

Land North of Bryn Lane, Wrexham Industrial Estate

106 Albert Mill
10 Hulme Hall Road
Manchester,
M15 4LY

WCBC Highways Consultation Response – Offsite Mitigation

0161 4649495
✉ info@modetransport.co.uk

Client: Net World Sports

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Prepared by: LJ

Job No 329525

Approved by: ME

1. Introduction

- 1.1.1 This note (TN03) has been prepared by Mode Transport Planning ('Mode') on behalf of Net World Sports (the 'Applicant') to review comments raised by Wrexham County Borough Council (WCBC) Highways, as the Local Highway Authority (LHA), in relation to a planning application (ref P/2023/0497) for a proposed employment development at Land North of Bryn Lane, Wrexham (known as Utopia City).
- 1.1.2 The LHA's response included comments in relation to the modelling undertaken by Cora IHT for the proposed off-site works at the A534 / Industrial Estate Road / Borrass Hall Lane / Sandy Lane roundabout. The LHA's comments, which are attached in [Appendix A](#) included concerns regarding the potential for internal circulatory queuing associated with the proposed signalised arrangement and issues with the calibration of the LinSig model.
- 1.1.3 Mode has reviewed the full LinSig outputs and replicated the model in LinSig whilst seeking to address the concerns raised within the LHA's response. The LinSig model however continues to show excessive circulatory queuing, which is unlikely to be acceptable to the LHA. On this basis, TN03 includes an updated traffic impact assessment at this junction with updated baseline traffic data and presents a revised mitigation scheme at the junction which retains the roundabout arrangement.

2. Traffic Impact Assessment

2.1 Previously Agreed Trip Generation

- 2.1.1 Based on a review of the most recent information submitted to the LHA, the trip generation for Utopia Phases 1 and 2 remains as previously agreed and is presented on the network diagrams attached in [Appendix B](#).

2.2 Scope of Assessment

2.2.1 The updated junction capacity analysis has been undertaken at the A534 / Industrial Estate Road / Borrass Hall Lane / Sandy Lane roundabout.

2.3 Base Traffic Flows

2.3.1 Although the baseline survey data from 2023 was deemed to be appropriate when the application was first registered, Mode considered it to be prudent to obtain updated baseline traffic data at the junction to ensure an appropriate mitigation scheme could be developed which was based on the most up to date count data.

2.3.2 As such a Manual classified count (MCC) was undertaken at the roundabout on 22nd April 2026, which represents a neutral weekday. All raw survey data is attached in [Appendix C](#).

2.3.3 Video footage associated with the updated survey can be provided on request.

2.4 Assessment Scenarios

2.4.1 The assessment periods over which the above flows are considered on the local highway network are based on the AM and PM network peak hours derived for each junction from the traffic survey data.

2.4.2 The junction capacity assessments were undertaken for the following scenarios during the weekday AM and PM peak hours:

- 2026 Base
- 2030 Base
- 2030 Base + Utopia P1
- 2030 Base + Utopia P1 and P2
- 2037 Base
- 2037 Base + Utopia P1
- 2037 Base + Utopia P1 and P2
- 2030 Base + Committed
- 2030 Base + Committed + Utopia P1
- 2030 Base + Committed + Utopia P1 and P2
- 2037 Base + Committed
- 2037 Base + Committed + Utopia P1

- 2037 Base + Committed + Utopia P1 and P2

2.5 Committed Development

2.5.1 On the basis that updated 2026 traffic survey data has been obtained, the following committed development has been considered:

- Land off Bryn Lane, Wrexham (Kingsmoor) development (P/2023/0280)

2.5.2 Committed development traffic flows have been included in the assessment using development trip flows and distributions obtained from the publicly available information on WCBC's Planning Portal.

2.5.3 The future year flows including committed developments are presented on the network diagrams attached in [Appendix B](#).

2.6 Background Traffic Growth

2.6.1 To robustly represent future traffic conditions on the local highway network, TEMPRO has been used to derive locally adjusted background traffic growth factors for the weekday AM and PM peak periods.

2.6.2 TEMPRO v8.1 calibrated with the Regional Transport Model (RTM 18) dataset has been used to generate traffic growth factors specific to the site's MSOA, 'Wrexham 020'.

2.6.3 The future year growth factors will be applied to the 2026 base flows to generate future baseline flows for 2030 and 2037.

2.6.4 A summary of the AM and PM peak period TEMPRO growth factors is shown in [Table 2.1](#).

Table 2.1 : TEMPRO Growth Factors (Wrexham 020')

Day / Time Period	2026-2030	2026-2037
Weekday AM Period	1.0371	1.0846
Weekday PM Period	1.0371	1.0822

2.6.5 TEMPRO growth factors inherently include an allowance for forecast background development across the study area. Consequently, there is potential for a degree of double counting, whereby some committed developments may be represented both within the TEMPRO growth forecasts and as explicit committed developments in the traffic model. This approach is therefore considered to be robust and, if anything, represents a conservative assessment of future junction performance. WCBC should take this into account when reviewing the assessment and interpreting the forecast operational performance of the assessed junctions.

2.7 Assessment Tools

Junctions 11 – ARCADY and PICADY

2.7.1 The industry standard traffic software package Junctions 9 (ARCADY and PICADY) has been used to model roundabouts (ARCADY) and priority junctions (PICADY) across the study area.

2.7.2 As an assessment tool, ARCADY and PICADY results are typically reported for the following performance statistics:

- Ratio of Flow to Capacity (RFC):
- Max Queue in PCUs; and
- Delay in seconds per PCU

2.7.3 A Ratio of Flow to Capacity (RFC) value of 0.85 or less typically demonstrates that a junction arm or turning movement is operating within practical capacity and is therefore unlikely to experience regular queuing. However, junctions that are operating between 0.85 and 1.00 are considered to be operating within theoretical capacity. Any junction operating over 1.00 is considered to be operating outside of typically acceptable thresholds of capacity.

2.7.4 The queue results are measured in Passenger Car Units (PCU), and the delay results are measured in seconds per vehicle.

2.8 Junctions 11 – Demand Profile

2.8.1 For the roundabout junction assessments, a 'FLAT' demand profile has been adopted. A review of the surveyed arrival profiles has been undertaken to understand traffic flow characteristics across the modelled hour, with the findings summarised in [Table 2.2](#).

Table 2.2 : 2026 Survey – Peak Hour Roundabout Demand Profile

Junction	0730-0745	0745-0800	0800-0815	0815-0830	AM Peak Total	0730-0745 %	0745-0800 %	0800-0815 %	0815-0830 %
A534 / Borrass Hall Lane / Industrial Estate Road / Sandy Lane	808	803	792	639	3043	27%	26%	26%	21%
Junction	1630-1645	1645-1700	1700-1715	1715-1730	PM Peak Total	1630-1645 %	1645-1700 %	1700-1715 %	1715-1730 %
A534 / Borrass Hall Lane / Industrial Estate Road / Sandy Lane	716	603	793	616	2727	26%	22%	29%	23%

2.8.2 The review in [Table 2.2](#) indicates that traffic demand is relatively evenly distributed across the assessment period, with no significant peaking characteristics evident between each 15-minute period. On this basis, the use of a 'FLAT' demand profile is considered appropriate for the purposes of this assessment. This approach was also considered to be acceptable by WCBC Highways for the Kingsmoor application.

2.9 A534 / Industrial Estate Road / Borrass Hall Lane / Sandy Lane Roundabout – Existing Layout

Existing Layout

2.9.1 A summary of the junction capacity results at the A534 / Industrial Estate Road / Borrass Hall Lane / Sandy Lane roundabout junction are summarised in [Table 2.3](#), with the full ARCADY outputs included in [Appendix D](#).

Table 2.3 : A534 / Industrial Estate Road / Borrass Hall Lane / Sandy Lane - Capacity Modelling Results

Arm	Weekday AM Peak			Weekday PM Peak		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
2026 Base						
Borrass Hall Lane	0.3	10.85	0.22	0	3.95	0.01
A534 Wrexham Road	0.8	8.53	0.45	0.4	3.44	0.26
Industrial Estate Road	0.2	1.82	0.16	1.5	3.78	0.59
Sandy Lane	0	3.19	0.04	0	5.41	0.02
A534 West	4.9	8.12	0.83	0.7	2.7	0.41
2030 Base						
Borrass Hall Lane	0.3	12.81	0.26	0	4.06	0.01
A534 Wrexham Road	1.0	9.8	0.49	0.4	3.53	0.28
Industrial Estate Road	0.2	1.85	0.17	1.6	4.08	0.62
Sandy Lane	0.0	3.24	0.04	0	5.71	0.03
A534 West	6.5	10.45	0.87	0.8	2.83	0.43
2030 Base + Development Phase 1						
Borrass Hall Lane	0.5	17.1	0.33	0	4.27	0.01

Arm	Weekday AM Peak			Weekday PM Peak		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
A534 Wrexham Road	1.3	12.48	0.56	0.4	3.7	0.29
Industrial Estate Road	0.3	1.93	0.21	2.1	4.83	0.68
Sandy Lane	0	3.35	0.04	0	6.34	0.03
A534 West	11.2	17.24	0.92	0.9	3.03	0.47
2030 Base + Development Phase 1+2						
Borras Hall Lane	0.6	19	0.36	0	4.42	0.02
A534 Wrexham Road	1.4	13.45	0.58	0.4	3.82	0.3
Industrial Estate Road	0.3	1.99	0.23	2.3	5.1	0.7
Sandy Lane	0.0	3.43	0.04	0	6.56	0.03
A534 West	13.8	21.08	0.94	1	3.18	0.49
2030 Base + Committed						
Borras Hall Lane	0.4	15.35	0.3	0	4.27	0.01
A534 Wrexham Road	1.1	11.41	0.53	0.4	3.71	0.29
Industrial Estate Road	0.3	1.92	0.2	2	4.68	0.67
Sandy Lane	0.0	3.34	0.04	0	6.23	0.03
A534 West	9.1	14.23	0.90	0.9	3.04	0.47
2030 Base + Committed + Development Phase 1						
Borras Hall Lane	0.6	21.87	0.39	0	4.5	0.01
A534 Wrexham Road	1.6	15.25	0.61	0.4	3.89	0.3
Industrial Estate Road	0.3	2.01	0.24	2.7	5.71	0.73
Sandy Lane	0.0	3.46	0.04	0	7.01	0.03
A534 West	19.6	29.42	0.96	1	3.27	0.51
2030 Base + Committed + Development Phase 1+2						
Borras Hall Lane	0.7	24.95	0.43	0	4.66	0.02
A534 Wrexham Road	1.7	16.6	0.63	0.5	4.03	0.31
Industrial Estate Road	0.4	2.07	0.26	2.9	6.09	0.75

Arm	Weekday AM Peak			Weekday PM Peak		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
Sandy Lane	0.0	3.55	0.05	0	7.27	0.03
A534 West	27.2	40.46	0.97	1.1	3.45	0.53
2037 Base						
Borras Hall Lane	0.4	15.7	0.31	0	4.17	0.01
A534 Wrexham Road	1.2	11.52	0.54	0.4	3.62	0.29
Industrial Estate Road	0.2	1.87	0.18	1.8	4.41	0.65
Sandy Lane	0.0	3.28	0.04	0	6.03	0.03
A534 West	9.4	14.6	0.91	0.8	2.96	0.45
2037 Base + Development Phase 1						
Borras Hall Lane	0.7	23.19	0.41	0	4.39	0.01
A534 Wrexham Road	1.6	15.67	0.62	0.4	3.8	0.3
Industrial Estate Road	0.3	1.96	0.22	2.4	5.34	0.71
Sandy Lane	0.0	3.4	0.05	0	6.78	0.03
A534 West	21.8	32.67	0.96	1	3.19	0.49
2037 Base + Development Phase 1+2						
Borras Hall Lane	0.8	25.84	0.44	0	4.55	0.02
A534 Wrexham Road	1.8	16.81	0.64	0.4	3.93	0.31
Industrial Estate Road	0.3	2.01	0.24	2.6	5.63	0.73
Sandy Lane	0.0	3.48	0.05	0	7	0.03
A534 West	29.0	42.96	0.97	1.1	3.35	0.51
2037 Base + Committed						
Borras Hall Lane	0.6	19.63	0.36	0	4.39	0.01
A534 Wrexham Road	1.4	13.83	0.59	0.4	3.8	0.3
Industrial Estate Road	0.3	1.95	0.21	2.3	5.13	0.7
Sandy Lane	0.0	3.39	0.05	0	6.63	0.03
A534 West	15.0	22.71	0.94	1	3.19	0.49
2037 Base + Committed + Development Phase 1						

Arm	Weekday AM Peak			Weekday PM Peak		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
Borras Hall Lane	0.9	30.9	0.49	0	4.64	0.02
A534 Wrexham Road	2.1	19.51	0.68	0.5	4.01	0.32
Industrial Estate Road	0.3	2.04	0.25	3.1	6.43	0.76
Sandy Lane	0.0	3.52	0.05	0	7.54	0.04
A534 West	56.7	79.97	1.00	1.1	3.46	0.53
2037 Base + Committed + Development Phase 1+2						
Borras Hall Lane	1.0	32.79	0.51	0	4.79	0.02
A534 Wrexham Road	2.1	20.25	0.69	0.5	4.13	0.32
Industrial Estate Road	0.4	2.1	0.27	3.4	6.77	0.77
Sandy Lane	0.1	3.6	0.05	0	7.75	0.04
A534 West	74.3	102.46	1.01	1.2	3.62	0.55

2.9.2 The analysis demonstrates that all arms of the roundabout are forecast to operate within the practical capacity threshold (RFC <0.85) during the PM peak throughout the assessment period. The PM peak therefore does not identify any operational concerns associated with the proposed development.

2.9.3 During the AM peak, the A534 West approach is identified as the arm operating with the highest level of RFC. In the 2026 Base scenario the approach is forecast to operate with an RFC of 0.83, increasing to 0.90 in the 2030 Base + Committed scenario and 0.94 in the 2037 Base + Committed scenario. This reflects the cumulative effect of forecast background traffic growth and committed development, which represent the principal contributors to the deterioration in junction performance over the assessment period. All other approaches continue to operate comfortably within capacity.

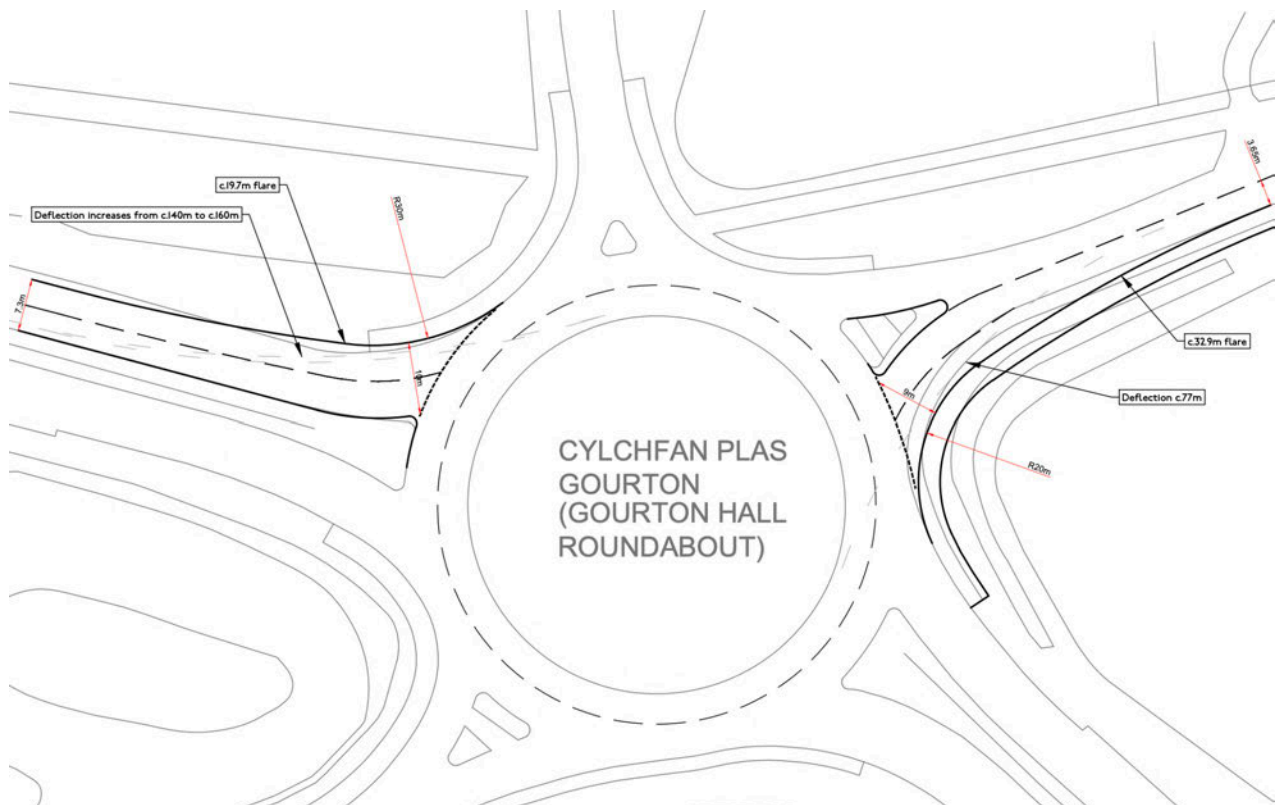
2.9.4 The proposed development results in a further increase in demand on the A534 West approach, although the increase in RFC attributable to the development is comparatively modest when considered against the future baseline conditions. The assessment therefore indicates that the capacity constraint is primarily driven by background traffic growth and committed development, with the proposed development making a relatively limited contribution to the forecast operation of the roundabout. In response, a package of mitigation measures has been developed to improve the operation of the A534 West approach and offset the development impact.

3. Proposed Mitigation and Traffic Impact

3.1 A534 / Industrial Estate Road / Borrass Hall Lane / Sandy Lane Roundabout – Proposed Mitigation

- 3.1.1 Mitigation is proposed at the A534 / Industrial Estate Road / Borrass Hall Lane / Sandy Lane Roundabout to improve the operational performance of the junction under future year traffic conditions. The mitigation has been developed by optimising the existing highway layout, with modifications focused on increasing entry capacity and improving the geometry of the approaches.
- 3.1.2 The extent of adopted highway plan is attached in [Appendix E](#) and demonstrates that the proposed measures could be accommodated within land under the control of the LHA.
- 3.1.3 The proposed mitigation measures are shown in [Figure 3.1](#) and in drawing **J32-9525-PS-021** attached in [Appendix F](#).

Figure 3.1 : Proposed Mitigation Measures



- 3.1.4 The proposed mitigation measures comprise the following design changes:

- Widening of the roundabout entry widths on the A534 approaches to increase available entry capacity.

- Increasing the entry deflection on the western approach, with the entry path radius increasing from approximately 140 m to 160 m, encouraging a more controlled approach.
- Increasing the effective flare length on the western approach to approximately 19.7 m, together with a revised entry width of approximately 10m.
- Increasing the effective flare length on the eastern approach to approximately 32.9m together with a revised entry width of approximately 9m.

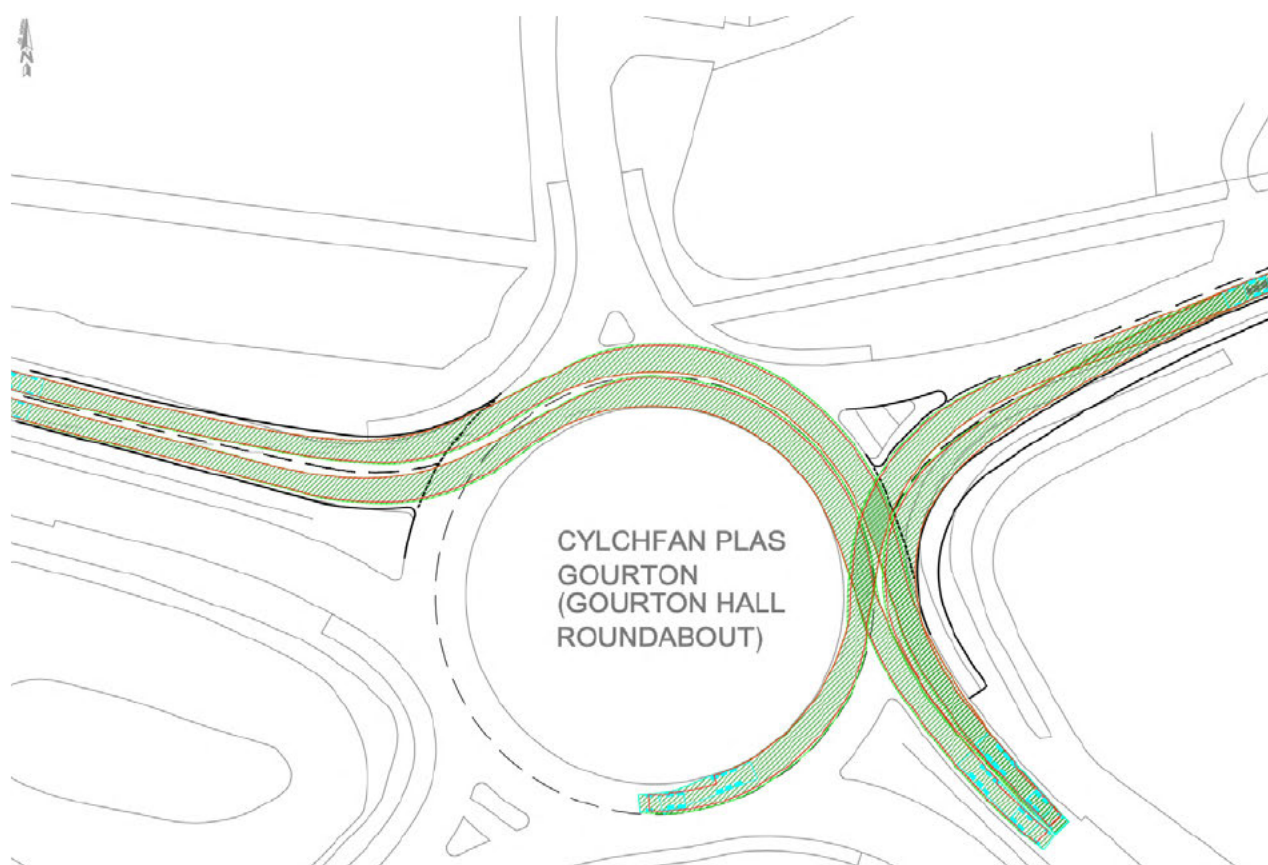
3.2 Observed and Modelled Conditions

- 3.2.1 It should be noted that the modelling results presented in the subsequent sections do not identify any existing capacity constraints on the eastern A534 Wrexham Road approach. Notwithstanding this, a review of the AM peak video footage indicated that the operation of this approach was periodically affected by the volume and continuity of traffic entering the roundabout from the western A534 approach. Whilst these effects are not reflected in the modelling outputs, they were evident within the observed operation of the junction.
- 3.2.2 The proposed mitigation therefore includes improvements to both the western and eastern A534 approaches. Whilst the improvements to the eastern approach are not required on the basis of the capacity modelling alone, they have been incorporated in response to the observed operation of the junction and are expected to provide additional operational benefits by improving opportunities for vehicles on the eastern approach to enter the roundabout.
- 3.2.3 Furthermore, the modelled performance of the eastern A534 approach is slightly worse than that observed in the classified video survey footage, indicating that the modelling provides a robust and slightly conservative representation of the operation of this arm. As noted previously, Mode can make the classified video survey footage available to WCBC upon request.

3.3 Swept Path Analysis

- 3.3.1 Swept path analysis for a 16.5m articulated HGV has been undertaken for the mitigation scheme at the A534 / Industrial Estate Road / Borrass Hall Lane / Sandy Lane Roundabout. It should be noted that the speed at which the vehicle was tracked at was 15mph. The swept path analysis is shown in [Figure 3.2](#) and in drawing **J32-9525-PS-022** attached in [Appendix F](#).

Figure 3.2 : Swept Path Analysis



3.4 Proposed Mitigation Scheme – ARCADY Results

3.4.1 A summary of the junction capacity results at the A534 / Industrial Estate Road / Borrass Hall Lane / Sandy Lane roundabout junction for the proposed mitigation are summarised in [Table 3.1](#), with the full ARCADY outputs included in [Appendix G](#).

Table 3.1 : A534 / Industrial Estate Road / Borrass Hall Lane / Sandy Lane – Mitigation Capacity Modelling Results

Arm	Weekday AM Peak			Weekday PM Peak		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
2026 Base						
Borrass Hall Lane	0.3	10.85	0.22	0.0	3.95	0.01
A534 Wrexham Road	0.4	4.61	0.30	0.2	2.39	0.20
Industrial Estate Road	0.2	1.82	0.16	1.5	3.78	0.59
Sandy Lane	0.0	3.20	0.04	0.0	5.41	0.02
A534 West	3.8	6.29	0.79	0.6	2.48	0.39

Arm	Weekday AM Peak			Weekday PM Peak		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
2030 Base						
Borras Hall Lane	0.3	12.81	0.26	0.0	4.06	0.01
A534 Wrexham Road	0.5	4.99	0.33	0.3	2.44	0.21
Industrial Estate Road	0.2	1.85	0.17	1.6	4.08	0.62
Sandy Lane	0.0	3.24	0.04	0.0	5.71	0.03
A534 West	4.8	7.60	0.83	0.7	2.59	0.41
2030 Base + Development Phase 1						
Borras Hall Lane	0.5	17.11	0.33	0.0	4.27	0.01
A534 Wrexham Road	0.6	5.70	0.37	0.3	2.53	0.22
Industrial Estate Road	0.3	1.93	0.21	2.1	4.83	0.68
Sandy Lane	0.0	3.35	0.04	0.0	6.34	0.03
A534 West	7.1	10.71	0.88	0.8	2.76	0.45
2030 Base + Development Phase 1+2						
Borras Hall Lane	0.6	19.03	0.36	0.0	4.42	0.02
A534 Wrexham Road	0.6	5.93	0.38	0.3	2.59	0.22
Industrial Estate Road	0.3	1.99	0.23	2.3	5.10	0.70
Sandy Lane	0.0	3.43	0.04	0.0	6.56	0.03
A534 West	8.1	12.13	0.89	0.9	2.88	0.47
2030 Base + Committed						
Borras Hall Lane	0.4	15.36	0.30	0.0	4.27	0.01
A534 Wrexham Road	0.5	5.44	0.35	0.3	2.53	0.22
Industrial Estate Road	0.3	1.92	0.20	2.0	4.68	0.67
Sandy Lane	0.0	3.34	0.04	0.0	6.23	0.03
A534 West	6.1	9.44	0.86	0.8	2.76	0.45
2030 Base + Committed + Development Phase 1						
Borras Hall Lane	0.6	21.95	0.39	0.0	4.50	0.01

Arm	Weekday AM Peak			Weekday PM Peak		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
A534 Wrexham Road	0.6	6.30	0.39	0.3	2.63	0.23
Industrial Estate Road	0.3	2.01	0.24	2.7	5.71	0.73
Sandy Lane	0.0	3.46	0.04	0.0	7.01	0.03
A534 West	10.0	14.70	0.91	0.9	2.96	0.48
2030 Base + Committed + Development Phase 1+2						
Borras Hall Lane	0.7	25.21	0.43	0.0	4.66	0.02
A534 Wrexham Road	0.7	6.56	0.41	0.3	2.70	0.23
Industrial Estate Road	0.4	2.07	0.26	2.9	6.09	0.75
Sandy Lane	0.0	3.55	0.05	0.0	7.27	0.03
A534 West	11.9	17.46	0.93	1.0	3.10	0.50
2037 Base						
Borras Hall Lane	0.4	15.71	0.31	0.0	4.17	0.01
A534 Wrexham Road	0.6	5.46	0.36	0.3	2.48	0.22
Industrial Estate Road	0.2	1.87	0.18	1.8	4.41	0.65
Sandy Lane	0.0	3.28	0.04	0.0	6.03	0.03
A534 West	6.3	9.61	0.86	0.8	2.70	0.43
2037 Base + Development Phase 1						
Borras Hall Lane	0.7	23.31	0.41	0.0	4.39	0.01
A534 Wrexham Road	0.7	6.37	0.40	0.3	2.58	0.23
Industrial Estate Road	0.3	1.96	0.22	2.4	5.34	0.71
Sandy Lane	0.0	3.40	0.05	0.0	6.78	0.03
A534 West	10.6	15.56	0.92	0.9	2.89	0.47
2037 Base + Development Phase 1+2						
Borras Hall Lane	0.8	26.17	0.44	0.0	4.55	0.02
A534 Wrexham Road	0.7	6.59	0.41	0.3	2.64	0.23

Arm	Weekday AM Peak			Weekday PM Peak		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
Industrial Estate Road	0.3	2.01	0.24	2.6	5.63	0.73
Sandy Lane	0.0	3.48	0.05	0.0	7.00	0.03
A534 West	12.4	18.01	0.93	1.0	3.02	0.49
2037 Base + Committed						
Borras Hall Lane	0.6	19.66	0.36	0.0	4.39	0.01
A534 Wrexham Road	0.6	6.00	0.39	0.3	2.58	0.23
Industrial Estate Road	0.3	1.95	0.21	2.3	5.13	0.70
Sandy Lane	0.0	3.39	0.05	0.0	6.63	0.03
A534 West	8.5	12.67	0.90	0.9	2.89	0.47
2037 Base + Committed + Development Phase 1						
Borras Hall Lane	1.0	33.23	0.51	0.0	4.64	0.02
A534 Wrexham Road	0.8	7.11	0.43	0.3	2.69	0.24
Industrial Estate Road	0.3	2.04	0.25	3.1	6.43	0.76
Sandy Lane	0.0	3.52	0.05	0.0	7.54	0.04
A534 West	17.4	25.11	0.95	1.0	3.11	0.50
2037 Base + Committed + Development Phase 1+2						
Borras Hall Lane	1.1	37.36	0.54	0.0	4.79	0.02
A534 Wrexham Road	0.8	7.29	0.44	0.3	2.75	0.24
Industrial Estate Road	0.4	2.10	0.27	3.4	6.77	0.77
Sandy Lane	0.1	3.60	0.05	0.0	7.75	0.04
A534 West	20.4	29.21	0.96	1.1	3.24	0.52

3.4.2 The analysis demonstrates that the proposed mitigation improves the operation of the roundabout, with all approaches continuing to operate within the practical capacity threshold during the PM peak throughout the assessment period. The highest RFC in the PM peak is 0.77 on the Industrial Estate Road approach in the 2037 Base + Committed + Development Phase 1+2 scenario, indicating that the proposed mitigation comfortably accommodates forecast traffic demand during the evening peak.

- 3.4.3 During the AM peak, the A534 West approach remains the arm operating with the highest level of RFC. Compared with the unmitigated scenario, the proposed mitigation delivers a consistent improvement in the operation of this approach across all future year scenarios. In the 2037 Base + Committed scenario, the RFC reduces from 0.94 to 0.90, whilst in the 2037 Base + Committed + Development Phase 1 and Phase 1+2 scenarios the RFC reduces from 1.00 to 0.95 and from 1.01 to 0.96, respectively. These improvements demonstrate that the proposed geometric amendments increase the operational capacity of the A534 West approach and reduce the forecast impact of future traffic growth.
- 3.4.4 Whilst the A534 West approach remains the critical arm during the AM peak, the proposed mitigation substantially reduces the forecast deterioration in junction performance arising from background traffic growth, committed development and the proposed development. The improvement is achieved without adversely affecting the operation of the remaining approaches, all of which continue to operate comfortably within capacity throughout the assessment period. The proposed mitigation is therefore considered to provide an effective and proportionate solution to the forecast operational impacts at the roundabout.

3.5 Summary

- 3.5.1 The operational performance of the roundabout with and without the proposed mitigation is summarised in [Table 3.2](#), which compares the RFC values for each forecast scenario on the A534 West approach.

Table 3.2 : Comparison of Operational Performance

Scenario	Existing Junction RFC	Mitigated RFC	Improvement
2030 Base + Committed	0.90	0.86	-0.04
2030 Base + Committed + Dev P1	0.96	0.91	-0.05
2030 Base + Committed + Dev P1+P2	0.97	0.93	-0.04
2037 Base + Committed	0.94	0.90	-0.04
2037 Base + Committed + Dev P1	1.00	0.95	-0.05
2037 Base + Committed + Dev P1+P2	1.01	0.96	-0.05

- 3.5.2 The modelling demonstrates that the proposed mitigation provides a notable improvement in the operation of the roundabout when compared with the unmitigated development scenarios. The proposed highway improvements reduce the RFC on the critical A534 West approach by approximately 0.04–0.05 across the future year scenarios, whilst all remaining approaches continue to operate comfortably within capacity during both the AM and PM peak periods.

- 3.5.3 The modelling indicates that the principal constraint at the roundabout arises from forecast background traffic growth and committed development, with the proposed development making a comparatively limited contribution to the overall deterioration in performance.
- 3.5.4 Notwithstanding this, under the existing junction arrangement the A534 West approach is forecast to reach an RFC of 1.00 in the 2037 Base + Committed + Development Phase 1 scenario. The modelling therefore demonstrates that the proposed mitigation should be implemented in association with Phase 1 of the development.
- 3.5.5 With the mitigation in place, the corresponding RFC reduces to 0.95, demonstrating that the improvements provide additional capacity and offset the operational impact associated with Phase 1. The modelling demonstrates that the proposed mitigation provides sufficient additional capacity to accommodate Phase 2 of the development, with the A534 West approach remaining below theoretical capacity in the 2037 Base + Committed + Development Phase 1+2 scenario, with an RFC of 0.96.

4. Conclusion

- 4.1.1 This Technical Note has reviewed the highway comments received from WCBC and presents a revised assessment of the A534 / Industrial Estate Road / Borrass Hall Lane / Sandy Lane roundabout based on updated traffic survey data and a revised mitigation strategy.
- 4.1.2 The proposed highway improvements provide a notable improvement in the operation of the roundabout by increasing capacity on the A534 approaches, reducing the forecast impact of the proposed development and maintaining satisfactory operation on the remaining arms of the junction.
- 4.1.3 The proposed mitigation is therefore considered to represent an appropriate and proportionate solution to accommodate the development and address the concerns raised by WCBC Highways.

APPENDIX A WCBC Highways Response

MEMORANDUM

From:	Chief Officer, Environment & Technical	To:	Chief Officer Economy & Planning
		FAO:	Philip Mullineux
Our Ref:	ET/DC/AO/P/2023/0497	Your Ref:	P/2023/0497/R5
Date:	30/06/2026		

TOWN AND COUNTRY PLANNING ACT 1990

Application Ref: 2023/0497 - Land North of Bryn Lane, Wrexham Industrial Estate. Hybrid application seeking: Full planning permission for the erection of buildings for class. B1, B2 & B8 use and formation of vehicular access and outline planning permission for the erection of buildings for class B1, B2 and B8 use and retail, drive thru, hotel and petrol filling station classes A1, A3, C1 and sui generis and associated infrastructure (all matters reserved).

Following numerous previous submissions of information and proposals and a significant input from the Local Highway Authority (including 16 responses and five Consultation Responses), further information has been submitted in response to previously identified issues and requirements.

This consultation response addresses the following information submitted 18/06/26:

- Response to Highway Comments
- Parking Justification Note (further updated on 26/06/26)
- Swept-Path Drawings
- Amended Substation Site Plan
- Illustrative Masterplan (B2 and B8 variants)
- Offsite Mitigation Technical Note

Highway Comment Response Technical Note

The response note refers to confusion over the review of older versions of documents and plans. For the avoidance of doubt, this confusion has arisen following the applicant's team sharing superseded information with the WCBC Highways and Planning team for review immediately after the meeting on the 11/05/26 via email. This information was then uploaded to the planning portal. The confusion therefore results from this sharing of superseded material not from the Council's part.

Parking Justification Note (Updated)

As clearly stated in the last consultation response the Council's parking standards (as set out in LPGN 16) are maximum standards. Previous comments have been made by the LHA about earlier versions of the masterplan(s) showing a significant shortfall against these maximum standards. However, it should be emphasised that these are maximum standards not targets. The maximum standards are used to try and achieve a balance between ensuring practical provision whilst trying to not over provide parking and therefore encourage over reliance on vehicle-trip making. The latest masterplans for both B2 and B8 show a number of units with over 100% provision against the maximum standard. From a policy point of view over provision must be justified (as under provision must be). It is noted that the over provision is a not a significant number, but given particularly for the B2 masterplan, it appears additional car parking has been squeezed into areas that would not normally be considered for parking (given these are generally HGV manoeuvring spaces) that there would be no need to exceed the maximum – indeed this point is made in paragraph 26 of the

applicants latest Parking Justification Note. **The LHA cannot accept the proposals in this regard as they exceed the number of parking spaces as derived from the Council's Maximum Parking Standards, which could undermine the need to encourage the right balance of vehicle based and sustainable trip making (particularly given concerns raised earlier in this response on the acceptability of Active Travel Provision).**

Cycle Parking – Cycle parking should be provided in accordance with the Council's LPGN 16 Parking Standards. For B2 use this equates to one space per 500sqm (or one per 1000sqm for B8). Cycle parking proposals have not been specified, either in the masterplan or the Parking Justification Note, but for the larger units the required level of cycle parking does not appear to be proposed given the limited cycle stands shown. Cycle parking (in this case secure lockers / cages) should be provided in safe and convenient locations and meet the requirements set out in the Welsh Government's Active Travel Act Guidance (ATAG) section 14.8. **The LHA cannot therefore support the proposals given the uncertainty that sufficient and suitable cycle parking in accordance with the Council's LPGN16 and ATAG appears not to have been proposed.**

Swept-Path Drawings

Various swept-path drawings have been submitted for the internal site area:

Unit 3 B2 Layout – No swept-paths have been provided for the HGV parking bays, or at least the most onerously positioned bays.

The swept-path envelope for the loading bay movement is very close to a number of parking spaces which indicates this will be an onerous manoeuvre. As noted in other aspects of the application, the LHA would expect to see clearance beyond the envelope to allow for a margin of error – for instance the driver not being ideally positioned or not manoeuvring exactly as required. There appears to be a separation of less than 20cm between swept-path envelope and the edge of the nearest parking space. If the movement is this tight, the risk is drivers will not attempt it and instead reverse in from the highway, which is not acceptable.

If the dark circles/dots indicate a loading bay, there appears to be a second loading bay for which no swept-path has been provided. Given this apparent second loading bay is very close to the double parking area, it is unclear if this would be possible without conflict.

The egressing left turn swept-path is tight against the kerb and encroaches into the oncoming lane. Encroachment into oncoming lanes is acceptable in certain scenarios – for instance refuse collection vehicles, as these are infrequent movements. Given the type of land use, this situation would not be infrequent and therefore a HGV encroaching into the oncoming traffic lane is not acceptable. This is a new layout, free of constraint and the should be designed to accommodate movements safely and efficiently.

Unit 4 and 5 B2 Layout – These two units share an access and manoeuvring space. The LHA have concerns over shared manoeuvring space unless there is a control mechanism to ensure this space is safeguarded and maintained for this purpose alone.

The egressing swept-path over-runs the kerb of the splitter island suggesting the remaining movement will need to be re-assessed.

Unit 6 B2 Layout – as noted above, the most onerously positioned HGV bays have not been assessed.

Unit 14 and 15 B2 Layout - These two units share an access and manoeuvring space. The LHA have concerns over shared manoeuvring space unless there is a control mechanism to ensure this space is safeguarded and maintained for this purpose alone. The swept-paths should assume a HGV parked at the loading bay of the adjacent unit to demonstrate the movements are still practical if a HGV is loading in this adjacent bay.

Unit 16 B2 Layout – The left turn out movement encroaches into the oncoming lane, and as shown on this plan conflicts with an oncoming HGV. Similarly, the left turn is shown as conflicting with the right turn out. Within the site the reversing movement into the HGV bay appears to have a separation of less than 25cm between the swept-path envelope and the edge of a parking space.

In several instances, the swept-path assessment does not cover both left *and* right turns into / out of units, where such movements in/from either direction might reasonably be expected to take place.

It appears that the on-site highway configuration has changed from that presented in previous iterations of the scheme proposals. No swept-path assessments have been provided for the internal spine road or key adjacent roads, nor of the side junctions. The LHA therefore cannot be sure that the internal highway is suitable to accommodate coincidental HGVs especially on the bends in the spine road.

The above missing assessments are needed to demonstrate HGVs can enter and egress each site in a forward gear, to avoid the potential of HGVs reversing from, or into the highway and safely negotiate the wider site. **The LHA cannot accept the proposals as presented given these missing elements mean the safe and efficient operation of the highway has not been demonstrated.**

On-Site Highway Layout

Requests have previously been made for confirmation of the proposed highway adaptation strategy, given the spine road and other key roads are within the detailed application element. The latest information states that client wishes to retain flexibility in this regard and proposes to design the internal highway to adoptable standards. Given the gaps in information provision highlighted above the LHA cannot be sure that the proposals will be workable.

Active Travel

The applicant's Highways Technical Note states that the updated masterplan meets the LHA's requirements with regards to Active Travel provision – this is not correct. The latest masterplan shows 3m shared footway / cycleway. Whilst this represents an improvement over the previous proposals, this 'shared' provision does not meet the standards or expectations of the LHA or the Council's. As set out in the ATAG, Shared footway/cycle surfaces are not generally recommended and are usually only acceptable where there are significant constraints. As this is a new site, no such constraints exist and there is no justification for this lesser level of provision. Both the LHA and the Council's Active Travel officer consider that for such a size, scale and type of development, a segregated footway and cycle-track, separated from traffic should be provided – as has been communicated previously.

Previous iterations of the masterplan have shown highway cross sections with sufficient width to accommodate the necessary segregated cycle and pedestrian provision, so this should not impact on the developable area. It is therefore unclear why despite previous discussions on this, this higher level of provision is not shown.

The existing shared provision across much of the Industrial Estate pre-dates current standards and is no longer suitable for new development. WCBC have plans to upgrade walking and cycling provision across the industrial estate to meet ATAG standards and therefore ATAG compliant and aspirational provision will be the requirement, not a provision that is usually only accepted because of clear constraints. As stated elsewhere, this is a blank canvas site and should be designed to the highest standards.

Active Travel Crossings – The latest masterplan now shows crossings over unit access points which is a welcomed improvement. Crossings of side road junctions are also shown, but these are set back from the likely desire line and should be positioned closer to the junction.

Based on this latest information, the LHA and the WCBC Active Travel Officer cannot support the proposals as they are unlikely to deliver the potential to encourage modal shift or provide a safe environment for pedestrian and / or cyclists.

Substations

Despite previous requests, swept-paths and visibility splays have not been provided for the substation on Ridley Wood Road. Such information is required where any new permanent access onto the highway is proposed. Swept-paths are needed to demonstrate suitable vehicles can enter and egress the sub-station area in a forward gear and will not need to reverse into or from the carriageway.

Off-Site Junction Mitigation (Borras Hall Lane Roundabout)

Having reviewed the LinSig model of the proposed partially-signalised junction proposal, the LHA has identified a number of concerns over the layout and modelling of this mitigation proposal:

- Traffic Minimum greens are set to 5s rather than the required 7s. This is important as the minor entry arms are shown as only running to minimum greens in some scenarios.
- As the junction will still contain two un-signalised entries, it is important that the modelling of these is accurate – especially as LinSig is not primarily intended to model priority controlled elements within roundabouts. For the Sandy Lane and Borras Hall Lane entries all give-way coefficients are set to 1.09. This is the standard value for an opposed right turn at a signalised junction (where a vehicle has to give-way to oncoming traffic to turn right) and is generally not appropriate for roundabout entry give-way behaviour. We note the LinSig user guidance in this regard states that roundabout entry behaviour is not exactly the same as a simple priority junction, and using any default coefficient is only the starting point rather than the final calibrated value. The final calibrated value should be based on ARCADY assessments. It appears that the incorrect default value has been used and that there is no certainty that the junction would operate as shown.
- The layout in Appendix A shows a number of the proposed stoplines positioned in front of, adjacent to or very close to the existing uncontrolled pedestrian crossing points. There should be a minimum 2m set back from edge of crossing to the stop-line. Correcting this may affect the assumed lane widths and the subsequent stopline saturation flow values which also therefore raises uncertainty over the accuracy of the modelling and predicted operation.
- On the Wrexham Road entry, it is unclear if there is sufficient space on the pedestrian refuge / splitter island to accommodate the signal equipment (signal pole, head etc) and still maintain the pedestrian crossing width, particularly given the comment above about stopline setback position.
- As noted on previous LHA responses, the results show problematic internal queuing on two of the circulatory stoplines that would be significant enough to impede the upstream operation of the junction (Links 12/1 and 15/2). As noted in previous responses this is a fundamental challenge with signalising roundabouts, where there is often insufficient space to practically manage internal queuing.

Notwithstanding this and as noted in previous responses, whilst the Degree of Saturation (DoS) and queuing values referenced in the Technical Note (TN) appear reasonable, these do not reflect the full operational picture, or the operational and potential safety issues that will result from the internal queuing.

On the basis of these issues, the LHA does not have confidence that the proposed layout would be safe or efficient. Nor does the LHA have confidence that the predicted level of operation would be realistic, given the changes that would need to be made are likely to significantly affect the timings of the junction. On this basis the LHA cannot accept the proposals nor the unmitigated impact on this junction.

Summary:

A significant volume of material has been submitted to and reviewed by the LHA, requiring significant time and input from officers. The LHA has been proactive in responding to this information, in dialogue with the applicant team and the numerous meetings held. The submitted information in many cases lacked the technical accuracy required and this has contributed to a drawn-out review period and multiple-iterations of reviews and re-reviews that has been significantly beyond that which would normally or reasonably be expected, even for such a significant development proposal.

Given this, and that as noted in this response, there are numerous technical issues that are still to be addressed, the LHA considers that the gap between the current proposals and being able to support the application as too significant to accept. The LHA considers that more than ample time and input has been provided to the application but a solution has still not been achieved.

The LHA therefore has no option other than to issue a recommendation for refusal on the basis of a lack of suitable information being provided.



Contracts & Engineering Manager
On behalf of the Chief Officer, Environment & Technical

APPENDIX B Network Diagrams

NOTES

AM Network Peak Hour (07:30-08:30)

PM Network Peak Hour (16:30 - 17:30)

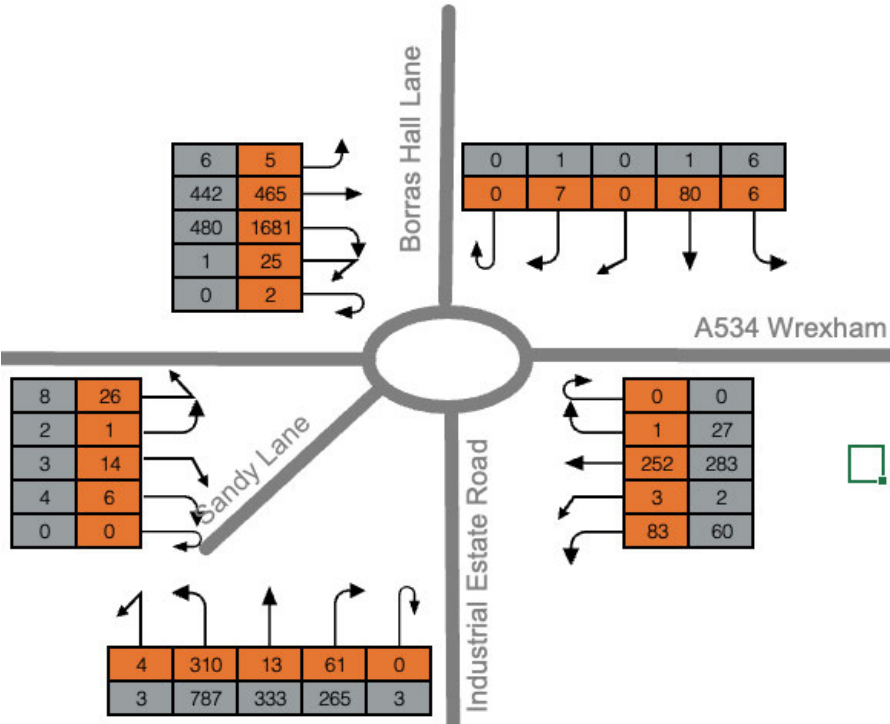
All Flows are in PCU's

LEGEND

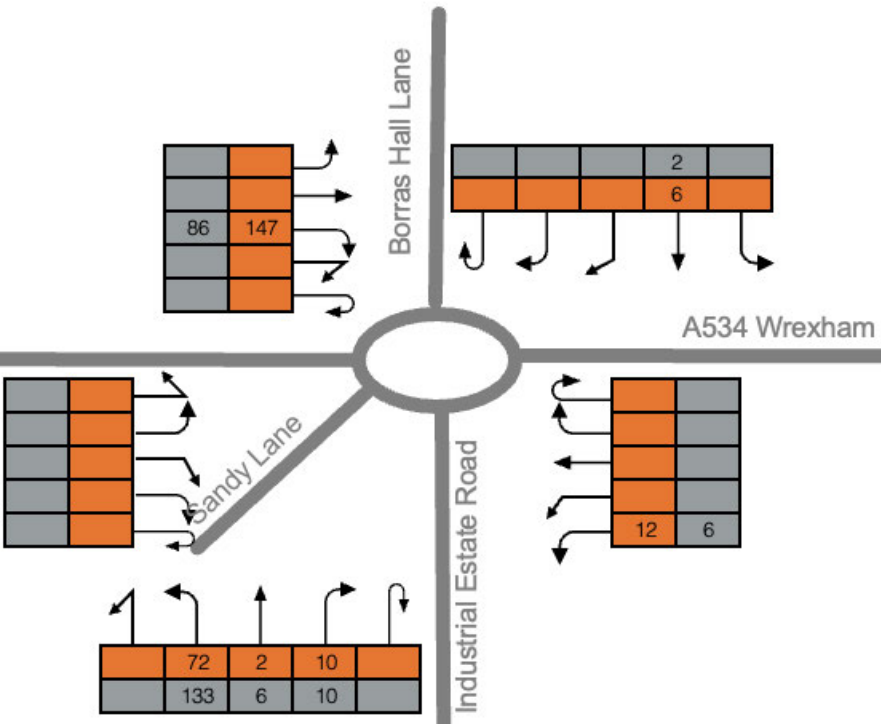
AM

PM

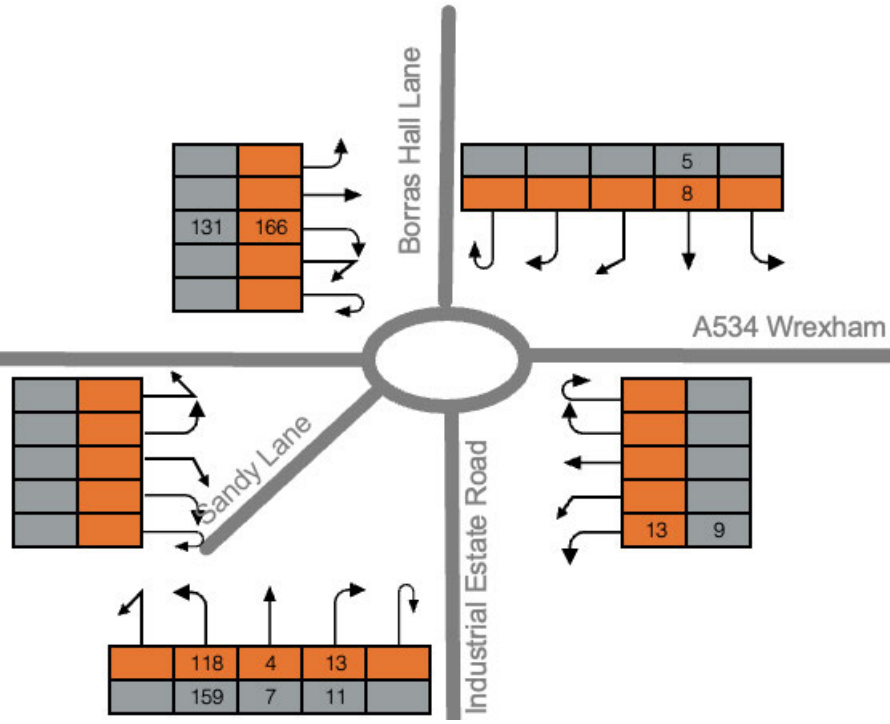
2026 Base



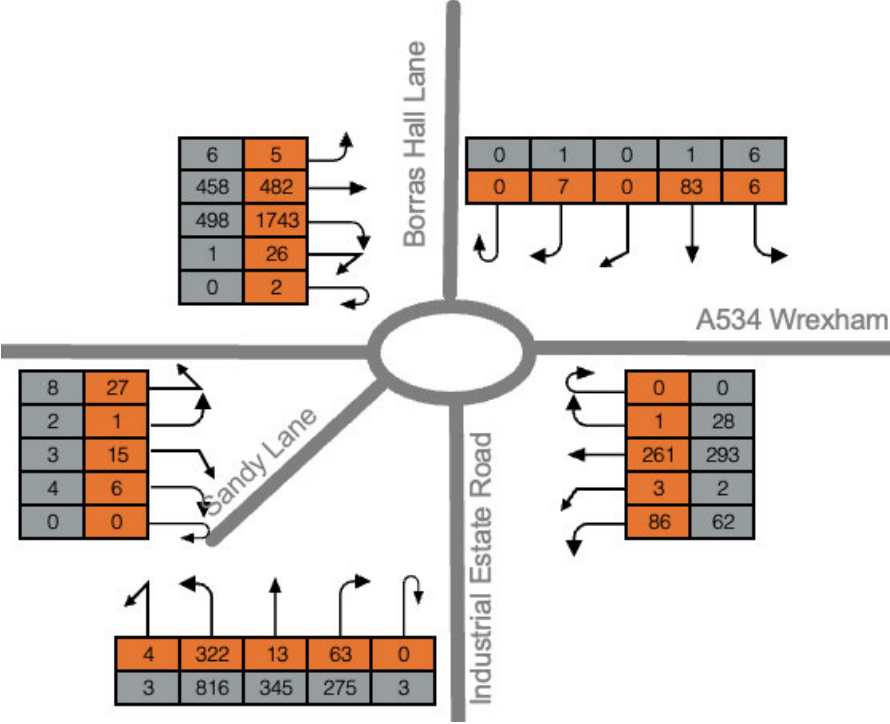
Utopia Phase 1



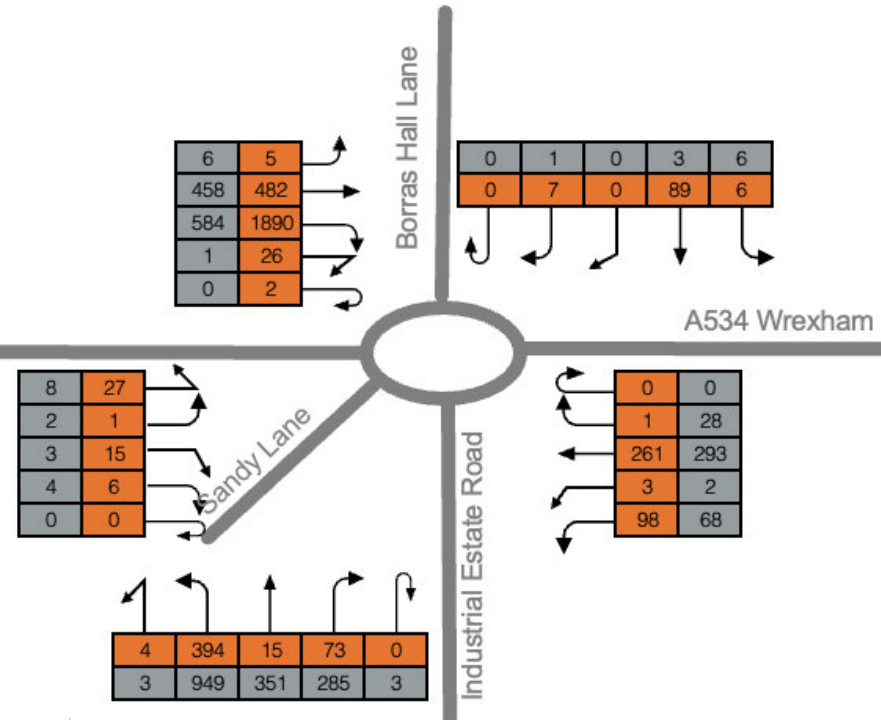
Utopia Phase 1 + 2



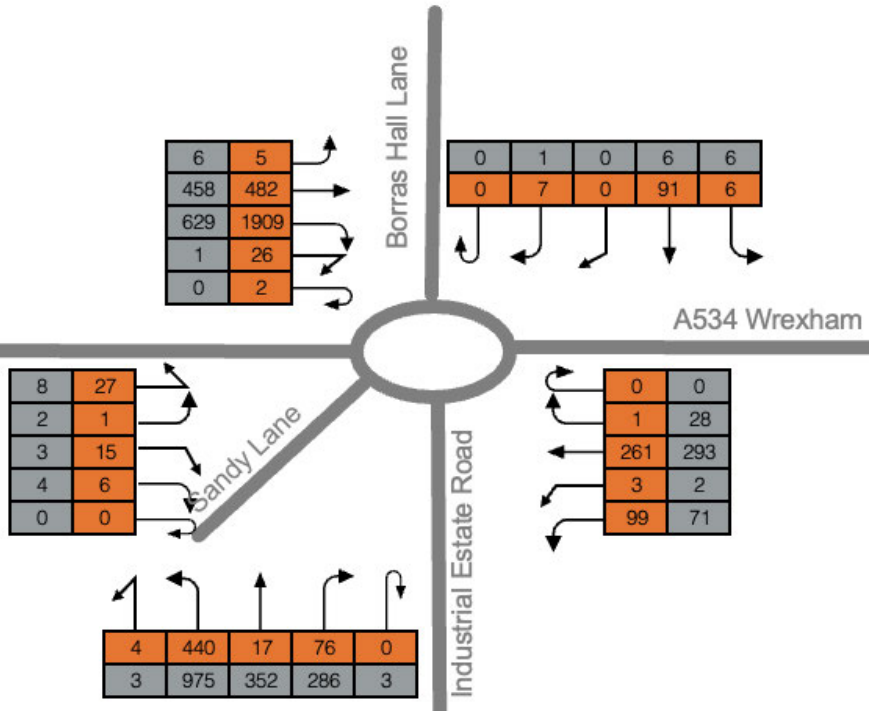
2030 Base



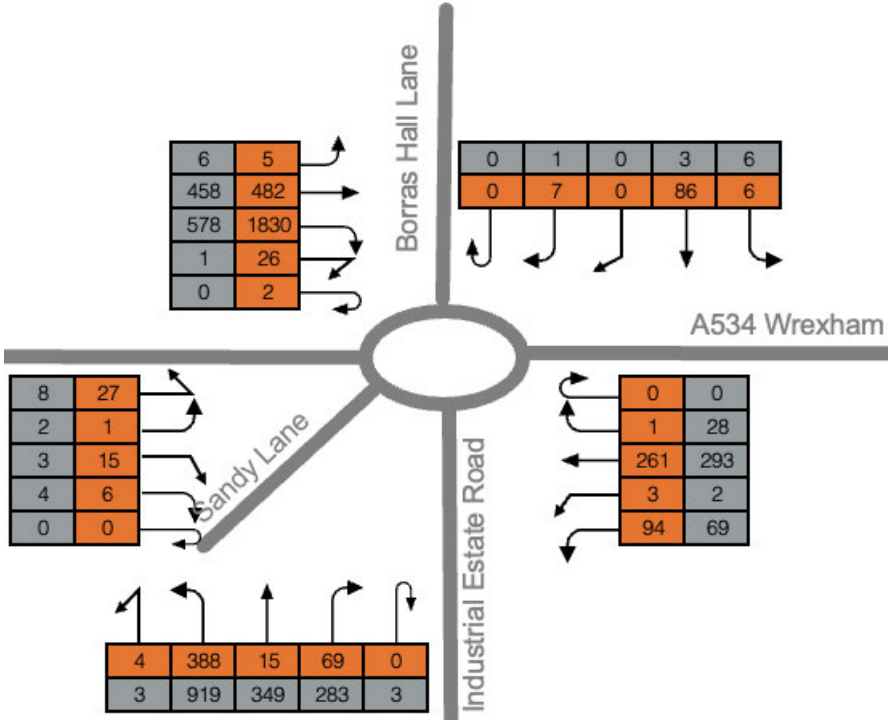
2030 Base + Utopia P1



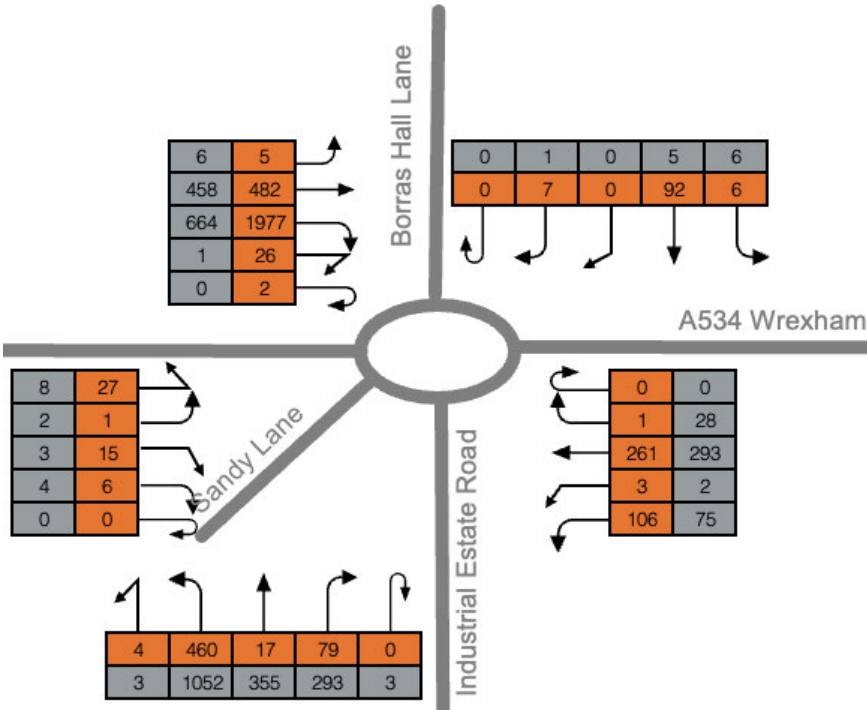
2030 Base + Utopia P1+2



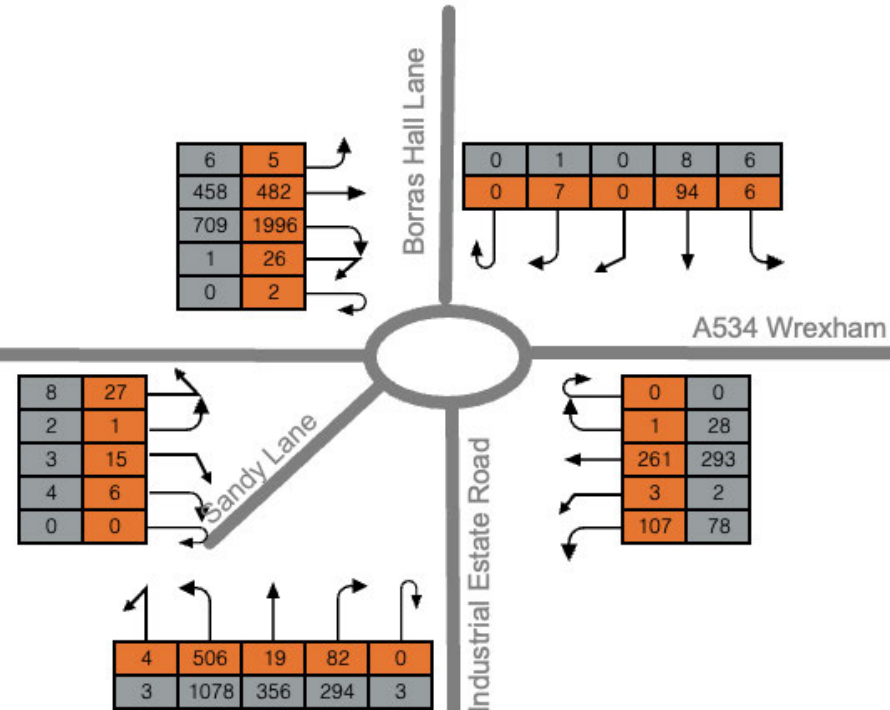
2030 Base + Comm



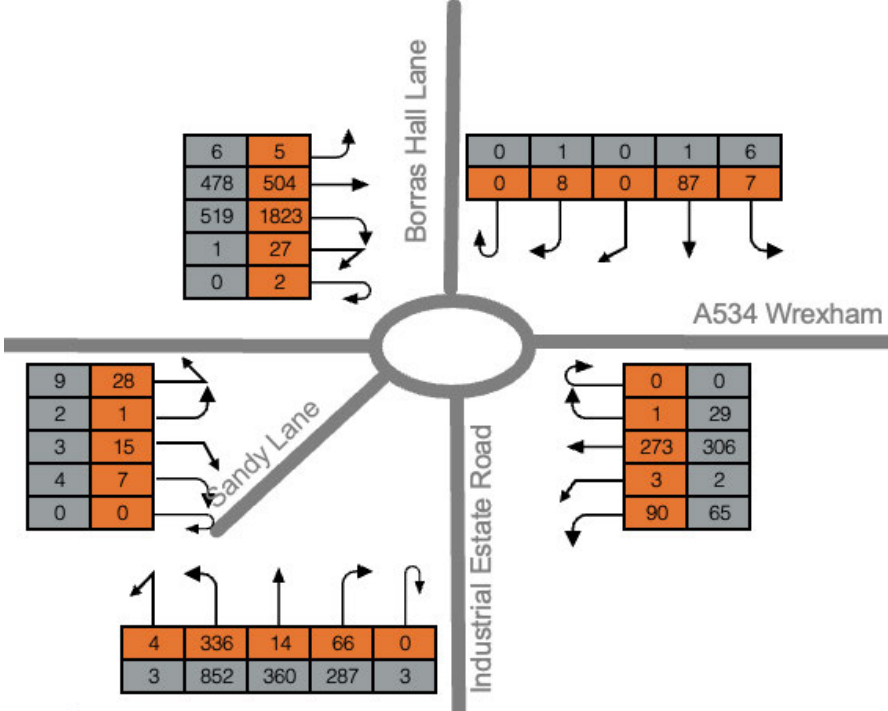
2030 Base + Comm + Utopia P1



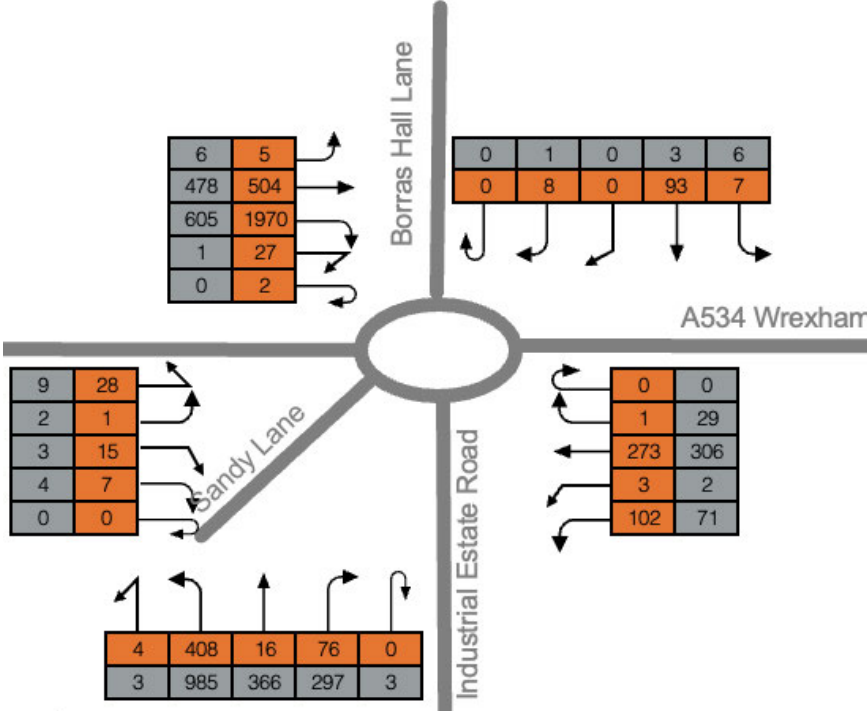
2030 Base + Comm + Utopia P1+2



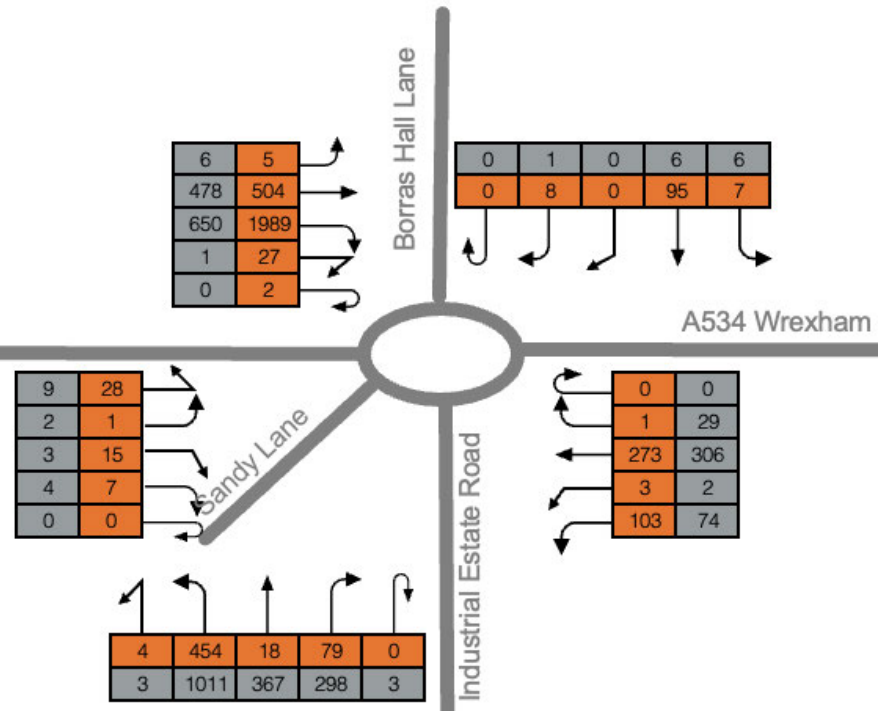
2037 Base



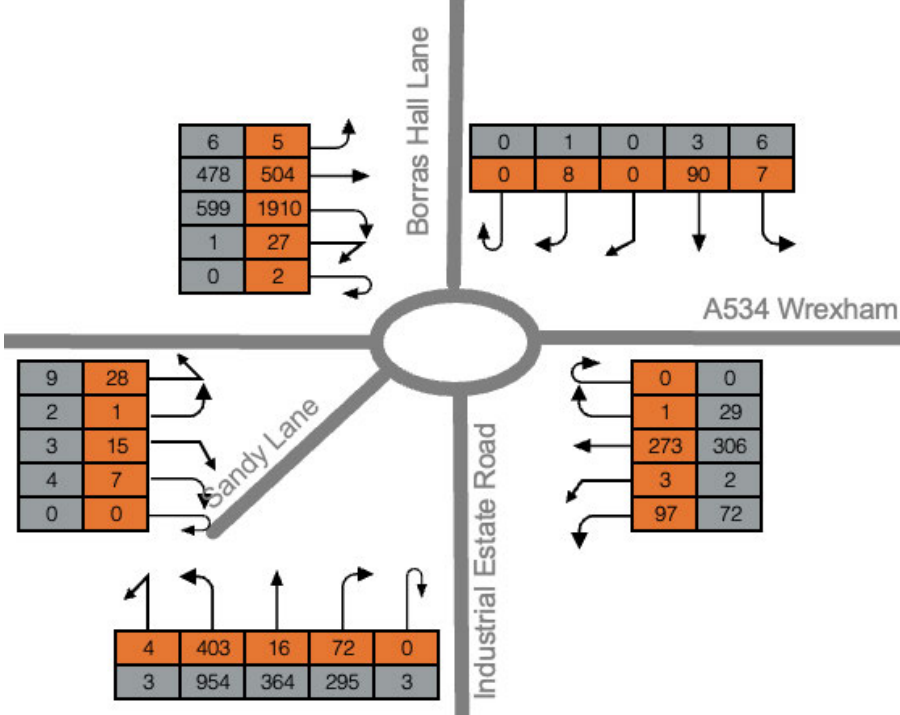
2037 Base + Utopia P1



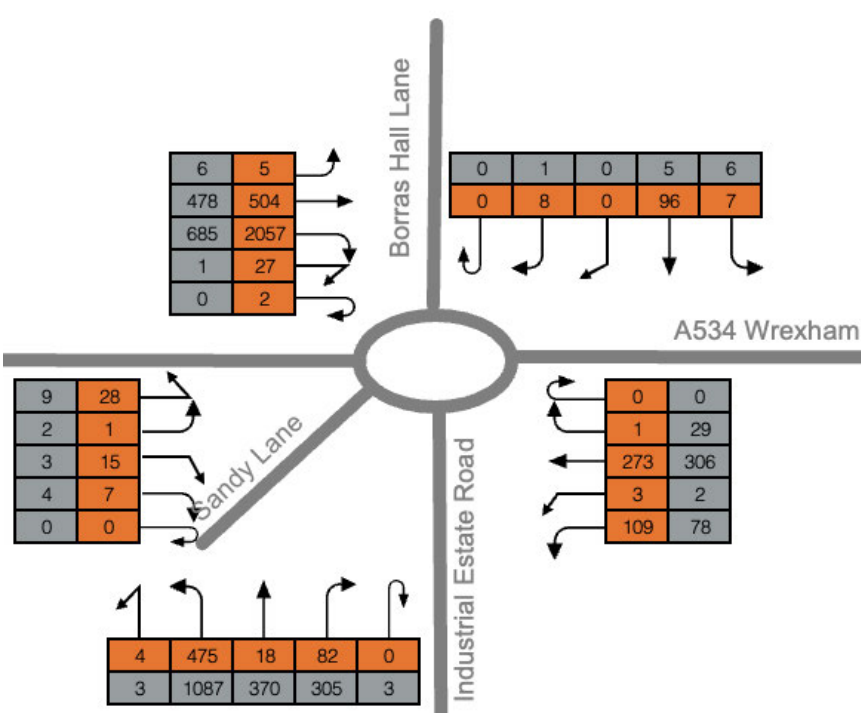
2037 Base + Utopia P1+2



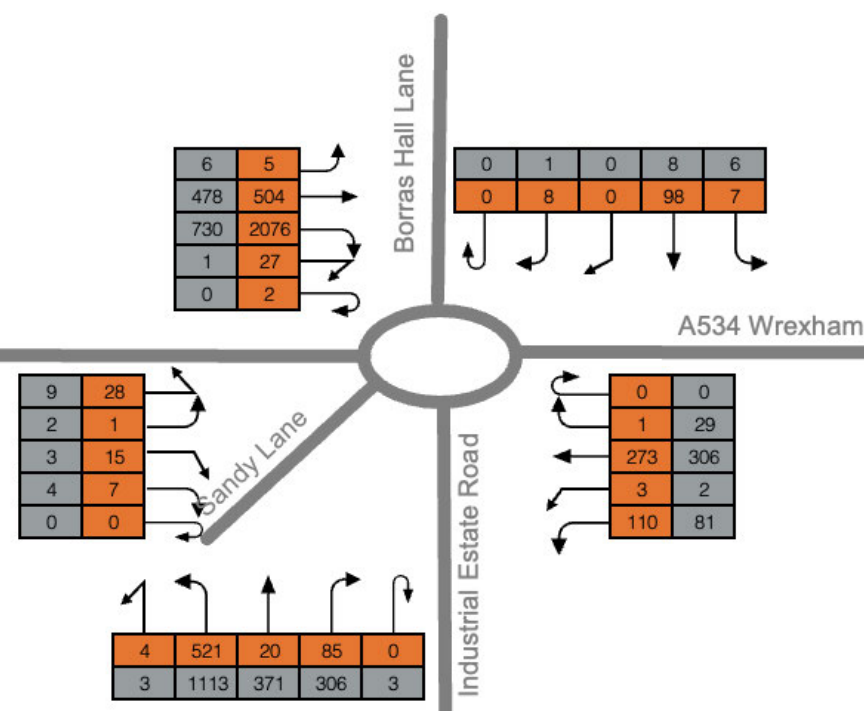
2037 Base + Comm



2037 Base + Comm + Utopia P1

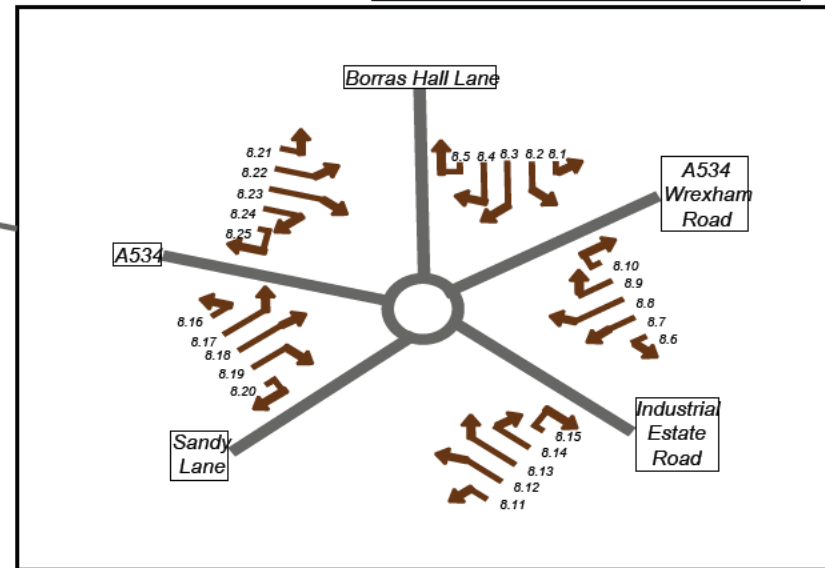


2037 Base + Comm + Utopia P1+2



APPENDIX C Traffic Survey Data

8.5	8.4	8.3	8.2	8.1
0	39	1	232	46
0	39	0	257	49



8.21	67	68
8.22	3124	3236
8.23	6495	7259
8.24	104	192
8.25	10	11

8.16	122	207
8.17	12	13
8.18	37	63
8.19	39	62
8.20	0	0

8.10	9	9
8.9	71	74
8.8	2554	2665
8.7	29	44
8.6	520	628

8.15	29	28
8.14	814	918
8.13	694	721
8.12	5187	5906
8.11	29	40

Wrexham
Classified Junction Count

Site 8 of 11
Borras Hall Lane
A534 Wrexham Road
Industrial Estate Road
Sandy Lane
A534

Lat/Long
lat 53.060252° lon -2.937804°

Date
Wednesday 22 April 2026

Weather
Cloudy
Temp: 17°C

0700 - 1900 (Weekday 12H Session)

TIME	Movement 8.1: Left from Borras Hall Lane to A534 Wrexham Road								Original Data	
	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0700 - 0715	0	0	0	0	1	0	0	0	1	1.00
0715 - 0730	0	0	0	0	0	0	0	0	0	0.00
0730 - 0745	0	0	0	0	0	0	0	0	0	0.00
0745 - 0800	0	0	0	0	1	0	0	0	1	1.00
Hourly Total	0	0	0	0	2	0	0	0	2	2.00
Hourly Average	0.00	0.00	0.00	0.00	0.50	0.00	0.00	0.00	0.50	0.50
0800 - 0815	0	0	2	0	0	0	0	0	2	2.00
0815 - 0830	0	0	3	0	0	0	0	0	3	3.00
0830 - 0845	0	1	0	0	0	0	0	0	1	0.40
0845 - 0900	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	1	5	0	0	0	0	0	6	5.40
Hourly Average	0.00	0.25	1.25	0.00	0.00	0.00	0.00	0.00	1.50	1.35
0900 - 0915	0	0	1	1	0	0	0	0	2	2.00
0915 - 0930	0	0	0	0	1	0	0	0	1	1.00
0930 - 0945	0	0	1	0	0	0	0	0	1	1.00
0945 - 1000	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	2	1	1	0	0	0	4	4.00
Hourly Average	0.00	0.00	0.50	0.25	0.25	0.00	0.00	0.00	1.00	1.00
1000 - 1015	0	0	0	0	0	0	0	0	0	0.00
1015 - 1030	0	0	0	0	0	0	0	0	0	0.00
1030 - 1045	0	0	0	0	0	0	0	0	0	0.00
1045 - 1100	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	0	0	0	0	0	0	0	0.00
Hourly Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1100 - 1115	0	0	1	0	1	0	0	0	2	2.00
1115 - 1130	0	0	1	0	0	0	1	0	2	3.30
1130 - 1145	0	0	0	0	0	0	0	0	0	0.00
1145 - 1200	0	0	3	0	0	0	0	0	3	3.00
Hourly Total	0	0	5	0	1	0	1	0	7	8.30
Hourly Average	0.00	0.00	1.25	0.00	0.25	0.00	0.25	0.00	1.75	2.08
1200 - 1215	0	0	1	0	0	0	0	0	1	1.00
1215 - 1230	0	0	1	0	0	0	0	0	1	1.00
1230 - 1245	0	0	0	0	0	0	0	0	0	0.00
1245 - 1300	0	0	2	0	0	0	0	0	2	2.00
Hourly Total	0	0	4	0	0	0	0	0	4	4.00
Hourly Average	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00
1300 - 1315	0	0	0	0	0	0	1	0	1	2.30
1315 - 1330	0	0	1	0	1	0	0	0	2	2.00
1330 - 1345	0	0	1	0	0	0	0	0	1	1.00
1345 - 1400	0	0	1	0	0	0	0	0	1	1.00
Hourly Total	0	0	3	0	1	0	1	0	5	6.30
Hourly Average	0.00	0.00	0.75	0.00	0.25	0.00	0.25	0.00	1.25	1.58
1400 - 1415	0	0	0	0	0	0	0	0	0	0.00
1415 - 1430	0	0	0	0	0	0	0	0	0	0.00
1430 - 1445	0	0	3	0	0	0	0	0	3	3.00
1445 - 1500	0	0	1	0	0	0	0	0	1	1.00
Hourly Total	0	0	4	0	0	0	0	0	4	4.00
Hourly Average	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00
1500 - 1515	0	0	1	0	0	0	0	0	1	1.00
1515 - 1530	0	0	2	0	0	0	0	0	2	2.00
1530 - 1545	0	0	0	0	1	1	0	0	2	2.50
1545 - 1600	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	3	0	1	1	0	0	5	5.50
Hourly Average	0.00	0.00	0.75	0.00	0.25	0.25	0.00	0.00	1.25	1.38
1600 - 1615	0	0	2	0	0	0	0	0	2	2.00
1615 - 1630	0	0	1	0	0	0	0	0	1	1.00
1630 - 1645	0	0	0	0	0	0	0	0	0	0.00
1645 - 1700	0	0	3	0	0	0	0	0	3	3.00
Hourly Total	0	0	6	0	0	0	0	0	6	6.00
Hourly Average	0.00	0.00	1.50	0.00	0.00	0.00	0.00	0.00	1.50	1.50
1700 - 1715	0	0	1	0	1	0	0	0	2	2.00
1715 - 1730	0	0	0	0	1	0	0	0	1	1.00
1730 - 1745	0	0	0	0	0	0	0	0	0	0.00
1745 - 1800	0	0	0	0	1	0	0	0	1	1.00
Hourly Total	0	0	1	0	3	0	0	0	4	4.00
Hourly Average	0.00	0.00	0.25	0.00	0.75	0.00	0.00	0.00	1.00	1.00
1800 - 1815	0	0	0	0	0	0	0	0	0	0.00
1815 - 1830	0	0	1	0	0	0	0	0	1	1.00
1830 - 1845	0	0	0	0	0	0	0	0	0	0.00
1845 - 1900	0	0	1	0	0	0	0	0	1	1.00
Hourly Total	0	0	2	0	0	0	0	0	2	2.00
Hourly Average	0.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	0.50	0.50
Session Total	0	1	35	1	9	1	2	0	49	51.50
Session Average	0.00	0.02	0.73	0.02	0.19	0.02	0.04	0.00	1.02	1.07

Wrexham
Classified Junction Count

Site 8 of 11
Borras Hall Lane
A534 Wrexham Road
Industrial Estate Road
Sandy Lane
A534

Lat/Long
lat 53.060252° lon -2.937804°

Date
Wednesday 22 April 2026

Weather
Cloudy
Temp: 17°C

0700 - 1900 (Weekday 12H Session)

TIME	Movement 8.2: Left from Borras Hall Lane to Industrial Estate Road								Original Data	
	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0700 - 0715	0	0	3	0	1	0	0	0	4	4.00
0715 - 0730	0	0	3	0	1	0	0	0	4	4.00
0730 - 0745	0	0	9	0	0	0	0	0	9	9.00
0745 - 0800	1	0	23	0	1	1	0	0	26	25.70
Hourly Total	1	0	38	0	3	1	0	0	43	42.70
Hourly Average	0.25	0.00	9.50	0.00	0.75	0.25	0.00	0.00	10.75	10.68
0800 - 0815	0	0	27	1	2	1	0	0	31	31.50
0815 - 0830	0	0	11	0	1	1	0	0	13	13.50
0830 - 0845	0	0	10	0	3	0	0	0	13	13.00
0845 - 0900	0	0	8	0	1	0	0	0	9	9.00
Hourly Total	0	0	56	1	7	2	0	0	66	67.00
Hourly Average	0.00	0.00	14.00	0.25	1.75	0.50	0.00	0.00	16.50	16.75
0900 - 0915	0	0	5	0	0	0	0	0	5	5.00
0915 - 0930	0	0	1	0	1	0	0	0	2	2.00
0930 - 0945	0	0	4	0	2	0	1	0	7	8.30
0945 - 1000	0	0	1	0	0	1	0	0	2	2.50
Hourly Total	0	0	11	0	3	1	1	0	16	17.80
Hourly Average	0.00	0.00	2.75	0.00	0.75	0.25	0.25	0.00	4.00	4.45
1000 - 1015	0	0	2	0	2	0	0	0	4	4.00
1015 - 1030	0	0	2	0	0	1	1	0	4	5.80
1030 - 1045	0	0	1	0	0	1	0	0	2	2.50
1045 - 1100	0	0	0	0	0	2	0	0	2	3.00
Hourly Total	0	0	5	0	2	4	1	0	12	15.30
Hourly Average	0.00	0.00	1.25	0.00	0.50	1.00	0.25	0.00	3.00	3.83
1100 - 1115	1	0	1	0	1	0	0	0	3	2.20
1115 - 1130	0	0	2	0	0	1	0	0	3	3.50
1130 - 1145	0	0	3	0	1	1	0	0	5	5.50
1145 - 1200	0	0	2	0	1	0	1	0	4	5.30
Hourly Total	1	0	8	0	3	2	1	0	15	16.50
Hourly Average	0.25	0.00	2.00	0.00	0.75	0.50	0.25	0.00	3.75	4.13
1200 - 1215	0	0	2	0	0	0	0	0	2	2.00
1215 - 1230	0	0	3	0	2	0	1	0	6	7.30
1230 - 1245	0	0	1	0	2	0	1	0	4	5.30
1245 - 1300	1	0	1	0	2	0	0	0	4	3.20
Hourly Total	1	0	7	0	6	0	2	0	16	17.80
Hourly Average	0.25	0.00	1.75	0.00	1.50	0.00	0.50	0.00	4.00	4.45
1300 - 1315	0	0	0	0	1	0	0	0	1	1.00
1315 - 1330	0	0	3	0	1	0	0	0	4	4.00
1330 - 1345	0	0	1	0	0	1	0	0	2	2.50
1345 - 1400	0	0	4	0	0	0	2	0	6	8.60
Hourly Total	0	0	8	0	2	1	2	0	13	16.10
Hourly Average	0.00	0.00	2.00	0.00	0.50	0.25	0.50	0.00	3.25	4.03
1400 - 1415	0	0	0	0	1	0	0	0	1	1.00
1415 - 1430	0	0	5	0	1	0	1	0	7	8.30
1430 - 1445	0	0	2	0	0	0	0	0	2	2.00
1445 - 1500	0	0	4	0	1	2	0	0	7	8.00
Hourly Total	0	0	11	0	3	2	1	0	17	19.30
Hourly Average	0.00	0.00	2.75	0.00	0.75	0.50	0.25	0.00	4.25	4.83
1500 - 1515	0	0	2	0	0	0	1	0	3	4.30
1515 - 1530	0	0	1	0	1	0	2	0	4	6.60
1530 - 1545	0	0	4	0	1	1	1	0	7	8.80
1545 - 1600	0	0	1	0	1	0	1	0	3	4.30
Hourly Total	0	0	8	0	3	1	5	0	17	24.00
Hourly Average	0.00	0.00	2.00	0.00	0.75	0.25	1.25	0.00	4.25	6.00
1600 - 1615	0	0	3	0	0	0	1	0	4	5.30
1615 - 1630	0	0	3	0	0	0	0	0	3	3.00
1630 - 1645	0	0	0	0	2	0	1	0	3	4.30
1645 - 1700	0	0	1	0	1	0	0	0	2	2.00
Hourly Total	0	0	7	0	3	0	2	0	12	14.60
Hourly Average	0.00	0.00	1.75	0.00	0.75	0.00	0.50	0.00	3.00	3.65
1700 - 1715	0	0	1	0	0	0	0	0	1	1.00
1715 - 1730	0	0	2	0	1	0	1	0	4	5.30
1730 - 1745	0	0	3	0	0	0	0	0	3	3.00
1745 - 1800	0	0	1	0	1	0	0	0	2	2.00
Hourly Total	0	0	7	0	2	0	1	0	10	11.30
Hourly Average	0.00	0.00	1.75	0.00	0.50	0.00	0.25	0.00	2.50	2.83
1800 - 1815	0	0	2	0	0	0	0	0	2	2.00
1815 - 1830	1	0	0	0	0	0	0	0	1	0.20
1830 - 1845	1	0	2	0	0	0	0	0	3	2.20
1845 - 1900	0	0	1	0	0	0	0	0	1	1.00
Hourly Total	2	0	5	0	0	0	0	0	7	5.40
Hourly Average	0.50	0.00	1.25	0.00	0.00	0.00	0.00	0.00	1.75	1.35
Session Total	5	0	171	1	37	14	16	0	244	267.80
Session Average	0.10	0.00	3.56	0.02	0.77	0.29	0.33	0.00	5.08	5.58

Wrexham

Classified Junction Count

Site 8 of 11
Borras Hall Lane
A534 Wrexham Road
Industrial Estate Road
Sandy Lane
A534

Lat/Long
lat 53.060252° lon -2.937804°

Date
Wednesday 22 April 2026

Weather
Cloudy
Temp: 17°C

0700 - 1900 (Weekday 12H Session)

	Movement 8.3: Right from Borras Hall Lane to Sandy Lane								Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0700 - 0715	0	0	0	0	0	0	0	0	0	0.00
0715 - 0730	0	0	0	0	0	0	0	0	0	0.00
0730 - 0745	0	0	0	0	0	0	0	0	0	0.00
0745 - 0800	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	0	0	0	0	0	0	0	0.00
Hourly Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0800 - 0815	0	0	0	0	0	0	0	0	0	0.00
0815 - 0830	0	0	0	0	0	0	0	0	0	0.00
0830 - 0845	0	0	0	0	0	0	0	0	0	0.00
0845 - 0900	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	0	0	0	0	0	0	0	0.00
Hourly Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0900 - 0915	0	0	0	0	0	0	0	0	0	0.00
0915 - 0930	0	0	0	0	0	0	0	0	0	0.00
0930 - 0945	0	0	0	0	0	0	0	0	0	0.00
0945 - 1000	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	0	0	0	0	0	0	0	0.00
Hourly Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1000 - 1015	0	0	0	0	0	0	0	0	0	0.00
1015 - 1030	0	0	0	0	0	0	0	0	0	0.00
1030 - 1045	0	0	0	0	0	0	0	0	0	0.00
1045 - 1100	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	0	0	0	0	0	0	0	0.00
Hourly Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1100 - 1115	0	0	0	0	0	0	0	0	0	0.00
1115 - 1130	0	0	0	0	0	0	0	0	0	0.00
1130 - 1145	0	0	0	0	0	0	0	0	0	0.00
1145 - 1200	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	0	0	0	0	0	0	0	0.00
Hourly Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1200 - 1215	0	0	0	0	0	0	0	0	0	0.00
1215 - 1230	0	0	0	0	0	0	0	0	0	0.00
1230 - 1245	0	0	0	0	0	0	0	0	0	0.00
1245 - 1300	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	0	0	0	0	0	0	0	0.00
Hourly Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1300 - 1315	1	0	0	0	0	0	0	0	1	0.20
1315 - 1330	0	0	0	0	0	0	0	0	0	0.00
1330 - 1345	0	0	0	0	0	0	0	0	0	0.00
1345 - 1400	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	1	0	0	0	0	0	0	0	1	0.20
Hourly Average	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.25	0.05
1400 - 1415	0	0	0	0	0	0	0	0	0	0.00
1415 - 1430	0	0	0	0	0	0	0	0	0	0.00
1430 - 1445	0	0	0	0	0	0	0	0	0	0.00
1445 - 1500	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	0	0	0	0	0	0	0	0.00
Hourly Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1500 - 1515	0	0	0	0	0	0	0	0	0	0.00
1515 - 1530	0	0	0	0	0	0	0	0	0	0.00
1530 - 1545	0	0	0	0	0	0	0	0	0	0.00
1545 - 1600	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	0	0	0	0	0	0	0	0.00
Hourly Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1600 - 1615	0	0	0	0	0	0	0	0	0	0.00
1615 - 1630	0	0	0	0	0	0	0	0	0	0.00
1630 - 1645	0	0	0	0	0	0	0	0	0	0.00
1645 - 1700	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	0	0	0	0	0	0	0	0.00
Hourly Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1700 - 1715	0	0	0	0	0	0	0	0	0	0.00
1715 - 1730	0	0	0	0	0	0	0	0	0	0.00
1730 - 1745	0	0	0	0	0	0	0	0	0	0.00
1745 - 1800	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	0	0	0	0	0	0	0	0.00
Hourly Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1800 - 1815	0	0	0	0	0	0	0	0	0	0.00
1815 - 1830	0	0	0	0	0	0	0	0	0	0.00
1830 - 1845	0	0	0	0	0	0	0	0	0	0.00
1845 - 1900	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	0	0	0	0	0	0	0	0.00
Hourly Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Session Total	1	0	0	0	0	0	0	0	1	0.20
Session Average	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00

Wrexham
Classified Junction Count

Site 8 of 11
Borras Hall Lane
A534 Wrexham Road
Industrial Estate Road
Sandy Lane
A534

Lat/Long
lat 53.060252° lon -2.937804°

Date
Wednesday 22 April 2026

Weather
Cloudy
Temp: 17°C

0700 - 1900 (Weekday 12H Session)

TIME	Movement 8.4: Right from Borras Hall Lane to A534								Original Data	
	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0700 - 0715	0	0	0	0	0	0	0	0	0	0.00
0715 - 0730	0	0	0	0	0	0	0	0	0	0.00
0730 - 0745	0	0	2	0	0	0	0	0	2	2.00
0745 - 0800	0	0	2	0	1	0	0	0	3	3.00
Hourly Total	0	0	4	0	1	0	0	0	5	5.00
Hourly Average	0.00	0.00	1.00	0.00	0.25	0.00	0.00	0.00	1.25	1.25
0800 - 0815	0	0	0	0	1	0	0	0	1	1.00
0815 - 0830	0	0	1	0	0	0	0	0	1	1.00
0830 - 0845	0	0	2	0	0	0	0	0	2	2.00
0845 - 0900	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	3	0	1	0	0	0	4	4.00
Hourly Average	0.00	0.00	0.75	0.00	0.25	0.00	0.00	0.00	1.00	1.00
0900 - 0915	0	0	3	0	2	0	0	0	5	5.00
0915 - 0930	0	0	0	0	1	0	0	0	1	1.00
0930 - 0945	0	0	0	0	0	0	0	0	0	0.00
0945 - 1000	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	3	0	3	0	0	0	6	6.00
Hourly Average	0.00	0.00	0.75	0.00	0.75	0.00	0.00	0.00	1.50	1.50
1000 - 1015	0	0	0	0	0	0	0	0	0	0.00
1015 - 1030	0	0	0	0	0	0	0	0	0	0.00
1030 - 1045	0	0	2	0	0	0	0	0	2	2.00
1045 - 1100	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	2	0	0	0	0	0	2	2.00
Hourly Average	0.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	0.50	0.50
1100 - 1115	0	0	1	0	0	0	0	0	1	1.00
1115 - 1130	0	0	2	0	0	0	0	0	2	2.00
1130 - 1145	0	0	1	0	0	0	0	0	1	1.00
1145 - 1200	0	0	2	0	0	0	0	0	2	2.00
Hourly Total	0	0	6	0	0	0	0	0	6	6.00
Hourly Average	0.00	0.00	1.50	0.00	0.00	0.00	0.00	0.00	1.50	1.50
1200 - 1215	0	0	0	0	0	0	0	0	0	0.00
1215 - 1230	0	0	2	0	0	0	0	0	2	2.00
1230 - 1245	0	0	0	0	0	0	0	0	0	0.00
1245 - 1300	0	0	0	0	1	0	0	0	1	1.00
Hourly Total	0	0	2	0	1	0	0	0	3	3.00
Hourly Average	0.00	0.00	0.50	0.00	0.25	0.00	0.00	0.00	0.75	0.75
1300 - 1315	0	0	0	0	0	0	0	0	0	0.00
1315 - 1330	0	0	1	0	0	0	0	0	1	1.00
1330 - 1345	0	0	1	0	0	0	0	0	1	1.00
1345 - 1400	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	2	0	0	0	0	0	2	2.00
Hourly Average	0.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	0.50	0.50
1400 - 1415	0	0	3	0	0	0	0	0	3	3.00
1415 - 1430	0	0	0	0	0	0	0	0	0	0.00
1430 - 1445	0	0	0	0	1	0	0	0	1	1.00
1445 - 1500	0	0	0	0	1	0	0	0	1	1.00
Hourly Total	0	0	3	0	2	0	0	0	5	5.00
Hourly Average	0.00	0.00	0.75	0.00	0.50	0.00	0.00	0.00	1.25	1.25
1500 - 1515	0	0	1	0	0	0	0	0	1	1.00
1515 - 1530	0	0	0	0	0	0	0	0	0	0.00
1530 - 1545	0	0	2	0	0	0	0	0	2	2.00
1545 - 1600	0	0	0	0	1	0	0	0	1	1.00
Hourly Total	0	0	3	0	1	0	0	0	4	4.00
Hourly Average	0.00	0.00	0.75	0.00	0.25	0.00	0.00	0.00	1.00	1.00
1600 - 1615	0	0	1	0	0	0	0	0	1	1.00
1615 - 1630	0	0	0	0	0	0	0	0	0	0.00
1630 - 1645	0	0	0	0	0	0	0	0	0	0.00
1645 - 1700	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	1	0	0	0	0	0	1	1.00
Hourly Average	0.00	0.00	0.25	0.00	0.00	0.00	0.00	0.00	0.25	0.25
1700 - 1715	0	0	0	0	0	0	0	0	0	0.00
1715 - 1730	0	0	1	0	0	0	0	0	1	1.00
1730 - 1745	0	0	0	0	0	0	0	0	0	0.00
1745 - 1800	0	0	1	0	0	0	0	0	1	1.00
Hourly Total	0	0	2	0	0	0	0	0	2	2.00
Hourly Average	0.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	0.50	0.50
1800 - 1815	0	0	0	0	0	0	0	0	0	0.00
1815 - 1830	0	0	0	0	0	0	0	0	0	0.00
1830 - 1845	0	0	1	0	0	0	0	0	1	1.00
1845 - 1900	0	0	1	0	0	0	0	0	1	1.00
Hourly Total	0	0	2	0	0	0	0	0	2	2.00
Hourly Average	0.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	0.50	0.50
Session Total	0	0	33	0	9	0	0	0	42	42.00
Session Average	0.00	0.00	0.69	0.00	0.19	0.00	0.00	0.00	0.88	0.88

Wrexham

Classified Junction Count

Site 8 of 11
Borras Hall Lane
A534 Wrexham Road
Industrial Estate Road
Sandy Lane
A534

Lat/Long
lat 53.060252° lon -2.937804°

Date
Wednesday 22 April 2026

Weather
Cloudy
Temp: 17°C

0700 - 1900 (Weekday 12H Session)

	Movement 8.5: U-Turn from Borras Hall Lane to Borras Hall Lane								Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0700 - 0715	0	0	0	0	0	0	0	0	0	0.00
0715 - 0730	0	0	0	0	0	0	0	0	0	0.00
0730 - 0745	0	0	0	0	0	0	0	0	0	0.00
0745 - 0800	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	0	0	0	0	0	0	0	0.00
Hourly Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0800 - 0815	0	0	0	0	0	0	0	0	0	0.00
0815 - 0830	0	0	0	0	0	0	0	0	0	0.00
0830 - 0845	0	0	0	0	0	0	0	0	0	0.00
0845 - 0900	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	0	0	0	0	0	0	0	0.00
Hourly Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0900 - 0915	0	0	0	0	0	0	0	0	0	0.00
0915 - 0930	0	0	0	0	0	0	0	0	0	0.00
0930 - 0945	0	0	0	0	0	0	0	0	0	0.00
0945 - 1000	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	0	0	0	0	0	0	0	0.00
Hourly Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1000 - 1015	0	0	0	0	0	0	0	0	0	0.00
1015 - 1030	0	0	0	0	0	0	0	0	0	0.00
1030 - 1045	0	0	0	0	0	0	0	0	0	0.00
1045 - 1100	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	0	0	0	0	0	0	0	0.00
Hourly Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1100 - 1115	0	0	0	0	0	0	0	0	0	0.00
1115 - 1130	0	0	0	0	0	0	0	0	0	0.00
1130 - 1145	0	0	0	0	0	0	0	0	0	0.00
1145 - 1200	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	0	0	0	0	0	0	0	0.00
Hourly Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1200 - 1215	0	0	0	0	0	0	0	0	0	0.00
1215 - 1230	0	0	0	0	0	0	0	0	0	0.00
1230 - 1245	0	0	0	0	0	0	0	0	0	0.00
1245 - 1300	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	0	0	0	0	0	0	0	0.00
Hourly Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1300 - 1315	0	0	0	0	0	0	0	0	0	0.00
1315 - 1330	0	0	0	0	0	0	0	0	0	0.00
1330 - 1345	0	0	0	0	0	0	0	0	0	0.00
1345 - 1400	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	0	0	0	0	0	0	0	0.00
Hourly Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1400 - 1415	0	0	0	0	0	0	0	0	0	0.00
1415 - 1430	0	0	0	0	0	0	0	0	0	0.00
1430 - 1445	0	0	0	0	0	0	0	0	0	0.00
1445 - 1500	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	0	0	0	0	0	0	0	0.00
Hourly Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1500 - 1515	0	0	0	0	0	0	0	0	0	0.00
1515 - 1530	0	0	0	0	0	0	0	0	0	0.00
1530 - 1545	0	0	0	0	0	0	0	0	0	0.00
1545 - 1600	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	0	0	0	0	0	0	0	0.00
Hourly Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1600 - 1615	0	0	0	0	0	0	0	0	0	0.00
1615 - 1630	0	0	0	0	0	0	0	0	0	0.00
1630 - 1645	0	0	0	0	0	0	0	0	0	0.00
1645 - 1700	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	0	0	0	0	0	0	0	0.00
Hourly Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1700 - 1715	0	0	0	0	0	0	0	0	0	0.00
1715 - 1730	0	0	0	0	0	0	0	0	0	0.00
1730 - 1745	0	0	0	0	0	0	0	0	0	0.00
1745 - 1800	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	0	0	0	0	0	0	0	0.00
Hourly Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1800 - 1815	0	0	0	0	0	0	0	0	0	0.00
1815 - 1830	0	0	0	0	0	0	0	0	0	0.00
1830 - 1845	0	0	0	0	0	0	0	0	0	0.00
1845 - 1900	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	0	0	0	0	0	0	0	0.00
Hourly Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Session Total	0	0	0	0	0	0	0	0	0	0.00
Session Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Wrexham
Classified Junction Count

Site 8 of 11
Borras Hall Lane
A534 Wrexham Road
Industrial Estate Road
Sandy Lane
A534

Lat/Long
lat 53.060252° lon -2.937804°

Date
Wednesday 22 April 2026

Weather
Cloudy
Temp: 17°C

0700 - 1900 (Weekday 12H Session)

TIME	Movement 8.6: Left from A534 Wrexham Road to Industrial Estate Road								Original Data	
	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0700 - 0715	0	0	14	0	1	0	1	0	16	17.30
0715 - 0730	0	0	8	1	3	2	1	0	15	17.30
0730 - 0745	0	0	10	1	2	0	1	0	14	15.30
0745 - 0800	0	0	3	0	3	0	3	0	9	12.90
Hourly Total	0	0	35	2	9	2	6	0	54	62.80
Hourly Average	0.00	0.00	8.75	0.50	2.25	0.50	1.50	0.00	13.50	15.70
0800 - 0815	0	0	16	0	7	3	4	0	30	36.70
0815 - 0830	0	0	9	1	3	0	2	0	15	17.60
0830 - 0845	0	1	16	0	4	0	1	0	22	22.70
0845 - 0900	0	0	20	0	3	0	1	0	24	25.30
Hourly Total	0	1	61	1	17	3	8	0	91	102.30
Hourly Average	0.00	0.25	15.25	0.25	4.25	0.75	2.00	0.00	22.75	25.58
0900 - 0915	0	0	13	0	6	2	3	0	24	28.90
0915 - 0930	0	0	9	0	6	4	4	0	23	30.20
0930 - 0945	0	0	4	0	1	1	5	0	11	18.00
0945 - 1000	0	0	10	0	2	3	2	0	17	21.10
Hourly Total	0	0	36	0	15	10	14	0	75	98.20
Hourly Average	0.00	0.00	9.00	0.00	3.75	2.50	3.50	0.00	18.75	24.55
1000 - 1015	0	0	2	0	0	1	1	0	4	5.80
1015 - 1030	0	0	7	0	3	2	3	0	15	19.90
1030 - 1045	0	0	4	0	3	0	2	0	9	11.60
1045 - 1100	0	0	5	0	1	0	3	0	9	12.90
Hourly Total	0	0	18	0	7	3	9	0	37	50.20
Hourly Average	0.00	0.00	4.50	0.00	1.75	0.75	2.25	0.00	9.25	12.55
1100 - 1115	0	0	7	0	2	0	0	0	9	9.00
1115 - 1130	0	0	2	0	3	0	3	0	8	11.90
1130 - 1145	0	0	4	0	3	0	0	0	7	7.00
1145 - 1200	0	0	5	0	2	1	0	0	8	8.50
Hourly Total	0	0	18	0	10	1	3	0	32	36.40
Hourly Average	0.00	0.00	4.50	0.00	2.50	0.25	0.75	0.00	8.00	9.10
1200 - 1215	0	0	3	0	3	0	2	0	8	10.60
1215 - 1230	0	0	3	0	2	1	6	0	12	20.30
1230 - 1245	0	0	7	0	0	0	3	0	10	13.90
1245 - 1300	0	0	9	0	1	0	1	0	11	12.30
Hourly Total	0	0	22	0	6	1	12	0	41	57.10
Hourly Average	0.00	0.00	5.50	0.00	1.50	0.25	3.00	0.00	10.25	14.28
1300 - 1315	0	0	5	0	2	0	0	0	7	7.00
1315 - 1330	0	1	3	0	1	0	1	0	6	6.70
1330 - 1345	0	0	6	0	2	0	2	0	10	12.60
1345 - 1400	0	0	9	0	2	3	2	0	16	20.10
Hourly Total	0	1	23	0	7	3	5	0	39	46.40
Hourly Average	0.00	0.25	5.75	0.00	1.75	0.75	1.25	0.00	9.75	11.60
1400 - 1415	0	0	2	0	3	1	0	0	6	6.50
1415 - 1430	0	0	7	0	2	1	1	0	11	12.80
1430 - 1445	0	1	2	0	1	1	4	0	9	14.10
1445 - 1500	0	0	2	0	2	0	3	0	7	10.90
Hourly Total	0	1	13	0	8	3	8	0	33	44.30
Hourly Average	0.00	0.25	3.25	0.00	2.00	0.75	2.00	0.00	8.25	11.08
1500 - 1515	0	0	8	0	2	0	1	0	11	12.30
1515 - 1530	0	0	4	0	3	2	0	0	9	10.00
1530 - 1545	0	2	3	0	2	0	3	0	10	12.70
1545 - 1600	0	0	6	1	1	0	0	0	8	8.00
Hourly Total	0	2	21	1	8	2	4	0	38	43.00
Hourly Average	0.00	0.50	5.25	0.25	2.00	0.50	1.00	0.00	9.50	10.75
1600 - 1615	0	0	5	0	2	2	1	0	10	12.30
1615 - 1630	0	1	7	0	5	0	1	0	14	14.70
1630 - 1645	0	0	11	0	1	0	1	0	13	14.30
1645 - 1700	0	0	14	0	1	1	1	0	17	18.80
Hourly Total	0	1	37	0	9	3	4	0	54	60.10
Hourly Average	0.00	0.25	9.25	0.00	2.25	0.75	1.00	0.00	13.50	15.03
1700 - 1715	0	1	9	0	1	0	0	0	11	10.40
1715 - 1730	0	0	12	0	2	0	1	0	15	16.30
1730 - 1745	0	2	15	0	0	0	1	0	18	18.10
1745 - 1800	0	0	8	0	2	0	1	0	11	12.30
Hourly Total	0	3	44	0	5	0	3	0	55	57.10
Hourly Average	0.00	0.75	11.00	0.00	1.25	0.00	0.75	0.00	13.75	14.28
1800 - 1815	0	0	5	0	1	0	0	0	6	6.00
1815 - 1830	0	0	4	0	0	0	1	0	5	6.30
1830 - 1845	0	0	0	0	0	1	0	0	1	1.50
1845 - 1900	0	0	3	0	0	1	0	0	4	4.50
Hourly Total	0	0	12	0	1	2	1	0	16	18.30
Hourly Average	0.00	0.00	3.00	0.00	0.25	0.50	0.25	0.00	4.00	4.58
Session Total	0	9	340	4	102	33	77	0	565	676.20
Session Average	0.00	0.19	7.08	0.08	2.13	0.69	1.60	0.00	11.77	14.09

Wrexham
Classified Junction Count

Site 8 of 11
Borras Hall Lane
A534 Wrexham Road
Industrial Estate Road
Sandy Lane
A534

Lat/Long
lat 53.060252° lon -2.937804°

Date
Wednesday 22 April 2026

Weather
Cloudy
Temp: 17°C

0700 - 1900 (Weekday 12H Session)

TIME	Movement 8.7: Left from A534 Wrexham Road to Sandy Lane								Original Data	
	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0700 - 0715	0	0	0	0	0	0	0	0	0	0.00
0715 - 0730	0	0	0	0	0	0	0	0	0	0.00
0730 - 0745	0	0	0	0	0	0	1	0	1	2.30
0745 - 0800	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	0	0	0	0	1	0	1	2.30
Hourly Average	0.00	0.00	0.00	0.00	0.00	0.00	0.25	0.00	0.25	0.58
0800 - 0815	0	0	1	0	0	0	0	0	1	1.00
0815 - 0830	0	0	0	0	0	0	0	0	0	0.00
0830 - 0845	0	0	0	0	0	0	0	0	0	0.00
0845 - 0900	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	1	0	0	0	0	0	1	1.00
Hourly Average	0.00	0.00	0.25	0.00	0.00	0.00	0.00	0.00	0.25	0.25
0900 - 0915	0	0	0	0	0	0	0	0	0	0.00
0915 - 0930	0	0	0	0	0	0	0	0	0	0.00
0930 - 0945	0	0	0	0	1	0	2	0	3	5.60
0945 - 1000	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	0	0	1	0	2	0	3	5.60
Hourly Average	0.00	0.00	0.00	0.00	0.25	0.00	0.50	0.00	0.75	1.40
1000 - 1015	0	0	0	0	0	0	0	0	0	0.00
1015 - 1030	0	0	1	0	0	0	1	0	2	3.30
1030 - 1045	0	0	0	0	0	0	0	0	0	0.00
1045 - 1100	0	0	1	0	0	0	0	0	1	1.00
Hourly Total	0	0	2	0	0	0	1	0	3	4.30
Hourly Average	0.00	0.00	0.50	0.00	0.00	0.00	0.25	0.00	0.75	1.08
1100 - 1115	0	0	0	0	0	0	1	0	1	2.30
1115 - 1130	0	0	0	0	0	0	0	0	0	0.00
1130 - 1145	0	0	0	0	0	0	1	0	1	2.30
1145 - 1200	0	0	1	0	0	0	0	0	1	1.00
Hourly Total	0	0	1	0	0	0	2	0	3	5.60
Hourly Average	0.00	0.00	0.25	0.00	0.00	0.00	0.50	0.00	0.75	1.40
1200 - 1215	0	0	0	0	0	0	0	0	0	0.00
1215 - 1230	0	0	1	0	0	0	0	0	1	1.00
1230 - 1245	0	0	0	0	1	0	0	0	1	1.00
1245 - 1300	0	0	0	0	0	0	1	0	1	2.30
Hourly Total	0	0	1	0	1	0	1	0	3	4.30
Hourly Average	0.00	0.00	0.25	0.00	0.25	0.00	0.25	0.00	0.75	1.08
1300 - 1315	0	0	0	0	1	0	0	0	1	1.00
1315 - 1330	0	0	0	0	0	0	0	0	0	0.00
1330 - 1345	0	0	0	0	0	0	1	0	1	2.30
1345 - 1400	0	0	0	0	0	1	1	0	2	3.80
Hourly Total	0	0	0	0	1	1	2	0	4	7.10
Hourly Average	0.00	0.00	0.00	0.00	0.25	0.25	0.50	0.00	1.00	1.78
1400 - 1415	0	0	0	0	0	0	2	0	2	4.60
1415 - 1430	0	0	0	0	0	0	1	0	1	2.30
1430 - 1445	1	0	0	0	0	0	0	0	1	0.20
1445 - 1500	0	0	0	0	0	0	1	0	1	2.30
Hourly Total	1	0	0	0	0	0	4	0	5	9.40
Hourly Average	0.25	0.00	0.00	0.00	0.00	0.00	1.00	0.00	1.25	2.35
1500 - 1515	0	0	0	0	0	0	1	0	1	2.30
1515 - 1530	0	0	0	0	0	0	0	0	0	0.00
1530 - 1545	0	0	0	0	0	0	0	0	0	0.00
1545 - 1600	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	0	0	0	0	1	0	1	2.30
Hourly Average	0.00	0.00	0.00	0.00	0.00	0.00	0.25	0.00	0.25	0.58
1600 - 1615	0	0	0	0	0	0	0	0	0	0.00
1615 - 1630	0	0	0	0	0	0	0	0	0	0.00
1630 - 1645	0	0	0	0	0	0	0	0	0	0.00
1645 - 1700	1	0	0	0	0	0	0	0	1	0.20
Hourly Total	1	0	0	0	0	0	0	0	1	0.20
Hourly Average	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.25	0.05
1700 - 1715	2	0	1	0	0	0	0	0	3	1.40
1715 - 1730	1	0	0	0	0	0	0	0	1	0.20
1730 - 1745	0	0	0	0	0	0	0	0	0	0.00
1745 - 1800	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	3	0	1	0	0	0	0	0	4	1.60
Hourly Average	0.75	0.00	0.25	0.00	0.00	0.00	0.00	0.00	1.00	0.40
1800 - 1815	0	0	0	0	0	0	0	0	0	0.00
1815 - 1830	0	0	0	0	1	0	0	0	1	1.00
1830 - 1845	0	0	0	0	0	0	0	0	0	0.00
1845 - 1900	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	0	0	1	0	0	0	1	1.00
Hourly Average	0.00	0.00	0.00	0.00	0.25	0.00	0.00	0.00	0.25	0.25
Session Total	5	0	6	0	4	1	14	0	30	44.70
Session Average	0.10	0.00	0.13	0.00	0.08	0.02	0.29	0.00	0.63	0.93

Wrexham
Classified Junction Count

Site 8 of 11
Borras Hall Lane
A534 Wrexham Road
Industrial Estate Road
Sandy Lane
A534

Lat/Long
lat 53.060252° lon -2.937804°

Date
Wednesday 22 April 2026

Weather
Cloudy
Temp: 17°C

0700 - 1900 (Weekday 12H Session)

TIME	Movement 8.8: Westbound from A534 Wrexham Road to A534								Original Data	
	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0700 - 0715	0	0	12	1	4	2	3	0	22	26.90
0715 - 0730	0	1	24	2	7	0	1	2	37	39.70
0730 - 0745	0	1	37	0	6	1	2	1	48	51.50
0745 - 0800	0	0	25	4	13	2	1	0	45	47.30
Hourly Total	0	2	98	7	30	5	7	3	152	165.40
Hourly Average	0.00	0.50	24.50	1.75	7.50	1.25	1.75	0.75	38.00	41.35
0800 - 0815	0	0	65	2	17	0	2	0	86	88.60
0815 - 0830	0	0	41	2	13	1	3	0	60	64.40
0830 - 0845	0	0	72	1	7	0	4	0	84	89.20
0845 - 0900	0	0	63	1	9	2	1	2	78	82.30
Hourly Total	0	0	241	6	46	3	10	2	308	324.50
Hourly Average	0.00	0.00	60.25	1.50	11.50	0.75	2.50	0.50	77.00	81.13
0900 - 0915	0	0	69	2	9	1	0	0	81	81.50
0915 - 0930	0	0	42	2	10	1	2	0	57	60.10
0930 - 0945	0	0	35	2	3	5	1	0	46	49.80
0945 - 1000	0	3	49	1	16	4	2	0	75	77.80
Hourly Total	0	3	195	7	38	11	5	0	259	269.20
Hourly Average	0.00	0.75	48.75	1.75	9.50	2.75	1.25	0.00	64.75	67.30
1000 - 1015	0	0	32	1	8	0	1	0	42	43.30
1015 - 1030	0	0	59	1	8	0	0	1	69	70.00
1030 - 1045	0	4	39	1	5	0	4	0	53	55.80
1045 - 1100	0	1	46	0	16	2	1	1	67	69.70
Hourly Total	0	5	176	3	37	2	6	2	231	238.80
Hourly Average	0.00	1.25	44.00	0.75	9.25	0.50	1.50	0.50	57.75	59.70
1100 - 1115	0	3	55	0	10	2	2	0	72	73.80
1115 - 1130	0	0	31	2	10	2	1	0	46	48.30
1130 - 1145	0	1	46	0	3	1	0	0	51	50.90
1145 - 1200	0	1	43	0	4	1	2	1	52	55.50
Hourly Total	0	5	175	2	27	6	5	1	221	228.50
Hourly Average	0.00	1.25	43.75	0.50	6.75	1.50	1.25	0.25	55.25	57.13
1200 - 1215	0	1	50	1	6	0	2	0	60	62.00
1215 - 1230	0	1	44	0	12	0	1	1	59	60.70
1230 - 1245	0	0	42	0	11	2	3	0	58	62.90
1245 - 1300	0	1	45	1	11	0	2	0	60	62.00
Hourly Total	0	3	181	2	40	2	8	1	237	247.60
Hourly Average	0.00	0.75	45.25	0.50	10.00	0.50	2.00	0.25	59.25	61.90
1300 - 1315	0	2	38	0	10	2	1	0	53	54.10
1315 - 1330	0	2	47	2	13	0	5	1	70	76.30
1330 - 1345	0	3	62	0	6	0	0	0	71	69.20
1345 - 1400	0	2	46	0	8	2	2	0	60	62.40
Hourly Total	0	9	193	2	37	4	8	1	254	262.00
Hourly Average	0.00	2.25	48.25	0.50	9.25	1.00	2.00	0.25	63.50	65.50
1400 - 1415	0	1	50	2	8	3	0	0	64	64.90
1415 - 1430	0	0	49	1	6	1	6	0	63	71.30
1430 - 1445	0	0	48	1	5	1	2	0	57	60.10
1445 - 1500	0	0	43	1	12	2	1	1	60	63.30
Hourly Total	0	1	190	5	31	7	9	1	244	259.60
Hourly Average	0.00	0.25	47.50	1.25	7.75	1.75	2.25	0.25	61.00	64.90
1500 - 1515	0	1	37	2	7	1	0	0	48	47.90
1515 - 1530	0	0	35	1	9	2	1	0	48	50.30
1530 - 1545	0	0	73	1	9	1	4	0	88	93.70
1545 - 1600	0	0	45	1	13	0	0	2	61	63.00
Hourly Total	0	1	190	5	38	4	5	2	245	254.90
Hourly Average	0.00	0.25	47.50	1.25	9.50	1.00	1.25	0.50	61.25	63.73
1600 - 1615	0	1	43	0	14	1	1	0	60	61.20
1615 - 1630	0	1	47	0	19	0	1	1	69	70.70
1630 - 1645	0	0	56	1	13	0	3	0	73	76.90
1645 - 1700	0	0	49	1	10	1	2	0	63	66.10
Hourly Total	0	2	195	2	56	2	7	1	265	274.90
Hourly Average	0.00	0.50	48.75	0.50	14.00	0.50	1.75	0.25	66.25	68.73
1700 - 1715	0	2	54	0	13	0	2	0	71	72.40
1715 - 1730	0	2	55	0	9	0	1	0	67	67.10
1730 - 1745	0	0	85	0	7	0	3	0	95	98.90
1745 - 1800	0	4	59	0	9	0	1	2	75	75.90
Hourly Total	0	8	253	0	38	0	7	2	308	314.30
Hourly Average	0.00	2.00	63.25	0.00	9.50	0.00	1.75	0.50	77.00	78.58
1800 - 1815	0	3	40	0	3	0	1	0	47	46.50
1815 - 1830	0	1	56	0	8	0	1	0	66	66.70
1830 - 1845	0	2	42	0	12	0	0	0	56	54.80
1845 - 1900	0	2	50	0	7	0	0	0	59	57.80
Hourly Total	0	8	188	0	30	0	2	0	228	225.80
Hourly Average	0.00	2.00	47.00	0.00	7.50	0.00	0.50	0.00	57.00	56.45
Session Total	0	47	2275	41	448	46	79	16	2952	3065.50
Session Average	0.00	0.98	47.40	0.85	9.33	0.96	1.65	0.33	61.50	63.86

Wrexham
Classified Junction Count

Site 8 of 11
Borras Hall Lane
A534 Wrexham Road
Industrial Estate Road
Sandy Lane
A534

Lat/Long
lat 53.060252° lon -2.937804°

Date
Wednesday 22 April 2026

Weather
Cloudy
Temp: 17°C

0700 - 1900 (Weekday 12H Session)

TIME	Movement 8.9: Right from A534 Wrexham Road to Borras Hall Lane								Original Data	
	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0700 - 0715	0	0	0	0	0	0	0	0	0	0.00
0715 - 0730	0	0	0	0	0	0	0	0	0	0.00
0730 - 0745	0	0	0	0	0	0	0	0	0	0.00
0745 - 0800	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	0	0	0	0	0	0	0	0.00
Hourly Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0800 - 0815	0	0	0	0	0	0	0	0	0	0.00
0815 - 0830	0	0	1	0	0	0	0	0	1	1.00
0830 - 0845	0	0	0	0	0	0	0	0	0	0.00
0845 - 0900	0	0	2	0	0	0	0	0	2	2.00
Hourly Total	0	0	3	0	0	0	0	0	3	3.00
Hourly Average	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.75	0.75
0900 - 0915	0	0	1	0	0	0	0	0	1	1.00
0915 - 0930	0	0	0	0	0	0	0	0	0	0.00
0930 - 0945	0	0	0	0	0	0	0	0	0	0.00
0945 - 1000	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	1	0	0	0	0	0	1	1.00
Hourly Average	0.00	0.00	0.25	0.00	0.00	0.00	0.00	0.00	0.25	0.25
1000 - 1015	0	0	1	0	0	0	0	0	1	1.00
1015 - 1030	0	0	0	0	0	0	0	0	0	0.00
1030 - 1045	0	0	2	0	0	1	0	0	3	3.50
1045 - 1100	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	3	0	0	1	0	0	4	4.50
Hourly Average	0.00	0.00	0.75	0.00	0.00	0.25	0.00	0.00	1.00	1.13
1100 - 1115	0	0	0	0	0	0	1	0	1	2.30
1115 - 1130	0	0	1	0	0	0	0	0	1	1.00
1130 - 1145	0	0	0	0	0	0	0	0	0	0.00
1145 - 1200	0	0	0	0	0	0	1	0	1	2.30
Hourly Total	0	0	1	0	0	0	2	0	3	5.60
Hourly Average	0.00	0.00	0.25	0.00	0.00	0.00	0.50	0.00	0.75	1.40
1200 - 1215	0	0	0	0	0	0	0	0	0	0.00
1215 - 1230	0	0	1	0	1	0	0	0	2	2.00
1230 - 1245	0	0	0	0	0	0	0	0	0	0.00
1245 - 1300	0	0	0	0	1	0	0	0	1	1.00
Hourly Total	0	0	1	0	2	0	0	0	3	3.00
Hourly Average	0.00	0.00	0.25	0.00	0.50	0.00	0.00	0.00	0.75	0.75
1300 - 1315	0	0	2	0	0	0	0	0	2	2.00
1315 - 1330	0	0	1	0	0	0	0	0	1	1.00
1330 - 1345	0	0	1	0	0	0	0	0	1	1.00
1345 - 1400	0	0	2	0	0	0	0	0	2	2.00
Hourly Total	0	0	6	0	0	0	0	0	6	6.00
Hourly Average	0.00	0.00	1.50	0.00	0.00	0.00	0.00	0.00	1.50	1.50
1400 - 1415	0	0	1	0	0	0	0	0	1	1.00
1415 - 1430	0	0	0	0	0	0	0	0	0	0.00
1430 - 1445	0	0	0	0	0	0	0	0	0	0.00
1445 - 1500	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	1	0	0	0	0	0	1	1.00
Hourly Average	0.00	0.00	0.25	0.00	0.00	0.00	0.00	0.00	0.25	0.25
1500 - 1515	0	0	3	0	0	0	0	0	3	3.00
1515 - 1530	0	0	4	0	0	0	0	0	4	4.00
1530 - 1545	0	0	1	0	0	0	0	0	1	1.00
1545 - 1600	0	0	0	0	1	0	0	0	1	1.00
Hourly Total	0	0	8	0	1	0	0	0	9	9.00
Hourly Average	0.00	0.00	2.00	0.00	0.25	0.00	0.00	0.00	2.25	2.25
1600 - 1615	0	0	7	0	1	0	0	0	8	8.00
1615 - 1630	0	0	3	0	3	0	0	0	6	6.00
1630 - 1645	0	0	2	0	0	0	0	0	2	2.00
1645 - 1700	0	0	5	0	2	0	0	0	7	7.00
Hourly Total	0	0	17	0	6	0	0	0	23	23.00
Hourly Average	0.00	0.00	4.25	0.00	1.50	0.00	0.00	0.00	5.75	5.75
1700 - 1715	0	0	9	0	0	0	0	0	9	9.00
1715 - 1730	0	0	6	0	3	0	0	0	9	9.00
1730 - 1745	0	0	4	0	0	0	0	0	4	4.00
1745 - 1800	0	1	1	0	1	0	0	0	3	2.40
Hourly Total	0	1	20	0	4	0	0	0	25	24.40
Hourly Average	0.00	0.25	5.00	0.00	1.00	0.00	0.00	0.00	6.25	6.10
1800 - 1815	0	0	2	0	0	0	0	0	2	2.00
1815 - 1830	0	0	2	0	1	0	0	0	3	3.00
1830 - 1845	0	0	0	0	0	0	0	0	0	0.00
1845 - 1900	0	0	1	0	0	0	0	0	1	1.00
Hourly Total	0	0	5	0	1	0	0	0	6	6.00
Hourly Average	0.00	0.00	1.25	0.00	0.25	0.00	0.00	0.00	1.50	1.50
Session Total	0	1	66	0	14	1	2	0	84	86.50
Session Average	0.00	0.02	1.38	0.00	0.29	0.02	0.04	0.00	1.75	1.80

Wrexham
Classified Junction Count

Site 8 of 11
Borras Hall Lane
A534 Wrexham Road
Industrial Estate Road
Sandy Lane
A534

Lat/Long
lat 53.060252° lon -2.937804°

Date
Wednesday 22 April 2026

Weather
Cloudy
Temp: 17°C

0700 - 1900 (Weekday 12H Session)

TIME	Movement 8.10: U-Turn from A534 Wrexham Road to A534 Wrexham Road								Original Data	
	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0700 - 0715	0	0	1	0	0	0	0	0	1	1.00
0715 - 0730	0	0	0	0	0	0	0	0	0	0.00
0730 - 0745	0	0	0	0	0	0	0	0	0	0.00
0745 - 0800	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	1	0	0	0	0	0	1	1.00
Hourly Average	0.00	0.00	0.25	0.00	0.00	0.00	0.00	0.00	0.25	0.25
0800 - 0815	0	0	0	0	0	0	0	0	0	0.00
0815 - 0830	0	0	0	0	0	0	0	0	0	0.00
0830 - 0845	0	0	0	0	0	0	0	0	0	0.00
0845 - 0900	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	0	0	0	0	0	0	0	0.00
Hourly Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0900 - 0915	0	0	0	0	0	0	0	0	0	0.00
0915 - 0930	0	0	0	0	0	0	0	0	0	0.00
0930 - 0945	0	0	0	0	0	0	0	0	0	0.00
0945 - 1000	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	0	0	0	0	0	0	0	0.00
Hourly Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1000 - 1015	0	0	1	0	0	0	0	0	1	1.00
1015 - 1030	0	0	0	0	0	0	0	0	0	0.00
1030 - 1045	0	0	0	0	0	0	0	0	0	0.00
1045 - 1100	0	0	1	0	0	0	0	0	1	1.00
Hourly Total	0	0	2	0	0	0	0	0	2	2.00
Hourly Average	0.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	0.50	0.50
1100 - 1115	0	0	0	0	0	0	0	0	0	0.00
1115 - 1130	0	0	0	0	0	0	0	0	0	0.00
1130 - 1145	0	0	0	0	0	0	0	0	0	0.00
1145 - 1200	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	0	0	0	0	0	0	0	0.00
Hourly Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1200 - 1215	0	0	0	0	0	0	0	0	0	0.00
1215 - 1230	0	0	0	0	0	0	0	0	0	0.00
1230 - 1245	0	0	0	0	2	0	0	0	2	2.00
1245 - 1300	0	0	0	1	0	0	0	0	1	1.00
Hourly Total	0	0	0	1	2	0	0	0	3	3.00
Hourly Average	0.00	0.00	0.00	0.25	0.50	0.00	0.00	0.00	0.75	0.75
1300 - 1315	0	0	0	0	0	0	0	0	0	0.00
1315 - 1330	0	0	0	0	0	0	0	0	0	0.00
1330 - 1345	0	0	0	0	0	0	0	0	0	0.00
1345 - 1400	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	0	0	0	0	0	0	0	0.00
Hourly Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1400 - 1415	0	0	0	0	0	0	0	0	0	0.00
1415 - 1430	0	0	1	0	0	0	0	0	1	1.00
1430 - 1445	0	0	0	0	0	0	0	0	0	0.00
1445 - 1500	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	1	0	0	0	0	0	1	1.00
Hourly Average	0.00	0.00	0.25	0.00	0.00	0.00	0.00	0.00	0.25	0.25
1500 - 1515	0	0	0	0	0	0	0	0	0	0.00
1515 - 1530	0	0	0	0	1	0	0	0	1	1.00
1530 - 1545	0	0	0	0	0	0	0	0	0	0.00
1545 - 1600	0	0	1	0	0	0	0	0	1	1.00
Hourly Total	0	0	1	0	1	0	0	0	2	2.00
Hourly Average	0.00	0.00	0.25	0.00	0.25	0.00	0.00	0.00	0.50	0.50
1600 - 1615	0	0	0	0	0	0	0	0	0	0.00
1615 - 1630	0	0	0	0	0	0	0	0	0	0.00
1630 - 1645	0	0	0	0	0	0	0	0	0	0.00
1645 - 1700	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	0	0	0	0	0	0	0	0.00
Hourly Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1700 - 1715	0	0	0	0	0	0	0	0	0	0.00
1715 - 1730	0	0	0	0	0	0	0	0	0	0.00
1730 - 1745	0	0	0	0	0	0	0	0	0	0.00
1745 - 1800	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	0	0	0	0	0	0	0	0.00
Hourly Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1800 - 1815	0	0	1	0	0	0	0	0	1	1.00
1815 - 1830	0	0	0	0	0	0	0	0	0	0.00
1830 - 1845	0	0	0	0	0	0	0	0	0	0.00
1845 - 1900	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	1	0	0	0	0	0	1	1.00
Hourly Average	0.00	0.00	0.25	0.00	0.00	0.00	0.00	0.00	0.25	0.25
Session Total	0	0	6	1	3	0	0	0	10	10.00
Session Average	0.00	0.00	0.13	0.02	0.06	0.00	0.00	0.00	0.21	0.21

Wrexham
Classified Junction Count

Site 8 of 11
Borras Hall Lane
A534 Wrexham Road
Industrial Estate Road
Sandy Lane
A534

Lat/Long
lat 53.060252° lon -2.937804°

Date
Wednesday 22 April 2026

Weather
Cloudy
Temp: 17°C

0700 - 1900 (Weekday 12H Session)

TIME	Movement 8.11: Left from Industrial Estate Road to Sandy Lane								Original Data	
	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0700 - 0715	0	0	0	0	0	2	0	0	2	3.00
0715 - 0730	0	0	0	0	0	0	0	0	0	0.00
0730 - 0745	0	0	0	0	0	0	0	0	0	0.00
0745 - 0800	0	0	2	0	0	1	0	0	3	3.50
Hourly Total	0	0	2	0	0	3	0	0	5	6.50
Hourly Average	0.00	0.00	0.50	0.00	0.00	0.75	0.00	0.00	1.25	1.63
0800 - 0815	0	0	0	0	0	0	0	0	0	0.00
0815 - 0830	0	0	0	0	0	0	0	0	0	0.00
0830 - 0845	0	0	0	0	0	1	0	0	1	1.50
0845 - 0900	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	0	0	0	1	0	0	1	1.50
Hourly Average	0.00	0.00	0.00	0.00	0.00	0.25	0.00	0.00	0.25	0.38
0900 - 0915	0	0	0	0	0	0	0	0	0	0.00
0915 - 0930	0	0	0	0	0	0	0	0	0	0.00
0930 - 0945	0	0	0	0	0	0	0	0	0	0.00
0945 - 1000	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	0	0	0	0	0	0	0	0.00
Hourly Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1000 - 1015	0	0	0	0	0	0	0	0	0	0.00
1015 - 1030	0	0	1	0	0	0	0	0	1	1.00
1030 - 1045	0	0	0	0	0	0	2	0	2	4.60
1045 - 1100	0	0	0	0	1	0	0	0	1	1.00
Hourly Total	0	0	1	0	1	0	2	0	4	6.60
Hourly Average	0.00	0.00	0.25	0.00	0.25	0.00	0.50	0.00	1.00	1.65
1100 - 1115	0	0	2	0	0	0	0	0	2	2.00
1115 - 1130	0	0	0	0	0	0	0	0	0	0.00
1130 - 1145	0	0	0	0	1	0	1	0	2	3.30
1145 - 1200	0	0	1	0	0	0	0	0	1	1.00
Hourly Total	0	0	3	0	1	0	1	0	5	6.30
Hourly Average	0.00	0.00	0.75	0.00	0.25	0.00	0.25	0.00	1.25	1.58
1200 - 1215	0	0	0	0	0	0	1	0	1	2.30
1215 - 1230	0	0	0	0	0	0	0	0	0	0.00
1230 - 1245	0	0	0	0	1	0	0	0	1	1.00
1245 - 1300	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	0	0	1	0	1	0	2	3.30
Hourly Average	0.00	0.00	0.00	0.00	0.25	0.00	0.25	0.00	0.50	0.83
1300 - 1315	0	0	0	0	0	0	0	0	0	0.00
1315 - 1330	0	0	0	0	0	0	0	0	0	0.00
1330 - 1345	0	0	0	0	1	0	0	0	1	1.00
1345 - 1400	0	0	1	0	0	0	1	0	2	3.30
Hourly Total	0	0	1	0	1	0	1	0	3	4.30
Hourly Average	0.00	0.00	0.25	0.00	0.25	0.00	0.25	0.00	0.75	1.08
1400 - 1415	0	0	0	0	1	0	0	0	1	1.00
1415 - 1430	0	0	0	0	0	1	0	0	1	1.50
1430 - 1445	0	0	0	0	0	0	0	0	0	0.00
1445 - 1500	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	0	0	1	1	0	0	2	2.50
Hourly Average	0.00	0.00	0.00	0.00	0.25	0.25	0.00	0.00	0.50	0.63
1500 - 1515	0	0	0	0	0	1	0	0	1	1.50
1515 - 1530	0	0	0	0	0	0	0	0	0	0.00
1530 - 1545	0	0	0	0	0	0	1	0	1	2.30
1545 - 1600	0	0	0	0	0	0	1	0	1	2.30
Hourly Total	0	0	0	0	0	1	2	0	3	6.10
Hourly Average	0.00	0.00	0.00	0.00	0.00	0.25	0.50	0.00	0.75	1.53
1600 - 1615	0	0	0	0	0	0	0	0	0	0.00
1615 - 1630	0	0	0	0	0	0	0	0	0	0.00
1630 - 1645	0	0	0	0	0	0	0	0	0	0.00
1645 - 1700	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	0	0	0	0	0	0	0	0.00
Hourly Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1700 - 1715	0	0	3	0	0	0	0	0	3	3.00
1715 - 1730	1	0	0	0	0	0	0	0	1	0.20
1730 - 1745	0	0	0	0	0	0	0	0	0	0.00
1745 - 1800	0	0	0	0	1	0	0	0	1	1.00
Hourly Total	1	0	3	0	1	0	0	0	5	4.20
Hourly Average	0.25	0.00	0.75	0.00	0.25	0.00	0.00	0.00	1.25	1.05
1800 - 1815	0	0	0	0	0	0	0	0	0	0.00
1815 - 1830	0	0	0	0	0	0	0	0	0	0.00
1830 - 1845	0	0	0	0	0	0	0	0	0	0.00
1845 - 1900	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	0	0	0	0	0	0	0	0.00
Hourly Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Session Total	1	0	10	0	6	6	7	0	30	41.30
Session Average	0.02	0.00	0.21	0.00	0.13	0.13	0.15	0.00	0.63	0.86

Wrexham
Classified Junction Count

Site 8 of 11
Borras Hall Lane
A534 Wrexham Road
Industrial Estate Road
Sandy Lane
A534

Lat/Long
lat 53.060252° lon -2.937804°

Date
Wednesday 22 April 2026

Weather
Cloudy
Temp: 17°C

0700 - 1900 (Weekday 12H Session)

TIME	Movement 8.12: Left from Industrial Estate Road to A534								Original Data	
	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0700 - 0715	0	0	65	0	6	8	7	0	86	99.10
0715 - 0730	0	0	32	0	20	25	9	0	86	110.20
0730 - 0745	0	0	29	0	15	16	9	0	69	88.70
0745 - 0800	0	2	44	1	12	5	8	0	72	83.70
Hourly Total	0	2	170	1	53	54	33	0	313	381.70
Hourly Average	0.00	0.50	42.50	0.25	13.25	13.50	8.25	0.00	78.25	95.43
0800 - 0815	0	0	38	1	11	3	5	0	58	66.00
0815 - 0830	0	0	37	2	14	5	5	0	63	72.00
0830 - 0845	0	0	43	0	19	10	15	0	87	111.50
0845 - 0900	0	0	27	1	24	7	18	0	77	103.90
Hourly Total	0	0	145	4	68	25	43	0	285	353.40
Hourly Average	0.00	0.00	36.25	1.00	17.00	6.25	10.75	0.00	71.25	88.35
0900 - 0915	0	1	50	0	27	6	10	0	94	109.40
0915 - 0930	0	1	24	0	29	4	17	0	75	98.50
0930 - 0945	0	0	47	1	24	5	8	0	85	97.90
0945 - 1000	0	0	45	0	16	4	10	0	75	90.00
Hourly Total	0	2	166	1	96	19	45	0	329	395.80
Hourly Average	0.00	0.50	41.50	0.25	24.00	4.75	11.25	0.00	82.25	98.95
1000 - 1015	0	0	39	1	16	8	12	0	76	95.60
1015 - 1030	0	0	42	1	24	7	15	0	89	112.00
1030 - 1045	0	0	51	1	23	8	14	0	97	119.20
1045 - 1100	0	0	50	2	25	6	10	1	94	111.00
Hourly Total	0	0	182	5	88	29	51	1	356	437.80
Hourly Average	0.00	0.00	45.50	1.25	22.00	7.25	12.75	0.25	89.00	109.45
1100 - 1115	0	2	46	0	22	13	17	1	101	129.40
1115 - 1130	0	0	60	2	31	6	17	0	116	141.10
1130 - 1145	0	0	63	2	22	7	18	0	112	138.90
1145 - 1200	0	0	71	0	31	9	12	0	123	143.10
Hourly Total	0	2	240	4	106	35	64	1	452	552.50
Hourly Average	0.00	0.50	60.00	1.00	26.50	8.75	16.00	0.25	113.00	138.13
1200 - 1215	0	1	79	1	20	3	12	0	116	132.50
1215 - 1230	0	0	75	2	20	9	16	0	122	147.30
1230 - 1245	0	1	75	0	21	3	15	0	115	135.40
1245 - 1300	0	0	73	2	23	5	14	0	117	137.70
Hourly Total	0	2	302	5	84	20	57	0	470	552.90
Hourly Average	0.00	0.50	75.50	1.25	21.00	5.00	14.25	0.00	117.50	138.23
1300 - 1315	0	1	80	0	19	2	16	2	120	143.20
1315 - 1330	0	0	58	0	20	6	9	0	93	107.70
1330 - 1345	0	0	62	0	31	8	8	0	109	123.40
1345 - 1400	0	0	86	0	19	8	10	0	123	140.00
Hourly Total	0	1	286	0	89	24	43	2	445	514.30
Hourly Average	0.00	0.25	71.50	0.00	22.25	6.00	10.75	0.50	111.25	128.58
1400 - 1415	0	3	153	3	26	6	16	0	207	229.00
1415 - 1430	0	2	86	0	29	6	11	1	135	152.10
1430 - 1445	0	1	105	0	17	5	19	0	147	173.60
1445 - 1500	0	0	86	0	18	5	10	0	119	134.50
Hourly Total	0	6	430	3	90	22	56	1	608	689.20
Hourly Average	0.00	1.50	107.50	0.75	22.50	5.50	14.00	0.25	152.00	172.30
1500 - 1515	0	3	179	1	30	7	12	0	232	249.30
1515 - 1530	0	3	110	0	37	3	15	0	168	187.20
1530 - 1545	0	3	151	0	36	4	10	0	204	217.20
1545 - 1600	0	1	118	0	32	2	8	0	161	171.80
Hourly Total	0	10	558	1	135	16	45	0	765	825.50
Hourly Average	0.00	2.50	139.50	0.25	33.75	4.00	11.25	0.00	191.25	206.38
1600 - 1615	1	2	197	2	22	2	6	0	232	238.80
1615 - 1630	1	2	121	0	35	1	8	0	168	176.90
1630 - 1645	0	1	192	1	31	0	5	0	230	235.90
1645 - 1700	0	1	126	1	19	1	6	0	154	161.70
Hourly Total	2	6	636	4	107	4	25	0	784	813.30
Hourly Average	0.50	1.50	159.00	1.00	26.75	1.00	6.25	0.00	196.00	203.33
1700 - 1715	0	6	203	1	19	1	5	0	235	238.40
1715 - 1730	0	0	127	1	12	1	4	0	145	150.70
1730 - 1745	0	5	152	1	13	2	2	0	175	175.60
1745 - 1800	0	2	136	1	7	0	3	0	149	151.70
Hourly Total	0	13	618	4	51	4	14	0	704	716.40
Hourly Average	0.00	3.25	154.50	1.00	12.75	1.00	3.50	0.00	176.00	179.10
1800 - 1815	1	2	198	0	16	1	3	0	221	223.40
1815 - 1830	0	1	72	0	1	3	3	0	80	84.80
1830 - 1845	0	0	94	0	10	1	2	0	107	110.10
1845 - 1900	0	5	96	0	7	1	4	0	113	115.70
Hourly Total	1	8	460	0	34	6	12	0	521	534.00
Hourly Average	0.25	2.00	115.00	0.00	8.50	1.50	3.00	0.00	130.25	133.50
Session Total	3	52	4193	32	1001	258	488	5	6032	6766.80
Session Average	0.06	1.08	87.35	0.67	20.85	5.38	10.17	0.10	125.67	140.98

Wrexham
Classified Junction Count

Site 8 of 11
Borras Hall Lane
A534 Wrexham Road
Industrial Estate Road
Sandy Lane
A534

Lat/Long
lat 53.060252° lon -2.937804°

Date
Wednesday 22 April 2026

Weather
Cloudy
Temp: 17°C

0700 - 1900 (Weekday 12H Session)

TIME	Movement 8.13: Right from Industrial Estate Road to Borras Hall Lane								Original Data	
	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0700 - 0715	0	0	3	0	0	0	0	0	3	3.00
0715 - 0730	0	0	0	0	0	3	0	0	3	4.50
0730 - 0745	0	0	0	0	0	1	0	0	1	1.50
0745 - 0800	0	0	1	0	1	0	0	0	2	2.00
Hourly Total	0	0	4	0	1	4	0	0	9	11.00
Hourly Average	0.00	0.00	1.00	0.00	0.25	1.00	0.00	0.00	2.25	2.75
0800 - 0815	0	0	2	1	1	0	0	0	4	4.00
0815 - 0830	0	0	2	0	3	0	0	0	5	5.00
0830 - 0845	0	0	4	0	1	0	0	0	5	5.00
0845 - 0900	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	8	1	5	0	0	0	14	14.00
Hourly Average	0.00	0.00	2.00	0.25	1.25	0.00	0.00	0.00	3.50	3.50
0900 - 0915	0	0	2	0	1	0	0	0	3	3.00
0915 - 0930	0	0	0	0	1	0	1	0	2	3.30
0930 - 0945	0	0	2	0	0	1	0	0	3	3.50
0945 - 1000	0	0	0	0	3	0	0	0	3	3.00
Hourly Total	0	0	4	0	5	1	1	0	11	12.80
Hourly Average	0.00	0.00	1.00	0.00	1.25	0.25	0.25	0.00	2.75	3.20
1000 - 1015	0	0	0	0	0	0	0	0	0	0.00
1015 - 1030	0	0	2	0	0	0	0	0	2	2.00
1030 - 1045	0	0	3	0	2	1	0	0	6	6.50
1045 - 1100	0	0	1	0	0	0	1	0	2	3.30
Hourly Total	0	0	6	0	2	1	1	0	10	11.80
Hourly Average	0.00	0.00	1.50	0.00	0.50	0.25	0.25	0.00	2.50	2.95
1100 - 1115	0	0	1	0	0	2	1	0	4	6.30
1115 - 1130	0	0	5	0	0	0	0	0	5	5.00
1130 - 1145	0	0	1	0	0	1	1	0	3	4.80
1145 - 1200	0	0	3	0	3	0	1	0	7	8.30
Hourly Total	0	0	10	0	3	3	3	0	19	24.40
Hourly Average	0.00	0.00	2.50	0.00	0.75	0.75	0.75	0.00	4.75	6.10
1200 - 1215	0	1	3	0	1	1	1	0	7	8.20
1215 - 1230	0	0	3	0	2	0	0	0	5	5.00
1230 - 1245	0	0	3	0	0	0	1	0	4	5.30
1245 - 1300	0	0	4	0	4	0	0	0	8	8.00
Hourly Total	0	1	13	0	7	1	2	0	24	26.50
Hourly Average	0.00	0.25	3.25	0.00	1.75	0.25	0.50	0.00	6.00	6.63
1300 - 1315	0	0	6	0	3	1	1	0	11	12.80
1315 - 1330	0	0	3	0	2	0	0	0	5	5.00
1330 - 1345	0	0	3	0	2	0	0	0	5	5.00
1345 - 1400	0	0	3	0	0	0	0	0	3	3.00
Hourly Total	0	0	15	0	7	1	1	0	24	25.80
Hourly Average	0.00	0.00	3.75	0.00	1.75	0.25	0.25	0.00	6.00	6.45
1400 - 1415	0	0	4	0	0	0	1	0	5	6.30
1415 - 1430	0	0	5	0	4	0	0	0	9	9.00
1430 - 1445	0	0	3	0	2	0	1	0	6	7.30
1445 - 1500	0	0	4	0	0	0	0	0	4	4.00
Hourly Total	0	0	16	0	6	0	2	0	24	26.60
Hourly Average	0.00	0.00	4.00	0.00	1.50	0.00	0.50	0.00	6.00	6.65
1500 - 1515	0	0	4	0	4	0	0	0	8	8.00
1515 - 1530	1	0	10	1	5	0	2	0	19	20.80
1530 - 1545	0	0	27	0	7	0	1	0	35	36.30
1545 - 1600	0	0	36	0	10	1	0	0	47	47.50
Hourly Total	1	0	77	1	26	1	3	0	109	112.60
Hourly Average	0.25	0.00	19.25	0.25	6.50	0.25	0.75	0.00	27.25	28.15
1600 - 1615	0	1	59	0	13	0	0	0	73	72.40
1615 - 1630	0	0	40	0	8	0	1	0	49	50.30
1630 - 1645	0	0	83	0	9	2	1	0	95	97.30
1645 - 1700	0	0	47	0	8	0	0	0	55	55.00
Hourly Total	0	1	229	0	38	2	2	0	272	275.00
Hourly Average	0.00	0.25	57.25	0.00	9.50	0.50	0.50	0.00	68.00	68.75
1700 - 1715	0	0	105	1	8	0	1	0	115	116.30
1715 - 1730	0	0	59	0	3	0	1	0	63	64.30
1730 - 1745	0	0	37	0	3	0	0	0	40	40.00
1745 - 1800	0	0	19	1	2	0	1	0	23	24.30
Hourly Total	0	0	220	2	16	0	3	0	241	244.90
Hourly Average	0.00	0.00	55.00	0.50	4.00	0.00	0.75	0.00	60.25	61.23
1800 - 1815	0	0	34	0	3	0	0	0	37	37.00
1815 - 1830	0	0	10	0	4	0	0	0	14	14.00
1830 - 1845	0	0	3	0	1	1	0	0	5	5.50
1845 - 1900	0	0	4	0	0	0	0	0	4	4.00
Hourly Total	0	0	51	0	8	1	0	0	60	60.50
Hourly Average	0.00	0.00	12.75	0.00	2.00	0.25	0.00	0.00	15.00	15.13
Session Total	1	2	653	4	124	15	18	0	817	845.90
Session Average	0.02	0.04	13.60	0.08	2.58	0.31	0.38	0.00	17.02	17.62

Wrexham
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Site 8 of 11
Borras Hall Lane
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A534

Lat/Long
lat 53.060252° lon -2.937804°

Date
Wednesday 22 April 2026

Weather
Cloudy
Temp: 17°C

0700 - 1900 (Weekday 12H Session)

TIME	Movement 8.14: Right from Industrial Estate Road to A534 Wrexham Road								Original Data	
	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0700 - 0715	0	0	3	0	2	0	1	0	6	7.30
0715 - 0730	0	0	2	0	4	2	1	0	9	11.30
0730 - 0745	0	0	5	0	5	1	2	0	13	16.10
0745 - 0800	0	0	6	0	2	1	2	1	12	16.10
Hourly Total	0	0	16	0	13	4	6	1	40	50.80
Hourly Average	0.00	0.00	4.00	0.00	3.25	1.00	1.50	0.25	10.00	12.70
0800 - 0815	0	0	3	0	3	0	3	0	9	12.90
0815 - 0830	0	0	8	0	3	0	2	0	13	15.60
0830 - 0845	0	0	4	0	3	0	2	0	9	11.60
0845 - 0900	0	0	8	0	1	2	1	0	12	14.30
Hourly Total	0	0	23	0	10	2	8	0	43	54.40
Hourly Average	0.00	0.00	5.75	0.00	2.50	0.50	2.00	0.00	10.75	13.60
0900 - 0915	0	0	3	0	2	0	3	0	8	11.90
0915 - 0930	0	0	3	0	6	2	1	0	12	14.30
0930 - 0945	0	0	3	0	5	1	1	0	10	11.80
0945 - 1000	0	0	4	0	3	0	2	0	9	11.60
Hourly Total	0	0	13	0	16	3	7	0	39	49.60
Hourly Average	0.00	0.00	3.25	0.00	4.00	0.75	1.75	0.00	9.75	12.40
1000 - 1015	0	0	2	0	2	3	1	0	8	10.80
1015 - 1030	0	0	8	0	4	1	3	0	16	20.40
1030 - 1045	0	0	6	0	4	1	2	0	13	16.10
1045 - 1100	0	0	7	1	2	1	1	0	12	13.80
Hourly Total	0	0	23	1	12	6	7	0	49	61.10
Hourly Average	0.00	0.00	5.75	0.25	3.00	1.50	1.75	0.00	12.25	15.28
1100 - 1115	0	0	5	0	2	1	0	0	8	8.50
1115 - 1130	0	0	6	0	1	2	1	0	10	12.30
1130 - 1145	0	0	6	0	7	0	3	0	16	19.90
1145 - 1200	0	0	6	0	3	3	3	0	15	20.40
Hourly Total	0	0	23	0	13	6	7	0	49	61.10
Hourly Average	0.00	0.00	5.75	0.00	3.25	1.50	1.75	0.00	12.25	15.28
1200 - 1215	0	0	6	0	3	0	3	0	12	15.90
1215 - 1230	0	0	4	0	6	1	2	0	13	16.10
1230 - 1245	0	0	5	0	3	0	2	0	10	12.60
1245 - 1300	0	0	4	0	4	0	0	0	8	8.00
Hourly Total	0	0	19	0	16	1	7	0	43	52.60
Hourly Average	0.00	0.00	4.75	0.00	4.00	0.25	1.75	0.00	10.75	13.15
1300 - 1315	0	0	5	0	3	0	3	0	11	14.90
1315 - 1330	0	1	7	0	0	1	2	0	11	13.50
1330 - 1345	0	0	6	0	1	0	1	0	8	9.30
1345 - 1400	0	0	12	0	2	0	3	0	17	20.90
Hourly Total	0	1	30	0	6	1	9	0	47	58.60
Hourly Average	0.00	0.25	7.50	0.00	1.50	0.25	2.25	0.00	11.75	14.65
1400 - 1415	0	0	8	0	2	2	1	0	13	15.30
1415 - 1430	0	0	10	0	2	1	1	0	14	15.80
1430 - 1445	0	0	7	0	4	0	1	0	12	13.30
1445 - 1500	0	0	13	0	2	0	1	0	16	17.30
Hourly Total	0	0	38	0	10	3	4	0	55	61.70
Hourly Average	0.00	0.00	9.50	0.00	2.50	0.75	1.00	0.00	13.75	15.43
1500 - 1515	0	0	10	0	2	0	2	0	14	16.60
1515 - 1530	0	0	8	0	6	0	2	0	16	18.60
1530 - 1545	0	0	15	0	8	1	1	0	25	26.80
1545 - 1600	0	0	24	0	7	1	3	0	35	39.40
Hourly Total	0	0	57	0	23	2	8	0	90	101.40
Hourly Average	0.00	0.00	14.25	0.00	5.75	0.50	2.00	0.00	22.50	25.35
1600 - 1615	0	1	35	0	5	1	0	0	42	41.90
1615 - 1630	0	1	47	0	9	1	1	0	59	60.20
1630 - 1645	0	0	64	0	5	0	0	0	69	69.00
1645 - 1700	0	1	45	1	6	1	2	0	56	58.50
Hourly Total	0	3	191	1	25	3	3	0	226	229.60
Hourly Average	0.00	0.75	47.75	0.25	6.25	0.75	0.75	0.00	56.50	57.40
1700 - 1715	0	0	74	0	9	2	0	0	85	86.00
1715 - 1730	0	0	44	0	1	1	2	0	48	51.10
1730 - 1745	0	0	41	0	1	0	1	0	43	44.30
1745 - 1800	0	0	32	0	1	0	0	0	33	33.00
Hourly Total	0	0	191	0	12	3	3	0	209	214.40
Hourly Average	0.00	0.00	47.75	0.00	3.00	0.75	0.75	0.00	52.25	53.60
1800 - 1815	0	0	20	0	4	0	0	0	24	24.00
1815 - 1830	0	2	11	0	1	1	0	0	15	14.30
1830 - 1845	0	0	6	0	0	0	0	0	6	6.00
1845 - 1900	0	0	6	0	0	0	0	0	6	6.00
Hourly Total	0	2	43	0	5	1	0	0	51	50.30
Hourly Average	0.00	0.50	10.75	0.00	1.25	0.25	0.00	0.00	12.75	12.58
Session Total	0	6	667	2	161	35	69	1	941	1045.60
Session Average	0.00	0.13	13.90	0.04	3.35	0.73	1.44	0.02	19.60	21.78

Wrexham
Classified Junction Count

Site 8 of 11
Borras Hall Lane
A534 Wrexham Road
Industrial Estate Road
Sandy Lane
A534

Lat/Long
lat 53.060252° lon -2.937804°

Date
Wednesday 22 April 2026

Weather
Cloudy
Temp: 17°C

0700 - 1900 (Weekday 12H Session)

TIME	Movement 8.15: U-Turn from Industrial Estate Road to Industrial Estate Road								Original Data	
	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0700 - 0715	0	0	0	0	0	0	0	0	0	0.00
0715 - 0730	0	0	0	0	0	0	0	0	0	0.00
0730 - 0745	0	0	0	0	0	0	0	0	0	0.00
0745 - 0800	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	0	0	0	0	0	0	0	0.00
Hourly Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0800 - 0815	0	0	0	0	0	0	0	0	0	0.00
0815 - 0830	0	0	0	0	0	0	0	0	0	0.00
0830 - 0845	0	0	0	0	0	0	0	0	0	0.00
0845 - 0900	0	0	0	0	1	0	0	0	1	1.00
Hourly Total	0	0	0	0	1	0	0	0	1	1.00
Hourly Average	0.00	0.00	0.00	0.00	0.25	0.00	0.00	0.00	0.25	0.25
0900 - 0915	0	0	0	0	0	0	0	0	0	0.00
0915 - 0930	0	0	0	0	1	0	0	0	1	1.00
0930 - 0945	0	0	0	0	0	0	0	0	0	0.00
0945 - 1000	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	0	0	1	0	0	0	1	1.00
Hourly Average	0.00	0.00	0.00	0.00	0.25	0.00	0.00	0.00	0.25	0.25
1000 - 1015	0	0	0	0	0	0	0	0	0	0.00
1015 - 1030	0	0	0	0	0	0	0	0	0	0.00
1030 - 1045	0	0	2	0	0	0	0	0	2	2.00
1045 - 1100	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	2	0	0	0	0	0	2	2.00
Hourly Average	0.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	0.50	0.50
1100 - 1115	0	0	1	0	0	0	0	0	1	1.00
1115 - 1130	0	0	0	0	0	0	0	0	0	0.00
1130 - 1145	0	0	0	0	0	0	0	0	0	0.00
1145 - 1200	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	1	0	0	0	0	0	1	1.00
Hourly Average	0.00	0.00	0.25	0.00	0.00	0.00	0.00	0.00	0.25	0.25
1200 - 1215	0	0	1	0	0	0	0	0	1	1.00
1215 - 1230	0	0	1	0	0	0	0	0	1	1.00
1230 - 1245	0	0	1	0	1	0	0	0	2	2.00
1245 - 1300	0	0	1	0	2	0	0	0	3	3.00
Hourly Total	0	0	4	0	3	0	0	0	7	7.00
Hourly Average	0.00	0.00	1.00	0.00	0.75	0.00	0.00	0.00	1.75	1.75
1300 - 1315	0	0	0	0	0	0	0	0	0	0.00
1315 - 1330	0	0	0	0	0	0	0	0	0	0.00
1330 - 1345	0	0	1	0	0	0	0	0	1	1.00
1345 - 1400	0	0	1	0	0	0	0	0	1	1.00
Hourly Total	0	0	2	0	0	0	0	0	2	2.00
Hourly Average	0.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	0.50	0.50
1400 - 1415	0	1	1	0	0	0	0	0	2	1.40
1415 - 1430	0	0	2	0	0	0	0	0	2	2.00
1430 - 1445	0	0	0	0	1	0	0	0	1	1.00
1445 - 1500	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	1	3	0	1	0	0	0	5	4.40
Hourly Average	0.00	0.25	0.75	0.00	0.25	0.00	0.00	0.00	1.25	1.10
1500 - 1515	0	0	0	0	0	0	0	0	0	0.00
1515 - 1530	0	0	0	0	0	0	0	0	0	0.00
1530 - 1545	0	0	1	0	0	0	0	0	1	1.00
1545 - 1600	0	0	1	0	0	0	0	0	1	1.00
Hourly Total	0	0	2	0	0	0	0	0	2	2.00
Hourly Average	0.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	0.50	0.50
1600 - 1615	0	0	1	0	0	0	0	0	1	1.00
1615 - 1630	0	0	4	0	0	0	0	0	4	4.00
1630 - 1645	0	0	1	0	0	0	0	0	1	1.00
1645 - 1700	0	0	1	0	0	0	0	0	1	1.00
Hourly Total	0	0	7	0	0	0	0	0	7	7.00
Hourly Average	0.00	0.00	1.75	0.00	0.00	0.00	0.00	0.00	1.75	1.75
1700 - 1715	0	0	0	0	0	0	0	0	0	0.00
1715 - 1730	0	0	1	0	0	0	0	0	1	1.00
1730 - 1745	0	0	0	0	0	0	0	0	0	0.00
1745 - 1800	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	1	0	0	0	0	0	1	1.00
Hourly Average	0.00	0.00	0.25	0.00	0.00	0.00	0.00	0.00	0.25	0.25
1800 - 1815	0	0	0	0	1	0	0	0	1	1.00
1815 - 1830	0	0	0	0	0	0	0	0	0	0.00
1830 - 1845	0	0	0	0	1	0	0	0	1	1.00
1845 - 1900	0	0	1	0	0	0	0	0	1	1.00
Hourly Total	0	0	1	0	2	0	0	0	3	3.00
Hourly Average	0.00	0.00	0.25	0.00	0.50	0.00	0.00	0.00	0.75	0.75
Session Total	0	1	23	0	8	0	0	0	32	31.40
Session Average	0.00	0.02	0.48	0.00	0.17	0.00	0.00	0.00	0.67	0.65

Wrexham
Classified Junction Count

Site 8 of 11
Borras Hall Lane
A534 Wrexham Road
Industrial Estate Road
Sandy Lane
A534

Lat/Long
lat 53.060252° lon -2.937804°

Date
Wednesday 22 April 2026

Weather
Cloudy
Temp: 17°C

0700 - 1900 (Weekday 12H Session)

TIME	Movement 8.16: Left from Sandy Lane to A534								Original Data	
	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0700 - 0715	0	0	0	0	0	0	2	0	2	4.60
0715 - 0730	0	0	0	0	0	0	5	0	5	11.50
0730 - 0745	0	0	1	0	2	0	3	0	6	9.90
0745 - 0800	0	0	1	1	0	1	2	0	5	8.10
Hourly Total	0	0	2	1	2	1	12	0	18	34.10
Hourly Average	0.00	0.00	0.50	0.25	0.50	0.25	3.00	0.00	4.50	8.53
0800 - 0815	0	0	0	0	0	0	1	0	1	2.30
0815 - 0830	0	0	0	0	1	0	2	0	3	5.60
0830 - 0845	0	0	1	0	0	1	2	0	4	7.10
0845 - 0900	0	0	0	0	0	0	2	0	2	4.60
Hourly Total	0	0	1	0	1	1	7	0	10	19.60
Hourly Average	0.00	0.00	0.25	0.00	0.25	0.25	1.75	0.00	2.50	4.90
0900 - 0915	0	0	1	0	0	0	0	0	1	1.00
0915 - 0930	0	0	0	0	0	0	1	0	1	2.30
0930 - 0945	0	0	1	0	0	0	3	0	4	7.90
0945 - 1000	0	0	0	0	0	0	1	0	1	2.30
Hourly Total	0	0	2	0	0	0	5	0	7	13.50
Hourly Average	0.00	0.00	0.50	0.00	0.00	0.00	1.25	0.00	1.75	3.38
1000 - 1015	0	0	0	0	0	0	0	0	0	0.00
1015 - 1030	0	0	1	0	0	0	1	0	2	3.30
1030 - 1045	0	0	0	0	0	0	0	0	0	0.00
1045 - 1100	0	0	0	0	1	0	0	0	1	1.00
Hourly Total	0	0	1	0	1	0	1	0	3	4.30
Hourly Average	0.00	0.00	0.25	0.00	0.25	0.00	0.25	0.00	0.75	1.08
1100 - 1115	0	0	0	0	1	0	6	0	7	14.80
1115 - 1130	0	0	0	0	0	0	1	0	1	2.30
1130 - 1145	0	0	2	0	0	0	3	0	5	8.90
1145 - 1200	0	0	1	0	1	0	3	0	5	8.90
Hourly Total	0	0	3	0	2	0	13	0	18	34.90
Hourly Average	0.00	0.00	0.75	0.00	0.50	0.00	3.25	0.00	4.50	8.73
1200 - 1215	0	0	1	0	1	0	0	0	2	2.00
1215 - 1230	0	0	2	0	0	0	3	0	5	8.90
1230 - 1245	0	0	1	0	0	0	1	0	2	3.30
1245 - 1300	0	0	1	0	2	0	2	0	5	7.60
Hourly Total	0	0	5	0	3	0	6	0	14	21.80
Hourly Average	0.00	0.00	1.25	0.00	0.75	0.00	1.50	0.00	3.50	5.45
1300 - 1315	0	0	1	0	1	0	1	0	3	4.30
1315 - 1330	0	0	2	0	0	0	1	0	3	4.30
1330 - 1345	0	0	0	0	0	0	1	0	1	2.30
1345 - 1400	0	0	1	0	2	0	6	0	9	16.80
Hourly Total	0	0	4	0	3	0	9	0	16	27.70
Hourly Average	0.00	0.00	1.00	0.00	0.75	0.00	2.25	0.00	4.00	6.93
1400 - 1415	0	0	1	0	2	0	0	0	3	3.00
1415 - 1430	0	0	3	0	0	0	1	0	4	5.30
1430 - 1445	0	0	3	0	1	0	3	0	7	10.90
1445 - 1500	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	7	0	3	0	4	0	14	19.20
Hourly Average	0.00	0.00	1.75	0.00	0.75	0.00	1.00	0.00	3.50	4.80
1500 - 1515	0	0	3	0	1	1	1	0	6	7.80
1515 - 1530	0	0	1	0	0	0	0	0	1	1.00
1530 - 1545	0	0	1	0	0	0	0	0	1	1.00
1545 - 1600	0	0	0	0	0	0	2	0	2	4.60
Hourly Total	0	0	5	0	1	1	3	0	10	14.40
Hourly Average	0.00	0.00	1.25	0.00	0.25	0.25	0.75	0.00	2.50	3.60
1600 - 1615	0	0	1	0	0	0	2	0	3	5.60
1615 - 1630	0	0	1	0	0	0	1	0	2	3.30
1630 - 1645	0	0	2	0	0	0	0	0	2	2.00
1645 - 1700	0	0	0	0	0	0	1	0	1	2.30
Hourly Total	0	0	4	0	0	0	4	0	8	13.20
Hourly Average	0.00	0.00	1.00	0.00	0.00	0.00	1.00	0.00	2.00	3.30
1700 - 1715	0	0	3	0	1	0	0	0	4	4.00
1715 - 1730	0	0	0	0	0	0	0	0	0	0.00
1730 - 1745	0	0	0	0	0	0	0	0	0	0.00
1745 - 1800	0	0	1	0	0	0	0	0	1	1.00
Hourly Total	0	0	4	0	1	0	0	0	5	5.00
Hourly Average	0.00	0.00	1.00	0.00	0.25	0.00	0.00	0.00	1.25	1.25
1800 - 1815	0	0	0	0	0	0	0	0	0	0.00
1815 - 1830	0	0	1	0	0	0	0	0	1	1.00
1830 - 1845	0	0	0	0	0	0	0	0	0	0.00
1845 - 1900	0	0	1	0	1	0	0	0	2	2.00
Hourly Total	0	0	2	0	1	0	0	0	3	3.00
Hourly Average	0.00	0.00	0.50	0.00	0.25	0.00	0.00	0.00	0.75	0.75
Session Total	0	0	40	1	18	3	64	0	126	210.70
Session Average	0.00	0.00	0.83	0.02	0.38	0.06	1.33	0.00	2.63	4.39

Wrexham
Classified Junction Count

Site 8 of 11
Borras Hall Lane
A534 Wrexham Road
Industrial Estate Road
Sandy Lane
A534

Lat/Long
lat 53.060252° lon -2.937804°

Date
Wednesday 22 April 2026

Weather
Cloudy
Temp: 17°C

0700 - 1900 (Weekday 12H Session)

TIME	Movement 8.17: Left from Sandy Lane to Borras Hall Lane								Original Data	
	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0700 - 0715	0	0	0	0	0	0	0	0	0	0.00
0715 - 0730	0	0	0	0	0	0	0	0	0	0.00
0730 - 0745	0	0	0	0	0	0	0	0	0	0.00
0745 - 0800	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	0	0	0	0	0	0	0	0.00
Hourly Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0800 - 0815	0	0	1	0	0	0	0	0	1	1.00
0815 - 0830	0	0	0	0	0	0	0	0	0	0.00
0830 - 0845	0	0	0	0	0	0	0	0	0	0.00
0845 - 0900	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	1	0	0	0	0	0	1	1.00
Hourly Average	0.00	0.00	0.25	0.00	0.00	0.00	0.00	0.00	0.25	0.25
0900 - 0915	0	0	0	0	1	0	0	0	1	1.00
0915 - 0930	0	0	0	0	0	0	0	0	0	0.00
0930 - 0945	0	0	0	0	0	0	0	0	0	0.00
0945 - 1000	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	0	0	1	0	0	0	1	1.00
Hourly Average	0.00	0.00	0.00	0.00	0.25	0.00	0.00	0.00	0.25	0.25
1000 - 1015	0	0	0	0	1	0	0	0	1	1.00
1015 - 1030	0	0	0	0	0	0	0	0	0	0.00
1030 - 1045	0	0	0	0	0	0	0	0	0	0.00
1045 - 1100	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	0	0	1	0	0	0	1	1.00
Hourly Average	0.00	0.00	0.00	0.00	0.25	0.00	0.00	0.00	0.25	0.25
1100 - 1115	0	0	0	0	0	0	0	0	0	0.00
1115 - 1130	0	0	0	0	0	0	0	0	0	0.00
1130 - 1145	0	0	0	0	0	0	0	0	0	0.00
1145 - 1200	0	0	0	0	1	0	0	0	1	1.00
Hourly Total	0	0	0	0	1	0	0	0	1	1.00
Hourly Average	0.00	0.00	0.00	0.00	0.25	0.00	0.00	0.00	0.25	0.25
1200 - 1215	0	0	0	0	0	0	0	0	0	0.00
1215 - 1230	0	0	0	0	0	0	0	0	0	0.00
1230 - 1245	0	0	0	0	0	0	0	0	0	0.00
1245 - 1300	0	0	1	0	0	0	0	0	1	1.00
Hourly Total	0	0	1	0	0	0	0	0	1	1.00
Hourly Average	0.00	0.00	0.25	0.00	0.00	0.00	0.00	0.00	0.25	0.25
1300 - 1315	0	0	0	0	0	0	0	0	0	0.00
1315 - 1330	0	0	0	0	0	0	0	0	0	0.00
1330 - 1345	0	0	0	0	0	0	0	0	0	0.00
1345 - 1400	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	0	0	0	0	0	0	0	0.00
Hourly Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1400 - 1415	0	0	0	0	0	0	0	0	0	0.00
1415 - 1430	0	0	0	0	0	0	0	0	0	0.00
1430 - 1445	0	0	0	0	0	0	0	0	0	0.00
1445 - 1500	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	0	0	0	0	0	0	0	0.00
Hourly Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1500 - 1515	0	0	0	0	0	0	0	0	0	0.00
1515 - 1530	0	0	0	0	0	0	0	0	0	0.00
1530 - 1545	0	0	0	0	0	0	0	0	0	0.00
1545 - 1600	0	0	1	0	1	0	0	0	2	2.00
Hourly Total	0	0	1	0	1	0	0	0	2	2.00
Hourly Average	0.00	0.00	0.25	0.00	0.25	0.00	0.00	0.00	0.50	0.50
1600 - 1615	0	0	2	0	0	0	0	0	2	2.00
1615 - 1630	0	0	0	0	0	0	1	0	1	2.30
1630 - 1645	0	0	1	0	0	0	0	0	1	1.00
1645 - 1700	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	3	0	0	0	1	0	4	5.30
Hourly Average	0.00	0.00	0.75	0.00	0.00	0.00	0.25	0.00	1.00	1.33
1700 - 1715	0	0	1	0	0	0	0	0	1	1.00
1715 - 1730	0	0	0	0	0	0	0	0	0	0.00
1730 - 1745	0	0	0	0	0	0	0	0	0	0.00
1745 - 1800	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	1	0	0	0	0	0	1	1.00
Hourly Average	0.00	0.00	0.25	0.00	0.00	0.00	0.00	0.00	0.25	0.25
1800 - 1815	0	0	0	0	0	0	0	0	0	0.00
1815 - 1830	0	0	0	0	0	0	0	0	0	0.00
1830 - 1845	0	0	0	0	0	0	0	0	0	0.00
1845 - 1900	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	0	0	0	0	0	0	0	0.00
Hourly Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Session Total	0	0	7	0	4	0	1	0	12	13.30
Session Average	0.00	0.00	0.15	0.00	0.08	0.00	0.02	0.00	0.25	0.28

Wrexham
Classified Junction Count

Site 8 of 11
Borras Hall Lane
A534 Wrexham Road
Industrial Estate Road
Sandy Lane
A534

Lat/Long
lat 53.060252° lon -2.937804°

Date
Wednesday 22 April 2026

Weather
Cloudy
Temp: 17°C

0700 - 1900 (Weekday 12H Session)

TIME	Movement 8.18: Right from Sandy Lane to A534 Wrexham Road								Original Data	
	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0700 - 0715	0	0	0	0	0	0	1	0	1	2.30
0715 - 0730	0	0	0	0	1	0	1	0	2	3.30
0730 - 0745	0	0	0	0	0	0	2	0	2	4.60
0745 - 0800	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	0	0	1	0	4	0	5	10.20
Hourly Average	0.00	0.00	0.00	0.00	0.25	0.00	1.00	0.00	1.25	2.55
0800 - 0815	0	0	2	0	0	0	3	0	5	8.90
0815 - 0830	0	0	0	0	0	0	0	0	0	0.00
0830 - 0845	1	0	0	0	0	0	0	0	1	0.20
0845 - 0900	2	0	0	0	0	0	1	0	3	2.70
Hourly Total	3	0	2	0	0	0	4	0	9	11.80
Hourly Average	0.75	0.00	0.50	0.00	0.00	0.00	1.00	0.00	2.25	2.95
0900 - 0915	0	0	0	0	0	0	0	0	0	0.00
0915 - 0930	0	0	0	0	0	0	0	0	0	0.00
0930 - 0945	0	0	0	0	0	0	0	0	0	0.00
0945 - 1000	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	0	0	0	0	0	0	0	0.00
Hourly Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1000 - 1015	0	0	0	0	0	0	2	0	2	4.60
1015 - 1030	0	0	0	0	0	0	0	0	0	0.00
1030 - 1045	0	0	0	0	0	0	1	0	1	2.30
1045 - 1100	0	0	0	0	0	0	1	0	1	2.30
Hourly Total	0	0	0	0	0	0	4	0	4	9.20
Hourly Average	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00	2.30
1100 - 1115	0	0	0	0	0	0	0	0	0	0.00
1115 - 1130	0	0	0	0	0	0	1	0	1	2.30
1130 - 1145	0	0	0	0	0	0	1	0	1	2.30
1145 - 1200	0	0	0	0	0	0	2	0	2	4.60
Hourly Total	0	0	0	0	0	0	4	0	4	9.20
Hourly Average	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00	2.30
1200 - 1215	0	0	0	0	1	0	1	0	2	3.30
1215 - 1230	0	0	0	0	0	0	2	0	2	4.60
1230 - 1245	0	0	0	0	0	0	1	0	1	2.30
1245 - 1300	1	0	0	0	0	0	0	0	1	0.20
Hourly Total	1	0	0	0	1	0	4	0	6	10.40
Hourly Average	0.25	0.00	0.00	0.00	0.25	0.00	1.00	0.00	1.50	2.60
1300 - 1315	0	0	0	0	0	0	0	0	0	0.00
1315 - 1330	0	0	0	0	0	0	0	0	0	0.00
1330 - 1345	0	0	0	0	0	0	0	0	0	0.00
1345 - 1400	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	0	0	0	0	0	0	0	0.00
Hourly Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1400 - 1415	0	0	0	0	0	0	1	0	1	2.30
1415 - 1430	0	0	0	0	0	0	0	0	0	0.00
1430 - 1445	0	0	0	0	1	0	0	0	1	1.00
1445 - 1500	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	0	0	1	0	1	0	2	3.30
Hourly Average	0.00	0.00	0.00	0.00	0.25	0.00	0.25	0.00	0.50	0.83
1500 - 1515	0	0	0	0	0	0	1	0	1	2.30
1515 - 1530	0	0	0	0	0	0	0	0	0	0.00
1530 - 1545	0	0	1	0	0	0	0	0	1	1.00
1545 - 1600	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	1	0	0	0	1	0	2	3.30
Hourly Average	0.00	0.00	0.25	0.00	0.00	0.00	0.25	0.00	0.50	0.83
1600 - 1615	0	0	0	0	0	0	0	0	0	0.00
1615 - 1630	0	0	0	0	0	0	1	0	1	2.30
1630 - 1645	0	0	2	0	0	0	0	0	2	2.00
1645 - 1700	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	2	0	0	0	1	0	3	4.30
Hourly Average	0.00	0.00	0.50	0.00	0.00	0.00	0.25	0.00	0.75	1.08
1700 - 1715	0	1	1	0	0	0	0	0	2	1.40
1715 - 1730	0	0	0	0	0	0	0	0	0	0.00
1730 - 1745	0	0	0	0	0	0	0	0	0	0.00
1745 - 1800	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	1	1	0	0	0	0	0	2	1.40
Hourly Average	0.00	0.25	0.25	0.00	0.00	0.00	0.00	0.00	0.50	0.35
1800 - 1815	0	0	0	0	0	0	0	0	0	0.00
1815 - 1830	0	0	0	0	0	0	0	0	0	0.00
1830 - 1845	0	0	0	0	0	0	0	0	0	0.00
1845 - 1900	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	0	0	0	0	0	0	0	0.00
Hourly Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Session Total	4	1	6	0	3	0	23	0	37	63.10
Session Average	0.08	0.02	0.13	0.00	0.06	0.00	0.48	0.00	0.77	1.31

Wrexham
Classified Junction Count

Site 8 of 11
Borras Hall Lane
A534 Wrexham Road
Industrial Estate Road
Sandy Lane
A534

Lat/Long
lat 53.060252° lon -2.937804°

Date
Wednesday 22 April 2026

Weather
Cloudy
Temp: 17°C

0700 - 1900 (Weekday 12H Session)

TIME	Movement 8.19: Right from Sandy Lane to Industrial Estate Road								Original Data	
	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0700 - 0715	0	0	0	0	0	0	0	0	0	0.00
0715 - 0730	0	0	0	0	0	0	0	0	0	0.00
0730 - 0745	0	0	0	0	0	0	0	0	0	0.00
0745 - 0800	0	0	0	0	0	0	1	0	1	2.30
Hourly Total	0	0	0	0	0	0	1	0	1	2.30
Hourly Average	0.00	0.00	0.00	0.00	0.00	0.00	0.25	0.00	0.25	0.58
0800 - 0815	0	0	0	0	0	0	1	0	1	2.30
0815 - 0830	0	0	1	0	0	0	0	0	1	1.00
0830 - 0845	0	0	1	0	0	0	1	0	2	3.30
0845 - 0900	0	0	1	0	0	0	0	0	1	1.00
Hourly Total	0	0	3	0	0	0	2	0	5	7.60
Hourly Average	0.00	0.00	0.75	0.00	0.00	0.00	0.50	0.00	1.25	1.90
0900 - 0915	0	0	1	0	0	0	0	0	1	1.00
0915 - 0930	0	0	0	0	0	0	0	0	0	0.00
0930 - 0945	0	0	2	0	0	0	0	0	2	2.00
0945 - 1000	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	3	0	0	0	0	0	3	3.00
Hourly Average	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.75	0.75
1000 - 1015	0	0	0	0	0	0	0	0	0	0.00
1015 - 1030	0	0	1	0	0	0	0	0	1	1.00
1030 - 1045	0	0	0	0	0	0	1	0	1	2.30
1045 - 1100	0	0	1	0	0	0	0	0	1	1.00
Hourly Total	0	0	2	0	0	0	1	0	3	4.30
Hourly Average	0.00	0.00	0.50	0.00	0.00	0.00	0.25	0.00	0.75	1.08
1100 - 1115	0	0	0	0	0	0	0	0	0	0.00
1115 - 1130	0	0	0	0	0	0	1	0	1	2.30
1130 - 1145	0	0	0	0	0	0	0	0	0	0.00
1145 - 1200	0	0	0	0	0	0	1	0	1	2.30
Hourly Total	0	0	0	0	0	0	2	0	2	4.60
Hourly Average	0.00	0.00	0.00	0.00	0.00	0.00	0.50	0.00	0.50	1.15
1200 - 1215	0	0	2	0	1	0	1	0	4	5.30
1215 - 1230	0	0	0	0	0	1	0	0	1	1.50
1230 - 1245	0	0	1	0	0	0	0	0	1	1.00
1245 - 1300	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	3	0	1	1	1	0	6	7.80
Hourly Average	0.00	0.00	0.75	0.00	0.25	0.25	0.25	0.00	1.50	1.95
1300 - 1315	0	0	0	0	0	0	0	0	0	0.00
1315 - 1330	0	0	0	0	0	0	1	0	1	2.30
1330 - 1345	0	0	0	0	0	0	0	0	0	0.00
1345 - 1400	0	0	0	0	0	1	1	0	2	3.80
Hourly Total	0	0	0	0	0	1	2	0	3	6.10
Hourly Average	0.00	0.00	0.00	0.00	0.00	0.25	0.50	0.00	0.75	1.53
1400 - 1415	0	0	0	0	0	0	1	0	1	2.30
1415 - 1430	0	0	0	0	0	1	0	0	1	1.50
1430 - 1445	0	0	0	0	1	0	0	0	1	1.00
1445 - 1500	0	0	0	0	0	0	1	0	1	2.30
Hourly Total	0	0	0	0	1	1	2	0	4	7.10
Hourly Average	0.00	0.00	0.00	0.00	0.25	0.25	0.50	0.00	1.00	1.78
1500 - 1515	0	0	0	0	0	0	0	0	0	0.00
1515 - 1530	0	0	0	0	0	1	1	0	2	3.80
1530 - 1545	0	0	0	0	0	0	1	0	1	2.30
1545 - 1600	0	0	1	0	0	0	0	0	1	1.00
Hourly Total	0	0	1	0	0	1	2	0	4	7.10
Hourly Average	0.00	0.00	0.25	0.00	0.00	0.25	0.50	0.00	1.00	1.78
1600 - 1615	0	0	0	0	0	0	3	0	3	6.90
1615 - 1630	0	0	1	0	0	0	0	0	1	1.00
1630 - 1645	0	0	1	0	0	0	0	0	1	1.00
1645 - 1700	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	2	0	0	0	3	0	5	8.90
Hourly Average	0.00	0.00	0.50	0.00	0.00	0.00	0.75	0.00	1.25	2.23
1700 - 1715	0	0	3	0	0	0	0	0	3	3.00
1715 - 1730	0	0	0	0	0	0	0	0	0	0.00
1730 - 1745	0	0	0	0	0	0	0	0	0	0.00
1745 - 1800	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	3	0	0	0	0	0	3	3.00
Hourly Average	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.75	0.75
1800 - 1815	0	0	0	0	0	0	0	0	0	0.00
1815 - 1830	2	0	0	0	0	0	0	0	2	0.40
1830 - 1845	0	0	1	0	0	0	0	0	1	1.00
1845 - 1900	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	2	0	1	0	0	0	0	0	3	1.40
Hourly Average	0.50	0.00	0.25	0.00	0.00	0.00	0.00	0.00	0.75	0.35
Session Total	2	0	18	0	2	4	16	0	42	63.20
Session Average	0.04	0.00	0.38	0.00	0.04	0.08	0.33	0.00	0.88	1.32

Wrexham

Classified Junction Count

Site 8 of 11
Borras Hall Lane
A534 Wrexham Road
Industrial Estate Road
Sandy Lane
A534

Lat/Long
lat 53.060252° lon -2.937804°

Date
Wednesday 22 April 2026

Weather
Cloudy
Temp: 17°C

0700 - 1900 (Weekday 12H Session)

	Movement 8.20: U-Turn from Sandy Lane to Sandy Lane								Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0700 - 0715	0	0	0	0	0	0	0	0	0	0.00
0715 - 0730	0	0	0	0	0	0	0	0	0	0.00
0730 - 0745	0	0	0	0	0	0	0	0	0	0.00
0745 - 0800	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	0	0	0	0	0	0	0	0.00
Hourly Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0800 - 0815	0	0	0	0	0	0	0	0	0	0.00
0815 - 0830	0	0	0	0	0	0	0	0	0	0.00
0830 - 0845	0	0	0	0	0	0	0	0	0	0.00
0845 - 0900	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	0	0	0	0	0	0	0	0.00
Hourly Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0900 - 0915	0	0	0	0	0	0	0	0	0	0.00
0915 - 0930	0	0	0	0	0	0	0	0	0	0.00
0930 - 0945	0	0	0	0	0	0	0	0	0	0.00
0945 - 1000	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	0	0	0	0	0	0	0	0.00
Hourly Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1000 - 1015	0	0	0	0	0	0	0	0	0	0.00
1015 - 1030	0	0	0	0	0	0	0	0	0	0.00
1030 - 1045	0	0	0	0	0	0	0	0	0	0.00
1045 - 1100	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	0	0	0	0	0	0	0	0.00
Hourly Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1100 - 1115	0	0	0	0	0	0	0	0	0	0.00
1115 - 1130	0	0	0	0	0	0	0	0	0	0.00
1130 - 1145	0	0	0	0	0	0	0	0	0	0.00
1145 - 1200	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	0	0	0	0	0	0	0	0.00
Hourly Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1200 - 1215	0	0	0	0	0	0	0	0	0	0.00
1215 - 1230	0	0	0	0	0	0	0	0	0	0.00
1230 - 1245	0	0	0	0	0	0	0	0	0	0.00
1245 - 1300	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	0	0	0	0	0	0	0	0.00
Hourly Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1300 - 1315	0	0	0	0	0	0	0	0	0	0.00
1315 - 1330	0	0	0	0	0	0	0	0	0	0.00
1330 - 1345	0	0	0	0	0	0	0	0	0	0.00
1345 - 1400	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	0	0	0	0	0	0	0	0.00
Hourly Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1400 - 1415	0	0	0	0	0	0	0	0	0	0.00
1415 - 1430	0	0	0	0	0	0	0	0	0	0.00
1430 - 1445	0	0	0	0	0	0	0	0	0	0.00
1445 - 1500	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	0	0	0	0	0	0	0	0.00
Hourly Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1500 - 1515	0	0	0	0	0	0	0	0	0	0.00
1515 - 1530	0	0	0	0	0	0	0	0	0	0.00
1530 - 1545	0	0	0	0	0	0	0	0	0	0.00
1545 - 1600	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	0	0	0	0	0	0	0	0.00
Hourly Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1600 - 1615	0	0	0	0	0	0	0	0	0	0.00
1615 - 1630	0	0	0	0	0	0	0	0	0	0.00
1630 - 1645	0	0	0	0	0	0	0	0	0	0.00
1645 - 1700	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	0	0	0	0	0	0	0	0.00
Hourly Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1700 - 1715	0	0	0	0	0	0	0	0	0	0.00
1715 - 1730	0	0	0	0	0	0	0	0	0	0.00
1730 - 1745	0	0	0	0	0	0	0	0	0	0.00
1745 - 1800	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	0	0	0	0	0	0	0	0.00
Hourly Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1800 - 1815	0	0	0	0	0	0	0	0	0	0.00
1815 - 1830	0	0	0	0	0	0	0	0	0	0.00
1830 - 1845	0	0	0	0	0	0	0	0	0	0.00
1845 - 1900	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	0	0	0	0	0	0	0	0.00
Hourly Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Session Total	0	0	0	0	0	0	0	0	0	0.00
Session Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Wrexham
Classified Junction Count

Site 8 of 11
Borras Hall Lane
A534 Wrexham Road
Industrial Estate Road
Sandy Lane
A534

Lat/Long
lat 53.060252° lon -2.937804°

Date
Wednesday 22 April 2026

Weather
Cloudy
Temp: 17°C

0700 - 1900 (Weekday 12H Session)

TIME	Movement 8.21: Left from A534 to Borras Hall Lane								Original Data	
	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0700 - 0715	0	0	0	0	0	0	0	0	0	0.00
0715 - 0730	0	0	1	0	0	0	0	0	1	1.00
0730 - 0745	0	0	1	0	0	0	0	0	1	1.00
0745 - 0800	0	0	2	0	1	0	0	0	3	3.00
Hourly Total	0	0	4	0	1	0	0	0	5	5.00
Hourly Average	0.00	0.00	1.00	0.00	0.25	0.00	0.00	0.00	1.25	1.25
0800 - 0815	0	0	1	0	0	0	0	0	1	1.00
0815 - 0830	0	0	1	0	0	0	0	0	1	1.00
0830 - 0845	0	0	2	0	0	0	0	0	2	2.00
0845 - 0900	0	0	2	0	0	0	0	0	2	2.00
Hourly Total	0	0	6	0	0	0	0	0	6	6.00
Hourly Average	0.00	0.00	1.50	0.00	0.00	0.00	0.00	0.00	1.50	1.50
0900 - 0915	0	0	1	0	1	0	0	0	2	2.00
0915 - 0930	0	0	1	0	0	0	0	0	1	1.00
0930 - 0945	0	0	0	0	0	0	0	0	0	0.00
0945 - 1000	0	0	2	0	1	0	0	0	3	3.00
Hourly Total	0	0	4	0	2	0	0	0	6	6.00
Hourly Average	0.00	0.00	1.00	0.00	0.50	0.00	0.00	0.00	1.50	1.50
1000 - 1015	0	0	0	0	1	0	0	0	1	1.00
1015 - 1030	0	0	1	0	0	0	0	0	1	1.00
1030 - 1045	0	0	0	0	0	0	0	0	0	0.00
1045 - 1100	0	0	1	0	1	0	0	0	2	2.00
Hourly Total	0	0	2	0	2	0	0	0	4	4.00
Hourly Average	0.00	0.00	0.50	0.00	0.50	0.00	0.00	0.00	1.00	1.00
1100 - 1115	0	0	0	0	1	0	0	0	1	1.00
1115 - 1130	0	0	0	0	0	0	0	0	0	0.00
1130 - 1145	0	0	3	0	0	0	0	0	3	3.00
1145 - 1200	0	0	2	0	1	0	0	0	3	3.00
Hourly Total	0	0	5	0	2	0	0	0	7	7.00
Hourly Average	0.00	0.00	1.25	0.00	0.50	0.00	0.00	0.00	1.75	1.75
1200 - 1215	0	0	3	0	0	0	0	0	3	3.00
1215 - 1230	0	0	1	0	1	0	0	0	2	2.00
1230 - 1245	0	0	3	0	1	0	0	0	4	4.00
1245 - 1300	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	7	0	2	0	0	0	9	9.00
Hourly Average	0.00	0.00	1.75	0.00	0.50	0.00	0.00	0.00	2.25	2.25
1300 - 1315	0	0	1	0	0	0	0	0	1	1.00
1315 - 1330	0	0	2	0	1	0	0	0	3	3.00
1330 - 1345	0	0	0	0	0	0	0	0	0	0.00
1345 - 1400	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	3	0	1	0	0	0	4	4.00
Hourly Average	0.00	0.00	0.75	0.00	0.25	0.00	0.00	0.00	1.00	1.00
1400 - 1415	0	0	1	0	0	0	0	0	1	1.00
1415 - 1430	0	0	2	0	0	0	1	0	3	4.30
1430 - 1445	0	0	1	0	0	0	0	0	1	1.00
1445 - 1500	0	0	1	0	0	0	0	0	1	1.00
Hourly Total	0	0	5	0	0	0	1	0	6	7.30
Hourly Average	0.00	0.00	1.25	0.00	0.00	0.00	0.25	0.00	1.50	1.83
1500 - 1515	0	0	1	1	1	0	0	0	3	3.00
1515 - 1530	0	0	2	0	0	0	0	0	2	2.00
1530 - 1545	0	0	1	0	0	0	0	0	1	1.00
1545 - 1600	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	4	1	1	0	0	0	6	6.00
Hourly Average	0.00	0.00	1.00	0.25	0.25	0.00	0.00	0.00	1.50	1.50
1600 - 1615	0	0	5	0	0	0	0	0	5	5.00
1615 - 1630	0	0	3	0	0	0	0	0	3	3.00
1630 - 1645	0	0	2	0	0	0	0	0	2	2.00
1645 - 1700	0	0	1	0	0	0	0	0	1	1.00
Hourly Total	0	0	11	0	0	0	0	0	11	11.00
Hourly Average	0.00	0.00	2.75	0.00	0.00	0.00	0.00	0.00	2.75	2.75
1700 - 1715	0	0	1	0	0	0	0	0	1	1.00
1715 - 1730	0	0	2	0	0	0	0	0	2	2.00
1730 - 1745	0	0	2	0	0	0	0	0	2	2.00
1745 - 1800	0	0	4	0	0	0	0	0	4	4.00
Hourly Total	0	0	9	0	0	0	0	0	9	9.00
Hourly Average	0.00	0.00	2.25	0.00	0.00	0.00	0.00	0.00	2.25	2.25
1800 - 1815	0	0	1	0	0	0	0	0	1	1.00
1815 - 1830	0	0	1	0	0	0	0	0	1	1.00
1830 - 1845	0	0	2	0	0	0	0	0	2	2.00
1845 - 1900	0	0	1	0	0	0	0	0	1	1.00
Hourly Total	0	0	5	0	0	0	0	0	5	5.00
Hourly Average	0.00	0.00	1.25	0.00	0.00	0.00	0.00	0.00	1.25	1.25
Session Total	0	0	65	1	11	0	1	0	78	79.30
Session Average	0.00	0.00	1.35	0.02	0.23	0.00	0.02	0.00	1.63	1.65

Wrexham
Classified Junction Count

Site 8 of 11
Borras Hall Lane
A534 Wrexham Road
Industrial Estate Road
Sandy Lane
A534

Lat/Long
lat 53.060252° lon -2.937804°

Date
Wednesday 22 April 2026

Weather
Cloudy
Temp: 17°C

0700 - 1900 (Weekday 12H Session)

TIME	Movement 8.22: Eastbound from A534 to A534 Wrexham Road								Original Data	
	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0700 - 0715	1	0	45	0	8	2	1	0	57	58.50
0715 - 0730	0	0	53	0	21	1	2	1	78	82.10
0730 - 0745	0	0	90	0	36	0	3	1	130	134.90
0745 - 0800	0	1	76	0	26	0	3	2	108	113.30
Hourly Total	1	1	264	0	91	3	9	4	373	388.80
Hourly Average	0.25	0.25	66.00	0.00	22.75	0.75	2.25	1.00	93.25	97.20
0800 - 0815	0	2	88	0	24	4	1	1	120	123.10
0815 - 0830	0	0	70	0	17	3	1	0	91	93.80
0830 - 0845	0	0	75	1	18	4	2	0	100	104.60
0845 - 0900	0	0	45	0	18	1	2	0	66	69.10
Hourly Total	0	2	278	1	77	12	6	1	377	390.60
Hourly Average	0.00	0.50	69.50	0.25	19.25	3.00	1.50	0.25	94.25	97.65
0900 - 0915	0	0	42	0	11	0	4	0	57	62.20
0915 - 0930	0	0	57	0	12	3	1	1	74	77.80
0930 - 0945	0	0	32	0	10	2	2	0	46	49.60
0945 - 1000	0	0	47	1	9	2	4	0	63	69.20
Hourly Total	0	0	178	1	42	7	11	1	240	258.80
Hourly Average	0.00	0.00	44.50	0.25	10.50	1.75	2.75	0.25	60.00	64.70
1000 - 1015	0	3	35	1	5	3	2	0	49	51.30
1015 - 1030	0	1	32	0	7	3	5	0	48	55.40
1030 - 1045	0	1	42	0	10	0	3	1	57	61.30
1045 - 1100	0	0	36	0	9	2	0	1	48	50.00
Hourly Total	0	5	145	1	31	8	10	2	202	218.00
Hourly Average	0.00	1.25	36.25	0.25	7.75	2.00	2.50	0.50	50.50	54.50
1100 - 1115	1	0	47	0	4	4	2	0	58	61.80
1115 - 1130	0	0	51	0	17	2	4	0	74	80.20
1130 - 1145	0	0	43	0	10	2	2	0	57	60.60
1145 - 1200	0	5	62	0	8	0	1	0	76	74.30
Hourly Total	1	5	203	0	39	8	9	0	265	276.90
Hourly Average	0.25	1.25	50.75	0.00	9.75	2.00	2.25	0.00	66.25	69.23
1200 - 1215	0	0	45	0	9	3	1	1	59	62.80
1215 - 1230	0	0	65	0	10	1	1	1	78	80.80
1230 - 1245	0	1	54	2	7	1	6	0	71	78.70
1245 - 1300	0	2	54	2	11	1	2	0	72	73.90
Hourly Total	0	3	218	4	37	6	10	2	280	296.20
Hourly Average	0.00	0.75	54.50	1.00	9.25	1.50	2.50	0.50	70.00	74.05
1300 - 1315	0	1	55	2	12	5	0	0	75	76.90
1315 - 1330	0	0	47	0	6	0	1	0	54	55.30
1330 - 1345	1	3	40	0	11	0	1	0	56	54.70
1345 - 1400	0	3	60	1	11	1	3	1	80	83.60
Hourly Total	1	7	202	3	40	6	5	1	265	270.50
Hourly Average	0.25	1.75	50.50	0.75	10.00	1.50	1.25	0.25	66.25	67.63
1400 - 1415	0	0	36	0	11	2	0	0	49	50.00
1415 - 1430	0	2	40	0	13	1	1	0	57	57.60
1430 - 1445	0	3	41	0	11	0	0	0	55	53.20
1445 - 1500	0	1	55	0	9	1	1	0	67	68.20
Hourly Total	0	6	172	0	44	4	2	0	228	229.00
Hourly Average	0.00	1.50	43.00	0.00	11.00	1.00	0.50	0.00	57.00	57.25
1500 - 1515	0	1	61	0	8	0	5	0	75	80.90
1515 - 1530	0	0	59	0	6	1	0	1	67	68.50
1530 - 1545	0	2	55	0	11	0	0	0	68	66.80
1545 - 1600	0	1	50	0	21	1	0	0	73	72.90
Hourly Total	0	4	225	0	46	2	5	1	283	289.10
Hourly Average	0.00	1.00	56.25	0.00	11.50	0.50	1.25	0.25	70.75	72.28
1600 - 1615	0	0	59	0	12	0	3	0	74	77.90
1615 - 1630	0	5	78	0	12	1	2	0	98	98.10
1630 - 1645	0	0	99	2	13	0	0	0	114	114.00
1645 - 1700	0	2	90	2	19	1	1	1	116	117.60
Hourly Total	0	7	326	4	56	2	6	1	402	407.60
Hourly Average	0.00	1.75	81.50	1.00	14.00	0.50	1.50	0.25	100.50	101.90
1700 - 1715	0	1	100	0	10	1	0	1	113	113.90
1715 - 1730	0	0	85	2	8	1	0	0	96	96.50
1730 - 1745	0	1	88	1	13	1	3	0	107	110.80
1745 - 1800	0	4	78	1	10	0	0	0	93	90.60
Hourly Total	0	6	351	4	41	3	3	1	409	411.80
Hourly Average	0.00	1.50	87.75	1.00	10.25	0.75	0.75	0.25	102.25	102.95
1800 - 1815	0	0	94	2	8	0	1	0	105	106.30
1815 - 1830	0	1	45	2	9	0	0	0	57	56.40
1830 - 1845	0	0	45	0	8	0	0	1	54	55.00
1845 - 1900	0	2	32	0	2	0	2	0	38	39.40
Hourly Total	0	3	216	4	27	0	3	1	254	257.10
Hourly Average	0.00	0.75	54.00	1.00	6.75	0.00	0.75	0.25	63.50	64.28
Session Total	3	49	2778	22	571	61	79	15	3578	3694.40
Session Average	0.06	1.02	57.88	0.46	11.90	1.27	1.65	0.31	74.54	76.97

Wrexham
Classified Junction Count

Site 8 of 11
Borras Hall Lane
A534 Wrexham Road
Industrial Estate Road
Sandy Lane
A534

Lat/Long
lat 53.060252° lon -2.937804°

Date
Wednesday 22 April 2026

Weather
Cloudy
Temp: 17°C

0700 - 1900 (Weekday 12H Session)

TIME	Movement 8.23: Right from A534 to Industrial Estate Road								Original Data	
	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0700 - 0715	0	8	209	1	43	3	10	0	274	283.70
0715 - 0730	0	3	251	0	50	5	19	0	328	353.40
0730 - 0745	0	4	385	2	40	4	13	0	448	464.50
0745 - 0800	0	3	388	2	55	5	7	0	460	469.80
Hourly Total	0	18	1233	5	188	17	49	0	1510	1571.40
Hourly Average	0.00	4.50	308.25	1.25	47.00	4.25	12.25	0.00	377.50	392.85
0800 - 0815	0	0	306	2	45	6	20	1	380	410.00
0815 - 0830	0	0	272	2	34	2	11	0	321	336.30
0830 - 0845	1	1	247	1	31	5	8	0	294	305.50
0845 - 0900	0	0	231	1	49	3	5	0	289	297.00
Hourly Total	1	1	1056	6	159	16	44	1	1284	1348.80
Hourly Average	0.25	0.25	264.00	1.50	39.75	4.00	11.00	0.25	321.00	337.20
0900 - 0915	0	0	113	1	28	11	13	0	166	188.40
0915 - 0930	0	0	92	1	20	7	12	0	132	151.10
0930 - 0945	0	0	95	0	20	7	13	0	135	155.40
0945 - 1000	0	1	66	0	26	5	14	0	112	132.10
Hourly Total	0	1	366	2	94	30	52	0	545	627.00
Hourly Average	0.00	0.25	91.50	0.50	23.50	7.50	13.00	0.00	136.25	156.75
1000 - 1015	0	0	90	2	36	9	16	0	153	178.30
1015 - 1030	0	1	53	2	33	8	12	1	110	130.00
1030 - 1045	0	1	54	2	22	10	17	1	107	134.50
1045 - 1100	0	0	45	1	21	6	18	0	91	117.40
Hourly Total	0	2	242	7	112	33	63	2	461	560.20
Hourly Average	0.00	0.50	60.50	1.75	28.00	8.25	15.75	0.50	115.25	140.05
1100 - 1115	0	1	68	0	19	11	15	0	114	138.40
1115 - 1130	0	0	48	2	26	6	14	1	97	119.20
1130 - 1145	0	0	59	0	21	9	10	0	99	116.50
1145 - 1200	0	0	63	1	22	2	15	0	103	123.50
Hourly Total	0	1	238	3	88	28	54	1	413	497.60
Hourly Average	0.00	0.25	59.50	0.75	22.00	7.00	13.50	0.25	103.25	124.40
1200 - 1215	0	0	60	2	24	4	18	0	108	133.40
1215 - 1230	0	5	48	1	35	5	12	2	108	125.10
1230 - 1245	0	2	62	0	26	5	16	1	112	135.10
1245 - 1300	0	0	94	1	19	6	12	0	132	150.60
Hourly Total	0	7	264	4	104	20	58	3	460	544.20
Hourly Average	0.00	1.75	66.00	1.00	26.00	5.00	14.50	0.75	115.00	136.05
1300 - 1315	0	1	75	0	20	6	9	0	111	125.10
1315 - 1330	0	0	103	2	18	13	4	0	140	151.70
1330 - 1345	0	1	69	0	30	6	6	0	112	122.20
1345 - 1400	0	0	71	1	23	10	18	0	123	151.40
Hourly Total	0	2	318	3	91	35	37	0	486	550.40
Hourly Average	0.00	0.50	79.50	0.75	22.75	8.75	9.25	0.00	121.50	137.60
1400 - 1415	0	0	39	1	18	18	19	0	95	128.70
1415 - 1430	0	1	60	0	33	10	15	0	119	142.90
1430 - 1445	0	0	37	0	21	11	14	0	83	106.70
1445 - 1500	0	0	53	1	22	6	10	0	92	108.00
Hourly Total	0	1	189	2	94	45	58	0	389	486.30
Hourly Average	0.00	0.25	47.25	0.50	23.50	11.25	14.50	0.00	97.25	121.58
1500 - 1515	0	0	58	0	14	2	14	0	88	107.20
1515 - 1530	0	1	41	3	20	4	13	0	82	100.30
1530 - 1545	0	1	61	1	15	2	11	0	91	105.70
1545 - 1600	0	0	60	1	16	2	11	0	90	105.30
Hourly Total	0	2	220	5	65	10	49	0	351	418.50
Hourly Average	0.00	0.50	55.00	1.25	16.25	2.50	12.25	0.00	87.75	104.63
1600 - 1615	0	1	46	0	11	6	6	1	71	82.20
1615 - 1630	0	1	57	0	14	5	6	0	83	92.70
1630 - 1645	0	0	49	2	17	3	9	0	80	93.20
1645 - 1700	0	0	71	0	16	3	7	0	97	107.60
Hourly Total	0	2	223	2	58	17	28	1	331	375.70
Hourly Average	0.00	0.50	55.75	0.50	14.50	4.25	7.00	0.25	82.75	93.93
1700 - 1715	0	0	94	3	11	6	5	0	119	128.50
1715 - 1730	0	1	123	1	16	2	3	0	146	150.30
1730 - 1745	0	2	157	3	12	2	5	0	181	187.30
1745 - 1800	0	0	103	1	7	2	4	0	117	123.20
Hourly Total	0	3	477	8	46	12	17	0	563	589.30
Hourly Average	0.00	0.75	119.25	2.00	11.50	3.00	4.25	0.00	140.75	147.33
1800 - 1815	0	2	57	1	11	0	2	0	73	74.40
1815 - 1830	0	1	79	1	14	1	3	0	99	102.80
1830 - 1845	0	0	73	0	10	0	5	0	88	94.50
1845 - 1900	0	0	38	0	2	0	5	0	45	51.50
Hourly Total	0	3	247	2	37	1	15	0	305	323.20
Hourly Average	0.00	0.75	61.75	0.50	9.25	0.25	3.75	0.00	76.25	80.80
Session Total	1	43	5073	49	1136	264	524	8	7098	7892.60
Session Average	0.02	0.90	105.69	1.02	23.67	5.50	10.92	0.17	147.88	164.43

Wrexham
Classified Junction Count

Site 8 of 11
Borras Hall Lane
A534 Wrexham Road
Industrial Estate Road
Sandy Lane
A534

Lat/Long
lat 53.060252° lon -2.937804°

Date
Wednesday 22 April 2026

Weather
Cloudy
Temp: 17°C

0700 - 1900 (Weekday 12H Session)

TIME	Movement 8.24: Right from A534 to Sandy Lane								Original Data	
	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0700 - 0715	0	0	0	0	0	0	0	0	0	0.00
0715 - 0730	0	0	0	0	2	0	1	0	3	4.30
0730 - 0745	0	0	0	0	0	0	3	0	3	6.90
0745 - 0800	0	0	0	0	0	0	5	0	5	11.50
Hourly Total	0	0	0	0	2	0	9	0	11	22.70
Hourly Average	0.00	0.00	0.00	0.00	0.50	0.00	2.25	0.00	2.75	5.68
0800 - 0815	0	0	0	0	0	0	0	0	0	0.00
0815 - 0830	0	0	1	0	1	0	2	0	4	6.60
0830 - 0845	0	0	0	0	0	0	2	0	2	4.60
0845 - 0900	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	1	0	1	0	4	0	6	11.20
Hourly Average	0.00	0.00	0.25	0.00	0.25	0.00	1.00	0.00	1.50	2.80
0900 - 0915	0	0	1	0	0	0	2	0	3	5.60
0915 - 0930	0	0	0	0	1	0	1	0	2	3.30
0930 - 0945	0	0	1	0	0	0	0	0	1	1.00
0945 - 1000	0	0	0	0	1	0	2	0	3	5.60
Hourly Total	0	0	2	0	2	0	5	0	9	15.50
Hourly Average	0.00	0.00	0.50	0.00	0.50	0.00	1.25	0.00	2.25	3.88
1000 - 1015	0	0	1	0	0	0	4	0	5	10.20
1015 - 1030	0	0	0	0	0	0	1	0	1	2.30
1030 - 1045	0	0	0	0	1	0	2	0	3	5.60
1045 - 1100	0	0	1	0	0	0	5	0	6	12.50
Hourly Total	0	0	2	0	1	0	12	0	15	30.60
Hourly Average	0.00	0.00	0.50	0.00	0.25	0.00	3.00	0.00	3.75	7.65
1100 - 1115	0	0	0	0	1	0	6	0	7	14.80
1115 - 1130	0	0	0	0	0	0	1	0	1	2.30
1130 - 1145	0	0	0	0	0	1	2	0	3	6.10
1145 - 1200	0	0	1	0	0	0	1	0	2	3.30
Hourly Total	0	0	1	0	1	1	10	0	13	26.50
Hourly Average	0.00	0.00	0.25	0.00	0.25	0.25	2.50	0.00	3.25	6.63
1200 - 1215	0	0	2	0	1	0	1	0	4	5.30
1215 - 1230	0	0	1	0	0	0	1	0	2	3.30
1230 - 1245	0	0	1	0	0	0	2	0	3	5.60
1245 - 1300	0	0	1	0	0	0	2	0	3	5.60
Hourly Total	0	0	5	0	1	0	6	0	12	19.80
Hourly Average	0.00	0.00	1.25	0.00	0.25	0.00	1.50	0.00	3.00	4.95
1300 - 1315	0	0	0	0	1	1	1	0	3	4.80
1315 - 1330	0	0	0	0	0	0	3	0	3	6.90
1330 - 1345	0	0	1	0	0	0	2	0	3	5.60
1345 - 1400	0	0	0	0	0	0	1	0	1	2.30
Hourly Total	0	0	1	0	1	1	7	0	10	19.60
Hourly Average	0.00	0.00	0.25	0.00	0.25	0.25	1.75	0.00	2.50	4.90
1400 - 1415	0	0	0	0	0	0	1	0	1	2.30
1415 - 1430	0	0	0	0	0	0	2	0	2	4.60
1430 - 1445	0	0	2	0	2	0	0	0	4	4.00
1445 - 1500	0	0	0	0	0	0	3	0	3	6.90
Hourly Total	0	0	2	0	2	0	6	0	10	17.80
Hourly Average	0.00	0.00	0.50	0.00	0.50	0.00	1.50	0.00	2.50	4.45
1500 - 1515	0	0	0	1	1	0	0	0	2	2.00
1515 - 1530	0	0	2	0	0	0	3	0	5	8.90
1530 - 1545	0	0	0	0	1	0	1	0	2	3.30
1545 - 1600	0	0	2	0	1	0	2	0	5	7.60
Hourly Total	0	0	4	1	3	0	6	0	14	21.80
Hourly Average	0.00	0.00	1.00	0.25	0.75	0.00	1.50	0.00	3.50	5.45
1600 - 1615	0	0	0	0	0	0	1	0	1	2.30
1615 - 1630	0	0	1	0	0	0	1	0	2	3.30
1630 - 1645	0	0	0	0	0	0	0	0	0	0.00
1645 - 1700	0	0	1	0	0	0	0	0	1	1.00
Hourly Total	0	0	2	0	0	0	2	0	4	6.60
Hourly Average	0.00	0.00	0.50	0.00	0.00	0.00	0.50	0.00	1.00	1.65
1700 - 1715	0	0	0	0	0	0	0	0	0	0.00
1715 - 1730	0	0	0	0	0	0	0	0	0	0.00
1730 - 1745	0	0	0	0	0	0	0	0	0	0.00
1745 - 1800	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	0	0	0	0	0	0	0	0.00
Hourly Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1800 - 1815	0	0	0	0	0	0	0	0	0	0.00
1815 - 1830	0	0	1	0	0	0	0	0	1	1.00
1830 - 1845	0	0	0	0	0	0	0	0	0	0.00
1845 - 1900	0	0	1	0	0	0	0	0	1	1.00
Hourly Total	0	0	2	0	0	0	0	0	2	2.00
Hourly Average	0.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	0.50	0.50
Session Total	0	0	22	1	14	2	67	0	106	194.10
Session Average	0.00	0.00	0.46	0.02	0.29	0.04	1.40	0.00	2.21	4.04

Wrexham
Classified Junction Count

Site 8 of 11
Borras Hall Lane
A534 Wrexham Road
Industrial Estate Road
Sandy Lane
A534

Lat/Long
lat 53.060252° lon -2.937804°

Date
Wednesday 22 April 2026

Weather
Cloudy
Temp: 17°C

0700 - 1900 (Weekday 12H Session)

TIME	Movement 8.25: U-Turn from A534 to A534								Original Data	
	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0700 - 0715	0	0	0	0	0	0	0	0	0	0.00
0715 - 0730	0	0	0	0	0	0	0	0	0	0.00
0730 - 0745	0	0	0	0	0	0	0	0	0	0.00
0745 - 0800	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	0	0	0	0	0	0	0	0.00
Hourly Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0800 - 0815	0	0	0	0	0	0	0	0	0	0.00
0815 - 0830	0	0	0	0	0	1	0	0	1	1.50
0830 - 0845	0	0	0	0	0	0	0	0	0	0.00
0845 - 0900	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	0	0	0	1	0	0	1	1.50
Hourly Average	0.00	0.00	0.00	0.00	0.00	0.25	0.00	0.00	0.25	0.38
0900 - 0915	0	0	0	0	0	0	0	0	0	0.00
0915 - 0930	0	0	0	0	0	0	0	0	0	0.00
0930 - 0945	0	0	0	0	0	0	0	0	0	0.00
0945 - 1000	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	0	0	0	0	0	0	0	0.00
Hourly Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1000 - 1015	0	0	0	0	0	0	0	0	0	0.00
1015 - 1030	0	0	0	0	0	0	0	0	0	0.00
1030 - 1045	0	0	0	0	0	0	0	0	0	0.00
1045 - 1100	0	0	0	0	1	0	0	0	1	1.00
Hourly Total	0	0	0	0	1	0	0	0	1	1.00
Hourly Average	0.00	0.00	0.00	0.00	0.25	0.00	0.00	0.00	0.25	0.25
1100 - 1115	0	0	0	0	0	0	0	0	0	0.00
1115 - 1130	0	0	1	0	0	0	0	0	1	1.00
1130 - 1145	0	0	0	0	0	0	0	0	0	0.00
1145 - 1200	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	1	0	0	0	0	0	1	1.00
Hourly Average	0.00	0.00	0.25	0.00	0.00	0.00	0.00	0.00	0.25	0.25
1200 - 1215	0	0	0	0	0	0	0	0	0	0.00
1215 - 1230	0	0	1	0	0	0	0	0	1	1.00
1230 - 1245	0	0	2	0	0	0	0	0	2	2.00
1245 - 1300	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	3	0	0	0	0	0	3	3.00
Hourly Average	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.75	0.75
1300 - 1315	0	0	0	0	0	0	0	0	0	0.00
1315 - 1330	0	0	0	0	0	0	0	0	0	0.00
1330 - 1345	0	0	0	1	0	0	0	0	1	1.00
1345 - 1400	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	0	1	0	0	0	0	1	1.00
Hourly Average	0.00	0.00	0.00	0.25	0.00	0.00	0.00	0.00	0.25	0.25
1400 - 1415	0	0	0	0	0	0	0	0	0	0.00
1415 - 1430	0	0	0	0	0	0	0	0	0	0.00
1430 - 1445	0	0	1	0	0	0	0	0	1	1.00
1445 - 1500	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	1	0	0	0	0	0	1	1.00
Hourly Average	0.00	0.00	0.25	0.00	0.00	0.00	0.00	0.00	0.25	0.25
1500 - 1515	0	0	0	0	0	0	0	0	0	0.00
1515 - 1530	0	0	1	0	0	0	0	0	1	1.00
1530 - 1545	0	0	0	0	0	0	0	0	0	0.00
1545 - 1600	0	0	1	0	0	0	0	0	1	1.00
Hourly Total	0	0	2	0	0	0	0	0	2	2.00
Hourly Average	0.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	0.50	0.50
1600 - 1615	0	0	0	0	0	0	0	0	0	0.00
1615 - 1630	0	0	0	0	0	0	0	0	0	0.00
1630 - 1645	0	0	0	0	0	0	0	0	0	0.00
1645 - 1700	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	0	0	0	0	0	0	0	0.00
Hourly Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1700 - 1715	0	0	0	0	0	0	0	0	0	0.00
1715 - 1730	0	0	0	0	0	0	0	0	0	0.00
1730 - 1745	0	0	0	0	0	0	0	0	0	0.00
1745 - 1800	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	0	0	0	0	0	0	0	0.00
Hourly Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1800 - 1815	0	0	0	0	0	0	0	0	0	0.00
1815 - 1830	0	0	0	0	0	0	0	0	0	0.00
1830 - 1845	0	0	0	0	0	0	0	0	0	0.00
1845 - 1900	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	0	0	0	0	0	0	0	0.00
Hourly Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Session Total	0	0	7	1	1	1	0	0	10	10.50
Session Average	0.00	0.00	0.15	0.02	0.02	0.02	0.00	0.00	0.21	0.22

APPENDIX D

ARCADY Results Existing Layout

Junctions 11											
ARCADY 11 - Roundabout Module											
Version: 11.1.0.2307											
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+44 (0)1344 379777 software@trl.co.uk trlsoftware.com											
The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution											

Filename: Borrás Hall Lane Roundabout_2026 Survey Flows.j11

Path: C:\Users\Windows\mode Dropbox\Project\Manchester\2. Projects\J329525_Utopia City Phase 1\4. Data\6. Junction Capacity Assessments\1. Junctions 11\1. Base Models

Report generation date: 05/08/2026 16:25:59

»D1 - 2026 | Base | AM
 »D2 - 2026 | Base | PM
 »D3 - 2030 | Base | AM
 »D4 - 2030 | Base | PM
 »D5 - 2030 | B+D (P1) | AM
 »D6 - 2030 | B+D (P1) | PM
 »D7 - 2030 | B+D (P1_P2) | AM
 »D8 - 2030 | B+D (P1_P2) | PM
 »D9 - 2030 | B+C | AM
 »D10 - 2030 | B+C | PM
 »D11 - 2030 | B+C+D (P1) | AM
 »D12 - 2030 | B+C+D (P1) | PM
 »D13 - 2030 | B+C+D (P1_P2) | AM
 »D14 - 2030 | B+C+D (P1_P2) | PM
 »D15 - 2037 | Base | AM
 »D16 - 2037 | Base | PM
 »D17 - 2037 | B+D (P1) | AM
 »D18 - 2037 | B+D (P1) | PM
 »D19 - 2037 | B+D (P1_P2) | AM
 »D20 - 2037 | B+D (P1_P2) | PM
 »D21 - 2037 | B+C | AM
 »D22 - 2037 | B+C | PM
 »D23 - 2037 | B+C+D (P1) | AM
 »D24 - 2037 | B+C+D (P1) | PM
 »D25 - 2037 | B+C+D (P1_P2) | AM
 »D26 - 2037 | B+C+D (P1_P2) | PM

Summary of junction performance

	AM						PM					
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity
	2026 - Base											
Arm 1	D1	0.3	10.85	0.22	B	15 % [Arm 5]	D2	0.0	3.95	0.01	A	54 % [Arm 3]
Arm 2		0.8	8.53	0.45	A			0.4	3.44	0.26	A	
Arm 3		0.2	1.82	0.16	A			1.5	3.78	0.59	A	
Arm 4		0.0	3.19	0.04	A			0.0	5.41	0.02	A	
Arm 5		4.9	8.12	0.83	A			0.7	2.70	0.41	A	
	2030 - Base											

Arm 1	D3	0.3	12.81	0.26	B	10 % [Arm 5]	D4	0.0	4.06	0.01	A	47 % [Arm 3]
Arm 2		1.0	9.80	0.49	A			0.4	3.53	0.28	A	
Arm 3		0.2	1.85	0.17	A			1.6	4.08	0.62	A	
Arm 4		0.0	3.24	0.04	A			0.0	5.71	0.03	A	
Arm 5		6.5	10.45	0.87	B			0.8	2.83	0.43	A	
2030 - B+D (P1)												
Arm 1	D5	0.5	17.10	0.33	C	4 % [Arm 5]	D6	0.0	4.27	0.01	A	36 % [Arm 3]
Arm 2		1.3	12.48	0.56	B			0.4	3.70	0.29	A	
Arm 3		0.3	1.93	0.21	A			2.1	4.83	0.68	A	
Arm 4		0.0	3.35	0.04	A			0.0	6.34	0.03	A	
Arm 5		11.2	17.24	0.92	C			0.9	3.03	0.47	A	
2030 - B+D (P1_P2)												
Arm 1	D7	0.6	19.00	0.36	C	3 % [Arm 5]	D8	0.0	4.42	0.02	A	33 % [Arm 3]
Arm 2		1.4	13.45	0.58	B			0.4	3.82	0.30	A	
Arm 3		0.3	1.99	0.23	A			2.3	5.10	0.70	A	
Arm 4		0.0	3.43	0.04	A			0.0	6.56	0.03	A	
Arm 5		13.8	21.08	0.94	C			1.0	3.18	0.49	A	
2030 - B+C												
Arm 1	D9	0.4	15.35	0.30	C	6 % [Arm 5]	D10	0.0	4.27	0.01	A	38 % [Arm 3]
Arm 2		1.1	11.41	0.53	B			0.4	3.71	0.29	A	
Arm 3		0.3	1.92	0.20	A			2.0	4.68	0.67	A	
Arm 4		0.0	3.34	0.04	A			0.0	6.23	0.03	A	
Arm 5		9.1	14.23	0.90	B			0.9	3.04	0.47	A	
2030 - B+C+D (P1)												
Arm 1	D11	0.6	21.87	0.39	C	1 % [Arm 5]	D12	0.0	4.50	0.01	A	28 % [Arm 3]
Arm 2		1.6	15.25	0.61	C			0.4	3.89	0.30	A	
Arm 3		0.3	2.01	0.24	A			2.7	5.71	0.73	A	
Arm 4		0.0	3.46	0.04	A			0.0	7.01	0.03	A	
Arm 5		19.6	29.42	0.96	D			1.0	3.27	0.51	A	
2030 - B+C+D (P1_P2)												
Arm 1	D13	0.7	24.95	0.43	C	-1 % [Arm 5]	D14	0.0	4.66	0.02	A	25 % [Arm 3]
Arm 2		1.7	16.60	0.63	C			0.5	4.03	0.31	A	
Arm 3		0.4	2.07	0.26	A			2.9	6.09	0.75	A	
Arm 4		0.0	3.55	0.05	A			0.0	7.27	0.03	A	
Arm 5		27.2	40.46	0.97	E			1.1	3.45	0.53	A	
2037 - Base												
Arm 1	D15	0.4	15.70	0.31	C	6 % [Arm 5]	D16	0.0	4.17	0.01	A	41 % [Arm 3]
Arm 2		1.2	11.52	0.54	B			0.4	3.62	0.29	A	
Arm 3		0.2	1.87	0.18	A			1.8	4.41	0.65	A	
Arm 4		0.0	3.28	0.04	A			0.0	6.03	0.03	A	
Arm 5		9.4	14.60	0.91	B			0.8	2.96	0.45	A	
2037 - B+D (P1)												
Arm 1	D17	0.7	23.19	0.41	C	0 % [Arm 5]	D18	0.0	4.39	0.01	A	31 % [Arm 3]
Arm 2		1.6	15.67	0.62	C			0.4	3.80	0.30	A	
Arm 3		0.3	1.96	0.22	A			2.4	5.34	0.71	A	
Arm 4		0.0	3.40	0.05	A			0.0	6.78	0.03	A	
Arm 5		21.8	32.67	0.96	D			1.0	3.19	0.49	A	
2037 - B+D (P1_P2)												
Arm 1	D19	0.8	25.84	0.44	D	-1 % [Arm 5]	D20	0.0	4.55	0.02	A	28 % [Arm 3]
Arm 2		1.8	16.81	0.64	C			0.4	3.93	0.31	A	
Arm 3		0.3	2.01	0.24	A			2.6	5.63	0.73	A	
Arm 4		0.0	3.48	0.05	A			0.0	7.00	0.03	A	
Arm 5		29.0	42.96	0.97	E			1.1	3.35	0.51	A	
2037 - B+C												
Arm 1		0.6	19.63	0.36	C			0.0	4.39	0.01	A	

Arm 2	D21	1.4	13.83	0.59	B	2 % [Arm 5]	D22	0.4	3.80	0.30	A	33 % [Arm 3]
Arm 3		0.3	1.95	0.21	A			2.3	5.13	0.70	A	
Arm 4		0.0	3.39	0.05	A			0.0	6.63	0.03	A	
Arm 5		15.0	22.71	0.94	C			1.0	3.19	0.49	A	
2037 - B+C+D (P1)												
Arm 1	D23	0.9	30.90	0.49	D	-3 % [Arm 5]	D24	0.0	4.64	0.02	A	23 % [Arm 3]
Arm 2		2.1	19.51	0.68	C			0.5	4.01	0.32	A	
Arm 3		0.3	2.04	0.25	A			3.1	6.43	0.76	A	
Arm 4		0.0	3.52	0.05	A			0.0	7.54	0.04	A	
Arm 5		56.7	79.97	1.00	F			1.1	3.46	0.53	A	
2037 - B+C+D (P1_P2)												
Arm 1	D25	1.0	32.79	0.51	D	-4 % [Arm 5]	D26	0.0	4.79	0.02	A	21 % [Arm 3]
Arm 2		2.1	20.25	0.69	C			0.5	4.13	0.32	A	
Arm 3		0.4	2.10	0.27	A			3.4	6.77	0.77	A	
Arm 4		0.1	3.60	0.05	A			0.0	7.75	0.04	A	
Arm 5		74.3	102.46	1.01	F			1.2	3.62	0.55	A	

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

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

File summary

File Description

Title	
Location	
Site number	
Date	15/05/2026
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DESKTOP-P980MS0\Windows
Description	

Units

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

Analysis Options

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

Demand Set Summary

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D1	2026	Base	AM	FLAT	06:45	08:15	90	15	✓
D2	2026	Base	PM	FLAT	16:00	17:30	90	15	✓
D3	2030	Base	AM	FLAT	06:45	08:15	90	15	✓
D4	2030	Base	PM	FLAT	16:00	17:30	90	15	✓
D5	2030	B+D (P1)	AM	FLAT	06:45	08:15	90	15	✓
D6	2030	B+D (P1)	PM	FLAT	16:00	17:30	90	15	✓
D7	2030	B+D (P1_P2)	AM	FLAT	06:45	08:15	90	15	✓
D8	2030	B+D (P1_P2)	PM	FLAT	16:00	17:30	90	15	✓
D9	2030	B+C	AM	FLAT	06:45	08:15	90	15	✓
D10	2030	B+C	PM	FLAT	16:00	17:30	90	15	✓
D11	2030	B+C+D (P1)	AM	FLAT	06:45	08:15	90	15	✓
D12	2030	B+C+D (P1)	PM	FLAT	16:00	17:30	90	15	✓
D13	2030	B+C+D (P1_P2)	AM	FLAT	06:45	08:15	90	15	✓
D14	2030	B+C+D (P1_P2)	PM	FLAT	16:00	17:30	90	15	✓
D15	2037	Base	AM	FLAT	06:45	08:15	90	15	✓
D16	2037	Base	PM	FLAT	16:00	17:30	90	15	✓
D17	2037	B+D (P1)	AM	FLAT	06:45	08:15	90	15	✓
D18	2037	B+D (P1)	PM	FLAT	16:00	17:30	90	15	✓
D19	2037	B+D (P1_P2)	AM	FLAT	06:45	08:15	90	15	✓
D20	2037	B+D (P1_P2)	PM	FLAT	16:00	17:30	90	15	✓
D21	2037	B+C	AM	FLAT	06:45	08:15	90	15	✓
D22	2037	B+C	PM	FLAT	16:00	17:30	90	15	✓
D23	2037	B+C+D (P1)	AM	FLAT	06:45	08:15	90	15	✓
D24	2037	B+C+D (P1)	PM	FLAT	16:00	17:30	90	15	✓
D25	2037	B+C+D (P1_P2)	AM	FLAT	06:45	08:15	90	15	✓
D26	2037	B+C+D (P1_P2)	PM	FLAT	16:00	17:30	90	15	✓

Analysis Set Details

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

D1 - 2026 | Base | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	7.37	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	15	Arm 5	7.37	A

Arms

Arms

Arm	Name	Description	No give-way line
1	Borras Hall Lane		
2	A534 Wrexham Road (East)		
3	Industrial Estate Road		
4	Sandy Lane		
5	A534 W		

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Entry only	Exit only
1	3.60	5.80	11.0	17.3	70.0	31.0		
2	3.50	7.30	13.0	26.2	70.0	32.0		
3	7.00	8.70	15.7	38.8	70.0	32.0		
4	3.70	5.30	18.1	16.0	70.0	31.0		
5	7.80	10.10	5.0	32.0	70.0	31.0		

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.468	1481
2	0.501	1663
3	0.643	2545
4	0.467	1475
5	0.664	2685

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

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D1	2026	Base	AM	FLAT	06:45	08:15	90	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		FLAT	✓	93	100.000
2		FLAT	✓	339	100.000
3		FLAT	✓	388	100.000
4		FLAT	✓	47	100.000
5		FLAT	✓	2178	100.000

Origin-Destination Data

Demand (PCU/hr)

	To					
	1	2	3	4	5	
From	1	0	6	80	0	7
	2	1	0	83	3	252
	3	13	61	0	4	310
	4	1	14	6	0	26
	5	5	465	1681	25	2

Vehicle Mix

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

Heavy Vehicle %

	To					
	1	2	3	4	5	
From	1	0	0	0	0	0
	2	0	0	0	0	0
	3	0	0	0	0	0
	4	0	0	0	0	0
	5	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.22	10.85	0.3	B	93	140
2	0.45	8.53	0.8	A	339	509
3	0.16	1.82	0.2	A	388	582
4	0.04	3.19	0.0	A	47	71
5	0.83	8.12	4.9	A	2178	3267

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	93	23	2235	434	0.214	92	20	0.0	0.3	10.504	B
2	339	85	1785	769	0.441	336	542	0.0	0.8	8.257	A
3	388	97	287	2361	0.164	387	1834	0.0	0.2	1.823	A
4	47	12	643	1176	0.040	47	32	0.0	0.0	3.189	A
5	2178	545	96	2621	0.831	2159	594	0.0	4.7	7.518	A

07:00 - 07:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	93	23	2254	425	0.219	93	20	0.3	0.3	10.840	B
2	339	85	1801	761	0.445	339	546	0.8	0.8	8.522	A
3	388	97	290	2359	0.164	388	1850	0.2	0.2	1.825	A
4	47	12	646	1174	0.040	47	32	0.0	0.0	3.193	A
5	2178	545	96	2621	0.831	2178	597	4.7	4.8	8.096	A

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	93	23	2254	425	0.219	93	20	0.3	0.3	10.846	B
2	339	85	1801	761	0.445	339	546	0.8	0.8	8.528	A
3	388	97	290	2359	0.164	388	1850	0.2	0.2	1.825	A
4	47	12	646	1174	0.040	47	32	0.0	0.0	3.193	A
5	2178	545	96	2621	0.831	2178	597	4.8	4.8	8.111	A

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	93	23	2254	425	0.219	93	20	0.3	0.3	10.848	B
2	339	85	1801	761	0.445	339	546	0.8	0.8	8.529	A
3	388	97	290	2359	0.164	388	1850	0.2	0.2	1.825	A
4	47	12	646	1174	0.040	47	32	0.0	0.0	3.193	A
5	2178	545	96	2621	0.831	2178	597	4.8	4.9	8.116	A

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	93	23	2254	425	0.219	93	20	0.3	0.3	10.848	B
2	339	85	1801	761	0.445	339	546	0.8	0.8	8.529	A
3	388	97	290	2359	0.164	388	1850	0.2	0.2	1.825	A
4	47	12	646	1174	0.040	47	32	0.0	0.0	3.193	A
5	2178	545	96	2621	0.831	2178	597	4.9	4.9	8.119	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	93	23	2254	425	0.219	93	20	0.3	0.3	10.848	B
2	339	85	1801	761	0.445	339	546	0.8	0.8	8.529	A
3	388	97	290	2359	0.164	388	1850	0.2	0.2	1.825	A
4	47	12	646	1174	0.040	47	32	0.0	0.0	3.193	A
5	2178	545	96	2621	0.831	2178	597	4.9	4.9	8.121	A

D2 - 2026 | Base | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	3.37	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	54	Arm 3	3.37	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D2	2026	Base	PM	FLAT	16:00	17:30	90	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		FLAT	✓	8	100.000
2		FLAT	✓	372	100.000
3		FLAT	✓	1391	100.000
4		FLAT	✓	17	100.000
5		FLAT	✓	929	100.000

Origin-Destination Data

Demand (PCU/hr)

	To					
	1	2	3	4	5	
From	1	0	6	1	0	1
	2	27	0	60	2	283
	3	333	265	3	3	787
	4	2	3	4	0	8
	5	6	442	480	1	0

Vehicle Mix

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

Heavy Vehicle %

	To					
From		1	2	3	4	5
	1	0	0	0	0	0
	2	0	0	0	0	0
	3	0	0	0	0	0
	4	0	0	0	0	0
	5	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.01	3.95	0.0	A	8	12
2	0.26	3.44	0.4	A	372	558
3	0.59	3.78	1.5	A	1391	2087
4	0.02	5.41	0.0	A	17	26
5	0.41	2.70	0.7	A	929	1394

Main Results for each time segment

16:00 - 16:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	8	2	1194	921	0.009	8	366	0.0	0.0	3.941	A
2	372	93	489	1418	0.262	371	714	0.0	0.4	3.431	A
3	1391	348	313	2345	0.593	1385	546	0.0	1.4	3.730	A
4	17	4	1692	686	0.025	17	6	0.0	0.0	5.379	A
5	929	232	634	2263	0.410	926	1075	0.0	0.7	2.686	A

16:15 - 16:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	8	2	1198	919	0.009	8	368	0.0	0.0	3.949	A
2	372	93	490	1418	0.262	372	716	0.4	0.4	3.441	A
3	1391	348	314	2344	0.594	1391	548	1.4	1.5	3.777	A
4	17	4	1699	683	0.025	17	6	0.0	0.0	5.405	A
5	929	232	637	2262	0.411	929	1079	0.7	0.7	2.700	A

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	8	2	1198	919	0.009	8	368	0.0	0.0	3.949	A
2	372	93	490	1418	0.262	372	716	0.4	0.4	3.441	A
3	1391	348	314	2344	0.594	1391	548	1.5	1.5	3.777	A
4	17	4	1699	683	0.025	17	6	0.0	0.0	5.405	A
5	929	232	637	2262	0.411	929	1079	0.7	0.7	2.700	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	8	2	1198	919	0.009	8	368	0.0	0.0	3.949	A
2	372	93	490	1418	0.262	372	716	0.4	0.4	3.441	A
3	1391	348	314	2344	0.594	1391	548	1.5	1.5	3.777	A
4	17	4	1699	683	0.025	17	6	0.0	0.0	5.405	A
5	929	232	637	2262	0.411	929	1079	0.7	0.7	2.700	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	8	2	1198	919	0.009	8	368	0.0	0.0	3.949	A
2	372	93	490	1418	0.262	372	716	0.4	0.4	3.441	A
3	1391	348	314	2344	0.594	1391	548	1.5	1.5	3.777	A
4	17	4	1699	683	0.025	17	6	0.0	0.0	5.405	A
5	929	232	637	2262	0.411	929	1079	0.7	0.7	2.700	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	8	2	1198	919	0.009	8	368	0.0	0.0	3.949	A
2	372	93	490	1418	0.262	372	716	0.4	0.4	3.441	A
3	1391	348	314	2344	0.594	1391	548	1.5	1.5	3.777	A
4	17	4	1699	683	0.025	17	6	0.0	0.0	5.406	A
5	929	232	637	2262	0.411	929	1079	0.7	0.7	2.700	A

D3 - 2030 | Base | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	9.24	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	10	Arm 5	9.24	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D3	2030	Base	AM	FLAT	06:45	08:15	90	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		FLAT	✓	97	100.000
2		FLAT	✓	354	100.000
3		FLAT	✓	406	100.000
4		FLAT	✓	49	100.000
5		FLAT	✓	2274	100.000

Origin-Destination Data

Demand (PCU/hr)

	To					
	1	2	3	4	5	
From	1	0	6	84	0	7
	2	1	0	87	3	263
	3	14	64	0	4	324
	4	1	15	6	0	27
	5	5	486	1755	26	2

Vehicle Mix

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

Heavy Vehicle %

	To					
From		1	2	3	4	5
	1	0	0	0	0	0
	2	0	0	0	0	0
	3	0	0	0	0	0
	4	0	0	0	0	0
	5	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.26	12.81	0.3	B	97	146
2	0.49	9.80	1.0	A	354	531
3	0.17	1.85	0.2	A	406	609
4	0.04	3.24	0.0	A	49	74
5	0.87	10.45	6.5	B	2274	3411

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	97	24	2329	389	0.249	96	21	0.0	0.3	12.202	B
2	354	89	1860	732	0.484	350	566	0.0	0.9	9.354	A
3	406	102	299	2353	0.173	405	1911	0.0	0.2	1.847	A
4	49	12	671	1162	0.042	49	33	0.0	0.0	3.232	A
5	2274	569	101	2618	0.869	2250	619	0.0	6.1	9.242	A

07:00 - 07:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	97	24	2353	378	0.256	97	21	0.3	0.3	12.787	B
2	354	89	1879	722	0.490	354	571	0.9	0.9	9.778	A
3	406	102	302	2352	0.173	406	1931	0.2	0.2	1.849	A
4	49	12	675	1161	0.042	49	33	0.0	0.0	3.237	A
5	2274	569	101	2618	0.869	2273	623	6.1	6.3	10.372	B

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	97	24	2354	378	0.257	97	21	0.3	0.3	12.805	B
2	354	89	1880	722	0.491	354	571	0.9	1.0	9.791	A
3	406	102	302	2351	0.173	406	1932	0.2	0.2	1.849	A
4	49	12	675	1161	0.042	49	33	0.0	0.0	3.237	A
5	2274	569	101	2618	0.869	2274	623	6.3	6.4	10.421	B

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	97	24	2354	378	0.257	97	21	0.3	0.3	12.808	B
2	354	89	1880	722	0.491	354	571	1.0	1.0	9.794	A
3	406	102	302	2351	0.173	406	1932	0.2	0.2	1.849	A
4	49	12	675	1161	0.042	49	33	0.0	0.0	3.237	A
5	2274	569	101	2618	0.869	2274	623	6.4	6.5	10.440	B

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	97	24	2354	378	0.257	97	21	0.3	0.3	12.810	B
2	354	89	1880	721	0.491	354	571	1.0	1.0	9.795	A
3	406	102	302	2351	0.173	406	1932	0.2	0.2	1.849	A
4	49	12	675	1161	0.042	49	33	0.0	0.0	3.237	A
5	2274	569	101	2618	0.869	2274	623	6.5	6.5	10.448	B

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	97	24	2354	378	0.257	97	21	0.3	0.3	12.811	B
2	354	89	1880	721	0.491	354	571	1.0	1.0	9.795	A
3	406	102	302	2351	0.173	406	1932	0.2	0.2	1.849	A
4	49	12	675	1161	0.042	49	33	0.0	0.0	3.237	A
5	2274	569	101	2618	0.869	2274	623	6.5	6.5	10.454	B

D4 - 2030 | Base | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	3.59	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	47	Arm 3	3.59	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D4	2030	Base	PM	FLAT	16:00	17:30	90	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		FLAT	✓	8	100.000
2		FLAT	✓	388	100.000
3		FLAT	✓	1453	100.000
4		FLAT	✓	17	100.000
5		FLAT	✓	970	100.000

Origin-Destination Data

Demand (PCU/hr)

	To					
	1	2	3	4	5	
From	1	0	6	1	0	1
	2	28	0	63	2	295
	3	348	277	3	3	822
	4	2	3	4	0	8
	5	6	462	501	1	0

Vehicle Mix

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

Heavy Vehicle %

	To					
From		1	2	3	4	5
	1	0	0	0	0	0
	2	0	0	0	0	0
	3	0	0	0	0	0
	4	0	0	0	0	0
	5	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.01	4.06	0.0	A	8	12
2	0.28	3.53	0.4	A	388	582
3	0.62	4.08	1.6	A	1453	2180
4	0.03	5.71	0.0	A	17	26
5	0.43	2.83	0.8	A	970	1455

Main Results for each time segment

16:00 - 16:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	8	2	1247	897	0.009	8	382	0.0	0.0	4.050	A
2	388	97	509	1408	0.276	386	745	0.0	0.4	3.520	A
3	1453	363	326	2336	0.622	1446	570	0.0	1.6	4.018	A
4	17	4	1766	651	0.026	17	6	0.0	0.0	5.673	A
5	970	243	662	2245	0.432	967	1121	0.0	0.8	2.808	A

16:15 - 16:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	8	2	1251	895	0.009	8	384	0.0	0.0	4.059	A
2	388	97	511	1407	0.276	388	748	0.4	0.4	3.531	A
3	1453	363	327	2335	0.622	1453	572	1.6	1.6	4.079	A
4	17	4	1774	648	0.026	17	6	0.0	0.0	5.705	A
5	970	243	665	2243	0.432	970	1126	0.8	0.8	2.827	A

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	8	2	1251	895	0.009	8	384	0.0	0.0	4.059	A
2	388	97	511	1407	0.276	388	748	0.4	0.4	3.531	A
3	1453	363	327	2335	0.622	1453	572	1.6	1.6	4.079	A
4	17	4	1774	648	0.026	17	6	0.0	0.0	5.705	A
5	970	243	665	2243	0.432	970	1126	0.8	0.8	2.827	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	8	2	1251	895	0.009	8	384	0.0	0.0	4.060	A
2	388	97	511	1407	0.276	388	748	0.4	0.4	3.531	A
3	1453	363	327	2335	0.622	1453	572	1.6	1.6	4.079	A
4	17	4	1774	648	0.026	17	6	0.0	0.0	5.705	A
5	970	243	665	2243	0.432	970	1126	0.8	0.8	2.827	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	8	2	1251	895	0.009	8	384	0.0	0.0	4.060	A
2	388	97	511	1407	0.276	388	748	0.4	0.4	3.531	A
3	1453	363	327	2335	0.622	1453	572	1.6	1.6	4.079	A
4	17	4	1774	648	0.026	17	6	0.0	0.0	5.705	A
5	970	243	665	2243	0.432	970	1126	0.8	0.8	2.827	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	8	2	1251	895	0.009	8	384	0.0	0.0	4.060	A
2	388	97	511	1407	0.276	388	748	0.4	0.4	3.531	A
3	1453	363	327	2335	0.622	1453	572	1.6	1.6	4.079	A
4	17	4	1774	648	0.026	17	6	0.0	0.0	5.705	A
5	970	243	665	2243	0.432	970	1126	0.8	0.8	2.827	A

D5 - 2030 | B+D (P1) | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	14.34	B

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	4	Arm 5	14.34	B

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D5	2030	B+D (P1)	AM	FLAT	06:45	08:15	90	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		FLAT	✓	102	100.000
2		FLAT	✓	363	100.000
3		FLAT	✓	486	100.000
4		FLAT	✓	49	100.000
5		FLAT	✓	2405	100.000

Origin-Destination Data

Demand (PCU/hr)

	To					
	1	2	3	4	5	
From	1	0	6	89	0	7
	2	1	0	98	3	261
	3	15	73	0	4	394
	4	1	15	6	0	27
	5	5	482	1890	26	2

Vehicle Mix

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

Heavy Vehicle %

	To					
From		1	2	3	4	5
	1	0	0	0	0	0
	2	0	0	0	0	0
	3	0	0	0	0	0
	4	0	0	0	0	0
	5	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.33	17.10	0.5	C	102	153
2	0.56	12.48	1.3	B	363	545
3	0.21	1.93	0.3	A	486	729
4	0.04	3.35	0.0	A	49	74
5	0.92	17.24	11.2	C	2405	3608

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	102	26	2455	331	0.309	100	22	0.0	0.4	15.518	C
2	363	91	1988	668	0.544	358	568	0.0	1.2	11.478	B
3	486	122	296	2355	0.206	485	2050	0.0	0.3	1.924	A
4	49	12	748	1126	0.044	49	33	0.0	0.0	3.340	A
5	2405	601	111	2611	0.921	2366	687	0.0	9.7	13.125	B

07:00 - 07:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	102	26	2491	314	0.325	102	22	0.4	0.5	16.959	C
2	363	91	2017	653	0.556	363	575	1.2	1.2	12.395	B
3	486	122	300	2353	0.207	486	2080	0.3	0.3	1.928	A
4	49	12	753	1124	0.044	49	33	0.0	0.0	3.347	A
5	2405	601	111	2611	0.921	2402	691	9.7	10.5	16.597	C

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	102	26	2493	313	0.326	102	22	0.5	0.5	17.053	C
2	363	91	2019	652	0.557	363	576	1.2	1.2	12.451	B
3	486	122	300	2353	0.207	486	2082	0.3	0.3	1.928	A
4	49	12	753	1124	0.044	49	33	0.0	0.0	3.347	A
5	2405	601	111	2611	0.921	2404	691	10.5	10.8	16.957	C

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	102	26	2493	313	0.326	102	22	0.5	0.5	17.080	C
2	363	91	2019	652	0.557	363	576	1.2	1.2	12.466	B
3	486	122	300	2353	0.207	486	2082	0.3	0.3	1.928	A
4	49	12	753	1124	0.044	49	33	0.0	0.0	3.347	A
5	2405	601	111	2611	0.921	2404	691	10.8	11.0	17.107	C

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	102	26	2494	313	0.326	102	22	0.5	0.5	17.092	C
2	363	91	2020	652	0.557	363	576	1.2	1.2	12.474	B
3	486	122	300	2353	0.207	486	2083	0.3	0.3	1.928	A
4	49	12	753	1124	0.044	49	33	0.0	0.0	3.347	A
5	2405	601	111	2611	0.921	2405	691	11.0	11.2	17.189	C

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	102	26	2494	313	0.326	102	22	0.5	0.5	17.097	C
2	363	91	2020	651	0.557	363	576	1.2	1.3	12.476	B
3	486	122	300	2353	0.207	486	2083	0.3	0.3	1.928	A
4	49	12	753	1124	0.044	49	33	0.0	0.0	3.347	A
5	2405	601	111	2611	0.921	2405	691	11.2	11.2	17.242	C

D6 - 2030 | B+D (P1) | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	4.07	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	36	Arm 3	4.07	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D6	2030	B+D (P1)	PM	FLAT	16:00	17:30	90	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		FLAT	✓	10	100.000
2		FLAT	✓	391	100.000
3		FLAT	✓	1591	100.000
4		FLAT	✓	17	100.000
5		FLAT	✓	1049	100.000

Origin-Destination Data

Demand (PCU/hr)

	To					
	1	2	3	4	5	
From	1	0	6	3	0	1
	2	28	0	68	2	293
	3	351	285	3	3	949
	4	2	3	4	0	8
	5	6	458	584	1	0

Vehicle Mix

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

Heavy Vehicle %

	To					
From		1	2	3	4	5
	1	0	0	0	0	0
	2	0	0	0	0	0
	3	0	0	0	0	0
	4	0	0	0	0	0
	5	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.01	4.27	0.0	A	10	15
2	0.29	3.70	0.4	A	391	587
3	0.68	4.83	2.1	A	1591	2387
4	0.03	6.34	0.0	A	17	26
5	0.47	3.03	0.9	A	1049	1574

Main Results for each time segment

16:00 - 16:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	10	3	1333	856	0.012	10	385	0.0	0.0	4.253	A
2	391	98	594	1366	0.286	389	749	0.0	0.4	3.681	A
3	1591	398	324	2338	0.681	1583	660	0.0	2.1	4.718	A
4	17	4	1900	589	0.029	17	6	0.0	0.0	6.291	A
5	1049	262	672	2238	0.469	1045	1245	0.0	0.9	3.010	A

16:15 - 16:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	10	3	1338	854	0.012	10	387	0.0	0.0	4.265	A
2	391	98	596	1365	0.287	391	752	0.4	0.4	3.696	A
3	1591	398	325	2337	0.681	1591	662	2.1	2.1	4.827	A
4	17	4	1910	584	0.029	17	6	0.0	0.0	6.343	A
5	1049	262	676	2236	0.469	1049	1251	0.9	0.9	3.032	A

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	10	3	1338	854	0.012	10	387	0.0	0.0	4.265	A
2	391	98	596	1365	0.287	391	752	0.4	0.4	3.696	A
3	1591	398	325	2337	0.681	1591	662	2.1	2.1	4.827	A
4	17	4	1910	584	0.029	17	6	0.0	0.0	6.343	A
5	1049	262	676	2236	0.469	1049	1251	0.9	0.9	3.032	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	10	3	1338	854	0.012	10	387	0.0	0.0	4.265	A
2	391	98	596	1365	0.287	391	752	0.4	0.4	3.696	A
3	1591	398	325	2337	0.681	1591	662	2.1	2.1	4.827	A
4	17	4	1910	584	0.029	17	6	0.0	0.0	6.343	A
5	1049	262	676	2236	0.469	1049	1251	0.9	0.9	3.032	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	10	3	1338	854	0.012	10	387	0.0	0.0	4.265	A
2	391	98	596	1365	0.287	391	752	0.4	0.4	3.696	A
3	1591	398	325	2337	0.681	1591	662	2.1	2.1	4.827	A
4	17	4	1910	584	0.029	17	6	0.0	0.0	6.343	A
5	1049	262	676	2236	0.469	1049	1251	0.9	0.9	3.032	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	10	3	1338	854	0.012	10	387	0.0	0.0	4.265	A
2	391	98	596	1365	0.287	391	752	0.4	0.4	3.696	A
3	1591	398	325	2337	0.681	1591	662	2.1	2.1	4.827	A
4	17	4	1910	584	0.029	17	6	0.0	0.0	6.343	A
5	1049	262	676	2236	0.469	1049	1251	0.9	0.9	3.032	A

D7 - 2030 | B+D (P1_P2) | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	17.02	C

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	3	Arm 5	17.02	C

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D7	2030	B+D (P1_P2)	AM	FLAT	06:45	08:15	90	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		FLAT	✓	105	100.000
2		FLAT	✓	367	100.000
3		FLAT	✓	541	100.000
4		FLAT	✓	49	100.000
5		FLAT	✓	2440	100.000

Origin-Destination Data

Demand (PCU/hr)

	To					
	1	2	3	4	5	
From	1	0	6	92	0	7
	2	1	0	100	3	263
	3	18	77	0	4	442
	4	1	15	6	0	27
	5	5	486	1921	26	2

Vehicle Mix

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

Heavy Vehicle %

	To					
From		1	2	3	4	5
	1	0	0	0	0	0
	2	0	0	0	0	0
	3	0	0	0	0	0
	4	0	0	0	0	0
	5	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.36	19.00	0.6	C	105	158
2	0.58	13.45	1.4	B	367	551
3	0.23	1.99	0.3	A	541	812
4	0.04	3.43	0.0	A	49	74
5	0.94	21.08	13.8	C	2440	3660

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	105	26	2488	315	0.333	103	25	0.0	0.5	16.811	C
2	367	92	2016	653	0.562	362	575	0.0	1.2	12.162	B
3	541	135	298	2354	0.230	540	2080	0.0	0.3	1.983	A
4	49	12	805	1100	0.045	49	32	0.0	0.0	3.424	A
5	2440	610	118	2607	0.936	2395	736	0.0	11.3	14.756	B

07:00 - 07:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	105	26	2528	297	0.354	105	25	0.5	0.5	18.749	C
2	367	92	2050	636	0.577	367	583	1.2	1.3	13.317	B
3	541	135	302	2352	0.230	541	2115	0.3	0.3	1.987	A
4	49	12	810	1098	0.045	49	33	0.0	0.0	3.431	A
5	2440	610	118	2606	0.936	2435	741	11.3	12.6	19.754	C

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	105	26	2531	295	0.356	105	25	0.5	0.5	18.917	C
2	367	92	2052	635	0.578	367	584	1.3	1.3	13.407	B
3	541	135	302	2352	0.230	541	2117	0.3	0.3	1.988	A
4	49	12	810	1098	0.045	49	33	0.0	0.0	3.432	A
5	2440	610	118	2606	0.936	2438	741	12.6	13.2	20.460	C

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	105	26	2532	295	0.356	105	25	0.5	0.5	18.968	C
2	367	92	2053	635	0.578	367	584	1.3	1.4	13.433	B
3	541	135	302	2351	0.230	541	2118	0.3	0.3	1.988	A
4	49	12	810	1098	0.045	49	33	0.0	0.0	3.432	A
5	2440	610	118	2606	0.936	2439	741	13.2	13.5	20.778	C

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	105	26	2532	294	0.357	105	25	0.5	0.5	18.993	C
2	367	92	2053	635	0.578	367	584	1.4	1.4	13.444	B
3	541	135	302	2351	0.230	541	2118	0.3	0.3	1.988	A
4	49	12	810	1098	0.045	49	33	0.0	0.0	3.432	A
5	2440	610	118	2606	0.936	2439	741	13.5	13.7	20.962	C

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	105	26	2532	294	0.357	105	25	0.5	0.6	19.005	C
2	367	92	2054	635	0.578	367	584	1.4	1.4	13.452	B
3	541	135	302	2351	0.230	541	2119	0.3	0.3	1.988	A
4	49	12	810	1098	0.045	49	33	0.0	0.0	3.432	A
5	2440	610	118	2606	0.936	2439	741	13.7	13.8	21.080	C

D8 - 2030 | B+D (P1_P2) | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	4.28	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	33	Arm 3	4.28	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D8	2030	B+D (P1_P2)	PM	FLAT	16:00	17:30	90	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		FLAT	✓	13	100.000
2		FLAT	✓	397	100.000
3		FLAT	✓	1630	100.000
4		FLAT	✓	17	100.000
5		FLAT	✓	1101	100.000

Origin-Destination Data

Demand (PCU/hr)

	To					
	1	2	3	4	5	
From	1	0	6	6	0	1
	2	28	0	72	2	295
	3	355	288	3	3	981
	4	2	3	4	0	8
	5	6	462	632	1	0

Vehicle Mix

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

Heavy Vehicle %

	To					
From		1	2	3	4	5
	1	0	0	0	0	0
	2	0	0	0	0	0
	3	0	0	0	0	0
	4	0	0	0	0	0
	5	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.02	4.42	0.0	A	13	20
2	0.30	3.82	0.4	A	397	596
3	0.70	5.10	2.3	A	1630	2445
4	0.03	6.56	0.0	A	17	26
5	0.49	3.18	1.0	A	1101	1652

Main Results for each time segment

16:00 - 16:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	13	3	1387	831	0.016	13	389	0.0	0.0	4.402	A
2	397	99	645	1340	0.296	395	756	0.0	0.4	3.803	A
3	1630	408	326	2336	0.698	1621	714	0.0	2.3	4.973	A
4	17	4	1941	570	0.030	17	6	0.0	0.0	6.504	A
5	1101	275	679	2234	0.493	1097	1278	0.0	1.0	3.157	A

16:15 - 16:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	13	3	1393	828	0.016	13	391	0.0	0.0	4.416	A
2	397	99	647	1339	0.296	397	759	0.4	0.4	3.820	A
3	1630	408	327	2335	0.698	1630	717	2.3	2.3	5.101	A
4	17	4	1951	565	0.030	17	6	0.0	0.0	6.564	A
5	1101	275	683	2231	0.493	1101	1285	1.0	1.0	3.184	A

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	13	3	1393	828	0.016	13	391	0.0	0.0	4.416	A
2	397	99	647	1339	0.296	397	759	0.4	0.4	3.820	A
3	1630	408	327	2335	0.698	1630	717	2.3	2.3	5.103	A
4	17	4	1951	565	0.030	17	6	0.0	0.0	6.564	A
5	1101	275	683	2231	0.493	1101	1285	1.0	1.0	3.184	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	13	3	1393	828	0.016	13	391	0.0	0.0	4.416	A
2	397	99	647	1339	0.296	397	759	0.4	0.4	3.820	A
3	1630	408	327	2335	0.698	1630	717	2.3	2.3	5.103	A
4	17	4	1951	565	0.030	17	6	0.0	0.0	6.564	A
5	1101	275	683	2231	0.493	1101	1285	1.0	1.0	3.184	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	13	3	1393	828	0.016	13	391	0.0	0.0	4.416	A
2	397	99	647	1339	0.296	397	759	0.4	0.4	3.820	A
3	1630	408	327	2335	0.698	1630	717	2.3	2.3	5.103	A
4	17	4	1951	565	0.030	17	6	0.0	0.0	6.564	A
5	1101	275	683	2231	0.493	1101	1285	1.0	1.0	3.184	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	13	3	1393	828	0.016	13	391	0.0	0.0	4.416	A
2	397	99	647	1339	0.296	397	759	0.4	0.4	3.820	A
3	1630	408	327	2335	0.698	1630	717	2.3	2.3	5.103	A
4	17	4	1951	565	0.030	17	6	0.0	0.0	6.565	A
5	1101	275	683	2231	0.493	1101	1285	1.0	1.0	3.184	A

D9 - 2030 | B+C | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	12.04	B

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	6	Arm 5	12.04	B

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D9	2030	B+C	AM	FLAT	06:45	08:15	90	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		FLAT	✓	100	100.000
2		FLAT	✓	361	100.000
3		FLAT	✓	480	100.000
4		FLAT	✓	49	100.000
5		FLAT	✓	2361	100.000

Origin-Destination Data

Demand (PCU/hr)

	To					
	1	2	3	4	5	
From	1	0	6	87	0	7
	2	1	0	94	3	263
	3	16	70	0	4	390
	4	1	15	6	0	27
	5	5	486	1842	26	2

Vehicle Mix

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

Heavy Vehicle %

	To					
From		1	2	3	4	5
	1	0	0	0	0	0
	2	0	0	0	0	0
	3	0	0	0	0	0
	4	0	0	0	0	0
	5	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.30	15.35	0.4	C	100	150
2	0.53	11.41	1.1	B	361	542
3	0.20	1.92	0.3	A	480	720
4	0.04	3.34	0.0	A	49	74
5	0.90	14.23	9.1	B	2361	3542

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	100	25	2414	350	0.286	98	23	0.0	0.4	14.235	B
2	361	90	1943	690	0.523	357	570	0.0	1.1	10.668	B
3	480	120	298	2354	0.204	479	2001	0.0	0.3	1.919	A
4	49	12	745	1128	0.043	49	33	0.0	0.0	3.335	A
5	2361	590	109	2612	0.904	2328	685	0.0	8.2	11.586	B

07:00 - 07:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	100	25	2445	335	0.298	100	23	0.4	0.4	15.278	C
2	361	90	1968	677	0.533	361	577	1.1	1.1	11.364	B
3	480	120	302	2352	0.204	480	2027	0.3	0.3	1.923	A
4	49	12	749	1126	0.044	49	33	0.0	0.0	3.341	A
5	2361	590	109	2612	0.904	2359	689	8.2	8.7	13.922	B

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	100	25	2446	335	0.299	100	23	0.4	0.4	15.329	C
2	361	90	1969	677	0.533	361	577	1.1	1.1	11.397	B
3	480	120	302	2351	0.204	480	2028	0.3	0.3	1.923	A
4	49	12	749	1126	0.044	49	33	0.0	0.0	3.341	A
5	2361	590	109	2612	0.904	2360	689	8.7	8.9	14.099	B

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	100	25	2447	335	0.299	100	23	0.4	0.4	15.344	C
2	361	90	1970	677	0.534	361	577	1.1	1.1	11.405	B
3	480	120	302	2351	0.204	480	2029	0.3	0.3	1.923	A
4	49	12	749	1126	0.044	49	33	0.0	0.0	3.341	A
5	2361	590	109	2612	0.904	2361	689	8.9	9.0	14.166	B

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	100	25	2447	335	0.299	100	23	0.4	0.4	15.349	C
2	361	90	1970	676	0.534	361	577	1.1	1.1	11.408	B
3	480	120	302	2351	0.204	480	2029	0.3	0.3	1.923	A
4	49	12	749	1126	0.044	49	33	0.0	0.0	3.341	A
5	2361	590	109	2612	0.904	2361	689	9.0	9.1	14.205	B

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	100	25	2447	334	0.299	100	23	0.4	0.4	15.352	C
2	361	90	1970	676	0.534	361	577	1.1	1.1	11.411	B
3	480	120	302	2351	0.204	480	2029	0.3	0.3	1.923	A
4	49	12	749	1126	0.044	49	33	0.0	0.0	3.341	A
5	2361	590	109	2612	0.904	2361	689	9.1	9.1	14.228	B

D10 - 2030 | B+C | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	3.99	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	38	Arm 3	3.99	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D10	2030	B+C	PM	FLAT	16:00	17:30	90	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		FLAT	✓	10	100.000
2		FLAT	✓	395	100.000
3		FLAT	✓	1567	100.000
4		FLAT	✓	17	100.000
5		FLAT	✓	1050	100.000

Origin-Destination Data

Demand (PCU/hr)

	To					
	1	2	3	4	5	
From	1	0	6	3	0	1
	2	28	0	70	2	295
	3	352	285	3	3	924
	4	2	3	4	0	8
	5	6	462	581	1	0

Vehicle Mix

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

Heavy Vehicle %

	To					
From		1	2	3	4	5
	1	0	0	0	0	0
	2	0	0	0	0	0
	3	0	0	0	0	0
	4	0	0	0	0	0
	5	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.01	4.27	0.0	A	10	15
2	0.29	3.71	0.4	A	395	593
3	0.67	4.68	2.0	A	1567	2351
4	0.03	6.23	0.0	A	17	26
5	0.47	3.04	0.9	A	1050	1575

Main Results for each time segment

16:00 - 16:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	10	3	1334	856	0.012	10	386	0.0	0.0	4.256	A
2	395	99	591	1367	0.289	393	753	0.0	0.4	3.690	A
3	1567	392	326	2336	0.671	1559	659	0.0	2.0	4.586	A
4	17	4	1879	599	0.028	17	6	0.0	0.0	6.182	A
5	1050	263	674	2237	0.469	1046	1222	0.0	0.9	3.014	A

16:15 - 16:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	10	3	1339	853	0.012	10	388	0.0	0.0	4.267	A
2	395	99	593	1366	0.289	395	756	0.4	0.4	3.706	A
3	1567	392	327	2335	0.671	1567	661	2.0	2.0	4.684	A
4	17	4	1888	595	0.029	17	6	0.0	0.0	6.230	A
5	1050	263	677	2235	0.470	1050	1228	0.9	0.9	3.036	A

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	10	3	1339	853	0.012	10	388	0.0	0.0	4.268	A
2	395	99	593	1366	0.289	395	756	0.4	0.4	3.706	A
3	1567	392	327	2335	0.671	1567	661	2.0	2.0	4.684	A
4	17	4	1888	595	0.029	17	6	0.0	0.0	6.230	A
5	1050	263	677	2235	0.470	1050	1228	0.9	0.9	3.036	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	10	3	1339	853	0.012	10	388	0.0	0.0	4.268	A
2	395	99	593	1366	0.289	395	756	0.4	0.4	3.706	A
3	1567	392	327	2335	0.671	1567	661	2.0	2.0	4.684	A
4	17	4	1888	595	0.029	17	6	0.0	0.0	6.230	A
5	1050	263	677	2235	0.470	1050	1228	0.9	0.9	3.036	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	10	3	1339	853	0.012	10	388	0.0	0.0	4.268	A
2	395	99	593	1366	0.289	395	756	0.4	0.4	3.706	A
3	1567	392	327	2335	0.671	1567	661	2.0	2.0	4.684	A
4	17	4	1888	595	0.029	17	6	0.0	0.0	6.231	A
5	1050	263	677	2235	0.470	1050	1228	0.9	0.9	3.036	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	10	3	1339	853	0.012	10	388	0.0	0.0	4.268	A
2	395	99	593	1366	0.289	395	756	0.4	0.4	3.706	A
3	1567	392	327	2335	0.671	1567	661	2.0	2.0	4.684	A
4	17	4	1888	595	0.029	17	6	0.0	0.0	6.231	A
5	1050	263	677	2235	0.470	1050	1228	0.9	0.9	3.036	A

D11 - 2030 | B+C+D (P1) | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	23.08	C

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	1	Arm 5	23.08	C

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D11	2030	B+C+D (P1)	AM	FLAT	06:45	08:15	90	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		FLAT	✓	105	100.000
2		FLAT	✓	371	100.000
3		FLAT	✓	560	100.000
4		FLAT	✓	49	100.000
5		FLAT	✓	2492	100.000

Origin-Destination Data

Demand (PCU/hr)

	To					
	1	2	3	4	5	
From	1	0	6	92	0	7
	2	1	0	106	3	261
	3	17	79	0	4	460
	4	1	15	6	0	27
	5	5	482	1977	26	2

Vehicle Mix

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

Heavy Vehicle %

	To					
From		1	2	3	4	5
	1	0	0	0	0	0
	2	0	0	0	0	0
	3	0	0	0	0	0
	4	0	0	0	0	0
	5	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.39	21.87	0.6	C	105	158
2	0.61	15.25	1.6	C	371	557
3	0.24	2.01	0.3	A	560	840
4	0.04	3.46	0.0	A	49	74
5	0.96	29.42	19.6	D	2492	3738

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	105	26	2530	296	0.355	103	24	0.0	0.5	18.489	C
2	371	93	2062	630	0.589	365	571	0.0	1.4	13.337	B
3	560	140	295	2356	0.238	559	2132	0.0	0.3	2.002	A
4	49	12	822	1092	0.045	49	32	0.0	0.0	3.450	A
5	2492	623	119	2606	0.956	2435	752	0.0	14.3	17.416	C

07:00 - 07:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	105	26	2577	273	0.384	105	24	0.5	0.6	21.292	C
2	371	93	2102	610	0.608	371	580	1.4	1.5	14.963	B
3	560	140	300	2353	0.238	560	2173	0.3	0.3	2.007	A
4	49	12	827	1090	0.045	49	33	0.0	0.0	3.457	A
5	2492	623	119	2606	0.956	2482	757	14.3	16.7	25.668	D

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	105	26	2582	271	0.387	105	24	0.6	0.6	21.646	C
2	371	93	2106	608	0.610	371	581	1.5	1.5	15.145	C
3	560	140	300	2353	0.238	560	2177	0.3	0.3	2.007	A
4	49	12	827	1090	0.045	49	33	0.0	0.0	3.458	A
5	2492	623	119	2606	0.956	2487	757	16.7	17.9	27.475	D

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	105	26	2584	270	0.389	105	24	0.6	0.6	21.774	C
2	371	93	2108	607	0.611	371	581	1.5	1.5	15.207	C
3	560	140	300	2353	0.238	560	2179	0.3	0.3	2.007	A
4	49	12	827	1090	0.045	49	33	0.0	0.0	3.458	A
5	2492	623	119	2606	0.956	2489	757	17.9	18.7	28.419	D

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	105	26	2585	270	0.389	105	24	0.6	0.6	21.838	C
2	371	93	2108	607	0.611	371	582	1.5	1.6	15.236	C
3	560	140	300	2353	0.238	560	2179	0.3	0.3	2.007	A
4	49	12	827	1090	0.045	49	33	0.0	0.0	3.458	A
5	2492	623	119	2606	0.956	2490	757	18.7	19.2	29.009	D

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	105	26	2586	270	0.390	105	24	0.6	0.6	21.874	C
2	371	93	2109	607	0.611	371	582	1.6	1.6	15.253	C
3	560	140	300	2353	0.238	560	2180	0.3	0.3	2.007	A
4	49	12	827	1090	0.045	49	33	0.0	0.0	3.458	A
5	2492	623	119	2606	0.956	2491	757	19.2	19.6	29.416	D

D12 - 2030 | B+C+D (P1) | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	4.65	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	28	Arm 3	4.65	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D12	2030	B+C+D (P1)	PM	FLAT	16:00	17:30	90	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		FLAT	✓	12	100.000
2		FLAT	✓	398	100.000
3		FLAT	✓	1706	100.000
4		FLAT	✓	17	100.000
5		FLAT	✓	1129	100.000

Origin-Destination Data

Demand (PCU/hr)

	To					
	1	2	3	4	5	
From	1	0	6	5	0	1
	2	28	0	75	2	293
	3	355	293	3	3	1052
	4	2	3	4	0	8
	5	6	458	664	1	0

Vehicle Mix

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

Heavy Vehicle %

	To					
From		1	2	3	4	5
	1	0	0	0	0	0
	2	0	0	0	0	0
	3	0	0	0	0	0
	4	0	0	0	0	0
	5	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.01	4.50	0.0	A	12	18
2	0.30	3.89	0.4	A	398	597
3	0.73	5.71	2.7	A	1706	2559
4	0.03	7.01	0.0	A	17	26
5	0.51	3.27	1.0	A	1129	1694

Main Results for each time segment

16:00 - 16:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	12	3	1420	815	0.015	12	389	0.0	0.0	4.480	A
2	398	100	676	1325	0.300	396	756	0.0	0.4	3.870	A
3	1706	427	324	2338	0.730	1695	748	0.0	2.6	5.519	A
4	17	4	2013	536	0.032	17	6	0.0	0.0	6.928	A
5	1129	282	684	2231	0.506	1125	1346	0.0	1.0	3.244	A

16:15 - 16:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	12	3	1426	813	0.015	12	391	0.0	0.0	4.495	A
2	398	100	678	1324	0.301	398	760	0.4	0.4	3.889	A
3	1706	427	325	2337	0.730	1706	751	2.6	2.7	5.701	A
4	17	4	2025	531	0.032	17	6	0.0	0.0	7.005	A
5	1129	282	688	2228	0.507	1129	1354	1.0	1.0	3.275	A

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	12	3	1426	813	0.015	12	391	0.0	0.0	4.495	A
2	398	100	678	1324	0.301	398	760	0.4	0.4	3.889	A
3	1706	427	325	2337	0.730	1706	751	2.7	2.7	5.707	A
4	17	4	2025	531	0.032	17	6	0.0	0.0	7.005	A
5	1129	282	688	2228	0.507	1129	1354	1.0	1.0	3.275	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	12	3	1426	813	0.015	12	391	0.0	0.0	4.495	A
2	398	100	678	1323	0.301	398	760	0.4	0.4	3.889	A
3	1706	427	325	2337	0.730	1706	751	2.7	2.7	5.707	A
4	17	4	2025	531	0.032	17	6	0.0	0.0	7.005	A
5	1129	282	688	2228	0.507	1129	1354	1.0	1.0	3.275	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	12	3	1426	813	0.015	12	391	0.0	0.0	4.495	A
2	398	100	678	1323	0.301	398	760	0.4	0.4	3.889	A
3	1706	427	325	2337	0.730	1706	751	2.7	2.7	5.707	A
4	17	4	2025	531	0.032	17	6	0.0	0.0	7.006	A
5	1129	282	688	2228	0.507	1129	1354	1.0	1.0	3.275	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	12	3	1426	813	0.015	12	391	0.0	0.0	4.495	A
2	398	100	678	1323	0.301	398	760	0.4	0.4	3.889	A
3	1706	427	325	2337	0.730	1706	751	2.7	2.7	5.707	A
4	17	4	2025	531	0.032	17	6	0.0	0.0	7.006	A
5	1129	282	688	2228	0.507	1129	1354	1.0	1.0	3.275	A

D13 - 2030 | B+C+D (P1_P2) | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	30.65	D

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	-1	Arm 5	30.65	D

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D13	2030	B+C+D (P1_P2)	AM	FLAT	06:45	08:15	90	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		FLAT	✓	108	100.000
2		FLAT	✓	374	100.000
3		FLAT	✓	615	100.000
4		FLAT	✓	49	100.000
5		FLAT	✓	2527	100.000

Origin-Destination Data

Demand (PCU/hr)

	To					
	1	2	3	4	5	
From	1	0	6	95	0	7
	2	1	0	107	3	263
	3	20	83	0	4	508
	4	1	15	6	0	27
	5	5	486	2008	26	2

Vehicle Mix

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

Heavy Vehicle %

	To					
From		1	2	3	4	5
	1	0	0	0	0	0
	2	0	0	0	0	0
	3	0	0	0	0	0
	4	0	0	0	0	0
	5	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.43	24.95	0.7	C	108	162
2	0.63	16.60	1.7	C	374	561
3	0.26	2.07	0.4	A	615	923
4	0.05	3.55	0.0	A	49	74
5	0.97	40.46	27.2	E	2527	3791

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	108	27	2557	283	0.382	106	27	0.0	0.6	20.063	C
2	374	94	2086	618	0.605	368	576	0.0	1.5	14.092	B
3	615	154	297	2355	0.261	614	2158	0.0	0.4	2.065	A
4	49	12	878	1066	0.046	49	32	0.0	0.0	3.539	A
5	2527	632	126	2601	0.971	2458	801	0.0	17.2	19.876	C

07:00 - 07:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	108	27	2610	258	0.418	108	27	0.6	0.7	23.821	C
2	374	94	2130	596	0.627	373	587	1.5	1.6	16.102	C
3	615	154	301	2352	0.261	615	2202	0.4	0.4	2.072	A
4	49	12	884	1063	0.046	49	33	0.0	0.0	3.548	A
5	2527	632	126	2601	0.972	2511	807	17.2	21.3	31.902	D

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	108	27	2617	255	0.424	108	27	0.7	0.7	24.450	C
2	374	94	2136	593	0.631	374	588	1.6	1.7	16.390	C
3	615	154	302	2352	0.262	615	2208	0.4	0.4	2.072	A
4	49	12	884	1063	0.046	49	33	0.0	0.0	3.548	A
5	2527	632	126	2601	0.972	2518	807	21.3	23.6	35.571	E

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	108	27	2620	253	0.426	108	27	0.7	0.7	24.713	C
2	374	94	2139	592	0.632	374	589	1.7	1.7	16.502	C
3	615	154	302	2352	0.262	615	2211	0.4	0.4	2.072	A
4	49	12	884	1063	0.046	49	33	0.0	0.0	3.549	A
5	2527	632	126	2601	0.972	2521	807	23.6	25.2	37.789	E

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	108	27	2621	253	0.427	108	27	0.7	0.7	24.861	C
2	374	94	2140	591	0.633	374	589	1.7	1.7	16.564	C
3	615	154	302	2352	0.262	615	2212	0.4	0.4	2.072	A
4	49	12	884	1063	0.046	49	33	0.0	0.0	3.549	A
5	2527	632	126	2601	0.972	2522	807	25.2	26.4	39.321	E

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	108	27	2623	252	0.428	108	27	0.7	0.7	24.952	C
2	374	94	2141	591	0.633	374	589	1.7	1.7	16.601	C
3	615	154	302	2351	0.262	615	2213	0.4	0.4	2.072	A
4	49	12	884	1063	0.046	49	33	0.0	0.0	3.549	A
5	2527	632	126	2601	0.972	2524	807	26.4	27.2	40.455	E

D14 - 2030 | B+C+D (P1_P2) | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	4.91	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	25	Arm 3	4.91	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D14	2030	B+C+D (P1_P2)	PM	FLAT	16:00	17:30	90	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		FLAT	✓	15	100.000
2		FLAT	✓	404	100.000
3		FLAT	✓	1744	100.000
4		FLAT	✓	17	100.000
5		FLAT	✓	1181	100.000

Origin-Destination Data

Demand (PCU/hr)

	To					
	1	2	3	4	5	
From	1	0	6	8	0	1
	2	28	0	79	2	295
	3	359	296	3	3	1083
	4	2	3	4	0	8
	5	6	462	712	1	0

Vehicle Mix

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

Heavy Vehicle %

	To					
From		1	2	3	4	5
	1	0	0	0	0	0
	2	0	0	0	0	0
	3	0	0	0	0	0
	4	0	0	0	0	0
	5	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.02	4.66	0.0	A	15	23
2	0.31	4.03	0.5	A	404	606
3	0.75	6.09	2.9	A	1744	2616
4	0.03	7.27	0.0	A	17	26
5	0.53	3.45	1.1	A	1181	1772

Main Results for each time segment

16:00 - 16:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	15	4	1475	790	0.019	15	392	0.0	0.0	4.645	A
2	404	101	726	1299	0.311	402	763	0.0	0.4	4.004	A
3	1744	436	326	2336	0.746	1733	803	0.0	2.9	5.856	A
4	17	4	2052	518	0.033	17	6	0.0	0.0	7.180	A
5	1181	295	690	2226	0.531	1177	1378	0.0	1.1	3.416	A

16:15 - 16:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	15	4	1481	787	0.019	15	395	0.0	0.0	4.663	A
2	404	101	729	1298	0.311	404	767	0.4	0.5	4.026	A
3	1744	436	327	2335	0.747	1744	806	2.9	2.9	6.081	A
4	17	4	2065	512	0.033	17	6	0.0	0.0	7.269	A
5	1181	295	695	2223	0.531	1181	1387	1.1	1.1	3.453	A

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	15	4	1481	787	0.019	15	395	0.0	0.0	4.663	A
2	404	101	729	1298	0.311	404	767	0.5	0.5	4.026	A
3	1744	436	327	2335	0.747	1744	806	2.9	2.9	6.084	A
4	17	4	2065	512	0.033	17	6	0.0	0.0	7.269	A
5	1181	295	695	2223	0.531	1181	1387	1.1	1.1	3.453	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	15	4	1481	787	0.019	15	395	0.0	0.0	4.663	A
2	404	101	729	1298	0.311	404	767	0.5	0.5	4.026	A
3	1744	436	327	2335	0.747	1744	806	2.9	2.9	6.086	A
4	17	4	2065	512	0.033	17	6	0.0	0.0	7.269	A
5	1181	295	695	2223	0.531	1181	1387	1.1	1.1	3.453	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	15	4	1481	787	0.019	15	395	0.0	0.0	4.663	A
2	404	101	729	1298	0.311	404	767	0.5	0.5	4.026	A
3	1744	436	327	2335	0.747	1744	806	2.9	2.9	6.086	A
4	17	4	2065	512	0.033	17	6	0.0	0.0	7.270	A
5	1181	295	695	2223	0.531	1181	1387	1.1	1.1	3.453	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	15	4	1481	787	0.019	15	395	0.0	0.0	4.663	A
2	404	101	729	1298	0.311	404	767	0.5	0.5	4.026	A
3	1744	436	327	2335	0.747	1744	806	2.9	2.9	6.086	A
4	17	4	2065	512	0.033	17	6	0.0	0.0	7.270	A
5	1181	295	695	2223	0.531	1181	1387	1.1	1.1	3.453	A

D15 - 2037 | Base | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	12.50	B

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	6	Arm 5	12.50	B

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D15	2037	Base	AM	FLAT	06:45	08:15	90	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		FLAT	✓	102	100.000
2		FLAT	✓	368	100.000
3		FLAT	✓	422	100.000
4		FLAT	✓	51	100.000
5		FLAT	✓	2371	100.000

Origin-Destination Data

Demand (PCU/hr)

	To					
	1	2	3	4	5	
From	1	0	7	87	0	8
	2	1	0	90	3	274
	3	14	66	0	4	338
	4	1	15	7	0	28
	5	5	506	1831	27	2

Vehicle Mix

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

Heavy Vehicle %

	To					
From		1	2	3	4	5
	1	0	0	0	0	0
	2	0	0	0	0	0
	3	0	0	0	0	0
	4	0	0	0	0	0
	5	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.31	15.70	0.4	C	102	153
2	0.54	11.52	1.2	B	368	552
3	0.18	1.87	0.2	A	422	633
4	0.04	3.28	0.0	A	51	77
5	0.91	14.60	9.4	B	2371	3557

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	102	26	2420	347	0.294	100	21	0.0	0.4	14.511	B
2	368	92	1934	694	0.530	364	587	0.0	1.1	10.748	B
3	422	106	311	2346	0.180	421	1987	0.0	0.2	1.870	A
4	51	13	699	1150	0.044	51	34	0.0	0.0	3.276	A
5	2371	593	104	2616	0.906	2337	646	0.0	8.4	11.791	B

07:00 - 07:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	102	26	2452	332	0.307	102	21	0.4	0.4	15.622	C
2	368	92	1960	681	0.540	368	594	1.1	1.2	11.469	B
3	422	106	315	2343	0.180	422	2013	0.2	0.2	1.872	A
4	51	13	703	1148	0.044	51	34	0.0	0.0	3.282	A
5	2371	593	104	2616	0.906	2369	650	8.4	9.0	14.265	B

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	102	26	2453	332	0.308	102	21	0.4	0.4	15.679	C
2	368	92	1961	681	0.541	368	594	1.2	1.2	11.503	B
3	422	106	315	2343	0.180	422	2014	0.2	0.2	1.872	A
4	51	13	703	1148	0.044	51	34	0.0	0.0	3.282	A
5	2371	593	104	2616	0.906	2370	650	9.0	9.2	14.461	B

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	102	26	2454	331	0.308	102	21	0.4	0.4	15.696	C
2	368	92	1962	681	0.541	368	594	1.2	1.2	11.514	B
3	422	106	315	2343	0.180	422	2015	0.2	0.2	1.872	A
4	51	13	703	1148	0.044	51	34	0.0	0.0	3.282	A
5	2371	593	104	2616	0.906	2371	650	9.2	9.3	14.538	B

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	102	26	2454	331	0.308	102	21	0.4	0.4	15.701	C
2	368	92	1962	680	0.541	368	594	1.2	1.2	11.517	B
3	422	106	315	2343	0.180	422	2015	0.2	0.2	1.872	A
4	51	13	703	1148	0.044	51	34	0.0	0.0	3.282	A
5	2371	593	104	2616	0.906	2371	650	9.3	9.4	14.579	B

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	102	26	2454	331	0.308	102	21	0.4	0.4	15.704	C
2	368	92	1962	680	0.541	368	594	1.2	1.2	11.518	B
3	422	106	315	2343	0.180	422	2015	0.2	0.2	1.872	A
4	51	13	703	1148	0.044	51	34	0.0	0.0	3.282	A
5	2371	593	104	2616	0.906	2371	650	9.4	9.4	14.605	B

D16 - 2037 | Base | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	3.81	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	41	Arm 3	3.81	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D16	2037	Base	PM	FLAT	16:00	17:30	90	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		FLAT	✓	9	100.000
2		FLAT	✓	403	100.000
3		FLAT	✓	1511	100.000
4		FLAT	✓	18	100.000
5		FLAT	✓	1009	100.000

Origin-Destination Data

Demand (PCU/hr)

	To					
		1	2	3	4	5
From	1	0	7	1	0	1
	2	29	0	65	2	307
	3	362	288	3	3	855
	4	2	3	4	0	9
	5	7	480	521	1	0

Vehicle Mix

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

Heavy Vehicle %

	To					
From		1	2	3	4	5
	1	0	0	0	0	0
	2	0	0	0	0	0
	3	0	0	0	0	0
	4	0	0	0	0	0
	5	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.01	4.17	0.0	A	9	14
2	0.29	3.62	0.4	A	403	605
3	0.65	4.41	1.8	A	1511	2267
4	0.03	6.03	0.0	A	18	27
5	0.45	2.96	0.8	A	1009	1514

Main Results for each time segment

16:00 - 16:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	9	2	1295	874	0.010	9	398	0.0	0.0	4.162	A
2	403	101	529	1398	0.288	401	775	0.0	0.4	3.605	A
3	1511	378	339	2328	0.649	1504	592	0.0	1.8	4.330	A
4	18	5	1836	619	0.029	18	6	0.0	0.0	5.989	A
5	1009	252	688	2228	0.453	1006	1167	0.0	0.8	2.938	A

16:15 - 16:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	9	2	1300	872	0.010	9	400	0.0	0.0	4.172	A
2	403	101	531	1397	0.288	403	778	0.4	0.4	3.620	A
3	1511	378	340	2327	0.649	1511	594	1.8	1.8	4.411	A
4	18	5	1845	615	0.029	18	6	0.0	0.0	6.031	A
5	1009	252	691	2226	0.453	1009	1172	0.8	0.8	2.957	A

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	9	2	1300	872	0.010	9	400	0.0	0.0	4.172	A
2	403	101	531	1397	0.288	403	778	0.4	0.4	3.620	A
3	1511	378	340	2327	0.649	1511	594	1.8	1.8	4.411	A
4	18	5	1845	615	0.029	18	6	0.0	0.0	6.031	A
5	1009	252	691	2226	0.453	1009	1172	0.8	0.8	2.957	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	9	2	1300	872	0.010	9	400	0.0	0.0	4.172	A
2	403	101	531	1397	0.288	403	778	0.4	0.4	3.620	A
3	1511	378	340	2327	0.649	1511	594	1.8	1.8	4.411	A
4	18	5	1845	615	0.029	18	6	0.0	0.0	6.032	A
5	1009	252	691	2226	0.453	1009	1172	0.8	0.8	2.957	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	9	2	1300	872	0.010	9	400	0.0	0.0	4.172	A
2	403	101	531	1397	0.288	403	778	0.4	0.4	3.620	A
3	1511	378	340	2327	0.649	1511	594	1.8	1.8	4.411	A
4	18	5	1845	615	0.029	18	6	0.0	0.0	6.032	A
5	1009	252	691	2226	0.453	1009	1172	0.8	0.8	2.957	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	9	2	1300	872	0.010	9	400	0.0	0.0	4.172	A
2	403	101	531	1397	0.288	403	778	0.4	0.4	3.620	A
3	1511	378	340	2327	0.649	1511	594	1.8	1.8	4.411	A
4	18	5	1845	615	0.029	18	6	0.0	0.0	6.032	A
5	1009	252	691	2226	0.453	1009	1172	0.8	0.8	2.957	A

D17 - 2037 | B+D (P1) | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	25.79	D

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	0	Arm 5	25.79	D

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D17	2037	B+D (P1)	AM	FLAT	06:45	08:15	90	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		FLAT	✓	108	100.000
2		FLAT	✓	379	100.000
3		FLAT	✓	504	100.000
4		FLAT	✓	51	100.000
5		FLAT	✓	2508	100.000

Origin-Destination Data

Demand (PCU/hr)

	To					
	1	2	3	4	5	
From	1	0	7	93	0	8
	2	1	0	102	3	273
	3	16	76	0	4	408
	4	1	15	7	0	28
	5	5	504	1970	27	2

Vehicle Mix

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

Heavy Vehicle %

	To					
From		1	2	3	4	5
	1	0	0	0	0	0
	2	0	0	0	0	0
	3	0	0	0	0	0
	4	0	0	0	0	0
	5	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.41	23.19	0.7	C	108	162
2	0.62	15.67	1.6	C	379	569
3	0.22	1.96	0.3	A	504	756
4	0.05	3.40	0.0	A	51	77
5	0.96	32.67	21.8	D	2508	3762

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	108	27	2540	291	0.371	106	23	0.0	0.6	19.226	C
2	379	95	2056	633	0.599	373	589	0.0	1.4	13.571	B
3	504	126	309	2347	0.215	503	2121	0.0	0.3	1.951	A
4	51	13	779	1112	0.046	51	33	0.0	0.0	3.391	A
5	2508	627	116	2608	0.962	2447	714	0.0	15.2	18.231	C

07:00 - 07:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	108	27	2589	268	0.403	108	23	0.6	0.7	22.425	C
2	379	95	2097	613	0.619	378	600	1.4	1.6	15.321	C
3	504	126	313	2344	0.215	504	2162	0.3	0.3	1.956	A
4	51	13	784	1110	0.046	51	34	0.0	0.0	3.398	A
5	2508	627	116	2608	0.962	2496	719	15.2	18.2	27.664	D

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	108	27	2595	265	0.407	108	23	0.7	0.7	22.858	C
2	379	95	2102	610	0.621	379	601	1.6	1.6	15.534	C
3	504	126	314	2344	0.215	504	2167	0.3	0.3	1.956	A
4	51	13	784	1110	0.046	51	34	0.0	0.0	3.399	A
5	2508	627	116	2608	0.962	2502	719	18.2	19.7	29.988	D

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	108	27	2597	264	0.409	108	23	0.7	0.7	23.046	C
2	379	95	2104	609	0.622	379	601	1.6	1.6	15.610	C
3	504	126	314	2344	0.215	504	2169	0.3	0.3	1.956	A
4	51	13	784	1110	0.046	51	34	0.0	0.0	3.399	A
5	2508	627	116	2608	0.962	2504	719	19.7	20.7	31.265	D

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	108	27	2598	264	0.410	108	23	0.7	0.7	23.133	C
2	379	95	2105	609	0.623	379	601	1.6	1.6	15.650	C
3	504	126	314	2344	0.215	504	2170	0.3	0.3	1.956	A
4	51	13	784	1110	0.046	51	34	0.0	0.0	3.399	A
5	2508	627	116	2608	0.962	2505	719	20.7	21.3	32.088	D

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	108	27	2599	263	0.410	108	23	0.7	0.7	23.187	C
2	379	95	2105	609	0.623	379	602	1.6	1.6	15.672	C
3	504	126	314	2344	0.215	504	2170	0.3	0.3	1.956	A
4	51	13	784	1110	0.046	51	34	0.0	0.0	3.399	A
5	2508	627	116	2608	0.962	2506	719	21.3	21.8	32.669	D

D18 - 2037 | B+D (P1) | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	4.41	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	31	Arm 3	4.41	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D18	2037	B+D (P1)	PM	FLAT	16:00	17:30	90	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		FLAT	✓	10	100.000
2		FLAT	✓	408	100.000
3		FLAT	✓	1654	100.000
4		FLAT	✓	18	100.000
5		FLAT	✓	1090	100.000

Origin-Destination Data

Demand (PCU/hr)

	To					
	1	2	3	4	5	
From	1	0	6	3	0	1
	2	29	0	71	2	306
	3	366	297	3	3	985
	4	2	3	4	0	9
	5	6	478	605	1	0

Vehicle Mix

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

Heavy Vehicle %

	To					
From		1	2	3	4	5
	1	0	0	0	0	0
	2	0	0	0	0	0
	3	0	0	0	0	0
	4	0	0	0	0	0
	5	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.01	4.39	0.0	A	10	15
2	0.30	3.80	0.4	A	408	612
3	0.71	5.34	2.4	A	1654	2481
4	0.03	6.78	0.0	A	18	27
5	0.49	3.19	1.0	A	1090	1635

Main Results for each time segment

16:00 - 16:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	10	3	1385	832	0.012	10	401	0.0	0.0	4.380	A
2	408	102	615	1355	0.301	406	781	0.0	0.4	3.788	A
3	1654	414	338	2329	0.710	1644	684	0.0	2.4	5.192	A
4	18	5	1976	554	0.033	18	6	0.0	0.0	6.717	A
5	1090	273	700	2220	0.491	1086	1294	0.0	1.0	3.165	A

16:15 - 16:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	10	3	1391	829	0.012	10	403	0.0	0.0	4.394	A
2	408	102	617	1354	0.301	408	784	0.4	0.4	3.804	A
3	1654	414	339	2328	0.711	1654	686	2.4	2.4	5.341	A
4	18	5	1987	549	0.033	18	6	0.0	0.0	6.784	A
5	1090	273	704	2217	0.492	1090	1301	1.0	1.0	3.192	A

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	10	3	1391	829	0.012	10	403	0.0	0.0	4.394	A
2	408	102	617	1354	0.301	408	784	0.4	0.4	3.804	A
3	1654	414	339	2328	0.711	1654	686	2.4	2.4	5.343	A
4	18	5	1987	549	0.033	18	6	0.0	0.0	6.785	A
5	1090	273	704	2217	0.492	1090	1301	1.0	1.0	3.192	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	10	3	1391	829	0.012	10	403	0.0	0.0	4.394	A
2	408	102	617	1354	0.301	408	784	0.4	0.4	3.804	A
3	1654	414	339	2328	0.711	1654	686	2.4	2.4	5.343	A
4	18	5	1987	549	0.033	18	6	0.0	0.0	6.785	A
5	1090	273	704	2217	0.492	1090	1301	1.0	1.0	3.192	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	10	3	1391	829	0.012	10	403	0.0	0.0	4.394	A
2	408	102	617	1354	0.301	408	784	0.4	0.4	3.804	A
3	1654	414	339	2328	0.711	1654	686	2.4	2.4	5.343	A
4	18	5	1987	549	0.033	18	6	0.0	0.0	6.785	A
5	1090	273	704	2217	0.492	1090	1301	1.0	1.0	3.192	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	10	3	1391	829	0.012	10	403	0.0	0.0	4.394	A
2	408	102	617	1354	0.301	408	784	0.4	0.4	3.804	A
3	1654	414	339	2328	0.711	1654	686	2.4	2.4	5.343	A
4	18	5	1987	549	0.033	18	6	0.0	0.0	6.785	A
5	1090	273	704	2217	0.492	1090	1301	1.0	1.0	3.192	A

D19 - 2037 | B+D (P1_P2) | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	32.88	D

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	-1	Arm 5	32.88	D

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D19	2037	B+D (P1_P2)	AM	FLAT	06:45	08:15	90	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		FLAT	✓	110	100.000
2		FLAT	✓	381	100.000
3		FLAT	✓	557	100.000
4		FLAT	✓	51	100.000
5		FLAT	✓	2537	100.000

Origin-Destination Data

Demand (PCU/hr)

	To					
	1	2	3	4	5	
From	1	0	7	95	0	8
	2	1	0	103	3	274
	3	18	79	0	4	456
	4	1	15	7	0	28
	5	5	506	1997	27	2

Vehicle Mix

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

Heavy Vehicle %

	To					
From		1	2	3	4	5
	1	0	0	0	0	0
	2	0	0	0	0	0
	3	0	0	0	0	0
	4	0	0	0	0	0
	5	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.44	25.84	0.8	D	110	165
2	0.64	16.81	1.8	C	381	572
3	0.24	2.01	0.3	A	557	836
4	0.05	3.48	0.0	A	51	77
5	0.97	42.96	29.0	E	2537	3806

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	110	28	2562	281	0.392	108	25	0.0	0.6	20.528	C
2	381	95	2077	623	0.612	375	592	0.0	1.5	14.200	B
3	557	139	310	2347	0.237	556	2142	0.0	0.3	2.009	A
4	51	13	832	1087	0.047	51	33	0.0	0.0	3.473	A
5	2537	634	121	2605	0.974	2466	762	0.0	17.8	20.323	C

07:00 - 07:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	110	28	2615	256	0.430	110	25	0.6	0.7	24.551	C
2	381	95	2121	601	0.634	380	603	1.5	1.7	16.274	C
3	557	139	314	2344	0.238	557	2187	0.3	0.3	2.014	A
4	51	13	837	1085	0.047	51	34	0.0	0.0	3.481	A
5	2537	634	121	2604	0.974	2519	767	17.8	22.3	33.117	D

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	110	28	2622	252	0.436	110	25	0.7	0.8	25.258	D
2	381	95	2127	597	0.638	381	605	1.7	1.7	16.581	C
3	557	139	315	2343	0.238	557	2194	0.3	0.3	2.015	A
4	51	13	838	1085	0.047	51	34	0.0	0.0	3.482	A
5	2537	634	121	2604	0.974	2526	768	22.3	24.9	37.242	E

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	110	28	2626	251	0.439	110	25	0.8	0.8	25.562	D
2	381	95	2130	596	0.639	381	606	1.7	1.7	16.702	C
3	557	139	315	2343	0.238	557	2196	0.3	0.3	2.015	A
4	51	13	838	1085	0.047	51	34	0.0	0.0	3.482	A
5	2537	634	121	2604	0.974	2530	768	24.9	26.7	39.802	E

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	110	28	2628	250	0.440	110	25	0.8	0.8	25.733	D
2	381	95	2132	595	0.640	381	606	1.7	1.7	16.770	C
3	557	139	315	2343	0.238	557	2198	0.3	0.3	2.015	A
4	51	13	838	1085	0.047	51	34	0.0	0.0	3.482	A
5	2537	634	121	2604	0.974	2532	768	26.7	28.0	41.607	E

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	110	28	2629	249	0.441	110	25	0.8	0.8	25.842	D
2	381	95	2133	595	0.640	381	606	1.7	1.8	16.813	C
3	557	139	315	2343	0.238	557	2199	0.3	0.3	2.015	A
4	51	13	838	1085	0.047	51	34	0.0	0.0	3.482	A
5	2537	634	121	2604	0.974	2533	768	28.0	29.0	42.964	E

D20 - 2037 | B+D (P1_P2) | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	4.63	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	28	Arm 3	4.63	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D20	2037	B+D (P1_P2)	PM	FLAT	16:00	17:30	90	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		FLAT	✓	14	100.000
2		FLAT	✓	412	100.000
3		FLAT	✓	1688	100.000
4		FLAT	✓	18	100.000
5		FLAT	✓	1140	100.000

Origin-Destination Data

Demand (PCU/hr)

	To					
	1	2	3	4	5	
From	1	0	7	6	0	1
	2	29	0	74	2	307
	3	369	299	3	3	1014
	4	2	3	4	0	9
	5	7	480	652	1	0

Vehicle Mix

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

Heavy Vehicle %

	To					
From		1	2	3	4	5
	1	0	0	0	0	0
	2	0	0	0	0	0
	3	0	0	0	0	0
	4	0	0	0	0	0
	5	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.02	4.55	0.0	A	14	21
2	0.31	3.93	0.4	A	412	618
3	0.73	5.63	2.6	A	1688	2532
4	0.03	7.00	0.0	A	18	27
5	0.51	3.35	1.1	A	1140	1710

Main Results for each time segment

16:00 - 16:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	14	4	1436	808	0.017	14	405	0.0	0.0	4.533	A
2	412	103	665	1330	0.310	410	785	0.0	0.4	3.906	A
3	1688	422	339	2328	0.725	1678	736	0.0	2.6	5.453	A
4	18	5	2010	538	0.033	18	6	0.0	0.0	6.924	A
5	1140	285	705	2217	0.514	1136	1323	0.0	1.1	3.319	A

16:15 - 16:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	14	4	1442	805	0.017	14	407	0.0	0.0	4.549	A
2	412	103	667	1329	0.310	412	789	0.4	0.4	3.925	A
3	1688	422	340	2327	0.725	1688	739	2.6	2.6	5.630	A
4	18	5	2022	532	0.034	18	6	0.0	0.0	6.999	A
5	1140	285	709	2214	0.515	1140	1331	1.1	1.1	3.351	A

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	14	4	1442	805	0.017	14	407	0.0	0.0	4.549	A
2	412	103	667	1329	0.310	412	789	0.4	0.4	3.925	A
3	1688	422	340	2327	0.725	1688	739	2.6	2.6	5.632	A
4	18	5	2022	532	0.034	18	6	0.0	0.0	7.000	A
5	1140	285	709	2214	0.515	1140	1331	1.1	1.1	3.351	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	14	4	1442	805	0.017	14	407	0.0	0.0	4.549	A
2	412	103	667	1329	0.310	412	789	0.4	0.4	3.925	A
3	1688	422	340	2327	0.725	1688	739	2.6	2.6	5.632	A
4	18	5	2022	532	0.034	18	6	0.0	0.0	7.000	A
5	1140	285	709	2214	0.515	1140	1331	1.1	1.1	3.351	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	14	4	1442	805	0.017	14	407	0.0	0.0	4.549	A
2	412	103	667	1329	0.310	412	789	0.4	0.4	3.925	A
3	1688	422	340	2327	0.725	1688	739	2.6	2.6	5.632	A
4	18	5	2022	532	0.034	18	6	0.0	0.0	7.000	A
5	1140	285	709	2214	0.515	1140	1331	1.1	1.1	3.351	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	14	4	1442	805	0.017	14	407	0.0	0.0	4.549	A
2	412	103	667	1329	0.310	412	789	0.4	0.4	3.925	A
3	1688	422	340	2327	0.725	1688	739	2.6	2.6	5.632	A
4	18	5	2022	532	0.034	18	6	0.0	0.0	7.000	A
5	1140	285	709	2214	0.515	1140	1331	1.1	1.1	3.351	A

D21 - 2037 | B+C | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	18.42	C

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	2	Arm 5	18.42	C

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D21	2037	B+C	AM	FLAT	06:45	08:15	90	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		FLAT	✓	105	100.000
2		FLAT	✓	376	100.000
3		FLAT	✓	496	100.000
4		FLAT	✓	51	100.000
5		FLAT	✓	2457	100.000

Origin-Destination Data

Demand (PCU/hr)

	To					
	1	2	3	4	5	
From	1	0	7	90	0	8
	2	1	0	98	3	274
	3	16	72	0	4	404
	4	1	15	7	0	28
	5	5	506	1917	27	2

Vehicle Mix

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

Heavy Vehicle %

	To					
From		1	2	3	4	5
	1	0	0	0	0	0
	2	0	0	0	0	0
	3	0	0	0	0	0
	4	0	0	0	0	0
	5	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.36	19.63	0.6	C	105	158
2	0.59	13.83	1.4	B	376	564
3	0.21	1.95	0.3	A	496	744
4	0.05	3.39	0.0	A	51	77
5	0.94	22.71	15.0	C	2457	3686

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	105	26	2498	311	0.338	103	23	0.0	0.5	17.194	C
2	376	94	2011	656	0.573	371	590	0.0	1.3	12.421	B
3	496	124	310	2346	0.211	495	2072	0.0	0.3	1.944	A
4	51	13	772	1115	0.046	51	33	0.0	0.0	3.381	A
5	2457	614	112	2610	0.941	2409	711	0.0	12.0	15.351	C

07:00 - 07:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	105	26	2540	291	0.361	105	23	0.5	0.6	19.317	C
2	376	94	2046	638	0.589	376	599	1.3	1.4	13.672	B
3	496	124	315	2343	0.212	496	2107	0.3	0.3	1.948	A
4	51	13	777	1113	0.046	51	34	0.0	0.0	3.388	A
5	2457	614	112	2610	0.941	2451	716	12.0	13.5	21.003	C

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	105	26	2543	289	0.363	105	23	0.6	0.6	19.518	C
2	376	94	2049	637	0.590	376	599	1.4	1.4	13.781	B
3	496	124	315	2343	0.212	496	2110	0.3	0.3	1.948	A
4	51	13	777	1113	0.046	51	34	0.0	0.0	3.388	A
5	2457	614	112	2610	0.941	2454	716	13.5	14.2	21.893	C

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	105	26	2544	289	0.364	105	23	0.6	0.6	19.583	C
2	376	94	2050	636	0.591	376	600	1.4	1.4	13.818	B
3	496	124	315	2343	0.212	496	2111	0.3	0.3	1.948	A
4	51	13	777	1113	0.046	51	34	0.0	0.0	3.389	A
5	2457	614	112	2610	0.941	2455	716	14.2	14.6	22.306	C

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	105	26	2545	288	0.364	105	23	0.6	0.6	19.612	C
2	376	94	2050	636	0.591	376	600	1.4	1.4	13.828	B
3	496	124	315	2343	0.212	496	2111	0.3	0.3	1.948	A
4	51	13	777	1113	0.046	51	34	0.0	0.0	3.389	A
5	2457	614	112	2610	0.941	2456	716	14.6	14.8	22.547	C

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	105	26	2545	288	0.364	105	23	0.6	0.6	19.629	C
2	376	94	2050	636	0.591	376	600	1.4	1.4	13.835	B
3	496	124	315	2343	0.212	496	2111	0.3	0.3	1.948	A
4	51	13	777	1113	0.046	51	34	0.0	0.0	3.389	A
5	2457	614	112	2610	0.941	2456	716	14.8	15.0	22.707	C

D22 - 2037 | B+C | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	4.30	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	33	Arm 3	4.30	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D22	2037	B+C	PM	FLAT	16:00	17:30	90	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		FLAT	✓	11	100.000
2		FLAT	✓	410	100.000
3		FLAT	✓	1626	100.000
4		FLAT	✓	18	100.000
5		FLAT	✓	1089	100.000

Origin-Destination Data

Demand (PCU/hr)

	To					
		1	2	3	4	5
From	1	0	7	3	0	1
	2	29	0	72	2	307
	3	366	296	3	3	958
	4	2	3	4	0	9
	5	7	480	601	1	0

Vehicle Mix

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

Heavy Vehicle %

	To					
From		1	2	3	4	5
	1	0	0	0	0	0
	2	0	0	0	0	0
	3	0	0	0	0	0
	4	0	0	0	0	0
	5	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.01	4.39	0.0	A	11	17
2	0.30	3.80	0.4	A	410	615
3	0.70	5.13	2.3	A	1626	2439
4	0.03	6.63	0.0	A	18	27
5	0.49	3.19	1.0	A	1089	1634

Main Results for each time segment

16:00 - 16:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	11	3	1382	833	0.013	11	402	0.0	0.0	4.378	A
2	410	103	611	1357	0.302	408	783	0.0	0.4	3.788	A
3	1626	407	339	2328	0.698	1617	681	0.0	2.3	5.001	A
4	18	5	1950	566	0.032	18	6	0.0	0.0	6.566	A
5	1089	272	699	2220	0.490	1085	1268	0.0	1.0	3.161	A

16:15 - 16:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	11	3	1388	830	0.013	11	404	0.0	0.0	4.392	A
2	410	103	613	1356	0.302	410	786	0.4	0.4	3.804	A
3	1626	407	340	2327	0.699	1626	683	2.3	2.3	5.132	A
4	18	5	1960	561	0.032	18	6	0.0	0.0	6.627	A
5	1089	272	703	2218	0.491	1089	1275	1.0	1.0	3.188	A

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	11	3	1388	830	0.013	11	404	0.0	0.0	4.392	A
2	410	103	613	1356	0.302	410	786	0.4	0.4	3.804	A
3	1626	407	340	2327	0.699	1626	683	2.3	2.3	5.134	A
4	18	5	1960	561	0.032	18	6	0.0	0.0	6.627	A
5	1089	272	703	2218	0.491	1089	1275	1.0	1.0	3.188	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	11	3	1388	830	0.013	11	404	0.0	0.0	4.392	A
2	410	103	613	1356	0.302	410	786	0.4	0.4	3.804	A
3	1626	407	340	2327	0.699	1626	683	2.3	2.3	5.134	A
4	18	5	1960	561	0.032	18	6	0.0	0.0	6.627	A
5	1089	272	703	2218	0.491	1089	1275	1.0	1.0	3.188	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	11	3	1388	830	0.013	11	404	0.0	0.0	4.392	A
2	410	103	613	1356	0.302	410	786	0.4	0.4	3.804	A
3	1626	407	340	2327	0.699	1626	683	2.3	2.3	5.134	A
4	18	5	1960	561	0.032	18	6	0.0	0.0	6.627	A
5	1089	272	703	2218	0.491	1089	1275	1.0	1.0	3.188	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	11	3	1388	830	0.013	11	404	0.0	0.0	4.392	A
2	410	103	613	1356	0.302	410	786	0.4	0.4	3.804	A
3	1626	407	340	2327	0.699	1626	683	2.3	2.3	5.134	A
4	18	5	1960	561	0.032	18	6	0.0	0.0	6.627	A
5	1089	272	703	2218	0.491	1089	1275	1.0	1.0	3.188	A

D23 - 2037 | B+C+D (P1) | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	59.07	F

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	-3	Arm 5	59.07	F

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D23	2037	B+C+D (P1)	AM	FLAT	06:45	08:15	90	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		FLAT	✓	111	100.000
2		FLAT	✓	386	100.000
3		FLAT	✓	579	100.000
4		FLAT	✓	51	100.000
5		FLAT	✓	2595	100.000

Origin-Destination Data

Demand (PCU/hr)

	To					
	1	2	3	4	5	
From	1	0	7	96	0	8
	2	1	0	109	3	273
	3	18	82	0	4	475
	4	1	15	7	0	28
	5	5	504	2057	27	2

Vehicle Mix

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

Heavy Vehicle %

	To					
From		1	2	3	4	5
	1	0	0	0	0	0
	2	0	0	0	0	0
	3	0	0	0	0	0
	4	0	0	0	0	0
	5	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.49	30.90	0.9	D	111	167
2	0.68	19.51	2.1	C	386	579
3	0.25	2.04	0.3	A	579	869
4	0.05	3.52	0.0	A	51	77
5	1.00	79.97	56.7	F	2595	3893

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	111	28	2598	264	0.421	108	25	0.0	0.7	22.762	C
2	386	97	2117	603	0.640	379	589	0.0	1.7	15.670	C
3	579	145	308	2348	0.247	578	2188	0.0	0.3	2.033	A
4	51	13	853	1078	0.047	51	33	0.0	0.0	3.505	A
5	2595	649	124	2603	0.997	2499	780	0.0	24.1	24.990	C

07:00 - 07:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	111	28	2655	237	0.469	110	25	0.7	0.8	28.318	D
2	386	97	2165	579	0.667	385	600	1.7	1.9	18.487	C
3	579	145	313	2344	0.247	579	2238	0.3	0.3	2.038	A
4	51	13	858	1075	0.047	51	34	0.0	0.0	3.514	A
5	2595	649	124	2602	0.997	2556	785	24.1	33.7	46.736	E

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	111	28	2665	232	0.478	111	25	0.8	0.9	29.572	D
2	386	97	2174	574	0.672	386	602	1.9	2.0	19.014	C
3	579	145	313	2344	0.247	579	2246	0.3	0.3	2.039	A
4	51	13	859	1075	0.047	51	34	0.0	0.0	3.515	A
5	2595	649	124	2602	0.997	2566	786	33.7	41.0	57.611	F

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	111	28	2670	230	0.483	111	25	0.9	0.9	30.202	D
2	386	97	2178	572	0.674	386	603	2.0	2.0	19.256	C
3	579	145	314	2344	0.247	579	2250	0.3	0.3	2.039	A
4	51	13	859	1075	0.047	51	34	0.0	0.0	3.515	A
5	2595	649	124	2602	0.997	2571	786	41.0	46.9	66.208	F

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	111	28	2673	228	0.486	111	25	0.9	0.9	30.609	D
2	386	97	2180	571	0.676	386	604	2.0	2.0	19.408	C
3	579	145	314	2344	0.247	579	2253	0.3	0.3	2.039	A
4	51	13	859	1075	0.047	51	34	0.0	0.0	3.515	A
5	2595	649	124	2602	0.997	2574	786	46.9	52.1	73.521	F

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	111	28	2676	227	0.488	111	25	0.9	0.9	30.903	D
2	386	97	2182	570	0.677	386	604	2.0	2.1	19.514	C
3	579	145	314	2344	0.247	579	2254	0.3	0.3	2.039	A
4	51	13	859	1075	0.047	51	34	0.0	0.0	3.515	A
5	2595	649	124	2602	0.997	2577	786	52.1	56.7	79.970	F

D24 - 2037 | B+C+D (P1) | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	5.11	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	23	Arm 3	5.11	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D24	2037	B+C+D (P1)	PM	FLAT	16:00	17:30	90	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		FLAT	✓	12	100.000
2		FLAT	✓	415	100.000
3		FLAT	✓	1768	100.000
4		FLAT	✓	18	100.000
5		FLAT	✓	1170	100.000

Origin-Destination Data

Demand (PCU/hr)

	To					
	1	2	3	4	5	
From	1	0	6	5	0	1
	2	29	0	78	2	306
	3	370	305	3	3	1087
	4	2	3	4	0	9
	5	6	478	685	1	0

Vehicle Mix

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

Heavy Vehicle %

	To					
From		1	2	3	4	5
	1	0	0	0	0	0
	2	0	0	0	0	0
	3	0	0	0	0	0
	4	0	0	0	0	0
	5	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.02	4.64	0.0	A	12	18
2	0.32	4.01	0.5	A	415	623
3	0.76	6.43	3.1	A	1768	2652
4	0.04	7.54	0.0	A	18	27
5	0.53	3.46	1.1	A	1170	1755

Main Results for each time segment

16:00 - 16:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	12	3	1472	791	0.015	12	404	0.0	0.0	4.621	A
2	415	104	696	1314	0.316	413	788	0.0	0.5	3.987	A
3	1768	442	338	2329	0.759	1756	772	0.0	3.1	6.159	A
4	18	5	2087	502	0.036	18	6	0.0	0.0	7.438	A
5	1170	293	711	2213	0.529	1166	1394	0.0	1.1	3.425	A

16:15 - 16:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	12	3	1479	788	0.015	12	407	0.0	0.0	4.639	A
2	415	104	699	1313	0.316	415	792	0.5	0.5	4.008	A
3	1768	442	339	2328	0.760	1768	775	3.1	3.1	6.423	A
4	18	5	2101	495	0.036	18	6	0.0	0.0	7.539	A
5	1170	293	716	2209	0.530	1170	1403	1.1	1.1	3.462	A

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	12	3	1479	788	0.015	12	407	0.0	0.0	4.639	A
2	415	104	699	1313	0.316	415	792	0.5	0.5	4.008	A
3	1768	442	339	2328	0.760	1768	775	3.1	3.1	6.428	A
4	18	5	2101	495	0.036	18	6	0.0	0.0	7.540	A
5	1170	293	716	2209	0.530	1170	1403	1.1	1.1	3.463	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	12	3	1479	788	0.015	12	407	0.0	0.0	4.639	A
2	415	104	699	1313	0.316	415	792	0.5	0.5	4.008	A
3	1768	442	339	2328	0.760	1768	775	3.1	3.1	6.428	A
4	18	5	2101	495	0.036	18	6	0.0	0.0	7.540	A
5	1170	293	716	2209	0.530	1170	1403	1.1	1.1	3.463	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	12	3	1479	788	0.015	12	407	0.0	0.0	4.639	A
2	415	104	699	1313	0.316	415	792	0.5	0.5	4.008	A
3	1768	442	339	2328	0.760	1768	775	3.1	3.1	6.431	A
4	18	5	2101	495	0.036	18	6	0.0	0.0	7.541	A
5	1170	293	716	2209	0.530	1170	1403	1.1	1.1	3.463	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	12	3	1479	788	0.015	12	407	0.0	0.0	4.639	A
2	415	104	699	1313	0.316	415	792	0.5	0.5	4.008	A
3	1768	442	339	2328	0.760	1768	775	3.1	3.1	6.431	A
4	18	5	2101	495	0.036	18	6	0.0	0.0	7.541	A
5	1170	293	716	2209	0.530	1170	1403	1.1	1.1	3.463	A

D25 - 2037 | B+C+D (P1_P2) | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	74.02	F

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	-4	Arm 5	74.02	F

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D25	2037	B+C+D (P1_P2)	AM	FLAT	06:45	08:15	90	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		FLAT	✓	113	100.000
2		FLAT	✓	387	100.000
3		FLAT	✓	630	100.000
4		FLAT	✓	51	100.000
5		FLAT	✓	2614	100.000

Origin-Destination Data

Demand (PCU/hr)

	To					
	1	2	3	4	5	
From	1	0	7	98	0	8
	2	1	0	110	3	273
	3	20	85	0	4	521
	4	1	15	7	0	28
	5	5	504	2076	27	2

Vehicle Mix

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

Heavy Vehicle %

	To					
From		1	2	3	4	5
	1	0	0	0	0	0
	2	0	0	0	0	0
	3	0	0	0	0	0
	4	0	0	0	0	0
	5	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.51	32.79	1.0	D	113	170
2	0.69	20.25	2.1	C	387	581
3	0.27	2.10	0.4	A	630	945
4	0.05	3.60	0.1	A	51	77
5	1.01	102.46	74.3	F	2614	3921

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	113	28	2608	259	0.436	110	27	0.0	0.7	23.751	C
2	387	97	2128	597	0.648	380	590	0.0	1.8	16.113	C
3	630	158	308	2348	0.268	629	2201	0.0	0.4	2.092	A
4	51	13	903	1054	0.048	51	33	0.0	0.1	3.588	A
5	2614	654	129	2599	1.006	2506	825	0.0	26.9	27.015	D

07:00 - 07:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	113	28	2666	232	0.487	112	27	0.7	0.9	29.897	D
2	387	97	2177	573	0.676	386	601	1.8	2.0	19.016	C
3	630	158	313	2345	0.269	630	2250	0.4	0.4	2.099	A
4	51	13	909	1051	0.049	51	33	0.1	0.1	3.598	A
5	2614	654	129	2599	1.006	2564	831	26.9	39.5	53.055	F

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	113	28	2675	227	0.497	113	27	0.9	0.9	31.310	D
2	387	97	2185	569	0.681	387	603	2.0	2.1	19.709	C
3	630	158	313	2344	0.269	630	2258	0.4	0.4	2.099	A
4	51	13	910	1051	0.049	51	34	0.1	0.1	3.598	A
5	2614	654	129	2599	1.006	2573	832	39.5	49.7	67.911	F

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	113	28	2680	225	0.502	113	27	0.9	1.0	32.013	D
2	387	97	2189	567	0.683	387	604	2.1	2.1	19.971	C
3	630	158	313	2344	0.269	630	2263	0.4	0.4	2.099	A
4	51	13	910	1051	0.049	51	34	0.1	0.1	3.599	A
5	2614	654	129	2599	1.006	2578	832	49.7	58.6	80.536	F

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	113	28	2684	224	0.505	113	27	1.0	1.0	32.464	D
2	387	97	2192	565	0.685	387	605	2.1	2.1	20.135	C
3	630	158	314	2344	0.269	630	2265	0.4	0.4	2.100	A
4	51	13	910	1051	0.049	51	34	0.1	0.1	3.599	A
5	2614	654	129	2599	1.006	2582	832	58.6	66.7	91.918	F

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	113	28	2686	223	0.508	113	27	1.0	1.0	32.788	D
2	387	97	2194	564	0.686	387	605	2.1	2.1	20.246	C
3	630	158	314	2344	0.269	630	2267	0.4	0.4	2.100	A
4	51	13	910	1051	0.049	51	34	0.1	0.1	3.599	A
5	2614	654	129	2599	1.006	2584	832	66.7	74.3	102.464	F

D26 - 2037 | B+C+D (P1_P2) | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	5.34	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	21	Arm 3	5.34	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D26	2037	B+C+D (P1_P2)	PM	FLAT	16:00	17:30	90	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		FLAT	✓	15	100.000
2		FLAT	✓	418	100.000
3		FLAT	✓	1796	100.000
4		FLAT	✓	18	100.000
5		FLAT	✓	1215	100.000

Origin-Destination Data

Demand (PCU/hr)

	To					
	1	2	3	4	5	
From	1	0	6	8	0	1
	2	29	0	81	2	306
	3	371	306	3	3	1113
	4	2	3	4	0	9
	5	6	478	730	1	0

Vehicle Mix

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

Heavy Vehicle %

	To					
From		1	2	3	4	5
	1	0	0	0	0	0
	2	0	0	0	0	0
	3	0	0	0	0	0
	4	0	0	0	0	0
	5	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.02	4.79	0.0	A	15	23
2	0.32	4.13	0.5	A	418	627
3	0.77	6.77	3.4	A	1796	2694
4	0.04	7.75	0.0	A	18	27
5	0.55	3.62	1.2	A	1215	1823

Main Results for each time segment

16:00 - 16:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	15	4	1518	770	0.019	15	405	0.0	0.0	4.770	A
2	418	105	744	1290	0.324	416	789	0.0	0.5	4.108	A
3	1796	449	337	2329	0.771	1783	823	0.0	3.3	6.451	A
4	18	5	2114	489	0.037	18	6	0.0	0.0	7.638	A
5	1215	304	713	2211	0.549	1210	1419	0.0	1.2	3.578	A

16:15 - 16:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	15	4	1525	766	0.020	15	408	0.0	0.0	4.791	A
2	418	105	747	1289	0.324	418	793	0.5	0.5	4.133	A
3	1796	449	339	2328	0.772	1796	826	3.3	3.3	6.755	A
4	18	5	2129	482	0.037	18	6	0.0	0.0	7.752	A
5	1215	304	718	2208	0.550	1215	1429	1.2	1.2	3.624	A

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	15	4	1525	766	0.020	15	408	0.0	0.0	4.791	A
2	418	105	747	1289	0.324	418	793	0.5	0.5	4.133	A
3	1796	449	339	2328	0.772	1796	826	3.3	3.3	6.763	A
4	18	5	2129	482	0.037	18	6	0.0	0.0	7.753	A
5	1215	304	718	2208	0.550	1215	1429	1.2	1.2	3.624	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	15	4	1525	766	0.020	15	408	0.0	0.0	4.791	A
2	418	105	747	1289	0.324	418	793	0.5	0.5	4.133	A
3	1796	449	339	2328	0.772	1796	826	3.3	3.4	6.767	A
4	18	5	2129	482	0.037	18	6	0.0	0.0	7.753	A
5	1215	304	718	2208	0.550	1215	1429	1.2	1.2	3.624	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	15	4	1525	766	0.020	15	408	0.0	0.0	4.791	A
2	418	105	747	1289	0.324	418	793	0.5	0.5	4.133	A
3	1796	449	339	2328	0.772	1796	826	3.4	3.4	6.767	A
4	18	5	2129	482	0.037	18	6	0.0	0.0	7.753	A
5	1215	304	718	2208	0.550	1215	1429	1.2	1.2	3.624	A

17:15 - 17:30

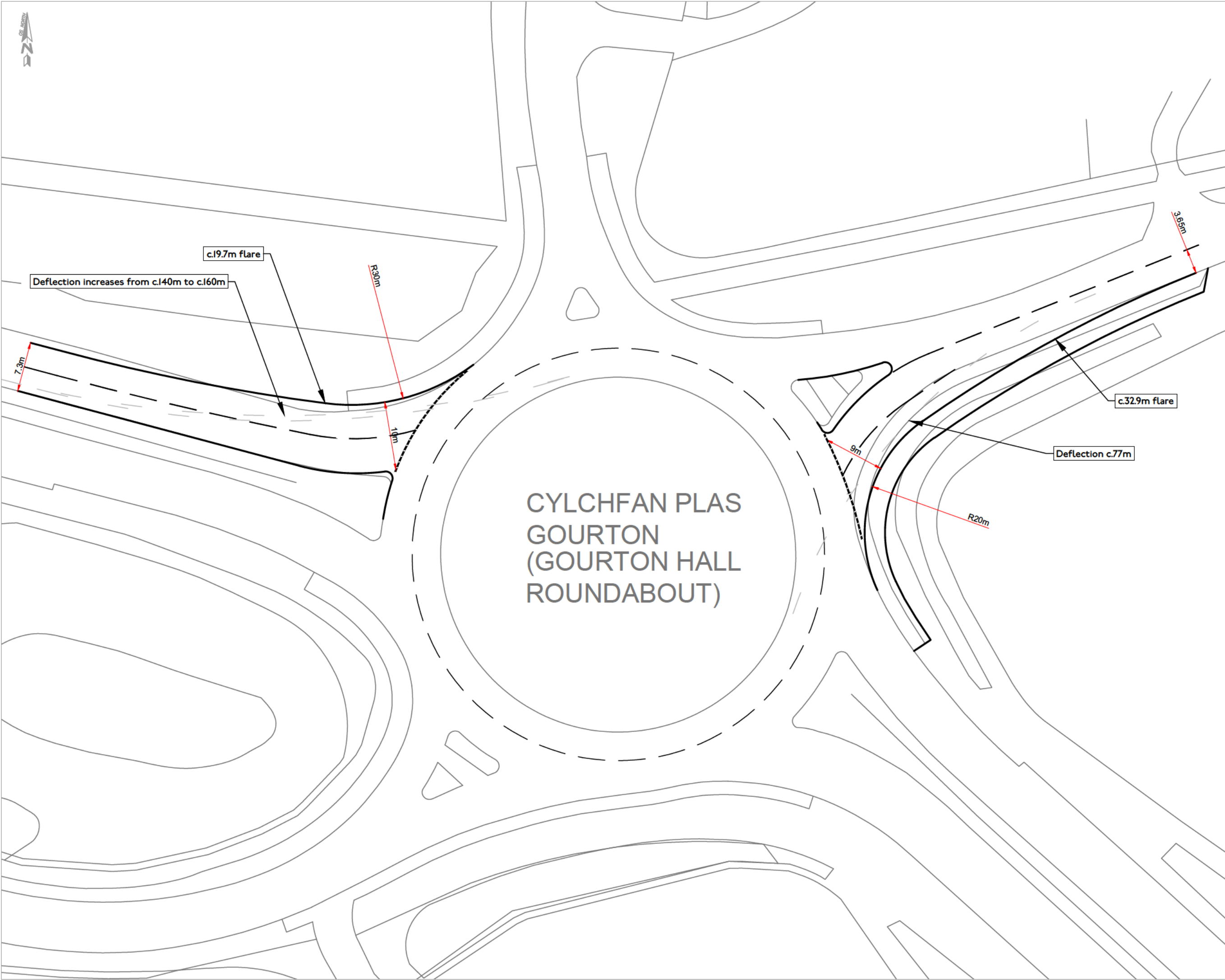
Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	15	4	1525	766	0.020	15	408	0.0	0.0	4.791	A
2	418	105	747	1289	0.324	418	793	0.5	0.5	4.133	A
3	1796	449	339	2328	0.772	1796	826	3.4	3.4	6.770	A
4	18	5	2129	482	0.037	18	6	0.0	0.0	7.754	A
5	1215	304	718	2208	0.550	1215	1429	1.2	1.2	3.624	A

APPENDIX E

Extent of Adopted Highway

APPENDIX F

Proposed Mitigation and Swept Path Analysis



Transport Planning

t 0161 464 9495
e info@modetransport.co.uk
w www.modetransport.co.uk

1. This drawing is to be read in conjunction with all other relevant drawings, any discrepancies, errors or omissions to be brought to the attention of overseeing organisation.
2. All dimensions to be checked before commencement of work on site.
3. All dimensions in metres unless otherwise stated.
4. The design is subject to approval of Wrexham County Borough Council.
5. Drawing based on OS Mapping.

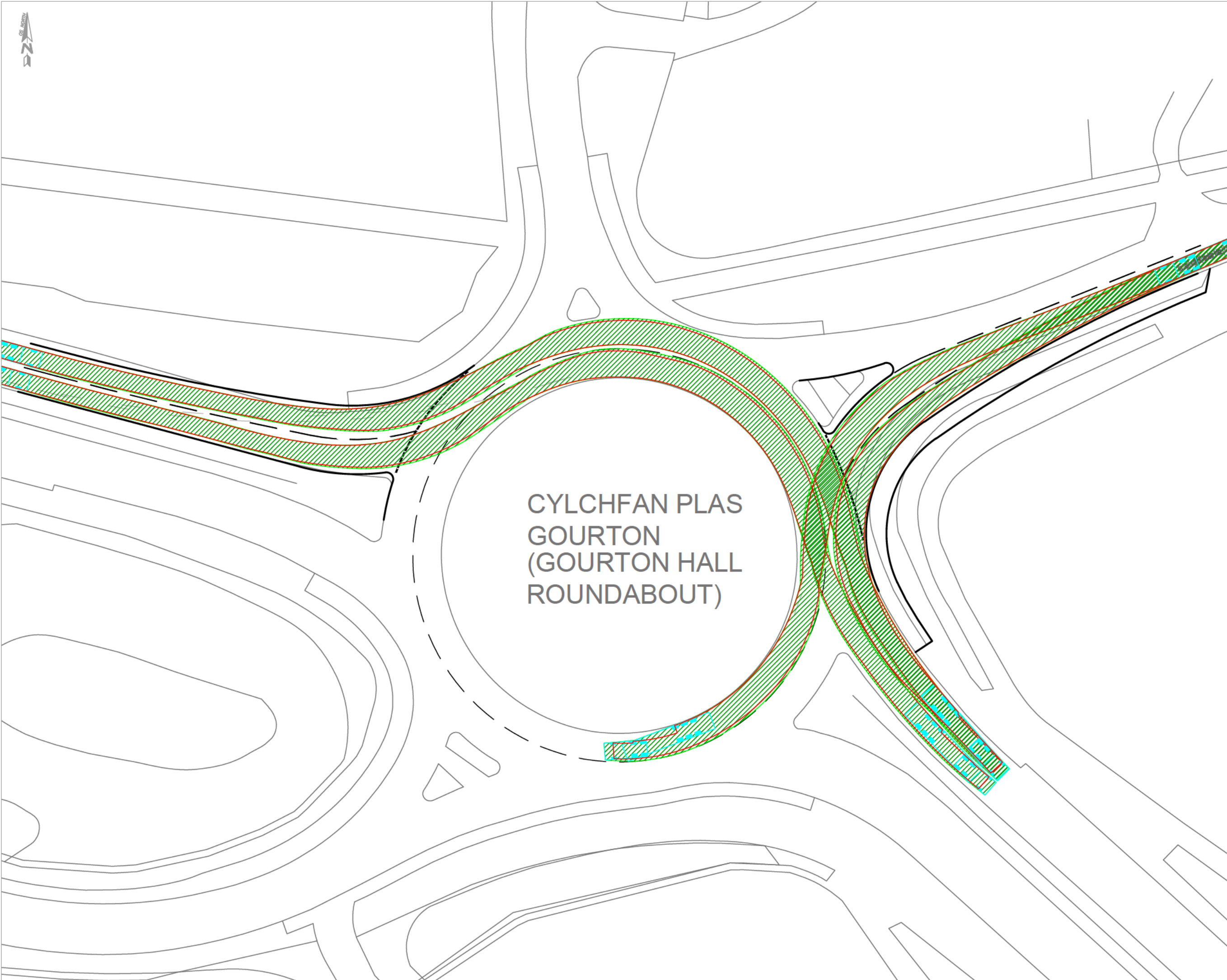
Issue/Revision

I/R	Date	Issued Description
-----	------	--------------------

Client: Net World Sports
Project: Land north of Bryn Lane, Wrexham
Project Number: J329525
Scale: 1:500@A3
Drawing Title: Gourton Hall Roundabout Mitigation
Drawing Number: J32-9525-PS-021

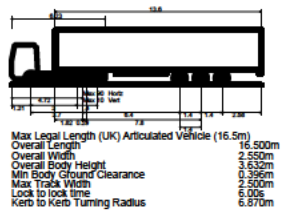
Filename: \\HMAC\12 PROJECTS\J329525_UTORIA_CITY_PHASE 1\5. GRAPHICS\12 CAD\12 SHEETS\J32-9525-PS-021D.WG
Last saved by: LUKEWHEELER Last Plotter: 2026-06-04

Project Management Initials: Designer: ME Checked: LJ Approved: LCW ISO A3 297mm x 420mm



Transport Planning

t 0161 464 9495
e info@modetransport.co.uk
w www.modetransport.co.uk



1. This drawing is to be read in conjunction with all other relevant drawings, any discrepancies, errors or omissions to be brought to the attention of overseeing organisation.
2. All dimensions to be checked before commencement of work on site.
3. All dimensions in metres unless otherwise stated.
4. The design is subject to approval of Wrexham County Borough Council.
5. Drawing based on OS Mapping.

Issue/Revision		
-	04/08/2026	Issued
I/R	Date	Description

Client: Net World Sports
Project: Land north of Bryn Lane, Wrexham
Project Number: J329525
Scale: 1:500@A3
Drawing Title:
Gourton Hall Roundabout Mitigation
Swept Path Analysis
Drawing Number:
J32-9525-PS-022

APPENDIX G

ARCADY Results - Proposed Mitigation

Junctions 11											
ARCADY 11 - Roundabout Module											
Version: 11.1.0.2307											
© Copyright TRL Software Limited, 2024											
For sales and distribution information, program advice and maintenance, contact TRL Software:											
+44 (0)1344 379777 software@trl.co.uk trlsoftware.com											
The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution											

Filename: Borrás Hall Lane Roundabout Opt1_2026 Survey Flows.j11

Path: C:\Users\Windows\mode Dropbox\Project\Manchester\2. Projects\J329525_Utopia City Phase 1\4. Data\6. Junction Capacity Assessments\1. Junctions 11\2. Mitigation

Report generation date: 05/08/2026 16:27:31

»D1 - 2026 | Base | AM
 »D2 - 2026 | Base | PM
 »D3 - 2030 | Base | AM
 »D4 - 2030 | Base | PM
 »D5 - 2030 | B+D (P1) | AM
 »D6 - 2030 | B+D (P1) | PM
 »D7 - 2030 | B+D (P1_P2) | AM
 »D8 - 2030 | B+D (P1_P2) | PM
 »D9 - 2030 | B+C | AM
 »D10 - 2030 | B+C | PM
 »D11 - 2030 | B+C+D (P1) | AM
 »D12 - 2030 | B+C+D (P1) | PM
 »D13 - 2030 | B+C+D (P1_P2) | AM
 »D14 - 2030 | B+C+D (P1_P2) | PM
 »D15 - 2037 | Base | AM
 »D16 - 2037 | Base | PM
 »D17 - 2037 | B+D (P1) | AM
 »D18 - 2037 | B+D (P1) | PM
 »D19 - 2037 | B+D (P1_P2) | AM
 »D20 - 2037 | B+D (P1_P2) | PM
 »D21 - 2037 | B+C | AM
 »D22 - 2037 | B+C | PM
 »D23 - 2037 | B+C+D (P1) | AM
 »D24 - 2037 | B+C+D (P1) | PM
 »D25 - 2037 | B+C+D (P1_P2) | AM
 »D26 - 2037 | B+C+D (P1_P2) | PM

Summary of junction performance

	AM						PM					
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity
	2026 - Base											
Arm 1	D1	0.3	10.85	0.22	B	20 % [Arm 1]	D2	0.0	3.95	0.01	A	54 % [Arm 3]
Arm 2		0.4	4.61	0.30	A			0.2	2.39	0.20	A	
Arm 3		0.2	1.82	0.16	A			1.5	3.78	0.59	A	
Arm 4		0.0	3.20	0.04	A			0.0	5.41	0.02	A	
Arm 5		3.8	6.29	0.79	A			0.6	2.48	0.39	A	
	2030 - Base											

Arm 1	D3	0.3	12.81	0.26	B	15 % [Arm 1]	D4	0.0	4.06	0.01	A	47 % [Arm 3]
Arm 2		0.5	4.99	0.33	A			0.3	2.44	0.21	A	
Arm 3		0.2	1.85	0.17	A			1.6	4.08	0.62	A	
Arm 4		0.0	3.24	0.04	A			0.0	5.71	0.03	A	
Arm 5		4.8	7.60	0.83	A			0.7	2.59	0.41	A	
	2030 - B+D (P1)											
Arm 1	D5	0.5	17.11	0.33	C	8 % [Arm 1]	D6	0.0	4.27	0.01	A	36 % [Arm 3]
Arm 2		0.6	5.70	0.37	A			0.3	2.53	0.22	A	
Arm 3		0.3	1.93	0.21	A			2.1	4.83	0.68	A	
Arm 4		0.0	3.35	0.04	A			0.0	6.34	0.03	A	
Arm 5		7.1	10.71	0.88	B			0.8	2.76	0.45	A	
	2030 - B+D (P1_P2)											
Arm 1	D7	0.6	19.03	0.36	C	6 % [Arm 1]	D8	0.0	4.42	0.02	A	33 % [Arm 3]
Arm 2		0.6	5.93	0.38	A			0.3	2.59	0.22	A	
Arm 3		0.3	1.99	0.23	A			2.3	5.10	0.70	A	
Arm 4		0.0	3.43	0.04	A			0.0	6.56	0.03	A	
Arm 5		8.1	12.13	0.89	B			0.9	2.88	0.47	A	
	2030 - B+C											
Arm 1	D9	0.4	15.36	0.30	C	10 % [Arm 1]	D10	0.0	4.27	0.01	A	38 % [Arm 3]
Arm 2		0.5	5.44	0.35	A			0.3	2.53	0.22	A	
Arm 3		0.3	1.92	0.20	A			2.0	4.68	0.67	A	
Arm 4		0.0	3.34	0.04	A			0.0	6.23	0.03	A	
Arm 5		6.1	9.44	0.86	A			0.8	2.76	0.45	A	
	2030 - B+C+D (P1)											
Arm 1	D11	0.6	21.95	0.39	C	4 % [Arm 1]	D12	0.0	4.50	0.01	A	28 % [Arm 3]
Arm 2		0.6	6.30	0.39	A			0.3	2.63	0.23	A	
Arm 3		0.3	2.01	0.24	A			2.7	5.71	0.73	A	
Arm 4		0.0	3.46	0.04	A			0.0	7.01	0.03	A	
Arm 5		10.0	14.70	0.91	B			0.9	2.96	0.48	A	
	2030 - B+C+D (P1_P2)											
Arm 1	D13	0.7	25.21	0.43	D	3 % [Arm 1]	D14	0.0	4.66	0.02	A	25 % [Arm 3]
Arm 2		0.7	6.56	0.41	A			0.3	2.70	0.23	A	
Arm 3		0.4	2.07	0.26	A			2.9	6.09	0.75	A	
Arm 4		0.0	3.55	0.05	A			0.0	7.27	0.03	A	
Arm 5		11.9	17.46	0.93	C			1.0	3.10	0.50	A	
	2037 - Base											
Arm 1	D15	0.4	15.71	0.31	C	10 % [Arm 1]	D16	0.0	4.17	0.01	A	41 % [Arm 3]
Arm 2		0.6	5.46	0.36	A			0.3	2.48	0.22	A	
Arm 3		0.2	1.87	0.18	A			1.8	4.41	0.65	A	
Arm 4		0.0	3.28	0.04	A			0.0	6.03	0.03	A	
Arm 5		6.3	9.61	0.86	A			0.8	2.70	0.43	A	
	2037 - B+D (P1)											
Arm 1	D17	0.7	23.31	0.41	C	4 % [Arm 1]	D18	0.0	4.39	0.01	A	31 % [Arm 3]
Arm 2		0.7	6.37	0.40	A			0.3	2.58	0.23	A	
Arm 3		0.3	1.96	0.22	A			2.4	5.34	0.71	A	
Arm 4		0.0	3.40	0.05	A			0.0	6.78	0.03	A	
Arm 5		10.6	15.56	0.92	C			0.9	2.89	0.47	A	
	2037 - B+D (P1_P2)											
Arm 1	D19	0.8	26.17	0.44	D	2 % [Arm 1]	D20	0.0	4.55	0.02	A	28 % [Arm 3]
Arm 2		0.7	6.59	0.41	A			0.3	2.64	0.23	A	
Arm 3		0.3	2.01	0.24	A			2.6	5.63	0.73	A	
Arm 4		0.0	3.48	0.05	A			0.0	7.00	0.03	A	
Arm 5		12.4	18.01	0.93	C			1.0	3.02	0.49	A	
	2037 - B+C											
Arm 1		0.6	19.66	0.36	C			0.0	4.39	0.01	A	

Arm 2	D21	0.6	6.00	0.39	A	6 % [Arm 1]	D22	0.3	2.58	0.23	A	33 % [Arm 3]
Arm 3		0.3	1.95	0.21	A			2.3	5.13	0.70	A	
Arm 4		0.0	3.39	0.05	A			0.0	6.63	0.03	A	
Arm 5		8.5	12.67	0.90	B			0.9	2.89	0.47	A	
2037 - B+C+D (P1)												
Arm 1	D23	1.0	33.23	0.51	D	0 % [Arm 1]	D24	0.0	4.64	0.02	A	23 % [Arm 3]
Arm 2		0.8	7.11	0.43	A			0.3	2.69	0.24	A	
Arm 3		0.3	2.04	0.25	A			3.1	6.43	0.76	A	
Arm 4		0.0	3.52	0.05	A			0.0	7.54	0.04	A	
Arm 5		17.4	25.11	0.95	D			1.0	3.11	0.50	A	
2037 - B+C+D (P1_P2)												
Arm 1	D25	1.1	37.36	0.54	E	-1 % [Arm 1]	D26	0.0	4.79	0.02	A	21 % [Arm 3]
Arm 2		0.8	7.29	0.44	A			0.3	2.75	0.24	A	
Arm 3		0.4	2.10	0.27	A			3.4	6.77	0.77	A	
Arm 4		0.1	3.60	0.05	A			0.0	7.75	0.04	A	
Arm 5		20.4	29.21	0.96	D			1.1	3.24	0.52	A	

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

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

File summary

File Description

Title	
Location	
Site number	
Date	15/05/2026
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DESKTOP-P980MS0\Windows
Description	

Units

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

Analysis Options

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

Demand Set Summary

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D1	2026	Base	AM	FLAT	06:45	08:15	90	15	✓
D2	2026	Base	PM	FLAT	16:00	17:30	90	15	✓
D3	2030	Base	AM	FLAT	06:45	08:15	90	15	✓
D4	2030	Base	PM	FLAT	16:00	17:30	90	15	✓
D5	2030	B+D (P1)	AM	FLAT	06:45	08:15	90	15	✓
D6	2030	B+D (P1)	PM	FLAT	16:00	17:30	90	15	✓
D7	2030	B+D (P1_P2)	AM	FLAT	06:45	08:15	90	15	✓
D8	2030	B+D (P1_P2)	PM	FLAT	16:00	17:30	90	15	✓
D9	2030	B+C	AM	FLAT	06:45	08:15	90	15	✓
D10	2030	B+C	PM	FLAT	16:00	17:30	90	15	✓
D11	2030	B+C+D (P1)	AM	FLAT	06:45	08:15	90	15	✓
D12	2030	B+C+D (P1)	PM	FLAT	16:00	17:30	90	15	✓
D13	2030	B+C+D (P1_P2)	AM	FLAT	06:45	08:15	90	15	✓
D14	2030	B+C+D (P1_P2)	PM	FLAT	16:00	17:30	90	15	✓
D15	2037	Base	AM	FLAT	06:45	08:15	90	15	✓
D16	2037	Base	PM	FLAT	16:00	17:30	90	15	✓
D17	2037	B+D (P1)	AM	FLAT	06:45	08:15	90	15	✓
D18	2037	B+D (P1)	PM	FLAT	16:00	17:30	90	15	✓
D19	2037	B+D (P1_P2)	AM	FLAT	06:45	08:15	90	15	✓
D20	2037	B+D (P1_P2)	PM	FLAT	16:00	17:30	90	15	✓
D21	2037	B+C	AM	FLAT	06:45	08:15	90	15	✓
D22	2037	B+C	PM	FLAT	16:00	17:30	90	15	✓
D23	2037	B+C+D (P1)	AM	FLAT	06:45	08:15	90	15	✓
D24	2037	B+C+D (P1)	PM	FLAT	16:00	17:30	90	15	✓
D25	2037	B+C+D (P1_P2)	AM	FLAT	06:45	08:15	90	15	✓
D26	2037	B+C+D (P1_P2)	PM	FLAT	16:00	17:30	90	15	✓

Analysis Set Details

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

D1 - 2026 | Base | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	5.62	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	20	Arm 1	5.62	A

Arms

Arms

Arm	Name	Description	No give-way line
1	Borras Hall Lane		
2	A534 Wrexham Road (East)		
3	Industrial Estate Road		
4	Sandy Lane		
5	A534 W		

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Entry only	Exit only
1	3.60	5.80	11.0	17.3	70.0	31.0		
2	3.65	9.00	32.9	20.0	70.0	32.0		
3	7.00	8.70	15.7	38.8	70.0	32.0		
4	3.70	5.30	18.1	16.0	70.0	31.0		
5	7.30	10.00	19.7	30.0	70.0	31.0		

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.468	1481
2	0.576	2157
3	0.643	2545
4	0.467	1475
5	0.684	2816

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

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D1	2026	Base	AM	FLAT	06:45	08:15	90	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		FLAT	✓	93	100.000
2		FLAT	✓	339	100.000
3		FLAT	✓	388	100.000
4		FLAT	✓	47	100.000
5		FLAT	✓	2178	100.000

Origin-Destination Data

Demand (PCU/hr)

	To					
	1	2	3	4	5	
From	1	0	6	80	0	7
	2	1	0	83	3	252
	3	13	61	0	4	310
	4	1	14	6	0	26
	5	5	465	1681	25	2

Vehicle Mix

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

Heavy Vehicle %

	To					
	1	2	3	4	5	
From	1	0	0	0	0	0
	2	0	0	0	0	0
	3	0	0	0	0	0
	4	0	0	0	0	0
	5	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.22	10.85	0.3	B	93	140
2	0.30	4.61	0.4	A	339	509
3	0.16	1.82	0.2	A	388	582
4	0.04	3.20	0.0	A	47	71
5	0.79	6.29	3.8	A	2178	3267

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	93	23	2239	432	0.215	92	20	0.0	0.3	10.527	B
2	339	85	1788	1127	0.301	337	543	0.0	0.4	4.548	A
3	388	97	288	2360	0.164	387	1837	0.0	0.2	1.824	A
4	47	12	644	1175	0.040	47	32	0.0	0.0	3.190	A
5	2178	545	96	2751	0.792	2163	595	0.0	3.7	5.987	A

07:00 - 07:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	93	23	2254	425	0.219	93	20	0.3	0.3	10.843	B
2	339	85	1801	1120	0.303	339	546	0.4	0.4	4.607	A
3	388	97	290	2359	0.164	388	1850	0.2	0.2	1.825	A
4	47	12	646	1174	0.040	47	32	0.0	0.0	3.193	A
5	2178	545	96	2751	0.792	2178	597	3.7	3.7	6.276	A

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	93	23	2254	425	0.219	93	20	0.3	0.3	10.848	B
2	339	85	1801	1120	0.303	339	546	0.4	0.4	4.608	A
3	388	97	290	2359	0.164	388	1850	0.2	0.2	1.825	A
4	47	12	646	1174	0.040	47	32	0.0	0.0	3.193	A
5	2178	545	96	2751	0.792	2178	597	3.7	3.8	6.281	A

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	93	23	2254	425	0.219	93	20	0.3	0.3	10.848	B
2	339	85	1801	1120	0.303	339	546	0.4	0.4	4.608	A
3	388	97	290	2359	0.164	388	1850	0.2	0.2	1.825	A
4	47	12	646	1174	0.040	47	32	0.0	0.0	3.193	A
5	2178	545	96	2751	0.792	2178	597	3.8	3.8	6.284	A

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	93	23	2254	425	0.219	93	20	0.3	0.3	10.848	B
2	339	85	1801	1120	0.303	339	546	0.4	0.4	4.608	A
3	388	97	290	2359	0.164	388	1850	0.2	0.2	1.825	A
4	47	12	646	1174	0.040	47	32	0.0	0.0	3.193	A
5	2178	545	96	2751	0.792	2178	597	3.8	3.8	6.284	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	93	23	2254	425	0.219	93	20	0.3	0.3	10.849	B
2	339	85	1801	1120	0.303	339	546	0.4	0.4	4.608	A
3	388	97	290	2359	0.164	388	1850	0.2	0.2	1.825	A
4	47	12	646	1174	0.040	47	32	0.0	0.0	3.195	A
5	2178	545	96	2751	0.792	2178	597	3.8	3.8	6.286	A

D2 - 2026 | Base | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	3.15	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	54	Arm 3	3.15	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D2	2026	Base	PM	FLAT	16:00	17:30	90	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		FLAT	✓	8	100.000
2		FLAT	✓	372	100.000
3		FLAT	✓	1391	100.000
4		FLAT	✓	17	100.000
5		FLAT	✓	929	100.000

Origin-Destination Data

Demand (PCU/hr)

	To					
	1	2	3	4	5	
From	1	0	6	1	0	1
	2	27	0	60	2	283
	3	333	265	3	3	787
	4	2	3	4	0	8
	5	6	442	480	1	0

Vehicle Mix

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

Heavy Vehicle %

	To					
From		1	2	3	4	5
	1	0	0	0	0	0
	2	0	0	0	0	0
	3	0	0	0	0	0
	4	0	0	0	0	0
	5	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.01	3.95	0.0	A	8	12
2	0.20	2.39	0.2	A	372	558
3	0.59	3.78	1.5	A	1391	2087
4	0.02	5.41	0.0	A	17	26
5	0.39	2.48	0.6	A	929	1394

Main Results for each time segment

16:00 - 16:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	8	2	1194	921	0.009	8	367	0.0	0.0	3.941	A
2	372	93	489	1876	0.198	371	714	0.0	0.2	2.391	A
3	1391	348	313	2344	0.593	1385	546	0.0	1.4	3.731	A
4	17	4	1692	686	0.025	17	6	0.0	0.0	5.381	A
5	929	232	634	2382	0.390	926	1075	0.0	0.6	2.469	A

16:15 - 16:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	8	2	1198	919	0.009	8	368	0.0	0.0	3.949	A
2	372	93	490	1875	0.198	372	716	0.2	0.2	2.394	A
3	1391	348	314	2344	0.594	1391	548	1.4	1.5	3.777	A
4	17	4	1699	683	0.025	17	6	0.0	0.0	5.405	A
5	929	232	637	2380	0.390	929	1079	0.6	0.6	2.479	A

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	8	2	1198	919	0.009	8	368	0.0	0.0	3.949	A
2	372	93	490	1875	0.198	372	716	0.2	0.2	2.394	A
3	1391	348	314	2344	0.594	1391	548	1.5	1.5	3.777	A
4	17	4	1699	683	0.025	17	6	0.0	0.0	5.405	A
5	929	232	637	2380	0.390	929	1079	0.6	0.6	2.479	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	8	2	1198	919	0.009	8	368	0.0	0.0	3.949	A
2	372	93	490	1875	0.198	372	716	0.2	0.2	2.394	A
3	1391	348	314	2344	0.594	1391	548	1.5	1.5	3.777	A
4	17	4	1699	683	0.025	17	6	0.0	0.0	5.405	A
5	929	232	637	2380	0.390	929	1079	0.6	0.6	2.479	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	8	2	1198	919	0.009	8	368	0.0	0.0	3.949	A
2	372	93	490	1875	0.198	372	716	0.2	0.2	2.394	A
3	1391	348	314	2344	0.594	1391	548	1.5	1.5	3.777	A
4	17	4	1699	683	0.025	17	6	0.0	0.0	5.405	A
5	929	232	637	2380	0.390	929	1079	0.6	0.6	2.479	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	8	2	1198	919	0.009	8	368	0.0	0.0	3.949	A
2	372	93	490	1875	0.198	372	716	0.2	0.2	2.394	A
3	1391	348	314	2344	0.594	1391	548	1.5	1.5	3.777	A
4	17	4	1699	683	0.025	17	6	0.0	0.0	5.406	A
5	929	232	637	2380	0.390	929	1079	0.6	0.6	2.479	A

D3 - 2030 | Base | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	6.67	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	15	Arm 1	6.67	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D3	2030	Base	AM	FLAT	06:45	08:15	90	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		FLAT	✓	97	100.000
2		FLAT	✓	354	100.000
3		FLAT	✓	406	100.000
4		FLAT	✓	49	100.000
5		FLAT	✓	2274	100.000

Origin-Destination Data

Demand (PCU/hr)

	To					
From		1	2	3	4	5
	1	0	6	84	0	7
	2	1	0	87	3	263
	3	14	64	0	4	324
	4	1	15	6	0	27
	5	5	486	1755	26	2

Vehicle Mix

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

Heavy Vehicle %

	To					
From		1	2	3	4	5
	1	0	0	0	0	0
	2	0	0	0	0	0
	3	0	0	0	0	0
	4	0	0	0	0	0
	5	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.26	12.81	0.3	B	97	146
2	0.33	4.99	0.5	A	354	531
3	0.17	1.85	0.2	A	406	609
4	0.04	3.24	0.0	A	49	74
5	0.83	7.60	4.8	A	2274	3411

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	97	24	2335	387	0.251	96	21	0.0	0.3	12.319	B
2	354	89	1864	1084	0.327	352	567	0.0	0.5	4.908	A
3	406	102	300	2353	0.173	405	1916	0.0	0.2	1.848	A
4	49	12	673	1162	0.042	49	33	0.0	0.0	3.234	A
5	2274	569	101	2747	0.828	2256	621	0.0	4.6	7.078	A

07:00 - 07:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	97	24	2354	378	0.257	97	21	0.3	0.3	12.798	B
2	354	89	1880	1075	0.329	354	571	0.5	0.5	4.993	A
3	406	102	302	2351	0.173	406	1932	0.2	0.2	1.849	A
4	49	12	675	1161	0.042	49	33	0.0	0.0	3.237	A
5	2274	569	101	2747	0.828	2274	623	4.6	4.7	7.583	A

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	97	24	2354	378	0.257	97	21	0.3	0.3	12.809	B
2	354	89	1880	1075	0.329	354	571	0.5	0.5	4.994	A
3	406	102	302	2351	0.173	406	1932	0.2	0.2	1.849	A
4	49	12	675	1161	0.042	49	33	0.0	0.0	3.237	A
5	2274	569	101	2747	0.828	2274	623	4.7	4.7	7.595	A

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	97	24	2354	378	0.257	97	21	0.3	0.3	12.811	B
2	354	89	1880	1075	0.329	354	571	0.5	0.5	4.995	A
3	406	102	302	2351	0.173	406	1932	0.2	0.2	1.849	A
4	49	12	675	1161	0.042	49	33	0.0	0.0	3.237	A
5	2274	569	101	2747	0.828	2274	623	4.7	4.7	7.598	A

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	97	24	2354	378	0.257	97	21	0.3	0.3	12.811	B
2	354	89	1880	1075	0.329	354	571	0.5	0.5	4.995	A
3	406	102	302	2351	0.173	406	1932	0.2	0.2	1.849	A
4	49	12	675	1161	0.042	49	33	0.0	0.0	3.237	A
5	2274	569	101	2747	0.828	2274	623	4.7	4.8	7.601	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	97	24	2354	378	0.257	97	21	0.3	0.3	12.811	B
2	354	89	1880	1075	0.329	354	571	0.5	0.5	4.995	A
3	406	102	302	2351	0.173	406	1932	0.2	0.2	1.849	A
4	49	12	675	1161	0.042	49	33	0.0	0.0	3.237	A
5	2274	569	101	2747	0.828	2274	623	4.8	4.8	7.604	A

D4 - 2030 | Base | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	3.35	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	47	Arm 3	3.35	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D4	2030	Base	PM	FLAT	16:00	17:30	90	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		FLAT	✓	8	100.000
2		FLAT	✓	388	100.000
3		FLAT	✓	1453	100.000
4		FLAT	✓	17	100.000
5		FLAT	✓	970	100.000

Origin-Destination Data

Demand (PCU/hr)

	To					
	1	2	3	4	5	
From	1	0	6	1	0	1
	2	28	0	63	2	295
	3	348	277	3	3	822
	4	2	3	4	0	8
	5	6	462	501	1	0

Vehicle Mix

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

Heavy Vehicle %

	To					
From		1	2	3	4	5
	1	0	0	0	0	0
	2	0	0	0	0	0
	3	0	0	0	0	0
	4	0	0	0	0	0
	5	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.01	4.06	0.0	A	8	12
2	0.21	2.44	0.3	A	388	582
3	0.62	4.08	1.6	A	1453	2180
4	0.03	5.71	0.0	A	17	26
5	0.41	2.59	0.7	A	970	1455

Main Results for each time segment

16:00 - 16:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	8	2	1247	897	0.009	8	382	0.0	0.0	4.051	A
2	388	97	510	1864	0.208	387	745	0.0	0.3	2.437	A
3	1453	363	326	2336	0.622	1446	570	0.0	1.6	4.019	A
4	17	4	1767	651	0.026	17	6	0.0	0.0	5.674	A
5	970	243	662	2363	0.410	967	1121	0.0	0.7	2.573	A

16:15 - 16:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	8	2	1251	895	0.009	8	384	0.0	0.0	4.059	A
2	388	97	511	1863	0.208	388	748	0.3	0.3	2.440	A
3	1453	363	327	2335	0.622	1453	572	1.6	1.6	4.079	A
4	17	4	1774	648	0.026	17	6	0.0	0.0	5.705	A
5	970	243	665	2361	0.411	970	1126	0.7	0.7	2.586	A

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	8	2	1251	895	0.009	8	384	0.0	0.0	4.059	A
2	388	97	511	1863	0.208	388	748	0.3	0.3	2.440	A
3	1453	363	327	2335	0.622	1453	572	1.6	1.6	4.079	A
4	17	4	1774	648	0.026	17	6	0.0	0.0	5.705	A
5	970	243	665	2361	0.411	970	1126	0.7	0.7	2.587	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	8	2	1251	895	0.009	8	384	0.0	0.0	4.060	A
2	388	97	511	1863	0.208	388	748	0.3	0.3	2.440	A
3	1453	363	327	2335	0.622	1453	572	1.6	1.6	4.079	A
4	17	4	1774	648	0.026	17	6	0.0	0.0	5.705	A
5	970	243	665	2361	0.411	970	1126	0.7	0.7	2.587	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	8	2	1251	895	0.009	8	384	0.0	0.0	4.060	A
2	388	97	511	1863	0.208	388	748	0.3	0.3	2.440	A
3	1453	363	327	2335	0.622	1453	572	1.6	1.6	4.079	A
4	17	4	1774	648	0.026	17	6	0.0	0.0	5.705	A
5	970	243	665	2361	0.411	970	1126	0.7	0.7	2.587	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	8	2	1251	895	0.009	8	384	0.0	0.0	4.060	A
2	388	97	511	1863	0.208	388	748	0.3	0.3	2.440	A
3	1453	363	327	2335	0.622	1453	572	1.6	1.6	4.079	A
4	17	4	1774	648	0.026	17	6	0.0	0.0	5.705	A
5	970	243	665	2361	0.411	970	1126	0.7	0.7	2.587	A

D5 - 2030 | B+D (P1) | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	9.01	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	8	Arm 1	9.01	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D5	2030	B+D (P1)	AM	FLAT	06:45	08:15	90	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		FLAT	✓	102	100.000
2		FLAT	✓	363	100.000
3		FLAT	✓	486	100.000
4		FLAT	✓	49	100.000
5		FLAT	✓	2405	100.000

Origin-Destination Data

Demand (PCU/hr)

	To					
From		1	2	3	4	5
	1	0	6	89	0	7
	2	1	0	98	3	261
	3	15	73	0	4	394
	4	1	15	6	0	27
	5	5	482	1890	26	2

Vehicle Mix

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

Heavy Vehicle %

	To					
From		1	2	3	4	5
	1	0	0	0	0	0
	2	0	0	0	0	0
	3	0	0	0	0	0
	4	0	0	0	0	0
	5	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.33	17.11	0.5	C	102	153
2	0.37	5.70	0.6	A	363	545
3	0.21	1.93	0.3	A	486	729
4	0.04	3.35	0.0	A	49	74
5	0.88	10.71	7.1	B	2405	3608

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	102	26	2468	325	0.314	100	22	0.0	0.4	15.911	C
2	363	91	1997	1007	0.360	361	570	0.0	0.6	5.552	A
3	486	122	298	2354	0.206	485	2060	0.0	0.3	1.925	A
4	49	12	750	1125	0.044	49	33	0.0	0.0	3.343	A
5	2405	601	111	2741	0.878	2379	688	0.0	6.6	9.363	A

07:00 - 07:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	102	26	2493	313	0.326	102	22	0.4	0.5	17.048	C
2	363	91	2019	995	0.365	363	576	0.6	0.6	5.699	A
3	486	122	300	2353	0.207	486	2082	0.3	0.3	1.928	A
4	49	12	753	1124	0.044	49	33	0.0	0.0	3.347	A
5	2405	601	111	2740	0.878	2404	691	6.6	6.9	10.609	B

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	102	26	2494	313	0.326	102	22	0.5	0.5	17.093	C
2	363	91	2020	994	0.365	363	576	0.6	0.6	5.702	A
3	486	122	300	2353	0.207	486	2083	0.3	0.3	1.928	A
4	49	12	753	1124	0.044	49	33	0.0	0.0	3.347	A
5	2405	601	111	2740	0.878	2405	691	6.9	7.0	10.668	B

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	102	26	2494	312	0.326	102	22	0.5	0.5	17.100	C
2	363	91	2020	994	0.365	363	576	0.6	0.6	5.703	A
3	486	122	300	2353	0.207	486	2083	0.3	0.3	1.928	A
4	49	12	753	1124	0.044	49	33	0.0	0.0	3.347	A
5	2405	601	111	2740	0.878	2405	691	7.0	7.0	10.689	B

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	102	26	2494	312	0.326	102	22	0.5	0.5	17.105	C
2	363	91	2020	994	0.365	363	576	0.6	0.6	5.704	A
3	486	122	300	2353	0.207	486	2083	0.3	0.3	1.928	A
4	49	12	753	1124	0.044	49	33	0.0	0.0	3.347	A
5	2405	601	111	2740	0.878	2405	691	7.0	7.0	10.699	B

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	102	26	2494	312	0.326	102	22	0.5	0.5	17.106	C
2	363	91	2020	994	0.365	363	576	0.6	0.6	5.704	A
3	486	122	300	2353	0.207	486	2083	0.3	0.3	1.928	A
4	49	12	753	1124	0.044	49	33	0.0	0.0	3.347	A
5	2405	601	111	2740	0.878	2405	691	7.0	7.1	10.708	B

D6 - 2030 | B+D (P1) | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	3.83	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	36	Arm 3	3.83	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D6	2030	B+D (P1)	PM	FLAT	16:00	17:30	90	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		FLAT	✓	10	100.000
2		FLAT	✓	391	100.000
3		FLAT	✓	1591	100.000
4		FLAT	✓	17	100.000
5		FLAT	✓	1049	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
	1	2	3	4	5
From	1	0	6	3	0
	2	28	0	68	2
	3	351	285	3	3
	4	2	3	4	0
	5	6	458	584	1

Vehicle Mix

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

Heavy Vehicle %

	To					
From		1	2	3	4	5
	1	0	0	0	0	0
	2	0	0	0	0	0
	3	0	0	0	0	0
	4	0	0	0	0	0
	5	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.01	4.27	0.0	A	10	15
2	0.22	2.53	0.3	A	391	587
3	0.68	4.83	2.1	A	1591	2387
4	0.03	6.34	0.0	A	17	26
5	0.45	2.76	0.8	A	1049	1574

Main Results for each time segment

16:00 - 16:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	10	3	1333	856	0.012	10	385	0.0	0.0	4.254	A
2	391	98	594	1815	0.215	390	749	0.0	0.3	2.525	A
3	1591	398	324	2337	0.681	1583	660	0.0	2.1	4.719	A
4	17	4	1901	589	0.029	17	6	0.0	0.0	6.293	A
5	1049	262	672	2356	0.445	1046	1245	0.0	0.8	2.740	A

16:15 - 16:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	10	3	1338	854	0.012	10	387	0.0	0.0	4.265	A
2	391	98	596	1814	0.216	391	752	0.3	0.3	2.529	A
3	1591	398	325	2337	0.681	1591	662	2.1	2.1	4.827	A
4	17	4	1910	584	0.029	17	6	0.0	0.0	6.343	A
5	1049	262	676	2354	0.446	1049	1251	0.8	0.8	2.758	A

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	10	3	1338	854	0.012	10	387	0.0	0.0	4.265	A
2	391	98	596	1814	0.216	391	752	0.3	0.3	2.529	A
3	1591	398	325	2337	0.681	1591	662	2.1	2.1	4.827	A
4	17	4	1910	584	0.029	17	6	0.0	0.0	6.343	A
5	1049	262	676	2354	0.446	1049	1251	0.8	0.8	2.758	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	10	3	1338	854	0.012	10	387	0.0	0.0	4.265	A
2	391	98	596	1814	0.216	391	752	0.3	0.3	2.529	A
3	1591	398	325	2337	0.681	1591	662	2.1	2.1	4.827	A
4	17	4	1910	584	0.029	17	6	0.0	0.0	6.343	A
5	1049	262	676	2354	0.446	1049	1251	0.8	0.8	2.758	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	10	3	1338	854	0.012	10	387	0.0	0.0	4.265	A
2	391	98	596	1814	0.216	391	752	0.3	0.3	2.529	A
3	1591	398	325	2337	0.681	1591	662	2.1	2.1	4.827	A
4	17	4	1910	584	0.029	17	6	0.0	0.0	6.343	A
5	1049	262	676	2354	0.446	1049	1251	0.8	0.8	2.758	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	10	3	1338	854	0.012	10	387	0.0	0.0	4.265	A
2	391	98	596	1814	0.216	391	752	0.3	0.3	2.529	A
3	1591	398	325	2337	0.681	1591	662	2.1	2.1	4.827	A
4	17	4	1910	584	0.029	17	6	0.0	0.0	6.343	A
5	1049	262	676	2354	0.446	1049	1251	0.8	0.8	2.758	A

D7 - 2030 | B+D (P1_P2) | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	10.00	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	6	Arm 1	10.00	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D7	2030	B+D (P1_P2)	AM	FLAT	06:45	08:15	90	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		FLAT	✓	105	100.000
2		FLAT	✓	367	100.000
3		FLAT	✓	541	100.000
4		FLAT	✓	49	100.000
5		FLAT	✓	2440	100.000

Origin-Destination Data

Demand (PCU/hr)

	To					
From		1	2	3	4	5
	1	0	6	92	0	7
	2	1	0	100	3	263
	3	18	77	0	4	442
	4	1	15	6	0	27
	5	5	486	1921	26	2

Vehicle Mix

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

Heavy Vehicle %

	To					
From		1	2	3	4	5
	1	0	0	0	0	0
	2	0	0	0	0	0
	3	0	0	0	0	0
	4	0	0	0	0	0
	5	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.36	19.03	0.6	C	105	158
2	0.38	5.93	0.6	A	367	551
3	0.23	1.99	0.3	A	541	812
4	0.04	3.43	0.0	A	49	74
5	0.89	12.13	8.1	B	2440	3660

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	105	26	2503	308	0.341	103	25	0.0	0.5	17.392	C
2	367	92	2028	989	0.371	365	578	0.0	0.6	5.745	A
3	541	135	300	2353	0.230	540	2093	0.0	0.3	1.985	A
4	49	12	807	1099	0.045	49	33	0.0	0.0	3.427	A
5	2440	610	118	2736	0.892	2410	738	0.0	7.4	10.279	B

07:00 - 07:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	105	26	2531	295	0.356	105	25	0.5	0.5	18.927	C
2	367	92	2053	975	0.376	367	584	0.6	0.6	5.918	A
3	541	135	302	2351	0.230	541	2118	0.3	0.3	1.988	A
4	49	12	810	1098	0.045	49	33	0.0	0.0	3.432	A
5	2440	610	118	2736	0.892	2438	741	7.4	7.8	11.961	B

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	105	26	2532	294	0.357	105	25	0.5	0.5	19.000	C
2	367	92	2054	975	0.377	367	584	0.6	0.6	5.923	A
3	541	135	302	2351	0.230	541	2119	0.3	0.3	1.988	A
4	49	12	810	1098	0.045	49	33	0.0	0.0	3.432	A
5	2440	610	118	2736	0.892	2439	741	7.8	7.9	12.059	B

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	105	26	2533	294	0.357	105	25	0.5	0.5	19.016	C
2	367	92	2054	975	0.377	367	584	0.6	0.6	5.924	A
3	541	135	302	2351	0.230	541	2119	0.3	0.3	1.988	A
4	49	12	810	1098	0.045	49	33	0.0	0.0	3.432	A
5	2440	610	118	2736	0.892	2440	741	7.9	8.0	12.097	B

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	105	26	2533	294	0.357	105	25	0.5	0.6	19.023	C
2	367	92	2054	974	0.377	367	584	0.6	0.6	5.925	A
3	541	135	302	2351	0.230	541	2119	0.3	0.3	1.988	A
4	49	12	810	1098	0.045	49	33	0.0	0.0	3.432	A
5	2440	610	118	2736	0.892	2440	741	8.0	8.1	12.116	B

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	105	26	2533	294	0.357	105	25	0.6	0.6	19.028	C
2	367	92	2054	974	0.377	367	584	0.6	0.6	5.925	A
3	541	135	302	2351	0.230	541	2119	0.3	0.3	1.988	A
4	49	12	810	1098	0.045	49	33	0.0	0.0	3.432	A
5	2440	610	118	2736	0.892	2440	741	8.1	8.1	12.130	B

D8 - 2030 | B+D (P1_P2) | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	4.02	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	33	Arm 3	4.02	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D8	2030	B+D (P1_P2)	PM	FLAT	16:00	17:30	90	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		FLAT	✓	13	100.000
2		FLAT	✓	397	100.000
3		FLAT	✓	1630	100.000
4		FLAT	✓	17	100.000
5		FLAT	✓	1101	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
	1	2	3	4	5
From	1	0	6	0	1
	2	28	0	72	2
	3	355	288	3	3
	4	2	3	4	0
	5	6	462	632	1

Vehicle Mix

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

Heavy Vehicle %

	To					
From		1	2	3	4	5
	1	0	0	0	0	0
	2	0	0	0	0	0
	3	0	0	0	0	0
	4	0	0	0	0	0
	5	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.02	4.42	0.0	A	13	20
2	0.22	2.59	0.3	A	397	596
3	0.70	5.10	2.3	A	1630	2445
4	0.03	6.56	0.0	A	17	26
5	0.47	2.88	0.9	A	1101	1652

Main Results for each time segment

16:00 - 16:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	13	3	1388	831	0.016	13	389	0.0	0.0	4.403	A
2	397	99	645	1786	0.222	396	756	0.0	0.3	2.587	A
3	1630	408	326	2336	0.698	1621	715	0.0	2.3	4.973	A
4	17	4	1941	570	0.030	17	6	0.0	0.0	6.507	A
5	1101	275	679	2352	0.468	1097	1279	0.0	0.9	2.862	A

16:15 - 16:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	13	3	1393	828	0.016	13	391	0.0	0.0	4.416	A
2	397	99	647	1785	0.222	397	759	0.3	0.3	2.593	A
3	1630	408	327	2335	0.698	1630	717	2.3	2.3	5.101	A
4	17	4	1951	565	0.030	17	6	0.0	0.0	6.564	A
5	1101	275	683	2349	0.469	1101	1285	0.9	0.9	2.883	A

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	13	3	1393	828	0.016	13	391	0.0	0.0	4.416	A
2	397	99	647	1785	0.222	397	759	0.3	0.3	2.593	A
3	1630	408	327	2335	0.698	1630	717	2.3	2.3	5.103	A
4	17	4	1951	565	0.030	17	6	0.0	0.0	6.564	A
5	1101	275	683	2349	0.469	1101	1285	0.9	0.9	2.884	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	13	3	1393	828	0.016	13	391	0.0	0.0	4.416	A
2	397	99	647	1785	0.222	397	759	0.3	0.3	2.593	A
3	1630	408	327	2335	0.698	1630	717	2.3	2.3	5.103	A
4	17	4	1951	565	0.030	17	6	0.0	0.0	6.564	A
5	1101	275	683	2349	0.469	1101	1285	0.9	0.9	2.884	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	13	3	1393	828	0.016	13	391	0.0	0.0	4.416	A
2	397	99	647	1785	0.222	397	759	0.3	0.3	2.593	A
3	1630	408	327	2335	0.698	1630	717	2.3	2.3	5.103	A
4	17	4	1951	565	0.030	17	6	0.0	0.0	6.564	A
5	1101	275	683	2349	0.469	1101	1285	0.9	0.9	2.884	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	13	3	1393	828	0.016	13	391	0.0	0.0	4.416	A
2	397	99	647	1785	0.222	397	759	0.3	0.3	2.593	A
3	1630	408	327	2335	0.698	1630	717	2.3	2.3	5.103	A
4	17	4	1951	565	0.030	17	6	0.0	0.0	6.565	A
5	1101	275	683	2349	0.469	1101	1285	0.9	0.9	2.884	A

D9 - 2030 | B+C | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	8.02	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	10	Arm 1	8.02	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D9	2030	B+C	AM	FLAT	06:45	08:15	90	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		FLAT	✓	100	100.000
2		FLAT	✓	361	100.000
3		FLAT	✓	480	100.000
4		FLAT	✓	49	100.000
5		FLAT	✓	2361	100.000

Origin-Destination Data

Demand (PCU/hr)

	To					
From		1	2	3	4	5
	1	0	6	87	0	7
	2	1	0	94	3	263
	3	16	70	0	4	390
	4	1	15	6	0	27
	5	5	486	1842	26	2

Vehicle Mix

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

Heavy Vehicle %

	To					
From		1	2	3	4	5
	1	0	0	0	0	0
	2	0	0	0	0	0
	3	0	0	0	0	0
	4	0	0	0	0	0
	5	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.30	15.36	0.4	C	100	150
2	0.35	5.44	0.5	A	361	542
3	0.20	1.92	0.3	A	480	720
4	0.04	3.34	0.0	A	49	74
5	0.86	9.44	6.1	A	2361	3542

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	100	25	2424	345	0.290	98	23	0.0	0.4	14.490	B
2	361	90	1950	1034	0.349	359	572	0.0	0.5	5.315	A
3	480	120	300	2353	0.204	479	2009	0.0	0.3	1.920	A
4	49	12	746	1127	0.043	49	33	0.0	0.0	3.337	A
5	2361	590	109	2742	0.861	2338	686	0.0	5.8	8.480	A

07:00 - 07:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	100	25	2446	335	0.299	100	23	0.4	0.4	15.321	C
2	361	90	1969	1023	0.353	361	577	0.5	0.5	5.436	A
3	480	120	302	2351	0.204	480	2028	0.3	0.3	1.923	A
4	49	12	749	1126	0.044	49	33	0.0	0.0	3.341	A
5	2361	590	109	2742	0.861	2360	689	5.8	6.0	9.385	A

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	100	25	2447	335	0.299	100	23	0.4	0.4	15.346	C
2	361	90	1970	1023	0.353	361	577	0.5	0.5	5.438	A
3	480	120	302	2351	0.204	480	2029	0.3	0.3	1.923	A
4	49	12	749	1126	0.044	49	33	0.0	0.0	3.341	A
5	2361	590	109	2742	0.861	2361	689	6.0	6.1	9.419	A

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	100	25	2447	334	0.299	100	23	0.4	0.4	15.353	C
2	361	90	1970	1023	0.353	361	577	0.5	0.5	5.438	A
3	480	120	302	2351	0.204	480	2029	0.3	0.3	1.923	A
4	49	12	749	1126	0.044	49	33	0.0	0.0	3.341	A
5	2361	590	109	2742	0.861	2361	689	6.1	6.1	9.432	A

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	100	25	2447	334	0.299	100	23	0.4	0.4	15.355	C
2	361	90	1970	1023	0.353	361	577	0.5	0.5	5.439	A
3	480	120	302	2351	0.204	480	2029	0.3	0.3	1.923	A
4	49	12	749	1126	0.044	49	33	0.0	0.0	3.341	A
5	2361	590	109	2742	0.861	2361	689	6.1	6.1	9.437	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	100	25	2447	334	0.299	100	23	0.4	0.4	15.356	C
2	361	90	1970	1023	0.353	361	577	0.5	0.5	5.439	A
3	480	120	302	2351	0.204	480	2029	0.3	0.3	1.923	A
4	49	12	749	1126	0.044	49	33	0.0	0.0	3.341	A
5	2361	590	109	2742	0.861	2361	689	6.1	6.1	9.441	A

D10 - 2030 | B+C | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	3.75	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	38	Arm 3	3.75	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D10	2030	B+C	PM	FLAT	16:00	17:30	90	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		FLAT	✓	10	100.000
2		FLAT	✓	395	100.000
3		FLAT	✓	1567	100.000
4		FLAT	✓	17	100.000
5		FLAT	✓	1050	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
	1	2	3	4	5
From	1	0	6	3	0
	2	28	0	70	2
	3	352	285	3	3
	4	2	3	4	0
	5	6	462	581	1

Vehicle Mix

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

Heavy Vehicle %

	To					
From		1	2	3	4	5
	1	0	0	0	0	0
	2	0	0	0	0	0
	3	0	0	0	0	0
	4	0	0	0	0	0
	5	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.01	4.27	0.0	A	10	15
2	0.22	2.53	0.3	A	395	593
3	0.67	4.68	2.0	A	1567	2351
4	0.03	6.23	0.0	A	17	26
5	0.45	2.76	0.8	A	1050	1575

Main Results for each time segment

16:00 - 16:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	10	3	1334	856	0.012	10	386	0.0	0.0	4.256	A
2	395	99	591	1817	0.217	394	753	0.0	0.3	2.530	A
3	1567	392	326	2336	0.671	1559	659	0.0	2.0	4.587	A
4	17	4	1879	599	0.028	17	6	0.0	0.0	6.184	A
5	1050	263	674	2355	0.446	1047	1222	0.0	0.8	2.744	A

16:15 - 16:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	10	3	1339	853	0.012	10	388	0.0	0.0	4.267	A
2	395	99	593	1816	0.218	395	756	0.3	0.3	2.533	A
3	1567	392	327	2335	0.671	1567	661	2.0	2.0	4.684	A
4	17	4	1888	595	0.029	17	6	0.0	0.0	6.230	A
5	1050	263	677	2353	0.446	1050	1228	0.8	0.8	2.762	A

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	10	3	1339	853	0.012	10	388	0.0	0.0	4.268	A
2	395	99	593	1816	0.218	395	756	0.3	0.3	2.533	A
3	1567	392	327	2335	0.671	1567	661	2.0	2.0	4.684	A
4	17	4	1888	595	0.029	17	6	0.0	0.0	6.230	A
5	1050	263	677	2353	0.446	1050	1228	0.8	0.8	2.762	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	10	3	1339	853	0.012	10	388	0.0	0.0	4.268	A
2	395	99	593	1816	0.218	395	756	0.3	0.3	2.533	A
3	1567	392	327	2335	0.671	1567	661	2.0	2.0	4.684	A
4	17	4	1888	595	0.029	17	6	0.0	0.0	6.230	A
5	1050	263	677	2353	0.446	1050	1228	0.8	0.8	2.762	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	10	3	1339	853	0.012	10	388	0.0	0.0	4.268	A
2	395	99	593	1816	0.218	395	756	0.3	0.3	2.533	A
3	1567	392	327	2335	0.671	1567	661	2.0	2.0	4.684	A
4	17	4	1888	595	0.029	17	6	0.0	0.0	6.231	A
5	1050	263	677	2353	0.446	1050	1228	0.8	0.8	2.762	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	10	3	1339	853	0.012	10	388	0.0	0.0	4.268	A
2	395	99	593	1816	0.218	395	756	0.3	0.3	2.533	A
3	1567	392	327	2335	0.671	1567	661	2.0	2.0	4.684	A
4	17	4	1888	595	0.029	17	6	0.0	0.0	6.231	A
5	1050	263	677	2353	0.446	1050	1228	0.8	0.8	2.762	A

D11 - 2030 | B+C+D (P1) | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	11.90	B

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	4	Arm 1	11.90	B

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D11	2030	B+C+D (P1)	AM	FLAT	06:45	08:15	90	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		FLAT	✓	105	100.000
2		FLAT	✓	371	100.000
3		FLAT	✓	560	100.000
4		FLAT	✓	49	100.000
5		FLAT	✓	2492	100.000

Origin-Destination Data

Demand (PCU/hr)

	To					
From		1	2	3	4	5
	1	0	6	92	0	7
	2	1	0	106	3	261
	3	17	79	0	4	460
	4	1	15	6	0	27
	5	5	482	1977	26	2

Vehicle Mix

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

Heavy Vehicle %

	To					
From		1	2	3	4	5
	1	0	0	0	0	0
	2	0	0	0	0	0
	3	0	0	0	0	0
	4	0	0	0	0	0
	5	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.39	21.95	0.6	C	105	158
2	0.39	6.30	0.6	A	371	557
3	0.24	2.01	0.3	A	560	840
4	0.04	3.46	0.0	A	49	74
5	0.91	14.70	10.0	B	2492	3738

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	105	26	2552	285	0.368	103	24	0.0	0.6	19.481	C
2	371	93	2079	960	0.387	369	575	0.0	0.6	6.063	A
3	560	140	298	2354	0.238	559	2150	0.0	0.3	2.004	A
4	49	12	824	1091	0.045	49	33	0.0	0.0	3.453	A
5	2492	623	119	2735	0.911	2457	754	0.0	8.8	11.747	B

07:00 - 07:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	105	26	2585	270	0.389	105	24	0.6	0.6	21.751	C
2	371	93	2108	943	0.393	371	582	0.6	0.6	6.288	A
3	560	140	300	2353	0.238	560	2179	0.3	0.3	2.007	A
4	49	12	827	1090	0.045	49	33	0.0	0.0	3.458	A
5	2492	623	119	2735	0.911	2490	757	8.8	9.4	14.325	B

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	105	26	2586	269	0.390	105	24	0.6	0.6	21.896	C
2	371	93	2109	943	0.394	371	582	0.6	0.6	6.296	A
3	560	140	300	2353	0.238	560	2180	0.3	0.3	2.007	A
4	49	12	827	1090	0.045	49	33	0.0	0.0	3.458	A
5	2492	623	119	2735	0.911	2491	757	9.4	9.7	14.539	B

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	105	26	2586	269	0.390	105	24	0.6	0.6	21.932	C
2	371	93	2110	942	0.394	371	582	0.6	0.6	6.299	A
3	560	140	300	2353	0.238	560	2181	0.3	0.3	2.007	A
4	49	12	827	1090	0.045	49	33	0.0	0.0	3.458	A
5	2492	623	119	2735	0.911	2491	757	9.7	9.8	14.623	B

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	105	26	2587	269	0.390	105	24	0.6	0.6	21.943	C
2	371	93	2110	942	0.394	371	582	0.6	0.6	6.300	A
3	560	140	300	2353	0.238	560	2181	0.3	0.3	2.007	A
4	49	12	827	1090	0.045	49	33	0.0	0.0	3.458	A
5	2492	623	119	2735	0.911	2492	757	9.8	9.9	14.669	B

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	105	26	2587	269	0.390	105	24	0.6	0.6	21.955	C
2	371	93	2110	942	0.394	371	582	0.6	0.6	6.301	A
3	560	140	300	2353	0.238	560	2181	0.3	0.3	2.007	A
4	49	12	827	1090	0.045	49	33	0.0	0.0	3.458	A
5	2492	623	119	2735	0.911	2492	757	9.9	10.0	14.698	B

D12 - 2030 | B+C+D (P1) | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	4.38	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	28	Arm 3	4.38	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D12	2030	B+C+D (P1)	PM	FLAT	16:00	17:30	90	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		FLAT	✓	12	100.000
2		FLAT	✓	398	100.000
3		FLAT	✓	1706	100.000
4		FLAT	✓	17	100.000
5		FLAT	✓	1129	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
	1	2	3	4	5
From	1	0	6	5	0
	2	28	0	75	2
	3	355	293	3	3
	4	2	3	4	0
	5	6	458	664	1

Vehicle Mix

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

Heavy Vehicle %

	To					
From		1	2	3	4	5
	1	0	0	0	0	0
	2	0	0	0	0	0
	3	0	0	0	0	0
	4	0	0	0	0	0
	5	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.01	4.50	0.0	A	12	18
2	0.23	2.63	0.3	A	398	597
3	0.73	5.71	2.7	A	1706	2559
4	0.03	7.01	0.0	A	17	26
5	0.48	2.96	0.9	A	1129	1694

Main Results for each time segment

16:00 - 16:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	12	3	1420	815	0.015	12	389	0.0	0.0	4.481	A
2	398	100	676	1768	0.225	397	757	0.0	0.3	2.623	A
3	1706	427	324	2337	0.730	1695	749	0.0	2.6	5.521	A
4	17	4	2014	536	0.032	17	6	0.0	0.0	6.931	A
5	1129	282	684	2348	0.481	1125	1347	0.0	0.9	2.935	A

16:15 - 16:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	12	3	1426	813	0.015	12	391	0.0	0.0	4.495	A
2	398	100	678	1767	0.225	398	760	0.3	0.3	2.629	A
3	1706	427	325	2337	0.730	1706	751	2.6	2.7	5.705	A
4	17	4	2025	531	0.032	17	6	0.0	0.0	7.005	A
5	1129	282	688	2346	0.481	1129	1354	0.9	0.9	2.958	A

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	12	3	1426	813	0.015	12	391	0.0	0.0	4.495	A
2	398	100	678	1767	0.225	398	760	0.3	0.3	2.629	A
3	1706	427	325	2337	0.730	1706	751	2.7	2.7	5.707	A
4	17	4	2025	531	0.032	17	6	0.0	0.0	7.005	A
5	1129	282	688	2346	0.481	1129	1354	0.9	0.9	2.958	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	12	3	1426	813	0.015	12	391	0.0	0.0	4.495	A
2	398	100	678	1767	0.225	398	760	0.3	0.3	2.629	A
3	1706	427	325	2337	0.730	1706	751	2.7	2.7	5.707	A
4	17	4	2025	531	0.032	17	6	0.0	0.0	7.005	A
5	1129	282	688	2346	0.481	1129	1354	0.9	0.9	2.958	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	12	3	1426	813	0.015	12	391	0.0	0.0	4.495	A
2	398	100	678	1767	0.225	398	760	0.3	0.3	2.629	A
3	1706	427	325	2337	0.730	1706	751	2.7	2.7	5.707	A
4	17	4	2025	531	0.032	17	6	0.0	0.0	7.006	A
5	1129	282	688	2346	0.481	1129	1354	0.9	0.9	2.958	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	12	3	1426	813	0.015	12	391	0.0	0.0	4.495	A
2	398	100	678	1767	0.225	398	760	0.3	0.3	2.629	A
3	1706	427	325	2337	0.730	1706	751	2.7	2.7	5.707	A
4	17	4	2025	531	0.032	17	6	0.0	0.0	7.006	A
5	1129	282	688	2346	0.481	1129	1354	0.9	0.9	2.958	A

D13 - 2030 | B+C+D (P1_P2) | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	13.81	B

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	3	Arm 1	13.81	B

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D13	2030	B+C+D (P1_P2)	AM	FLAT	06:45	08:15	90	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		FLAT	✓	108	100.000
2		FLAT	✓	374	100.000
3		FLAT	✓	615	100.000
4		FLAT	✓	49	100.000
5		FLAT	✓	2527	100.000

Origin-Destination Data

Demand (PCU/hr)

	To					
From		1	2	3	4	5
	1	0	6	95	0	7
	2	1	0	107	3	263
	3	20	83	0	4	508
	4	1	15	6	0	27
	5	5	486	2008	26	2

Vehicle Mix

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

Heavy Vehicle %

	To					
From		1	2	3	4	5
	1	0	0	0	0	0
	2	0	0	0	0	0
	3	0	0	0	0	0
	4	0	0	0	0	0
	5	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.43	25.21	0.7	D	108	162
2	0.41	6.56	0.7	A	374	561
3	0.26	2.07	0.4	A	615	923
4	0.05	3.55	0.0	A	49	74
5	0.93	17.46	11.9	C	2527	3791

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	108	27	2585	270	0.400	105	27	0.0	0.6	21.617	C
2	374	94	2109	943	0.397	371	582	0.0	0.6	6.272	A
3	615	154	300	2353	0.261	614	2181	0.0	0.4	2.067	A
4	49	12	881	1065	0.046	49	33	0.0	0.0	3.543	A
5	2527	632	126	2730	0.926	2486	804	0.0	10.2	13.101	B

07:00 - 07:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	108	27	2622	252	0.428	108	27	0.6	0.7	24.817	C
2	374	94	2141	924	0.405	374	589	0.6	0.7	6.536	A
3	615	154	302	2352	0.262	615	2213	0.4	0.4	2.072	A
4	49	12	884	1063	0.046	49	33	0.0	0.0	3.549	A
5	2527	632	126	2730	0.926	2523	807	10.2	11.1	16.738	C

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	108	27	2624	251	0.430	108	27	0.7	0.7	25.088	D
2	374	94	2143	923	0.405	374	590	0.7	0.7	6.552	A
3	615	154	302	2351	0.262	615	2215	0.4	0.4	2.072	A
4	49	12	884	1063	0.046	49	33	0.0	0.0	3.549	A
5	2527	632	126	2730	0.926	2525	807	11.1	11.5	17.136	C

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	108	27	2625	251	0.430	108	27	0.7	0.7	25.162	D
2	374	94	2143	923	0.405	374	590	0.7	0.7	6.556	A
3	615	154	302	2351	0.262	615	2215	0.4	0.4	2.072	A
4	49	12	884	1063	0.046	49	33	0.0	0.0	3.549	A
5	2527	632	126	2730	0.926	2526	807	11.5	11.7	17.304	C

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	108	27	2625	251	0.431	108	27	0.7	0.7	25.195	D
2	374	94	2144	923	0.405	374	590	0.7	0.7	6.558	A
3	615	154	302	2351	0.262	615	2216	0.4	0.4	2.072	A
4	49	12	884	1063	0.046	49	33	0.0	0.0	3.549	A
5	2527	632	126	2730	0.926	2526	807	11.7	11.8	17.397	C

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	108	27	2626	251	0.431	108	27	0.7	0.7	25.211	D
2	374	94	2144	923	0.405	374	590	0.7	0.7	6.559	A
3	615	154	302	2351	0.262	615	2216	0.4	0.4	2.072	A
4	49	12	884	1063	0.046	49	33	0.0	0.0	3.549	A
5	2527	632	126	2730	0.926	2527	807	11.8	11.9	17.458	C

D14 - 2030 | B+C+D (P1_P2) | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	4.63	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	25	Arm 3	4.63	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D14	2030	B+C+D (P1_P2)	PM	FLAT	16:00	17:30	90	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		FLAT	✓	15	100.000
2		FLAT	✓	404	100.000
3		FLAT	✓	1744	100.000
4		FLAT	✓	17	100.000
5		FLAT	✓	1181	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
	1	2	3	4	5
From	1	0	6	8	0
	2	28	0	79	2
	3	359	296	3	3
	4	2	3	4	0
	5	6	462	712	1

Vehicle Mix

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

Heavy Vehicle %

	To					
From		1	2	3	4	5
	1	0	0	0	0	0
	2	0	0	0	0	0
	3	0	0	0	0	0
	4	0	0	0	0	0
	5	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.02	4.66	0.0	A	15	23
2	0.23	2.70	0.3	A	404	606
3	0.75	6.09	2.9	A	1744	2616
4	0.03	7.27	0.0	A	17	26
5	0.50	3.10	1.0	A	1181	1772

Main Results for each time segment

16:00 - 16:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	15	4	1475	790	0.019	15	393	0.0	0.0	4.646	A
2	404	101	726	1739	0.232	403	763	0.0	0.3	2.692	A
3	1744	436	326	2336	0.747	1733	803	0.0	2.9	5.859	A
4	17	4	2053	518	0.033	17	6	0.0	0.0	7.183	A
5	1181	295	691	2344	0.504	1177	1379	0.0	1.0	3.075	A

16:15 - 16:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	15	4	1481	787	0.019	15	395	0.0	0.0	4.663	A
2	404	101	729	1737	0.233	404	767	0.3	0.3	2.699	A
3	1744	436	327	2335	0.747	1744	806	2.9	2.9	6.081	A
4	17	4	2065	512	0.033	17	6	0.0	0.0	7.269	A
5	1181	295	695	2341	0.505	1181	1387	1.0	1.0	3.103	A

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	15	4	1481	787	0.019	15	395	0.0	0.0	4.663	A
2	404	101	729	1737	0.233	404	767	0.3	0.3	2.699	A
3	1744	436	327	2335	0.747	1744	806	2.9	2.9	6.084	A
4	17	4	2065	512	0.033	17	6	0.0	0.0	7.269	A
5	1181	295	695	2341	0.505	1181	1387	1.0	1.0	3.103	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	15	4	1481	787	0.019	15	395	0.0	0.0	4.663	A
2	404	101	729	1737	0.233	404	767	0.3	0.3	2.699	A
3	1744	436	327	2335	0.747	1744	806	2.9	2.9	6.086	A
4	17	4	2065	512	0.033	17	6	0.0	0.0	7.269	A
5	1181	295	695	2341	0.505	1181	1387	1.0	1.0	3.103	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	15	4	1481	787	0.019	15	395	0.0	0.0	4.663	A
2	404	101	729	1737	0.233	404	767	0.3	0.3	2.699	A
3	1744	436	327	2335	0.747	1744	806	2.9	2.9	6.086	A
4	17	4	2065	512	0.033	17	6	0.0	0.0	7.270	A
5	1181	295	695	2341	0.505	1181	1387	1.0	1.0	3.103	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	15	4	1481	787	0.019	15	395	0.0	0.0	4.663	A
2	404	101	729	1737	0.233	404	767	0.3	0.3	2.699	A
3	1744	436	327	2335	0.747	1744	806	2.9	2.9	6.086	A
4	17	4	2065	512	0.033	17	6	0.0	0.0	7.270	A
5	1181	295	695	2341	0.505	1181	1387	1.0	1.0	3.103	A

D15 - 2037 | Base | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	8.25	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	10	Arm 1	8.25	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D15	2037	Base	AM	FLAT	06:45	08:15	90	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		FLAT	✓	102	100.000
2		FLAT	✓	368	100.000
3		FLAT	✓	422	100.000
4		FLAT	✓	51	100.000
5		FLAT	✓	2371	100.000

Origin-Destination Data

Demand (PCU/hr)

	To					
	1	2	3	4	5	
From	1	0	7	87	0	8
	2	1	0	90	3	274
	3	14	66	0	4	338
	4	1	15	7	0	28
	5	5	506	1831	27	2

Vehicle Mix

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

Heavy Vehicle %

	To					
From		1	2	3	4	5
	1	0	0	0	0	0
	2	0	0	0	0	0
	3	0	0	0	0	0
	4	0	0	0	0	0
	5	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.31	15.71	0.4	C	102	153
2	0.36	5.46	0.6	A	368	552
3	0.18	1.87	0.2	A	422	633
4	0.04	3.28	0.0	A	51	77
5	0.86	9.61	6.3	A	2371	3557

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	102	26	2430	342	0.298	100	21	0.0	0.4	14.784	B
2	368	92	1942	1039	0.354	366	589	0.0	0.5	5.331	A
3	422	106	313	2344	0.180	421	1995	0.0	0.2	1.871	A
4	51	13	700	1149	0.044	51	34	0.0	0.0	3.278	A
5	2371	593	104	2745	0.864	2347	647	0.0	5.9	8.597	A

07:00 - 07:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	102	26	2453	331	0.308	102	21	0.4	0.4	15.670	C
2	368	92	1961	1028	0.358	368	594	0.5	0.6	5.455	A
3	422	106	315	2343	0.180	422	2014	0.2	0.2	1.872	A
4	51	13	703	1148	0.044	51	34	0.0	0.0	3.282	A
5	2371	593	104	2745	0.864	2370	650	5.9	6.1	9.545	A

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	102	26	2454	331	0.308	102	21	0.4	0.4	15.699	C
2	368	92	1962	1028	0.358	368	594	0.6	0.6	5.457	A
3	422	106	315	2343	0.180	422	2015	0.2	0.2	1.872	A
4	51	13	703	1148	0.044	51	34	0.0	0.0	3.282	A
5	2371	593	104	2745	0.864	2371	650	6.1	6.2	9.582	A

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	102	26	2454	331	0.308	102	21	0.4	0.4	15.705	C
2	368	92	1962	1027	0.358	368	594	0.6	0.6	5.458	A
3	422	106	315	2343	0.180	422	2015	0.2	0.2	1.872	A
4	51	13	703	1148	0.044	51	34	0.0	0.0	3.282	A
5	2371	593	104	2745	0.864	2371	650	6.2	6.2	9.596	A

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	102	26	2454	331	0.308	102	21	0.4	0.4	15.707	C
2	368	92	1962	1027	0.358	368	594	0.6	0.6	5.458	A
3	422	106	315	2343	0.180	422	2015	0.2	0.2	1.872	A
4	51	13	703	1148	0.044	51	34	0.0	0.0	3.282	A
5	2371	593	104	2745	0.864	2371	650	6.2	6.2	9.601	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	102	26	2454	331	0.308	102	21	0.4	0.4	15.710	C
2	368	92	1962	1027	0.358	368	594	0.6	0.6	5.458	A
3	422	106	315	2343	0.180	422	2015	0.2	0.2	1.872	A
4	51	13	703	1148	0.044	51	34	0.0	0.0	3.282	A
5	2371	593	104	2745	0.864	2371	650	6.2	6.3	9.605	A

D16 - 2037 | Base | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	3.57	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	41	Arm 3	3.57	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D16	2037	Base	PM	FLAT	16:00	17:30	90	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		FLAT	✓	9	100.000
2		FLAT	✓	403	100.000
3		FLAT	✓	1511	100.000
4		FLAT	✓	18	100.000
5		FLAT	✓	1009	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
	1	2	3	4	5
From	1	0	7	1	0
	2	29	0	65	2
	3	362	288	3	3
	4	2	3	4	0
	5	7	480	521	1

Vehicle Mix

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

Heavy Vehicle %

	To					
From		1	2	3	4	5
	1	0	0	0	0	0
	2	0	0	0	0	0
	3	0	0	0	0	0
	4	0	0	0	0	0
	5	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.01	4.17	0.0	A	9	14
2	0.22	2.48	0.3	A	403	605
3	0.65	4.41	1.8	A	1511	2267
4	0.03	6.03	0.0	A	18	27
5	0.43	2.70	0.8	A	1009	1514

Main Results for each time segment

16:00 - 16:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	9	2	1296	874	0.010	9	398	0.0	0.0	4.162	A
2	403	101	529	1852	0.218	402	775	0.0	0.3	2.481	A
3	1511	378	339	2328	0.649	1504	592	0.0	1.8	4.332	A
4	18	5	1837	619	0.029	18	6	0.0	0.0	5.991	A
5	1009	252	688	2346	0.430	1006	1167	0.0	0.8	2.682	A

16:15 - 16:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	9	2	1300	872	0.010	9	400	0.0	0.0	4.172	A
2	403	101	531	1851	0.218	403	778	0.3	0.3	2.485	A
3	1511	378	340	2327	0.649	1511	594	1.8	1.8	4.411	A
4	18	5	1845	615	0.029	18	6	0.0	0.0	6.031	A
5	1009	252	691	2344	0.431	1009	1172	0.8	0.8	2.697	A

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	9	2	1300	872	0.010	9	400	0.0	0.0	4.172	A
2	403	101	531	1851	0.218	403	778	0.3	0.3	2.485	A
3	1511	378	340	2327	0.649	1511	594	1.8	1.8	4.411	A
4	18	5	1845	615	0.029	18	6	0.0	0.0	6.031	A
5	1009	252	691	2344	0.431	1009	1172	0.8	0.8	2.697	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	9	2	1300	872	0.010	9	400	0.0	0.0	4.172	A
2	403	101	531	1851	0.218	403	778	0.3	0.3	2.485	A
3	1511	378	340	2327	0.649	1511	594	1.8	1.8	4.411	A
4	18	5	1845	615	0.029	18	6	0.0	0.0	6.032	A
5	1009	252	691	2344	0.431	1009	1172	0.8	0.8	2.697	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	9	2	1300	872	0.010	9	400	0.0	0.0	4.172	A
2	403	101	531	1851	0.218	403	778	0.3	0.3	2.485	A
3	1511	378	340	2327	0.649	1511	594	1.8	1.8	4.411	A
4	18	5	1845	615	0.029	18	6	0.0	0.0	6.032	A
5	1009	252	691	2344	0.431	1009	1172	0.8	0.8	2.697	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	9	2	1300	872	0.010	9	400	0.0	0.0	4.172	A
2	403	101	531	1851	0.218	403	778	0.3	0.3	2.485	A
3	1511	378	340	2327	0.649	1511	594	1.8	1.8	4.411	A
4	18	5	1845	615	0.029	18	6	0.0	0.0	6.032	A
5	1009	252	691	2344	0.431	1009	1172	0.8	0.8	2.697	A

D17 - 2037 | B+D (P1) | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	12.71	B

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	4	Arm 1	12.71	B

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D17	2037	B+D (P1)	AM	FLAT	06:45	08:15	90	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		FLAT	✓	108	100.000
2		FLAT	✓	379	100.000
3		FLAT	✓	504	100.000
4		FLAT	✓	51	100.000
5		FLAT	✓	2508	100.000

Origin-Destination Data

Demand (PCU/hr)

	To					
From		1	2	3	4	5
	1	0	7	93	0	8
	2	1	0	102	3	273
	3	16	76	0	4	408
	4	1	15	7	0	28
	5	5	504	1970	27	2

Vehicle Mix

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

Heavy Vehicle %

	To					
From		1	2	3	4	5
	1	0	0	0	0	0
	2	0	0	0	0	0
	3	0	0	0	0	0
	4	0	0	0	0	0
	5	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.41	23.31	0.7	C	108	162
2	0.40	6.37	0.7	A	379	569
3	0.22	1.96	0.3	A	504	756
4	0.05	3.40	0.0	A	51	77
5	0.92	15.56	10.6	C	2508	3762

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	108	27	2564	280	0.386	106	23	0.0	0.6	20.423	C
2	379	95	2075	962	0.394	376	594	0.0	0.6	6.118	A
3	504	126	312	2345	0.215	503	2140	0.0	0.3	1.953	A
4	51	13	781	1111	0.046	51	34	0.0	0.0	3.394	A
5	2508	627	116	2737	0.916	2471	716	0.0	9.3	12.193	B

07:00 - 07:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	108	27	2598	264	0.410	108	23	0.6	0.7	23.042	C
2	379	95	2104	945	0.401	379	601	0.6	0.7	6.355	A
3	504	126	314	2344	0.215	504	2170	0.3	0.3	1.956	A
4	51	13	784	1110	0.046	51	34	0.0	0.0	3.399	A
5	2508	627	116	2737	0.916	2505	719	9.3	10.0	15.097	C

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	108	27	2600	263	0.411	108	23	0.7	0.7	23.229	C
2	379	95	2106	944	0.401	379	602	0.7	0.7	6.365	A
3	504	126	314	2344	0.215	504	2171	0.3	0.3	1.956	A
4	51	13	784	1110	0.046	51	34	0.0	0.0	3.399	A
5	2508	627	116	2737	0.916	2507	719	10.0	10.3	15.361	C

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	108	27	2600	263	0.411	108	23	0.7	0.7	23.277	C
2	379	95	2106	944	0.401	379	602	0.7	0.7	6.368	A
3	504	126	314	2344	0.215	504	2171	0.3	0.3	1.956	A
4	51	13	784	1110	0.046	51	34	0.0	0.0	3.399	A
5	2508	627	116	2737	0.916	2507	719	10.3	10.4	15.469	C

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	108	27	2601	262	0.412	108	23	0.7	0.7	23.298	C
2	379	95	2107	944	0.401	379	602	0.7	0.7	6.370	A
3	504	126	314	2344	0.215	504	2172	0.3	0.3	1.956	A
4	51	13	784	1110	0.046	51	34	0.0	0.0	3.399	A
5	2508	627	116	2737	0.916	2508	719	10.4	10.5	15.527	C

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	108	27	2601	262	0.412	108	23	0.7	0.7	23.315	C
2	379	95	2107	944	0.401	379	602	0.7	0.7	6.370	A
3	504	126	314	2344	0.215	504	2172	0.3	0.3	1.956	A
4	51	13	784	1110	0.046	51	34	0.0	0.0	3.399	A
5	2508	627	116	2737	0.916	2508	719	10.5	10.6	15.564	C

D18 - 2037 | B+D (P1) | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	4.15	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	31	Arm 3	4.15	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D18	2037	B+D (P1)	PM	FLAT	16:00	17:30	90	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		FLAT	✓	10	100.000
2		FLAT	✓	408	100.000
3		FLAT	✓	1654	100.000
4		FLAT	✓	18	100.000
5		FLAT	✓	1090	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
	1	2	3	4	5
From	1	0	6	3	0
	2	29	0	71	2
	3	366	297	3	3
	4	2	3	4	0
	5	6	478	605	1

Vehicle Mix

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

Heavy Vehicle %

	To					
From		1	2	3	4	5
	1	0	0	0	0	0
	2	0	0	0	0	0
	3	0	0	0	0	0
	4	0	0	0	0	0
	5	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.01	4.39	0.0	A	10	15
2	0.23	2.58	0.3	A	408	612
3	0.71	5.34	2.4	A	1654	2481
4	0.03	6.78	0.0	A	18	27
5	0.47	2.89	0.9	A	1090	1635

Main Results for each time segment

16:00 - 16:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	10	3	1386	832	0.012	10	401	0.0	0.0	4.381	A
2	408	102	615	1803	0.226	407	781	0.0	0.3	2.576	A
3	1654	414	338	2328	0.710	1644	684	0.0	2.4	5.194	A
4	18	5	1976	553	0.033	18	6	0.0	0.0	6.720	A
5	1090	273	700	2337	0.466	1087	1294	0.0	0.9	2.869	A

16:15 - 16:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	10	3	1391	829	0.012	10	403	0.0	0.0	4.394	A
2	408	102	617	1802	0.226	408	784	0.3	0.3	2.582	A
3	1654	414	339	2328	0.711	1654	686	2.4	2.4	5.341	A
4	18	5	1987	549	0.033	18	6	0.0	0.0	6.784	A
5	1090	273	704	2335	0.467	1090	1301	0.9	0.9	2.891	A

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	10	3	1391	829	0.012	10	403	0.0	0.0	4.394	A
2	408	102	617	1802	0.226	408	784	0.3	0.3	2.582	A
3	1654	414	339	2328	0.711	1654	686	2.4	2.4	5.343	A
4	18	5	1987	549	0.033	18	6	0.0	0.0	6.785	A
5	1090	273	704	2335	0.467	1090	1301	0.9	0.9	2.891	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	10	3	1391	829	0.012	10	403	0.0	0.0	4.394	A
2	408	102	617	1802	0.226	408	784	0.3	0.3	2.582	A
3	1654	414	339	2328	0.711	1654	686	2.4	2.4	5.343	A
4	18	5	1987	549	0.033	18	6	0.0	0.0	6.785	A
5	1090	273	704	2335	0.467	1090	1301	0.9	0.9	2.891	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	10	3	1391	829	0.012	10	403	0.0	0.0	4.394	A
2	408	102	617	1802	0.226	408	784	0.3	0.3	2.582	A
3	1654	414	339	2328	0.711	1654	686	2.4	2.4	5.343	A
4	18	5	1987	549	0.033	18	6	0.0	0.0	6.785	A
5	1090	273	704	2335	0.467	1090	1301	0.9	0.9	2.891	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	10	3	1391	829	0.012	10	403	0.0	0.0	4.394	A
2	408	102	617	1802	0.226	408	784	0.3	0.3	2.582	A
3	1654	414	339	2328	0.711	1654	686	2.4	2.4	5.343	A
4	18	5	1987	549	0.033	18	6	0.0	0.0	6.785	A
5	1090	273	704	2335	0.467	1090	1301	0.9	0.9	2.891	A

D19 - 2037 | B+D (P1_P2) | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	14.41	B

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	2	Arm 1	14.41	B

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D19	2037	B+D (P1_P2)	AM	FLAT	06:45	08:15	90	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		FLAT	✓	110	100.000
2		FLAT	✓	381	100.000
3		FLAT	✓	557	100.000
4		FLAT	✓	51	100.000
5		FLAT	✓	2537	100.000

Origin-Destination Data

Demand (PCU/hr)

	To					
From		1	2	3	4	5
	1	0	7	95	0	8
	2	1	0	103	3	274
	3	18	79	0	4	456
	4	1	15	7	0	28
	5	5	506	1997	27	2

Vehicle Mix

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

Heavy Vehicle %

	To					
From		1	2	3	4	5
	1	0	0	0	0	0
	2	0	0	0	0	0
	3	0	0	0	0	0
	4	0	0	0	0	0
	5	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.44	26.17	0.8	D	110	165
2	0.41	6.59	0.7	A	381	572
3	0.24	2.01	0.3	A	557	836
4	0.05	3.48	0.0	A	51	77
5	0.93	18.01	12.4	C	2537	3806

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	110	28	2591	267	0.412	107	25	0.0	0.7	22.206	C
2	381	95	2100	948	0.402	378	598	0.0	0.7	6.292	A
3	557	139	312	2345	0.238	556	2166	0.0	0.3	2.011	A
4	51	13	835	1086	0.047	51	34	0.0	0.0	3.477	A
5	2537	634	121	2734	0.928	2495	765	0.0	10.5	13.345	B

07:00 - 07:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	110	28	2629	249	0.442	110	25	0.7	0.8	25.718	D
2	381	95	2132	929	0.410	381	606	0.7	0.7	6.563	A
3	557	139	315	2343	0.238	557	2199	0.3	0.3	2.015	A
4	51	13	838	1085	0.047	51	34	0.0	0.0	3.482	A
5	2537	634	121	2733	0.928	2533	768	10.5	11.5	17.202	C

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	110	28	2631	248	0.443	110	25	0.8	0.8	26.029	D
2	381	95	2135	928	0.411	381	607	0.7	0.7	6.580	A
3	557	139	315	2343	0.238	557	2201	0.3	0.3	2.015	A
4	51	13	838	1085	0.047	51	34	0.0	0.0	3.482	A
5	2537	634	121	2733	0.928	2535	768	11.5	11.9	17.645	C

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	110	28	2632	248	0.444	110	25	0.8	0.8	26.115	D
2	381	95	2135	928	0.411	381	607	0.7	0.7	6.585	A
3	557	139	315	2343	0.238	557	2201	0.3	0.3	2.015	A
4	51	13	838	1085	0.047	51	34	0.0	0.0	3.482	A
5	2537	634	121	2733	0.928	2536	768	11.9	12.1	17.837	C

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	110	28	2632	248	0.444	110	25	0.8	0.8	26.153	D
2	381	95	2136	927	0.411	381	607	0.7	0.7	6.586	A
3	557	139	315	2343	0.238	557	2202	0.3	0.3	2.015	A
4	51	13	838	1085	0.047	51	34	0.0	0.0	3.482	A
5	2537	634	121	2733	0.928	2536	768	12.1	12.3	17.942	C

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	110	28	2633	247	0.445	110	25	0.8	0.8	26.174	D
2	381	95	2136	927	0.411	381	607	0.7	0.7	6.588	A
3	557	139	315	2343	0.238	557	2202	0.3	0.3	2.015	A
4	51	13	838	1085	0.047	51	34	0.0	0.0	3.482	A
5	2537	634	121	2733	0.928	2537	768	12.3	12.4	18.010	C

D20 - 2037 | B+D (P1_P2) | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	4.35	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	28	Arm 3	4.35	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D20	2037	B+D (P1_P2)	PM	FLAT	16:00	17:30	90	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		FLAT	✓	14	100.000
2		FLAT	✓	412	100.000
3		FLAT	✓	1688	100.000
4		FLAT	✓	18	100.000
5		FLAT	✓	1140	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
	1	2	3	4	5
From	1	0	7	6	0
	2	29	0	74	2
	3	369	299	3	3
	4	2	3	4	0
	5	7	480	652	1

Vehicle Mix

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

Heavy Vehicle %

	To					
From		1	2	3	4	5
	1	0	0	0	0	0
	2	0	0	0	0	0
	3	0	0	0	0	0
	4	0	0	0	0	0
	5	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.02	4.55	0.0	A	14	21
2	0.23	2.64	0.3	A	412	618
3	0.73	5.63	2.6	A	1688	2532
4	0.03	7.00	0.0	A	18	27
5	0.49	3.02	1.0	A	1140	1710

Main Results for each time segment

16:00 - 16:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	14	4	1436	808	0.017	14	405	0.0	0.0	4.534	A
2	412	103	665	1774	0.232	411	786	0.0	0.3	2.637	A
3	1688	422	339	2328	0.725	1678	737	0.0	2.6	5.455	A
4	18	5	2011	537	0.033	18	6	0.0	0.0	6.926	A
5	1140	285	705	2334	0.488	1136	1324	0.0	0.9	2.995	A

16:15 - 16:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	14	4	1442	805	0.017	14	407	0.0	0.0	4.549	A
2	412	103	667	1773	0.232	412	789	0.3	0.3	2.644	A
3	1688	422	340	2327	0.725	1688	739	2.6	2.6	5.630	A
4	18	5	2022	532	0.034	18	6	0.0	0.0	6.999	A
5	1140	285	709	2331	0.489	1140	1331	0.9	1.0	3.021	A

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	14	4	1442	805	0.017	14	407	0.0	0.0	4.549	A
2	412	103	667	1773	0.232	412	789	0.3	0.3	2.644	A
3	1688	422	340	2327	0.725	1688	739	2.6	2.6	5.632	A
4	18	5	2022	532	0.034	18	6	0.0	0.0	7.000	A
5	1140	285	709	2331	0.489	1140	1331	1.0	1.0	3.021	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	14	4	1442	805	0.017	14	407	0.0	0.0	4.549	A
2	412	103	667	1773	0.232	412	789	0.3	0.3	2.644	A
3	1688	422	340	2327	0.725	1688	739	2.6	2.6	5.632	A
4	18	5	2022	532	0.034	18	6	0.0	0.0	7.000	A
5	1140	285	709	2331	0.489	1140	1331	1.0	1.0	3.021	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	14	4	1442	805	0.017	14	407	0.0	0.0	4.549	A
2	412	103	667	1773	0.232	412	789	0.3	0.3	2.644	A
3	1688	422	340	2327	0.725	1688	739	2.6	2.6	5.632	A
4	18	5	2022	532	0.034	18	6	0.0	0.0	7.000	A
5	1140	285	709	2331	0.489	1140	1331	1.0	1.0	3.021	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	14	4	1442	805	0.017	14	407	0.0	0.0	4.549	A
2	412	103	667	1773	0.232	412	789	0.3	0.3	2.644	A
3	1688	422	340	2327	0.725	1688	739	2.6	2.6	5.632	A
4	18	5	2022	532	0.034	18	6	0.0	0.0	7.000	A
5	1140	285	709	2331	0.489	1140	1331	1.0	1.0	3.021	A

D21 - 2037 | B+C | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	10.50	B

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	6	Arm 1	10.50	B

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D21	2037	B+C	AM	FLAT	06:45	08:15	90	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		FLAT	✓	105	100.000
2		FLAT	✓	376	100.000
3		FLAT	✓	496	100.000
4		FLAT	✓	51	100.000
5		FLAT	✓	2457	100.000

Origin-Destination Data

Demand (PCU/hr)

	To					
From		1	2	3	4	5
	1	0	7	90	0	8
	2	1	0	98	3	274
	3	16	72	0	4	404
	4	1	15	7	0	28
	5	5	506	1917	27	2

Vehicle Mix

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

Heavy Vehicle %

	To					
From		1	2	3	4	5
	1	0	0	0	0	0
	2	0	0	0	0	0
	3	0	0	0	0	0
	4	0	0	0	0	0
	5	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.36	19.66	0.6	C	105	158
2	0.39	6.00	0.6	A	376	564
3	0.21	1.95	0.3	A	496	744
4	0.05	3.39	0.0	A	51	77
5	0.90	12.67	8.5	B	2457	3686

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	105	26	2515	303	0.347	103	23	0.0	0.5	17.858	C
2	376	94	2025	991	0.379	374	593	0.0	0.6	5.806	A
3	496	124	313	2345	0.212	495	2085	0.0	0.3	1.945	A
4	51	13	774	1114	0.046	51	34	0.0	0.0	3.384	A
5	2457	614	112	2740	0.897	2426	713	0.0	7.7	10.607	B

07:00 - 07:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	105	26	2544	289	0.364	105	23	0.5	0.6	19.539	C
2	376	94	2049	977	0.385	376	600	0.6	0.6	5.989	A
3	496	124	315	2343	0.212	496	2110	0.3	0.3	1.948	A
4	51	13	777	1113	0.046	51	34	0.0	0.0	3.388	A
5	2457	614	112	2740	0.897	2455	716	7.7	8.2	12.470	B

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	105	26	2545	288	0.364	105	23	0.6	0.6	19.625	C
2	376	94	2050	976	0.385	376	600	0.6	0.6	5.994	A
3	496	124	315	2343	0.212	496	2111	0.3	0.3	1.948	A
4	51	13	777	1113	0.046	51	34	0.0	0.0	3.389	A
5	2457	614	112	2740	0.897	2456	716	8.2	8.3	12.589	B

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	105	26	2546	288	0.364	105	23	0.6	0.6	19.649	C
2	376	94	2051	976	0.385	376	600	0.6	0.6	5.996	A
3	496	124	315	2343	0.212	496	2112	0.3	0.3	1.948	A
4	51	13	777	1113	0.046	51	34	0.0	0.0	3.389	A
5	2457	614	112	2740	0.897	2457	716	8.3	8.4	12.634	B

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	105	26	2546	288	0.364	105	23	0.6	0.6	19.655	C
2	376	94	2051	976	0.385	376	600	0.6	0.6	5.996	A
3	496	124	315	2343	0.212	496	2112	0.3	0.3	1.948	A
4	51	13	777	1113	0.046	51	34	0.0	0.0	3.389	A
5	2457	614	112	2740	0.897	2457	716	8.4	8.5	12.659	B

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	105	26	2546	288	0.364	105	23	0.6	0.6	19.657	C
2	376	94	2051	976	0.385	376	600	0.6	0.6	5.997	A
3	496	124	315	2343	0.212	496	2112	0.3	0.3	1.948	A
4	51	13	777	1113	0.046	51	34	0.0	0.0	3.389	A
5	2457	614	112	2740	0.897	2457	716	8.5	8.5	12.674	B

D22 - 2037 | B+C | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	4.03	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	33	Arm 3	4.03	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D22	2037	B+C	PM	FLAT	16:00	17:30	90	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		FLAT	✓	11	100.000
2		FLAT	✓	410	100.000
3		FLAT	✓	1626	100.000
4		FLAT	✓	18	100.000
5		FLAT	✓	1089	100.000

Origin-Destination Data

Demand (PCU/hr)

	To					
From		1	2	3	4	5
	1	0	7	3	0	1
	2	29	0	72	2	307
	3	366	296	3	3	958
	4	2	3	4	0	9
	5	7	480	601	1	0

Vehicle Mix

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

Heavy Vehicle %

	To					
From		1	2	3	4	5
	1	0	0	0	0	0
	2	0	0	0	0	0
	3	0	0	0	0	0
	4	0	0	0	0	0
	5	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.01	4.39	0.0	A	11	17
2	0.23	2.58	0.3	A	410	615
3	0.70	5.13	2.3	A	1626	2439
4	0.03	6.63	0.0	A	18	27
5	0.47	2.89	0.9	A	1089	1634

Main Results for each time segment

16:00 - 16:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	11	3	1383	833	0.013	11	402	0.0	0.0	4.379	A
2	410	103	611	1805	0.227	409	783	0.0	0.3	2.575	A
3	1626	407	339	2328	0.699	1617	681	0.0	2.3	5.003	A
4	18	5	1950	566	0.032	18	6	0.0	0.0	6.568	A
5	1089	272	699	2338	0.466	1086	1269	0.0	0.9	2.866	A

16:15 - 16:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	11	3	1388	830	0.013	11	404	0.0	0.0	4.392	A
2	410	103	613	1804	0.227	410	786	0.3	0.3	2.581	A
3	1626	407	340	2327	0.699	1626	683	2.3	2.3	5.132	A
4	18	5	1960	561	0.032	18	6	0.0	0.0	6.627	A
5	1089	272	703	2335	0.466	1089	1275	0.9	0.9	2.887	A

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	11	3	1388	830	0.013	11	404	0.0	0.0	4.392	A
2	410	103	613	1804	0.227	410	786	0.3	0.3	2.581	A
3	1626	407	340	2327	0.699	1626	683	2.3	2.3	5.134	A
4	18	5	1960	561	0.032	18	6	0.0	0.0	6.627	A
5	1089	272	703	2335	0.466	1089	1275	0.9	0.9	2.887	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	11	3	1388	830	0.013	11	404	0.0	0.0	4.392	A
2	410	103	613	1804	0.227	410	786	0.3	0.3	2.581	A
3	1626	407	340	2327	0.699	1626	683	2.3	2.3	5.134	A
4	18	5	1960	561	0.032	18	6	0.0	0.0	6.627	A
5	1089	272	703	2335	0.466	1089	1275	0.9	0.9	2.887	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	11	3	1388	830	0.013	11	404	0.0	0.0	4.392	A
2	410	103	613	1804	0.227	410	786	0.3	0.3	2.581	A
3	1626	407	340	2327	0.699	1626	683	2.3	2.3	5.134	A
4	18	5	1960	561	0.032	18	6	0.0	0.0	6.627	A
5	1089	272	703	2335	0.466	1089	1275	0.9	0.9	2.887	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	11	3	1388	830	0.013	11	404	0.0	0.0	4.392	A
2	410	103	613	1804	0.227	410	786	0.3	0.3	2.581	A
3	1626	407	340	2327	0.699	1626	683	2.3	2.3	5.134	A
4	18	5	1960	561	0.032	18	6	0.0	0.0	6.627	A
5	1089	272	703	2335	0.466	1089	1275	0.9	0.9	2.887	A

D23 - 2037 | B+C+D (P1) | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	19.60	C

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	0	Arm 1	19.60	C

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D23	2037	B+C+D (P1)	AM	FLAT	06:45	08:15	90	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		FLAT	✓	111	100.000
2		FLAT	✓	386	100.000
3		FLAT	✓	579	100.000
4		FLAT	✓	51	100.000
5		FLAT	✓	2595	100.000

Origin-Destination Data

Demand (PCU/hr)

	To					
From		1	2	3	4	5
	1	0	7	96	0	8
	2	1	0	109	3	273
	3	18	82	0	4	475
	4	1	15	7	0	28
	5	5	504	2057	27	2

Vehicle Mix

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

Heavy Vehicle %

	To					
From		1	2	3	4	5
	1	0	0	0	0	0
	2	0	0	0	0	0
	3	0	0	0	0	0
	4	0	0	0	0	0
	5	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.51	33.23	1.0	D	111	167
2	0.43	7.11	0.8	A	386	579
3	0.25	2.04	0.3	A	579	869
4	0.05	3.52	0.0	A	51	77
5	0.95	25.11	17.4	D	2595	3893

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	111	28	2640	244	0.455	108	25	0.0	0.8	25.926	D
2	386	97	2151	919	0.420	383	597	0.0	0.7	6.690	A
3	579	145	311	2346	0.247	578	2223	0.0	0.3	2.035	A
4	51	13	855	1076	0.047	51	33	0.0	0.0	3.509	A
5	2595	649	124	2732	0.950	2542	783	0.0	13.4	15.963	C

07:00 - 07:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	111	28	2686	222	0.499	110	25	0.8	0.9	31.913	D
2	386	97	2190	896	0.431	386	606	0.7	0.7	7.054	A
3	579	145	314	2344	0.247	579	2262	0.3	0.3	2.039	A
4	51	13	859	1075	0.047	51	34	0.0	0.0	3.515	A
5	2595	649	124	2731	0.950	2587	786	13.4	15.3	22.647	C

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	111	28	2690	220	0.504	111	25	0.9	1.0	32.750	D
2	386	97	2194	894	0.432	386	607	0.7	0.8	7.087	A
3	579	145	314	2344	0.247	579	2266	0.3	0.3	2.039	A
4	51	13	859	1075	0.047	51	34	0.0	0.0	3.515	A
5	2595	649	124	2731	0.950	2591	786	15.3	16.3	23.887	C

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	111	28	2692	220	0.505	111	25	1.0	1.0	33.016	D
2	386	97	2195	893	0.432	386	608	0.8	0.8	7.098	A
3	579	145	314	2344	0.247	579	2267	0.3	0.3	2.039	A
4	51	13	859	1075	0.047	51	34	0.0	0.0	3.515	A
5	2595	649	124	2731	0.950	2593	786	16.3	16.8	24.498	C

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	111	28	2693	219	0.506	111	25	1.0	1.0	33.153	D
2	386	97	2196	893	0.432	386	608	0.8	0.8	7.103	A
3	579	145	314	2344	0.247	579	2268	0.3	0.3	2.039	A
4	51	13	859	1075	0.047	51	34	0.0	0.0	3.515	A
5	2595	649	124	2731	0.950	2594	786	16.8	17.2	24.865	C

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	111	28	2693	219	0.506	111	25	1.0	1.0	33.227	D
2	386	97	2196	893	0.432	386	608	0.8	0.8	7.105	A
3	579	145	314	2344	0.247	579	2268	0.3	0.3	2.039	A
4	51	13	859	1075	0.047	51	34	0.0	0.0	3.515	A
5	2595	649	124	2731	0.950	2594	786	17.2	17.4	25.113	D

D24 - 2037 | B+C+D (P1) | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	4.82	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	23	Arm 3	4.82	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D24	2037	B+C+D (P1)	PM	FLAT	16:00	17:30	90	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		FLAT	✓	12	100.000
2		FLAT	✓	415	100.000
3		FLAT	✓	1768	100.000
4		FLAT	✓	18	100.000
5		FLAT	✓	1170	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
	1	2	3	4	5
From	1	0	6	5	0
	2	29	0	78	2
	3	370	305	3	3
	4	2	3	4	0
	5	6	478	685	1

Vehicle Mix

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

Heavy Vehicle %

	To					
From		1	2	3	4	5
	1	0	0	0	0	0
	2	0	0	0	0	0
	3	0	0	0	0	0
	4	0	0	0	0	0
	5	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.02	4.64	0.0	A	12	18
2	0.24	2.69	0.3	A	415	623
3	0.76	6.43	3.1	A	1768	2652
4	0.04	7.54	0.0	A	18	27
5	0.50	3.11	1.0	A	1170	1755

Main Results for each time segment

16:00 - 16:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	12	3	1473	791	0.015	12	404	0.0	0.0	4.622	A
2	415	104	697	1756	0.236	414	788	0.0	0.3	2.679	A
3	1768	442	338	2328	0.759	1756	772	0.0	3.1	6.163	A
4	18	5	2088	501	0.036	18	6	0.0	0.0	7.441	A
5	1170	293	711	2330	0.502	1166	1394	0.0	1.0	3.084	A

16:15 - 16:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	12	3	1479	788	0.015	12	407	0.0	0.0	4.639	A
2	415	104	699	1755	0.237	415	792	0.3	0.3	2.686	A
3	1768	442	339	2328	0.760	1768	775	3.1	3.1	6.423	A
4	18	5	2101	495	0.036	18	6	0.0	0.0	7.539	A
5	1170	293	716	2326	0.503	1170	1403	1.0	1.0	3.112	A

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	12	3	1479	788	0.015	12	407	0.0	0.0	4.639	A
2	415	104	699	1755	0.237	415	792	0.3	0.3	2.686	A
3	1768	442	339	2328	0.760	1768	775	3.1	3.1	6.429	A
4	18	5	2101	495	0.036	18	6	0.0	0.0	7.540	A
5	1170	293	716	2326	0.503	1170	1403	1.0	1.0	3.112	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	12	3	1479	788	0.015	12	407	0.0	0.0	4.639	A
2	415	104	699	1755	0.237	415	792	0.3	0.3	2.686	A
3	1768	442	339	2328	0.760	1768	775	3.1	3.1	6.429	A
4	18	5	2101	495	0.036	18	6	0.0	0.0	7.540	A
5	1170	293	716	2326	0.503	1170	1403	1.0	1.0	3.112	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	12	3	1479	788	0.015	12	407	0.0	0.0	4.639	A
2	415	104	699	1755	0.237	415	792	0.3	0.3	2.686	A
3	1768	442	339	2328	0.760	1768	775	3.1	3.1	6.431	A
4	18	5	2101	495	0.036	18	6	0.0	0.0	7.541	A
5	1170	293	716	2326	0.503	1170	1403	1.0	1.0	3.112	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	12	3	1479	788	0.015	12	407	0.0	0.0	4.639	A
2	415	104	699	1755	0.237	415	792	0.3	0.3	2.686	A
3	1768	442	339	2328	0.760	1768	775	3.1	3.1	6.431	A
4	18	5	2101	495	0.036	18	6	0.0	0.0	7.541	A
5	1170	293	716	2326	0.503	1170	1403	1.0	1.0	3.112	A

D25 - 2037 | B+C+D (P1_P2) | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	22.37	C

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	-1	Arm 1	22.37	C

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D25	2037	B+C+D (P1_P2)	AM	FLAT	06:45	08:15	90	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		FLAT	✓	113	100.000
2		FLAT	✓	387	100.000
3		FLAT	✓	630	100.000
4		FLAT	✓	51	100.000
5		FLAT	✓	2614	100.000

Origin-Destination Data

Demand (PCU/hr)

	To					
From		1	2	3	4	5
	1	0	7	98	0	8
	2	1	0	110	3	273
	3	20	85	0	4	521
	4	1	15	7	0	28
	5	5	504	2076	27	2

Vehicle Mix

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

Heavy Vehicle %

	To					
From		1	2	3	4	5
	1	0	0	0	0	0
	2	0	0	0	0	0
	3	0	0	0	0	0
	4	0	0	0	0	0
	5	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.54	37.36	1.1	E	113	170
2	0.44	7.29	0.8	A	387	581
3	0.27	2.10	0.4	A	630	945
4	0.05	3.60	0.1	A	51	77
5	0.96	29.21	20.4	D	2614	3921

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	113	28	2657	236	0.479	110	27	0.0	0.9	27.763	D
2	387	97	2167	909	0.426	384	599	0.0	0.7	6.813	A
3	630	158	311	2346	0.269	629	2240	0.0	0.4	2.094	A
4	51	13	906	1053	0.048	51	33	0.0	0.1	3.592	A
5	2614	654	129	2728	0.958	2555	828	0.0	14.7	17.133	C

07:00 - 07:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	113	28	2706	213	0.530	112	27	0.9	1.1	35.285	E
2	387	97	2209	885	0.437	387	609	0.7	0.8	7.222	A
3	630	158	314	2344	0.269	630	2282	0.4	0.4	2.100	A
4	51	13	910	1051	0.049	51	34	0.1	0.1	3.599	A
5	2614	654	129	2728	0.958	2604	832	14.7	17.3	25.378	D

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	113	28	2711	211	0.536	113	27	1.1	1.1	36.553	E
2	387	97	2214	882	0.439	387	610	0.8	0.8	7.264	A
3	630	158	314	2344	0.269	630	2287	0.4	0.4	2.100	A
4	51	13	910	1051	0.049	51	34	0.1	0.1	3.599	A
5	2614	654	129	2728	0.958	2609	832	17.3	18.6	27.217	D

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	113	28	2713	210	0.538	113	27	1.1	1.1	37.001	E
2	387	97	2215	882	0.439	387	610	0.8	0.8	7.279	A
3	630	158	314	2344	0.269	630	2288	0.4	0.4	2.100	A
4	51	13	910	1051	0.049	51	34	0.1	0.1	3.599	A
5	2614	654	129	2728	0.958	2611	832	18.6	19.4	28.185	D

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	113	28	2714	209	0.540	113	27	1.1	1.1	37.228	E
2	387	97	2216	881	0.439	387	611	0.8	0.8	7.286	A
3	630	158	314	2344	0.269	630	2289	0.4	0.4	2.100	A
4	51	13	910	1051	0.049	51	34	0.1	0.1	3.599	A
5	2614	654	129	2728	0.958	2612	832	19.4	20.0	28.794	D

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	113	28	2714	209	0.540	113	27	1.1	1.1	37.361	E
2	387	97	2217	881	0.439	387	611	0.8	0.8	7.290	A
3	630	158	314	2344	0.269	630	2290	0.4	0.4	2.100	A
4	51	13	910	1051	0.049	51	34	0.1	0.1	3.599	A
5	2614	654	129	2728	0.958	2612	832	20.0	20.4	29.212	D

D26 - 2037 | B+C+D (P1_P2) | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	5.04	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	21	Arm 3	5.04	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D26	2037	B+C+D (P1_P2)	PM	FLAT	16:00	17:30	90	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		FLAT	✓	15	100.000
2		FLAT	✓	418	100.000
3		FLAT	✓	1796	100.000
4		FLAT	✓	18	100.000
5		FLAT	✓	1215	100.000

Origin-Destination Data

Demand (PCU/hr)

	To					
From		1	2	3	4	5
	1	0	6	8	0	1
	2	29	0	81	2	306
	3	371	306	3	3	1113
	4	2	3	4	0	9
	5	6	478	730	1	0

Vehicle Mix

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

Heavy Vehicle %

	To					
From		1	2	3	4	5
	1	0	0	0	0	0
	2	0	0	0	0	0
	3	0	0	0	0	0
	4	0	0	0	0	0
	5	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.02	4.79	0.0	A	15	23
2	0.24	2.75	0.3	A	418	627
3	0.77	6.77	3.4	A	1796	2694
4	0.04	7.75	0.0	A	18	27
5	0.52	3.24	1.1	A	1215	1823

Main Results for each time segment

16:00 - 16:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	15	4	1518	769	0.020	15	405	0.0	0.0	4.771	A
2	418	105	744	1729	0.242	417	789	0.0	0.3	2.742	A
3	1796	449	338	2328	0.771	1783	823	0.0	3.3	6.455	A
4	18	5	2115	489	0.037	18	6	0.0	0.0	7.642	A
5	1215	304	713	2329	0.522	1211	1420	0.0	1.1	3.209	A

16:15 - 16:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	15	4	1525	766	0.020	15	408	0.0	0.0	4.791	A
2	418	105	747	1727	0.242	418	793	0.3	0.3	2.749	A
3	1796	449	339	2328	0.772	1796	826	3.3	3.3	6.762	A
4	18	5	2129	482	0.037	18	6	0.0	0.0	7.752	A
5	1215	304	718	2325	0.523	1215	1429	1.1	1.1	3.242	A

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	15	4	1525	766	0.020	15	408	0.0	0.0	4.791	A
2	418	105	747	1727	0.242	418	793	0.3	0.3	2.749	A
3	1796	449	339	2328	0.772	1796	826	3.3	3.3	6.768	A
4	18	5	2129	482	0.037	18	6	0.0	0.0	7.753	A
5	1215	304	718	2325	0.523	1215	1429	1.1	1.1	3.242	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	15	4	1525	766	0.020	15	408	0.0	0.0	4.791	A
2	418	105	747	1727	0.242	418	793	0.3	0.3	2.749	A
3	1796	449	339	2328	0.772	1796	826	3.3	3.4	6.767	A
4	18	5	2129	482	0.037	18	6	0.0	0.0	7.753	A
5	1215	304	718	2325	0.523	1215	1429	1.1	1.1	3.242	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	15	4	1525	766	0.020	15	408	0.0	0.0	4.791	A
2	418	105	747	1727	0.242	418	793	0.3	0.3	2.749	A
3	1796	449	339	2328	0.772	1796	826	3.4	3.4	6.770	A
4	18	5	2129	482	0.037	18	6	0.0	0.0	7.753	A
5	1215	304	718	2325	0.523	1215	1429	1.1	1.1	3.242	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	15	4	1525	766	0.020	15	408	0.0	0.0	4.791	A
2	418	105	747	1727	0.242	418	793	0.3	0.3	2.749	A
3	1796	449	339	2328	0.772	1796	826	3.4	3.4	6.770	A
4	18	5	2129	482	0.037	18	6	0.0	0.0	7.754	A
5	1215	304	718	2325	0.523	1215	1429	1.1	1.1	3.242	A