0	0.0	0.000	A
D	Entry	1	1	A	221	55	984	920	0.240	219	224	0.6	0.4	5.764	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	11	3	890	836	0.013	10	10	0.0	0.1	4.976	A
				C	14	3	890	835	0.017	14	16	0.0	0.0	4.555	A
				D	7	2	609	571	0.013	7	5	0.0	0.0	5.573	A
		2	1	A	221	55	-	-	-	221	223	0.0	0.0	0.245	A
				B	11	3	-	-	-	11	11	0.0	0.0	0.000	A
				C	14	3	-	-	-	14	16	0.0	0.0	0.000	A
				D	7	2	-	-	-	7	5	0.0	0.0	0.462	A

08:30 - 08:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	283	71	1420	1908	0.149	282	278	0.5	0.3	3.152	A
				C	469	117	1420	1908	0.246	469	466	0.5	0.3	3.180	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	7	2	1352	1817	0.004	7	10	0.0	0.0	3.853	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	674	169	1420	1908	0.353	675	692	1.4	0.4	3.275	A
B	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	31	8	962	613	0.051	32	28	0.0	0.0	7.162	A
				D	33	8	962	608	0.055	34	34	0.1	0.0	6.792	A
			2	A	78	19	962	605	0.128	77	82	0.1	0.2	8.905	A
				B	2	0.57	183	112	0.020	0	0.76	0.0	0.2	8.589	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	78	19	-	-	-	78	82	0.0	0.0	0.155	A
				B	2	0.57	-	-	-	2	2	0.0	0.0	0.000	A
				C	31	8	-	-	-	31	28	0.0	0.0	0.061	A
				D	33	8	-	-	-	33	34	0.0	0.0	0.150	A
C	Entry	1	1	A	29	7	814	606	0.047	30	28	0.1	0.0	6.899	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	7	2	620	459	0.015	7	7	0.0	0.0	7.852	A
			2	A	39	10	814	612	0.063	39	36	0.3	0.2	8.818	A
				B	4	1	581	407	0.010	4	4	0.0	0.0	6.173	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	67	17	-	-	-	67	64	0.0	0.0	0.000	A
				B	4	1	-	-	-	4	4	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	7	2	-	-	-	7	7	0.0	0.0	0.000	A
D	Entry	1	1	A	187	47	984	936	0.200	189	199	0.4	0.1	5.834	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	12	3	937	888	0.014	12	13	0.1	0.0	4.109	A
				C	11	3	844	800	0.014	12	14	0.0	0.0	4.232	A
				D	5	1	375	356	0.013	5	2	0.0	0.0	6.478	A
		2	1	A	187	47	-	-	-	187	198	0.0	0.0	0.388	A
				B	12	3	-	-	-	12	13	0.0	0.0	0.308	A
				C	11	3	-	-	-	11	14	0.0	0.0	0.167	A
				D	5	1	-	-	-	5	2	0.0	0.0	3.460	A

PM - 2026, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Q percentiles may be unreliable if the mean queue in any time segment is very low or very high.
Info	Simulation	A2 - PM [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Analysis Set Details

ID	Name	Use Lane Simulation	Include in report	Use specific Demand Set(s)	Specific Demand Set (s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	PM	✓	✓	✓	D2,D4,D6,D8,D10	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		A, B, C, D	7.73	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	7.73	A

Arms

Arms

Arm	Name	Description	No give-way line
A	Industrial Estate Road		
B	Bryn Lane		
C	Ash Road North		
D	Abenbury Way		

Roundabout Geometry

Arm	V (m)	E (m)	l' (m)	R (m)	D (m)	PHI (deg)	Entry only	Exit only
A	8.59	9.82	7.6	38.4	60.0	37.6		
B	3.89	6.96	18.7	49.1	60.0	16.5		
C	3.34	7.53	19.0	11.3	60.0	40.3		
D	3.54	8.21	19.5	40.7	60.0	22.5		

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A	0.754	2840
B	0.616	1924
C	0.525	1628
D	0.617	1968

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

Arm Capacity Adjustments

Arm	Type	Reason	Direct capacity adjustment (PCU/hr)
D	Direct	Queue Observation	200

Lane Simulation: Arm options

Arm	Lane capacity source	Traffic considering secondary lanes (%)
A	Evenly split	10.00
B	Evenly split	10.00
C	Evenly split	10.00
D	Evenly split	10.00

Lanes

Arm	Side	Lane level	Lane	Destination arms	Has limited storage	Storage (PCU)	Has bottleneck	Has obstruction	Min Cap (PCU/hr)	Max Cap (PCU/hr)	Signalised
A	Entry	1	1	B, C		Infinity			0	99999	
			2	A, D		Infinity			0	99999	
	Exit	1	1			Infinity					
B	Entry	1	1	C, D	✓	3.00			0	99999	
			2	A, B	✓	3.00			0	99999	
		2	1	(A, B, C, D)		Infinity					
	Exit	1	1			Infinity					
C	Entry	1	1	A, D	✓	3.00			0	99999	
			2	A, B, C	✓	3.00			0	99999	
		2	1	(B, C, D, A)		Infinity					
	Exit	1	1			Infinity					
D	Entry	1	1	A	✓	3.00			0	99999	
			2	B, C, D	✓	3.00			0	99999	
		2	1	(A, B, C, D)		Infinity					
	Exit	1	1			Infinity					

Entry Lane slope and intercept

Arm	Side	Lane level	Lane	Final slope	Final intercept (PCU/hr)
A	Entry	1	1	0.377	1420
			2	0.377	1420
B	Entry	1	1	0.308	962
			2	0.308	962
C	Entry	1	1	0.263	814
			2	0.263	814
D	Entry	1	1	0.309	984
			2	0.309	984

Summary of Entry Lane allowed movements

Arm	Lane Level	Lane	Destination arm			
			B	C	D	A
B	1	1		✓	✓	
		2	✓			✓
	2	1	✓	✓	✓	✓
C	1	1			✓	✓
		2	✓	✓		✓
	2	1	✓	✓	✓	✓
D	1	1				✓
		2	✓	✓	✓	
	2	1	✓	✓	✓	✓
A	1	1	✓	✓		
		2			✓	✓

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2026	PM	ONE HOUR	16:15	17:45	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	591	100.000
B		ONE HOUR	✓	342	100.000
C		ONE HOUR	✓	666	100.000
D		ONE HOUR	✓	471	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	26	147	186	232
	B	305	0	10	27
	C	636	22	0	8
	D	438	30	3	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To			
		A	B	C	D
From	A	0	8	8	11
	B	5	0	0	24
	C	2	0	0	75
	D	5	20	0	0

Cyclist %

		To			
		A	B	C	D
From	A	0	0	0	0
	B	0	0	0	0
	C	0	0	0	0
	D	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max Q95 (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
A	0.22	3.86	1.2	5.0	A	539	809
B	0.42	8.09	0.9	4.0	A	316	475
C	0.58	9.57	2.9	9.0	A	604	906
D	0.60	9.68	1.6	8.0	A	438	658

Main Results for each time segment

16:15 - 16:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	475	119	38	2792	0.170	470	445	1095	0.0	0.6	3.213	A
B	271	68	354	971	0.279	271	267	155	0.0	0.5	5.961	A
C	499	125	467	1348	0.370	506	501	157	0.0	0.8	6.836	A
D	367	92	767	1022	0.360	366	358	206	0.0	0.6	5.691	A

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	530	132	46	2771	0.191	525	540	1223	0.6	0.7	3.435	A
B	294	74	392	913	0.322	295	306	178	0.5	0.5	6.382	A
C	565	141	505	1375	0.411	565	579	181	0.8	1.3	7.290	A
D	431	108	836	1013	0.426	433	430	234	0.6	0.9	7.610	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	614	154	62	2787	0.220	609	627	1510	0.7	1.2	3.694	A
B	380	95	473	913	0.416	391	393	199	0.5	0.4	7.986	A
C	711	178	658	1315	0.541	694	726	205	1.3	2.9	9.568	A
D	516	129	1054	869	0.594	519	513	298	0.9	1.6	9.580	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	617	154	57	2758	0.224	616	654	1509	1.2	0.6	3.860	A
B	362	90	471	902	0.401	358	376	202	0.4	0.8	8.094	A
C	722	180	622	1242	0.581	717	727	208	2.9	1.9	8.886	A
D	530	132	1047	882	0.601	518	526	292	1.6	1.6	9.681	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	557	139	43	2754	0.202	555	536	1283	0.6	0.7	3.490	A
B	318	79	430	942	0.337	312	311	169	0.8	0.9	6.839	A
C	603	151	558	1325	0.456	599	602	186	1.9	1.6	7.830	A
D	430	107	895	958	0.448	431	414	262	1.6	0.7	7.606	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	443	111	34	2756	0.161	449	459	1094	0.7	0.4	3.383	A
B	274	68	338	962	0.284	271	269	145	0.9	0.5	5.990	A
C	522	130	465	1373	0.380	518	522	145	1.6	1.2	6.580	A
D	356	89	775	993	0.358	353	358	208	0.7	0.8	6.002	A

Q Variation Results for each time segment

16:15 - 16:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	0.57	0.00	0.00	1.63	3.00
B	0.48	0.00	0.00	0.86	2.00
C	0.81	0.00	0.00	1.73	4.00
D	0.62	0.00	0.00	3.00	3.00

16:30 - 16:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	0.67	0.00	0.00	3.00	3.00
B	0.48	0.00	0.00	2.00	2.00
C	1.29	0.00	0.92	1.88	3.00
D	0.90	0.00	0.00	1.90	7.00

16:45 - 17:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	1.18	0.00	0.00	3.45	5.00
B	0.43	0.00	0.00	2.00	2.00
C	2.86	0.00	2.08	4.80	9.00
D	1.62	0.00	0.70	2.70	8.00

17:00 - 17:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	0.62	0.00	0.00	3.00	3.00
B	0.81	0.00	0.00	1.78	3.00
C	1.90	0.00	1.08	3.80	8.00
D	1.62	0.00	0.63	3.90	6.00

17:15 - 17:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	0.71	0.00	0.00	1.90	4.00
B	0.86	0.00	0.07	1.90	4.00
C	1.57	0.00	0.56	5.00	5.00
D	0.71	0.00	0.00	3.00	3.00

17:30 - 17:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	0.38	0.00	0.00	0.78	3.00
B	0.48	0.00	0.00	2.00	2.00
C	1.19	0.00	0.38	3.00	3.00
D	0.81	0.00	0.00	2.45	4.00

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

16:15 - 16:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	271	1405	0.193	269	258	0.0	0.3	3.318	A
			2	A, D	204	1405	0.145	202	188	0.0	0.2	3.070	A
	Exit	1	1		1095			1095	1067	0.0	0.0	0.000	A
B	Entry	1	1	C, D	27	853	0.032	27	30	0.0	0.0	4.346	A
			2	A, B	243	853	0.285	244	237	0.0	0.4	5.903	A
		2	1	(A, B, C, D)	271			271	269	0.0	0.0	0.212	A
	Exit	1	1		155			155	150	0.0	0.0	0.000	A
C	Entry	1	1	A, D	258	691	0.373	259	250	0.0	0.5	6.621	A
			2	A, B, C	242	691	0.351	247	251	0.0	0.3	6.921	A
		2	1	(B, C, D, A)	499			500	504	0.0	0.0	0.064	A
	Exit	1	1		157			157	156	0.0	0.0	0.000	A
D	Entry	1	1	A	346	948	0.365	346	334	0.0	0.6	5.530	A
			2	B, C, D	21	948	0.022	21	24	0.0	0.0	4.517	A
		2	1	(A, B, C, D)	367			367	361	0.0	0.0	0.224	A
	Exit	1	1		206			206	198	0.0	0.0	0.000	A

16:30 - 16:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	310	1403	0.221	308	310	0.3	0.4	3.467	A
			2	A, D	220	1403	0.157	217	230	0.2	0.3	3.392	A
	Exit	1	1		1223			1223	1247	0.0	0.0	0.000	A
B	Entry	1	1	C, D	38	842	0.045	37	37	0.0	0.0	5.173	A
			2	A, B	257	842	0.305	258	270	0.4	0.4	6.388	A
		2	1	(A, B, C, D)	294			294	306	0.0	0.0	0.125	A
	Exit	1	1		178			178	178	0.0	0.0	0.000	A
C	Entry	1	1	A, D	271	681	0.398	271	282	0.5	0.6	7.284	A
			2	A, B, C	294	681	0.432	294	297	0.3	0.7	7.189	A
		2	1	(B, C, D, A)	565			565	581	0.0	0.0	0.055	A
	Exit	1	1		181			181	185	0.0	0.0	0.000	A
D	Entry	1	1	A	403	926	0.436	406	402	0.6	0.7	6.752	A
			2	B, C, D	27	926	0.029	27	29	0.0	0.0	4.499	A
		2	1	(A, B, C, D)	431			430	431	0.0	0.2	0.982	A
	Exit	1	1		234			234	245	0.0	0.0	0.000	A

16:45 - 17:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	331	1396	0.237	331	340	0.4	0.3	3.617	A
			2	A, D	281	1396	0.201	278	287	0.3	0.8	3.788	A
	Exit	1	1		1510			1510	1550	0.0	0.0	0.000	A
B	Entry	1	1	C, D	41	817	0.050	39	39	0.0	0.1	6.049	A
			2	A, B	342	817	0.419	351	354	0.4	0.3	7.312	A
		2	1	(A, B, C, D)	380			383	393	0.0	0.0	0.789	A
	Exit	1	1		199			199	209	0.0	0.0	0.000	A
C	Entry	1	1	A, D	345	641	0.538	339	352	0.6	1.3	9.183	A
			2	A, B, C	363	641	0.567	355	374	0.7	1.3	8.963	A
		2	1	(B, C, D, A)	711			709	731	0.0	0.2	0.502	A
	Exit	1	1		205			205	201	0.0	0.0	0.000	A
D	Entry	1	1	A	483	859	0.562	483	480	0.7	1.2	7.729	A
			2	B, C, D	35	859	0.041	36	33	0.0	0.1	5.323	A
		2	1	(A, B, C, D)	516			518	515	0.2	0.3	1.998	A
	Exit	1	1		298			298	300	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	345	1399	0.247	346	359	0.3	0.4	3.894	A
			2	A, D	273	1399	0.195	271	295	0.8	0.2	3.816	A
	Exit	1	1		1509			1509	1543	0.0	0.0	0.000	A
B	Entry	1	1	C, D	45	817	0.055	45	43	0.1	0.0	4.953	A
			2	A, B	317	817	0.388	313	332	0.3	0.8	7.395	A
		2	1	(A, B, C, D)	362			362	377	0.0	0.0	0.954	A
	Exit	1	1		202			202	218	0.0	0.0	0.000	A
C	Entry	1	1	A, D	355	651	0.546	352	358	1.3	0.8	8.515	A
			2	A, B, C	365	651	0.561	364	369	1.3	1.0	8.398	A
		2	1	(B, C, D, A)	722			721	723	0.2	0.1	0.426	A
	Exit	1	1		208			208	214	0.0	0.0	0.000	A
D	Entry	1	1	A	490	861	0.569	483	486	1.2	1.2	8.089	A
			2	B, C, D	37	861	0.043	35	40	0.1	0.1	4.748	A
		2	1	(A, B, C, D)	530			527	526	0.3	0.2	1.826	A
	Exit	1	1		292			292	307	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	310	1404	0.221	306	301	0.4	0.6	3.428	A
			2	A, D	248	1404	0.177	250	236	0.2	0.1	3.572	A
	Exit	1	1		1283			1283	1259	0.0	0.0	0.000	A
B	Entry	1	1	C, D	31	830	0.038	32	34	0.0	0.0	4.974	A
			2	A, B	285	830	0.344	281	277	0.8	0.8	6.434	A
		2	1	(A, B, C, D)	318			317	311	0.0	0.0	0.544	A
	Exit	1	1		169			169	175	0.0	0.0	0.000	A
C	Entry	1	1	A, D	294	667	0.441	294	300	0.8	0.7	7.706	A
			2	A, B, C	308	667	0.462	303	302	1.0	0.9	7.846	A
		2	1	(B, C, D, A)	603			603	601	0.1	0.0	0.056	A
	Exit	1	1		186			186	182	0.0	0.0	0.000	A
D	Entry	1	1	A	405	908	0.446	404	386	1.2	0.7	6.736	A
			2	B, C, D	28	908	0.031	27	28	0.1	0.0	5.023	A
		2	1	(A, B, C, D)	430			433	411	0.2	0.0	0.971	A
	Exit	1	1		262			262	248	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	244	1407	0.173	248	261	0.6	0.2	3.537	A
			2	A, D	198	1407	0.141	201	198	0.1	0.1	3.182	A
	Exit	1	1		1094			1094	1092	0.0	0.0	0.000	A
B	Entry	1	1	C, D	33	858	0.039	33	35	0.0	0.0	5.243	A
			2	A, B	240	858	0.280	238	234	0.8	0.4	5.833	A
		2	1	(A, B, C, D)	274			274	268	0.0	0.0	0.229	A
	Exit	1	1		145			145	153	0.0	0.0	0.000	A
C	Entry	1	1	A, D	260	692	0.376	259	258	0.7	0.6	6.486	A
			2	A, B, C	263	692	0.380	261	264	0.9	0.6	6.638	A
		2	1	(B, C, D, A)	522			522	521	0.0	0.0	0.017	A
	Exit	1	1		145			145	156	0.0	0.0	0.000	A
D	Entry	1	1	A	335	945	0.354	333	336	0.7	0.7	5.685	A
			2	B, C, D	20	945	0.021	19	22	0.0	0.0	5.534	A
		2	1	(A, B, C, D)	356			355	358	0.0	0.0	0.327	A
	Exit	1	1		208			208	208	0.0	0.0	0.000	A

Lanes: Q Variation Results for each time segment

16:15 - 16:30

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	Entry	1	1	0.33	0.00	0.00	0.90	3.00
			2	0.24	0.00	0.00	0.63	2.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
B	Entry	1	1	0.05	0.00	0.00	0.00	1.00
			2	0.43	0.00	0.00	0.84	2.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
C	Entry	1	1	0.48	0.00	0.00	2.00	2.00
			2	0.33	0.00	0.00	0.78	2.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
D	Entry	1	1	0.62	0.00	0.00	3.00	3.00
			2	0.00	0.00	0.00	0.00	0.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

16:30 - 16:45

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	Entry	1	1	0.38	0.00	0.00	0.82	2.00
			2	0.29	0.00	0.00	0.73	2.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
B	Entry	1	1	0.05	0.00	0.00	0.00	1.00
			2	0.43	0.00	0.00	2.00	2.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
C	Entry	1	1	0.62	0.00	0.14	0.90	2.00
			2	0.67	0.00	0.06	0.90	3.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
D	Entry	1	1	0.71	0.00	0.00	3.00	3.00
			2	0.00	0.00	0.00	0.00	0.00
		2	1	0.19	0.00	0.00	0.00	4.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

16:45 - 17:00

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	Entry	1	1	0.33	0.00	0.00	0.78	2.00
			2	0.81	0.00	0.00	1.80	5.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
B	Entry	1	1	0.10	0.00	0.00	1.00	1.00
			2	0.33	0.00	0.00	0.78	2.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
C	Entry	1	1	1.33	0.00	0.69	3.00	3.00
			2	1.33	0.00	0.68	3.00	3.00
		2	1	0.19	0.00	0.00	-0.10	3.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
D	Entry	1	1	1.19	0.00	0.63	3.00	3.00
			2	0.10	0.00	0.00	1.00	1.00
		2	1	0.33	0.00	0.00	-0.20	5.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

17:00 - 17:15

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	Entry	1	1	0.38	0.00	0.00	1.45	3.00
			2	0.24	0.00	0.00	0.63	2.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
B	Entry	1	1	0.05	0.00	0.00	0.00	1.00
			2	0.76	0.00	0.00	1.73	3.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
C	Entry	1	1	0.76	0.00	0.00	3.00	3.00
			2	1.05	0.00	0.42	3.00	3.00
		2	1	0.10	0.00	0.00	0.00	2.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
D	Entry	1	1	1.24	0.00	0.50	3.00	3.00
			2	0.14	0.00	0.00	1.00	1.00
		2	1	0.24	0.00	0.00	-0.20	3.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

17:15 - 17:30

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	Entry	1	1	0.62	0.00	0.00	1.90	4.00
			2	0.10	0.00	0.00	1.00	1.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
B	Entry	1	1	0.00	0.00	0.00	0.00	0.00
			2	0.81	0.00	0.07	3.00	3.00
		2	1	0.05	0.00	0.00	0.00	1.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
C	Entry	1	1	0.67	0.00	0.00	2.00	2.00
			2	0.90	0.00	0.21	3.00	3.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
D	Entry	1	1	0.67	0.00	0.00	3.00	3.00
			2	0.05	0.00	0.00	0.00	1.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

17:30 - 17:45

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	Entry	1	1	0.24	0.00	0.00	0.63	2.00
			2	0.14	0.00	0.00	1.00	1.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
B	Entry	1	1	0.05	0.00	0.00	0.00	1.00
			2	0.43	0.00	0.00	2.00	2.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
C	Entry	1	1	0.57	0.00	0.00	2.00	2.00
			2	0.62	0.00	0.00	0.90	3.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
D	Entry	1	1	0.71	0.00	0.00	3.00	3.00
			2	0.05	0.00	0.00	0.00	1.00
		2	1	0.05	0.00	0.00	0.00	1.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

Lane movements: Main Results for each time segment

16:15 - 16:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	119	30	1420	1406	0.085	118	110	0.0	0.1	3.263	A
				C	152	38	1420	1407	0.108	150	148	0.0	0.2	3.359	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	22	5	1420	1403	0.015	21	18	0.0	0.0	2.701	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	184	46	1420	1406	0.131	182	170	0.0	0.2	3.114	A
B	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	5	1	687	617	0.008	5	7	0.0	0.0	3.331	A
				D	22	6	916	821	0.027	22	23	0.0	0.0	4.726	A
			2	A	243	61	962	854	0.285	244	237	0.0	0.4	5.903	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	243	61	-	-	-	243	238	0.0	0.0	0.236	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	5	1	-	-	-	5	7	0.0	0.0	0.000	A
				D	22	6	-	-	-	22	24	0.0	0.0	0.000	A
C	Entry	1	1	A	254	63	814	692	0.367	255	245	0.0	0.5	6.610	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	4	1	465	397	0.010	4	6	0.0	0.0	7.523	A
			2	A	225	56	814	692	0.325	230	232	0.0	0.3	6.823	A
				B	17	4	814	695	0.025	17	18	0.0	0.0	8.127	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	478	120	-	-	-	479	480	0.0	0.0	0.066	A
				B	17	4	-	-	-	17	18	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	4	1	-	-	-	4	6	0.0	0.0	0.000	A
D	Entry	1	1	A	346	87	984	947	0.366	346	334	0.0	0.6	5.530	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	19	5	984	951	0.020	19	22	0.0	0.0	4.554	A
				C	2	0.43	328	318	0.005	2	2	0.0	0.0	4.100	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	346	87	-	-	-	346	337	0.0	0.0	0.235	A
				B	19	5	-	-	-	19	22	0.0	0.0	0.051	A
				C	2	0.43	-	-	-	2	2	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

16:30 - 16:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	138	35	1420	1403	0.099	137	135	0.1	0.2	3.579	A
				C	171	43	1420	1403	0.122	171	174	0.2	0.2	3.379	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	19	5	1352	1337	0.014	18	17	0.0	0.0	3.401	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	201	50	1420	1403	0.143	198	213	0.2	0.2	3.391	A
B	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	7	2	916	794	0.009	6	8	0.0	0.0	4.407	A
				D	31	8	962	844	0.037	31	29	0.0	0.0	5.448	A
			2	A	257	64	962	843	0.304	258	270	0.4	0.4	6.388	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	257	64	-	-	-	257	270	0.0	0.0	0.135	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	7	2	-	-	-	7	8	0.0	0.0	0.000	A
				D	31	8	-	-	-	31	28	0.0	0.0	0.057	A
C	Entry	1	1	A	266	67	814	680	0.391	266	279	0.5	0.6	7.237	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	5	1	271	220	0.021	5	3	0.0	0.0	13.926	B
			2	A	276	69	814	681	0.405	275	280	0.3	0.7	7.201	A
				B	18	5	814	679	0.027	19	17	0.0	0.0	6.996	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	542	136	-	-	-	542	561	0.0	0.0	0.057	A
				B	18	5	-	-	-	18	17	0.0	0.0	0.007	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	5	1	-	-	-	5	3	0.0	0.0	0.000	A
D	Entry	1	1	A	403	101	984	925	0.436	406	402	0.6	0.7	6.752	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	22	6	984	925	0.024	22	26	0.0	0.0	4.550	A
				C	5	1	562	531	0.009	5	3	0.0	0.0	4.098	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	405	101	-	-	-	403	402	0.0	0.2	1.035	A
				B	22	6	-	-	-	22	26	0.0	0.0	0.071	A
				C	5	1	-	-	-	5	3	0.0	0.0	0.943	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

16:45 - 17:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	139	35	1420	1397	0.100	140	151	0.2	0.2	3.738	A
				C	192	48	1420	1396	0.138	191	189	0.2	0.1	3.520	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	18	4	1420	1397	0.013	18	25	0.0	0.0	3.088	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	265	66	1420	1396	0.190	260	262	0.2	0.8	3.860	A
B	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	11	3	916	788	0.014	10	10	0.0	0.1	5.612	A
				D	30	7	916	779	0.038	30	29	0.0	0.0	6.233	A
			2	A	342	86	962	816	0.420	351	354	0.4	0.3	7.312	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	339	85	-	-	-	342	354	0.0	0.0	0.846	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	11	3	-	-	-	11	10	0.0	0.0	0.000	A
				D	30	7	-	-	-	30	29	0.0	0.0	0.312	A
C	Entry	1	1	A	337	84	814	641	0.526	331	344	0.6	1.3	9.047	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	8	2	543	422	0.019	8	8	0.0	0.0	18.171	C
			2	A	336	84	814	641	0.524	328	347	0.7	1.3	8.864	A
				B	27	7	814	637	0.043	27	26	0.0	0.0	10.233	B
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	675	169	-	-	-	673	696	0.0	0.2	0.474	A
				B	27	7	-	-	-	27	27	0.0	0.0	1.105	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	8	2	-	-	-	8	8	0.0	0.0	1.041	A
D	Entry	1	1	A	483	121	984	859	0.562	483	480	0.7	1.2	7.729	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	31	8	984	852	0.037	32	31	0.0	0.1	5.480	A
				C	3	0.86	422	373	0.009	3	2	0.0	0.0	3.371	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	483	121	-	-	-	483	482	0.2	0.3	1.999	A
				B	31	8	-	-	-	31	31	0.0	0.0	1.913	A
				C	3	0.86	-	-	-	3	2	0.0	0.0	2.681	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	149	37	1420	1397	0.106	149	160	0.2	0.2	4.077	A
				C	197	49	1420	1397	0.141	198	199	0.1	0.1	3.746	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	29	7	1420	1399	0.020	28	29	0.0	0.0	3.707	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	243	61	1420	1398	0.174	242	266	0.8	0.2	3.830	A
B	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	7	2	916	771	0.010	7	10	0.1	0.0	4.035	A
				D	38	9	962	812	0.046	37	33	0.0	0.0	5.298	A
			2	A	317	79	962	816	0.389	313	332	0.3	0.8	7.395	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	317	79	-	-	-	317	334	0.0	0.0	0.959	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	7	2	-	-	-	7	10	0.0	0.0	0.785	A
				D	38	9	-	-	-	38	33	0.0	0.0	0.957	A
C	Entry	1	1	A	343	86	814	649	0.529	341	350	1.3	0.8	8.499	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	13	3	620	487	0.026	13	8	0.0	0.0	9.636	A
			2	A	343	86	814	649	0.529	343	346	1.3	1.0	8.256	A
				B	22	5	814	650	0.033	21	22	0.0	0.1	10.516	B
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	687	172	-	-	-	686	693	0.2	0.1	0.409	A
				B	22	5	-	-	-	22	23	0.0	0.0	0.782	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	13	3	-	-	-	13	8	0.0	0.0	1.084	A
D	Entry	1	1	A	490	122	984	863	0.568	483	486	1.2	1.2	8.089	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	34	9	984	858	0.040	33	35	0.1	0.1	5.040	A
				C	3	0.71	750	649	0.004	3	4	0.0	0.0	2.645	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	493	123	-	-	-	490	486	0.3	0.2	1.867	A
				B	34	9	-	-	-	34	36	0.0	0.0	1.354	A
				C	3	0.71	-	-	-	3	4	0.0	0.0	0.701	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	130	32	1420	1402	0.092	126	128	0.2	0.3	3.409	A
				C	180	45	1420	1402	0.128	180	173	0.1	0.3	3.442	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	23	6	1420	1403	0.017	23	22	0.0	0.0	3.687	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	225	56	1420	1403	0.160	227	213	0.2	0.1	3.559	A
B	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	5	1	687	595	0.009	5	7	0.0	0.0	5.379	A
				D	26	7	962	838	0.031	27	27	0.0	0.0	4.844	A
			2	A	285	71	962	829	0.344	281	277	0.8	0.8	6.434	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	286	72	-	-	-	285	277	0.0	0.0	0.515	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	5	1	-	-	-	5	7	0.0	0.0	0.000	A
				D	26	7	-	-	-	26	27	0.0	0.0	1.069	A
C	Entry	1	1	A	288	72	814	667	0.432	287	292	0.8	0.7	7.562	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	7	2	543	448	0.017	7	8	0.0	0.0	17.047	C
			2	A	293	73	814	667	0.440	289	282	1.0	0.9	7.786	A
				B	15	4	814	663	0.022	15	20	0.1	0.0	8.676	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	581	145	-	-	-	581	573	0.1	0.0	0.051	A
				B	15	4	-	-	-	15	20	0.0	0.0	0.185	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	7	2	-	-	-	7	8	0.0	0.0	0.000	A
D	Entry	1	1	A	405	101	984	908	0.445	404	386	1.2	0.7	6.736	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	27	7	984	911	0.030	27	26	0.1	0.0	5.172	A
				C	0.57	0.14	422	382	0.002	0.57	2	0.0	0.0	3.162	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	402	101	-	-	-	405	383	0.2	0.0	0.952	A
				B	27	7	-	-	-	27	26	0.0	0.0	0.866	A
				C	0	0	-	-	-	0.57	2	0.0	0.0	6.390	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	114	28	1420	1408	0.081	115	116	0.3	0.2	3.659	A
				C	130	33	1420	1407	0.093	132	145	0.3	0.0	3.441	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	22	6	1352	1339	0.017	22	20	0.0	0.0	2.667	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	176	44	1420	1407	0.125	179	178	0.1	0.1	3.246	A
B	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	8	2	871	777	0.010	7	9	0.0	0.0	4.417	A
				D	26	6	962	860	0.030	26	26	0.0	0.0	5.594	A
			2	A	240	60	962	858	0.280	238	234	0.8	0.4	5.833	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	240	60	-	-	-	240	233	0.0	0.0	0.248	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	8	2	-	-	-	8	9	0.0	0.0	0.000	A
				D	26	6	-	-	-	26	26	0.0	0.0	0.125	A
C	Entry	1	1	A	257	64	814	692	0.371	254	254	0.7	0.6	6.467	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	3	0.71	388	331	0.009	3	4	0.0	0.0	8.388	A
			2	A	247	62	814	691	0.357	246	247	0.9	0.5	6.551	A
				B	15	4	775	660	0.023	14	17	0.0	0.1	7.852	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	503	126	-	-	-	504	499	0.0	0.0	0.018	A
				B	15	4	-	-	-	15	17	0.0	0.0	0.011	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	3	0.71	-	-	-	3	4	0.0	0.0	0.000	A
D	Entry	1	1	A	335	84	984	945	0.354	333	336	0.7	0.7	5.685	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	17	4	984	946	0.018	16	21	0.0	0.0	5.825	A
				C	4	1	375	356	0.011	4	2	0.0	0.0	2.942	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	335	84	-	-	-	335	336	0.0	0.0	0.336	A
				B	17	4	-	-	-	17	21	0.0	0.0	0.199	A
				C	4	1	-	-	-	4	2	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

PM - 2031 No Development, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Q percentiles may be unreliable if the mean queue in any time segment is very low or very high.
Info	Simulation	A2 - PM [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Analysis Set Details

ID	Name	Use Lane Simulation	Include in report	Use specific Demand Set(s)	Specific Demand Set (s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	PM	✓	✓	✓	D2,D4,D6,D8,D10	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		A, B, C, D	8.72	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	8.72	A

Arms

Arms

Arm	Name	Description	No give-way line
A	Industrial Estate Road		
B	Bryn Lane		
C	Ash Road North		
D	Abenbury Way		

Roundabout Geometry

Arm	V (m)	E (m)	l' (m)	R (m)	D (m)	PHI (deg)	Entry only	Exit only
A	8.59	9.82	7.6	38.4	60.0	37.6		
B	3.89	6.96	18.7	49.1	60.0	16.5		
C	3.34	7.53	19.0	11.3	60.0	40.3		
D	3.54	8.21	19.5	40.7	60.0	22.5		

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A	0.754	2840
B	0.616	1924
C	0.525	1628
D	0.617	1968

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

Arm Capacity Adjustments

Arm	Type	Reason	Direct capacity adjustment (PCU/hr)
D	Direct	Queue Observation	200

Lane Simulation: Arm options

Arm	Lane capacity source	Traffic considering secondary lanes (%)
A	Evenly split	10.00
B	Evenly split	10.00
C	Evenly split	10.00
D	Evenly split	10.00

Lanes

Arm	Side	Lane level	Lane	Destination arms	Has limited storage	Storage (PCU)	Has bottleneck	Has obstruction	Min Cap (PCU/hr)	Max Cap (PCU/hr)	Signalised
A	Entry	1	1	B, C		Infinity			0	99999	
			2	A, D		Infinity			0	99999	
	Exit	1	1			Infinity					
B	Entry	1	1	C, D	✓	3.00			0	99999	
			2	A, B	✓	3.00			0	99999	
		2	1	(A, B, C, D)		Infinity					
	Exit	1	1			Infinity					
C	Entry	1	1	A, D	✓	3.00			0	99999	
			2	A, B, C	✓	3.00			0	99999	
		2	1	(B, C, D, A)		Infinity					
	Exit	1	1			Infinity					
D	Entry	1	1	A	✓	3.00			0	99999	
			2	B, C, D	✓	3.00			0	99999	
		2	1	(A, B, C, D)		Infinity					
	Exit	1	1			Infinity					

Entry Lane slope and intercept

Arm	Side	Lane level	Lane	Final slope	Final intercept (PCU/hr)
A	Entry	1	1	0.377	1420
			2	0.377	1420
B	Entry	1	1	0.308	962
			2	0.308	962
C	Entry	1	1	0.263	814
			2	0.263	814
D	Entry	1	1	0.309	984
			2	0.309	984

Summary of Entry Lane allowed movements

Arm	Lane Level	Lane	Destination arm			
			B	C	D	A
B	1	1		✓	✓	
		2	✓			✓
	2	1	✓	✓	✓	✓
C	1	1			✓	✓
		2	✓	✓		✓
	2	1	✓	✓	✓	✓
D	1	1				✓
		2	✓	✓	✓	
	2	1	✓	✓	✓	✓
A	1	1	✓	✓		
		2			✓	✓

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2031 No Development	PM	ONE HOUR	16:15	17:45	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	616	100.000
B		ONE HOUR	✓	357	100.000
C		ONE HOUR	✓	695	100.000
D		ONE HOUR	✓	492	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	27	153	194	242
	B	319	0	10	28
	C	664	23	0	8
	D	458	31	3	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To			
		A	B	C	D
From	A	0	8	8	11
	B	5	0	0	24
	C	2	0	0	75
	D	5	20	0	0

Cyclist %

		To			
		A	B	C	D
From	A	0	0	0	0
	B	0	0	0	0
	C	0	0	0	0
	D	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max Q95 (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
A	0.26	3.89	1.1	8.0	A	564	846
B	0.44	8.07	1.0	7.0	A	321	482
C	0.60	10.88	2.5	10.0	B	638	957
D	0.65	12.08	2.8	14.0	B	462	693

Main Results for each time segment

16:15 - 16:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	431	108	47	2774	0.155	434	459	1151	0.0	0.3	3.426	A
B	283	71	330	958	0.296	279	276	151	0.0	1.0	6.361	A
C	541	135	457	1371	0.394	549	536	152	0.0	0.5	6.545	A
D	391	98	807	982	0.399	390	370	198	0.0	0.7	5.807	A

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	558	139	59	2865	0.195	558	562	1301	0.3	0.5	3.500	A
B	321	80	420	923	0.348	322	316	198	1.0	0.5	6.827	A
C	635	159	549	1282	0.496	630	623	190	0.5	1.1	7.753	A
D	437	109	923	903	0.484	437	435	258	0.7	0.9	7.365	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	720	180	67	2798	0.257	711	678	1609	0.5	1.1	3.886	A
B	365	91	540	905	0.403	369	387	235	0.5	0.7	7.759	A
C	772	193	673	1289	0.599	778	785	235	1.1	1.9	10.884	B
D	565	141	1123	879	0.643	553	534	328	0.9	2.8	11.849	B

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	690	173	69	2740	0.252	689	683	1610	1.1	0.9	3.798	A
B	401	100	507	904	0.443	404	406	250	0.7	0.9	8.070	A
C	730	183	674	1228	0.595	733	754	239	1.9	2.5	10.703	B
D	559	140	1117	855	0.654	561	559	289	2.8	2.0	12.080	B

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	539	135	47	2769	0.195	542	557	1277	0.9	0.3	3.424	A
B	295	74	415	963	0.307	295	332	173	0.9	0.6	6.664	A
C	614	153	526	1309	0.469	612	628	183	2.5	1.3	7.580	A
D	445	111	891	936	0.475	433	442	247	2.0	1.4	9.790	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	445	111	42	2888	0.154	448	458	1105	0.3	0.4	3.240	A
B	264	66	348	951	0.278	266	267	142	0.6	0.2	6.439	A
C	535	134	459	1393	0.384	529	528	154	1.3	1.1	6.803	A
D	375	94	777	1001	0.375	370	366	212	1.4	1.1	5.937	A

Q Variation Results for each time segment

16:15 - 16:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	0.29	0.00	0.00	2.00	2.00
B	0.95	0.00	0.00	2.45	4.00
C	0.52	0.00	0.00	2.00	2.00
D	0.67	0.00	0.00	3.00	3.00

16:30 - 16:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	0.52	0.00	0.00	2.00	2.00
B	0.48	0.00	0.00	2.00	2.00
C	1.10	0.00	0.13	2.45	5.00
D	0.86	0.00	0.25	2.00	2.00

16:45 - 17:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	1.14	0.00	0.13	2.90	5.00
B	0.67	0.00	0.00	1.45	3.00
C	1.92	0.00	0.88	2.80	10.00
D	2.81	0.00	1.17	5.70	14.00

17:00 - 17:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	0.86	0.00	0.00	1.90	8.00
B	0.90	0.00	0.06	1.45	7.00
C	2.52	0.00	1.58	8.00	8.00
D	2.01	0.00	0.88	3.70	8.00

17:15 - 17:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	0.29	0.00	0.00	2.00	2.00
B	0.57	0.00	0.00	1.63	3.00
C	1.33	0.00	0.30	2.90	5.00
D	1.43	0.00	0.00	8.00	8.00

17:30 - 17:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	0.43	0.00	0.00	2.00	2.00
B	0.24	0.00	0.00	0.45	3.00
C	1.14	0.00	0.56	1.82	4.00
D	1.10	0.00	0.00	2.63	5.00

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

16:15 - 16:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	245	1402	0.175	249	262	0.0	0.2	3.598	A
			2	A, D	186	1402	0.132	185	197	0.0	0.1	3.195	A
	Exit	1	1		1151			1151	1123	0.0	0.0	0.000	A
B	Entry	1	1	C, D	31	861	0.037	31	30	0.0	0.0	5.392	A
			2	A, B	251	861	0.292	247	246	0.0	0.9	6.257	A
		2	1	(A, B, C, D)	283			283	279	0.0	0.0	0.169	A
	Exit	1	1		151			151	158	0.0	0.0	0.000	A
C	Entry	1	1	A, D	271	694	0.391	275	259	0.0	0.2	6.634	A
			2	A, B, C	269	694	0.388	274	276	0.0	0.3	6.421	A
		2	1	(B, C, D, A)	541			541	538	0.0	0.0	0.021	A
	Exit	1	1		152			152	156	0.0	0.0	0.000	A
D	Entry	1	1	A	367	935	0.393	366	344	0.0	0.6	5.665	A
			2	B, C, D	24	935	0.026	25	26	0.0	0.0	4.911	A
		2	1	(A, B, C, D)	391			391	372	0.0	0.0	0.190	A
	Exit	1	1		198			198	203	0.0	0.0	0.000	A

16:30 - 16:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	321	1397	0.230	320	315	0.2	0.4	3.442	A
			2	A, D	237	1397	0.169	238	246	0.1	0.1	3.574	A
	Exit	1	1		1301			1301	1299	0.0	0.0	0.000	A
B	Entry	1	1	C, D	45	833	0.054	44	33	0.0	0.0	6.087	A
			2	A, B	277	833	0.332	278	283	0.9	0.4	6.653	A
		2	1	(A, B, C, D)	321			321	314	0.0	0.0	0.240	A
	Exit	1	1		198			198	190	0.0	0.0	0.000	A
C	Entry	1	1	A, D	309	669	0.461	307	306	0.2	0.5	7.505	A
			2	A, B, C	327	669	0.488	323	317	0.3	0.6	7.657	A
		2	1	(B, C, D, A)	635			635	626	0.0	0.0	0.171	A
	Exit	1	1		190			190	193	0.0	0.0	0.000	A
D	Entry	1	1	A	401	899	0.446	400	397	0.6	0.9	6.721	A
			2	B, C, D	37	899	0.041	37	38	0.0	0.0	5.132	A
		2	1	(A, B, C, D)	437			438	435	0.0	0.0	0.759	A
	Exit	1	1		258			258	254	0.0	0.0	0.000	A

16:45 - 17:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	395	1394	0.284	392	370	0.4	0.6	3.968	A
			2	A, D	325	1394	0.233	320	307	0.1	0.5	3.786	A
	Exit	1	1		1609			1609	1618	0.0	0.0	0.000	A
B	Entry	1	1	C, D	48	796	0.060	48	40	0.0	0.0	5.627	A
			2	A, B	316	796	0.396	319	347	0.4	0.6	7.189	A
		2	1	(A, B, C, D)	365			365	388	0.0	0.0	0.717	A
	Exit	1	1		235			235	233	0.0	0.0	0.000	A
C	Entry	1	1	A, D	385	637	0.605	389	391	0.5	0.8	9.695	A
			2	A, B, C	386	637	0.605	389	395	0.6	0.9	9.692	A
		2	1	(B, C, D, A)	772			771	788	0.0	0.2	1.191	A
	Exit	1	1		235			235	214	0.0	0.0	0.000	A
D	Entry	1	1	A	519	838	0.619	512	494	0.9	1.6	9.065	A
			2	B, C, D	38	838	0.046	41	39	0.0	0.0	5.431	A
		2	1	(A, B, C, D)	565			557	537	0.0	1.2	2.982	A
	Exit	1	1		328			328	318	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	406	1394	0.291	407	384	0.6	0.3	3.915	A
			2	A, D	285	1394	0.204	282	298	0.5	0.6	3.646	A
	Exit	1	1		1610			1610	1628	0.0	0.0	0.000	A
B	Entry	1	1	C, D	40	806	0.050	41	46	0.0	0.0	5.241	A
			2	A, B	359	806	0.446	363	360	0.6	0.7	7.549	A
		2	1	(A, B, C, D)	401			399	406	0.0	0.2	0.741	A
	Exit	1	1		250			250	229	0.0	0.0	0.000	A
C	Entry	1	1	A, D	357	637	0.560	359	373	0.8	1.1	9.911	A
			2	A, B, C	373	637	0.586	372	381	0.9	1.2	9.734	A
		2	1	(B, C, D, A)	730			729	756	0.2	0.2	0.878	A
	Exit	1	1		239			239	227	0.0	0.0	0.000	A
D	Entry	1	1	A	520	840	0.619	521	521	1.6	1.5	9.014	A
			2	B, C, D	41	840	0.049	41	38	0.0	0.0	5.311	A
		2	1	(A, B, C, D)	559			561	558	1.2	0.5	3.297	A
	Exit	1	1		289			289	317	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	299	1402	0.213	299	309	0.3	0.2	3.511	A
			2	A, D	240	1402	0.171	242	248	0.6	0.0	3.312	A
	Exit	1	1		1277			1277	1330	0.0	0.0	0.000	A
B	Entry	1	1	C, D	33	834	0.039	33	34	0.0	0.0	6.051	A
			2	A, B	263	834	0.315	262	298	0.7	0.6	6.449	A
		2	1	(A, B, C, D)	295			295	331	0.2	0.0	0.270	A
	Exit	1	1		173			173	184	0.0	0.0	0.000	A
C	Entry	1	1	A, D	304	676	0.450	304	315	1.1	0.7	7.352	A
			2	A, B, C	310	676	0.458	308	313	1.2	0.7	7.610	A
		2	1	(B, C, D, A)	614			614	624	0.2	0.0	0.107	A
	Exit	1	1		183			183	186	0.0	0.0	0.000	A
D	Entry	1	1	A	410	909	0.451	404	411	1.5	0.9	7.715	A
			2	B, C, D	29	909	0.031	29	31	0.0	0.0	5.462	A
		2	1	(A, B, C, D)	445			438	440	0.5	0.5	2.208	A
	Exit	1	1		247			247	259	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	246	1404	0.175	246	254	0.2	0.3	3.182	A
			2	A, D	200	1404	0.142	203	205	0.0	0.1	3.315	A
	Exit	1	1		1105			1105	1105	0.0	0.0	0.000	A
B	Entry	1	1	C, D	32	855	0.037	32	27	0.0	0.0	4.550	A
			2	A, B	232	855	0.271	234	240	0.6	0.2	6.400	A
		2	1	(A, B, C, D)	264			264	266	0.0	0.0	0.219	A
	Exit	1	1		142			142	158	0.0	0.0	0.000	A
C	Entry	1	1	A, D	256	693	0.369	257	259	0.7	0.4	6.615	A
			2	A, B, C	277	693	0.400	271	269	0.7	0.7	6.789	A
		2	1	(B, C, D, A)	535			533	527	0.0	0.1	0.107	A
	Exit	1	1		154			154	150	0.0	0.0	0.000	A
D	Entry	1	1	A	345	944	0.365	342	336	0.9	0.8	5.832	A
			2	B, C, D	30	944	0.031	27	29	0.0	0.2	3.944	A
		2	1	(A, B, C, D)	375			374	366	0.5	0.1	0.305	A
	Exit	1	1		212			212	206	0.0	0.0	0.000	A

Lanes: Q Variation Results for each time segment

16:15 - 16:30

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	Entry	1	1	0.19	0.00	0.00	0.45	2.00
			2	0.10	0.00	0.00	0.00	2.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
B	Entry	1	1	0.00	0.00	0.00	0.00	0.00
			2	0.90	0.00	0.00	3.00	3.00
		2	1	0.05	0.00	0.00	0.00	1.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
C	Entry	1	1	0.19	0.00	0.00	1.00	1.00
			2	0.33	0.00	0.00	0.78	2.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
D	Entry	1	1	0.62	0.00	0.00	1.63	3.00
			2	0.05	0.00	0.00	0.00	1.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

16:30 - 16:45

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	Entry	1	1	0.38	0.00	0.00	2.00	2.00
			2	0.14	0.00	0.00	1.00	1.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
B	Entry	1	1	0.05	0.00	0.00	0.00	1.00
			2	0.43	0.00	0.00	2.00	2.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
C	Entry	1	1	0.48	0.00	0.00	0.90	3.00
			2	0.62	0.00	0.00	2.00	2.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
D	Entry	1	1	0.86	0.00	0.25	2.00	2.00
			2	0.00	0.00	0.00	0.00	0.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

16:45 - 17:00

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	Entry	1	1	0.57	0.00	0.00	1.73	3.00
			2	0.52	0.00	0.00	1.45	4.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
B	Entry	1	1	0.05	0.00	0.00	0.00	1.00
			2	0.62	0.00	0.00	1.45	3.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
C	Entry	1	1	0.81	0.00	0.00	1.78	3.00
			2	0.90	0.00	0.25	3.00	3.00
		2	1	0.19	0.00	0.00	0.00	4.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
D	Entry	1	1	1.57	0.00	1.17	3.00	3.00
			2	0.05	0.00	0.00	0.00	1.00
		2	1	1.19	0.00	0.00	2.70	11.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

17:00 - 17:15

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	Entry	1	1	0.29	0.00	0.00	2.00	2.00
			2	0.57	0.00	0.00	0.90	8.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
B	Entry	1	1	0.05	0.00	0.00	0.00	1.00
			2	0.67	0.00	0.06	0.90	3.00
		2	1	0.19	0.00	0.00	0.00	4.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
C	Entry	1	1	1.10	0.00	0.44	3.00	3.00
			2	1.24	0.00	0.61	3.00	3.00
		2	1	0.19	0.00	0.00	2.00	2.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
D	Entry	1	1	1.48	0.00	0.88	2.78	4.00
			2	0.05	0.00	0.00	0.00	1.00
		2	1	0.48	0.00	0.00	0.80	5.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

17:15 - 17:30

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	Entry	1	1	0.24	0.00	0.00	2.00	2.00
			2	0.05	0.00	0.00	0.00	1.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
B	Entry	1	1	0.00	0.00	0.00	0.00	0.00
			2	0.57	0.00	0.00	1.63	3.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
C	Entry	1	1	0.67	0.00	0.00	1.45	4.00
			2	0.67	0.00	0.00	1.63	3.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
D	Entry	1	1	0.90	0.00	0.00	3.00	3.00
			2	0.00	0.00	0.00	0.00	0.00
		2	1	0.52	0.00	0.00	5.00	5.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

17:30 - 17:45

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	Entry	1	1	0.29	0.00	0.00	2.00	2.00
			2	0.14	0.00	0.00	-0.10	2.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
B	Entry	1	1	0.00	0.00	0.00	0.00	0.00
			2	0.24	0.00	0.00	0.45	3.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
C	Entry	1	1	0.38	0.00	0.00	0.82	2.00
			2	0.67	0.00	0.06	2.00	2.00
		2	1	0.10	0.00	0.00	0.00	2.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
D	Entry	1	1	0.82	0.00	0.00	3.00	3.00
			2	0.19	0.00	0.00	2.00	2.00
		2	1	0.10	0.00	0.00	0.00	2.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

Lane movements: Main Results for each time segment

16:15 - 16:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	104	26	1420	1403	0.074	106	116	0.0	0.0	3.411	A
				C	141	35	1420	1404	0.101	143	145	0.0	0.1	3.745	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	17	4	1420	1405	0.012	17	20	0.0	0.0	3.025	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	169	42	1420	1402	0.120	167	177	0.0	0.1	3.217	A
B	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	7	2	871	774	0.009	7	8	0.0	0.0	3.846	A
				D	25	6	962	860	0.029	25	22	0.0	0.0	6.174	A
			2	A	251	63	962	861	0.292	247	246	0.0	0.9	6.257	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	251	63	-	-	-	251	249	0.0	0.0	0.184	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	7	2	-	-	-	7	8	0.0	0.0	0.085	A
				D	25	6	-	-	-	25	22	0.0	0.0	0.000	A
C	Entry	1	1	A	265	66	814	694	0.382	269	255	0.0	0.2	6.566	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	6	1	388	332	0.017	6	4	0.0	0.0	12.576	B
			2	A	247	62	814	693	0.356	251	258	0.0	0.3	6.297	A
				B	22	6	814	694	0.032	22	18	0.0	0.0	8.135	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	512	128	-	-	-	512	515	0.0	0.0	0.021	A
				B	22	6	-	-	-	22	18	0.0	0.0	0.015	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	6	1	-	-	-	6	4	0.0	0.0	0.000	A
D	Entry	1	1	A	367	92	984	935	0.393	366	344	0.0	0.6	5.665	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	22	5	984	931	0.023	23	23	0.0	0.0	5.065	A
				C	2	0.57	469	458	0.005	2	2	0.0	0.0	3.382	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	367	92	-	-	-	367	346	0.0	0.0	0.203	A
				B	22	5	-	-	-	22	24	0.0	0.0	0.000	A
				C	2	0.57	-	-	-	2	2	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

16:30 - 16:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	142	36	1420	1397	0.102	142	133	0.0	0.1	3.544	A
				C	179	45	1420	1398	0.128	178	182	0.1	0.2	3.365	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	25	6	1420	1398	0.018	25	24	0.0	0.0	3.481	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	212	53	1420	1398	0.152	211	222	0.1	0.1	3.585	A
B	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	9	2	733	633	0.014	9	7	0.0	0.0	4.593	A
				D	35	9	962	830	0.043	35	26	0.0	0.0	6.647	A
			2	A	277	69	962	833	0.332	278	283	0.9	0.4	6.653	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	277	69	-	-	-	277	282	0.0	0.0	0.255	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	9	2	-	-	-	9	7	0.0	0.0	0.000	A
				D	35	9	-	-	-	35	26	0.0	0.0	0.126	A
C	Entry	1	1	A	299	75	814	669	0.448	297	300	0.2	0.5	7.426	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	9	2	465	383	0.024	10	6	0.0	0.0	13.656	B
			2	A	304	76	814	668	0.455	301	295	0.3	0.6	7.497	A
				B	23	6	775	643	0.036	22	21	0.0	0.0	9.811	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	603	151	-	-	-	603	598	0.0	0.0	0.157	A
				B	23	6	-	-	-	23	21	0.0	0.0	0.491	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	9	2	-	-	-	9	6	0.0	0.0	0.479	A
D	Entry	1	1	A	401	100	984	900	0.446	400	397	0.6	0.9	6.721	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	34	8	984	911	0.037	34	35	0.0	0.0	5.275	A
				C	3	0.86	656	612	0.006	3	3	0.0	0.0	3.955	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	400	100	-	-	-	401	398	0.0	0.0	0.774	A
				B	34	8	-	-	-	34	35	0.0	0.0	0.505	A
				C	3	0.86	-	-	-	3	3	0.0	0.0	1.168	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

16:45 - 17:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	175	44	1420	1393	0.126	173	169	0.1	0.2	3.951	A
				C	221	55	1420	1394	0.158	219	202	0.2	0.3	3.983	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	32	8	1420	1392	0.023	31	30	0.0	0.0	3.257	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	293	73	1420	1395	0.210	287	278	0.1	0.5	3.848	A
B	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	14	4	962	801	0.018	14	10	0.0	0.0	5.383	A
				D	35	9	962	802	0.043	35	30	0.0	0.0	5.729	A
			2	A	316	79	962	798	0.396	319	347	0.4	0.6	7.189	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	315	79	-	-	-	316	348	0.0	0.0	0.747	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	14	4	-	-	-	14	10	0.0	0.0	0.342	A
				D	35	9	-	-	-	35	30	0.0	0.0	0.464	A
C	Entry	1	1	A	379	95	814	636	0.597	383	381	0.5	0.8	9.574	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	6	1	698	551	0.010	6	10	0.0	0.0	17.590	C
			2	A	360	90	814	637	0.565	363	367	0.6	0.9	9.612	A
				B	26	6	814	635	0.041	26	28	0.0	0.0	10.717	B
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	741	185	-	-	-	739	750	0.0	0.2	1.193	A
				B	26	6	-	-	-	26	28	0.0	0.0	0.941	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	6	1	-	-	-	6	10	0.0	0.0	2.089	A
D	Entry	1	1	A	519	130	984	837	0.619	512	494	0.9	1.6	9.065	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	37	9	984	823	0.044	39	37	0.0	0.0	5.634	A
				C	2	0.57	516	434	0.005	2	3	0.0	0.0	3.354	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	528	132	-	-	-	519	497	0.0	1.1	3.064	A
				B	37	9	-	-	-	37	37	0.0	0.0	1.758	A
				C	2	0.57	-	-	-	2	3	0.0	0.0	1.943	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	183	46	1420	1395	0.132	184	170	0.2	0.1	3.727	A
				C	222	56	1420	1395	0.159	223	214	0.3	0.1	4.062	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	26	6	1420	1396	0.018	26	26	0.0	0.0	2.917	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	259	65	1420	1394	0.186	255	272	0.5	0.6	3.724	A
B	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	11	3	779	652	0.018	12	10	0.0	0.0	5.002	A
				D	29	7	962	807	0.035	29	36	0.0	0.0	5.322	A
			2	A	359	90	962	806	0.446	363	360	0.6	0.7	7.549	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	361	90	-	-	-	359	361	0.0	0.2	0.771	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	11	3	-	-	-	11	10	0.0	0.0	0.042	A
				D	29	7	-	-	-	29	36	0.0	0.0	0.623	A
C	Entry	1	1	A	353	88	814	637	0.554	355	364	0.8	1.1	9.799	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	3	0.86	504	385	0.009	5	9	0.0	0.0	17.579	C
			2	A	346	86	814	637	0.543	344	357	0.9	1.1	9.725	A
				B	27	7	814	639	0.043	28	24	0.0	0.1	9.866	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	701	175	-	-	-	699	722	0.2	0.2	0.850	A
				B	27	7	-	-	-	27	24	0.0	0.0	1.033	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	3	0.86	-	-	-	3	9	0.0	0.0	3.932	A
D	Entry	1	1	A	520	130	984	839	0.620	521	521	1.6	1.5	9.014	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	38	10	984	832	0.046	38	35	0.0	0.0	5.528	A
				C	3	0.71	562	468	0.006	3	3	0.0	0.0	3.417	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	518	129	-	-	-	520	520	1.1	0.5	3.363	A
				B	38	10	-	-	-	38	35	0.0	0.0	1.843	A
				C	2	0.57	-	-	-	3	3	0.0	0.0	5.782	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	129	32	1420	1403	0.092	127	134	0.1	0.1	3.639	A
				C	170	42	1420	1402	0.121	172	174	0.1	0.1	3.412	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	24	6	1420	1403	0.017	24	22	0.0	0.0	3.146	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	216	54	1420	1404	0.154	218	226	0.6	0.0	3.330	A
B	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	11	3	871	751	0.014	11	10	0.0	0.0	5.137	A
				D	22	5	916	797	0.027	22	25	0.0	0.0	6.491	A
			2	A	263	66	962	834	0.315	262	298	0.7	0.6	6.449	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	263	66	-	-	-	263	297	0.2	0.0	0.282	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	11	3	-	-	-	11	10	0.0	0.0	0.183	A
				D	22	5	-	-	-	22	25	0.0	0.0	0.144	A
C	Entry	1	1	A	297	74	814	674	0.441	297	307	1.1	0.7	7.281	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	7	2	504	414	0.017	7	8	0.0	0.0	11.564	B
			2	A	291	73	814	674	0.432	291	292	1.1	0.7	7.675	A
				B	18	5	814	659	0.028	18	21	0.1	0.0	6.710	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	589	147	-	-	-	589	595	0.2	0.0	0.106	A
				B	18	5	-	-	-	18	20	0.0	0.0	0.095	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	7	2	-	-	-	7	8	0.0	0.0	0.231	A
D	Entry	1	1	A	410	102	984	909	0.451	404	411	1.5	0.9	7.715	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	27	7	984	906	0.030	27	29	0.0	0.0	5.530	A
				C	1	0.29	375	330	0.003	1	2	0.0	0.0	4.602	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	416	104	-	-	-	410	409	0.5	0.5	2.079	A
				B	27	7	-	-	-	27	29	0.0	0.0	4.464	A
				C	1	0.29	-	-	-	1	2	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	102	26	1420	1405	0.073	101	112	0.1	0.2	3.171	A
				C	145	36	1420	1404	0.103	145	142	0.1	0.1	3.190	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	22	6	1420	1401	0.016	22	22	0.0	0.0	3.464	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	177	44	1420	1404	0.126	180	183	0.0	0.1	3.295	A
B	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	8	2	825	735	0.011	8	7	0.0	0.0	4.898	A
				D	24	6	962	856	0.028	24	19	0.0	0.0	4.406	A
			2	A	232	58	962	857	0.271	234	240	0.6	0.2	6.400	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	232	58	-	-	-	232	239	0.0	0.0	0.228	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	8	2	-	-	-	8	7	0.0	0.0	0.476	A
				D	24	6	-	-	-	24	19	0.0	0.0	0.000	A
C	Entry	1	1	A	249	62	814	694	0.359	250	255	0.7	0.4	6.552	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	7	2	349	292	0.023	7	4	0.0	0.0	14.106	B
			2	A	263	66	814	694	0.379	257	251	0.7	0.7	6.700	A
				B	14	4	775	661	0.022	14	18	0.0	0.0	7.980	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	513	128	-	-	-	512	505	0.0	0.1	0.086	A
				B	14	4	-	-	-	14	18	0.0	0.0	0.698	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	7	2	-	-	-	7	4	0.0	0.0	0.000	A
D	Entry	1	1	A	345	86	984	944	0.365	342	336	0.9	0.8	5.832	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	29	7	984	941	0.030	26	28	0.0	0.2	3.961	A
				C	1	0.29	187	179	0.006	1	1	0.0	0.0	3.574	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	346	86	-	-	-	345	336	0.5	0.1	0.321	A
				B	29	7	-	-	-	29	29	0.0	0.0	0.000	A
				C	1	0.29	-	-	-	1	1	0.0	0.0	2.527	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

PM - Scenario 1, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Q percentiles may be unreliable if the mean queue in any time segment is very low or very high.
Info	Simulation	A2 - PM [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Analysis Set Details

ID	Name	Use Lane Simulation	Include in report	Use specific Demand Set(s)	Specific Demand Set (s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	PM	✓	✓	✓	D2,D4,D6,D8,D10	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		A, B, C, D	8.72	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	8.72	A

Arms

Arms

Arm	Name	Description	No give-way line
A	Industrial Estate Road		
B	Bryn Lane		
C	Ash Road North		
D	Abenbury Way		

Roundabout Geometry

Arm	V (m)	E (m)	l' (m)	R (m)	D (m)	PHI (deg)	Entry only	Exit only
A	8.59	9.82	7.6	38.4	60.0	37.6		
B	3.89	6.96	18.7	49.1	60.0	16.5		
C	3.34	7.53	19.0	11.3	60.0	40.3		
D	3.54	8.21	19.5	40.7	60.0	22.5		

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A	0.754	2840
B	0.616	1924
C	0.525	1628
D	0.617	1968

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

Arm Capacity Adjustments

Arm	Type	Reason	Direct capacity adjustment (PCU/hr)
D	Direct	Queue Observation	200

Lane Simulation: Arm options

Arm	Lane capacity source	Traffic considering secondary lanes (%)
A	Evenly split	10.00
B	Evenly split	10.00
C	Evenly split	10.00
D	Evenly split	10.00

Lanes

Arm	Side	Lane level	Lane	Destination arms	Has limited storage	Storage (PCU)	Has bottleneck	Has obstruction	Min Cap (PCU/hr)	Max Cap (PCU/hr)	Signalised
A	Entry	1	1	B, C		Infinity			0	99999	
			2	A, D		Infinity			0	99999	
	Exit	1	1			Infinity					
B	Entry	1	1	C, D	✓	3.00			0	99999	
			2	A, B	✓	3.00			0	99999	
		2	1	(A, B, C, D)		Infinity					
	Exit	1	1			Infinity					
C	Entry	1	1	A, D	✓	3.00			0	99999	
			2	A, B, C	✓	3.00			0	99999	
		2	1	(B, C, D, A)		Infinity					
	Exit	1	1			Infinity					
D	Entry	1	1	A	✓	3.00			0	99999	
			2	B, C, D	✓	3.00			0	99999	
		2	1	(A, B, C, D)		Infinity					
	Exit	1	1			Infinity					

Entry Lane slope and intercept

Arm	Side	Lane level	Lane	Final slope	Final intercept (PCU/hr)
A	Entry	1	1	0.377	1420
			2	0.377	1420
B	Entry	1	1	0.308	962
			2	0.308	962
C	Entry	1	1	0.263	814
			2	0.263	814
D	Entry	1	1	0.309	984
			2	0.309	984

Summary of Entry Lane allowed movements

Arm	Lane Level	Lane	Destination arm			
			B	C	D	A
B	1	1		✓	✓	
		2	✓			✓
	2	1	✓	✓	✓	✓
C	1	1			✓	✓
		2	✓	✓		✓
	2	1	✓	✓	✓	✓
D	1	1				✓
		2	✓	✓	✓	
	2	1	✓	✓	✓	✓
A	1	1	✓	✓		
		2			✓	✓

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	Scenario 1	PM	ONE HOUR	16:15	17:45	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	616	100.000
B		ONE HOUR	✓	357	100.000
C		ONE HOUR	✓	695	100.000
D		ONE HOUR	✓	492	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	27	153	194	242
	B	319	0	10	28
	C	664	23	0	8
	D	458	31	3	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To			
		A	B	C	D
From	A	0	8	8	11
	B	5	0	0	24
	C	2	0	0	75
	D	5	20	0	0

Cyclist %

		To			
		A	B	C	D
From	A	0	0	0	0
	B	0	0	0	0
	C	0	0	0	0
	D	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max Q95 (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
A	0.26	3.89	1.1	8.0	A	564	846
B	0.44	8.07	1.0	7.0	A	321	482
C	0.60	10.88	2.5	10.0	B	638	957
D	0.65	12.08	2.8	14.0	B	462	693

Main Results for each time segment

16:15 - 16:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	431	108	47	2774	0.155	434	459	1151	0.0	0.3	3.426	A
B	283	71	330	958	0.296	279	276	151	0.0	1.0	6.361	A
C	541	135	457	1371	0.394	549	536	152	0.0	0.5	6.545	A
D	391	98	807	982	0.399	390	370	198	0.0	0.7	5.807	A

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	558	139	59	2865	0.195	558	562	1301	0.3	0.5	3.500	A
B	321	80	420	923	0.348	322	316	198	1.0	0.5	6.827	A
C	635	159	549	1282	0.496	630	623	190	0.5	1.1	7.753	A
D	437	109	923	903	0.484	437	435	258	0.7	0.9	7.365	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	720	180	67	2798	0.257	711	678	1609	0.5	1.1	3.886	A
B	365	91	540	905	0.403	369	387	235	0.5	0.7	7.759	A
C	772	193	673	1289	0.599	778	785	235	1.1	1.9	10.884	B
D	565	141	1123	879	0.643	553	534	328	0.9	2.8	11.849	B

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	690	173	69	2740	0.252	689	683	1610	1.1	0.9	3.798	A
B	401	100	507	904	0.443	404	406	250	0.7	0.9	8.070	A
C	730	183	674	1228	0.595	733	754	239	1.9	2.5	10.703	B
D	559	140	1117	855	0.654	561	559	289	2.8	2.0	12.080	B

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	539	135	47	2769	0.195	542	557	1277	0.9	0.3	3.424	A
B	295	74	415	963	0.307	295	332	173	0.9	0.6	6.664	A
C	614	153	526	1309	0.469	612	628	183	2.5	1.3	7.580	A
D	445	111	891	936	0.475	433	442	247	2.0	1.4	9.790	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	445	111	42	2888	0.154	448	458	1105	0.3	0.4	3.240	A
B	264	66	348	951	0.278	266	267	142	0.6	0.2	6.439	A
C	535	134	459	1393	0.384	529	528	154	1.3	1.1	6.803	A
D	375	94	777	1001	0.375	370	366	212	1.4	1.1	5.937	A

Q Variation Results for each time segment

16:15 - 16:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	0.29	0.00	0.00	2.00	2.00
B	0.95	0.00	0.00	2.45	4.00
C	0.52	0.00	0.00	2.00	2.00
D	0.67	0.00	0.00	3.00	3.00

16:30 - 16:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	0.52	0.00	0.00	2.00	2.00
B	0.48	0.00	0.00	2.00	2.00
C	1.10	0.00	0.13	2.45	5.00
D	0.86	0.00	0.25	2.00	2.00

16:45 - 17:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	1.14	0.00	0.13	2.90	5.00
B	0.67	0.00	0.00	1.45	3.00
C	1.92	0.00	0.88	2.80	10.00
D	2.81	0.00	1.17	5.70	14.00

17:00 - 17:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	0.86	0.00	0.00	1.90	8.00
B	0.90	0.00	0.06	1.45	7.00
C	2.52	0.00	1.58	8.00	8.00
D	2.01	0.00	0.88	3.70	8.00

17:15 - 17:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	0.29	0.00	0.00	2.00	2.00
B	0.57	0.00	0.00	1.63	3.00
C	1.33	0.00	0.30	2.90	5.00
D	1.43	0.00	0.00	8.00	8.00

17:30 - 17:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	0.43	0.00	0.00	2.00	2.00
B	0.24	0.00	0.00	0.45	3.00
C	1.14	0.00	0.56	1.82	4.00
D	1.10	0.00	0.00	2.63	5.00

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

16:15 - 16:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	245	1402	0.175	249	262	0.0	0.2	3.598	A
			2	A, D	186	1402	0.132	185	197	0.0	0.1	3.195	A
	Exit	1	1		1151			1151	1123	0.0	0.0	0.000	A
B	Entry	1	1	C, D	31	861	0.037	31	30	0.0	0.0	5.392	A
			2	A, B	251	861	0.292	247	246	0.0	0.9	6.257	A
		2	1	(A, B, C, D)	283			283	279	0.0	0.0	0.169	A
	Exit	1	1		151			151	158	0.0	0.0	0.000	A
C	Entry	1	1	A, D	271	694	0.391	275	259	0.0	0.2	6.634	A
			2	A, B, C	269	694	0.388	274	276	0.0	0.3	6.421	A
		2	1	(B, C, D, A)	541			541	538	0.0	0.0	0.021	A
	Exit	1	1		152			152	156	0.0	0.0	0.000	A
D	Entry	1	1	A	367	935	0.393	366	344	0.0	0.6	5.665	A
			2	B, C, D	24	935	0.026	25	26	0.0	0.0	4.911	A
		2	1	(A, B, C, D)	391			391	372	0.0	0.0	0.190	A
	Exit	1	1		198			198	203	0.0	0.0	0.000	A

16:30 - 16:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	321	1397	0.230	320	315	0.2	0.4	3.442	A
			2	A, D	237	1397	0.169	238	246	0.1	0.1	3.574	A
	Exit	1	1		1301			1301	1299	0.0	0.0	0.000	A
B	Entry	1	1	C, D	45	833	0.054	44	33	0.0	0.0	6.087	A
			2	A, B	277	833	0.332	278	283	0.9	0.4	6.653	A
		2	1	(A, B, C, D)	321			321	314	0.0	0.0	0.240	A
	Exit	1	1		198			198	190	0.0	0.0	0.000	A
C	Entry	1	1	A, D	309	669	0.461	307	306	0.2	0.5	7.505	A
			2	A, B, C	327	669	0.488	323	317	0.3	0.6	7.657	A
		2	1	(B, C, D, A)	635			635	626	0.0	0.0	0.171	A
	Exit	1	1		190			190	193	0.0	0.0	0.000	A
D	Entry	1	1	A	401	899	0.446	400	397	0.6	0.9	6.721	A
			2	B, C, D	37	899	0.041	37	38	0.0	0.0	5.132	A
		2	1	(A, B, C, D)	437			438	435	0.0	0.0	0.759	A
	Exit	1	1		258			258	254	0.0	0.0	0.000	A

16:45 - 17:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	395	1394	0.284	392	370	0.4	0.6	3.968	A
			2	A, D	325	1394	0.233	320	307	0.1	0.5	3.786	A
	Exit	1	1		1609			1609	1618	0.0	0.0	0.000	A
B	Entry	1	1	C, D	48	796	0.060	48	40	0.0	0.0	5.627	A
			2	A, B	316	796	0.396	319	347	0.4	0.6	7.189	A
		2	1	(A, B, C, D)	365			365	388	0.0	0.0	0.717	A
	Exit	1	1		235			235	233	0.0	0.0	0.000	A
C	Entry	1	1	A, D	385	637	0.605	389	391	0.5	0.8	9.695	A
			2	A, B, C	386	637	0.605	389	395	0.6	0.9	9.692	A
		2	1	(B, C, D, A)	772			771	788	0.0	0.2	1.191	A
	Exit	1	1		235			235	214	0.0	0.0	0.000	A
D	Entry	1	1	A	519	838	0.619	512	494	0.9	1.6	9.065	A
			2	B, C, D	38	838	0.046	41	39	0.0	0.0	5.431	A
		2	1	(A, B, C, D)	565			557	537	0.0	1.2	2.982	A
	Exit	1	1		328			328	318	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	406	1394	0.291	407	384	0.6	0.3	3.915	A
			2	A, D	285	1394	0.204	282	298	0.5	0.6	3.646	A
	Exit	1	1		1610			1610	1628	0.0	0.0	0.000	A
B	Entry	1	1	C, D	40	806	0.050	41	46	0.0	0.0	5.241	A
			2	A, B	359	806	0.446	363	360	0.6	0.7	7.549	A
		2	1	(A, B, C, D)	401			399	406	0.0	0.2	0.741	A
	Exit	1	1		250			250	229	0.0	0.0	0.000	A
C	Entry	1	1	A, D	357	637	0.560	359	373	0.8	1.1	9.911	A
			2	A, B, C	373	637	0.586	372	381	0.9	1.2	9.734	A
		2	1	(B, C, D, A)	730			729	756	0.2	0.2	0.878	A
	Exit	1	1		239			239	227	0.0	0.0	0.000	A
D	Entry	1	1	A	520	840	0.619	521	521	1.6	1.5	9.014	A
			2	B, C, D	41	840	0.049	41	38	0.0	0.0	5.311	A
		2	1	(A, B, C, D)	559			561	558	1.2	0.5	3.297	A
	Exit	1	1		289			289	317	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	299	1402	0.213	299	309	0.3	0.2	3.511	A
			2	A, D	240	1402	0.171	242	248	0.6	0.0	3.312	A
	Exit	1	1		1277			1277	1330	0.0	0.0	0.000	A
B	Entry	1	1	C, D	33	834	0.039	33	34	0.0	0.0	6.051	A
			2	A, B	263	834	0.315	262	298	0.7	0.6	6.449	A
		2	1	(A, B, C, D)	295			295	331	0.2	0.0	0.270	A
	Exit	1	1		173			173	184	0.0	0.0	0.000	A
C	Entry	1	1	A, D	304	676	0.450	304	315	1.1	0.7	7.352	A
			2	A, B, C	310	676	0.458	308	313	1.2	0.7	7.610	A
		2	1	(B, C, D, A)	614			614	624	0.2	0.0	0.107	A
	Exit	1	1		183			183	186	0.0	0.0	0.000	A
D	Entry	1	1	A	410	909	0.451	404	411	1.5	0.9	7.715	A
			2	B, C, D	29	909	0.031	29	31	0.0	0.0	5.462	A
		2	1	(A, B, C, D)	445			438	440	0.5	0.5	2.208	A
	Exit	1	1		247			247	259	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	246	1404	0.175	246	254	0.2	0.3	3.182	A
			2	A, D	200	1404	0.142	203	205	0.0	0.1	3.315	A
	Exit	1	1		1105			1105	1105	0.0	0.0	0.000	A
B	Entry	1	1	C, D	32	855	0.037	32	27	0.0	0.0	4.550	A
			2	A, B	232	855	0.271	234	240	0.6	0.2	6.400	A
		2	1	(A, B, C, D)	264			264	266	0.0	0.0	0.219	A
	Exit	1	1		142			142	158	0.0	0.0	0.000	A
C	Entry	1	1	A, D	256	693	0.369	257	259	0.7	0.4	6.615	A
			2	A, B, C	277	693	0.400	271	269	0.7	0.7	6.789	A
		2	1	(B, C, D, A)	535			533	527	0.0	0.1	0.107	A
	Exit	1	1		154			154	150	0.0	0.0	0.000	A
D	Entry	1	1	A	345	944	0.365	342	336	0.9	0.8	5.832	A
			2	B, C, D	30	944	0.031	27	29	0.0	0.2	3.944	A
		2	1	(A, B, C, D)	375			374	366	0.5	0.1	0.305	A
	Exit	1	1		212			212	206	0.0	0.0	0.000	A

Lanes: Q Variation Results for each time segment

16:15 - 16:30

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	Entry	1	1	0.19	0.00	0.00	0.45	2.00
			2	0.10	0.00	0.00	0.00	2.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
B	Entry	1	1	0.00	0.00	0.00	0.00	0.00
			2	0.90	0.00	0.00	3.00	3.00
		2	1	0.05	0.00	0.00	0.00	1.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
C	Entry	1	1	0.19	0.00	0.00	1.00	1.00
			2	0.33	0.00	0.00	0.78	2.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
D	Entry	1	1	0.62	0.00	0.00	1.63	3.00
			2	0.05	0.00	0.00	0.00	1.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

16:30 - 16:45

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	Entry	1	1	0.38	0.00	0.00	2.00	2.00
			2	0.14	0.00	0.00	1.00	1.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
B	Entry	1	1	0.05	0.00	0.00	0.00	1.00
			2	0.43	0.00	0.00	2.00	2.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
C	Entry	1	1	0.48	0.00	0.00	0.90	3.00
			2	0.62	0.00	0.00	2.00	2.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
D	Entry	1	1	0.86	0.00	0.25	2.00	2.00
			2	0.00	0.00	0.00	0.00	0.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

16:45 - 17:00

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	Entry	1	1	0.57	0.00	0.00	1.73	3.00
			2	0.52	0.00	0.00	1.45	4.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
B	Entry	1	1	0.05	0.00	0.00	0.00	1.00
			2	0.62	0.00	0.00	1.45	3.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
C	Entry	1	1	0.81	0.00	0.00	1.78	3.00
			2	0.90	0.00	0.25	3.00	3.00
		2	1	0.19	0.00	0.00	0.00	4.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
D	Entry	1	1	1.57	0.00	1.17	3.00	3.00
			2	0.05	0.00	0.00	0.00	1.00
		2	1	1.19	0.00	0.00	2.70	11.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

17:00 - 17:15

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	Entry	1	1	0.29	0.00	0.00	2.00	2.00
			2	0.57	0.00	0.00	0.90	8.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
B	Entry	1	1	0.05	0.00	0.00	0.00	1.00
			2	0.67	0.00	0.06	0.90	3.00
		2	1	0.19	0.00	0.00	0.00	4.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
C	Entry	1	1	1.10	0.00	0.44	3.00	3.00
			2	1.24	0.00	0.61	3.00	3.00
		2	1	0.19	0.00	0.00	2.00	2.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
D	Entry	1	1	1.48	0.00	0.88	2.78	4.00
			2	0.05	0.00	0.00	0.00	1.00
		2	1	0.48	0.00	0.00	0.80	5.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

17:15 - 17:30

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	Entry	1	1	0.24	0.00	0.00	2.00	2.00
			2	0.05	0.00	0.00	0.00	1.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
B	Entry	1	1	0.00	0.00	0.00	0.00	0.00
			2	0.57	0.00	0.00	1.63	3.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
C	Entry	1	1	0.67	0.00	0.00	1.45	4.00
			2	0.67	0.00	0.00	1.63	3.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
D	Entry	1	1	0.90	0.00	0.00	3.00	3.00
			2	0.00	0.00	0.00	0.00	0.00
		2	1	0.52	0.00	0.00	5.00	5.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

17:30 - 17:45

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	Entry	1	1	0.29	0.00	0.00	2.00	2.00
			2	0.14	0.00	0.00	-0.10	2.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
B	Entry	1	1	0.00	0.00	0.00	0.00	0.00
			2	0.24	0.00	0.00	0.45	3.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
C	Entry	1	1	0.38	0.00	0.00	0.82	2.00
			2	0.67	0.00	0.06	2.00	2.00
		2	1	0.10	0.00	0.00	0.00	2.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
D	Entry	1	1	0.82	0.00	0.00	3.00	3.00
			2	0.19	0.00	0.00	2.00	2.00
		2	1	0.10	0.00	0.00	0.00	2.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

Lane movements: Main Results for each time segment

16:15 - 16:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	104	26	1420	1403	0.074	106	116	0.0	0.0	3.411	A
				C	141	35	1420	1404	0.101	143	145	0.0	0.1	3.745	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	17	4	1420	1405	0.012	17	20	0.0	0.0	3.025	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	169	42	1420	1402	0.120	167	177	0.0	0.1	3.217	A
B	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	7	2	871	774	0.009	7	8	0.0	0.0	3.846	A
				D	25	6	962	860	0.029	25	22	0.0	0.0	6.174	A
			2	A	251	63	962	861	0.292	247	246	0.0	0.9	6.257	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	251	63	-	-	-	251	249	0.0	0.0	0.184	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	7	2	-	-	-	7	8	0.0	0.0	0.085	A
				D	25	6	-	-	-	25	22	0.0	0.0	0.000	A
C	Entry	1	1	A	265	66	814	694	0.382	269	255	0.0	0.2	6.566	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	6	1	388	332	0.017	6	4	0.0	0.0	12.576	B
			2	A	247	62	814	693	0.356	251	258	0.0	0.3	6.297	A
				B	22	6	814	694	0.032	22	18	0.0	0.0	8.135	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	512	128	-	-	-	512	515	0.0	0.0	0.021	A
				B	22	6	-	-	-	22	18	0.0	0.0	0.015	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	6	1	-	-	-	6	4	0.0	0.0	0.000	A
D	Entry	1	1	A	367	92	984	935	0.393	366	344	0.0	0.6	5.665	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	22	5	984	931	0.023	23	23	0.0	0.0	5.065	A
				C	2	0.57	469	458	0.005	2	2	0.0	0.0	3.382	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	367	92	-	-	-	367	346	0.0	0.0	0.203	A
				B	22	5	-	-	-	22	24	0.0	0.0	0.000	A
				C	2	0.57	-	-	-	2	2	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

16:30 - 16:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	142	36	1420	1397	0.102	142	133	0.0	0.1	3.544	A
				C	179	45	1420	1398	0.128	178	182	0.1	0.2	3.365	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	25	6	1420	1398	0.018	25	24	0.0	0.0	3.481	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	212	53	1420	1398	0.152	211	222	0.1	0.1	3.585	A
B	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	9	2	733	633	0.014	9	7	0.0	0.0	4.593	A
				D	35	9	962	830	0.043	35	26	0.0	0.0	6.647	A
			2	A	277	69	962	833	0.332	278	283	0.9	0.4	6.653	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	277	69	-	-	-	277	282	0.0	0.0	0.255	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	9	2	-	-	-	9	7	0.0	0.0	0.000	A
				D	35	9	-	-	-	35	26	0.0	0.0	0.126	A
C	Entry	1	1	A	299	75	814	669	0.448	297	300	0.2	0.5	7.426	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	9	2	465	383	0.024	10	6	0.0	0.0	13.656	B
			2	A	304	76	814	668	0.455	301	295	0.3	0.6	7.497	A
				B	23	6	775	643	0.036	22	21	0.0	0.0	9.811	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	603	151	-	-	-	603	598	0.0	0.0	0.157	A
				B	23	6	-	-	-	23	21	0.0	0.0	0.491	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	9	2	-	-	-	9	6	0.0	0.0	0.479	A
D	Entry	1	1	A	401	100	984	900	0.446	400	397	0.6	0.9	6.721	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	34	8	984	911	0.037	34	35	0.0	0.0	5.275	A
				C	3	0.86	656	612	0.006	3	3	0.0	0.0	3.955	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	400	100	-	-	-	401	398	0.0	0.0	0.774	A
				B	34	8	-	-	-	34	35	0.0	0.0	0.505	A
				C	3	0.86	-	-	-	3	3	0.0	0.0	1.168	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

16:45 - 17:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	175	44	1420	1393	0.126	173	169	0.1	0.2	3.951	A
				C	221	55	1420	1394	0.158	219	202	0.2	0.3	3.983	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	32	8	1420	1392	0.023	31	30	0.0	0.0	3.257	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	293	73	1420	1395	0.210	287	278	0.1	0.5	3.848	A
B	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	14	4	962	801	0.018	14	10	0.0	0.0	5.383	A
				D	35	9	962	802	0.043	35	30	0.0	0.0	5.729	A
			2	A	316	79	962	798	0.396	319	347	0.4	0.6	7.189	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	315	79	-	-	-	316	348	0.0	0.0	0.747	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	14	4	-	-	-	14	10	0.0	0.0	0.342	A
				D	35	9	-	-	-	35	30	0.0	0.0	0.464	A
C	Entry	1	1	A	379	95	814	636	0.597	383	381	0.5	0.8	9.574	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	6	1	698	551	0.010	6	10	0.0	0.0	17.590	C
			2	A	360	90	814	637	0.565	363	367	0.6	0.9	9.612	A
				B	26	6	814	635	0.041	26	28	0.0	0.0	10.717	B
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	741	185	-	-	-	739	750	0.0	0.2	1.193	A
				B	26	6	-	-	-	26	28	0.0	0.0	0.941	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	6	1	-	-	-	6	10	0.0	0.0	2.089	A
D	Entry	1	1	A	519	130	984	837	0.619	512	494	0.9	1.6	9.065	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	37	9	984	823	0.044	39	37	0.0	0.0	5.634	A
				C	2	0.57	516	434	0.005	2	3	0.0	0.0	3.354	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	528	132	-	-	-	519	497	0.0	1.1	3.064	A
				B	37	9	-	-	-	37	37	0.0	0.0	1.758	A
				C	2	0.57	-	-	-	2	3	0.0	0.0	1.943	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	183	46	1420	1395	0.132	184	170	0.2	0.1	3.727	A
				C	222	56	1420	1395	0.159	223	214	0.3	0.1	4.062	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	26	6	1420	1396	0.018	26	26	0.0	0.0	2.917	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	259	65	1420	1394	0.186	255	272	0.5	0.6	3.724	A
B	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	11	3	779	652	0.018	12	10	0.0	0.0	5.002	A
				D	29	7	962	807	0.035	29	36	0.0	0.0	5.322	A
			2	A	359	90	962	806	0.446	363	360	0.6	0.7	7.549	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	361	90	-	-	-	359	361	0.0	0.2	0.771	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	11	3	-	-	-	11	10	0.0	0.0	0.042	A
				D	29	7	-	-	-	29	36	0.0	0.0	0.623	A
C	Entry	1	1	A	353	88	814	637	0.554	355	364	0.8	1.1	9.799	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	3	0.86	504	385	0.009	5	9	0.0	0.0	17.579	C
			2	A	346	86	814	637	0.543	344	357	0.9	1.1	9.725	A
				B	27	7	814	639	0.043	28	24	0.0	0.1	9.866	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	701	175	-	-	-	699	722	0.2	0.2	0.850	A
				B	27	7	-	-	-	27	24	0.0	0.0	1.033	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	3	0.86	-	-	-	3	9	0.0	0.0	3.932	A
D	Entry	1	1	A	520	130	984	839	0.620	521	521	1.6	1.5	9.014	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	38	10	984	832	0.046	38	35	0.0	0.0	5.528	A
				C	3	0.71	562	468	0.006	3	3	0.0	0.0	3.417	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	518	129	-	-	-	520	520	1.1	0.5	3.363	A
				B	38	10	-	-	-	38	35	0.0	0.0	1.843	A
				C	2	0.57	-	-	-	3	3	0.0	0.0	5.782	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	129	32	1420	1403	0.092	127	134	0.1	0.1	3.639	A
				C	170	42	1420	1402	0.121	172	174	0.1	0.1	3.412	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	24	6	1420	1403	0.017	24	22	0.0	0.0	3.146	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	216	54	1420	1404	0.154	218	226	0.6	0.0	3.330	A
B	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	11	3	871	751	0.014	11	10	0.0	0.0	5.137	A
				D	22	5	916	797	0.027	22	25	0.0	0.0	6.491	A
			2	A	263	66	962	834	0.315	262	298	0.7	0.6	6.449	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	263	66	-	-	-	263	297	0.2	0.0	0.282	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	11	3	-	-	-	11	10	0.0	0.0	0.183	A
				D	22	5	-	-	-	22	25	0.0	0.0	0.144	A
C	Entry	1	1	A	297	74	814	674	0.441	297	307	1.1	0.7	7.281	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	7	2	504	414	0.017	7	8	0.0	0.0	11.564	B
			2	A	291	73	814	674	0.432	291	292	1.1	0.7	7.675	A
				B	18	5	814	659	0.028	18	21	0.1	0.0	6.710	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	589	147	-	-	-	589	595	0.2	0.0	0.106	A
				B	18	5	-	-	-	18	20	0.0	0.0	0.095	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	7	2	-	-	-	7	8	0.0	0.0	0.231	A
D	Entry	1	1	A	410	102	984	909	0.451	404	411	1.5	0.9	7.715	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	27	7	984	906	0.030	27	29	0.0	0.0	5.530	A
				C	1	0.29	375	330	0.003	1	2	0.0	0.0	4.602	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	416	104	-	-	-	410	409	0.5	0.5	2.079	A
				B	27	7	-	-	-	27	29	0.0	0.0	4.464	A
				C	1	0.29	-	-	-	1	2	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	102	26	1420	1405	0.073	101	112	0.1	0.2	3.171	A
				C	145	36	1420	1404	0.103	145	142	0.1	0.1	3.190	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	22	6	1420	1401	0.016	22	22	0.0	0.0	3.464	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	177	44	1420	1404	0.126	180	183	0.0	0.1	3.295	A
B	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	8	2	825	735	0.011	8	7	0.0	0.0	4.898	A
				D	24	6	962	856	0.028	24	19	0.0	0.0	4.406	A
			2	A	232	58	962	857	0.271	234	240	0.6	0.2	6.400	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	232	58	-	-	-	232	239	0.0	0.0	0.228	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	8	2	-	-	-	8	7	0.0	0.0	0.476	A
				D	24	6	-	-	-	24	19	0.0	0.0	0.000	A
C	Entry	1	1	A	249	62	814	694	0.359	250	255	0.7	0.4	6.552	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	7	2	349	292	0.023	7	4	0.0	0.0	14.106	B
			2	A	263	66	814	694	0.379	257	251	0.7	0.7	6.700	A
				B	14	4	775	661	0.022	14	18	0.0	0.0	7.980	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	513	128	-	-	-	512	505	0.0	0.1	0.086	A
				B	14	4	-	-	-	14	18	0.0	0.0	0.698	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	7	2	-	-	-	7	4	0.0	0.0	0.000	A
D	Entry	1	1	A	345	86	984	944	0.365	342	336	0.9	0.8	5.832	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	29	7	984	941	0.030	26	28	0.0	0.2	3.961	A
				C	1	0.29	187	179	0.006	1	1	0.0	0.0	3.574	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	346	86	-	-	-	345	336	0.5	0.1	0.321	A
				B	29	7	-	-	-	29	29	0.0	0.0	0.000	A
				C	1	0.29	-	-	-	1	1	0.0	0.0	2.527	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

PM - Scenario 2, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Q percentiles may be unreliable if the mean queue in any time segment is very low or very high.
Info	Simulation	A2 - PM [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Analysis Set Details

ID	Name	Use Lane Simulation	Include in report	Use specific Demand Set(s)	Specific Demand Set (s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	PM	✓	✓	✓	D2,D4,D6,D8,D10	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		A, B, C, D	9.14	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	9.14	A

Arms

Arms

Arm	Name	Description	No give-way line
A	Industrial Estate Road		
B	Bryn Lane		
C	Ash Road North		
D	Abenbury Way		

Roundabout Geometry

Arm	V (m)	E (m)	l' (m)	R (m)	D (m)	PHI (deg)	Entry only	Exit only
A	8.59	9.82	7.6	38.4	60.0	37.6		
B	3.89	6.96	18.7	49.1	60.0	16.5		
C	3.34	7.53	19.0	11.3	60.0	40.3		
D	3.54	8.21	19.5	40.7	60.0	22.5		

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A	0.754	2840
B	0.616	1924
C	0.525	1628
D	0.617	1968

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

Arm Capacity Adjustments

Arm	Type	Reason	Direct capacity adjustment (PCU/hr)
D	Direct	Queue Observation	200

Lane Simulation: Arm options

Arm	Lane capacity source	Traffic considering secondary lanes (%)
A	Evenly split	10.00
B	Evenly split	10.00
C	Evenly split	10.00
D	Evenly split	10.00

Lanes

Arm	Side	Lane level	Lane	Destination arms	Has limited storage	Storage (PCU)	Has bottleneck	Has obstruction	Min Cap (PCU/hr)	Max Cap (PCU/hr)	Signalised
A	Entry	1	1	B, C		Infinity			0	99999	
			2	A, D		Infinity			0	99999	
	Exit	1	1			Infinity					
B	Entry	1	1	C, D	✓	3.00			0	99999	
			2	A, B	✓	3.00			0	99999	
		2	1	(A, B, C, D)		Infinity					
	Exit	1	1			Infinity					
C	Entry	1	1	A, D	✓	3.00			0	99999	
			2	A, B, C	✓	3.00			0	99999	
		2	1	(B, C, D, A)		Infinity					
	Exit	1	1			Infinity					
D	Entry	1	1	A	✓	3.00			0	99999	
			2	B, C, D	✓	3.00			0	99999	
		2	1	(A, B, C, D)		Infinity					
	Exit	1	1			Infinity					

Entry Lane slope and intercept

Arm	Side	Lane level	Lane	Final slope	Final intercept (PCU/hr)
A	Entry	1	1	0.377	1420
			2	0.377	1420
B	Entry	1	1	0.308	962
			2	0.308	962
C	Entry	1	1	0.263	814
			2	0.263	814
D	Entry	1	1	0.309	984
			2	0.309	984

Summary of Entry Lane allowed movements

Arm	Lane Level	Lane	Destination arm			
			B	C	D	A
B	1	1		✓	✓	
		2	✓			✓
	2	1	✓	✓	✓	✓
C	1	1			✓	✓
		2	✓	✓		✓
	2	1	✓	✓	✓	✓
D	1	1				✓
		2	✓	✓	✓	
	2	1	✓	✓	✓	✓
A	1	1	✓	✓		
		2			✓	✓

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	Scenario 2	PM	ONE HOUR	16:15	17:45	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	617	100.000
B		ONE HOUR	✓	357	100.000
C		ONE HOUR	✓	618	100.000
D		ONE HOUR	✓	577	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	27	153	132	305
	B	319	0	7	31
	C	580	23	0	15
	D	542	31	4	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To			
		A	B	C	D
From	A	0	8	8	11
	B	5	0	0	24
	C	2	0	0	75
	D	5	20	0	0

Cyclist %

		To			
		A	B	C	D
From	A	0	0	0	0
	B	0	0	0	0
	C	0	0	0	0
	D	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max Q95 (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
A	0.25	4.01	1.0	7.0	A	562	843
B	0.44	8.58	0.7	4.0	A	329	494
C	0.62	9.64	3.2	9.0	A	578	867
D	0.72	14.39	3.0	10.0	B	529	794

Main Results for each time segment

16:15 - 16:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	478	119	50	2891	0.165	481	464	1098	0.0	0.3	3.254	A
B	282	70	372	948	0.297	280	263	159	0.0	0.3	5.850	A
C	463	116	539	1355	0.342	466	457	115	0.0	0.5	6.696	A
D	421	105	730	1009	0.417	419	418	273	0.0	0.7	6.832	A

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	550	138	59	2803	0.196	549	545	1319	0.3	0.5	3.468	A
B	326	82	410	909	0.359	327	333	198	0.3	0.7	7.196	A
C	557	139	601	1327	0.419	557	556	136	0.5	0.9	7.262	A
D	530	133	847	977	0.543	530	517	310	0.7	1.3	8.396	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	680	170	53	2768	0.246	690	692	1614	0.5	0.7	4.006	A
B	383	96	518	866	0.443	392	385	222	0.7	0.5	7.522	A
C	734	183	759	1175	0.624	704	677	151	0.9	3.2	9.640	A
D	613	153	1068	925	0.663	599	624	395	1.3	3.0	13.276	B

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	646	162	59	2846	0.227	640	671	1640	0.7	0.9	3.828	A
B	389	97	481	925	0.420	392	393	221	0.5	0.7	8.579	A
C	658	164	715	1211	0.543	666	668	157	3.2	1.0	8.606	A
D	662	166	1029	917	0.722	670	652	353	3.0	2.0	14.391	B

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	558	139	57	2795	0.200	561	563	1326	0.9	0.4	3.513	A
B	323	81	424	866	0.373	322	328	195	0.7	0.3	6.940	A
C	585	146	606	1269	0.461	586	560	139	1.0	1.2	7.490	A
D	511	128	875	970	0.527	508	517	317	2.0	1.7	9.595	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	460	115	61	2803	0.164	451	453	1089	0.4	1.0	3.420	A
B	272	68	351	959	0.284	271	277	161	0.3	0.4	6.067	A
C	471	118	518	1368	0.345	467	463	104	1.2	1.0	6.758	A
D	437	109	720	1037	0.421	430	438	265	1.7	1.4	6.733	A

Q Variation Results for each time segment

16:15 - 16:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	0.29	0.00	0.00	0.73	2.00
B	0.33	0.00	0.00	1.00	1.00
C	0.52	0.00	0.00	0.90	3.00
D	0.71	0.00	0.06	1.45	3.00

16:30 - 16:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	0.52	0.00	0.00	0.90	3.00
B	0.67	0.00	0.00	1.45	3.00
C	0.86	0.00	0.08	1.73	4.00
D	1.33	0.00	0.25	5.00	5.00

16:45 - 17:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	0.71	0.00	0.07	2.00	2.00
B	0.48	0.00	0.00	2.00	2.00
C	3.24	0.00	1.63	9.00	9.00
D	3.05	0.00	1.69	6.90	10.00

17:00 - 17:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	0.90	0.00	0.00	2.90	6.00
B	0.67	0.00	0.00	1.45	3.00
C	1.05	0.00	0.30	1.82	5.00
D	1.95	0.00	0.75	4.63	7.00

17:15 - 17:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	0.38	0.00	0.00	2.00	2.00
B	0.33	0.00	0.00	0.90	4.00
C	1.19	0.00	0.28	5.00	5.00
D	1.67	0.00	0.13	2.40	10.00

17:30 - 17:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	1.05	0.00	0.25	1.90	7.00
B	0.43	0.00	0.00	0.84	2.00
C	1.00	0.00	0.08	1.90	6.00
D	1.38	0.00	0.17	2.80	7.00

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

16:15 - 16:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	218	1401	0.156	218	218	0.0	0.1	3.034	A
			2	A, D	259	1401	0.185	264	246	0.0	0.1	3.454	A
	Exit	1	1		1098			1098	1073	0.0	0.0	0.000	A
B	Entry	1	1	C, D	26	848	0.031	26	27	0.0	0.0	4.737	A
			2	A, B	255	848	0.301	254	236	0.0	0.3	5.781	A
		2	1	(A, B, C, D)	282			282	265	0.0	0.0	0.164	A
	Exit	1	1		159			159	162	0.0	0.0	0.000	A
C	Entry	1	1	A, D	235	673	0.349	235	228	0.0	0.4	6.791	A
			2	A, B, C	228	673	0.339	232	229	0.0	0.1	6.554	A
		2	1	(B, C, D, A)	463			463	459	0.0	0.0	0.024	A
	Exit	1	1		115			115	110	0.0	0.0	0.000	A
D	Entry	1	1	A	388	959	0.405	385	388	0.0	0.7	6.320	A
			2	B, C, D	31	959	0.033	32	29	0.0	0.0	5.169	A
		2	1	(A, B, C, D)	421			421	420	0.0	0.0	0.580	A
	Exit	1	1		273			273	256	0.0	0.0	0.000	A

16:30 - 16:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	271	1398	0.194	269	258	0.1	0.4	3.372	A
			2	A, D	277	1398	0.198	279	286	0.1	0.1	3.556	A
	Exit	1	1		1319			1319	1326	0.0	0.0	0.000	A
B	Entry	1	1	C, D	44	836	0.053	43	37	0.0	0.1	5.475	A
			2	A, B	284	836	0.340	283	296	0.3	0.6	6.853	A
		2	1	(A, B, C, D)	326			328	334	0.0	0.0	0.474	A
	Exit	1	1		198			198	185	0.0	0.0	0.000	A
C	Entry	1	1	A, D	271	656	0.413	270	275	0.4	0.5	7.075	A
			2	A, B, C	286	656	0.435	287	281	0.1	0.4	7.413	A
		2	1	(B, C, D, A)	557			557	557	0.0	0.0	0.014	A
	Exit	1	1		136			136	132	0.0	0.0	0.000	A
D	Entry	1	1	A	495	923	0.537	494	486	0.7	1.1	6.892	A
			2	B, C, D	35	923	0.038	37	31	0.0	0.0	5.004	A
		2	1	(A, B, C, D)	530			530	518	0.0	0.2	1.602	A
	Exit	1	1		310			310	307	0.0	0.0	0.000	A

16:45 - 17:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	314	1400	0.224	313	320	0.4	0.3	3.817	A
			2	A, D	367	1400	0.262	374	373	0.1	0.4	4.171	A
	Exit	1	1		1614			1614	1599	0.0	0.0	0.000	A
B	Entry	1	1	C, D	37	803	0.046	36	35	0.1	0.0	5.568	A
			2	A, B	349	803	0.434	354	349	0.6	0.4	6.938	A
		2	1	(A, B, C, D)	383			385	384	0.0	0.0	0.698	A
	Exit	1	1		222			222	227	0.0	0.0	0.000	A
C	Entry	1	1	A, D	360	615	0.585	349	339	0.5	1.4	8.982	A
			2	A, B, C	367	615	0.597	357	338	0.4	1.3	9.269	A
		2	1	(B, C, D, A)	734			727	684	0.0	0.5	0.488	A
	Exit	1	1		151			151	159	0.0	0.0	0.000	A
D	Entry	1	1	A	576	855	0.674	567	589	1.1	2.2	8.969	A
			2	B, C, D	31	855	0.036	32	35	0.0	0.0	4.981	A
		2	1	(A, B, C, D)	613			607	628	0.2	1.0	4.501	A
	Exit	1	1		395			395	393	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	311	1397	0.223	311	319	0.3	0.3	3.762	A
			2	A, D	335	1397	0.240	329	352	0.4	0.6	3.887	A
	Exit	1	1		1640			1640	1626	0.0	0.0	0.000	A
B	Entry	1	1	C, D	31	814	0.039	31	39	0.0	0.0	5.705	A
			2	A, B	358	814	0.440	361	354	0.4	0.7	7.972	A
		2	1	(A, B, C, D)	389			390	394	0.0	0.0	0.808	A
	Exit	1	1		221			221	228	0.0	0.0	0.000	A
C	Entry	1	1	A, D	324	626	0.518	331	333	1.4	0.4	8.347	A
			2	A, B, C	333	626	0.532	335	335	1.3	0.6	8.531	A
		2	1	(B, C, D, A)	658			658	661	0.5	0.0	0.194	A
	Exit	1	1		157			157	158	0.0	0.0	0.000	A
D	Entry	1	1	A	630	867	0.727	632	615	2.2	1.3	9.230	A
			2	B, C, D	41	867	0.047	39	37	0.0	0.2	5.708	A
		2	1	(A, B, C, D)	662			671	650	1.0	0.4	5.344	A
	Exit	1	1		353			353	372	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	267	1398	0.191	270	263	0.3	0.2	3.481	A
			2	A, D	290	1398	0.208	291	300	0.6	0.1	3.542	A
	Exit	1	1		1326			1326	1314	0.0	0.0	0.000	A
B	Entry	1	1	C, D	36	832	0.043	36	38	0.0	0.0	5.059	A
			2	A, B	286	832	0.344	286	290	0.7	0.3	6.727	A
		2	1	(A, B, C, D)	323			322	326	0.0	0.0	0.383	A
	Exit	1	1		195			195	193	0.0	0.0	0.000	A
C	Entry	1	1	A, D	284	655	0.434	285	273	0.4	0.5	7.439	A
			2	A, B, C	301	655	0.460	302	286	0.6	0.7	7.406	A
		2	1	(B, C, D, A)	585			585	560	0.0	0.0	0.069	A
	Exit	1	1		139			139	138	0.0	0.0	0.000	A
D	Entry	1	1	A	467	914	0.511	470	478	1.3	0.9	7.463	A
			2	B, C, D	40	914	0.044	39	39	0.2	0.1	5.262	A
		2	1	(A, B, C, D)	511			507	515	0.4	0.6	2.282	A
	Exit	1	1		317			317	322	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	204	1397	0.146	201	208	0.2	0.3	3.403	A
			2	A, D	256	1397	0.183	251	244	0.1	0.7	3.436	A
	Exit	1	1		1089			1089	1109	0.0	0.0	0.000	A
B	Entry	1	1	C, D	29	854	0.034	29	29	0.0	0.0	5.085	A
			2	A, B	242	854	0.284	241	248	0.3	0.4	5.845	A
		2	1	(A, B, C, D)	272			272	277	0.0	0.0	0.298	A
	Exit	1	1		161			161	151	0.0	0.0	0.000	A
C	Entry	1	1	A, D	225	678	0.332	224	228	0.5	0.6	6.689	A
			2	A, B, C	246	678	0.363	243	235	0.7	0.4	6.766	A
		2	1	(B, C, D, A)	471			471	462	0.0	0.0	0.029	A
	Exit	1	1		104			104	111	0.0	0.0	0.000	A
D	Entry	1	1	A	406	962	0.422	402	412	0.9	1.1	6.147	A
			2	B, C, D	27	962	0.029	27	27	0.1	0.0	4.312	A
		2	1	(A, B, C, D)	437			432	439	0.6	0.3	0.725	A
	Exit	1	1		265			265	260	0.0	0.0	0.000	A

Lanes: Q Variation Results for each time segment

16:15 - 16:30

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	Entry	1	1	0.14	0.00	0.00	1.00	1.00
			2	0.14	0.00	0.00	-0.10	2.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
B	Entry	1	1	0.00	0.00	0.00	0.00	0.00
			2	0.33	0.00	0.00	1.00	1.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
C	Entry	1	1	0.38	0.00	0.00	0.82	2.00
			2	0.14	0.00	0.00	-0.10	2.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
D	Entry	1	1	0.71	0.00	0.06	1.45	3.00
			2	0.00	0.00	0.00	0.00	0.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

16:30 - 16:45

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	Entry	1	1	0.43	0.00	0.00	0.90	3.00
			2	0.10	0.00	0.00	1.00	1.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
B	Entry	1	1	0.10	0.00	0.00	0.00	2.00
			2	0.57	0.00	0.00	0.90	3.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
C	Entry	1	1	0.48	0.00	0.00	2.00	2.00
			2	0.38	0.00	0.00	0.82	2.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
D	Entry	1	1	1.10	0.00	0.25	3.00	3.00
			2	0.00	0.00	0.00	0.00	0.00
		2	1	0.24	0.00	0.00	2.00	2.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

16:45 - 17:00

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	Entry	1	1	0.29	0.00	0.00	0.73	2.00
			2	0.43	0.00	0.00	0.84	2.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
B	Entry	1	1	0.05	0.00	0.00	0.00	1.00
			2	0.43	0.00	0.00	2.00	2.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
C	Entry	1	1	1.43	0.00	0.75	3.00	3.00
			2	1.29	0.00	0.50	3.00	3.00
		2	1	0.52	0.00	0.00	3.00	3.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
D	Entry	1	1	2.19	0.00	1.69	3.00	3.00
			2	0.00	0.00	0.00	0.00	0.00
		2	1	1.00	0.00	0.00	3.90	7.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

17:00 - 17:15

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	Entry	1	1	0.33	0.00	0.00	0.73	3.00
			2	0.57	0.00	0.00	0.90	6.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
B	Entry	1	1	0.00	0.00	0.00	0.00	0.00
			2	0.67	0.00	0.00	1.45	3.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
C	Entry	1	1	0.43	0.00	0.00	2.00	2.00
			2	0.62	0.00	0.00	0.90	3.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
D	Entry	1	1	1.33	0.00	0.58	2.73	4.00
			2	0.19	0.00	0.00	2.00	2.00
		2	1	0.43	0.00	0.00	1.27	3.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

17:15 - 17:30

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	Entry	1	1	0.24	0.00	0.00	0.63	2.00
			2	0.14	0.00	0.00	1.00	1.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
B	Entry	1	1	0.00	0.00	0.00	0.00	0.00
			2	0.29	0.00	0.00	0.90	3.00
		2	1	0.05	0.00	0.00	0.00	1.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
C	Entry	1	1	0.52	0.00	0.00	1.45	3.00
			2	0.67	0.00	0.00	3.00	3.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
D	Entry	1	1	0.90	0.00	0.00	3.00	3.00
			2	0.14	0.00	0.00	-0.10	2.00
		2	1	0.62	0.00	0.00	-0.60	7.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

17:30 - 17:45

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	Entry	1	1	0.33	0.00	0.00	0.78	2.00
			2	0.71	0.00	0.00	0.80	7.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
B	Entry	1	1	0.05	0.00	0.00	0.00	1.00
			2	0.38	0.00	0.00	1.00	1.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
C	Entry	1	1	0.57	0.00	0.00	0.90	3.00
			2	0.43	0.00	0.00	0.90	3.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
D	Entry	1	1	1.10	0.00	0.17	3.00	3.00
			2	0.00	0.00	0.00	0.00	0.00
		2	1	0.29	0.00	0.00	-0.20	4.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

Lane movements: Main Results for each time segment

16:15 - 16:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	114	29	1420	1401	0.082	114	118	0.0	0.0	3.101	A
				C	104	26	1420	1402	0.074	105	100	0.0	0.1	2.955	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	17	4	1420	1404	0.012	17	16	0.0	0.0	3.117	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	242	61	1420	1402	0.173	246	229	0.0	0.1	3.480	A
B	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	6	1	733	648	0.009	6	7	0.0	0.0	4.648	A
				D	20	5	962	851	0.024	20	20	0.0	0.0	4.773	A
			2	A	255	64	962	849	0.301	254	236	0.0	0.3	5.781	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	255	64	-	-	-	255	238	0.0	0.0	0.170	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	6	1	-	-	-	6	7	0.0	0.0	0.220	A
				D	20	5	-	-	-	20	20	0.0	0.0	0.066	A
C	Entry	1	1	A	228	57	814	672	0.339	227	221	0.0	0.4	6.727	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	7	2	504	420	0.016	7	7	0.0	0.0	10.118	B
			2	A	211	53	814	674	0.313	215	212	0.0	0.1	6.530	A
				B	18	4	775	647	0.027	18	17	0.0	0.0	6.845	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	438	110	-	-	-	438	434	0.0	0.0	0.021	A
				B	18	4	-	-	-	18	17	0.0	0.0	0.106	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	7	2	-	-	-	7	7	0.0	0.0	0.000	A
D	Entry	1	1	A	388	97	984	960	0.404	385	388	0.0	0.7	6.320	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	26	7	984	970	0.027	27	26	0.0	0.0	5.460	A
				C	5	1	469	458	0.010	5	3	0.0	0.0	3.334	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	388	97	-	-	-	388	391	0.0	0.0	0.561	A
				B	26	7	-	-	-	26	26	0.0	0.0	1.014	A
				C	5	1	-	-	-	5	3	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

16:30 - 16:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	145	36	1420	1396	0.104	142	135	0.0	0.3	3.384	A
				C	127	32	1420	1399	0.091	127	123	0.1	0.1	3.359	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	19	5	1352	1331	0.014	19	22	0.0	0.0	3.082	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	259	65	1420	1397	0.185	261	264	0.1	0.1	3.600	A
B	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	6	2	641	558	0.011	6	6	0.0	0.0	4.312	A
				D	38	9	916	797	0.047	38	31	0.0	0.1	5.747	A
			2	A	284	71	962	838	0.339	283	296	0.3	0.6	6.853	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	282	71	-	-	-	284	297	0.0	0.0	0.497	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	6	2	-	-	-	6	6	0.0	0.0	0.000	A
				D	38	9	-	-	-	38	31	0.0	0.0	0.317	A
C	Entry	1	1	A	259	65	814	655	0.395	258	263	0.4	0.5	6.895	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	12	3	659	534	0.022	12	12	0.0	0.0	14.247	B
			2	A	265	66	814	656	0.403	265	258	0.1	0.4	7.330	A
				B	21	5	814	656	0.032	22	22	0.0	0.0	8.370	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	523	131	-	-	-	523	523	0.0	0.0	0.015	A
				B	21	5	-	-	-	21	22	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	12	3	-	-	-	12	12	0.0	0.0	0.015	A
D	Entry	1	1	A	495	124	984	923	0.537	494	486	0.7	1.1	6.892	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	31	8	984	926	0.034	33	27	0.0	0.0	5.356	A
				C	3	0.86	562	535	0.006	3	3	0.0	0.0	2.615	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	495	124	-	-	-	495	487	0.0	0.2	1.642	A
				B	31	8	-	-	-	31	27	0.0	0.0	1.010	A
				C	3	0.86	-	-	-	3	3	0.0	0.0	0.171	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

16:45 - 17:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	171	43	1420	1399	0.122	171	171	0.3	0.1	3.634	A
				C	142	35	1420	1399	0.101	142	149	0.1	0.1	4.023	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	29	7	1420	1400	0.021	29	26	0.0	0.0	4.544	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	338	85	1420	1398	0.242	343	346	0.1	0.4	4.139	A
B	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	7	2	779	651	0.011	7	7	0.0	0.0	3.992	A
				D	29	7	962	802	0.037	29	29	0.1	0.0	6.021	A
			2	A	349	87	962	802	0.435	354	349	0.6	0.4	6.938	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	347	87	-	-	-	349	349	0.0	0.0	0.708	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	7	2	-	-	-	7	7	0.0	0.0	0.560	A
				D	29	7	-	-	-	29	28	0.0	0.0	0.582	A
C	Entry	1	1	A	339	85	814	616	0.550	328	322	0.5	1.3	8.775	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	22	6	775	585	0.038	21	18	0.0	0.1	15.240	C
			2	A	344	86	814	616	0.559	335	314	0.4	1.1	9.031	A
				B	23	6	814	616	0.038	21	24	0.0	0.2	12.257	B
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	688	172	-	-	-	683	641	0.0	0.4	0.440	A
				B	25	6	-	-	-	23	25	0.0	0.1	1.285	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	22	6	-	-	-	22	18	0.0	0.0	1.479	A
D	Entry	1	1	A	576	144	984	855	0.674	567	589	1.1	2.2	8.969	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	29	7	984	868	0.033	30	32	0.0	0.0	4.905	A
				C	2	0.57	562	499	0.005	2	3	0.0	0.0	5.637	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	582	145	-	-	-	576	592	0.2	1.0	4.607	A
				B	29	7	-	-	-	29	32	0.0	0.0	2.806	A
				C	2	0.57	-	-	-	2	3	0.0	0.0	0.709	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	168	42	1420	1398	0.120	165	172	0.1	0.3	3.566	A
				C	142	35	1420	1398	0.102	147	147	0.1	0.0	3.998	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	30	7	1420	1398	0.021	29	34	0.0	0.1	3.629	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	305	76	1420	1398	0.218	300	318	0.4	0.5	3.918	A
B	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	5	1	825	688	0.007	5	7	0.0	0.0	4.875	A
				D	26	6	962	808	0.032	26	32	0.0	0.0	5.941	A
			2	A	358	90	962	814	0.440	361	354	0.4	0.7	7.972	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	357	89	-	-	-	358	355	0.0	0.0	0.833	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	5	1	-	-	-	5	7	0.0	0.0	0.000	A
				D	26	6	-	-	-	26	32	0.0	0.0	0.709	A
C	Entry	1	1	A	300	75	814	625	0.480	305	311	1.3	0.4	8.189	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	25	6	775	599	0.042	27	22	0.1	0.0	12.230	B
			2	A	312	78	814	627	0.498	313	312	1.1	0.5	8.434	A
				B	22	6	814	622	0.036	21	23	0.2	0.1	9.855	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	611	153	-	-	-	612	617	0.4	0.0	0.176	A
				B	22	6	-	-	-	22	22	0.1	0.0	0.584	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	25	6	-	-	-	25	22	0.0	0.0	0.392	A
D	Entry	1	1	A	630	158	984	868	0.726	632	615	2.2	1.3	9.230	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	38	9	984	867	0.043	35	33	0.0	0.2	5.882	A
				C	4	1	609	530	0.008	4	4	0.0	0.0	4.425	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	621	155	-	-	-	630	612	1.0	0.4	5.359	A
				B	35	9	-	-	-	38	34	0.0	0.0	5.045	A
				C	4	1	-	-	-	4	4	0.0	0.0	5.170	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	139	35	1420	1399	0.100	142	138	0.3	0.2	3.397	A
				C	128	32	1420	1399	0.092	128	125	0.0	0.0	3.570	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	22	5	1420	1396	0.016	22	25	0.1	0.0	2.951	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	269	67	1420	1398	0.192	269	275	0.5	0.1	3.599	A
B	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	7	2	825	712	0.010	7	8	0.0	0.0	5.748	A
				D	29	7	962	834	0.035	29	30	0.0	0.0	4.837	A
			2	A	286	72	962	834	0.343	286	290	0.7	0.3	6.727	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	287	72	-	-	-	286	288	0.0	0.0	0.409	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	7	2	-	-	-	7	8	0.0	0.0	0.663	A
				D	29	7	-	-	-	29	30	0.0	0.0	0.000	A
C	Entry	1	1	A	264	66	814	654	0.404	265	257	0.4	0.4	7.242	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	21	5	736	592	0.035	19	16	0.0	0.1	12.956	B
			2	A	282	70	814	655	0.430	284	265	0.5	0.6	7.251	A
				B	19	5	814	651	0.030	19	21	0.1	0.1	9.295	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	546	136	-	-	-	546	523	0.0	0.0	0.071	A
				B	19	5	-	-	-	19	21	0.0	0.0	0.057	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	21	5	-	-	-	21	16	0.0	0.0	0.000	A
D	Entry	1	1	A	467	117	984	914	0.511	470	478	1.3	0.9	7.463	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	36	9	984	912	0.040	34	34	0.2	0.1	5.552	A
				C	5	1	703	660	0.007	5	6	0.0	0.0	3.831	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	471	118	-	-	-	467	476	0.4	0.6	2.333	A
				B	36	9	-	-	-	36	34	0.0	0.0	1.539	A
				C	5	1	-	-	-	5	6	0.0	0.0	1.764	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	104	26	1420	1396	0.075	100	107	0.2	0.3	3.373	A
				C	98	25	1420	1397	0.070	98	102	0.0	0.0	3.433	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	19	5	1420	1399	0.013	18	19	0.0	0.1	3.434	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	237	59	1420	1397	0.170	233	225	0.1	0.6	3.436	A
B	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	3	0.71	687	609	0.005	3	5	0.0	0.0	4.399	A
				D	27	7	962	852	0.032	26	24	0.0	0.0	5.245	A
			2	A	242	61	962	853	0.284	241	248	0.3	0.4	5.845	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	242	61	-	-	-	242	248	0.0	0.0	0.315	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	3	0.71	-	-	-	3	5	0.0	0.0	0.255	A
				D	27	7	-	-	-	27	25	0.0	0.0	0.109	A
C	Entry	1	1	A	220	55	814	677	0.325	219	217	0.4	0.6	6.573	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	6	1	620	515	0.011	6	11	0.1	0.0	10.810	B
			2	A	213	53	814	679	0.313	210	213	0.6	0.4	6.704	A
				B	33	8	814	681	0.049	33	22	0.1	0.0	7.354	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	433	108	-	-	-	433	430	0.0	0.0	0.026	A
				B	33	8	-	-	-	33	22	0.0	0.0	0.096	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	6	1	-	-	-	6	10	0.0	0.0	0.000	A
D	Entry	1	1	A	406	101	984	963	0.421	402	412	0.9	1.1	6.147	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	25	6	984	965	0.026	25	22	0.1	0.0	4.525	A
				C	2	0.57	656	638	0.004	2	4	0.0	0.0	3.366	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	408	102	-	-	-	406	413	0.6	0.2	0.740	A
				B	25	6	-	-	-	25	22	0.0	0.0	0.468	A
				C	2	0.57	-	-	-	2	4	0.0	0.0	0.510	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

PM - Scenario 3, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Q percentiles may be unreliable if the mean queue in any time segment is very low or very high.
Info	Simulation	A2 - PM [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Analysis Set Details

ID	Name	Use Lane Simulation	Include in report	Use specific Demand Set(s)	Specific Demand Set (s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	PM	✓	✓	✓	D2,D4,D6,D8,D10	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		A, B, C, D	10.39	B

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	10.39	B

Arms

Arms

Arm	Name	Description	No give-way line
A	Industrial Estate Road		
B	Bryn Lane		
C	Ash Road North		
D	Abenbury Way		

Roundabout Geometry

Arm	V (m)	E (m)	l' (m)	R (m)	D (m)	PHI (deg)	Entry only	Exit only
A	8.59	9.82	7.6	38.4	60.0	37.6		
B	3.89	6.96	18.7	49.1	60.0	16.5		
C	3.34	7.53	19.0	11.3	60.0	40.3		
D	3.54	8.21	19.5	40.7	60.0	22.5		

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A	0.754	2840
B	0.616	1924
C	0.525	1628
D	0.617	1968

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

Arm Capacity Adjustments

Arm	Type	Reason	Direct capacity adjustment (PCU/hr)
D	Direct	Queue Observation	200

Lane Simulation: Arm options

Arm	Lane capacity source	Traffic considering secondary lanes (%)
A	Evenly split	10.00
B	Evenly split	10.00
C	Evenly split	10.00
D	Evenly split	10.00

Lanes

Arm	Side	Lane level	Lane	Destination arms	Has limited storage	Storage (PCU)	Has bottleneck	Has obstruction	Min Cap (PCU/hr)	Max Cap (PCU/hr)	Signalised
A	Entry	1	1	B, C		Infinity			0	99999	
			2	A, D		Infinity			0	99999	
	Exit	1	1			Infinity					
B	Entry	1	1	C, D	✓	3.00			0	99999	
			2	A, B	✓	3.00			0	99999	
		2	1	(A, B, C, D)		Infinity					
	Exit	1	1			Infinity					
C	Entry	1	1	A, D	✓	3.00			0	99999	
			2	A, B, C	✓	3.00			0	99999	
		2	1	(B, C, D, A)		Infinity					
	Exit	1	1			Infinity					
D	Entry	1	1	A	✓	3.00			0	99999	
			2	B, C, D	✓	3.00			0	99999	
		2	1	(A, B, C, D)		Infinity					
	Exit	1	1			Infinity					

Entry Lane slope and intercept

Arm	Side	Lane level	Lane	Final slope	Final intercept (PCU/hr)
A	Entry	1	1	0.377	1420
			2	0.377	1420
B	Entry	1	1	0.308	962
			2	0.308	962
C	Entry	1	1	0.263	814
			2	0.263	814
D	Entry	1	1	0.309	984
			2	0.309	984

Summary of Entry Lane allowed movements

Arm	Lane Level	Lane	Destination arm			
			B	C	D	A
B	1	1		✓	✓	
		2	✓			✓
	2	1	✓	✓	✓	✓
C	1	1			✓	✓
		2	✓	✓		✓
	2	1	✓	✓	✓	✓
D	1	1				✓
		2	✓	✓	✓	
	2	1	✓	✓	✓	✓
A	1	1	✓	✓		
		2			✓	✓

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	Scenario 3	PM	ONE HOUR	16:15	17:45	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	616	100.000
B		ONE HOUR	✓	357	100.000
C		ONE HOUR	✓	528	100.000
D		ONE HOUR	✓	667	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	27	153	130	306
	B	319	0	7	31
	C	490	23	0	15
	D	632	31	4	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To			
		A	B	C	D
From	A	0	8	8	11
	B	5	0	0	24
	C	2	0	0	75
	D	5	20	0	0

Cyclist %

		To			
		A	B	C	D
From	A	0	0	0	0
	B	0	0	0	0
	C	0	0	0	0
	D	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max Q95 (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
A	0.25	3.91	0.9	5.0	A	558	836
B	0.44	8.24	0.7	4.0	A	326	489
C	0.51	8.44	1.9	11.0	A	484	726
D	0.84	18.99	4.4	21.0	C	612	918

Main Results for each time segment

16:15 - 16:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	480	120	43	2779	0.173	477	470	1108	0.0	0.4	3.523	A
B	286	71	358	931	0.307	279	286	161	0.0	0.7	6.676	A
C	391	98	521	1313	0.298	394	391	117	0.0	0.9	6.737	A
D	490	122	655	1086	0.451	494	474	259	0.0	1.0	7.513	A

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	567	142	49	2780	0.204	566	556	1315	0.4	0.8	3.573	A
B	313	78	430	985	0.318	316	318	185	0.7	0.3	7.183	A
C	474	118	615	1270	0.373	475	468	131	0.9	0.9	7.496	A
D	593	148	769	962	0.617	595	581	321	1.0	1.1	8.496	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	634	158	55	2763	0.229	638	673	1614	0.8	0.5	3.909	A
B	397	99	487	927	0.428	397	385	205	0.3	0.7	8.244	A
C	609	152	743	1197	0.509	604	580	141	0.9	1.9	8.438	A
D	719	180	964	927	0.776	703	725	383	1.1	4.4	18.230	C

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	667	167	59	2723	0.245	669	675	1605	0.5	0.8	3.894	A
B	398	99	520	905	0.439	405	389	207	0.7	0.4	7.027	A
C	546	137	776	1218	0.449	544	580	150	1.9	1.7	8.167	A
D	747	187	923	887	0.842	741	742	397	4.4	4.0	18.990	C

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	549	137	62	2803	0.196	546	564	1333	0.8	0.9	3.520	A
B	304	76	417	868	0.350	305	331	190	0.4	0.5	6.597	A
C	483	121	577	1343	0.360	484	482	145	1.7	0.9	7.479	A
D	621	155	774	969	0.640	621	620	287	4.0	1.2	9.806	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	449	112	40	2775	0.162	444	456	1098	0.9	0.8	3.214	A
B	259	65	347	995	0.261	259	282	137	0.5	0.5	6.573	A
C	401	100	493	1294	0.309	398	398	113	0.9	1.0	6.589	A
D	503	126	636	1065	0.472	501	505	256	1.2	0.9	8.062	A

Q Variation Results for each time segment

16:15 - 16:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	0.43	0.00	0.00	2.00	2.00
B	0.71	0.00	0.00	1.73	3.00
C	0.86	0.00	0.00	1.90	4.00
D	1.05	0.00	0.00	5.00	5.00

16:30 - 16:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	0.76	0.00	0.07	1.63	3.00
B	0.29	0.00	0.00	1.00	1.00
C	0.86	0.00	0.00	3.00	3.00
D	1.14	0.00	0.56	1.82	4.00

16:45 - 17:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	0.48	0.00	0.00	0.90	4.00
B	0.71	0.00	0.00	1.63	3.00
C	1.86	0.00	0.50	3.70	11.00
D	4.43	0.18	2.25	7.70	21.00

17:00 - 17:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	0.81	0.00	0.00	2.90	5.00
B	0.43	0.00	0.00	0.78	4.00
C	1.71	0.00	1.10	4.00	4.00
D	4.02	0.00	1.17	10.90	16.00

17:15 - 17:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	0.90	0.00	0.08	1.73	5.00
B	0.52	0.00	0.00	1.45	4.00
C	0.90	0.00	0.00	3.00	3.00
D	1.24	0.00	0.13	5.00	5.00

17:30 - 17:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	0.81	0.00	0.08	1.73	3.00
B	0.48	0.00	0.00	0.86	2.00
C	0.95	0.00	0.41	1.63	3.00
D	0.92	0.00	0.17	1.90	4.00

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

16:15 - 16:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	233	1404	0.166	232	219	0.0	0.1	3.390	A
			2	A, D	247	1404	0.176	245	250	0.0	0.3	3.641	A
	Exit	1	1		1108			1108	1087	0.0	0.0	0.000	A
B	Entry	1	1	C, D	28	852	0.032	28	33	0.0	0.0	4.261	A
			2	A, B	258	852	0.303	252	253	0.0	0.7	6.645	A
		2	1	(A, B, C, D)	286			286	289	0.0	0.0	0.278	A
	Exit	1	1		161			161	156	0.0	0.0	0.000	A
C	Entry	1	1	A, D	194	677	0.286	198	192	0.0	0.3	6.933	A
			2	A, B, C	198	677	0.292	198	199	0.0	0.5	6.550	A
		2	1	(B, C, D, A)	391			391	394	0.0	0.0	0.002	A
	Exit	1	1		117			117	111	0.0	0.0	0.000	A
D	Entry	1	1	A	465	982	0.474	466	448	0.0	0.8	6.322	A
			2	B, C, D	29	982	0.029	29	25	0.0	0.0	4.062	A
		2	1	(A, B, C, D)	490			492	477	0.0	0.2	1.280	A
	Exit	1	1		259			259	267	0.0	0.0	0.000	A

16:30 - 16:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	256	1402	0.183	259	256	0.1	0.3	3.697	A
			2	A, D	312	1402	0.222	306	301	0.3	0.5	3.465	A
	Exit	1	1		1315			1315	1290	0.0	0.0	0.000	A
B	Entry	1	1	C, D	27	830	0.033	29	33	0.0	0.0	5.228	A
			2	A, B	286	830	0.345	287	285	0.7	0.3	6.786	A
		2	1	(A, B, C, D)	313			313	316	0.0	0.0	0.539	A
	Exit	1	1		185			185	186	0.0	0.0	0.000	A
C	Entry	1	1	A, D	231	652	0.354	233	231	0.3	0.4	7.600	A
			2	A, B, C	243	652	0.373	242	237	0.5	0.5	7.159	A
		2	1	(B, C, D, A)	474			474	468	0.0	0.0	0.123	A
	Exit	1	1		131			131	128	0.0	0.0	0.000	A
D	Entry	1	1	A	563	947	0.594	562	548	0.8	1.1	6.944	A
			2	B, C, D	33	947	0.034	33	33	0.0	0.0	4.940	A
		2	1	(A, B, C, D)	593			595	582	0.2	0.0	1.669	A
	Exit	1	1		321			321	318	0.0	0.0	0.000	A

16:45 - 17:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	283	1399	0.202	285	299	0.3	0.2	3.671	A
			2	A, D	351	1399	0.251	353	374	0.5	0.2	4.106	A
	Exit	1	1		1614			1614	1603	0.0	0.0	0.000	A
B	Entry	1	1	C, D	44	812	0.054	45	37	0.0	0.0	5.564	A
			2	A, B	354	812	0.436	352	348	0.3	0.7	7.657	A
		2	1	(A, B, C, D)	397			398	386	0.0	0.0	0.768	A
	Exit	1	1		205			205	214	0.0	0.0	0.000	A
C	Entry	1	1	A, D	293	619	0.474	292	283	0.4	0.7	8.138	A
			2	A, B, C	315	619	0.509	312	297	0.5	0.9	7.832	A
		2	1	(B, C, D, A)	609			608	583	0.0	0.3	0.432	A
	Exit	1	1		141			141	152	0.0	0.0	0.000	A
D	Entry	1	1	A	669	887	0.754	668	687	1.1	2.3	9.618	A
			2	B, C, D	35	887	0.040	35	38	0.0	0.0	4.595	A
		2	1	(A, B, C, D)	719			704	730	0.0	2.1	8.839	A
	Exit	1	1		383			383	394	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	294	1398	0.210	291	301	0.2	0.5	3.711	A
			2	A, D	374	1398	0.267	377	374	0.2	0.3	4.044	A
	Exit	1	1		1605			1605	1623	0.0	0.0	0.000	A
B	Entry	1	1	C, D	42	802	0.052	41	42	0.0	0.0	6.212	A
			2	A, B	355	802	0.443	365	347	0.7	0.3	6.739	A
		2	1	(A, B, C, D)	398			397	388	0.0	0.0	0.337	A
	Exit	1	1		207			207	219	0.0	0.0	0.000	A
	Entry	1	1	A, D	271	610	0.444	271	290	0.7	0.9	7.957	A
			2	A, B, C	275	610	0.451	273	290	0.9	0.8	8.226	A
	Exit	1	1		150			150	151	0.0	0.0	0.000	A
D	Entry	1	1	A	704	899	0.783	709	706	2.3	1.7	9.801	A
			2	B, C, D	34	899	0.037	34	36	0.0	0.0	4.717	A
		2	1	(A, B, C, D)	747			738	739	2.1	2.2	9.385	A
	Exit	1	1		397			397	393	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	268	1397	0.192	267	266	0.5	0.3	3.532	A
			2	A, D	281	1397	0.201	279	297	0.3	0.6	3.509	A
	Exit	1	1		1333			1333	1344	0.0	0.0	0.000	A
B	Entry	1	1	C, D	27	834	0.033	27	41	0.0	0.0	4.793	A
			2	A, B	277	834	0.332	277	290	0.3	0.5	6.453	A
		2	1	(A, B, C, D)	304			304	331	0.0	0.0	0.328	A
	Exit	1	1		190			190	200	0.0	0.0	0.000	A
C	Entry	1	1	A, D	239	662	0.361	239	242	0.9	0.4	7.250	A
			2	A, B, C	244	662	0.368	245	240	0.8	0.5	7.664	A
		2	1	(B, C, D, A)	483			483	479	0.0	0.0	0.020	A
	Exit	1	1		145			145	132	0.0	0.0	0.000	A
D	Entry	1	1	A	582	945	0.616	585	586	1.7	1.0	7.497	A
			2	B, C, D	36	945	0.038	37	35	0.0	0.1	4.359	A
		2	1	(A, B, C, D)	621			619	618	2.2	0.2	2.527	A
	Exit	1	1		287			287	321	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	207	1405	0.148	205	205	0.3	0.5	3.117	A
			2	A, D	241	1405	0.172	239	251	0.6	0.3	3.294	A
	Exit	1	1		1098			1098	1124	0.0	0.0	0.000	A
B	Entry	1	1	C, D	29	855	0.034	28	27	0.0	0.1	4.903	A
			2	A, B	230	855	0.269	231	255	0.5	0.4	6.426	A
		2	1	(A, B, C, D)	259			259	282	0.0	0.0	0.280	A
	Exit	1	1		137			137	147	0.0	0.0	0.000	A
C	Entry	1	1	A, D	195	684	0.286	191	195	0.4	0.6	6.698	A
			2	A, B, C	205	684	0.300	206	203	0.5	0.3	6.376	A
		2	1	(B, C, D, A)	401			401	398	0.0	0.0	0.056	A
	Exit	1	1		113			113	107	0.0	0.0	0.000	A
D	Entry	1	1	A	479	988	0.485	477	481	1.0	0.9	6.902	A
			2	B, C, D	25	988	0.025	25	24	0.1	0.0	4.221	A
		2	1	(A, B, C, D)	503			503	504	0.2	0.0	1.283	A
	Exit	1	1		256			256	263	0.0	0.0	0.000	A

Lanes: Q Variation Results for each time segment

16:15 - 16:30

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	Entry	1	1	0.10	0.00	0.00	1.00	1.00
			2	0.33	0.00	0.00	1.00	1.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
B	Entry	1	1	0.00	0.00	0.00	0.00	0.00
			2	0.71	0.00	0.00	1.73	3.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
C	Entry	1	1	0.33	0.00	0.00	0.78	2.00
			2	0.52	0.00	0.00	2.00	2.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
D	Entry	1	1	0.81	0.00	0.00	3.00	3.00
			2	0.00	0.00	0.00	0.00	0.00
		2	1	0.24	0.00	0.00	2.00	2.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

16:30 - 16:45

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	Entry	1	1	0.29	0.00	0.00	2.00	2.00
			2	0.48	0.00	0.00	2.00	2.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
B	Entry	1	1	0.00	0.00	0.00	0.00	0.00
			2	0.29	0.00	0.00	1.00	1.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
C	Entry	1	1	0.38	0.00	0.00	2.00	2.00
			2	0.48	0.00	0.00	2.00	2.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
D	Entry	1	1	1.10	0.00	0.56	1.82	3.00
			2	0.00	0.00	0.00	0.00	0.00
		2	1	0.05	0.00	0.00	0.00	1.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

16:45 - 17:00

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	Entry	1	1	0.24	0.00	0.00	0.63	2.00
			2	0.24	0.00	0.00	-0.10	4.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
B	Entry	1	1	0.00	0.00	0.00	0.00	0.00
			2	0.71	0.00	0.00	1.63	3.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
C	Entry	1	1	0.71	0.00	0.00	3.00	3.00
			2	0.86	0.00	0.08	3.00	3.00
		2	1	0.29	0.00	0.00	-0.10	5.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
D	Entry	1	1	2.29	0.18	2.05	2.89	4.00
			2	0.00	0.00	0.00	0.00	0.00
		2	1	2.14	0.00	0.00	4.70	18.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

17:00 - 17:15

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	Entry	1	1	0.52	0.00	0.00	1.63	4.00
			2	0.29	0.00	0.00	0.73	2.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
B	Entry	1	1	0.05	0.00	0.00	0.00	1.00
			2	0.33	0.00	0.00	0.73	3.00
		2	1	0.05	0.00	0.00	0.00	1.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
C	Entry	1	1	0.90	0.00	0.25	1.78	3.00
			2	0.81	0.00	0.00	3.00	3.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
D	Entry	1	1	1.72	0.00	1.17	2.84	4.00
			2	0.00	0.00	0.00	0.00	0.00
		2	1	2.24	0.00	0.00	7.90	13.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

17:15 - 17:30

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	Entry	1	1	0.33	0.00	0.00	1.00	1.00
			2	0.57	0.00	0.00	0.84	5.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
B	Entry	1	1	0.00	0.00	0.00	0.00	0.00
			2	0.52	0.00	0.00	1.45	4.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
C	Entry	1	1	0.43	0.00	0.00	2.00	2.00
			2	0.48	0.00	0.00	2.00	2.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
D	Entry	1	1	0.95	0.00	0.00	3.00	3.00
			2	0.10	0.00	0.00	1.00	1.00
		2	1	0.19	0.00	0.00	2.00	2.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

17:30 - 17:45

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
A	Entry	1	1	0.48	0.00	0.00	0.90	3.00
			2	0.33	0.00	0.00	0.78	2.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
B	Entry	1	1	0.10	0.00	0.00	1.00	1.00
			2	0.38	0.00	0.00	0.82	2.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
C	Entry	1	1	0.62	0.00	0.14	0.90	2.00
			2	0.33	0.00	0.00	0.78	2.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
D	Entry	1	1	0.92	0.00	0.17	1.90	4.00
			2	0.00	0.00	0.00	0.00	0.00
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

Lane movements: Main Results for each time segment

16:15 - 16:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	121	30	1420	1404	0.086	121	115	0.0	0.0	3.297	A
				C	112	28	1420	1405	0.080	111	104	0.0	0.0	3.495	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	17	4	1420	1404	0.012	17	20	0.0	0.0	3.575	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	230	57	1420	1404	0.164	229	230	0.0	0.3	3.647	A
B	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	3	0.86	779	682	0.005	3	6	0.0	0.0	3.147	A
				D	24	6	962	852	0.028	24	28	0.0	0.0	4.535	A
			2	A	258	65	962	850	0.304	252	253	0.0	0.7	6.645	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	258	65	-	-	-	258	256	0.0	0.0	0.310	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	3	0.86	-	-	-	3	6	0.0	0.0	0.000	A
				D	24	6	-	-	-	24	28	0.0	0.0	0.000	A
C	Entry	1	1	A	188	47	814	677	0.278	189	183	0.0	0.3	6.818	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	6	2	659	550	0.011	7	9	0.0	0.0	10.915	B
			2	A	183	46	814	677	0.271	184	182	0.0	0.5	6.473	A
				B	14	4	814	671	0.021	14	17	0.0	0.0	7.382	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	371	93	-	-	-	371	369	0.0	0.0	0.002	A
				B	14	4	-	-	-	14	17	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	6	2	-	-	-	6	9	0.0	0.0	0.000	A
D	Entry	1	1	A	465	116	984	982	0.474	466	448	0.0	0.8	6.322	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	26	6	984	975	0.026	26	23	0.0	0.0	4.147	A
				C	2	0.43	375	378	0.005	2	2	0.0	0.0	3.138	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	463	116	-	-	-	465	452	0.0	0.2	1.288	A
				B	25	6	-	-	-	26	23	0.0	0.0	1.191	A
				C	2	0.43	-	-	-	2	2	0.0	0.0	0.411	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

16:30 - 16:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	138	35	1420	1402	0.099	141	138	0.0	0.1	3.696	A
				C	118	29	1420	1403	0.084	118	117	0.0	0.1	3.697	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	25	6	1420	1403	0.018	24	21	0.0	0.0	2.911	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	286	72	1420	1402	0.204	284	279	0.3	0.4	3.513	A
B	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	9	2	733	635	0.013	9	7	0.0	0.0	4.797	A
				D	19	5	916	794	0.024	20	26	0.0	0.0	5.388	A
			2	A	286	72	962	829	0.345	287	285	0.7	0.3	6.786	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	286	72	-	-	-	286	283	0.0	0.0	0.543	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	9	2	-	-	-	9	7	0.0	0.0	0.451	A
				D	19	5	-	-	-	19	26	0.0	0.0	0.521	A
C	Entry	1	1	A	214	53	814	649	0.329	215	217	0.3	0.4	7.434	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	17	4	698	562	0.030	17	14	0.0	0.0	12.229	B
			2	A	226	56	814	650	0.348	226	219	0.5	0.4	7.167	A
				B	17	4	814	656	0.025	16	18	0.0	0.0	7.064	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	440	110	-	-	-	440	436	0.0	0.0	0.126	A
				B	17	4	-	-	-	17	18	0.0	0.0	0.099	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	17	4	-	-	-	17	14	0.0	0.0	0.014	A
D	Entry	1	1	A	563	141	984	946	0.595	562	548	0.8	1.1	6.944	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	29	7	984	946	0.030	29	30	0.0	0.0	4.912	A
				C	4	1	516	499	0.008	4	3	0.0	0.0	5.146	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	561	140	-	-	-	563	549	0.2	0.0	1.687	A
				B	29	7	-	-	-	29	30	0.0	0.0	1.377	A
				C	4	1	-	-	-	4	3	0.0	0.0	0.855	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

16:45 - 17:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	154	39	1420	1399	0.110	155	158	0.1	0.1	3.623	A
				C	129	32	1420	1398	0.092	130	140	0.1	0.1	3.725	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	27	7	1420	1399	0.019	27	29	0.0	0.0	3.382	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	324	81	1420	1399	0.232	326	345	0.4	0.2	4.174	A
B	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	5	1	687	573	0.009	6	6	0.0	0.0	5.566	A
				D	39	10	962	803	0.048	39	30	0.0	0.0	5.564	A
			2	A	354	89	962	811	0.437	352	348	0.3	0.7	7.657	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	353	88	-	-	-	354	349	0.0	0.0	0.785	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	5	1	-	-	-	5	6	0.0	0.0	0.390	A
				D	39	10	-	-	-	39	30	0.0	0.0	0.641	A
C	Entry	1	1	A	274	69	814	618	0.444	273	265	0.4	0.7	7.974	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	19	5	698	524	0.036	19	18	0.0	0.0	12.115	B
			2	A	296	74	814	618	0.479	293	274	0.4	0.8	7.768	A
				B	19	5	814	616	0.031	19	23	0.0	0.1	8.583	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	572	143	-	-	-	570	542	0.0	0.3	0.426	A
				B	18	5	-	-	-	19	23	0.0	0.0	0.591	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	19	5	-	-	-	19	18	0.0	0.0	0.360	A
D	Entry	1	1	A	669	167	984	887	0.754	668	687	1.1	2.3	9.618	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	31	8	937	845	0.037	31	33	0.0	0.0	4.567	A
				C	5	1	750	681	0.007	5	5	0.0	0.0	4.748	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	683	171	-	-	-	669	692	0.0	2.0	8.928	A
				B	32	8	-	-	-	31	33	0.0	0.1	6.594	A
				C	5	1	-	-	-	5	5	0.0	0.0	9.084	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	159	40	1420	1397	0.114	157	162	0.1	0.3	3.739	A
				C	135	34	1420	1398	0.096	134	139	0.1	0.2	3.678	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	28	7	1420	1399	0.020	29	29	0.0	0.0	4.014	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	346	86	1420	1398	0.247	349	345	0.2	0.2	4.047	A
B	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	7	2	916	757	0.010	7	8	0.0	0.0	5.655	A
				D	34	9	962	807	0.042	34	34	0.0	0.0	6.366	A
			2	A	355	89	962	802	0.443	365	347	0.7	0.3	6.739	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	356	89	-	-	-	355	345	0.0	0.0	0.352	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	7	2	-	-	-	7	8	0.0	0.0	0.000	A
				D	34	9	-	-	-	34	35	0.0	0.0	0.260	A
C	Entry	1	1	A	259	65	814	611	0.424	257	277	0.7	0.9	7.757	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	12	3	736	559	0.021	14	13	0.0	0.0	14.747	B
			2	A	250	63	814	609	0.411	247	266	0.8	0.7	8.075	A
				B	25	6	814	618	0.041	25	25	0.1	0.1	9.785	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	509	127	-	-	-	509	542	0.3	0.0	0.102	A
				B	25	6	-	-	-	25	25	0.0	0.0	0.121	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	12	3	-	-	-	12	13	0.0	0.0	0.000	A
D	Entry	1	1	A	704	176	984	899	0.783	709	706	2.3	1.7	9.801	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	26	6	984	895	0.029	26	32	0.0	0.0	4.891	A
				C	8	2	656	591	0.014	8	4	0.0	0.0	3.626	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	713	178	-	-	-	704	703	2.0	2.2	9.440	A
				B	26	6	-	-	-	26	32	0.1	0.0	8.321	A
				C	8	2	-	-	-	8	4	0.0	0.0	7.118	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	135	34	1420	1397	0.097	134	146	0.3	0.2	3.522	A
				C	133	33	1420	1396	0.095	133	120	0.2	0.1	3.545	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	23	6	1420	1400	0.017	23	23	0.0	0.0	3.030	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	258	64	1420	1395	0.185	256	274	0.2	0.5	3.552	A
B	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	7	2	779	668	0.010	7	7	0.0	0.0	3.685	A
				D	21	5	962	826	0.025	21	34	0.0	0.0	5.085	A
			2	A	277	69	962	832	0.332	277	290	0.3	0.5	6.453	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	277	69	-	-	-	277	291	0.0	0.0	0.354	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	7	2	-	-	-	7	7	0.0	0.0	0.000	A
				D	21	5	-	-	-	21	34	0.0	0.0	0.144	A
C	Entry	1	1	A	229	57	814	660	0.347	229	229	0.9	0.4	7.086	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	10	3	698	554	0.019	10	13	0.0	0.0	12.172	B
			2	A	217	54	814	662	0.328	220	217	0.7	0.3	7.473	A
				B	27	7	814	653	0.041	25	24	0.1	0.1	9.351	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	446	112	-	-	-	446	443	0.0	0.0	0.021	A
				B	27	7	-	-	-	27	24	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	10	3	-	-	-	10	13	0.0	0.0	0.000	A
D	Entry	1	1	A	582	146	984	946	0.616	585	586	1.7	1.0	7.497	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	31	8	984	941	0.033	31	30	0.0	0.0	4.303	A
				C	5	1	703	666	0.008	6	5	0.0	0.0	4.655	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	585	146	-	-	-	582	582	2.2	0.2	2.575	A
				B	31	8	-	-	-	31	30	0.0	0.0	1.591	A
				C	5	1	-	-	-	5	5	0.0	0.0	1.869	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Av. throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	105	26	1420	1405	0.074	103	109	0.2	0.3	3.301	A
				C	103	26	1420	1406	0.073	102	96	0.1	0.1	2.909	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	21	5	1420	1404	0.015	21	21	0.0	0.0	3.560	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	220	55	1420	1405	0.157	219	230	0.5	0.3	3.268	A
B	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	6	1	641	568	0.010	6	6	0.0	0.0	3.977	A
				D	23	6	962	854	0.027	22	21	0.0	0.1	5.243	A
			2	A	230	58	962	857	0.269	231	255	0.5	0.4	6.426	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	230	58	-	-	-	230	254	0.0	0.0	0.294	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	6	1	-	-	-	6	6	0.0	0.0	0.359	A
				D	23	6	-	-	-	23	22	0.0	0.0	0.054	A
C	Entry	1	1	A	182	45	814	684	0.266	177	183	0.4	0.6	6.488	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	14	3	736	616	0.022	15	12	0.0	0.0	12.494	B
			2	A	192	48	814	686	0.279	192	184	0.3	0.3	6.204	A
				B	14	3	775	648	0.021	15	18	0.1	0.0	8.101	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	373	93	-	-	-	373	368	0.0	0.0	0.028	A
				B	14	3	-	-	-	14	18	0.0	0.0	0.286	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	14	3	-	-	-	14	12	0.0	0.0	0.975	A
D	Entry	1	1	A	479	120	984	989	0.484	477	481	1.0	0.9	6.902	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	19	5	937	939	0.021	20	20	0.0	0.0	4.573	A
				C	5	1	609	623	0.008	5	4	0.0	0.0	2.734	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	479	120	-	-	-	479	480	0.2	0.0	1.294	A
				B	19	5	-	-	-	19	20	0.0	0.0	1.084	A
				C	5	1	-	-	-	5	4	0.0	0.0	0.843	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

Appendix E – PICADY Outputs for the Proposed MSCP Access

Junctions 10

PICADY 10 - Priority Intersection Module

Version: 10.1.1.1905
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Filename: Ipsen MSCP Proposed Access Senario 1 & 2.j10
Path: Q:\5201-5250\5246 Ipsen MSCP\Documents\Transport\Modelling
Report generation date: 26/10/2026 11:56:00

»Scenario 1, AM
»Scenario 1, PM
»Scenario 2, AM
»Scenario 2, PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	Scenario 1									
Stream B-AC	D1	0.0	5.78	0.02	A	D2	0.3	7.94	0.23	A
Stream C-AB		0.8	7.94	0.40	A		0.0	5.72	0.02	A
	Scenario 2									
Stream B-AC	D3	0.0	6.00	0.02	A	D4	0.3	7.86	0.22	A
Stream C-AB		0.7	7.52	0.36	A		0.0	5.58	0.02	A

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

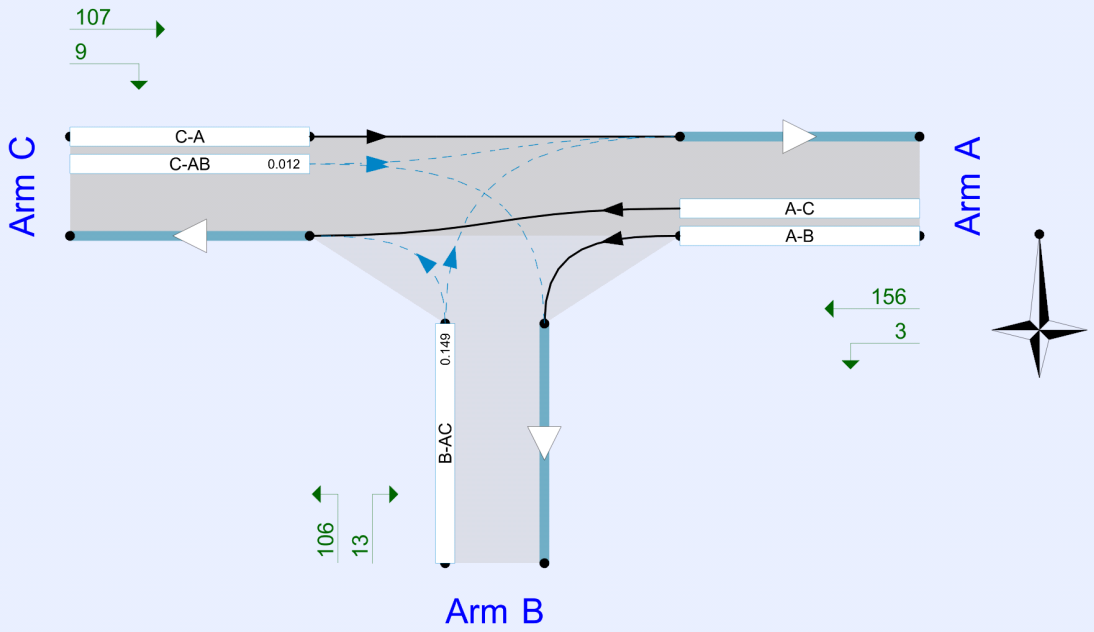
File summary

File Description

Title	Ipsen MSCP
Location	Ashford Road North, Wrexham Industrial Estate
Site number	
Date	26/10/2026
Version	Preliminary
Status	(new file)
Identifier	RB
Client	Ipsen BioPharm LTD
Jobnumber	5246
Enumerator	AzureAD\AlexBannister
Description	Drawing: 5246-D10-Proposed MSCP Site Access

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



Flows show original traffic demand (PCU/hr).
Streams (downstream end) show RFC ()

The junction diagram reflects the last run of Junctions.

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	Scenario 1	AM	ONE HOUR	07:15	08:45	15
D2	Scenario 1	PM	ONE HOUR	16:15	17:45	15
D3	Scenario 2	AM	ONE HOUR	07:15	08:45	15
D4	Scenario 2	PM	ONE HOUR	16:15	17:45	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Scenario 1, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		4.79	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.79	A

Arms

Arms

Arm	Name	Description	Arm type
A	Ash Road South (East)		Major
B	MSCP Access		Minor
C	Ash Road South (West)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	7.52			105.0	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	3.00	114	38

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	533	0.090	0.228	0.143	0.325
B-C	648	0.094	0.236	-	-
C-B	635	0.230	0.230	-	-

The slopes and intercepts shown above include custom intercept adjustments only.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	Scenario 1	AM	ONE HOUR	07:15	08:45	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	40	100.000
B		✓	13	100.000
C		✓	402	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	0	40
	B	0	0	13
	C	206	196	0

Vehicle Mix

Heavy Vehicle %

		To		
		A	B	C
From	A	0	0	10
	B	0	0	0
	C	10	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.02	5.78	0.0	A
C-AB	0.40	7.94	0.8	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:15 - 07:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	10	641	0.015	10	0.0	5.705	A
C-AB	187	729	0.257	186	0.4	6.745	A
C-A	115			115			
A-B	0			0			
A-C	30			30			

07:30 - 07:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	12	639	0.018	12	0.0	5.734	A
C-AB	235	747	0.314	234	0.6	7.164	A
C-A	127			127			
A-B	0			0			
A-C	36			36			

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	14	637	0.022	14	0.0	5.776	A
C-AB	306	773	0.396	305	0.8	7.885	A
C-A	136			136			
A-B	0			0			
A-C	44			44			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	14	637	0.022	14	0.0	5.776	A
C-AB	306	773	0.396	306	0.8	7.943	A
C-A	136			136			
A-B	0			0			
A-C	44			44			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	12	639	0.018	12	0.0	5.737	A
C-AB	235	748	0.314	236	0.6	7.248	A
C-A	126			126			
A-B	0			0			
A-C	36			36			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	10	641	0.015	10	0.0	5.705	A
C-AB	188	729	0.258	189	0.4	6.824	A
C-A	115			115			
A-B	0			0			
A-C	30			30			

Scenario 1, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		2.15	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.15	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	Scenario 1	PM	ONE HOUR	16:15	17:45	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	240	100.000
B		✓	120	100.000
C		✓	118	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	0	240
	B	0	0	120
	C	107	11	0

Vehicle Mix

Heavy Vehicle %

		To		
		A	B	C
From	A	0	0	10
	B	0	0	0
	C	10	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.23	7.94	0.3	A
C-AB	0.02	5.72	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	90	605	0.149	90	0.2	6.975	A
C-AB	9	647	0.015	9	0.0	5.708	A
C-A	79			79			
A-B	0			0			
A-C	181			181			

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	108	597	0.181	108	0.2	7.358	A
C-AB	12	650	0.018	12	0.0	5.708	A
C-A	94			94			
A-B	0			0			
A-C	216			216			

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	132	585	0.226	132	0.3	7.932	A
C-AB	15	654	0.023	15	0.0	5.715	A
C-A	115			115			
A-B	0			0			
A-C	264			264			

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	132	585	0.226	132	0.3	7.941	A
C-AB	15	654	0.023	15	0.0	5.723	A
C-A	115			115			
A-B	0			0			
A-C	264			264			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	108	597	0.181	108	0.2	7.369	A
C-AB	12	650	0.018	12	0.0	5.725	A
C-A	94			94			
A-B	0			0			
A-C	216			216			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	90	605	0.149	91	0.2	6.999	A
C-AB	9	647	0.015	9	0.0	5.718	A
C-A	79			79			
A-B	0			0			
A-C	181			181			

Scenario 2, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		4.24	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.24	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	Scenario 2	AM	ONE HOUR	07:15	08:45	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	47	100.000
B		✓	12	100.000
C		✓	384	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	19	28
	B	1	0	11
	C	206	178	0

Vehicle Mix

Heavy Vehicle %

		To		
		A	B	C
From	A	0	0	10
	B	0	0	0
	C	10	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.02	6.00	0.0	A
C-AB	0.36	7.52	0.7	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:15 - 07:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	9	621	0.015	9	0.0	5.878	A
C-AB	170	728	0.234	169	0.4	6.556	A
C-A	119			119			
A-B	14			14			
A-C	21			21			

07:30 - 07:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	11	618	0.017	11	0.0	5.927	A
C-AB	213	746	0.286	213	0.5	6.894	A
C-A	132			132			
A-B	17			17			
A-C	25			25			

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	13	613	0.022	13	0.0	5.997	A
C-AB	278	772	0.361	277	0.7	7.468	A
C-A	145			145			
A-B	21			21			
A-C	31			31			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	13	613	0.022	13	0.0	5.997	A
C-AB	279	772	0.361	278	0.7	7.516	A
C-A	144			144			
A-B	21			21			
A-C	31			31			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	11	618	0.017	11	0.0	5.928	A
C-AB	214	747	0.286	214	0.5	6.967	A
C-A	132			132			
A-B	17			17			
A-C	25			25			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	9	621	0.015	9	0.0	5.879	A
C-AB	171	728	0.235	171	0.4	6.624	A
C-A	118			118			
A-B	14			14			
A-C	21			21			

Scenario 2, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		2.52	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.52	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	Scenario 2	PM	ONE HOUR	16:15	17:45	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	159	100.000
B		✓	119	100.000
C		✓	116	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	3	156
	B	13	0	106
	C	107	9	0

Vehicle Mix

Heavy Vehicle %

		To		
		A	B	C
From	A	0	0	10
	B	0	0	0
	C	10	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.22	7.86	0.3	A
C-AB	0.02	5.58	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	90	603	0.149	89	0.2	6.995	A
C-AB	8	661	0.012	8	0.0	5.574	A
C-A	80			80			
A-B	2			2			
A-C	117			117			

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	107	597	0.179	107	0.2	7.342	A
C-AB	9	666	0.014	9	0.0	5.550	A
C-A	95			95			
A-B	3			3			
A-C	140			140			

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	131	589	0.222	131	0.3	7.852	A
C-AB	12	673	0.018	12	0.0	5.523	A
C-A	116			116			
A-B	3			3			
A-C	172			172			

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	131	589	0.222	131	0.3	7.862	A
C-AB	12	673	0.018	12	0.0	5.530	A
C-A	116			116			
A-B	3			3			
A-C	172			172			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	107	597	0.179	107	0.2	7.353	A
C-AB	9	666	0.014	9	0.0	5.565	A
C-A	95			95			
A-B	3			3			
A-C	140			140			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	90	603	0.149	90	0.2	7.017	A
C-AB	8	661	0.012	8	0.0	5.582	A
C-A	80			80			
A-B	2			2			
A-C	117			117			