ttp consulting

transport planning specialists

Broughton Unit Trust (Capital)

Broughton Shopping Park – Proposed new Discount Foodstore, Northern Quarter

Transport Assessment

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TTP Consulting Ltd
27 Beak Street
London W1F 9RU
Tel: 020 7100 0753

www.ttp-consulting.co.uk

Registered in England: 09931399

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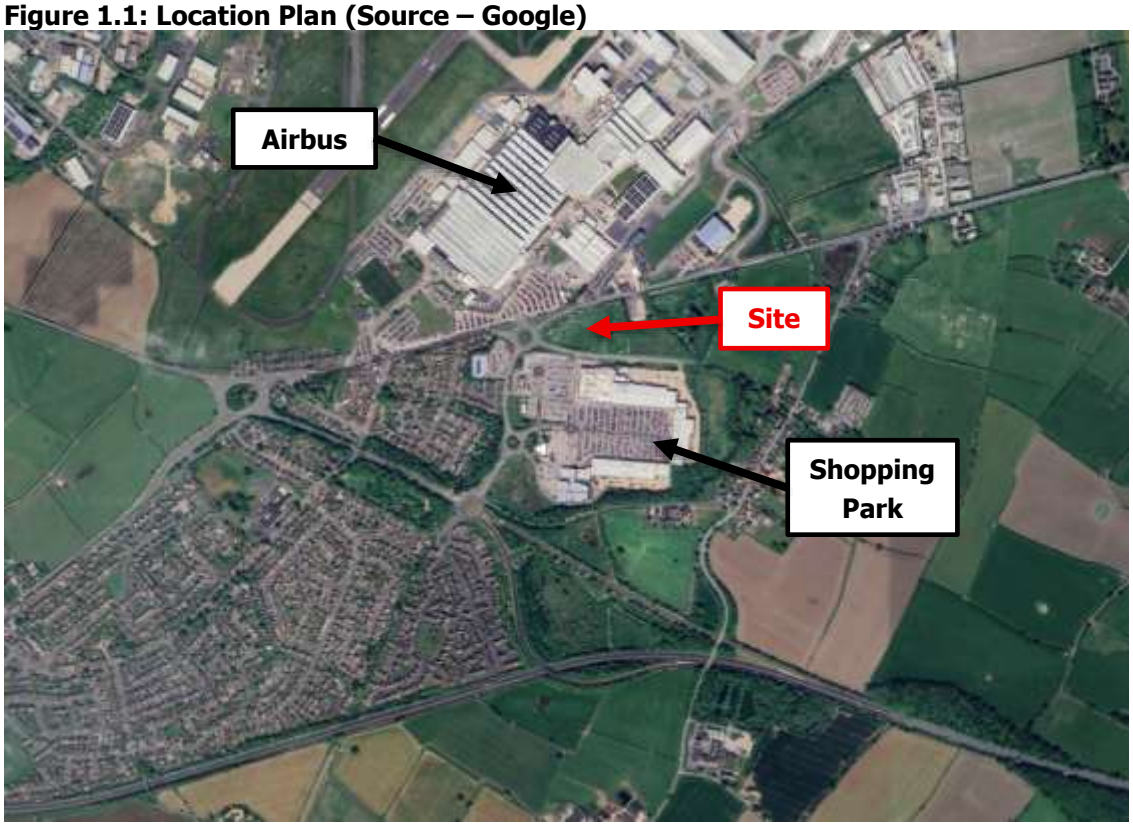
Appendices

1 INTRODUCTION

1.1 TTP Consulting is retained to provide highways and transport advice in relation to the proposals for the Northern Quarter at Broughton Shopping Park in North Wales where it is proposed to construct a new Discount Food Store to be occupied by Lidl on the parcel of land located between the existing Shopping Centre and the A5104.

Figure 1.1: Location Plan (Source – Google)



1.2 The application Site, hereafter referred to as the Site, encompasses the western part of the site which was previously granted consent under Appeal for a development that comprised of a medical centre and an 80 bedroom hotel along with four drive-thru units and a pub / restaurant, with parking for up to 381 cars.

1.3 The proposals associated with this application include the construction of new Discount Food Store with parking for up to 138 cars as illustrated on the plan in **Appendix A**. The facility would for the most offer an alternative to existing stores in the area along with draw trade for customers from the wider Park with the local area already containing a relatively significant quantum of retail which is outlined in more detail in Section 2. This report provides an overview of the proposed development in highways terms and has been prepared with the benefit of a Site visit along with feedback from a pre-application submission. It concludes that the proposals would not result in any material changes in conditions on the local or wider highway network.

2 POLICY

2.1 Consideration has been given to how the proposed arrangement accords with local and regional transport policy.

2.2 Technical Advice Note 18 (TAN 18) sets out the need for all TA supporting documents in Wales to include a Transport Implementation Strategy (TIS), which should include the following information in respect of each particular development proposal:

- Details of how the development and the TIS relate to transport planning policies and strategy. TIS's are intended to incorporate all the elements of a Travel Plan (TP) and to ensure that these are integrated with design elements of the new development;
- A set of objectives and targets relating to managing travel demand for the development;
- A framework for monitoring the objectives and targets, including the future modal split of transport to the development; and
- Details of measures proposed to improve access by public transport, walking and cycling to reduce the number and impacts of motorised journeys associated with the development.

2.3 This Transport Assessment is effectively the TIS for the development and it has been prepared having regard to the advice from TAN 18, as outlined above.

Planning Policy Wales (PPW)

2.4 In terms of the national transport policy that is relevant to the TIS, the latest 12th edition of PPW was published in February 2024 by the Welsh Government and sets out a framework for the Welsh planning authorities to prepare their development plans.

2.5 Paragraph 4.1.1 states that: *"The planning system should enable people to access jobs and services through shorter, more efficient and sustainable journeys, by walking, cycling and public transport. By influencing the location, scale, density, mix of uses and design of new development, the planning system can improve choice in transport and secure accessibility in a way which supports sustainable development, increases physical activity, improves health and helps to tackle the causes of climate change and airborne pollution by:*

- *Brining services to people to reduce the need to travel. This is not about preventing travel altogether, it is about planning ahead for better physical and digital connectivity to support access to more local services, and more home and remote working. If more people can walk and cycle for everyday trips, we will reduce our dependency on cars.*

- *Allowing people and goods to move easily from door-to-door by accessible, sustainable and efficient transport. To achieve this, we will need to invest in reliable, efficient and affordable transport services that people want to use, can use and do use. We also need the transport infrastructure to support those services. We will make sure our transport infrastructure is safe, accessible, well-maintained and future-proofed, to adapt to climate change.*
- *Where we need new transport infrastructure, we will use the sustainable transport hierarchy to give priority to meeting the demand for travel by walking, cycling and public transport ahead of private motor vehicles.*
- *Encouraging people to make the change to more sustainable transport. If we are going to meet our climate change targets, we also need people to travel differently. Which means making it easier to do the right thing. We will do this by making low-carbon sustainable transport more attractive and more affordable, and by adopting innovations."*

2.6 Paragraph 4.1.4 states that: *"Land use and transport planning must be integrated. The planning system must ensure it enables integration:*

- *within and between different types of transport;*
- *between transport measures and land use planning;*
- *between transport measures and policies to protect and improve the environment; and*
- *between transport measures and policies for education, health, social inclusion and wealth creation."*

2.7 Paragraph 4.1.27 which covers the active travel states that: *"The Active Travel (Wales) Act 2013 makes walking and cycling the preferred option for shorter journeys, particularly everyday journeys, such as to and from a workplace or education establishment, or in order to access health, leisure or other services or facilities. The Active Travel Act requires local authorities to produce Active Travel Network Maps (ATNMs), identifying the walking and cycling routes required to create fully integrated networks for walking and cycling to access work, education, services and facilities.."*

2.8 Paragraph 4.1.42 covers EV charging and states that: "*The provision of electric vehicle charging points should be planned as part of the overall design of a development and should maximise their social, economic and environmental benefits. Charging points must not cause an obstruction to walking or cycling, should be resistant to vandalism, and located where there is good lighting and natural surveillance. Charging infrastructure must, where possible, ensure that it makes full use of renewable energy generation. Regional energy plans (see section 5.9) will assist local authority-led charging infrastructure*."

North Wales Joint Local Transport Plan (2015)

2.9 North Wales Joint Local Transport Plan (2015) sets out the six North Wales local authorities' strategies, plans and visions for each of their respective counties. Jointly, the plan details the priorities of all six counties to tackle poverty, ensure the growth of sustainable jobs and to help rural communities remain vibrant with a high quality of life, employment, and public services.

2.10 The document continues to highlight the issues affecting each of the North Wales Counties and the opportunities which can be capitalised upon. Some of the key improvements which aim to be achieved are:

- Improved connection to key destinations;
- Improved connection to employment;
- Better access to services;
- Increased levels of walking and cycling;
- Improved safety and security; and
- Minimise the impact on the environment;

Wales National Transport Delivery Plan

2.11 The Wales National Transport Deliver Plan was published in 2022 and provides guidance on the provision and maintenance of Welsh travel. The document outlines the encouragement of providing electric vehicle (EV) charging points like those proposed in the development plans:

"We will ensure that there is at least one publicly accessible charge point for between every 7 and 11 electric cars and vans in Wales"

2.12 The document also outlines the importance of blue badge parking bays in order to make sites accessible to all members of the general public and cycle parking to encourage active travel, both of which are included in the proposal.

Flintshire Policy

2.13 The Flintshire Local Development Plan was adopted by the Council on the 24th of January 2023 and covers the period from 2015 to 2030. It forms part of the statutory development plan alongside the Future Wales National Plan 2040. The plan sets out the council's vision to promote growth in the region with reference to a number of policies and guidance along with Supplementary Planning Policy guidance.

2.14 This includes the Flintshire Supplementary Planning Guidance Parking Standards document which was adopted in January 2017 provides guidance on parking bay sizes and number of spaces as follows:

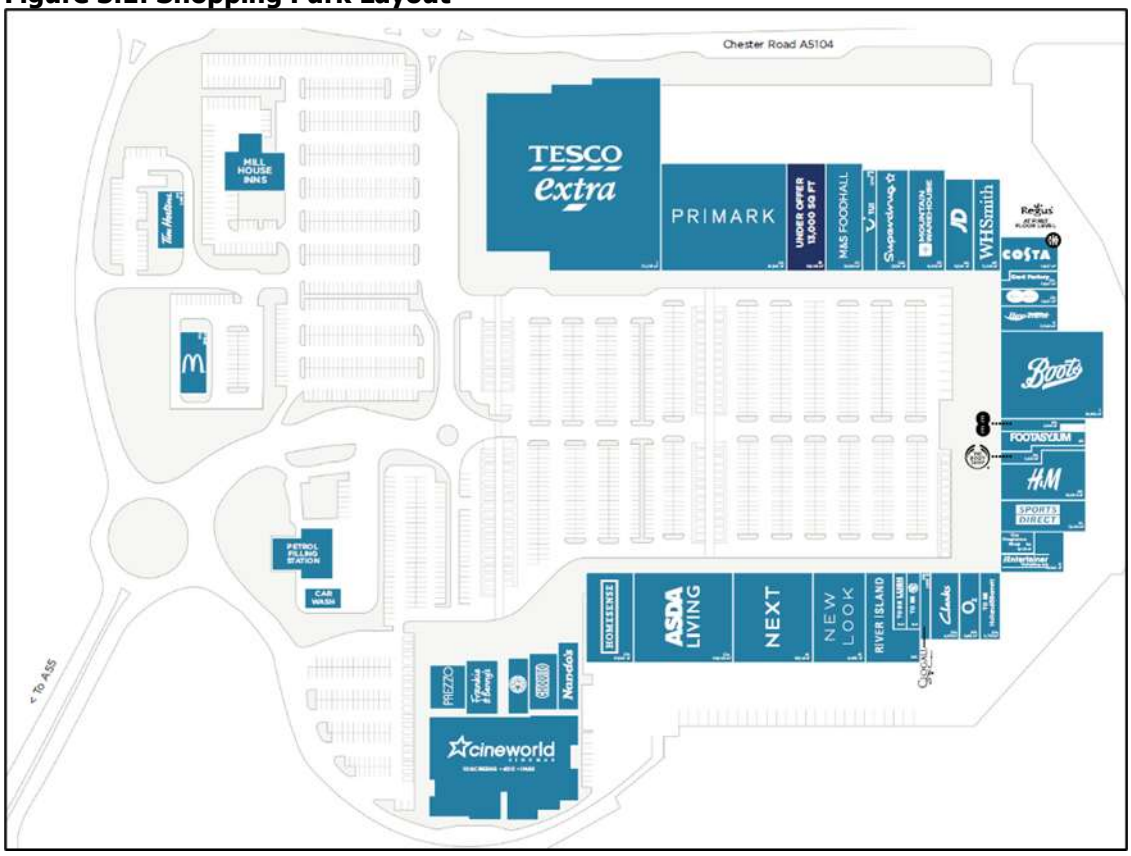
- Parking spaces should be a minimum of 2.4m by 4.8m
- Food retail less than 2,500sqm GFA are permitted a maximum of 1 space per 14sqm GFA

3 EXISTING SITUATION

Broughton Shopping Park

3.1 Broughton Shopping Park ("the Park") is located between the A5104 Chester Road in the north and Bretton Road in the south and directly south of the Site; a layout of the Park is shown in **Figure 3.1** below.

Figure 3.1: Shopping Park Layout



3.2 The Park provides approximately 350,000sqft (33,000sqm) of floorspace with tenants including Cineworld, Tesco, Boots, Asda, Next, and WH Smiths, amongst others. In addition to this, there are 5 restaurants including Prezzo, Frankie and Bennies, Nando's, Chiquito and Pizza Express which are located adjacent to the Cineworld. There are also two drive-thru fast-food units on the Park including McDonalds and Tim Hortons as well as the Mill House pub / restaurant and Costa Coffee dine-in. The Park provides a significant quantum of leisure incorporating restaurants and fast-food units.

3.3 A Tesco fuel station is located to the south-west corner of the Park and in total there is in the region of 2,160 parking spaces.

Surrounding Area

3.4 The local area surrounding the Site comprises a mixture of commercial uses, residential and undeveloped land. The largest commercial activity is Airbus which is located immediately to the north of the Site to the north of the A5104 Chester Road; the Airbus campus includes a significant quantum of floorspace along with a runway and parking for several thousand cars, with accesses in a number of locations including one from the A5104 Chester Road roundabout immediately west of the Site. There is further commercial to the east of the Site accessed from Broughton Mill Road and to the north-west of Airbus.

3.5 The closest residential is located a short distance to the west of the Site to the west of the A5104 Chester Road roundabout with the area known as Bretton which is bound by the A5104 to the north, the B5125 to the south and the Broughton Shopping Park to the east. Broughton is located to the south of the B5125 and bound also by the M55 to the south and Main Road to the west.

3.6 The closest existing food stores include Aldi which is located immediately to the south-west A5104 Chester Road roundabout along with a M&S Foodhall and a Tesco supermarket on the Broughton Shopping Park. The closets existing Lidl supermarkets are located to the east, north and west as follows:

- Chester: the store which is approximately 5miles east of the Site is located on Sealand Road to the west of Chester; it shares the car park with other retailers including Boots and Home Bargains, with a Tesco supermarket approximately 275m to the east.
- Shotton: the store which is approximately 5miles north-west of the Site is located on the High Street a short distance to the north of the railway station. It is a new store recently opened and has a dedicated car park.
- Mold: the store which is located on Hall Road is approximately 8miles to the west of the Site. it has a dedicated car park and has been trading for over 15 years.

3.7 In addition, there are three Lidl stores in Wrexham to the south with the store in the north of the town approximately 13miles from the Site.

Access on Foot

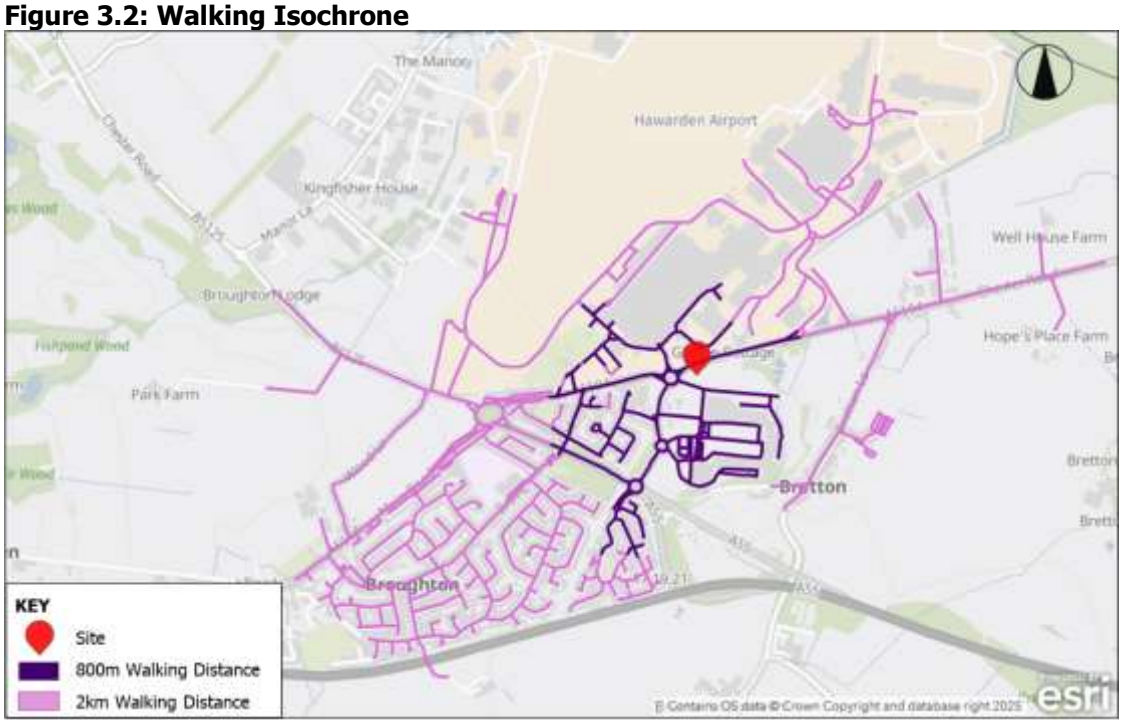
3.8 The Broughton Shopping Park Northern Quater is accessible by foot via Chester Road (A5104) to the north as well as from the road that runs parallel to the south of the site from the A5104 roundabout. Chester Road and the A5104 roundabout to the ear of the site are also used to access the Airbus facility North of Chester Road.

3.9 Both roads are bordered by footpaths on both sides in the vicinity of the site, as well as consistent street lighting provision. A proposed footway will provide direct pedestrian access to the site from Chester Road, improvements to the footways to the south are also proposed to improve access to the bus stops and other facilities in the Shopping Park. Currently, there is a tactile paved, crossing point with dropped kerbs and a central reservation at the junction between the south round and the A5104 roundabout.

3.10 Walking is considered a suitable mode to replace short car and public transport journeys up to distances of approximately 2km with factors such as health, weather and access to a car along with journey purpose all influencing a person's choice to walk.

3.11 **Figure 3.2** shows an 800m (10 minute) and 2km (25 minute) walk distance around the site which shows that Broughton and the surrounding employment area including much of the Airbus compound are accessible by foot.

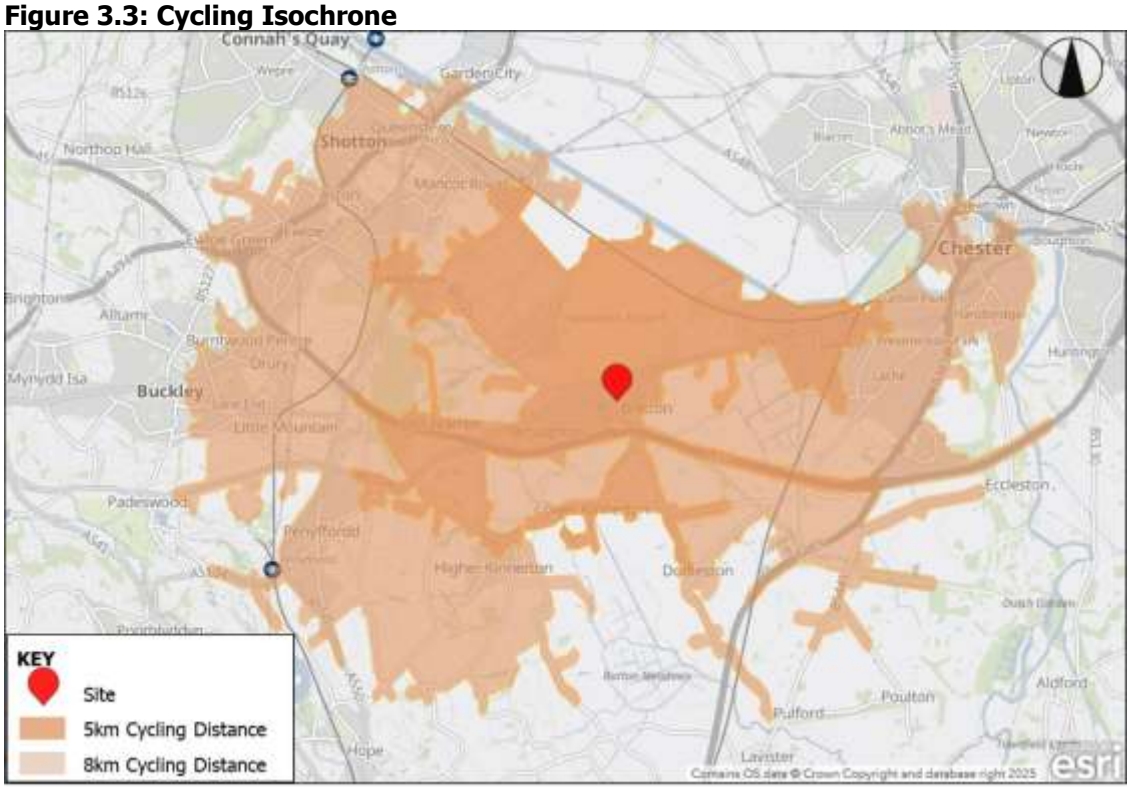
Figure 3.2: Walking Isochrone



Access by Bicycle

3.12 Cycling is considered to be a suitable mode of transport to replace car and public transport journeys up to distances of 8km with similar factors to walking influencing a person's choice to cycle. **Figure 3.3** shows a 5km and 8km cycling catchment from the site which shows an extensive area is within acceptable cycling distance, including Chester, Shotton and Buckley. The isochrone also indicates that Shotton and Penyffordd train stations are within 8km of the site, providing links to stations in both greater Wales, Cheshire and Manchester. It should be noted that there are a number of other existing discount food stores including Lidl's as noted earlier that fall within the 8km catchment n particular.

Figure 3.3: Cycling Isochrone



Access by Bus

3.13 The Closest bus stops to the Site are the 'Broughton Park Tesco' stop a 230m (3 minute) walk away and the 'Glynne Arms' stop 300m (4 minute) walk away. The Tesco bus stop has a sheltered seating area with service information. Other bus stops are located 500m (7 minutes) west on Chester Road and 650m (10 minutes) southwest on Beeby Way. **Figure 3.4** shows the location of these stops in relation to the site and **Table 3.1** shows the service route and frequency at the closest stops to the site.

Figure 3.4: Location of Local Bus Stops

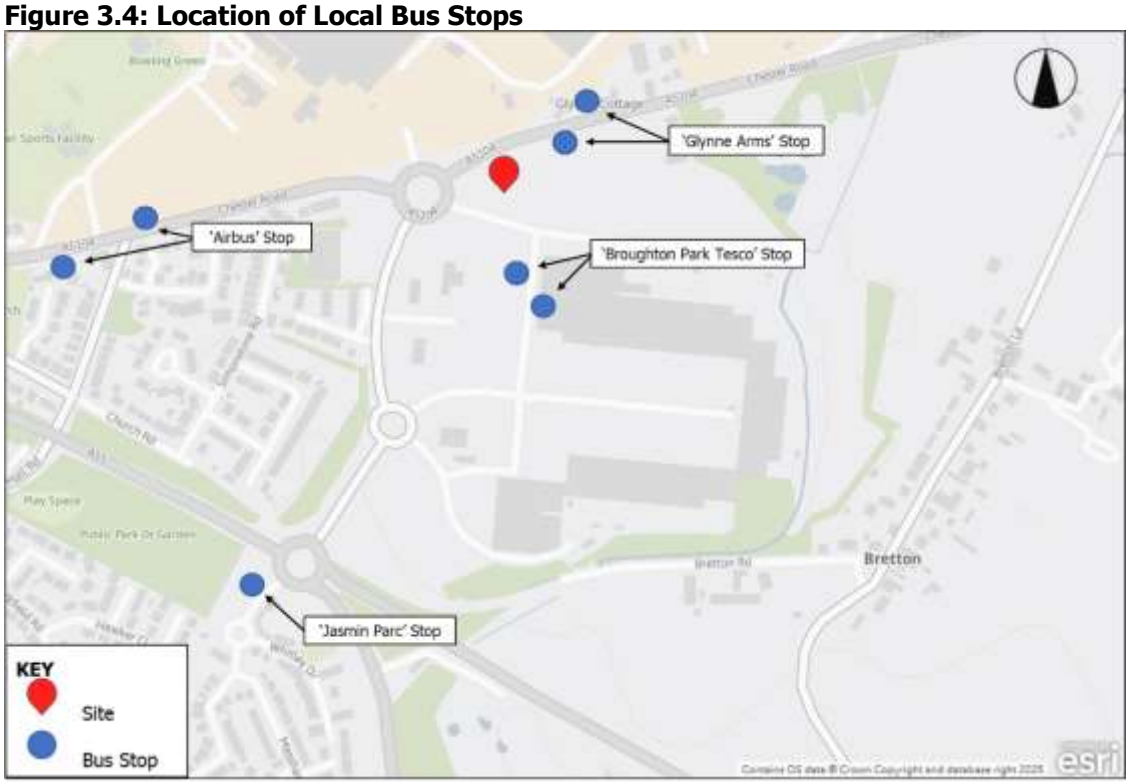


Table 3.1: Summary of Local Bus Services

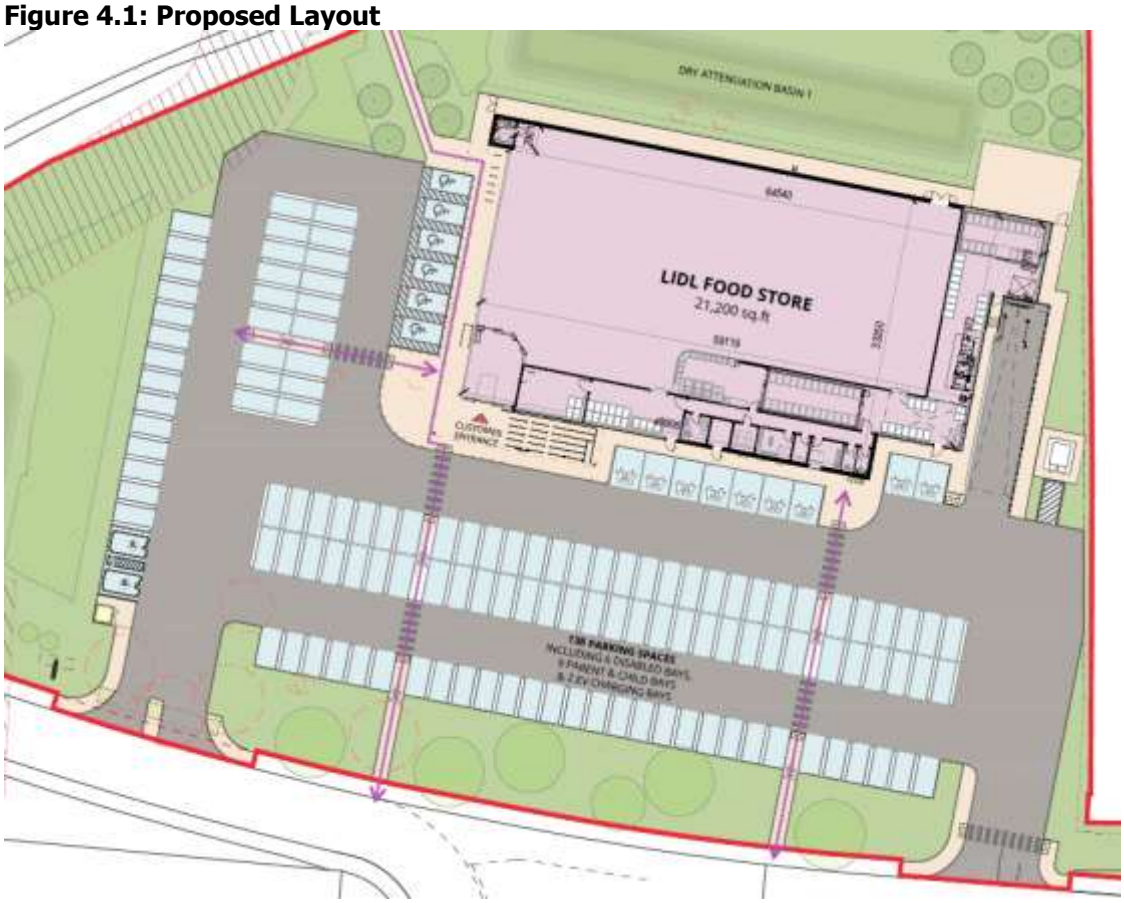
Bus Stop	Route		Peak frequency every 'x' minutes		
	No.	Destination	M-F	Sat	Sun
Broughton Park Tesco	4	Mold Bus Station– Broughton Depot	20	20	30
	9	Quay Shopping Centre – Broughton Park Tesco	100	100	No Service
	11/11A	Chester Bus Interchange – Broughton Park Tesco	30/60	30/60	120/ No Service
	T8	Chester Railway Station – Corwen Bus Station	60	60	No Service
	X4	Chester Railway Station – Mold Bus Station	60	60	No Service
Airbus	811	Knutsford Road Morton – Broughton Park Tesco	120	No Service	No Service

4 PROPOSED DEVELOPMENT

Overview

4.1 The proposals include the construction of a 2,059sqm discount food store along with associated parking and loading facilities as illustrated on **Figure 4.1** with a copy of the application plans included at **Appendix A**. The store would be located towards the middle of the Site with car parking to the south and west and landscaping north of the store and west of the car parking.

Figure 4.1: Proposed Layout



Access Arrangements

4.2 The proposed layout includes two vehicular accesses onto the service road along with pedestrian connections to the service road and to the A5104 Chester Road to the north.

- The primary vehicular access is proposed in the south-western corner of the car park approximately 65m from the A5104 Chester Road roundabout. The junction would operate under priority control with vehicles entering and exiting the main car park (and service yard) having priority over vehicles entering and exiting the new car park. The access would be used by customers with delivery vehicles using the secondary access.

- The secondary vehicular access is which located in the south-eastern corner of the Site will operate under priority control with vehicles on the service road having priority. The access will be available for customers as a secondary point of access with delivery drivers required to use the access.
- The proposals include pedestrian connections to the A5104 Chester Road to the north and to the service road to the south to improve pedestrian permeability along with facilitating access to the bus stops on the A5104 Chester Road and the wider Broughton Shopping Park.

4.3 The two vehicular accesses connect to private highway and as such do not require technical approval. The accesses will however be designed to relevant design standards to ensure that they can accommodate the anticipated level of traffic movements and vehicles.

Car Parking

4.4 The proposed layout includes a total of 138 parking spaces for cars which includes 6 spaces reserved for Blue Badge holders and 9 spaces reserved for parents with small children and 2 spaces with EV charging facilities.

4.5 The provision is consistent with parking standards set out in policy and considered sufficient by Lidl as the intended occupier with the pedestrian connections to the wider Broughton Shopping Park which is served by buses offers an alternative location to park or mode to travel.

4.6 The standards suggest a minimum of 10% of spaces should be provide with EV charging facilities. The requirement is not deemed appropriate for a number of reasons as follows:

- The standards were originally set when electric vehicles had considerably shorter ranges, with changes in technology such that cars are typically charged on a less frequent basis.
- Drivers who would typically visit the Site would be relatively local and not be undertaking a long-distance journey; charging at home or in the office would be cheaper.
- Drivers would typically be on Site for no more than 30 minutes and as such only charge if absolutely necessary.
- Power requirements for the required number particularly if faster chargers are adopted is less likely to be available.
- The take up of EV cars has not been as quick as anticipated.

4.7 The proposals include 2 spaces with rapid EV charger capabilities. These are equivalent to five or six fast chargers and is in line with current demand levels at Lidl supermarkets. Furthermore, the provision is the same as that associated with the recently granted store at Shotton.

Cycle Parking

4.8 Parking is provided for up to 12 bicycles in the form of 6 Sheffield stands located at the front of the store. The provision is the same as that provided for the new store in Shotton.

Deliveries

4.9 Lidl receives on average 1 to 2 deliveries per day through the week which can increase to 2 to 3 deliveries at peak times such as Easter and Christmas. All deliveries which are made by 16.5m articulated vehicles are received through the loading bay which is accessed via the car park in common with many Lidl stores throughout the UK with vehicles able to leave and enter the highway in forward gear as shown on the swept path assessments in **Appendix B**.

4.10 Lidl will implement a Delivery and Servicing Management Plan that sets out obligations for management and drivers alike in relation to ensuring that deliveries are conducted in the most efficient and safe manner possible.

4.11 Waste and recycling is taken away in the delivery vehicle.

5 EFFECTS OF THE DEVELOPMENT

Trip Generation

5.1 The potential number of trips associated with the proposed discount food store has been estimated using trip rate information from the TRICS database considering all surveys from stores with a gross floor area of greater than 1,000sqm undertaken since January 2022 excluding stores in London and town centres. The exercise revealed a total of 11 weekday and 3 Saturday surveys with a copy of the TRICS output included at **Appendix C**.

5.2 **Table 5.1** provides a summary of the trip rates and resultant number of vehicular trips for the weekday peak periods and Saturday, with **Table 5.2** setting out the trip rates and movements for the peak hours as identified during the traffic surveys.

Table 5.1: Trip Rates & Resultant Vehicles (Peak Periods)

		Trip Rates		Vehicles	
		Arrive	**Depart**	**Arrive**	**Depart**
AM Peak	0700 - 0800	0.689	0.245	14	5
	0800 – 0900	3.434	2.353	71	48
	0900 – 1000	4.256	3.654	88	75
PM Peak	1600 – 1700	5.860	5.865	121	121
	1700 – 1800	5.900	6.364	121	131
	1800 - 1900	4.682	5.176	96	107
Saturday	1000 - 1100	6.196	5.277	128	109
	1100 – 1200	6.664	6.286	137	129
	1200 – 1300	6.610	6.988	136	144
	1300 – 1400	6.358	6.250	131	129
	1400 - 1500	5.584	6.070	115	125

Table 5.2: Trip Rates & Resultant Vehicles (Peak Hours)

	Trip Rates		Vehicles	
	Arrive	**Depart**	**Arrive**	**Depart**
AM Peak 0730 - 0830	2.062	1.299	42	27
PM Peak 1600 – 1700	5.860	5.865	121	121
Saturday 1200 - 1300	6.610	6.988	136	144

5.3 The above flows are those recorded at the entrance to the car park rather than those new to the local and wider highway network. In this regard, there have been a number of studies in the past looking at the proportion of secondary trips which demonstrated that there are a higher proportion of secondary trips in locations where there is a higher concentration of retail and commercial activity and on busy roads. In practice, there will be very few new trips on the wider highway network with convenience shopping with the need for the shop made by the person with the shop simply providing the destination.

5.4 **Table 5.3** sets out the assumed breakdown of trips by type for the proposed new discount food store taking into account the proximity to existing supermarkets, the nature of the existing highway network and the quantum of retail in the immediate area, with the assumed split comparable to those accepted for the Shotton store. The assumptions do not include any pass-by trips as these are assumed to be diverted from either Aldi or Tesco on the grounds it has been assumed that a customer would have selected one of these two stores should the Lidl not be open. Furthermore, the majority of the new trips are likely to be transferred from other existing Lidl stores outside the study network and as such although new to the study network would not be new to the wider highway network with a resultant reduction elsewhere.

Table 5.3: Assumed breakdown of Trips by Type (Peak Hours)

	AM Peak (0730 – 0830)		PM Peak (1600 – 1700)		Saturday (1200 – 1300)	
	Arrive	**Depart**	**Arrive**	**Depart**	**Arrive**	**Depart**
New	21	13	48	48	54	58
Linked	4	3	24	24	27	29
Transferred ALDI	8	5	24	24	27	29
Transferred Tesco	8	5	24	24	27	29
Pass-by	0	0	0	0	0	0
Total	42	27	121	121	136	144

5.5 The exercise suggests that there could be a total of 34 new two-way trips (21 arrivals / 13 departures) during the weekday morning peak hour with 96 new two-way trips (48 arrivals / 48 departures) during the weekday evening peak hour and 112 new two-way trips (54 arrivals / 58 departures) during the Saturday peak hour. As noted above, the majority of the new trips are most likely to be transferred from other existing Lidl stores.

Trip Distribution

5.6 The assumed distribution of the trips is set out on Flow diagrams 07 through 09 for the weekday morning, weekday evening and Saturday peak hours respectively; the exercise suggests that the greatest potential increases could be along the A5104 with 18 – 20 additional movements each way during the Saturday afternoon peak hour with lesser increases at other times. The exercise does not allow for reductions in flows that could result for example a person living in Broughton or Bretton visiting an existing Lidl store in Chester or Shotton.

Junction Modelling

5.7 Flow diagrams 01 through 18 set out the distribution of traffic movements on the local highway network as follows:

- Flow 01 - 2023 Observed Scenario (AM Peak 0730 – 0830)
- Flow 02 - 2023 Observed Scenario (PM Peak 1600 – 1700)
- Flow 03 - 2023 Observed Scenario (Saturday 1200 – 1300)
- Flow 04 - 2026 Base Year (AM Peak 0730 – 0830)
- Flow 05 - 2026 Base Year (PM Peak 1600 – 1700)
- Flow 06 - 2026 Base Year (Saturday 1200 – 1300)
- Flow 07 - Development Traffic (AM Peak 0730 – 0830)
- Flow 08 - Development Traffic (PM Peak 1600 – 1700)
- Flow 09 - Development Traffic (Saturday 1200 – 1300)
- Flow 10 - 2026 Development Scenario (AM Peak 0730 – 0830)
- Flow 11 - 2026 Development Scenario (PM Peak 1600 – 1700)
- Flow 12 - 2026 Development Scenario (Saturday 1200 – 1300)
- Flow 13 - 2031 Future Year Base Scenario (AM Peak 0730 – 0830)
- Flow 14 - 2031 Future Year Base Scenario (PM Peak 1600 – 1700)
- Flow 15 - 2031 Future Year Base Scenario (Saturday 1200 – 1300)
- Flow 16 - 2031 Future Year Development Scenario (AM Peak 0730 – 0830)
- Flow 17 - 2031 Future Year Development Scenario (PM Peak 1600 – 1700)
- Flow 18 - 2031 Future Year Development Scenario (Saturday 1200 – 1300)

5.8 The peak hours are those as identified in the November 2023 surveys and are presented in PCU values on the flow diagrams based on the values set out in **Table 5.4**.

Table 5.4: PCU Values

Vehicle	PCU Value
Car / LGV	1
MGV	1.5
HGV	2.3
Bus	2
Motorcycle	0.4
Bicycle	0.2

5.9 The 2026 and 2031 Base Year flows have been estimated based on applying TEMPRo factors to the 2023 Observed Scenario flows based on the values in **Table 5.5**, with the Development Scenarios including the development flows.

Table 5.5: TEMPRo Growth Factors

Year	Factor		
	AM Peak	PM Peak	Saturday
2023 – 2026	1.0148	1.0136	1.0158
2023 - 2031	1.0628	1.0604	1.0627

5.10 The capacity of Airbus / Chester Road junction and southern Shopping Park roundabout junctions has been tested using ARCADY with the results for the Observed, Base and Development Scenario summarised below.

Airbus / Chester Road Roundabout

5.11 **Tables 5.6** through **5.8** provide summaries of the results of the ARCADY modelling for the weekday morning, weekday evening and Saturday peak hours respectively with copies of the output included at **Appendix E**. The results demonstrate that the proposed development would not result in any material changes in traffic conditions in the local area, with potential reductions in traffic flows further afield due to the new shop.

Table 5.6: Airbus / Chester Road ARCADY (AM Peak)

	2023 Observed					
	Queue	Delay	RFC			
Airbus	1	3.18	0.01			
A5104 Chester Rd East	2	3.01	0.25			
Shopping Park Access	1	3.12	0.05			
Shopping Park Thru Route	2	4.17	0.29			
A5014 Chester Rd West	3	4.16	0.43			
	2026 Base			2026 Development		
	Queue	Delay	RFC	Queue	Delay	RFC
Airbus	1	3.27	0.01	1	3.29	0.01
A5104 Chester Rd East	2	3.14	0.28	2	3.18	0.29
Shopping Park Access	1	3.22	0.06	1	3.27	0.08
Shopping Park Thru Route	2	4.33	0.31	2	4.36	0.31
A5014 Chester Rd West	2	4.41	0.46	2	4.48	0.47
	2031 Base			2031 Development		
	Queue	Delay	RFC	Queue	Delay	RFC
Airbus	1	3.34	0.01	1	3.36	0.01
A5104 Chester Rd East	2	3.21	0.30	2	3.25	0.30
Shopping Park Access	1	3.26	0.06	1	3.31	0.08
Shopping Park Thru Route	3	4.47	0.33	3	4.48	0.32
A5014 Chester Rd West	2	4.64	0.48	2	4.71	0.49

Table 5.7: Airbus / Chester Road ARCADY (PM Peak)

	2023 Observed					
	Queue	Delay	RFC			
Airbus	1	3.08	0.01			
A5104 Chester Rd East	2	4.65	0.49			
Shopping Park Access	1	4.09	0.17			
Shopping Park Thru Route	3	5.21	0.37			
A5014 Chester Rd West	3	3.54	0.34			
	2026 Base			2026 Development		
	Queue	Delay	RFC	Queue	Delay	RFC
Airbus	1	3.13	0.01	1	3.19	0.01
A5104 Chester Rd East	2	4.82	0.51	2	5.03	0.52
Shopping Park Access	1	4.19	0.18	1	4.66	0.28
Shopping Park Thru Route	3	5.32	0.38	3	5.34	0.35
A5014 Chester Rd West	3	3.64	0.35	3	3.76	0.37
	2031 Base			2031 Development		
	Queue	Delay	RFC	Queue	Delay	RFC
Airbus	1	3.19	0.01	1	3.25	0.01
A5104 Chester Rd East	2	5.11	0.53	2	5.35	0.55
Shopping Park Access	1	4.32	0.20	2	4.81	0.29
Shopping Park Thru Route	3	5.58	0.40	3	5.59	0.37
A5014 Chester Rd West	3	3.76	0.37	3	3.89	0.39

Table 5.8: Airbus / Chester Road ARCADY (Saturday Peak)

	2023 Observed					
	Queue	Delay	RFC			
Airbus	1	3.97	0.17			
A5104 Chester Rd East	3	4.97	0.45			
Shopping Park Access	2	4.31	0.21			
Shopping Park Thru Route	3	5.48	0.39			
A5014 Chester Rd West	3	4.24	0.44			
	2026 Base			2026 Development		
	Queue	Delay	RFC	Queue	Delay	RFC
Airbus	1	4.02	0.17	1	4.14	0.17
A5104 Chester Rd East	3	4.95	0.46	3	5.19	0.48
Shopping Park Access	2	4.41	0.22	3	5.05	0.33
Shopping Park Thru Route	3	5.50	0.39	3	5.53	0.36
A5014 Chester Rd West	3	4.35	0.46	2	4.55	0.47
	2031 Base			2031 Development		
	Queue	Delay	RFC	Queue	Delay	RFC
Airbus	1	4.18	0.18	1	4.31	0.19
A5104 Chester Rd East	2	5.27	0.49	2	5.54	0.51
Shopping Park Access	2	4.56	0.23	3	5.25	0.35
Shopping Park Thru Route	3	5.79	0.42	3	5.82	0.39
A5014 Chester Rd West	2	4.57	0.48	2	4.79	0.50

5.12 The modelling shows that the junction currently operates within capacity with queues forming on the approaches and that although the redevelopment of the Site could result in increased queues and RFC values, it would not result in a material change in traffic conditions.

Shopping Park Access

5.13 **Tables 5.9** through **5.11** provide summaries of the results of the ARCADY modelling for the weekday morning, weekday evening and Saturday peak hours respectively with copies of the output included at **Appendix F**. The results demonstrate that the proposed development would not result in any material changes in traffic conditions in the local area, with potential reductions in traffic flows further afield due to the new shop.

Table 5.9: Shopping Park Main Access Roundabout ARCADY (AM Peak)

	2023 Observed					
	Queue	**Delay**	**RFC**			
Northern Approach	1	2.55	0.13			
Main Car Park Access	1	2.64	0.14			
Southern Car Park Access	1	2.59	0.01			
Southern Approach	3	3.01	0.33			
	2026 Base			**2026 Development**		
	Queue	**Delay**	**RFC**	**Queue**	**Delay**	**RFC**
Northern Approach	1	2.56	0.13	1	2.57	0.13
Main Car Park Access	1	2.65	0.15	1	2.64	0.14
Southern Car Park Access	1	2.60	0.01	1	2.59	0.01
Southern Approach	3	3.04	0.33	3	3.04	0.33
	2031 Base			**2031 Development**		
	Queue	**Delay**	**RFC**	**Queue**	**Delay**	**RFC**
Northern Approach	1	2.57	0.13	1	2.60	0.14
Main Car Park Access	1	2.68	0.15	1	2.67	0.15
Southern Car Park Access	1	2.62	0.01	1	2.62	0.01
Southern Approach	3	3.11	0.35	3	3.12	0.35

Table 5.10: Shopping Park Main Access Roundabout ARCADY (PM Peak)

	2023 Observed					
	Queue	**Delay**	**RFC**			
Northern Approach	2	3.42	0.24			
Main Car Park Access	2	4.65	0.48			
Southern Car Park Access	2	4.45	0.22			
Southern Approach	2	3.89	0.46			
	2026 Base			**2026 Development**		
	Queue	**Delay**	**RFC**	**Queue**	**Delay**	**RFC**
Northern Approach	2	3.45	0.25	2	3.50	0.25
Main Car Park Access	2	4.72	0.49	2	4.59	0.47
Southern Car Park Access	2	4.50	0.22	2	0.22	0.22
Southern Approach	2	3.94	0.47	2	0.47	0.47
	2031 Base			**2031 Development**		
	Queue	**Delay**	**RFC**	**Queue**	**Delay**	**RFC**
Northern Approach	2	3.56	0.26	2	3.62	0.27
Main Car Park Access	2	5.01	0.52	2	4.85	0.50
Southern Car Park Access	2	4.74	0.24	2	4.67	0.23
Southern Approach	2	4.12	0.49	2	4.09	0.49

Table 5.11: Shopping Park Main Access Roundabout ARCADY (Saturday Peak)						
	2023 Observed					
	Queue	Delay	RFC			
Northern Approach	2	4.12	0.31			
Main Car Park Access	3	4.46	0.43			
Southern Car Park Access	2	4.70	0.29			
Southern Approach	2	5.11	0.58			
	2026 Base			2026 Development		
	Queue	Delay	RFC	Queue	Delay	RFC
Northern Approach	3	4.35	0.35	3	4.28	0.33
Main Car Park Access	3	4.66	0.45	3	4.40	0.42
Southern Car Park Access	2	4.78	0.29	2	4.71	0.29
Southern Approach	2	5.25	0.59	2	5.19	0.59
	2031 Base			2031 Development		
	Queue	Delay	RFC	Queue	Delay	RFC
Northern Approach	3	4.40	0.34	3	4.50	0.35
Main Car Park Access	3	4.80	0.47	3	4.64	0.45
Southern Car Park Access	2	5.06	0.31	2	4.98	0.31
Southern Approach	3	5.68	0.62	3	5.61	0.62

5.14 As with the Airbus roundabout, the results of the modelling demonstrate that the proposals associated with this application would not result in any material changes in traffic conditions. As such, mitigation measures are not required.

Capacity Assessment Summary

5.15 The modelling demonstrates that the proposed development would not result in any noticeable changes in traffic conditions with relatively small changes in delay and RFC values; this is primarily associated with the fact that the vast majority of trips to a discount food store / supermarket would already be on the highway network with the proposed store offering an alternative to existing facilities in the immediate and wider area.

5.16 Furthermore, the assessments do not take into consideration flows associated with the consented scheme on the Site which would have attracted a number of trips across the day. As such, physical mitigation measures are not required.

6 SUMMARY AND CONCLUSION

Summary

6.1 TTP Consulting has been appointed by British Land to provide traffic and transport advice in relation to the proposed development of a discount food store in the Northern Quarter of the Broughton Shopping Park which is located within Flintshire in Wales.

6.2 The parcel of land on which the proposed discount food store is located is currently vacant albeit benefited from permission to be redeveloped as part of a wider scheme. The proposals which form part of this application is for a 2,059sqm discount food store with parking for up to 138 cars.

6.3 The potential number of trips has been estimated based on trip rates from the TRICS database with flows distributed onto the local highway network taking into account factors including existing supermarkets and traffic flows along with proximity to residential properties. The proposed store would provide further choice with the majority of trips expected to be transferred from existing supermarkets which include Aldi and Tesco in the immediate vicinity along with other existing Lidl stores in surrounding towns.

6.4 The potential impact on the capacity of the local junctions demonstrates that the proposals would not result in a material change in traffic conditions. Furthermore, the assessments do not take into consideration the consented scheme on the Site. As such, capacity enhancements are not required.

6.5 The proposed number of parking spaces is in line with policy and Lidl's requirement and is similar to the number of spaces recently approved at the store on Shotton. In addition, there are opportunities to park in the wider Broughton Shopping Park and travel by modes other than the car with buses calling at nearby stops.

6.6 Deliveries will take place via the car park in line with Lidl stores throughout the UK, with on average 1 – 2 deliveries per day using a 16.5m articulated vehicle, potentially increasing to 2 – 3 per day in peak trading times.

6.7 Parking is provided for up to 12 bicycles in the form of 6 Sheffield stands located at the front of the store. The provision is the same as that provided for the new store in Shotton.

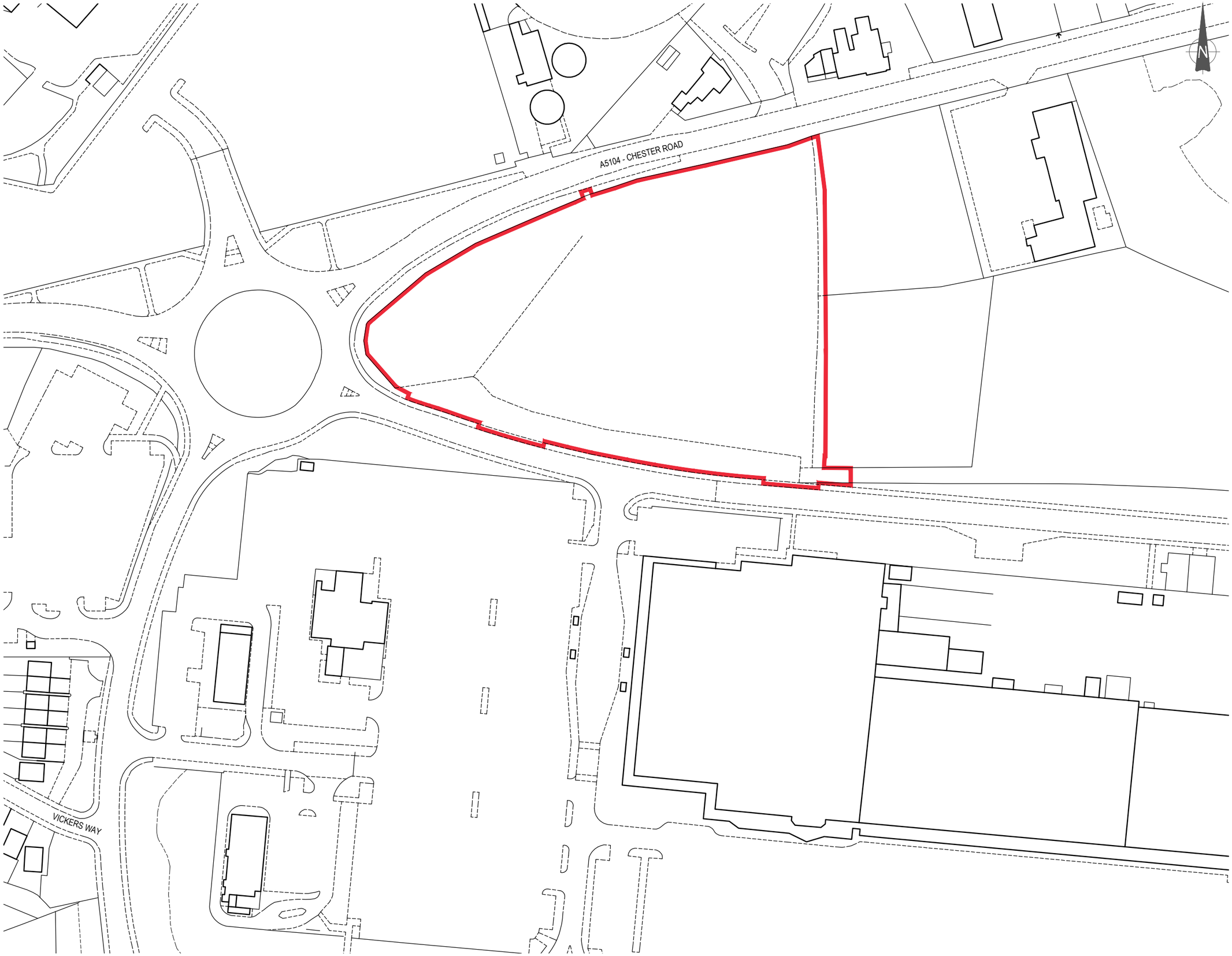
6.8 Lidl will implement a Travel Plan to encourage staff to travel by the most sustainable mode possible when travelling to / from work each day.

Conclusion

6.9 The proposed scheme is consistent with relevant transport planning policy guidance and will not give rise to any material transport related impacts.

Appendix A

(Application Plans)



SCALE 1 : 1250
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0m 10mm 20mm 40mm 60mm 80mm 100mm

Urban Edge Architecture Limited
One Scotgate Mews, Scotgate,
Stamford, Lincolnshire, PE9 2FX.

Tel. ++44 (0)1780 755 665
Fax. ++44 (0)1780 755 360

THIS DRAWING IS FOR PLANNING ONLY AND IS **NOT TO BE USED FOR TENDER OR CONSTRUCTION**

DRAWING TO BE READ IN COLOUR

LEGEND:

APPLICATION BOUNDARY

Rev No	Description	Drawn By	Date
P00	FOR PLANNING	AS	13/01/26

URBANEDGE
architecture / landscape / masterplanning

Client
BRITISH LAND COMPANY PLC

Project
NORTHERN QUARTER
BROUGHTON SHOPPING PARK
CHESTER

Drawing
SITE LOCATION PLAN

Issue Purpose
FOR PLANNING

UE Proj No	Scale	Date	Drawn	Status	Revision
2960	1:1,250@A3	JAN 26	AS	-	P00

Project - Organisation - Volume/System - Level - Type - Role - Number
2960-URB-NQ-00-DR-A-208900

Urban Edge Architecture Limited
One Scotgate Mews, Scotgate,
Stamford, Lincolnshire, PE9 2FX.

Tel. ++44 (0)1780 755 665
Fax. ++44 (0)1780 755 360

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DRAWING TO BE READ IN COLOUR

SCALE 1 : 500
SCALE 1 : 1

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Rev No	Description	Drawn By	Date
P01	REVISED FOR PLANNING	AS	27/01/26
P00	FOR PLANNING	AS	13/01/26

URBAN EDGE
architecture / landscape / masterplanning

Client
BRITISH LAND COMPANY PLC

Project
NORTHERN QUARTER
BROUGHTON SHOPPING PARK
CHESTER

Drawing
SITE BLOCK PLAN
AS EXISTING

Issue Purpose
FOR PLANNING

UE Proj No	Scale	Date	Drawn	Status	Revision
2960	1:500@A3	JAN 26	AS	-	P01

Project - Organisation - Volume/System - Level - Type - Role - Number
2960-URB-NQ-00-DR-A-208901

Urban Edge Architecture Limited
One Scotgate Mews, Scotgate,
Stamford, Lincolnshire, PE9 2FX.

Tel. ++44 (0)1780 755 665
Fax. ++44 (0)1780 755 360

THIS DRAWING IS FOR PLANNING ONLY AND IS **NOT TO BE USED FOR TENDER OR CONSTRUCTION**

DRAWING TO BE READ IN COLOUR

A5104 - CHESTER ROAD

DRY ATTENUATION BASIN 1

DRY ATTENUATION BASIN 2

LIDL FOOD STORE
21,200 sq.ft

64540
59119
33250
2384
2900
8879
17972
48906

CUSTOMER ENTRANCE

138 PARKING SPACES
INCLUDING 6 DISABLED BAYS,
9 PARENT & CHILD BAYS
& 2 EV CHARGING BAYS

SCALE 1 : 500
SCALE 1 : 1

0m 5m 10m 20m 30m 40m 50m
0m 10mm 20mm 40mm 60mm 80mm 100mm

Rev No	Description	Drawn By	Date
P01	REVISED FOR PLANNING	AS	26/01/26
P00	FOR PLANNING	AS	13/01/26

URBAN EDGE
architecture / landscape / masterplanning

Client
BRITISH LAND COMPANY PLC

Project
NORTHERN QUARTER
BROUGHTON SHOPPING PARK
CHESTER

Drawing
SITE BLOCK PLAN
AS PROPOSED

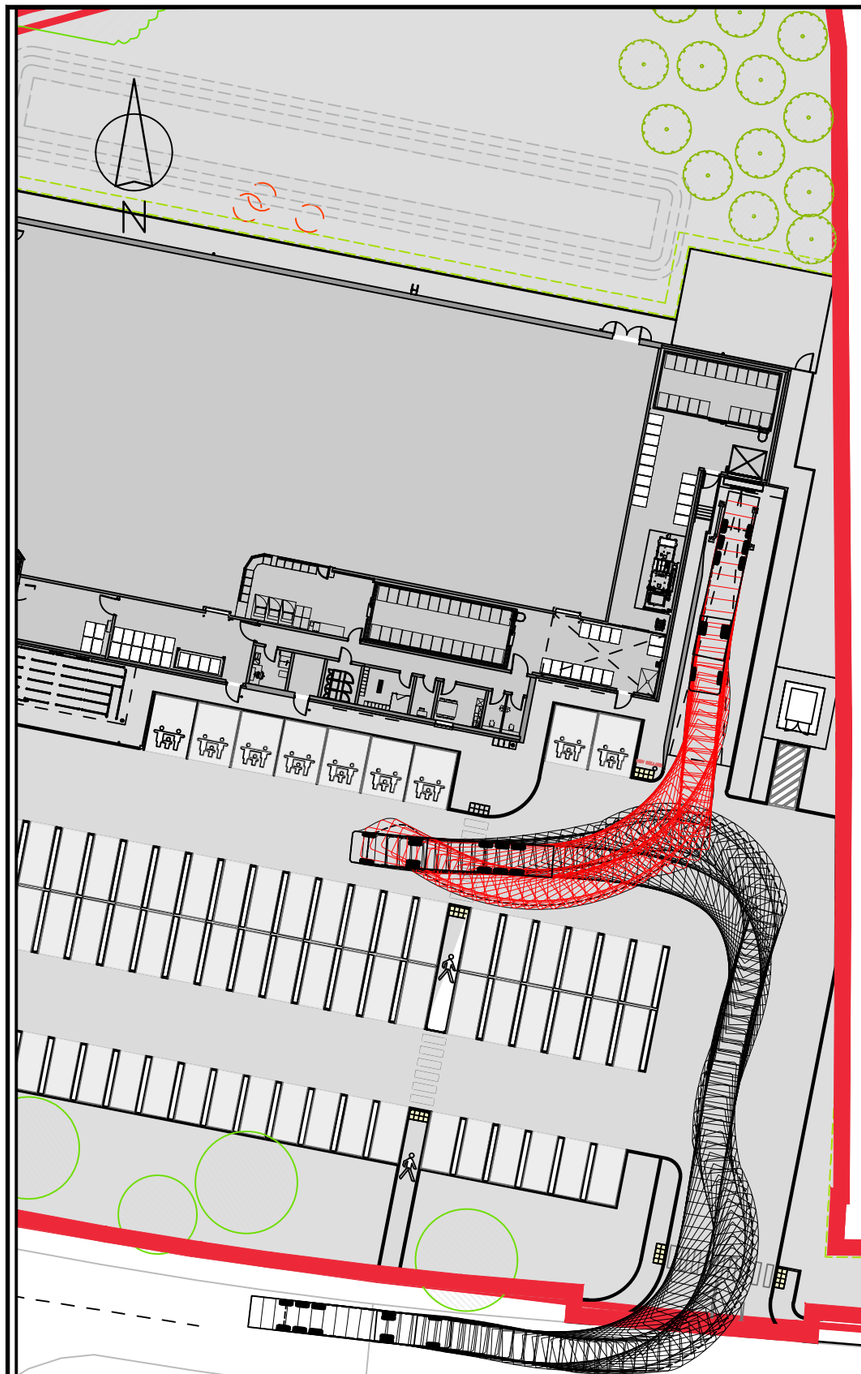
Issue Purpose
FOR PLANNING

UE Proj No	Scale	Date	Drawn	Status	Revision
2960	1:500@A3	JAN 26	AS	-	P01

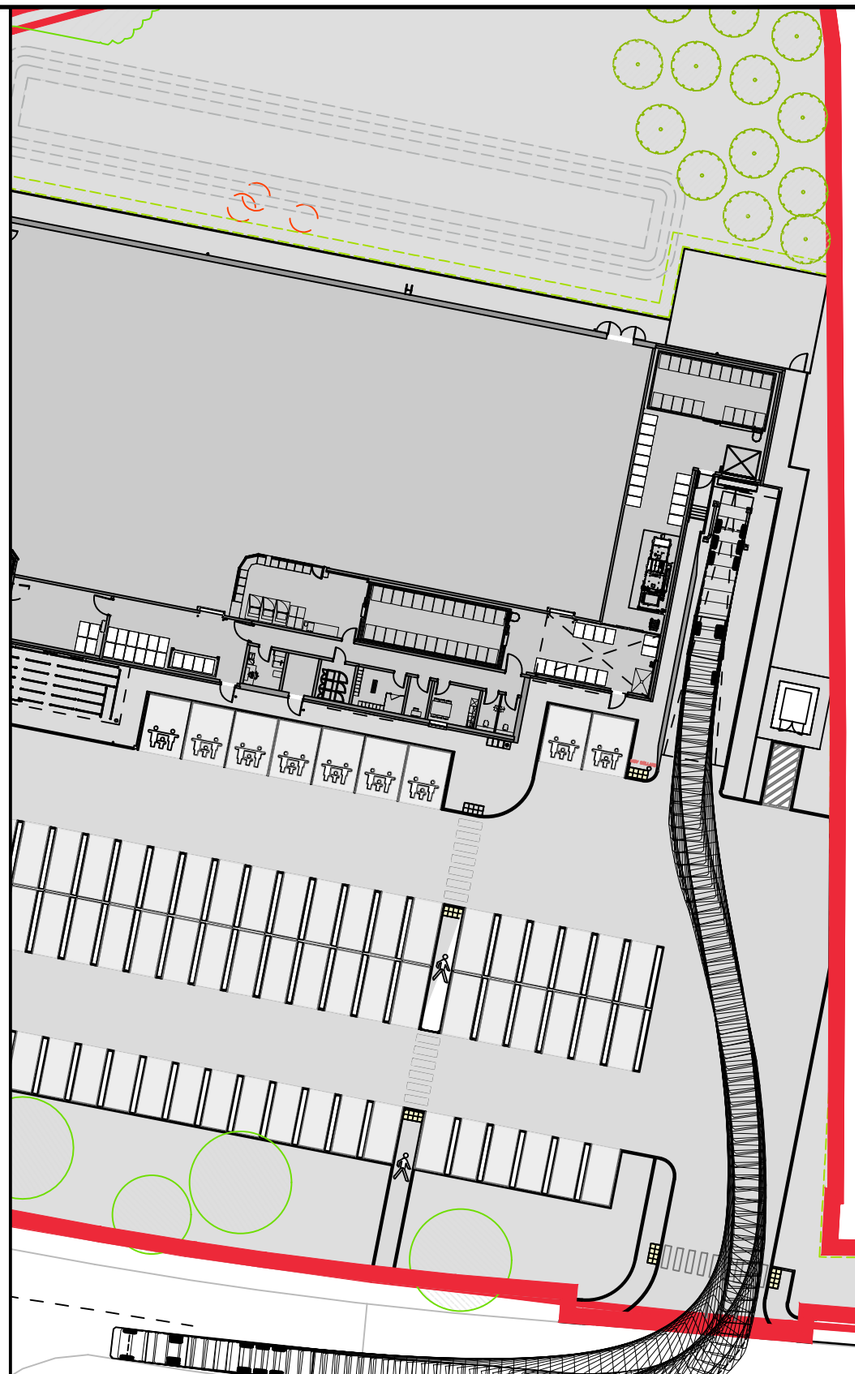
Project - Organisation - Volume/System - Level - Type - Role - Number
2960-URB-NQ-00-DR-A-208950

Appendix B

(Swept Path Assessments)

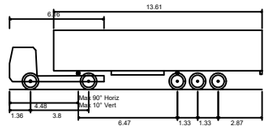


ENTRY



EXIT

Rev	Details	Drawn	Checked	Date
.	.	.	.	.



FTA Design Articulated Vehicle (1998)

Overall Length	16.480m
Overall Width	2.550m
Overall Body Height	3.870m
Min Body Ground Clearance	0.515m
Max Track Width	2.470m
Lock to Lock Time	3.00 sec
Kerb to Kerb Turning Radius	6.550m

Notes:
1. This is not a construction drawing and is intended for illustrative purposes only.

Client
-

Project
Broughton Phase 3

Drawing Title
Swept Path Analysis Using a 16.5m Articulated Vehicle

Scale
1:500 at A3

Drawn	MG	13.01.26
Checked	AM	13.01.26

ttp consulting
transport planning specialists

27 Beak Street
London
W1F 9RU
Tel. No. 020 7100 0753

Drawing Number
2023-4860-AT-120

Rev
.

Appendix C

(TRICS Output)

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use: 01 - RETAIL

Category: C - DISCOUNT FOOD STORES

Total Vehicles

Selected regions and areas:

02	**SOUTH EAST**		
	SO	SLOUGH	1 day
	WS	WEST SUSSEX	3 days
03	**SOUTH WEST**		
	WL	WILTSHIRE	1 day
05	**EAST MIDLANDS**		
	NN	NORTH NORTHAMPTONSHIRE	2 days
07	**YORKSHIRE & NORTH LINCOLNSHIRE**		
	NY	NORTH YORKSHIRE	1 day
09	**NORTH**		
	TW	TYNE & WEAR	1 day
14	**LEINSTER**		
	WX	WEXFORD	1 day
17	**ULSTER (NORTHERN IRELAND)**		
	AN	ANTRIM	1 day

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

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:	1297 to 2315 (units:sqm)
Range Selected by User:	1000 to 2773 (units:sqm)
Parking Spaces Range:	1 - 230

Public Transport Provision:

Selection by:	All Surveys Included
Date Range:	01/01/22 to 24/06/24

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	2 days
Monday	1 days
Thursday	4 days
Tuesday	3 days
Wednesday	1 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	3 days
Edge of Town Centre	3 days
Suburban Area (PPS6 Out of Centre)	5 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:

Commercial Zone	1 days
Development Zone	1 days
Industrial Zone	2 days
No Sub Category	1 days
Residential Zone	3 days
Retail Zone	3 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 Excluded	3 days
Servicing vehicles Included	8 days

Secondary Filtering Selection:

Use Class:

E(a)	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:

75 - 6613

Population within 1 mile:

1,001 to 5,000	1 surveys
10,001 to 15,000	1 surveys
20,001 to 25,000	3 surveys
25,001 to 50,000	4 surveys
5,001 to 10,000	2 surveys

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

Population within 5 miles:

100,001 to 125,000	1 surveys
125,001 to 250,000	2 surveys
25,001 to 50,000	1 surveys
250,001 to 500,000	2 surveys
5,001 to 25,000	1 surveys
50,001 to 75,000	1 surveys
75,001 to 100,000	3 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	6 surveys
1.1 to 1.5	5 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.

Petrol filling station:

Unknown	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.

Travel Plan:

No	7 surveys
Yes	4 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

1 **AN-01-C-04** **LIDL** **ANTRIM**
CASTLEREAGH ROAD
BELFAST
CASTLEREAGH
Suburban Area (PPS6 Out of Centre)
Commercial Zone
Gross floor area: 2315 sqm
Survey date: Friday 21/06/2024 Survey Type: Manual

2 **NN-01-C-01** **ALDI** **NORTH NORTHAMPTONSHIRE**
SAXON WAY WEST
CORBY
GREAT OAKLEY
Edge of Town
Development Zone
Gross floor area: 1924 sqm
Survey date: Tuesday 14/06/2022 Survey Type: Manual

3 **NN-01-C-02** **LIDL** **NORTH NORTHAMPTONSHIRE**
MARINERS WAY
KETTERING
Edge of Town Centre
Retail Zone
Gross floor area: 1850 sqm
Survey date: Monday 27/06/2022 Survey Type: Manual

4 **NY-01-C-03** **ALDI** **NORTH YORKSHIRE**
STONEBRIDGEGATE
RIPON
Edge of Town Centre
Residential Zone
Gross floor area: 1551 sqm
Survey date: Friday 20/05/2022 Survey Type: Manual

5 **SO-01-C-01** **LIDL** **SLOUGH**
BATH ROAD
SLOUGH
Suburban Area (PPS6 Out of Centre)
Retail Zone
Gross floor area: 1880 sqm
Survey date: Thursday 22/09/2022 Survey Type: Manual

6 **TW-01-C-02** **ALDI** **TYNE & WEAR**
FOXHUNTERS ROAD
WHITLEY BAY
Suburban Area (PPS6 Out of Centre)
Residential Zone
Gross floor area: 1600 sqm
Survey date: Tuesday 17/05/2022 Survey Type: Manual

7 **WL-01-C-02** **LIDL** **WILTSHIRE**
HUNGERDOWN LANE
CHIPPENHAM
Suburban Area (PPS6 Out of Centre)
Residential Zone
Gross floor area: 2125 sqm
Survey date: Tuesday 09/05/2023 Survey Type: Manual

8 **WS-01-C-05** **LIDL** **WEST SUSSEX**
WESTHAMPNETT ROAD
CHICHESTER
Edge of Town
Retail Zone

Gross floor area: 2125 sqm
Survey date: Thursday 08/09/2022 Survey Type: Manual

9 **WS-01-C-06** **LIDL** **WEST SUSSEX**
FOUNDRY LANE
HORSHAM
Suburban Area (PPS6 Out of Centre)
Industrial Zone
Gross floor area: 1616 sqm
Survey date: Wednesday 07/09/2022 Survey Type: Manual

10 **WS-01-C-07** **LIDL** **WEST SUSSEX**
NEWLANDS ROAD
BOGNOR REGIS
Edge of Town
Industrial Zone
Gross floor area: 2159 sqm
Survey date: Thursday 21/09/2023 Survey Type: Manual

11 **WX-01-C-01** **ALDI** **WEXFORD**
TRINITY STREET
WEXFORD
Edge of Town Centre
No Sub Category
Gross floor area: 1297 sqm
Survey date: Thursday 20/04/2023 Survey Type: Manual

TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES

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					
06:00-07:00	**2**	**1870**	**0.454**	**0.000**	**0.454**
07:00-08:00	**10**	**1914**	**0.689**	**0.245**	**0.934**
08:00-09:00	**11**	**1858**	**3.434**	**2.353**	**5.787**
09:00-10:00	**11**	**1858**	**4.256**	**3.654**	**7.910**
10:00-11:00	**11**	**1858**	**5.391**	**4.911**	**10.302**
11:00-12:00	**11**	**1858**	**5.831**	**5.591**	**11.422**
12:00-13:00	**11**	**1858**	**6.012**	**6.262**	**12.274**
13:00-14:00	**11**	**1858**	**5.949**	**5.988**	**11.937**
14:00-15:00	**11**	**1858**	**5.699**	**5.821**	**11.520**
15:00-16:00	**11**	**1858**	**6.359**	**6.320**	**12.679**
16:00-17:00	**11**	**1858**	**5.860**	**5.865**	**11.725**
17:00-18:00	**11**	**1858**	**5.900**	**6.364**	**12.264**
18:00-19:00	**11**	**1858**	**4.682**	**5.176**	**9.858**
19:00-20:00	**11**	**1858**	**3.106**	**3.796**	**6.902**
20:00-21:00	**11**	**1858**	**2.236**	**2.602**	**4.838**
21:00-22:00	**11**	**1858**	**0.993**	**1.399**	**2.392**
22:00-23:00	**11**	**1858**	**0.010**	**0.249**	**0.259**
23:00-00:00					
Total Rates:			**66.861**	**66.596**	**133.457**

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.*

Parameter Summary:

Trip rate parameter range selected:	1000 - 2773 (units: sqm)
Survey date date range:	17/05/2022 - 21/06/2024
Number of weekdays (Monday-Friday):	11
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
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.

TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES

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					
06:00-07:00	**2**	**1870**	**0.588**	**0.000**	**0.588**
07:00-08:00	**10**	**1914**	**1.013**	**0.303**	**1.316**
08:00-09:00	**11**	**1858**	**5.489**	**3.948**	**9.437**
09:00-10:00	**11**	**1858**	**6.673**	**5.606**	**12.279**
10:00-11:00	**11**	**1858**	**8.399**	**7.768**	**16.167**
11:00-12:00	**11**	**1858**	**9.417**	**8.991**	**18.408**
12:00-13:00	**11**	**1858**	**10.160**	**10.263**	**20.423**
13:00-14:00	**11**	**1858**	**9.691**	**9.750**	**19.441**
14:00-15:00	**11**	**1858**	**9.114**	**9.016**	**18.130**
15:00-16:00	**11**	**1858**	**10.508**	**10.488**	**20.996**
16:00-17:00	**11**	**1858**	**9.642**	**9.627**	**19.269**
17:00-18:00	**11**	**1858**	**9.197**	**10.077**	**19.274**
18:00-19:00	**11**	**1858**	**7.308**	**8.125**	**15.433**
19:00-20:00	**11**	**1858**	**5.112**	**6.066**	**11.178**
20:00-21:00	**11**	**1858**	**3.605**	**4.403**	**8.008**
21:00-22:00	**11**	**1858**	**1.605**	**2.358**	**3.963**
22:00-23:00	**11**	**1858**	**0.010**	**0.382**	**0.392**
23:00-00:00					
Total Rates:			**107.531**	**107.171**	**214.702**

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.*

Parameter Summary:

Trip rate parameter range selected:	1000 - 2773 (units: sqm)
Survey date date range:	17/05/2022 - 21/06/2024
Number of weekdays (Monday-Friday):	11
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
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.

TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES

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					
06:00-07:00	**2**	**1870**	**0.000**	**0.000**	**0.000**
07:00-08:00	**10**	**1914**	**0.005**	**0.000**	**0.005**
08:00-09:00	**11**	**1858**	**0.049**	**0.039**	**0.088**
09:00-10:00	**11**	**1858**	**0.093**	**0.054**	**0.147**
10:00-11:00	**11**	**1858**	**0.068**	**0.073**	**0.141**
11:00-12:00	**11**	**1858**	**0.088**	**0.073**	**0.161**
12:00-13:00	**11**	**1858**	**0.078**	**0.068**	**0.146**
13:00-14:00	**11**	**1858**	**0.049**	**0.059**	**0.108**
14:00-15:00	**11**	**1858**	**0.073**	**0.054**	**0.127**
15:00-16:00	**11**	**1858**	**0.064**	**0.103**	**0.167**
16:00-17:00	**11**	**1858**	**0.068**	**0.068**	**0.136**
17:00-18:00	**11**	**1858**	**0.054**	**0.068**	**0.122**
18:00-19:00	**11**	**1858**	**0.049**	**0.064**	**0.113**
19:00-20:00	**11**	**1858**	**0.083**	**0.059**	**0.142**
20:00-21:00	**11**	**1858**	**0.034**	**0.054**	**0.088**
21:00-22:00	**11**	**1858**	**0.005**	**0.034**	**0.039**
22:00-23:00	**11**	**1858**	**0.000**	**0.005**	**0.005**
23:00-00:00					
Total Rates:			**0.860**	**0.875**	**1.735**

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.*

Parameter Summary:

Trip rate parameter range selected:	1000 - 2773 (units: sqm)
Survey date date range:	17/05/2022 - 21/06/2024
Number of weekdays (Monday-Friday):	11
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
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.

TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES

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					
06:00-07:00	**2**	**1870**	**0.000**	**0.000**	**0.000**
07:00-08:00	**10**	**1914**	**0.000**	**0.000**	**0.000**
08:00-09:00	**11**	**1858**	**0.000**	**0.000**	**0.000**
09:00-10:00	**11**	**1858**	**0.010**	**0.000**	**0.010**
10:00-11:00	**11**	**1858**	**0.000**	**0.010**	**0.010**
11:00-12:00	**11**	**1858**	**0.000**	**0.000**	**0.000**
12:00-13:00	**11**	**1858**	**0.000**	**0.000**	**0.000**
13:00-14:00	**11**	**1858**	**0.005**	**0.005**	**0.010**
14:00-15:00	**11**	**1858**	**0.000**	**0.000**	**0.000**
15:00-16:00	**11**	**1858**	**0.000**	**0.000**	**0.000**
16:00-17:00	**11**	**1858**	**0.000**	**0.000**	**0.000**
17:00-18:00	**11**	**1858**	**0.000**	**0.000**	**0.000**
18:00-19:00	**11**	**1858**	**0.000**	**0.000**	**0.000**
19:00-20:00	**11**	**1858**	**0.000**	**0.000**	**0.000**
20:00-21:00	**11**	**1858**	**0.000**	**0.000**	**0.000**
21:00-22:00	**11**	**1858**	**0.000**	**0.000**	**0.000**
22:00-23:00	**11**	**1858**	**0.000**	**0.000**	**0.000**
23:00-00:00					
Total Rates:			**0.015**	**0.015**	**0.030**

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.*

Parameter Summary:

Trip rate parameter range selected:	1000 - 2773 (units: sqm)
Survey date date range:	17/05/2022 - 21/06/2024
Number of weekdays (Monday-Friday):	2
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
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.

TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES

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					
06:00-07:00	**2**	**1870**	**0.000**	**0.000**	**0.000**
07:00-08:00	**10**	**1914**	**0.010**	**0.010**	**0.020**
08:00-09:00	**11**	**1858**	**0.034**	**0.034**	**0.068**
09:00-10:00	**11**	**1858**	**0.024**	**0.029**	**0.053**
10:00-11:00	**11**	**1858**	**0.010**	**0.010**	**0.020**
11:00-12:00	**11**	**1858**	**0.015**	**0.015**	**0.030**
12:00-13:00	**11**	**1858**	**0.015**	**0.010**	**0.025**
13:00-14:00	**11**	**1858**	**0.020**	**0.010**	**0.030**
14:00-15:00	**11**	**1858**	**0.020**	**0.024**	**0.044**
15:00-16:00	**11**	**1858**	**0.005**	**0.015**	**0.020**
16:00-17:00	**11**	**1858**	**0.005**	**0.005**	**0.010**
17:00-18:00	**11**	**1858**	**0.010**	**0.005**	**0.015**
18:00-19:00	**11**	**1858**	**0.010**	**0.020**	**0.030**
19:00-20:00	**11**	**1858**	**0.005**	**0.005**	**0.010**
20:00-21:00	**11**	**1858**	**0.005**	**0.000**	**0.005**
21:00-22:00	**11**	**1858**	**0.005**	**0.010**	**0.015**
22:00-23:00	**11**	**1858**	**0.000**	**0.000**	**0.000**
23:00-00:00					
Total Rates:			**0.193**	**0.202**	**0.395**

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.*

Parameter Summary:

Trip rate parameter range selected:	1000 - 2773 (units: sqm)
Survey date date range:	17/05/2022 - 21/06/2024
Number of weekdays (Monday-Friday):	11
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
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.

TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES

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					
06:00-07:00	**2**	**1870**	**0.000**	**0.000**	**0.000**
07:00-08:00	**10**	**1914**	**0.005**	**0.005**	**0.010**
08:00-09:00	**11**	**1858**	**0.034**	**0.034**	**0.068**
09:00-10:00	**11**	**1858**	**0.054**	**0.049**	**0.103**
10:00-11:00	**11**	**1858**	**0.064**	**0.064**	**0.128**
11:00-12:00	**11**	**1858**	**0.078**	**0.068**	**0.146**
12:00-13:00	**11**	**1858**	**0.083**	**0.088**	**0.171**
13:00-14:00	**11**	**1858**	**0.083**	**0.078**	**0.161**
14:00-15:00	**11**	**1858**	**0.093**	**0.108**	**0.201**
15:00-16:00	**11**	**1858**	**0.049**	**0.049**	**0.098**
16:00-17:00	**11**	**1858**	**0.044**	**0.039**	**0.083**
17:00-18:00	**11**	**1858**	**0.039**	**0.044**	**0.083**
18:00-19:00	**11**	**1858**	**0.049**	**0.049**	**0.098**
19:00-20:00	**11**	**1858**	**0.015**	**0.015**	**0.030**
20:00-21:00	**11**	**1858**	**0.010**	**0.010**	**0.020**
21:00-22:00	**11**	**1858**	**0.005**	**0.000**	**0.005**
22:00-23:00	**11**	**1858**	**0.000**	**0.005**	**0.005**
23:00-00:00					
Total Rates:			**0.705**	**0.705**	**1.410**

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.*

Parameter Summary:

Trip rate parameter range selected:	1000 - 2773 (units: sqm)
Survey date date range:	17/05/2022 - 21/06/2024
Number of weekdays (Monday-Friday):	11
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
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.

TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES

Cars

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					
06:00-07:00	**2**	**1870**	**0.454**	**0.000**	**0.454**
07:00-08:00	**10**	**1914**	**0.622**	**0.225**	**0.847**
08:00-09:00	**11**	**1858**	**3.194**	**2.182**	**5.376**
09:00-10:00	**11**	**1858**	**3.972**	**3.405**	**7.377**
10:00-11:00	**11**	**1858**	**5.034**	**4.574**	**9.608**
11:00-12:00	**11**	**1858**	**5.445**	**5.273**	**10.718**
12:00-13:00	**11**	**1858**	**5.616**	**5.826**	**11.442**
13:00-14:00	**11**	**1858**	**5.635**	**5.670**	**11.305**
14:00-15:00	**11**	**1858**	**5.327**	**5.450**	**10.777**
15:00-16:00	**11**	**1858**	**5.973**	**5.851**	**11.824**
16:00-17:00	**11**	**1858**	**5.410**	**5.430**	**10.840**
17:00-18:00	**11**	**1858**	**5.591**	**6.012**	**11.603**
18:00-19:00	**11**	**1858**	**4.368**	**4.823**	**9.191**
19:00-20:00	**11**	**1858**	**2.969**	**3.625**	**6.594**
20:00-21:00	**11**	**1858**	**2.074**	**2.441**	**4.515**
21:00-22:00	**11**	**1858**	**0.920**	**1.301**	**2.221**
22:00-23:00	**11**	**1858**	**0.010**	**0.245**	**0.255**
23:00-00:00					
Total Rates:			**62.614**	**62.333**	**124.947**

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.*

Parameter Summary:

Trip rate parameter range selected:	1000 - 2773 (units: sqm)
Survey date date range:	17/05/2022 - 21/06/2024
Number of weekdays (Monday-Friday):	11
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
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.

TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES

LGVs

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					
06:00-07:00	**2**	**1870**	**0.000**	**0.000**	**0.000**
07:00-08:00	**10**	**1914**	**0.052**	**0.005**	**0.057**
08:00-09:00	**11**	**1858**	**0.161**	**0.103**	**0.264**
09:00-10:00	**11**	**1858**	**0.176**	**0.157**	**0.333**
10:00-11:00	**11**	**1858**	**0.269**	**0.240**	**0.509**
11:00-12:00	**11**	**1858**	**0.269**	**0.220**	**0.489**
12:00-13:00	**11**	**1858**	**0.289**	**0.313**	**0.602**
13:00-14:00	**11**	**1858**	**0.161**	**0.196**	**0.357**
14:00-15:00	**11**	**1858**	**0.240**	**0.210**	**0.450**
15:00-16:00	**11**	**1858**	**0.318**	**0.386**	**0.704**
16:00-17:00	**11**	**1858**	**0.372**	**0.357**	**0.729**
17:00-18:00	**11**	**1858**	**0.249**	**0.294**	**0.543**
18:00-19:00	**11**	**1858**	**0.245**	**0.274**	**0.519**
19:00-20:00	**11**	**1858**	**0.117**	**0.152**	**0.269**
20:00-21:00	**11**	**1858**	**0.132**	**0.137**	**0.269**
21:00-22:00	**11**	**1858**	**0.064**	**0.083**	**0.147**
22:00-23:00	**11**	**1858**	**0.000**	**0.000**	**0.000**
23:00-00:00					
Total Rates:			**3.114**	**3.127**	**6.241**

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.*

Parameter Summary:

Trip rate parameter range selected:	1000 - 2773 (units: sqm)
Survey date date range:	17/05/2022 - 21/06/2024
Number of weekdays (Monday-Friday):	11
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
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.

TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES

Motorcycles

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					
06:00-07:00	**2**	**1870**	**0.000**	**0.000**	**0.000**
07:00-08:00	**10**	**1914**	**0.000**	**0.000**	**0.000**
08:00-09:00	**11**	**1858**	**0.010**	**0.000**	**0.010**
09:00-10:00	**11**	**1858**	**0.020**	**0.015**	**0.035**
10:00-11:00	**11**	**1858**	**0.015**	**0.015**	**0.030**
11:00-12:00	**11**	**1858**	**0.024**	**0.015**	**0.039**
12:00-13:00	**11**	**1858**	**0.010**	**0.024**	**0.034**
13:00-14:00	**11**	**1858**	**0.044**	**0.029**	**0.073**
14:00-15:00	**11**	**1858**	**0.020**	**0.029**	**0.049**
15:00-16:00	**11**	**1858**	**0.015**	**0.020**	**0.035**
16:00-17:00	**11**	**1858**	**0.029**	**0.034**	**0.063**
17:00-18:00	**11**	**1858**	**0.010**	**0.010**	**0.020**
18:00-19:00	**11**	**1858**	**0.010**	**0.010**	**0.020**
19:00-20:00	**11**	**1858**	**0.000**	**0.000**	**0.000**
20:00-21:00	**11**	**1858**	**0.015**	**0.015**	**0.030**
21:00-22:00	**11**	**1858**	**0.000**	**0.005**	**0.005**
22:00-23:00	**11**	**1858**	**0.000**	**0.000**	**0.000**
23:00-00:00					
Total Rates:			**0.222**	**0.221**	**0.443**

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.*

Parameter Summary:

Trip rate parameter range selected:	1000 - 2773 (units: sqm)
Survey date date range:	17/05/2022 - 21/06/2024
Number of weekdays (Monday-Friday):	11
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
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.

TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES

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					
06:00-07:00	**2**	**1870**	**0.588**	**0.000**	**0.588**
07:00-08:00	**10**	**1914**	**0.831**	**0.266**	**1.097**
08:00-09:00	**11**	**1858**	**4.329**	**2.911**	**7.240**
09:00-10:00	**11**	**1858**	**5.792**	**4.858**	**10.650**
10:00-11:00	**11**	**1858**	**7.353**	**6.761**	**14.114**
11:00-12:00	**11**	**1858**	**7.974**	**7.719**	**15.693**
12:00-13:00	**11**	**1858**	**8.458**	**8.732**	**17.190**
13:00-14:00	**11**	**1858**	**8.262**	**8.375**	**16.637**
14:00-15:00	**11**	**1858**	**7.807**	**7.954**	**15.761**
15:00-16:00	**11**	**1858**	**9.084**	**8.869**	**17.953**
16:00-17:00	**11**	**1858**	**8.287**	**8.233**	**16.520**
17:00-18:00	**11**	**1858**	**8.169**	**8.742**	**16.911**
18:00-19:00	**11**	**1858**	**6.540**	**7.235**	**13.775**
19:00-20:00	**11**	**1858**	**4.422**	**5.337**	**9.759**
20:00-21:00	**11**	**1858**	**3.048**	**3.659**	**6.707**
21:00-22:00	**11**	**1858**	**1.277**	**1.898**	**3.175**
22:00-23:00	**11**	**1858**	**0.010**	**0.333**	**0.343**
23:00-00:00					
Total Rates:			**92.231**	**91.882**	**184.113**

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.*

Parameter Summary:

Trip rate parameter range selected:	1000 - 2773 (units: sqm)
Survey date date range:	17/05/2022 - 21/06/2024
Number of weekdays (Monday-Friday):	11
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
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.

TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES

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					
06:00-07:00	**2**	**1870**	**0.000**	**0.000**	**0.000**
07:00-08:00	**10**	**1914**	**0.136**	**0.031**	**0.167**
08:00-09:00	**11**	**1858**	**1.013**	**0.949**	**1.962**
09:00-10:00	**11**	**1858**	**0.709**	**0.631**	**1.340**
10:00-11:00	**11**	**1858**	**0.885**	**0.866**	**1.751**
11:00-12:00	**11**	**1858**	**1.213**	**1.101**	**2.314**
12:00-13:00	**11**	**1858**	**1.477**	**1.321**	**2.798**
13:00-14:00	**11**	**1858**	**1.203**	**1.154**	**2.357**
14:00-15:00	**11**	**1858**	**1.106**	**0.866**	**1.972**
15:00-16:00	**11**	**1858**	**1.291**	**1.375**	**2.666**
16:00-17:00	**11**	**1858**	**1.203**	**1.228**	**2.431**
17:00-18:00	**11**	**1858**	**0.890**	**1.174**	**2.064**
18:00-19:00	**11**	**1858**	**0.656**	**0.744**	**1.400**
19:00-20:00	**11**	**1858**	**0.582**	**0.641**	**1.223**
20:00-21:00	**11**	**1858**	**0.504**	**0.660**	**1.164**
21:00-22:00	**11**	**1858**	**0.318**	**0.411**	**0.729**
22:00-23:00	**11**	**1858**	**0.000**	**0.029**	**0.029**
23:00-00:00					
Total Rates:			**13.186**	**13.181**	**26.367**

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.*

Parameter Summary:

Trip rate parameter range selected:	1000 - 2773 (units: sqm)
Survey date date range:	17/05/2022 - 21/06/2024
Number of weekdays (Monday-Friday):	11
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
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.

TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES

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					
06:00-07:00	**2**	**1870**	**0.000**	**0.000**	**0.000**
07:00-08:00	**10**	**1914**	**0.042**	**0.005**	**0.047**
08:00-09:00	**11**	**1858**	**0.093**	**0.044**	**0.137**
09:00-10:00	**11**	**1858**	**0.068**	**0.059**	**0.127**
10:00-11:00	**11**	**1858**	**0.078**	**0.054**	**0.132**
11:00-12:00	**11**	**1858**	**0.127**	**0.093**	**0.220**
12:00-13:00	**11**	**1858**	**0.137**	**0.127**	**0.264**
13:00-14:00	**11**	**1858**	**0.166**	**0.152**	**0.318**
14:00-15:00	**11**	**1858**	**0.108**	**0.127**	**0.235**
15:00-16:00	**11**	**1858**	**0.049**	**0.108**	**0.157**
16:00-17:00	**11**	**1858**	**0.073**	**0.093**	**0.166**
17:00-18:00	**11**	**1858**	**0.068**	**0.078**	**0.146**
18:00-19:00	**11**	**1858**	**0.044**	**0.059**	**0.103**
19:00-20:00	**11**	**1858**	**0.020**	**0.024**	**0.044**
20:00-21:00	**11**	**1858**	**0.005**	**0.015**	**0.020**
21:00-22:00	**11**	**1858**	**0.000**	**0.010**	**0.010**
22:00-23:00	**11**	**1858**	**0.000**	**0.015**	**0.015**
23:00-00:00					
Total Rates:			**1.078**	**1.063**	**2.141**

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.*

Parameter Summary:

Trip rate parameter range selected:	1000 - 2773 (units: sqm)
Survey date date range:	17/05/2022 - 21/06/2024
Number of weekdays (Monday-Friday):	9
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
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.

TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES

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					
06:00-07:00	**2**	**1870**	**0.000**	**0.000**	**0.000**
07:00-08:00	**10**	**1914**	**0.037**	**0.000**	**0.037**
08:00-09:00	**11**	**1858**	**0.088**	**0.039**	**0.127**
09:00-10:00	**11**	**1858**	**0.068**	**0.049**	**0.117**
10:00-11:00	**11**	**1858**	**0.073**	**0.049**	**0.122**
11:00-12:00	**11**	**1858**	**0.127**	**0.088**	**0.215**
12:00-13:00	**11**	**1858**	**0.132**	**0.127**	**0.259**
13:00-14:00	**11**	**1858**	**0.127**	**0.108**	**0.235**
14:00-15:00	**11**	**1858**	**0.098**	**0.122**	**0.220**
15:00-16:00	**11**	**1858**	**0.049**	**0.108**	**0.157**
16:00-17:00	**11**	**1858**	**0.068**	**0.078**	**0.146**
17:00-18:00	**11**	**1858**	**0.068**	**0.073**	**0.141**
18:00-19:00	**11**	**1858**	**0.024**	**0.059**	**0.083**
19:00-20:00	**11**	**1858**	**0.010**	**0.024**	**0.034**
20:00-21:00	**11**	**1858**	**0.000**	**0.015**	**0.015**
21:00-22:00	**11**	**1858**	**0.000**	**0.010**	**0.010**
22:00-23:00	**11**	**1858**	**0.000**	**0.015**	**0.015**
23:00-00:00					
Total Rates:			**0.969**	**0.964**	**1.933**

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.*

Parameter Summary:

Trip rate parameter range selected:	1000 - 2773 (units: sqm)
Survey date date range:	17/05/2022 - 21/06/2024
Number of weekdays (Monday-Friday):	9
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
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.

TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES

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					
06:00-07:00	**2**	**1870**	**0.000**	**0.000**	**0.000**
07:00-08:00	**10**	**1914**	**0.000**	**0.000**	**0.000**
08:00-09:00	**11**	**1858**	**0.000**	**0.000**	**0.000**
09:00-10:00	**11**	**1858**	**0.000**	**0.000**	**0.000**
10:00-11:00	**11**	**1858**	**0.000**	**0.000**	**0.000**
11:00-12:00	**11**	**1858**	**0.000**	**0.000**	**0.000**
12:00-13:00	**11**	**1858**	**0.000**	**0.000**	**0.000**
13:00-14:00	**11**	**1858**	**0.034**	**0.034**	**0.068**
14:00-15:00	**11**	**1858**	**0.000**	**0.000**	**0.000**
15:00-16:00	**11**	**1858**	**0.000**	**0.000**	**0.000**
16:00-17:00	**11**	**1858**	**0.000**	**0.000**	**0.000**
17:00-18:00	**11**	**1858**	**0.000**	**0.000**	**0.000**
18:00-19:00	**11**	**1858**	**0.000**	**0.000**	**0.000**
19:00-20:00	**11**	**1858**	**0.000**	**0.000**	**0.000**
20:00-21:00	**11**	**1858**	**0.000**	**0.000**	**0.000**
21:00-22:00	**11**	**1858**	**0.000**	**0.000**	**0.000**
22:00-23:00	**11**	**1858**	**0.000**	**0.000**	**0.000**
23:00-00:00					
Total Rates:			**0.034**	**0.034**	**0.068**

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.*

Parameter Summary:

Trip rate parameter range selected:	1000 - 2773 (units: sqm)
Survey date date range:	17/05/2022 - 17/05/2022
Number of weekdays (Monday-Friday):	1
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
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.

TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES

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					
06:00-07:00	**2**	**1870**	**0.000**	**0.000**	**0.000**
07:00-08:00	**10**	**1914**	**0.005**	**0.005**	**0.010**
08:00-09:00	**11**	**1858**	**0.005**	**0.005**	**0.010**
09:00-10:00	**11**	**1858**	**0.000**	**0.010**	**0.010**
10:00-11:00	**11**	**1858**	**0.005**	**0.005**	**0.010**
11:00-12:00	**11**	**1858**	**0.000**	**0.005**	**0.005**
12:00-13:00	**11**	**1858**	**0.005**	**0.000**	**0.005**
13:00-14:00	**11**	**1858**	**0.005**	**0.010**	**0.015**
14:00-15:00	**11**	**1858**	**0.010**	**0.005**	**0.015**
15:00-16:00	**11**	**1858**	**0.000**	**0.000**	**0.000**
16:00-17:00	**11**	**1858**	**0.005**	**0.015**	**0.020**
17:00-18:00	**11**	**1858**	**0.000**	**0.005**	**0.005**
18:00-19:00	**11**	**1858**	**0.020**	**0.000**	**0.020**
19:00-20:00	**11**	**1858**	**0.010**	**0.000**	**0.010**
20:00-21:00	**11**	**1858**	**0.005**	**0.000**	**0.005**
21:00-22:00	**11**	**1858**	**0.000**	**0.000**	**0.000**
22:00-23:00	**11**	**1858**	**0.000**	**0.000**	**0.000**
23:00-00:00					
Total Rates:			**0.075**	**0.065**	**0.140**

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.*

Parameter Summary:

Trip rate parameter range selected:	1000 - 2773 (units: sqm)
Survey date date range:	17/05/2022 - 22/09/2022
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
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.

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use: 01 - RETAIL

Category: C - DISCOUNT FOOD STORES

Total Vehicles

Selected regions and areas:

02	**SOUTH EAST**		
	ES	EAST SUSSEX	1 day
04	**EAST ANGLIA**		
	NF	NORFOLK	1 day
06	**WEST MIDLANDS**		
	WM	WEST MIDLANDS	1 day

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

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:	1286 to 2773 (units:sqm)
Range Selected by User:	1000 to 2773 (units:sqm)
Parking Spaces Range:	1 - 230

Public Transport Provision:

Selection by:	All Surveys Included
Date Range:	01/01/22 to 24/06/24

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:

Saturday	3 days

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

Selected survey types:

Manual count	3
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:

Neighbourhood Centre (PPS6 Local Centre)	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:

No Sub Category	1 days
Residential Zone	2 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	3 days

Secondary Filtering Selection:

Use Class:

E(a)	3 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:

3827 - 4757

Population within 1 mile:

25,001 to 50,000	3 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
250,001 to 500,000	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	3 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.

Petrol filling station:

Unknown	3 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.

Travel Plan:

No	3 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	3 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

1	**ES-01-C-02**	**LIDL**	**EAST SUSSEX**

SEASIDE
EASTBOURNE
ST. ANTHONY'S HILL
Neighbourhood Centre (PPS6 Local Centre)
Residential Zone
Gross floor area: 1493 sqm
Survey date: Saturday 16/03/2024 Survey Type: Manual

2	**NF-01-C-02**	**LIDL**	**NORFOLK**

AYLSHAM ROAD
NORWICH
Neighbourhood Centre (PPS6 Local Centre)
No Sub Category
Gross floor area: 2773 sqm
Survey date: Saturday 10/09/2022 Survey Type: Manual

3	**WM-01-C-03**	**ALDI**	**WEST MIDLANDS**

RADFORD ROAD
COVENTRY
RADFORD
Neighbourhood Centre (PPS6 Local Centre)
Residential Zone
Gross floor area: 1286 sqm
Survey date: Saturday 19/11/2022 Survey Type: Manual

TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES

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					
06:00-07:00					
07:00-08:00	3	1851	0.937	0.090	1.027
08:00-09:00	3	1851	4.125	3.044	7.169
09:00-10:00	3	1851	5.277	4.017	9.294
10:00-11:00	3	1851	6.196	5.277	11.473
11:00-12:00	3	1851	6.664	6.286	12.950
12:00-13:00	3	1851	6.610	6.988	13.598
13:00-14:00	3	1851	6.358	6.250	12.608
14:00-15:00	3	1851	5.584	6.070	11.654
15:00-16:00	3	1851	5.205	5.710	10.915
16:00-17:00	3	1851	4.611	4.971	9.582
17:00-18:00	3	1851	4.017	4.665	8.682
18:00-19:00	3	1851	3.638	4.053	7.691
19:00-20:00	3	1851	3.044	3.512	6.556
20:00-21:00	3	1851	2.323	3.008	5.331
21:00-22:00	3	1851	1.063	1.531	2.594
22:00-23:00	3	1851	0.000	0.144	0.144
23:00-00:00					
Total Rates:			65.652	65.616	131.268

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.*

Parameter Summary:

Trip rate parameter range selected:	1000 - 2773 (units: sqm)
Survey date date range:	10/09/2022 - 16/03/2024
Number of weekdays (Monday-Friday):	0
Number of Saturdays:	3
Number of Sundays:	0
Surveys automatically removed from selection:	0
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.

TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES

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					
06:00-07:00					
07:00-08:00	**3**	**1851**	**1.675**	**0.108**	**1.783**
08:00-09:00	**3**	**1851**	**8.195**	**5.998**	**14.193**
09:00-10:00	**3**	**1851**	**10.447**	**8.159**	**18.606**
10:00-11:00	**3**	**1851**	**12.230**	**10.483**	**22.713**
11:00-12:00	**3**	**1851**	**12.482**	**12.050**	**24.532**
12:00-13:00	**3**	**1851**	**13.022**	**13.076**	**26.098**
13:00-14:00	**3**	**1851**	**12.590**	**12.302**	**24.892**
14:00-15:00	**3**	**1851**	**10.825**	**11.924**	**22.749**
15:00-16:00	**3**	**1851**	**10.249**	**11.149**	**21.398**
16:00-17:00	**3**	**1851**	**8.555**	**9.312**	**17.867**
17:00-18:00	**3**	**1851**	**7.565**	**8.862**	**16.427**
18:00-19:00	**3**	**1851**	**6.754**	**7.907**	**14.661**
19:00-20:00	**3**	**1851**	**5.800**	**6.790**	**12.590**
20:00-21:00	**3**	**1851**	**4.017**	**5.241**	**9.258**
21:00-22:00	**3**	**1851**	**1.909**	**2.720**	**4.629**
22:00-23:00	**3**	**1851**	**0.000**	**0.234**	**0.234**
23:00-00:00					
Total Rates:			**126.315**	**126.315**	**252.630**

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.*

Parameter Summary:

Trip rate parameter range selected:	1000 - 2773 (units: sqm)
Survey date date range:	10/09/2022 - 16/03/2024
Number of weekdays (Monday-Friday):	0
Number of Saturdays:	3
Number of Sundays:	0
Surveys automatically removed from selection:	0
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.

TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES

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					
06:00-07:00					
07:00-08:00	**3**	**1851**	**0.036**	**0.018**	**0.054**
08:00-09:00	**3**	**1851**	**0.198**	**0.144**	**0.342**
09:00-10:00	**3**	**1851**	**0.216**	**0.216**	**0.432**
10:00-11:00	**3**	**1851**	**0.324**	**0.234**	**0.558**
11:00-12:00	**3**	**1851**	**0.288**	**0.270**	**0.558**
12:00-13:00	**3**	**1851**	**0.288**	**0.324**	**0.612**
13:00-14:00	**3**	**1851**	**0.342**	**0.306**	**0.648**
14:00-15:00	**3**	**1851**	**0.252**	**0.252**	**0.504**
15:00-16:00	**3**	**1851**	**0.216**	**0.234**	**0.450**
16:00-17:00	**3**	**1851**	**0.162**	**0.180**	**0.342**
17:00-18:00	**3**	**1851**	**0.090**	**0.162**	**0.252**
18:00-19:00	**3**	**1851**	**0.144**	**0.162**	**0.306**
19:00-20:00	**3**	**1851**	**0.072**	**0.108**	**0.180**
20:00-21:00	**3**	**1851**	**0.018**	**0.036**	**0.054**
21:00-22:00	**3**	**1851**	**0.018**	**0.018**	**0.036**
22:00-23:00	**3**	**1851**	**0.000**	**0.000**	**0.000**
23:00-00:00					
Total Rates:			**2.664**	**2.664**	**5.328**

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.*

Parameter Summary:

Trip rate parameter range selected:	1000 - 2773 (units: sqm)
Survey date date range:	10/09/2022 - 16/03/2024
Number of weekdays (Monday-Friday):	0
Number of Saturdays:	3
Number of Sundays:	0
Surveys automatically removed from selection:	0
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.

TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES

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					
06:00-07:00					
07:00-08:00	**3**	**1851**	**0.000**	**0.000**	**0.000**
08:00-09:00	**3**	**1851**	**0.000**	**0.000**	**0.000**
09:00-10:00	**3**	**1851**	**0.000**	**0.000**	**0.000**
10:00-11:00	**3**	**1851**	**0.000**	**0.000**	**0.000**
11:00-12:00	**3**	**1851**	**0.000**	**0.000**	**0.000**
12:00-13:00	**3**	**1851**	**0.000**	**0.000**	**0.000**
13:00-14:00	**3**	**1851**	**0.000**	**0.000**	**0.000**
14:00-15:00	**3**	**1851**	**0.000**	**0.000**	**0.000**
15:00-16:00	**3**	**1851**	**0.000**	**0.000**	**0.000**
16:00-17:00	**3**	**1851**	**0.000**	**0.000**	**0.000**
17:00-18:00	**3**	**1851**	**0.000**	**0.000**	**0.000**
18:00-19:00	**3**	**1851**	**0.000**	**0.000**	**0.000**
19:00-20:00	**3**	**1851**	**0.000**	**0.000**	**0.000**
20:00-21:00	**3**	**1851**	**0.000**	**0.000**	**0.000**
21:00-22:00	**3**	**1851**	**0.000**	**0.000**	**0.000**
22:00-23:00	**3**	**1851**	**0.000**	**0.000**	**0.000**
23:00-00:00					
Total Rates:			**0.000**	**0.000**	**0.000**

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.*

Parameter Summary:

Trip rate parameter range selected:	1000 - 2773 (units: sqm)
Survey date date range:	N/A - N/A
Number of weekdays (Monday-Friday):	0
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
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.

TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES

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					
06:00-07:00					
07:00-08:00	**3**	**1851**	**0.018**	**0.000**	**0.018**
08:00-09:00	**3**	**1851**	**0.000**	**0.018**	**0.018**
09:00-10:00	**3**	**1851**	**0.018**	**0.000**	**0.018**
10:00-11:00	**3**	**1851**	**0.018**	**0.036**	**0.054**
11:00-12:00	**3**	**1851**	**0.000**	**0.000**	**0.000**
12:00-13:00	**3**	**1851**	**0.000**	**0.000**	**0.000**
13:00-14:00	**3**	**1851**	**0.000**	**0.000**	**0.000**
14:00-15:00	**3**	**1851**	**0.000**	**0.000**	**0.000**
15:00-16:00	**3**	**1851**	**0.000**	**0.000**	**0.000**
16:00-17:00	**3**	**1851**	**0.000**	**0.000**	**0.000**
17:00-18:00	**3**	**1851**	**0.000**	**0.000**	**0.000**
18:00-19:00	**3**	**1851**	**0.000**	**0.000**	**0.000**
19:00-20:00	**3**	**1851**	**0.000**	**0.000**	**0.000**
20:00-21:00	**3**	**1851**	**0.000**	**0.000**	**0.000**
21:00-22:00	**3**	**1851**	**0.000**	**0.000**	**0.000**
22:00-23:00	**3**	**1851**	**0.000**	**0.000**	**0.000**
23:00-00:00					
Total Rates:			**0.054**	**0.054**	**0.108**

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.*

Parameter Summary:

Trip rate parameter range selected:	1000 - 2773 (units: sqm)
Survey date date range:	10/09/2022 - 16/03/2024
Number of weekdays (Monday-Friday):	0
Number of Saturdays:	3
Number of Sundays:	0
Surveys automatically removed from selection:	0
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.

TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES

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					
06:00-07:00					
07:00-08:00	**3**	**1851**	**0.018**	**0.018**	**0.036**
08:00-09:00	**3**	**1851**	**0.090**	**0.072**	**0.162**
09:00-10:00	**3**	**1851**	**0.180**	**0.198**	**0.378**
10:00-11:00	**3**	**1851**	**0.216**	**0.198**	**0.414**
11:00-12:00	**3**	**1851**	**0.126**	**0.144**	**0.270**
12:00-13:00	**3**	**1851**	**0.270**	**0.270**	**0.540**
13:00-14:00	**3**	**1851**	**0.162**	**0.162**	**0.324**
14:00-15:00	**3**	**1851**	**0.162**	**0.162**	**0.324**
15:00-16:00	**3**	**1851**	**0.126**	**0.108**	**0.234**
16:00-17:00	**3**	**1851**	**0.072**	**0.072**	**0.144**
17:00-18:00	**3**	**1851**	**0.036**	**0.054**	**0.090**
18:00-19:00	**3**	**1851**	**0.054**	**0.054**	**0.108**
19:00-20:00	**3**	**1851**	**0.036**	**0.036**	**0.072**
20:00-21:00	**3**	**1851**	**0.000**	**0.000**	**0.000**
21:00-22:00	**3**	**1851**	**0.000**	**0.000**	**0.000**
22:00-23:00	**3**	**1851**	**0.000**	**0.000**	**0.000**
23:00-00:00					
Total Rates:			**1.548**	**1.548**	**3.096**

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.*

Parameter Summary:

Trip rate parameter range selected:	1000 - 2773 (units: sqm)
Survey date date range:	10/09/2022 - 16/03/2024
Number of weekdays (Monday-Friday):	0
Number of Saturdays:	3
Number of Sundays:	0
Surveys automatically removed from selection:	0
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.

TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES

Cars

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					
06:00-07:00					
07:00-08:00	**3**	**1851**	**0.865**	**0.072**	**0.937**
08:00-09:00	**3**	**1851**	**3.836**	**2.828**	**6.664**
09:00-10:00	**3**	**1851**	**4.719**	**3.620**	**8.339**
10:00-11:00	**3**	**1851**	**5.602**	**4.701**	**10.303**
11:00-12:00	**3**	**1851**	**6.124**	**5.746**	**11.870**
12:00-13:00	**3**	**1851**	**6.052**	**6.304**	**12.356**
13:00-14:00	**3**	**1851**	**5.890**	**5.854**	**11.744**
14:00-15:00	**3**	**1851**	**5.187**	**5.602**	**10.789**
15:00-16:00	**3**	**1851**	**4.881**	**5.385**	**10.266**
16:00-17:00	**3**	**1851**	**4.413**	**4.683**	**9.096**
17:00-18:00	**3**	**1851**	**3.927**	**4.539**	**8.466**
18:00-19:00	**3**	**1851**	**3.512**	**3.945**	**7.457**
19:00-20:00	**3**	**1851**	**2.972**	**3.440**	**6.412**
20:00-21:00	**3**	**1851**	**2.269**	**2.918**	**5.187**
21:00-22:00	**3**	**1851**	**1.045**	**1.513**	**2.558**
22:00-23:00	**3**	**1851**	**0.000**	**0.144**	**0.144**
23:00-00:00					
Total Rates:			**61.294**	**61.294**	**122.588**

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.*

Parameter Summary:

Trip rate parameter range selected:	1000 - 2773 (units: sqm)
Survey date date range:	10/09/2022 - 16/03/2024
Number of weekdays (Monday-Friday):	0
Number of Saturdays:	3
Number of Sundays:	0
Surveys automatically removed from selection:	0
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.

TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES

LGVs

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					
06:00-07:00					
07:00-08:00	**3**	**1851**	**0.018**	**0.000**	**0.018**
08:00-09:00	**3**	**1851**	**0.198**	**0.108**	**0.306**
09:00-10:00	**3**	**1851**	**0.306**	**0.198**	**0.504**
10:00-11:00	**3**	**1851**	**0.324**	**0.288**	**0.612**
11:00-12:00	**3**	**1851**	**0.378**	**0.360**	**0.738**
12:00-13:00	**3**	**1851**	**0.252**	**0.360**	**0.612**
13:00-14:00	**3**	**1851**	**0.306**	**0.216**	**0.522**
14:00-15:00	**3**	**1851**	**0.216**	**0.288**	**0.504**
15:00-16:00	**3**	**1851**	**0.180**	**0.216**	**0.396**
16:00-17:00	**3**	**1851**	**0.108**	**0.198**	**0.306**
17:00-18:00	**3**	**1851**	**0.054**	**0.054**	**0.108**
18:00-19:00	**3**	**1851**	**0.072**	**0.054**	**0.126**
19:00-20:00	**3**	**1851**	**0.018**	**0.036**	**0.054**
20:00-21:00	**3**	**1851**	**0.054**	**0.072**	**0.126**
21:00-22:00	**3**	**1851**	**0.018**	**0.018**	**0.036**
22:00-23:00	**3**	**1851**	**0.000**	**0.000**	**0.000**
23:00-00:00					
Total Rates:			**2.502**	**2.466**	**4.968**

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.*

Parameter Summary:

Trip rate parameter range selected:	1000 - 2773 (units: sqm)
Survey date date range:	10/09/2022 - 16/03/2024
Number of weekdays (Monday-Friday):	0
Number of Saturdays:	3
Number of Sundays:	0
Surveys automatically removed from selection:	0
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.

TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES

Motorcycles

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					
06:00-07:00					
07:00-08:00	**3**	**1851**	**0.018**	**0.000**	**0.018**
08:00-09:00	**3**	**1851**	**0.000**	**0.018**	**0.018**
09:00-10:00	**3**	**1851**	**0.054**	**0.000**	**0.054**
10:00-11:00	**3**	**1851**	**0.036**	**0.054**	**0.090**
11:00-12:00	**3**	**1851**	**0.036**	**0.036**	**0.072**
12:00-13:00	**3**	**1851**	**0.036**	**0.054**	**0.090**
13:00-14:00	**3**	**1851**	**0.000**	**0.018**	**0.018**
14:00-15:00	**3**	**1851**	**0.018**	**0.018**	**0.036**
15:00-16:00	**3**	**1851**	**0.018**	**0.000**	**0.018**
16:00-17:00	**3**	**1851**	**0.018**	**0.018**	**0.036**
17:00-18:00	**3**	**1851**	**0.000**	**0.018**	**0.018**
18:00-19:00	**3**	**1851**	**0.000**	**0.000**	**0.000**
19:00-20:00	**3**	**1851**	**0.018**	**0.000**	**0.018**
20:00-21:00	**3**	**1851**	**0.000**	**0.018**	**0.018**
21:00-22:00	**3**	**1851**	**0.000**	**0.000**	**0.000**
22:00-23:00	**3**	**1851**	**0.000**	**0.000**	**0.000**
23:00-00:00					
Total Rates:			**0.252**	**0.252**	**0.504**

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.*

Parameter Summary:

Trip rate parameter range selected:	1000 - 2773 (units: sqm)
Survey date date range:	10/09/2022 - 19/11/2022
Number of weekdays (Monday-Friday):	0
Number of Saturdays:	2
Number of Sundays:	0
Surveys automatically removed from selection:	0
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.

TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES

Servicing 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					
06:00-07:00					
07:00-08:00	**3**	**1851**	**0.018**	**0.000**	**0.018**
08:00-09:00	**3**	**1851**	**0.018**	**0.018**	**0.036**
09:00-10:00	**3**	**1851**	**0.036**	**0.018**	**0.054**
10:00-11:00	**3**	**1851**	**0.054**	**0.036**	**0.090**
11:00-12:00	**3**	**1851**	**0.018**	**0.054**	**0.072**
12:00-13:00	**3**	**1851**	**0.018**	**0.018**	**0.036**
13:00-14:00	**3**	**1851**	**0.018**	**0.000**	**0.018**
14:00-15:00	**3**	**1851**	**0.000**	**0.018**	**0.018**
15:00-16:00	**3**	**1851**	**0.000**	**0.018**	**0.018**
16:00-17:00	**3**	**1851**	**0.000**	**0.000**	**0.000**
17:00-18:00	**3**	**1851**	**0.000**	**0.000**	**0.000**
18:00-19:00	**3**	**1851**	**0.000**	**0.000**	**0.000**
19:00-20:00	**3**	**1851**	**0.000**	**0.000**	**0.000**
20:00-21:00	**3**	**1851**	**0.000**	**0.000**	**0.000**
21:00-22:00	**3**	**1851**	**0.000**	**0.000**	**0.000**
22:00-23:00	**3**	**1851**	**0.000**	**0.000**	**0.000**
23:00-00:00					
Total Rates:			**0.180**	**0.180**	**0.360**

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.*

Parameter Summary:

Trip rate parameter range selected:	1000 - 2773 (units: sqm)
Survey date date range:	10/09/2022 - 16/03/2024
Number of weekdays (Monday-Friday):	0
Number of Saturdays:	3
Number of Sundays:	0
Surveys automatically removed from selection:	0
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.

TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES

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					
06:00-07:00					
07:00-08:00	**3**	**1851**	**1.333**	**0.090**	**1.423**
08:00-09:00	**3**	**1851**	**6.466**	**4.773**	**11.239**
09:00-10:00	**3**	**1851**	**8.357**	**6.070**	**14.427**
10:00-11:00	**3**	**1851**	**9.996**	**8.465**	**18.461**
11:00-12:00	**3**	**1851**	**10.393**	**9.798**	**20.191**
12:00-13:00	**3**	**1851**	**10.339**	**10.717**	**21.056**
13:00-14:00	**3**	**1851**	**9.996**	**9.816**	**19.812**
14:00-15:00	**3**	**1851**	**8.736**	**9.510**	**18.246**
15:00-16:00	**3**	**1851**	**8.249**	**9.024**	**17.273**
16:00-17:00	**3**	**1851**	**7.097**	**7.709**	**14.806**
17:00-18:00	**3**	**1851**	**6.304**	**7.331**	**13.635**
18:00-19:00	**3**	**1851**	**5.656**	**6.682**	**12.338**
19:00-20:00	**3**	**1851**	**4.899**	**5.728**	**10.627**
20:00-21:00	**3**	**1851**	**3.512**	**4.701**	**8.213**
21:00-22:00	**3**	**1851**	**1.603**	**2.305**	**3.908**
22:00-23:00	**3**	**1851**	**0.000**	**0.180**	**0.180**
23:00-00:00					
Total Rates:			**102.936**	**102.899**	**205.835**

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.*

Parameter Summary:

Trip rate parameter range selected:	1000 - 2773 (units: sqm)
Survey date date range:	10/09/2022 - 16/03/2024
Number of weekdays (Monday-Friday):	0
Number of Saturdays:	3
Number of Sundays:	0
Surveys automatically removed from selection:	0
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.

TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES

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					
06:00-07:00					
07:00-08:00	**3**	**1851**	**0.144**	**0.000**	**0.144**
08:00-09:00	**3**	**1851**	**0.973**	**0.648**	**1.621**
09:00-10:00	**3**	**1851**	**1.117**	**1.117**	**2.234**
10:00-11:00	**3**	**1851**	**1.099**	**1.009**	**2.108**
11:00-12:00	**3**	**1851**	**1.045**	**1.153**	**2.198**
12:00-13:00	**3**	**1851**	**1.405**	**1.135**	**2.540**
13:00-14:00	**3**	**1851**	**1.441**	**1.369**	**2.810**
14:00-15:00	**3**	**1851**	**1.189**	**1.387**	**2.576**
15:00-16:00	**3**	**1851**	**1.207**	**1.171**	**2.378**
16:00-17:00	**3**	**1851**	**0.883**	**0.883**	**1.766**
17:00-18:00	**3**	**1851**	**0.793**	**0.919**	**1.712**
18:00-19:00	**3**	**1851**	**0.666**	**0.702**	**1.368**
19:00-20:00	**3**	**1851**	**0.684**	**0.684**	**1.368**
20:00-21:00	**3**	**1851**	**0.414**	**0.414**	**0.828**
21:00-22:00	**3**	**1851**	**0.270**	**0.288**	**0.558**
22:00-23:00	**3**	**1851**	**0.000**	**0.018**	**0.018**
23:00-00:00					
Total Rates:			**13.330**	**12.897**	**26.227**

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.*

Parameter Summary:

Trip rate parameter range selected:	1000 - 2773 (units: sqm)
Survey date date range:	10/09/2022 - 16/03/2024
Number of weekdays (Monday-Friday):	0
Number of Saturdays:	3
Number of Sundays:	0
Surveys automatically removed from selection:	0
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.

TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES

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					
06:00-07:00					
07:00-08:00	**3**	**1851**	**0.162**	**0.000**	**0.162**
08:00-09:00	**3**	**1851**	**0.558**	**0.432**	**0.990**
09:00-10:00	**3**	**1851**	**0.720**	**0.756**	**1.476**
10:00-11:00	**3**	**1851**	**0.793**	**0.738**	**1.531**
11:00-12:00	**3**	**1851**	**0.702**	**0.756**	**1.458**
12:00-13:00	**3**	**1851**	**0.973**	**0.901**	**1.874**
13:00-14:00	**3**	**1851**	**0.774**	**0.793**	**1.567**
14:00-15:00	**3**	**1851**	**0.648**	**0.738**	**1.386**
15:00-16:00	**3**	**1851**	**0.540**	**0.684**	**1.224**
16:00-17:00	**3**	**1851**	**0.414**	**0.540**	**0.954**
17:00-18:00	**3**	**1851**	**0.378**	**0.450**	**0.828**
18:00-19:00	**3**	**1851**	**0.288**	**0.360**	**0.648**
19:00-20:00	**3**	**1851**	**0.126**	**0.252**	**0.378**
20:00-21:00	**3**	**1851**	**0.072**	**0.090**	**0.162**
21:00-22:00	**3**	**1851**	**0.018**	**0.108**	**0.126**
22:00-23:00	**3**	**1851**	**0.000**	**0.036**	**0.036**
23:00-00:00					
Total Rates:			**7.166**	**7.634**	**14.800**

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.*

Parameter Summary:

Trip rate parameter range selected:	1000 - 2773 (units: sqm)
Survey date date range:	10/09/2022 - 16/03/2024
Number of weekdays (Monday-Friday):	0
Number of Saturdays:	3
Number of Sundays:	0
Surveys automatically removed from selection:	0
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.

TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES

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					
06:00-07:00					
07:00-08:00	**3**	**1851**	**0.162**	**0.000**	**0.162**
08:00-09:00	**3**	**1851**	**0.558**	**0.432**	**0.990**
09:00-10:00	**3**	**1851**	**0.720**	**0.756**	**1.476**
10:00-11:00	**3**	**1851**	**0.793**	**0.738**	**1.531**
11:00-12:00	**3**	**1851**	**0.702**	**0.756**	**1.458**
12:00-13:00	**3**	**1851**	**0.973**	**0.901**	**1.874**
13:00-14:00	**3**	**1851**	**0.774**	**0.793**	**1.567**
14:00-15:00	**3**	**1851**	**0.648**	**0.738**	**1.386**
15:00-16:00	**3**	**1851**	**0.540**	**0.684**	**1.224**
16:00-17:00	**3**	**1851**	**0.414**	**0.540**	**0.954**
17:00-18:00	**3**	**1851**	**0.378**	**0.450**	**0.828**
18:00-19:00	**3**	**1851**	**0.288**	**0.360**	**0.648**
19:00-20:00	**3**	**1851**	**0.126**	**0.252**	**0.378**
20:00-21:00	**3**	**1851**	**0.072**	**0.090**	**0.162**
21:00-22:00	**3**	**1851**	**0.018**	**0.108**	**0.126**
22:00-23:00	**3**	**1851**	**0.000**	**0.036**	**0.036**
23:00-00:00					
Total Rates:			**7.166**	**7.634**	**14.800**

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.*

Parameter Summary:

Trip rate parameter range selected:	1000 - 2773 (units: sqm)
Survey date date range:	10/09/2022 - 16/03/2024
Number of weekdays (Monday-Friday):	0
Number of Saturdays:	3
Number of Sundays:	0
Surveys automatically removed from selection:	0
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.

TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES

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					
06:00-07:00					
07:00-08:00	**3**	**1851**	**0.000**	**0.000**	**0.000**
08:00-09:00	**3**	**1851**	**0.000**	**0.000**	**0.000**
09:00-10:00	**3**	**1851**	**0.000**	**0.000**	**0.000**
10:00-11:00	**3**	**1851**	**0.000**	**0.000**	**0.000**
11:00-12:00	**3**	**1851**	**0.000**	**0.000**	**0.000**
12:00-13:00	**3**	**1851**	**0.000**	**0.000**	**0.000**
13:00-14:00	**3**	**1851**	**0.000**	**0.000**	**0.000**
14:00-15:00	**3**	**1851**	**0.000**	**0.000**	**0.000**
15:00-16:00	**3**	**1851**	**0.000**	**0.000**	**0.000**
16:00-17:00	**3**	**1851**	**0.000**	**0.000**	**0.000**
17:00-18:00	**3**	**1851**	**0.000**	**0.000**	**0.000**
18:00-19:00	**3**	**1851**	**0.000**	**0.000**	**0.000**
19:00-20:00	**3**	**1851**	**0.000**	**0.000**	**0.000**
20:00-21:00	**3**	**1851**	**0.000**	**0.000**	**0.000**
21:00-22:00	**3**	**1851**	**0.000**	**0.000**	**0.000**
22:00-23:00	**3**	**1851**	**0.000**	**0.000**	**0.000**
23:00-00:00					
Total Rates:			**0.000**	**0.000**	**0.000**

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.*

Parameter Summary:

Trip rate parameter range selected:	1000 - 2773 (units: sqm)
Survey date date range:	N/A - N/A
Number of weekdays (Monday-Friday):	0
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
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.

TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES

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					
06:00-07:00					
07:00-08:00	**3**	**1851**	**0.000**	**0.000**	**0.000**
08:00-09:00	**3**	**1851**	**0.000**	**0.000**	**0.000**
09:00-10:00	**3**	**1851**	**0.000**	**0.000**	**0.000**
10:00-11:00	**3**	**1851**	**0.000**	**0.000**	**0.000**
11:00-12:00	**3**	**1851**	**0.000**	**0.000**	**0.000**
12:00-13:00	**3**	**1851**	**0.000**	**0.000**	**0.000**
13:00-14:00	**3**	**1851**	**0.000**	**0.000**	**0.000**
14:00-15:00	**3**	**1851**	**0.000**	**0.000**	**0.000**
15:00-16:00	**3**	**1851**	**0.000**	**0.000**	**0.000**
16:00-17:00	**3**	**1851**	**0.000**	**0.000**	**0.000**
17:00-18:00	**3**	**1851**	**0.000**	**0.000**	**0.000**
18:00-19:00	**3**	**1851**	**0.000**	**0.000**	**0.000**
19:00-20:00	**3**	**1851**	**0.000**	**0.000**	**0.000**
20:00-21:00	**3**	**1851**	**0.000**	**0.000**	**0.000**
21:00-22:00	**3**	**1851**	**0.000**	**0.000**	**0.000**
22:00-23:00	**3**	**1851**	**0.000**	**0.000**	**0.000**
23:00-00:00					
Total Rates:			**0.000**	**0.000**	**0.000**

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.*

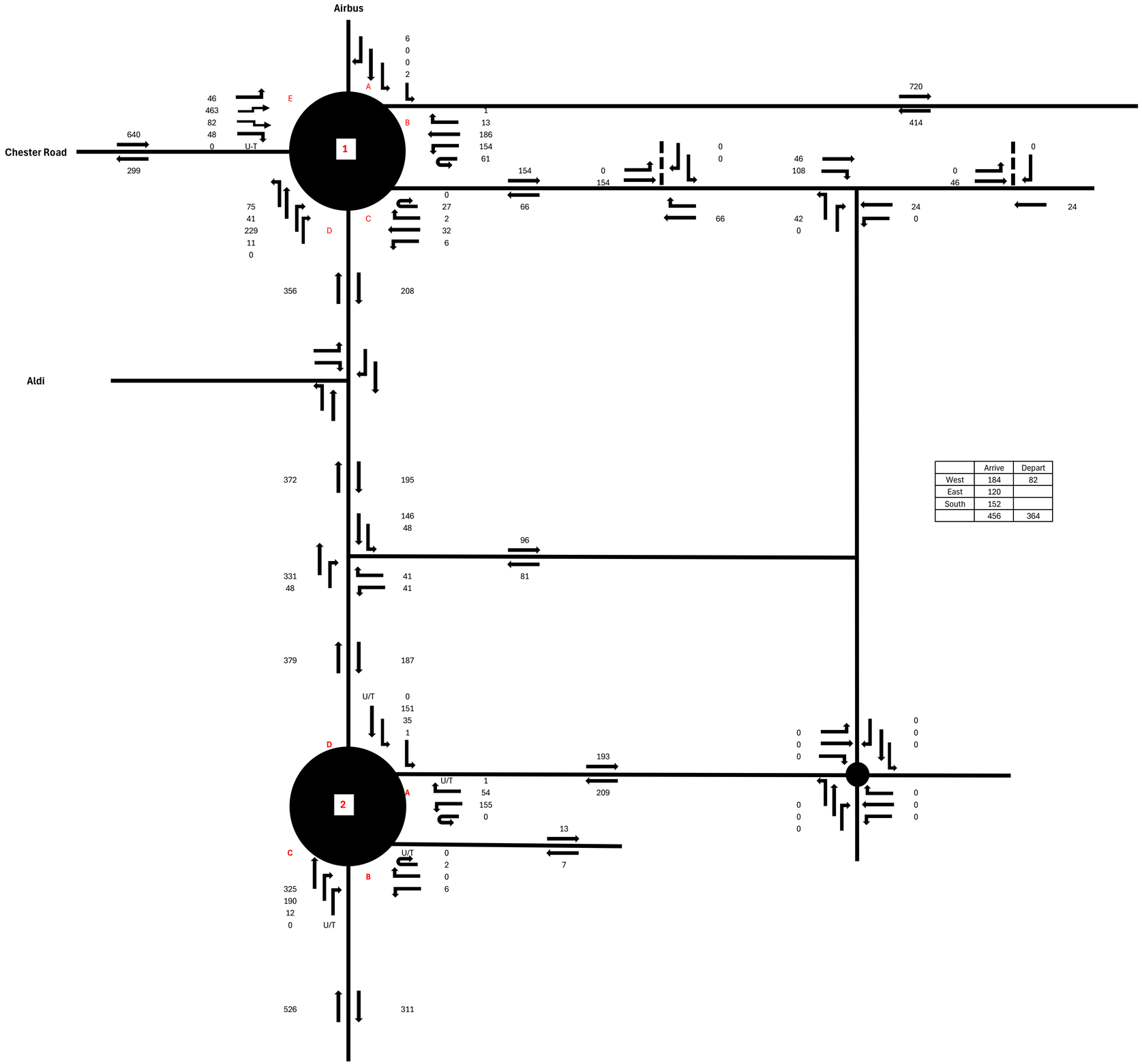
Parameter Summary:

Trip rate parameter range selected:	1000 - 2773 (units: sqm)
Survey date date range:	N/A - N/A
Number of weekdays (Monday-Friday):	0
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
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.

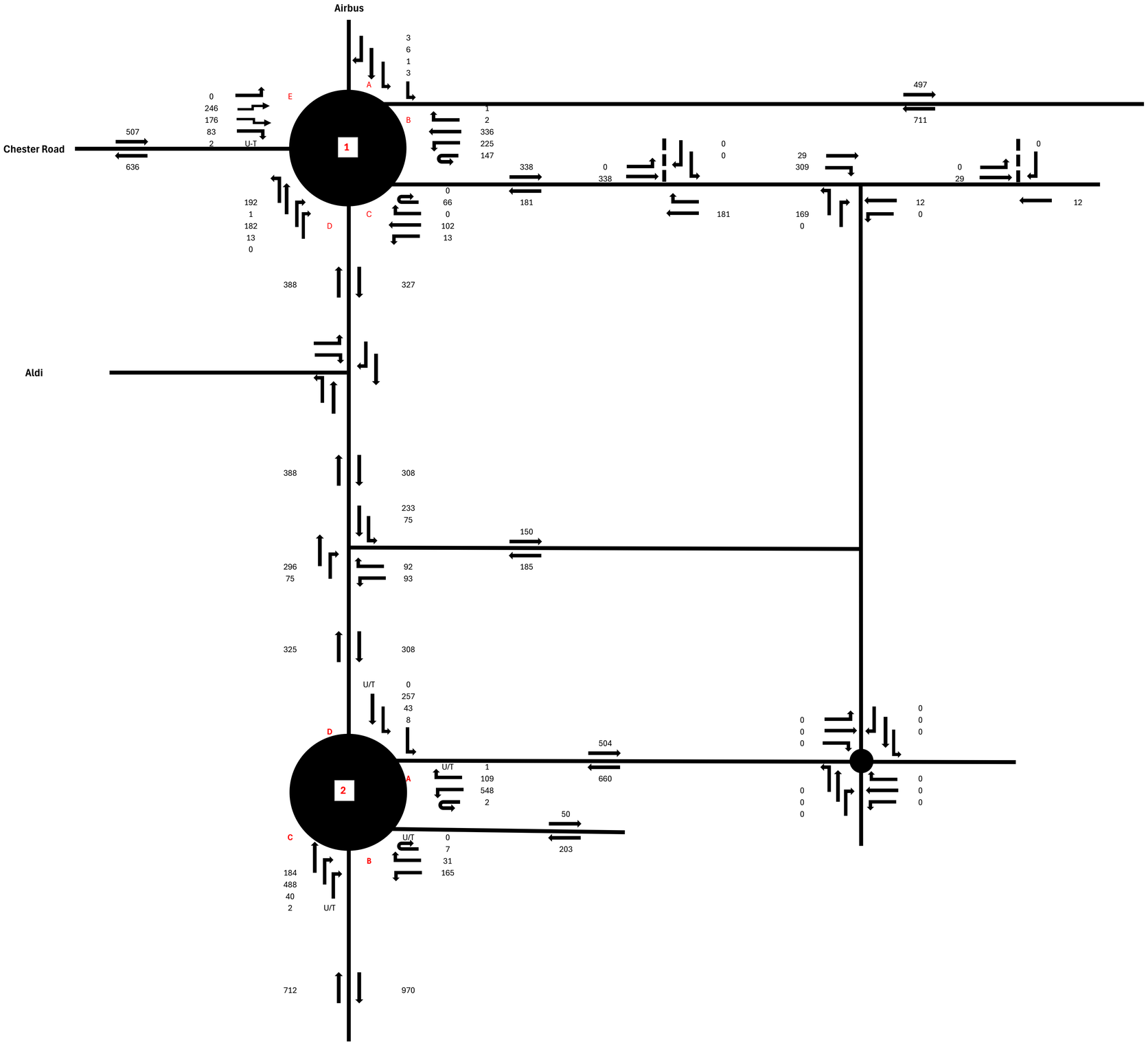
Appendix D

(Flow Diagrams)

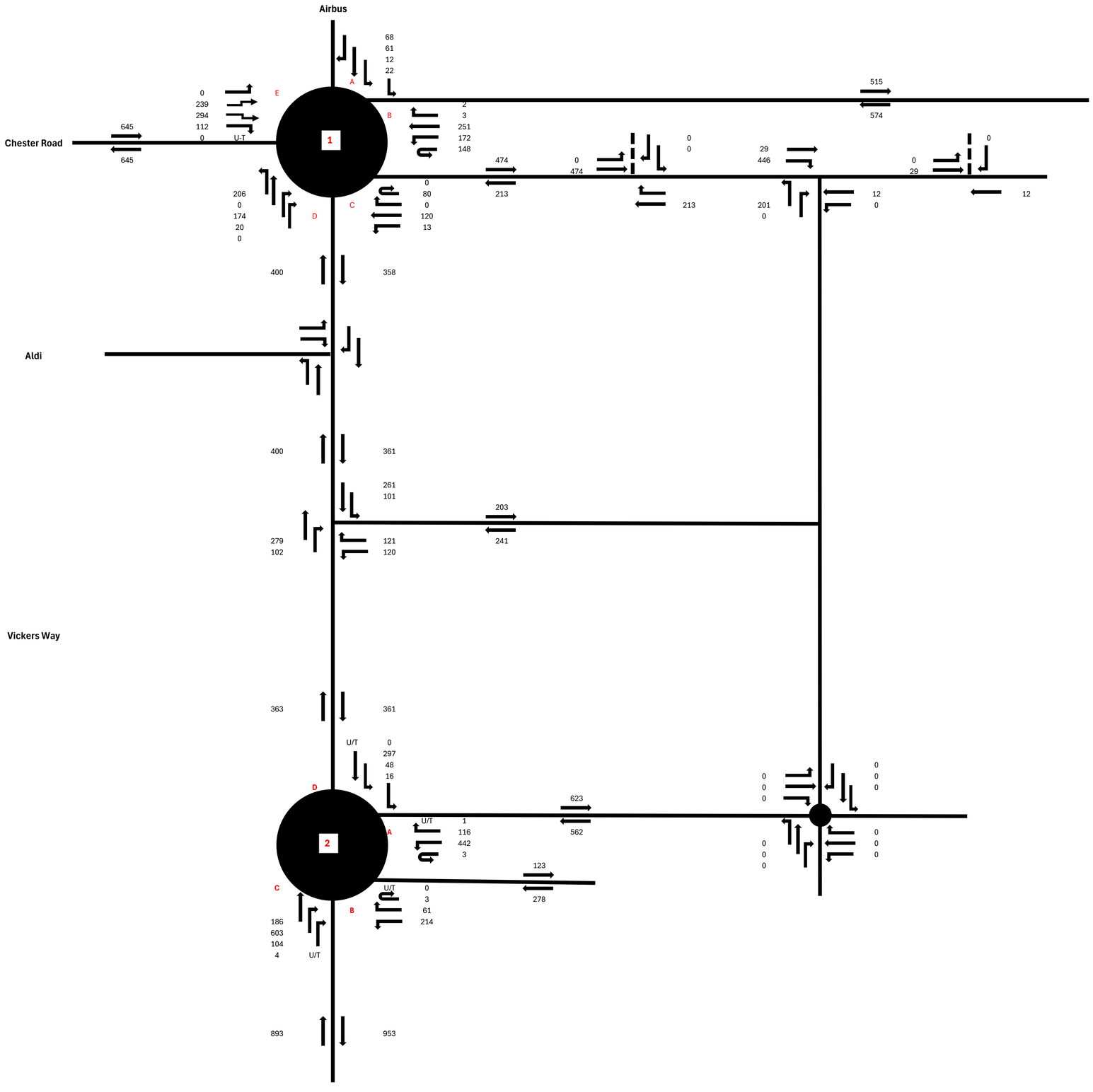


	Arrive	Depart
West	184	82
East	120	
South	152	
	456	364

Flow 01 - 2023 Observed Scenario (AM Peak 0730 - 0830)

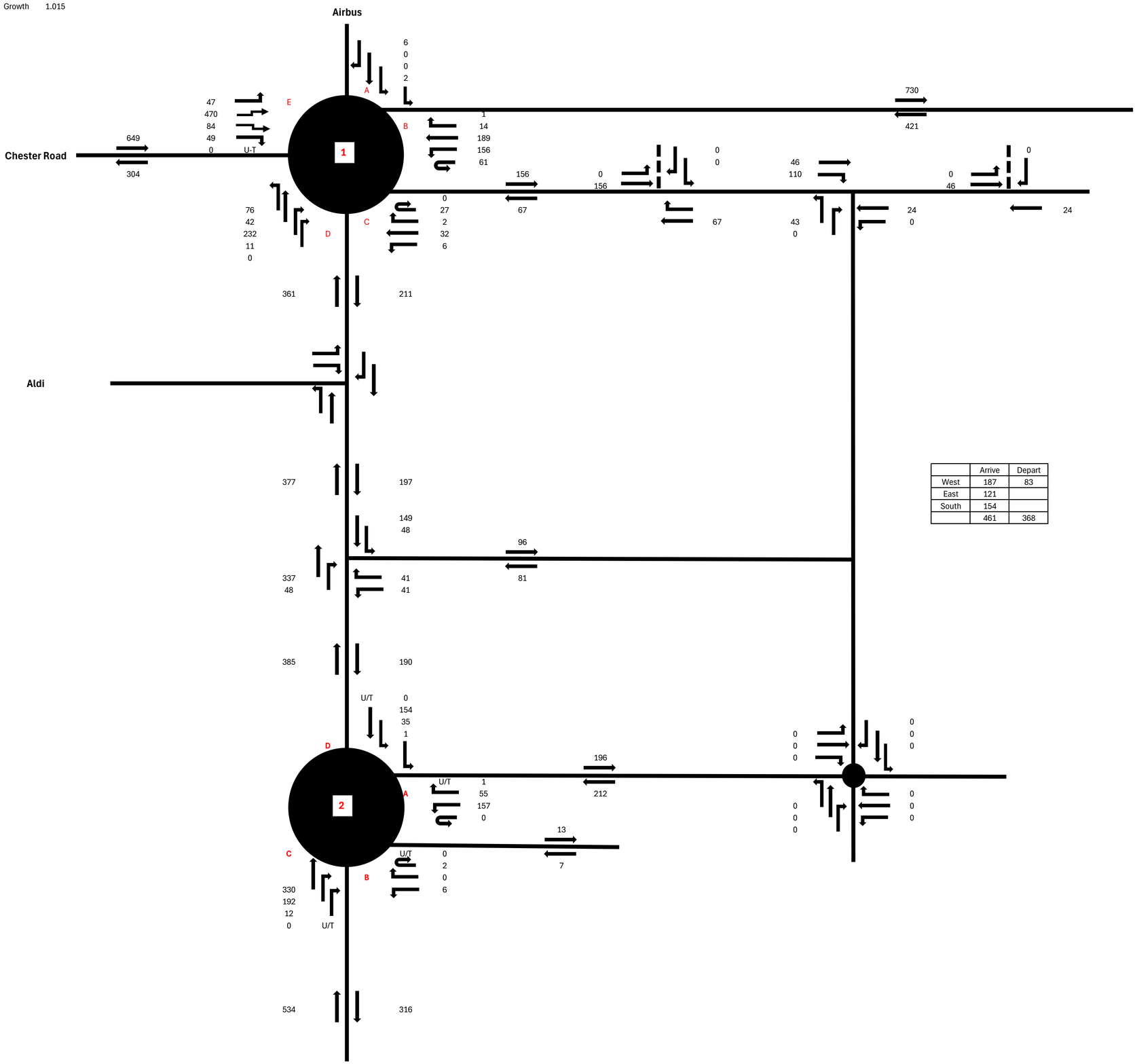


Flow 02 - 2023 Observed Scenario (PM Peak 1600 - 1700)



Flow 03 - 2023 Observed Scenario (SAT Peak 1200 - 1300)

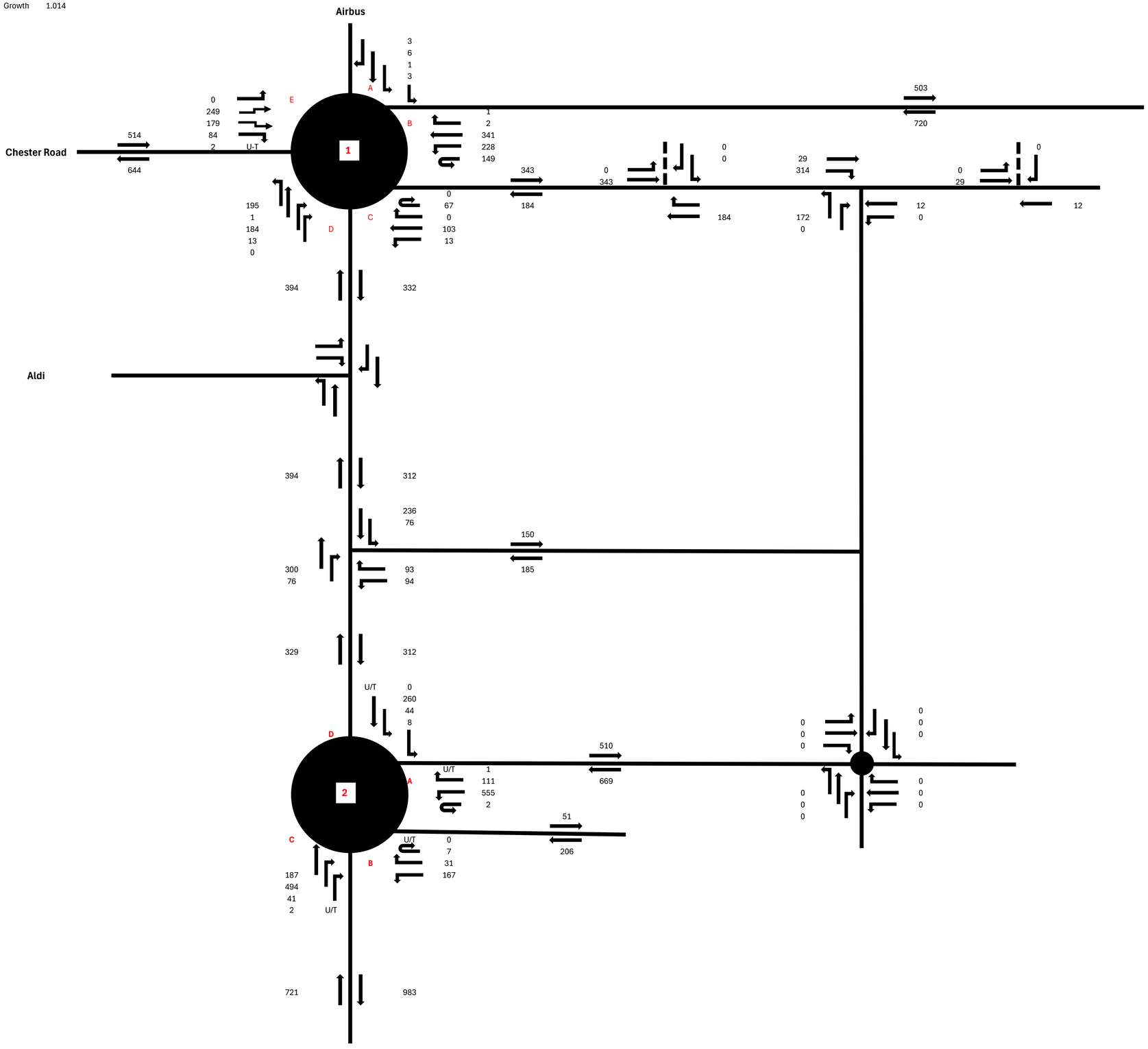
Growth 1.015



	Arrive	Depart
West	187	83
East	121	
South	154	
	461	368

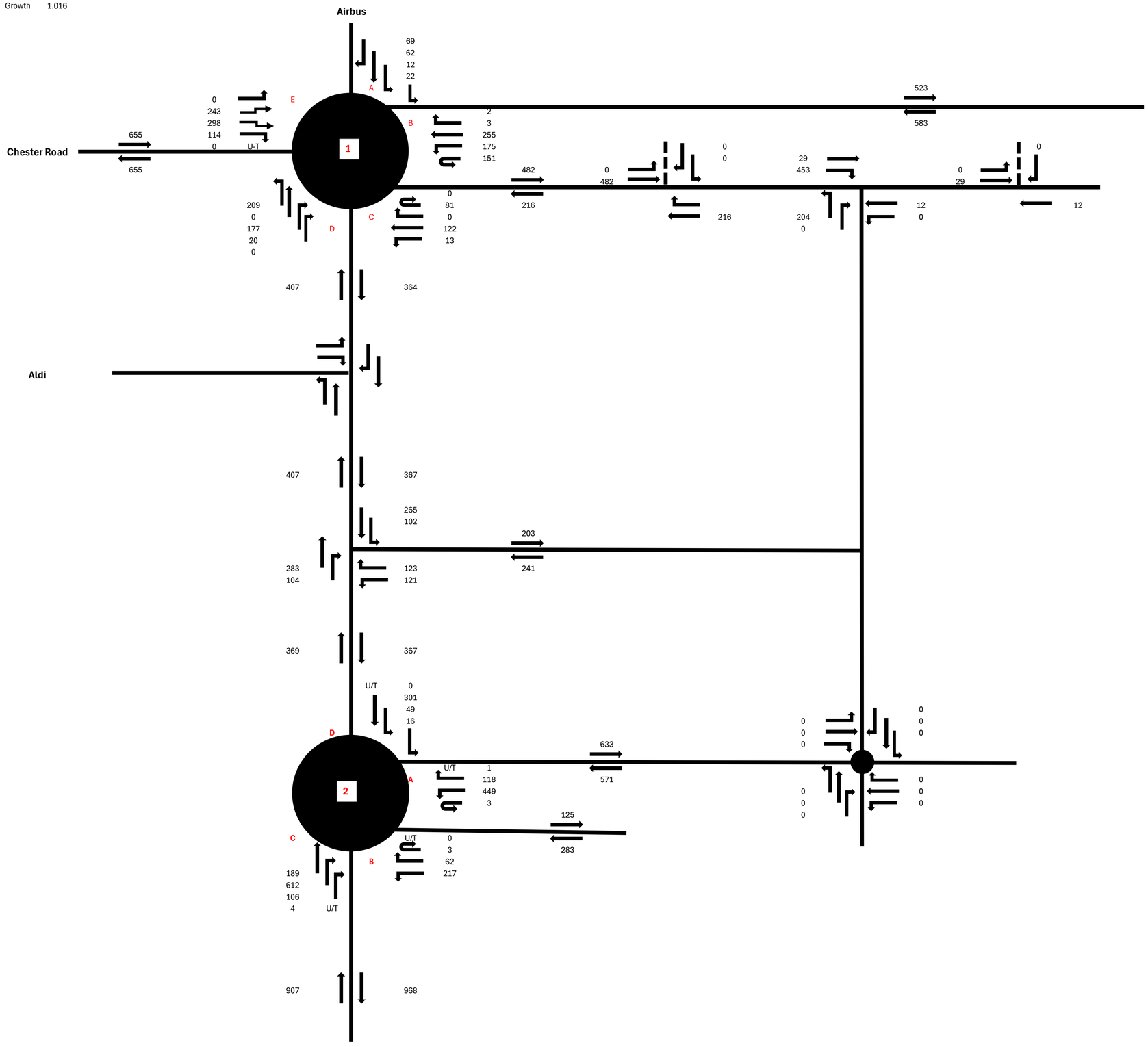
Flow 04 - 2026 Base Scenario (AM Peak 0730 - 0830)

Growth 1.014

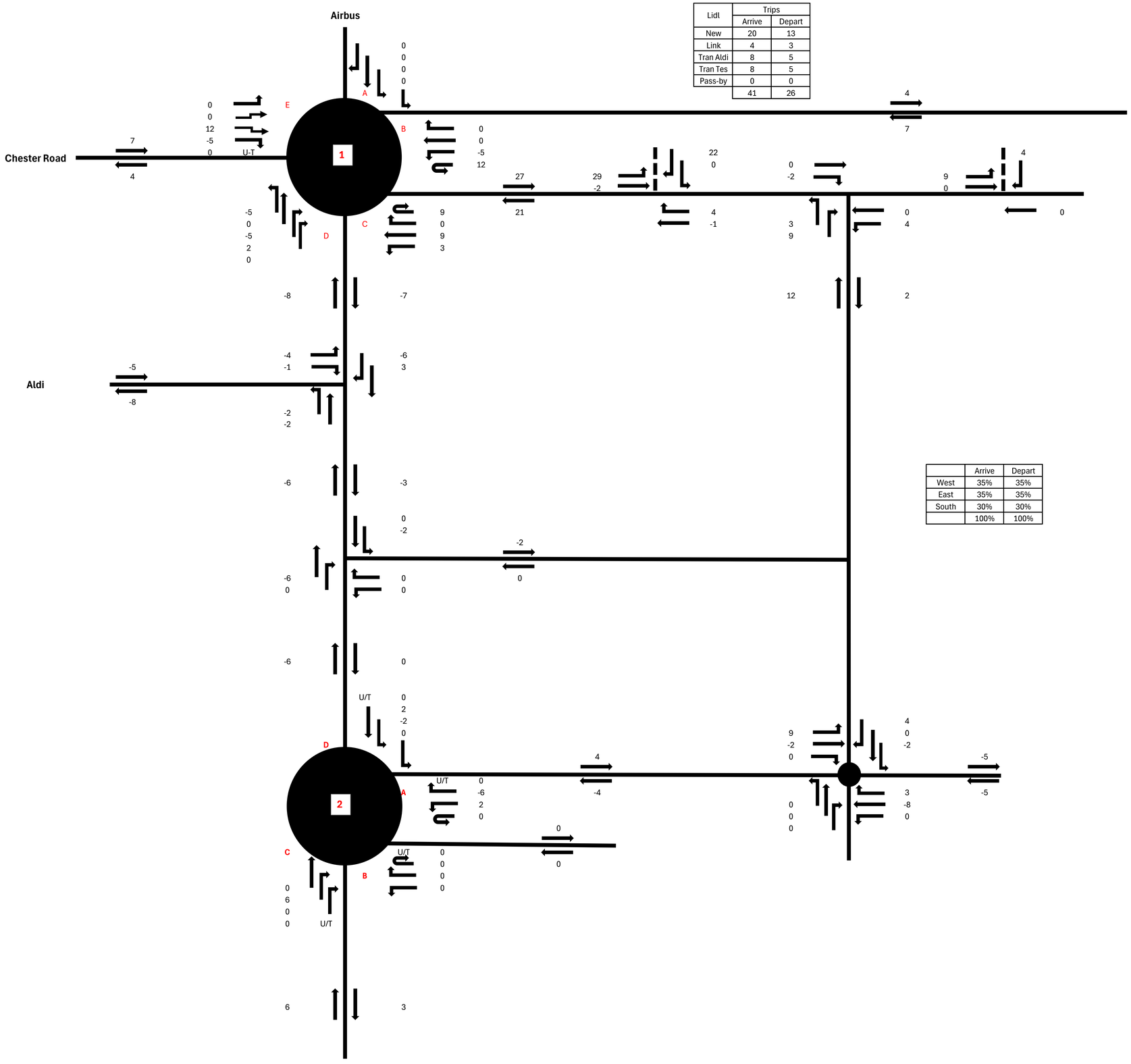


Flow 05 - 2026 Base Scenario (PM Peak 1600 - 1700)

Growth 1.016



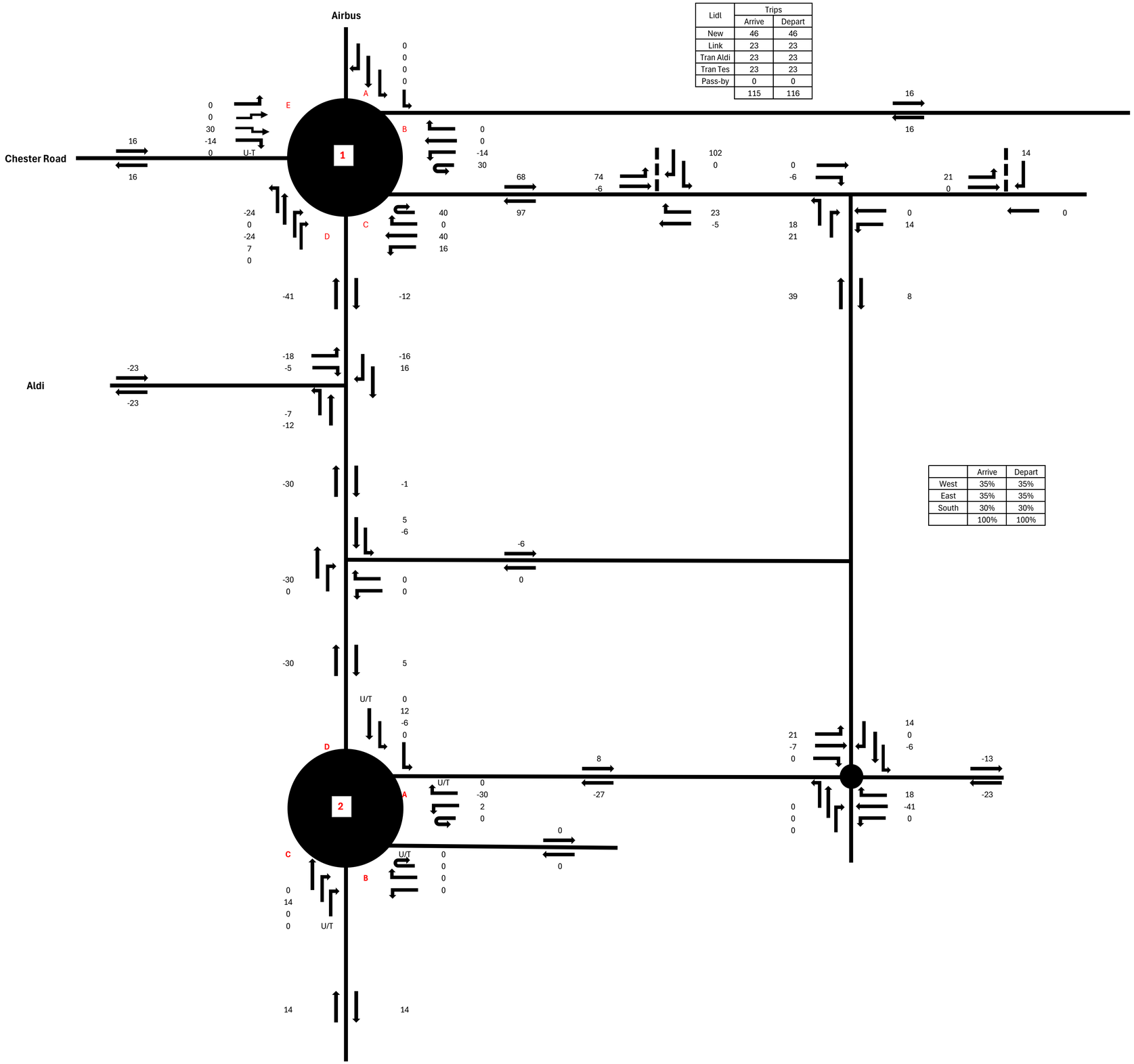
Flow 06 - 2026 Base Scenario (SAT Peak 1200 - 1300)



Lidl	Trips	
	Arrive	Depart
New	20	13
Link	4	3
Tran Aldi	8	5
Tran Tes	8	5
Pass-by	0	0
	41	26

	Arrive	Depart
West	35%	35%
East	35%	35%
South	30%	30%
	100%	100%

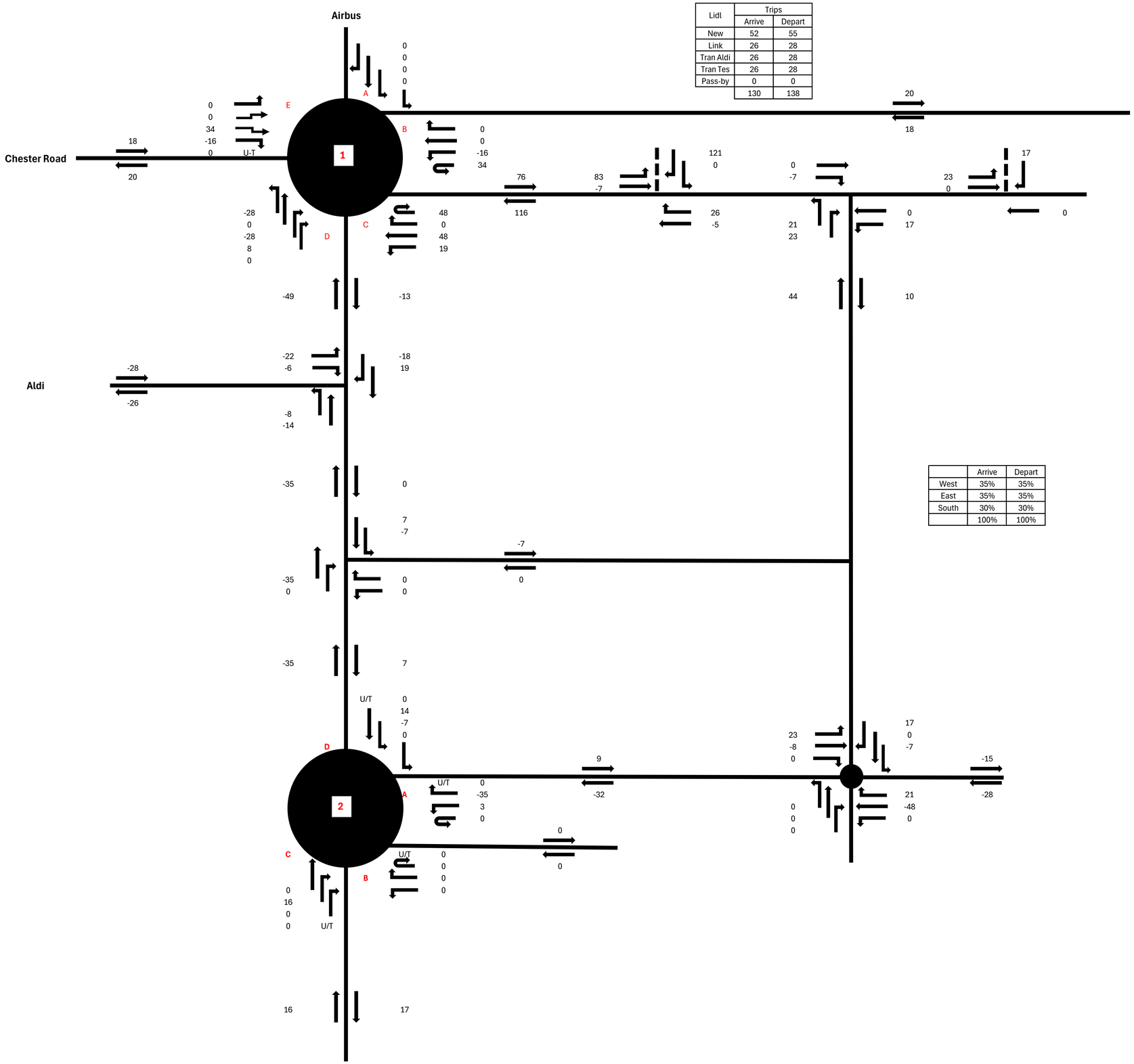
Flow 07 - Development Flows (AM Peak 0730 - 0830)



Lidl	Trips	
	Arrive	Depart
New	46	46
Link	23	23
Tran Aldi	23	23
Tran Tes	23	23
Pass-by	0	0
	115	116

	Arrive	Depart
West	35%	35%
East	35%	35%
South	30%	30%
	100%	100%

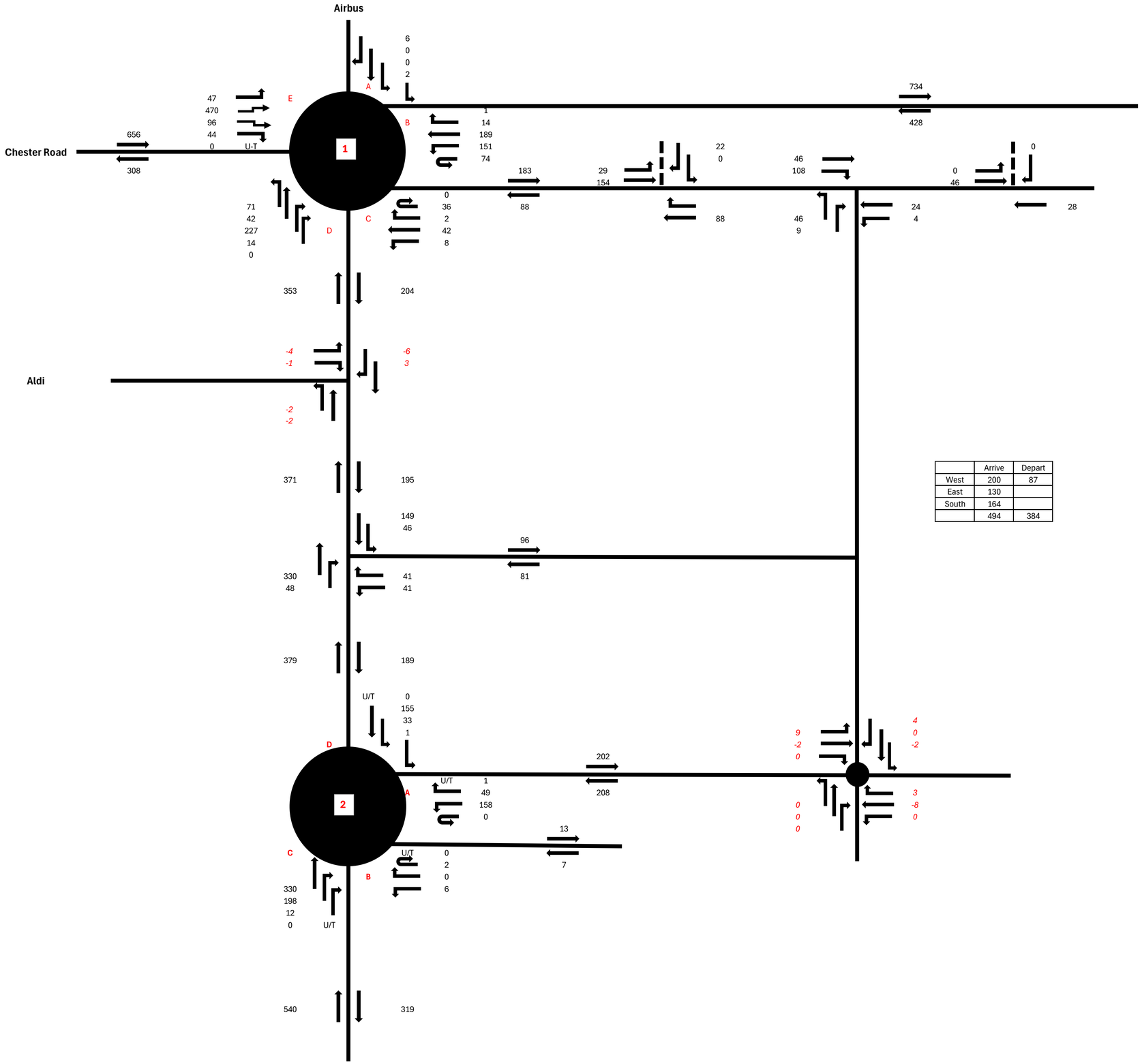
Flow 08 - Development Flows (PM Peak 1600 - 1700)



Lidl	Trips	
	Arrive	Depart
New	52	55
Link	26	28
Tran Aldi	26	28
Tran Tes	26	28
Pass-by	0	0
	130	138

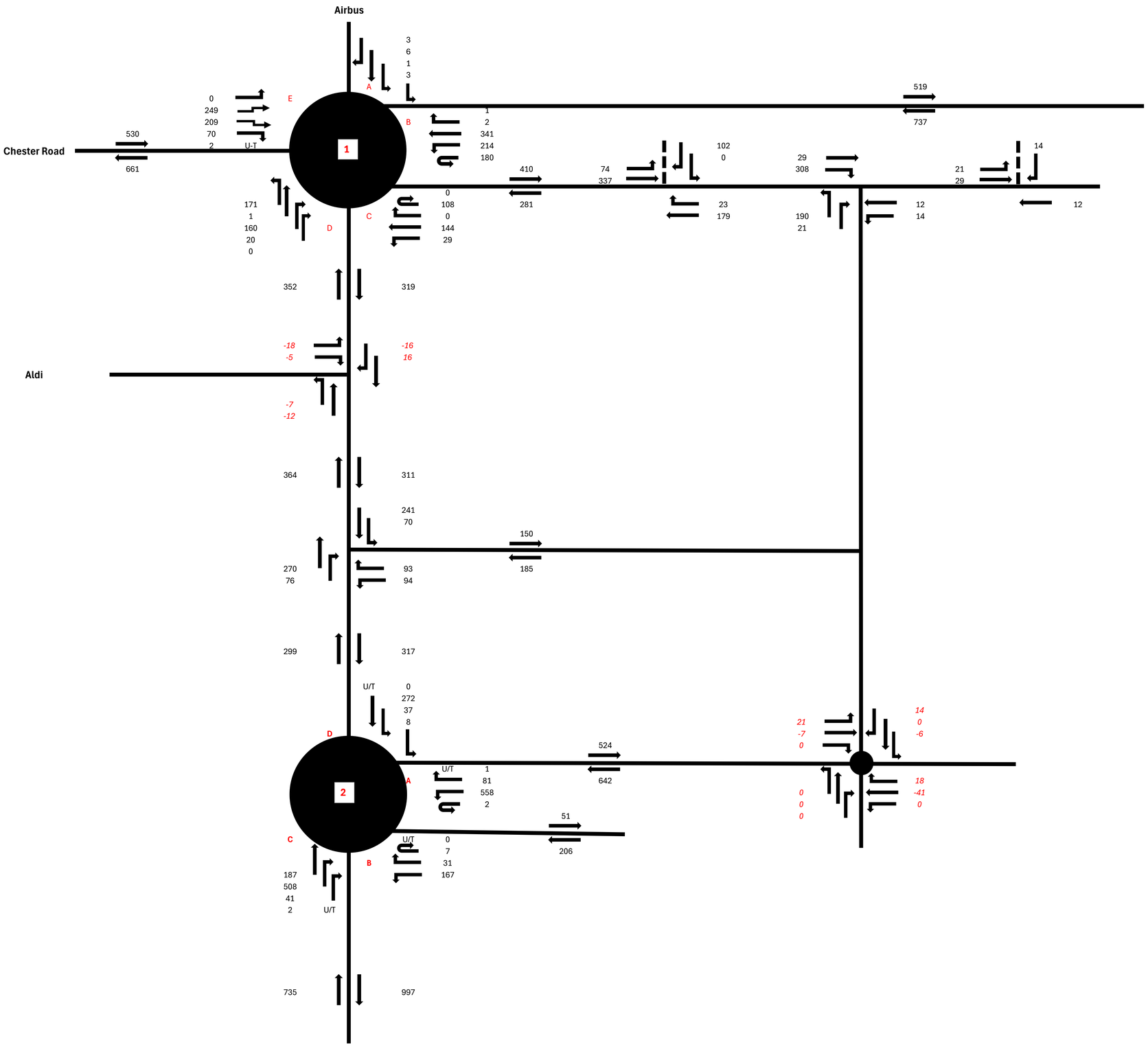
	Arrive	Depart
West	35%	35%
East	35%	35%
South	30%	30%
	100%	100%

Flow 09 - Development Flows (SAT Peak 1200 - 1300)

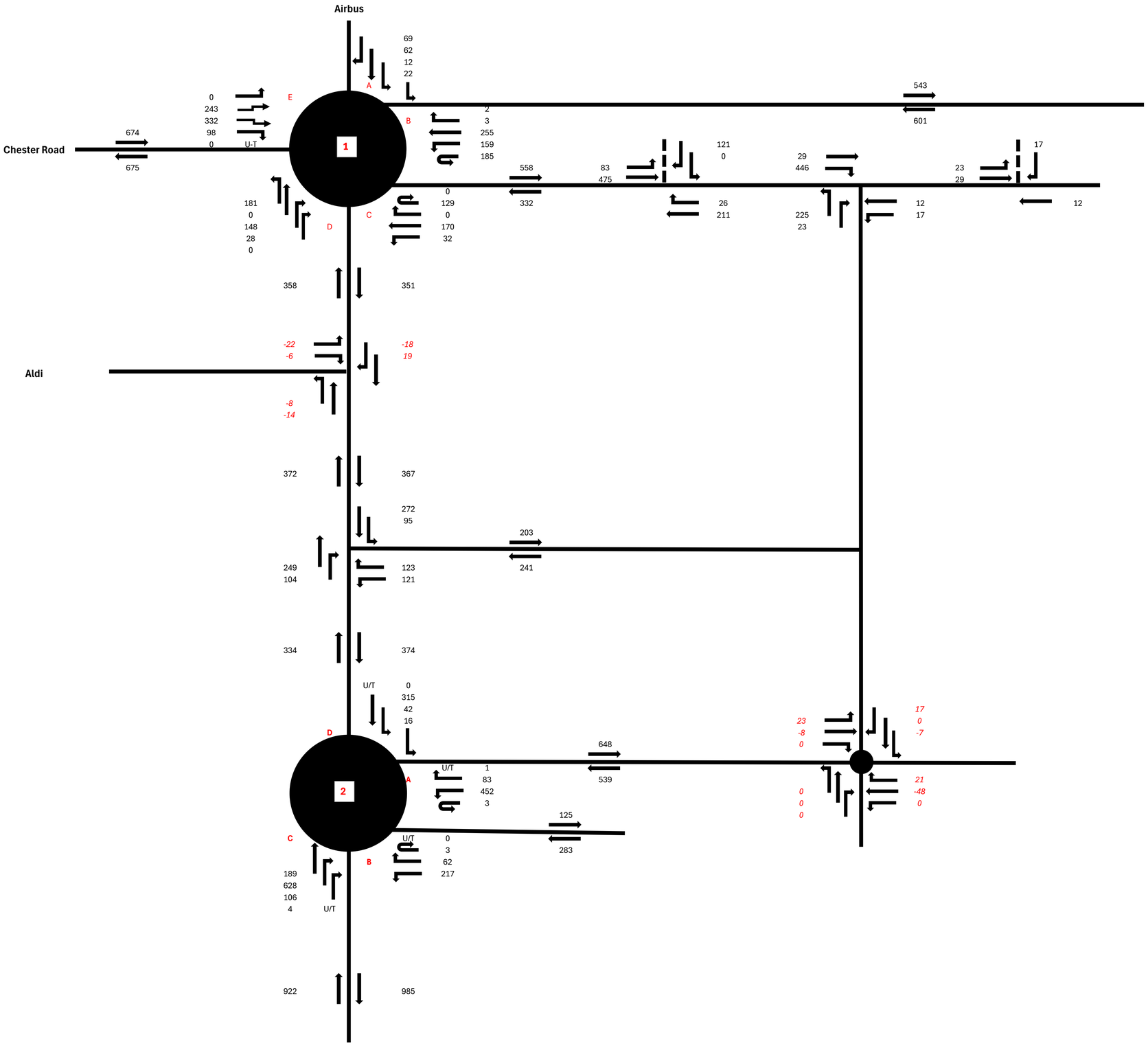


	Arrive	Depart
West	200	87
East	130	
South	164	
	494	384

Flow 10 - 2026 Development Scenario (AM Peak 0730 - 0830)

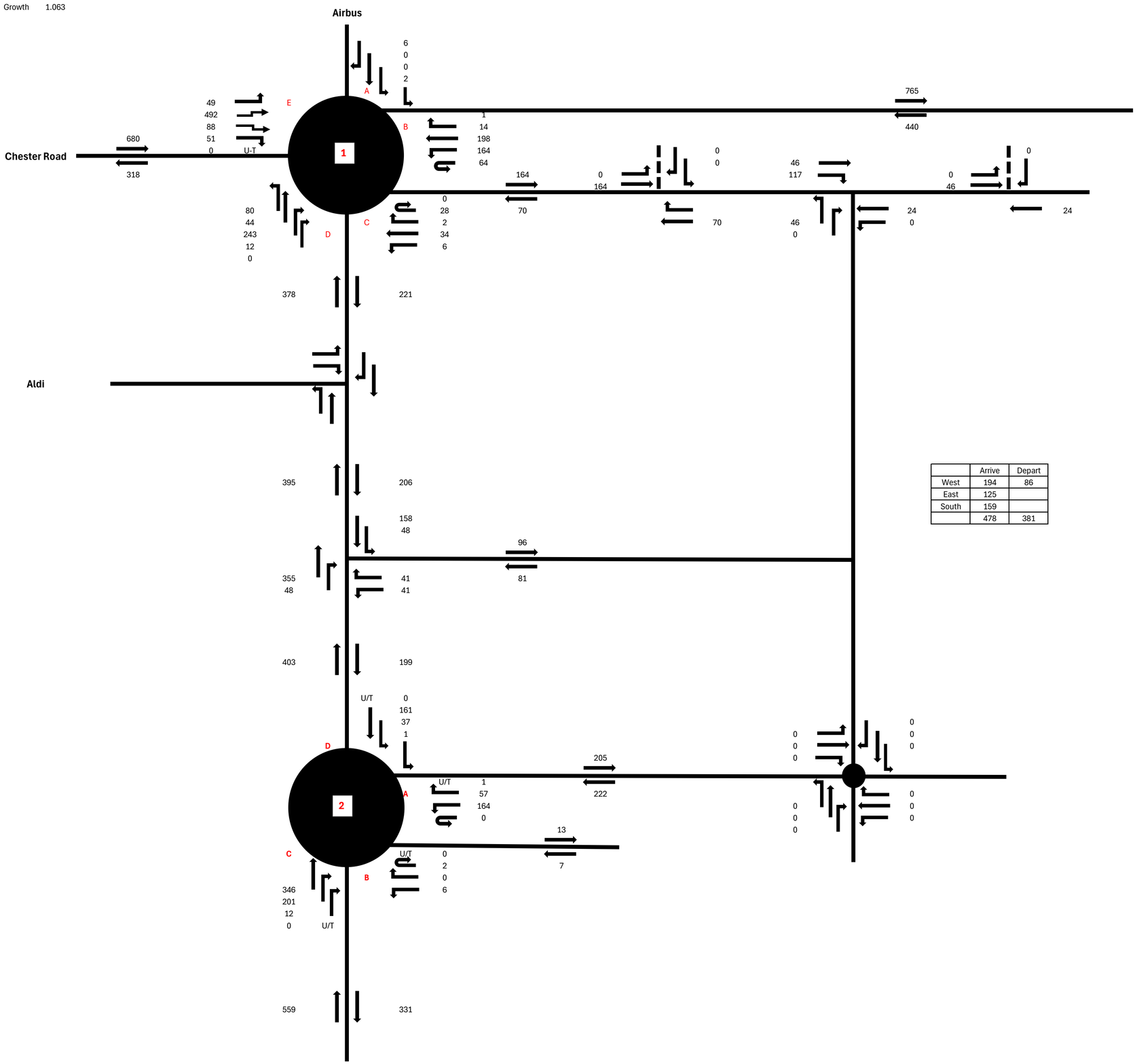


Flow 11 - 2026 Development Scenario (PM Peak 1600 - 1700)



Flow 12 - 2026 Development Scenario (SAT Peak 1200 - 1300)

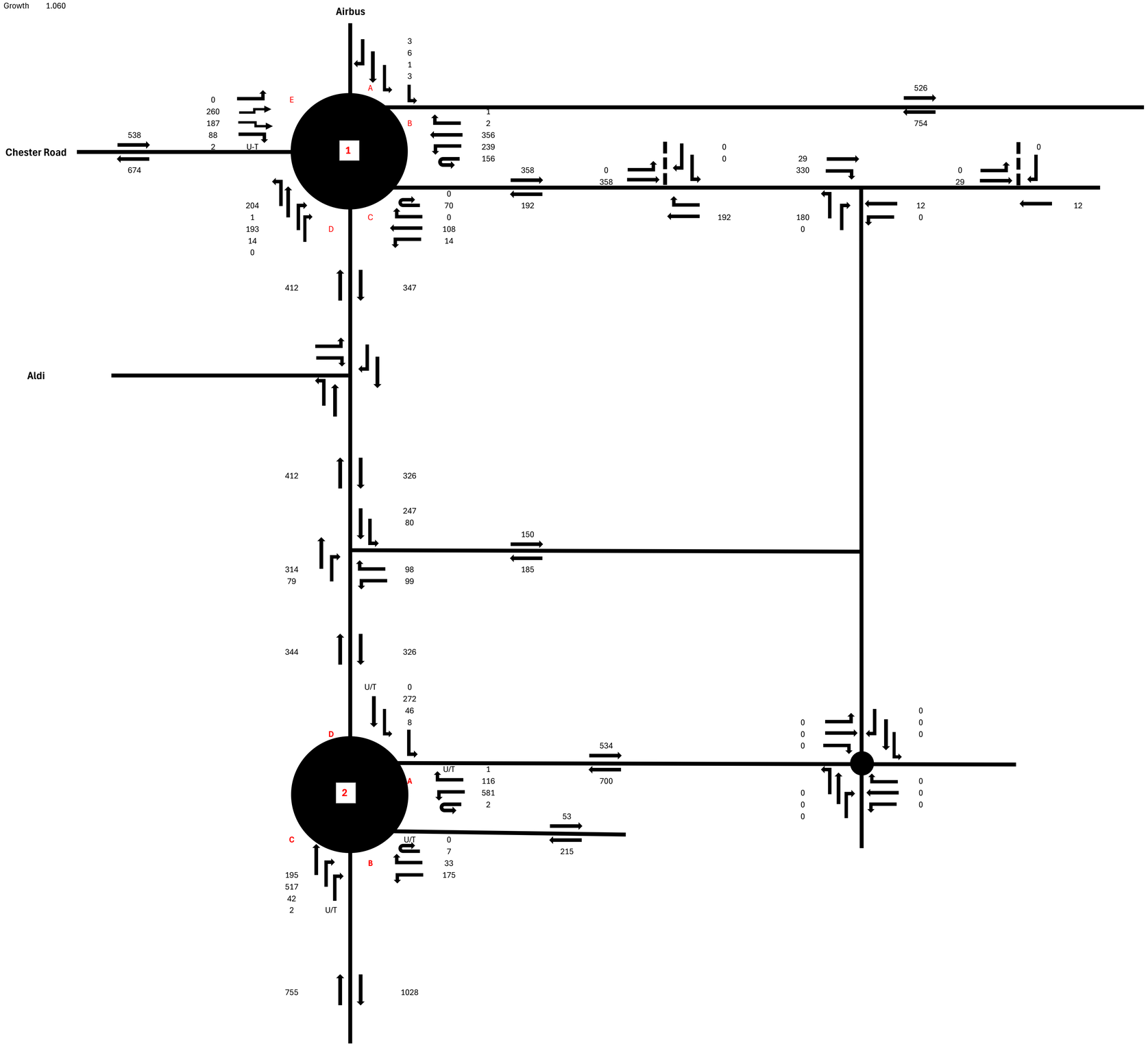
Growth 1.063



	Arrive	Depart
West	194	86
East	125	
South	159	
	478	381

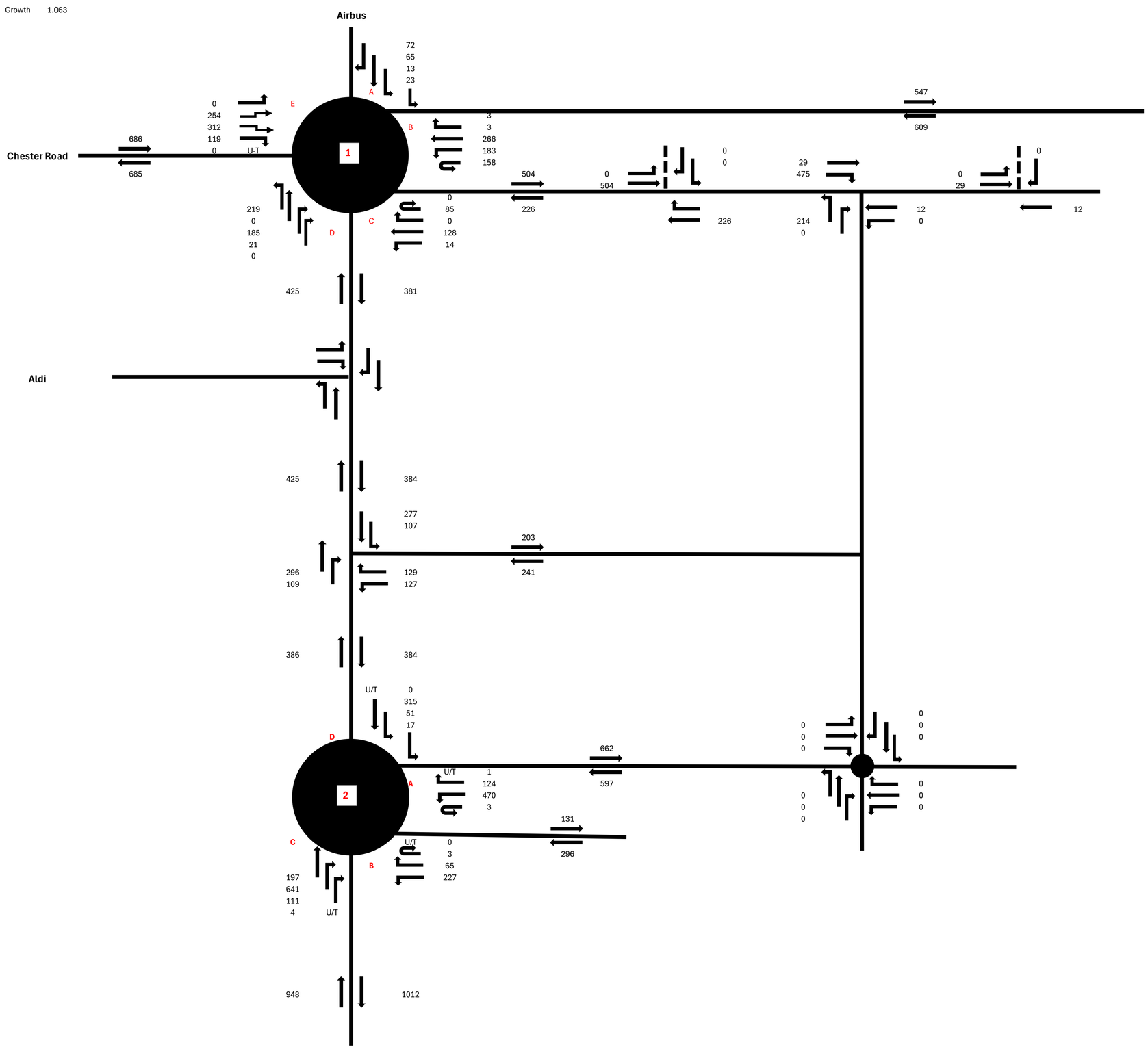
Flow 13 - 2031 Base Scenario (AM Peak 0730 - 0830)

Growth 1.060

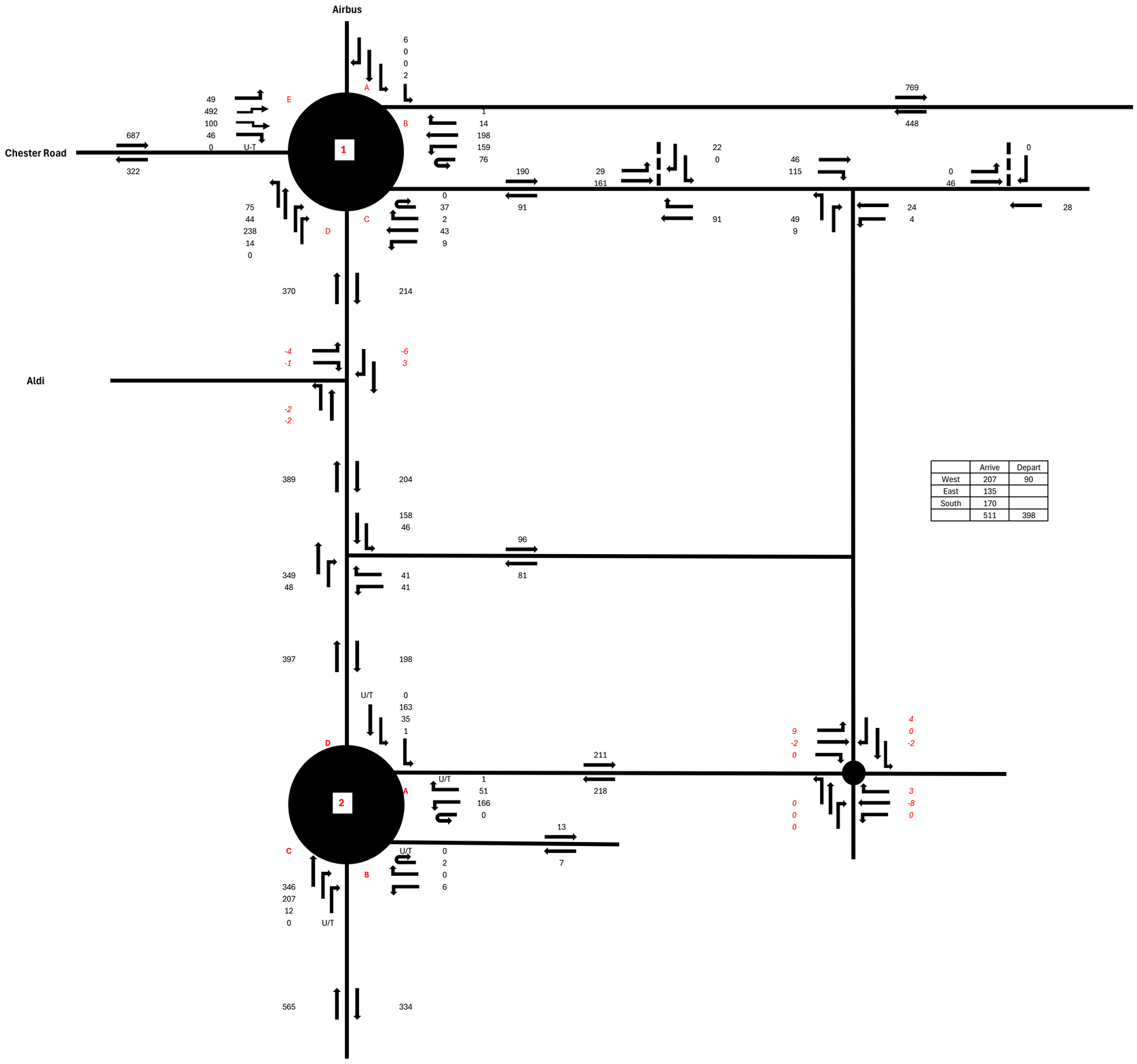


Flow 14 - 2031 Base Scenario (PM Peak 1600 - 1700)

Growth 1.063

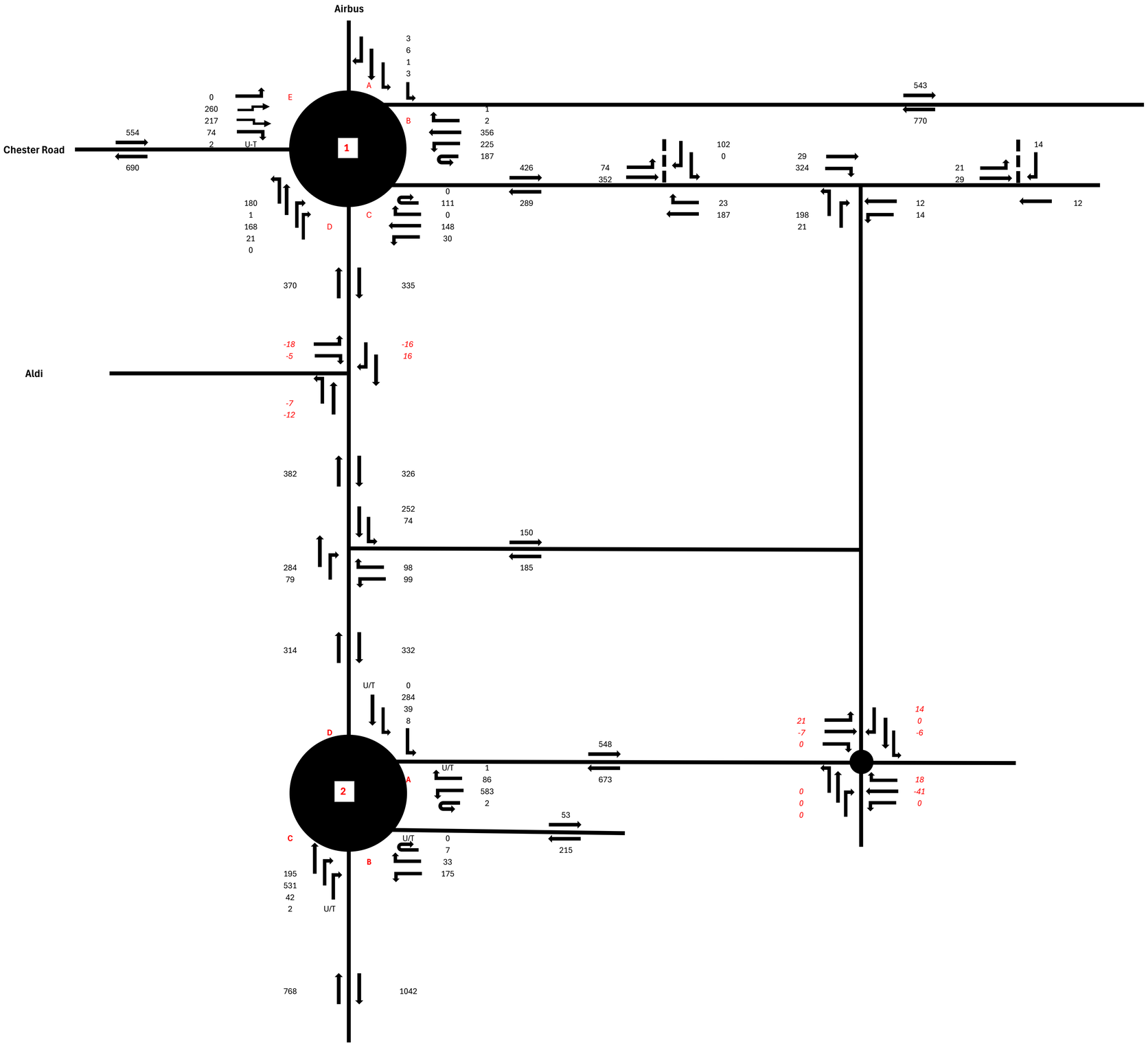


Flow 15 - 2031 Base Scenario (SAT Peak 1200 - 1300)

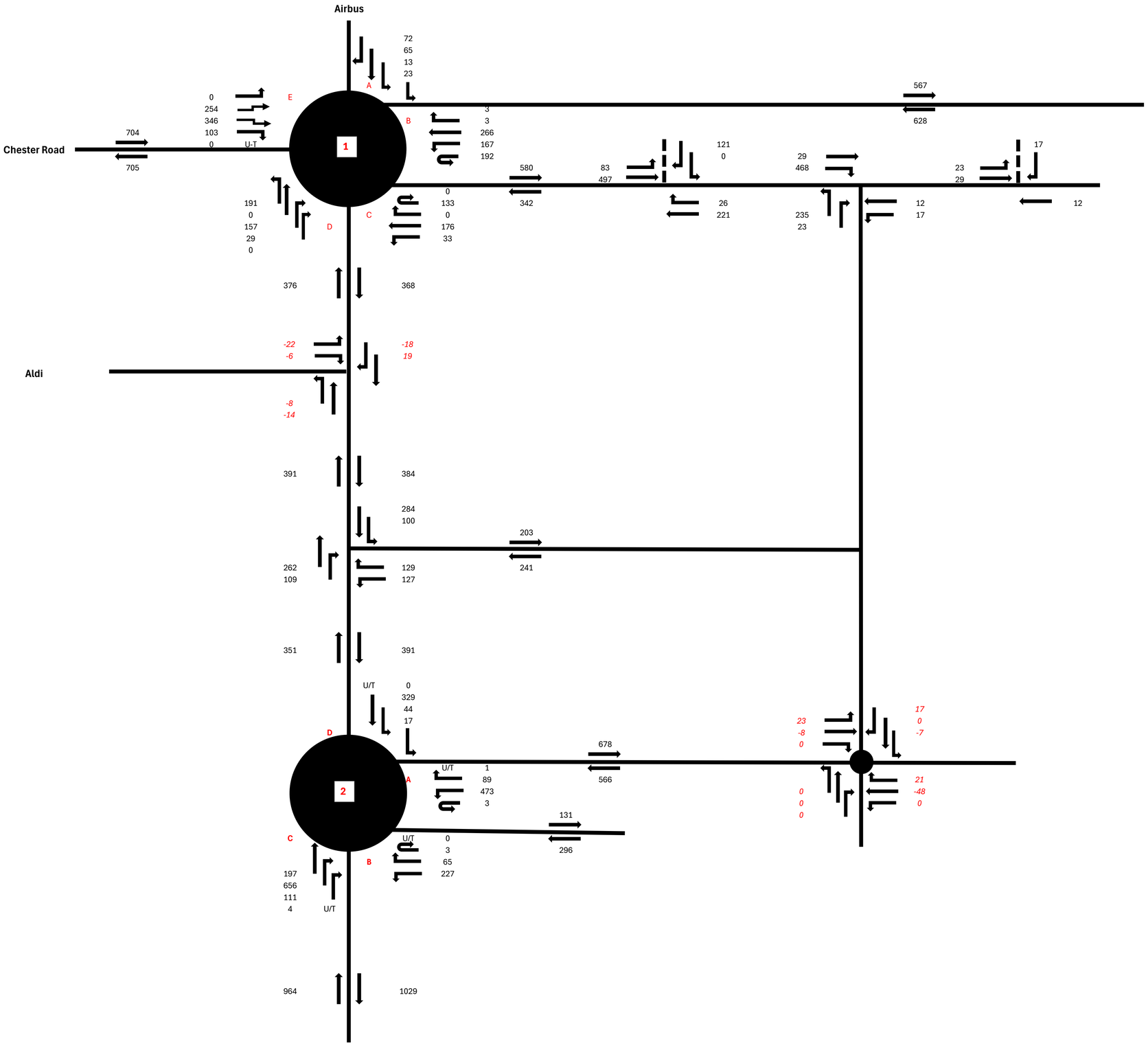


	Arrive	Depart
West	207	90
East	135	
South	170	
	511	398

Flow 16 - 2031 Development Scenario (AM Peak 0730 - 0830)



Flow 17 - 2031 Development Scenario (PM Peak 1600 - 1700)



Flow 18 - 2031 Development Scenario (SAT Peak 1200 - 1300)

Appendix E

(Airbus Roundabout ARCADY Output)

Junctions 10

ARCADY 10 - Roundabout Module

Filename: M01-ah-Chester Road Airbus (251010).j10
Path: C:\Users\SheilaGough\OneDrive - TTP Consulting\Staff Site - 4860 - Broughton Phase 3\Junction modelling
Report generation date: 13/10/2025 10:59:01

Summary of junction performance

	AM						PM						SAT					
	Set ID	Q (PCU)	Q95 (PCU)	Delay (s)	RFC	LOS	Set ID	Q (PCU)	Q95 (PCU)	Delay (s)	RFC	LOS	Set ID	Q (PCU)	Q95 (PCU)	Delay (s)	RFC	LOS
	2023 Observed																	
1 - Airbus	D1	0.0	0.5	3.18	0.01	A	D2	0.0	0.5	3.08	0.01	A	D3	0.2	0.5	3.97	0.17	A
2 - Chester Road		0.3	1.4	3.01	0.25	A		1.0	1.5	4.65	0.49	A		0.8	2.6	4.79	0.45	A
3 - Shopping Park		0.1	0.5	3.12	0.05	A		0.2	0.5	4.09	0.17	A		0.3	1.2	4.31	0.21	A
4 - Shopping Park		0.4	1.7	4.17	0.29	A		0.6	2.8	5.21	0.37	A		0.7	3.0	5.48	0.39	A
5 - Chester Road		0.8	2.5	4.16	0.43	A		0.5	2.4	3.54	0.34	A		0.8	2.4	4.24	0.44	A
	2026 Base																	
1 - Airbus	D4	0.0	0.5	3.27	0.01	A	D5	0.0	0.5	3.13	0.01	A	D6	0.2	0.5	4.02	0.17	A
2 - Chester Road		0.4	1.4	3.14	0.28	A		1.1	1.5	4.82	0.51	A		0.9	2.3	4.95	0.46	A
3 - Shopping Park		0.1	0.5	3.22	0.06	A		0.2	0.5	4.19	0.18	A		0.3	1.3	4.41	0.22	A
4 - Shopping Park		0.5	2.0	4.33	0.31	A		0.6	2.9	5.32	0.38	A		0.7	3.0	5.50	0.39	A
5 - Chester Road		0.9	2.0	4.41	0.46	A		0.6	2.7	3.64	0.35	A		0.9	2.1	4.35	0.46	A
	2026 with Dev																	
1 - Airbus	D7	0.0	0.5	3.29	0.01	A	D8	0.0	0.5	3.19	0.01	A	D9	0.2	0.5	4.14	0.17	A
2 - Chester Road		0.4	1.5	3.18	0.29	A		1.1	1.5	5.03	0.52	A		1.0	2.1	5.19	0.48	A
3 - Shopping Park		0.1	0.5	3.27	0.08	A		0.4	1.4	4.66	0.28	A		0.5	2.3	5.05	0.33	A
4 - Shopping Park		0.5	2.0	4.36	0.31	A		0.6	2.7	5.34	0.35	A		0.6	2.8	5.53	0.36	A
5 - Chester Road		0.9	2.0	4.48	0.47	A		0.6	2.8	3.76	0.37	A		0.9	1.9	4.55	0.47	A
	2031 Base																	
1 - Airbus	D10	0.0	0.5	3.34	0.01	A	D11	0.0	0.5	3.19	0.01	A	D12	0.2	0.5	4.18	0.18	A
2 - Chester Road		0.4	1.7	3.21	0.30	A		1.2	1.5	5.11	0.53	A		1.0	2.0	5.27	0.49	A
3 - Shopping Park		0.1	0.5	3.26	0.06	A		0.3	0.9	4.32	0.20	A		0.3	1.4	4.56	0.23	A

4 - Shopping Park		0.5	2.3	4.47	0.33	A		0.7	3.0	5.58	0.40	A		0.7	3.0	5.79	0.42	A
5 - Chester Road		1.0	1.7	4.64	0.48	A		0.6	2.8	3.76	0.37	A		1.0	1.8	4.57	0.48	A
	2031 Base with Dev																	
1 - Airbus		0.0	0.5	3.36	0.01	A		0.0	0.5	3.25	0.01	A		0.2	0.5	4.31	0.19	A
2 - Chester Road		0.4	1.8	3.25	0.30	A		1.3	1.5	5.35	0.55	A		1.1	1.8	5.54	0.51	A
3 - Shopping Park	D13	0.1	0.5	3.31	0.08	A	D14	0.4	1.6	4.81	0.29	A	D15	0.5	2.5	5.25	0.35	A
4 - Shopping Park		0.5	2.2	4.48	0.32	A		0.6	2.9	5.59	0.37	A		0.7	3.0	5.82	0.39	A
5 - Chester Road		1.0	1.6	4.71	0.49	A		0.7	2.8	3.89	0.39	A		1.0	1.5	4.79	0.50	A

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

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

File summary

File Description

Title	Chester Road/ Airbus
Location	
Site number	
Date	13/01/2025
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	Sheila Gough
Description	

Units

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

Analysis Options

Calculate Q Percentiles	Calculate residual capacity	RFC Threshold	Av. Delay threshold (s)	Q 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 Observed	AM	ONE HOUR	07:45	09:15	15
D2	2023 Observed	PM	ONE HOUR	16:45	18:15	15
D3	2023 Observed	SAT	ONE HOUR	11:45	13:15	15
D4	2026 Base	AM	ONE HOUR	07:45	09:15	15
D5	2026 Base	PM	ONE HOUR	16:45	18:15	15
D6	2026 Base	SAT	ONE HOUR	11:45	13:15	15
D7	2026 with Dev	AM	ONE HOUR	07:45	09:15	15
D8	2026 with Dev	PM	ONE HOUR	16:45	18:15	15
D9	2026 with Dev	SAT	ONE HOUR	11:45	13:15	15
D10	2031 Base	AM	ONE HOUR	07:45	09:15	15
D11	2031 Base	PM	ONE HOUR	16:45	18:15	15
D12	2031 Base	SAT	ONE HOUR	11:45	13:15	15
D13	2031 Base with Dev	AM	ONE HOUR	07:45	09:15	15
D14	2031 Base with Dev	PM	ONE HOUR	16:45	18:15	15
D15	2031 Base with Dev	SAT	ONE HOUR	11:45	13:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2023 Observed, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Q percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	3.80	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.80	A

Arms

Arms

Arm	Name	Description	No give-way line
1	Airbus		
2	Chester Road		
3	Shopping Park		
4	Shopping Park		
5	Chester Road		

Roundabout Geometry

Arm	V (m)	E (m)	l' (m)	R (m)	D (m)	PHI (deg)	Entry only	Exit only
1 - Airbus	3.65	8.00	10.0	20.0	64.0	40.0		
2 - Chester Road	3.65	7.00	20.0	25.0	64.0	39.0		
3 - Shopping Park	3.65	5.75	9.0	10.0	64.0	19.0		
4 - Shopping Park	3.65	7.00	5.5	22.0	64.0	37.0		
5 - Chester Road	3.65	8.25	15.0	17.0	64.0	37.0		

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Airbus	0.510	1599
2 - Chester Road	0.534	1729
3 - Shopping Park	0.492	1454
4 - Shopping Park	0.484	1421
5 - Chester Road	0.535	1750

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 Observed	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	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Airbus		✓	8	100.000
2 - Chester Road		✓	377	100.000
3 - Shopping Park		✓	55	100.000
4 - Shopping Park		✓	341	100.000
5 - Chester Road		✓	614	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Airbus	2 - Chester Road	3 - Shopping Park	4 - Shopping Park	5 - Chester Road
From	1 - Airbus	0	2	0	0	6
	2 - Chester Road	14	0	57	131	175
	3 - Shopping Park	2	26	0	4	23
	4 - Shopping Park	41	214	11	0	75
	5 - Chester Road	46	442	77	49	0

Vehicle Mix

HV %s

		To				
		1 - Airbus	2 - Chester Road	3 - Shopping Park	4 - Shopping Park	5 - Chester Road
From	1 - Airbus	0	0	0	0	0
	2 - Chester Road	0	0	3	4	2
	3 - Shopping Park	0	2	0	0	6
	4 - Shopping Park	0	7	50	0	2
	5 - Chester Road	0	3	7	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max Q95 (PCU)	Max LOS
1 - Airbus	0.01	3.18	0.0	0.5	A
2 - Chester Road	0.25	3.01	0.3	1.4	A
3 - Shopping Park	0.05	3.12	0.1	0.5	A
4 - Shopping Park	0.29	4.17	0.4	1.7	A
5 - Chester Road	0.43	4.16	0.8	2.5	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 - Airbus	6	614	1286	0.005	6	0.0	2.811	A
2 - Chester Road	284	107	1672	0.170	283	0.2	2.663	A
3 - Shopping Park	41	281	1316	0.031	41	0.0	2.919	A

4 - Shopping Park	257	185	1332	0.193	256	0.3	3.540	A
5 - Chester Road	462	231	1626	0.284	461	0.4	3.180	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 - Airbus	7	736	1225	0.006	7	0.0	2.956	A
2 - Chester Road	339	128	1660	0.204	339	0.3	2.799	A
3 - Shopping Park	49	337	1289	0.038	49	0.0	3.002	A
4 - Shopping Park	307	221	1314	0.233	306	0.3	3.783	A
5 - Chester Road	552	277	1602	0.345	551	0.5	3.531	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 - Airbus	9	901	1141	0.008	9	0.0	3.180	A
2 - Chester Road	415	157	1645	0.252	415	0.3	3.007	A
3 - Shopping Park	61	413	1252	0.048	61	0.1	3.124	A
4 - Shopping Park	375	271	1290	0.291	375	0.4	4.164	A
5 - Chester Road	676	339	1569	0.431	675	0.8	4.149	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 - Airbus	9	902	1140	0.008	9	0.0	3.181	A
2 - Chester Road	415	157	1645	0.252	415	0.3	3.007	A
3 - Shopping Park	61	413	1252	0.048	61	0.1	3.124	A
4 - Shopping Park	375	271	1290	0.291	375	0.4	4.168	A
5 - Chester Road	676	339	1568	0.431	676	0.8	4.158	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 - Airbus	7	737	1224	0.006	7	0.0	2.958	A
2 - Chester Road	339	129	1660	0.204	339	0.3	2.803	A
3 - Shopping Park	49	337	1289	0.038	49	0.0	3.006	A
4 - Shopping Park	307	221	1314	0.233	307	0.3	3.787	A
5 - Chester Road	552	277	1601	0.345	553	0.5	3.541	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 - Airbus	6	617	1285	0.005	6	0.0	2.816	A
2 - Chester Road	284	108	1671	0.170	284	0.2	2.668	A
3 - Shopping Park	41	283	1316	0.031	41	0.0	2.921	A
4 - Shopping Park	257	185	1332	0.193	257	0.3	3.548	A
5 - Chester Road	462	232	1626	0.284	463	0.4	3.194	A

Q Variation Results for each time segment

07:45 - 08:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Airbus	0.00	0.00	0.00	0.00	0.00			N/A	N/A
2 - Chester Road	0.21	0.00	0.00	0.21	0.21			N/A	N/A
3 - Shopping Park	0.03	0.00	0.00	0.03	0.03			N/A	N/A
4 - Shopping Park	0.25	0.00	0.00	0.25	0.25			N/A	N/A
5 - Chester Road	0.41	0.00	0.00	0.41	0.41			N/A	N/A

08:00 - 08:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Airbus	0.01	0.01	0.25	0.45	0.48			N/A	N/A
2 - Chester Road	0.26	0.00	0.00	0.26	0.26			N/A	N/A
3 - Shopping Park	0.04	0.03	0.26	0.47	0.49			N/A	N/A
4 - Shopping Park	0.32	0.00	0.00	0.32	0.32			N/A	N/A
5 - Chester Road	0.54	0.54	1.03	1.44	1.49			N/A	N/A

08:15 - 08:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Airbus	0.01	0.01	0.25	0.46	0.48			N/A	N/A
2 - Chester Road	0.35	0.03	0.26	0.47	0.49			N/A	N/A
3 - Shopping Park	0.05	0.03	0.26	0.48	0.50			N/A	N/A
4 - Shopping Park	0.43	0.03	0.27	0.48	0.51			N/A	N/A
5 - Chester Road	0.77	0.03	0.26	0.77	0.77			N/A	N/A

08:30 - 08:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Airbus	0.01	0.00	0.00	0.01	0.01			N/A	N/A
2 - Chester Road	0.35	0.03	0.33	1.16	1.42			N/A	N/A
3 - Shopping Park	0.05	0.00	0.00	0.05	0.05			N/A	N/A
4 - Shopping Park	0.43	0.03	0.34	1.40	1.69			N/A	N/A
5 - Chester Road	0.78	0.03	0.29	0.78	2.50			N/A	N/A

08:45 - 09:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Airbus	0.01	0.00	0.00	0.01	0.01			N/A	N/A
2 - Chester Road	0.26	0.00	0.00	0.26	0.26			N/A	N/A
3 - Shopping Park	0.04	0.00	0.00	0.04	0.04			N/A	N/A
4 - Shopping Park	0.32	0.00	0.00	0.32	0.32			N/A	N/A
5 - Chester Road	0.55	0.55	1.03	1.44	1.49			N/A	N/A

09:00 - 09:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Airbus	0.00	0.00	0.00	0.00	0.00			N/A	N/A
2 - Chester Road	0.21	0.00	0.00	0.21	0.21			N/A	N/A
3 - Shopping Park	0.03	0.00	0.00	0.03	0.03			N/A	N/A
4 - Shopping Park	0.25	0.00	0.00	0.25	0.25			N/A	N/A
5 - Chester Road	0.41	0.00	0.00	0.41	0.41			N/A	N/A

2023 Observed, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Q percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	4.40	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.40	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	2023 Observed	PM	ONE HOUR	16:45	18:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Airbus		✓	13	100.000
2 - Chester Road		✓	695	100.000
3 - Shopping Park		✓	174	100.000
4 - Shopping Park		✓	385	100.000
5 - Chester Road		✓	490	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Airbus	2 - Chester Road	3 - Shopping Park	4 - Shopping Park	5 - Chester Road
From	1 - Airbus	0	3	1	6	3
	2 - Chester Road	2	0	146	214	333
	3 - Shopping Park	0	65	0	13	96
	4 - Shopping Park	1	171	20	0	193
	5 - Chester Road	0	234	173	83	0

Vehicle Mix

HV %s

	To					
		1 - Airbus	2 - Chester Road	3 - Shopping Park	4 - Shopping Park	5 - Chester Road

From	1 - Airbus	0	0	0	0	0
	2 - Chester Road	0	0	3	4	2
	3 - Shopping Park	0	2	0	0	6
	4 - Shopping Park	0	7	50	0	2
	5 - Chester Road	0	3	7	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max Q95 (PCU)	Max LOS
1 - Airbus	0.01	3.08	0.0	0.5	A
2 - Chester Road	0.49	4.65	1.0	1.5	A
3 - Shopping Park	0.17	4.09	0.2	0.5	A
4 - Shopping Park	0.37	5.21	0.6	2.8	A
5 - Chester Road	0.34	3.54	0.5	2.4	A

Main Results for each time segment

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 - Airbus	10	560	1314	0.007	10	0.0	2.759	A
2 - Chester Road	523	215	1614	0.324	521	0.5	3.381	A
3 - Shopping Park	131	481	1218	0.108	130	0.1	3.440	A
4 - Shopping Park	290	374	1240	0.234	289	0.3	4.003	A
5 - Chester Road	369	194	1646	0.224	368	0.3	2.927	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 - Airbus	12	670	1258	0.009	12	0.0	2.887	A
2 - Chester Road	625	257	1592	0.393	624	0.7	3.824	A
3 - Shopping Park	156	576	1172	0.134	156	0.2	3.687	A
4 - Shopping Park	346	448	1205	0.287	346	0.4	4.439	A
5 - Chester Road	440	233	1625	0.271	440	0.4	3.159	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 - Airbus	14	820	1181	0.012	14	0.0	3.083	A
2 - Chester Road	765	315	1561	0.490	764	1.0	4.637	A
3 - Shopping Park	192	705	1108	0.173	191	0.2	4.083	A
4 - Shopping Park	424	549	1156	0.367	423	0.6	5.199	A
5 - Chester Road	540	285	1598	0.338	539	0.5	3.535	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 - Airbus	14	821	1181	0.012	14	0.0	3.085	A
2 - Chester Road	765	315	1561	0.490	765	1.0	4.652	A
3 - Shopping Park	192	706	1108	0.173	192	0.2	4.087	A
4 - Shopping Park	424	549	1156	0.367	424	0.6	5.212	A
5 - Chester Road	540	285	1597	0.338	539	0.5	3.539	A

17:45 - 18:00

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 - Airbus	12	672	1257	0.009	12	0.0	2.889	A
2 - Chester Road	625	257	1591	0.393	626	0.7	3.841	A
3 - Shopping Park	156	577	1171	0.134	157	0.2	3.692	A
4 - Shopping Park	346	449	1204	0.287	347	0.4	4.453	A
5 - Chester Road	440	233	1625	0.271	441	0.4	3.166	A

18:00 - 18:15

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 - Airbus	10	562	1313	0.007	10	0.0	2.761	A
2 - Chester Road	523	216	1614	0.324	524	0.5	3.400	A
3 - Shopping Park	131	483	1217	0.108	131	0.1	3.450	A
4 - Shopping Park	290	376	1239	0.234	290	0.3	4.021	A
5 - Chester Road	369	195	1645	0.224	369	0.3	2.936	A

Q Variation Results for each time segment

16:45 - 17:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Airbus	0.01	0.00	0.00	0.01	0.01			N/A	N/A
2 - Chester Road	0.49	0.00	0.00	0.49	0.49			N/A	N/A
3 - Shopping Park	0.12	0.00	0.00	0.12	0.12			N/A	N/A
4 - Shopping Park	0.32	0.00	0.00	0.32	0.32			N/A	N/A
5 - Chester Road	0.30	0.00	0.00	0.30	0.30			N/A	N/A

17:00 - 17:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Airbus	0.01	0.01	0.25	0.45	0.48			N/A	N/A
2 - Chester Road	0.66	0.10	0.86	1.41	1.47			N/A	N/A
3 - Shopping Park	0.16	0.00	0.00	0.16	0.16			N/A	N/A
4 - Shopping Park	0.42	0.00	0.00	0.42	0.42			N/A	N/A
5 - Chester Road	0.38	0.00	0.00	0.38	0.38			N/A	N/A

17:15 - 17:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Airbus	0.01	0.01	0.25	0.45	0.48			N/A	N/A
2 - Chester Road	0.98	0.03	0.26	0.98	0.98			N/A	N/A
3 - Shopping Park	0.22	0.03	0.26	0.48	0.50			N/A	N/A
4 - Shopping Park	0.61	0.03	0.27	0.61	0.61			N/A	N/A
5 - Chester Road	0.53	0.03	0.26	0.53	0.53			N/A	N/A

17:30 - 17:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Airbus	0.01	0.00	0.00	0.01	0.01			N/A	N/A
2 - Chester Road	0.98	0.03	0.28	0.98	1.52			N/A	N/A
3 - Shopping Park	0.22	0.03	0.26	0.47	0.50			N/A	N/A
4 - Shopping Park	0.61	0.03	0.31	1.37	2.84			N/A	N/A
5 - Chester Road	0.53	0.03	0.31	1.44	2.41			N/A	N/A

17:45 - 18:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Airbus	0.01	0.00	0.00	0.01	0.01			N/A	N/A
2 - Chester Road	0.67	0.57	1.03	1.44	1.49			N/A	N/A
3 - Shopping Park	0.16	0.00	0.00	0.16	0.16			N/A	N/A

4 - Shopping Park	0.43	0.00	0.00	0.43	0.43			N/A	N/A
5 - Chester Road	0.39	0.00	0.00	0.39	0.39			N/A	N/A

18:00 - 18:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Airbus	0.01	0.00	0.00	0.01	0.01			N/A	N/A
2 - Chester Road	0.50	0.04	0.43	1.29	1.41			N/A	N/A
3 - Shopping Park	0.13	0.00	0.00	0.13	0.13			N/A	N/A
4 - Shopping Park	0.33	0.00	0.00	0.33	0.33			N/A	N/A
5 - Chester Road	0.30	0.00	0.00	0.30	0.30			N/A	N/A

2023 Observed , SAT

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Q percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	4.64	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.64	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	2023 Observed	SAT	ONE HOUR	11:45	13:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Airbus		✓	163	100.000
2 - Chester Road		✓	566	100.000
3 - Shopping Park		✓	208	100.000
4 - Shopping Park		✓	406	100.000
5 - Chester Road		✓	634	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Airbus	2 - Chester Road	3 - Shopping Park	4 - Shopping Park	5 - Chester Road
From	1 - Airbus	0	21	13	61	68
	2 - Chester Road	2	0	147	168	249
	3 - Shopping Park	0	80	0	13	115
	4 - Shopping Park	0	169	30	0	207
	5 - Chester Road	0	239	283	112	0

Vehicle Mix

HV %s

	To				
		1 - Airbus	2 - Chester Road	3 - Shopping Park	4 - Shopping Park	5 - Chester Road

From	1 - Airbus	0	0	0	0	0
	2 - Chester Road	0	0	3	4	2
	3 - Shopping Park	0	2	0	0	6
	4 - Shopping Park	0	7	50	0	2
	5 - Chester Road	0	3	7	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max Q95 (PCU)	Max LOS
1 - Airbus	0.17	3.97	0.2	0.5	A
2 - Chester Road	0.45	4.79	0.8	2.6	A
3 - Shopping Park	0.21	4.31	0.3	1.2	A
4 - Shopping Park	0.39	5.48	0.7	3.0	A
5 - Chester Road	0.44	4.24	0.8	2.4	A

Main Results for each time segment

11:45 - 12:00

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 - Airbus	123	685	1251	0.098	122	0.1	3.191	A
2 - Chester Road	426	425	1502	0.284	424	0.4	3.433	A
3 - Shopping Park	157	495	1211	0.129	156	0.2	3.548	A
4 - Shopping Park	306	385	1235	0.248	304	0.3	4.117	A
5 - Chester Road	477	211	1637	0.292	476	0.4	3.231	A

12:00 - 12:15

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 - Airbus	147	820	1182	0.124	146	0.1	3.477	A
2 - Chester Road	509	509	1457	0.349	508	0.5	3.900	A
3 - Shopping Park	187	593	1163	0.161	187	0.2	3.835	A
4 - Shopping Park	365	462	1198	0.305	365	0.5	4.602	A
5 - Chester Road	570	252	1615	0.353	569	0.6	3.592	A

12:15 - 12:30

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 - Airbus	179	1004	1088	0.165	179	0.2	3.960	A
2 - Chester Road	623	623	1396	0.447	622	0.8	4.778	A
3 - Shopping Park	229	726	1098	0.209	229	0.3	4.308	A
4 - Shopping Park	447	565	1148	0.389	446	0.7	5.460	A
5 - Chester Road	698	309	1585	0.441	697	0.8	4.229	A

12:30 - 12:45

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 - Airbus	179	1005	1087	0.165	179	0.2	3.965	A
2 - Chester Road	623	624	1395	0.447	623	0.8	4.794	A
3 - Shopping Park	229	727	1097	0.209	229	0.3	4.313	A
4 - Shopping Park	447	566	1148	0.390	447	0.7	5.476	A
5 - Chester Road	698	309	1584	0.441	698	0.8	4.239	A

12:45 - 13:00

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 - Airbus	147	822	1180	0.124	147	0.1	3.485	A
2 - Chester Road	509	511	1456	0.349	510	0.6	3.918	A
3 - Shopping Park	187	594	1162	0.161	187	0.2	3.842	A
4 - Shopping Park	365	463	1197	0.305	366	0.5	4.620	A
5 - Chester Road	570	253	1614	0.353	571	0.6	3.606	A

13:00 - 13:15

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 - Airbus	123	688	1249	0.098	123	0.1	3.199	A
2 - Chester Road	426	427	1500	0.284	427	0.4	3.451	A
3 - Shopping Park	157	498	1210	0.129	157	0.2	3.558	A
4 - Shopping Park	306	387	1234	0.248	306	0.4	4.139	A
5 - Chester Road	477	212	1636	0.292	478	0.4	3.243	A

Q Variation Results for each time segment

11:45 - 12:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Airbus	0.11	0.00	0.00	0.11	0.11			N/A	N/A
2 - Chester Road	0.41	0.00	0.00	0.41	0.41			N/A	N/A
3 - Shopping Park	0.15	0.00	0.00	0.15	0.15			N/A	N/A
4 - Shopping Park	0.35	0.00	0.00	0.35	0.35			N/A	N/A
5 - Chester Road	0.43	0.00	0.00	0.43	0.43			N/A	N/A

12:00 - 12:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Airbus	0.14	0.00	0.00	0.14	0.14			N/A	N/A
2 - Chester Road	0.55	0.55	1.03	1.44	1.49			N/A	N/A
3 - Shopping Park	0.20	0.00	0.00	0.20	0.20			N/A	N/A
4 - Shopping Park	0.46	0.00	0.00	0.46	0.46			N/A	N/A
5 - Chester Road	0.57	0.08	0.77	1.41	1.49			N/A	N/A

12:15 - 12:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Airbus	0.20	0.03	0.25	0.46	0.48			N/A	N/A
2 - Chester Road	0.82	0.03	0.26	0.82	0.82			N/A	N/A
3 - Shopping Park	0.27	0.03	0.26	0.48	0.50			N/A	N/A
4 - Shopping Park	0.67	0.03	0.27	0.67	0.67			N/A	N/A
5 - Chester Road	0.82	0.03	0.26	0.82	0.82			N/A	N/A

12:30 - 12:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Airbus	0.20	0.03	0.25	0.45	0.48			N/A	N/A
2 - Chester Road	0.83	0.03	0.28	0.83	2.56			N/A	N/A
3 - Shopping Park	0.27	0.03	0.30	0.76	1.16			N/A	N/A
4 - Shopping Park	0.68	0.03	0.31	1.21	2.96			N/A	N/A
5 - Chester Road	0.82	0.03	0.29	0.82	2.37			N/A	N/A

12:45 - 13:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Airbus	0.14	0.00	0.00	0.14	0.14			N/A	N/A
2 - Chester Road	0.56	0.56	1.03	1.44	1.49			N/A	N/A
3 - Shopping Park	0.20	0.00	0.00	0.20	0.20			N/A	N/A

4 - Shopping Park	0.47	0.00	0.00	0.47	0.47			N/A	N/A
5 - Chester Road	0.57	0.57	1.04	1.46	1.51			N/A	N/A

13:00 - 13:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Airbus	0.11	0.00	0.00	0.11	0.11			N/A	N/A
2 - Chester Road	0.41	0.00	0.00	0.41	0.41			N/A	N/A
3 - Shopping Park	0.16	0.00	0.00	0.16	0.16			N/A	N/A
4 - Shopping Park	0.35	0.00	0.00	0.35	0.35			N/A	N/A
5 - Chester Road	0.43	0.00	0.00	0.43	0.43			N/A	N/A

2026 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Q percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	3.98	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.98	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	2026 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	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Airbus		✓	8	100.000
2 - Chester Road		✓	420	100.000
3 - Shopping Park		✓	67	100.000
4 - Shopping Park		✓	361	100.000
5 - Chester Road		✓	650	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Airbus	2 - Chester Road	3 - Shopping Park	4 - Shopping Park	5 - Chester Road
From	1 - Airbus	0	2	0	0	6
	2 - Chester Road	14	0	61	156	189
	3 - Shopping Park	2	27	0	6	32
	4 - Shopping Park	42	232	11	0	76
	5 - Chester Road	47	470	84	49	0

Vehicle Mix

HV %s

	To				
		1 - Airbus	2 - Chester Road	3 - Shopping Park	4 - Shopping Park	5 - Chester Road

From	1 - Airbus	0	0	0	0	0
	2 - Chester Road	0	0	3	4	2
	3 - Shopping Park	0	2	0	0	6
	4 - Shopping Park	0	7	50	0	2
	5 - Chester Road	0	3	7	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max Q95 (PCU)	Max LOS
1 - Airbus	0.01	3.27	0.0	0.5	A
2 - Chester Road	0.28	3.14	0.4	1.4	A
3 - Shopping Park	0.06	3.22	0.1	0.5	A
4 - Shopping Park	0.31	4.33	0.5	2.0	A
5 - Chester Road	0.46	4.41	0.9	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 - Airbus	6	655	1266	0.005	6	0.0	2.857	A
2 - Chester Road	316	113	1669	0.189	315	0.2	2.733	A
3 - Shopping Park	50	311	1302	0.039	50	0.0	2.980	A
4 - Shopping Park	272	203	1323	0.205	271	0.3	3.621	A
5 - Chester Road	489	246	1618	0.302	488	0.4	3.273	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 - Airbus	7	784	1200	0.006	7	0.0	3.017	A
2 - Chester Road	378	135	1657	0.228	377	0.3	2.892	A
3 - Shopping Park	60	372	1272	0.047	60	0.1	3.078	A
4 - Shopping Park	325	243	1304	0.249	324	0.3	3.892	A
5 - Chester Road	584	295	1592	0.367	584	0.6	3.679	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 - Airbus	9	960	1110	0.008	9	0.0	3.267	A
2 - Chester Road	462	165	1641	0.282	462	0.4	3.140	A
3 - Shopping Park	74	455	1231	0.060	74	0.1	3.223	A
4 - Shopping Park	397	297	1278	0.311	397	0.5	4.330	A
5 - Chester Road	716	361	1557	0.460	715	0.9	4.402	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 - Airbus	9	961	1110	0.008	9	0.0	3.269	A
2 - Chester Road	462	165	1641	0.282	462	0.4	3.140	A
3 - Shopping Park	74	456	1230	0.060	74	0.1	3.224	A
4 - Shopping Park	397	297	1278	0.311	397	0.5	4.334	A
5 - Chester Road	716	361	1557	0.460	716	0.9	4.414	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 - Airbus	7	786	1199	0.006	7	0.0	3.020	A
2 - Chester Road	378	135	1657	0.228	378	0.3	2.894	A
3 - Shopping Park	60	373	1271	0.047	60	0.1	3.082	A
4 - Shopping Park	325	243	1304	0.249	325	0.4	3.899	A
5 - Chester Road	584	295	1592	0.367	585	0.6	3.694	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 - Airbus	6	658	1264	0.005	6	0.0	2.863	A
2 - Chester Road	316	113	1668	0.190	316	0.2	2.737	A
3 - Shopping Park	50	312	1301	0.039	50	0.0	2.984	A
4 - Shopping Park	272	203	1323	0.205	272	0.3	3.633	A
5 - Chester Road	489	247	1618	0.303	490	0.4	3.293	A

Q Variation Results for each time segment

07:45 - 08:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Airbus	0.00	0.00	0.00	0.00	0.00			N/A	N/A
2 - Chester Road	0.24	0.00	0.00	0.24	0.24			N/A	N/A
3 - Shopping Park	0.04	0.00	0.00	0.04	0.04			N/A	N/A
4 - Shopping Park	0.27	0.00	0.00	0.27	0.27			N/A	N/A
5 - Chester Road	0.44	0.00	0.00	0.44	0.44			N/A	N/A

08:00 - 08:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Airbus	0.01	0.01	0.25	0.45	0.48			N/A	N/A
2 - Chester Road	0.30	0.00	0.00	0.30	0.30			N/A	N/A
3 - Shopping Park	0.05	0.03	0.26	0.47	0.49			N/A	N/A
4 - Shopping Park	0.35	0.00	0.00	0.35	0.35			N/A	N/A
5 - Chester Road	0.59	0.09	0.82	1.40	1.47			N/A	N/A

08:15 - 08:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Airbus	0.01	0.01	0.25	0.46	0.48			N/A	N/A
2 - Chester Road	0.40	0.03	0.26	0.47	0.49			N/A	N/A
3 - Shopping Park	0.07	0.03	0.27	0.48	0.51			N/A	N/A
4 - Shopping Park	0.48	0.03	0.27	0.48	0.51			N/A	N/A
5 - Chester Road	0.87	0.03	0.26	0.87	0.87			N/A	N/A

08:30 - 08:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Airbus	0.01	0.00	0.00	0.01	0.01			N/A	N/A
2 - Chester Road	0.40	0.03	0.33	1.32	1.37			N/A	N/A
3 - Shopping Park	0.07	0.00	0.00	0.07	0.07			N/A	N/A
4 - Shopping Park	0.48	0.03	0.33	1.45	2.00			N/A	N/A
5 - Chester Road	0.87	0.03	0.28	0.87	2.04			N/A	N/A

08:45 - 09:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Airbus	0.01	0.00	0.00	0.01	0.01			N/A	N/A
2 - Chester Road	0.30	0.00	0.00	0.30	0.30			N/A	N/A
3 - Shopping Park	0.05	0.00	0.00	0.05	0.05			N/A	N/A

4 - Shopping Park	0.35	0.00	0.00	0.35	0.35			N/A	N/A
5 - Chester Road	0.60	0.57	1.03	1.44	1.50			N/A	N/A

09:00 - 09:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Airbus	0.00	0.00	0.00	0.00	0.00			N/A	N/A
2 - Chester Road	0.24	0.00	0.00	0.24	0.24			N/A	N/A
3 - Shopping Park	0.04	0.00	0.00	0.04	0.04			N/A	N/A
4 - Shopping Park	0.28	0.00	0.00	0.28	0.28			N/A	N/A
5 - Chester Road	0.45	0.00	0.00	0.45	0.45			N/A	N/A

2026 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Q percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	4.52	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.52	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	2026 Base	PM	ONE HOUR	16:45	18:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Airbus		✓	13	100.000
2 - Chester Road		✓	720	100.000
3 - Shopping Park		✓	183	100.000
4 - Shopping Park		✓	393	100.000
5 - Chester Road		✓	512	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Airbus	2 - Chester Road	3 - Shopping Park	4 - Shopping Park	5 - Chester Road
From	1 - Airbus	0	3	1	6	3
	2 - Chester Road	2	0	149	228	341
	3 - Shopping Park	0	67	0	13	103
	4 - Shopping Park	1	184	13	0	195
	5 - Chester Road	0	249	179	84	0

Vehicle Mix

HV %s

	To					
		1 - Airbus	2 - Chester Road	3 - Shopping Park	4 - Shopping Park	5 - Chester Road

From	1 - Airbus	0	0	0	0	0
	2 - Chester Road	0	0	3	4	2
	3 - Shopping Park	0	2	0	0	6
	4 - Shopping Park	0	7	50	0	2
	5 - Chester Road	0	3	7	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max Q95 (PCU)	Max LOS
1 - Airbus	0.01	3.13	0.0	0.5	A
2 - Chester Road	0.51	4.82	1.1	1.5	A
3 - Shopping Park	0.18	4.19	0.2	0.5	A
4 - Shopping Park	0.38	5.32	0.6	2.9	A
5 - Chester Road	0.35	3.64	0.6	2.7	A

Main Results for each time segment

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 - Airbus	10	582	1303	0.008	10	0.0	2.783	A
2 - Chester Road	542	215	1614	0.336	540	0.5	3.441	A
3 - Shopping Park	138	498	1210	0.114	137	0.1	3.491	A
4 - Shopping Park	296	387	1234	0.240	295	0.3	4.033	A
5 - Chester Road	385	200	1643	0.235	384	0.3	2.973	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 - Airbus	12	697	1244	0.009	12	0.0	2.919	A
2 - Chester Road	647	257	1592	0.407	647	0.7	3.911	A
3 - Shopping Park	165	596	1161	0.142	164	0.2	3.756	A
4 - Shopping Park	353	463	1197	0.295	353	0.4	4.492	A
5 - Chester Road	460	240	1622	0.284	460	0.4	3.223	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 - Airbus	14	853	1165	0.012	14	0.0	3.128	A
2 - Chester Road	793	315	1561	0.508	791	1.1	4.802	A
3 - Shopping Park	201	730	1096	0.184	201	0.2	4.187	A
4 - Shopping Park	433	567	1147	0.377	432	0.6	5.301	A
5 - Chester Road	564	293	1593	0.354	563	0.6	3.635	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 - Airbus	14	854	1164	0.012	14	0.0	3.130	A
2 - Chester Road	793	315	1561	0.508	793	1.1	4.820	A
3 - Shopping Park	201	731	1095	0.184	201	0.2	4.191	A
4 - Shopping Park	433	568	1147	0.377	433	0.6	5.315	A
5 - Chester Road	564	294	1593	0.354	564	0.6	3.638	A

17:45 - 18:00

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 - Airbus	12	699	1243	0.009	12	0.0	2.924	A
2 - Chester Road	647	257	1591	0.407	649	0.7	3.934	A
3 - Shopping Park	165	598	1160	0.142	165	0.2	3.762	A
4 - Shopping Park	353	465	1197	0.295	354	0.4	4.508	A
5 - Chester Road	460	241	1621	0.284	461	0.4	3.228	A

18:00 - 18:15

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 - Airbus	10	585	1301	0.008	10	0.0	2.788	A
2 - Chester Road	542	216	1614	0.336	543	0.5	3.460	A
3 - Shopping Park	138	501	1208	0.114	138	0.1	3.499	A
4 - Shopping Park	296	389	1233	0.240	296	0.3	4.052	A
5 - Chester Road	385	201	1642	0.235	386	0.3	2.983	A

Q Variation Results for each time segment

16:45 - 17:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Airbus	0.01	0.00	0.00	0.01	0.01			N/A	N/A
2 - Chester Road	0.52	0.52	1.03	1.44	1.49			N/A	N/A
3 - Shopping Park	0.13	0.00	0.00	0.13	0.13			N/A	N/A
4 - Shopping Park	0.33	0.00	0.00	0.33	0.33			N/A	N/A
5 - Chester Road	0.32	0.00	0.00	0.32	0.32			N/A	N/A

17:00 - 17:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Airbus	0.01	0.01	0.25	0.45	0.48			N/A	N/A
2 - Chester Road	0.70	0.10	0.86	1.41	1.48			N/A	N/A
3 - Shopping Park	0.17	0.00	0.00	0.17	0.17			N/A	N/A
4 - Shopping Park	0.44	0.00	0.00	0.44	0.44			N/A	N/A
5 - Chester Road	0.41	0.00	0.00	0.41	0.41			N/A	N/A

17:15 - 17:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Airbus	0.01	0.01	0.25	0.45	0.48			N/A	N/A
2 - Chester Road	1.05	0.03	0.26	1.05	1.05			N/A	N/A
3 - Shopping Park	0.23	0.03	0.26	0.48	0.50			N/A	N/A
4 - Shopping Park	0.63	0.03	0.27	0.63	0.63			N/A	N/A
5 - Chester Road	0.57	0.03	0.26	0.57	0.57			N/A	N/A

17:30 - 17:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Airbus	0.01	0.00	0.00	0.01	0.01			N/A	N/A
2 - Chester Road	1.06	0.03	0.28	1.06	1.22			N/A	N/A
3 - Shopping Park	0.23	0.03	0.27	0.49	0.51			N/A	N/A
4 - Shopping Park	0.64	0.03	0.31	1.30	2.90			N/A	N/A
5 - Chester Road	0.57	0.03	0.31	1.39	2.66			N/A	N/A

17:45 - 18:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Airbus	0.01	0.00	0.00	0.01	0.01			N/A	N/A
2 - Chester Road	0.71	0.49	1.00	1.43	1.49			N/A	N/A
3 - Shopping Park	0.17	0.00	0.00	0.17	0.17			N/A	N/A

4 - Shopping Park	0.44	0.00	0.00	0.44	0.44			N/A	N/A
5 - Chester Road	0.41	0.00	0.00	0.41	0.41			N/A	N/A

18:00 - 18:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Airbus	0.01	0.00	0.00	0.01	0.01			N/A	N/A
2 - Chester Road	0.52	0.05	0.51	1.34	1.44			N/A	N/A
3 - Shopping Park	0.13	0.00	0.00	0.13	0.13			N/A	N/A
4 - Shopping Park	0.33	0.00	0.00	0.33	0.33			N/A	N/A
5 - Chester Road	0.32	0.00	0.00	0.32	0.32			N/A	N/A

2026 Base, SAT

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Q percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	4.74	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.74	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)
D6	2026 Base	SAT	ONE HOUR	11:45	13:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Airbus		✓	165	100.000
2 - Chester Road		✓	584	100.000
3 - Shopping Park		✓	216	100.000
4 - Shopping Park		✓	406	100.000
5 - Chester Road		✓	655	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Airbus	2 - Chester Road	3 - Shopping Park	4 - Shopping Park	5 - Chester Road
From	1 - Airbus	0	22	12	62	69
	2 - Chester Road	3	0	151	175	255
	3 - Shopping Park	0	81	0	13	122
	4 - Shopping Park	0	177	20	0	209
	5 - Chester Road	0	243	298	114	0

Vehicle Mix

HV %s

	To				
		1 - Airbus	2 - Chester Road	3 - Shopping Park	4 - Shopping Park	5 - Chester Road

From	1 - Airbus	0	0	0	0	0
	2 - Chester Road	0	0	3	4	2
	3 - Shopping Park	0	2	0	0	6
	4 - Shopping Park	0	7	50	0	2
	5 - Chester Road	0	3	7	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max Q95 (PCU)	Max LOS
1 - Airbus	0.17	4.02	0.2	0.5	A
2 - Chester Road	0.46	4.95	0.9	2.3	A
3 - Shopping Park	0.22	4.41	0.3	1.3	A
4 - Shopping Park	0.39	5.50	0.7	3.0	A
5 - Chester Road	0.46	4.35	0.9	2.1	A

Main Results for each time segment

11:45 - 12:00

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 - Airbus	124	700	1243	0.100	124	0.1	3.214	A
2 - Chester Road	440	431	1498	0.293	438	0.4	3.485	A
3 - Shopping Park	163	509	1205	0.135	162	0.2	3.592	A
4 - Shopping Park	306	397	1229	0.249	304	0.3	4.113	A
5 - Chester Road	493	211	1637	0.301	491	0.4	3.277	A

12:00 - 12:15

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 - Airbus	148	838	1173	0.127	148	0.1	3.514	A
2 - Chester Road	525	516	1453	0.361	524	0.6	3.985	A
3 - Shopping Park	194	609	1155	0.168	194	0.2	3.897	A
4 - Shopping Park	365	476	1191	0.306	365	0.5	4.607	A
5 - Chester Road	589	252	1615	0.365	588	0.6	3.659	A

12:15 - 12:30

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 - Airbus	182	1026	1077	0.169	181	0.2	4.019	A
2 - Chester Road	643	632	1391	0.462	642	0.9	4.933	A
3 - Shopping Park	238	745	1088	0.219	238	0.3	4.404	A
4 - Shopping Park	447	583	1140	0.392	446	0.7	5.487	A
5 - Chester Road	721	309	1585	0.455	720	0.9	4.342	A

12:30 - 12:45

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 - Airbus	182	1027	1076	0.169	182	0.2	4.025	A
2 - Chester Road	643	633	1391	0.462	643	0.9	4.952	A
3 - Shopping Park	238	746	1088	0.219	238	0.3	4.409	A
4 - Shopping Park	447	584	1139	0.392	447	0.7	5.503	A
5 - Chester Road	721	309	1584	0.455	721	0.9	4.354	A

12:45 - 13:00

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 - Airbus	148	840	1171	0.127	149	0.1	3.520	A
2 - Chester Road	525	518	1452	0.362	526	0.6	4.004	A
3 - Shopping Park	194	611	1154	0.168	194	0.2	3.905	A
4 - Shopping Park	365	477	1190	0.307	366	0.5	4.625	A
5 - Chester Road	589	253	1614	0.365	590	0.6	3.674	A

13:00 - 13:15

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 - Airbus	124	703	1241	0.100	124	0.1	3.225	A
2 - Chester Road	440	433	1497	0.294	440	0.4	3.503	A
3 - Shopping Park	163	511	1203	0.135	163	0.2	3.604	A
4 - Shopping Park	306	400	1228	0.249	306	0.4	4.133	A
5 - Chester Road	493	212	1636	0.301	494	0.5	3.290	A

Q Variation Results for each time segment

11:45 - 12:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Airbus	0.11	0.00	0.00	0.11	0.11			N/A	N/A
2 - Chester Road	0.42	0.00	0.00	0.42	0.42			N/A	N/A
3 - Shopping Park	0.16	0.00	0.00	0.16	0.16			N/A	N/A
4 - Shopping Park	0.35	0.00	0.00	0.35	0.35			N/A	N/A
5 - Chester Road	0.45	0.00	0.00	0.45	0.45			N/A	N/A

12:00 - 12:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Airbus	0.14	0.00	0.00	0.14	0.14			N/A	N/A
2 - Chester Road	0.58	0.08	0.79	1.39	1.47			N/A	N/A
3 - Shopping Park	0.21	0.00	0.00	0.21	0.21			N/A	N/A
4 - Shopping Park	0.46	0.00	0.00	0.46	0.46			N/A	N/A
5 - Chester Road	0.60	0.09	0.83	1.42	1.49			N/A	N/A

12:15 - 12:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Airbus	0.20	0.03	0.25	0.46	0.48			N/A	N/A
2 - Chester Road	0.88	0.03	0.26	0.88	0.88			N/A	N/A
3 - Shopping Park	0.29	0.03	0.26	0.48	0.50			N/A	N/A
4 - Shopping Park	0.68	0.03	0.27	0.68	0.68			N/A	N/A
5 - Chester Road	0.86	0.03	0.27	0.86	0.86			N/A	N/A

12:30 - 12:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Airbus	0.20	0.03	0.25	0.45	0.48			N/A	N/A
2 - Chester Road	0.88	0.03	0.28	0.88	2.35			N/A	N/A
3 - Shopping Park	0.29	0.03	0.31	0.93	1.26			N/A	N/A
4 - Shopping Park	0.68	0.03	0.30	1.19	2.95			N/A	N/A
5 - Chester Road	0.87	0.03	0.29	0.87	2.09			N/A	N/A

12:45 - 13:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Airbus	0.15	0.00	0.00	0.15	0.15			N/A	N/A
2 - Chester Road	0.59	0.57	1.03	1.44	1.49			N/A	N/A
3 - Shopping Park	0.21	0.00	0.00	0.21	0.21			N/A	N/A

4 - Shopping Park	0.47	0.00	0.00	0.47	0.47			N/A	N/A
5 - Chester Road	0.60	0.57	1.04	1.46	1.51			N/A	N/A

13:00 - 13:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Airbus	0.11	0.00	0.00	0.11	0.11			N/A	N/A
2 - Chester Road	0.43	0.00	0.00	0.43	0.43			N/A	N/A
3 - Shopping Park	0.16	0.00	0.00	0.16	0.16			N/A	N/A
4 - Shopping Park	0.35	0.00	0.00	0.35	0.35			N/A	N/A
5 - Chester Road	0.45	0.00	0.00	0.45	0.45			N/A	N/A

2026 with Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Q percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	4.01	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.01	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	2026 with Dev	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	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Airbus		✓	8	100.000
2 - Chester Road		✓	428	100.000
3 - Shopping Park		✓	88	100.000
4 - Shopping Park		✓	354	100.000
5 - Chester Road		✓	657	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Airbus	2 - Chester Road	3 - Shopping Park	4 - Shopping Park	5 - Chester Road
From	1 - Airbus	0	2	0	0	6
	2 - Chester Road	14	0	74	151	189
	3 - Shopping Park	2	36	0	8	42
	4 - Shopping Park	42	227	14	0	71
	5 - Chester Road	47	470	96	44	0

Vehicle Mix

HV %s

	To				
		1 - Airbus	2 - Chester Road	3 - Shopping Park	4 - Shopping Park	5 - Chester Road

From	1 - Airbus	0	0	0	0	0
	2 - Chester Road	0	0	3	4	2
	3 - Shopping Park	0	2	0	0	6
	4 - Shopping Park	0	7	50	0	2
	5 - Chester Road	0	3	7	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max Q95 (PCU)	Max LOS
1 - Airbus	0.01	3.29	0.0	0.5	A
2 - Chester Road	0.29	3.18	0.4	1.5	A
3 - Shopping Park	0.08	3.27	0.1	0.5	A
4 - Shopping Park	0.31	4.36	0.5	2.0	A
5 - Chester Road	0.47	4.48	0.9	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 - Airbus	6	665	1260	0.005	6	0.0	2.869	A
2 - Chester Road	322	120	1665	0.194	321	0.2	2.753	A
3 - Shopping Park	66	303	1305	0.051	66	0.1	3.009	A
4 - Shopping Park	267	217	1316	0.202	265	0.3	3.637	A
5 - Chester Road	495	251	1615	0.306	493	0.5	3.303	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 - Airbus	7	797	1194	0.006	7	0.0	3.033	A
2 - Chester Road	385	144	1652	0.233	385	0.3	2.919	A
3 - Shopping Park	79	363	1276	0.062	79	0.1	3.116	A
4 - Shopping Park	318	260	1296	0.246	318	0.3	3.912	A
5 - Chester Road	591	301	1589	0.372	590	0.6	3.718	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 - Airbus	9	975	1103	0.008	9	0.0	3.290	A
2 - Chester Road	471	176	1635	0.288	471	0.4	3.179	A
3 - Shopping Park	97	444	1236	0.078	97	0.1	3.274	A
4 - Shopping Park	390	318	1268	0.307	389	0.5	4.354	A
5 - Chester Road	723	368	1553	0.466	722	0.9	4.467	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 - Airbus	9	977	1102	0.008	9	0.0	3.292	A
2 - Chester Road	471	176	1635	0.288	471	0.4	3.180	A
3 - Shopping Park	97	445	1236	0.078	97	0.1	3.274	A
4 - Shopping Park	390	318	1267	0.308	390	0.5	4.358	A
5 - Chester Road	723	369	1553	0.466	723	0.9	4.480	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 - Airbus	7	799	1192	0.006	7	0.0	3.036	A
2 - Chester Road	385	144	1652	0.233	385	0.3	2.921	A
3 - Shopping Park	79	364	1276	0.062	79	0.1	3.119	A
4 - Shopping Park	318	260	1296	0.246	319	0.3	3.918	A
5 - Chester Road	591	302	1588	0.372	592	0.6	3.733	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 - Airbus	6	669	1259	0.005	6	0.0	2.873	A
2 - Chester Road	322	121	1664	0.194	322	0.2	2.757	A
3 - Shopping Park	66	304	1305	0.051	66	0.1	3.011	A
4 - Shopping Park	267	218	1316	0.203	267	0.3	3.646	A
5 - Chester Road	495	252	1615	0.306	495	0.5	3.319	A

Q Variation Results for each time segment

07:45 - 08:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Airbus	0.00	0.00	0.00	0.00	0.00			N/A	N/A
2 - Chester Road	0.25	0.00	0.00	0.25	0.25			N/A	N/A
3 - Shopping Park	0.06	0.00	0.00	0.06	0.06			N/A	N/A
4 - Shopping Park	0.27	0.00	0.00	0.27	0.27			N/A	N/A
5 - Chester Road	0.45	0.00	0.00	0.45	0.45			N/A	N/A

08:00 - 08:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Airbus	0.01	0.01	0.25	0.45	0.48			N/A	N/A
2 - Chester Road	0.31	0.00	0.00	0.31	0.31			N/A	N/A
3 - Shopping Park	0.07	0.03	0.26	0.47	0.49			N/A	N/A
4 - Shopping Park	0.34	0.00	0.00	0.34	0.34			N/A	N/A
5 - Chester Road	0.61	0.09	0.83	1.41	1.48			N/A	N/A

08:15 - 08:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Airbus	0.01	0.01	0.25	0.46	0.48			N/A	N/A
2 - Chester Road	0.41	0.03	0.26	0.47	0.49			N/A	N/A
3 - Shopping Park	0.09	0.03	0.27	0.48	0.51			N/A	N/A
4 - Shopping Park	0.47	0.03	0.27	0.48	0.51			N/A	N/A
5 - Chester Road	0.89	0.03	0.26	0.89	0.89			N/A	N/A

08:30 - 08:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Airbus	0.01	0.00	0.00	0.01	0.01			N/A	N/A
2 - Chester Road	0.42	0.03	0.33	1.35	1.52			N/A	N/A
3 - Shopping Park	0.09	0.00	0.00	0.09	0.09			N/A	N/A
4 - Shopping Park	0.47	0.03	0.33	1.45	1.96			N/A	N/A
5 - Chester Road	0.90	0.03	0.28	0.90	1.96			N/A	N/A

08:45 - 09:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Airbus	0.01	0.00	0.00	0.01	0.01			N/A	N/A
2 - Chester Road	0.31	0.00	0.00	0.31	0.31			N/A	N/A
3 - Shopping Park	0.07	0.00	0.00	0.07	0.07			N/A	N/A

4 - Shopping Park	0.35	0.00	0.00	0.35	0.35			N/A	N/A
5 - Chester Road	0.61	0.57	1.03	1.44	1.50			N/A	N/A

09:00 - 09:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Airbus	0.00	0.00	0.00	0.00	0.00			N/A	N/A
2 - Chester Road	0.25	0.00	0.00	0.25	0.25			N/A	N/A
3 - Shopping Park	0.06	0.00	0.00	0.06	0.06			N/A	N/A
4 - Shopping Park	0.27	0.00	0.00	0.27	0.27			N/A	N/A
5 - Chester Road	0.46	0.00	0.00	0.46	0.46			N/A	N/A

2026 with Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Q percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	4.67	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.67	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)
D8	2026 with Dev	PM	ONE HOUR	16:45	18:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Airbus		✓	13	100.000
2 - Chester Road		✓	737	100.000
3 - Shopping Park		✓	281	100.000
4 - Shopping Park		✓	352	100.000
5 - Chester Road		✓	528	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Airbus	2 - Chester Road	3 - Shopping Park	4 - Shopping Park	5 - Chester Road
From	1 - Airbus	0	3	1	6	3
	2 - Chester Road	2	0	180	214	341
	3 - Shopping Park	0	108	0	29	144
	4 - Shopping Park	1	160	20	0	171
	5 - Chester Road	0	249	209	70	0

Vehicle Mix

HV %s

	To				
	1 - Airbus	2 - Chester Road	3 - Shopping Park	4 - Shopping Park	5 - Chester Road

From	1 - Airbus	0	0	0	0	0
	2 - Chester Road	0	0	3	4	2
	3 - Shopping Park	0	2	0	0	6
	4 - Shopping Park	0	7	50	0	2
	5 - Chester Road	0	3	7	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max Q95 (PCU)	Max LOS
1 - Airbus	0.01	3.19	0.0	0.5	A
2 - Chester Road	0.52	5.03	1.1	1.5	A
3 - Shopping Park	0.28	4.66	0.4	1.4	A
4 - Shopping Park	0.35	5.34	0.6	2.7	A
5 - Chester Road	0.37	3.76	0.6	2.8	A

Main Results for each time segment

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 - Airbus	10	612	1288	0.008	10	0.0	2.816	A
2 - Chester Road	555	232	1605	0.346	553	0.5	3.509	A
3 - Shopping Park	212	477	1220	0.173	211	0.2	3.698	A
4 - Shopping Park	265	448	1204	0.220	264	0.3	4.058	A
5 - Chester Road	398	218	1633	0.243	396	0.3	3.032	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 - Airbus	12	733	1226	0.010	12	0.0	2.963	A
2 - Chester Road	663	278	1581	0.419	662	0.7	4.025	A
3 - Shopping Park	253	571	1174	0.215	252	0.3	4.054	A
4 - Shopping Park	316	537	1162	0.272	316	0.4	4.518	A
5 - Chester Road	475	261	1610	0.295	474	0.4	3.305	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 - Airbus	14	897	1142	0.013	14	0.0	3.190	A
2 - Chester Road	811	340	1547	0.524	810	1.1	5.009	A
3 - Shopping Park	309	699	1111	0.279	309	0.4	4.657	A
4 - Shopping Park	388	657	1103	0.351	387	0.6	5.328	A
5 - Chester Road	581	320	1579	0.368	581	0.6	3.759	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 - Airbus	14	898	1142	0.013	14	0.0	3.192	A
2 - Chester Road	811	340	1547	0.525	811	1.1	5.031	A
3 - Shopping Park	309	700	1110	0.279	309	0.4	4.664	A
4 - Shopping Park	388	658	1103	0.351	388	0.6	5.342	A
5 - Chester Road	581	320	1578	0.368	581	0.6	3.763	A

17:45 - 18:00

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 - Airbus	12	735	1225	0.010	12	0.0	2.968	A
2 - Chester Road	663	278	1580	0.419	664	0.7	4.048	A
3 - Shopping Park	253	573	1173	0.215	253	0.3	4.064	A
4 - Shopping Park	316	539	1161	0.273	317	0.4	4.534	A
5 - Chester Road	475	262	1610	0.295	475	0.4	3.313	A

18:00 - 18:15

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 - Airbus	10	615	1286	0.008	10	0.0	2.822	A
2 - Chester Road	555	233	1604	0.346	556	0.5	3.533	A
3 - Shopping Park	212	479	1219	0.174	212	0.2	3.713	A
4 - Shopping Park	265	451	1203	0.220	265	0.3	4.078	A
5 - Chester Road	398	219	1632	0.244	398	0.3	3.040	A

Q Variation Results for each time segment

16:45 - 17:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Airbus	0.01	0.00	0.00	0.01	0.01			N/A	N/A
2 - Chester Road	0.54	0.54	1.03	1.44	1.49			N/A	N/A
3 - Shopping Park	0.22	0.00	0.00	0.22	0.22			N/A	N/A
4 - Shopping Park	0.30	0.00	0.00	0.30	0.30			N/A	N/A
5 - Chester Road	0.33	0.00	0.00	0.33	0.33			N/A	N/A

17:00 - 17:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Airbus	0.01	0.01	0.25	0.45	0.48			N/A	N/A
2 - Chester Road	0.74	0.10	0.86	1.43	1.50			N/A	N/A
3 - Shopping Park	0.28	0.00	0.00	0.28	0.28			N/A	N/A
4 - Shopping Park	0.39	0.00	0.00	0.39	0.39			N/A	N/A
5 - Chester Road	0.43	0.00	0.00	0.43	0.43			N/A	N/A

17:15 - 17:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Airbus	0.01	0.01	0.25	0.45	0.48			N/A	N/A
2 - Chester Road	1.12	0.03	0.26	1.12	1.12			N/A	N/A
3 - Shopping Park	0.40	0.03	0.26	0.47	0.50			N/A	N/A
4 - Shopping Park	0.57	0.03	0.27	0.57	0.57			N/A	N/A
5 - Chester Road	0.60	0.03	0.26	0.60	0.60			N/A	N/A

17:30 - 17:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Airbus	0.01	0.00	0.00	0.01	0.01			N/A	N/A
2 - Chester Road	1.13	0.03	0.28	1.13	1.52			N/A	N/A
3 - Shopping Park	0.40	0.03	0.33	1.32	1.37			N/A	N/A
4 - Shopping Park	0.57	0.03	0.32	1.45	2.68			N/A	N/A
5 - Chester Road	0.61	0.03	0.30	1.30	2.79			N/A	N/A

17:45 - 18:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Airbus	0.01	0.00	0.00	0.01	0.01			N/A	N/A
2 - Chester Road	0.75	0.42	0.99	1.43	1.49			N/A	N/A
3 - Shopping Park	0.29	0.00	0.00	0.29	0.29			N/A	N/A

4 - Shopping Park	0.40	0.00	0.00	0.40	0.40			N/A	N/A
5 - Chester Road	0.44	0.00	0.00	0.44	0.44			N/A	N/A

18:00 - 18:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Airbus	0.01	0.00	0.00	0.01	0.01			N/A	N/A
2 - Chester Road	0.55	0.06	0.61	1.36	1.45			N/A	N/A
3 - Shopping Park	0.22	0.00	0.00	0.22	0.22			N/A	N/A
4 - Shopping Park	0.30	0.00	0.00	0.30	0.30			N/A	N/A
5 - Chester Road	0.34	0.00	0.00	0.34	0.34			N/A	N/A

2026 with Dev, SAT

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Q percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	4.94	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.94	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	2026 with Dev	SAT	ONE HOUR	11:45	13:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Airbus		✓	165	100.000
2 - Chester Road		✓	602	100.000
3 - Shopping Park		✓	331	100.000
4 - Shopping Park		✓	357	100.000
5 - Chester Road		✓	673	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Airbus	2 - Chester Road	3 - Shopping Park	4 - Shopping Park	5 - Chester Road
From	1 - Airbus	0	22	12	62	69
	2 - Chester Road	3	0	185	159	255
	3 - Shopping Park	0	129	0	32	170
	4 - Shopping Park	0	148	28	0	181
	5 - Chester Road	0	243	332	98	0

Vehicle Mix

HV %s

	To				
	1 - Airbus	2 - Chester Road	3 - Shopping Park	4 - Shopping Park	5 - Chester Road

From	1 - Airbus	0	0	0	0	0
	2 - Chester Road	0	0	3	4	2
	3 - Shopping Park	0	2	0	0	6
	4 - Shopping Park	0	7	50	0	2
	5 - Chester Road	0	3	7	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max Q95 (PCU)	Max LOS
1 - Airbus	0.17	4.14	0.2	0.5	A
2 - Chester Road	0.48	5.19	1.0	2.1	A
3 - Shopping Park	0.33	5.05	0.5	2.3	A
4 - Shopping Park	0.36	5.53	0.6	2.8	A
5 - Chester Road	0.47	4.55	0.9	1.9	A

Main Results for each time segment

11:45 - 12:00

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 - Airbus	124	733	1226	0.101	124	0.1	3.264	A
2 - Chester Road	453	451	1488	0.305	451	0.4	3.565	A
3 - Shopping Park	249	484	1216	0.205	248	0.3	3.856	A
4 - Shopping Park	269	469	1194	0.225	268	0.3	4.141	A
5 - Chester Road	507	231	1626	0.312	505	0.5	3.352	A

12:00 - 12:15

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 - Airbus	148	878	1152	0.129	148	0.1	3.586	A
2 - Chester Road	541	540	1440	0.376	541	0.6	4.111	A
3 - Shopping Park	298	580	1169	0.254	297	0.4	4.283	A
4 - Shopping Park	321	562	1149	0.279	321	0.4	4.634	A
5 - Chester Road	605	277	1602	0.378	604	0.6	3.774	A

12:15 - 12:30

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 - Airbus	182	1075	1052	0.173	181	0.2	4.136	A
2 - Chester Road	663	661	1376	0.482	661	0.9	5.172	A
3 - Shopping Park	364	710	1106	0.330	364	0.5	5.034	A
4 - Shopping Park	393	688	1089	0.361	392	0.6	5.513	A
5 - Chester Road	741	338	1569	0.472	740	0.9	4.537	A

12:30 - 12:45

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 - Airbus	182	1077	1051	0.173	182	0.2	4.141	A
2 - Chester Road	663	662	1375	0.482	663	1.0	5.195	A
3 - Shopping Park	364	711	1105	0.330	364	0.5	5.046	A
4 - Shopping Park	393	689	1088	0.361	393	0.6	5.529	A
5 - Chester Road	741	339	1568	0.472	741	0.9	4.551	A

12:45 - 13:00

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 - Airbus	148	881	1151	0.129	149	0.1	3.592	A
2 - Chester Road	541	541	1440	0.376	542	0.6	4.131	A
3 - Shopping Park	298	582	1168	0.255	298	0.4	4.297	A
4 - Shopping Park	321	564	1149	0.279	322	0.4	4.652	A
5 - Chester Road	605	277	1601	0.378	606	0.6	3.791	A

13:00 - 13:15

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 - Airbus	124	737	1224	0.102	124	0.1	3.274	A
2 - Chester Road	453	453	1487	0.305	454	0.5	3.587	A
3 - Shopping Park	249	487	1215	0.205	250	0.3	3.871	A
4 - Shopping Park	269	472	1193	0.225	269	0.3	4.162	A
5 - Chester Road	507	232	1626	0.312	507	0.5	3.369	A

Q Variation Results for each time segment

11:45 - 12:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Airbus	0.11	0.00	0.00	0.11	0.11			N/A	N/A
2 - Chester Road	0.45	0.00	0.00	0.45	0.45			N/A	N/A
3 - Shopping Park	0.27	0.00	0.00	0.27	0.27			N/A	N/A
4 - Shopping Park	0.31	0.00	0.00	0.31	0.31			N/A	N/A
5 - Chester Road	0.47	0.00	0.00	0.47	0.47			N/A	N/A

12:00 - 12:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Airbus	0.15	0.00	0.00	0.15	0.15			N/A	N/A
2 - Chester Road	0.61	0.09	0.83	1.40	1.47			N/A	N/A
3 - Shopping Park	0.35	0.00	0.00	0.35	0.35			N/A	N/A
4 - Shopping Park	0.41	0.00	0.00	0.41	0.41			N/A	N/A
5 - Chester Road	0.63	0.10	0.86	1.43	1.50			N/A	N/A

12:15 - 12:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Airbus	0.21	0.03	0.25	0.46	0.48			N/A	N/A
2 - Chester Road	0.95	0.03	0.26	0.95	0.95			N/A	N/A
3 - Shopping Park	0.51	0.03	0.26	0.51	0.51			N/A	N/A
4 - Shopping Park	0.60	0.03	0.27	0.60	0.60			N/A	N/A
5 - Chester Road	0.93	0.03	0.27	0.93	0.93			N/A	N/A

12:30 - 12:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Airbus	0.21	0.03	0.25	0.45	0.48			N/A	N/A
2 - Chester Road	0.95	0.03	0.28	0.95	2.07			N/A	N/A
3 - Shopping Park	0.51	0.03	0.32	1.45	2.26			N/A	N/A
4 - Shopping Park	0.60	0.03	0.32	1.43	2.82			N/A	N/A
5 - Chester Road	0.93	0.03	0.28	0.93	1.87			N/A	N/A

12:45 - 13:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Airbus	0.15	0.00	0.00	0.15	0.15			N/A	N/A
2 - Chester Road	0.62	0.57	1.03	1.44	1.49			N/A	N/A
3 - Shopping Park	0.36	0.00	0.00	0.36	0.36			N/A	N/A

4 - Shopping Park	0.42	0.00	0.00	0.42	0.42			N/A	N/A
5 - Chester Road	0.64	0.58	1.05	1.46	1.52			N/A	N/A

13:00 - 13:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Airbus	0.11	0.00	0.00	0.11	0.11			N/A	N/A
2 - Chester Road	0.45	0.03	0.33	1.10	1.32			N/A	N/A
3 - Shopping Park	0.27	0.00	0.00	0.27	0.27			N/A	N/A
4 - Shopping Park	0.31	0.00	0.00	0.31	0.31			N/A	N/A
5 - Chester Road	0.48	0.00	0.00	0.48	0.48			N/A	N/A

2031 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Q percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	4.13	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.13	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)
D10	2031 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	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Airbus		✓	8	100.000
2 - Chester Road		✓	440	100.000
3 - Shopping Park		✓	70	100.000
4 - Shopping Park		✓	379	100.000
5 - Chester Road		✓	680	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Airbus	2 - Chester Road	3 - Shopping Park	4 - Shopping Park	5 - Chester Road
From	1 - Airbus	0	2	0	0	6
	2 - Chester Road	14	0	64	164	198
	3 - Shopping Park	2	28	0	6	34
	4 - Shopping Park	44	243	12	0	80
	5 - Chester Road	49	492	88	51	0

Vehicle Mix

HV %s

	To				
	1 - Airbus	2 - Chester Road	3 - Shopping Park	4 - Shopping Park	5 - Chester Road

From	1 - Airbus	0	0	0	0	0
	2 - Chester Road	0	0	3	4	2
	3 - Shopping Park	0	2	0	0	6
	4 - Shopping Park	0	7	50	0	2
	5 - Chester Road	0	3	7	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max Q95 (PCU)	Max LOS
1 - Airbus	0.01	3.34	0.0	0.5	A
2 - Chester Road	0.30	3.21	0.4	1.7	A
3 - Shopping Park	0.06	3.26	0.1	0.5	A
4 - Shopping Park	0.33	4.47	0.5	2.3	A
5 - Chester Road	0.48	4.64	1.0	1.7	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 - Airbus	6	685	1250	0.005	6	0.0	2.892	A
2 - Chester Road	331	118	1666	0.199	330	0.3	2.770	A
3 - Shopping Park	53	325	1295	0.041	53	0.0	3.003	A
4 - Shopping Park	285	212	1319	0.216	284	0.3	3.685	A
5 - Chester Road	512	257	1612	0.318	510	0.5	3.362	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 - Airbus	7	821	1181	0.006	7	0.0	3.065	A
2 - Chester Road	396	141	1654	0.239	395	0.3	2.941	A
3 - Shopping Park	63	389	1263	0.050	63	0.1	3.108	A
4 - Shopping Park	341	253	1299	0.262	340	0.4	3.981	A
5 - Chester Road	611	308	1585	0.386	611	0.6	3.808	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 - Airbus	9	1005	1087	0.008	9	0.0	3.336	A
2 - Chester Road	484	173	1637	0.296	484	0.4	3.211	A
3 - Shopping Park	77	476	1220	0.063	77	0.1	3.263	A
4 - Shopping Park	417	310	1271	0.328	417	0.5	4.462	A
5 - Chester Road	749	377	1548	0.484	747	1.0	4.629	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 - Airbus	9	1006	1087	0.008	9	0.0	3.339	A
2 - Chester Road	484	173	1637	0.296	484	0.4	3.212	A
3 - Shopping Park	77	477	1220	0.063	77	0.1	3.263	A
4 - Shopping Park	417	310	1271	0.328	417	0.5	4.468	A
5 - Chester Road	749	378	1548	0.484	749	1.0	4.645	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 - Airbus	7	823	1180	0.006	7	0.0	3.068	A
2 - Chester Road	396	141	1653	0.239	396	0.3	2.944	A
3 - Shopping Park	63	390	1263	0.050	63	0.1	3.109	A
4 - Shopping Park	341	254	1299	0.262	341	0.4	3.989	A
5 - Chester Road	611	309	1585	0.386	613	0.7	3.822	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 - Airbus	6	689	1248	0.005	6	0.0	2.899	A
2 - Chester Road	331	118	1666	0.199	332	0.3	2.776	A
3 - Shopping Park	53	326	1294	0.041	53	0.0	3.008	A
4 - Shopping Park	285	212	1319	0.216	286	0.3	3.694	A
5 - Chester Road	512	259	1612	0.318	513	0.5	3.382	A

Q Variation Results for each time segment

07:45 - 08:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Airbus	0.00	0.00	0.00	0.00	0.00			N/A	N/A
2 - Chester Road	0.25	0.00	0.00	0.25	0.25			N/A	N/A
3 - Shopping Park	0.04	0.00	0.00	0.04	0.04			N/A	N/A
4 - Shopping Park	0.29	0.00	0.00	0.29	0.29			N/A	N/A
5 - Chester Road	0.48	0.00	0.00	0.48	0.48			N/A	N/A

08:00 - 08:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Airbus	0.01	0.01	0.25	0.45	0.48			N/A	N/A
2 - Chester Road	0.32	0.00	0.00	0.32	0.32			N/A	N/A
3 - Shopping Park	0.05	0.03	0.26	0.47	0.49			N/A	N/A
4 - Shopping Park	0.37	0.00	0.00	0.37	0.37			N/A	N/A
5 - Chester Road	0.64	0.10	0.85	1.41	1.48			N/A	N/A

08:15 - 08:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Airbus	0.01	0.01	0.25	0.46	0.48			N/A	N/A
2 - Chester Road	0.43	0.03	0.26	0.47	0.49			N/A	N/A
3 - Shopping Park	0.07	0.03	0.27	0.48	0.51			N/A	N/A
4 - Shopping Park	0.51	0.03	0.27	0.51	0.51			N/A	N/A
5 - Chester Road	0.96	0.03	0.26	0.96	0.96			N/A	N/A

08:30 - 08:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Airbus	0.01	0.00	0.00	0.01	0.01			N/A	N/A
2 - Chester Road	0.43	0.03	0.33	1.38	1.67			N/A	N/A
3 - Shopping Park	0.07	0.00	0.00	0.07	0.07			N/A	N/A
4 - Shopping Park	0.52	0.03	0.32	1.46	2.31			N/A	N/A
5 - Chester Road	0.96	0.03	0.28	0.96	1.70			N/A	N/A

08:45 - 09:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Airbus	0.01	0.00	0.00	0.01	0.01			N/A	N/A
2 - Chester Road	0.32	0.00	0.00	0.32	0.32			N/A	N/A
3 - Shopping Park	0.05	0.00	0.00	0.05	0.05			N/A	N/A

4 - Shopping Park	0.38	0.00	0.00	0.38	0.38			N/A	N/A
5 - Chester Road	0.65	0.57	1.03	1.44	1.50			N/A	N/A

09:00 - 09:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Airbus	0.00	0.00	0.00	0.00	0.00			N/A	N/A
2 - Chester Road	0.26	0.00	0.00	0.26	0.26			N/A	N/A
3 - Shopping Park	0.04	0.00	0.00	0.04	0.04			N/A	N/A
4 - Shopping Park	0.29	0.00	0.00	0.29	0.29			N/A	N/A
5 - Chester Road	0.48	0.00	0.00	0.48	0.48			N/A	N/A

2031 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Q percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	4.74	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.74	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)
D11	2031 Base	PM	ONE HOUR	16:45	18:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Airbus		✓	13	100.000
2 - Chester Road		✓	753	100.000
3 - Shopping Park		✓	192	100.000
4 - Shopping Park		✓	412	100.000
5 - Chester Road		✓	535	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Airbus	2 - Chester Road	3 - Shopping Park	4 - Shopping Park	5 - Chester Road
From	1 - Airbus	0	3	1	6	3
	2 - Chester Road	2	0	156	239	356
	3 - Shopping Park	0	70	0	14	108
	4 - Shopping Park	1	193	14	0	204
	5 - Chester Road	0	260	187	88	0

Vehicle Mix

HV %s

		To				
		1 - Airbus	2 - Chester Road	3 - Shopping Park	4 - Shopping Park	5 - Chester Road

From	1 - Airbus	0	0	0	0	0
	2 - Chester Road	0	0	3	4	2
	3 - Shopping Park	0	2	0	0	6
	4 - Shopping Park	0	7	50	0	2
	5 - Chester Road	0	3	7	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max Q95 (PCU)	Max LOS
1 - Airbus	0.01	3.19	0.0	0.5	A
2 - Chester Road	0.53	5.11	1.2	1.5	A
3 - Shopping Park	0.20	4.32	0.3	0.9	A
4 - Shopping Park	0.40	5.58	0.7	3.0	A
5 - Chester Road	0.37	3.76	0.6	2.8	A

Main Results for each time segment

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 - Airbus	10	609	1289	0.008	10	0.0	2.813	A
2 - Chester Road	567	224	1609	0.352	565	0.6	3.537	A
3 - Shopping Park	145	520	1199	0.121	144	0.1	3.550	A
4 - Shopping Park	310	404	1226	0.253	309	0.4	4.134	A
5 - Chester Road	403	210	1638	0.246	401	0.3	3.027	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 - Airbus	12	729	1228	0.010	12	0.0	2.959	A
2 - Chester Road	677	269	1585	0.427	676	0.8	4.068	A
3 - Shopping Park	173	623	1148	0.150	172	0.2	3.838	A
4 - Shopping Park	370	484	1187	0.312	370	0.5	4.641	A
5 - Chester Road	481	251	1615	0.298	481	0.4	3.300	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 - Airbus	14	893	1145	0.013	14	0.0	3.184	A
2 - Chester Road	829	329	1553	0.534	827	1.2	5.089	A
3 - Shopping Park	211	763	1080	0.196	211	0.3	4.312	A
4 - Shopping Park	454	592	1135	0.400	453	0.7	5.559	A
5 - Chester Road	589	308	1585	0.372	588	0.6	3.755	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 - Airbus	14	894	1144	0.013	14	0.0	3.186	A
2 - Chester Road	829	329	1553	0.534	829	1.2	5.113	A
3 - Shopping Park	211	764	1079	0.196	211	0.3	4.317	A
4 - Shopping Park	454	593	1134	0.400	454	0.7	5.576	A
5 - Chester Road	589	308	1585	0.372	589	0.6	3.759	A

17:45 - 18:00

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 - Airbus	12	731	1227	0.010	12	0.0	2.964	A
2 - Chester Road	677	269	1585	0.427	679	0.8	4.090	A
3 - Shopping Park	173	625	1147	0.150	173	0.2	3.845	A
4 - Shopping Park	370	486	1187	0.312	371	0.5	4.661	A
5 - Chester Road	481	252	1615	0.298	482	0.4	3.308	A

18:00 - 18:15

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 - Airbus	10	612	1288	0.008	10	0.0	2.818	A
2 - Chester Road	567	225	1608	0.352	568	0.6	3.561	A
3 - Shopping Park	145	523	1197	0.121	145	0.1	3.561	A
4 - Shopping Park	310	406	1225	0.253	311	0.4	4.154	A
5 - Chester Road	403	211	1637	0.246	403	0.3	3.035	A

Q Variation Results for each time segment

16:45 - 17:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Airbus	0.01	0.00	0.00	0.01	0.01			N/A	N/A
2 - Chester Road	0.56	0.56	1.03	1.44	1.49			N/A	N/A
3 - Shopping Park	0.14	0.00	0.00	0.14	0.14			N/A	N/A
4 - Shopping Park	0.36	0.00	0.00	0.36	0.36			N/A	N/A
5 - Chester Road	0.34	0.00	0.00	0.34	0.34			N/A	N/A

17:00 - 17:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Airbus	0.01	0.01	0.25	0.45	0.48			N/A	N/A
2 - Chester Road	0.76	0.10	0.86	1.44	1.51			N/A	N/A
3 - Shopping Park	0.18	0.00	0.00	0.18	0.18			N/A	N/A
4 - Shopping Park	0.47	0.00	0.00	0.47	0.47			N/A	N/A
5 - Chester Road	0.44	0.00	0.00	0.44	0.44			N/A	N/A

17:15 - 17:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Airbus	0.01	0.01	0.25	0.45	0.48			N/A	N/A
2 - Chester Road	1.16	0.03	0.27	1.16	1.16			N/A	N/A
3 - Shopping Park	0.25	0.03	0.26	0.48	0.50			N/A	N/A
4 - Shopping Park	0.70	0.03	0.27	0.70	0.70			N/A	N/A
5 - Chester Road	0.61	0.03	0.26	0.61	0.61			N/A	N/A

17:30 - 17:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Airbus	0.01	0.00	0.00	0.01	0.01			N/A	N/A
2 - Chester Road	1.17	0.03	0.27	1.17	1.44			N/A	N/A
3 - Shopping Park	0.25	0.03	0.28	0.51	0.92			N/A	N/A
4 - Shopping Park	0.70	0.03	0.30	1.12	2.95			N/A	N/A
5 - Chester Road	0.61	0.03	0.30	1.27	2.80			N/A	N/A

17:45 - 18:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Airbus	0.01	0.00	0.00	0.01	0.01			N/A	N/A
2 - Chester Road	0.77	0.39	0.99	1.43	1.49			N/A	N/A
3 - Shopping Park	0.19	0.00	0.00	0.19	0.19			N/A	N/A

4 - Shopping Park	0.48	0.00	0.00	0.48	0.48			N/A	N/A
5 - Chester Road	0.44	0.00	0.00	0.44	0.44			N/A	N/A

18:00 - 18:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Airbus	0.01	0.00	0.00	0.01	0.01			N/A	N/A
2 - Chester Road	0.56	0.06	0.65	1.37	1.45			N/A	N/A
3 - Shopping Park	0.14	0.00	0.00	0.14	0.14			N/A	N/A
4 - Shopping Park	0.36	0.00	0.00	0.36	0.36			N/A	N/A
5 - Chester Road	0.34	0.00	0.00	0.34	0.34			N/A	N/A

2031 Base, SAT

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Q percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	4.98	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.98	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)
D12	2031 Base	SAT	ONE HOUR	11:45	13:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Airbus		✓	173	100.000
2 - Chester Road		✓	610	100.000
3 - Shopping Park		✓	227	100.000
4 - Shopping Park		✓	425	100.000
5 - Chester Road		✓	685	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Airbus	2 - Chester Road	3 - Shopping Park	4 - Shopping Park	5 - Chester Road
From	1 - Airbus	0	23	13	65	72
	2 - Chester Road	3	0	158	183	266
	3 - Shopping Park	0	85	0	14	128
	4 - Shopping Park	0	185	21	0	219
	5 - Chester Road	0	254	312	119	0

Vehicle Mix

HV %s

		To				
		1 - Airbus	2 - Chester Road	3 - Shopping Park	4 - Shopping Park	5 - Chester Road

From	1 - Airbus	0	0	0	0	0
	2 - Chester Road	0	0	3	4	2
	3 - Shopping Park	0	2	0	0	6
	4 - Shopping Park	0	7	50	0	2
	5 - Chester Road	0	3	7	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max Q95 (PCU)	Max LOS
1 - Airbus	0.18	4.18	0.2	0.5	A
2 - Chester Road	0.49	5.27	1.0	2.0	A
3 - Shopping Park	0.23	4.56	0.3	1.4	A
4 - Shopping Park	0.42	5.79	0.7	3.0	A
5 - Chester Road	0.48	4.57	1.0	1.8	A

Main Results for each time segment

11:45 - 12:00

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 - Airbus	130	732	1227	0.106	130	0.1	3.280	A
2 - Chester Road	459	452	1488	0.309	457	0.5	3.588	A
3 - Shopping Park	171	531	1194	0.143	170	0.2	3.660	A
4 - Shopping Park	320	415	1220	0.262	318	0.4	4.217	A
5 - Chester Road	516	220	1632	0.316	514	0.5	3.356	A

12:00 - 12:15

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 - Airbus	156	876	1153	0.135	155	0.2	3.608	A
2 - Chester Road	548	541	1440	0.381	548	0.6	4.149	A
3 - Shopping Park	204	636	1142	0.179	204	0.2	3.993	A
4 - Shopping Park	382	497	1181	0.324	382	0.5	4.764	A
5 - Chester Road	616	264	1609	0.383	615	0.6	3.782	A

12:15 - 12:30

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 - Airbus	190	1073	1053	0.181	190	0.2	4.172	A
2 - Chester Road	672	662	1375	0.488	670	1.0	5.241	A
3 - Shopping Park	250	778	1072	0.233	250	0.3	4.553	A
4 - Shopping Park	468	609	1127	0.415	467	0.7	5.765	A
5 - Chester Road	754	323	1577	0.478	753	0.9	4.555	A

12:30 - 12:45

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 - Airbus	190	1075	1052	0.181	190	0.2	4.178	A
2 - Chester Road	672	663	1375	0.489	672	1.0	5.265	A
3 - Shopping Park	250	779	1071	0.233	250	0.3	4.561	A
4 - Shopping Park	468	610	1126	0.415	468	0.7	5.785	A
5 - Chester Road	754	324	1577	0.478	754	1.0	4.570	A

12:45 - 13:00

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 - Airbus	156	879	1151	0.135	156	0.2	3.618	A
2 - Chester Road	548	542	1439	0.381	550	0.6	4.170	A
3 - Shopping Park	204	638	1141	0.179	204	0.2	4.002	A
4 - Shopping Park	382	499	1180	0.324	383	0.5	4.787	A
5 - Chester Road	616	265	1608	0.383	617	0.7	3.796	A

13:00 - 13:15

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 - Airbus	130	736	1225	0.106	130	0.1	3.292	A
2 - Chester Road	459	454	1486	0.309	460	0.5	3.608	A
3 - Shopping Park	171	534	1192	0.143	171	0.2	3.672	A
4 - Shopping Park	320	418	1219	0.262	320	0.4	4.242	A
5 - Chester Road	516	222	1631	0.316	516	0.5	3.372	A

Q Variation Results for each time segment

11:45 - 12:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Airbus	0.12	0.00	0.00	0.12	0.12			N/A	N/A
2 - Chester Road	0.46	0.00	0.00	0.46	0.46			N/A	N/A
3 - Shopping Park	0.17	0.00	0.00	0.17	0.17			N/A	N/A
4 - Shopping Park	0.37	0.00	0.00	0.37	0.37			N/A	N/A
5 - Chester Road	0.48	0.00	0.00	0.48	0.48			N/A	N/A

12:00 - 12:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Airbus	0.16	0.00	0.00	0.16	0.16			N/A	N/A
2 - Chester Road	0.63	0.09	0.84	1.40	1.47			N/A	N/A
3 - Shopping Park	0.23	0.00	0.00	0.23	0.23			N/A	N/A
4 - Shopping Park	0.50	0.00	0.00	0.50	0.50			N/A	N/A
5 - Chester Road	0.64	0.10	0.86	1.43	1.50			N/A	N/A

12:15 - 12:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Airbus	0.22	0.03	0.25	0.46	0.48			N/A	N/A
2 - Chester Road	0.97	0.03	0.26	0.97	0.97			N/A	N/A
3 - Shopping Park	0.31	0.03	0.26	0.47	0.50			N/A	N/A
4 - Shopping Park	0.74	0.03	0.27	0.74	0.74			N/A	N/A
5 - Chester Road	0.95	0.03	0.27	0.95	0.95			N/A	N/A

12:30 - 12:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Airbus	0.22	0.03	0.26	0.46	0.49			N/A	N/A
2 - Chester Road	0.98	0.03	0.28	0.98	1.99			N/A	N/A
3 - Shopping Park	0.32	0.03	0.32	1.07	1.35			N/A	N/A
4 - Shopping Park	0.75	0.03	0.30	0.97	2.98			N/A	N/A
5 - Chester Road	0.95	0.03	0.28	0.95	1.76			N/A	N/A

12:45 - 13:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Airbus	0.16	0.00	0.00	0.16	0.16			N/A	N/A
2 - Chester Road	0.64	0.57	1.03	1.44	1.49			N/A	N/A
3 - Shopping Park	0.23	0.00	0.00	0.23	0.23			N/A	N/A

4 - Shopping Park	0.51	0.00	0.00	0.51	0.51			N/A	N/A
5 - Chester Road	0.65	0.57	1.04	1.46	1.51			N/A	N/A

13:00 - 13:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Airbus	0.12	0.00	0.00	0.12	0.12			N/A	N/A
2 - Chester Road	0.46	0.04	0.36	1.17	1.36			N/A	N/A
3 - Shopping Park	0.18	0.00	0.00	0.18	0.18			N/A	N/A
4 - Shopping Park	0.38	0.00	0.00	0.38	0.38			N/A	N/A
5 - Chester Road	0.49	0.00	0.00	0.49	0.49			N/A	N/A

2031 Base with Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Q percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	4.17	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.17	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)
D13	2031 Base with Dev	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	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Airbus		✓	8	100.000
2 - Chester Road		✓	447	100.000
3 - Shopping Park		✓	91	100.000
4 - Shopping Park		✓	371	100.000
5 - Chester Road		✓	687	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Airbus	2 - Chester Road	3 - Shopping Park	4 - Shopping Park	5 - Chester Road
From	1 - Airbus	0	2	0	0	6
	2 - Chester Road	14	0	76	159	198
	3 - Shopping Park	2	37	0	9	43
	4 - Shopping Park	44	238	14	0	75
	5 - Chester Road	49	492	100	46	0

Vehicle Mix

HV %s

		To				
		1 - Airbus	2 - Chester Road	3 - Shopping Park	4 - Shopping Park	5 - Chester Road

From	1 - Airbus	0	0	0	0	0
	2 - Chester Road	0	0	3	4	2
	3 - Shopping Park	0	2	0	0	6
	4 - Shopping Park	0	7	50	0	2
	5 - Chester Road	0	3	7	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max Q95 (PCU)	Max LOS
1 - Airbus	0.01	3.36	0.0	0.5	A
2 - Chester Road	0.30	3.25	0.4	1.8	A
3 - Shopping Park	0.08	3.31	0.1	0.5	A
4 - Shopping Park	0.32	4.48	0.5	2.2	A
5 - Chester Road	0.49	4.71	1.0	1.6	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 - Airbus	6	695	1245	0.005	6	0.0	2.904	A
2 - Chester Road	337	125	1662	0.202	335	0.3	2.789	A
3 - Shopping Park	69	317	1298	0.053	68	0.1	3.031	A
4 - Shopping Park	279	225	1312	0.213	278	0.3	3.694	A
5 - Chester Road	517	262	1610	0.321	515	0.5	3.388	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 - Airbus	7	832	1175	0.006	7	0.0	3.081	A
2 - Chester Road	402	149	1649	0.244	402	0.3	2.966	A
3 - Shopping Park	82	380	1268	0.065	82	0.1	3.144	A
4 - Shopping Park	334	270	1291	0.258	333	0.4	3.991	A
5 - Chester Road	618	313	1582	0.390	617	0.7	3.847	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 - Airbus	9	1019	1080	0.008	9	0.0	3.359	A
2 - Chester Road	492	182	1631	0.302	492	0.4	3.245	A
3 - Shopping Park	100	465	1226	0.082	100	0.1	3.312	A
4 - Shopping Park	408	330	1262	0.324	408	0.5	4.475	A
5 - Chester Road	756	384	1545	0.490	755	1.0	4.699	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 - Airbus	9	1021	1079	0.008	9	0.0	3.361	A
2 - Chester Road	492	183	1631	0.302	492	0.4	3.248	A
3 - Shopping Park	100	466	1226	0.082	100	0.1	3.313	A
4 - Shopping Park	408	330	1262	0.324	408	0.5	4.481	A
5 - Chester Road	756	384	1544	0.490	756	1.0	4.715	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 - Airbus	7	835	1174	0.006	7	0.0	3.087	A
2 - Chester Road	402	150	1649	0.244	402	0.3	2.971	A
3 - Shopping Park	82	381	1267	0.065	82	0.1	3.145	A
4 - Shopping Park	334	270	1291	0.258	334	0.4	3.998	A
5 - Chester Road	618	314	1582	0.390	619	0.7	3.863	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 - Airbus	6	699	1243	0.005	6	0.0	2.911	A
2 - Chester Road	337	125	1662	0.202	337	0.3	2.795	A
3 - Shopping Park	69	319	1298	0.053	69	0.1	3.033	A
4 - Shopping Park	279	226	1312	0.213	280	0.3	3.706	A
5 - Chester Road	517	263	1609	0.321	518	0.5	3.406	A

Q Variation Results for each time segment

07:45 - 08:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Airbus	0.00	0.00	0.00	0.00	0.00			N/A	N/A
2 - Chester Road	0.26	0.00	0.00	0.26	0.26			N/A	N/A
3 - Shopping Park	0.06	0.00	0.00	0.06	0.06			N/A	N/A
4 - Shopping Park	0.29	0.00	0.00	0.29	0.29			N/A	N/A
5 - Chester Road	0.49	0.00	0.00	0.49	0.49			N/A	N/A

08:00 - 08:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Airbus	0.01	0.01	0.25	0.45	0.48			N/A	N/A
2 - Chester Road	0.33	0.00	0.00	0.33	0.33			N/A	N/A
3 - Shopping Park	0.07	0.03	0.26	0.47	0.49			N/A	N/A
4 - Shopping Park	0.37	0.00	0.00	0.37	0.37			N/A	N/A
5 - Chester Road	0.66	0.10	0.85	1.41	1.48			N/A	N/A

08:15 - 08:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Airbus	0.01	0.01	0.25	0.46	0.48			N/A	N/A
2 - Chester Road	0.44	0.03	0.26	0.47	0.49			N/A	N/A
3 - Shopping Park	0.09	0.03	0.27	0.48	0.51			N/A	N/A
4 - Shopping Park	0.50	0.03	0.27	0.50	0.51			N/A	N/A
5 - Chester Road	0.98	0.03	0.26	0.98	0.98			N/A	N/A

08:30 - 08:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Airbus	0.01	0.00	0.00	0.01	0.01			N/A	N/A
2 - Chester Road	0.44	0.03	0.33	1.40	1.76			N/A	N/A
3 - Shopping Park	0.09	0.00	0.00	0.09	0.09			N/A	N/A
4 - Shopping Park	0.51	0.03	0.32	1.46	2.22			N/A	N/A
5 - Chester Road	0.99	0.03	0.28	0.99	1.61			N/A	N/A

08:45 - 09:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Airbus	0.01	0.00	0.00	0.01	0.01			N/A	N/A
2 - Chester Road	0.33	0.00	0.00	0.33	0.33			N/A	N/A
3 - Shopping Park	0.07	0.00	0.00	0.07	0.07			N/A	N/A

4 - Shopping Park	0.37	0.00	0.00	0.37	0.37			N/A	N/A
5 - Chester Road	0.67	0.57	1.03	1.44	1.50			N/A	N/A

09:00 - 09:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Airbus	0.00	0.00	0.00	0.00	0.00			N/A	N/A
2 - Chester Road	0.26	0.00	0.00	0.26	0.26			N/A	N/A
3 - Shopping Park	0.06	0.00	0.00	0.06	0.06			N/A	N/A
4 - Shopping Park	0.29	0.00	0.00	0.29	0.29			N/A	N/A
5 - Chester Road	0.49	0.04	0.41	1.27	1.41			N/A	N/A

2031 Base with Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Q percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	4.90	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.90	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)
D14	2031 Base with Dev	PM	ONE HOUR	16:45	18:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Airbus		✓	13	100.000
2 - Chester Road		✓	770	100.000
3 - Shopping Park		✓	289	100.000
4 - Shopping Park		✓	370	100.000
5 - Chester Road		✓	551	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Airbus	2 - Chester Road	3 - Shopping Park	4 - Shopping Park	5 - Chester Road
From	1 - Airbus	0	3	1	6	3
	2 - Chester Road	2	0	187	225	356
	3 - Shopping Park	0	111	0	30	148
	4 - Shopping Park	1	168	21	0	180
	5 - Chester Road	0	260	217	74	0

Vehicle Mix

HV %s

		To				
		1 - Airbus	2 - Chester Road	3 - Shopping Park	4 - Shopping Park	5 - Chester Road

From	1 - Airbus	0	0	0	0	0
	2 - Chester Road	0	0	3	4	2
	3 - Shopping Park	0	2	0	0	6
	4 - Shopping Park	0	7	50	0	2
	5 - Chester Road	0	3	7	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max Q95 (PCU)	Max LOS
1 - Airbus	0.01	3.25	0.0	0.5	A
2 - Chester Road	0.55	5.35	1.3	1.5	A
3 - Shopping Park	0.29	4.81	0.4	1.6	A
4 - Shopping Park	0.37	5.59	0.6	2.9	A
5 - Chester Road	0.39	3.89	0.7	2.8	A

Main Results for each time segment

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 - Airbus	10	638	1274	0.008	10	0.0	2.846	A
2 - Chester Road	580	242	1600	0.362	577	0.6	3.613	A
3 - Shopping Park	218	499	1209	0.180	217	0.2	3.761	A
4 - Shopping Park	279	465	1197	0.233	277	0.3	4.152	A
5 - Chester Road	415	227	1628	0.255	413	0.4	3.087	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 - Airbus	12	764	1210	0.010	12	0.0	3.003	A
2 - Chester Road	692	289	1574	0.440	691	0.8	4.187	A
3 - Shopping Park	260	598	1161	0.224	260	0.3	4.146	A
4 - Shopping Park	333	557	1152	0.289	332	0.4	4.660	A
5 - Chester Road	495	272	1604	0.309	495	0.5	3.381	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 - Airbus	14	936	1123	0.013	14	0.0	3.247	A
2 - Chester Road	848	354	1540	0.551	846	1.2	5.322	A
3 - Shopping Park	318	732	1095	0.291	318	0.4	4.805	A
4 - Shopping Park	407	681	1092	0.373	407	0.6	5.574	A
5 - Chester Road	607	333	1572	0.386	606	0.7	3.880	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 - Airbus	14	937	1122	0.013	14	0.0	3.249	A
2 - Chester Road	848	355	1539	0.551	848	1.3	5.351	A
3 - Shopping Park	318	733	1094	0.291	318	0.4	4.815	A
4 - Shopping Park	407	683	1091	0.373	407	0.6	5.589	A
5 - Chester Road	607	334	1571	0.386	607	0.7	3.890	A

17:45 - 18:00

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 - Airbus	12	766	1209	0.010	12	0.0	3.008	A
2 - Chester Road	692	290	1574	0.440	694	0.8	4.214	A
3 - Shopping Park	260	600	1159	0.224	260	0.3	4.158	A
4 - Shopping Park	333	559	1151	0.289	333	0.4	4.678	A
5 - Chester Road	495	273	1604	0.309	496	0.5	3.392	A

18:00 - 18:15

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 - Airbus	10	641	1273	0.008	10	0.0	2.852	A
2 - Chester Road	580	243	1599	0.362	581	0.6	3.638	A
3 - Shopping Park	218	502	1208	0.180	218	0.2	3.778	A
4 - Shopping Park	279	467	1195	0.233	279	0.3	4.174	A
5 - Chester Road	415	228	1628	0.255	415	0.4	3.096	A

Q Variation Results for each time segment

16:45 - 17:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Airbus	0.01	0.00	0.00	0.01	0.01			N/A	N/A
2 - Chester Road	0.58	0.57	1.03	1.44	1.49			N/A	N/A
3 - Shopping Park	0.23	0.00	0.00	0.23	0.23			N/A	N/A
4 - Shopping Park	0.32	0.00	0.00	0.32	0.32			N/A	N/A
5 - Chester Road	0.35	0.00	0.00	0.35	0.35			N/A	N/A

17:00 - 17:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Airbus	0.01	0.01	0.25	0.45	0.48			N/A	N/A
2 - Chester Road	0.80	0.09	0.86	1.22	1.22			N/A	N/A
3 - Shopping Park	0.30	0.00	0.00	0.30	0.30			N/A	N/A
4 - Shopping Park	0.43	0.00	0.00	0.43	0.43			N/A	N/A
5 - Chester Road	0.46	0.00	0.00	0.46	0.46			N/A	N/A

17:15 - 17:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Airbus	0.01	0.01	0.25	0.45	0.48			N/A	N/A
2 - Chester Road	1.24	0.03	0.27	1.24	1.24			N/A	N/A
3 - Shopping Park	0.42	0.03	0.26	0.47	0.50			N/A	N/A
4 - Shopping Park	0.63	0.03	0.27	0.63	0.63			N/A	N/A
5 - Chester Road	0.65	0.03	0.26	0.65	0.65			N/A	N/A

17:30 - 17:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Airbus	0.01	0.00	0.00	0.01	0.01			N/A	N/A
2 - Chester Road	1.25	0.03	0.27	1.25	1.35			N/A	N/A
3 - Shopping Park	0.42	0.03	0.33	1.37	1.61			N/A	N/A
4 - Shopping Park	0.63	0.03	0.31	1.37	2.91			N/A	N/A
5 - Chester Road	0.65	0.03	0.30	1.13	2.82			N/A	N/A

17:45 - 18:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Airbus	0.01	0.00	0.00	0.01	0.01			N/A	N/A
2 - Chester Road	0.81	0.32	0.99	1.44	1.49			N/A	N/A
3 - Shopping Park	0.30	0.00	0.00	0.30	0.30			N/A	N/A

4 - Shopping Park	0.43	0.00	0.00	0.43	0.43			N/A	N/A
5 - Chester Road	0.47	0.00	0.00	0.47	0.47			N/A	N/A

18:00 - 18:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Airbus	0.01	0.00	0.00	0.01	0.01			N/A	N/A
2 - Chester Road	0.59	0.06	0.68	1.37	1.46			N/A	N/A
3 - Shopping Park	0.23	0.00	0.00	0.23	0.23			N/A	N/A
4 - Shopping Park	0.32	0.00	0.00	0.32	0.32			N/A	N/A
5 - Chester Road	0.36	0.00	0.00	0.36	0.36			N/A	N/A

2031 Base with Dev, SAT

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Q percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	5.21	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.21	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)
D15	2031 Base with Dev	SAT	ONE HOUR	11:45	13:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Airbus		✓	173	100.000
2 - Chester Road		✓	628	100.000
3 - Shopping Park		✓	342	100.000
4 - Shopping Park		✓	377	100.000
5 - Chester Road		✓	703	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Airbus	2 - Chester Road	3 - Shopping Park	4 - Shopping Park	5 - Chester Road
From	1 - Airbus	0	23	13	65	72
	2 - Chester Road	3	0	192	167	266
	3 - Shopping Park	0	133	0	33	176
	4 - Shopping Park	0	157	29	0	191
	5 - Chester Road	0	254	346	103	0

Vehicle Mix

HV %s

		To				
		1 - Airbus	2 - Chester Road	3 - Shopping Park	4 - Shopping Park	5 - Chester Road

From	1 - Airbus	0	0	0	0	0
	2 - Chester Road	0	0	3	4	2
	3 - Shopping Park	0	2	0	0	6
	4 - Shopping Park	0	7	50	0	2
	5 - Chester Road	0	3	7	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max Q95 (PCU)	Max LOS
1 - Airbus	0.19	4.31	0.2	0.5	A
2 - Chester Road	0.51	5.54	1.1	1.8	A
3 - Shopping Park	0.35	5.25	0.5	2.5	A
4 - Shopping Park	0.39	5.82	0.7	3.0	A
5 - Chester Road	0.50	4.79	1.0	1.5	A

Main Results for each time segment

11:45 - 12:00

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 - Airbus	130	766	1209	0.108	130	0.1	3.333	A
2 - Chester Road	473	471	1477	0.320	471	0.5	3.672	A
3 - Shopping Park	257	507	1205	0.214	256	0.3	3.932	A
4 - Shopping Park	284	487	1186	0.239	282	0.3	4.247	A
5 - Chester Road	529	241	1621	0.327	527	0.5	3.439	A

12:00 - 12:15

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 - Airbus	156	918	1132	0.137	155	0.2	3.686	A
2 - Chester Road	565	564	1427	0.395	564	0.7	4.282	A
3 - Shopping Park	307	607	1156	0.266	307	0.4	4.399	A
4 - Shopping Park	339	584	1139	0.298	338	0.4	4.796	A
5 - Chester Road	632	289	1595	0.396	631	0.7	3.905	A

12:15 - 12:30

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 - Airbus	190	1123	1027	0.185	190	0.2	4.300	A
2 - Chester Road	691	690	1360	0.508	690	1.1	5.512	A
3 - Shopping Park	377	743	1089	0.346	376	0.5	5.234	A
4 - Shopping Park	415	714	1076	0.386	414	0.7	5.798	A
5 - Chester Road	774	354	1561	0.496	773	1.0	4.773	A

12:30 - 12:45

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 - Airbus	190	1125	1026	0.186	190	0.2	4.307	A
2 - Chester Road	691	691	1359	0.509	691	1.1	5.541	A
3 - Shopping Park	377	744	1089	0.346	377	0.5	5.247	A
4 - Shopping Park	415	716	1075	0.386	415	0.7	5.818	A
5 - Chester Road	774	355	1560	0.496	774	1.0	4.790	A

12:45 - 13:00

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 - Airbus	156	921	1130	0.138	156	0.2	3.694	A
2 - Chester Road	565	566	1427	0.396	566	0.7	4.309	A
3 - Shopping Park	307	609	1155	0.266	308	0.4	4.417	A
4 - Shopping Park	339	586	1138	0.298	340	0.5	4.818	A
5 - Chester Road	632	290	1595	0.396	633	0.7	3.924	A

13:00 - 13:15

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 - Airbus	130	771	1207	0.108	130	0.1	3.346	A
2 - Chester Road	473	473	1476	0.320	474	0.5	3.694	A
3 - Shopping Park	257	510	1204	0.214	258	0.3	3.951	A
4 - Shopping Park	284	490	1184	0.240	284	0.3	4.271	A
5 - Chester Road	529	243	1620	0.327	530	0.5	3.459	A

Q Variation Results for each time segment

11:45 - 12:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Airbus	0.12	0.00	0.00	0.12	0.12			N/A	N/A
2 - Chester Road	0.48	0.00	0.00	0.48	0.48			N/A	N/A
3 - Shopping Park	0.28	0.00	0.00	0.28	0.28			N/A	N/A
4 - Shopping Park	0.33	0.00	0.00	0.33	0.33			N/A	N/A
5 - Chester Road	0.50	0.00	0.00	0.50	0.50			N/A	N/A

12:00 - 12:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Airbus	0.16	0.00	0.00	0.16	0.16			N/A	N/A
2 - Chester Road	0.67	0.10	0.85	1.40	1.47			N/A	N/A
3 - Shopping Park	0.37	0.00	0.00	0.37	0.37			N/A	N/A
4 - Shopping Park	0.45	0.00	0.00	0.45	0.45			N/A	N/A
5 - Chester Road	0.68	0.10	0.87	1.43	1.50			N/A	N/A

12:15 - 12:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Airbus	0.23	0.03	0.25	0.46	0.48			N/A	N/A
2 - Chester Road	1.05	0.03	0.26	1.05	1.05			N/A	N/A
3 - Shopping Park	0.54	0.03	0.26	0.54	0.54			N/A	N/A
4 - Shopping Park	0.66	0.03	0.27	0.66	0.66			N/A	N/A
5 - Chester Road	1.02	0.03	0.27	1.02	1.02			N/A	N/A

12:30 - 12:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Airbus	0.23	0.03	0.26	0.47	0.49			N/A	N/A
2 - Chester Road	1.06	0.03	0.28	1.06	1.80			N/A	N/A
3 - Shopping Park	0.55	0.03	0.31	1.44	2.52			N/A	N/A
4 - Shopping Park	0.67	0.03	0.31	1.30	3.01			N/A	N/A
5 - Chester Road	1.02	0.03	0.28	1.02	1.51			N/A	N/A

12:45 - 13:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Airbus	0.16	0.00	0.00	0.16	0.16			N/A	N/A
2 - Chester Road	0.68	0.24	0.97	1.43	1.49			N/A	N/A
3 - Shopping Park	0.38	0.00	0.00	0.38	0.38			N/A	N/A

4 - Shopping Park	0.46	0.00	0.00	0.46	0.46			N/A	N/A
5 - Chester Road	0.69	0.58	1.05	1.46	1.52			N/A	N/A

13:00 - 13:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Airbus	0.12	0.00	0.00	0.12	0.12			N/A	N/A
2 - Chester Road	0.49	0.04	0.42	1.28	1.41			N/A	N/A
3 - Shopping Park	0.28	0.00	0.00	0.28	0.28			N/A	N/A
4 - Shopping Park	0.34	0.00	0.00	0.34	0.34			N/A	N/A
5 - Chester Road	0.51	0.05	0.46	1.32	1.45			N/A	N/A

Appendix F

(Shopping Park Roundabout ARCADY Output)

Junctions 10

ARCADY 10 - Roundabout Module

Version: 10.0.0.1499

Filename: M02-ah-Shopping Park Main Access (251010).j10
Path: C:\Users\SheilaGough\OneDrive - TTP Consulting\Staff Site - 4860 - Broughton Phase 3\Junction modelling
Report generation date: 13/10/2025 15:38:04

Summary of junction performance

	AM						PM						SAT					
	Set ID	Q (PCU)	Q95 (PCU)	Delay (s)	RFC	LOS	Set ID	Q (PCU)	Q95 (PCU)	Delay (s)	RFC	LOS	Set ID	Q (PCU)	Q95 (PCU)	Delay (s)	RFC	LOS
	2023 Observed																	
1 - North Link	D1	0.1	0.5	2.55	0.13	A	D2	0.3	1.3	3.42	0.24	A	D3	0.5	1.8	4.12	0.31	A
2 - Shoping Park North		0.2	0.5	2.64	0.14	A		0.9	1.7	4.65	0.48	A		0.8	2.5	4.46	0.43	A
3 - Shopping Park South		0.0	0.5	2.59	0.01	A		0.3	1.2	4.45	0.22	A		0.4	1.4	4.70	0.29	A
4 - South Link		0.5	2.1	3.01	0.33	A		0.8	1.8	3.89	0.46	A		1.4	1.8	5.11	0.58	A
	2026 Base																	
1 - North Link	D4	0.1	0.5	2.56	0.13	A	D5	0.3	1.4	3.45	0.25	A	D6	0.5	2.4	4.35	0.35	A
2 - Shoping Park North		0.2	0.5	2.65	0.15	A		1.0	1.5	4.72	0.49	A		0.8	2.4	4.66	0.45	A
3 - Shopping Park South		0.0	0.5	2.60	0.01	A		0.3	1.2	4.50	0.22	A		0.4	1.5	4.78	0.29	A
4 - South Link		0.5	2.2	3.04	0.33	A		0.9	1.7	3.94	0.47	A		1.4	1.9	5.25	0.59	A
	2026 with Dev																	
1 - North Link	D7	0.1	0.5	2.57	0.13	A	D8	0.3	1.4	3.50	0.25	A	D9	0.5	2.1	4.28	0.33	A
2 - Shoping Park North		0.2	0.5	2.64	0.14	A		0.9	1.8	4.59	0.47	A		0.7	2.7	4.40	0.42	A
3 - Shopping Park South		0.0	0.5	2.59	0.01	A		0.3	1.2	4.44	0.22	A		0.4	1.5	4.71	0.29	A
4 - South Link		0.5	2.3	3.04	0.33	A		0.9	1.6	3.91	0.47	A		1.5	1.9	5.19	0.59	A
	2031 Base																	
1 - North Link	D10	0.1	0.5	2.57	0.13	A	D11	0.4	1.4	3.56	0.26	A	D12	0.5	2.3	4.40	0.34	A
2 - Shoping Park North		0.2	0.5	2.68	0.15	A		1.1	1.5	5.01	0.52	A		0.9	2.1	4.80	0.47	A
3 - Shopping Park South		0.0	0.5	2.62	0.01	A		0.3	1.3	4.74	0.24	A		0.5	1.8	5.06	0.31	A
4 - South Link		0.5	2.5	3.11	0.35	A		0.9	1.5	4.12	0.49	A		1.6	2.5	5.68	0.62	A
	2031 with Dev																	
1 - North Link	D13	0.2	0.5	2.60	0.14	A	D14	0.4	1.5	3.62	0.27	A	D15	0.5	2.5	4.50	0.35	A
2 - Shoping Park North		0.2	0.5	2.67	0.15	A		1.0	1.5	4.85	0.50	A		0.8	2.5	4.64	0.45	A

3 - Shopping Park South		0.0	0.5	2.62	0.01	A		0.3	1.3	4.67	0.23	A		0.4	1.8	4.98	0.31	A
4 - South Link		0.5	2.5	3.12	0.35	A		1.0	1.5	4.09	0.49	A		1.6	2.5	5.61	0.62	A

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

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

File summary

File Description

Title	
Location	
Site number	
Date	13/10/2025
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	AzureAD\SheilaGough
Description	

Units

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

Analysis Options

Calculate Q Percentiles	Calculate residual capacity	RFC Threshold	Av. Delay threshold (s)	Q 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 Observed	AM	ONE HOUR	07:45	09:15	15
D2	2023 Observed	PM	ONE HOUR	16:45	18:15	15
D3	2023 Observed	SAT	ONE HOUR	12:45	14:15	15
D4	2026 Base	AM	ONE HOUR	07:45	09:15	15
D5	2026 Base	PM	ONE HOUR	16:45	18:15	15
D6	2026 Base	SAT	ONE HOUR	12:45	14:15	15
D7	2026 with Dev	AM	ONE HOUR	07:45	09:15	15
D8	2026 with Dev	PM	ONE HOUR	16:45	18:15	15
D9	2026 with Dev	SAT	ONE HOUR	12:45	14:15	15
D10	2031 Base	AM	ONE HOUR	07:45	09:15	15
D11	2031 Base	PM	ONE HOUR	16:45	18:15	15
D12	2031 Base	SAT	ONE HOUR	12:45	14:15	15
D13	2031 with Dev	AM	ONE HOUR	07:45	09:15	15
D14	2031 with Dev	PM	ONE HOUR	16:45	18:15	15
D15	2031 with Dev	SAT	ONE HOUR	12:45	14:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2023 Observed, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Q percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	2.83	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.83	A

Arms

Arms

Arm	Name	Description	No give-way line
1	North Link		
2	Shoping Park North		
3	Shopping Park South		
4	South Link		

Roundabout Geometry

Arm	V (m)	E (m)	I' (m)	R (m)	D (m)	PHI (deg)	Entry only	Exit only
1 - North Link	3.65	7.00	15.0	23.0	52.0	22.0		
2 - Shoping Park North	3.65	7.00	12.0	24.0	52.0	21.0		
3 - Shopping Park South	3.65	6.75	10.0	17.0	52.0	17.0		
4 - South Link	3.65	7.00	16.0	23.0	52.0	15.0		

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - North Link	0.619	1756
2 - Shoping Park North	0.612	1707
3 - Shopping Park South	0.598	1635
4 - South Link	0.637	1814

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 Observed	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	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - North Link		✓	187	100.000
2 - Shoping Park North		✓	210	100.000
3 - Shopping Park South		✓	8	100.000
4 - South Link		✓	527	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - North Link	2 - Shoping Park North	3 - Shopping Park South	4 - South Link
From	1 - North Link	0	35	1	151
	2 - Shoping Park North	54	1	0	155
	3 - Shopping Park South	0	2	0	6
	4 - South Link	325	190	12	0

Vehicle Mix

HV %s

		To			
		1 - North Link	2 - Shoping Park North	3 - Shopping Park South	4 - South Link
From	1 - North Link	0	0	0	0
	2 - Shoping Park North	0	0	0	0
	3 - Shopping Park South	0	0	0	0
	4 - South Link	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max Q95 (PCU)	Max LOS
1 - North Link	0.13	2.55	0.1	0.5	A
2 - Shoping Park North	0.14	2.64	0.2	0.5	A
3 - Shopping Park South	0.01	2.59	0.0	0.5	A
4 - South Link	0.33	3.01	0.5	2.1	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 - North Link	141	154	1661	0.085	140	0.1	2.368	A
2 - Shoping Park North	158	123	1631	0.097	158	0.1	2.443	A
3 - Shopping Park South	6	271	1473	0.004	6	0.0	2.453	A
4 - South Link	397	43	1787	0.222	396	0.3	2.585	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 - North Link	168	184	1642	0.102	168	0.1	2.442	A
2 - Shoping Park North	189	147	1617	0.117	189	0.1	2.520	A
3 - Shopping Park South	7	324	1441	0.005	7	0.0	2.509	A
4 - South Link	474	51	1781	0.266	473	0.4	2.752	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 - North Link	206	226	1616	0.127	206	0.1	2.552	A
2 - Shoping Park North	231	180	1596	0.145	231	0.2	2.636	A
3 - Shopping Park South	9	397	1398	0.006	9	0.0	2.591	A
4 - South Link	580	63	1774	0.327	580	0.5	3.012	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 - North Link	206	226	1616	0.127	206	0.1	2.552	A
2 - Shoping Park North	231	181	1596	0.145	231	0.2	2.636	A
3 - Shopping Park South	9	397	1398	0.006	9	0.0	2.591	A
4 - South Link	580	63	1774	0.327	580	0.5	3.015	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 - North Link	168	184	1642	0.102	168	0.1	2.443	A
2 - Shoping Park North	189	148	1616	0.117	189	0.1	2.521	A
3 - Shopping Park South	7	325	1441	0.005	7	0.0	2.512	A
4 - South Link	474	51	1781	0.266	474	0.4	2.754	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 - North Link	141	154	1660	0.085	141	0.1	2.369	A
2 - Shoping Park North	158	124	1631	0.097	158	0.1	2.445	A
3 - Shopping Park South	6	272	1473	0.004	6	0.0	2.456	A
4 - South Link	397	43	1787	0.222	397	0.3	2.593	A

Q Variation Results for each time segment

07:45 - 08:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - North Link	0.09	0.00	0.00	0.09	0.09			N/A	N/A
2 - Shoping Park North	0.11	0.00	0.00	0.11	0.11			N/A	N/A
3 - Shopping Park South	0.00	0.00	0.00	0.00	0.00			N/A	N/A
4 - South Link	0.28	0.00	0.00	0.28	0.28			N/A	N/A

08:00 - 08:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - North Link	0.11	0.00	0.00	0.11	0.11			N/A	N/A
2 - Shoping Park North	0.13	0.00	0.00	0.13	0.13			N/A	N/A
3 - Shopping Park South	0.01	0.01	0.25	0.45	0.48			N/A	N/A
4 - South Link	0.36	0.00	0.00	0.36	0.36			N/A	N/A

08:15 - 08:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - North Link	0.15	0.03	0.26	0.46	0.49			N/A	N/A
2 - Shoping Park North	0.17	0.03	0.25	0.46	0.48			N/A	N/A
3 - Shopping Park South	0.01	0.00	0.00	0.01	0.01			N/A	N/A
4 - South Link	0.48	0.03	0.25	0.48	0.48			N/A	N/A

08:30 - 08:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - North Link	0.15	0.00	0.00	0.15	0.15			N/A	N/A
2 - Shoping Park North	0.17	0.03	0.25	0.45	0.48			N/A	N/A
3 - Shopping Park South	0.01	0.00	0.00	0.01	0.01			N/A	N/A

4 - South Link	0.48	0.03	0.31	1.40	2.13			N/A	N/A

08:45 - 09:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - North Link	0.11	0.00	0.00	0.11	0.11			N/A	N/A
2 - Shoping Park North	0.13	0.00	0.00	0.13	0.13			N/A	N/A
3 - Shopping Park South	0.01	0.00	0.00	0.01	0.01			N/A	N/A
4 - South Link	0.36	0.00	0.00	0.36	0.36			N/A	N/A

09:00 - 09:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - North Link	0.09	0.00	0.00	0.09	0.09			N/A	N/A
2 - Shoping Park North	0.11	0.00	0.00	0.11	0.11			N/A	N/A
3 - Shopping Park South	0.00	0.00	0.00	0.00	0.00			N/A	N/A
4 - South Link	0.29	0.00	0.00	0.29	0.29			N/A	N/A

2023 Observed, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Q percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	4.14	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.14	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	2023 Observed	PM	ONE HOUR	16:45	18:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - North Link		✓	308	100.000
2 - Shoping Park North		✓	660	100.000
3 - Shopping Park South		✓	203	100.000
4 - South Link		✓	712	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - North Link	2 - Shoping Park North	3 - Shopping Park South	4 - South Link
From	1 - North Link	0	43	8	257
	2 - Shoping Park North	109	1	2	548
	3 - Shopping Park South	31	7	0	165
	4 - South Link	184	488	40	0

Vehicle Mix

HV %s

		To			
		1 - North Link	2 - Shoping Park North	3 - Shopping Park South	4 - South Link
From	1 - North Link	0	0	0	0
	2 - Shoping Park North	0	0	0	0
	3 - Shopping Park South	0	0	0	0

	4 - South Link	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max Q95 (PCU)	Max LOS
1 - North Link	0.24	3.42	0.3	1.3	A
2 - Shoping Park North	0.48	4.65	0.9	1.7	A
3 - Shopping Park South	0.22	4.45	0.3	1.2	A
4 - South Link	0.46	3.89	0.8	1.8	A

Main Results for each time segment

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 - North Link	232	402	1507	0.154	231	0.2	2.820	A
2 - Shoping Park North	497	229	1567	0.317	495	0.5	3.353	A
3 - Shopping Park South	153	686	1225	0.125	152	0.1	3.354	A
4 - South Link	536	111	1743	0.308	534	0.4	2.974	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 - North Link	277	481	1458	0.190	277	0.2	3.048	A
2 - Shoping Park North	593	274	1539	0.386	593	0.6	3.802	A
3 - Shopping Park South	182	822	1144	0.160	182	0.2	3.743	A
4 - South Link	640	133	1729	0.370	640	0.6	3.301	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 - North Link	339	589	1391	0.244	339	0.3	3.422	A
2 - Shoping Park North	727	335	1502	0.484	725	0.9	4.631	A
3 - Shopping Park South	224	1006	1034	0.216	223	0.3	4.438	A
4 - South Link	784	163	1710	0.458	783	0.8	3.878	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 - North Link	339	590	1390	0.244	339	0.3	3.423	A
2 - Shoping Park North	727	336	1501	0.484	727	0.9	4.647	A
3 - Shopping Park South	224	1007	1033	0.216	224	0.3	4.446	A
4 - South Link	784	163	1710	0.458	784	0.8	3.886	A

17:45 - 18:00

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 - North Link	277	483	1457	0.190	277	0.2	3.054	A
2 - Shoping Park North	593	275	1539	0.386	595	0.6	3.816	A
3 - Shopping Park South	182	824	1143	0.160	183	0.2	3.754	A
4 - South Link	640	133	1729	0.370	641	0.6	3.314	A

18:00 - 18:15

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 - North Link	232	404	1506	0.154	232	0.2	2.828	A

2 - Shoping Park North	497	230	1566	0.317	498	0.5	3.370	A
3 - Shopping Park South	153	690	1223	0.125	153	0.1	3.364	A
4 - South Link	536	112	1743	0.308	537	0.4	2.987	A

Q Variation Results for each time segment

16:45 - 17:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - North Link	0.18	0.00	0.00	0.18	0.18			N/A	N/A
2 - Shoping Park North	0.46	0.00	0.00	0.46	0.46			N/A	N/A
3 - Shopping Park South	0.14	0.00	0.00	0.14	0.14			N/A	N/A
4 - South Link	0.44	0.00	0.00	0.44	0.44			N/A	N/A

17:00 - 17:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - North Link	0.23	0.00	0.00	0.23	0.23			N/A	N/A
2 - Shoping Park North	0.62	0.10	0.82	1.37	1.43			N/A	N/A
3 - Shopping Park South	0.19	0.00	0.00	0.19	0.19			N/A	N/A
4 - South Link	0.58	0.09	0.80	1.36	1.43			N/A	N/A

17:15 - 17:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - North Link	0.32	0.03	0.25	0.45	0.48			N/A	N/A
2 - Shoping Park North	0.93	0.03	0.26	0.93	0.93			N/A	N/A
3 - Shopping Park South	0.27	0.03	0.25	0.46	0.48			N/A	N/A
4 - South Link	0.84	0.03	0.25	0.84	0.84			N/A	N/A

17:30 - 17:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - North Link	0.32	0.03	0.32	1.08	1.33			N/A	N/A
2 - Shoping Park North	0.93	0.03	0.27	0.93	1.65			N/A	N/A
3 - Shopping Park South	0.28	0.03	0.29	0.82	1.16			N/A	N/A
4 - South Link	0.84	0.03	0.27	0.84	1.80			N/A	N/A

17:45 - 18:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - North Link	0.24	0.00	0.00	0.24	0.24			N/A	N/A
2 - Shoping Park North	0.63	0.55	1.00	1.40	1.45			N/A	N/A
3 - Shopping Park South	0.19	0.00	0.00	0.19	0.19			N/A	N/A
4 - South Link	0.59	0.55	1.00	1.40	1.45			N/A	N/A

18:00 - 18:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - North Link	0.18	0.00	0.00	0.18	0.18			N/A	N/A
2 - Shoping Park North	0.47	0.00	0.00	0.47	0.47			N/A	N/A
3 - Shopping Park South	0.14	0.00	0.00	0.14	0.14			N/A	N/A
4 - South Link	0.45	0.00	0.00	0.45	0.45			N/A	N/A

2023 Observed, SAT

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Q percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	4.71	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.71	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	2023 Observed	SAT	ONE HOUR	12:45	14:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - North Link		✓	361	100.000
2 - Shoping Park North		✓	562	100.000
3 - Shopping Park South		✓	278	100.000
4 - South Link		✓	893	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - North Link	2 - Shoping Park North	3 - Shopping Park South	4 - South Link
From	1 - North Link	0	48	16	297
	2 - Shoping Park North	116	1	3	442
	3 - Shopping Park South	61	3	0	214
	4 - South Link	186	603	104	0

Vehicle Mix

HV %s

		To			
		1 - North Link	2 - Shoping Park North	3 - Shopping Park South	4 - South Link
From	1 - North Link	0	0	0	0
	2 - Shoping Park North	0	0	0	0
	3 - Shopping Park South	0	0	0	0

	4 - South Link	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max Q95 (PCU)	Max LOS
1 - North Link	0.31	4.12	0.5	1.8	A
2 - Shoping Park North	0.43	4.46	0.8	2.5	A
3 - Shopping Park South	0.29	4.70	0.4	1.4	A
4 - South Link	0.58	5.11	1.4	1.8	A

Main Results for each time segment

12:45 - 13:00

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 - North Link	272	533	1426	0.191	271	0.2	3.114	A
2 - Shoping Park North	423	313	1515	0.279	422	0.4	3.287	A
3 - Shopping Park South	209	642	1251	0.167	208	0.2	3.451	A
4 - South Link	672	136	1727	0.389	670	0.6	3.395	A

13:00 - 13:15

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 - North Link	325	638	1360	0.239	324	0.3	3.474	A
2 - Shoping Park North	505	374	1478	0.342	505	0.5	3.698	A
3 - Shopping Park South	250	769	1176	0.213	250	0.3	3.887	A
4 - South Link	803	163	1710	0.469	802	0.9	3.958	A

13:15 - 13:30

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 - North Link	397	781	1272	0.312	397	0.5	4.111	A
2 - Shoping Park North	619	458	1426	0.434	618	0.8	4.447	A
3 - Shopping Park South	306	941	1073	0.285	306	0.4	4.690	A
4 - South Link	983	199	1687	0.583	981	1.4	5.085	A

13:30 - 13:45

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 - North Link	397	783	1271	0.313	397	0.5	4.120	A
2 - Shoping Park North	619	459	1426	0.434	619	0.8	4.460	A
3 - Shopping Park South	306	942	1072	0.286	306	0.4	4.700	A
4 - South Link	983	199	1687	0.583	983	1.4	5.115	A

13:45 - 14:00

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 - North Link	325	641	1359	0.239	325	0.3	3.482	A
2 - Shoping Park North	505	376	1477	0.342	506	0.5	3.713	A
3 - Shopping Park South	250	771	1174	0.213	250	0.3	3.899	A
4 - South Link	803	163	1710	0.469	805	0.9	3.985	A

14:00 - 14:15

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 - North Link	272	536	1424	0.191	272	0.2	3.128	A

2 - Shoping Park North	423	314	1514	0.279	424	0.4	3.301	A
3 - Shopping Park South	209	645	1249	0.168	210	0.2	3.462	A
4 - South Link	672	136	1727	0.389	673	0.6	3.419	A

Q Variation Results for each time segment

12:45 - 13:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - North Link	0.23	0.00	0.00	0.23	0.23			N/A	N/A
2 - Shoping Park North	0.39	0.00	0.00	0.39	0.39			N/A	N/A
3 - Shopping Park South	0.20	0.00	0.00	0.20	0.20			N/A	N/A
4 - South Link	0.63	0.55	1.00	1.40	1.45			N/A	N/A

13:00 - 13:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - North Link	0.31	0.00	0.00	0.31	0.31			N/A	N/A
2 - Shoping Park North	0.52	0.52	1.00	1.40	1.45			N/A	N/A
3 - Shopping Park South	0.27	0.00	0.00	0.27	0.27			N/A	N/A
4 - South Link	0.88	0.08	0.83	1.39	1.80			N/A	N/A

13:15 - 13:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - North Link	0.45	0.03	0.25	0.45	0.48			N/A	N/A
2 - Shoping Park North	0.76	0.03	0.25	0.76	0.76			N/A	N/A
3 - Shopping Park South	0.40	0.03	0.25	0.46	0.48			N/A	N/A
4 - South Link	1.38	0.03	0.26	1.38	1.38			N/A	N/A

13:30 - 13:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - North Link	0.45	0.03	0.32	1.40	1.84			N/A	N/A
2 - Shoping Park North	0.76	0.03	0.28	0.76	2.55			N/A	N/A
3 - Shopping Park South	0.40	0.03	0.32	1.30	1.38			N/A	N/A
4 - South Link	1.39	0.03	0.26	1.39	1.39			N/A	N/A

13:45 - 14:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - North Link	0.32	0.00	0.00	0.32	0.32			N/A	N/A
2 - Shoping Park North	0.52	0.52	1.00	1.40	1.45			N/A	N/A
3 - Shopping Park South	0.27	0.00	0.00	0.27	0.27			N/A	N/A
4 - South Link	0.89	0.31	0.98	1.43	1.49			N/A	N/A

14:00 - 14:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - North Link	0.24	0.00	0.00	0.24	0.24			N/A	N/A
2 - Shoping Park North	0.39	0.00	0.00	0.39	0.39			N/A	N/A
3 - Shopping Park South	0.20	0.00	0.00	0.20	0.20			N/A	N/A
4 - South Link	0.64	0.07	0.74	1.36	1.44			N/A	N/A

2026 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Q percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	2.85	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.85	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	2026 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	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - North Link		✓	190	100.000
2 - Shoping Park North		✓	213	100.000
3 - Shopping Park South		✓	8	100.000
4 - South Link		✓	534	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - North Link	2 - Shoping Park North	3 - Shopping Park South	4 - South Link
From	1 - North Link	0	35	1	154
	2 - Shoping Park North	55	1	0	157
	3 - Shopping Park South	0	2	0	6
	4 - South Link	330	192	12	0

Vehicle Mix

HV %s

		To			
		1 - North Link	2 - Shoping Park North	3 - Shopping Park South	4 - South Link
From	1 - North Link	0	0	0	0
	2 - Shoping Park North	0	0	0	0
	3 - Shopping Park South	0	0	0	0

	4 - South Link	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max Q95 (PCU)	Max LOS
1 - North Link	0.13	2.56	0.1	0.5	A
2 - Shoping Park North	0.15	2.65	0.2	0.5	A
3 - Shopping Park South	0.01	2.60	0.0	0.5	A
4 - South Link	0.33	3.04	0.5	2.2	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 - North Link	143	155	1660	0.086	143	0.1	2.373	A
2 - Shoping Park North	160	125	1630	0.098	160	0.1	2.449	A
3 - Shopping Park South	6	276	1470	0.004	6	0.0	2.457	A
4 - South Link	402	44	1786	0.225	401	0.3	2.596	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 - North Link	171	186	1641	0.104	171	0.1	2.448	A
2 - Shoping Park North	191	150	1615	0.119	191	0.1	2.528	A
3 - Shopping Park South	7	330	1438	0.005	7	0.0	2.515	A
4 - South Link	480	52	1781	0.270	480	0.4	2.767	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 - North Link	209	228	1615	0.130	209	0.1	2.560	A
2 - Shoping Park North	235	184	1594	0.147	234	0.2	2.646	A
3 - Shopping Park South	9	404	1394	0.006	9	0.0	2.598	A
4 - South Link	588	64	1773	0.332	587	0.5	3.034	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 - North Link	209	228	1615	0.130	209	0.1	2.560	A
2 - Shoping Park North	235	184	1594	0.147	235	0.2	2.647	A
3 - Shopping Park South	9	404	1394	0.006	9	0.0	2.599	A
4 - South Link	588	64	1773	0.332	588	0.5	3.036	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 - North Link	171	186	1641	0.104	171	0.1	2.449	A
2 - Shoping Park North	191	150	1615	0.119	192	0.1	2.529	A
3 - Shopping Park South	7	330	1438	0.005	7	0.0	2.518	A
4 - South Link	480	52	1781	0.270	481	0.4	2.771	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 - North Link	143	156	1659	0.086	143	0.1	2.374	A

2 - Shoping Park North	160	126	1630	0.098	160	0.1	2.451	A
3 - Shopping Park South	6	276	1470	0.004	6	0.0	2.460	A
4 - South Link	402	44	1786	0.225	402	0.3	2.603	A

Q Variation Results for each time segment

07:45 - 08:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - North Link	0.09	0.00	0.00	0.09	0.09			N/A	N/A
2 - Shoping Park North	0.11	0.00	0.00	0.11	0.11			N/A	N/A
3 - Shopping Park South	0.00	0.00	0.00	0.00	0.00			N/A	N/A
4 - South Link	0.29	0.00	0.00	0.29	0.29			N/A	N/A

08:00 - 08:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - North Link	0.12	0.00	0.00	0.12	0.12			N/A	N/A
2 - Shoping Park North	0.13	0.00	0.00	0.13	0.13			N/A	N/A
3 - Shopping Park South	0.01	0.01	0.25	0.45	0.48			N/A	N/A
4 - South Link	0.37	0.00	0.00	0.37	0.37			N/A	N/A

08:15 - 08:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - North Link	0.15	0.03	0.26	0.46	0.48			N/A	N/A
2 - Shoping Park North	0.17	0.03	0.25	0.46	0.48			N/A	N/A
3 - Shopping Park South	0.01	0.00	0.00	0.01	0.01			N/A	N/A
4 - South Link	0.49	0.03	0.25	0.49	0.49			N/A	N/A

08:30 - 08:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - North Link	0.15	0.00	0.00	0.15	0.15			N/A	N/A
2 - Shoping Park North	0.17	0.03	0.25	0.45	0.48			N/A	N/A
3 - Shopping Park South	0.01	0.00	0.00	0.01	0.01			N/A	N/A
4 - South Link	0.49	0.03	0.31	1.40	2.22			N/A	N/A

08:45 - 09:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - North Link	0.12	0.00	0.00	0.12	0.12			N/A	N/A
2 - Shoping Park North	0.13	0.00	0.00	0.13	0.13			N/A	N/A
3 - Shopping Park South	0.01	0.00	0.00	0.01	0.01			N/A	N/A
4 - South Link	0.37	0.00	0.00	0.37	0.37			N/A	N/A

09:00 - 09:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - North Link	0.09	0.00	0.00	0.09	0.09			N/A	N/A
2 - Shoping Park North	0.11	0.00	0.00	0.11	0.11			N/A	N/A
3 - Shopping Park South	0.00	0.00	0.00	0.00	0.00			N/A	N/A
4 - South Link	0.29	0.00	0.00	0.29	0.29			N/A	N/A

2026 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Q percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	4.20	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.20	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	2026 Base	PM	ONE HOUR	16:45	18:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - North Link		✓	312	100.000
2 - Shoping Park North		✓	669	100.000
3 - Shopping Park South		✓	205	100.000
4 - South Link		✓	722	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - North Link	2 - Shoping Park North	3 - Shopping Park South	4 - South Link
From	1 - North Link	0	44	8	260
	2 - Shoping Park North	111	1	2	555
	3 - Shopping Park South	31	7	0	167
	4 - South Link	187	494	41	0

Vehicle Mix

HV %s

		To			
		1 - North Link	2 - Shoping Park North	3 - Shopping Park South	4 - South Link
From	1 - North Link	0	0	0	0
	2 - Shoping Park North	0	0	0	0
	3 - Shopping Park South	0	0	0	0

	4 - South Link	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max Q95 (PCU)	Max LOS
1 - North Link	0.25	3.45	0.3	1.4	A
2 - Shoping Park North	0.49	4.72	1.0	1.5	A
3 - Shopping Park South	0.22	4.50	0.3	1.2	A
4 - South Link	0.47	3.94	0.9	1.7	A

Main Results for each time segment

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 - North Link	235	407	1504	0.156	234	0.2	2.834	A
2 - Shoping Park North	504	232	1565	0.322	502	0.5	3.380	A
3 - Shopping Park South	154	695	1219	0.127	154	0.1	3.376	A
4 - South Link	544	113	1742	0.312	542	0.5	2.995	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 - North Link	280	488	1454	0.193	280	0.2	3.067	A
2 - Shoping Park North	601	278	1537	0.391	601	0.6	3.843	A
3 - Shopping Park South	184	833	1138	0.162	184	0.2	3.775	A
4 - South Link	649	135	1728	0.376	648	0.6	3.332	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 - North Link	344	597	1386	0.248	343	0.3	3.452	A
2 - Shoping Park North	737	340	1499	0.491	735	1.0	4.707	A
3 - Shopping Park South	226	1019	1026	0.220	225	0.3	4.494	A
4 - South Link	795	165	1709	0.465	794	0.9	3.931	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 - North Link	344	598	1386	0.248	344	0.3	3.453	A
2 - Shoping Park North	737	340	1499	0.492	737	1.0	4.723	A
3 - Shopping Park South	226	1021	1025	0.220	226	0.3	4.502	A
4 - South Link	795	165	1709	0.465	795	0.9	3.939	A

17:45 - 18:00

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 - North Link	280	489	1453	0.193	281	0.2	3.073	A
2 - Shoping Park North	601	278	1537	0.391	603	0.6	3.859	A
3 - Shopping Park South	184	835	1136	0.162	185	0.2	3.786	A
4 - South Link	649	135	1728	0.376	650	0.6	3.345	A

18:00 - 18:15

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 - North Link	235	409	1502	0.156	235	0.2	2.842	A

2 - Shoping Park North	504	233	1564	0.322	504	0.5	3.397	A
3 - Shopping Park South	154	699	1217	0.127	155	0.1	3.386	A
4 - South Link	544	113	1742	0.312	544	0.5	3.008	A

Q Variation Results for each time segment

16:45 - 17:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - North Link	0.18	0.00	0.00	0.18	0.18			N/A	N/A
2 - Shoping Park North	0.47	0.00	0.00	0.47	0.47			N/A	N/A
3 - Shopping Park South	0.14	0.00	0.00	0.14	0.14			N/A	N/A
4 - South Link	0.45	0.00	0.00	0.45	0.45			N/A	N/A

17:00 - 17:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - North Link	0.24	0.00	0.00	0.24	0.24			N/A	N/A
2 - Shoping Park North	0.64	0.10	0.83	1.37	1.43			N/A	N/A
3 - Shopping Park South	0.19	0.00	0.00	0.19	0.19			N/A	N/A
4 - South Link	0.60	0.09	0.81	1.36	1.43			N/A	N/A

17:15 - 17:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - North Link	0.33	0.03	0.25	0.45	0.48			N/A	N/A
2 - Shoping Park North	0.96	0.03	0.26	0.96	0.96			N/A	N/A
3 - Shopping Park South	0.28	0.03	0.25	0.46	0.48			N/A	N/A
4 - South Link	0.86	0.03	0.25	0.86	0.86			N/A	N/A

17:30 - 17:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - North Link	0.33	0.03	0.32	1.10	1.35			N/A	N/A
2 - Shoping Park North	0.96	0.03	0.27	0.96	1.54			N/A	N/A
3 - Shopping Park South	0.28	0.03	0.30	0.88	1.20			N/A	N/A
4 - South Link	0.87	0.03	0.27	0.87	1.69			N/A	N/A

17:45 - 18:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - North Link	0.24	0.00	0.00	0.24	0.24			N/A	N/A
2 - Shoping Park North	0.65	0.55	1.00	1.40	1.45			N/A	N/A
3 - Shopping Park South	0.19	0.00	0.00	0.19	0.19			N/A	N/A
4 - South Link	0.61	0.55	1.00	1.40	1.45			N/A	N/A

18:00 - 18:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - North Link	0.19	0.00	0.00	0.19	0.19			N/A	N/A
2 - Shoping Park North	0.48	0.04	0.40	1.24	1.37			N/A	N/A
3 - Shopping Park South	0.15	0.00	0.00	0.15	0.15			N/A	N/A
4 - South Link	0.46	0.00	0.00	0.46	0.46			N/A	N/A

2026 Base, SAT

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Q percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	4.86	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.86	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)
D6	2026 Base	SAT	ONE HOUR	12:45	14:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - North Link		✓	396	100.000
2 - Shoping Park North		✓	571	100.000
3 - Shopping Park South		✓	282	100.000
4 - South Link		✓	907	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - North Link	2 - Shoping Park North	3 - Shopping Park South	4 - South Link
From	1 - North Link	0	49	46	301
	2 - Shoping Park North	118	1	3	449
	3 - Shopping Park South	62	3	0	217
	4 - South Link	189	612	106	0

Vehicle Mix

HV %s

		To			
		1 - North Link	2 - Shoping Park North	3 - Shopping Park South	4 - South Link
From	1 - North Link	0	0	0	0
	2 - Shoping Park North	0	0	0	0
	3 - Shopping Park South	0	0	0	0

	4 - South Link	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max Q95 (PCU)	Max LOS
1 - North Link	0.35	4.35	0.5	2.4	A
2 - Shoping Park North	0.45	4.66	0.8	2.4	A
3 - Shopping Park South	0.29	4.78	0.4	1.5	A
4 - South Link	0.59	5.25	1.4	1.9	A

Main Results for each time segment

12:45 - 13:00

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 - North Link	298	541	1420	0.210	297	0.3	3.201	A
2 - Shoping Park North	430	340	1499	0.287	428	0.4	3.359	A
3 - Shopping Park South	212	652	1246	0.170	211	0.2	3.476	A
4 - South Link	683	138	1726	0.396	680	0.7	3.434	A

13:00 - 13:15

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 - North Link	356	648	1354	0.263	356	0.4	3.605	A
2 - Shoping Park North	513	407	1458	0.352	513	0.5	3.807	A
3 - Shopping Park South	254	780	1169	0.217	253	0.3	3.931	A
4 - South Link	815	165	1709	0.477	814	0.9	4.022	A

13:15 - 13:30

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 - North Link	436	793	1265	0.345	435	0.5	4.338	A
2 - Shoping Park North	629	498	1402	0.448	628	0.8	4.641	A
3 - Shopping Park South	310	955	1064	0.292	310	0.4	4.770	A
4 - South Link	999	202	1685	0.593	997	1.4	5.213	A

13:30 - 13:45

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 - North Link	436	795	1263	0.345	436	0.5	4.350	A
2 - Shoping Park North	629	499	1402	0.449	629	0.8	4.657	A
3 - Shopping Park South	310	957	1063	0.292	310	0.4	4.781	A
4 - South Link	999	203	1685	0.593	999	1.4	5.245	A

13:45 - 14:00

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 - North Link	356	651	1353	0.263	357	0.4	3.618	A
2 - Shoping Park North	513	408	1457	0.352	514	0.5	3.821	A
3 - Shopping Park South	254	783	1167	0.217	254	0.3	3.944	A
4 - South Link	815	166	1708	0.477	817	0.9	4.051	A

14:00 - 14:15

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 - North Link	298	544	1419	0.210	298	0.3	3.214	A

2 - Shoping Park North	430	341	1498	0.287	430	0.4	3.376	A
3 - Shopping Park South	212	655	1244	0.171	213	0.2	3.491	A
4 - South Link	683	139	1726	0.396	684	0.7	3.458	A

Q Variation Results for each time segment

12:45 - 13:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - North Link	0.26	0.00	0.00	0.26	0.26			N/A	N/A
2 - Shoping Park North	0.40	0.00	0.00	0.40	0.40			N/A	N/A
3 - Shopping Park South	0.20	0.00	0.00	0.20	0.20			N/A	N/A
4 - South Link	0.65	0.55	1.00	1.40	1.45			N/A	N/A

13:00 - 13:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - North Link	0.35	0.00	0.00	0.35	0.35			N/A	N/A
2 - Shoping Park North	0.54	0.07	0.72	1.34	1.42			N/A	N/A
3 - Shopping Park South	0.28	0.00	0.00	0.28	0.28			N/A	N/A
4 - South Link	0.91	0.07	0.83	1.51	1.89			N/A	N/A

13:15 - 13:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - North Link	0.52	0.03	0.25	0.52	0.52			N/A	N/A
2 - Shoping Park North	0.81	0.03	0.25	0.81	0.81			N/A	N/A
3 - Shopping Park South	0.41	0.03	0.25	0.46	0.48			N/A	N/A
4 - South Link	1.43	0.03	0.26	1.43	1.43			N/A	N/A

13:30 - 13:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - North Link	0.52	0.03	0.30	1.42	2.41			N/A	N/A
2 - Shoping Park North	0.81	0.03	0.28	0.81	2.41			N/A	N/A
3 - Shopping Park South	0.41	0.03	0.32	1.32	1.51			N/A	N/A
4 - South Link	1.44	0.03	0.26	1.44	1.44			N/A	N/A

13:45 - 14:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - North Link	0.36	0.00	0.00	0.36	0.36			N/A	N/A
2 - Shoping Park North	0.55	0.55	1.00	1.40	1.45			N/A	N/A
3 - Shopping Park South	0.28	0.00	0.00	0.28	0.28			N/A	N/A
4 - South Link	0.92	0.27	0.98	1.24	1.24			N/A	N/A

14:00 - 14:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - North Link	0.27	0.00	0.00	0.27	0.27			N/A	N/A
2 - Shoping Park North	0.40	0.00	0.00	0.40	0.40			N/A	N/A
3 - Shopping Park South	0.21	0.00	0.00	0.21	0.21			N/A	N/A
4 - South Link	0.66	0.07	0.73	1.37	1.45			N/A	N/A

2026 with Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Q percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	2.85	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.85	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	2026 with Dev	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	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - North Link		✓	189	100.000
2 - Shoping Park North		✓	208	100.000
3 - Shopping Park South		✓	8	100.000
4 - South Link		✓	540	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - North Link	2 - Shoping Park North	3 - Shopping Park South	4 - South Link
From	1 - North Link	0	33	1	155
	2 - Shoping Park North	49	1	0	158
	3 - Shopping Park South	0	2	0	6
	4 - South Link	330	198	12	0

Vehicle Mix

HV %s

		To			
		1 - North Link	2 - Shoping Park North	3 - Shopping Park South	4 - South Link
From	1 - North Link	0	0	0	0
	2 - Shoping Park North	0	0	0	0
	3 - Shopping Park South	0	0	0	0

	4 - South Link	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max Q95 (PCU)	Max LOS
1 - North Link	0.13	2.57	0.1	0.5	A
2 - Shoping Park North	0.14	2.64	0.2	0.5	A
3 - Shopping Park South	0.01	2.59	0.0	0.5	A
4 - South Link	0.33	3.04	0.5	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 - North Link	142	160	1657	0.086	142	0.1	2.376	A
2 - Shoping Park North	157	126	1630	0.096	156	0.1	2.443	A
3 - Shopping Park South	6	273	1472	0.004	6	0.0	2.454	A
4 - South Link	407	39	1789	0.227	405	0.3	2.599	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 - North Link	170	191	1637	0.104	170	0.1	2.452	A
2 - Shoping Park North	187	151	1614	0.116	187	0.1	2.521	A
3 - Shopping Park South	7	326	1440	0.005	7	0.0	2.511	A
4 - South Link	485	47	1784	0.272	485	0.4	2.771	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 - North Link	208	234	1611	0.129	208	0.1	2.566	A
2 - Shoping Park North	229	185	1594	0.144	229	0.2	2.637	A
3 - Shopping Park South	9	399	1396	0.006	9	0.0	2.594	A
4 - South Link	595	57	1777	0.335	594	0.5	3.040	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 - North Link	208	235	1611	0.129	208	0.1	2.566	A
2 - Shoping Park North	229	185	1594	0.144	229	0.2	2.637	A
3 - Shopping Park South	9	400	1396	0.006	9	0.0	2.594	A
4 - South Link	595	57	1777	0.335	595	0.5	3.042	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 - North Link	170	192	1637	0.104	170	0.1	2.455	A
2 - Shoping Park North	187	151	1614	0.116	187	0.1	2.524	A
3 - Shopping Park South	7	327	1440	0.005	7	0.0	2.512	A
4 - South Link	485	47	1784	0.272	486	0.4	2.775	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 - North Link	142	160	1656	0.086	142	0.1	2.379	A

2 - Shoping Park North	157	127	1629	0.096	157	0.1	2.446	A
3 - Shopping Park South	6	273	1472	0.004	6	0.0	2.455	A
4 - South Link	407	39	1789	0.227	407	0.3	2.606	A

Q Variation Results for each time segment

07:45 - 08:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - North Link	0.09	0.00	0.00	0.09	0.09			N/A	N/A
2 - Shoping Park North	0.11	0.00	0.00	0.11	0.11			N/A	N/A
3 - Shopping Park South	0.00	0.00	0.00	0.00	0.00			N/A	N/A
4 - South Link	0.29	0.00	0.00	0.29	0.29			N/A	N/A

08:00 - 08:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - North Link	0.12	0.00	0.00	0.12	0.12			N/A	N/A
2 - Shoping Park North	0.13	0.00	0.00	0.13	0.13			N/A	N/A
3 - Shopping Park South	0.01	0.01	0.25	0.45	0.48			N/A	N/A
4 - South Link	0.37	0.00	0.00	0.37	0.37			N/A	N/A

08:15 - 08:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - North Link	0.15	0.03	0.26	0.46	0.49			N/A	N/A
2 - Shoping Park North	0.17	0.03	0.25	0.46	0.48			N/A	N/A
3 - Shopping Park South	0.01	0.00	0.00	0.01	0.01			N/A	N/A
4 - South Link	0.50	0.03	0.25	0.50	0.50			N/A	N/A

08:30 - 08:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - North Link	0.15	0.00	0.00	0.15	0.15			N/A	N/A
2 - Shoping Park North	0.17	0.03	0.25	0.45	0.48			N/A	N/A
3 - Shopping Park South	0.01	0.00	0.00	0.01	0.01			N/A	N/A
4 - South Link	0.50	0.03	0.30	1.39	2.27			N/A	N/A

08:45 - 09:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - North Link	0.12	0.00	0.00	0.12	0.12			N/A	N/A
2 - Shoping Park North	0.13	0.00	0.00	0.13	0.13			N/A	N/A
3 - Shopping Park South	0.01	0.00	0.00	0.01	0.01			N/A	N/A
4 - South Link	0.38	0.00	0.00	0.38	0.38			N/A	N/A

09:00 - 09:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - North Link	0.09	0.00	0.00	0.09	0.09			N/A	N/A
2 - Shoping Park North	0.11	0.00	0.00	0.11	0.11			N/A	N/A
3 - Shopping Park South	0.00	0.00	0.00	0.00	0.00			N/A	N/A
4 - South Link	0.30	0.00	0.00	0.30	0.30			N/A	N/A

2026 with Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Q percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	4.13	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.13	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)
D8	2026 with Dev	PM	ONE HOUR	16:45	18:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - North Link		✓	317	100.000
2 - Shoping Park North		✓	641	100.000
3 - Shopping Park South		✓	205	100.000
4 - South Link		✓	736	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - North Link	2 - Shoping Park North	3 - Shopping Park South	4 - South Link
From	1 - North Link	0	37	8	272
	2 - Shoping Park North	81	0	2	558
	3 - Shopping Park South	31	7	0	167
	4 - South Link	187	508	41	0

Vehicle Mix

HV %s

		To			
		1 - North Link	2 - Shoping Park North	3 - Shopping Park South	4 - South Link
From	1 - North Link	0	0	0	0
	2 - Shoping Park North	0	0	0	0
	3 - Shopping Park South	0	0	0	0

	4 - South Link	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max Q95 (PCU)	Max LOS
1 - North Link	0.25	3.50	0.3	1.4	A
2 - Shoping Park North	0.47	4.59	0.9	1.8	A
3 - Shopping Park South	0.22	4.44	0.3	1.2	A
4 - South Link	0.47	3.91	0.9	1.6	A

Main Results for each time segment

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 - North Link	239	417	1497	0.159	238	0.2	2.857	A
2 - Shoping Park North	483	241	1559	0.309	481	0.4	3.332	A
3 - Shopping Park South	154	683	1227	0.126	154	0.1	3.353	A
4 - South Link	554	89	1757	0.315	552	0.5	2.985	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 - North Link	285	499	1447	0.197	285	0.2	3.098	A
2 - Shoping Park North	576	288	1530	0.377	576	0.6	3.769	A
3 - Shopping Park South	184	818	1146	0.161	184	0.2	3.741	A
4 - South Link	662	107	1746	0.379	661	0.6	3.317	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 - North Link	349	611	1377	0.253	349	0.3	3.500	A
2 - Shoping Park North	706	353	1491	0.473	705	0.9	4.573	A
3 - Shopping Park South	226	1002	1037	0.218	225	0.3	4.436	A
4 - South Link	810	131	1731	0.468	809	0.9	3.905	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 - North Link	349	612	1377	0.254	349	0.3	3.502	A
2 - Shoping Park North	706	353	1491	0.473	706	0.9	4.586	A
3 - Shopping Park South	226	1003	1036	0.218	226	0.3	4.444	A
4 - South Link	810	131	1730	0.468	810	0.9	3.912	A

17:45 - 18:00

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 - North Link	285	501	1446	0.197	285	0.2	3.104	A
2 - Shoping Park North	576	289	1530	0.377	577	0.6	3.782	A
3 - Shopping Park South	184	820	1145	0.161	185	0.2	3.749	A
4 - South Link	662	107	1746	0.379	663	0.6	3.326	A

18:00 - 18:15

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 - North Link	239	419	1496	0.159	239	0.2	2.865	A

2 - Shoping Park North	483	242	1559	0.310	483	0.5	3.350	A
3 - Shopping Park South	154	687	1225	0.126	155	0.1	3.366	A
4 - South Link	554	90	1757	0.315	555	0.5	2.995	A

Q Variation Results for each time segment

16:45 - 17:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - North Link	0.19	0.00	0.00	0.19	0.19			N/A	N/A
2 - Shoping Park North	0.45	0.00	0.00	0.45	0.45			N/A	N/A
3 - Shopping Park South	0.14	0.00	0.00	0.14	0.14			N/A	N/A
4 - South Link	0.46	0.00	0.00	0.46	0.46			N/A	N/A

17:00 - 17:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - North Link	0.24	0.00	0.00	0.24	0.24			N/A	N/A
2 - Shoping Park North	0.60	0.09	0.81	1.36	1.43			N/A	N/A
3 - Shopping Park South	0.19	0.00	0.00	0.19	0.19			N/A	N/A
4 - South Link	0.61	0.09	0.82	1.36	1.43			N/A	N/A

17:15 - 17:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - North Link	0.34	0.03	0.25	0.45	0.48			N/A	N/A
2 - Shoping Park North	0.89	0.03	0.25	0.89	0.89			N/A	N/A
3 - Shopping Park South	0.28	0.03	0.25	0.46	0.48			N/A	N/A
4 - South Link	0.87	0.03	0.25	0.87	0.87			N/A	N/A

17:30 - 17:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - North Link	0.34	0.03	0.32	1.14	1.39			N/A	N/A
2 - Shoping Park North	0.89	0.03	0.27	0.89	1.83			N/A	N/A
3 - Shopping Park South	0.28	0.03	0.29	0.84	1.18			N/A	N/A
4 - South Link	0.88	0.03	0.27	0.88	1.59			N/A	N/A

17:45 - 18:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - North Link	0.25	0.00	0.00	0.25	0.25			N/A	N/A
2 - Shoping Park North	0.61	0.55	1.00	1.40	1.45			N/A	N/A
3 - Shopping Park South	0.19	0.00	0.00	0.19	0.19			N/A	N/A
4 - South Link	0.61	0.55	1.00	1.40	1.45			N/A	N/A

18:00 - 18:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - North Link	0.19	0.00	0.00	0.19	0.19			N/A	N/A
2 - Shoping Park North	0.45	0.00	0.00	0.45	0.45			N/A	N/A
3 - Shopping Park South	0.14	0.00	0.00	0.14	0.14			N/A	N/A
4 - South Link	0.46	0.00	0.00	0.46	0.46			N/A	N/A

2026 with Dev, SAT

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Q percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	4.76	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.76	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	2026 with Dev	SAT	ONE HOUR	12:45	14:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - North Link		✓	373	100.000
2 - Shoping Park North		✓	539	100.000
3 - Shopping Park South		✓	282	100.000
4 - South Link		✓	923	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - North Link	2 - Shoping Park North	3 - Shopping Park South	4 - South Link
From	1 - North Link	0	42	16	315
	2 - Shoping Park North	83	1	3	452
	3 - Shopping Park South	62	3	0	217
	4 - South Link	189	628	106	0

Vehicle Mix

HV %s

		To			
		1 - North Link	2 - Shoping Park North	3 - Shopping Park South	4 - South Link
From	1 - North Link	0	0	0	0
	2 - Shoping Park North	0	0	0	0
	3 - Shopping Park South	0	0	0	0

	4 - South Link	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max Q95 (PCU)	Max LOS
1 - North Link	0.33	4.28	0.5	2.1	A
2 - Shoping Park North	0.42	4.40	0.7	2.7	A
3 - Shopping Park South	0.29	4.71	0.4	1.5	A
4 - South Link	0.59	5.19	1.5	1.9	A

Main Results for each time segment

12:45 - 13:00

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 - North Link	281	553	1413	0.199	280	0.2	3.173	A
2 - Shoping Park North	406	328	1506	0.269	404	0.4	3.263	A
3 - Shopping Park South	212	638	1254	0.169	211	0.2	3.455	A
4 - South Link	695	112	1743	0.399	692	0.7	3.418	A

13:00 - 13:15

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 - North Link	335	663	1345	0.249	335	0.3	3.563	A
2 - Shoping Park North	485	392	1467	0.330	484	0.5	3.661	A
3 - Shopping Park South	254	764	1178	0.215	253	0.3	3.890	A
4 - South Link	830	134	1729	0.480	829	0.9	3.996	A

13:15 - 13:30

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 - North Link	411	811	1254	0.328	410	0.5	4.265	A
2 - Shoping Park North	593	480	1413	0.420	593	0.7	4.384	A
3 - Shopping Park South	310	936	1076	0.289	310	0.4	4.696	A
4 - South Link	1016	164	1710	0.594	1014	1.4	5.161	A

13:30 - 13:45

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 - North Link	411	813	1253	0.328	411	0.5	4.275	A
2 - Shoping Park North	593	481	1412	0.420	593	0.7	4.395	A
3 - Shopping Park South	310	937	1075	0.289	310	0.4	4.707	A
4 - South Link	1016	164	1709	0.595	1016	1.5	5.193	A

13:45 - 14:00

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 - North Link	335	665	1344	0.250	336	0.3	3.572	A
2 - Shoping Park North	485	394	1466	0.331	485	0.5	3.674	A
3 - Shopping Park South	254	766	1177	0.215	254	0.3	3.902	A
4 - South Link	830	134	1728	0.480	832	0.9	4.024	A

14:00 - 14:15

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 - North Link	281	556	1411	0.199	281	0.2	3.188	A

2 - Shoping Park North	406	329	1505	0.270	406	0.4	3.279	A
3 - Shopping Park South	212	641	1252	0.170	213	0.2	3.467	A
4 - South Link	695	112	1742	0.399	696	0.7	3.443	A

Q Variation Results for each time segment

12:45 - 13:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - North Link	0.25	0.00	0.00	0.25	0.25			N/A	N/A
2 - Shoping Park North	0.37	0.00	0.00	0.37	0.37			N/A	N/A
3 - Shopping Park South	0.20	0.00	0.00	0.20	0.20			N/A	N/A
4 - South Link	0.66	0.55	1.00	1.40	1.45			N/A	N/A

13:00 - 13:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - North Link	0.33	0.00	0.00	0.33	0.33			N/A	N/A
2 - Shoping Park North	0.49	0.00	0.00	0.49	0.49			N/A	N/A
3 - Shopping Park South	0.27	0.00	0.00	0.27	0.27			N/A	N/A
4 - South Link	0.92	0.07	0.83	1.55	1.92			N/A	N/A

13:15 - 13:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - North Link	0.48	0.03	0.25	0.48	0.48			N/A	N/A
2 - Shoping Park North	0.72	0.03	0.25	0.72	0.72			N/A	N/A
3 - Shopping Park South	0.40	0.03	0.25	0.46	0.48			N/A	N/A
4 - South Link	1.45	0.03	0.26	1.45	1.45			N/A	N/A

13:30 - 13:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - North Link	0.49	0.03	0.31	1.42	2.08			N/A	N/A
2 - Shoping Park North	0.72	0.03	0.28	0.75	2.69			N/A	N/A
3 - Shopping Park South	0.40	0.03	0.32	1.31	1.45			N/A	N/A
4 - South Link	1.46	0.03	0.26	1.46	1.46			N/A	N/A

13:45 - 14:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - North Link	0.33	0.00	0.00	0.33	0.33			N/A	N/A
2 - Shoping Park North	0.50	0.00	0.00	0.50	0.50			N/A	N/A
3 - Shopping Park South	0.28	0.00	0.00	0.28	0.28			N/A	N/A
4 - South Link	0.93	0.27	0.99	1.30	1.30			N/A	N/A

14:00 - 14:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - North Link	0.25	0.00	0.00	0.25	0.25			N/A	N/A
2 - Shoping Park North	0.37	0.00	0.00	0.37	0.37			N/A	N/A
3 - Shopping Park South	0.21	0.00	0.00	0.21	0.21			N/A	N/A
4 - South Link	0.67	0.07	0.74	1.37	1.45			N/A	N/A

2031 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Q percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	2.90	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.90	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)
D10	2031 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	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - North Link		✓	189	100.000
2 - Shoping Park North		✓	222	100.000
3 - Shopping Park South		✓	8	100.000
4 - South Link		✓	559	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - North Link	2 - Shoping Park North	3 - Shopping Park South	4 - South Link
From	1 - North Link	0	27	1	161
	2 - Shoping Park North	57	1	0	164
	3 - Shopping Park South	0	2	0	6
	4 - South Link	346	201	12	0

Vehicle Mix

HV %s

		To			
		1 - North Link	2 - Shoping Park North	3 - Shopping Park South	4 - South Link
From	1 - North Link	0	0	0	0
	2 - Shoping Park North	0	0	0	0
	3 - Shopping Park South	0	0	0	0

	4 - South Link	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max Q95 (PCU)	Max LOS
1 - North Link	0.13	2.57	0.1	0.5	A
2 - Shoping Park North	0.15	2.68	0.2	0.5	A
3 - Shopping Park South	0.01	2.62	0.0	0.5	A
4 - South Link	0.35	3.11	0.5	2.5	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 - North Link	142	162	1655	0.086	142	0.1	2.378	A
2 - Shoping Park North	167	131	1627	0.103	167	0.1	2.465	A
3 - Shopping Park South	6	288	1463	0.004	6	0.0	2.470	A
4 - South Link	421	45	1785	0.236	420	0.3	2.633	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 - North Link	170	194	1636	0.104	170	0.1	2.455	A
2 - Shoping Park North	200	156	1611	0.124	199	0.1	2.549	A
3 - Shopping Park South	7	344	1429	0.005	7	0.0	2.530	A
4 - South Link	503	54	1780	0.282	502	0.4	2.818	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 - North Link	208	238	1609	0.129	208	0.1	2.569	A
2 - Shoping Park North	244	191	1590	0.154	244	0.2	2.675	A
3 - Shopping Park South	9	421	1383	0.006	9	0.0	2.618	A
4 - South Link	615	66	1772	0.347	615	0.5	3.110	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 - North Link	208	238	1609	0.129	208	0.1	2.570	A
2 - Shoping Park North	244	192	1590	0.154	244	0.2	2.675	A
3 - Shopping Park South	9	422	1383	0.006	9	0.0	2.619	A
4 - South Link	615	66	1772	0.347	615	0.5	3.112	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 - North Link	170	194	1635	0.104	170	0.1	2.458	A
2 - Shoping Park North	200	157	1611	0.124	200	0.1	2.550	A
3 - Shopping Park South	7	345	1429	0.005	7	0.0	2.533	A
4 - South Link	503	54	1780	0.282	503	0.4	2.820	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 - North Link	142	163	1655	0.086	142	0.1	2.381	A

2 - Shoping Park North	167	131	1627	0.103	167	0.1	2.466	A
3 - Shopping Park South	6	289	1463	0.004	6	0.0	2.471	A
4 - South Link	421	45	1785	0.236	421	0.3	2.641	A

Q Variation Results for each time segment

07:45 - 08:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - North Link	0.09	0.00	0.00	0.09	0.09			N/A	N/A
2 - Shoping Park North	0.11	0.00	0.00	0.11	0.11			N/A	N/A
3 - Shopping Park South	0.00	0.00	0.00	0.00	0.00			N/A	N/A
4 - South Link	0.31	0.00	0.00	0.31	0.31			N/A	N/A

08:00 - 08:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - North Link	0.12	0.00	0.00	0.12	0.12			N/A	N/A
2 - Shoping Park North	0.14	0.00	0.00	0.14	0.14			N/A	N/A
3 - Shopping Park South	0.01	0.01	0.25	0.45	0.48			N/A	N/A
4 - South Link	0.39	0.00	0.00	0.39	0.39			N/A	N/A

08:15 - 08:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - North Link	0.15	0.03	0.26	0.46	0.49			N/A	N/A
2 - Shoping Park North	0.18	0.03	0.25	0.46	0.48			N/A	N/A
3 - Shopping Park South	0.01	0.00	0.00	0.01	0.01			N/A	N/A
4 - South Link	0.53	0.03	0.25	0.53	0.53			N/A	N/A

08:30 - 08:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - North Link	0.15	0.00	0.00	0.15	0.15			N/A	N/A
2 - Shoping Park North	0.18	0.03	0.25	0.45	0.48			N/A	N/A
3 - Shopping Park South	0.01	0.00	0.00	0.01	0.01			N/A	N/A
4 - South Link	0.53	0.03	0.30	1.36	2.47			N/A	N/A

08:45 - 09:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - North Link	0.12	0.00	0.00	0.12	0.12			N/A	N/A
2 - Shoping Park North	0.14	0.00	0.00	0.14	0.14			N/A	N/A
3 - Shopping Park South	0.01	0.00	0.00	0.01	0.01			N/A	N/A
4 - South Link	0.40	0.00	0.00	0.40	0.40			N/A	N/A

09:00 - 09:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - North Link	0.09	0.00	0.00	0.09	0.09			N/A	N/A
2 - Shoping Park North	0.11	0.00	0.00	0.11	0.11			N/A	N/A
3 - Shopping Park South	0.00	0.00	0.00	0.00	0.00			N/A	N/A
4 - South Link	0.31	0.00	0.00	0.31	0.31			N/A	N/A

2031 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Q percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

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

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.41	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)
D11	2031 Base	PM	ONE HOUR	16:45	18:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - North Link		✓	326	100.000
2 - Shoping Park North		✓	700	100.000
3 - Shopping Park South		✓	215	100.000
4 - South Link		✓	754	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - North Link	2 - Shoping Park North	3 - Shopping Park South	4 - South Link
From	1 - North Link	0	46	8	272
	2 - Shoping Park North	116	1	2	581
	3 - Shopping Park South	33	7	0	175
	4 - South Link	195	517	42	0

Vehicle Mix

HV %s

		To			
		1 - North Link	2 - Shoping Park North	3 - Shopping Park South	4 - South Link
From	1 - North Link	0	0	0	0
	2 - Shoping Park North	0	0	0	0
	3 - Shopping Park South	0	0	0	0

	4 - South Link	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max Q95 (PCU)	Max LOS
1 - North Link	0.26	3.56	0.4	1.4	A
2 - Shoping Park North	0.52	5.01	1.1	1.5	A
3 - Shopping Park South	0.24	4.74	0.3	1.3	A
4 - South Link	0.49	4.12	0.9	1.5	A

Main Results for each time segment

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 - North Link	245	425	1492	0.164	245	0.2	2.884	A
2 - Shoping Park North	527	242	1559	0.338	525	0.5	3.476	A
3 - Shopping Park South	162	728	1200	0.135	161	0.2	3.463	A
4 - South Link	568	118	1739	0.326	566	0.5	3.063	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 - North Link	293	509	1440	0.203	293	0.3	3.136	A
2 - Shoping Park North	629	289	1530	0.411	629	0.7	3.991	A
3 - Shopping Park South	193	871	1114	0.173	193	0.2	3.906	A
4 - South Link	678	141	1724	0.393	677	0.6	3.437	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 - North Link	359	623	1370	0.262	359	0.4	3.557	A
2 - Shoping Park North	771	354	1490	0.517	769	1.1	4.984	A
3 - Shopping Park South	237	1066	998	0.237	236	0.3	4.725	A
4 - South Link	830	173	1704	0.487	829	0.9	4.108	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 - North Link	359	624	1369	0.262	359	0.4	3.562	A
2 - Shoping Park North	771	355	1490	0.517	771	1.1	5.005	A
3 - Shopping Park South	237	1068	997	0.237	237	0.3	4.735	A
4 - South Link	830	173	1704	0.487	830	0.9	4.120	A

17:45 - 18:00

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 - North Link	293	511	1440	0.204	293	0.3	3.143	A
2 - Shoping Park North	629	290	1529	0.411	631	0.7	4.013	A
3 - Shopping Park South	193	874	1113	0.174	194	0.2	3.919	A
4 - South Link	678	141	1724	0.393	679	0.7	3.451	A

18:00 - 18:15

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 - North Link	245	427	1491	0.165	246	0.2	2.892	A

2 - Shoping Park North	527	243	1558	0.338	528	0.5	3.495	A
3 - Shopping Park South	162	731	1198	0.135	162	0.2	3.474	A
4 - South Link	568	118	1738	0.327	568	0.5	3.077	A

Q Variation Results for each time segment

16:45 - 17:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - North Link	0.20	0.00	0.00	0.20	0.20			N/A	N/A
2 - Shoping Park North	0.51	0.51	1.00	1.40	1.45			N/A	N/A
3 - Shopping Park South	0.16	0.00	0.00	0.16	0.16			N/A	N/A
4 - South Link	0.48	0.00	0.00	0.48	0.48			N/A	N/A

17:00 - 17:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - North Link	0.25	0.00	0.00	0.25	0.25			N/A	N/A
2 - Shoping Park North	0.69	0.10	0.83	1.38	1.44			N/A	N/A
3 - Shopping Park South	0.21	0.00	0.00	0.21	0.21			N/A	N/A
4 - South Link	0.64	0.10	0.82	1.37	1.43			N/A	N/A

17:15 - 17:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - North Link	0.35	0.03	0.25	0.45	0.48			N/A	N/A
2 - Shoping Park North	1.06	0.03	0.26	1.06	1.06			N/A	N/A
3 - Shopping Park South	0.31	0.03	0.25	0.46	0.48			N/A	N/A
4 - South Link	0.94	0.03	0.25	0.94	0.94			N/A	N/A

17:30 - 17:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - North Link	0.35	0.03	0.33	1.18	1.44			N/A	N/A
2 - Shoping Park North	1.07	0.03	0.27	1.07	1.16			N/A	N/A
3 - Shopping Park South	0.31	0.03	0.31	1.04	1.30			N/A	N/A
4 - South Link	0.95	0.03	0.27	0.95	1.28			N/A	N/A

17:45 - 18:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - North Link	0.26	0.00	0.00	0.26	0.26			N/A	N/A
2 - Shoping Park North	0.70	0.40	0.97	1.39	1.45			N/A	N/A
3 - Shopping Park South	0.21	0.00	0.00	0.21	0.21			N/A	N/A
4 - South Link	0.65	0.55	1.00	1.40	1.45			N/A	N/A

18:00 - 18:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - North Link	0.20	0.00	0.00	0.20	0.20			N/A	N/A
2 - Shoping Park North	0.51	0.05	0.52	1.30	1.40			N/A	N/A
3 - Shopping Park South	0.16	0.00	0.00	0.16	0.16			N/A	N/A
4 - South Link	0.49	0.00	0.00	0.49	0.49			N/A	N/A

2031 Base, SAT

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Q percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	5.14	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.14	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)
D12	2031 Base	SAT	ONE HOUR	12:45	14:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - North Link		✓	383	100.000
2 - Shoping Park North		✓	598	100.000
3 - Shopping Park South		✓	295	100.000
4 - South Link		✓	949	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - North Link	2 - Shoping Park North	3 - Shopping Park South	4 - South Link
From	1 - North Link	0	51	17	315
	2 - Shoping Park North	124	1	3	470
	3 - Shopping Park South	65	3	0	227
	4 - South Link	197	641	111	0

Vehicle Mix

HV %s

		To			
		1 - North Link	2 - Shoping Park North	3 - Shopping Park South	4 - South Link
From	1 - North Link	0	0	0	0
	2 - Shoping Park North	0	0	0	0
	3 - Shopping Park South	0	0	0	0

	4 - South Link	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max Q95 (PCU)	Max LOS
1 - North Link	0.34	4.40	0.5	2.3	A
2 - Shoping Park North	0.47	4.80	0.9	2.1	A
3 - Shopping Park South	0.31	5.06	0.5	1.8	A
4 - South Link	0.62	5.68	1.6	2.5	A

Main Results for each time segment

12:45 - 13:00

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 - North Link	288	567	1405	0.205	287	0.3	3.218	A
2 - Shoping Park North	450	332	1503	0.299	449	0.4	3.406	A
3 - Shopping Park South	222	683	1227	0.181	221	0.2	3.575	A
4 - South Link	714	145	1722	0.415	712	0.7	3.553	A

13:00 - 13:15

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 - North Link	344	679	1335	0.258	344	0.3	3.631	A
2 - Shoping Park North	538	398	1463	0.367	537	0.6	3.883	A
3 - Shopping Park South	265	817	1147	0.231	265	0.3	4.082	A
4 - South Link	853	173	1703	0.501	852	1.0	4.221	A

13:15 - 13:30

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 - North Link	422	830	1242	0.340	421	0.5	4.383	A
2 - Shoping Park North	658	487	1409	0.467	657	0.9	4.775	A
3 - Shopping Park South	325	1000	1037	0.313	324	0.5	5.044	A
4 - South Link	1045	212	1679	0.622	1042	1.6	5.634	A

13:30 - 13:45

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 - North Link	422	832	1240	0.340	422	0.5	4.397	A
2 - Shoping Park North	658	488	1408	0.468	658	0.9	4.799	A
3 - Shopping Park South	325	1002	1036	0.313	325	0.5	5.059	A
4 - South Link	1045	212	1679	0.623	1045	1.6	5.680	A

13:45 - 14:00

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 - North Link	344	682	1334	0.258	345	0.3	3.645	A
2 - Shoping Park North	538	399	1463	0.368	539	0.6	3.901	A
3 - Shopping Park South	265	820	1145	0.232	266	0.3	4.096	A
4 - South Link	853	174	1703	0.501	856	1.0	4.259	A

14:00 - 14:15

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 - North Link	288	570	1403	0.206	289	0.3	3.231	A

2 - Shoping Park North	450	334	1502	0.300	451	0.4	3.427	A
3 - Shopping Park South	222	686	1225	0.181	222	0.2	3.590	A
4 - South Link	714	146	1721	0.415	716	0.7	3.586	A

Q Variation Results for each time segment

12:45 - 13:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - North Link	0.26	0.00	0.00	0.26	0.26			N/A	N/A
2 - Shoping Park North	0.43	0.00	0.00	0.43	0.43			N/A	N/A
3 - Shopping Park South	0.22	0.00	0.00	0.22	0.22			N/A	N/A
4 - South Link	0.70	0.55	1.00	1.40	1.45			N/A	N/A

13:00 - 13:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - North Link	0.35	0.00	0.00	0.35	0.35			N/A	N/A
2 - Shoping Park North	0.58	0.08	0.79	1.36	1.43			N/A	N/A
3 - Shopping Park South	0.30	0.00	0.00	0.30	0.30			N/A	N/A
4 - South Link	0.99	0.07	0.82	1.81	2.46			N/A	N/A

13:15 - 13:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - North Link	0.51	0.03	0.25	0.51	0.51			N/A	N/A
2 - Shoping Park North	0.87	0.03	0.25	0.87	0.87			N/A	N/A
3 - Shopping Park South	0.45	0.03	0.25	0.46	0.48			N/A	N/A
4 - South Link	1.62	0.03	0.26	1.62	1.62			N/A	N/A

13:30 - 13:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - North Link	0.51	0.03	0.31	1.43	2.33			N/A	N/A
2 - Shoping Park North	0.87	0.03	0.27	0.87	2.09			N/A	N/A
3 - Shopping Park South	0.45	0.03	0.32	1.40	1.84			N/A	N/A
4 - South Link	1.64	0.03	0.26	1.64	1.64			N/A	N/A

13:45 - 14:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - North Link	0.35	0.00	0.00	0.35	0.35			N/A	N/A
2 - Shoping Park North	0.59	0.55	1.00	1.40	1.45			N/A	N/A
3 - Shopping Park South	0.30	0.00	0.00	0.30	0.30			N/A	N/A
4 - South Link	1.01	0.18	1.02	1.39	1.73			N/A	N/A

14:00 - 14:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - North Link	0.26	0.00	0.00	0.26	0.26			N/A	N/A
2 - Shoping Park North	0.43	0.00	0.00	0.43	0.43			N/A	N/A
3 - Shopping Park South	0.22	0.00	0.00	0.22	0.22			N/A	N/A
4 - South Link	0.71	0.07	0.72	1.23	1.23			N/A	N/A

2031 with Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Q percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	2.91	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.91	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)
D13	2031 with Dev	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	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - North Link		✓	199	100.000
2 - Shoping Park North		✓	218	100.000
3 - Shopping Park South		✓	8	100.000
4 - South Link		✓	565	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - North Link	2 - Shoping Park North	3 - Shopping Park South	4 - South Link
From	1 - North Link	0	35	1	163
	2 - Shoping Park North	51	1	0	166
	3 - Shopping Park South	0	2	0	6
	4 - South Link	346	207	12	0

Vehicle Mix

HV %s

		To			
		1 - North Link	2 - Shoping Park North	3 - Shopping Park South	4 - South Link
From	1 - North Link	0	0	0	0
	2 - Shoping Park North	0	0	0	0
	3 - Shopping Park South	0	0	0	0

	4 - South Link	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max Q95 (PCU)	Max LOS
1 - North Link	0.14	2.60	0.2	0.5	A
2 - Shoping Park North	0.15	2.67	0.2	0.5	A
3 - Shopping Park South	0.01	2.62	0.0	0.5	A
4 - South Link	0.35	3.12	0.5	2.5	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 - North Link	150	167	1653	0.091	149	0.1	2.395	A
2 - Shoping Park North	164	132	1626	0.101	164	0.1	2.462	A
3 - Shopping Park South	6	286	1464	0.004	6	0.0	2.468	A
4 - South Link	425	41	1788	0.238	424	0.3	2.637	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 - North Link	179	199	1632	0.110	179	0.1	2.476	A
2 - Shoping Park North	196	158	1610	0.122	196	0.1	2.545	A
3 - Shopping Park South	7	342	1430	0.005	7	0.0	2.528	A
4 - South Link	508	49	1783	0.285	508	0.4	2.822	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 - North Link	219	244	1605	0.137	219	0.2	2.597	A
2 - Shoping Park North	240	194	1588	0.151	240	0.2	2.669	A
3 - Shopping Park South	9	419	1385	0.006	9	0.0	2.616	A
4 - South Link	622	59	1776	0.350	622	0.5	3.116	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 - North Link	219	244	1604	0.137	219	0.2	2.598	A
2 - Shoping Park North	240	194	1588	0.151	240	0.2	2.669	A
3 - Shopping Park South	9	419	1384	0.006	9	0.0	2.616	A
4 - South Link	622	59	1776	0.350	622	0.5	3.119	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 - North Link	179	200	1632	0.110	179	0.1	2.479	A
2 - Shoping Park North	196	158	1610	0.122	196	0.1	2.548	A
3 - Shopping Park South	7	343	1430	0.005	7	0.0	2.529	A
4 - South Link	508	49	1783	0.285	508	0.4	2.827	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 - North Link	150	167	1652	0.091	150	0.1	2.395	A

2 - Shoping Park North	164	133	1626	0.101	164	0.1	2.463	A
3 - Shopping Park South	6	287	1464	0.004	6	0.0	2.469	A
4 - South Link	425	41	1788	0.238	426	0.3	2.642	A

Q Variation Results for each time segment

07:45 - 08:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - North Link	0.10	0.00	0.00	0.10	0.10			N/A	N/A
2 - Shoping Park North	0.11	0.00	0.00	0.11	0.11			N/A	N/A
3 - Shopping Park South	0.00	0.00	0.00	0.00	0.00			N/A	N/A
4 - South Link	0.31	0.00	0.00	0.31	0.31			N/A	N/A

08:00 - 08:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - North Link	0.12	0.00	0.00	0.12	0.12			N/A	N/A
2 - Shoping Park North	0.14	0.00	0.00	0.14	0.14			N/A	N/A
3 - Shopping Park South	0.01	0.01	0.25	0.45	0.48			N/A	N/A
4 - South Link	0.40	0.00	0.00	0.40	0.40			N/A	N/A

08:15 - 08:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - North Link	0.16	0.03	0.25	0.46	0.48			N/A	N/A
2 - Shoping Park North	0.18	0.03	0.25	0.46	0.48			N/A	N/A
3 - Shopping Park South	0.01	0.00	0.00	0.01	0.01			N/A	N/A
4 - South Link	0.54	0.03	0.25	0.54	0.54			N/A	N/A

08:30 - 08:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - North Link	0.16	0.00	0.00	0.16	0.16			N/A	N/A
2 - Shoping Park North	0.18	0.03	0.25	0.45	0.48			N/A	N/A
3 - Shopping Park South	0.01	0.00	0.00	0.01	0.01			N/A	N/A
4 - South Link	0.54	0.03	0.30	1.34	2.51			N/A	N/A

08:45 - 09:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - North Link	0.12	0.00	0.00	0.12	0.12			N/A	N/A
2 - Shoping Park North	0.14	0.00	0.00	0.14	0.14			N/A	N/A
3 - Shopping Park South	0.01	0.00	0.00	0.01	0.01			N/A	N/A
4 - South Link	0.40	0.00	0.00	0.40	0.40			N/A	N/A

09:00 - 09:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - North Link	0.10	0.00	0.00	0.10	0.10			N/A	N/A
2 - Shoping Park North	0.11	0.00	0.00	0.11	0.11			N/A	N/A
3 - Shopping Park South	0.00	0.00	0.00	0.00	0.00			N/A	N/A
4 - South Link	0.31	0.00	0.00	0.31	0.31			N/A	N/A

2031 with Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Q percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	4.33	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.33	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)
D14	2031 with Dev	PM	ONE HOUR	16:45	18:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - North Link		✓	331	100.000
2 - Shoping Park North		✓	672	100.000
3 - Shopping Park South		✓	215	100.000
4 - South Link		✓	768	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - North Link	2 - Shoping Park North	3 - Shopping Park South	4 - South Link
From	1 - North Link	0	39	8	284
	2 - Shoping Park North	86	1	2	583
	3 - Shopping Park South	33	7	0	175
	4 - South Link	195	531	42	0

Vehicle Mix

HV %s

		To			
		1 - North Link	2 - Shoping Park North	3 - Shopping Park South	4 - South Link
From	1 - North Link	0	0	0	0
	2 - Shoping Park North	0	0	0	0
	3 - Shopping Park South	0	0	0	0

	4 - South Link	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max Q95 (PCU)	Max LOS
1 - North Link	0.27	3.62	0.4	1.5	A
2 - Shoping Park North	0.50	4.85	1.0	1.5	A
3 - Shopping Park South	0.23	4.67	0.3	1.3	A
4 - South Link	0.49	4.09	1.0	1.5	A

Main Results for each time segment

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 - North Link	249	436	1486	0.168	248	0.2	2.908	A
2 - Shoping Park North	506	251	1553	0.326	504	0.5	3.425	A
3 - Shopping Park South	162	716	1207	0.134	161	0.2	3.439	A
4 - South Link	578	95	1753	0.330	576	0.5	3.053	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 - North Link	298	522	1433	0.208	297	0.3	3.170	A
2 - Shoping Park North	604	300	1523	0.397	603	0.7	3.912	A
3 - Shopping Park South	193	857	1123	0.172	193	0.2	3.870	A
4 - South Link	690	114	1741	0.397	690	0.7	3.422	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 - North Link	364	639	1360	0.268	364	0.4	3.611	A
2 - Shoping Park North	740	367	1482	0.499	739	1.0	4.833	A
3 - Shopping Park South	237	1049	1008	0.235	236	0.3	4.661	A
4 - South Link	846	140	1725	0.490	844	1.0	4.082	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 - North Link	364	640	1360	0.268	364	0.4	3.616	A
2 - Shoping Park North	740	368	1482	0.499	740	1.0	4.852	A
3 - Shopping Park South	237	1050	1007	0.235	237	0.3	4.670	A
4 - South Link	846	140	1725	0.490	846	1.0	4.094	A

17:45 - 18:00

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 - North Link	298	523	1432	0.208	298	0.3	3.175	A
2 - Shoping Park North	604	301	1523	0.397	605	0.7	3.929	A
3 - Shopping Park South	193	859	1122	0.172	194	0.2	3.881	A
4 - South Link	690	114	1741	0.397	692	0.7	3.436	A

18:00 - 18:15

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 - North Link	249	438	1485	0.168	249	0.2	2.914	A

2 - Shoping Park North	506	252	1553	0.326	507	0.5	3.445	A
3 - Shopping Park South	162	719	1205	0.134	162	0.2	3.450	A
4 - South Link	578	96	1753	0.330	579	0.5	3.069	A

Q Variation Results for each time segment

16:45 - 17:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - North Link	0.20	0.00	0.00	0.20	0.20			N/A	N/A
2 - Shoping Park North	0.48	0.00	0.00	0.48	0.48			N/A	N/A
3 - Shopping Park South	0.15	0.00	0.00	0.15	0.15			N/A	N/A
4 - South Link	0.49	0.00	0.00	0.49	0.49			N/A	N/A

17:00 - 17:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - North Link	0.26	0.00	0.00	0.26	0.26			N/A	N/A
2 - Shoping Park North	0.65	0.10	0.83	1.37	1.43			N/A	N/A
3 - Shopping Park South	0.21	0.00	0.00	0.21	0.21			N/A	N/A
4 - South Link	0.65	0.10	0.83	1.37	1.43			N/A	N/A

17:15 - 17:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - North Link	0.36	0.03	0.25	0.45	0.48			N/A	N/A
2 - Shoping Park North	0.99	0.03	0.26	0.99	0.99			N/A	N/A
3 - Shopping Park South	0.30	0.03	0.25	0.46	0.48			N/A	N/A
4 - South Link	0.95	0.03	0.25	0.95	0.95			N/A	N/A

17:30 - 17:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - North Link	0.37	0.03	0.33	1.21	1.48			N/A	N/A
2 - Shoping Park North	0.99	0.03	0.27	0.99	1.46			N/A	N/A
3 - Shopping Park South	0.31	0.03	0.31	1.02	1.29			N/A	N/A
4 - South Link	0.96	0.03	0.27	0.96	1.16			N/A	N/A

17:45 - 18:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - North Link	0.26	0.00	0.00	0.26	0.26			N/A	N/A
2 - Shoping Park North	0.66	0.55	1.00	1.40	1.45			N/A	N/A
3 - Shopping Park South	0.21	0.00	0.00	0.21	0.21			N/A	N/A
4 - South Link	0.66	0.55	1.00	1.40	1.45			N/A	N/A

18:00 - 18:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - North Link	0.20	0.00	0.00	0.20	0.20			N/A	N/A
2 - Shoping Park North	0.49	0.04	0.43	1.26	1.38			N/A	N/A
3 - Shopping Park South	0.16	0.00	0.00	0.16	0.16			N/A	N/A
4 - South Link	0.49	0.00	0.00	0.49	0.49			N/A	N/A

2031 with Dev, SAT

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Q percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	5.08	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.08	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)
D15	2031 with Dev	SAT	ONE HOUR	12:45	14:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - North Link		✓	390	100.000
2 - Shoping Park North		✓	566	100.000
3 - Shopping Park South		✓	295	100.000
4 - South Link		✓	964	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - North Link	2 - Shoping Park North	3 - Shopping Park South	4 - South Link
From	1 - North Link	0	44	17	329
	2 - Shoping Park North	89	1	3	473
	3 - Shopping Park South	65	3	0	227
	4 - South Link	197	656	111	0

Vehicle Mix

HV %s

		To			
		1 - North Link	2 - Shoping Park North	3 - Shopping Park South	4 - South Link
From	1 - North Link	0	0	0	0
	2 - Shoping Park North	0	0	0	0
	3 - Shopping Park South	0	0	0	0

	4 - South Link	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max Q95 (PCU)	Max LOS
1 - North Link	0.35	4.50	0.5	2.5	A
2 - Shoping Park North	0.45	4.64	0.8	2.5	A
3 - Shopping Park South	0.31	4.98	0.4	1.8	A
4 - South Link	0.62	5.61	1.6	2.5	A

Main Results for each time segment

12:45 - 13:00

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 - North Link	294	578	1398	0.210	293	0.3	3.254	A
2 - Shoping Park North	426	343	1497	0.285	425	0.4	3.352	A
3 - Shopping Park South	222	669	1235	0.180	221	0.2	3.546	A
4 - South Link	726	118	1738	0.417	723	0.7	3.534	A

13:00 - 13:15

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 - North Link	351	692	1327	0.264	350	0.4	3.685	A
2 - Shoping Park North	509	410	1456	0.350	508	0.5	3.798	A
3 - Shopping Park South	265	801	1156	0.229	265	0.3	4.037	A
4 - South Link	867	142	1724	0.503	865	1.0	4.189	A

13:15 - 13:30

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 - North Link	429	847	1231	0.349	429	0.5	4.481	A
2 - Shoping Park North	623	502	1399	0.445	622	0.8	4.626	A
3 - Shopping Park South	325	980	1049	0.310	324	0.4	4.961	A
4 - South Link	1061	174	1703	0.623	1059	1.6	5.566	A

13:30 - 13:45

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 - North Link	429	849	1230	0.349	429	0.5	4.495	A
2 - Shoping Park North	623	503	1399	0.445	623	0.8	4.640	A
3 - Shopping Park South	325	982	1048	0.310	325	0.4	4.976	A
4 - South Link	1061	174	1703	0.623	1061	1.6	5.609	A

13:45 - 14:00

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 - North Link	351	695	1325	0.265	351	0.4	3.697	A
2 - Shoping Park North	509	412	1455	0.350	510	0.5	3.812	A
3 - Shopping Park South	265	803	1155	0.230	266	0.3	4.053	A
4 - South Link	867	142	1723	0.503	869	1.0	4.226	A

14:00 - 14:15

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 - North Link	294	581	1396	0.210	294	0.3	3.267	A

2 - Shoping Park North	426	345	1496	0.285	427	0.4	3.370	A
3 - Shopping Park South	222	672	1233	0.180	222	0.2	3.561	A
4 - South Link	726	119	1738	0.418	727	0.7	3.563	A

Q Variation Results for each time segment

12:45 - 13:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - North Link	0.26	0.00	0.00	0.26	0.26			N/A	N/A
2 - Shoping Park North	0.40	0.00	0.00	0.40	0.40			N/A	N/A
3 - Shopping Park South	0.22	0.00	0.00	0.22	0.22			N/A	N/A
4 - South Link	0.71	0.55	1.00	1.40	1.45			N/A	N/A

13:00 - 13:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - North Link	0.36	0.00	0.00	0.36	0.36			N/A	N/A
2 - Shoping Park North	0.53	0.53	1.00	1.40	1.45			N/A	N/A
3 - Shopping Park South	0.30	0.00	0.00	0.30	0.30			N/A	N/A
4 - South Link	1.00	0.07	0.82	1.83	2.51			N/A	N/A

13:15 - 13:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - North Link	0.53	0.03	0.25	0.53	0.53			N/A	N/A
2 - Shoping Park North	0.80	0.03	0.25	0.80	0.80			N/A	N/A
3 - Shopping Park South	0.44	0.03	0.25	0.46	0.48			N/A	N/A
4 - South Link	1.63	0.03	0.26	1.63	1.63			N/A	N/A

13:30 - 13:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - North Link	0.53	0.03	0.30	1.42	2.47			N/A	N/A
2 - Shoping Park North	0.80	0.03	0.28	0.80	2.45			N/A	N/A
3 - Shopping Park South	0.45	0.03	0.32	1.39	1.79			N/A	N/A
4 - South Link	1.64	0.03	0.26	1.64	1.64			N/A	N/A

13:45 - 14:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - North Link	0.36	0.00	0.00	0.36	0.36			N/A	N/A
2 - Shoping Park North	0.54	0.54	1.00	1.40	1.45			N/A	N/A
3 - Shopping Park South	0.30	0.00	0.00	0.30	0.30			N/A	N/A
4 - South Link	1.02	0.19	1.02	1.41	1.75			N/A	N/A

14:00 - 14:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - North Link	0.27	0.00	0.00	0.27	0.27			N/A	N/A
2 - Shoping Park North	0.40	0.00	0.00	0.40	0.40			N/A	N/A
3 - Shopping Park South	0.22	0.00	0.00	0.22	0.22			N/A	N/A
4 - South Link	0.72	0.07	0.73	1.26	1.26			N/A	N/A