Technical Note - Highways

Project: Land South of Bryn Lane, Wrexham Industrial Estate, LL13 9US
Project reference: P/2025/0143
Date: 13th April 2026

1.1.1 This technical note provides a detailed response to the memorandum issued by Wrexham County Borough Council (WCBC), dated 18th March 2026, regarding the following planning application:

> *"DEMOLITION OF EXISTING STRUCTURES AND ERECTION OF EMPLOYMENT FACILITIES (CLASS B2/B8) WITH ANCILLARY OFFICE ACCOMMODATION (CLASS B1A) INCLUDING LANDSCAPING, PARKING, ACCESS AND OTHER ASSOCIATED WORKS"*

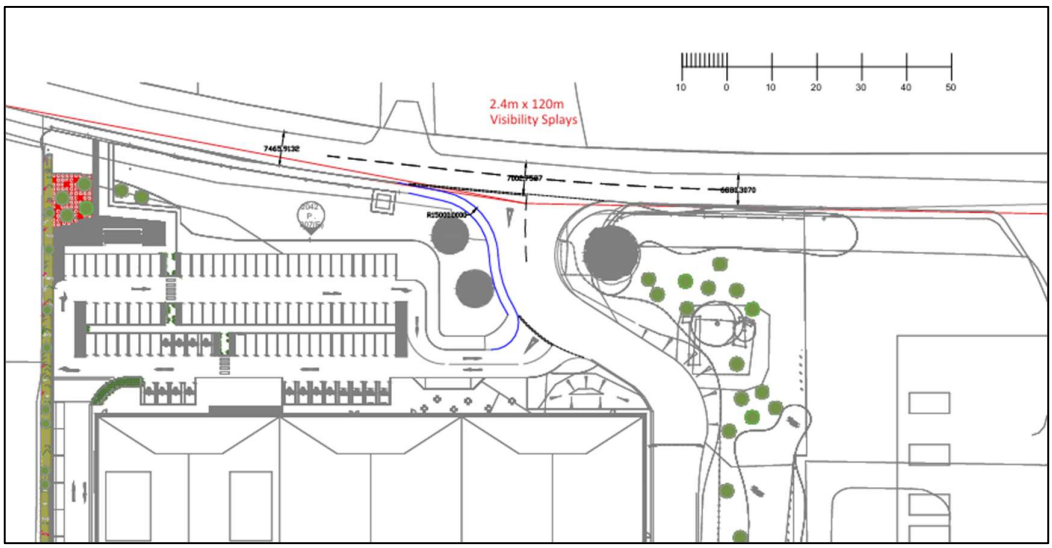
Site Access

Visibility Splays

A revised access drawing is required showing the full tangent area for the western visibility splay, along with clear X- and Y- axis measurements and a scale bar.

1.1.2 **Figure 1.1** shows an extract of the full site access arrangement. The full revised proposed access arrangement drawing is provided in **Appendix TN1**.

Figure 1.1: Site Access Arrangement



Swept Path Assessments

Swept-path analysis must be updated to incorporate a 0.5m operational margin between opposing HGV movements.

1.1.3 **Appendix TN2** shows updated tracking drawing.

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Trip Generation

1.1.4 The new trip rates to be used for the development have now been agreed. **Tables 1.1** and **1.2** shows the calculated trip rates and total new development trips for the B2 aspect of the developments in HGVs and total vehicles. **Appendix TN3** shows the new full TRICS outputs for the proposed B2 use.

Table 1.1: Trip Rates & Trip Generation – B2 Industrial (Total Vehicles) [New]

14,565m² GFA	AM Peak			PM Peak			Daily (AADT)		
	Arr	Dep	Total	Arr	Dep	Total	Arr	Dep	Total
Trip Rates	0.548	0.079	0.627	0.091	0.295	0.386	2.421	2.364	4.785
Trips	80	12	91	13	43	56	353	344	697

Table 1.2: Trip Rates & Trip Generation – B2 Industrial (HGVs) [New]

14,565m² GFA	AM Peak			PM Peak			Daily (AADT)		
	Arr	Dep	Total	Arr	Dep	Total	Arr	Dep	Total
Trip Rates	0.022	0.019	0.041	0.015	0.012	0.027	0.262	0.175	0.356
Trips	3	3	6	2	2	4	38	25	64

1.1.5 **Tables 1.3** below consider the multi-modal aspect of the new B2 trip rates.

1.1.6 The updated trip rates indicate an increase in total vehicle movements, but a reduction in total HGV trips during both the AM and PM peak periods compared with those previously assumed for the assessment of the proposed development as full B2 use.

Tables 1.3: Trip Rates & Trip Generation – B2 Industrial (Multi-Modal)

Cyclists

	Trip Rates			Trip Generation		
Time Range	Arr	Dep	Total	Arr	Dep	Total
0800-0900	0.007	0.001	0.008	1	0	1
1600-1700	0.002	0.011	0.013	0	2	2

Pedestrians

	Trip Rates			Trip Generation		
Time Range	Arr	Dep	Total	Arr	Dep	Total
0800-0900	0.037	0.009	0.046	5	1	7
1600-1700	0.093	0.027	0.12	14	4	17

Public Transport

	Trip Rates			Trip Generation		
Time Range	Arr	Dep	Total	Arr	Dep	Total
0800-0900	0.018	0.002	0.02	3	0	3
1600-1700	0.012	0.035	0.047	2	5	7

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Total People						
	Trip Rates			Trip Generation		
Time Range	Arr	Dep	Total	Arr	Dep	Total
0800-0900	0.672	0.091	0.763	98	13	111
1600-1700	0.208	0.434	0.642	30	63	94

Traffic Impact Assessment

With respect to the TIA...the LHA expects arm-specific and junction assessments wherever flows increase by >5% in any peak hour.

1.1.7 **Traffic Figures 25** & **26** present the 2030 Base (With Committed Development) Percentage Development Impact at the observed junction arms. It should be noted that the only arm where flows will increase by more than 5% is the Bryn Lane arm of the 4-arm roundabout to the west of the site in the PM Peak Period (8.3% increase). **Appendix TN4** provides the updated Traffic Figures.

1.1.8 The proposed development would not have severe traffic impact on the highway network.

1.1.9 Notwithstanding the above, the following junctions have been assessed, using the new trips rates as aforementioned above:

- Site Access / Bryn Lane; and
- Industrial Estate Road / Abenbury Way / Ash Road North / Bryn Lane Roundabout (Existing).

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Site Access / Bryn Lane

1.1.10 The "PICADY" assessment program has been used to assess the capacity at the new proposed site access / Bryn Lane priority junction.

1.1.11 **Table 1.4** summarises the 2030 & 2037 Base + Development + Committed capacity assessments. The full outputs are provided in **Appendix TN5**.

Table 1.4: Site Access / Bryn Lane – 2030 & 2037 Capacity Summary

	2030 Base + Development + Committed AM Peak		**2030 Base + Development + Committed PM Peak**	
Arm	**RFC**	**Queue**	**RFC**	**Queue**
Proposed Site Access	0.03	0	0.09	0
Bryn Lane	0.13	0	0.03	0
	2037 Base + Development + Committed AM Peak		**2037 Base + Development + Committed PM Peak**	
Arm	**RFC**	**Queue**	**RFC**	**Queue**
Proposed Site Access	0.03	0	0.09	0
Bryn Lane	0.13	0	0.03	0

1.1.12 The above assessments show that the proposed Bryn Lane site access junction would operate well within capacity.

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Industrial Estate Road / Abenbury Way / Ash Road North / Bryn Lane Roundabout (Existing)

1.1.13 **Table 1.5** below summarises the 2030 capacity assessments respectively. The full output is provided in **Appendix TN6.**

Table 1.5: Existing Bryn Lane / Industrial Estate Road Roundabout – 2030 Capacity Summary

	2030 Base AM Peak		2030 Base PM Peak		2030 Base + Committed AM Peak		2030 Base + Committed PM Peak	
Arm	**RFC**	**Queue**	**RFC**	**Queue**	**RFC**	**Queue**	**RFC**	**Queue**
Bryn Lane	0.25	0	0.23	0	0.33	1	0.31	1
Ash Road North	0.21	0	0.88	7	0.23	1	0.99	19
Abenbury Way	0.25	0	1.02	19	0.26	1	1.17	47
Industrial Estate Road	0.66	2	0.21	0	0.70	2	0.24	1

	2030 Base + Committed + Development AM Peak		2030 Base + Committed + Development PM Peak	
Arm	**RFC**	**Queue**	**RFC**	**Queue**
Bryn Lane	0.35	1	0.34	1
Ash Road North	0.23	1	1.02	27
Abenbury Way	0.26	1	1.20	53
Industrial Estate Road	0.73	3	0.25	1

1.1.14 **Table 1.6** presents the corresponding capacity assessment with only the proposed development in place.

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Table 1.6: Existing Bryn Lane / Industrial Estate Road – 2030 Base + Development [Phase 1] (Sensitivity – No Committed Developments)

	2030 Base + Development AM Peak		2030 Base + Development PM Peak	
Arm	**RFC**	**Queue**	**RFC**	**Queue**
Bryn Lane	0.26	1	0.26	1
Ash Road North	0.21	1	0.91	8
Abenbury Way	0.25	0	1.06	27
Industrial Estate Road	0.69	2	0.21	0

1.1.15 It can be deduced that the proposed development would result in an increase in RFC during the PM peak from 1.02 to 1.06 with increase in queuing of 19 to 27. This is not material compared to the increase due to the committed development he assessment indicates that the proposed development would lead to a modest increase in the Ratio of Flow to Capacity (RFC) at the junction during the PM peak period, rising from 1.02 to 1.06. An RFC value above 1.0 suggests that the junction is already operating at or over theoretical capacity, meaning demand slightly exceeds what the junction can efficiently accommodate. The projected increase of 0.04 therefore reflects a marginal worsening of already constrained conditions rather than a step change in operational performance.

1.1.16 In ARCADY, once RFC values exceed 1.0, the model enters a theoretical regime where demand is greater than capacity. Under these conditions, queue lengths are known to increase exponentially and can become unstable and less representative of real-world conditions. As such, the reported increase in queue length is unlikely to provide a reliable indication of actual on-street queuing and should not be treated as a precise forecast.

1.1.17 Accordingly, while the model shows an increase in queuing, this change is largely a function of the junction already operating over capacity rather than a direct and proportionate effect of the proposed development. The outputs should therefore be interpreted qualitatively, with greater emphasis placed on the relative change in RFC rather than the absolute queue values.

1.1.18 Furthermore, when considered alongside the impacts of committed development, the incremental effect of the proposed scheme remains small and not material.

1.1.19 Importantly, this impact should be considered in the context of background traffic growth and committed development. The assessment concludes that the incremental effect of the proposed development is not material when compared to the larger increases in RFC and queuing that arise from these committed schemes. In other words, the majority of the forecast stress on the junction is driven by external factors rather than the development itself.

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1.1.20 Overall, while the junction is expected to continue operating over capacity in the PM peak, the additional impact attributable to the proposed development is minor and would not be considered severe in transport planning terms.

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Appendices

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Appendix TN1 – Site Access

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Notes:

1. All dimensions are to be checked on site before the commencement of works. Any discrepancies are to be reported to the Architect & Engineer for verification. Figured dimensions only are to be taken from this drawing.

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Rev	Date	Description	Ckd	By
A	13/04/26	Amended to Council's comments	TC	MC

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Client

Net World Sports Limited

Project

Land South of Bryn Lane
Wrexham

Title

Proposed Access Arrangement

Drawing Status

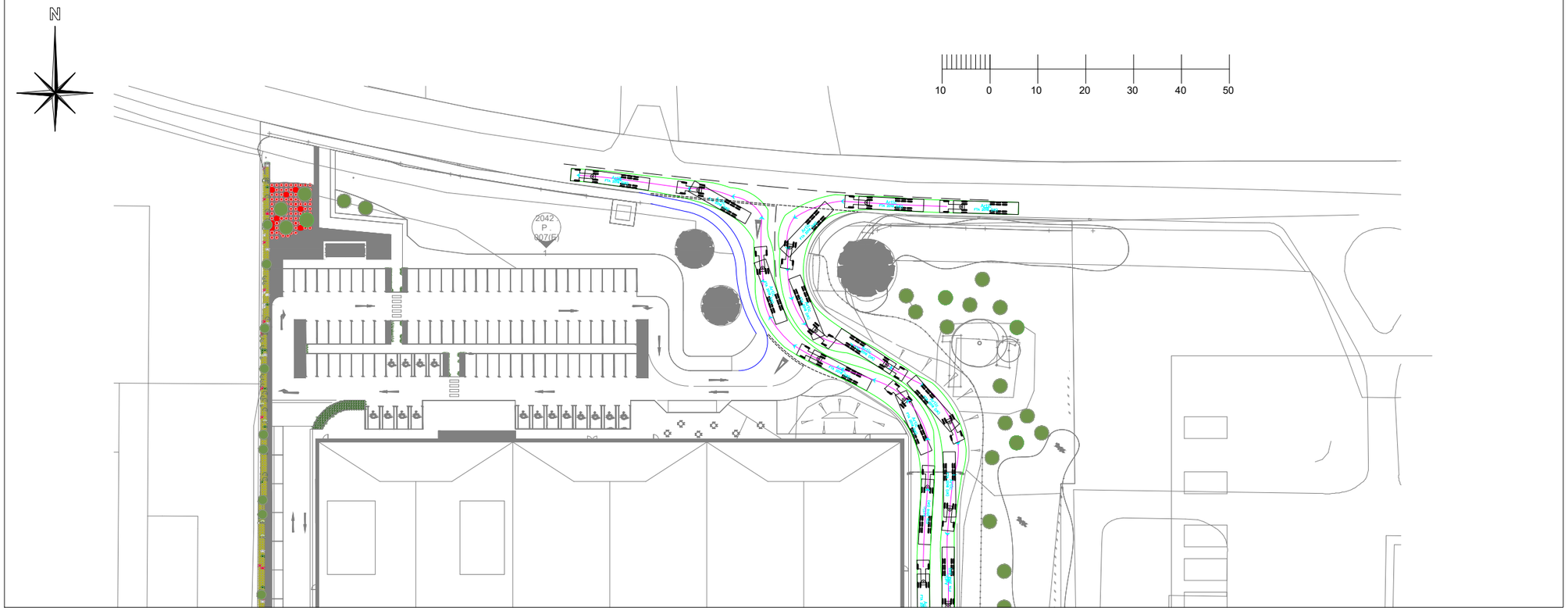
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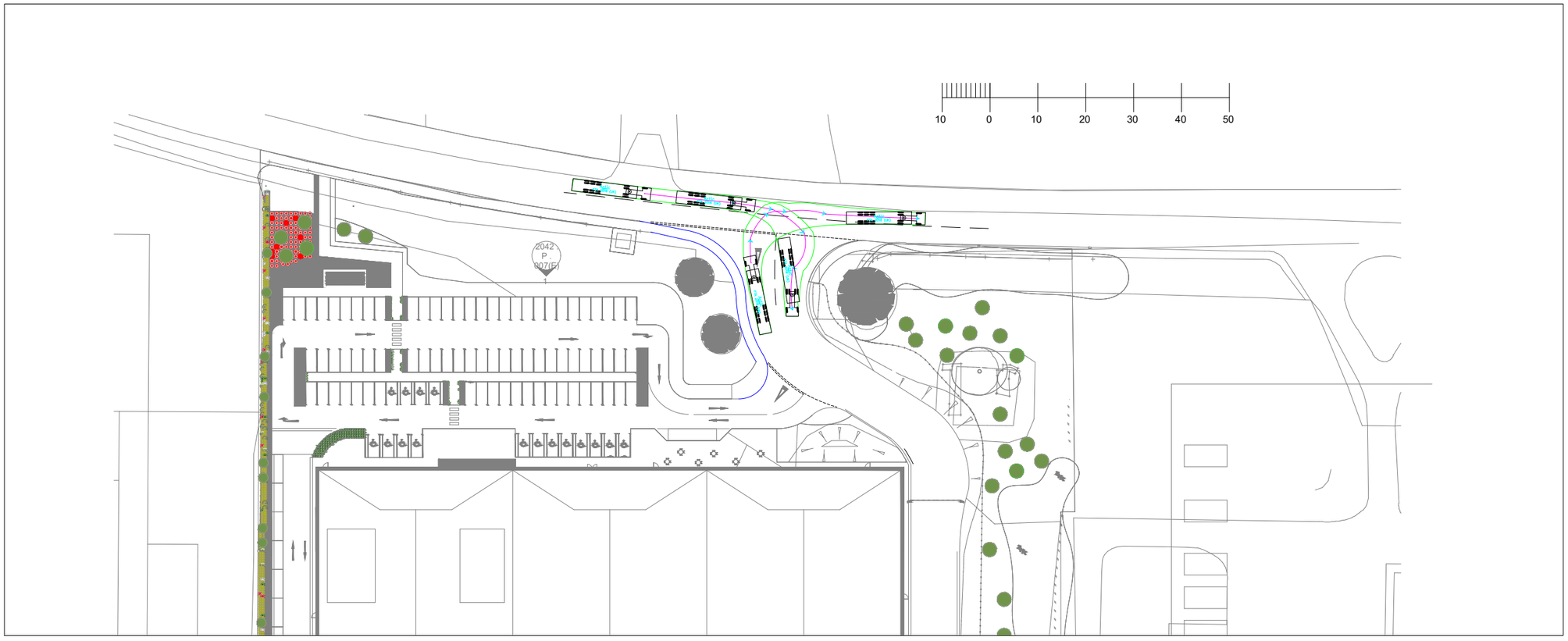
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MC	TC	1:500	04/03/26	-

Drawing No. 004 A

Appendix TN2 – Site Access Tracking

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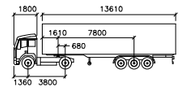




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Artic

	mm		
Tractor Width	: 2550	Lock to Lock Time	: 6.0
Trailer Width	: 2550	Steering Angle	: 42.7
Tractor Track	: 2550	Articulating Angle	: 70.0
Trailer Track	: 2550		

Rev	Date	Description	Ckd	By
A	13/04/26	Amended to Council's comments	TC	MC

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Client

Net World Sports Limited

Project

Land South of Bryn Lane
Wrexham

Title

Proposed Access
Arrangement
Tracking

Drawing Status

Job No. 16-3015

Drawn	Checked	Scale at A3	Date	Issue Date
MC	TC	1:500	04/03/26	-

Drawing No. 005 A

Appendix TN3 – TRICS Output

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TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use: 02 - EMPLOYMENT

Category: C - INDUSTRIAL UNIT

Selected Vehicle Type: Total Vehicles

Selected regions and areas:

01	**GREATER LONDON**		
	BT	BRENT	1 day
02	**SOUTH EAST**		
	HC	HAMPSHIRE	1 day
	HF	HERTFORDSHIRE	1 day
	WS	WEST SUSSEX	1 day
03	**SOUTH WEST**		
	CW	CORNWALL	2 days
	DC	DORSET	1 day
06	**WEST MIDLANDS**		
	WK	WARWICKSHIRE	1 day
	WM	WEST MIDLANDS	1 day
08	**NORTH WEST**		
	AC	CHESHIRE WEST & CHESTER	1 day
10	**WALES**		
	CF	CARDIFF	1 day

This section displays the number of survey days per TRICS® sub-region in the selected set.

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Primary Filtering Selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter:	GFA
Actual Range:	5070 to 17834 (units:sqm)
Range Selected by User:	5000 to 20000 (units:sqm)
Parking Spaces Range:	7 - 1378

Public Transport Provision:

Selection by:	All Surveys Included
Date Range:	13/09/05 to 03/06/25

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Friday	1 days
Monday	1 days
Thursday	3 days
Tuesday	1 days
Wednesday	5 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	11
Direction ATC Count	0

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaking using machines

Selected Locations:

Edge of Town	6 days
Free Standing	1 days
Neighbourhood Centre	1 days
Suburban Area	3 days

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Industrial Zone	8 days
No Sub Category	1 days
Out of Town	1 days
Village	1 days

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Inclusion of Servicing Vehicle Counts:

Servicing vehicles Included	4 days
Servicing vehicles Unknown	7 days

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Secondary Filtering Selection:

Use Class:

Not Known	11 surveys

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order (England) 2020 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 500m Range:

172 - 5400

Population within 1 mile:

1,000 or Less	2 surveys
1,001 to 5,000	2 surveys
10,001 to 15,000	2 surveys
15,001 to 20,000	1 surveys
25,001 to 50,000	1 surveys
5,001 to 10,000	2 surveys
50,001 to 100,000	1 surveys

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

125,001 to 250,000	2 surveys
25,001 to 50,000	1 surveys
250,001 to 500,000	1 surveys
5,001 to 25,000	1 surveys
50,001 to 75,000	4 surveys
500,001 or More	1 surveys
75,001 to 100,000	1 surveys

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.6 to 1.0	4 surveys
1.1 to 1.5	5 surveys
1.6 to 2.0	2 surveys

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

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Petrol filling station:

This data displays the number of surveys within the selected set that include petrol filling station activity, and the number of surveys that do not.

Travel Plan:

No	10 surveys
Yes	1 surveys

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:

No PTAL Present	11 surveys

This data displays the number of surveys within the selected set that include petrol filling station activity, and the number of surveys that do not.

COVID-19 Restrictions:

No

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1	**AC-02-C-01**	**BAKERY**	**CHESHIRE WEST & CHESTER**

GADBROOK PARK
NORTHWICH
HIGH SHURLACH
Edge of Town
Industrial Zone
Gross floor area: 15000.00 sqm
Survey date: Thursday 21/06/2007 Survey Type: Manual

2	**BT-02-C-02**	**FOOD PRODUCTION**	**BRENT**

ABBEYDALE ROAD
ALPERTON
Suburban Area
Industrial Zone
Gross floor area: 6100.00 sqm
Survey date: Wednesday 10/09/2014 Survey Type: Manual

3	**CF-02-C-02**	**BAKERY**	**CARDIFF**

MAES-Y-COED ROAD
CARDIFF
Suburban Area
Industrial Zone
Gross floor area: 14125.00 sqm
Survey date: Thursday 06/10/2016 Survey Type: Manual

4	**CW-02-C-01**	**FOOD DISTRIBUTION**	**CORNWALL**

WILSON WAY
CAMBORNE
POOL
Suburban Area
Industrial Zone
Gross floor area: 10200.00 sqm
Survey date: Friday 08/06/2007 Survey Type: Manual

5	**CW-02-C-02**	**LIGHTING COMPANY**	**CORNWALL**

NORMANDY WAY
BODMIN
Edge of Town
Industrial Zone
Gross floor area: 17675.00 sqm
Survey date: Wednesday 06/06/2007 Survey Type: Manual

6	**DC-02-C-07**	**NEW LOOK**	**DORSET**

MERCERY ROAD
WEYMOUTH
Edge of Town
No Sub Category
Gross floor area: 5467.00 sqm
Survey date: Monday 07/07/2008 Survey Type: Manual

7	**HC-02-C-02**	**GIN DISTILLERY**	**HAMPSHIRE**

LONDON ROAD
LAVERSTOKE
Neighbourhood Centre
Village
Gross floor area: 8000.00 sqm
Survey date: Wednesday 09/05/2018 Survey Type: Manual

8	**HF-02-C-02**	**FRESH PRODUCE**	**HERTFORDSHIRE**

COCKERELL CLOSE
STEVENAGE
Edge of Town
Industrial Zone

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Gross floor area: 17834.00 sqm
Survey date: Wednesday 08/11/2023 Survey Type: Manual

9	**WK-02-C-01**	**MACHINE ENGINEERING**	**WARWICKSHIRE**

CASTLE MOUND WAY
RUGBY
Edge of Town
Industrial Zone
Gross floor area: 9216.00 sqm
Survey date: Wednesday 10/11/2021 Survey Type: Manual

10	**WM-02-C-03**	**INDUSTRIAL GLASS**	**WEST MIDLANDS**

DOWNING STREET
SMETHWICK
Edge of Town
Industrial Zone
Gross floor area: 5070.00 sqm
Survey date: Tuesday 06/11/2012 Survey Type: Manual

11	**WS-02-C-02**	**AVIATION COMPANY**	**WEST SUSSEX**

MAYDWELL AVENUE
NEAR HORSHAM
SLINFOLD
Free Standing
Out of Town
Gross floor area: 11375.00 sqm
Survey date: Thursday 23/01/2014 Survey Type: Manual

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TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT

Total Vehicles

Calculation factor: 100 sqm

**BOLD print indicates peak (busiest) period*

Time Range	No. Days	Ave. GFA	Arrivals	Departures	Totals
00:00-01:00					
01:00-02:00					
02:00-03:00					
03:00-04:00					
04:00-05:00					
05:00-06:00	**2**	**13525**	**0.078**	**0.007**	**0.085**
06:00-07:00	**4**	**11131**	**0.229**	**0.124**	**0.353**
07:00-08:00	**11**	**10915**	**0.320**	**0.095**	**0.415**
08:00-09:00	**11**	**10915**	**0.548**	**0.079**	**0.627**
09:00-10:00	**11**	**10915**	**0.185**	**0.101**	**0.286**
10:00-11:00	**11**	**10915**	**0.145**	**0.110**	**0.255**
11:00-12:00	**11**	**10915**	**0.086**	**0.091**	**0.177**
12:00-13:00	**11**	**10915**	**0.120**	**0.169**	**0.289**
13:00-14:00	**11**	**10915**	**0.227**	**0.176**	**0.403**
14:00-15:00	**11**	**10915**	**0.111**	**0.213**	**0.324**
15:00-16:00	**11**	**10915**	**0.064**	**0.125**	**0.189**
16:00-17:00	**11**	**10915**	**0.091**	**0.295**	**0.386**
17:00-18:00	**11**	**10915**	**0.090**	**0.431**	**0.521**
18:00-19:00	**10**	**11396**	**0.109**	**0.245**	**0.354**
19:00-20:00	**4**	**11606**	**0.015**	**0.054**	**0.069**
20:00-21:00	**3**	**11683**	**0.003**	**0.049**	**0.052**
21:00-22:00	**1**	**8000**	**0.000**	**0.000**	**0.000**
22:00-23:00					
23:00-00:00					
Total Rates:			**2.421**	**2.364**	**4.785**

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

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Parameter Summary:

Trip rate parameter range selected:	5000 - 20000 (units: sqm)
Survey date date range:	06/06/2007 - 08/11/2023
Number of weekdays (Monday-Friday):	11
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	1
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

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TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT

Total People

Calculation factor: 100 sqm

**BOLD print indicates peak (busiest) period*

Time Range	No. Days	Ave. GFA	Arrivals	Departures	Totals
00:00-01:00					
01:00-02:00					
02:00-03:00					
03:00-04:00					
04:00-05:00					
05:00-06:00	**2**	**13525**	**0.078**	**0.007**	**0.085**
06:00-07:00	**4**	**11131**	**0.665**	**0.182**	**0.847**
07:00-08:00	**11**	**10915**	**0.426**	**0.122**	**0.548**
08:00-09:00	**11**	**10915**	**0.672**	**0.091**	**0.763**
09:00-10:00	**11**	**10915**	**0.277**	**0.130**	**0.407**
10:00-11:00	**11**	**10915**	**0.245**	**0.164**	**0.409**
11:00-12:00	**11**	**10915**	**0.172**	**0.127**	**0.299**
12:00-13:00	**11**	**10915**	**0.196**	**0.282**	**0.478**
13:00-14:00	**11**	**10915**	**0.416**	**0.283**	**0.699**
14:00-15:00	**11**	**10915**	**0.149**	**0.401**	**0.550**
15:00-16:00	**11**	**10915**	**0.152**	**0.204**	**0.356**
16:00-17:00	**11**	**10915**	**0.208**	**0.434**	**0.642**
17:00-18:00	**11**	**10915**	**0.181**	**0.745**	**0.926**
18:00-19:00	**10**	**11396**	**0.211**	**0.364**	**0.575**
19:00-20:00	**4**	**11606**	**0.062**	**0.179**	**0.241**
20:00-21:00	**3**	**11683**	**0.011**	**0.285**	**0.296**
21:00-22:00	**1**	**8000**	**0.012**	**0.000**	**0.012**
22:00-23:00					
23:00-00:00					
Total Rates:			**4.133**	**4.000**	**8.133**

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

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Parameter Summary:

Trip rate parameter range selected:	5000 - 20000 (units: sqm)
Survey date date range:	06/06/2007 - 08/11/2023
Number of weekdays (Monday-Friday):	11
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	1
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

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TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT

Cyclists

Calculation factor: 100 sqm

**BOLD print indicates peak (busiest) period*

Time Range	No. Days	Ave. GFA	Arrivals	Departures	Totals
00:00-01:00					
01:00-02:00					
02:00-03:00					
03:00-04:00					
04:00-05:00					
05:00-06:00	**2**	**13525**	**0.000**	**0.000**	**0.000**
06:00-07:00	**4**	**11131**	**0.027**	**0.002**	**0.029**
07:00-08:00	**11**	**10915**	**0.012**	**0.005**	**0.017**
08:00-09:00	**11**	**10915**	**0.007**	**0.001**	**0.008**
09:00-10:00	**11**	**10915**	**0.002**	**0.000**	**0.002**
10:00-11:00	**11**	**10915**	**0.000**	**0.002**	**0.002**
11:00-12:00	**11**	**10915**	**0.001**	**0.001**	**0.002**
12:00-13:00	**11**	**10915**	**0.000**	**0.002**	**0.002**
13:00-14:00	**11**	**10915**	**0.013**	**0.006**	**0.019**
14:00-15:00	**11**	**10915**	**0.002**	**0.014**	**0.016**
15:00-16:00	**11**	**10915**	**0.000**	**0.004**	**0.004**
16:00-17:00	**11**	**10915**	**0.002**	**0.011**	**0.013**
17:00-18:00	**11**	**10915**	**0.006**	**0.012**	**0.018**
18:00-19:00	**10**	**11396**	**0.009**	**0.007**	**0.016**
19:00-20:00	**4**	**11606**	**0.000**	**0.004**	**0.004**
20:00-21:00	**3**	**11683**	**0.000**	**0.000**	**0.000**
21:00-22:00	**1**	**8000**	**0.000**	**0.000**	**0.000**
22:00-23:00					
23:00-00:00					
Total Rates:			**0.081**	**0.071**	**0.152**

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

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Parameter Summary:

Trip rate parameter range selected:	5000 - 20000 (units: sqm)
Survey date date range:	06/06/2007 - 08/11/2023
Number of weekdays (Monday-Friday):	9
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	1
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

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TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT

PSVs

Calculation factor: 100 sqm

**BOLD print indicates peak (busiest) period*

Time Range	No. Days	Ave. GFA	Arrivals	Departures	Totals
00:00-01:00					
01:00-02:00					
02:00-03:00					
03:00-04:00					
04:00-05:00					
05:00-06:00	**2**	**13525**	**0.000**	**0.000**	**0.000**
06:00-07:00	**4**	**11131**	**0.002**	**0.002**	**0.004**
07:00-08:00	**11**	**10915**	**0.000**	**0.000**	**0.000**
08:00-09:00	**11**	**10915**	**0.000**	**0.000**	**0.000**
09:00-10:00	**11**	**10915**	**0.000**	**0.000**	**0.000**
10:00-11:00	**11**	**10915**	**0.000**	**0.000**	**0.000**
11:00-12:00	**11**	**10915**	**0.000**	**0.000**	**0.000**
12:00-13:00	**11**	**10915**	**0.001**	**0.000**	**0.001**
13:00-14:00	**11**	**10915**	**0.000**	**0.000**	**0.000**
14:00-15:00	**11**	**10915**	**0.001**	**0.000**	**0.001**
15:00-16:00	**11**	**10915**	**0.000**	**0.000**	**0.000**
16:00-17:00	**11**	**10915**	**0.000**	**0.000**	**0.000**
17:00-18:00	**11**	**10915**	**0.000**	**0.000**	**0.000**
18:00-19:00	**10**	**11396**	**0.000**	**0.000**	**0.000**
19:00-20:00	**4**	**11606**	**0.000**	**0.000**	**0.000**
20:00-21:00	**3**	**11683**	**0.000**	**0.000**	**0.000**
21:00-22:00	**1**	**8000**	**0.000**	**0.000**	**0.000**
22:00-23:00					
23:00-00:00					
Total Rates:			**0.004**	**0.002**	**0.006**

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

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Parameter Summary:

Trip rate parameter range selected:	5000 - 20000 (units: sqm)
Survey date date range:	21/06/2007 - 08/11/2023
Number of weekdays (Monday-Friday):	2
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	1
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

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TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT

OGVs

Calculation factor: 100 sqm

**BOLD print indicates peak (busiest) period*

Time Range	No. Days	Ave. GFA	Arrivals	Departures	Totals
00:00-01:00					
01:00-02:00					
02:00-03:00					
03:00-04:00					
04:00-05:00					
05:00-06:00	2	13525	0.004	0.000	0.004
06:00-07:00	4	11131	0.004	0.004	0.008
07:00-08:00	11	10915	0.010	0.012	0.022
08:00-09:00	11	10915	0.022	0.019	0.041
09:00-10:00	11	10915	0.045	0.015	0.060
10:00-11:00	11	10915	0.042	0.023	0.065
11:00-12:00	11	10915	0.027	0.020	0.047
12:00-13:00	11	10915	0.022	0.012	0.034
13:00-14:00	11	10915	0.025	0.018	0.043
14:00-15:00	11	10915	0.021	0.019	0.040
15:00-16:00	11	10915	0.010	0.007	0.017
16:00-17:00	11	10915	0.015	0.012	0.027
17:00-18:00	11	10915	0.006	0.004	0.010
18:00-19:00	10	11396	0.007	0.007	0.014
19:00-20:00	4	11606	0.002	0.000	0.002
20:00-21:00	3	11683	0.000	0.003	0.003
21:00-22:00	1	8000	0.000	0.000	0.000
22:00-23:00					
23:00-00:00					
Total Rates:			0.262	0.175	0.437

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

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Parameter Summary:

Trip rate parameter range selected:	5000 - 20000 (units: sqm)
Survey date date range:	06/06/2007 - 08/11/2023
Number of weekdays (Monday-Friday):	11
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	1
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

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TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT

Taxis

Calculation factor: 100 sqm

**BOLD print indicates peak (busiest) period*

Time Range	No. Days	Ave. GFA	Arrivals	Departures	Totals
00:00-01:00					
01:00-02:00					
02:00-03:00					
03:00-04:00					
04:00-05:00					
05:00-06:00	**2**	**13525**	**0.000**	**0.000**	**0.000**
06:00-07:00	**4**	**11131**	**0.000**	**0.000**	**0.000**
07:00-08:00	**11**	**10915**	**0.009**	**0.008**	**0.017**
08:00-09:00	**11**	**10915**	**0.001**	**0.002**	**0.003**
09:00-10:00	**11**	**10915**	**0.004**	**0.004**	**0.008**
10:00-11:00	**11**	**10915**	**0.003**	**0.003**	**0.006**
11:00-12:00	**11**	**10915**	**0.002**	**0.002**	**0.004**
12:00-13:00	**11**	**10915**	**0.003**	**0.003**	**0.006**
13:00-14:00	**11**	**10915**	**0.002**	**0.002**	**0.004**
14:00-15:00	**11**	**10915**	**0.002**	**0.002**	**0.004**
15:00-16:00	**11**	**10915**	**0.004**	**0.005**	**0.009**
16:00-17:00	**11**	**10915**	**0.007**	**0.005**	**0.012**
17:00-18:00	**11**	**10915**	**0.003**	**0.007**	**0.010**
18:00-19:00	**10**	**11396**	**0.003**	**0.003**	**0.006**
19:00-20:00	**4**	**11606**	**0.000**	**0.000**	**0.000**
20:00-21:00	**3**	**11683**	**0.000**	**0.000**	**0.000**
21:00-22:00	**1**	**8000**	**0.000**	**0.000**	**0.000**
22:00-23:00					
23:00-00:00					
Total Rates:			**0.043**	**0.046**	**0.089**

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

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Parameter Summary:

Trip rate parameter range selected:	5000 - 20000 (units: sqm)
Survey date date range:	06/06/2007 - 08/11/2023
Number of weekdays (Monday-Friday):	8
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	1
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

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TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT

Vehicle Occupants

Calculation factor: 100 sqm

**BOLD print indicates peak (busiest) period*

Time Range	No. Days	Ave. GFA	Arrivals	Departures	Totals
00:00-01:00					
01:00-02:00					
02:00-03:00					
03:00-04:00					
04:00-05:00					
05:00-06:00	**2**	**13525**	**0.074**	**0.007**	**0.081**
06:00-07:00	**4**	**11131**	**0.310**	**0.119**	**0.429**
07:00-08:00	**11**	**10915**	**0.376**	**0.098**	**0.474**
08:00-09:00	**11**	**10915**	**0.610**	**0.079**	**0.689**
09:00-10:00	**11**	**10915**	**0.213**	**0.103**	**0.316**
10:00-11:00	**11**	**10915**	**0.184**	**0.117**	**0.301**
11:00-12:00	**11**	**10915**	**0.100**	**0.098**	**0.198**
12:00-13:00	**11**	**10915**	**0.136**	**0.199**	**0.335**
13:00-14:00	**11**	**10915**	**0.300**	**0.224**	**0.524**
14:00-15:00	**11**	**10915**	**0.127**	**0.282**	**0.409**
15:00-16:00	**11**	**10915**	**0.073**	**0.142**	**0.215**
16:00-17:00	**11**	**10915**	**0.101**	**0.361**	**0.462**
17:00-18:00	**11**	**10915**	**0.095**	**0.514**	**0.609**
18:00-19:00	**10**	**11396**	**0.126**	**0.297**	**0.423**
19:00-20:00	**4**	**11606**	**0.017**	**0.067**	**0.084**
20:00-21:00	**3**	**11683**	**0.003**	**0.083**	**0.086**
21:00-22:00	**1**	**8000**	**0.000**	**0.000**	**0.000**
22:00-23:00					
23:00-00:00					
Total Rates:			**2.845**	**2.790**	**5.635**

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

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Parameter Summary:

Trip rate parameter range selected:	5000 - 20000 (units: sqm)
Survey date date range:	06/06/2007 - 08/11/2023
Number of weekdays (Monday-Friday):	11
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	1
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

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TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT

Pedestrians

Calculation factor: 100 sqm

**BOLD print indicates peak (busiest) period*

Time Range	No. Days	Ave. GFA	Arrivals	Departures	Totals
00:00-01:00					
01:00-02:00					
02:00-03:00					
03:00-04:00					
04:00-05:00					
05:00-06:00	**2**	**13525**	**0.000**	**0.000**	**0.000**
06:00-07:00	**4**	**11131**	**0.200**	**0.013**	**0.213**
07:00-08:00	**11**	**10915**	**0.025**	**0.014**	**0.039**
08:00-09:00	**11**	**10915**	**0.037**	**0.009**	**0.046**
09:00-10:00	**11**	**10915**	**0.036**	**0.026**	**0.062**
10:00-11:00	**11**	**10915**	**0.026**	**0.016**	**0.042**
11:00-12:00	**11**	**10915**	**0.023**	**0.022**	**0.045**
12:00-13:00	**11**	**10915**	**0.020**	**0.047**	**0.067**
13:00-14:00	**11**	**10915**	**0.077**	**0.028**	**0.105**
14:00-15:00	**11**	**10915**	**0.015**	**0.046**	**0.061**
15:00-16:00	**11**	**10915**	**0.021**	**0.028**	**0.049**
16:00-17:00	**11**	**10915**	**0.093**	**0.027**	**0.120**
17:00-18:00	**11**	**10915**	**0.022**	**0.138**	**0.160**
18:00-19:00	**10**	**11396**	**0.014**	**0.023**	**0.037**
19:00-20:00	**4**	**11606**	**0.000**	**0.000**	**0.000**
20:00-21:00	**3**	**11683**	**0.000**	**0.000**	**0.000**
21:00-22:00	**1**	**8000**	**0.000**	**0.000**	**0.000**
22:00-23:00					
23:00-00:00					
Total Rates:			**0.609**	**0.437**	**1.046**

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

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Parameter Summary:

Trip rate parameter range selected:	5000 - 20000 (units: sqm)
Survey date date range:	06/06/2007 - 08/11/2023
Number of weekdays (Monday-Friday):	10
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	1
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

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TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT

Public Transport Users

Calculation factor: 100 sqm

**BOLD print indicates peak (busiest) period*

Time Range	No. Days	Ave. GFA	Arrivals	Departures	Totals
00:00-01:00					
01:00-02:00					
02:00-03:00					
03:00-04:00					
04:00-05:00					
05:00-06:00	**2**	**13525**	**0.004**	**0.000**	**0.004**
06:00-07:00	**4**	**11131**	**0.121**	**0.047**	**0.168**
07:00-08:00	**11**	**10915**	**0.012**	**0.004**	**0.016**
08:00-09:00	**11**	**10915**	**0.018**	**0.002**	**0.020**
09:00-10:00	**11**	**10915**	**0.027**	**0.001**	**0.028**
10:00-11:00	**11**	**10915**	**0.035**	**0.029**	**0.064**
11:00-12:00	**11**	**10915**	**0.047**	**0.006**	**0.053**
12:00-13:00	**11**	**10915**	**0.040**	**0.035**	**0.075**
13:00-14:00	**11**	**10915**	**0.026**	**0.025**	**0.051**
14:00-15:00	**11**	**10915**	**0.005**	**0.059**	**0.064**
15:00-16:00	**11**	**10915**	**0.057**	**0.030**	**0.087**
16:00-17:00	**11**	**10915**	**0.012**	**0.035**	**0.047**
17:00-18:00	**11**	**10915**	**0.058**	**0.080**	**0.138**
18:00-19:00	**10**	**11396**	**0.061**	**0.038**	**0.099**
19:00-20:00	**4**	**11606**	**0.045**	**0.108**	**0.153**
20:00-21:00	**3**	**11683**	**0.009**	**0.203**	**0.212**
21:00-22:00	**1**	**8000**	**0.012**	**0.000**	**0.012**
22:00-23:00					
23:00-00:00					
Total Rates:			**0.589**	**0.702**	**1.291**

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

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Parameter Summary:

Trip rate parameter range selected:	5000 - 20000 (units: sqm)
Survey date date range:	21/06/2007 - 08/11/2023
Number of weekdays (Monday-Friday):	7
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	1
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

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TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT

Bus/Tram Passengers

Calculation factor: 100 sqm

**BOLD print indicates peak (busiest) period*

Time Range	No. Days	Ave. GFA	Arrivals	Departures	Totals
00:00-01:00					
01:00-02:00					
02:00-03:00					
03:00-04:00					
04:00-05:00					
05:00-06:00	**2**	**13525**	**0.004**	**0.000**	**0.004**
06:00-07:00	**4**	**11131**	**0.103**	**0.047**	**0.150**
07:00-08:00	**11**	**10915**	**0.010**	**0.003**	**0.013**
08:00-09:00	**11**	**10915**	**0.017**	**0.002**	**0.019**
09:00-10:00	**11**	**10915**	**0.005**	**0.001**	**0.006**
10:00-11:00	**11**	**10915**	**0.012**	**0.007**	**0.019**
11:00-12:00	**11**	**10915**	**0.006**	**0.005**	**0.011**
12:00-13:00	**11**	**10915**	**0.012**	**0.012**	**0.024**
13:00-14:00	**11**	**10915**	**0.007**	**0.006**	**0.013**
14:00-15:00	**11**	**10915**	**0.005**	**0.008**	**0.013**
15:00-16:00	**11**	**10915**	**0.002**	**0.007**	**0.009**
16:00-17:00	**11**	**10915**	**0.011**	**0.008**	**0.019**
17:00-18:00	**11**	**10915**	**0.012**	**0.044**	**0.056**
18:00-19:00	**10**	**11396**	**0.039**	**0.015**	**0.054**
19:00-20:00	**4**	**11606**	**0.000**	**0.043**	**0.043**
20:00-21:00	**3**	**11683**	**0.006**	**0.071**	**0.077**
21:00-22:00	**1**	**8000**	**0.012**	**0.000**	**0.012**
22:00-23:00					
23:00-00:00					
Total Rates:			**0.263**	**0.279**	**0.542**

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

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Parameter Summary:

Trip rate parameter range selected:	5000 - 20000 (units: sqm)
Survey date date range:	21/06/2007 - 08/11/2023
Number of weekdays (Monday-Friday):	6
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	1
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

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TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT

Coach Passengers

Calculation factor: 100 sqm

**BOLD print indicates peak (busiest) period*

Time Range	No. Days	Ave. GFA	Arrivals	Departures	Totals
00:00-01:00					
01:00-02:00					
02:00-03:00					
03:00-04:00					
04:00-05:00					
05:00-06:00	**2**	**13525**	**0.000**	**0.000**	**0.000**
06:00-07:00	**4**	**11131**	**0.009**	**0.000**	**0.009**
07:00-08:00	**11**	**10915**	**0.000**	**0.000**	**0.000**
08:00-09:00	**11**	**10915**	**0.000**	**0.000**	**0.000**
09:00-10:00	**11**	**10915**	**0.022**	**0.000**	**0.022**
10:00-11:00	**11**	**10915**	**0.023**	**0.022**	**0.045**
11:00-12:00	**11**	**10915**	**0.042**	**0.001**	**0.043**
12:00-13:00	**11**	**10915**	**0.027**	**0.023**	**0.050**
13:00-14:00	**11**	**10915**	**0.019**	**0.018**	**0.037**
14:00-15:00	**11**	**10915**	**0.000**	**0.050**	**0.050**
15:00-16:00	**11**	**10915**	**0.055**	**0.019**	**0.074**
16:00-17:00	**11**	**10915**	**0.000**	**0.027**	**0.027**
17:00-18:00	**11**	**10915**	**0.047**	**0.028**	**0.075**
18:00-19:00	**10**	**11396**	**0.021**	**0.023**	**0.044**
19:00-20:00	**4**	**11606**	**0.045**	**0.065**	**0.110**
20:00-21:00	**3**	**11683**	**0.003**	**0.131**	**0.134**
21:00-22:00	**1**	**8000**	**0.000**	**0.000**	**0.000**
22:00-23:00					
23:00-00:00					
Total Rates:			**0.313**	**0.407**	**0.720**

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

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Parameter Summary:

Trip rate parameter range selected:	5000 - 20000 (units: sqm)
Survey date date range:	09/05/2018 - 08/11/2023
Number of weekdays (Monday-Friday):	2
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	1
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

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TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT

Total Rail Passengers

Calculation factor: 100 sqm

**BOLD print indicates peak (busiest) period*

Time Range	No. Days	Ave. GFA	Arrivals	Departures	Totals
00:00-01:00					
01:00-02:00					
02:00-03:00					
03:00-04:00					
04:00-05:00					
05:00-06:00	**2**	**13525**	**0.000**	**0.000**	**0.000**
06:00-07:00	**4**	**11131**	**0.009**	**0.000**	**0.009**
07:00-08:00	**11**	**10915**	**0.002**	**0.001**	**0.003**
08:00-09:00	**11**	**10915**	**0.002**	**0.000**	**0.002**
09:00-10:00	**11**	**10915**	**0.000**	**0.000**	**0.000**
10:00-11:00	**11**	**10915**	**0.000**	**0.000**	**0.000**
11:00-12:00	**11**	**10915**	**0.000**	**0.000**	**0.000**
12:00-13:00	**11**	**10915**	**0.001**	**0.000**	**0.001**
13:00-14:00	**11**	**10915**	**0.000**	**0.001**	**0.001**
14:00-15:00	**11**	**10915**	**0.000**	**0.001**	**0.001**
15:00-16:00	**11**	**10915**	**0.000**	**0.003**	**0.003**
16:00-17:00	**11**	**10915**	**0.001**	**0.000**	**0.001**
17:00-18:00	**11**	**10915**	**0.000**	**0.007**	**0.007**
18:00-19:00	**10**	**11396**	**0.001**	**0.000**	**0.001**
19:00-20:00	**4**	**11606**	**0.000**	**0.000**	**0.000**
20:00-21:00	**3**	**11683**	**0.000**	**0.000**	**0.000**
21:00-22:00	**1**	**8000**	**0.000**	**0.000**	**0.000**
22:00-23:00					
23:00-00:00					
Total Rates:			**0.016**	**0.013**	**0.029**

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

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Parameter Summary:

Trip rate parameter range selected:	5000 - 20000 (units: sqm)
Survey date date range:	06/11/2012 - 08/11/2023
Number of weekdays (Monday-Friday):	4
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	1
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

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Appendix TN4 – Traffic Figures

Cora IHT Ltd. Adamson House, Towers Business Park, Wilmslow Road, Manchester, M20 2YY
Email: toan.chau@coraiht.com
Registered in England No 10321930

Figure 1 - 2023 Surveyed Traffic Flows
AM Peak: 0800-0900

Notes: 123 Total Vehicles
123 HGVs
Flows Taken from Kingmoor TA

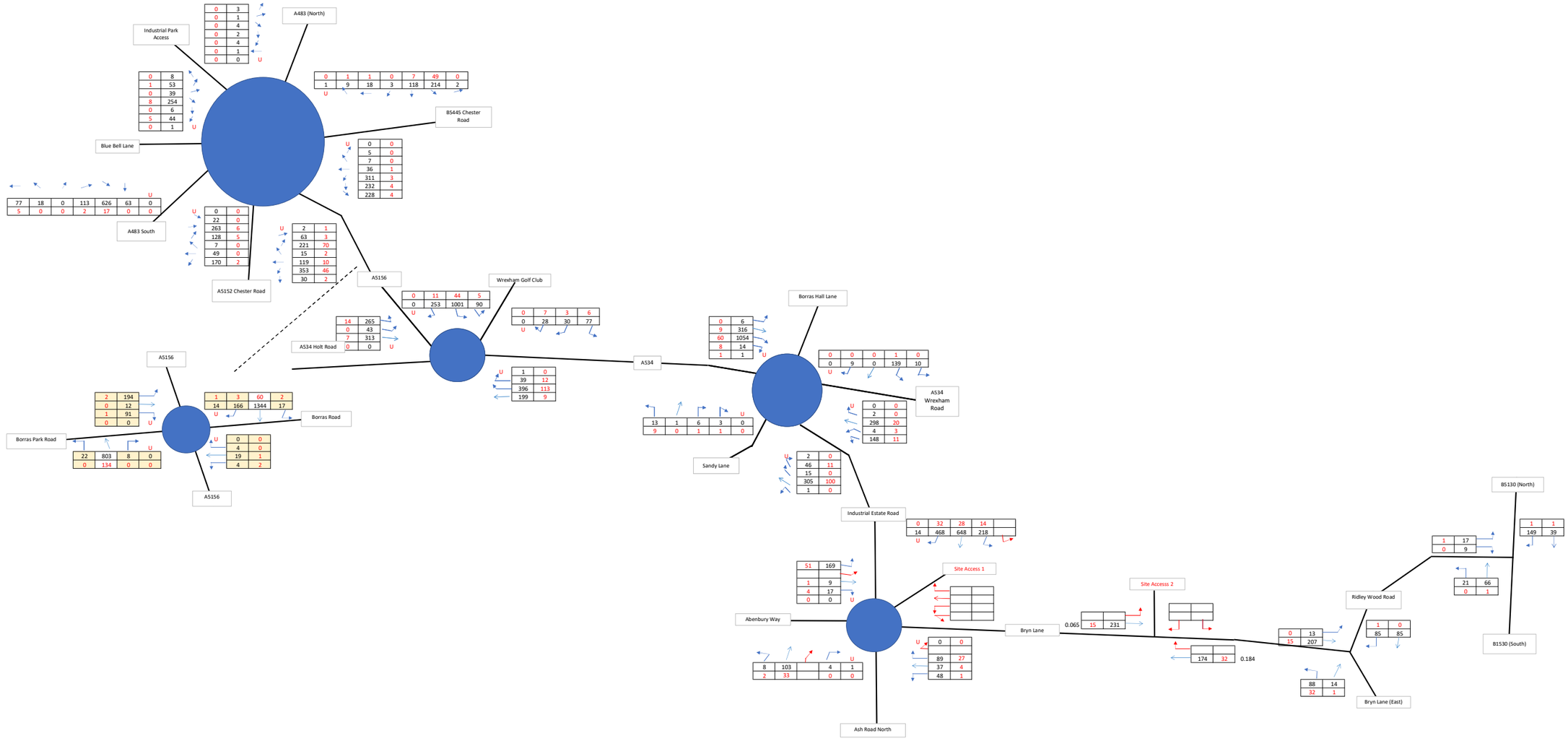


Figure 2 - 2023 Surveyed Traffic Flows
PM Peak: 1630-1730

Notes: 123 Total Vehicles
123 HGVs
Flows Taken from Kingmoor TA

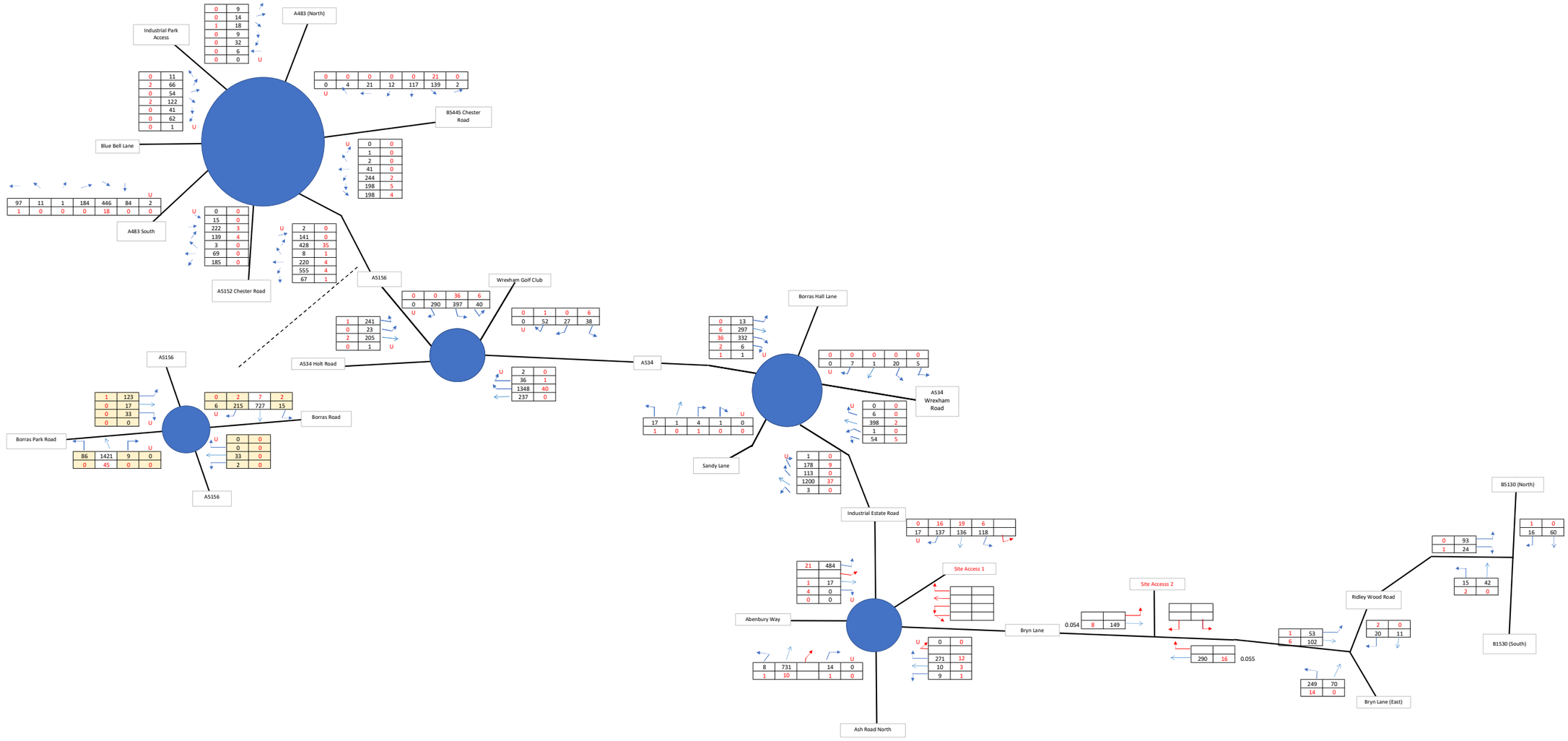


Figure 3 - 2023 Surveyed Traffic Flows
AM Peak: 0800-0900

Notes: 123 PCUs

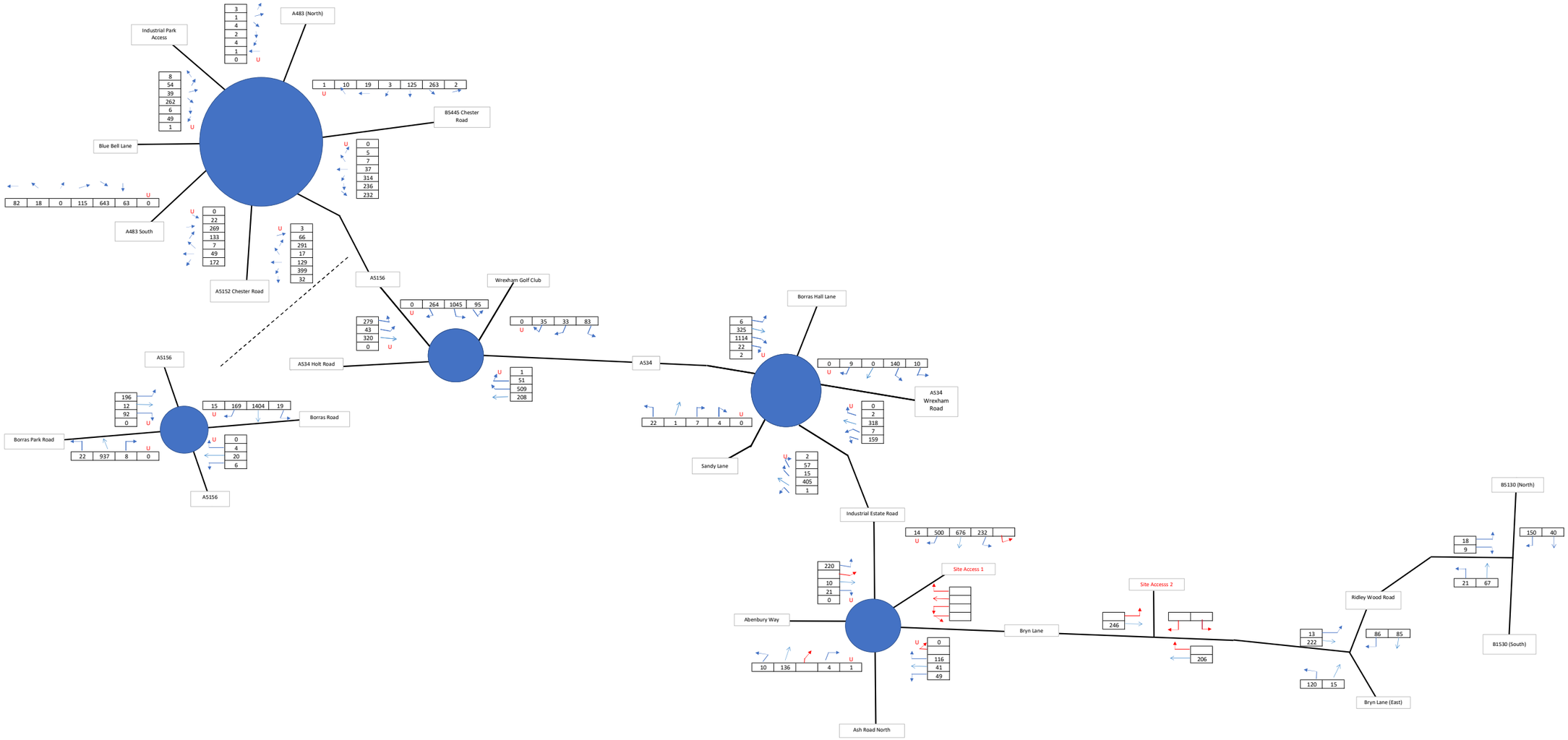


Figure 4 - 2023 Surveyed Traffic Flows
PM Peak: 1630-1730

Notes: 123 PCUs

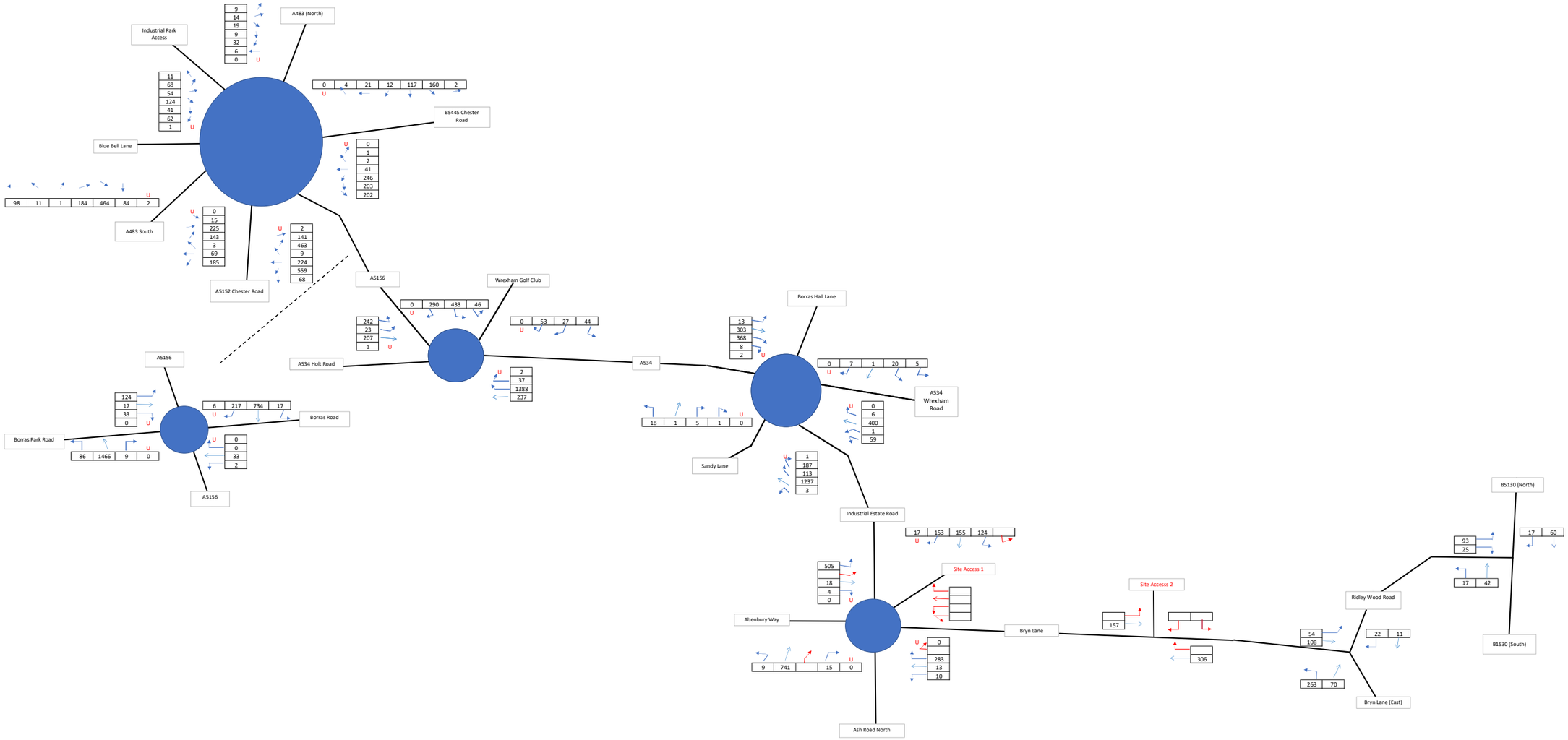


Figure 5 - 2030 Growthed Traffic Flows
AM Peak: 0800-0900

Notes: 123 PCUs
1.0499 Growth Factor

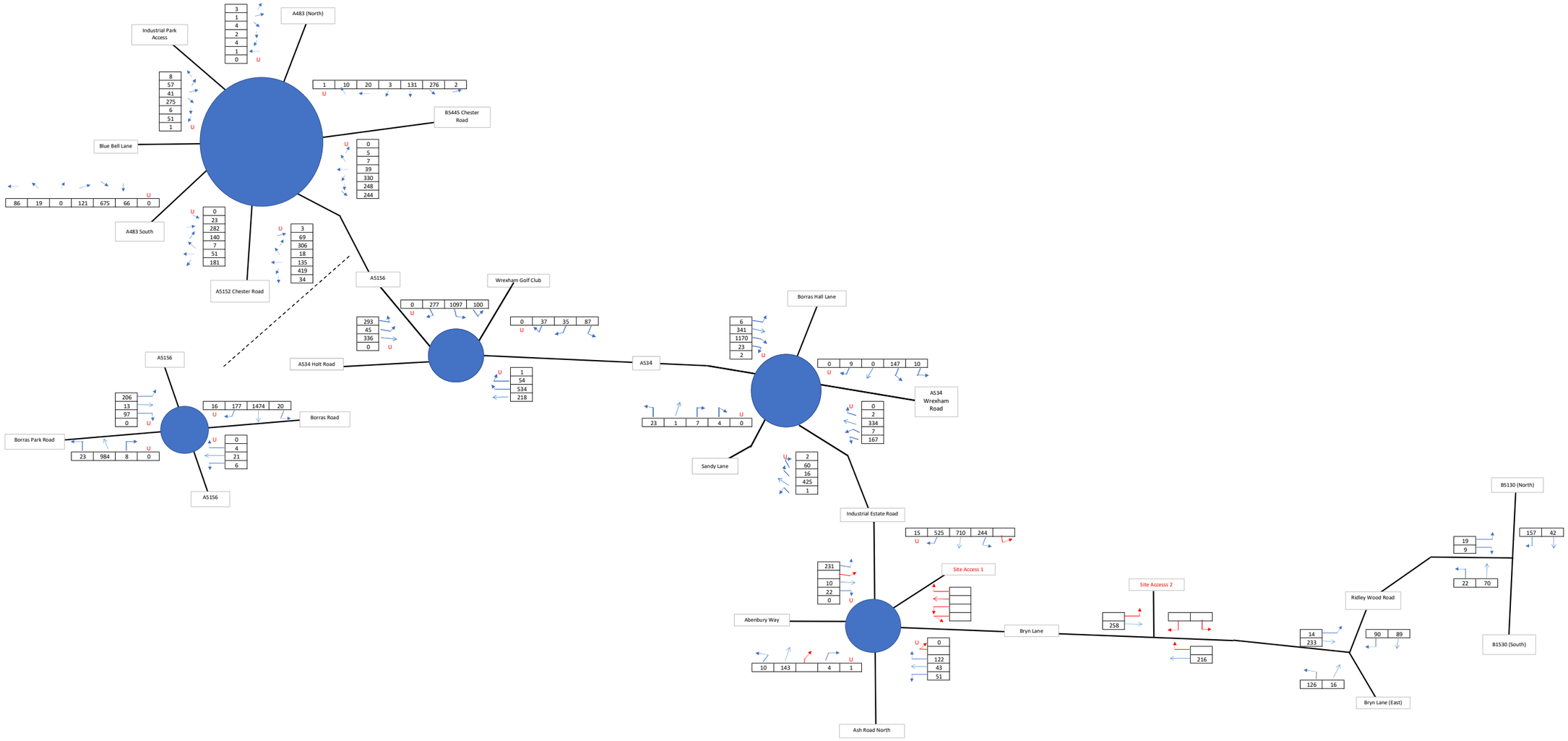


Figure 5a - 2037 Growthed Traffic Flows
AM Peak: 0800-0900

Notes: 123 PCUs
1.0937 Growth Factor

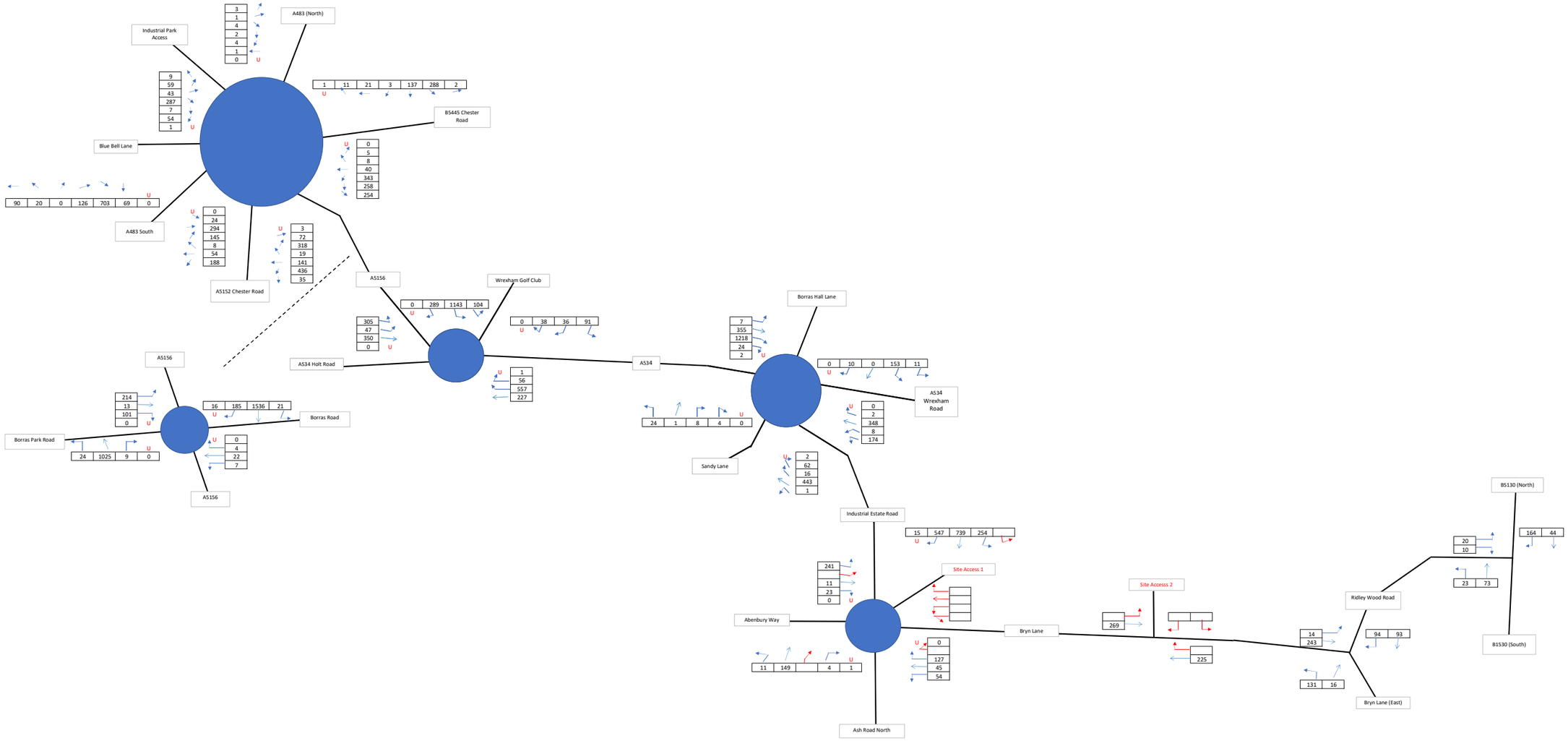


Figure 6 - 2030 Growthed Traffic Flows
PM Peak: 1630-1730

Notes: 123 PCUs
1.0499 Growth Factor

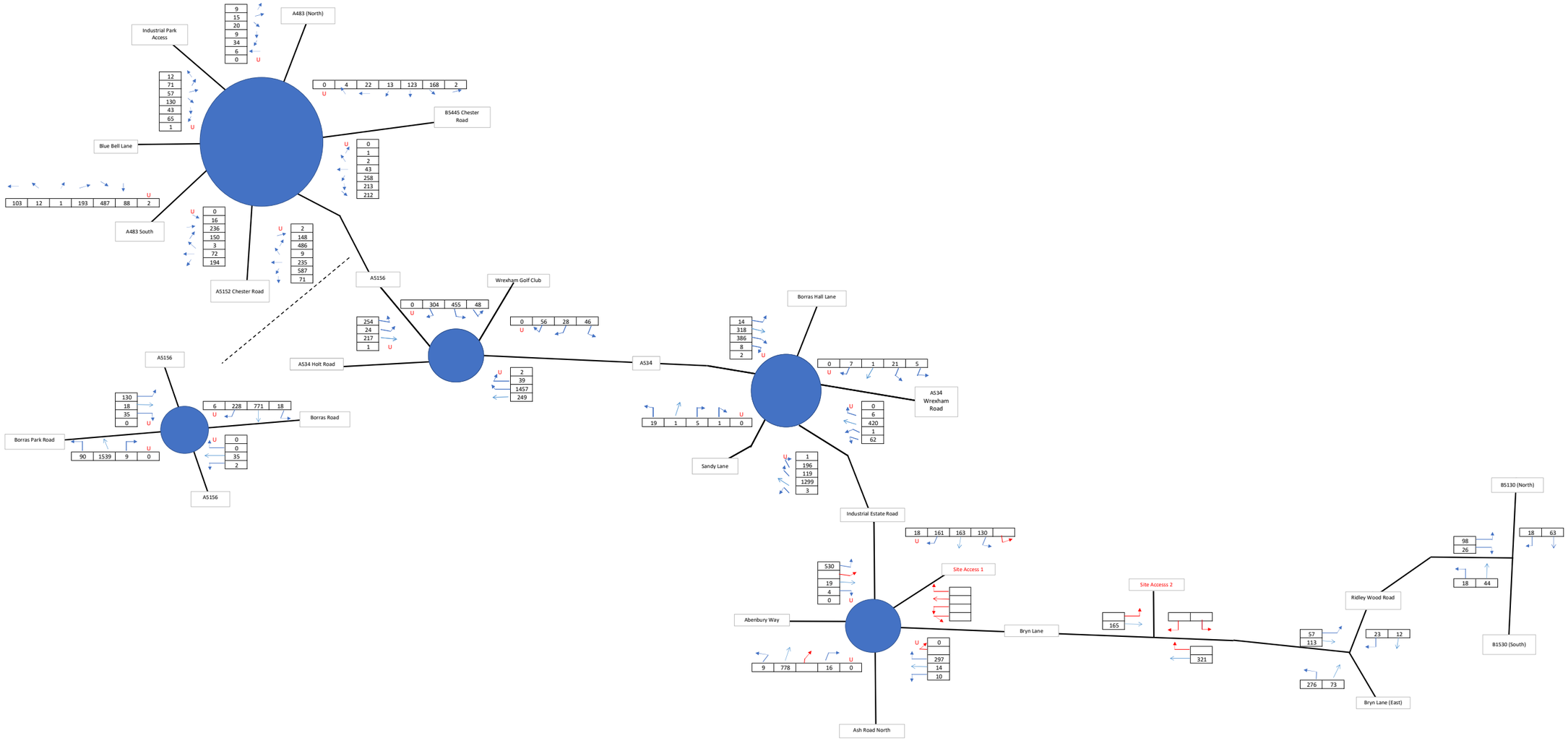


Figure 6a - 2037 Growthed Traffic Flows
PM Peak: 1630-1730

Notes: 123 PCUs
1.0927 Growth Factor

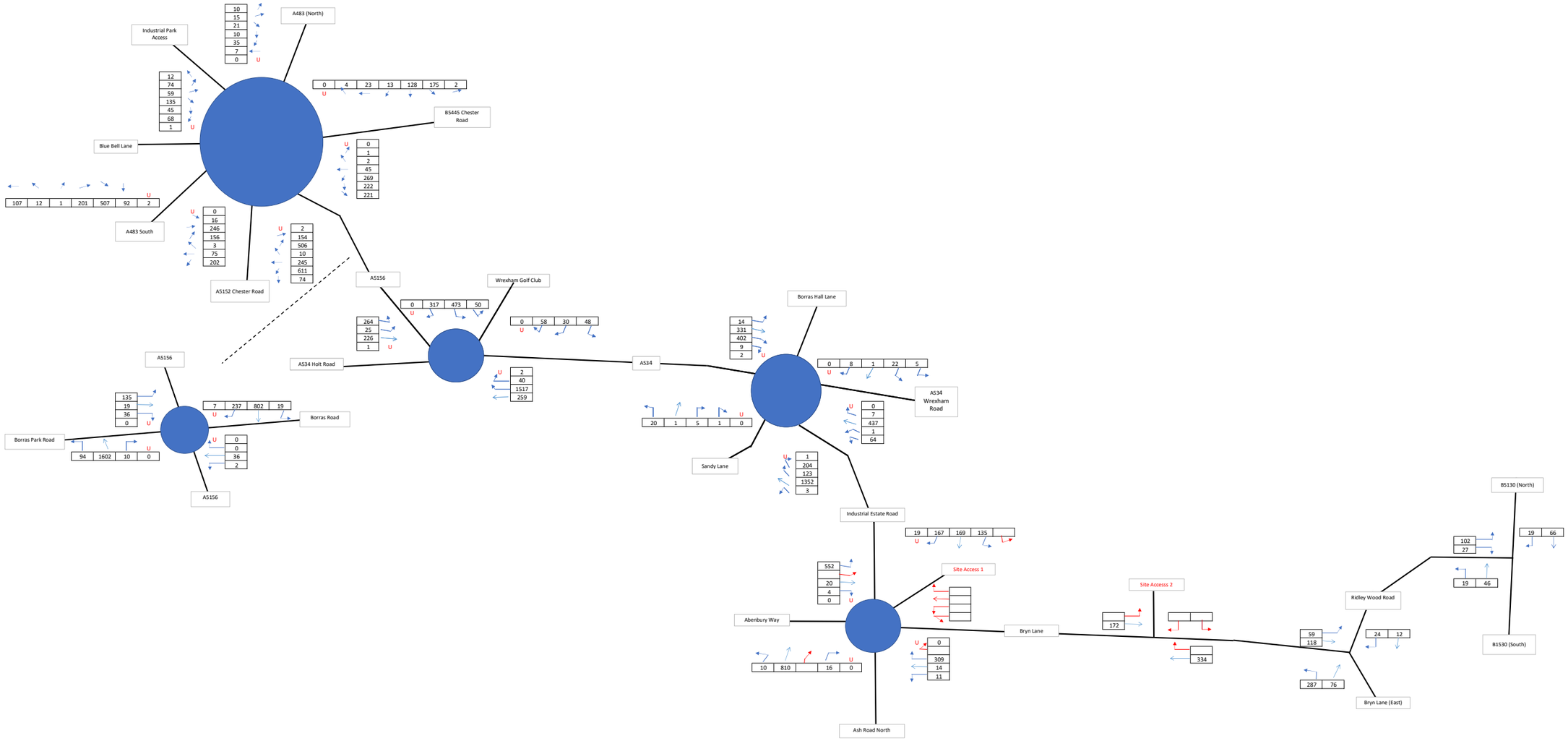


Figure 7a - Development Traffic Distribution
AM Peak

Notes: % Arrivals
% Departures

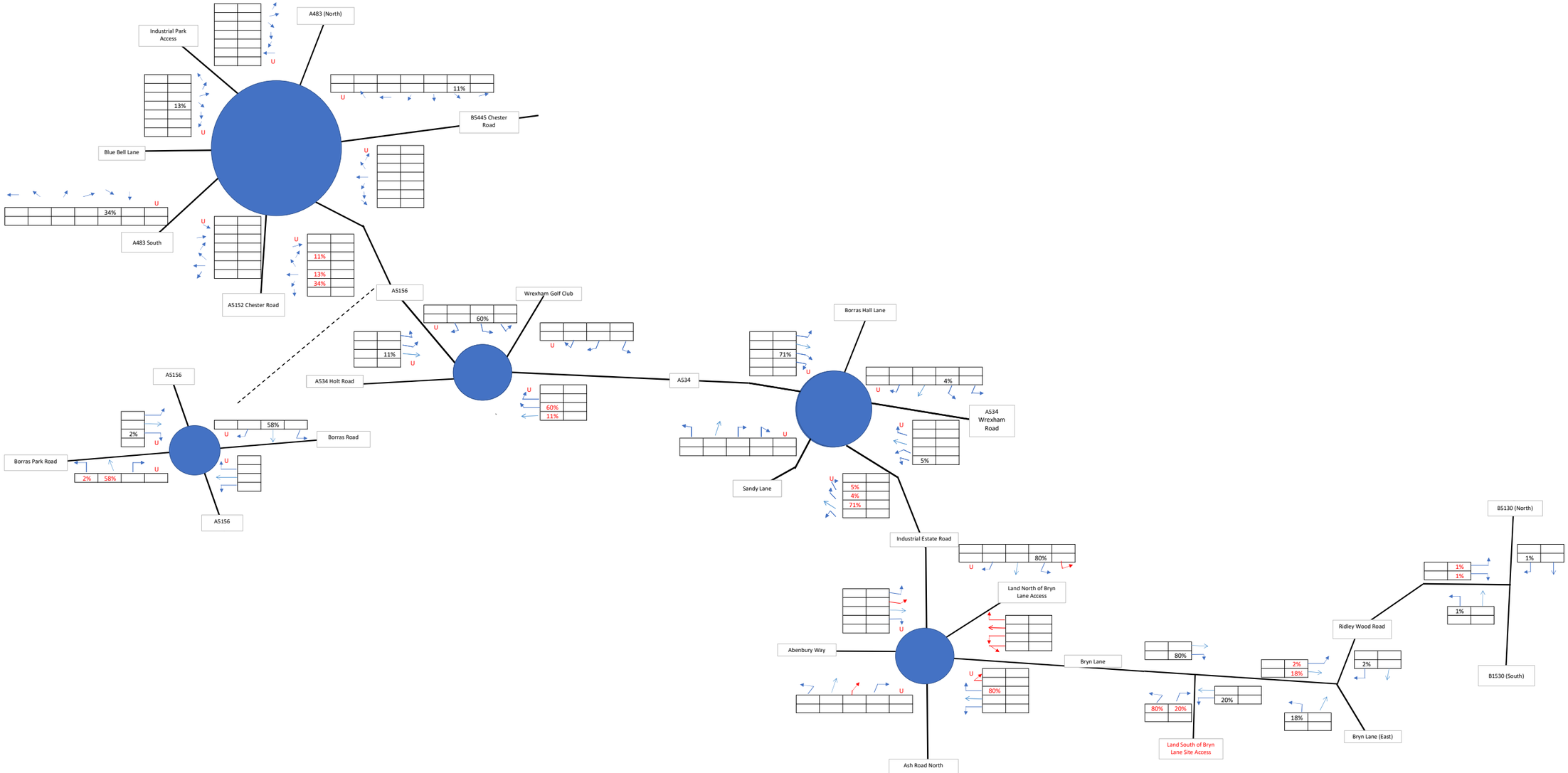


Figure 7b - Development Traffic Distribution
PM Peak

Notes: % Arrivals
% Departures

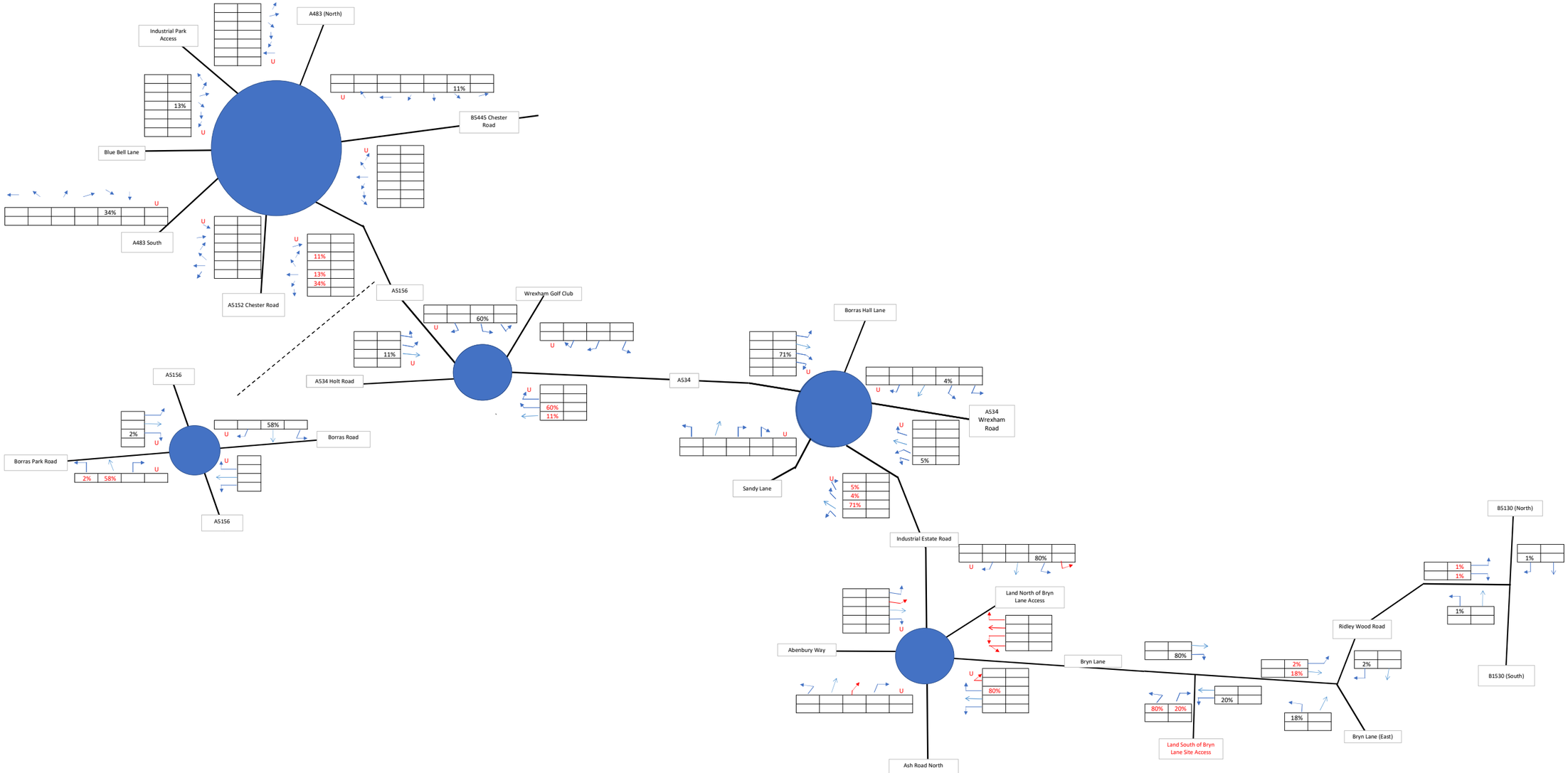


Figure 8a - Total Development Trips
AM Peak: 0800-0900

Notes: 83 Arrivals
14 Departures

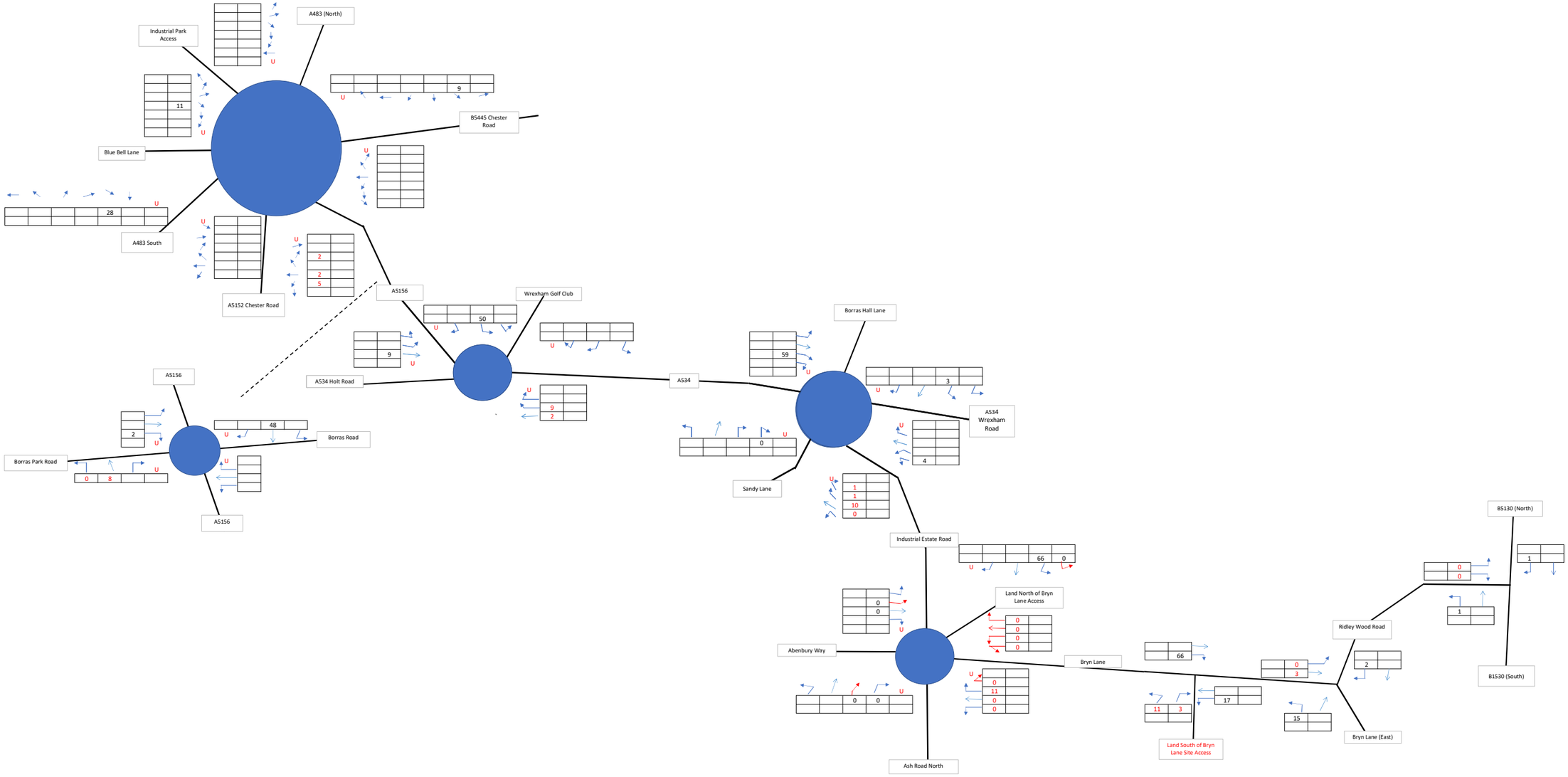


Figure 8b - Total Development Trips
PM Peak: 1630-1730

Notes: 15 Arrivals
45 Departures

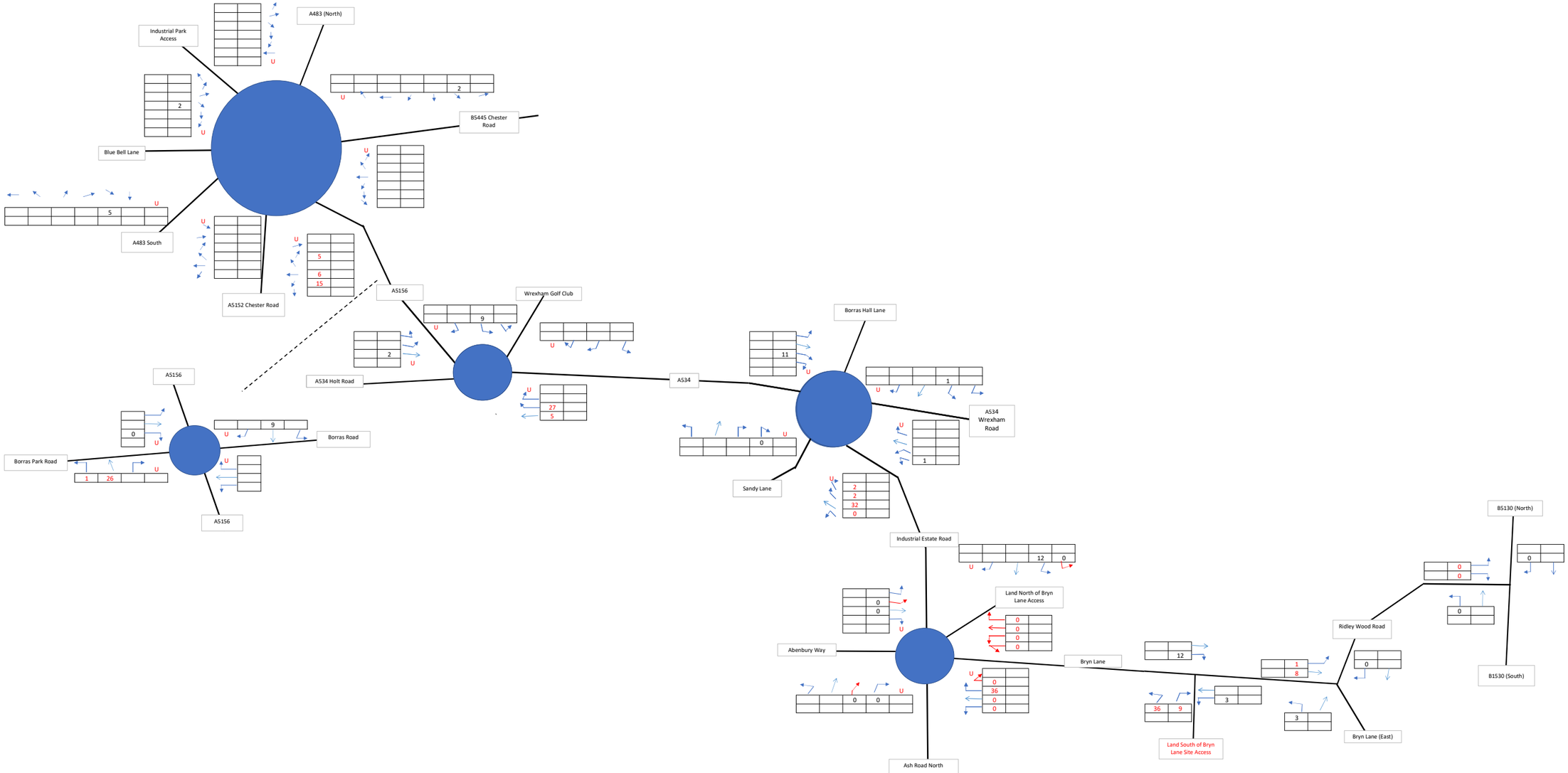


Figure 10 - Pacific Park Committed Traffic
AM Peak

Notes: 6 Arrivals
1 Departures

GFA 2567 sqm
Arr 0.228
Dep 0.028

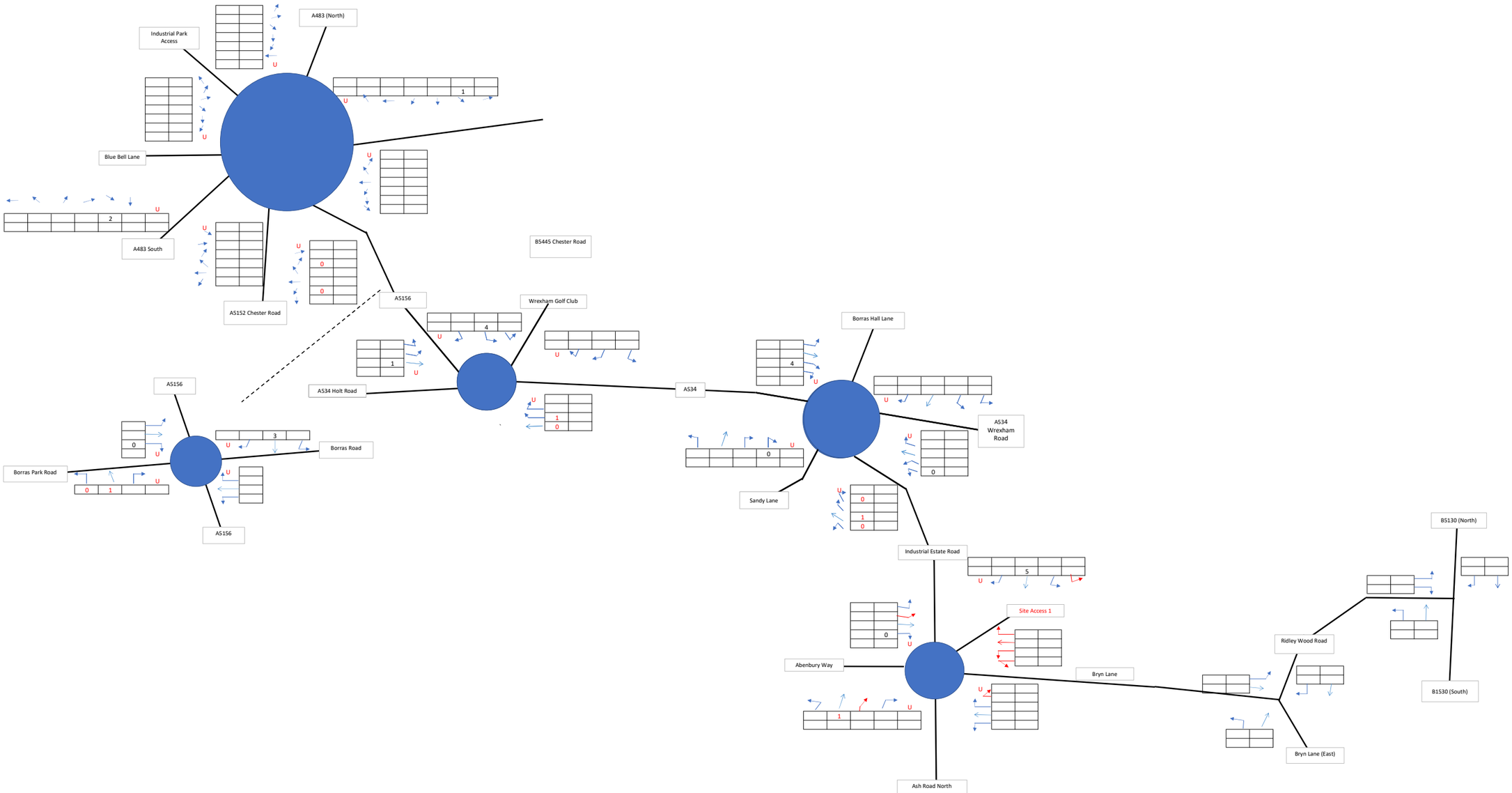


Figure 11 - Pacific Park Committed Traffic
PM Peak

Notes: 1 Arrivals
9 Departures

GFA 2567 sqm
Arr 0.039
Dep 0.361

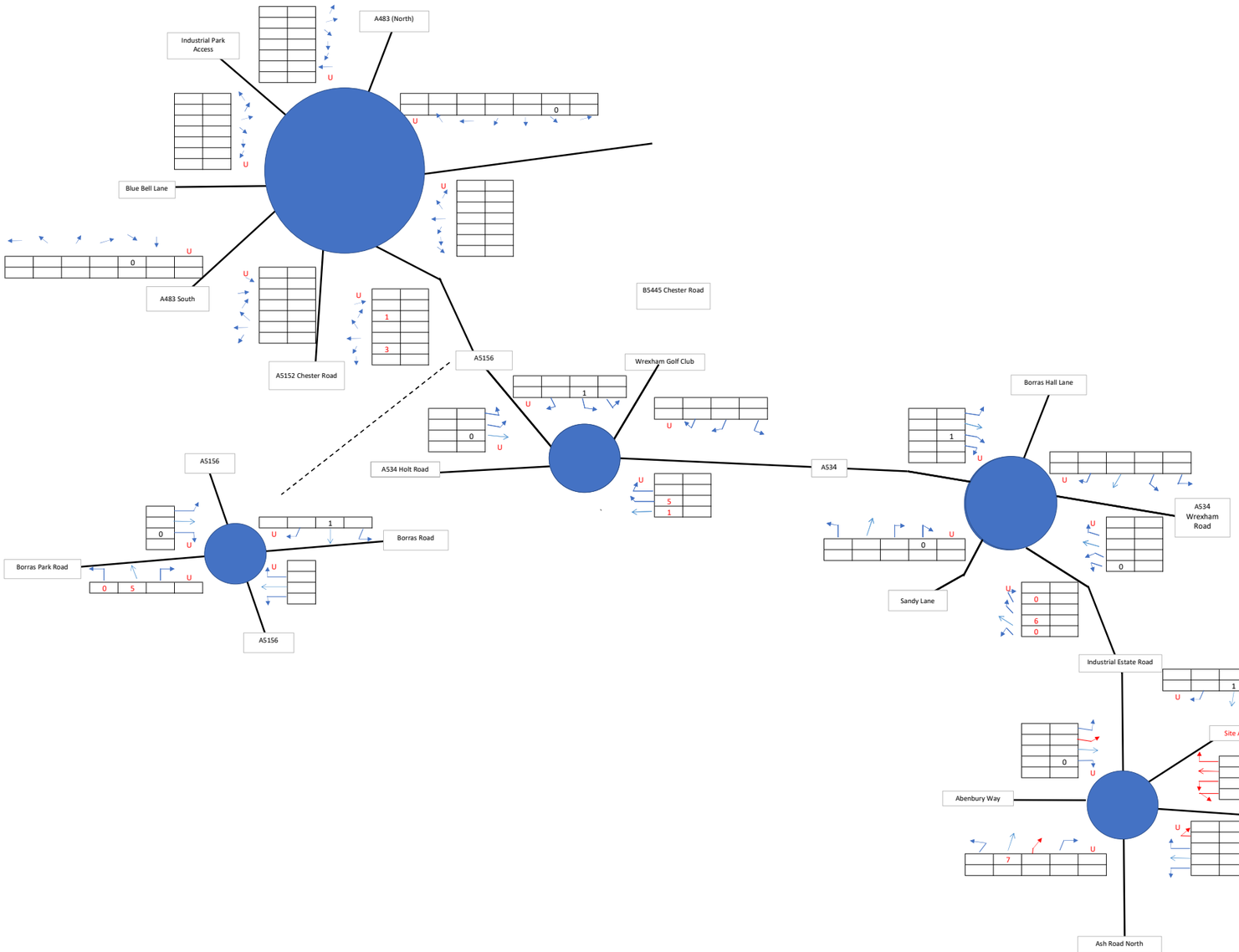


Figure 12 - Ash Road Committed Traffic
AM Peak

Notes: 6 Arrivals
1 Departures

GFA 2605 sqm
Arr 0.228
Dep 0.028

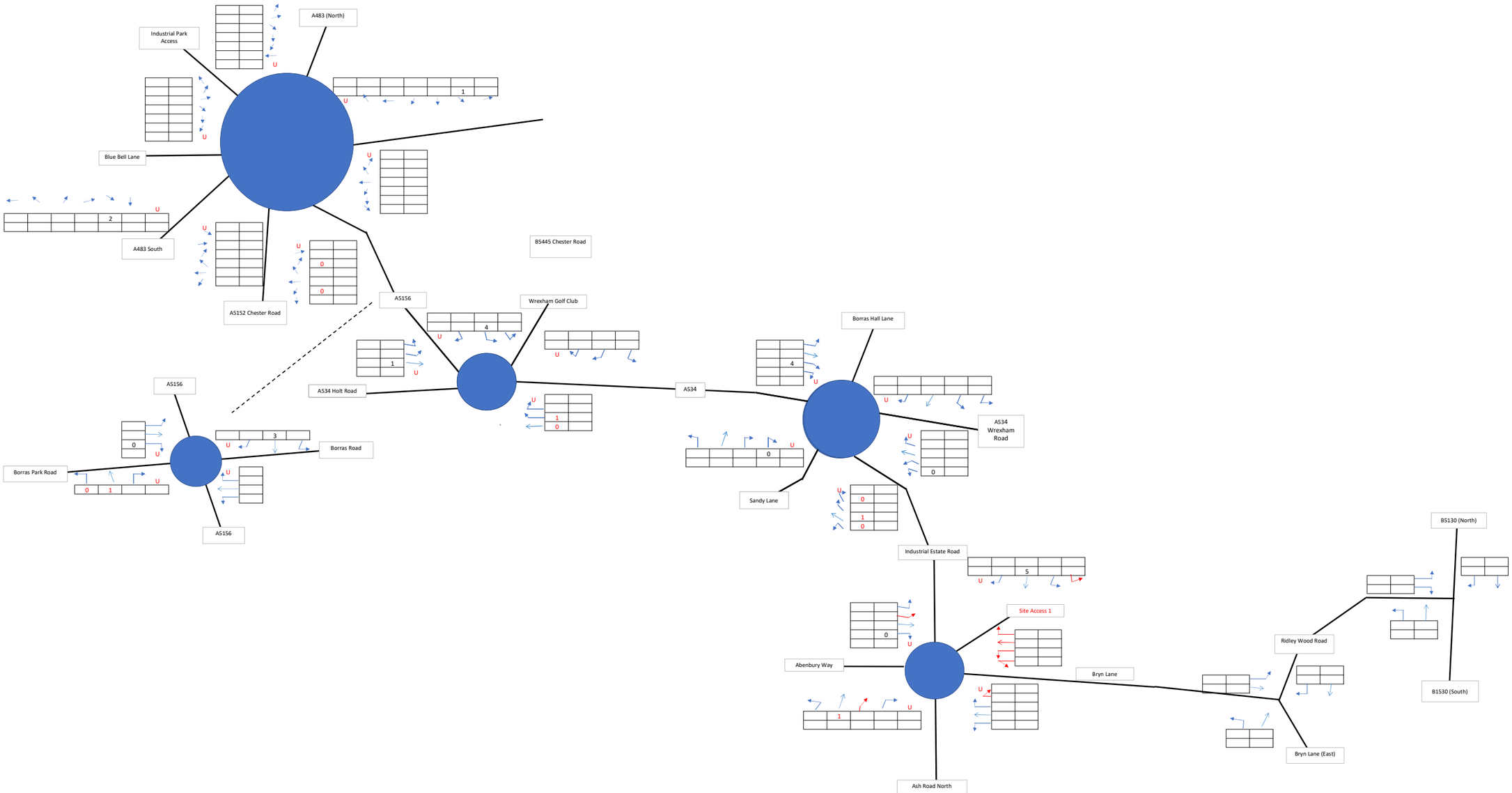


Figure 13 - Ash Road Committed Traffic
PM Peak

Notes: 1 Arrivals
9 Departures

GFA 2605 sqm
Arr 0.039
Dep 0.361

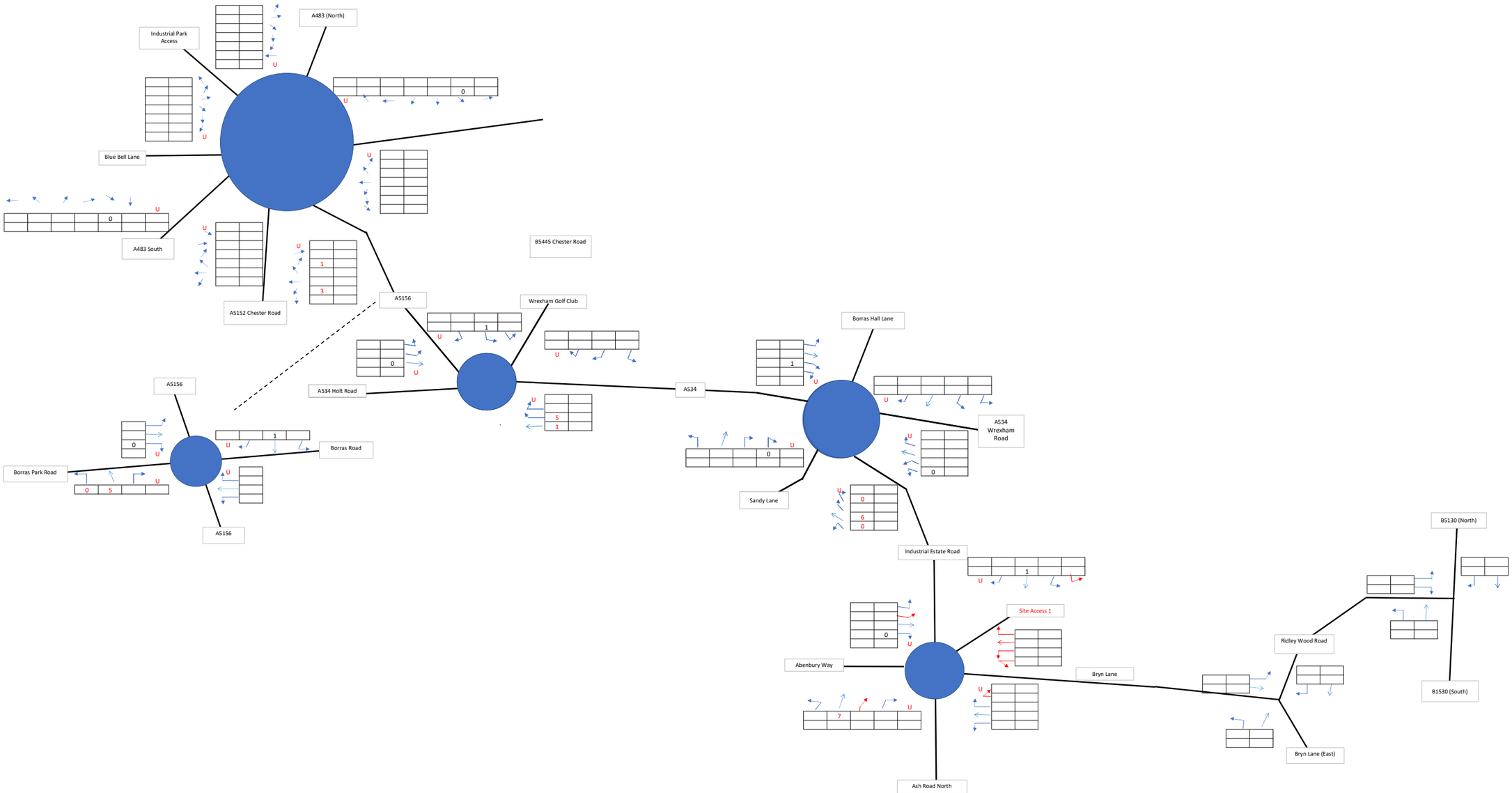


Figure 24 - KSS2 Development Traffic Distribution

Notes: % Arrivals
% Depatures

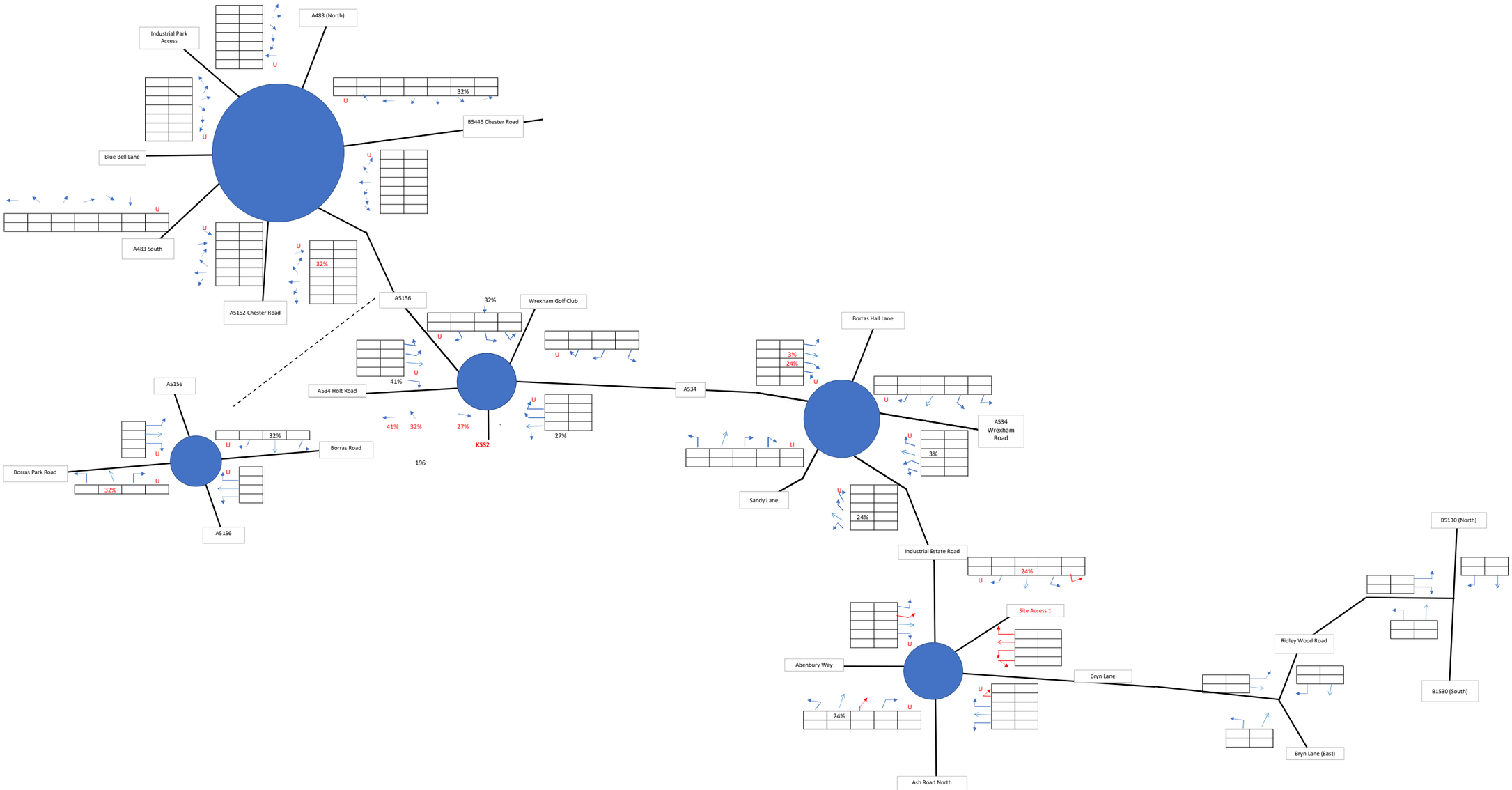


Figure 15a - KSS2 Development Trips
AM Peak

Notes: 237 Arrivals
626 Depatures

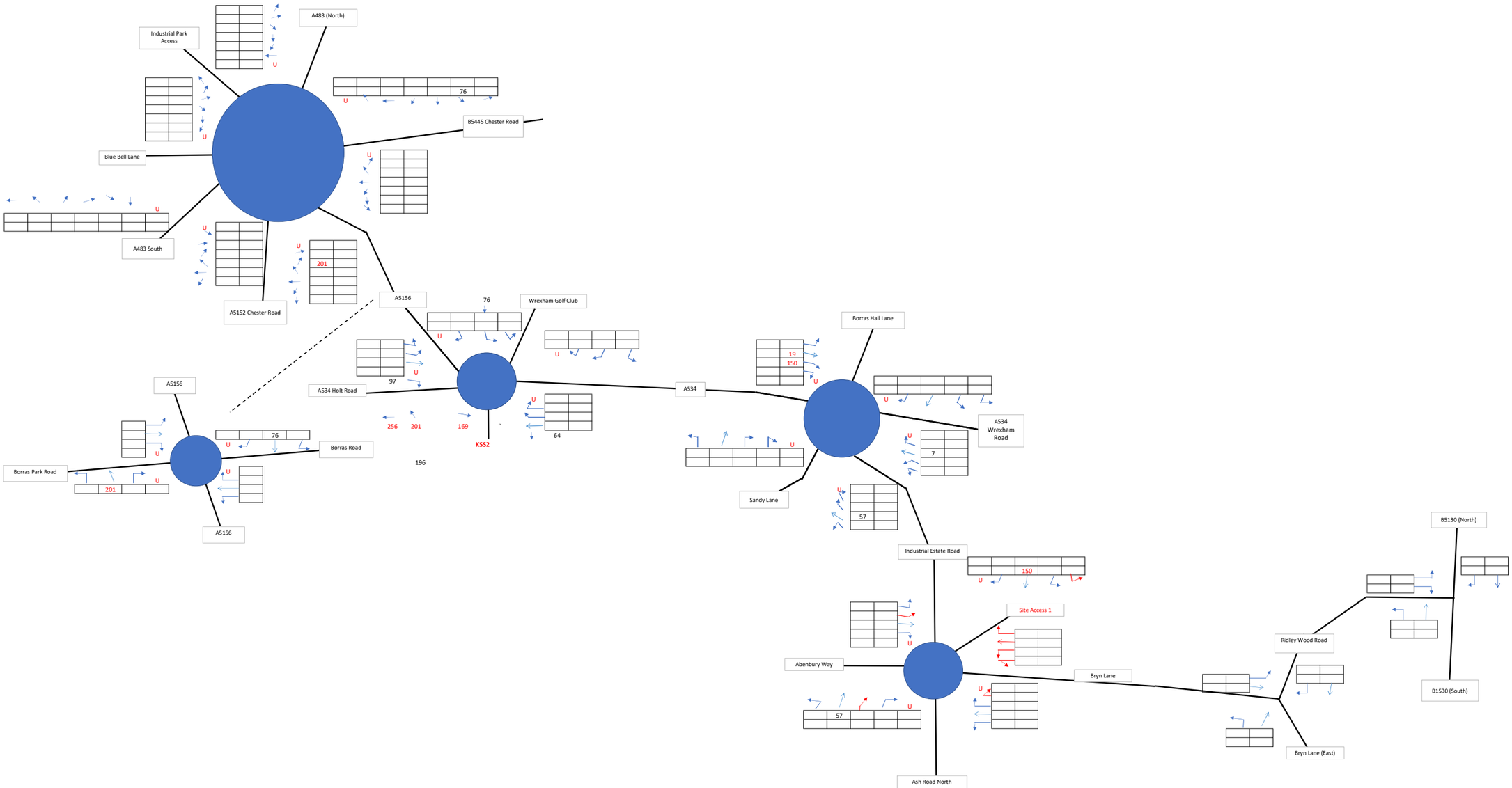


Figure 16 - KSS2 Development Trips
PM Peak

Notes: 547 Arrivals
301 Depatures

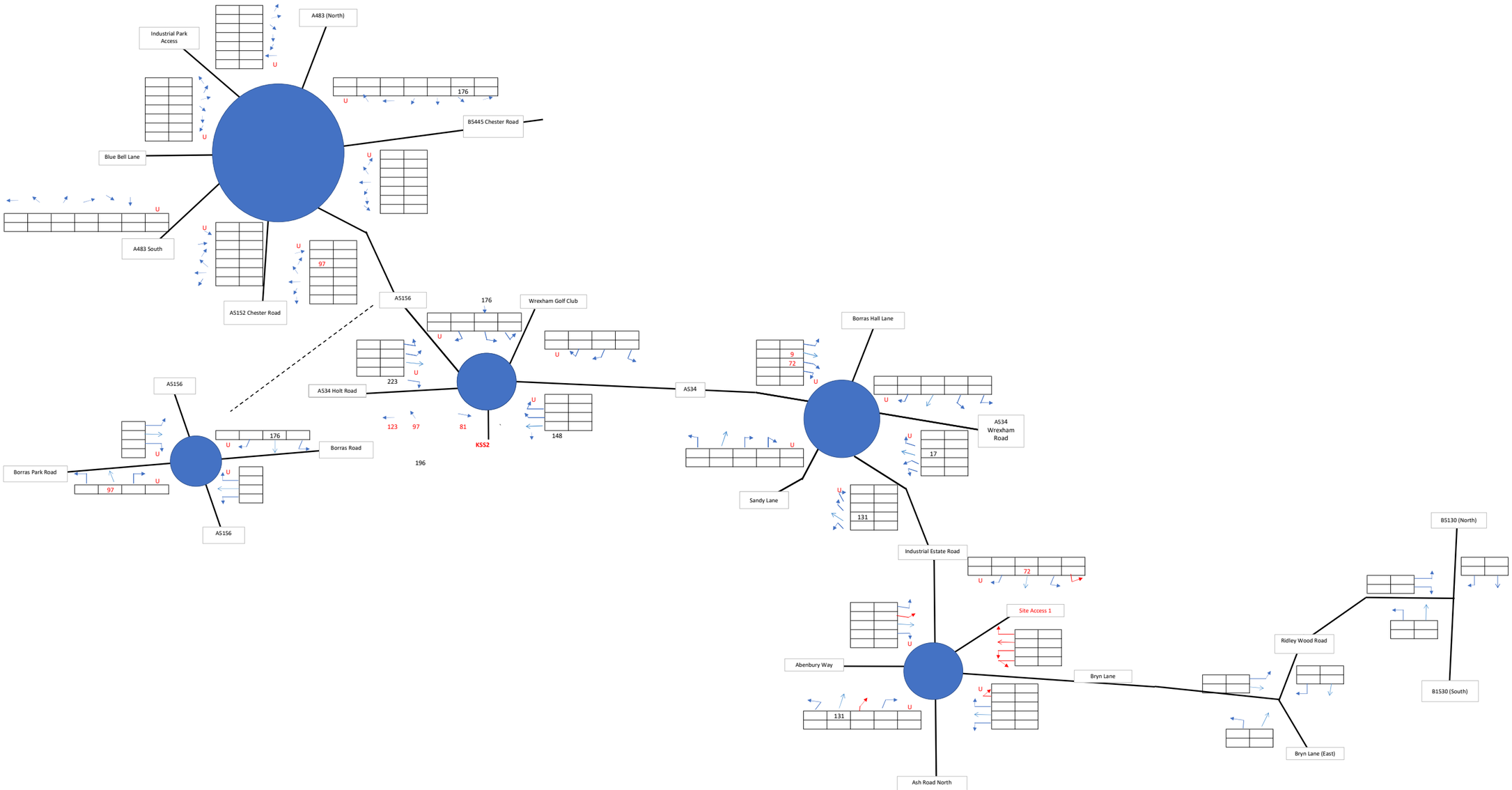


Figure 17 - Kingmoor Development Trips
AM Peak

Notes: 75 Arrivals (Lights) 16 Arrivals (HGVs)
50 Depatures (Lights) 15 Depatures (HGVs)

**Converted into PCUs*

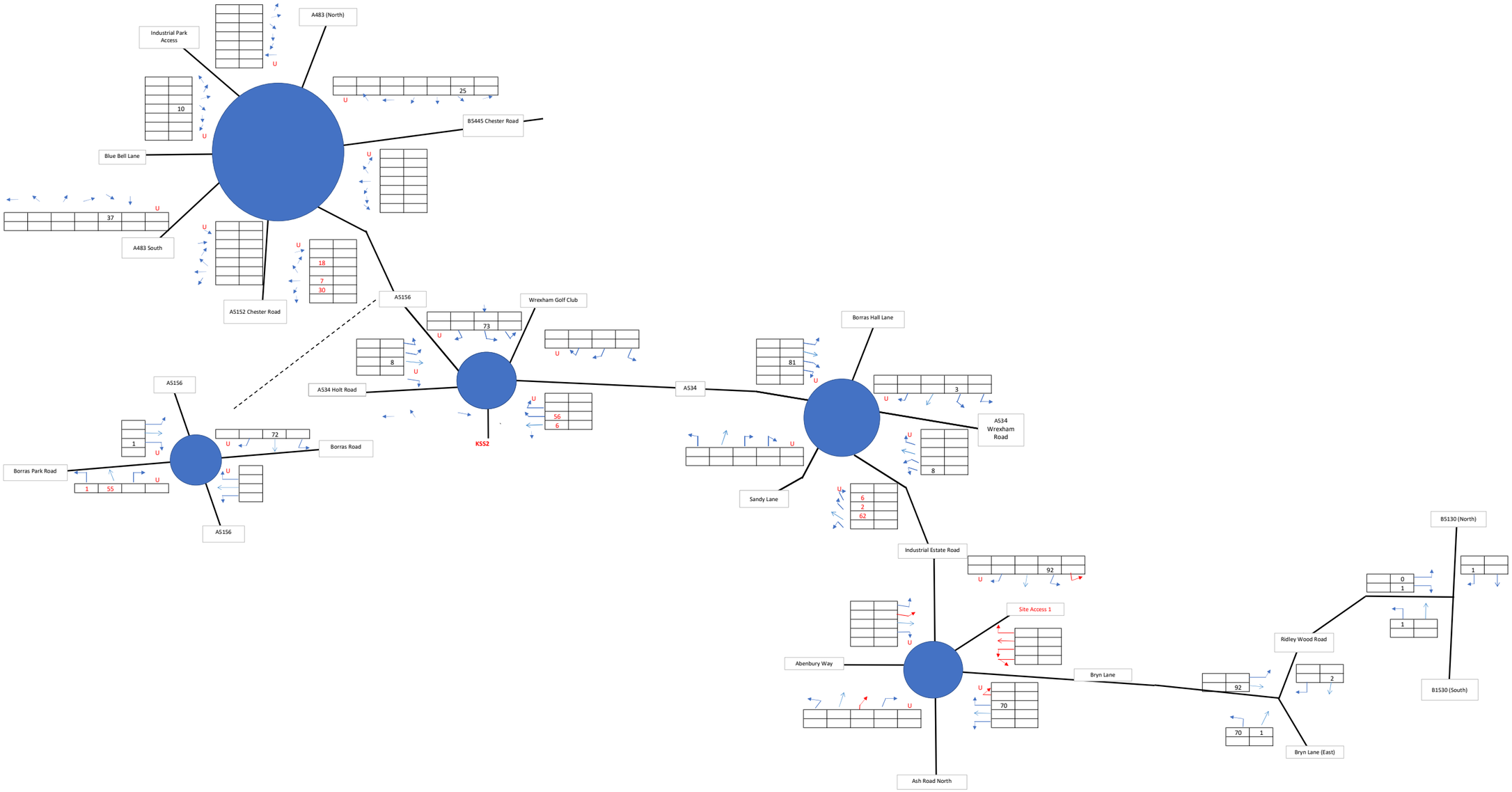


Figure 18 - Kingmoor Development Trips
PM Peak

Notes: 60 Arrivals (Lights) 98 Depatures (Lights) 18 Arrivals (HGVs) 16 Depatures (HGVs)

**Converted into PCUs*

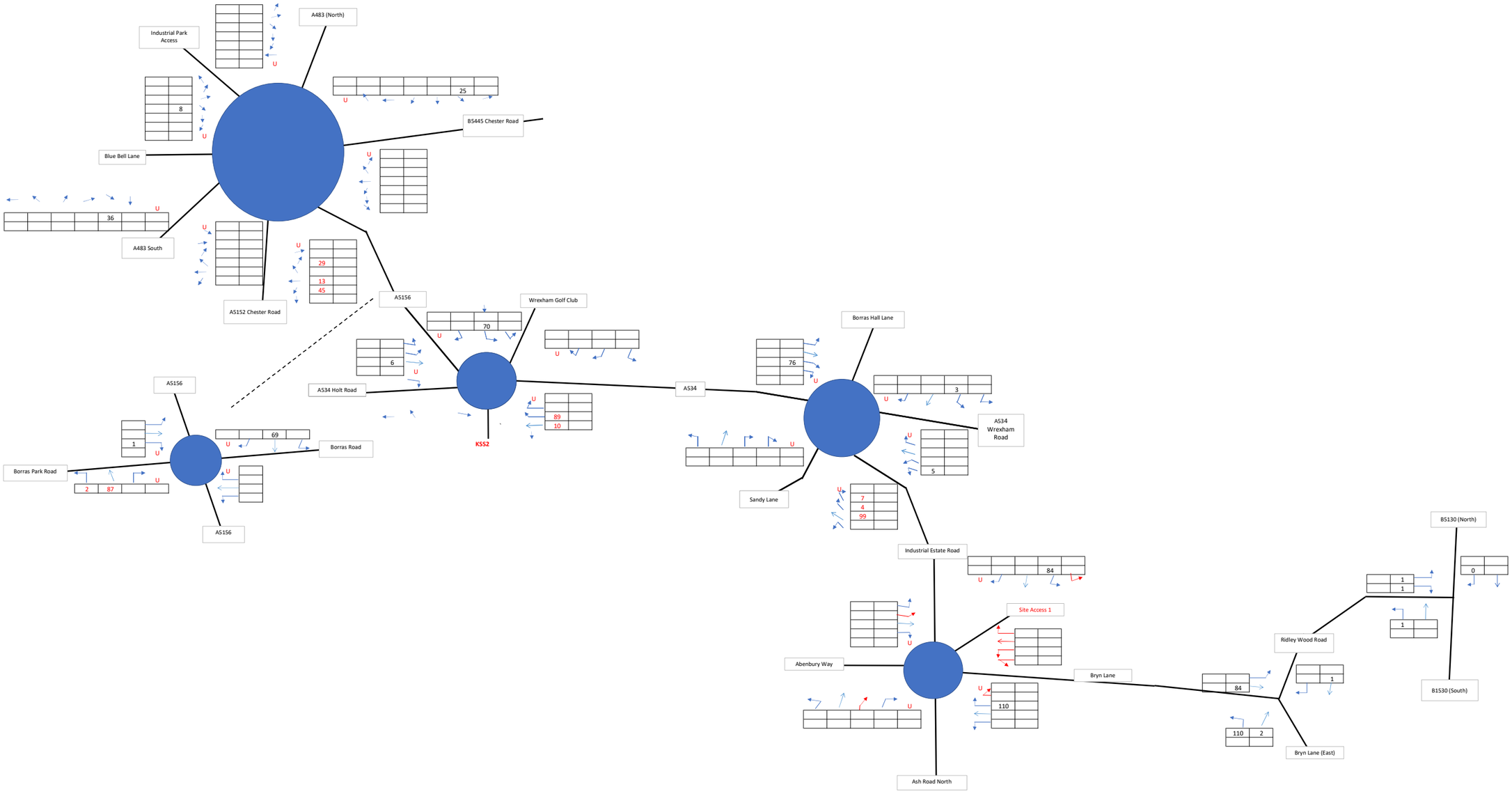


Figure 19b - 2030 Base + Committed (Excluding Utopia & KSS2)
AM Peak: 0800-0900

Notes: 123 PCUs

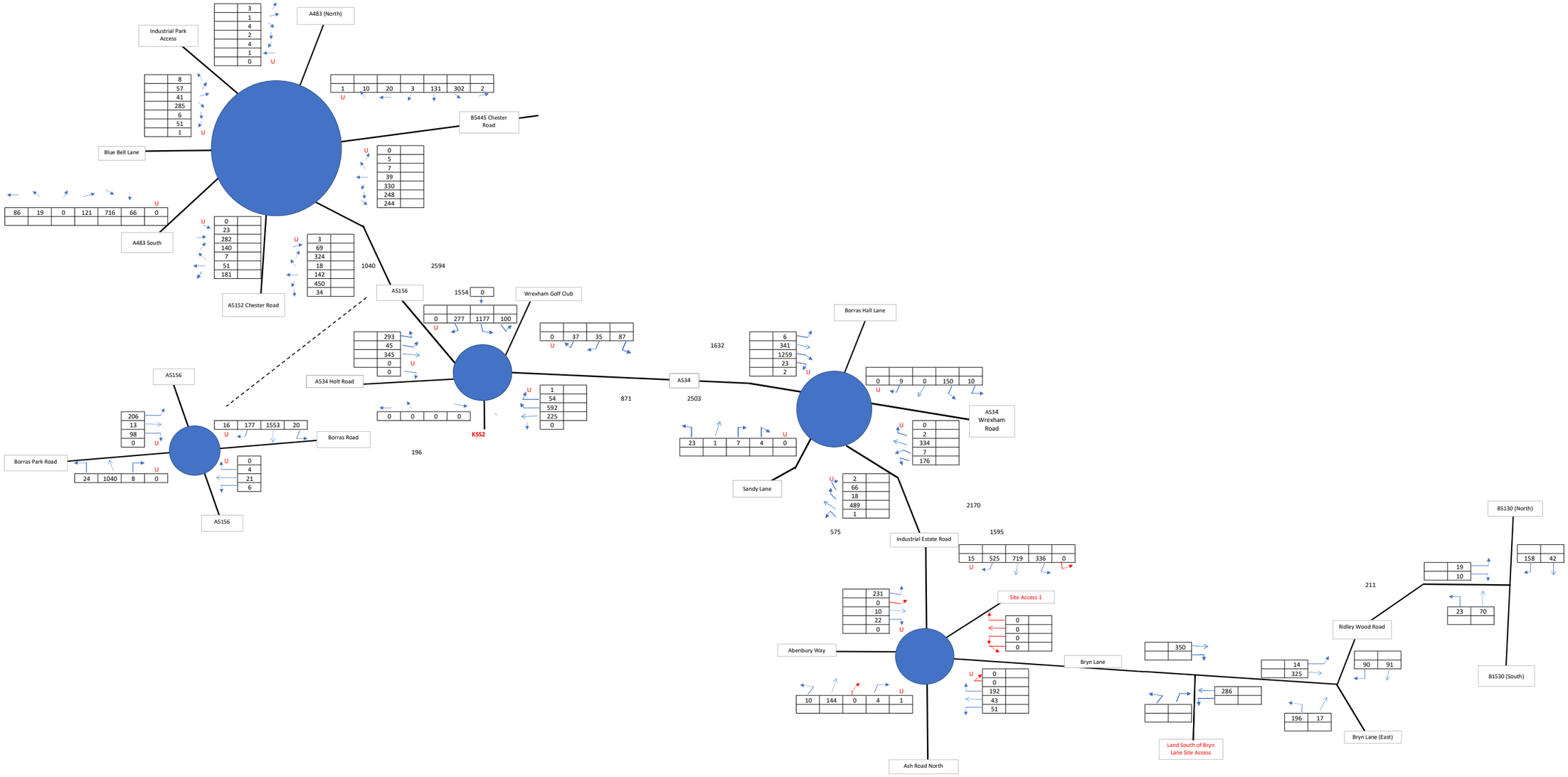


Figure 19c - 2037 Base + Committed (Excluding Utopia & KSS2)
AM Peak: 0800-0900

Notes: 123 PCUs

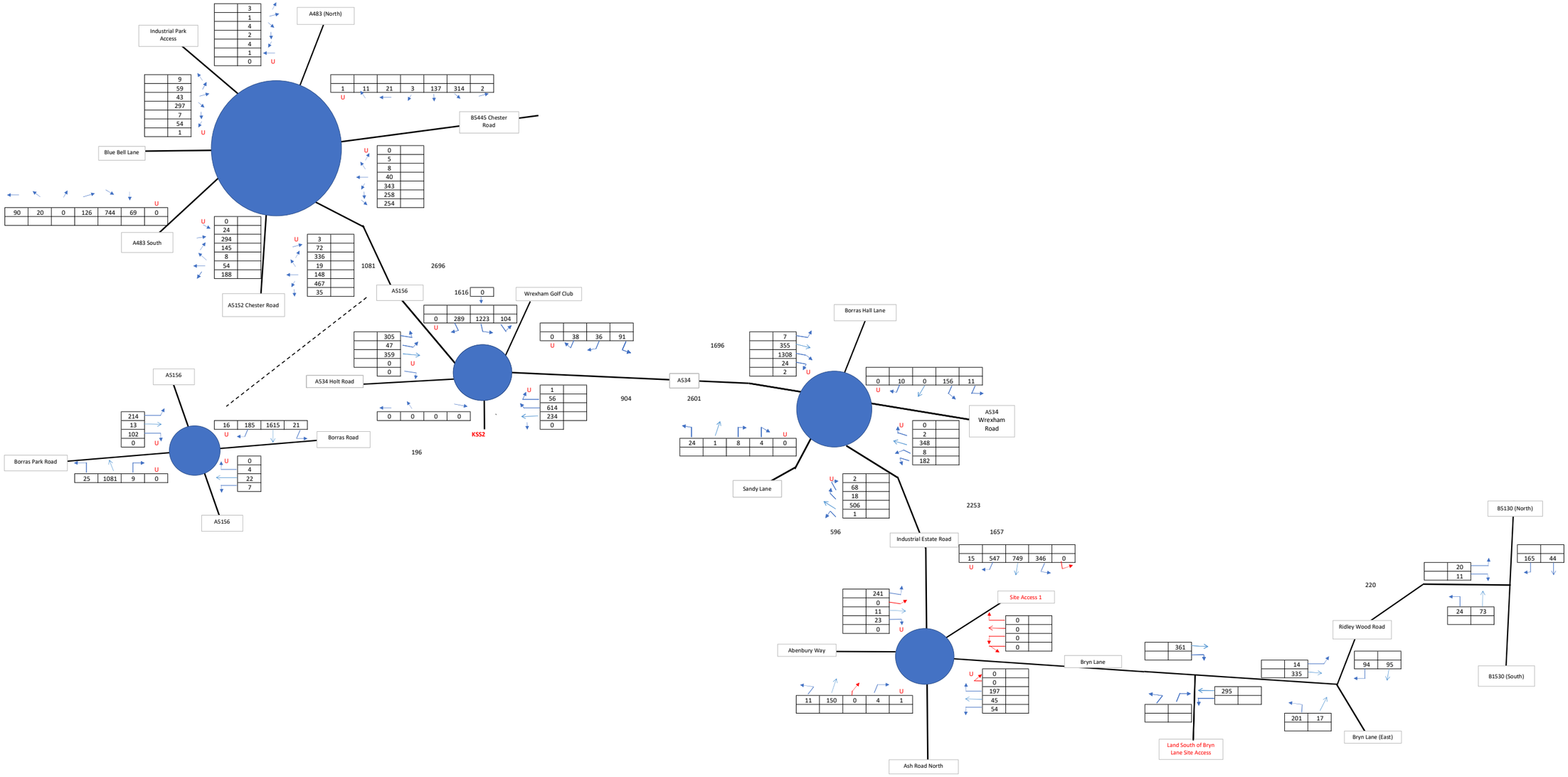


Figure 20b - 2030 Base + Committed (Excluding Utopia & KSS2)
PM Peak: 1630-1730

Notes: 123 PCUs

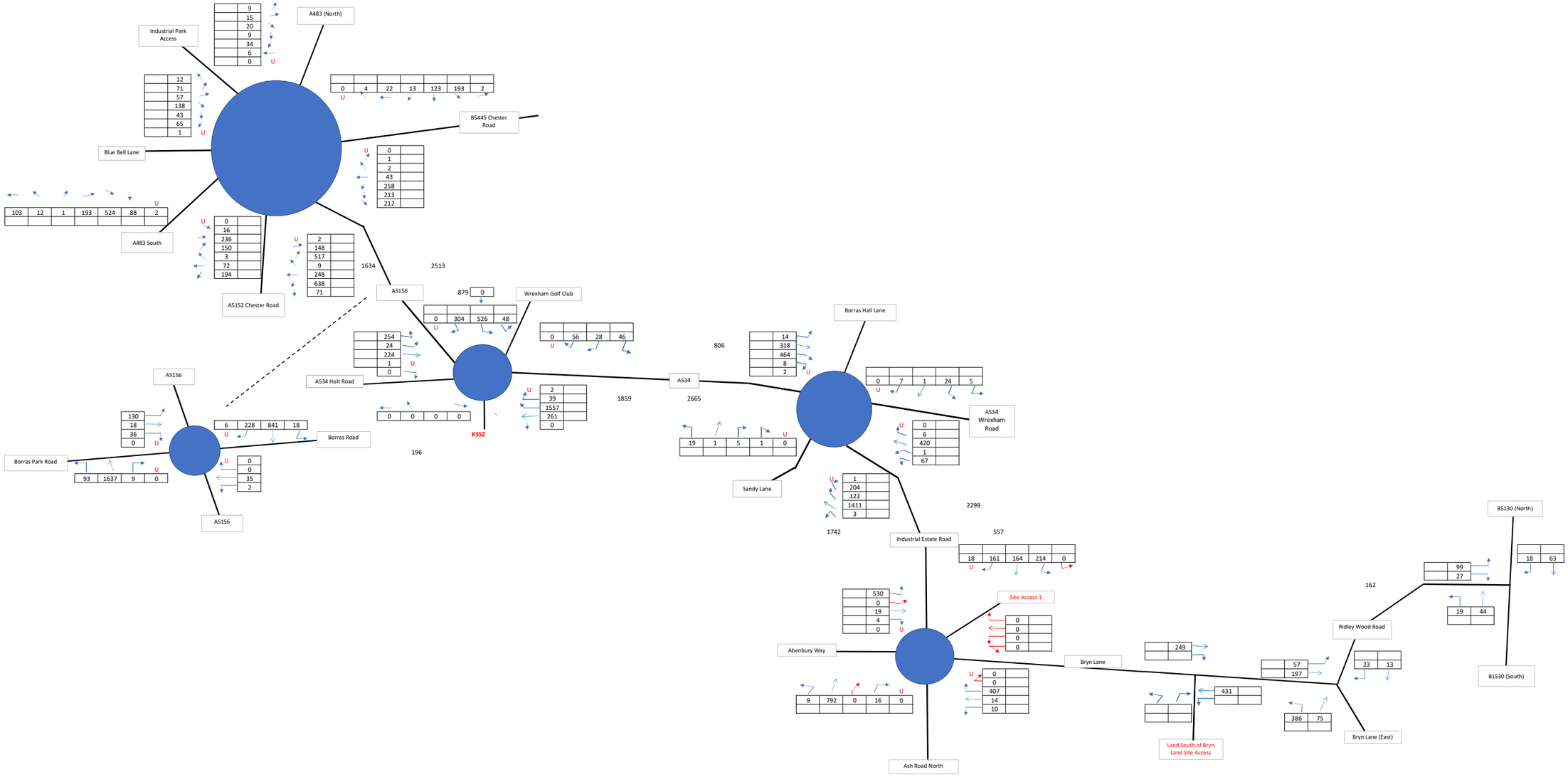


Figure 20c - 2037 Base + Committed (Excluding Utopia & KSS2)
PM Peak: 1630-1730

Notes: 123 PCUs

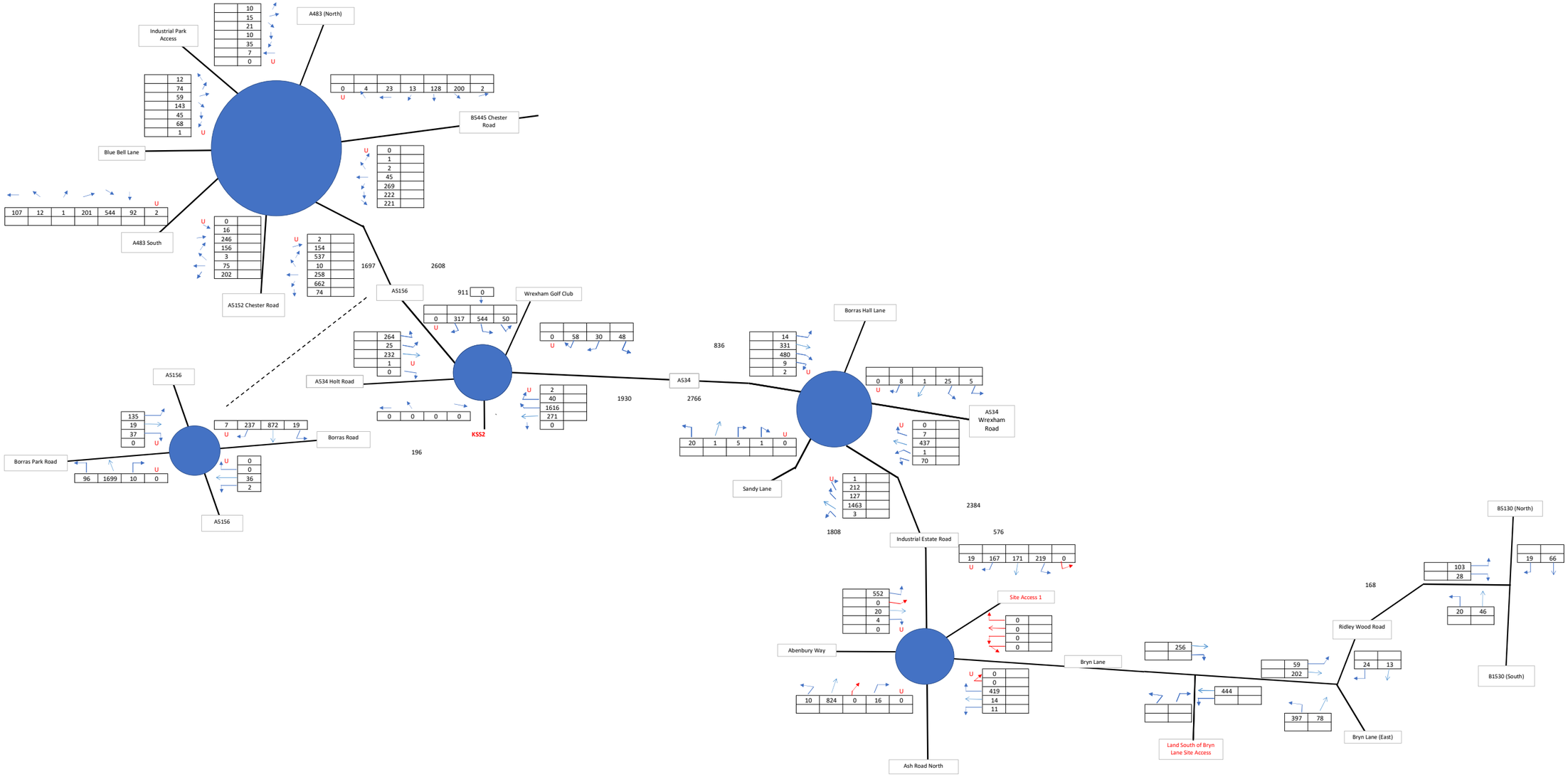


Figure 21a - 2030 Base + Committed (Excluding Utopia & KSS2) + Development
AM Peak: 0800-0900

Notes: 123 PCUs

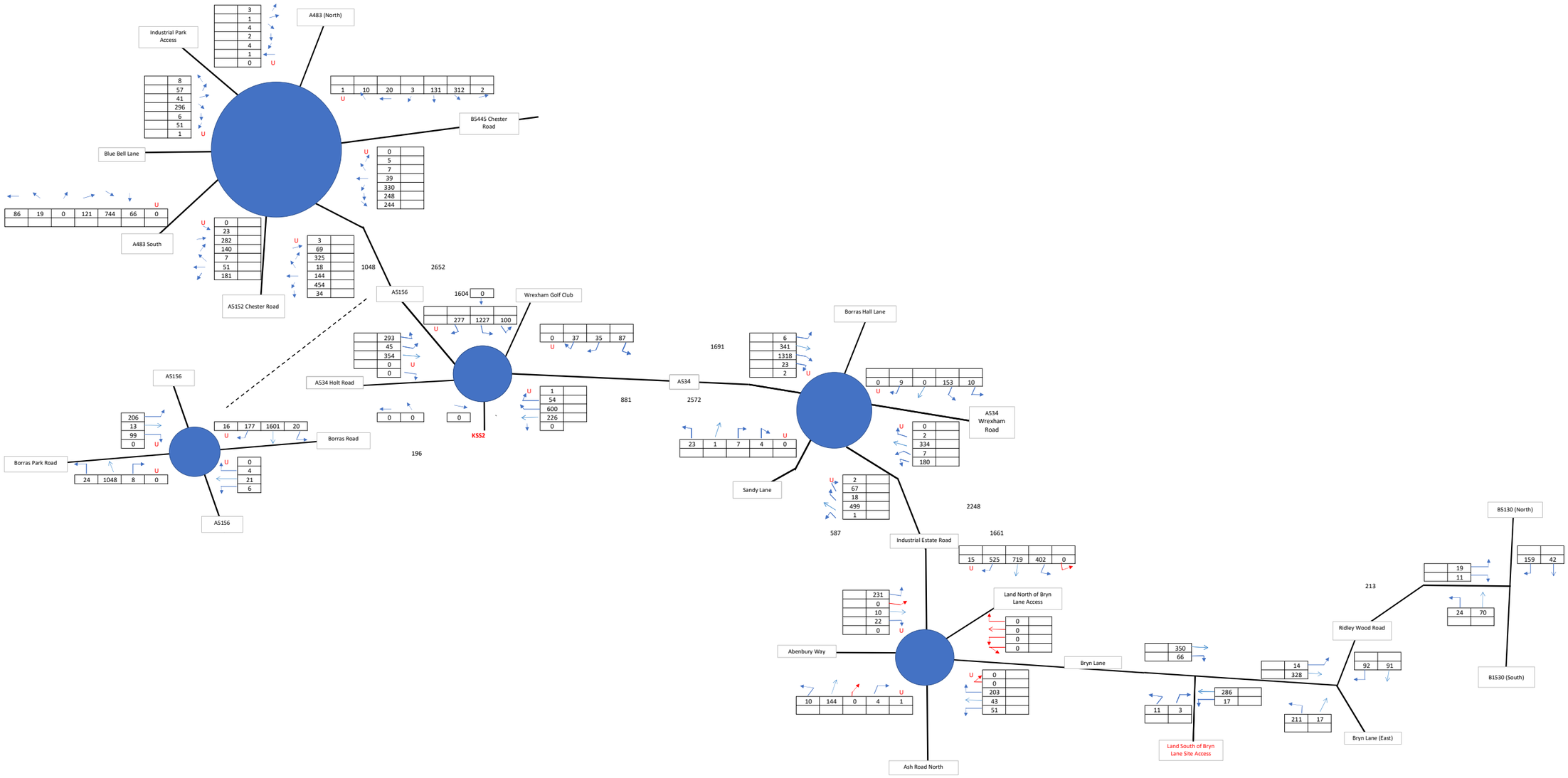


Figure 21b - 2030 Base + Development
AM Peak: 0800-0900

Notes: 123 PCUs

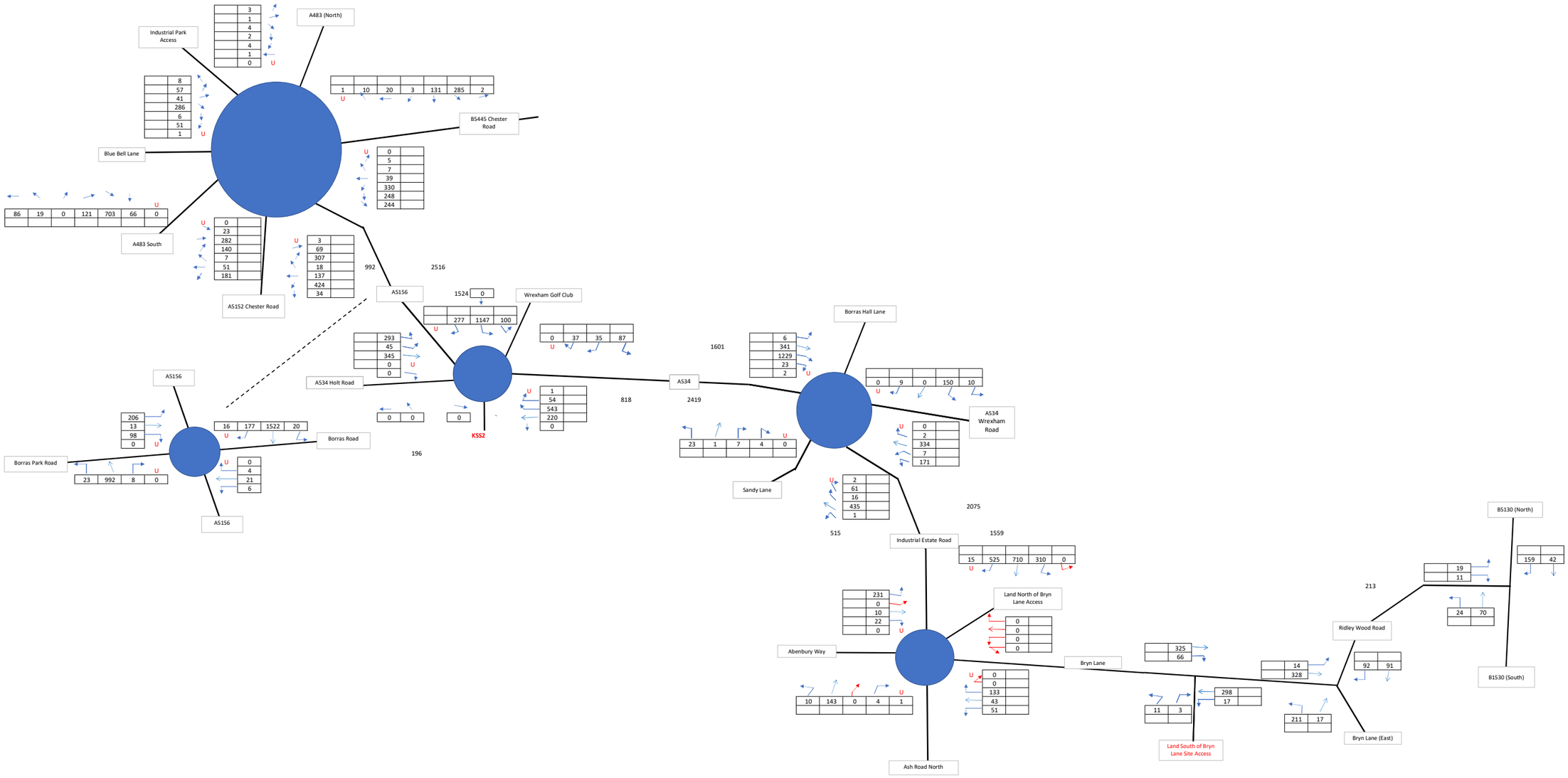


Figure 22b - 2030 Base + Development
PM Peak: 1630-1730

Notes: 123 PCUs

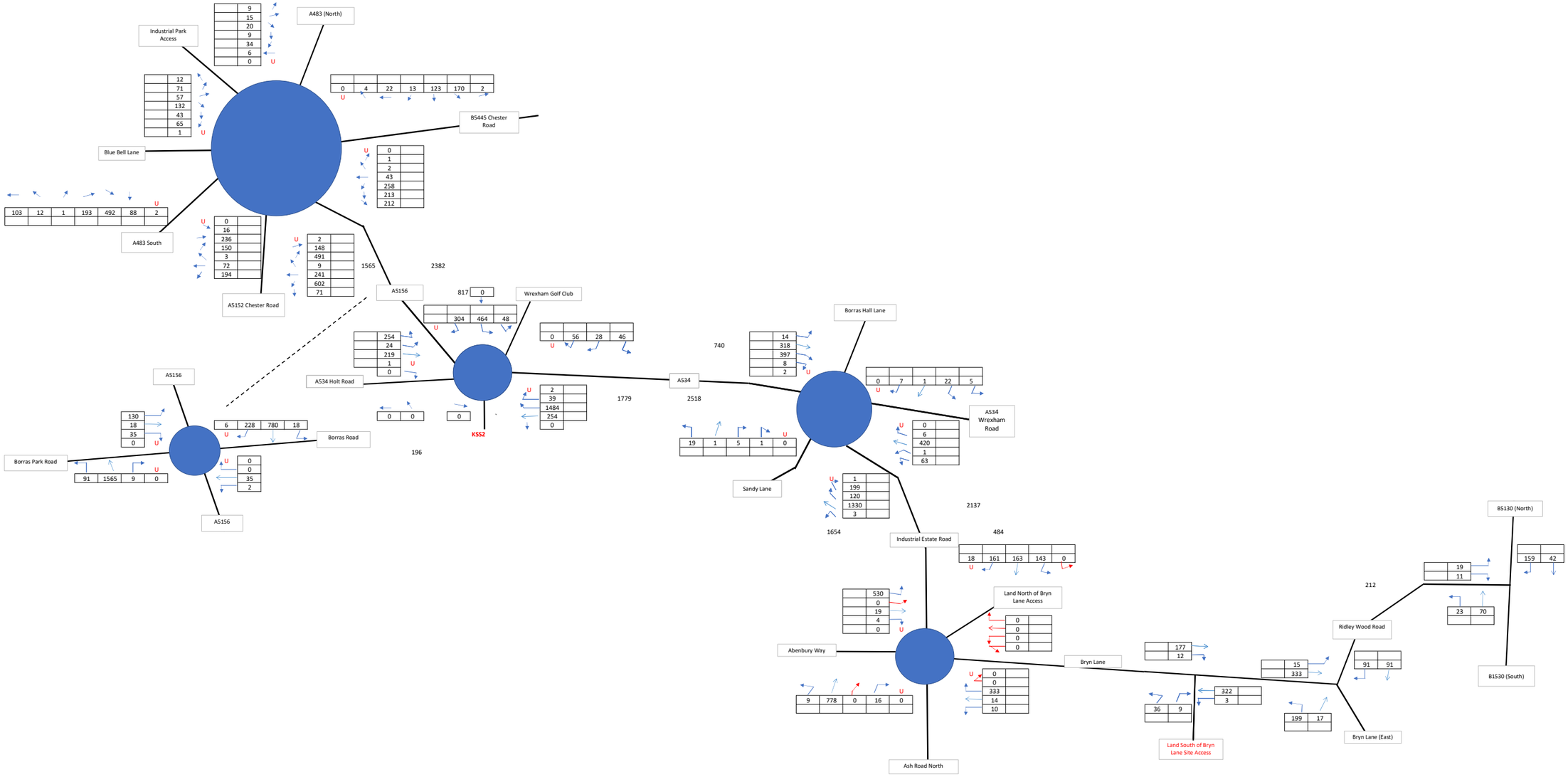


Figure 23a - 2037 Base + Committed (Excluding Utopia & KSS2) + Development
AM Peak: 0800-0900

Notes: 123 PCUs

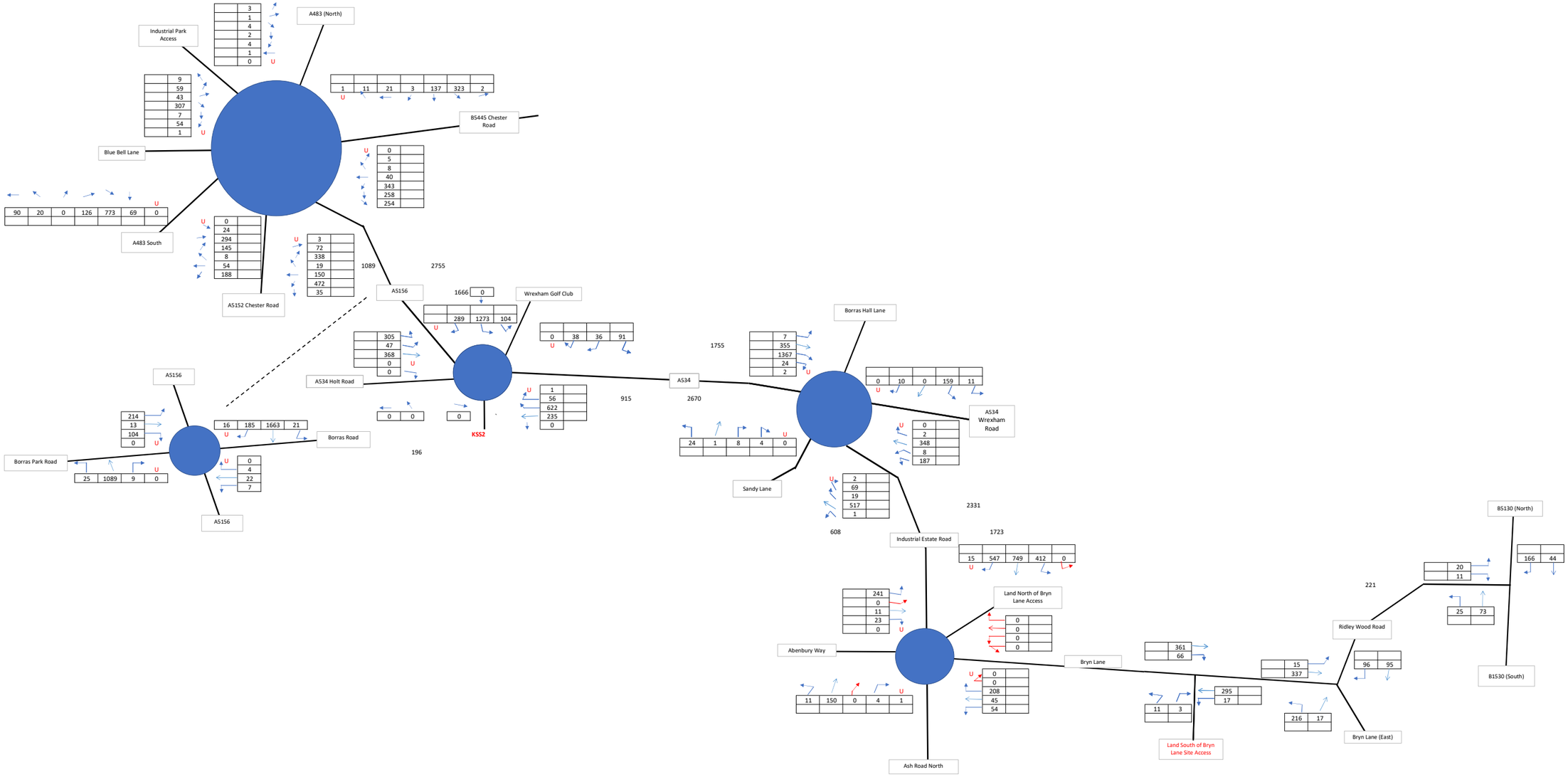


Figure 24a- 2037 Base + Committed (Excluding Utopia & KSS2) + Development
PM Peak: 1630-1730

Notes: 123 PCUs

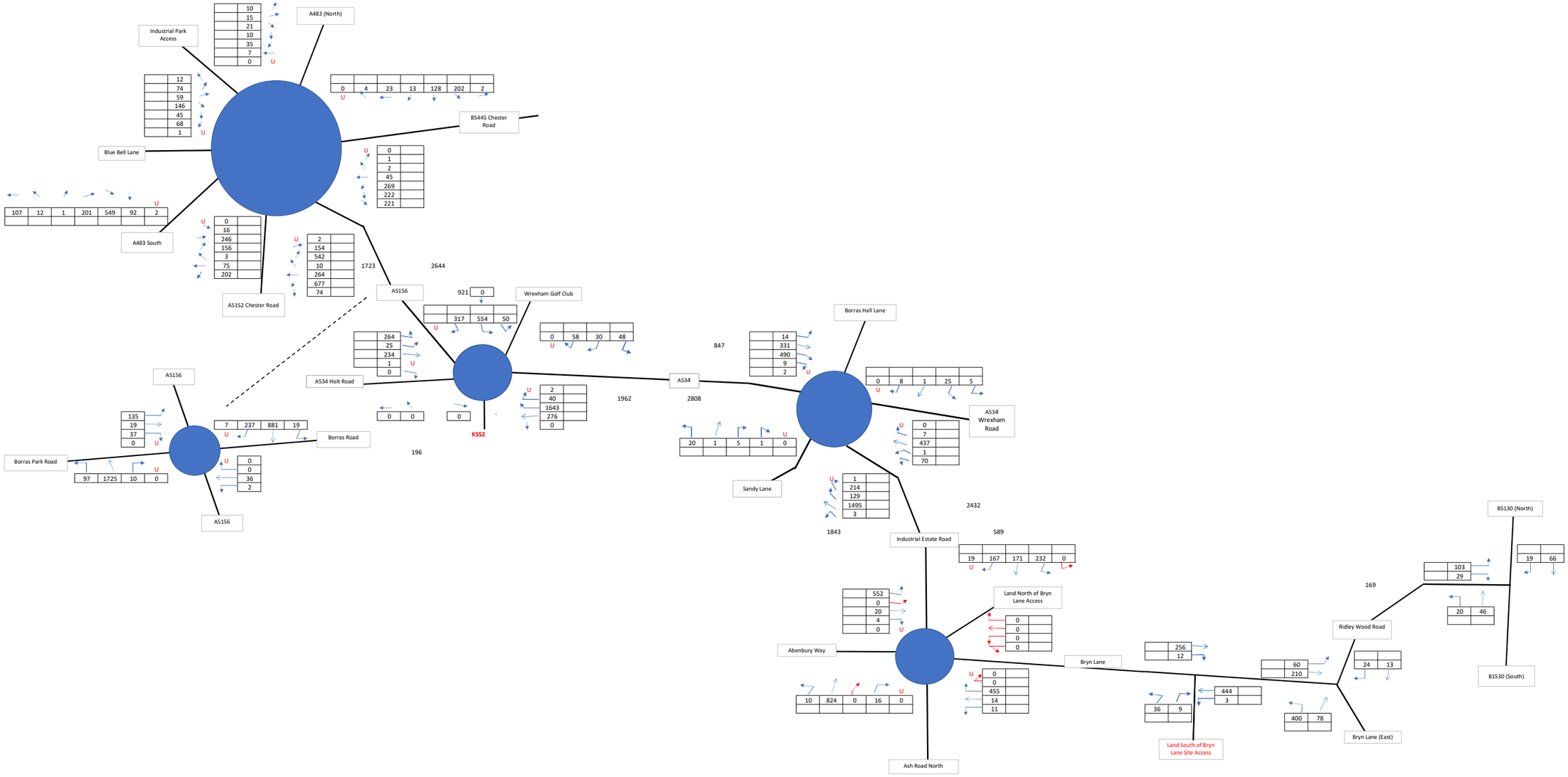


Figure 25 - 2030 Base Development Impact
AM Peak: 0800-0900

Notes: 123 PCUs
Committed Developments Included Except Utopia & KSS2

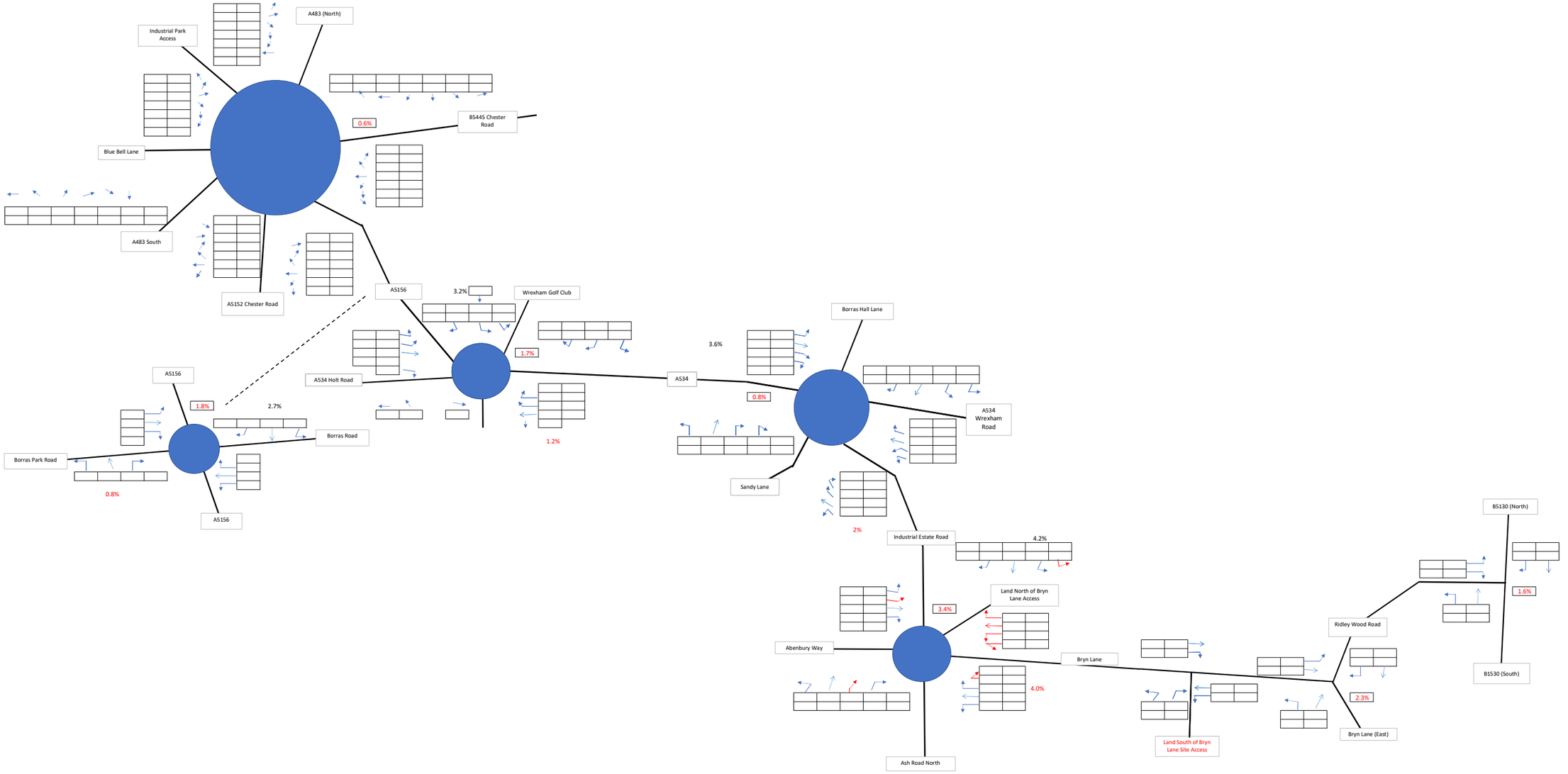
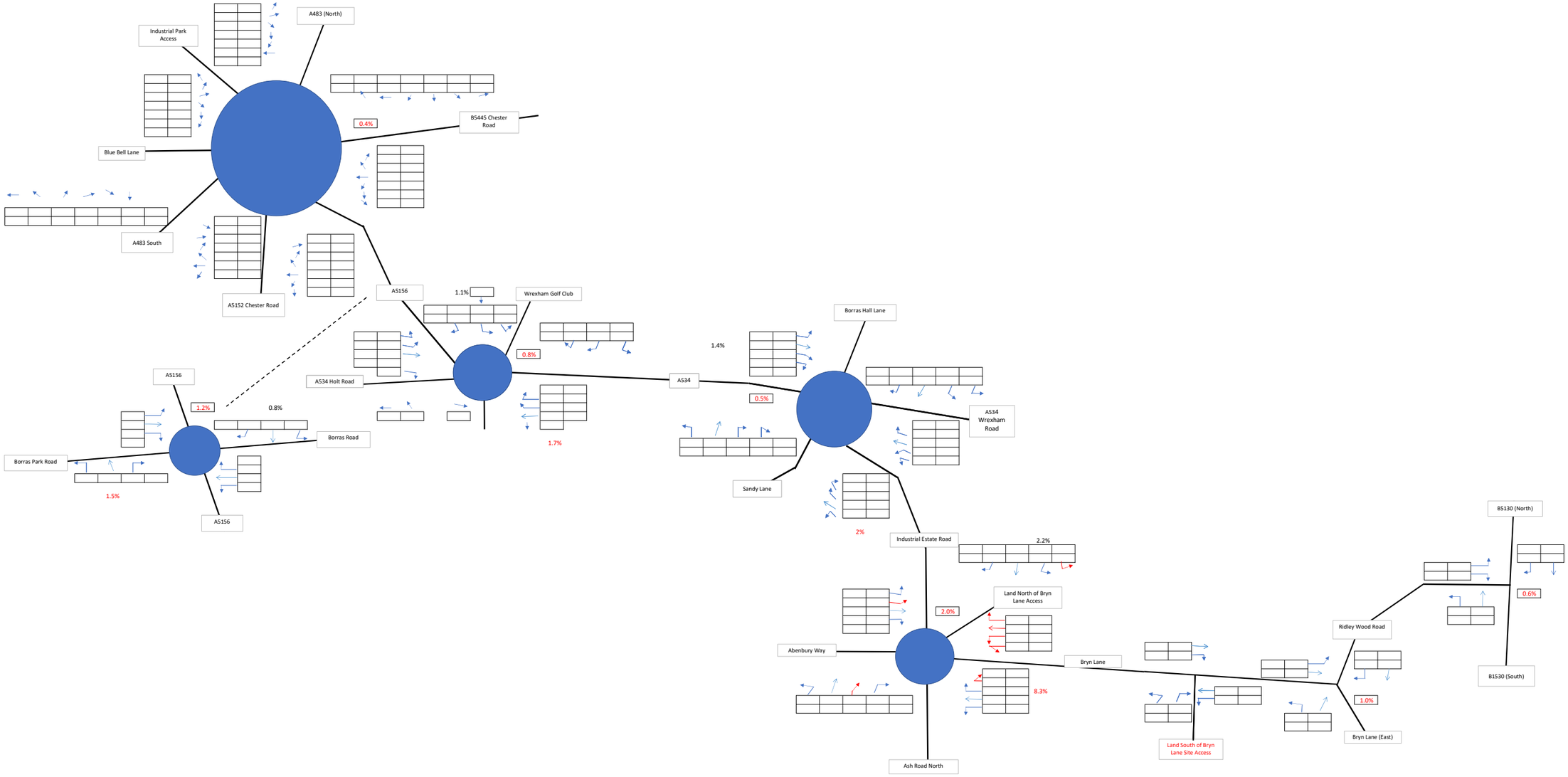


Figure 26 - 2030 Base Development Impact
PM Peak: 1630-1730

Notes: 123 PCUs
Committed Developments Included Except Utopia & KSS2



Appendix TN5 – PICADY Output

Cora IHT Ltd. Adamson House, Towers Business Park, Wilmslow Road, Manchester, M20 2YY
Email: toan.chau@coraiht.com
Registered in England No 10321930

Junctions 10

PICADY 10 - Priority Intersection Module

Version: 10.0.1.1519
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The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution

Filename: Site Access, Bryn Lane - Apr 2026.j10
Path: D:\Cora IHT\South of Bryn Lane, Wrexham\Apr 2026
Report generation date: 10/04/2026 14:43:31

»2030 Base + Development + Committed, AM
»2030 Base + Development + Committed, PM
»2037 Base + Development + Committed, AM
»2037 Base + Development + Committed, PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	2030 Base + Development + Committed									
Stream B-AC	D1	0.0	6.19	0.03	A	D2	0.1	6.88	0.09	A
Stream C-AB		0.2	7.03	0.13	A		0.0	7.15	0.03	A
	2037 Base + Development + Committed									
Stream B-AC	D3	0.0	6.23	0.03	A	D4	0.1	6.94	0.09	A
Stream C-AB		0.2	7.04	0.13	A		0.0	7.19	0.03	A

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

File summary

File Description

Title	Site Access / Bryn Lane
Location	Wrexham
Site number	
Date	05/05/2023
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	LAPTOP-DTQ9HGBB\mchau
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

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2030 Base + Development + Committed	AM	ONE HOUR	07:45	09:15	15
D2	2030 Base + Development + Committed	PM	ONE HOUR	16:15	17:45	15
D3	2037 Base + Development + Committed	AM	ONE HOUR	07:45	09:15	15
D4	2037 Base + Development + Committed	PM	ONE HOUR	16:15	17:45	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2030 Base + Development + Committed, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		0.79	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.79	A

Arms

Arms

Arm	Name	Description	Arm type
A	Bryn Lane (East)		Major
B	Site Access		Minor
C	Bryn Lane (West)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	6.90			80.0	✓	1.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	4.90	30	30

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	598	0.105	0.264	0.166	0.378
B-C	765	0.113	0.285	-	-
C-B	620	0.231	0.231	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2030 Base + Development + Committed	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	303	100.000
B		✓	14	100.000
C		✓	416	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	17	286
	B	3	0	11
	C	350	66	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	18
	B	0	0	0
	C	7	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.03	6.19	0.0	A
C-AB	0.13	7.03	0.2	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	11	638	0.017	10	0.0	5.739	A
C-AB	52	591	0.088	51	0.1	6.687	A
C-A	261			261			
A-B	13			13			
A-C	215			215			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	13	621	0.020	13	0.0	5.920	A
C-AB	63	591	0.107	63	0.1	6.842	A
C-A	311			311			
A-B	15			15			
A-C	257			257			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	15	597	0.026	15	0.0	6.194	A
C-AB	80	594	0.134	79	0.2	7.023	A
C-A	378			378			
A-B	19			19			
A-C	315			315			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	15	597	0.026	15	0.0	6.194	A
C-AB	80	595	0.134	80	0.2	7.027	A
C-A	378			378			
A-B	19			19			
A-C	315			315			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	13	621	0.020	13	0.0	5.923	A
C-AB	63	592	0.106	63	0.1	6.850	A
C-A	311			311			
A-B	15			15			
A-C	257			257			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	11	638	0.017	11	0.0	5.743	A
C-AB	52	591	0.087	52	0.1	6.698	A
C-A	261			261			
A-B	13			13			
A-C	215			215			

2030 Base + Development + Committed, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		0.54	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.54	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2030 Base + Development + Committed	PM	ONE HOUR	16:15	17:45	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	434	100.000
B		✓	45	100.000
C		✓	261	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	3	431
	B	9	0	36
	C	249	12	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	6
	B	0	0	0
	C	6	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.09	6.88	0.1	A
C-AB	0.03	7.15	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	34	621	0.055	34	0.1	6.124	A
C-AB	9	548	0.017	9	0.0	6.682	A
C-A	187			187			
A-B	2			2			
A-C	324			324			

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	40	601	0.067	40	0.1	6.419	A
C-AB	11	535	0.020	11	0.0	6.874	A
C-A	224			224			
A-B	3			3			
A-C	387			387			

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	50	573	0.086	49	0.1	6.878	A
C-AB	13	517	0.026	13	0.0	7.152	A
C-A	274			274			
A-B	3			3			
A-C	475			475			

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	50	573	0.086	50	0.1	6.878	A
C-AB	13	517	0.026	13	0.0	7.155	A
C-A	274			274			
A-B	3			3			
A-C	475			475			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	40	601	0.067	41	0.1	6.424	A
C-AB	11	535	0.020	11	0.0	6.875	A
C-A	224			224			
A-B	3			3			
A-C	387			387			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	34	621	0.055	34	0.1	6.129	A
C-AB	9	548	0.017	9	0.0	6.682	A
C-A	187			187			
A-B	2			2			
A-C	324			324			

2037 Base + Development + Committed, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		0.78	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.78	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2037 Base + Development + Committed	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	312	100.000
B		✓	14	100.000
C		✓	427	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	17	295
	B	3	0	11
	C	361	66	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	18
	B	0	0	0
	C	7	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.03	6.23	0.0	A
C-AB	0.13	7.04	0.2	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	11	635	0.017	10	0.0	5.762	A
C-AB	52	590	0.088	51	0.1	6.698	A
C-A	270			270			
A-B	13			13			
A-C	222			222			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	13	618	0.020	13	0.0	5.949	A
C-AB	63	590	0.107	63	0.1	6.854	A
C-A	321			321			
A-B	15			15			
A-C	265			265			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	15	593	0.026	15	0.0	6.234	A
C-AB	80	594	0.134	80	0.2	7.034	A
C-A	390			390			
A-B	19			19			
A-C	325			325			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	15	593	0.026	15	0.0	6.234	A
C-AB	80	594	0.134	80	0.2	7.041	A
C-A	390			390			
A-B	19			19			
A-C	325			325			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	13	618	0.020	13	0.0	5.952	A
C-AB	63	591	0.107	63	0.1	6.862	A
C-A	321			321			
A-B	15			15			
A-C	265			265			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	11	635	0.017	11	0.0	5.763	A
C-AB	52	590	0.088	52	0.1	6.709	A
C-A	270			270			
A-B	13			13			
A-C	222			222			

2037 Base + Development + Committed, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		0.53	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.53	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2037 Base + Development + Committed	PM	ONE HOUR	16:15	17:45	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	447	100.000
B		✓	45	100.000
C		✓	268	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	3	444
	B	9	0	36
	C	256	12	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	6
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.09	6.94	0.1	A
C-AB	0.03	7.19	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	34	618	0.055	34	0.1	6.152	A
C-AB	9	546	0.017	9	0.0	6.706	A
C-A	193			193			
A-B	2			2			
A-C	334			334			

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	40	597	0.068	40	0.1	6.462	A
C-AB	11	532	0.020	11	0.0	6.904	A
C-A	230			230			
A-B	3			3			
A-C	399			399			

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	50	568	0.087	49	0.1	6.938	A
C-AB	13	514	0.026	13	0.0	7.190	A
C-A	282			282			
A-B	3			3			
A-C	489			489			

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	50	568	0.087	50	0.1	6.938	A
C-AB	13	514	0.026	13	0.0	7.193	A
C-A	282			282			
A-B	3			3			
A-C	489			489			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	40	597	0.068	41	0.1	6.464	A
C-AB	11	532	0.020	11	0.0	6.908	A
C-A	230			230			
A-B	3			3			
A-C	399			399			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	34	618	0.055	34	0.1	6.159	A
C-AB	9	546	0.017	9	0.0	6.709	A
C-A	193			193			
A-B	2			2			
A-C	334			334			

Appendix TN6 – ARCADY Output

Cora IHT Ltd. Adamson House, Towers Business Park, Wilmslow Road, Manchester, M20 2YY
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Registered in England No 10321930

Junctions 10

ARCADY 10 - Roundabout Module

Version: 10.0.1.1519
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The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution

Filename: Industrial Estate Road, Wrexham ARCADY (Existing) - calib v2.j10
Path: D:\Cora IHT\South of Bryn Lane, Wrexham\Apr 2026
Report generation date: 13/04/2026 09:35:36

»2023 Base, AM
»2023 Base, PM
»2030 Base, AM
»2030 Base, PM
»2030 Base + Committed, AM
»2030 Base + Committed, PM
»2030 Base + Committed + Development, AM
»2030 Base + Committed + Development, PM
»2030 Base + Development, AM
»2030 Base + Development, PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	2023 Base									
1 - Bryn Lane	D1	0.4	5.61	0.23	A	D2	0.3	3.15	0.22	A
2 - Ash Road North		0.3	6.86	0.20	A		4.5	19.83	0.82	C
3 - Abenbury Way		0.3	4.14	0.24	A		8.0	53.52	0.92	F
4 - Industrial Estate Road		1.8	4.05	0.63	A		0.3	1.97	0.20	A
	2030 Base									
1 - Bryn Lane	D3	0.4	6.00	0.25	A	D4	0.3	3.22	0.23	A
2 - Ash Road North		0.3	7.26	0.21	A		6.7	28.87	0.88	D
3 - Abenbury Way		0.3	4.18	0.25	A		19.3	112.04	1.02	F
4 - Industrial Estate Road		2.0	4.40	0.66	A		0.3	1.99	0.21	A
	2030 Base + Committed									
1 - Bryn Lane	D5	0.6	6.95	0.33	A	D6	0.5	3.58	0.31	A
2 - Ash Road North		0.4	8.02	0.23	A		18.7	76.54	0.99	F
3 - Abenbury Way		0.4	4.43	0.26	A		46.5	251.68	1.17	F
4 - Industrial Estate Road		2.4	5.05	0.70	A		0.4	2.08	0.24	A
	2030 Base + Committed + Development									
1 - Bryn Lane	D7	0.6	7.10	0.35	A	D8	0.5	3.72	0.34	A
2 - Ash Road North		0.4	8.15	0.23	A		26.9	104.68	1.02	F
3 - Abenbury Way		0.4	4.47	0.26	A		53.3	293.75	1.20	F
4 - Industrial Estate Road		2.8	5.59	0.73	A		0.4	2.09	0.25	A
	2030 Base + Development									
1 - Bryn Lane	D9	0.4	6.13	0.26	A	D10	0.4	3.33	0.26	A
2 - Ash Road North		0.4	7.37	0.21	A		8.4	36.53	0.91	E
3 - Abenbury Way		0.3	4.22	0.25	A		26.6	147.76	1.06	F
4 - Industrial Estate Road		2.3	4.80	0.69	A		0.3	2.01	0.21	A

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

File summary

File Description

Title	Industrial Estate Road / Bryn Lane / Ash Road North / Abenbury Way
Location	Wrexham
Site number	
Date	09/02/2023
Version	
Status	(new file)
Identifier	
Client	LIDL
Jobnumber	
Enumerator	LAPTOP-DTQ9HGBB\mchau
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

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2023 Base	AM	ONE HOUR	07:45	09:15	15
D2	2023 Base	PM	ONE HOUR	16:15	17:45	15
D3	2030 Base	AM	ONE HOUR	07:45	09:15	15
D4	2030 Base	PM	ONE HOUR	16:15	17:45	15
D5	2030 Base + Committed	AM	ONE HOUR	07:45	09:15	15
D6	2030 Base + Committed	PM	ONE HOUR	16:15	17:45	15
D7	2030 Base + Committed + Development	AM	ONE HOUR	07:45	09:15	15
D8	2030 Base + Committed + Development	PM	ONE HOUR	16:15	17:45	15
D9	2030 Base + Development	AM	ONE HOUR	07:45	09:15	15
D10	2030 Base + Development	PM	ONE HOUR	16:15	17:45	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2023 Base, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	4.43	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.43	A

Arms

Arms

Arm	Name	Description	No give-way line
1	Bryn Lane		
2	Ash Road North		
3	Abenbury Way		
4	Industrial Estate Road		

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Entry only	Exit only
1 - Bryn Lane	3.60	7.00	17.7	40.7	59.7	34.6		
2 - Ash Road North	3.60	7.50	21.0	10.0	59.7	35.2		
3 - Abenbury Way	3.60	5.00	5.0	60.3	59.7	34.5		
4 - Industrial Estate Road	7.00	9.70	7.5	48.0	59.7	34.2		

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final slope	Final intercept (PCU/hr)
1 - Bryn Lane				0.569	1744
2 - Ash Road North	✓	0.780	1425	0.780	1425
3 - Abenbury Way	✓	0.630	1365	0.630	1365
4 - Industrial Estate Road				0.708	2536

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2023 Base	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Bryn Lane		✓	206	100.000
2 - Ash Road North		✓	151	100.000
3 - Abenbury Way		✓	260	100.000
4 - Industrial Estate Road		✓	1422	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Bryn Lane	2 - Ash Road North	3 - Abenbury Way	4 - Industrial Estate Road
From	1 - Bryn Lane	0	49	41	116
	2 - Ash Road North	4	1	10	136
	3 - Abenbury Way	19	21	0	220
	4 - Industrial Estate Road	232	676	500	14

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Bryn Lane	2 - Ash Road North	3 - Abenbury Way	4 - Industrial Estate Road
From	1 - Bryn Lane	0	2	11	30
	2 - Ash Road North	0	0	25	32
	3 - Abenbury Way	11	24	30	0
	4 - Industrial Estate Road	6	4	7	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - Bryn Lane	0.23	5.61	0.4	A
2 - Ash Road North	0.20	6.86	0.3	A
3 - Abenbury Way	0.24	4.14	0.3	A
4 - Industrial Estate Road	0.63	4.05	1.8	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Bryn Lane	155	910	1227	0.126	154	0.2	3.967	A
2 - Ash Road North	114	504	1032	0.110	113	0.2	5.093	A
3 - Abenbury Way	196	203	1237	0.158	195	0.2	3.534	A
4 - Industrial Estate Road	1071	34	2512	0.426	1067	0.8	2.619	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Bryn Lane	185	1089	1125	0.165	185	0.2	4.526	A
2 - Ash Road North	136	603	955	0.142	136	0.2	5.715	A
3 - Abenbury Way	234	243	1212	0.193	234	0.2	3.766	A
4 - Industrial Estate Road	1278	40	2507	0.510	1277	1.1	3.079	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Bryn Lane	227	1332	987	0.230	226	0.4	5.596	A
2 - Ash Road North	166	737	850	0.196	166	0.3	6.845	A
3 - Abenbury Way	286	298	1177	0.243	286	0.3	4.132	A
4 - Industrial Estate Road	1566	49	2501	0.626	1563	1.7	4.031	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Bryn Lane	227	1334	985	0.230	227	0.4	5.612	A
2 - Ash Road North	166	739	849	0.196	166	0.3	6.863	A
3 - Abenbury Way	286	298	1177	0.243	286	0.3	4.135	A
4 - Industrial Estate Road	1566	50	2501	0.626	1566	1.8	4.053	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Bryn Lane	185	1092	1123	0.165	186	0.2	4.543	A
2 - Ash Road North	136	605	953	0.142	136	0.2	5.736	A
3 - Abenbury Way	234	244	1211	0.193	234	0.2	3.771	A
4 - Industrial Estate Road	1278	41	2507	0.510	1281	1.1	3.097	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Bryn Lane	155	914	1225	0.127	155	0.2	3.983	A
2 - Ash Road North	114	506	1030	0.110	114	0.2	5.112	A
3 - Abenbury Way	196	204	1236	0.158	196	0.2	3.544	A
4 - Industrial Estate Road	1071	34	2512	0.426	1072	0.8	2.636	A

2023 Base, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	22.09	C

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	22.09	C

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2023 Base	PM	ONE HOUR	16:15	17:45	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Bryn Lane		✓	306	100.000
2 - Ash Road North		✓	765	100.000
3 - Abenbury Way		✓	527	100.000
4 - Industrial Estate Road		✓	449	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Bryn Lane	2 - Ash Road North	3 - Abenbury Way	4 - Industrial Estate Road
From	1 - Bryn Lane	0	10	13	283
	2 - Ash Road North	15	0	9	741
	3 - Abenbury Way	18	4	0	505
	4 - Industrial Estate Road	124	155	153	17

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Bryn Lane	2 - Ash Road North	3 - Abenbury Way	4 - Industrial Estate Road
From	1 - Bryn Lane	0	11	30	4
	2 - Ash Road North	7	0	13	2
	3 - Abenbury Way	6	0	4	0
	4 - Industrial Estate Road	5	14	12	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - Bryn Lane	0.22	3.15	0.3	A
2 - Ash Road North	0.82	19.83	4.5	C
3 - Abenbury Way	0.92	53.52	8.0	F
4 - Industrial Estate Road	0.20	1.97	0.3	A

Main Results for each time segment

16:15 - 16:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Bryn Lane	230	247	1604	0.144	230	0.2	2.752	A
2 - Ash Road North	576	350	1152	0.500	572	1.0	6.300	A
3 - Abenbury Way	397	790	867	0.458	393	0.8	7.563	A
4 - Industrial Estate Road	338	28	2516	0.134	337	0.2	1.819	A

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Bryn Lane	275	296	1576	0.175	275	0.2	2.907	A
2 - Ash Road North	688	419	1098	0.626	685	1.7	8.845	A
3 - Abenbury Way	474	947	769	0.616	471	1.6	11.995	B
4 - Industrial Estate Road	404	33	2513	0.161	403	0.2	1.879	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Bryn Lane	337	362	1538	0.219	337	0.3	3.148	A
2 - Ash Road North	842	513	1025	0.822	832	4.2	18.158	C
3 - Abenbury Way	580	1152	639	0.908	560	6.6	38.665	E
4 - Industrial Estate Road	494	40	2508	0.197	494	0.3	1.968	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Bryn Lane	337	362	1538	0.219	337	0.3	3.149	A
2 - Ash Road North	842	513	1025	0.822	841	4.5	19.826	C
3 - Abenbury Way	580	1162	633	0.917	574	8.0	53.523	F
4 - Industrial Estate Road	494	40	2507	0.197	494	0.3	1.969	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Bryn Lane	275	296	1576	0.175	275	0.2	2.912	A
2 - Ash Road North	688	419	1098	0.626	698	1.8	9.446	A
3 - Abenbury Way	474	960	760	0.623	499	1.7	15.069	C
4 - Industrial Estate Road	404	35	2512	0.161	404	0.2	1.883	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Bryn Lane	230	248	1603	0.144	231	0.2	2.758	A
2 - Ash Road North	576	351	1151	0.500	579	1.0	6.462	A
3 - Abenbury Way	397	798	862	0.460	400	0.9	7.863	A
4 - Industrial Estate Road	338	28	2516	0.134	338	0.2	1.819	A

2030 Base, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	4.75	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.75	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2030 Base	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Bryn Lane		✓	216	100.000
2 - Ash Road North		✓	158	100.000
3 - Abenbury Way		✓	263	100.000
4 - Industrial Estate Road		✓	1494	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Bryn Lane	2 - Ash Road North	3 - Abenbury Way	4 - Industrial Estate Road
From	1 - Bryn Lane	0	51	43	122
	2 - Ash Road North	4	1	10	143
	3 - Abenbury Way	10	22	0	231
	4 - Industrial Estate Road	244	710	525	15

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Bryn Lane	2 - Ash Road North	3 - Abenbury Way	4 - Industrial Estate Road
From	1 - Bryn Lane	0	2	11	30
	2 - Ash Road North	0	0	25	32
	3 - Abenbury Way	11	24	30	0
	4 - Industrial Estate Road	6	4	7	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - Bryn Lane	0.25	6.00	0.4	A
2 - Ash Road North	0.21	7.26	0.3	A
3 - Abenbury Way	0.25	4.18	0.3	A
4 - Industrial Estate Road	0.66	4.40	2.0	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Bryn Lane	163	955	1201	0.135	162	0.2	4.097	A
2 - Ash Road North	119	529	1012	0.117	118	0.2	5.240	A
3 - Abenbury Way	198	213	1231	0.161	197	0.2	3.553	A
4 - Industrial Estate Road	1125	28	2516	0.447	1121	0.8	2.711	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Bryn Lane	194	1143	1094	0.177	194	0.3	4.730	A
2 - Ash Road North	142	633	931	0.153	142	0.2	5.937	A
3 - Abenbury Way	236	256	1204	0.196	236	0.2	3.796	A
4 - Industrial Estate Road	1343	33	2513	0.535	1342	1.2	3.233	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Bryn Lane	238	1399	949	0.251	237	0.4	5.978	A
2 - Ash Road North	174	775	821	0.212	174	0.3	7.238	A
3 - Abenbury Way	290	313	1168	0.248	289	0.3	4.178	A
4 - Industrial Estate Road	1645	41	2507	0.656	1642	2.0	4.365	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Bryn Lane	238	1402	947	0.251	238	0.4	6.004	A
2 - Ash Road North	174	776	820	0.212	174	0.3	7.260	A
3 - Abenbury Way	290	314	1167	0.248	290	0.3	4.184	A
4 - Industrial Estate Road	1645	41	2507	0.656	1645	2.0	4.396	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Bryn Lane	194	1147	1092	0.178	195	0.3	4.749	A
2 - Ash Road North	142	635	929	0.153	142	0.2	5.959	A
3 - Abenbury Way	236	257	1203	0.197	237	0.3	3.804	A
4 - Industrial Estate Road	1343	33	2512	0.535	1346	1.2	3.261	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Bryn Lane	163	960	1198	0.136	163	0.2	4.113	A
2 - Ash Road North	119	532	1010	0.118	119	0.2	5.263	A
3 - Abenbury Way	198	215	1230	0.161	198	0.2	3.561	A
4 - Industrial Estate Road	1125	28	2516	0.447	1126	0.9	2.729	A

2030 Base, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	40.54	E

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	40.54	E

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2030 Base	PM	ONE HOUR	16:15	17:45	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Bryn Lane		✓	321	100.000
2 - Ash Road North		✓	803	100.000
3 - Abenbury Way		✓	553	100.000
4 - Industrial Estate Road		✓	472	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Bryn Lane	2 - Ash Road North	3 - Abenbury Way	4 - Industrial Estate Road
From	1 - Bryn Lane	0	10	14	297
	2 - Ash Road North	16	0	9	778
	3 - Abenbury Way	19	4	0	530
	4 - Industrial Estate Road	130	163	161	18

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Bryn Lane	2 - Ash Road North	3 - Abenbury Way	4 - Industrial Estate Road
From	1 - Bryn Lane	0	11	30	4
	2 - Ash Road North	7	0	13	2
	3 - Abenbury Way	6	0	4	0
	4 - Industrial Estate Road	5	14	12	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - Bryn Lane	0.23	3.22	0.3	A
2 - Ash Road North	0.88	28.87	6.7	D
3 - Abenbury Way	1.02	112.04	19.3	F
4 - Industrial Estate Road	0.21	1.99	0.3	A

Main Results for each time segment

16:15 - 16:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Bryn Lane	242	260	1596	0.151	241	0.2	2.790	A
2 - Ash Road North	605	368	1138	0.531	600	1.1	6.782	A
3 - Abenbury Way	416	830	842	0.494	412	1.0	8.320	A
4 - Industrial Estate Road	355	29	2515	0.141	355	0.2	1.834	A

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Bryn Lane	289	311	1567	0.184	288	0.2	2.958	A
2 - Ash Road North	722	440	1082	0.667	718	2.0	10.038	B
3 - Abenbury Way	497	993	739	0.673	493	2.0	14.429	B
4 - Industrial Estate Road	424	35	2511	0.169	424	0.2	1.898	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Bryn Lane	353	380	1528	0.231	353	0.3	3.221	A
2 - Ash Road North	884	539	1005	0.880	868	6.1	24.402	C
3 - Abenbury Way	609	1204	606	1.004	567	12.4	62.509	F
4 - Industrial Estate Road	520	41	2507	0.207	519	0.3	1.994	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Bryn Lane	353	381	1528	0.231	353	0.3	3.222	A
2 - Ash Road North	884	539	1004	0.880	882	6.7	28.870	D
3 - Abenbury Way	609	1219	597	1.020	581	19.3	112.038	F
4 - Industrial Estate Road	520	42	2507	0.207	520	0.3	1.995	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Bryn Lane	289	312	1567	0.184	289	0.2	2.961	A
2 - Ash Road North	722	441	1081	0.668	740	2.1	11.326	B
3 - Abenbury Way	497	1015	725	0.685	565	2.3	31.181	D
4 - Industrial Estate Road	424	38	2509	0.169	425	0.2	1.904	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Bryn Lane	242	261	1596	0.151	242	0.2	2.796	A
2 - Ash Road North	605	369	1137	0.532	608	1.2	7.009	A
3 - Abenbury Way	416	839	837	0.498	422	1.0	8.802	A
4 - Industrial Estate Road	355	30	2515	0.141	356	0.2	1.838	A

2030 Base + Committed, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	5.42	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.42	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	2030 Base + Committed	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Bryn Lane		✓	286	100.000
2 - Ash Road North		✓	159	100.000
3 - Abenbury Way		✓	263	100.000
4 - Industrial Estate Road		✓	1595	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Bryn Lane	2 - Ash Road North	3 - Abenbury Way	4 - Industrial Estate Road
From	1 - Bryn Lane	0	51	43	192
	2 - Ash Road North	4	1	10	144
	3 - Abenbury Way	10	22	0	231
	4 - Industrial Estate Road	336	719	525	15

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Bryn Lane	2 - Ash Road North	3 - Abenbury Way	4 - Industrial Estate Road
From	1 - Bryn Lane	0	2	11	30
	2 - Ash Road North	0	0	25	32
	3 - Abenbury Way	11	24	30	0
	4 - Industrial Estate Road	6	4	7	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - Bryn Lane	0.33	6.95	0.6	A
2 - Ash Road North	0.23	8.02	0.4	A
3 - Abenbury Way	0.26	4.43	0.4	A
4 - Industrial Estate Road	0.70	5.05	2.4	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Bryn Lane	215	962	1197	0.180	214	0.3	4.426	A
2 - Ash Road North	120	581	972	0.123	119	0.2	5.494	A
3 - Abenbury Way	198	267	1197	0.165	197	0.2	3.670	A
4 - Industrial Estate Road	1201	28	2516	0.477	1197	1.0	2.866	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Bryn Lane	257	1151	1090	0.236	257	0.4	5.226	A
2 - Ash Road North	143	696	882	0.162	143	0.2	6.337	A
3 - Abenbury Way	236	319	1164	0.203	236	0.3	3.959	A
4 - Industrial Estate Road	1434	33	2513	0.571	1432	1.4	3.504	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Bryn Lane	315	1408	943	0.334	314	0.6	6.910	A
2 - Ash Road North	175	851	761	0.230	175	0.4	7.985	A
3 - Abenbury Way	290	391	1119	0.259	289	0.4	4.425	A
4 - Industrial Estate Road	1756	41	2507	0.700	1752	2.4	4.995	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Bryn Lane	315	1411	941	0.334	315	0.6	6.949	A
2 - Ash Road North	175	853	759	0.231	175	0.4	8.022	A
3 - Abenbury Way	290	392	1118	0.259	290	0.4	4.433	A
4 - Industrial Estate Road	1756	41	2507	0.700	1756	2.4	5.047	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Bryn Lane	257	1156	1087	0.237	258	0.4	5.259	A
2 - Ash Road North	143	699	880	0.162	143	0.3	6.370	A
3 - Abenbury Way	236	321	1163	0.203	237	0.3	3.968	A
4 - Industrial Estate Road	1434	33	2512	0.571	1438	1.4	3.545	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Bryn Lane	215	967	1194	0.180	216	0.3	4.451	A
2 - Ash Road North	120	584	969	0.124	120	0.2	5.522	A
3 - Abenbury Way	198	269	1196	0.166	198	0.2	3.682	A
4 - Industrial Estate Road	1201	28	2516	0.477	1203	1.0	2.890	A

2030 Base + Committed, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	86.69	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	86.69	F

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	2030 Base + Committed	PM	ONE HOUR	16:15	17:45	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Bryn Lane		✓	431	100.000
2 - Ash Road North		✓	817	100.000
3 - Abenbury Way		✓	553	100.000
4 - Industrial Estate Road		✓	557	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Bryn Lane	2 - Ash Road North	3 - Abenbury Way	4 - Industrial Estate Road
From	1 - Bryn Lane	0	10	14	407
	2 - Ash Road North	16	0	9	792
	3 - Abenbury Way	19	4	0	530
	4 - Industrial Estate Road	214	164	161	18

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Bryn Lane	2 - Ash Road North	3 - Abenbury Way	4 - Industrial Estate Road
From	1 - Bryn Lane	0	11	30	4
	2 - Ash Road North	7	0	13	2
	3 - Abenbury Way	6	0	4	0
	4 - Industrial Estate Road	5	14	12	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - Bryn Lane	0.31	3.58	0.5	A
2 - Ash Road North	0.99	76.54	18.7	F
3 - Abenbury Way	1.17	251.68	46.5	F
4 - Industrial Estate Road	0.24	2.08	0.4	A

Main Results for each time segment

16:15 - 16:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Bryn Lane	324	261	1596	0.203	323	0.3	2.962	A
2 - Ash Road North	615	450	1074	0.573	610	1.3	7.843	A
3 - Abenbury Way	416	922	784	0.531	412	1.1	9.581	A
4 - Industrial Estate Road	419	29	2515	0.167	418	0.2	1.876	A

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Bryn Lane	387	312	1567	0.247	387	0.3	3.199	A
2 - Ash Road North	734	539	1005	0.731	729	2.6	13.118	B
3 - Abenbury Way	497	1103	670	0.742	491	2.7	19.486	C
4 - Industrial Estate Road	501	35	2511	0.199	501	0.3	1.957	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Bryn Lane	475	381	1527	0.311	474	0.5	3.580	A
2 - Ash Road North	900	660	910	0.988	855	13.7	47.509	E
3 - Abenbury Way	609	1313	538	1.133	522	24.3	111.726	F
4 - Industrial Estate Road	613	38	2509	0.244	613	0.4	2.076	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Bryn Lane	475	381	1527	0.311	475	0.5	3.584	A
2 - Ash Road North	900	661	910	0.989	879	18.7	76.542	F
3 - Abenbury Way	609	1338	522	1.166	520	46.5	251.683	F
4 - Industrial Estate Road	613	39	2509	0.244	613	0.4	2.076	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Bryn Lane	387	313	1566	0.247	388	0.3	3.206	A
2 - Ash Road North	734	540	1004	0.732	798	3.0	22.723	C
3 - Abenbury Way	497	1171	627	0.793	614	17.3	191.190	F
4 - Industrial Estate Road	501	41	2507	0.200	501	0.3	1.963	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Bryn Lane	324	262	1595	0.203	325	0.3	2.970	A
2 - Ash Road North	615	452	1072	0.574	621	1.4	8.268	A
3 - Abenbury Way	416	935	776	0.536	481	1.2	15.071	C
4 - Industrial Estate Road	419	32	2513	0.167	420	0.2	1.882	A

2030 Base + Committed + Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	5.83	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.83	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D7	2030 Base + Committed + Development	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Bryn Lane		✓	297	100.000
2 - Ash Road North		✓	159	100.000
3 - Abenbury Way		✓	263	100.000
4 - Industrial Estate Road		✓	1661	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Bryn Lane	2 - Ash Road North	3 - Abenbury Way	4 - Industrial Estate Road
From	1 - Bryn Lane	0	51	43	203
	2 - Ash Road North	4	1	10	144
	3 - Abenbury Way	10	22	0	231
	4 - Industrial Estate Road	402	719	525	15

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Bryn Lane	2 - Ash Road North	3 - Abenbury Way	4 - Industrial Estate Road
From	1 - Bryn Lane	0	2	11	30
	2 - Ash Road North	0	0	25	32
	3 - Abenbury Way	11	24	30	0
	4 - Industrial Estate Road	6	4	7	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - Bryn Lane	0.35	7.10	0.6	A
2 - Ash Road North	0.23	8.15	0.4	A
3 - Abenbury Way	0.26	4.47	0.4	A
4 - Industrial Estate Road	0.73	5.59	2.8	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Bryn Lane	224	962	1197	0.187	222	0.3	4.475	A
2 - Ash Road North	120	589	965	0.124	119	0.2	5.535	A
3 - Abenbury Way	198	275	1192	0.166	197	0.2	3.689	A
4 - Industrial Estate Road	1250	28	2516	0.497	1246	1.0	2.977	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Bryn Lane	267	1151	1090	0.245	267	0.4	5.302	A
2 - Ash Road North	143	706	875	0.163	143	0.3	6.405	A
3 - Abenbury Way	236	329	1158	0.204	236	0.3	3.986	A
4 - Industrial Estate Road	1493	33	2513	0.594	1491	1.5	3.709	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Bryn Lane	327	1408	944	0.347	326	0.6	7.057	A
2 - Ash Road North	175	863	752	0.233	175	0.4	8.113	A
3 - Abenbury Way	290	403	1111	0.261	289	0.4	4.466	A
4 - Industrial Estate Road	1829	41	2507	0.729	1824	2.8	5.509	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Bryn Lane	327	1411	941	0.347	327	0.6	7.104	A
2 - Ash Road North	175	865	750	0.233	175	0.4	8.153	A
3 - Abenbury Way	290	404	1110	0.261	290	0.4	4.474	A
4 - Industrial Estate Road	1829	41	2507	0.729	1829	2.8	5.588	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Bryn Lane	267	1156	1087	0.246	268	0.4	5.339	A
2 - Ash Road North	143	709	872	0.164	143	0.3	6.442	A
3 - Abenbury Way	236	331	1156	0.204	237	0.3	3.996	A
4 - Industrial Estate Road	1493	33	2512	0.594	1498	1.6	3.757	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Bryn Lane	224	967	1194	0.187	224	0.3	4.503	A
2 - Ash Road North	120	593	963	0.124	120	0.2	5.565	A
3 - Abenbury Way	198	277	1191	0.166	198	0.2	3.701	A
4 - Industrial Estate Road	1250	28	2516	0.497	1253	1.0	3.005	A

2030 Base + Committed + Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	104.23	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	104.23	F

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D8	2030 Base + Committed + Development	PM	ONE HOUR	16:15	17:45	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Bryn Lane		✓	467	100.000
2 - Ash Road North		✓	817	100.000
3 - Abenbury Way		✓	553	100.000
4 - Industrial Estate Road		✓	570	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Bryn Lane	2 - Ash Road North	3 - Abenbury Way	4 - Industrial Estate Road
From	1 - Bryn Lane	0	10	14	443
	2 - Ash Road North	16	0	9	792
	3 - Abenbury Way	19	4	0	530
	4 - Industrial Estate Road	227	164	161	18

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Bryn Lane	2 - Ash Road North	3 - Abenbury Way	4 - Industrial Estate Road
From	1 - Bryn Lane	0	11	30	4
	2 - Ash Road North	7	0	13	2
	3 - Abenbury Way	6	0	4	0
	4 - Industrial Estate Road	5	14	12	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - Bryn Lane	0.34	3.72	0.5	A
2 - Ash Road North	1.02	104.68	26.9	F
3 - Abenbury Way	1.20	293.75	53.3	F
4 - Industrial Estate Road	0.25	2.09	0.4	A

Main Results for each time segment

16:15 - 16:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Bryn Lane	352	261	1596	0.220	350	0.3	3.025	A
2 - Ash Road North	615	477	1053	0.584	609	1.4	8.203	A
3 - Abenbury Way	416	949	767	0.543	412	1.2	10.018	B
4 - Industrial Estate Road	429	29	2515	0.171	428	0.2	1.883	A

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Bryn Lane	420	312	1567	0.268	419	0.4	3.287	A
2 - Ash Road North	734	571	979	0.750	729	2.9	14.336	B
3 - Abenbury Way	497	1135	650	0.765	490	3.0	21.602	C
4 - Industrial Estate Road	512	35	2512	0.204	512	0.3	1.966	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Bryn Lane	514	381	1527	0.337	514	0.5	3.718	A
2 - Ash Road North	900	700	879	1.023	840	17.8	58.518	F
3 - Abenbury Way	609	1338	522	1.166	510	27.6	127.058	F
4 - Industrial Estate Road	628	38	2509	0.250	627	0.4	2.089	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Bryn Lane	514	381	1527	0.337	514	0.5	3.721	A
2 - Ash Road North	900	700	879	1.024	863	26.9	104.680	F
3 - Abenbury Way	609	1361	508	1.200	506	53.3	293.746	F
4 - Industrial Estate Road	628	38	2509	0.250	628	0.4	2.089	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Bryn Lane	420	313	1566	0.268	420	0.4	3.294	A
2 - Ash Road North	734	572	979	0.751	829	3.4	36.713	E
3 - Abenbury Way	497	1235	587	0.847	576	33.5	267.806	F
4 - Industrial Estate Road	512	40	2508	0.204	513	0.3	1.971	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Bryn Lane	352	262	1595	0.220	352	0.3	3.034	A
2 - Ash Road North	615	479	1051	0.585	623	1.5	8.732	A
3 - Abenbury Way	416	963	758	0.549	545	1.3	30.744	D
4 - Industrial Estate Road	429	35	2511	0.171	429	0.2	1.890	A

2030 Base + Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	5.05	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.05	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D9	2030 Base + Development	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Bryn Lane		✓	227	100.000
2 - Ash Road North		✓	158	100.000
3 - Abenbury Way		✓	263	100.000
4 - Industrial Estate Road		✓	1560	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Bryn Lane	2 - Ash Road North	3 - Abenbury Way	4 - Industrial Estate Road
From	1 - Bryn Lane	0	51	43	133
	2 - Ash Road North	4	1	10	143
	3 - Abenbury Way	10	22	0	231
	4 - Industrial Estate Road	310	710	525	15

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Bryn Lane	2 - Ash Road North	3 - Abenbury Way	4 - Industrial Estate Road
From	1 - Bryn Lane	0	2	11	30
	2 - Ash Road North	0	0	25	32
	3 - Abenbury Way	11	24	30	0
	4 - Industrial Estate Road	6	4	7	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - Bryn Lane	0.26	6.13	0.4	A
2 - Ash Road North	0.21	7.37	0.4	A
3 - Abenbury Way	0.25	4.22	0.3	A
4 - Industrial Estate Road	0.69	4.80	2.3	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Bryn Lane	171	955	1201	0.142	170	0.2	4.147	A
2 - Ash Road North	119	537	1006	0.118	118	0.2	5.281	A
3 - Abenbury Way	198	222	1225	0.162	197	0.2	3.571	A
4 - Industrial Estate Road	1174	28	2516	0.467	1171	0.9	2.812	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Bryn Lane	204	1143	1094	0.187	204	0.3	4.803	A
2 - Ash Road North	142	643	924	0.154	142	0.2	5.995	A
3 - Abenbury Way	236	266	1198	0.197	236	0.2	3.820	A
4 - Industrial Estate Road	1402	33	2513	0.558	1401	1.3	3.407	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Bryn Lane	250	1399	949	0.263	249	0.4	6.110	A
2 - Ash Road North	174	787	811	0.214	173	0.4	7.343	A
3 - Abenbury Way	290	325	1160	0.250	289	0.3	4.215	A
4 - Industrial Estate Road	1718	41	2507	0.685	1714	2.3	4.757	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Bryn Lane	250	1402	947	0.264	250	0.4	6.135	A
2 - Ash Road North	174	788	810	0.215	174	0.4	7.368	A
3 - Abenbury Way	290	326	1160	0.250	290	0.3	4.221	A
4 - Industrial Estate Road	1718	41	2507	0.685	1718	2.3	4.802	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Bryn Lane	204	1147	1092	0.187	205	0.3	4.825	A
2 - Ash Road North	142	645	922	0.154	142	0.2	6.022	A
3 - Abenbury Way	236	267	1197	0.198	237	0.3	3.829	A
4 - Industrial Estate Road	1402	33	2512	0.558	1406	1.3	3.441	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Bryn Lane	171	960	1198	0.143	171	0.2	4.165	A
2 - Ash Road North	119	540	1004	0.118	119	0.2	5.301	A
3 - Abenbury Way	198	223	1224	0.162	198	0.2	3.582	A
4 - Industrial Estate Road	1174	28	2516	0.467	1176	0.9	2.834	A

2030 Base + Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	51.50	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	51.50	F

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D10	2030 Base + Development	PM	ONE HOUR	16:15	17:45	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Bryn Lane		✓	357	100.000
2 - Ash Road North		✓	803	100.000
3 - Abenbury Way		✓	553	100.000
4 - Industrial Estate Road		✓	485	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Bryn Lane	2 - Ash Road North	3 - Abenbury Way	4 - Industrial Estate Road
From	1 - Bryn Lane	0	10	14	333
	2 - Ash Road North	16	0	9	778
	3 - Abenbury Way	19	4	0	530
	4 - Industrial Estate Road	143	163	161	18

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Bryn Lane	2 - Ash Road North	3 - Abenbury Way	4 - Industrial Estate Road
From	1 - Bryn Lane	0	11	30	4
	2 - Ash Road North	7	0	13	2
	3 - Abenbury Way	6	0	4	0
	4 - Industrial Estate Road	5	14	12	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - Bryn Lane	0.26	3.33	0.4	A
2 - Ash Road North	0.91	36.53	8.4	E
3 - Abenbury Way	1.06	147.76	26.6	F
4 - Industrial Estate Road	0.21	2.01	0.3	A

Main Results for each time segment

16:15 - 16:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Bryn Lane	269	260	1596	0.168	268	0.2	2.844	A
2 - Ash Road North	605	395	1117	0.541	600	1.2	7.053	A
3 - Abenbury Way	416	857	825	0.504	412	1.0	8.651	A
4 - Industrial Estate Road	365	29	2515	0.145	364	0.2	1.840	A

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Bryn Lane	321	311	1567	0.205	321	0.3	3.032	A
2 - Ash Road North	722	473	1056	0.683	718	2.1	10.756	B
3 - Abenbury Way	497	1025	719	0.691	493	2.1	15.626	C
4 - Industrial Estate Road	436	35	2511	0.174	436	0.2	1.907	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Bryn Lane	393	380	1528	0.257	393	0.4	3.330	A
2 - Ash Road North	884	579	974	0.908	863	7.4	28.972	D
3 - Abenbury Way	609	1239	584	1.042	555	15.6	75.359	F
4 - Industrial Estate Road	534	40	2508	0.213	534	0.3	2.006	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Bryn Lane	393	381	1528	0.257	393	0.4	3.330	A
2 - Ash Road North	884	579	973	0.908	880	8.4	36.527	E
3 - Abenbury Way	609	1257	573	1.062	565	26.6	147.764	F
4 - Industrial Estate Road	534	41	2507	0.213	534	0.3	2.006	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Bryn Lane	321	312	1567	0.205	321	0.3	3.035	A
2 - Ash Road North	722	473	1056	0.684	746	2.3	12.752	B
3 - Abenbury Way	497	1054	701	0.709	593	2.7	53.912	F
4 - Industrial Estate Road	436	40	2508	0.174	436	0.2	1.913	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Bryn Lane	269	261	1596	0.168	269	0.2	2.848	A
2 - Ash Road North	605	396	1116	0.542	609	1.2	7.317	A
3 - Abenbury Way	416	866	819	0.508	423	1.1	9.249	A
4 - Industrial Estate Road	365	30	2515	0.145	365	0.2	1.844	A

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