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Royal Mail Brighton Delivery Office

Transport Assessment

July 2023

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Royal Mail Brighton Delivery Office

Transport Assessment

July 2023

Issue and Revision Record

Revision	Date	Originator	Checker	Approver	Description
A	July 2022	James Wright			First Draft
B	July 2022	James Wright	Mark Taylor	Mark Staniland	Planning Issue
C	July 2023	James Wright	Mark Taylor	Ian Besford	Updated Issue for client review
D	July 2023	James Wright	Mark Taylor	Ian Besford	Updated Issue

Document reference: | BDO-MMD-XX-00-RP-T-0001 |

Information class: Standard

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Executive summary

Mott MacDonald has been commissioned by Royal Mail Group (RMG) Brighton to produce a Transport Assessment (TA) for the proposed demolition of existing buildings, and erection of storage and distribution building (Use Class B8) with associated access, parking, landscaping, re-grading of land, enclosures, and infrastructure works including two substations and an express vehicle maintenance facility.

The proposed development site is situated off Vale Avenue, approximately 6.5 kilometres north of Brighton city centre. The existing access to the site is off Vale Avenue, approximately 130m to the east of the A27 Link Road. The access junction is a four arm junction with Vale Avenue, and Church Hill.

This Transport Assessment has been prepared in accordance with 'Best Practice Guidance for Transport Assessments' (April 2010) and with reference to Brighton & Hove City Council (BHCC) policy. Disabled bays, motorcycle bays, cycling bays and EV charging bays have all been provided in line with BHCC guidelines. The proposed development complies with local and national policy through an emphasis on trips being undertaken by sustainable modes of transport.

The new Royal Mail Delivery Office (DO) will be constructed to the north of Vale Avenue on land currently occupied by Patcham Court Farm. The building will comprise 4,145sqm of B8 floorspace, with offices, a service yard, car, red fleet, and HGV parking and site access. The DO will consolidate the existing DOs at North Road, Brighton and Denmark Villas, Hove.

The proposed site access has been relocated approximately 60m to the west of the existing site access. The access junction is a four arm priority controlled junction with Vale Avenue. Dropped kerb crossings will be provided on the new site access arm and a new crossing is to be provide across Vale Avenue.

Mott MacDonald commissioned MHC Traffic Ltd to undertake Manual Classified Count (MCC) surveys at five junctions within the local area as agreed with BHCC and National Highways. These surveys were undertaken over two 24-hour periods on Tuesday 30th November and Wednesday 1st December 2021. Automatic Traffic Count (ATC) surveys were also undertaken at three locations on the local highway network. The data obtained from these surveys has been used as a 2021 baseline for the assessment. Temporo growth factors have been applied to this data to calculate a 2026 and 2032 future baseline for the assessment. 2026 is the anticipated opening year for the site, and 2032 is 10 years after the planning application is registered.

A trip generation forecast has been undertaken using bespoke forecasts provided by RMG which takes into consideration data from the existing Royal Mail DOs in Brighton and Hove and staff travel forecasts. These trips have been distributed onto the local transport networks using staff postcode and operational data from a staff travel survey. RMG operational vehicles have been routed away from local highways and towards the strategic network where possible. The forecast trips have been added to the future baseline data to calculate traffic flow data with the proposed scheme.

The impact that these forecast trips have on the local transport network has been assessed via junction capacity assessments undertaken to identify their impacts on the operation of the local highway network. The impact of pedestrian and public transport trips generated by the proposed development has also been assessed.

Royal Mail are currently in ongoing discussions with their workers regarding staff working hours, at the time of writing this report no agreement has been reached to amend the current operational hours. This Transport Assessment is therefore based on the existing Royal Mail operational hours. For transparency, the Transport Assessment includes a 'sensitivity test' on the proposed working hours for the Brighton & Hove, and subsequently Patcham, delivery offices. The proposed working hours are a 90-minute shift later in the day than the current working hours. The results of the 'sensitivity test' are comparable to those of the Transport Assessment using the current operational hours, and demonstrate a negligible impact on pedestrian, public transport and highway operation. The full 'sensitivity test' can be found in Appendix C.

1 Introduction

1.1 Overview

Mott MacDonald has been commissioned by Royal Mail Group (RMG) Brighton to produce a Transport Assessment (TA) for the proposed demolition of existing buildings, and erection of a storage and distribution building (Use Class B8) with associated access, parking, landscaping, re-grading of land, enclosures, and infrastructure works including two substations and an express vehicle maintenance facility.

The new RMG Patcham Delivery Office (DO) will replace two existing sites in Brighton and Hove. The existing Brighton site is situated on North Road, approximately 450 metres south of Brighton Railway Station. The existing Hove site is situated on Denmark Villas, approximately 200 metres east of Hove Railway Station. The proposals will see these two sites relocated to the proposed development site off Vale Avenue in Brighton, approximately 200m west of Brighton and Hove Crescent Cricket Club.

This TA report has been prepared in accordance with 'Best Practice Guidance for Transport Assessments' (April 2010).

1.2 Report Scope and Content

The remainder of this report follows the structure outlined below:

- Chapter 2 - A review of baseline transport conditions, including existing highway, walking, cycling and public transport infrastructure as well as an examination of road safety in the area.
- Chapter 3 - A review of relevant national and local planning policies.
- Chapter 4 - A summary of the development proposals.
- Chapter 5 - Sets out the forecast trip generation for all modes.
- Chapter 6 - Sets out the forecast trip distribution for all modes.
- Chapter 7 - Identification of the traffic and transport impacts of the proposed development; and
- Chapter 8 - Summary and conclusions.

2 Existing Conditions

2.1 Site Location and Site Use

The proposed development site is situated off Vale Avenue, approximately 6.5 kilometres north of Brighton city centre. The site is currently part of Patcham Court Farm, and there are several existing farm buildings on site. The site is currently bound by the A27 to the north, an allotment plot to the east, Vale Avenue to the south and trees bordering the A27 exit road to the west.

The existing access to the site is off Vale Avenue, approximately 130m to the east of the A27 Link Road. The access junction is a four arm junction with Vale Avenue, and Church Hill

A location plan of the site is shown in Figure 2.1

Figure 2.1: Existing Site Access and Site Location

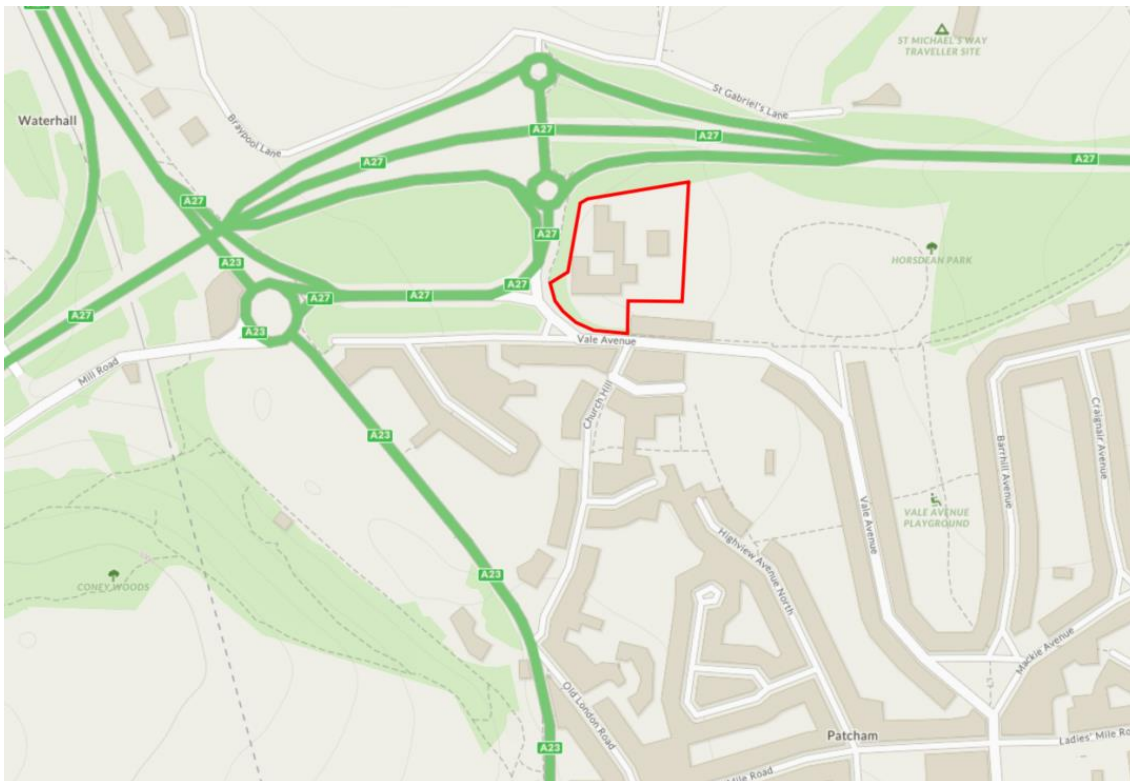


Source: Contains OS data © Crown copyright and database rights 2021

2.2 Highway Network

The highway network surrounding the site is shown in Figure 2.2 and are summarised below.

Figure 2.2: Local Highway Network



Source: Contains OS data © Crown copyright and database rights 2022

2.2.1 Vale Avenue

Vale Avenue is a single carriageway measuring approximately 7 metres in width. The road links the A27 Link Road in the west and Mackie Avenue in the east, and predominantly serves residential dwellings, as well as Brighton and Hove Crescent Cricket Club. The road is subject to a 30mph speed limit and has street lighting. Sections of the road are subject to double-yellow on-street parking restrictions. Adjacent to the existing site access point, Vale Avenue forms a staggered crossroads junction with Church Hill on the southern side of the road.

2.2.2 Church Hill

Church Hill is a single carriageway measuring approximately 5m at its widest, and 3.5m at its narrowest. The road links Vale Avenue in the north with the A23 London Road in the south, and predominantly serves residential dwellings. The road is subject to a 30mph speed limit and has street lighting. The width of the narrowest points of the road means that adjacent two-way movement is not possible at these pinch points. There are double-yellow on-street car parking restrictions along the majority of its length.

2.2.3 A27

The A27 is situated north of the site and is a dual carriageway measuring approximately 20 metres in total width (including the carriageway in both directions). The road is subject to the national speed limit and links Brighton with Portsmouth to the west and Eastbourne to the east. The A27 Link Road links the A27 to the A23 London Road. This is a dual carriageway with three lanes westbound and two lanes eastbound. The Link Road has a 50mph speed limit and has no pedestrian facilities.

2.2.4 A23 London Road / A23 Patcham By-Pass

The A23 London Road / A23 Patcham Bypass links Brighton City Centre in the south and Crawley in the north. To the north of the A23/A27 Link Road/Mill Road junction, the road is dual carriageway, with three lanes in either direction and is subject to the National Speed Limit. To the south of the junction, the road is a single carriageway measuring approximately 8 metres in width (not including sections of cycle lanes) and is subject to a 40mph speed limit. The road provides street lighting and sections of unrestricted on-street parking.

2.2.5 Baseline Traffic Surveys

Mott MacDonald commissioned MHC Traffic Ltd to undertake Manual Classified Count (MCC) surveys at the following locations:

- Site Access/Vale Avenue/Church Hill priority junction
- Vale Avenue/A27 Link Road westbound priority junction.
- A23 London Road/Mill Road/A27 Link Road roundabout
- A27 westbound exit/A27 Link Road/A27 overbridge roundabout
- A27 eastbound exit/A27 overbridge/Braypool Lane

These surveys were undertaken over two 24-hour periods on Tuesday 30th November 2021, and Wednesday 1st December 2021.

Automatic Traffic Count (ATC) surveys were also undertaken at the following locations:

- A27 mainline flow eastbound
- A27 mainline flow westbound
- A27 Link Road

These surveys comprised 24-hour video counts over two continuous weeks and were undertaken between Monday 29th November 2021 and Sunday 12th December 2021.

The surveys obtained baseline traffic flow data to be used for assessment.

2.3 Provisions for Non-Motorised Users

2.3.1 Walking

The development site currently has no formal pedestrian footway / footpath provision within the site. The site is accessible via footways from the east and west on Vale Avenue to the south of the site. These footways measure approximately 1 metre in usable surfaced width and approximately 3 metres in total width including grass verges that abut the carriageway. There are no formal pedestrian crossing points within the vicinity of the existing site access, however, there are dropped kerbs along the footways on both sides of Vale Avenue. The adjacent footways have street lighting and onward connections to the existing footway network towards public transport nodes and local amenities, which are outlined in Table 2.1.

Table 2.1: Pedestrian walking distances to local points of interest

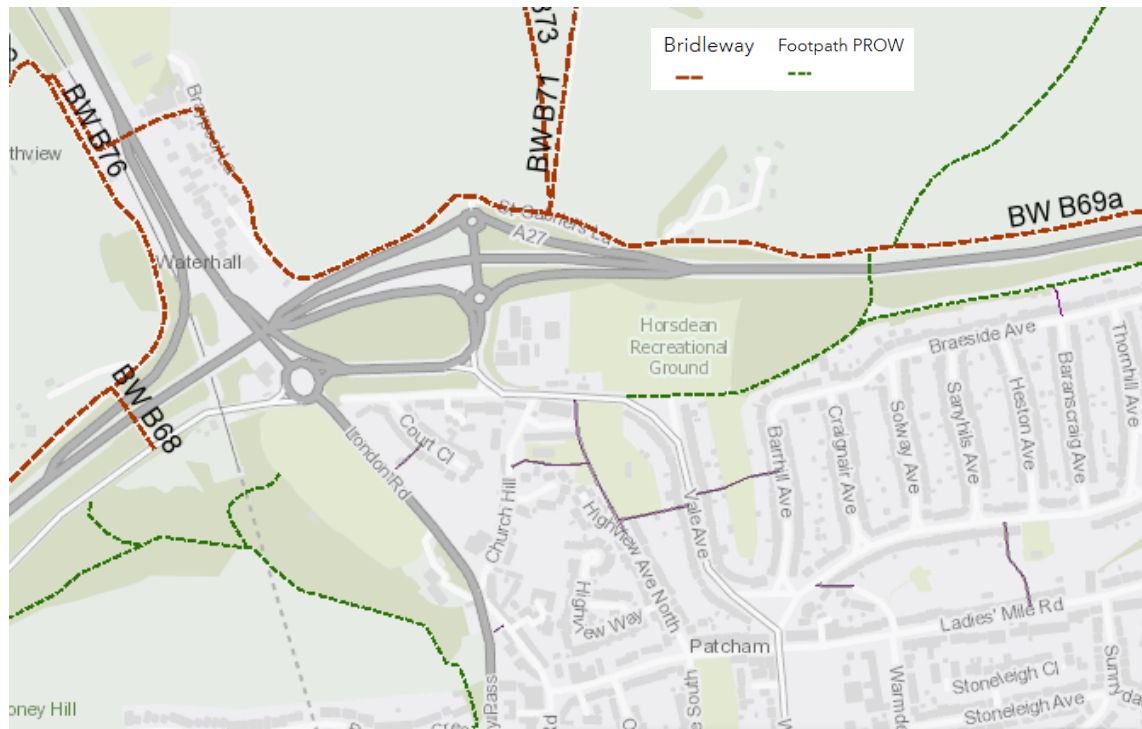
IHT Preferred Maximum Walking Distance	Destination / Service	Route	Walking Distance*	Walking Time
Local Services / Local Centre				
800 Metres				
	BP petrol station and Subway sandwich shop	Vale Avenue - London Road - Mill Road	500 metres	6 minutes
	Esoo Patcham	Vale Avenue - Church Hill - Patcham By-Pass	500 metres	6 minutes
	Co-op Food - Patcham	Vale Avenue - Church Hill - Old London Road	550 metres	6 minutes
Commuting				
2000 Metres				
	Patcham Place bus stops	Vale Avenue - Church Hill - Patcham By-Pass	350 metres	4 minutes
	Barrhill Avenue bus stops	Vale Avenue - Vale Avenue Playground (footway) - Barrhill Avenue	500 metres	7 minutes

**Measured from sites' existing access*

There is a footway along the eastern side of Church Hill which tapers in width between approximately 0.8 and 1.2 metres in usable width and a maximum 5.5 metres in total width including grass verges that abut the carriageway. There is a pedestrian crossing with dropped kerbs and tactile paving on Church Hill that connects to the Patcham Place bus stop (southbound services) and a staggered pedestrian crossing point with dropped kerbs and tactile paving that connects to the Patcham Place bus stop (northbound services) located along the A23 London Road. There is also a signalised pedestrian crossing with dropped kerbs and tactile paving and section of shared footway and cycleway along both sides of the A23 Patcham Bypass (northbound).

The nearest Public Right of Way (PRoW) footpath is located approximately 150 metres east of the existing site access and is illustrated in Figure 2.3.

Figure 2.3: Public Rights of Way and Bridleways



Source: Highway Search Information Map, BHCC. Contains OS data © Crown copyright and database rights. Accessed 10/05/2022

2.3.2 Cycling

Route 20 of the National Cycle Network (NCN) is situated approximately 350 metres west of the site. This is an on-road route and runs along the A23 London Road, Mill Road and Waterhill Road, connecting Brighton City Centre in the south and Pyecombe to the north. This route connects the site with several public transport nodes, including Preston Park Railway Station and Brighton Railway Station. The centre of Brighton can be reached from the site via this cycle route within an approximate 20-minute cycle journey.

There are several PROW and Permissive Bridleways providing traffic-free cycle routes to the north of the site. These are shown in Figure 2.3.

The local cycle infrastructure provisions are illustrated in Figure 2.4

Figure 2.4: Local Cycle Infrastructure Provisions



Source: BHCC Cycling Map. Contains OS data © Crown copyright and database rights. Accessed 29/04/2022

2.4 Public Transport

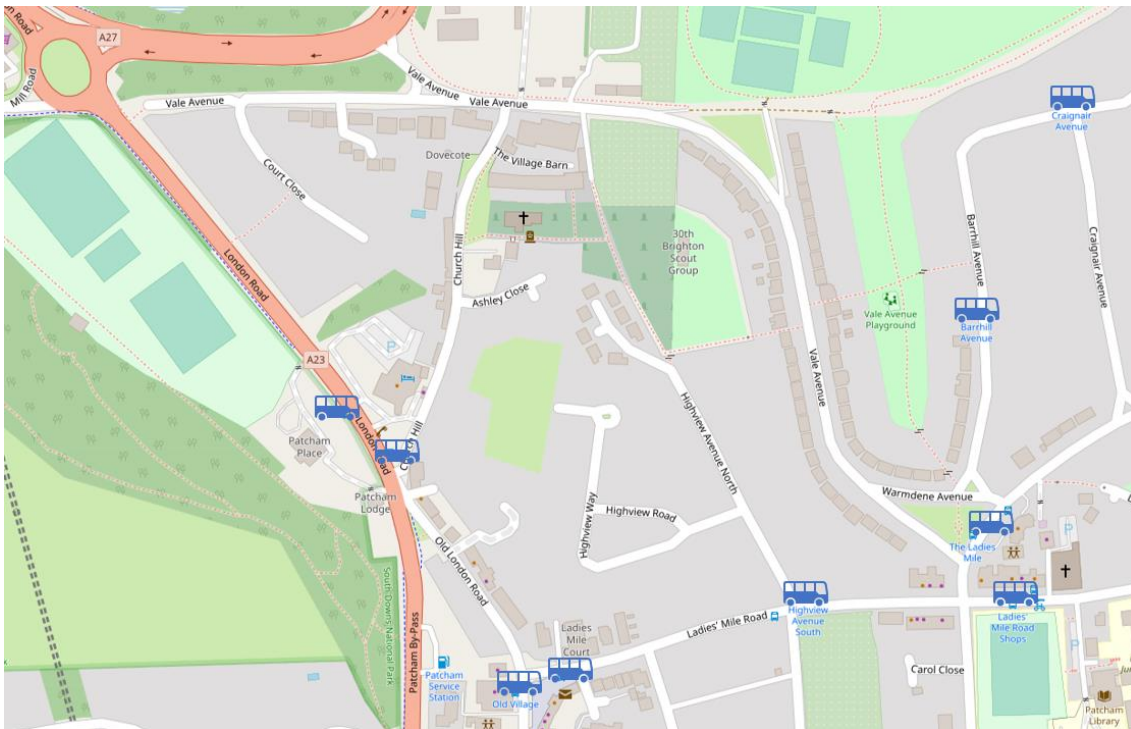
2.4.1 Bus

In residential areas, 400m has traditionally been regarded as the distance that pedestrians will walk to access a bus stop (Planning for Walking, CIHT. 2015). Research conducted by WYG in 2015 (attached in Appendix A) referring to National Travel Survey data on walking as a transport mode suggests that people are willing to walk further than 400 metres to a bus stop that offers additional services; an acceptable walking distance of 800 metres to bus stops is recommended (based on the 85th percentile walking distance).

There are several bus stops located within an 800-metre walking distance. The nearest bus stops providing services in both directions are situated approximately 350 metres south of the site on Patcham Bypass, followed by the Barrhill Avenue bus stop (500 metres), and bus stops along Ladies Mile.

The Patcham Bypass bus stops provide shelter, seating and timetable information, and the Barrhill Avenue bus stop is a flagpole stop. Bus stops along Ladies Mile have a mixture of sheltered and unsheltered stops. The location of local bus stops are shown in Figure 2.5.

Figure 2.5: Bus Stop Location Plan



Source: Contains OS data © Crown copyright and database rights 2022

The key services available at the bus stops described above are summarised in Table 2.2:
Nearby Bus Services

Table 2.2: Nearby Bus Services

Bus Stop	Service	Destination	Operator	Weekday Frequency
Patcham Bypass (southbound)				
	17	East Grinstead - Brighton	Stagecoach	Hourly between 06:50 - 20:00
	270	East Grinstead - Brighton	Metrobus	Hourly between 07:00 - 19:00
	271	Crawley - Kemp Town	Metrobus	Hourly between 05:30 - 20:00
	272	Crawley - Kemp Town	Metrobus	Hourly between 07:00 - 09:00 followed by mostly one service every two hours between 10:00 - 22:00
	273	Crawley - Brighton	Metrobus	Seven services a day (one service per hour during peak hours)
Barrhill Avenue				

Bus Stop	Service	Destination	Operator	Weekday Frequency
	5	Hangleton - Patcham	Brighton & Hove Bus and Coach Company	Average of three services per hour during 05:30 - 00:00
	5A	Hangleton - Patcham	Brighton & Hove Bus and Coach Company	Hourly service between 07:00 - 10:00 followed by three services per hour between 10:00 - 20:00 and one service per hour between 20:00 - 23:00
	N5	Hangleton - Hollingbury	Brighton & Hove Bus and Coach Company	Two services per day between 01:00 - 03:00

Source: Traveline.info, accessed 7/4/22

2.4.2 Train

2.4.2.1 Preston Park Station

The nearest station to the site is Preston Park Railway Station, which is located approximately 2.7 kilometres away. It can be reached in approximately 33 minutes on foot along the A23 London Road, 10 minutes via bike along NCN 20, or 12 minutes via bus during the AM and PM peak hours. The station has 20 bicycle parking spaces, is located close to a bus stop, and has lost property facilities, toilets and waiting rooms.

The station is managed by Southern Railway and is served by Southern and Thameslink trains running between Brighton, Littlehampton, London Victoria, and London Bridge/Blackfriars. The station is served by three or four trains per hour in each direction.

2.4.2.2 Brighton Station

Brighton Railway Station is located approximately 6 kilometres cycling distance south of the development site which can be reached in approximately 20 minutes via bike or approximately 30 minutes via a bus journey during the AM and PM peak hours. The station provides car parking facilities as well as a 500-cycle parking hub, a cycle repair / maintenance workshop and showers and changing rooms.

The Railway Station is the southern terminus of the Brighton Main Line and is managed by Southern. It is served by Southern, Thameslink, Great Western Railway and Gatwick Express. Trains run to London Victoria, London Bridge and London Blackfriars via Croydon with Thameslink services continuing north of London. Regular services also run providing access through to Seaford and Eastbourne in the east and Littlehampton and Chichester in the west.

Table 2.3 provides an outline of key services at Brighton Railway Station.

Table 2.3: Brighton Railway Station Services

Operator	Route
Southern	Hove - Worthing - Littlehampton - Chichester - Havant - Portsmouth
	Hove - Worthing - Littlehampton - Bognor Regis
	Gatwick Airport - East Croydon - Clapham Junction - London Victoria

Operator	Route
	Lewes - Eastbourne - St. Leonards Warrior Square - Hastings - Ore - Ashford International
	Lewes - Seaford
Gatwick Express	Gatwick Airport - London Victoria
Thameslink	Haywards Heath - Three Bridges - Gatwick Airport - Redhill - Purley - East Croydon - London Blackfriars - Farringdon - London St. Pancras International - West Hampstead - St. Albans City - Luton Airport Parkway - Luton - Bedford
	Burgess Hill - Haywards Heath - Balcombe - Three Bridges - Gatwick Airport - East Croydon - London Bridge - London Blackfriars - City Thameslink - Farringdon - London St Pancras International - Finsbury Park - Stevenage - Hitchin - Letchworth Garden City - Baldock - Royston - Cambridge
Great Western Railway	Hove - Shoreham-by-Sea - Worthing - Barnham - Chichester - Havant - Portsmouth - Cosham - Fareham - Southampton - Romsey - Salisbury - Warminster - Dilton Marsh - Westbury - Trowbridge - Bradford-on-Avon - Avoncliff - Bath Spa - Oldfield Park - Bristol

Source: National Rail website accessed August 2020 and Trainline website access July 2022

2.5 Car-Share

Car sharing represents an alternative travel mode whilst potentially lowering the overall mileage and take-up of single occupancy car journeys.

The local car club scheme in Brighton & Hove is operated by Enterprise. Further information can be found at: [Enterprise Car Club - Automated Daily & Hourly Car Rental across the UK](#).

2.6 Personal Injury Collision Data

Personal Injury Collision (PIC) Stats19 data has been obtained from Sussex Safer Roads Partnership for the last five-year period (2018-2022) to provide a robust dataset for an assessment of road and pedestrian safety within the study area. Table 2.4 provides a summary of this data over the five year period.

Table 2.4: Personal Injury Collision Data Summary

All Vehicles	2018	2019	2020	2021	2022
Slight	7	8	1	3	11
Serious	0	2	0	6	2
Fatal	0	0	1	0	0
Total	7	10	2	9	13

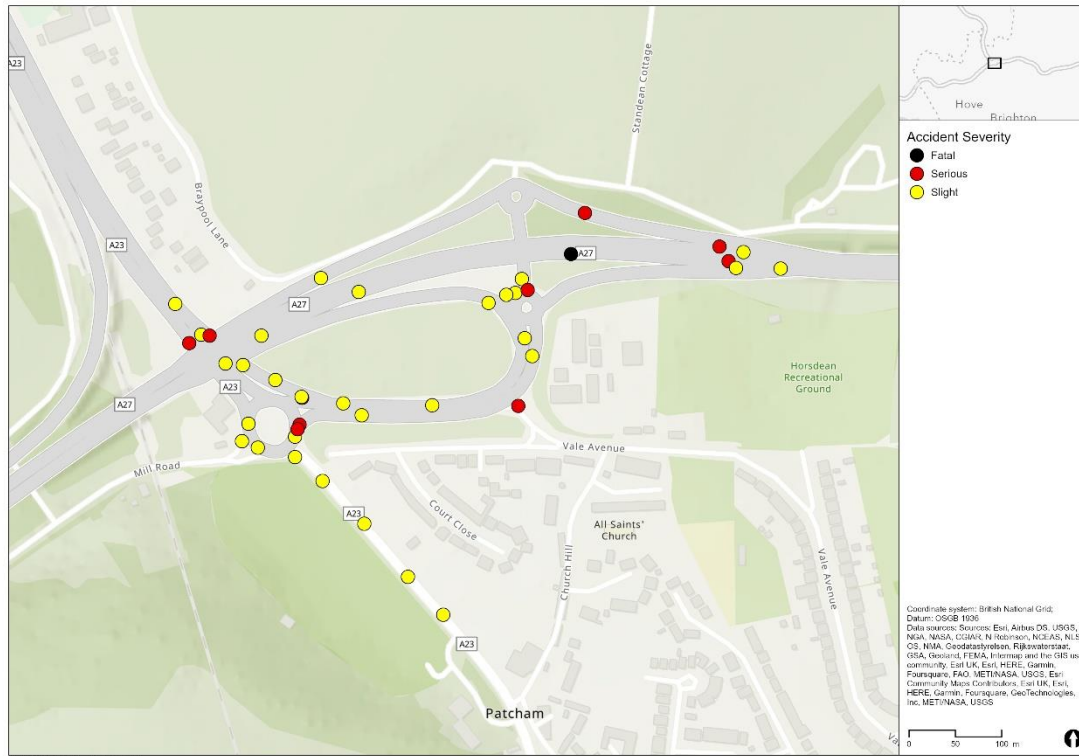
Source: Sussex Safer Roads Partnership, Stats19 data.

This shows that there are no discernible trends in PIC over the five-year period, with a reduction in PID in 2020 due to the traffic impact of the Covid-19 pandemic.

A total of 41 collisions have been identified, 30 of which are classified as slight, 10 classified as serious and one classified as fatal. One of the serious collisions involved a cyclist, but none of

the accidents involved pedestrians. Five of the collisions involved HGVs. The location of these collisions are shown in Figure 2.6.

Figure 2.6: Accident Analysis



Source: Mott MacDonald - Contains OS data © Crown copyright and database rights 2022

The collision data has been analysed to identify any collision clusters in the study area. Collision clusters have been defined as five or more collisions (i.e., one or more collisions per year on average) within a 30m radius.

A total of 2 collision clusters were identified in the following locations:

- A27 westbound off slip/A27 Overbridge/A27 Link Road junction – five accidents within the five-year period. Four of which are slight and one of which is serious.
- A23 London Road/A27 Link Road/Mill Road junction - five accidents within the five-year period. two of these collisions have been classed as slight and three were classed as serious.

The location of these clusters and accidents are shown in Figure 2.7.

3 Policy Review

3.1 Introduction

The national and regional / local planning policies considered relevant to the proposed development have been summarised below.

3.2 National Policy

3.2.1 National Planning Policy Framework (2021)

The National Planning Policy Framework (NPPF) sets out the Government's planning policies for England and how these are expected to contribute to the achievement of sustainable development.

Chapter 9 focuses on promoting sustainable transport. It begins with Paragraph 104 stating that transport issues should be considered from the earliest stages of plan-making and development proposals in order to:

- Address the potential impacts of development on transport networks.
- Identify, pursue, and promote walking, cycling and public transport use.
- Identify, assess, and consider the environmental impacts of traffic and transport infrastructure; and
- And consider the patterns of movement, streets, parking, and other transport in order to influence the design of schemes and contribute to producing high quality places.

Paragraph 109 states that when assessing specific applications for development, it should be ensured that:

- Appropriate opportunities to promote sustainable transport modes can be – or have been taken up, given the type of development and its location.
- Safe and suitable access to the site can be achieved for all users; and
- Any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety can be cost effectively mitigated to an acceptable degree.

A Travel Plan has been submitted in support of the planning application. There are several measures and incentives in the Travel Plan that ensure that there are opportunities for visitors/staff to travel to and from the site in a sustainable manner, and that sustainable modes of travel will be promoted and incentivised.

Safe and suitable access has been ensured by designing the site access in line with the Design Manual for Roads and Bridges (DMRB). An accident analysis has been undertaken to identify any accident risk present. Safe access for pedestrians has also been provided with a number of pedestrian focussed design features.

Junction capacity assessments have been completed for five junctions within the agreed study area. Any significant impacts from development traffic on these junctions is identified in the following sections of this report and will be mitigated accordingly.

It is made clear in Paragraph 111 that development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe.

Paragraph 112 sets out that applications for development should:

- Prioritise pedestrian and cycle movements, both within the scheme and with neighbouring areas; and second – so far as possible – to facilitating access to high quality public transport, with layouts that maximise the catchment area for bus or other public transport services, and appropriate facilities that encourage public transport use.
- Address the needs of people with disabilities and reduced mobility in relation to all modes of transport.
- Create places that are safe, secure, and attractive – which minimise the scope for conflicts between pedestrians, cyclists, and vehicles, avoid unnecessary street clutter, and respond to local character and design standards; and
- Allow for the efficient delivery of goods, and access by service and emergency vehicles.

The proposals include adequate cycle infrastructure such as cycle parking, safe storage and showering facilities. The site is well connected to public transport, with the nearest bus stop to the site 0.2 miles away.

Furthermore, adequate disabled parking and storage facilities will be provided on site, and there will be multiple HGV loading bays to allow for the efficient delivery of goods. The site access, and internal layout of the site has been designed to DMRB standards and in a manner that provides sufficient width to accommodate all types of emergency vehicles.

3.2.2 National Planning Practice Guidance: Travel Plans, Transport Assessments and Statements (2014)

The National Planning Practice Guidance (NPPG) provides the overarching guidance framework within which the transport implications of development should be considered. It provides advice on the preparation of Transport Assessments, Transport Statements and Travel Plans. The key advice is as follows:

“Travel Plans, Transport Assessments and Statements are all ways of assessing and mitigating the negative transport impacts of development in order to promote sustainable development. They are required for all developments which generate significant amounts of movements.”

Key principles that should be taken into account in preparing a Travel Plan, Transport Assessment or Transport Statement are provided as follows:

“Travel Plans, Transport Assessments and Statements should be:

- *proportionate to the size and scope of the proposed development to which they relate and build on existing information wherever possible.*
- *established at the earliest practicable possible stage of a development proposal.*
- *be tailored to particular local circumstances (other locally determined factors and information beyond those which are set out in this guidance may need to be considered in these studies provided there is robust evidence for doing so locally).*
- *be brought forward through collaborative ongoing working between the local planning authority/transport authority, transport operators, rail network operators, Highways Agency where there may be implications for the strategic road network and other relevant bodies. Engaging communities and local businesses in Travel Plans, Transport Assessments and Statements can be beneficial in positively supporting higher levels of walking and cycling (which in turn can encourage greater social inclusion, community cohesion and healthier communities).”*

Further detail on specific contents, methods and information that should be included within each document is detailed within the guidance document.

This Transport Assessment has been produced in line with this guidance and is tailored to the particular local circumstances.

3.2.3 DfT Circular 02/2013 – The Strategic Road Network and the Delivery of Sustainable Development

The DfT Circular 02/2013 sets out the way in which the Highways Agency will engage with communities and the development industry to deliver sustainable development whilst safeguarding the primary function and purpose of the strategic road network.

The document states that development proposals are likely to be acceptable if they can be accommodated within the existing capacity of a section (link or junction) of the strategic road network, or they do not increase demand for use of a section that is already operating at over-capacity levels, taking account of any travel plan, traffic management and/or capacity enhancement measures that may be agreed. Development will only be refused on transport grounds where the residual cumulative impacts of development are severe.

The DfT Circular 02/2013 states that in order to assess the impact of the development, the overall forecast demand should be compared to the ability of the existing network to accommodate traffic over a period of up to ten years after the date of registration of a planning application or the end of the relevant Local Plan, whichever is the greater. Within this Transport Assessment the development impact has been assessed for the forecast opening year (2026) and 10 years after the registration of the planning application (2032).

The assessment of the development impact shows that the overall forecast demand at the time of opening the development can be accommodated by the existing infrastructure, and therefore further capacity mitigation will not be sought in accordance with DfT Circular 02/2013.

3.3 Regional / Local Policy

3.3.1 Brighton & Hove City Council Local Transport Plan 4 (March 2015)

The BHCC Local Transport Plan 4 (LTP4) was approved at Full Council in March 2015 (the BHCC Local Transport Plan 5 to deliver the 2030 transport vision for the city is currently in development).

The Connected City's Transport Partnership vision which has become the vision of the LTP4 is as follows: "We want to continue to develop an integrated and accessible transport system that is well-maintained and enables people to travel around and access services as safely and freely as possible, while minimising damage to the environment and contributing to making our city a safer, cleaner, quieter, healthier and more attractive place".

The LTP4 outlines a delivery plan which sets out how the council plans to work towards "meeting its long-term transport goals and objectives relating to the economy, carbon reduction, safety and security, health & well-being, equality & accessibility, public realm and respect & responsibility". The Delivery Plan adopts three main approaches to delivering investment within the city's transport network which are summarised below:

- Maintaining and renewing the transport network and its infrastructure.
- Managing movement on the transport network, informing people's travel choices, and changing travel behaviour.

- Improving sustainable and accessible transport infrastructure, connections, information, and options to link people with places / communities and provide a safer and more attractive environment.

A Travel Plan has been submitted in support of the planning application. There are several measures and incentives in the travel plan that ensure that there are opportunities for visitors/staff to travel to and from the site in a sustainable manner and that sustainable modes of travel will be promoted and incentivised.

The Travel Plan will be used throughout the occupation of the site to manage and inform staff travel choices and change travel behaviour to using more sustainable modes.

3.3.2 Brighton & Hove City Plan Part One: Brighton & Hove City Council's Development Plan (March 2016)

The City Plan Part 1 strategy provides the overarching strategy for emerging Neighbourhood Plans and is to be followed by the City Plan Part Two which is expected to outline the remaining site allocations and development management policies for Brighton and Hove. The policies in the City Plan which comprise of development and special area policies as well as city-wide policies will help to ensure that there are enhanced links for the local communities to key employment and skills opportunities.

Policy CP9 Sustainable Transport states that the council will work with partners, stakeholders and communities to provide an *"integrated, safe and sustainable transport system that will accommodate new development; support the city's role as a sub-regional service and employment hub and improve accessibility to promote and provide measures that will help to manage and improve mobility and lead to a transfer of people and freight onto sustainable forms of transport to reduce the impact of traffic and congestion, increase physical activity and therefore improve people's health, safety and quality of life"*. Such measures include the following:

- Ensuring the priorities of the Transport Strategy are delivered within the city by:
 - Directing significant development into areas with good sustainable transport links and ensuring that major development will be located in areas where measures can be taken to secure accessibility improvements for all.
 - Improving access to significant uses, facilities, and services by supporting or providing sustainable transport measures (public transport, cycle and pedestrian and wheelchair friendly); and
 - Ensuring that all new, major development schemes submit a TA to identify the likely effects of the demand for travel they create and include measures to mitigate their impacts by reducing car use, implementing agreed Travel Plans.

The site access has been redesigned to provide suitable access for motorised vehicles. A number of pedestrian and cycling facilities have also been provided as part of the development to improve sustainable access. A number of measures have also been set out within the Travel Plan which promote and incentivise sustainable modes for staff.

This TA sets out the forecast impacts of trips generated by the site, and there are a number of measures implemented to sustain these trips for all modes.

- The following transport measures will be undertaken to manage the demand for travel within and to/from the city and deliver the Transport Strategy priorities:
 - Ensuring that sustainable transport infrastructure is in place to enable the introduction of rapid/express bus-based services with both east-west and north-south routes by 2024;

- Working with communities and partners to promote and provide measures including car clubs, promote the use of alternative fuels and provide associated equipment (electric charging points);
- Promote cycling and walking as ‘active travel’ by providing advice and information to residents and workers; and
- Working with partners to increase and implement travel and mobility management measures such as workplace travel plans to encourage more journeys by sustainable transport to reduce the number of car journeys to, from and within the city.

There are a number of measures and incentives in the Travel Plan submitted with the application that ensure that there are opportunities for visitors/staff to travel to and from the site in a sustainable manner and that sustainable modes of travel will be promoted and incentivised. Liftshare have also been consulted as part of the Travel Plan, to put car share measures in place, and a number of EV charging bays are proposed.

3.3.3 Brighton and Hove City Plan Part Two: Brighton & Hove City Council’s Development Plan (October 2022)

The role of the City Plan Part Two is to support the implementation and delivery of City Plan Part One; to complement the strategic policy framework; to identify and allocate additional development sites and to set out a detailed development management policy framework to assist in the determination of planning applications.

Policy DM33 – Safe, Sustainable and Active Travel states that the council will promote and provide for the use of sustainable transport and active travel by prioritising walking, cycling and public transport in the city. New developments should be designed in a way that is safe and accessible for all users, and encourages the greatest possible use of sustainable and active forms of travel.

The proposed development has been designed to provide safe, comfortable and convenient access for all pedestrians and cyclists irrespective of their level of personal mobility and cognition. A number of pedestrian crossings and ramps will be provided within and around the site. Pedestrian/wheelchair access will also be improved through a crossing provided on Vale Avenue. The location of the crossing gives consideration to pedestrian desire lines and is convenient and safe to use.

The proposed development has also been designed with sufficient levels of cycle parking facilities in line with Parking Standards for New Development, which are universally accessible, under cover, secure, convenient to use, well lit, and as close to the main entrance as possible. Communal cycle maintenance facilities, workplace showers, lockers, and changing facilities will also be provided.

The policy states that all new development should be located and designed to provide good access to public transport services and facilities. The site is located in close proximity to a number of bus stops and routes.

This document has been prepared in accordance with Policy DM 35, which states that all proposals should include appropriate measures to ensure that journeys by private car are minimised and to make the greatest possible use of sustainable travel.

3.3.4 Brighton & Hove City Council - SPD 14: Parking Standards (October 2016)

The Brighton & Hove City Councils’ Supplementary Planning Document Parking Standards provides guidance on the appropriate provision of parking at all new developments in the city.

Table 3.1 below sets out the outlined parking standards applicable to the proposed development against which all new development within the city will be reviewed.

Table 3.1: Parking Standards

Land Use	Parking Standard	
	Parking Type	Outer Areas
B8 Storage or Distribution		
Car		1 space per 150m ²
Cycle		1 space plus 1 space per 350m ² (Long Stay) Showers and changing facilities should be provided for all industrial developments of 500m ² and above. Facilities should be provided on the basis to cater for a minimum of 10% of staff
Disabled User Parking		0 - 200 bays: individual bays for each disabled employee where known plus 2 bays or 5% of total capacity whichever is greater. Over 200 bays: 6 bays plus 2% of total capacity
Servicing		On-site servicing provision provided
Motorcycle		Major developments based on at least 5% of the maximum total car parking standard. Minor developments provision provided on a case by case basis.

Parking has been provided in line with the standards above. The total parking numbers, EV charging spaces, disabled spaces and motorcycle spaces are set out in Section 4 of this document.

4 Proposed Development

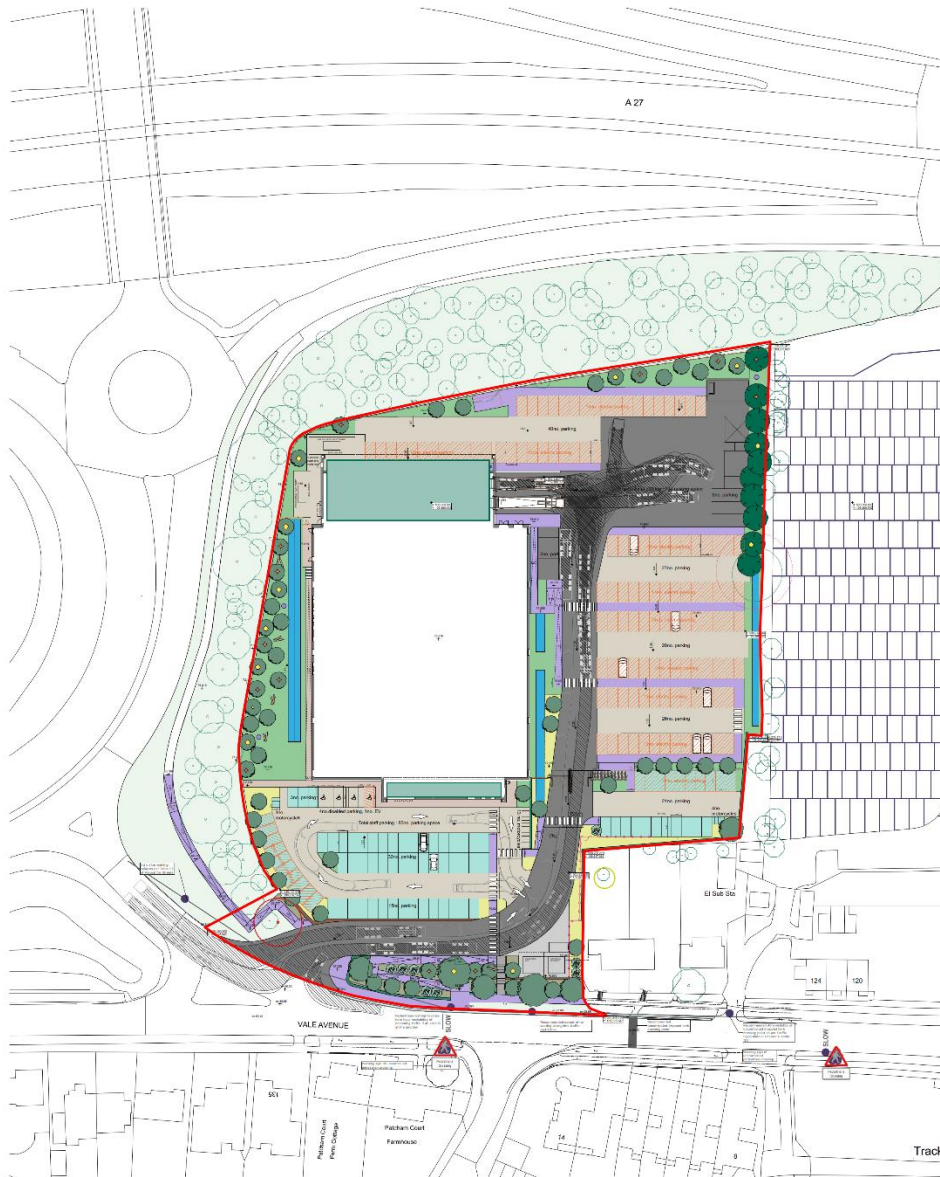
4.1 Proposal

The proposed development consists of the demolition of existing buildings, and erection of a storage and distribution building (Use Class B8) with associated access, parking, landscaping, re-grading of land, enclosures, and infrastructure works including two substations and an express vehicle maintenance facility.

The new Royal Mail Delivery Office (DO) will be constructed to the north of Vale Avenue on land currently occupied by Patcham Court Farm. The building will comprise 4,145 sqm of B8 floorspace, with ancillary offices, a service yard, car, red fleet, and HGV parking and site access. The DO will replace the existing DOs at North Road, Brighton and Denmark Villas, Hove.

Incoming mail would be delivered by HGVs before being distributed out during the daytime by the RMG fleet. It is not expected that the facility will include a Customer Service Point. It is anticipated that some of the delivery routes in Brighton City Centre will be served by High Capacity Trolleys (HCTs) from a base in Brighton City Centre. Figure 4.1 shows the masterplan for the proposed development.

Figure 4.1: Proposed Masterplan

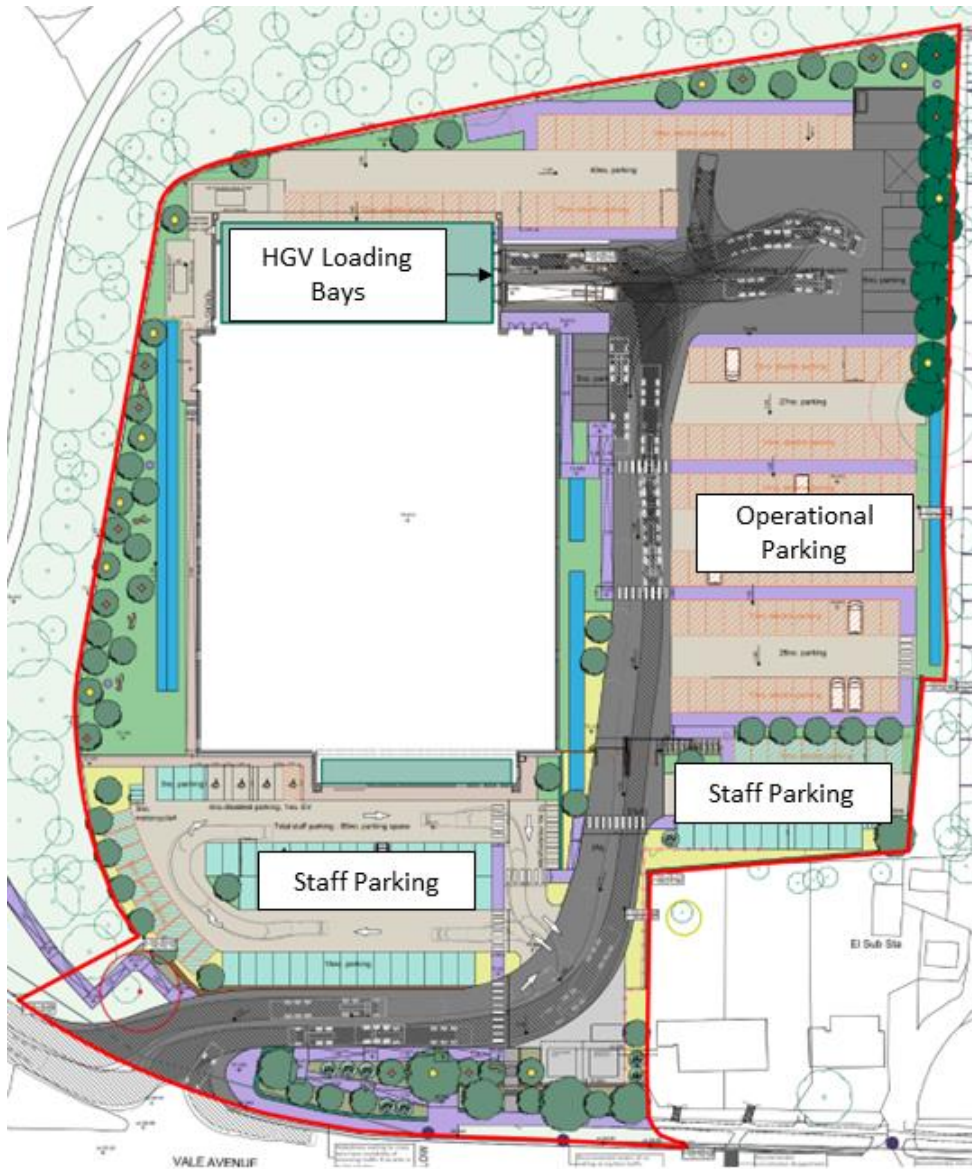


Source: HLM Architects

4.2 Highways Access

The proposed site access has been relocated approximately 60m to the west of the existing site access. The access junction is a four arm priority controlled junction with Vale Avenue. Dropped kerb crossings will be provided on the new site access arm, which will be set back from the stop line to provide sufficient visibility splays for pedestrians. The junction has been designed to DMRB standards so that there is sufficient width for HGVs and emergency vehicles to turn towards the A27 Link Road. There is also sufficient space provided within the site access arm for up to two HGVs to turn into the site and wait without blocking back onto Vale Avenue. The site access junction is shown in Figure 4.2. The vehicle tracking drawings for the site access junction are provided in Appendix B.

Figure 4.3: Parking Layout



Source: HLM Architects/Mott MacDonald

A breakdown of the proposed parking numbers is shown in Table 4.1.

Table 4.1: Parking Summary

Parking Area	Type of Parking	Number of Spaces
Staff Car Park	Total Car Parking	85
	Disabled Spaces (included within total spaces)	4
	Electric Vehicle Charging (included within total spaces)	21 (including 1 EV disabled space)
	Motorcycle spaces	20
Operational Car Park	Total Operational Parking	132
	Operational Electric Vehicle Charging (included within total spaces)	121

Parking Area	Type of Parking	Number of Spaces
	7.5t van spaces	3
Cycle Parking	Total Cycle Parking	40

This shows that the proposed development will provide sufficient levels of disabled, EV charging, and cycle spaces to satisfy BHCC parking guidelines. Disabled spaces are provided as close as possible to the main entrance of the DO, to the south of the main building in accordance with TAL5/95 guidance.

Operational parking provision has been determined based on the number of red fleet vehicles anticipated at the site. Section 7.3.1 includes an assessment of the staff parking provision against the trip generation and parking accumulation figures.

4.4 Non-Motorised User Access

Pedestrian access is provided from Vale Avenue, opposite the Vale Avenue/Church Hill junction. An uncontrolled dropped kerb crossing over Vale Avenue will be provided to the east of the pedestrian site access. This will include tactile paving and will provide a safe pedestrian crossing point over Vale Avenue. The crossing point has been provided here, rather than directly outside the pedestrian access due to visibility issues for oncoming traffic, in the event that a vehicle is waiting to turn into the site.

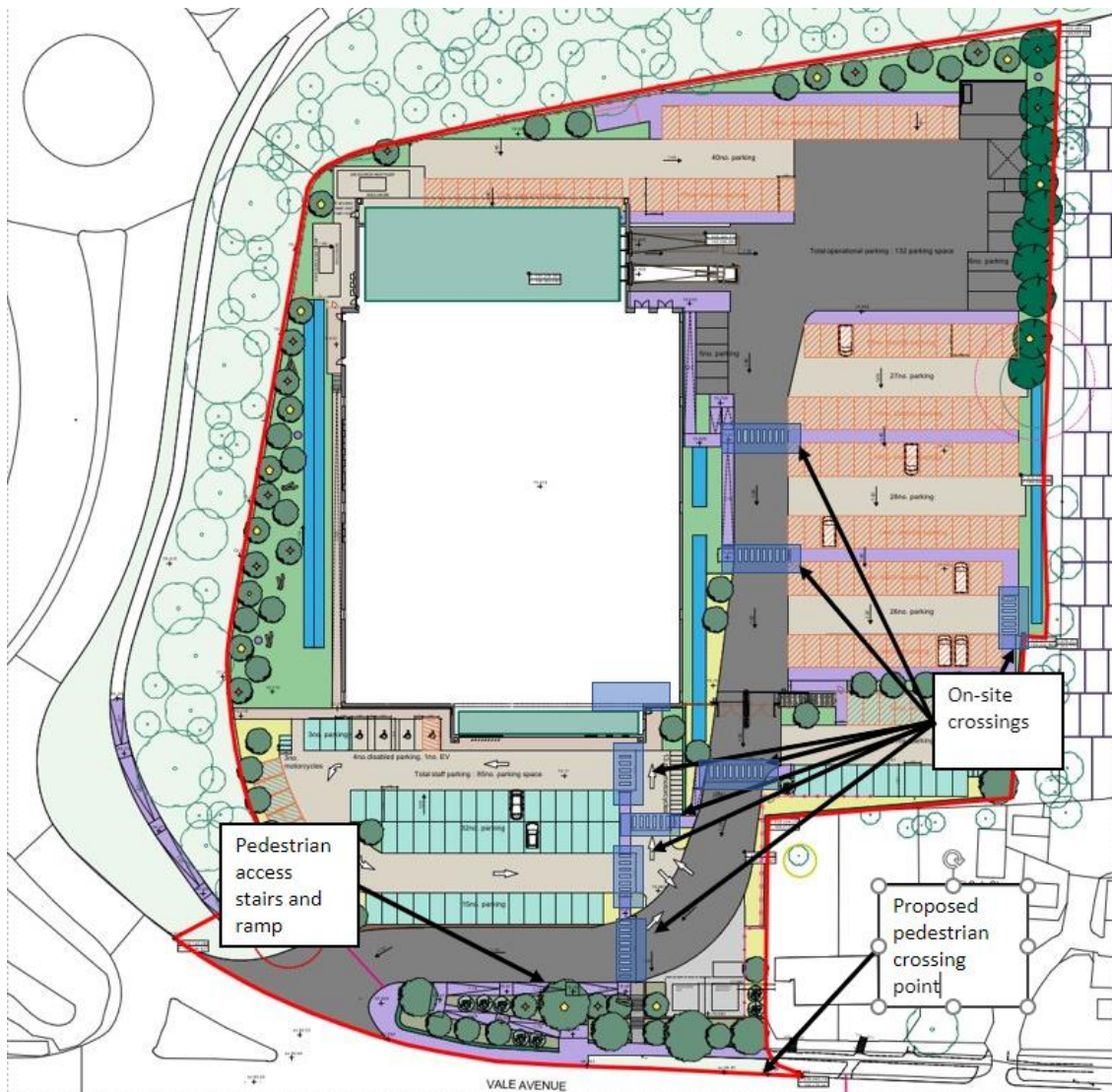
Stairs will be provided to overcome the elevation change between the Vale Avenue footway and the site, and a ramp will be provided for disabled access. A series of three crossing points between the stairs/ramp and main entrance are provided across the site access road and car park to ensure safe pedestrian access to the DO.

Crossing points between the operational car parking spaces and the eastern entrance of the DO building are also provided. An access ramp is also provided from these crossings to the eastern entrance.

Cycle access can be gained on road through the main site access junction, to the cycle parking located to the east of the main building entrance. Showers and Lockers will be provided on-site, a proportion of which will include charging points to charge electric bicycle batteries.

The non-motorised user (NMU) access arrangements are shown in Figure 4.4.

Figure 4.4: Non-Motorised User Access Arrangements



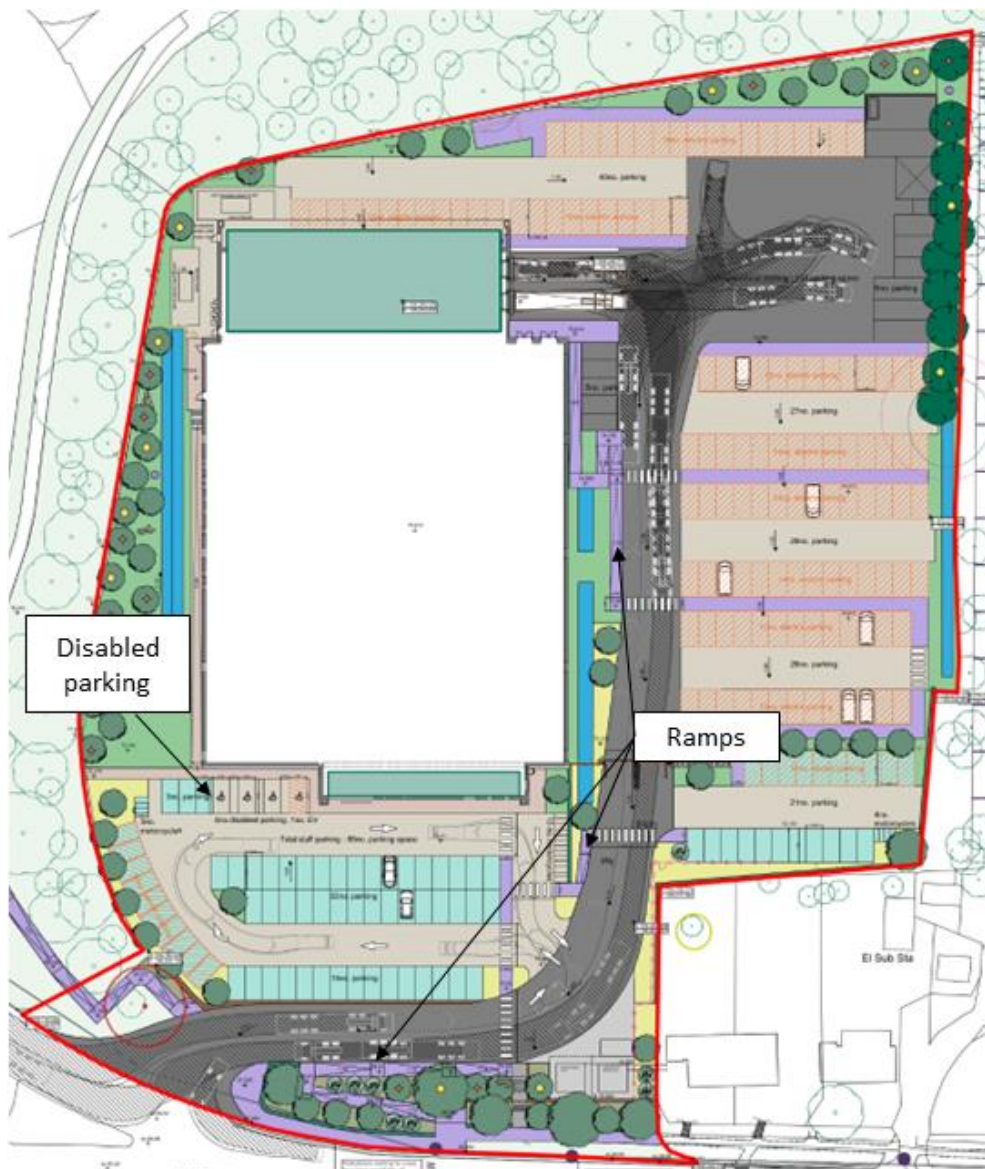
Source: HLM Architects/Mott MacDonald

4.5 Inclusive Access

The development would offer 4 disabled parking spaces located in the staff car park. These would be located to the west of the DO entrance. A number of ramps around the site would be provided to ensure inclusive access to all parts of the site. Wheelchair access routes from the accessible spaces to the building entrance and the accessible shower/WC will include suitable doorway widths to accommodate wheelchair users.

These facilities are shown in Figure 4.5.

Figure 4.5: Inclusive Access Facilities



Source: HLM Architects/Mott MacDonald

An Equality Impact Assessment report has been prepared which is submitted alongside this application.

4.6 Servicing

Waste will be stored to the north west of the site, and will be collected from this location by refuse vehicles. Refuse vehicles will access the site through the main site access. It is anticipated that waste collection will be infrequent and there will be a minimal number of waste collection trips to the site.

Other servicing vehicles will also access the site through the main site access. These vehicles will park in the operational bays, where there is likely to be spare capacity during the daytime. Servicing trips are also likely to be infrequent. Waste storage and refuse collection points are shown in Figure 4.6.

Figure 4.6: Waste Storage and Refuse Collection Points



Source: HLM Architects/Mott MacDonald

5 Trip Generation

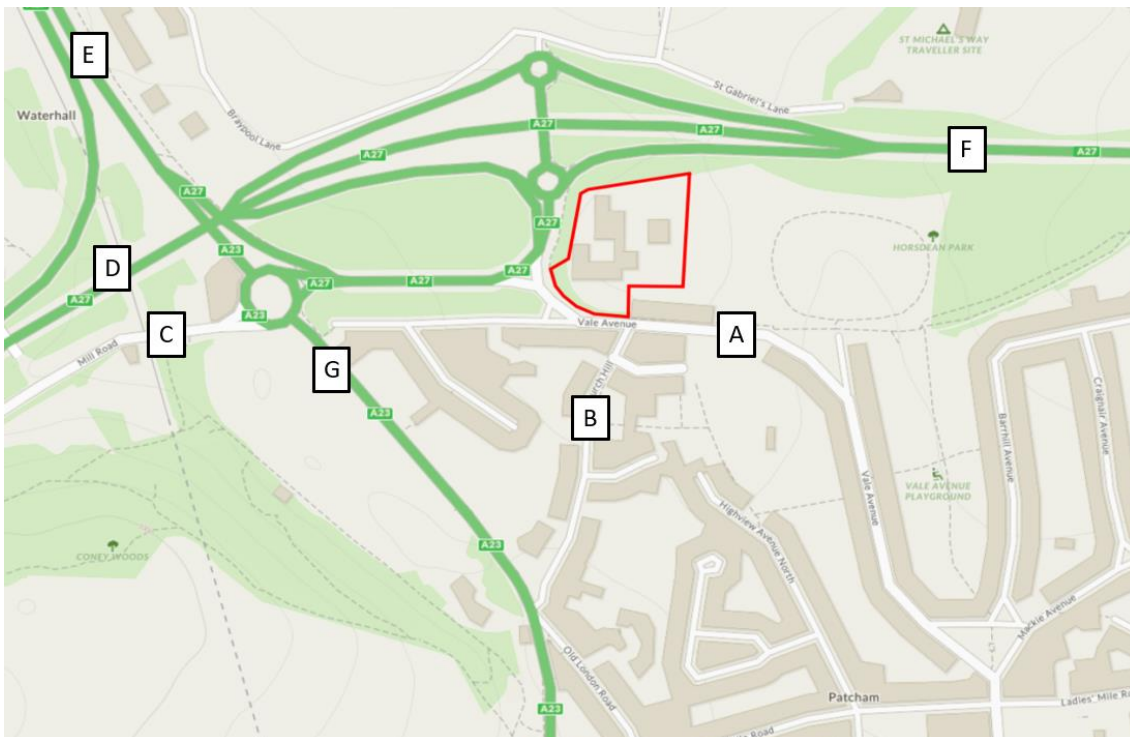
5.1 Trip Generation Methodology

5.1.1 Introduction

Due to the bespoke nature of proposed operations at the site, it has been agreed with BHCC and National Highways during pre-application discussions that a bespoke trip generation methodology, commensurate with the proposed operation of the site, is appropriate for the Transport Assessment.

In order to calculate the total trip generation for the proposed development, data for staff trips, HGV deliveries, and red fleet trips for both the existing DOs and proposed DO have been calculated separately. These vehicle trips have been distributed onto the network shown in Figure 5.1. The trips generated by the existing DOs have been taken from the network, whilst trips generated by the proposed DO have been added onto the network to calculate the overall trip generation for the proposed development.

Figure 5.1: Study Area and Distribution Zones



Source: Contains OS data © Crown copyright and database rights 2022

The following sub-sections show how this trip generation exercise was undertaken.

Royal Mail are currently in ongoing discussions with their workers regarding staff working hours, at the time of writing this report no agreement has been reached to amend the current operational hours. For transparency, a 'sensitivity test' has been undertaken on the proposed working hours for the Brighton & Hove, and subsequently Patcham, delivery offices. The proposed working hours are a 90-minute shift later in the day than the current working hours.

The full 'sensitivity test' can be found in Appendix C which presents a separate trip generation, distribution and impact assessment in the 'sensitivity test' scenario.

5.1.2 Existing Brighton and Hove Delivery Office Trips

5.1.2.1 Existing Staff Trips

To calculate the existing staff trips to/from the Brighton and Hove DOs, the following data was provided by Royal Mail Group (RMG) in March 2023 or collected from the staff travel surveys undertaken at each site:

- 230 staff trips to/from the sites per day
 - 156 to/from Brighton DO
 - 74 to/from Hove DO
- Staff clock-in/clock-out logs
- Mode share of staff trips at each site
- Staff postcode data

An arrival/departure profile for the 230 staff trips has been calculated using the staff clock-in/clock-out logs, and these trips have been applied to the staff mode share which was collected from the staff travel surveys undertaken at each site. The resulting existing staff trip generation by mode of transport is shown in Table 5.1 below.

Table 5.1: Existing Staff Trip Generation

Time	Bus		Car (driver)		Car (passenger)		Cycle		Motorcycle		Train		Walk		Other		Total		
	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	
00:00-01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00-02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00-03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00-04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00-05:00	1	0	3	0	0	0	1	0	0	0	0	0	2	0	0	0	0	8	0
05:00-06:00	2	0	5	0	0	0	2	0	1	0	0	0	2	0	1	0	13	0	
06:00-07:00	19	0	62	0	3	0	27	0	9	0	4	0	30	0	6	0	159	0	
07:00-08:00	2	0	7	0	0	0	3	0	1	0	0	0	3	0	1	0	17	0	
08:00-09:00	2	0	5	0	0	0	2	0	1	0	0	0	3	0	1	0	14	0	
09:00-10:00	1	0	3	0	0	0	1	0	0	0	0	0	2	0	0	0	8	0	
10:00-11:00	1	0	4	1	0	0	2	0	1	0	0	0	2	0	0	0	9	2	
11:00-12:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	
12:00-13:00	0	0	0	2	0	0	0	1	0	0	0	0	0	1	0	0	0	4	
13:00-14:00	0	1	0	3	0	0	0	1	0	0	0	0	0	2	0	0	1	8	

Time	Bus		Car (driver)		Car (passenger)		Cycle		Motorcycle		Train		Walk		Other		Total		
	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	
14:00-15:00	0	24	0	79	0	3	0	34	0	11	0	6	0	38	0	8	0	0	203
15:00-16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
16:00-17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00-18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:00-19:00	0	1	0	4	0	0	0	2	0	1	0	0	0	2	0	0	0	0	10
19:00-20:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20:00-21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
21:00-22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:00-23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00-00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	27	27	89	89	4	4	38	38	13	13	6	6	43	43	9	9	230	230	

Therefore, of the 230 daily staff trips, 89 are car trips, 43 are walking trips, 38 cycling trips, and 27 are bus trips.

These trips have been distributed onto the local transport networking using the methodology set out within Section 6 below.

5.1.2.2 Existing HGV Trips

To calculate the existing HGV trips to/from the existing Brighton and Hove DOs, a summary of HGV arrivals at each site was provided by RMG. This is shown in Table 5.2.

Table 5.2: Existing HGV Trips

Time	Arrivals	Departures	Total
00:00-01:00	1 17T Lorry	2 17T Lorries	3
01:00-02:00	1 17T Lorry	1 17T Lorry	2
02:00-03:00	1 17T Lorry	1 17T Lorry	2
03:00-04:00	3 17T Lorries	1 17T Lorry	4
04:00-05:00	4 7.5T Lorries	3 17T Lorries	7
05:00-06:00	2 7.5T Lorries	4 7.5T Lorries	6
06:00-07:00	3 17T Lorries and 1 7.5T Lorry	2 7.5T Lorries	6
07:00-08:00	2 17T Lorries	3 17T Lorries and 1 7.5T Lorry	6
08:00-09:00	-	2 17T Lorries	2
09:00-10:00	-	-	0
10:00-11:00	-	-	0
11:00-12:00	-	-	0
12:00-13:00	1 7.5T Lorry	-	1
13:00-14:00	-	1 7.5T Lorry	1
14:00-15:00	2 7.5T Lorries	-	2
15:00-16:00	-	2 7.5T Lorries	2
16:00-17:00	-	-	0
17:00-18:00	1 7.5T Lorry	-	1
18:00-19:00	-	1 7.5T Lorry	1
19:00-20:00	1 7.5T Lorry	-	1
20:00-21:00	-	1 7.5T Lorry	1
21:00-22:00	-	-	0
22:00-23:00	-	-	0
23:00-00:00	2 17T Lorries	-	2
Total	25	25	50

Therefore, there are 25 HGV trips to/from the existing Brighton and Hove DOs per day. 18 of these trips are to/from the Brighton DO, and seven are to/from the Hove site. These trips have been distributed onto the local transport networking using the methodology set out within Section 6 below.

5.1.2.3 Existing Red Fleet Trips

To calculate the red fleet trips to/from the existing Brighton and Hove DOs, a record of red fleet arrivals and departures from each site was provided by RMG on 01/03/2023. A summary of this data is shown in Table 5.3.

Table 5.3: RMG Existing Red fleet Data

Time	Brighton		Hove	
	Arrival	Departure	Arrival	Departure
00:00-00:59				
01:00-01:59				
02:00-02:59				
03:00-03:59				
04:00-04:59				
05:00-05:59				
06:00-06:59				
07:00-07:59		10		4
08:00-08:59				
09:00-09:59	10	45	4	20
10:00-10:59				
11:00-11:59				
12:00-12:59		11		
13:00-13:59				
14:00-14:59	56	16	20	7
15:00-15:59	16	22		
16:00-16:59		27		5
17:00-17:59				
18:00-18:59	27		5	
19:00-19:59	22		7	
20:00-20:59				
21:00-21:59				
22:00-22:59				
23:00-23:59				
Daily	131	131	36	36

Therefore, there are 167 red fleet trips to/from the existing Brighton and Hove DOs. 131 of these trips are to/from the Brighton DO, and 36 are to/from the Hove site. These trips have been distributed onto the local transport networking using the methodology set out within Section 6 below.

5.1.2.4 Total Existing Trip Generation

The total vehicle trip generation for the existing DOs is shown in Table 5.4, which shows two clear traffic peaks, between 09:00 and 10:00 and between 14:00 and 15:00.

Table 5.4: Total Existing Trip Generation

Time	Arrivals	Departures	Total
00:00-01:00	1	2	3
01:00-02:00	1	1	2
02:00-03:00	1	1	2
03:00-04:00	3	1	4
04:00-05:00	7	3	10
05:00-06:00	7	4	11
06:00-07:00	69	2	71

Time	Arrivals	Departures	Total
07:00-08:00	9	18	27
08:00-09:00	6	2	8
09:00-10:00	17	65	82
10:00-11:00	4	1	5
11:00-12:00	0	0	1
12:00-13:00	1	13	14
13:00-14:00	0	4	5
14:00-15:00	78	106	184
15:00-16:00	16	24	40
16:00-17:00	0	32	32
17:00-18:00	1	0	1
18:00-19:00	32	5	37
19:00-20:00	30	0	30
20:00-21:00	0	1	1
21:00-22:00	0	0	0
22:00-23:00	0	0	0
23:00-00:00	2	0	2
Total	286	286	573

In total there are 286 trips to/from the existing site per day. These trips have been distributed onto the network using the methodology in Section 6, which shows that most of the existing DO trips do not travel through the study area for this TA.

5.1.3 Proposed Patcham Delivery Office Trips

5.1.3.1 Proposed Staff Trips

Total Staff Trips

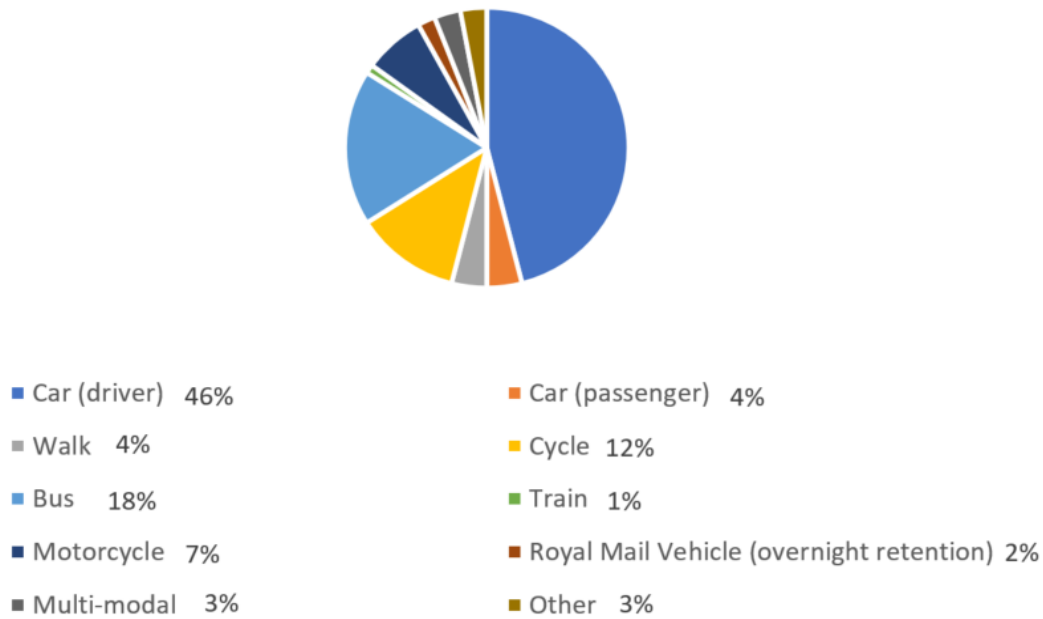
According to information from RMG, it is anticipated that there will be 246 staff trips to/from the proposed Patcham DO per day. These trips per day have been applied to the target mode share for the site which is facilitated by a number of measures set out within the Travel Plan. The methodology for the staff mode share is set out below.

Staff Mode Share

A staff travel survey was undertaken at the existing Brighton and Hove offices for three weeks between Friday 4th March 2022 and Friday 25th March 2022. The data obtained in this survey has been used to forecast the modal split for staff trips generated by the proposed development.

Staff at the Brighton and Hove sites were asked “*what is your expected main mode of travel to work should Royal Mail relocate to Patcham?*”. The responses to this question are set out in Figure 5.2.

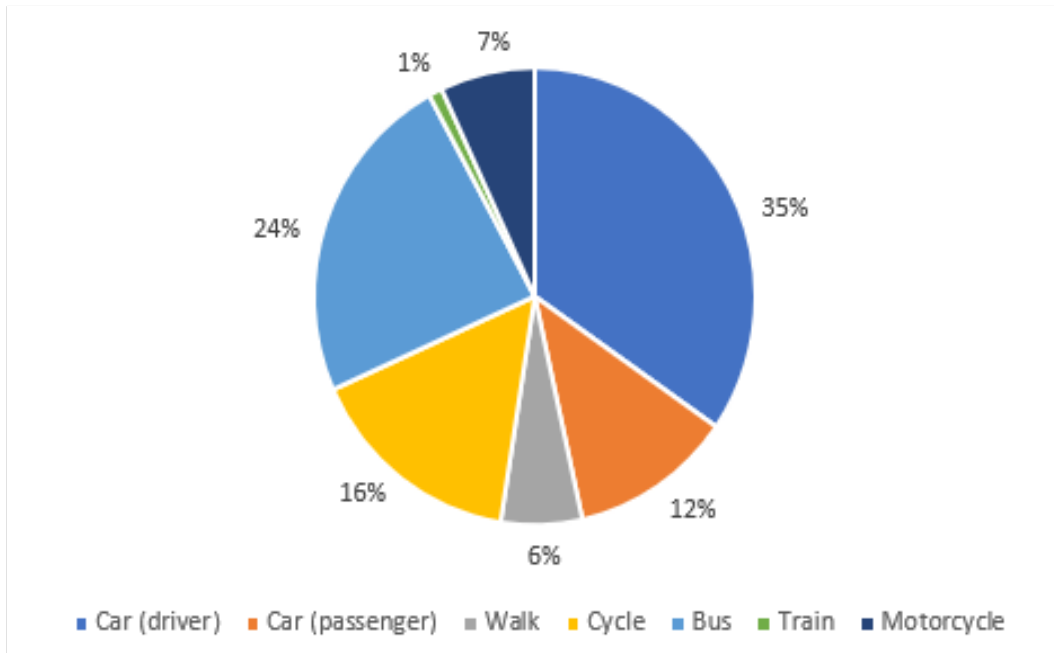
Figure 5.2: Expected main mode of travel to work for the proposed Patcham DO.



The results of the staff travel survey indicate that the most popular expected choice of travel to Patcham is likely to be car (driver), with 46% of staff selecting this.

The data collected from the staff travel survey, has been used alongside staff car parking numbers at the site to derive a target mode share for the site that includes the impacts of the Travel Plan Measures. The target mode share incorporates a shift away from single person car use, with more car sharing, use of public transport, and active travel. The target mode share is shown in Figure 5.3.

Figure 5.3: Target Mode Share



The target mode share shows that car driver is still the most common method of travel (35%). However, this is a smaller share than the expected mode of travel results from the staff travel survey due to the impact of Travel Plan measures. The target mode share also incorporates an increase in the mode share for car passengers and bus trips when compared to the staff travel survey results.

The data obtained through the staff travel survey shows that staff would be more likely to car share or travel by public transport if certain measures and incentives are put in place. Therefore, the target mode share will be the subject of a number of targeted measures and incentives, set out in the Travel Plan.

Discussions with bus companies are underway to explore opportunities for enhancing service provision for the site. The aim of these enhancements would be to facilitate better access to the site during staff shift start/end times.

Proposed Staff Trip Generation

The target mode share above has been applied to the forecast number of staff trips (246), and the total amount of trips generated per mode is shown in Table 5.5 below.

Table 5.5: Proposed Staff Trips

Time	Bus		Car (driver)		Car (passenger)		Cycle		Motorcycle		Train		Walk		Total	
	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep
00:00-00:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00-01:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00-02:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00-03:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00-04:59	2	0	3	0	1	0	1	0	1	0	0	0	1	0	9	0
05:00-05:59	3	0	5	0	2	0	2	0	1	0	0	0	1	0	14	0
06:00-06:59	40	0	59	0	20	0	27	0	12	0	2	0	10	0	170	0
07:00-07:59	4	0	6	0	2	0	3	0	1	0	0	0	1	0	18	0
08:00-08:59	4	0	5	0	2	0	2	0	1	0	0	0	1	0	15	0
09:00-09:59	2	0	3	0	1	0	1	0	1	0	0	0	1	0	9	0
10:00-10:59	2	1	3	1	1	0	2	0	1	0	0	0	1	0	10	2
11:00-11:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
12:00-12:59	0	1	0	1	0	1	0	1	0	0	0	0	0	0	0	4
13:00-13:59	0	2	0	3	0	1	0	1	0	1	0	0	0	1	1	9
14:00-14:59	0	51	0	75	0	26	0	35	0	15	0	2	0	13	0	217
15:00-15:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
16:00-16:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00-17:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:00-18:59	0	3	0	4	0	1	0	2	0	1	0	0	0	1	0	11
19:00-19:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20:00-20:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
21:00-21:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:00-22:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00-23:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Time	Bus		Car (driver)		Car (passenger)		Cycle		Motorcycle		Train		Walk		Total	
	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep
Daily	58	58	85	85	30	30	39	39	17	17	2	2	15	15	246	246

5.1.3.2 Proposed HGV Trips

Proposed HGV trip data has been provided by RMG. Whilst it is assumed that the proposed DO will have a very similar operation to the existing DOs, some of the smaller HGV trips will be consolidated into articulated lorries, meaning that 14 HGV trips to/from the Patcham site are forecast per day. These trips are spread throughout the day as per Table 5.6.

Table 5.6: HGV Trip Profile

Time	Arrivals	Departure	Total
00:00-00:59		1 Articulated Lorry	1
01:00-01:59			0
02:00-02:59	1 Articulated Lorry		1
03:00-03:59		1 Articulated Lorry	1
04:00-04:59	2 Articulated Lorries		2
05:00-05:59		2 Articulated Lorries	2
06:00-06:59	1 Articulated Lorry and 1 7.5T lorry		2
07:00-07:59	2 17T lorries	1 Articulated Lorry and 1 7.5T lorry	4
08:00-08:59			0
09:00-09:59		2 17T lorries	2
10:00-10:59			0
11:00-11:59			0
12:00-12:59	1 7.5T lorry		1
13:00-13:59		1 7.5T lorry	1
14:00-14:59	1 17T lorry		1
15:00-15:59	1 7.5T lorry and 1 17T lorry	1 17T lorry	3
16:00-16:59		1 7.5T lorry and 1 17T lorry	2
17:00-17:59			0
18:00-18:59	1 17T lorry		1
19:00-19:59	1 7.5T lorry	1 17T lorry	2
20:00-20:59		1 7.5T lorry	1
21:00-21:59			0
22:00-22:59			0
23:00-23:59	1 Articulated Lorry		1
Daily	14	14	28

The two 17T lorry arrivals at 07:00-07:59 will be refilled with post/parcels at Patcham and will depart the site at 09:00-09:59 in order to transport post/parcels that have been processed at the Patcham site to the HCT base in the centre of Brighton. These vehicles will then leave the HCT base at 10:00-10:59 and will travel back to Gatwick Mail Centre, which is the mailing office that serves Brighton and Hove.

5.1.3.3 Proposed Red fleet Trips

RMG have confirmed that there will be 15 additional red fleet trips to/from the Patcham DO when compared to the existing DOs. This is because HCTs are currently used for some routes in Hove, which is not feasible when operations are moved to Patcham. The operating hours are

assumed to be the same and a HCT base is going to be used in Brighton centre. Therefore, the red fleet trips for the Patcham site are summarised in Table 5.7.

Table 5.7: Proposed Red fleet Trips

Time	Arrivals	Departure	Total
00:00-00:59	0	0	0
01:00-01:59	0	0	0
02:00-02:59	0	0	0
03:00-03:59	0	0	0
04:00-04:59	0	0	0
05:00-05:59	0	0	0
06:00-06:59	0	0	0
07:00-07:59	0	14	14
08:00-08:59	0	0	0
09:00-09:59	14	80	94
10:00-10:59	0	0	0
11:00-11:59	0	0	0
12:00-12:59	0	11	11
13:00-13:59	0	0	0
14:00-14:59	91	23	114
15:00-15:59	16	22	38
16:00-16:59	0	32	32
17:00-17:59	0	0	0
18:00-18:59	32	0	32
19:00-19:59	29	0	29
20:00-20:59	0	0	0
21:00-21:59	0	0	0
22:00-22:59	0	0	0
23:00-23:59	0	0	0
Daily	182	182	364

5.1.3.4 Total Proposed Vehicle Trip Generation

The total vehicle trip generation for the proposed DO is shown in Table 5.8, which shows two clear traffic peaks, between 09:00 and 10:00 and between 14:00 and 15:00.

Table 5.8: Total Proposed Trip Generation

Time	Arrivals	Departures	Total
00:00-01:00	0	1	1
01:00-02:00	0	0	0
02:00-03:00	1	0	1
03:00-04:00	0	1	1
04:00-05:00	5	0	5
05:00-06:00	5	2	7
06:00-07:00	62	0	62
07:00-08:00	8	16	24
08:00-09:00	5	0	5
09:00-10:00	17	82	99

Time	Arrivals	Departures	Total
10:00-11:00	3	1	4
11:00-12:00	0	0	1
12:00-13:00	1	13	14
13:00-14:00	0	4	4
14:00-15:00	92	99	191
15:00-16:00	18	23	41
16:00-17:00	0	34	34
17:00-18:00	0	0	0
18:00-19:00	33	4	37
19:00-20:00	30	1	31
20:00-21:00	0	1	1
21:00-22:00	0	0	0
22:00-23:00	0	0	0
23:00-00:00	1	0	1
Total	282	282	565

In total there are 282 forecast trips to/from the proposed site on an average weekday.

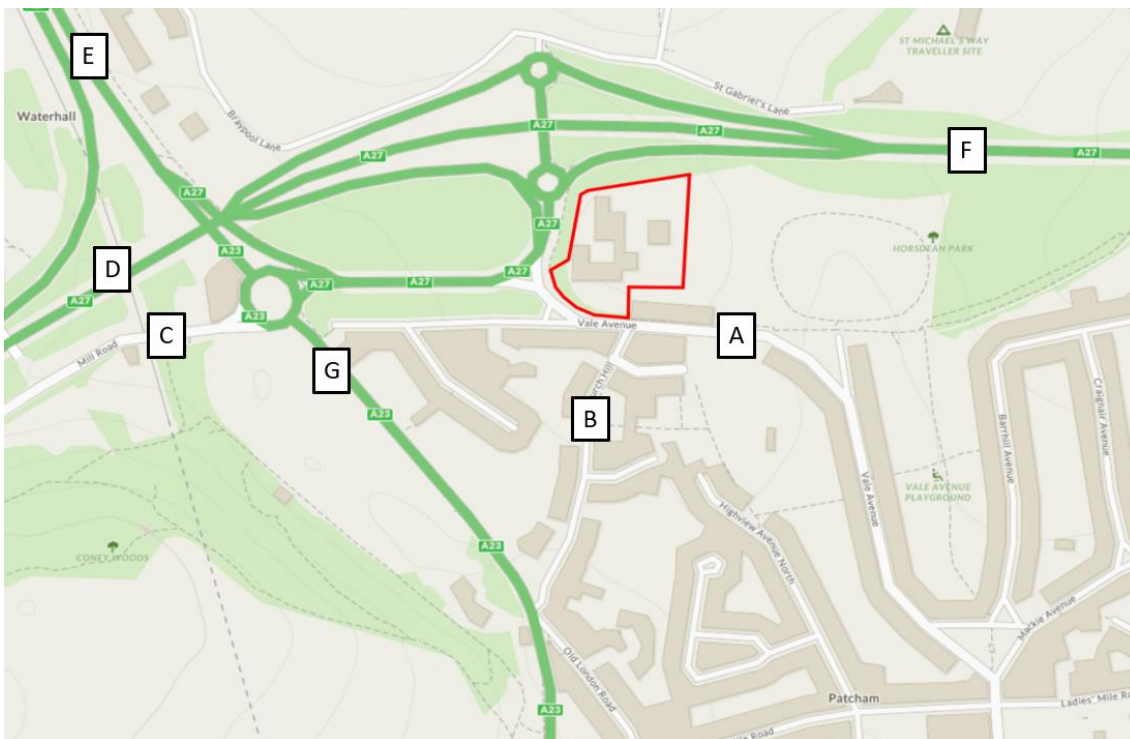
6 Trip Distribution

6.1 Vehicle Trip Distribution

6.1.1 Introduction

The vehicle trips generated by the existing and proposed DOs have been distributed onto the network shown in Figure 6.1. The trips generated by the existing DOs have been taken from the network, whilst trips generated by the proposed DO have been added onto the network to calculate the overall trip generation for the proposed development.

Figure 6.1: Study Area and Distribution Zones



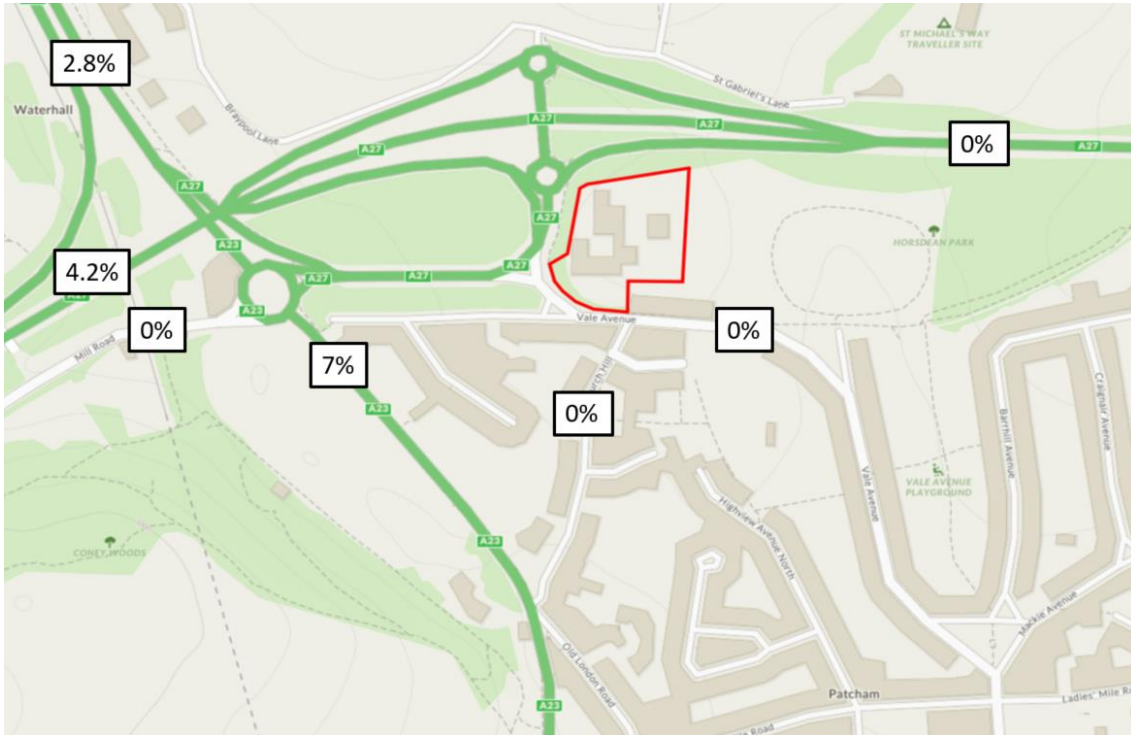
Source: Contains OS data © Crown copyright and database rights 2022

6.1.2 Existing Brighton and Hove Trip Distribution

6.1.2.1 Existing Staff Trip Distribution

The existing staff trips from the Brighton and Hove DOs have been distributed using the staff postcode data. Journey planning tools have been used to calculate the most likely route between the existing DOs and the postcode in which each member of staff resides. This shows that 7% of the existing staff trips enter/leave the Patcham study area. The distribution of these trips is shown in Figure 6.2.

Figure 6.2: Existing Staff Trip Distribution



Source: Contains OS data © Crown copyright and database rights 2022

This distribution results in seven existing staff vehicle trips travelling through the Patcham study area per day, as shown in the network diagram in Appendix E.1.

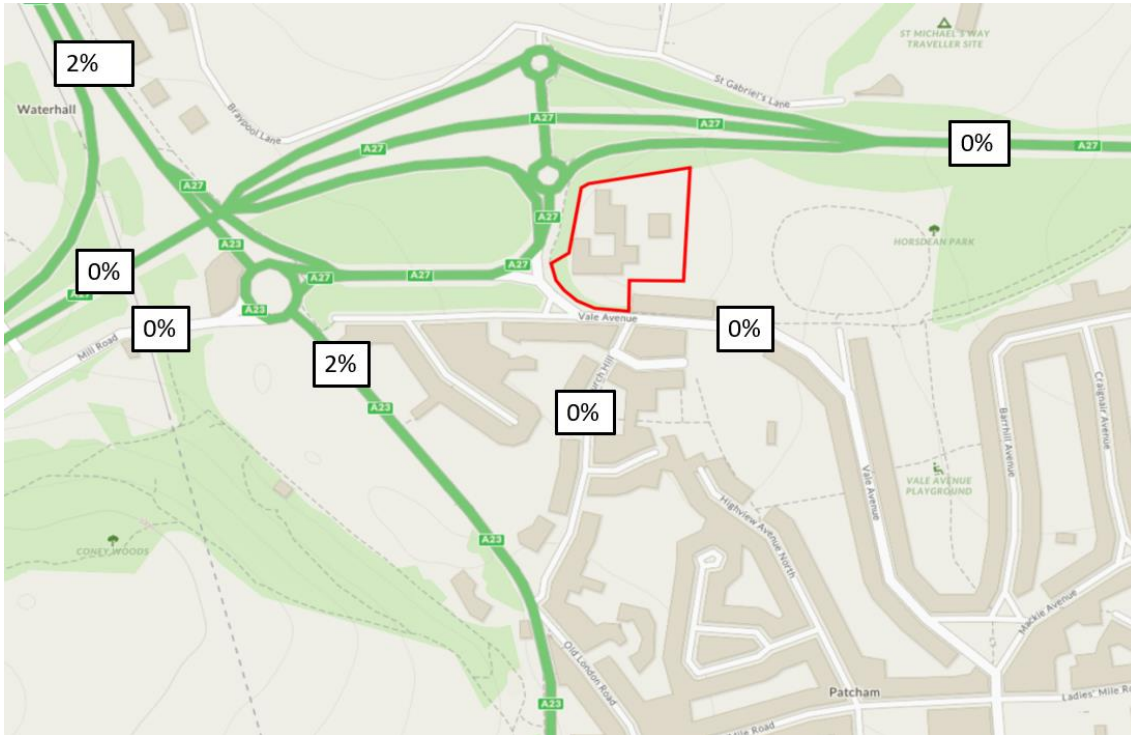
6.1.2.2 Existing HGV Trip Distribution

It is assumed that all existing HGV trips are distributed between the DOs and Gatwick mail office, which means all 25 HGV trips travel through the Patcham study area on the A23 London Road. This is shown in Appendix E.2.

6.1.2.3 Existing Red Fleet Trip Distribution

The existing red fleet trips have been distributed using the red fleet route data provided by RMG, which shows that 2% of the existing red fleet trips enter/leave the Patcham Study area. This is shown in Figure 6.3.

Figure 6.3: Existing Red fleet Distribution



Source: Contains OS data © Crown copyright and database rights 2022

This distribution results in three red fleet trips to/from the Brighton and Hove DOs travelling through the Patcham study area per day. This is shown in Appendix E.3.

6.1.2.4 Total Existing Trip Distribution

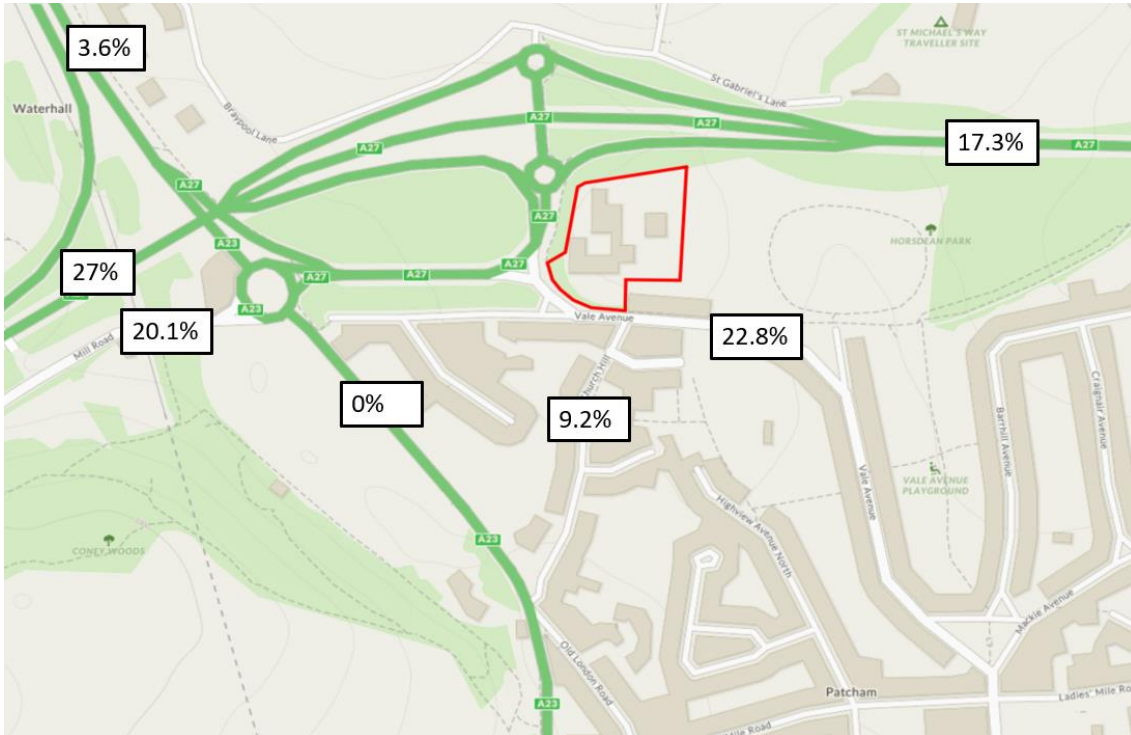
The existing trips that travel through the Patcham DO are shown in the Network Flow Diagram in Appendix E.4.

6.1.3 Proposed Patcham Trip Distribution

6.1.3.1 Proposed Staff Trip Distribution

Proposed staff vehicle trips have been distributed onto the local highway network using the postcode data provided by RMG. Journey planning tools have been used to calculate the most likely route between the proposed DO and the postcode in which each member of staff resides. This distribution is shown in Figure 6.4.

Figure 6.4: Staff Vehicle Trip Distribution



Source: Contains OS data © Crown copyright and database rights 2022

The forecast distribution of total daily staff vehicle trips is shown in Table 6.1.

Table 6.1: Daily Staff Vehicle Trip Distribution

Distribution Point	Road	Daily Staff Two-way Vehicle Trips
A	Vale Avenue (east)	20
B	Church Hill	8
C	Mill Road	17
D	A27 (west)	23
E	A23 (north)	3
F	A27 (east)	15
G	A23 (south)	0

The resulting staff trip generation from the proposed Patcham DO is shown in the network flow diagrams in Appendix E.5.

6.1.3.2 Proposed HGV Trip Distribution

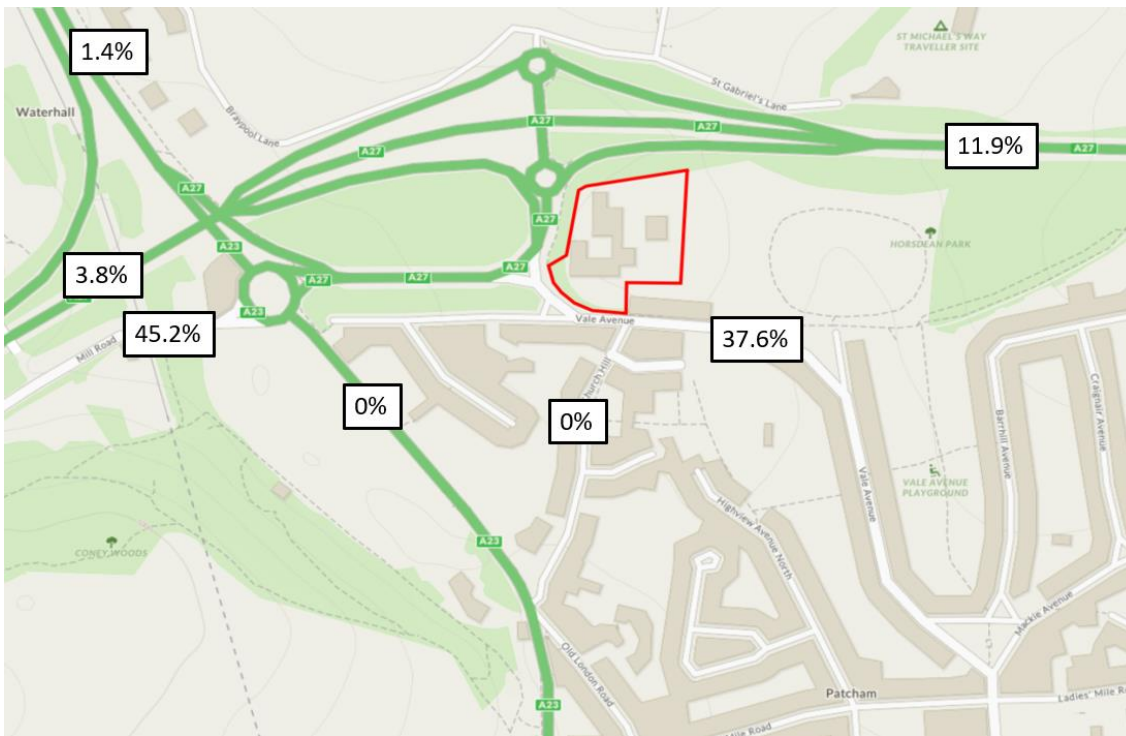
All HGV trips travel to the Patcham DO from the Gatwick Mail Centre. The two 17T lorry arrivals at 07:00-07:59 will be refilled with post/parcels at Patcham and will depart the site at 09:00-09:59 in order to transport post/parcels that have been processed at the Patcham site to the HCT base in the centre of Brighton. These vehicles will then leave the HCT base at 10:00-10:59 and will travel back to Gatwick.

The other 12 HGVs depart the Patcham DO and travel straight back to the Gatwick Mail Office. The proposed HGV trips to/from the Patcham DO are shown in Appendix E.6.

6.1.3.3 Proposed Red Fleet Trip Distribution

Red fleet trips from the existing Brighton and Hove DOs have been analysed and redistributed so that the routes originate/terminate at the proposed Patcham DO, whilst delivering to the same areas. Red fleet vehicles will be banned from using Church Hill, therefore, no trips have been distributed onto this road. This results in the red fleet distribution shown in Figure 6.5.

Figure 6.5: Red Fleet Trip Distribution



Source: Contains OS data © Crown copyright and database rights 2022

The forecast distribution of total daily red fleet trips is shown in Table 6.2.

Table 6.2: Daily Red Fleet Trip Distribution

Distribution Point	Road	Daily Red Fleet Two-way Vehicle Trips
A	Vale Avenue (east)	68
B	Church Hill	0
C	Mill Road	82
D	A27 (west)	7
E	A23 (north)	3
F	A27 (east)	22
G	A23 (south)	0

The red fleet trips have been distributed from the Patcham DO using the red fleet route data provided by RMG and the resulting red fleet trips are shown in Appendix E.7.

6.1.3.4 Total Proposed Trip Distribution

These trips are shown in the Network Flow diagram in Appendix E.8. Appendix E.9 shows the final proposed trip generation for the Patcham DO, which takes trips from the existing DOs away from the trips generated by the proposed Patcham DO.

6.2 Non-Motorised User Trip Distribution

Staff trips are the only trip type that will include travel by foot or bicycle. Therefore, the total NMU trip generation for the site is 39 cycle trips and 15 walking trips per day, as shown in Table 5.5 above.

Due to the location of the proposed site, staff travelling by foot or bicycle are likely to travel to/from the south or east of the site, where the land use is largely residential. The north/west of the site is predominantly rural or agricultural land, and it is unlikely that any staff will be travelling by foot or bicycle from these locations. Therefore, all NMU staff trips have been assumed to route to/from the site via Vale Avenue (east) or Church Hill.

The postcode data obtained in the staff travel survey shows that 23% of staff would access the site via Vale Avenue (east), and 9% of staff would access the site via Church Hill. The NMU distribution has been calculated using these routing percentages and is based on the assumption that, as noted previously, all pedestrian and cycling trips would access the site via Vale Avenue (east) and Church Hill. The forecast distribution for pedestrians and cyclists is set out in Table 6.3.

Table 6.3: NMU Trip Distribution

Distribution Point	Road Name	Survey Distribution	Calculated NMU Distribution	Pedestrians	Cyclists
A	Vale Avenue East	23%	71%	11	28
B	Church Hill	9%	29%	4	11
Total		32%	100%	15	39

6.3 Public Transport Trip Distribution

Staff trips are the only trip type that will include travel by public transport. Therefore, the total Public Transport trip generation for the site is 58 two-way public bus trips per day, and two two-way rail trips as shown in Table 5.5 above.

A summary of the main pedestrian routes to public transport and walking distances from the Patcham Court Farm DO entrance based on existing pedestrian provision are shown in Table 6.4 below.

Table 6.4: Pedestrian walking distances to public transport access points

Transport Access Point	Walking Point	Walking Distance
Patcham Place – Bus (both stops)	Church Hill – Patcham By-Pass	320m
Highview Avenue South – Bus (both stops)	Vale Avenue – unnamed road – Highview Avenue North	480m
Barrhill Avenue – Bus	Vale Avenue – Barrhill Avenue	480m

As set out in Section 2.4.1, the Institution of Highways and Transport (IHT) document ‘Providing for Journeys on Foot’ provides guidance on suggested acceptable walking distances and is set out in Table 6.5 below.

Table 6.5: Suggested Walking Classifications

Classification	Town Centres (m)
Desirable	200
Acceptable	400
Preferred Maximum	800

The nearest transport access point would be located within the acceptable walking distance, with the next closest access points would be within the preferred maximum.

The public bus trips have been distributed onto the bus services which are accessible within an 800m walking distance from the site. These bus services are set out in Table 2.2. Only one of these bus services operate during the main shift start time of 06:30:

- Patcham Bypass bus stop
 - Service 271 – Crawley to Kemp Town

As this are the only service available to staff during the main shift start time, staff trips have only been distributed onto this service. Postcode data shows that approximately 92 staff live within a walking distance of Service 271, which arrives at the site at 6:15am.

Therefore, it is forecast that there will be 58 staff trips to/from the site on Service 271. There are two two-way rail trips forecast to be generated by the proposed development. These trips are most likely to be distributed onto train services from Preston Park Station.

7 Trip Impact

7.1 Non-Motorised User Impact

7.1.1 Pedestrian Impact

An assessment of footway capacity along the main pedestrian routes to the site has been undertaken. This has been assessed based on footway capacity in line with 'Gehl' assuming a maximum capacity of 13 pedestrians per unobstructed metre of footway per minute. An assessment has been made of the average usable footway width along each likely pedestrian desire line to nearby public transport access points.

Baseline peak pedestrian trips have been taken from the MCC surveys set out in Section 2.2.5. Forecast peak pedestrian trips with the proposed scheme has been calculated by adding the pedestrian trip distribution in Table 6.3 with the bus trip distribution in Section 6.3, as it has been assumed that all bus users will travel to bus stops on foot.

It has been assumed that all bus users accessing the Patcham Bypass bus stop will walk along the Church Hill and Patcham Bypass footways. The assessment has been undertaken for the AM peak hour for the forecast pedestrian trip generation (06:00-07:00). As a worst-case assessment, it has been assumed that all daily one-way trips occur in the same hourly peak period.

The results of this assessment are shown in Table 7.1.

Table 7.1: Assessment of Footway Capacity

Footway	Approximate footway width	Capacity per hour	Baseline peak pedestrian trips (surveyed)	Forecast peak pedestrian trips generated	Do Something peak pedestrian trips
Vale Avenue	1.0m	780	0	11	11
Church Hill	1.2m	936	0	62	62
London Road	3.0m	2340	0	0	0
Patcham By-Pass	2.0m	1560	0	62	62

The assessment shows that all footways within the study area had no pedestrian movements within the AM peak hour in the baseline surveys. With the forecast peak pedestrian trips, all footways are well within capacity, and the pedestrian trips generated by the site are not forecast to cause any impact on the local pedestrian facilities.

In order to facilitate pedestrian movements and to assist with the increase in the number of pedestrians crossing Vale Avenue, a dropped kerb crossing has been proposed to the east of the Vale Avenue/Church Hill junction.

7.1.2 Cyclist Impact

The impact of cycle trips generated by the proposed development has been undertaken. Baseline AM peak cyclist trips have been taken from the MCC surveys set out in Section 2.2.5. Forecast daily cyclist trips with the proposed development has been calculated by adding the cyclist trip distribution in Table 6.3. As a worst-case assessment, it has been assumed that all daily one-way trips occur in the same hourly peak period. The results of this assessment are shown in Table 7.2.

Table 7.2: Assessment of Cyclist Impact

Road	Cyclist Provision	Baseline peak cyclist trips (surveyed)	Forecast peak cyclist trips generated	Do Something peak cyclist trips
Vale Avenue	None	0	28	28
Church Hill	None	0	11	11
London Road	1.5m on road cycle lane	0	0	0
Patcham Bypass	1.5m on road cycle lane	0	11	11

The assessment shows that all roads within the study area had no cyclist movements within the AM peak hour in the baseline surveys. The road with the most cycle trips in the forecast AM peak is Vale Avenue, with 28 cyclists. Whilst there are no cycle provisions on Vale Avenue, it is not anticipated that this amount of cycle trips will cause an impact on the current operation of the road due to the residential nature of the area and lower traffic speeds.

It is anticipated that the increase in cycle trips on Patcham Bypass can be accommodated within the current cycle lane provision on this road. The increase in cycle trips is not expected to cause a safety issue on any of the roads in the study area.

7.2 Public Transport Impact

The impact of the proposed development on bus services has been assessed by calculating the number of bus trips forecast on each bus service in the AM peak hour (06:00-07:00). As a worst-case assessment, it has been assumed that all daily one-way trips occur in the same hourly peak period. The forecast trips per bus route shown in Section 6.3 have been split evenly across the number of services per hour in the AM peak.

Table 7.3 sets out the number of bus trips forecast per service in the AM peak hour.

Table 7.3: Bus Service Impact

Bus Service	Forecast total AM peak hour trips	Buses per hour in the AM peak hour	Forecast AM peak hour trips per service
271 – Crawley to Kemp Town	58	1	58

This shows that the maximum forecast staff trips per bus service in the AM peak is on the services of bus route 271, with 58 staff bus trips per service. It is assumed that the existing bus capacity is approximately 90 passengers, and that the bus route during this period is lightly used. Therefore, it is anticipated that the current bus provision has sufficient capacity to accommodate this number of forecast trips per service. However, discussions with bus companies should be undertaken with the objective of increasing bus provision in this early period, either by increasing the frequency of Service 271, or bringing forward the timetables for other routes to accommodate the early start time of RMG staff.

Due to the low number of forecast rail trips (two two-way trips per day), it can be assumed there will be no detrimental impact on rail services as a result of the proposed development.

7.3 Vehicle Impact

7.3.1 Parking Accumulation

The forecast staff trip generation has been prepared in conjunction with RMG's forecast for the operation of the site to ensure efficient use of the available car parking spaces. Using the staff

arrival/departure profile and modal split outlined in previous sections, the parking accumulation for the staff spaces is shown below in Table 7.4.

Table 7.4: Parking Accumulation

Time Period	Staff Car Arrivals	Staff Car Departures	Parking Accumulation
00:00-01:00	0	0	0
01:00-02:00	0	0	0
02:00-03:00	0	0	0
03:00-04:00	0	0	0
04:00-05:00	3	0	3
05:00-06:00	5	0	8
06:00-07:00	57	0	66
07:00-08:00	6	0	71
08:00-09:00	7	0	79
09:00-10:00	3	1	81
10:00-11:00	4	0	84
11:00-12:00	1	0	85
12:00-13:00	0	1	84
13:00-14:00	0	3	81
14:00-15:00	0	76	5
15:00-16:00	0	0	5
16:00-17:00	0	0	5
17:00-18:00	0	0	5
18:00-19:00	0	4	1
19:00-20:00	0	0	1
20:00-21:00	0	1	0
21:00-22:00	0	0	0
22:00-23:00	0	0	0
23:00-00:00	0	0	0

This shows that parking accumulation peaks between 11:00 and 12:00 at 85 cars parked. 85 car parking spaces have been provided for staff as part of the proposed development. Therefore, the parking spaces provided are sufficient and can accommodate the forecast car parking demand at the site.

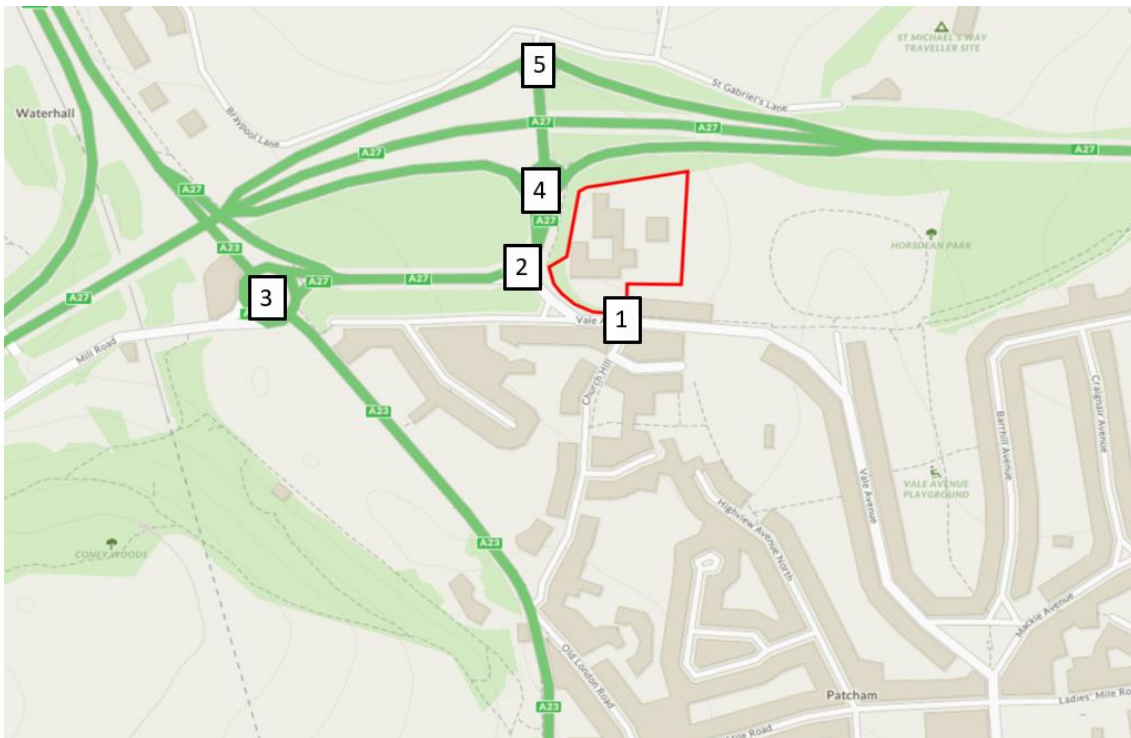
7.3.2 Junction Capacity Assessment

7.3.2.1 Study Area

Five junctions have been assessed for their existing and proposed capacity using Junctions9 software. The location of these junctions are shown in Figure 7.1, and are set out below:

1. Vale Avenue/Church Hill/Site Access
2. A27 Link Road/Vale Avenue
3. A23 London Road/A27 Link Road/Mill Road
4. A27 Westbound Offslip/A27 Link Road/A27 Overbridge
5. A27 Eastbound Offslip/A27 Overbridge/Braypool Lane

Figure 7.1: Junction Capacity Assessment Locations



Source: Contains OS data © Crown copyright and database rights 2022

7.3.2.2 Scenarios for Assessment

The junctions have been assessed under the following scenarios for both the observed AM and PM peaks (07:00-08:00 and 17:00-18:00):

- 2021 Baseline – taken from traffic surveys set out in Section 2.2.5
- 2026 Future Baseline – 2021 Baseline with TEMPro traffic growth factors
- 2026 Do Something – 2026 Future Baseline with forecast site vehicle trip generation
- 2032 Future Baseline – 2021 Baseline with TEMPro traffic growth factors
- 2032 Do Something – 2032 Future Baseline with forecast site vehicle trip generation

2026 is forecast to be the opening year of the site, and 2032 has been used as the review year of the assessment because it is ten years from the registration of the planning application. Traffic flow diagrams for the study area in these five scenarios are provided in Appendix F.

7.3.2.3 Traffic Flow Assumptions

The TEMPro growth factors that have been used are shown in Table 7.5. The criteria selected within TEMPro to calculate these growth factors are shown in the TEMPro exports within Appendix G.

Table 7.5: TEMPro Growth Factors

Assessment Year	TEMPro Factor	
	AM	PM
2026	1.04635	1.0456
2032	1.0981	1.0970

A list of committed developments to consider within the traffic flow assumptions were provided by BHCC. The committed developments provided are set out below:

- BH2022/00203: Toad Hole Development – Outline application for a mixed use development comprising residential dwellings (C3 use); land for a 6-form entry secondary school (F1 use)/community sports facilities (F2 use); office/research/light industry floorspace (E use); neighbourhood centre including retail outlets (E/sui generis uses), a doctors' surgery (E use) and community building (F2 and E use); public open and play space, alterations to the Site of Nature Conservation Interest (SNCI); and associated landscaping. Provision of 3no. vehicular accesses onto King George VI Avenue (unreserved) with associated highway alterations.
- BH2021/03142: 46 – 47 London Road – Erection of a 4 storey mixed-use development comprising Class E and 6 flats. Due to be granted once S106 is signed.
- BH2020/02289: 5-8 London Road – Redevelopment to provide a mixed-use development comprising retail floorspace and 156 student bedrooms in a 4-5 storey building. Granted 23.09.2021.
- BH2019/03755: 46-47 London Road – Erection of a three storey building to provide 6 flats. Granted 28.09.2020.

Traffic flow forecasts from the supporting documents for the planning applications of these committed developments have been analysed. This has confirmed that the committed developments will have a negligible impact on the future baseline traffic within the study area assessed within this Transport Assessment. It is assumed that any residual increases in traffic caused by these committed developments are included within the TEMPro factors used.

7.3.2.4 Model Validation

A validation exercise for each baseline model has been undertaken based on observed queue lengths in footage captured during the 2021 traffic surveys. Each baseline model has been calibrated to these queue lengths by adjusting the slope and intercept within the Junctions 9 software used. Where there have been no physical changes to the design of the junction with the proposed scheme, the same slope and intercept have been used in the Do Something scenarios for those junctions. The slope and intercept coefficients can be found in the full output reports for each junction in Appendix H.

7.3.2.5 Junction Capacity Assessment Outputs

The results of each junction assessment are set out below, and full model output reports are included in Appendix H.

The maximum Ratio of Flow to Capacity (RFC) for each junction has been analysed to assess whether the junction is within capacity, nearing capacity, at capacity, or over capacity. The following criteria has been used:

- RFC <0.75 – within capacity
- RFC >0.75 but <0.85 – nearing capacity
- RFC >0.85 but <1 – at capacity
- RFC >1 – over capacity.

Junction 1 – Vale Avenue/Church Hill/Site Access

This junction is a four-arm priority controlled staggered crossroads junction with a dropped kerb crossing on each arm. The junction has been assessed in Picady. The results of the 2021 Baseline assessment of this junction are shown in Table 7.6.

Table 7.6: Junction 1A Vale Avenue/Church Hill/Existing Site Access 2021 Baseline Assessment

Junction arm	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
Church Hill (ahead and left)	0.0	5.28	0.01	0.0	5.41	0.01
Church Hill (ahead and right)	0.0	8.02	0.00	0.0	7.83	0.02
Vale Avenue (east)	0.0	0.00	0.00	0.0	0.00	0.00
Existing Site Access	0.0	0.00	0.00	0.0	0.00	0.00
Vale Avenue (west)	0.1	5.53	0.04	0.1	5.04	0.06

The assessment shows that this junction operates within capacity in the 2021 Baseline, with a maximum RFC of 0.04 on the Vale Avenue (west) arm in the AM peak hour with an associated queue length of 0.1 PCU. In the PM peak hour, the maximum RFC of 0.06 is on the Vale Avenue (west) arm with an associated queue length of 0.1 PCU.

The results of the 2026 Future Baseline assessment of this junction are shown in Table 7.7.

Table 7.7: Junction 1A Vale Avenue/Church Hill/Existing Site Access 2026 Future Baseline Assessment

Junction arm	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
Church Hill (ahead and left)	0.0	5.30	0.01	0.0	5.42	0.01
Church Hill (ahead and right)	0.0	8.08	0.00	0.0	7.89	0.02
Vale Avenue (east)	0.0	0.00	0.00	0.0	0.00	0.00
Existing Site Access	0.0	0.00	0.00	0.0	0.00	0.00
Vale Avenue (west)	0.1	5.53	0.04	0.1	5.02	0.07

The assessment shows that this junction operates within capacity in the 2026 Future Baseline, with a maximum RFC of 0.04 on the Vale Avenue (west) arm in the AM peak hour with an associated queue length of 0.1 PCU. In the PM peak hour, the maximum RFC of 0.07 is on the Vale Avenue (west) arm with an associated queue length of 0.1 PCU.

A new site access junction has been designed as part of the proposed scheme. This junction is a four-arm priority controlled staggered junction with a dropped kerb crossing on each arm. Drawings of the proposed site access junction are shown in Appendix B.

The junction has been assessed in Picady, but due to the irregular layout of this junction, it has been modelled as a crossroads with a linked T-junction. Therefore, the results presented are for both junctions within the model; Junction 1 refers to the site access crossroads and Junction 2

refers to the Vale Avenue T-Junction to the west. The results of the 2026 Do Something assessment of this junction are shown in Table 7.8.

Table 7.8: Junction 1B Vale Avenue/Church Hill/Proposed Site Access 2026 Do Something Assessment

Junction arm	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
Junction 1 – Proposed Site Access (left and ahead)	0.0	5.75	0.01	0.0	0.00	0.00
Junction 1 – Proposed Site Access (right and ahead)	0.0	8.19	0.02	0.0	0.00	0.00
Junction 1 – Vale Avenue (south)	0.0	0.00	0.00	0.0	6.65	0.03
Junction 1 – Vale Avenue (east)	0.0	5.24	0.00	0.0	0.00	0.00
Junction 2 – Vale Avenue (south)	0.0	6.31	0.01	0.0	6.00	0.01
Junction 2 – Vale Avenue (west)	0.0	6.10	0.01	0.0	5.40	0.01

This shows that the junction operates within capacity in the 2026 Do Something AM peak, with a maximum RFC of 0.02 on the Proposed Site Access (right and ahead) approach and a corresponding queue of 0.0 PCU. The junction operates within capacity in the in the 2026 Do Something PM peak, with a maximum RFC of 0.03 on the Vale Avenue (south, right and ahead) approach and a corresponding queue of 0.0 PCU.

This shows that the proposed junction would operate within theoretical capacity with the proposed development in 2026.

The results of the 2032 Future Baseline assessment of this junction are shown in Table 7.9.

Table 7.9: Junction 1A Vale Avenue/Church Hill/Existing Site Access 2032 Future Baseline Assessment

Junction arm	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
Church Hill (ahead and left)	0.0	5.32	0.01	0.0	5.45	0.02
Church Hill (ahead and right)	0.0	8.14	0.00	0.0	7.98	0.02
Vale Avenue (east)	0.0	0.00	0.00	0.0	0.00	0.00

Junction arm	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
Existing Site Access	0.0	0.00	0.00	0.0	0.00	0.00
Vale Avenue (west)	0.1	5.54	0.04	0.1	5.00	0.07

The assessment shows that this junction operates within capacity in the 2032 Future Baseline, with a maximum RFC of 0.04 on the Vale Avenue (west) approach in the AM peak hour with an associated queue length of 0.1 PCU. In the PM peak hour, the maximum RFC of 0.07 is on the Vale Avenue (west) approach with an associated queue length of 0.1 PCU.

The results of the 2032 Do Something assessment of this junction are shown in Table 7.10.

Table 7.10: Junction 1B Vale Avenue/Church Hill/Proposed Site Access 2032 Do Something Assessment

Junction arm	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
Junction 1 – Proposed Site Access (left and ahead)	0.0	5.76	0.01	0.0	0.00	0.00
Junction 1 – Proposed Site Access (right and ahead)	0.0	8.24	0.02	0.0	0.00	0.00
Junction 1 – Vale Avenue (south)	0.0	0.00	0.00	0.0	6.72	0.04
Junction 1 – Vale Avenue (east)	0.0	5.21	0.00	0.0	0.00	0.00
Junction 2 – Vale Avenue (south)	0.0	6.35	0.01	0.0	6.03	0.01
Junction 2 – Vale Avenue (west)	0.0	6.10	0.01	0.0	5.37	0.01

This shows that the junction operates within capacity in the 2032 Do Something AM peak, with a maximum RFC of 0.02 on the Proposed Site Access (right and ahead) approach and a corresponding queue of 0.0 PCU. The junction operates within capacity in the in the 2032 Do Something PM peak, with a maximum RFC of 0.04 on the Vale Avenue (south) approach and a corresponding queue of 0.0 PCU.

This shows that the proposed junction would operate within theoretical capacity with the scheme.

Junction 2 – A27 Link Road/Vale Avenue

This junction is a three-arm priority controlled left-in left-out T junction and has been assessed in Picady. As this junction is left-in left-out junction, there is no right turn movement from the A27

Link Road (west), and movements from the A27 Link Road (north) are free flowing. Therefore, the only assessment results presented for this junction are on the Vale Avenue arm.

The results of the 2021 Baseline assessment of this junction are shown in Table 7.11.

Table 7.11: Junction 2 A27 Link Road/Vale Avenue 2021 Baseline Assessment

Junction arm	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
Vale Avenue (east)	0.6	9.98	0.37	0.3	7.75	0.22

The assessment shows that this junction operates within capacity in the 2021 Baseline, with a maximum RFC of 0.37 on the Vale Avenue (east) arm in the AM peak hour with an associated queue length of 0.6 PCU. In the PM peak hour, the maximum RFC of 0.22 is on the Vale Avenue (east) arm with an associated queue length of 0.3 PCU.

The results of the 2026 Future Baseline assessment of this junction are shown in Table 7.12.

Table 7.12: Junction 2 A27 Link Road/Vale Avenue 2026 Future Baseline Assessment

Junction arm	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
Vale Avenue (east)	0.6	10.57	0.39	0.3	8.00	0.23

The assessment shows that this junction operates within capacity in the 2026 Future Baseline, with a maximum RFC of 0.39 on the Vale Avenue (east) arm in the AM peak hour with an associated queue length of 0.6 PCU. In the PM peak hour, the maximum RFC of 0.23 is on the Vale Avenue (east) arm with an associated queue length of 0.3 PCU.

The results of the 2026 Do Something assessment of this junction are shown in Table 7.13

Table 7.13: Junction 2 A27 Link Road/Vale Avenue 2026 Do Something Assessment

Junction arm	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
Vale Avenue (east)	0.7	11.15	0.42	0.3	8.00	0.23

The assessment shows that this junction operates within capacity in the 2026 Do Something, with a maximum RFC of 0.42 on the Vale Avenue (east) arm in the AM peak hour with an associated queue length of 0.7 PCU. In the PM peak hour, the maximum RFC of 0.23 is on the Vale Avenue (east) arm with an associated queue length of 0.3 PCU.

This shows that the proposed development would have a negligible impact on the operation of this junction and it is forecast to continue to operate within theoretical capacity.

The results of the 2032 future baseline assessment of this junction are shown in Table 7.14.

Table 7.14: Junction 2 A27 Link Road/Vale Avenue 2032 Future Baseline Assessment

Junction arm	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
Vale Avenue (east)	0.7	11.31	0.42	0.3	8.30	0.24

The assessment shows that this junction operates within capacity in the 2032 Future Baseline, with a maximum RFC of 0.42 on the Vale Avenue (east) arm in the AM peak hour with an associated queue length of 0.7 PCU. In the PM peak hour, the maximum RFC of 0.24 is on the Vale Avenue (east) arm with an associated queue length of 0.3 PCU.

The results of the 2032 Do Something assessment of this junction are shown in Table 7.15.

Table 7.15: Junction 2 A27 Link Road/Vale Avenue 2032 Do Something Assessment

Junction arm	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
Vale Avenue (east)	0.8	11.88	0.44	0.3	8.30	0.24

The assessment shows that this junction operates within capacity in the 2032 Do Something, with a maximum RFC of 0.44 on the Vale Avenue (east) arm in the AM peak hour with an associated queue length of 0.8 PCU. In the PM peak hour, the maximum RFC of 0.24 is on the Vale Avenue (east) arm with an associated queue length of 0.3 PCU.

This shows that the proposed development would have a negligible impact on the operation of this junction and it is forecast to continue to operate within theoretical capacity.

Junction 3 – A23 London Road/A27 Link Road/Mill Road

This junction is a 4-arm priority-controlled roundabout with no pedestrian crossing facilities. The A23 London Road (north) approach has a left turn bypass, which has been included in the model. The junction has been assessed in Arcady. The results of the 2021 Baseline assessment of this junction are shown in Table 7.16.

Table 7.16: Junction 3 A23 London Road/A27 Link Road/Mill Road 2021 Baseline Assessment

Junction arm	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
A27 Link Road	43.4	96.19	1.03	7.4	22.99	0.89
A23 London Road (south)	13.3	50.94	0.96	3.4	13.39	0.78
Mill Road	1.1	20.97	0.53	0.4	10.33	0.31
A23 London Road (north)	1.6	5.28	0.60	2.2	6.60	0.69

The assessment shows that this junction operates over capacity in the 2021 Baseline, with a maximum RFC of 1.03 on the A27 Link Road arm in the AM peak hour with an associated queue length of 43.4 PCU. In the PM peak hour, the assessment shows that this junction is nearing capacity in the 2021 baseline with a maximum RFC of 0.89 on the A27 Link Road arm with an associated queue length of 7.4 PCU.

The results of the 2026 Future Baseline assessment of this junction are shown in Table 7.17.

Table 7.17: Junction 3 A23 London Road/A27 Link Road/Mill Road 2026 Future Baseline Assessment

Junction arm	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
A27 Link Road	85.9	173.25	1.11	14.0	41.86	0.95
A23 London Road (south)	21.7	75.90	1.00	4.8	18.23	0.83
Mill Road	1.3	22.75	0.57	0.5	11.79	0.35
A23 London Road (north)	1.8	5.70	0.63	2.6	7.45	0.73

The assessment shows that this junction operates over capacity in the 2026 Future Baseline, with a maximum RFC of 1.11 on the A27 Link Road arm in the AM peak hour with an associated queue length of 85.9 PCU. In the PM peak hour, the assessment shows that this junction is at capacity in the 2026 future baseline with a maximum RFC of 0.95 on the A27 Link Road arm in the PM peak hour with an associated queue length of 14.0 PCU.

The results of the 2026 Do Something assessment of this junction are shown in Table 7.18.

Table 7.18: Junction 3 A23 London Road/A27 Link Road/Mill Road 2026 Do Something Assessment

Junction arm	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
A27 Link Road	91.2	182.23	1.11	13.8	41.44	0.95
A23 London Road (south)	20.1	71.77	0.99	4.8	18.24	0.83
Mill Road	1.3	22.45	0.56	0.5	11.80	0.35
A23 London Road (north)	1.7	5.66	0.63	2.6	7.41	0.72

The assessment shows that this junction operates over capacity in the 2026 Do Something, with a maximum RFC of 1.11 on the A27 Link Road arm in the AM peak hour and an associated queue length of 91.2 PCU. In the PM peak hour, the maximum RFC of 0.95 is on the A27 Link Road arm with an associated queue length of 13.8 PCU.

There is no increase in RFC and an increase in queue of 5.3 PCU in the AM peak hour when compared to the 2026 Future baseline. There is no increase in RFC and a decrease of 0.02 in PCU in the PM peak hour when compared to the 2026 future baseline.

This shows that this junction is already operating over capacity, and the proposed development would have a negligible impact on its operation.

The results of the 2032 Future Baseline assessment of this junction are shown in Table 7.19.

Table 7.19: Junction 3 A23 London Road/A27 Link Road/Mill Road 2032 Future Baseline Assessment

Junction arm	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
A27 Link Road	141.2	285.48	1.19	36.4	92.39	1.03

Junction arm	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
A23 London Road (south)	34.9	110.61	1.04	7.1	26.02	0.89
Mill Road	1.4	23.86	0.59	0.6	13.25	0.39
A23 London Road (north)	2.0	6.26	0.66	3.2	8.65	0.76

The assessment shows that this junction operates over capacity in the 2032 Future Baseline, with a maximum RFC of 1.19 on the A27 Link Road arm in the AM peak hour and an associated queue length of 141.2 PCU. In the PM peak hour, the assessment shows that this junction operates over capacity in the 2032 future baseline with a maximum RFC of 1.03 on the A27 Link Road arm with an associated queue length of 36.4 PCU.

The results of the 2032 Do Something assessment of this junction are shown in Table 7.20.

Table 7.20: Junction 3 A23 London Road/A27 Link Road/Mill Road 2032 Do Something Assessment

Junction arm	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
A27 Link Road	147.2	301.49	1.20	35.6	90.61	1.03
A23 London Road (south)	32.4	104.51	1.03	7.0	25.70	0.89
Mill Road	1.4	23.77	0.59	0.6	13.28	0.39
A23 London Road (north)	2.0	6.23	0.66	3.2	8.69	0.76

The assessment shows that this junction operates over capacity in the 2032 Do Something, with a maximum RFC of 1.20 on the A27 Link Road arm in the AM peak hour and an associated queue length of 147.2 PCU. In the PM peak hour, the maximum RFC of 1.03 is on the A27 Link Road arm with an associated queue length of 35.6 PCU.

There is an increase of 0.01 in RFC and an increase in queue of 6 PCU in the AM peak hour when compared to the 2032 Future baseline. There is no increase in RFC and a decrease in queue of 0.8 PCU in the PM peak hour when compared to the 2032 future baseline. This shows that this junction is already operating over capacity, and the proposed development would have a negligible impact on its operation.

Junction 4 – A27 Westbound Offslip/A27 Link Road/A27 overbridge

This junction is a 4-arm priority-controlled roundabout with no pedestrian crossing facilities. This junction has been assessed in Arcady. The A27 westbound onslip is exit only at this junction, so has not been included in the assessment results. The results of the 2021 Baseline assessment of this junction are shown in Table 7.21.

Table 7.21: Junction 4 A27 Westbound Offslip/A27 Link Road/A27 overbridge 2021 Baseline Assessment

Junction arm	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
A27 westbound offslip	7.0	20.18	0.88	3.5	11.67	0.78
A27 Link Road	5.1	15.78	0.83	9.9	28.08	0.92
A27 overbridge	0.1	3.55	0.12	0.2	3.82	0.17

The assessment shows that this junction is nearing capacity in the 2021 Baseline, with a maximum RFC of 0.88 on the A27 Westbound offslip arm in the AM peak hour with an associated queue length of 7.0 PCU. In the PM peak hour, the maximum RFC of 0.92 is on the A27 Link Road arm with an associated queue length of 9.9 PCU.

The results of the 2026 Future Baseline assessment of this junction are shown in Table 7.22.

Table 7.22: Junction 4 A27 Westbound Offslip/A27 Link Road/A27 overbridge 2026 Future Baseline Assessment

Junction arm	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
A27 westbound offslip	10.2	28.70	0.92	4.4	14.17	0.82
A27 Link Road	6.8	20.23	0.87	15.9	43.08	0.96
A27 overbridge	0.1	3.58	0.12	0.2	3.86	0.18

The assessment shows that this junction is nearing capacity in the 2026 Future Baseline, with a maximum RFC of 0.92 on the A27 westbound offslip arm in the AM peak hour with an associated queue length of 10.2 PCU. The assessment shows that this junction operates at capacity in the 2026 future baseline in the PM peak hour, with a maximum RFC of 0.96 on the A27 Link Road arm and an associated queue length of 15.9 PCU.

The results of the 2026 Do Something assessment of this junction are shown in Table 7.23.

Table 7.23: Junction 4 A27 Westbound Offslip/A27 Link Road/A27 Overbridge 2026 Do Something Assessment

Junction arm	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
A27 westbound offslip	10.8	30.18	0.92	4.4	14.17	0.82
A27 Link Road	7.2	21.27	0.88	15.9	43.08	0.96
A27 overbridge	0.1	3.60	0.13	0.2	3.86	0.18

The assessment shows that this junction is nearing capacity in the 2026 Do Something, with a maximum RFC of 0.92 on the A27 westbound offslip arm in the AM peak hour with an associated queue length of 10.8 PCU. The assessment shows that this junction operates at capacity in the 2026 future baseline in the PM peak hour, the maximum RFC of 0.96 is on the A27 link Road arm with an associated queue length of 15.9 PCU.

There is no change in RFC and an increase in queue of 0.6 PCU in the AM peak hour when compared to the 2026 Future baseline. There is no change in RFC or queue in the PM peak hour when compared to the 2026 future baseline. This shows that the proposed development would have a negligible impact on the operation of this junction.

The results of the 2032 Future Baseline assessment of this junction are shown in Table 7.24.

Table 7.24: Junction 4 A27 Westbound Offslip/A27 Link Road/A27 overbridge 2032 Future Baseline Assessment

Junction arm	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
A27 westbound offslip	18.1	47.77	0.97	6.0	18.54	0.86
A27 Link Road	10.0	28.64	0.92	30.9	74.03	1.01
A27 overbridge	0.2	3.60	0.13	0.2	3.91	0.19

The assessment shows that this junction operates at capacity in the 2032 Future Baseline, with a maximum RFC of 0.97 on the A27 westbound offslip arm in the AM peak hour with an associated queue length of 18.1 PCU. The assessment shows that this junction operates over capacity in the 2032 future baseline in the PM peak hour, the maximum RFC of 1.01 is on the A27 Link Road arm with an associated queue length of 30.9 PCU.

The results of the 2032 Do Something assessment of this junction are shown in Table 7.25.

Table 7.25: Junction 4 A27 Westbound Offslip/A27 Link Road/A27 Overbridge 2032 Do Something Assessment

Junction arm	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
A27 westbound offslip	19.4	50.74	0.97	6.0	18.54	0.86
A27 Link Road	10.7	30.50	0.92	30.9	74.03	1.01
A27 overbridge	0.2	3.62	0.13	0.2	3.91	0.19

The assessment shows that this junction operates at capacity in the 2032 Do Something, with a maximum RFC of 0.97 on the A27 westbound offslip arm in the AM peak hour with an associated queue length of 19.4 PCU. The assessment shows that this junction operates over capacity in the 2032 future baseline in the PM peak hour, the maximum RFC of 1.01 is on the A27 Link Road arm with an associated queue length of 30.9 PCU.

There is no change in RFC and an increase in queue of 1.3 PCU in the AM peak hour when compared to the 2032 Future baseline. There is no change in RFC or queue in the PM peak

hour when compared to the 2032 future baseline. This shows that the proposed development would have a negligible impact on the operation of this junction.

Junction 5 – A27 Eastbound Offslip/Braypool Lane/A27 Overbridge

This junction is a 4-arm priority-controlled roundabout with no pedestrian crossing facilities. This junction has been assessed in Arcady. The A27 eastbound onslip is exit only at this junction, so has not been included in the assessment results. The results of the 2021 Baseline assessment of this junction are shown in Table 7.26.

Table 7.26: Junction 5 A27 Eastbound Offslip/Braypool Lane/A27 Overbridge 2021 Baseline Assessment

Junction arm	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
A27 overbridge	3.7	11.93	0.78	2.6	8.91	0.72
A27 eastbound offslip	1.8	52.23	0.65	7.2	141.17	0.94
Braypool Lane	0.1	8.40	0.07	0.1	7.92	0.05

The assessment shows that this junction operates within capacity in the 2021 Baseline, with a maximum RFC of 0.78 on the A27 overbridge arm in the AM peak hour with an associated queue length of 3.7 PCU. The assessment shows that in the PM peak hour the junction operates at capacity with a maximum RFC of 0.94 on the A27 eastbound offslip arm and an associated queue length of 7.2 PCU.

The results of the 2026 Future Baseline assessment of this junction are shown in Table 7.27.

Table 7.27: Junction 5 A27 Eastbound Offslip/Braypool Lane/A27 Overbridge 2026 Future Baseline Assessment

Junction arm	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
A27 overbridge	4.5	14.17	0.81	3.0	10.09	0.75
A27 eastbound offslip	2.2	62.27	0.70	10.4	191.41	1.01
Braypool Lane	0.1	9.08	0.08	0.1	8.45	0.06

The assessment shows that this junction operates within capacity in the 2026 Future Baseline, with a maximum RFC of 0.81 on the A27 overbridge arm in the AM peak hour with an associated queue length of 4.5 PCU. The assessment shows that this junction operates over capacity in the PM peak hour, the maximum RFC of 1.01 is on the A27 eastbound offslip arm with an associated queue length of 10.4 PCU.

The results of the 2026 Do Something assessment of this junction are shown in Table 7.28

Table 7.28: Junction 5 A27 Eastbound Offslip/Braypool Lane/A27 Overbridge 2026 Do Something Assessment

Junction arm	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
A27 overbridge	4.2	13.37	0.80	3.0	10.09	0.75
A27 eastbound offslip	2.1	60.20	0.70	10.4	191.41	1.01
Braypool Lane	0.1	8.86	0.08	0.1	8.45	0.06

The assessment shows that this junction operates within capacity in the 2026 Do Something, with a maximum RFC of 0.80 on the A27 overbridge arm in the AM peak hour with an associated queue length of 4.2 PCU. The assessment shows that this junction operates over capacity in the PM peak hour, the maximum RFC of 1.01 is on the A27 overbridge arm with an associated queue length of 10.4 PCU.

There is a decrease of 0.01 in RFC and a decrease in queue length of 0.03 PCU in the AM peak hour when compared to the 2026 future baseline. There is no change in RFC or queue in the PM peak hour when compared to the 2026 future baseline. This shows that the junction is forecast to already be operating within capacity in the AM peak hour of the 2026 future baseline and over-capacity in the PM peak hour of the 2026 future baseline, but the proposed development would have a negligible impact on the operation of this junction.

The results of the 2032 Future Baseline assessment of this junction are shown in Table 7.29.

Table 7.29: Junction 5 A27 Eastbound Offslip/Braypool Lane/A27 Overbridge 2032 Future Baseline Assessment

Junction arm	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
A27 overbridge	5.9	17.79	0.85	3.7	11.81	0.79
A27 eastbound offslip	2.8	78.74	0.77	16.9	285.25	1.11
Braypool Lane	0.1	9.96	0.09	0.1	9.08	0.07

The assessment shows that this junction is nearing capacity in the 2032 Future Baseline, with a maximum RFC of 0.85 on the A27 overbridge arm in the AM peak hour with an associated queue length of 5.9 PCU. The assessment shows that this junction is over capacity in the PM peak hour with a maximum RFC of 1.11 on the A27 eastbound offslip arm and an associated queue length of 16.9 PCU.

The results of the 2032 Do Something assessment of this junction are shown in Table 7.30.

Table 7.30: Junction 5 A27 Eastbound Offslip/Braypool Lane/A27 Overbridge 2032 Do Something Assessment

Junction arm	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
A27 overbridge	6.0	17.96	0.85	3.7	11.81	0.79
A27 eastbound offslip	3.0	82.41	0.78	16.9	285.25	1.11
Braypool Lane	0.1	10.02	0.09	0.1	9.08	0.07

The assessment shows that this junction is nearing capacity in the 2032 Do Something, with a maximum RFC of 0.85 on the A27 overbridge arm in the AM peak hour with an associated queue length of 6.0 PCU. The assessment shows that this junction is operating over capacity in the PM peak hour with a maximum RFC of 1.11 on the A27 eastbound offslip arm with an associated queue length of 16.9 PCU.

There is no change in RFC and an increase in queue length of 0.01 PCU in the AM peak hour when compared to the 2032 future baseline. There is no change in RFC or queue in the PM peak hour when compared to the 2032 future baseline. This shows that the junction is forecast to already be over capacity in the 2032 future baseline in the PM peak hour, but the proposed development would have a negligible impact on the operation of this junction.

7.4 Accidents and Safety Impact

Two collision clusters were identified in the review of PIC in the most recent five years, located at the A27 westbound off slip/A27 Overbridge/A27 Link Road junction, and A23 London Road/A27 Link Road/Mill Road junction. These are set out in Section 2.6.

Both of the junctions where these clusters were present have been assessed. It is anticipated that the negligible increase in traffic forecast at these junctions as a result of the proposed scheme will have no impact on accidents and safety in these locations.

The pedestrian trip distribution from the site shows that all trips will distribute along Church Hill and Vale Avenue. These routes have been assessed for pedestrian safety and an improvement is proposed to Vale Avenue through the introduction of a new uncontrolled dropped kerb crossing.

7.5 Summary

The above assessments show that:

- The pedestrian trips generated by the proposed development are forecast to have no impact on the operation of the local pedestrian network and footways. In order to provide a safe access to the site for pedestrians travelling from the south, a dropped kerb crossing has been proposed to the east of the Vale Avenue/Church Hill junction.
- The bus trips generated by the proposed development are forecast to have a negligible impact on the capacity of bus services. It is assumed that the existing bus provision has sufficient capacity to accommodate the bus trips generated by the proposed development and RMG will engage with local bus companies to facilitate access to the site by public transport.
- The rail trips generated by the proposed development are forecast to have no impact on the operation of rail services from local train stations.

- The vehicle trips generated by the proposed development are forecast to have a negligible impact on the operation of the local transport network. Therefore, no further mitigation is required to improve the operation of the junctions assessed.

8 Summary and Conclusions

Mott MacDonald has been commissioned by RMG to produce a Transport Assessment for a proposed Delivery Office at Patcham Court Farm in Brighton. This Transport Assessment has been prepared in accordance with 'Best Practice Guidance for Transport Assessments' (April 2010) and with reference to Brighton & Hove City Council Policy. The development will comprise a Delivery Office of 4,145sqm GFA.

Sufficient on-site parking is to be provided for the forecast staff and operational vehicles which is to be managed in line with a Travel Plan that will promote travel by modes other than single occupancy car where possible to the site. Disabled bays, motorcycle bays, cycling bays and EV charging bays have all been provided in line with BHCC guidelines. The proposed development complies with local and national policy through an emphasis on trips being undertaken by sustainable modes of transport.

Royal Mail are currently in ongoing discussions with their workers regarding staff working hours, at the time of writing this report no agreement has been reached to amend the current operational hours. This Transport Assessment is therefore based on the existing Royal Mail operational hours. For transparency, the Transport Assessment includes a 'sensitivity test' on the proposed working hours for the Brighton & Hove, and subsequently Patcham, delivery offices. The proposed working hours are a 90-minute shift later in the day than the current working hours. The results of the 'sensitivity test' are comparable to those of the Transport Assessment using the current operational hours, and demonstrate a negligible impact on pedestrian, public transport and highway operation. The full 'sensitivity test' can be found in Appendix C.

This Transport Assessment summarises:

- The site is easily accessible on the local highway network, with a number of strategic A roads in close proximity. This means that site traffic does not have a significant impact on local residential roads. Royal Mail Group operational vehicles will navigate away from sensitive local highways towards the strategic highway network.
- The site is highly accessible by sustainable modes of travel with good connectivity to local public transport services and a number of local walking and cycling routes.
- The accident review identifies two collision clusters over the five year period. Further analysis shows that there will be no impact on accidents and safety at these clusters as a result of the forecast site trips.
- The proposals include a new site access on Vale Avenue which has been designed to DMRB standards.
- Parking provision has been provided based on the parking accumulation figures which have been calculated based on the forecast trip generation, and staff arrival/departure profiles.
- Safe NMU access has been provided with a proposed dropped kerb crossing on Vale Avenue, and a number of onsite crossing points along key desire lines.
- A trip generation forecast has been undertaken for staff, HGV deliveries, and the RMG red fleet. This has been based on information provided by RMG.
- A target mode share has been calculated for the site, based on information gathered in a staff travel survey alongside a number of measures and incentives set out within the accompanying Travel Plan.
- Trips have been distributed onto the highway network, walking/cycling network, and public transport network using staff postcode data.

- The impact of pedestrian, cycling and public transport trips on the local transport network has been assessed and it can be concluded that the proposed development has a negligible impact on the operation of these networks.
- The impact of these trips on the highway network have been analysed by undertaking a number of junction capacity assessments on key junctions within the study area. The assessment concluded that the proposed development has a negligible impact on the operation of these junctions.

A. WYG Walking Distance to Bus Stops Research



How far do people walk?

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Presented at the PTRC Transport Practitioners' Meeting
London, July 2015



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Abstract

Walking and, to a lesser extent, cycling are important factors in assessing land allocations in Local Plans and in determining planning applications. Accessibility to public transport, defined in part, as the walking distance to bus stops can have significant financial implications for new developments if bus services need to be provided or diverted to serve the site. The information on walking distances is limited. Planning Policy Guidance 13 Transport, which gave some useful guidance on walking and cycling distances, was withdrawn in 2012. The IHT's Providing for Journeys on Foot and Planning for Public Transport in New Development were both published 15 years ago. In all three documents there is limited evidence to support the advice given. However, there is a clear need that policy and decision taking should be based on the best evidence available.

The National Travel Survey is a large-scale travel diary survey which provides data on a wide range of transport matters, including walking and cycling distances. It has limitations because it relies on self-completion and the distances are those estimated by respondents. However, the data has been consistently collected across the UK since 1988.

We have used the NTS to obtain average and 85th percentile distances for journeys where walking is the main mode of travel, and also where walking is the first stage of a public transport trip, i.e., walking distance to a bus stop or railway station. When assessing the accessibility of a new development on foot we suggest that the 85th percentile distance should be used to estimate the distance upto which people are prepared to walk. For new bus stops and railway stations, we suggest that the average walking distance is used for planning purposes. The contribution which the walking distance to a bus stop, or railway station, plays in the perceived convenience of public transport is not well understood and is an area for further study. Until further information is available, the use of average walking distance from the NTS is at least based on the distance that people actually walk.

We have looked at the influence of region, whether the area is urban or rural, journey purpose and gender on walking as the main mode and on walking to a bus stop or railway station.

We conclude that the following distances should be used for planning purposes:

	Mean (m)	85 th Percentile (m)
Walk – As main mode of travel		
UK (Excluding London)	1,150	1,950
London	1,000	1,600
Walk to a Bus Stop		
UK (Excluding London)	580	800
London	490	800
Walk to a Railway Station		
UK (Excluding London)	1,010	1,610
London	740	1,290

1.0 Review of Advice & Guidance

Walking

- 1.1** The Government introduced advice on walking distances in the 2001 revision to Planning Policy Guidance 13: Transport (PPG13) (DETR, 2001, para 75) which advised that, *“Walking is the most important mode of travel at the local level and offers the greatest potential to replace short car trips, particularly those under two kilometres”*. This advice was retained in the 2011 revision of PPG13 (DCLG, 2011). The 2km distance has been used for many years to define the areas within which facilities are considered accessible on foot. However, PPG13 did not provide any rationale or evidence to support the selection of 2km as an appropriate distance.
- 1.2** In 2012 PPG13 was withdrawn and replaced with the National Planning Policy Framework (NPPF) (DCLG, 2012). NPPF does not provide any specific guidance on walking distances, although walking is considered to be an important contributor to sustainability.
- 1.3** Planning Policy Guidance for Transport Assessments and Statements (DCLG, 2014, para 015) does not give any specific guidance advice on walking distances but advises that Transport Assessments and Transport Statements should include *“a qualitative and quantitative description of the travel characteristics of the proposed development, including movements across all modes of transport”*.
- 1.4** The Guidelines for Providing for Journeys on Foot (IHT, 2000, para 3.30) includes some evidence on walking distances taken from the NTS’s summary *findings “Approximately 80% of walk journeys and walk stages in urban areas are less than one mile. The average length of a walk journey is one kilometre (0.6 miles). This differs little by age or sex and has remained constant since 1975/76. However, this varies according to location. Average walking distances are longest in Inner London”*.
- 1.5** The same guidelines produced a table of suggested acceptable walking distances, which is reproduced below at Table 1.1. These distances are for people without mobility impairment and it is suggested in the guidelines that these may be used for planning and evaluation purposes.

	Town centres (m)	Commuting/school Sight-seeing (m)	Elsewhere (m)
Desirable	200	500	400
Acceptable	400	1,000	800
Preferred maximum	800	2,000	1,200

Table 1.1 – Suggested Acceptable Walking Distance (IHT, 2000, Table 3.2)

- 1.6** It is notable that these distances are only “suggested” and no evidence is provided to support them. From the NTS data quoted in IHT (2000), the average walking distance is 1km, which means that around half of walking trips are longer than the “suggested acceptable” walking distance for commuting and school purposes. The preferred maximum distance is the same as that in PPG13, but it is not clear why walking “elsewhere” should be associated with shorter distances, or why the distances in town centres are so much shorter. There are clearly problems inherent in this table.
- 1.7** The Manual for Streets (DfT, 2007) promoted the concept of walkable neighbourhoods and these are typically characterised by having a range of facilities within 10 minutes’ walking distance (about 800m) of residential areas. The Manual also advised that 800m is not “an upper limit” (DfT, 2007, para 4.4.1) and referred back to the 2km advice in PPG13.
- 1.8** Planning for Walking (CIHT, 2015) is an update to IHT (2000) and provides the following guidance on walking distances *“Most people will only walk if their destination is less than a mile away. Land use patterns most conducive to walking are thus mixed in use and resemble patchworks of “walkable neighbourhoods”, with a typical catchment of around 800m, or a 10 minute walk”* (CIHT, 2015, p.29).
- 1.9** It also recognises the lack of supporting evidence and that more work is needed, “These guidelines are designed to address the limited amount of guidance available to professionals about planning for walking. Some of the research quoted is quite old but is still valid and does in itself indicate that more work is needed in this area”, and, “CIHT would welcome examples that build on the content of this guidance for inclusion in further guidance on the subject” (CIHT, 2015, p.5).
- 1.10** Transport Statistics GB (DfT, 2014a) reports that walking accounted for 22% of all trips, and that 78% of all trips of less than one mile were walking trips. The DfT also produces Personal Travel Factsheets which provide summary detail on various sections of the NTS results (DfT, 2013a). The most recent document (released in 2011) showed that in Great Britain in 2009 11% of all commuting trips were on foot, whilst walking accounted for 47% of trips under 2 miles (DfT, 2011a). Although these documents provide some useful information they do not give details of the range of distances walked and the parameters used are often inconsistent.
- 1.11** In summary, there is no current national guidance on acceptable walking distances and the published guidance makes some suggestions, but with little supporting evidence. The CIHT acknowledges the current guidance is old and more research is needed.

Walking to Public Transport

- 1.12** PPG13 did not advise on walking distances to bus stops or railway stations and neither does the NPPF. Planning Policy Guidance on Transport Assessment (DCLG, 2014) also gives no guidance on acceptable distances, leaving Local Authorities and practitioners to devise their own estimates.
- 1.13** Planning for Public Transport in New Development (IHT, 1999, para 5.21) advises that, *“New developments should be located so that public transport trips involving a walking distance of less than 400m from the nearest bus stop or 800m from the nearest railway station”*; advice which has been widely adopted by Local Authorities. It also advises that *“These standards should be treated as guidance, to be achieved where possible by services that operate at regular frequencies and along direct routes. It is more important to provide services that are easy for passengers to understand and attractive to use than to achieve slavish adherence to some arbitrary criteria for walking distance”* (IHT, 1999, para 5.17).
- 1.14** IHT (1999) bases its recommended walking distance to a bus stop on DoE Circular 82/73. This circular advised that *“Estates should be designed so that the walking distance along the footpath system to the bus stops should not be more than 400m from the furthest houses and work places that they serve”* (DoE, 1973, para 4.3). The Circular provided no evidence to support its advice or to give any guidance on the walking distance to railway stations.
- 1.15** Planning for Walking (CIHT 2015, p.30) advises that, *“The power of a destination determines how far people will walk to get to it. For bus stops in residential areas, 400m has traditionally been regarded as a cut-off point, in town centres, 200m. People will walk up to 800m to get to a railway station, which reflects the greater perceived quality or importance of rail services”*. Again, no evidence is provided to support the advice it gives and, by describing 400m as a cut-off point, is more rigid in its recommendation than IHT (1999).
- 1.16** The Masterplanning Check List (TfQL, 2008) reports a 2003 study by Kuzmyak et al. (2003a) which found that walking was the dominant mode of station access for home to station distances up to 0.5 miles, 0.625 miles and 0.75 miles, for three different railways in San Francisco. The authors of the Check List interpreted this as supporting the assumption of an 800m (0.5 mile) catchment for railway stations, although Kuzmyak et al. 2003a study (cited in TfQL, 2008) reported the range of distance was between 800m and 1,200m.
- 1.17** Transport Statistics GB (DfT, 2013b) includes an assessment of the time taken to walk to the nearest bus stop broken down by area type (metropolitan, small urban, etc). This reports that in 2012 for all areas, 85% of people live within a 7 minute walk of a bus stop, 11% live between 7 minutes and 14 minutes, and 4% live over 14 minutes' walk. Assuming a walking speed of 1.4m/s (IHT, 2000), these equate to 85% of people living within 588m of a bus stop, 11% living between 588m and 1,176m, and 4% living over 1,176m. This data does not report how far people walk to bus stops.
- 1.18** In summary, a 400m walking distance to a bus stop and an 800m walking distance to a railway station has been widely adopted. However, the reason why these distances have been selected is not clear. The most recent publication from CIHT acknowledges that the research is old and more work is required.

2.0 National Travel Survey

- 2.1** The NTS is a household survey of some 15,000 households across the UK, of which normally around 55% fully co-operate; for the 2010 to 2012 survey years this was between 7,700 to 8,200 households and over 18,000 individuals (DfT, 2010, 2011b, 2012a and 2013b). A travel diary is used to record journeys by mode of travel, distance and the purpose of the journey as well as a range of other factors.
- 2.2** The NTS has some limitations because it relies on self completion of the diary and on individuals accurately estimating the distances travelled, as a result there may be inaccuracies in the data.
- 2.3** The NTS has been used to assess how far people walk to local facilities, bus stops and railway stations. Its use is recommended in Traffic Advisory Leaflet 6/00 Monitoring Walking (DfT, 2000). The NTS 2002 to 2012 dataset was available and the most recent three years' data (2010, 2011 and 2012) were selected for our analysis.
- 2.4** Walks of 1 mile or over are recorded on every day, whilst those less than 1 mile (termed "short walks"), which may form part of a multi-stage journey, are collected only on day 7 (DfT, 2012b). The day on which respondents begin completion of their travel diary is randomised, so that the day on which short walks are noted is randomly distributed over all weekdays. As a result, Day 7 includes both long and short walks and has been used for the walking assessment in this Paper. Appropriate weightings were applied to the data to adjust for non-response and drop-off in the number of trips recorded in accordance with DfT (2012b).
- 2.5** It is recommended by DfT (2013c) that for stage estimates, samples of less than 300 should not be used and that samples of less than 1,000 may not be statistically reliable. Where sample sizes are less than 300 the data has not been reported.
- 2.6** The longest 1% of walk distances from each dataset was removed from the sample to eliminate unusually long walks. As a result, our analysis was based on 99% of the surveyed distance distribution.
- 2.7** Actual walking distances are generally recorded in NTS to the tenth of a mile, but some are recorded to the hundredth of a mile, for example 0.5 miles and 0.75 miles. The reported distances have been converted to metres and then rounded to the nearest 50m, or to the nearest 10m for the walking distances to public transport.
- 2.8** The datasets were analysed for walking distances in relation to several variables and the mean and 85th percentile distances were determined. The mean is a useful measure of the distance that the average person walks, whereas the 85th percentile is a measure of the distance upto which people are prepared to walk, and so could be used to establish catchment areas for walking.

3.0 Results

Walking

3.1 These are for journeys where walking is the main mode of travel.

a. Regional Variations

3.2 The walking distances by region are shown below at Table 3.1.

Region	Weighted Sample Size	Mean (m)	85th Percentile (m)
North East	1539	1200	1950
North West	4251	1150	1950
Yorkshire & Humber	3067	1150	1600
East Midlands	2535	1150	2000
West Midlands	3029	1100	1600
East of England	3072	1150	1800
London	4608	1000	1600
South East	4765	1150	1950
South West	3159	1200	2250
Wales	1743	1100	1950
Scotland	3222	1100	1950
All Regions (Excl. London)	30382	1150	1950
All Regions (Incl. London)	34990	1150	1600

Table 3.1 – Walking Distances by Region

3.3 The results show that there is little variation in the average walking distance, which is between 1,000m and 1,200m. Excluding London the variation would be only 100m. There is greater variation (650m) in the 85th percentile distances, which are between 1600m and 2250m. London has the shortest average walking distance and has the one of the shortest 85th percentile walking distances at 1,600m.

3.4 The shorter walking distances in London given by the NTS does not fit with the information in IHT (1999) which found that walking distances are longest in Inner London. The NTS data is for both Inner and Outer London, but unless the walking distances in Outer London are abnormally low then it is difficult to reconcile the difference. Further study is needed and for this reason the remainder of our analysis excludes London.

3.5 The walking distances for All Regions excluding London should be used.

b. Urban and Rural Distribution

3.6 The walking distances by 2011 Census Rural/Urban Classification are shown below at Chart 3.1.

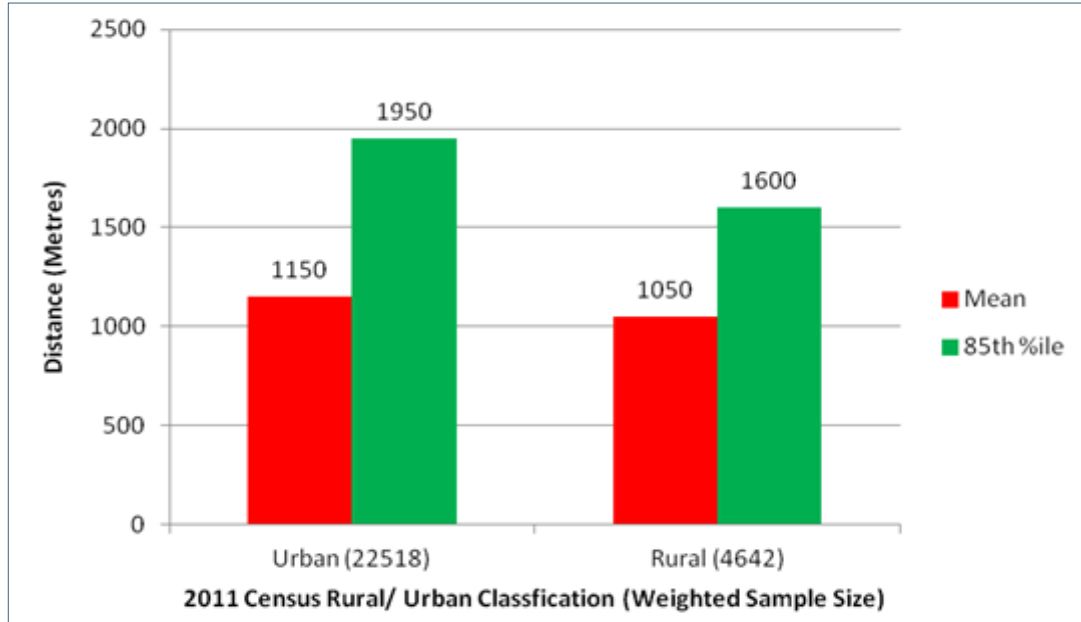


Chart 3.1 – Walking Distances by 2011 Census Rural/ Urban Classification (Excluding London)

3.7 People living in urban areas walk further than those in rural areas, with 85th percentile distances of 1,950m and 1,600m respectively. The result for rural areas corresponds with that for London, although the availability of facilities in London and in rural areas is likely to be quite different. Clearly further study is needed.

c. Effect of Gender

3.8 The walking distances by gender are shown below at Chart 3.2.



Chart 3.2 – Walking Distances by Gender (Excluding London)

3.9 There are slightly more women (54%) than men (46%) in the sample and they have a similar average walking distance, but men walk some 400m further than women at the 85th percentile level.

d. Effect of Journey Purpose

3.10 The walking distances by gender are shown below at Table 3.2.

Journey Purpose	Weighted Sample Size	Proportion	Mean (m)	85th Percentile (m)
Commuting	2166	7.1%	1250	2100
Business	290	1.0%		
Education/ Escort	5609	18.5%	1,000	1600
Shopping	5958	19.6%	1,000	1600
Other Escort	1392	4.6%	1100	1600
Personal Business	2730	9.0%	1,000	1600
Leisure	5539	18.2%	1150	1950
Other (including just walk)	6698	22.0%	1450	2400
All	30382	100%	1150	1950

Table 3.2 – Walking Distances by Journey Purpose (Excluding London)

3.11 The results show that walking is mainly used for leisure and other purposes, which together account for 40% of all walking journeys.

3.12 Education and shopping each account for around 20% of walking trips and they have the same average walking distance of 1,000m and the same 85th percentile walking distance of 1,600m. The walking distance for commuting is longer, with an average of 1,250m and an 85th percentile of 2,100m, but only 7% of walking journeys are for commuting.

3.13 It is difficult to compare the values in Table 3.2 with those from IHT (2000), reported at Table 1.1, even if it is assumed that their Preferred Maximum accords with our 85th percentile values, because “town centres” and “shopping” may not be looking at the same activity and the IHT table groups together a number of different purposes.

e. Summary

3.14 The analysis has shown that there is some variation in walking distance across the country, with London having the shortest walking distances. Walking is mainly used for leisure and other purposes, which together account for 40% of all walking trips, followed by shopping and education each accounting for 20%. There is a slight gender bias with women walking more, but men walking for longer distances. People in rural areas, on average, walk a similar distance to those in urban. People in rural areas walk shorter distances than people living in urban areas.

Walking to a Bus Stop

3.15 Walking distances have been analysed for those trips where walking was the 1st stage/ mode of travel and bus was the 2nd stage/ mode of travel. This is the walking distance from, for example, home to the bus stop or work to the bus stop. However, in considering only the most recent three years of data, the sample sizes are too low for reliable results. In order to increase the sample size, the whole 2002 to 2012 dataset has been used.

a. Regional Variations

3.16 The walking distances to bus stops by region are shown below at Table 3.3.

Region	Weighted Sample Size	Mean (m)	85th Percentile (m)
North East	293		
North West	775	600	800
Yorkshire & Humber	527	620	800
East Midlands	347	650	1210
West Midlands	580	550	800
East of England	472	630	800
London	2916	490	800
South East	717	580	800
South West	359	640	1290
Wales	133		
Scotland	871	510	800
All Regions (Excl. London)	5075	580	800
All Regions (Incl. London)	7990	550	800

Table 3.3 – Walking Distances to Bus Stops by Region

Note samples below 1,000 may not be statistically reliable

3.17 The sample size for two of the regions is below 300 so the data has not been shown.

3.18 Even with the larger dataset, many of the regions have sample sizes which are too low to report, or below 1,000, and so possibly unreliable. Reliable data is only available from London and for All Regions.

- 3.19** Within the limitations of the data, the results identify some regional variations. Notably, London has the lowest mean distance of 490m and the joint lowest 85th percentile of 800m, whereas the South West has the highest mean distance of 640m and the highest 85th percentile of 1,290m. The inclusion of London within the All Regions sample has a marginal effect on the average walking distance; 550m opposed to 580m, but has no effect at the 85th percentile level. The average walking distance to a bus stop is notably longer than the 400m recommended in IHT (1999) and CIHT (2015).
- 3.20** For consistency with previous practice, London has been excluded from the remainder of the analysis.

b. Urban and Rural Distribution

- 3.21** The walking distances to bus stops by 2011 Census Rural/ Urban Classification are shown below at Chart 3.3.

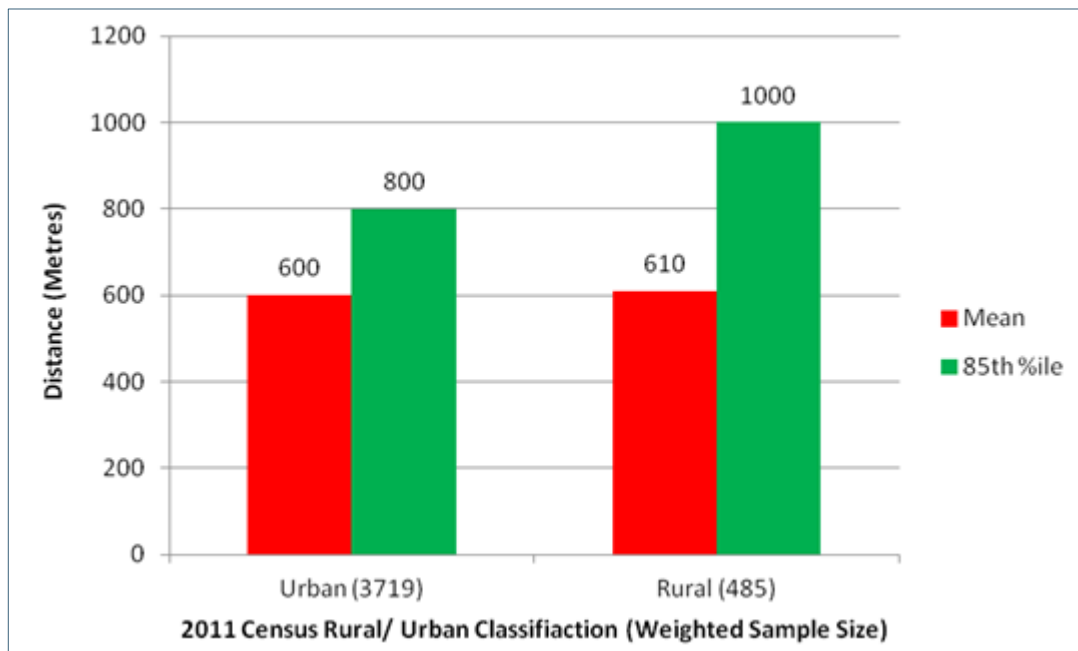


Chart 3.3 – Walking Distances to Bus Stops by 2011 Census Rural/ Urban Classification (Excluding London)

- 3.22** The sample size in rural areas is less than 1,000 so might be statistically unreliable.
- 3.23** The graph shows that the use of buses by people living in rural areas is quite small, accounting for only 12% of the distribution, and on average these people walk no further than those in urban areas although, at the 85th percentile level, rural people walk 200m further than those in urban areas.

c. Effect of Gender

3.24 The walking distances to bus stops by gender are shown below at Chart 3.4.

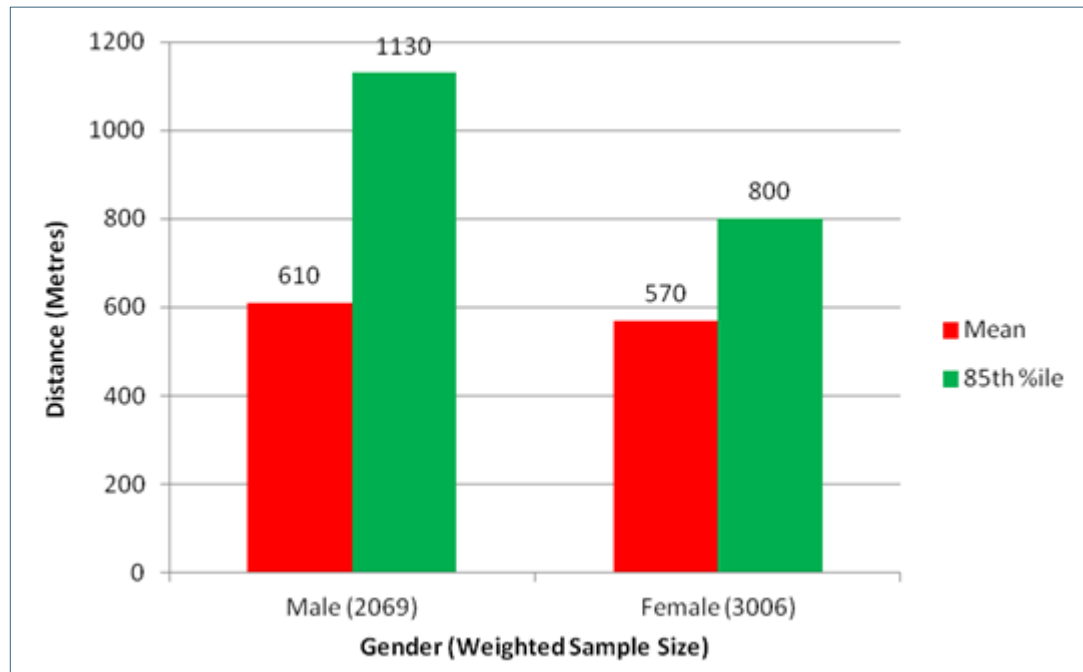


Chart 3.4 – Walking Distances to Bus Stops by Gender (Excluding London)

3.25 The results show that women account for 59% of the sample but walk on average slightly less to a bus stop than men; 570m opposed to 610m, whilst at the 85th percentile men walk considerably further; 1,130m opposed to 800m.

d. Effect of Journey Purpose

3.26 The walking distances to bus stops by journey purpose are shown below at Table 3.4.

Journey Purpose	Weighted Sample Size	Proportion	Mean (m)	85th Percentile (m)
Commuting	1352	26.6%	610	840
Business	97	1.9%		
Education/ Escort	845	16.7%	610	800
Shopping	1097	21.6%	500	800
Other Escort	109	2.1%		
Personal Business	479	9.4%	550	800
Leisure	1088	21.4%	640	1290
Other (including just walk)	7	0.1%		
All Purposes	5074	100.0%	580	800

Table 3.4 – Walking Distances to Bus Stops by Journey Purpose (Excluding London)

Note samples below 1,000 may not be statistically reliable

- 3.27** The sample size for three of the journey purposes is below 300 so the data has not been shown.
- 3.28** The results show that buses are mainly used for the purpose of commuting, followed by leisure and shopping purposes, these together accounting for over two-thirds of the distribution, followed by education/ escort.
- 3.29** The average walking distances to a bus stop for commuting, education and leisure are similar at just over 600m. However, people do not walk as far if on a shopping journey (500m). The 85th percentile for each journey purpose is similar, at 800m, apart from leisure at 1,290m.

e. Summary

- 3.30** This analysis has clearly demonstrated that average walking distances to a bus stop exceed the 400m which has been the distance recommended for use in IHT (1999) for some time. The analysis has also shown that the walking distances to bus stops in London are less than elsewhere in the UK. Walking to bus stops is mainly used for commuting, leisure and shopping purposes, and there is a small gender bias with women walking more, but men walking for longer distances. People in rural areas, on average, walk a similar distance to those in urban areas.

Walking to a Railway Station

3.31 Using the 2002 to 2012 dataset, walking distances have been analysed for those trips where walking was the 1st stage/ mode of travel and rail was the 2nd stage/ mode of travel. This is the walking distance from, for example, home to the railway station or work to the railway station.

a. Regional Variations

3.32 The walking distances to rail stations by region are shown below at Table 3.5.

Region	Weighted Sample Size	Mean (m)	85th Percentile (m)
North East	20		
North West	293		
Yorkshire & Humber	191		
East Midlands	67		
West Midlands	191		
East of England	505	1030	1610
London	3212	740	1290
South East	878	1020	1610
South West	89		
Wales	77		
Scotland	365	980	1610
All Regions (Excl. London)	2676	1010	1610
All Regions (Incl. London)	5888	870	1610

Table 3.5 – Walking Distances to Rail Stations by Region
Note samples below 1,000 may not be statistically reliable

3.33 The sample size in seven regions is below 300, so the data has not been shown, and in three regions the sample size is below 1,000 and so might be statistically unreliable. Reliable data is only available from London and for All Regions.

3.34 The results show that London has the lowest average walking distance of 740m and the lowest 85th percentile walking distance of 1,290m. The East of England and South East England have the highest average walking distance of 1,030m and 85th percentile walking distance of 1,610m.

- 3.35** By comparing data for both All Regions samples it can be seen that the inclusion of London results in a shorter average walking distance, 870m as opposed to 1010m, but has no effect at the 85th percentile level.
- 3.36** The average walking distance to a railway station outside London is notably longer than the 800m recommended in IHT (1999) and CIHT (2015), but is similar to that noted by Kuzmyak et al. 2003a (cited in TfQL, 2008).
- 3.37** IHT (1999) and CIHT (2015) both advise that people should not have to walk more than 800m to a rail station. The results show that people outside London walk on average 1,010m and 15% walk more than 1,610m.

b. Urban and Rural Distribution

- 3.38** The walking distances to rail stations by 2011 Census Rural/ Urban Classification are shown below at Chart 3.5.

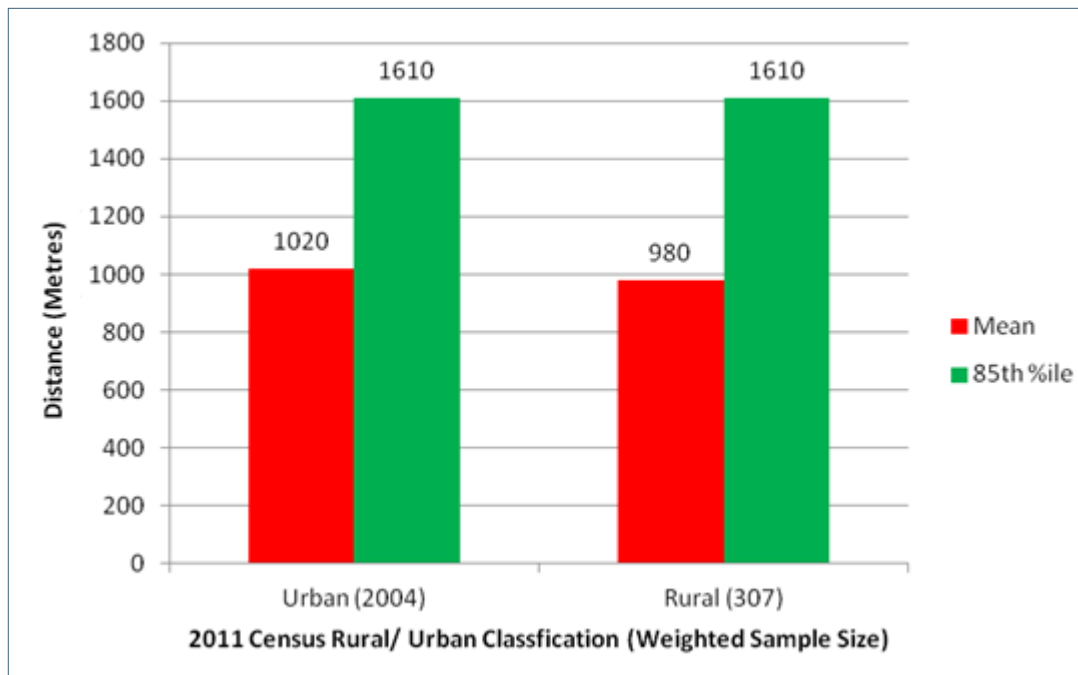


Chart 3.5 – Walking Distances to Rail Stations by 2011 Census Rural/ Urban Classification (Excluding London)

- 3.39** The sample size in rural areas is less than 1,000, and only just above 300, so is likely to be statistically unreliable; nevertheless the walking distances are similar.

c. Effect of Gender

3.40 The walking distances to rail stations by gender are shown below at Chart 3.6.

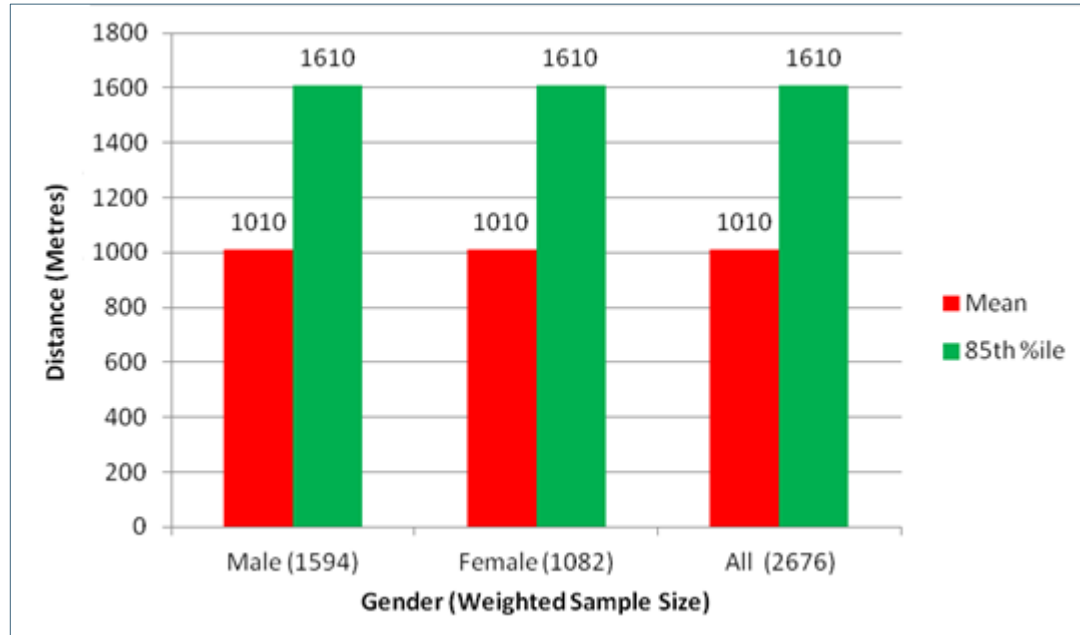


Chart 3.6 – Walking Distances to Rail Stations by Gender (Excluding London)

3.41 The results demonstrate that the average and 85th percentile walk distances to a rail station are unaffected by gender.

d. Effect of Journey Purpose

3.42 The walking distances to rail stations by journey purpose are shown below at Table 3.6.

Journey Purpose	Weighted Sample Size	Proportion	Mean (m)	85th Percentile (m)
Commuting	1307	48.8%	1030	1610
Business	165	6.2%		
Education/ Escort	217	8.1%		
Shopping	220	8.2%		
Other Escort	50	1.9%		
Personal Business	119	4.4%		
Leisure	598	22.3%	1010	1610
Other (including just walk)	2676	100.0%	1010	1610
All	1307	48.8%	1030	1610

Table 3.6 – Walking Distances to Rail Stations by Journey Purpose (Excluding London)

Note samples below 1,000 may not be statistically reliable

- 3.43** The sample size for five journey purposes is below 300 so the data has not been shown and one is below 1,000 so might be statistically unreliable.
- 3.44** The results show that walking to a railway station is undertaken predominantly for commuting (50%) and leisure (22.3%), these together accounting for over two-thirds of the sample.
- 3.45** The average walking distances to a rail station for commuting and for leisure are very similar at just over 1,000m, whilst the 85th percentile level is 1,610m.

e. Summary

- 3.46** The analysis has shown that average walking distances to a rail station exceed the 800m maximum distance recommended in IHT (1999). The analysis has also shown that walking distances to rail stations in London are less than elsewhere in the UK. Walking to rail stations is mainly used for commuting and leisure purposes, and there is no difference in the distances walked. There is very little difference in the distances walked to a rail station in rural and in urban areas.

4.0 Discussion

- 4.1** In relation to walking as the main mode of travel the main interest from a planning perspective is to assess whether there is a range of facilities within a reasonable walking distance of a site. This is normally done as a walkable catchment which shows the furthest extent that could reasonably be walked. In the past the 2km value from PPG13 was used, but since its withdrawal there is no basis for continuing to rely on this value.
- 4.2** From the simple analysis of the NTS data we have shown that the average walking distance for All Regions excluding London is 1,150m and the 85th percentile distance is 1,950m, which corresponds to the PPG13 2km value. We suggest that for planning purposes the 85th percentile distance should be used to establish the walking catchment for sites outside London.
- 4.3** In London we found that walking distances were less; the average is 1,000m and the 85th percentile is 1600m. It is not clear why the distances are less than elsewhere in the UK, but it is notable that the walking distances to a bus stop or a railway station are also lower in London. It may be that people don't have to walk far to reach the facilities they need, but the London walking distance are similar to those in rural areas where the opposite argument would apply. Further study is needed.
- 4.4** Outside London, walking is mainly a leisure activity accounting for 40% of journeys, with education and shopping each accounting for 20%. Commuting on foot was little used, accounting for only 7% of trips. People walked the furthest for commuting and other journey purposes, both at the average and 85th percentile levels (2,100m and 2,400m respectively). People did not walk as far for shopping or education purposes both at the average and 85th percentile levels (1,600m for both). With this data it is possible to consider the walking catchment of workplaces, schools and shops. The distances set out here should replace those in IHT (2000).
- 4.5** It has been found that males walk further than women especially at the 85th percentile level. Further study of gender differences in relation to journey purpose would be worthwhile.
- 4.6** At present the walking distance recommendations of 400m and 800m by IHT (1999) have been widely adopted. From our assessment the distances people actually walk to catch a bus or train are notably longer. The average walk to a bus stop is 490m in London and 580m elsewhere in the UK and the average walk to a railway station is 740m in London and 1,010m elsewhere. So, outside London, the average person walks further to a bus stop or railway station, with 15% walking further than 800m to a bus stop and further than 1,290m to a railway station in London, and further than 1,610m to a railway station elsewhere.

- 4.7** So what is a reasonable walking distance to a bus stop or railway station for planning purposes? There is no simple answer. To compete with car travel, bus services need to be convenient for passengers. Convenience is a poorly defined term (OECD/ ITF, 2014) comprising several aspects, only one of which is the access distance to the bus stop. From Transport Statistics GB (DfT, 2014), 86% of homes are shown to be within 588m of a bus stop and yet bus patronage is 7% nationally. From Kuzmyak et al. 2003a study (cited in TfQL, 2008) for home to station distances of 800m to 1,200m, walking was the predominant mode of access.
- 4.8** The contribution that the access distance to public transport has on the uptake of the mode is not clear and further research is needed. What is clear from our assessment is that the average walking distance to a bus stop is well above 400m and the average walking distance to a railway station, outside London, is well above 800m. Therefore, average walking distances to bus stops and railway stations based on revealed behaviour recorded in the NTS should be used for planning purposes in preference to the 400m and 800m distances recommended in IHT (1999). When considering the potential walking catchment of a new development, to bus stop or railway station, the 85th percentile distance should be used.

5.0 Conclusions

- 5.1** There has been little or no information about how far people walk to underpin the policy and guidance which has been used for many years.
- 5.2** Policy making and decision taking should be based on the best evidence available and the following distances are recommended for planning purposes.

	Mean (m)	85 th Percentile (m)
Walk – As main mode of travel		
UK (Excluding London)	1,150	1,950
London	1,000	1,600
Walk to a Bus Stop		
UK (Excluding London)	580	800
London	490	800
Walk to a Railway Station		
UK (Excluding London)	1,010	1,610
London	740	1,290

Table 5.1 Recommended Walking Distances



References

Chartered Institute of Highways & Transportation (2015) *Planning for Walking*, London: Chartered Institution of Highways & Transportation.

Department for Communities and Local Government (2011) *Planning Policy Guidance 13: Transport*, London: The Stationary Office.

Department for Communities and Local Government (2012) *National Planning Policy Framework*, London: Department for Communities and Local Government.

Department for Communities and Local Government (2014) *Transport Assessment and Statements*, Planning Practice Guidance, [online], Available at <http://planningguidance.planningportal.gov.uk/blog/guidance/travel-plans-transport-assessments-and-statements-in-decision-taking/transport-assessments-and-statements/> (accessed 31st May 2015).

Department of the Environment, Transport & The Regions (2001) *Planning Policy Guidance 13: Transport*, London: The Stationary Office.

Department for Transport (2000) Traffic Advisory Leaflet 6/00, *Monitoring Walking*, London: Department for Transport.

Department for Transport (2007) *Manual for Streets*, London: Thomas Telford.

Department for Transport (2010) *National Travel Survey: England 2010*, London: Department for Transport.

Department for Transport (2011a) *Personal Travel Factsheet: Commuting and Business Travel*, London: Department for Transport.

Department for Transport (2011b) *National Travel Survey: England 2011*, London: Department for Transport.

Department for Transport (2012a) *National Travel Survey: England 2012*, London: Department for Transport.

Department for Transport (2012b) *National Travel Survey: Data Extract User Guide, 2002-2012*, London: Department for Transport.

Department for Transport (2013a) *NTS factsheets* [online], Available at <https://www.gov.uk/government/publications/nts-factsheets> (accessed 2nd June 2015).

Department for Transport (2013b) *Table NTS0801 Time taken to walk to nearest bus stop by area type and bus availability indicator: Great Britain and England 2002 and 2012* [online], Available at <https://www.gov.uk/government/statistical-data-sets/nts08-availability-and-distance-from-key-local-services> (accessed 2nd June 2015).

Department for Transport (2013b) *National Travel Survey 2012 Technical report*, London: NatCen Social research.



Department for Transport (2013c) *National Travel Survey: England 2013, Notes and Definitions*, London: Department for Transport.

Department for Transport (2014a) *Transport Statistics Great Britain: 2014*, London: Department for Transport.

Department for Transport (2014b) *National Travel Survey: England 2013*, London: Department for Transport.

Department of the Environment (1973) *Circular 82/73 Bus Operation in Residential and Industrial Areas*, London: Her Majesty's Stationary Office.

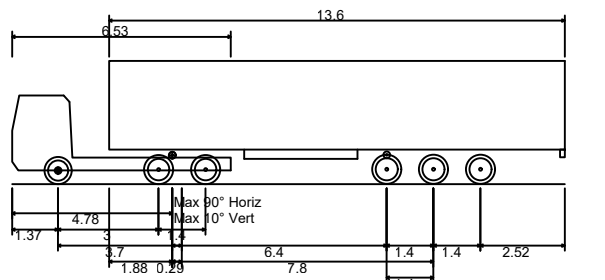
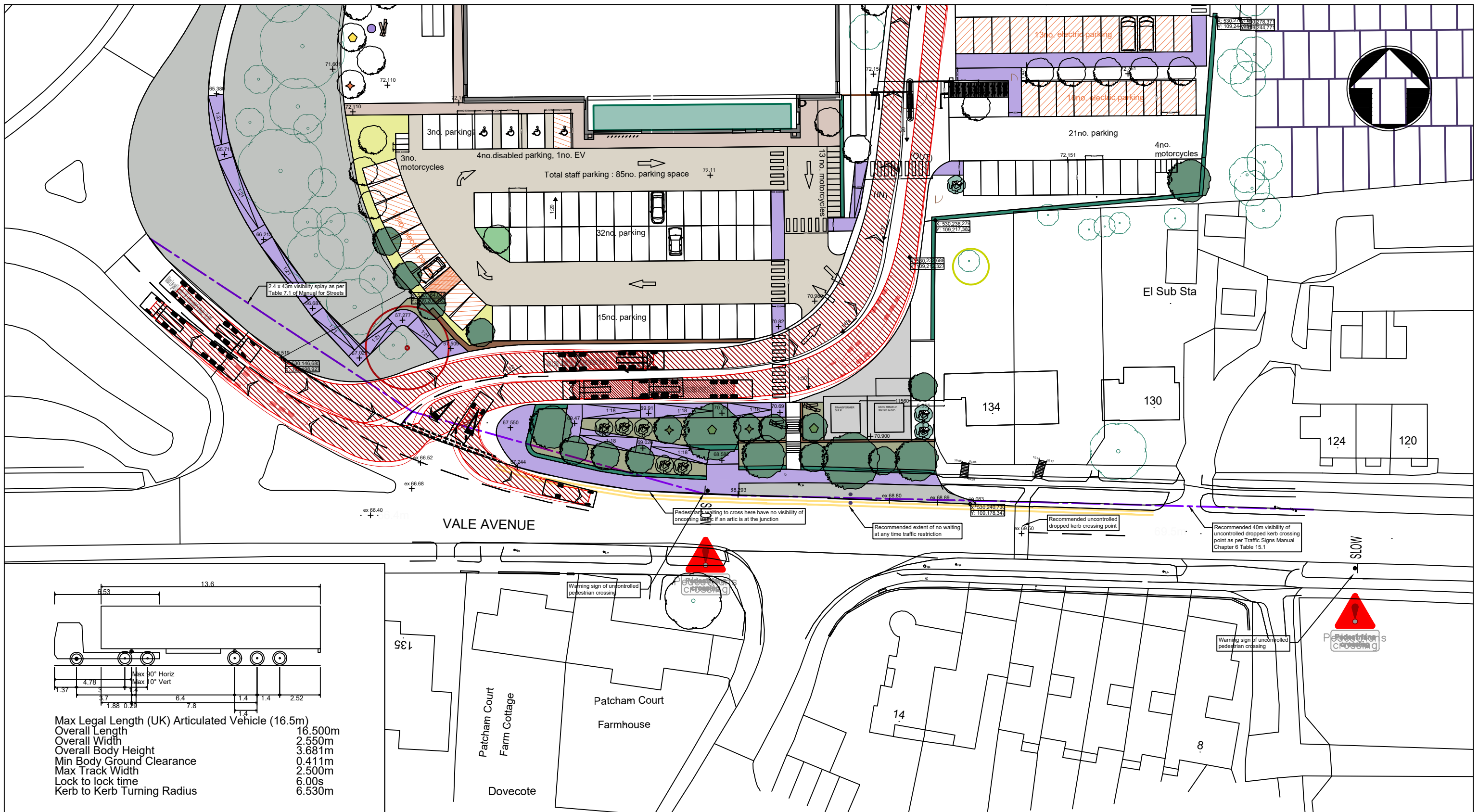
Institute of Highways & Transportation (1999) *Guidelines for Planning for Public Transport in Developments*, London: Institution of Highways & Transportation.

Institute of Highways & Transportation (2000) *Guidelines for Providing for Journeys on Foot*, London: Institution of Highways & Transportation.

OECD/ ITF (2014) *Valuing Convenience in Public Transport*, ITF Round Tables, No 156, Paris: OECD Publishing.

Transport for Quality of Life (2008) *Masterplanning Checklist for Sustainable Transport in New Developments*, Furnace: Transport for Quality of Life.

B. Site Access Vehicle Tracking



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			P01	05.07.22	SW	First Issue	MJT	MJT		Checked	M J Taylor	MJT		
			P02	23.03.23	SW	Updated for speed measures	MJT	MJT		Approved	M J Taylor	MJT		
			P03	29.06.23	SW	Updated for architects layout	MJT	MJT		Scale at A3 not to scale				
Drawing Number 103689-MMD-00-XX-DR-C-0001									Security	STD	Status	PRE	Rev	P03

C. Speed Survey Data

Site No.	Location.	Direction.	Speed Limit (mph)	Start Date.	End Date.	Total Vehicles.	2 Day Ave.	No. > Speed Limit.	% > Speed Limit.	No. > ACPO Limit.	% > ACPO Limit.	No. > DfT Limit.	% > DfT Limit.	Mean Speed	85%ile Speed
1	Vale Avenue, 50.867762, -0.152052	West	30	08 March 2023	09 March 2023	3637	1819	42	1.2	3	0.1	0	0.0	21.9	25.8
		East	30	08 March 2023	09 March 2023	4599	2300	5	0.1	0	0.0	0	0.0	20.8	23.5
		Two way	30	08 March 2023	09 March 2023	8236	4118	47	0.6	3	0.0	0	0.0	21.3	24.6

Site No.	Location.	Direction.	Speed Limit (mph)	Start Date.	End Date.	Total Vehicles.	2 Day Ave.	No. > Speed Limit.	% > Speed Limit.	No. > ACPO Limit.	% > ACPO Limit.	No. > DfT Limit.	% > DfT Limit.	Mean Speed	85%ile Speed
2	Vale Avenue, 50.867408, -0.150517	West	30	08 March 2023	09 March 2023	3602	1801	842	23.4	121	3.4	1	0.0	26.9	31.3
		East	30	08 March 2023	09 March 2023	4431	2216	420	9.5	53	1.2	6	0.1	24.8	29.0
		Two way	30	08 March 2023	09 March 2023	8033	4017	1262	15.7	174	2.2	7	0.1	25.7	30.1

D. Sensitivity Test Assessment

Project:	Royal Mail Brighton Delivery Office		
Our reference:	100103689 / 005 / A	Your reference:	
Prepared by:	James Wright	Date:	July 2023
Approved by:	Ian Besford	Checked by:	Mark Taylor
Subject:	Operating Hours Sensitivity Test		

1 Introduction

Royal Mail are currently in ongoing discussions with their workers regarding staff working hours, at the time of writing this report no agreement has been reached to amend the current operational hours. For transparency, a 'sensitivity test' has been undertaken on the proposed working hours for the Brighton & Hove, and subsequently Patcham, delivery offices. The proposed working hours are a 90-minute shift later in the day than the current working hours.

This assessment has been undertaken for vehicle, pedestrian, cycle, and public transport trips which is in line with the main Transport Assessment (TA).

2 Trip Generation

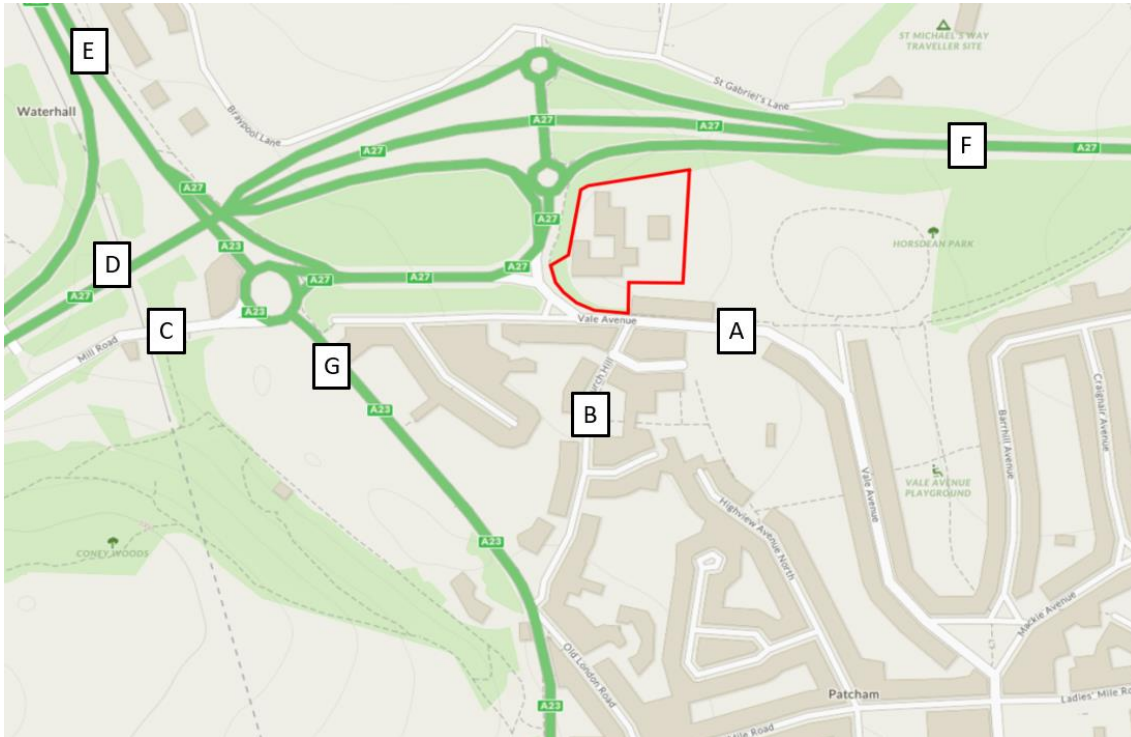
2.1 Trip Generation Methodology

2.1.1 Introduction

In order to calculate the total trip generation for the proposed development, data for staff trips, HGV deliveries, and red fleet trips for both the existing DOs and proposed DO have been calculated separately. For the purpose of the sensitivity test, both the existing DOs and proposed DO trips have been forecast based on the assumption that the operating hours will be pushed back by 90 minutes.

These vehicle trips have been distributed onto the network as shown in Figure 2.1. The trips generated by the existing DOs have been taken from the local network, whilst trips generated by the proposed DO have been added onto the local network to calculate the overall trip generation for the proposed development, which is in line with the methodology set out within the TA.

Figure 2.1: Study Area and Distribution Zones



Source: OpenStreetMap.com

The following sub-sections show how this trip generation exercise was undertaken.

2.1.2 Existing Brighton and Hove Delivery Office Trips

2.1.2.1 Existing Staff Trips

To calculate the existing staff trips to/from the Brighton and Hove DOs, the following data was provided by Royal Mail Group (RMG) in March 2023 or collected from the staff travel surveys undertaken at each site:

- 230 staff trips to/from the sites per day
 - 156 to/from Brighton DO
 - 74 to/from Hove DO
- Staff clock-in/clock-out logs
- Mode share of staff trips at each site
- Staff postcode data

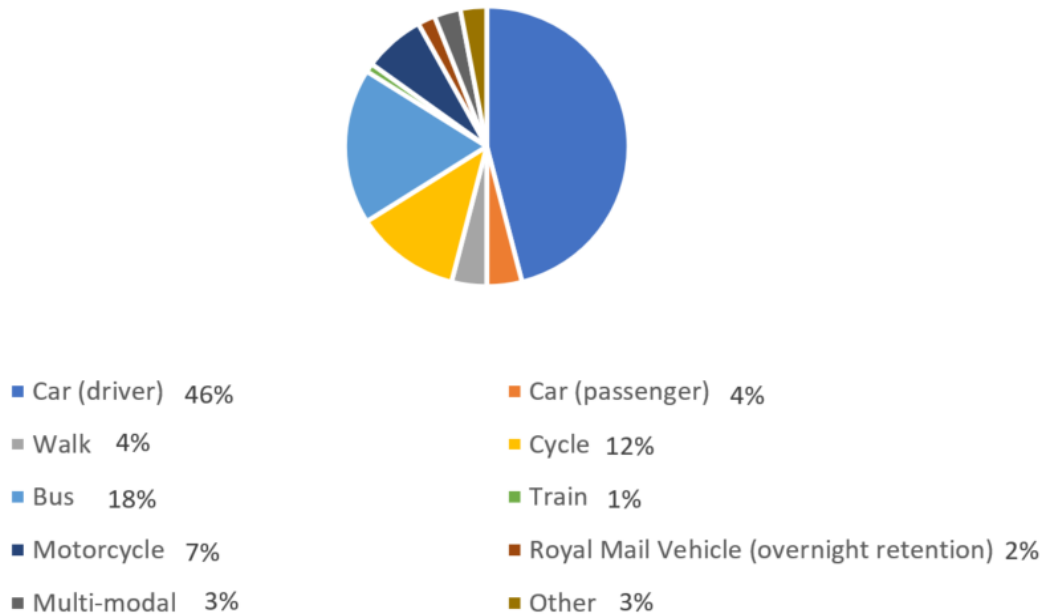
An arrival/departure profile for the 230 staff trips has been calculated using the staff clock-in/clock-out logs, which has been pushed back by 90 minutes to account for the operating hours within the sensitivity test. These trips have been applied to the staff mode share which was collected from the staff travel surveys undertaken at each site.

Staff Mode Share

A staff travel survey was undertaken at the existing Brighton and Hove offices for three weeks between Friday 4th March 2022 and Friday 25th March 2022. The data obtained in this survey has been used to forecast the modal split for staff trips generated by the proposed development.

Staff at the Brighton and Hove sites were asked “*what is your expected main mode of travel to work should Royal Mail relocate to Patcham?*”. The responses to this question are set out in Figure 2.2.

Figure 2.2: Expected main mode of travel to work for the proposed Patcham DO.



The results of the staff travel survey indicate that the most popular expected choice of travel to Patcham is likely to be car (driver), with 46% of staff selecting this. The resulting existing staff trip generation by mode of transport is shown in Table 2.1 below.

Table 2.1: Existing Staff Trip Generation

Time	Bus		Car (driver)		Car (passenger)		Cycle		Motorcycle		Train		Walk		Other		Total		
	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	
00:00-01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00-02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00-03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00-04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00-05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00-06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00-07:00	2	0	8	0	0	0	3	0	1	0	1	0	4	0	1	0	20	0	
07:00-08:00	1	0	4	0	0	0	2	0	1	0	0	0	2	0	0	0	11	0	
08:00-09:00	18	0	58	0	3	0	25	0	8	0	4	0	28	0	6	0	150	0	
09:00-10:00	4	0	12	0	1	0	5	0	2	0	1	0	6	0	1	0	30	0	
10:00-11:00	1	0	3	0	0	0	1	0	0	0	0	0	2	0	0	0	8	0	
11:00-12:00	1	0	3	1	0	0	1	0	0	0	0	0	1	0	0	0	7	2	
12:00-13:00	0	0	1	0	0	0	1	0	0	0	0	0	1	0	0	0	3	1	
13:00-14:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Time	Bus		Car (driver)		Car (passenger)		Cycle		Motorcycle		Train		Walk		Other		Total		
	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	
14:00-15:00	0	1	0	3	0	0	0	1	0	0	0	0	0	1	0	0	0	1	7
15:00-16:00	0	12	0	40	0	2	0	17	0	6	0	3	0	20	0	4	0	0	104
16:00-17:00	0	12	0	40	0	2	0	17	0	6	0	3	0	20	0	4	0	0	104
17:00-18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
18:00-19:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:00-20:00	0	1	0	3	0	0	0	1	0	0	0	0	0	1	0	0	0	0	7
20:00-21:00	0	0	0	1	0	0	0	1	0	0	0	0	0	1	0	0	0	0	3
21:00-22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:00-23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
23:00-00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	27	27	89	89	4	4	38	38	13	13	6	6	43	43	9	9	230	230	

Therefore, of the 230 daily staff trips, 89 are car trips, 43 are walking trips, 38 cycling trips, and 27 are bus trips.

These trips have been distributed onto the local transport networking using the methodology set out within Section 3 below.

2.1.2.2 Existing HGV Trips

To calculate the existing HGV trips to/from the existing Brighton and Hove DOs, the delivery arrival logs for HGVs have been provided by RMG. All HGV arrivals (except for the four HGV arrivals between 14:00 and 20:00 as requested by RMG) have been pushed back by 90 minutes to account for the sensitivity test scenario. This has been done in agreement with RMG. The resulting arrival/departure profile for the sensitivity test is shown in Table 2.2.

Table 2.2: Existing HGV Trips

Time	Arrivals	Departures	Total
00:00-01:00			0
01:00-02:00	2 17T Lorries		2
02:00-03:00	2 17T Lorries	2 17T Lorries	4
03:00-04:00	1 17T Lorry	2 17T Lorries	3
04:00-05:00		1 17T Lorry	1
05:00-06:00	1 18T Lorry, 2 17T Lorries, and 2 7.5T Lorries		5
06:00-07:00	3 7.5T Lorries	1 18T Lorry, 2 17T Lorries, and 2 7.5T Lorries	8
07:00-08:00	1 7.5T Lorry, 1 18T Lorry, and 1 17T Lorry	3 7.5T Lorries	6
08:00-09:00	1 7.5T Lorry, 1 18T Lorry, and 2 17T Lorries	1 7.5T Lorry, 1 18T Lorry, and 1 17T Lorry	7
09:00-10:00		1 7.5T Lorry, 1 18T Lorry, and 2 17T Lorries	4
10:00-11:00			0
11:00-12:00			0
12:00-13:00			0
13:00-14:00	1 7.5T Lorry		1
14:00-15:00	2 7.5T Lorries	1 7.5T Lorry	3
15:00-16:00		2 7.5T Lorries	2
16:00-17:00			0
17:00-18:00	1 7.5T Lorry		1
18:00-19:00		1 7.5T Lorry	1
19:00-20:00	1 7.5T Lorry		1
20:00-21:00		1 7.5T Lorry	1
21:00-22:00			0
22:00-23:00			0
23:00-00:00			0
Total	25	25	50

Therefore, there are 25 HGV trips to/from the existing Brighton and Hove DOs per day in the sensitivity test scenario. 18 of these trips are to/from the Brighton DO, and seven are to/from the

Hove site. These trips have been distributed onto the local transport networking using the methodology set out within Section 3 below.

2.1.2.3 Existing Red Fleet Trips

To calculate the red fleet trips to/from the existing Brighton and Hove DOs, a red fleet arrival/departure profile from each site was provided by RMG for the sensitivity test scenario. A summary of this data is shown in Table 2.3.

Table 2.3: RMG Existing Red fleet Data

Time	Brighton		Hove	
	Arrival	Departure	Arrival	Departure
00:00-00:59	0	0	0	0
01:00-01:59	0	0	0	0
02:00-02:59	0	0	0	0
03:00-03:59	0	0	0	0
04:00-04:59	0	0	0	0
05:00-05:59	0	0	0	0
06:00-06:59	0	0	0	0
07:00-07:59	0	0	0	0
08:00-08:59	0	10	0	4
09:00-09:59	10	0	4	0
10:00-10:59	0	0	0	0
11:00-11:59	0	45	0	35
12:00-12:59	0	11	0	0
13:00-13:59	0	0	0	0
14:00-14:59	0	16	0	7
15:00-15:59	16	27	0	0
16:00-16:59	56	25	35	5
17:00-17:59	0	0	0	0
18:00-18:59	25	0	5	0
19:00-19:59	27	0	7	0
20:00-20:59	0	0	0	0
21:00-21:59	0	0	0	0
22:00-22:59	0	0	0	0
23:00-23:59	0	0	0	0
Daily	134	134	51	51

Therefore, there are 185 red fleet trips to/from the existing Brighton and Hove DOs. 134 of these trips are to/from the Brighton DO, and 51 are to/from the Hove site. These trips have been distributed onto the local transport networking using the methodology set out within Section 3 below.

2.1.2.4 Total Existing Trip Generation

The total vehicle trip generation for the existing DOs in the sensitivity test scenario is shown in Table 2.4.

Table 2.4: Total Existing Trip Generation

Time	Arrivals	Departures	Total
00:00-01:00	0	0	0
01:00-02:00	2	0	2
02:00-03:00	2	2	4
03:00-04:00	1	2	3
04:00-05:00	0	1	1
05:00-06:00	5	0	5
06:00-07:00	11	5	16
07:00-08:00	7	3	10
08:00-09:00	62	17	79
09:00-10:00	26	4	30
10:00-11:00	3	0	3
11:00-12:00	3	81	84
12:00-13:00	1	11	13
13:00-14:00	1	0	1
14:00-15:00	2	27	29
15:00-16:00	16	69	85
16:00-17:00	91	70	161
17:00-18:00	1	0	1
18:00-19:00	30	1	31
19:00-20:00	35	3	38
20:00-21:00	0	2	2
21:00-22:00	0	0	0
22:00-23:00	0	0	0
23:00-00:00	0	0	0
Total	299	299	599

In total there are 299 vehicle trips forecast to/from the existing site per day in the sensitivity test scenario. These trips have been distributed onto the network using the methodology in Section 3, which shows that most of the existing DO trips do not travel through the study area for this TA.

2.1.3 Proposed Patcham Delivery Office Trips

2.1.3.1 Proposed Staff Trips

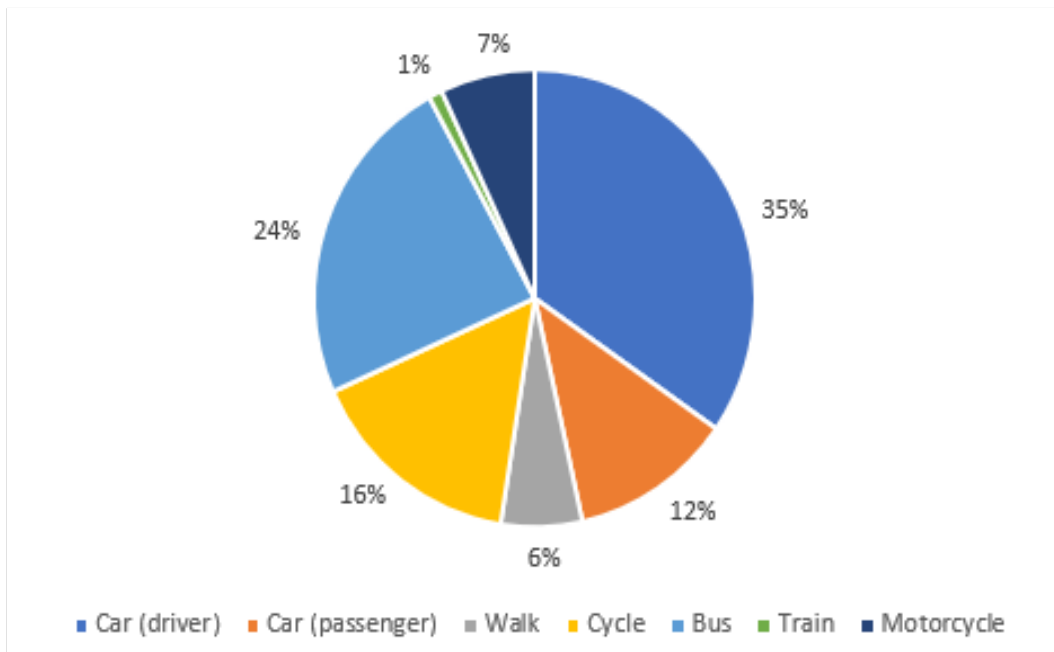
Total Staff Trips

According to information from RMG, it is anticipated that there will be 246 staff trips to/from the proposed Patcham DO per day. These trips have been applied to the target mode share for the site which is facilitated by a number of measures set out within the Travel Plan. The methodology for the staff mode share is set out below.

Forecast Staff Mode Share

The data collected from the staff travel survey, has been used alongside staff car parking numbers at the site to derive a target mode share for the site that includes the impacts of the Travel Plan Measures. The target mode share incorporates a shift away from single person car use, with more car sharing, use of public transport, and active travel. The target mode share is shown in Figure 2.3.

Figure 2.3: Target Mode Share



The target mode share shows that car driver is still the most common method of travel (35%). However, this is a smaller share than the expected mode of travel results from the staff travel survey. The target mode share also incorporates an increase in the mode share for car passengers and bus trips when compared to the staff travel survey results.

The data obtained through the staff travel survey shows that staff would be more likely to car share or travel by public transport if certain measures and incentives are put in place. Therefore, the target mode share will be the subject of a number of targeted measures and incentives, set out in the Travel Plan.

Discussions with bus companies are underway to explore opportunities for enhancing service provision for the site. The aim of these enhancements would be to facilitate better access to the site during staff shift start/end times.

Proposed Staff Trip Generation

The target mode share above has been applied to the forecast number of staff trips (246), and the staff arrival/departure profile within the clock in/clock out logs has been pushed back by 90 minutes to account for the sensitivity test scenario. The total amount of trips generated per mode is shown in Table 2.5 below.

Table 2.5: Proposed Staff Trips

Time	Bus		Car (driver)		Car (passenger)		Cycle		Motorcycle		Train		Walk		Total	
	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep
00:00-00:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00-01:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00-02:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00-03:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00-04:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00-05:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00-06:59	5	0	7	0	3	0	3	0	1	0	0	0	1	0	21	0
07:00-07:59	3	0	4	0	1	0	2	0	1	0	0	0	1	0	12	0
08:00-08:59	38	0	55	0	19	0	26	0	11	0	2	0	10	0	160	0
09:00-09:59	8	0	11	0	4	0	5	0	2	0	0	0	2	0	32	0
10:00-10:59	2	0	3	0	1	0	1	0	1	0	0	0	1	0	9	0
11:00-11:59	2	1	3	1	1	0	1	0	1	0	0	0	0	0	7	2
12:00-12:59	1	0	1	0	0	0	1	0	0	0	0	0	0	0	3	1
13:00-13:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:00-14:59	0	2	0	3	0	1	0	1	0	1	0	0	0	0	1	7
15:00-15:59	0	26	0	38	0	13	0	18	0	8	0	1	0	7	0	111
16:00-16:59	0	26	0	38	0	13	0	18	0	8	0	1	0	7	0	111
17:00-17:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
18:00-18:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:00-19:59	0	2	0	3	0	1	0	1	0	1	0	0	0	0	0	7
20:00-20:59	0	1	0	1	0	0	0	1	0	0	0	0	0	0	0	3
21:00-21:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:00-22:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
23:00-23:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Time	Bus		Car (driver)		Car (passenger)		Cycle		Motorcycle		Train		Walk		Total	
	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep
Daily	58	58	85	85	30	30	39	39	17	17	2	2	15	15	246	246

2.1.3.2 Proposed HGV Trips

Bespoke HGV trip data for the proposed site has been provided by RMG in the sensitivity test scenario. Whilst it is assumed that the proposed DO will have a very similar operation to the existing DOs, some of the smaller HGV trips will be consolidated into articulated lorries, meaning that 16 HGV trips to/from the Patcham site are forecast per day. These trips are spread throughout the day as per Table 2.6.

Table 2.6: HGV Trip Profile

Time	Arrivals	Departure	Total
00:00-00:59			0
01:00-01:59	1 Articulated Lorry		1
02:00-02:59		1 Articulated Lorry	1
03:00-03:59	1 Articulated Lorry		1
04:00-04:59	1 Articulated Lorry	1 Articulated Lorry	2
05:00-05:59		1 Articulated Lorry	1
06:00-06:59	1 17T Lorry and 2 Articulated Lorries		3
07:00-07:59		1 17T Lorry, and 2 Articulated Lorries	3
08:00-08:59	2 7.5T Lorries and 1 Articulated Lorry		3
09:00-09:59	1 17T Lorry	1 Articulated Lorry	2
10:00-10:59		1 17T Lorry and 2 7.5T lorries	3
11:00-11:59			0
12:00-12:59	1 7.5T Lorry		1
13:00-13:59		1 7.5T Lorry	1
14:00-14:59	1 17T Lorry		1
15:00-15:59	1 7.5T Lorry and 1 17T Lorry	1 17T Lorry	3
16:00-16:59		1 7.5T Lorry and 1 17T Lorry	2
17:00-17:59			0
18:00-18:59	1 17T Lorry		1
19:00-19:59	1 7.5T Lorry	1 17T Lorry	2
20:00-20:59		1 7.5T Lorry	1
21:00-21:59			0
22:00-22:59			0
23:00-23:59			0
Daily	16	16	32

The two 7.5 lorry arrivals at 08:00-08:59 are dedicated to the HCT base and will be filled with post/parcels at Patcham before departing the site at 10:00-10:59 in order to transport post/parcels that have been processed at the Patcham site to the HCT base in the centre of Brighton. These vehicles will then leave the HCT base at 11:00-11:59 and will travel back to the Gatwick MailCentre..

2.1.3.3 Proposed Red fleet Trips

RMG have provided a bespoke trip generation for red fleet trips within the sensitivity test scenario. These trips are based on the assumption that a HCT base is going to be used in Brighton city centre. Therefore, the red fleet trips for the Patcham site are summarised in Table 2.7.

Table 2.7: Proposed Red Fleet Trips

Time	Arrivals	Departure	Total
00:00-00:59	0	0	0
01:00-01:59	0	0	0
02:00-02:59	0	0	0
03:00-03:59	0	0	0
04:00-04:59	0	0	0
05:00-05:59	0	0	0
06:00-06:59	0	0	0
07:00-07:59	0	0	0
08:00-08:59	0	14	14
09:00-09:59	14	0	14
10:00-10:59	0	0	0
11:00-11:59	0	80	80
12:00-12:59	0	11	11
13:00-13:59	0	0	0
14:00-14:59	0	23	23
15:00-15:59	16	27	43
16:00-16:59	91	30	121
17:00-17:59	0	0	0
18:00-18:59	30	0	30
19:00-19:59	34	0	34
20:00-20:59	0	0	0
21:00-21:59	0	0	0
22:00-22:59	0	0	0
23:00-23:59	0	0	0
Daily	185	185	370

2.1.3.4 Total Proposed Vehicle Trip Generation

The total vehicle trip generation for the proposed DO in the sensitivity test scenario is shown in Table 2.8, which shows two clear traffic peaks, between 08:00 and 09:00 and between 16:00 and 17:00.

Table 2.8: Total Proposed Trip Generation

Time	Arrivals	Departures	Total
00:00-01:00	0	0	0
01:00-02:00	1	0	1
02:00-03:00	0	1	1
03:00-04:00	1	0	1
04:00-05:00	1	1	2
05:00-06:00	0	1	1
06:00-07:00	11	0	11

Time	Arrivals	Departures	Total
07:00-08:00	4	3	7
08:00-09:00	59	14	73
09:00-10:00	26	1	27
10:00-11:00	3	3	6
11:00-12:00	3	81	83
12:00-13:00	2	11	14
13:00-14:00	0	1	1
14:00-15:00	1	26	27
15:00-16:00	18	67	85
16:00-17:00	91	71	162
17:00-18:00	0	0	0
18:00-19:00	31	0	31
19:00-20:00	35	4	39
20:00-21:00	0	2	2
21:00-22:00	0	0	0
22:00-23:00	0	0	0
23:00-00:00	0	0	0
Total	287	287	575

In total there are 287 trips to/from the proposed site on an average weekday.

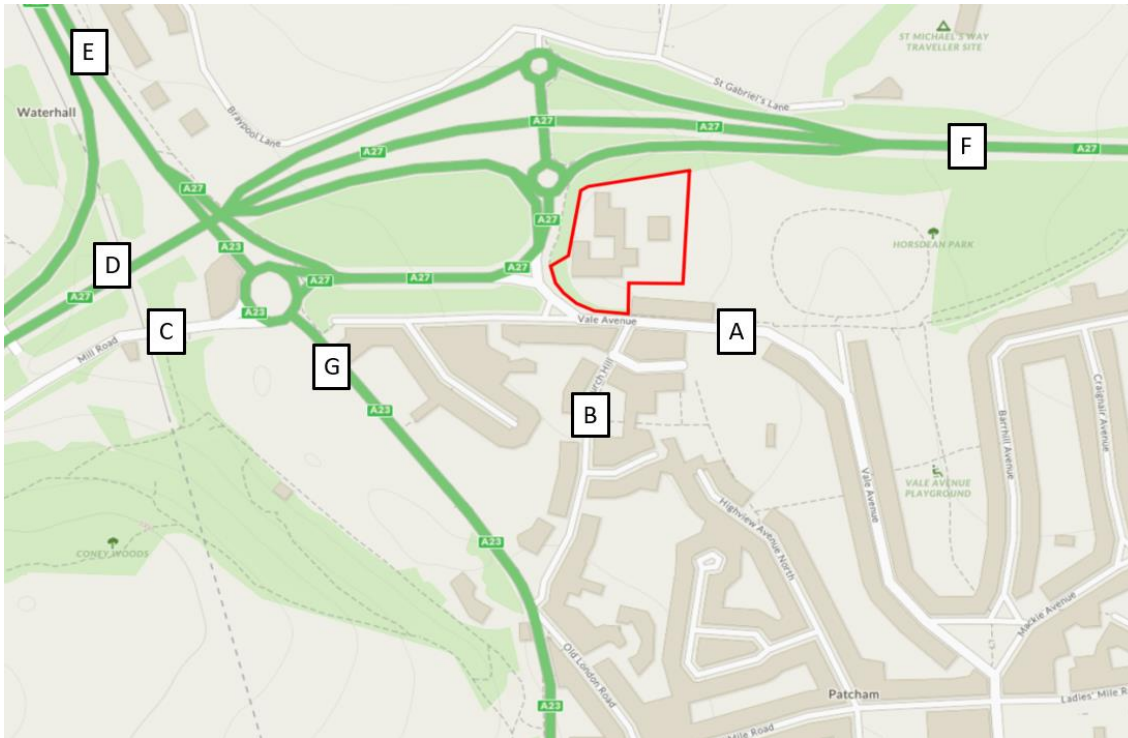
3 Trip Distribution

3.1 Vehicle Trip Distribution

The vehicle trips generated by the existing and proposed DOs have been distributed onto the network shown in Figure 3.1 using the same methodology as the main scenario within the TA. The trips generated by the existing DOs have been taken from the network, whilst trips generated by the proposed DO have been added onto the network to calculate the overall trip generation for the proposed development.

Therefore, the trip distribution methodology for the sensitivity test has not been repeated within this appendix. However, the resulting network flow diagrams for the sensitivity test are set out within Appendix H of the main TA for both the existing and proposed DOs.

Figure 3.1: Study Area and Distribution Zones



3.2 Non-Motorised User Trip Distribution

Staff trips are the only trip type that will include travel by foot or bicycle. Therefore, the sensitivity test arrival/departure profile for NMU trips to/from the site are shown in Table 2.5e above. The daily NMU trip generation of the site does not change, and the distribution of these NMU trips in the sensitivity test scenario is the same as the distribution set out within the main TA.

3.3 Public Transport Trip Distribution

Staff trips are the only trip type that will include travel by public transport. Therefore, the total Public Transport trip generation for the site is 58 two-way public bus trips per day, and two two-way rail trips as shown in Table 2.5 above.

The public bus trips have been distributed onto the bus services which are accessible within an 800m walking distance from the site. Because of the later operating hours of the site within the sensitivity test scenario, there are more bus services available to staff so that they can arrive in time for the main shift start time of 08:00. These bus services are set out below:

- Patcham Bypass Bus Stop
 - Service 17 - Brighton to Horsham
 - Service 273 - Crawley to Brighton Old Steine
 - Service 271 – Crawley to Kemp Town
- Barrhill Avenue Bus Stop
 - Service 5A - Patcham to Hangleton
 - Service 5 - Patcham - Hangleton

Postcode data has been used to distribute staff onto each of these bus services. The results of this distribution are set out in Table 3.1.

Table 3.1: Bus Trip Distribution

Bus Service	Distribution %	Trips
17	18%	10
273	14%	8
271	15%	9
5/5A	54%	31
Total	100%	58

Therefore, most bus trips are distributed onto Service 5 (31) in the sensitivity test scenario. There are two two-way rail trips forecast to be generated by the proposed development. These trips are most likely to be distributed onto train services from Preston Park Station.

4 Trip Impact

4.1 Non-Motorised User Impact

4.1.1 Pedestrian Impact

An assessment of footway capacity along the main pedestrian routes to the site has been undertaken within the main TA. This has been assessed based on footway capacity in line with ‘Gehl’ assuming a maximum capacity of 13 pedestrians per unobstructed metre of footway per minute. An assessment has been made of the average usable footway width along each likely pedestrian desire line to nearby public transport access points.

A worst-case assessment was done in the TA, which used the total daily pedestrian numbers to assess the impact of the proposed development NMU trips on footway capacity. As the total daily pedestrian numbers do not change as part of the sensitivity test, there is no impact of the sensitivity test scenario on the assessment of footway capacity undertaken within the main TA. This assessment concluded that with the forecast peak pedestrian trips, all footways are within capacity, and the pedestrian trips generated by the site are not forecast to cause any impact on the local pedestrian facilities.

4.1.2 Cyclist Impact

The impact of cycle trips generated by the proposed development has been undertaken within the main TA. A worst-case assessment was done in the TA, which used the total daily cyclist numbers to assess the impact of the proposed development NMU trips on cycle routes in the local area. As the total daily cyclist numbers do not change as part of the sensitivity test, there is no impact of the sensitivity test scenario on the assessment of cyclist impact undertaken within the main TA.

This assessment concluded that whilst there are no cycle provisions on Vale Avenue, it is not anticipated that the amount of cycle trips will cause an impact on the current operation of the road due the residential nature of the area and lower traffic speeds. In addition, the increase in cycle trips on Patcham Bypass can be accommodated within the current cycle lane provision on this road. The increase in cycle trips is not expected to cause a safety issue on any of the roads in the study area.

4.2 Public Transport Impact

The impact of the proposed development on bus services has been assessed by calculating the number of bus trips forecast on each bus service in the AM peak hour (07:00-08:00). As a worst-case assessment, it has been assumed that all daily one-way trips occur in the same hourly peak period. The forecast trips per bus route shown in Table 3.1 have been split evenly across the number of services per hour in the AM peak. Table 4.1 sets out the number of bus trips forecast per service in the AM peak hour.

Table 4.1: Bus Service Impact

Bus Service	Forecast total AM peak hour trips	Buses per hour in the AM peak hour	Forecast AM peak hour trips per service
17	10	1	10
273	8	1	8
271	9	1	9
5/5A	31	2	16

This shows that the maximum forecast staff trips per bus service in the AM peak is on the services of bus route 5/5A, with 16 staff bus trips per service. It is assumed that the existing bus capacity is approximately 90 passengers, and that the bus route during this period is lightly used. Therefore, it is anticipated that the current bus provision has sufficient capacity to accommodate this number of forecast trips per service. However, discussions with bus companies should be undertaken with the objective of increasing bus provision in this early period, either by increasing the frequency of local services, or bringing forward the timetables for other routes to accommodate the early start time of RMG staff.

Due to the low number of forecast rail trips (two two-way trips per day), it can be assumed there will be no detrimental impact on rail services as a result of the proposed development.

4.3 Vehicle Impact

4.3.1 Parking Accumulation

The forecast staff trip generation has been prepared in conjunction with RMG's forecast for the operation of the site to ensure efficient use of the available car parking spaces. Using the staff arrival/departure profile and modal split outlined in previous sections of this sensitivity test assessment, the parking accumulation for the staff spaces is shown below in Table 4.2.

Table 4.2: Parking Accumulation

Time Period	Staff Car Arrivals	Staff Car Departures	Parking Accumulation
00:00-01:00	0	0	0
01:00-02:00	0	0	0
02:00-03:00	0	0	0
03:00-04:00	0	0	0
04:00-05:00	0	0	0
05:00-06:00	0	0	0
06:00-07:00	8	0	8
07:00-08:00	4	0	12
08:00-09:00	56	0	68
09:00-10:00	11	0	79
10:00-11:00	3	0	82
11:00-12:00	3	1	84
12:00-13:00	1	0	85
13:00-14:00	0	0	85
14:00-15:00	0	3	83
15:00-16:00	0	39	44
16:00-17:00	0	39	5
17:00-18:00	0	0	4
18:00-19:00	0	0	4

Time Period	Staff Car Arrivals	Staff Car Departures	Parking Accumulation
19:00-20:00	0	3	2
20:00-21:00	0	1	0
21:00-22:00	0	0	0
22:00-23:00	0	0	0
23:00-00:00	0	0	0

This shows that parking accumulation peaks between 12:00 and 14:00 at 85 cars parked. 85 car parking spaces have been provided for staff as part of the proposed development. Therefore, the parking spaces provided are sufficient and can accommodate the forecast car parking demand at the site.

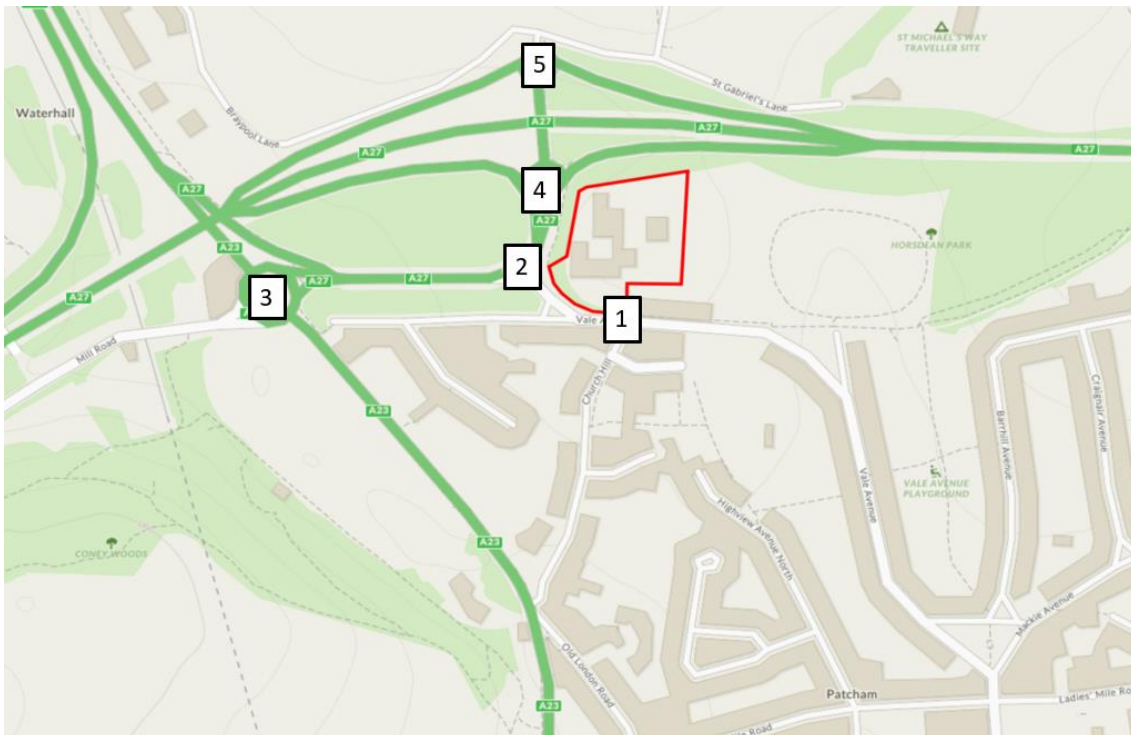
4.3.2 Junction Capacity Assessment

4.3.2.1 Study Area

Five junctions have been assessed for their existing and proposed capacity using Junctions9 software. The location of these junctions are shown in Figure 4.1, and are set out below:

1. Vale Avenue/Church Hill/Site Access
2. A27 Link Road/Vale Avenue
3. A23 London Road/A27 Link Road/Mill Road
4. A27 Westbound Offslip/A27 Link Road/A27 Overbridge
5. A27 Eastbound Offslip/A27 Overbridge/Braypool Lane

Figure 4.1: Junction Capacity Assessment Locations



4.3.2.2 Scenarios for Assessment

The junctions have been assessed under the following scenarios for both the observed AM and PM peaks (07:00-08:00 and 17:00-18:00):

- 2021 Baseline – taken from traffic surveys set out in Section 2 of the main TA.
- 2026 Future Baseline – 2021 Baseline with TEMPro traffic growth factors
- 2026 Do Something – 2026 Future Baseline with forecast site vehicle trip generation
- 2032 Future Baseline – 2021 Baseline with TEMPro traffic growth factors
- 2032 Do Something – 2032 Future Baseline with forecast site vehicle trip generation

2026 is forecast to be the opening year of the site, and 2032 has been used as the review year of the assessment because it is ten years from the registration of the planning application. All “Do Something” scenarios include the sensitivity test scenario in which all proposed trips have been pushed back by 90 minutes as set out in Section 2. Traffic flow diagrams for the study area in these five scenarios are provided in Appendix I of the main TA for the sensitivity test.

4.3.2.3 Traffic Flow Assumptions

The TEMPro growth factors that have been used are shown in Table 4.3. The criteria selected within TEMPro to calculate these growth factors are shown in the TEMPro exports within Appendix F of the main TA.

Table 4.3: TEMPro Growth Factors

Assessment Year	TEMPro Factor	
	AM	PM
2026	1.04635	1.0456
2032	1.0981	1.0970

A list of committed developments to consider within the traffic flow assumptions were provided by BHCC. The committed developments provided are set out below:

- BH2022/00203: Toad Hole Development – Outline application for a mixed use development comprising residential dwellings (C3 use); land for a 6-form entry secondary school (F1 use)/community sports facilities (F2 use); office/research/light industry floorspace (E use); neighbourhood centre including retail outlets (E/sui generis uses), a doctors’ surgery (E use) and community building (F2 and E use); public open and play space, alterations to the Site of Nature Conservation Interest (SNCI); and associated landscaping. Provision of 3no. vehicular accesses onto King George VI Avenue (unreserved) with associated highway alterations.
- BH2021/03142: 46 – 47 London Road – Erection of a 4 storey mixed-use development comprising Class E and 6 flats. Due to be granted once S106 is signed.
- BH2020/02289: 5-8 London Road – Redevelopment to provide a mixed-use development comprising retail floorspace and 156 student bedrooms in a 4-5 storey building. Granted 23.09.2021.
- BH2019/03755: 46-47 London Road – Erection of a three storey building to provide 6 flats. Granted 28.09.2020.

Traffic flow forecasts from the supporting documents for the planning applications of these committed developments have been analysed. This has confirmed that the committed developments will have a negligible impact on the future baseline traffic within the study area assessed within this Transport Assessment. It is assumed that any residual increases in traffic caused by these committed developments are included within the TEMPro factors used.

4.3.2.4 Model Validation

A validation exercise for each baseline model has been undertaken based on observed queue lengths in footage captured during the 2021 traffic surveys. Each baseline model has been calibrated to these queue lengths by adjusting the slope and intercept within the Junctions 9 software used. Where there have been no physical changes to the design of the junction with the proposed scheme, the same slope and intercept have

been used in the Do Something scenarios for those junctions. The slope and intercept coefficients can be found in the full output reports for each junction in Appendix J of the main TA.

4.3.2.5 Junction Capacity Assessment Outputs

The results of each junction assessment are set out below, and full model output reports are included in Appendix J of the main TA.

The maximum Ratio of Flow to Capacity (RFC) for each junction has been analysed to assess whether the junction is within capacity, nearing capacity, at capacity, or over capacity. The following criteria has been used:

- RFC <0.75 – within capacity
- RFC >0.75 but <0.85 – nearing capacity
- RFC >0.85 but <1 – at capacity
- RFC >1 – over capacity.

Junction 1 – Vale Avenue/Church Hill/Site Access

This junction is a four-arm priority controlled staggered crossroads junction with a dropped kerb crossing on each arm. The junction has been assessed in Picady. The results of the 2021 Baseline assessment of this junction are shown in Table 4.4.

Table 4.4: Junction 1A Vale Avenue/Church Hill/Existing Site Access 2021 Baseline Assessment

Junction arm	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
Church Hill (ahead and left)	0.0	5.28	0.01	0.0	5.41	0.01
Church Hill (ahead and right)	0.0	8.02	0.00	0.0	7.83	0.02
Vale Avenue (east)	0.0	0.00	0.00	0.0	0.00	0.00
Existing Site Access	0.0	0.00	0.00	0.0	0.00	0.00
Vale Avenue (west)	0.1	5.53	0.04	0.1	5.04	0.06

The assessment shows that this junction operates within capacity in the 2021 Baseline, with a maximum RFC of 0.04 on the Vale Avenue (west) arm in the AM peak hour with an associated queue length of 0.1 PCU. In the PM peak hour, the maximum RFC of 0.06 is on the Vale Avenue (west) arm with an associated queue length of 0.1 PCU.

The results of the 2026 Future Baseline assessment of this junction are shown in Table 4.5.

Table 4.5: Junction 1A Vale Avenue/Church Hill/Existing Site Access 2026 Future Baseline Assessment

Junction arm	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
Church Hill (ahead and left)	0.0	5.30	0.01	0.0	5.42	0.01

Junction arm	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
Church Hill (ahead and right)	0.0	8.08	0.00	0.0	7.89	0.02
Vale Avenue (east)	0.0	0.00	0.00	0.0	0.00	0.00
Existing Site Access	0.0	0.00	0.00	0.0	0.00	0.00
Vale Avenue (west)	0.1	5.53	0.04	0.1	5.02	0.07

The assessment shows that this junction operates within capacity in the 2026 Future Baseline, with a maximum RFC of 0.04 on the Vale Avenue (west) arm in the AM peak hour with an associated queue length of 0.1 PCU. In the PM peak hour, the maximum RFC of 0.07 is on the Vale Avenue (west) arm with an associated queue length of 0.1 PCU.

A new site access junction has been designed as part of the proposed scheme. This junction is a four-arm priority controlled staggered junction with a dropped kerb crossing on each arm. Drawings of the proposed site access junction are shown in Appendix B of the main TA.

The junction has been assessed in Picady, but due to the irregular layout of this junction, it has been modelled as a crossroads with a linked T-junction. Therefore, the results presented are for both junctions within the model; Junction 1 refers to the site access crossroads and Junction 2 refers to the Vale Avenue T-Junction to the west. The results of the 2026 Do Something assessment of this junction are shown in Table 4.6.

Table 4.6: Junction 1B Vale Avenue/Church Hill/Proposed Site Access 2026 Do Something Assessment

Junction arm	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
Junction 1 – Proposed Site Access (left and ahead)	0.0	5.82	0.01	0.0	0.00	0.00
Junction 1 – Proposed Site Access (right and ahead)	0.0	11.01	0.03	0.0	0.00	0.00
Junction 1 – Vale Avenue (south)	0.0	0.00	0.00	0.0	6.65	0.03
Junction 1 – Vale Avenue (east)	0.0	5.24	0.00	0.0	0.00	0.00
Junction 2 – Vale Avenue (south)	0.0	6.56	0.01	0.0	5.96	0.01
Junction 2 – Vale Avenue (west)	0.0	6.11	0.01	0.0	5.19	0.01

This shows that the junction operates within capacity in the 2026 Do Something AM peak, with a maximum RFC of 0.03 on the Proposed Site Access (right and ahead) approach and a corresponding queue of 0.0

PCU. The junction operates within capacity in the in the 2026 Do Something PM peak, with a maximum RFC of 0.03 on the Vale Avenue (south, right and ahead) approach and a corresponding queue of 0.0 PCU.

This shows that the proposed junction would operate within theoretical capacity with the proposed development in 2026.

The results of the 2032 Future Baseline assessment of this junction are shown in Table 4.5.

Table 4.7: Junction 1A Vale Avenue/Church Hill/Existing Site Access 2032 Future Baseline Assessment

Junction arm	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
Church Hill (ahead and left)	0.0	5.32	0.01	0.0	5.45	0.02
Church Hill (ahead and right)	0.0	8.14	0.00	0.0	7.98	0.02
Vale Avenue (east)	0.0	0.00	0.00	0.0	0.00	0.00
Existing Site Access	0.0	0.00	0.00	0.0	0.00	0.00
Vale Avenue (west)	0.1	5.54	0.04	0.1	5.00	0.07

The assessment shows that this junction operates within capacity in the 2032 Future Baseline, with a maximum RFC of 0.04 on the Vale Avenue (west) approach in the AM peak hour with an associated queue length of 0.1 PCU. In the PM peak hour, the maximum RFC of 0.07 is on the Vale Avenue (west) approach with an associated queue length of 0.1 PCU.

The results of the 2032 Do Something assessment of this junction are shown in Table 4.6.

Table 4.8: Junction 1B Vale Avenue/Church Hill/Proposed Site Access 2032 Do Something Assessment

Junction arm	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
Junction 1 – Proposed Site Access (left and ahead)	0.0	5.84	0.01	0.0	0.00	0.00
Junction 1 – Proposed Site Access (right and ahead)	0.0	11.08	0.03	0.0	0.00	0.00
Junction 1 – Vale Avenue (south)	0.0	0.00	0.00	0.0	6.72	0.04
Junction 1 – Vale Avenue (east)	0.0	5.21	0.00	0.0	0.00	0.00
Junction 2 – Vale Avenue (south)	0.0	6.60	0.01	0.0	5.99	0.01

	AM			PM		
Junction arm	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
Junction 2 – Vale Avenue (west)	0.0	5.46	0.01	0.0	5.14	0.01

This shows that the junction operates within capacity in the 2032 Do Something AM peak, with a maximum RFC of 0.03 on the Proposed Site Access (right and ahead) approach and a corresponding queue of 0.0 PCU. The junction operates within capacity in the in the 2032 Do Something PM peak, with a maximum RFC of 0.04 on the Vale Avenue (south) approach and a corresponding queue of 0.0 PCU.

This shows that the proposed junction would operate within theoretical capacity with the scheme.

Junction 2 – A27 Link Road/Vale Avenue

This junction is a three-arm priority controlled left-in left-out T junction and has been assessed in Picady. As this junction is left-in left-out junction, there is no right turn movement from the A27 Link Road (west), and movements from the A27 Link Road (north) are free flowing. Therefore, the only assessment results presented for this junction are on the Vale Avenue arm.

The results of the 2021 Baseline assessment of this junction are shown in Table 4.9.

Table 4.9: Junction 2 A27 Link Road/Vale Avenue 2021 Baseline Assessment

	AM			PM		
Junction arm	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
Vale Avenue (east)	0.6	9.98	0.37	0.3	7.75	0.22

The assessment shows that this junction operates within capacity in the 2021 Baseline, with a maximum RFC of 0.37 on the Vale Avenue (east) arm in the AM peak hour with an associated queue length of 0.6 PCU. In the PM peak hour, the maximum RFC of 0.22 is on the Vale Avenue (east) arm with an associated queue length of 0.3 PCU.

The results of the 2026 Future Baseline assessment of this junction are shown in Table 4.10.

Table 4.10: Junction 2 A27 Link Road/Vale Avenue 2026 Future Baseline Assessment

	AM			PM		
Junction arm	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
Vale Avenue (east)	0.6	10.57	0.39	0.3	8.00	0.23

The assessment shows that this junction operates within capacity in the 2026 Future Baseline, with a maximum RFC of 0.39 on the Vale Avenue (east) arm in the AM peak hour with an associated queue length of 0.6 PCU. In the PM peak hour, the maximum RFC of 0.23 is on the Vale Avenue (east) arm with an associated queue length of 0.3 PCU.

The results of the 2026 Do Something assessment of this junction are shown in Table 4.11

Table 4.11: Junction 2 A27 Link Road/Vale Avenue 2026 Do Something Assessment

Junction arm	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
Vale Avenue (east)	0.7	10.94	0.41	0.3	8.00	0.23

The assessment shows that this junction operates within capacity in the 2026 Do Something, with a maximum RFC of 0.41 on the Vale Avenue (east) arm in the AM peak hour with an associated queue length of 0.7 PCU. In the PM peak hour, the maximum RFC of 0.24 is on the Vale Avenue (east) arm with an associated queue length of 0.3 PCU.

This shows that the proposed development would have a negligible impact on the operation of this junction and it is forecast to continue to operate within theoretical capacity.

The results of the 2032 future baseline assessment of this junction are shown in Table 4.12.

Table 4.12: Junction 2 A27 Link Road/Vale Avenue 2032 Future Baseline Assessment

Junction arm	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
Vale Avenue (east)	0.7	11.31	0.42	0.3	8.30	0.24

The assessment shows that this junction operates within capacity in the 2032 Future Baseline, with a maximum RFC of 0.42 on the Vale Avenue (east) arm in the AM peak hour with an associated queue length of 0.7 PCU. In the PM peak hour, the maximum RFC of 0.24 is on the Vale Avenue (east) arm with an associated queue length of 0.3 PCU.

The results of the 2032 Do Something assessment of this junction are shown in Table 4.13.

Table 4.13: Junction 2 A27 Link Road/Vale Avenue 2032 Do Something Assessment

Junction arm	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
Vale Avenue (east)	0.8	11.71	0.43	0.3	8.30	0.24

The assessment shows that this junction operates within capacity in the 2032 Do Something, with a maximum RFC of 0.43 on the Vale Avenue (east) arm in the AM peak hour with an associated queue length of 0.8 PCU. In the PM peak hour, the maximum RFC of 0.24 is on the Vale Avenue (east) arm with an associated queue length of 0.3 PCU.

This shows that the proposed development would have a negligible impact on the operation of this junction and it is forecast to continue to operate within theoretical capacity.

Junction 3 – A23 London Road/A27 Link Road/Mill Road

This junction is a 4-arm priority-controlled roundabout with no pedestrian crossing facilities. The A23 London Road (north) approach has a left turn bypass, which has been included in the model. The junction has been assessed in Arcady. The results of the 2021 Baseline assessment of this junction are shown in Table 4.14.

Table 4.14: Junction 3 A23 London Road/A27 Link Road/Mill Road 2021 Baseline Assessment

Junction arm	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
A27 Link Road	43.4	96.19	1.03	7.4	22.99	0.89
A23 London Road (south)	13.3	50.94	0.96	3.4	13.39	0.78
Mill Road	1.1	20.97	0.53	0.4	10.33	0.31
A23 London Road (north)	1.6	5.28	0.60	2.2	6.60	0.69

The assessment shows that this junction operates over capacity in the 2021 Baseline, with a maximum RFC of 1.03 on the A27 Link Road arm in the AM peak hour with an associated queue length of 43.4 PCU. In the PM peak hour, the assessment shows that this junction is nearing capacity in the 2021 baseline with a maximum RFC of 0.89 on the A27 Link Road arm with an associated queue length of 7.4 PCU.

The results of the 2026 Future Baseline assessment of this junction are shown in Table 4.15.

Table 4.15: Junction 3 A23 London Road/A27 Link Road/Mill Road 2026 Future Baseline Assessment

Junction arm	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
A27 Link Road	85.9	173.25	1.11	14.0	41.86	0.95
A23 London Road (south)	21.7	75.90	1.00	4.8	18.23	0.83
Mill Road	1.3	22.75	0.57	0.5	11.79	0.35
A23 London Road (north)	1.8	5.70	0.63	2.6	7.45	0.73

The assessment shows that this junction operates over capacity in the 2026 Future Baseline, with a maximum RFC of 1.11 on the A27 Link Road arm in the AM peak hour with an associated queue length of 85.9 PCU. In the PM peak hour, the assessment shows that this junction is at capacity in the 2026 future baseline with a maximum RFC of 0.95 on the A27 Link Road arm in the PM peak hour with an associated queue length of 14.0 PCU.

The results of the 2026 Do Something assessment of this junction are shown in Table 4.16.

Table 4.16: Junction 3 A23 London Road/A27 Link Road/Mill Road 2026 Do Something Assessment

Junction arm	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
A27 Link Road	87.6	175.77	1.11	13.9	41.68	0.95
A23 London Road (south)	20.0	71.41	0.99	4.7	17.82	0.83
Mill Road	1.3	22.61	0.56	0.5	11.72	0.35
A23 London Road (north)	1.7	5.65	0.62	2.6	7.43	0.72

The assessment shows that this junction operates over capacity in the 2026 Do Something, with a maximum RFC of 1.11 on the A27 Link Road arm in the AM peak hour and an associated queue length of 87.6 PCU. In

the PM peak hour, the maximum RFC of 0.95 is on the A27 Link Road arm with an associated queue length of 13.9 PCU.

There is no change in RFC and an increase in queue of 1.7 PCU in the AM peak hour when compared to the 2026 Future baseline. There is no change in RFC of 0.00 and an increase of 0.01 PCU in the PM peak hour when compared to the 2026 future baseline.

This shows that this junction is already operating over capacity, and the proposed development would have a negligible impact on its operation.

The results of the 2032 Future Baseline assessment of this junction are shown in Table 4.17.

Table 4.17: Junction 3 A23 London Road/A27 Link Road/Mill Road 2032 Future Baseline Assessment

Junction arm	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
A27 Link Road	141.2	285.48	1.19	36.4	92.39	1.03
A23 London Road (south)	34.9	110.61	1.04	7.1	26.02	0.89
Mill Road	1.4	23.86	0.59	0.6	13.25	0.39
A23 London Road (north)	2.0	6.26	0.66	3.2	8.65	0.76

The assessment shows that this junction operates over capacity in the 2032 Future Baseline, with a maximum RFC of 1.19 on the A27 Link Road arm in the AM peak hour and an associated queue length of 141.2 PCU. In the PM peak hour, the assessment shows that this junction operates over capacity in the 2032 future baseline with a maximum RFC of 1.03 on the A27 Link Road arm with an associated queue length of 36.4 PCU.

The results of the 2032 Do Something assessment of this junction are shown in Table 4.18.

Table 4.18: Junction 3 A23 London Road/A27 Link Road/Mill Road 2032 Do Something Assessment

Junction arm	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
A27 Link Road	143.3	290.74	1.19	36.4	92.42	1.03
A23 London Road (south)	32.3	104.19	1.03	6.8	25.28	0.88
Mill Road	1.4	23.95	0.59	0.6	13.16	0.38
A23 London Road (north)	2.0	6.21	0.66	3.2	8.65	0.76

The assessment shows that this junction operates over capacity in the 2032 Do Something, with a maximum RFC of 1.19 on the A27 Link Road arm in the AM peak hour and an associated queue length of 143.3 PCU. In the PM peak hour, the maximum RFC of 1.03 is on the A27 Link Road arm with an associated queue length of 36.4 PCU.

There is no change in RFC and an increase in queue of 2.1 PCU in the AM peak hour when compared to the 2032 Future baseline. There is no increase in RFC or queue in the PM peak hour when compared to the 2032 future baseline. This shows that this junction is already operating over capacity, and the proposed development would have a negligible impact on its operation.

Junction 4 – A27 Westbound Offslip/A27 Link Road/A27 overbridge

This junction is a 4-arm priority-controlled roundabout with no pedestrian crossing facilities. This junction has been assessed in Arcady. The A27 westbound onslip is exit only at this junction, so has not been included in the assessment results. The results of the 2021 Baseline assessment of this junction are shown in Table 4.19.

Table 4.19: Junction 4 A27 Westbound Offslip/A27 Link Road/A27 overbridge 2021 Baseline Assessment

Junction arm	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
A27 westbound offslip	7.0	20.18	0.88	3.5	11.67	0.78
A27 Link Road	5.1	15.78	0.83	9.9	28.08	0.92
A27 overbridge	0.1	3.55	0.12	0.2	3.82	0.17

The assessment shows that this junction is nearing capacity in the 2021 Baseline, with a maximum RFC of 0.88 on the A27 Westbound offslip arm in the AM peak hour with an associated queue length of 7.0 PCU. In the PM peak hour, the maximum RFC of 0.92 is on the A27 Link Road arm with an associated queue length of 9.9 PCU.

The results of the 2026 Future Baseline assessment of this junction are shown in Table 4.20.

Table 4.20: Junction 4 A27 Westbound Offslip/A27 Link Road/A27 overbridge 2026 Future Baseline Assessment

Junction arm	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
A27 westbound offslip	10.2	28.70	0.92	4.4	14.17	0.82
A27 Link Road	6.8	20.23	0.87	15.9	43.08	0.96
A27 overbridge	0.1	3.58	0.12	0.2	3.86	0.18

The assessment shows that this junction is nearing capacity in the 2026 Future Baseline, with a maximum RFC of 0.92 on the A27 westbound offslip arm in the AM peak hour with an associated queue length of 10.2 PCU. The assessment shows that this junction operates at capacity in the 2026 future baseline in the PM peak hour, with a maximum RFC of 0.96 on the A27 Link Road arm and an associated queue length of 15.9 PCU.

The results of the 2026 Do Something assessment of this junction are shown in Table 4.21.

Table 4.21: Junction 4 A27 Westbound Offslip/A27 Link Road/A27 Overbridge 2026 Do Something Assessment

Junction arm	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
A27 westbound offslip	10.4	29.32	0.92	4.4	14.17	0.82
A27 Link Road	6.9	20.36	0.87	15.9	43.08	0.96
A27 overbridge	0.1	3.59	0.13	0.2	3.86	0.18

The assessment shows that this junction is nearing capacity in the 2026 Do Something, with a maximum RFC of 0.92 on the A27 westbound offslip arm in the AM peak hour with an associated queue length of 10.4 PCU. The assessment shows that this junction operates at capacity in the 2026 future baseline in the PM peak hour, the maximum RFC of 0.96 is on the A27 link Road arm with an associated queue length of 15.9 PCU.

There is no change in RFC and an increase in queue of 0.02 PCU in the AM peak hour when compared to the 2026 Future baseline. There is no change in RFC and a 0.1 increase in queue in the PM peak hour when compared to the 2026 future baseline. This shows that the proposed development would have a negligible impact on the operation of this junction.

The results of the 2032 Future Baseline assessment of this junction are shown in Table 4.22.

Table 4.22: Junction 4 A27 Westbound Offslip/A27 Link Road/A27 overbridge 2032 Future Baseline Assessment

Junction arm	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
A27 westbound offslip	18.1	47.77	0.97	6.0	18.54	0.86
A27 Link Road	10.0	28.64	0.92	30.9	74.03	1.01
A27 overbridge	0.2	3.60	0.13	0.2	3.91	0.19

The assessment shows that this junction operates at capacity in the 2032 Future Baseline, with a maximum RFC of 0.97 on the A27 westbound offslip arm in the AM peak hour with an associated queue length of 18.1 PCU. The assessment shows that this junction operates over capacity in the 2032 future baseline in the PM peak hour, the maximum RFC of 1.01 is on the A27 Link Road arm with an associated queue length of 30.9 PCU.

The results of the 2032 Do Something assessment of this junction are shown in Table 4.23.

Table 4.23: Junction 4 A27 Westbound Offslip/A27 Link Road/A27 Overbridge 2032 Do Something Assessment

Junction arm	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
A27 westbound offslip	18.7	49.00	0.97	6.0	18.54	0.86
A27 Link Road	10.1	28.83	0.92	30.9	74.03	1.01
A27 overbridge	0.2	3.61	0.13	0.2	3.91	0.19

The assessment shows that this junction operates at capacity in the 2032 Do Something, with a maximum RFC of 0.97 on the A27 westbound offslip arm in the AM peak hour with an associated queue length of 18.9 PCU. The assessment shows that this junction operates over capacity in the 2032 future baseline in the PM peak hour, the maximum RFC of 1.01 is on the A27 Link Road arm with an associated queue length of 33.3 PCU.

There is no change in RFC and an increase in queue of 1.3 PCU in the AM peak hour when compared to the 2032 Future baseline. There is no change in RFC or queue in the PM peak hour when compared to the 2032 future baseline. This shows that the proposed development would have a negligible impact on the operation of this junction.

Junction 5 – A27 Eastbound Offslip/Braypool Lane/A27 Overbridge

This junction is a 4-arm priority-controlled roundabout with no pedestrian crossing facilities. This junction has been assessed in Arcady. The A27 eastbound onslip is exit only at this junction, so has not been included in the assessment results. The results of the 2021 Baseline assessment of this junction are shown in Table 4.24.

Table 4.24: Junction 5 A27 Eastbound Offslip/Braypool Lane/A27 Overbridge 2021 Baseline Assessment

Junction arm	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
A27 overbridge	3.7	11.93	0.78	2.6	8.91	0.72
A27 eastbound offslip	1.8	52.23	0.65	7.2	141.17	0.94
Braypool Lane	0.1	8.40	0.07	0.1	7.92	0.05

The assessment shows that this junction operates within capacity in the 2021 Baseline, with a maximum RFC of 0.78 on the A27 overbridge arm in the AM peak hour with an associated queue length of 3.7 PCU. The assessment shows that in the PM peak hour the junction operates at capacity with a maximum RFC of 0.94 on the A27 eastbound offslip arm and an associated queue length of 7.2 PCU.

The results of the 2026 Future Baseline assessment of this junction are shown in Table 4.25.

Table 4.25: Junction 5 A27 Eastbound Offslip/Braypool Lane/A27 Overbridge 2026 Future Baseline Assessment

Junction arm	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
A27 overbridge	4.5	14.17	0.81	3.0	10.09	0.75
A27 eastbound offslip	2.2	62.27	0.70	10.4	191.41	1.01
Braypool Lane	0.1	9.08	0.08	0.1	8.45	0.06

The assessment shows that this junction operates within capacity in the 2026 Future Baseline, with a maximum RFC of 0.81 on the A27 overbridge arm in the AM peak hour with an associated queue length of 4.5 PCU. The assessment shows that this junction operates over capacity in the PM peak hour, the maximum RFC of 1.01 is on the A27 eastbound offslip arm with an associated queue length of 10.4 PCU.

The results of the 2026 Do Something assessment of this junction are shown in Table 4.26

Table 4.26: Junction 5 A27 Eastbound Offslip/Braypool Lane/A27 Overbridge 2026 Do Something Assessment

Junction arm	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
A27 overbridge	4.5	14.17	0.81	3.0	10.09	0.75
A27 eastbound offslip	2.2	63.34	0.71	10.4	191.40	1.01
	0.1	9.09	0.08	0.1	8.45	0.06

The assessment shows that this junction operates within capacity in the 2026 Do Something, with a maximum RFC of 0.81 on the A27 overbridge arm in the AM peak hour with an associated queue length of 4.5 PCU. The assessment shows that this junction operates over capacity in the PM peak hour, the maximum RFC of 1.01 is on the A27 eastbound offslip arm with an associated queue length of 10.4 PCU.

There is no change in RFC or queue length in the AM peak hour when compared to the 2026 future baseline. There is no change in RFC or queue length in the PM peak hour when compared to the 2026 future baseline. This shows that the junction is forecast to already be operating within capacity in the AM peak hour of the 2026 future baseline and over-capacity in the PM peak hour of the 2026 future baseline, but the proposed development would have a negligible impact on the operation of this junction.

The results of the 2032 Future Baseline assessment of this junction are shown in Table 4.27.

Table 4.27: Junction 5 A27 Eastbound Offslip/Braypool Lane/A27 Overbridge 2032 Future Baseline Assessment

Junction arm	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
A27 overbridge	5.9	17.19	0.85	3.7	11.81	0.79

Junction arm	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
A27 eastbound offslip	2.8	78.74	0.77	16.9	285.25	1.11
Braypool Lane	0.1	9.96	0.09	0.1	9.08	0.07

The assessment shows that this junction is nearing capacity in the 2032 Future Baseline, with a maximum RFC of 0.85 on the A27 overbridge arm in the AM peak hour with an associated queue length of 5.9 PCU. The assessment shows that this junction is over capacity in the PM peak hour with a maximum RFC of 1.11 on the A27 eastbound offslip arm and an associated queue length of 16.9 PCU.

The results of the 2032 Do Something assessment of this junction are shown in Table 4.28.

Table 4.28: Junction 5 A27 Eastbound Offslip/Braypool Lane/A27 Overbridge 2032 Do Something Assessment

Junction arm	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
A27 overbridge	5.9	17.79	0.85	3.7	11.81	0.79
A27 eastbound offslip	2.9	80.34	0.77	16.9	285.25	1.11
Braypool Lane	0.1	9.97	0.09	0.1	9.08	0.07

The assessment shows that this junction is nearing capacity in the 2032 Do Something, with a maximum RFC of 0.85 on the A27 overbridge arm in the AM peak hour with an associated queue length of 5.9 PCU. The assessment shows that this junction is operating over capacity in the PM peak hour with a maximum RFC of 1.11 on the A27 eastbound offslip arm with an associated queue length of 16.9 PCU.

There is no change in RFC or queue length in the AM peak hour when compared to the 2032 future baseline. There is no change in RFC or queue in the PM peak hour when compared to the 2032 future baseline. This shows that the junction is forecast to already be over capacity in the 2032 future baseline in the PM peak hour, but the proposed development would have a negligible impact on the operation of this junction.

5 Summary and Conclusions

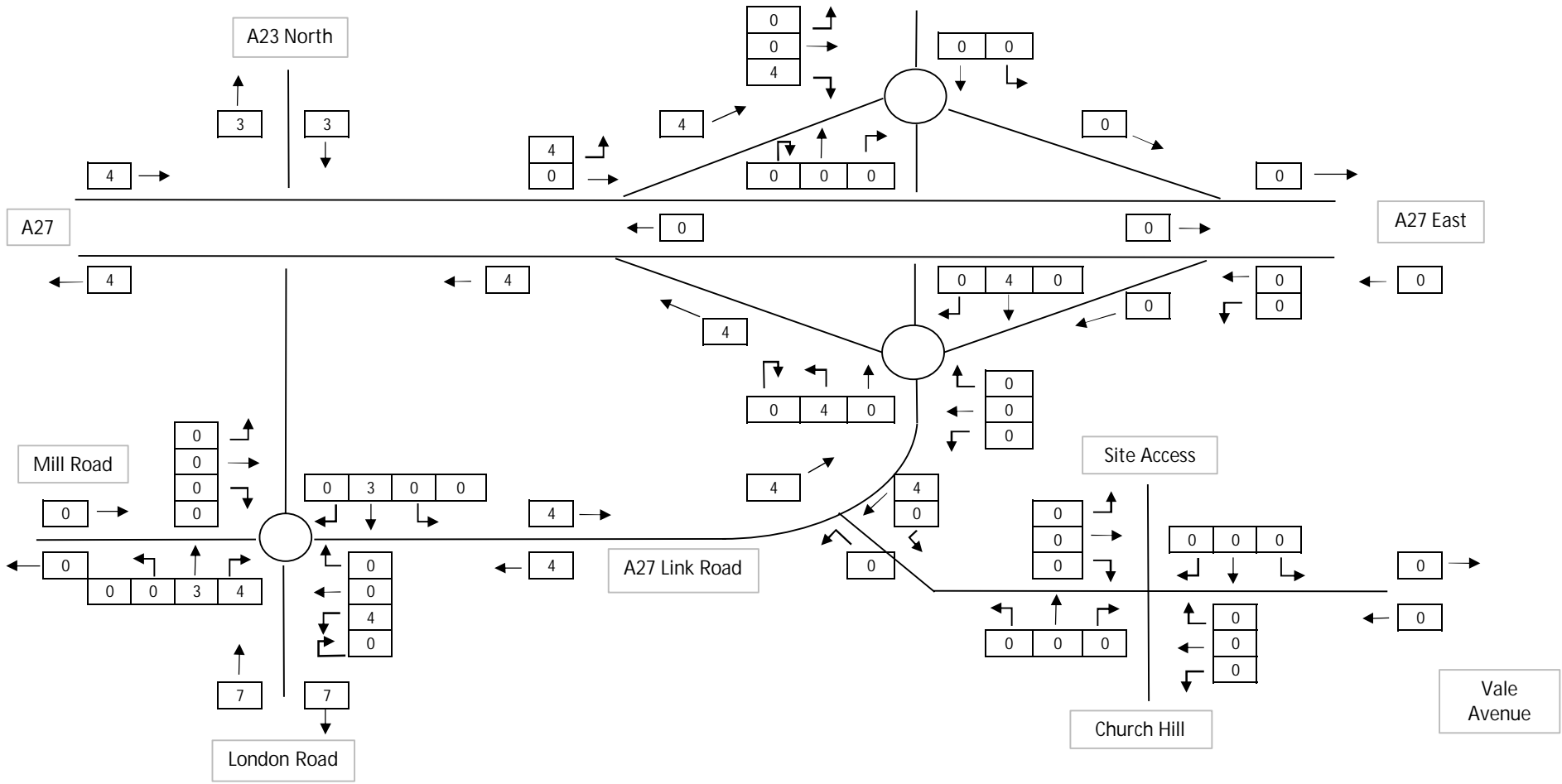
The above assessments show that in the sensitivity test scenario:

- The pedestrian trips generated by the proposed development are forecast to have no impact on the operation of the local pedestrian network and footways.
- The bus trips generated by the proposed development are forecast to have a negligible impact on the capacity of bus services. It is assumed that the existing bus provision has sufficient capacity to accommodate the bus trips generated by the proposed development and RMG will engage with local bus companies to facilitate access to the site by public transport.
- The rail trips generated by the proposed development are forecast to have no impact on the operation of rail services from local train stations.

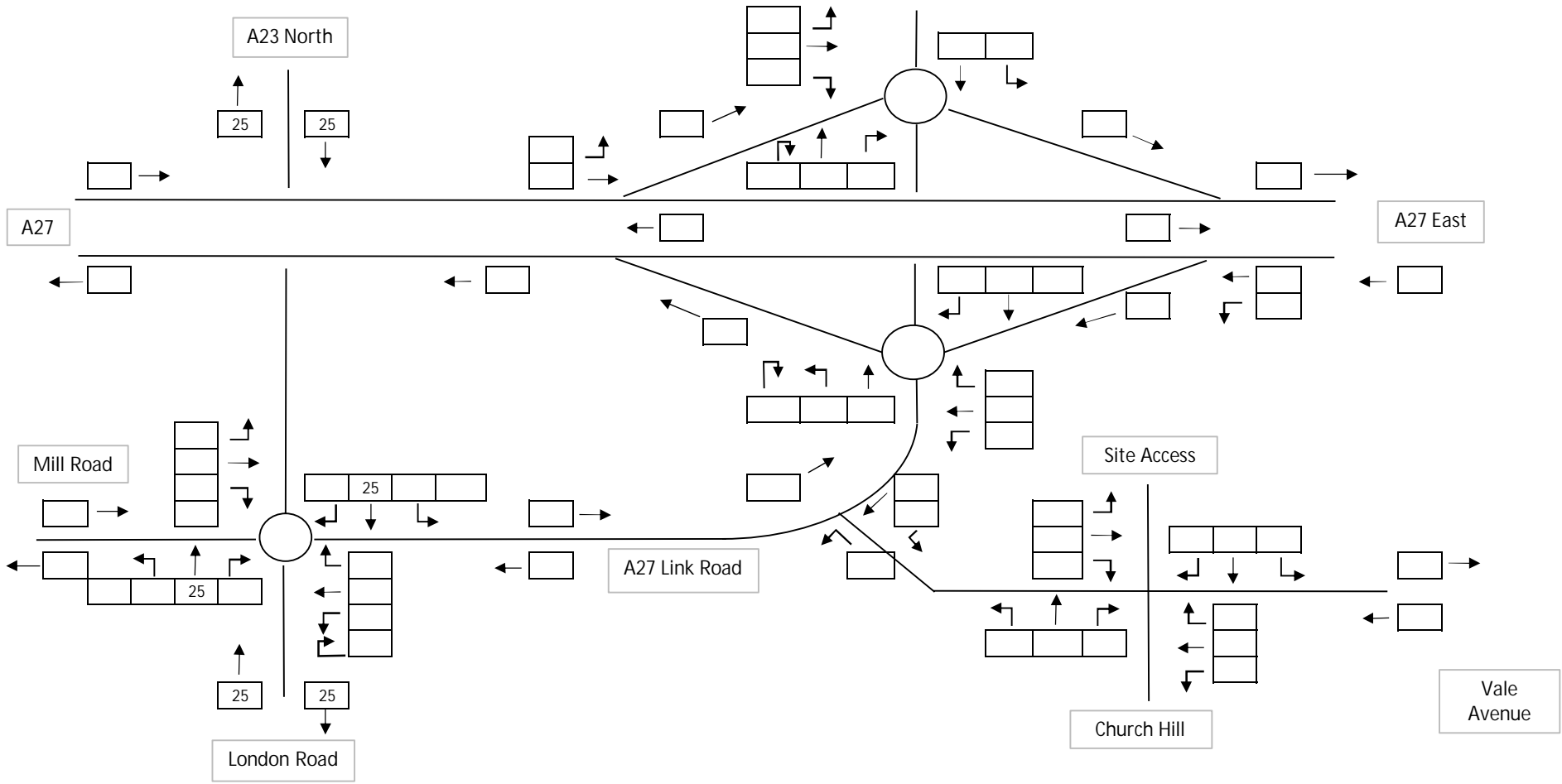
- The vehicle trips generated by the proposed development are forecast to have a negligible impact on the operation of the local transport network. Therefore, no further mitigation is required to improve the operation of the junctions assessed.

E. Trip Generation and Distribution

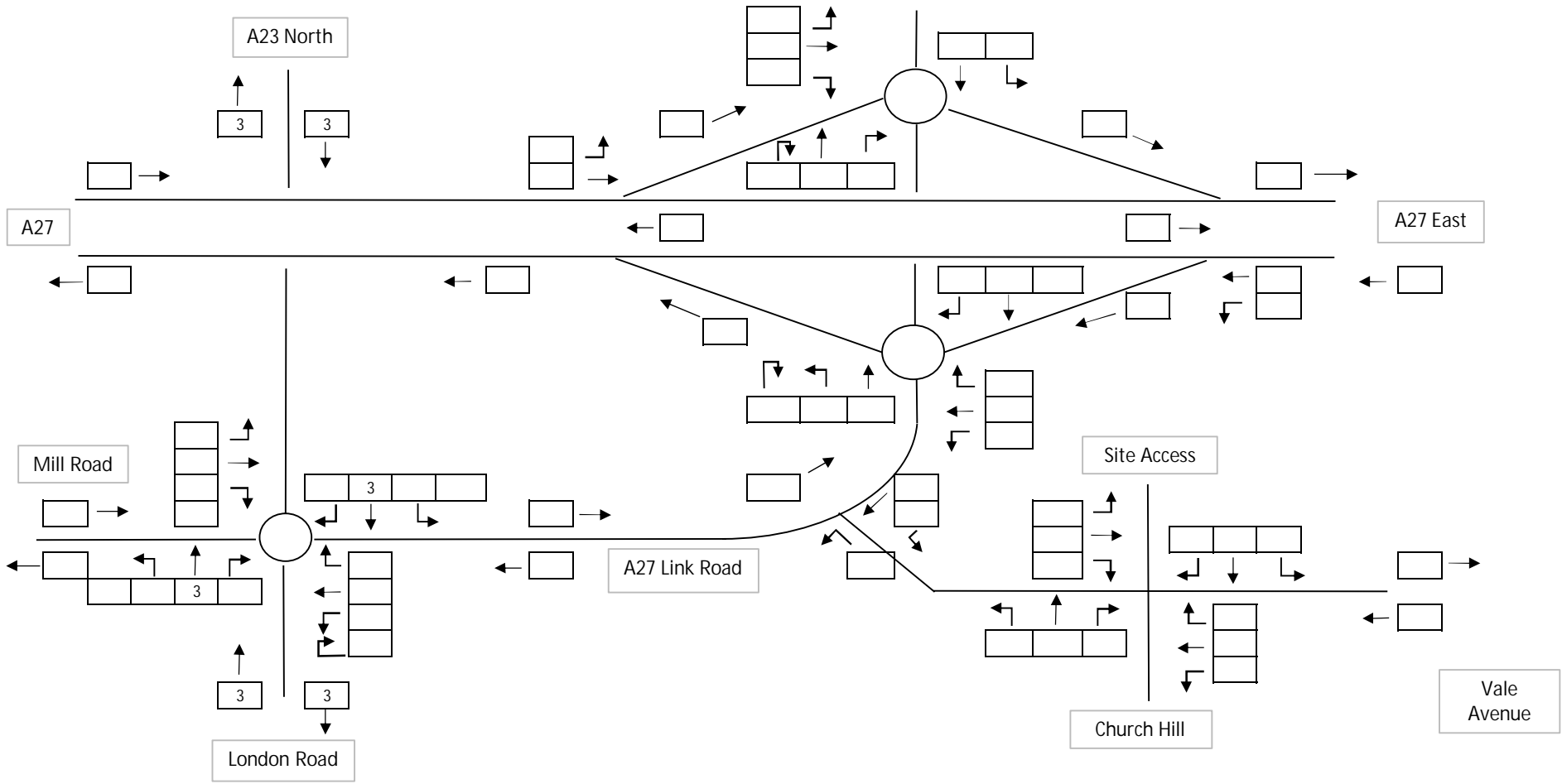
E.1 Existing Staff Distribution



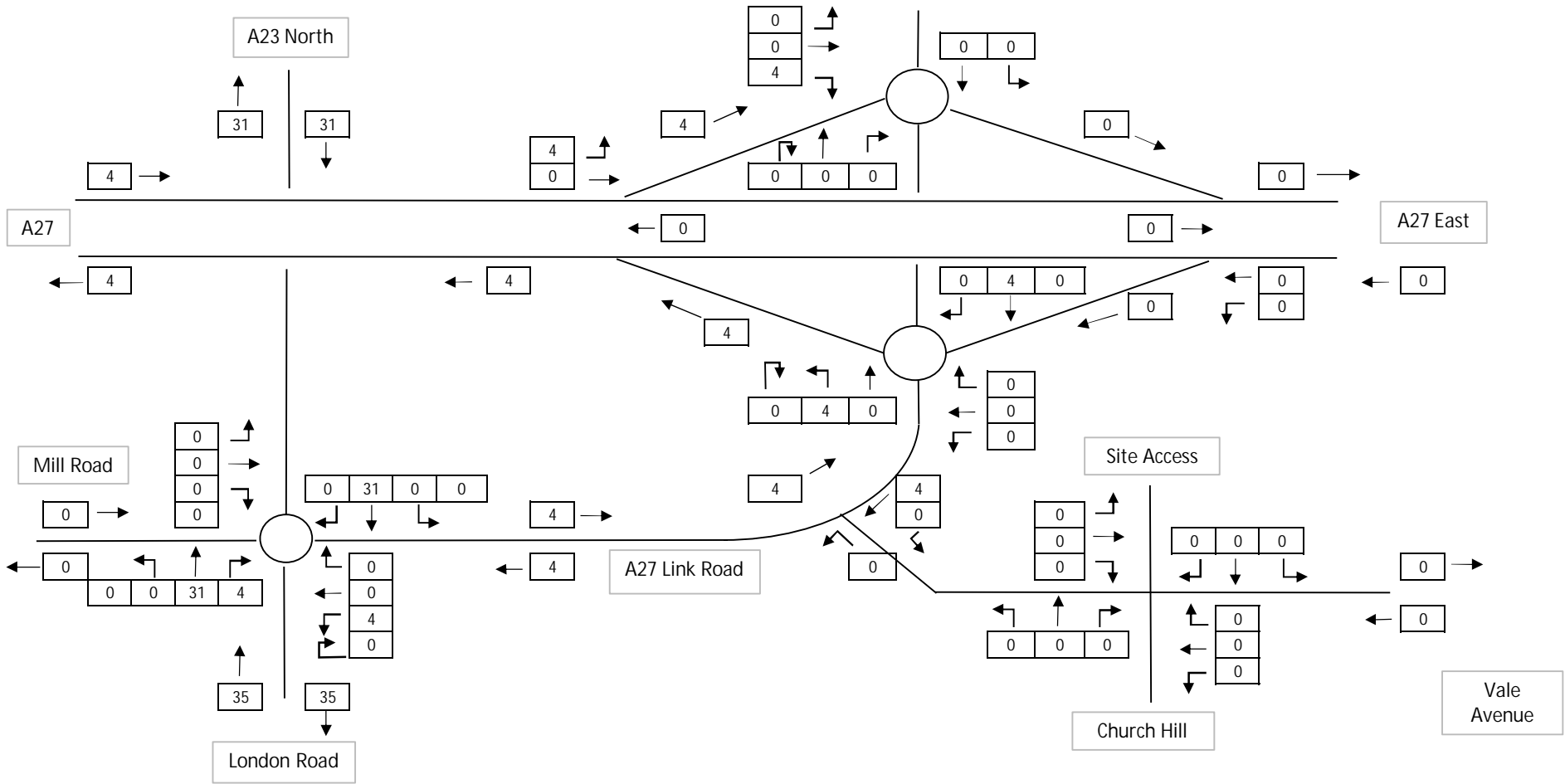
E.2 Existing HGV Distribution



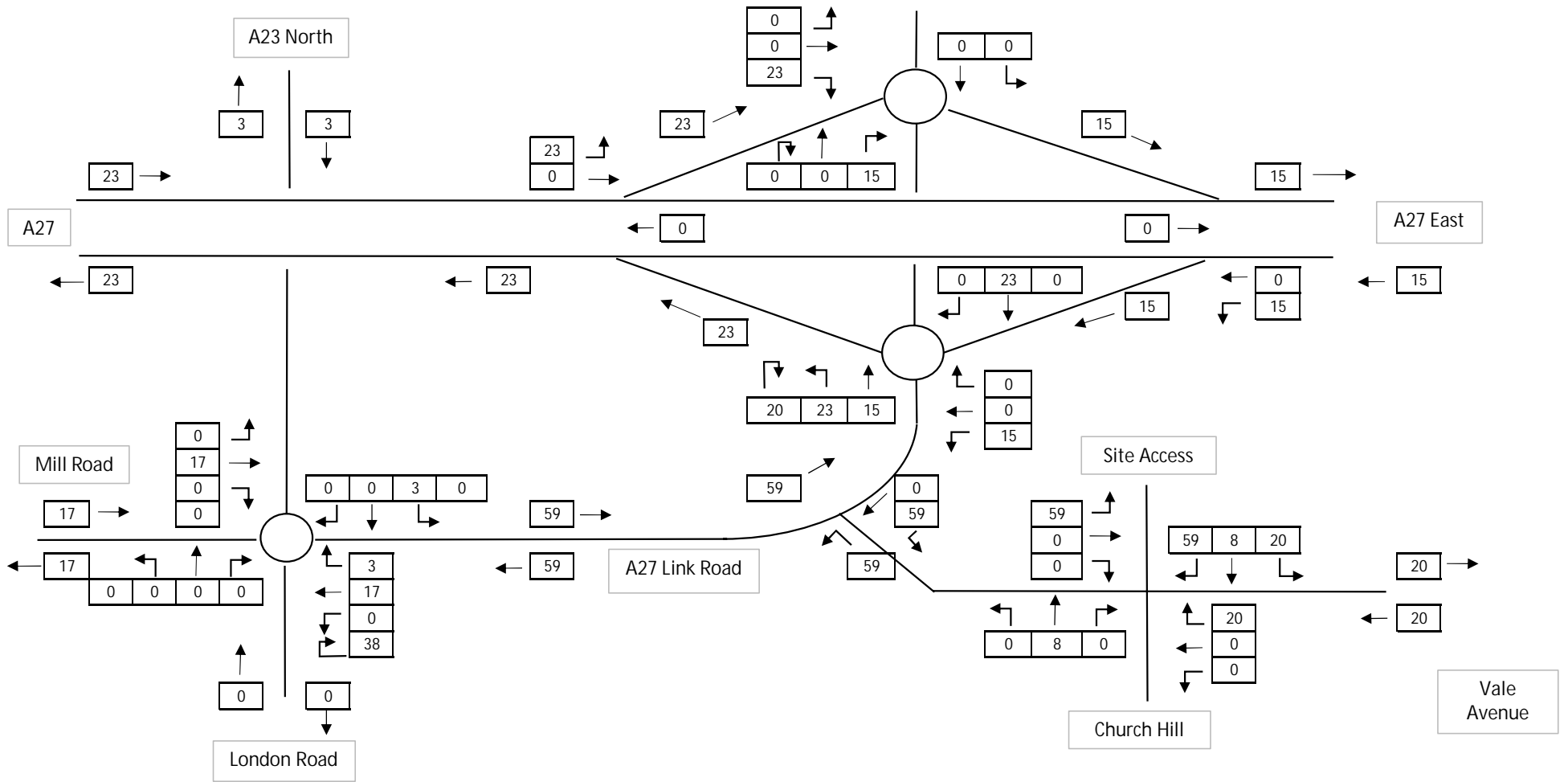
E.3 Existing Red Fleet Distribution



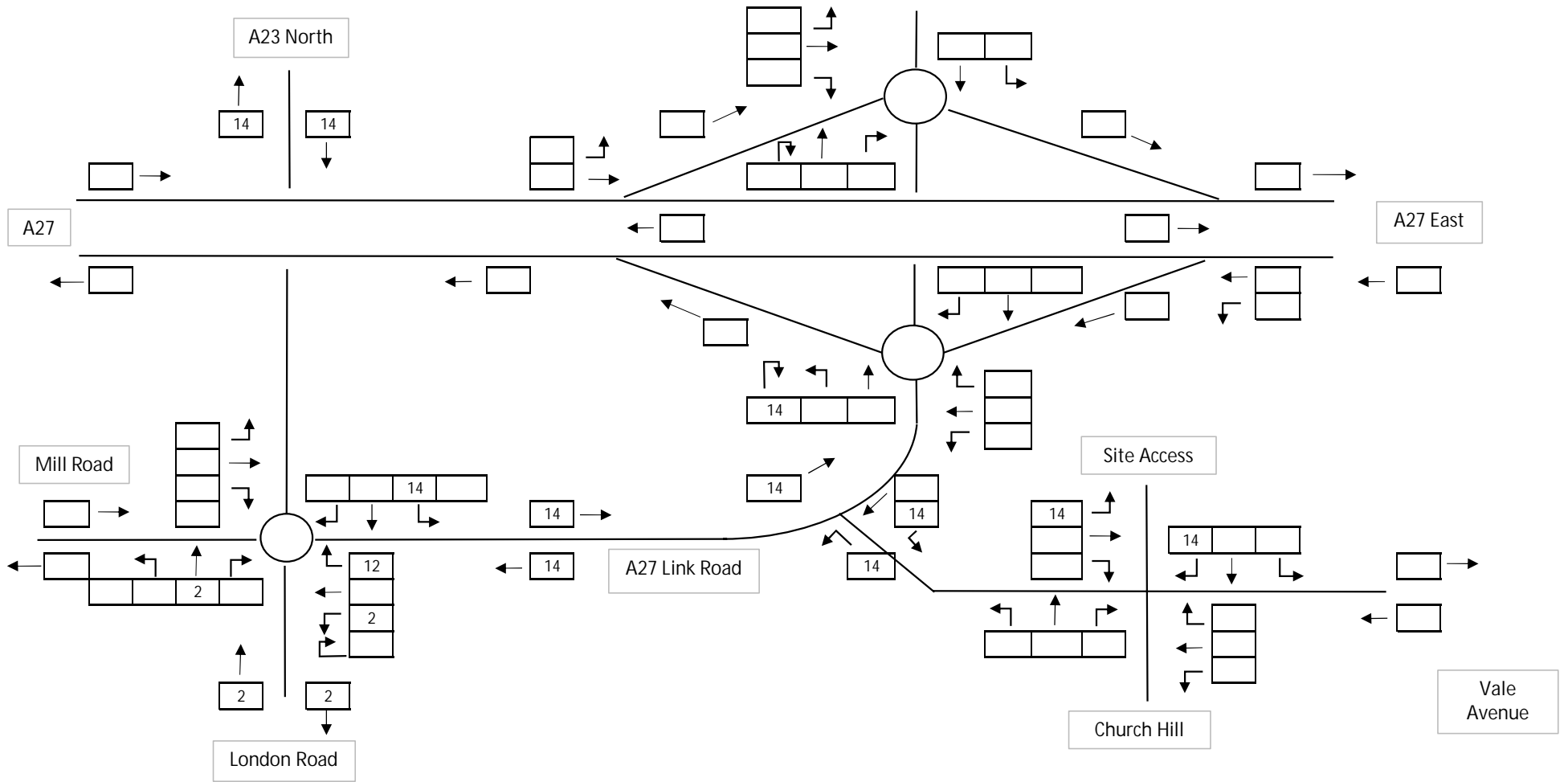
E.4 Total Existing Trip Distribution



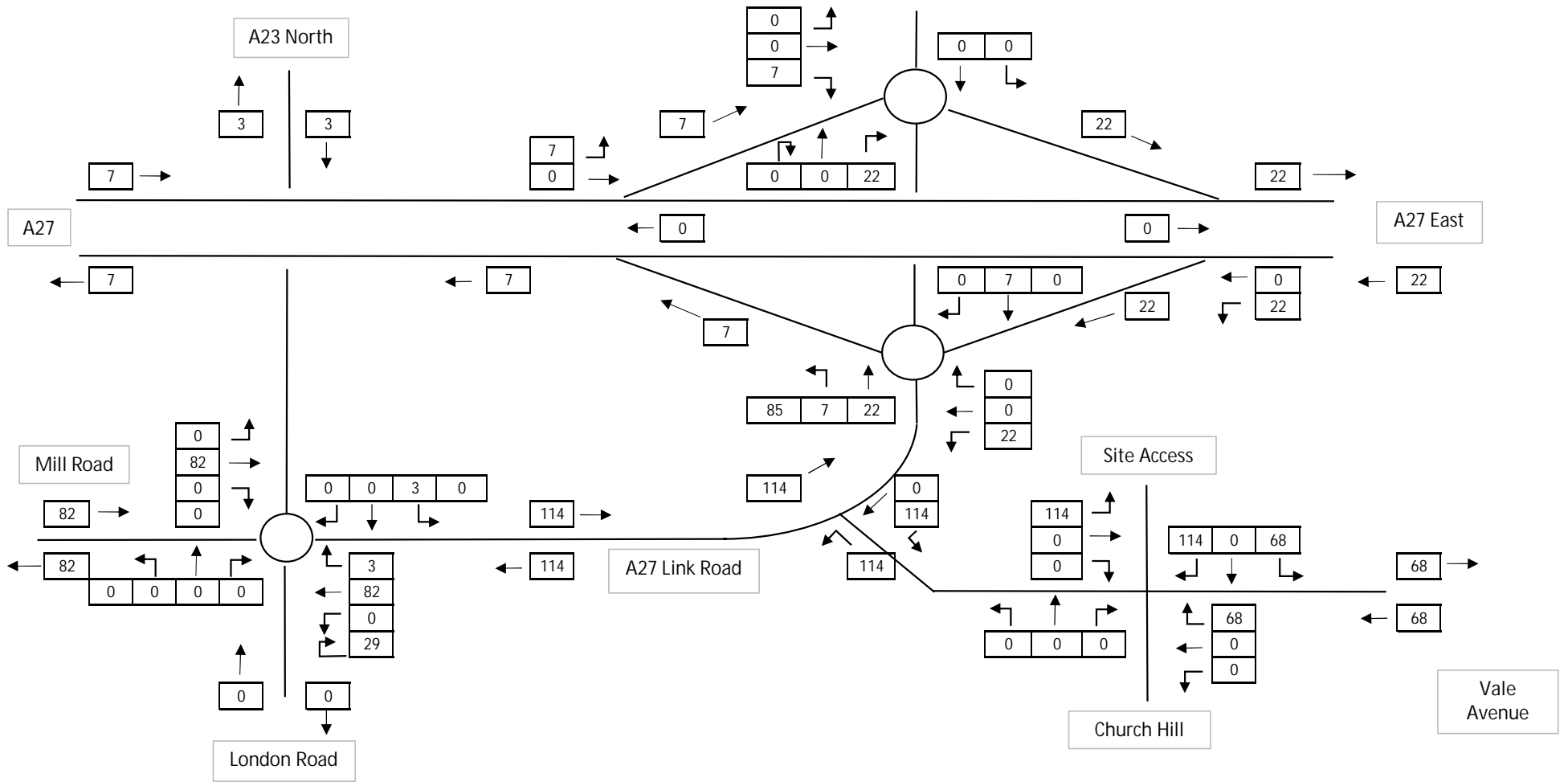
E.5 Proposed Staff Distribution



E.6 Proposed HGV Distribution

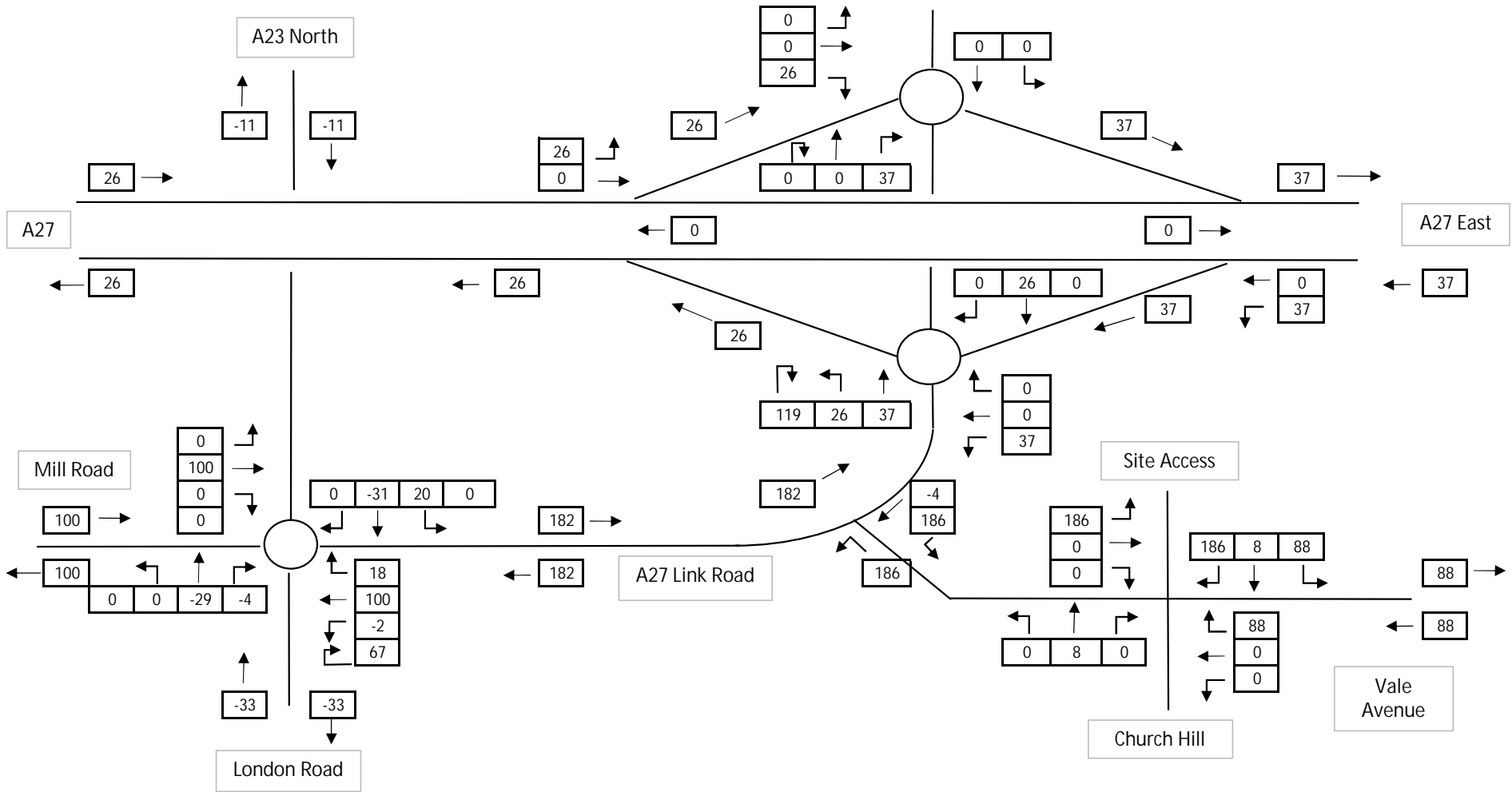


E.7 Proposed Red Fleet Distribution

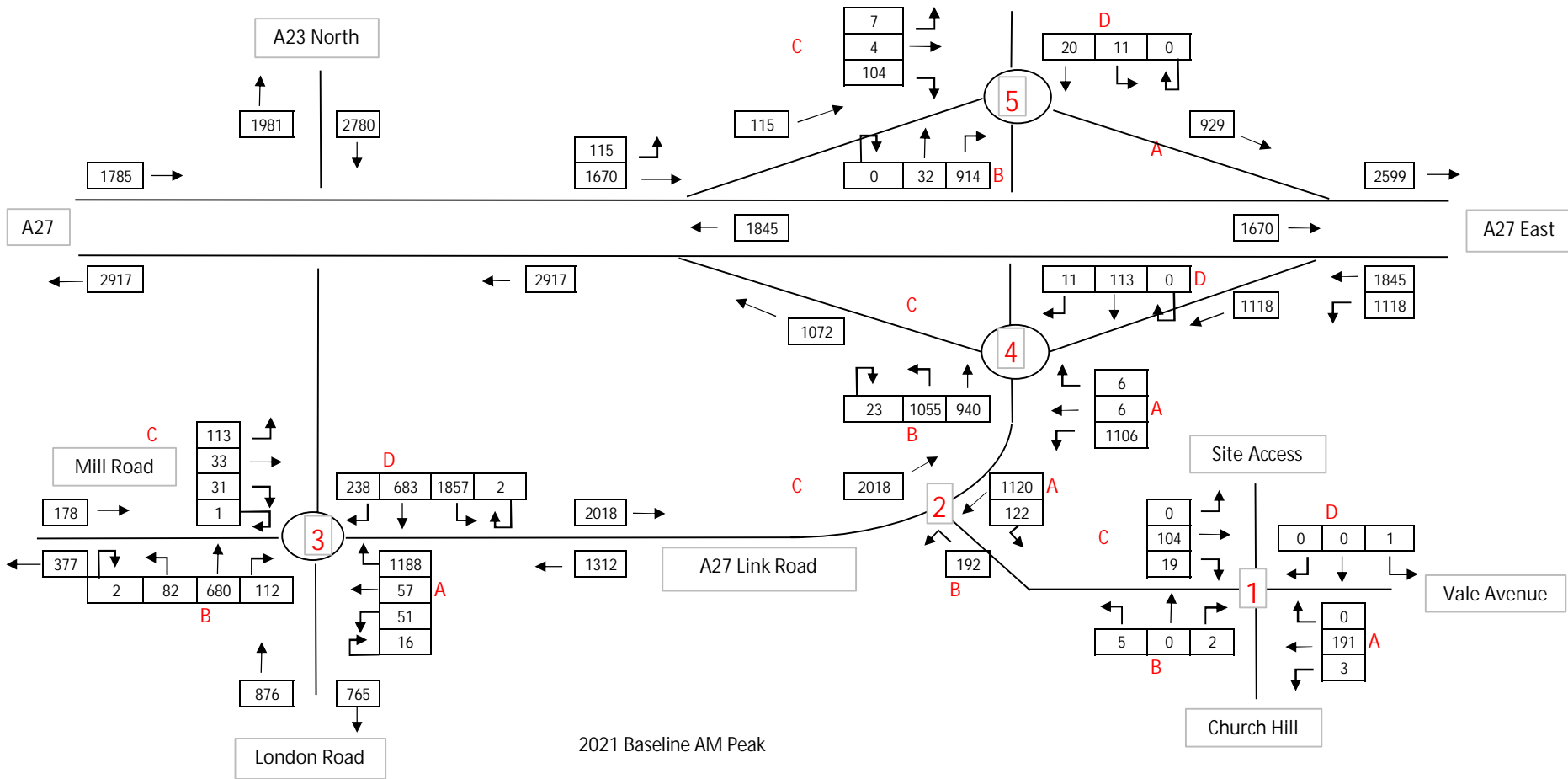


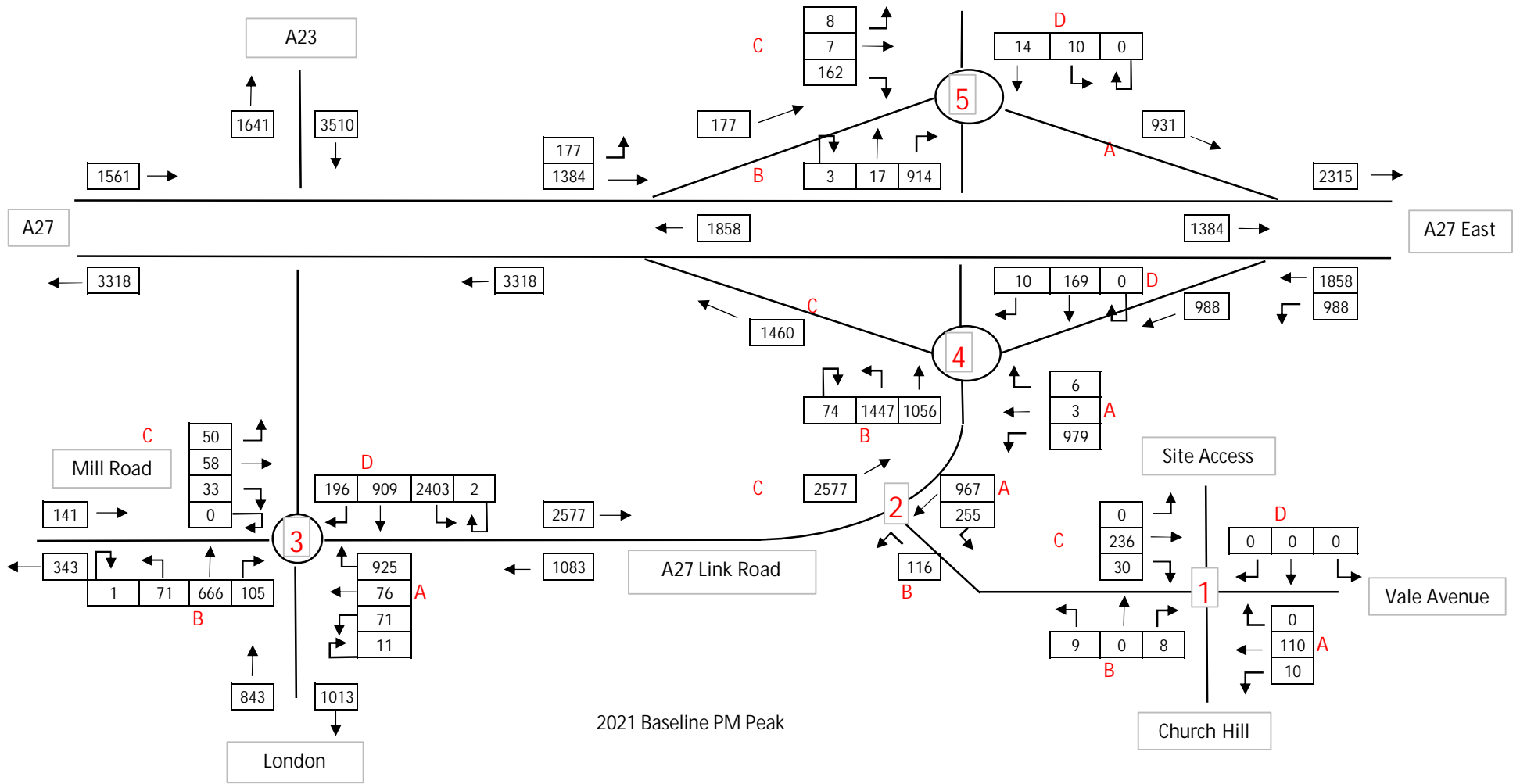
E.8 Total Proposed Trip Distribution

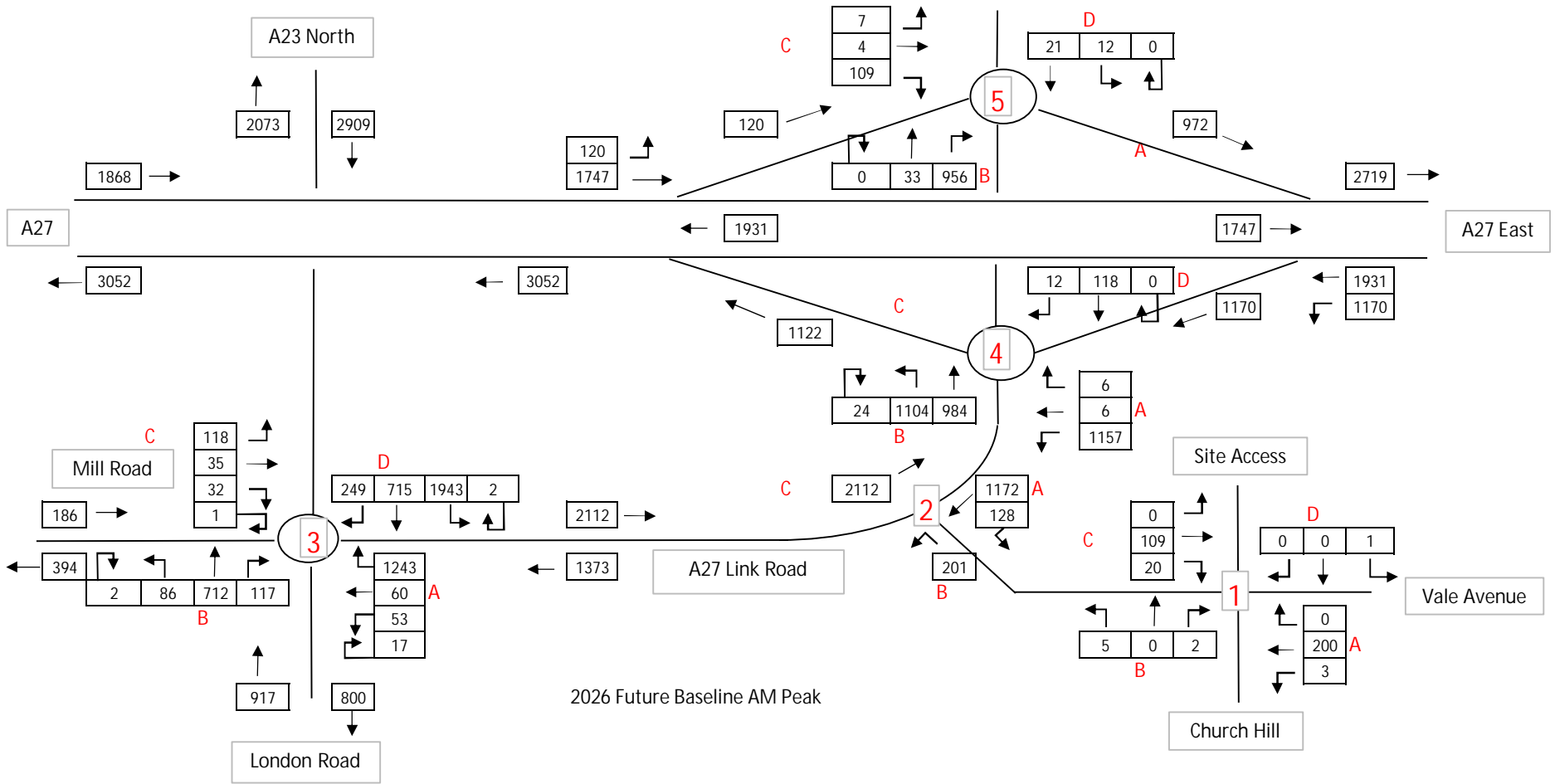
E.9 Overall Trip Generation

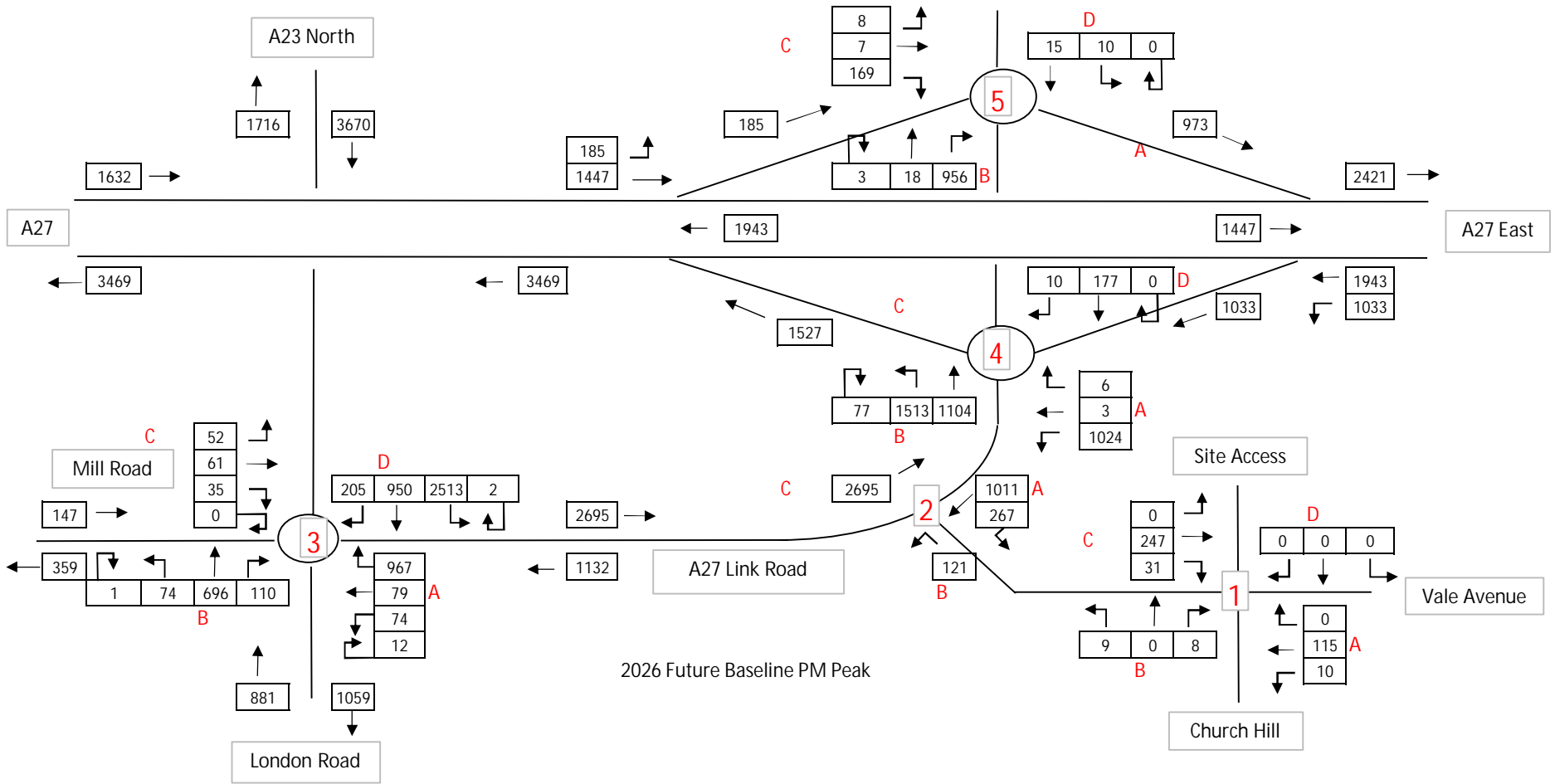


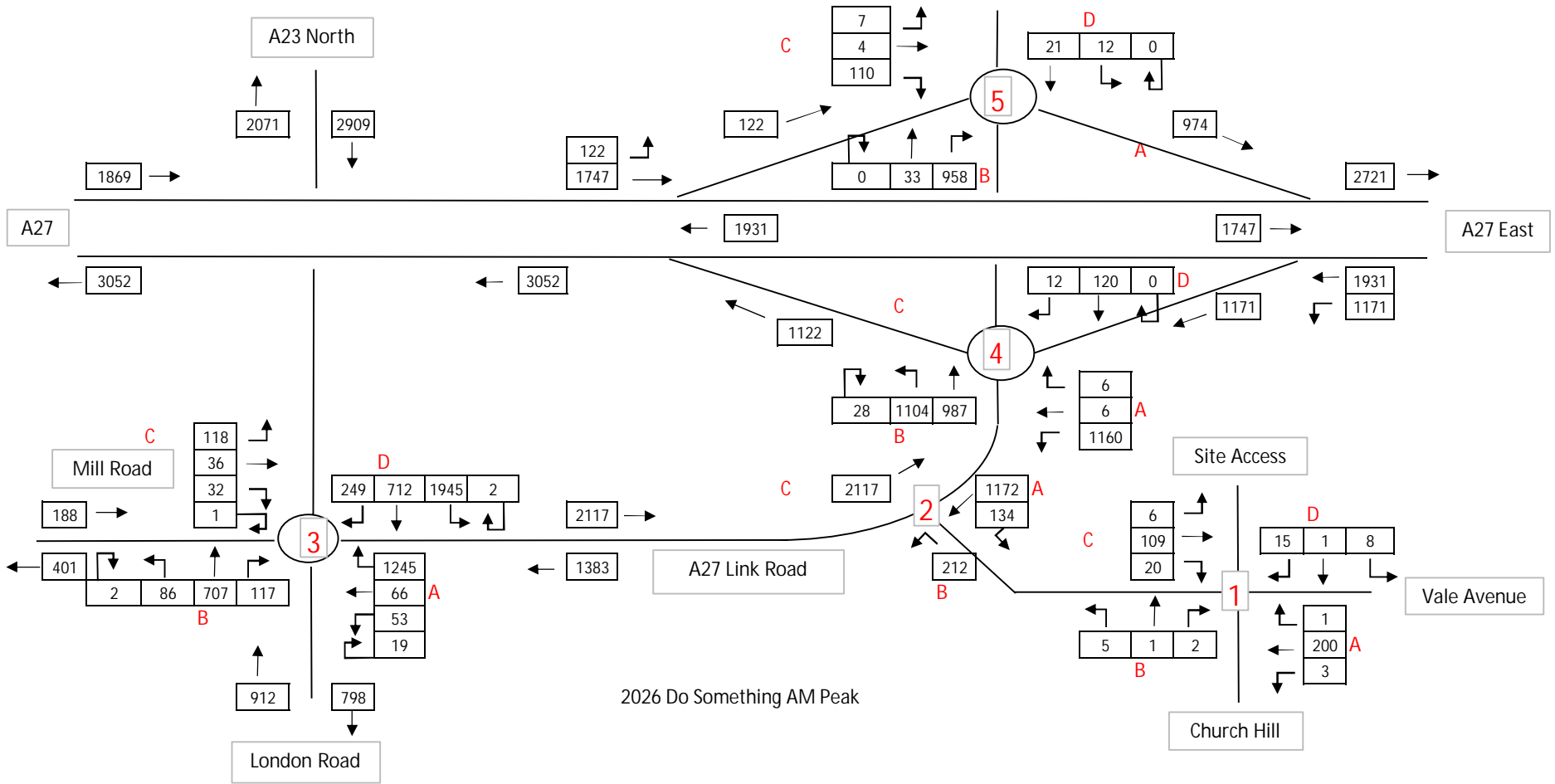
F. Traffic Flow Diagrams

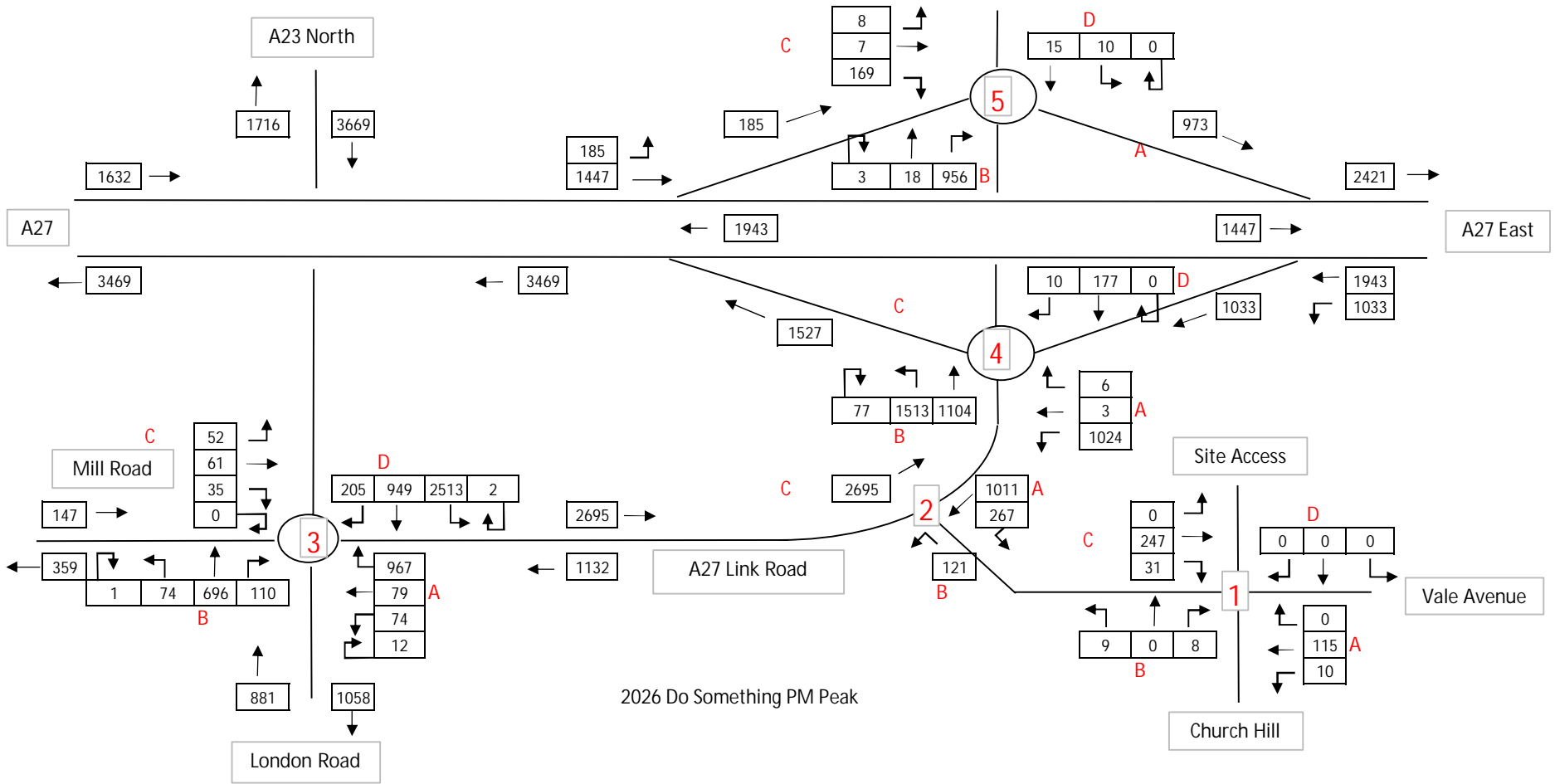


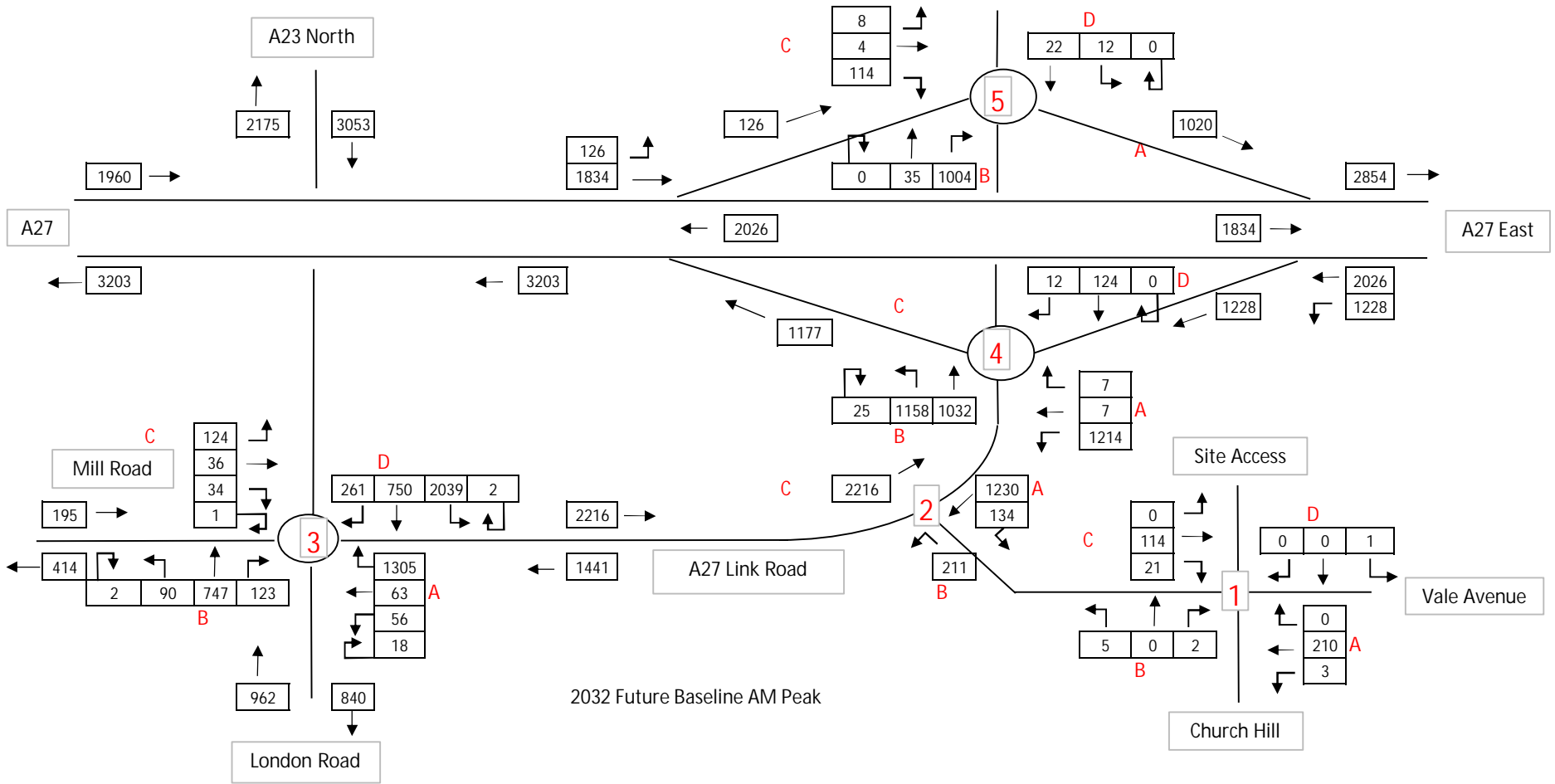


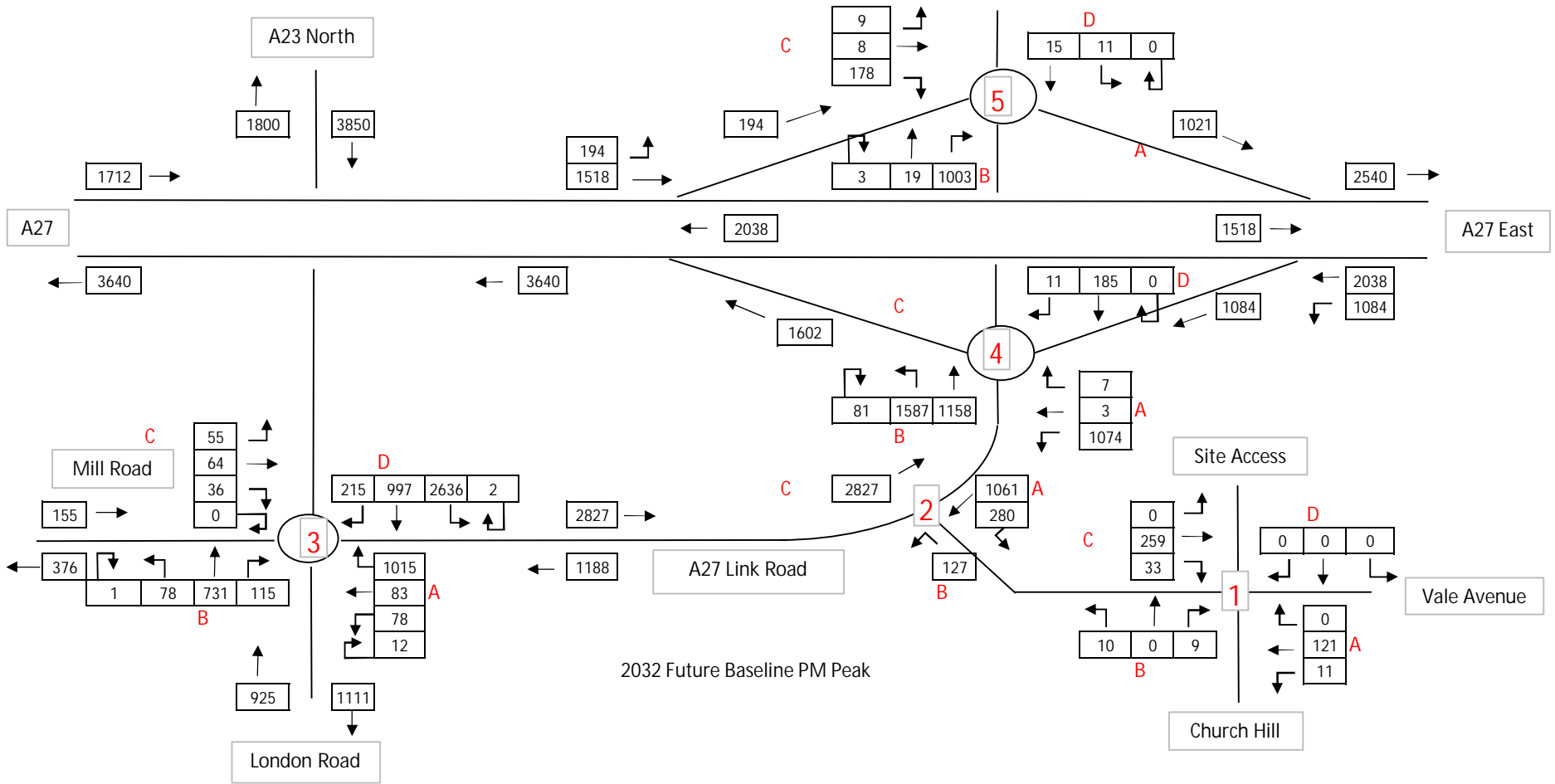


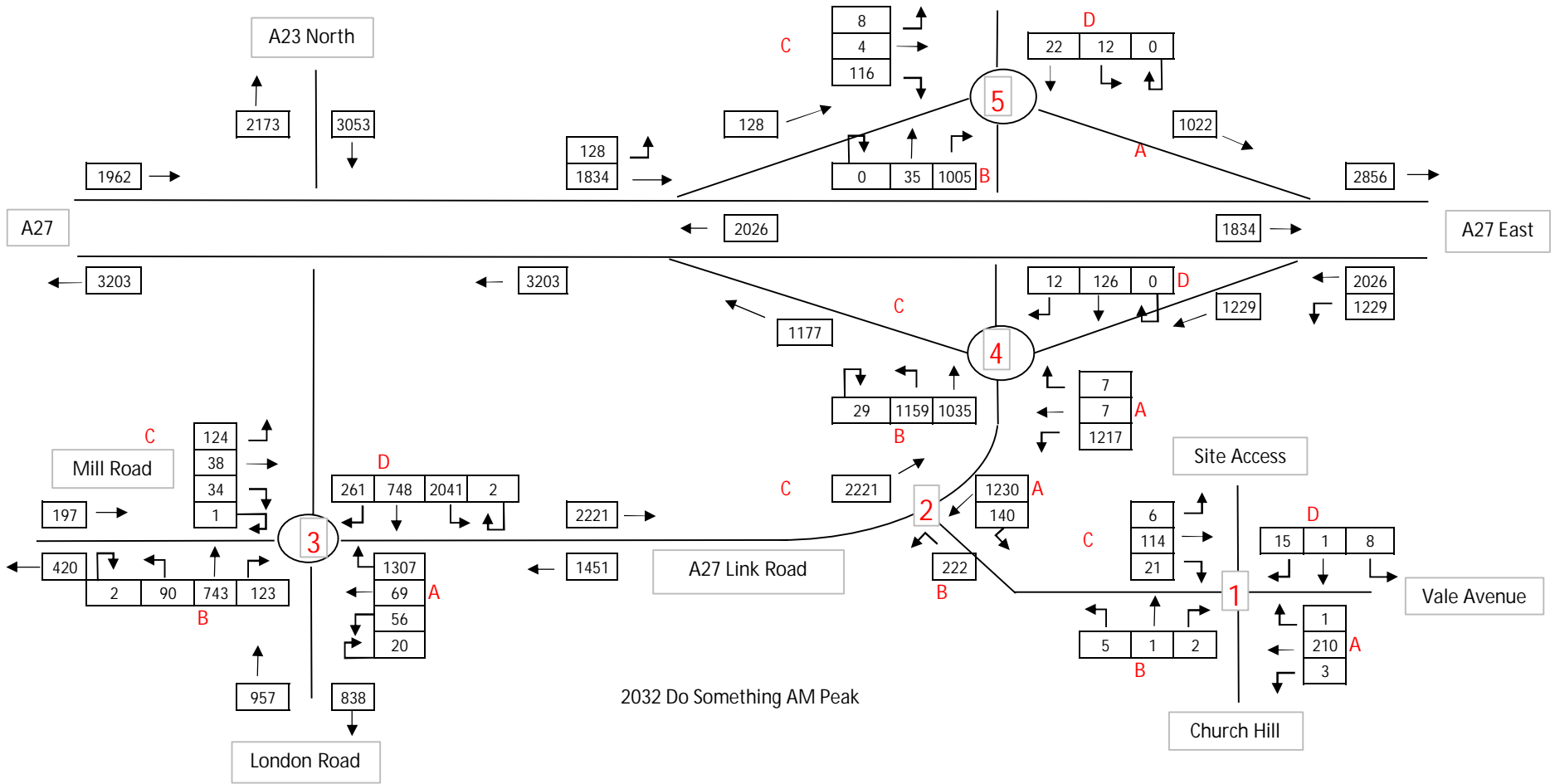


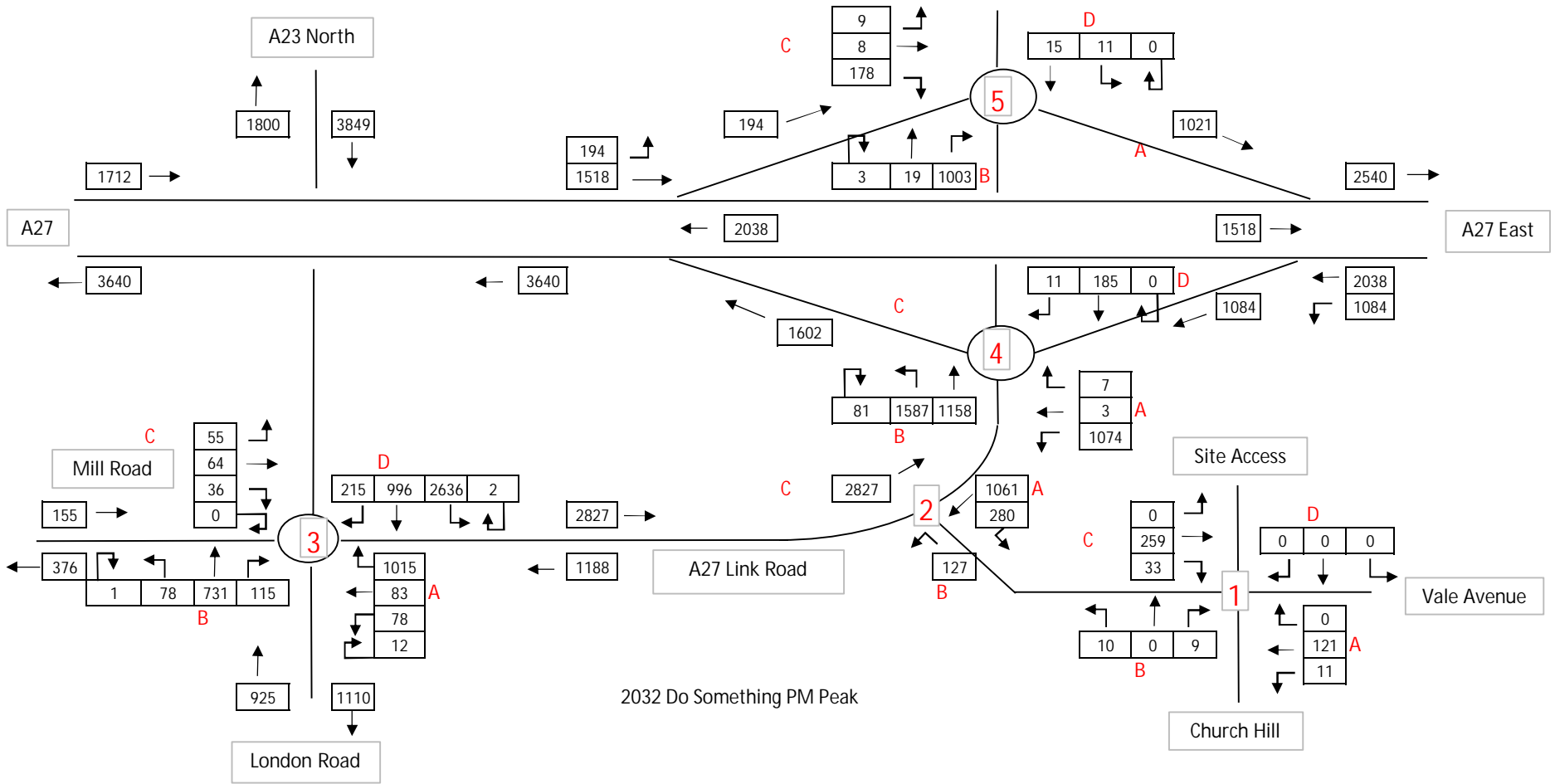












G. TEMPPro Growth Factors

Dataset Version: 72
 Result Type: Trip ends by time period
 Base Year: 2021
 Future Year: 2026
 Trip Purpose Group: All purposes
 Time Period: Weekday AM peak period (0700 - 0959)
 Trip End Type: Origin/Destination
 Alternative Assumptions Applied: No

Growth Factor

Area Description		All purposes	
Level	Name	Origin	Destination
Authority	Brighton and Hove	1.0526	1.0401

Future Year - Base Year

Area Description		All purposes	
Level	Name	Origin	Destination
Authority	Brighton and Hove	3,196	2,305

Base Year

Area Description		All purposes	
Level	Name	Origin	Destination
Authority	Brighton and Hove	60,807	57,476

Future Year

Area Description		All purposes	
Level	Name	Origin	Destination
Authority	Brighton and Hove	64,003	59,782

Dataset Version: 72
 Result Type: Trip ends by time period
 Base Year: 2021
 Future Year: 2026
 Trip Purpose Group: All purposes
 Time Period: Weekday PM peak period (1600 - 1859)
 Trip End Type: Origin/Destination
 Alternative Assumptions Applied: No

Growth Factor

Area Description		All purposes	
Level	Name	Origin	Destination
Authority	Brighton and Hove	1.0418	1.0494

Future Year - Base Year

Area Description		All purposes	
Level	Name	Origin	Destination
Authority	Brighton and Hove	2,715	3,349

Base Year

Area Description		All purposes	
Level	Name	Origin	Destination
Authority	Brighton and Hove	65,002	67,830

Future Year

Area Description		All purposes	
Level	Name	Origin	Destination
Authority	Brighton and Hove	67,717	71,178

Dataset Version: 72
 Result Type: Trip ends by time period
 Base Year: 2021
 Future Year: 2032
 Trip Purpose Group: All purposes
 Time Period: Weekday AM peak period (0700 - 0959)
 Trip End Type: Origin/Destination
 Alternative Assumptions Applied: No

Growth Factor

Area Description		All purposes	
Level	Name	Origin	Destination
Authority	Brighton and Hove	1.1109	1.0853

Future Year - Base Year

Area Description		All purposes	
Level	Name	Origin	Destination
Authority	Brighton and Hove	6,745	4,904

Base Year

Area Description		All purposes	
Level	Name	Origin	Destination
Authority	Brighton and Hove	60,807	57,476

Future Year

Area Description		All purposes	
Level	Name	Origin	Destination
Authority	Brighton and Hove	67,552	62,380

Dataset Version: 72
 Result Type: Trip ends by time period
 Base Year: 2021
 Future Year: 2032
 Trip Purpose Group: All purposes
 Time Period: Weekday PM peak period (1600 - 1859)
 Trip End Type: Origin/Destination
 Alternative Assumptions Applied: No

Growth Factor

Area Description		All purposes	
Level	Name	Origin	Destination
Authority	Brighton and Hove	1.0893	1.1047

Future Year - Base Year

Area Description		All purposes	
Level	Name	Origin	Destination
Authority	Brighton and Hove	5,804	7,105

Base Year

Area Description		All purposes	
Level	Name	Origin	Destination
Authority	Brighton and Hove	65,002	67,830

Future Year

Area Description		All purposes	
Level	Name	Origin	Destination
Authority	Brighton and Hove	70,807	74,934

H. Junction Capacity Assessment Output Reports

Junctions 9
PICADY 9 - Priority Intersection Module
Version: 9.5.1.7462 © Copyright TRL Limited, 2019
For sales and distribution information, program advice and maintenance, contact TRL: +44 (0)1344 379777 software@trl.co.uk www.trlsoftware.co.uk
The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution

Filename: Junction 1 Vale Avenue - Existing Site Access T-junction.j9
Path: C:\Users\WRI87273\Mott MacDonald\B RMF Brighton DO - T Transport\Junction models\Junction 1 Vale Avenue - Existing Site Access\05. Model Updates 2023\01. Model
Report generation date: 30/03/2023 16:02:18

- »(Default Analysis Set) - 2021 Baseline, AM
- »(Default Analysis Set) - 2021 Baseline, PM
- »(Default Analysis Set) - 2026 Future Baseline, AM
- »(Default Analysis Set) - 2026 Future Baseline, PM
- »(Default Analysis Set) - 2032 Future Baseline, AM
- »(Default Analysis Set) - 2032 Future Baseline, PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
A1 - 2021 Baseline										
Stream B-CD	D1	0.0	5.28	0.01	A	D2	0.0	5.41	0.01	A
Stream B-AD		0.0	8.02	0.00	A		0.0	7.83	0.02	A
Stream A-BCD		0.0	0.00	0.00	A		0.0	0.00	0.00	A
Stream D-ABC		0.0	0.00	0.00	A		0.0	0.00	0.00	A
Stream C-ABD		0.1	5.53	0.04	A		0.1	5.04	0.06	A
A1 - 2026 Future Baseline										
Stream B-CD	D3	0.0	5.30	0.01	A	D4	0.0	5.42	0.01	A
Stream B-AD		0.0	8.08	0.00	A		0.0	7.89	0.02	A
Stream A-BCD		0.0	0.00	0.00	A		0.0	0.00	0.00	A
Stream D-ABC		0.0	0.00	0.00	A		0.0	0.00	0.00	A
Stream C-ABD		0.1	5.53	0.04	A		0.1	5.02	0.07	A
A1 - 2032 Future Baseline										
Stream B-CD	D7	0.0	5.32	0.01	A	D8	0.0	5.45	0.02	A
Stream B-AD		0.0	8.14	0.00	A		0.0	7.98	0.02	A
Stream A-BCD		0.0	0.00	0.00	A		0.0	0.00	0.00	A
Stream D-ABC		0.0	0.00	0.00	A		0.0	0.00	0.00	A
Stream C-ABD		0.1	5.54	0.04	A		0.1	5.00	0.07	A

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

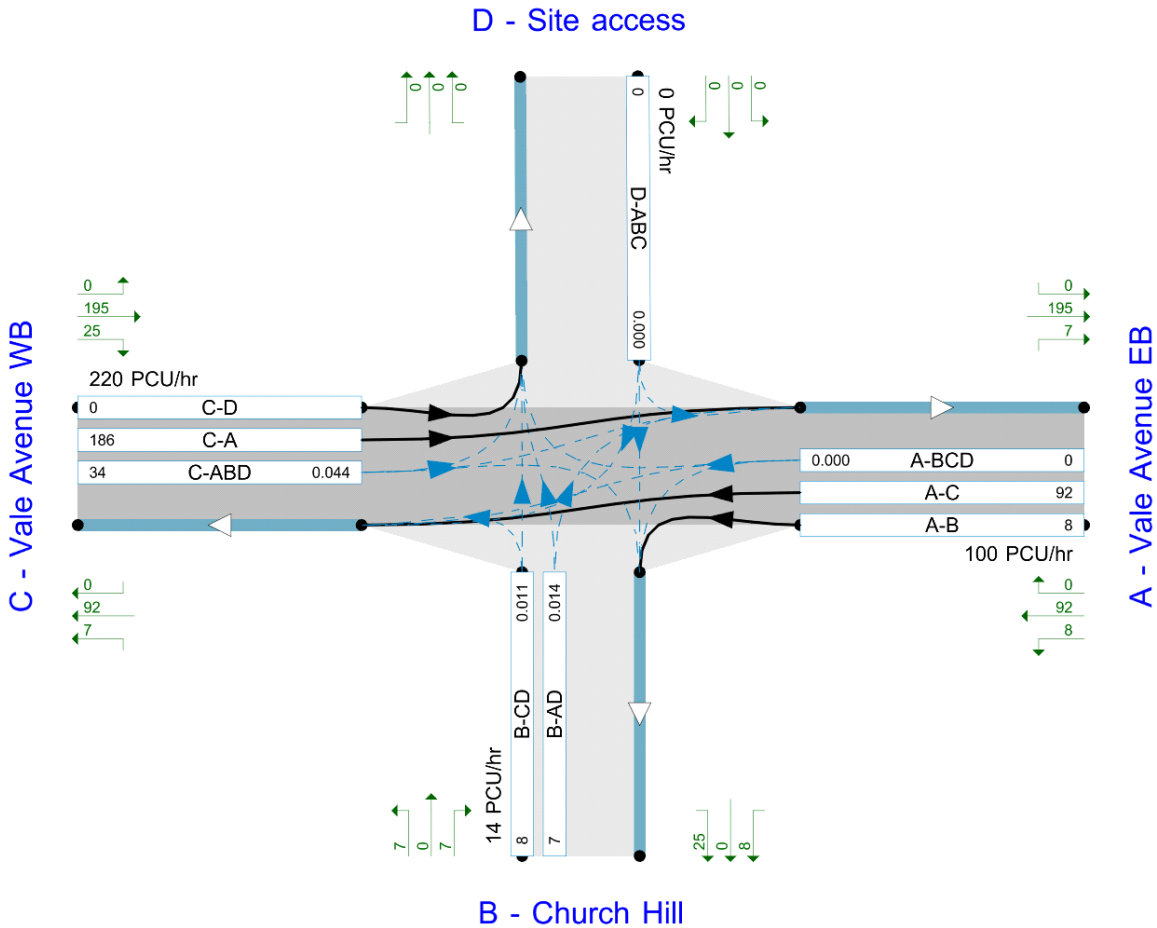
File summary

File Description

Title	(untitled)
Location	
Site number	
Date	10/02/2022
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	
Description	

Units

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



Flows show modelled flow through junction (PCU/hr).
Streams (upstream end) show Total Demand (PCU/hr); Streams (downstream end) show RFC ()

Time Segment: 16:45-17:00

The junction diagram reflects the last run of Junctions.

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2021 Baseline	AM	ONE HOUR	06:45	08:15	15
D2	2021 Baseline	PM	ONE HOUR	16:45	18:15	15
D3	2026 Future Baseline	AM	ONE HOUR	06:45	08:15	15
D4	2026 Future Baseline	PM	ONE HOUR	16:45	18:15	15
D7	2032 Future Baseline	AM	ONE HOUR	06:45	08:15	15
D8	2032 Future Baseline	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Name	Network flow scaling factor (%)
A1	(Default Analysis Set)	100.000

(Default Analysis Set) - 2021 Baseline, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Existing Junction Access	Crossroads	Two-way		0.51	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Vale Avenue EB		Major
B	Church Hill		Minor
C	Vale Avenue WB		Major
D	Site access		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A - Vale Avenue EB	8.00			65.0	✓	0.00
C - Vale Avenue WB	8.00			130.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B - Church Hill	One lane plus flare		10.00	5.62	4.06	2.89	2.25	✓	1.00	28	36
D - Site access	One lane	5.00								29	33

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
A-D	612	-	-	-	-	-	-	0.216	0.309	0.216	-	-	-
B-A	520	0.086	0.218	0.218	-	-	-	0.137	0.312	-	0.218	0.218	0.109
B-C	744	0.104	0.263	-	-	-	-	-	-	-	-	-	-
B-D, nearside lane	580	0.097	0.244	0.244	-	-	-	0.153	0.349	0.153	-	-	-
B-D, offside lane	520	0.086	0.218	0.218	-	-	-	0.137	0.312	0.137	-	-	-
C-B	649	0.230	0.230	0.328	-	-	-	-	-	-	-	-	-
D-A	774	-	-	-	-	-	-	0.274	-	0.108	-	-	-
D-B, nearside lane	604	0.160	0.160	0.363	-	-	-	0.254	0.254	0.100	-	-	-
D-B, offside lane	604	0.160	0.160	0.363	-	-	-	0.254	0.254	0.100	-	-	-
D-C	604	-	0.160	0.363	0.127	0.254	0.254	0.254	0.254	0.100	-	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.
Streams may be combined, in which case capacity will be adjusted.
Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2021 Baseline	AM	ONE HOUR	06:45	08:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Vale Avenue EB		✓	194	100.000
B - Church Hill		✓	7	100.000
C - Vale Avenue WB		✓	124	100.000
D - Site access		✓	1	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - Vale Avenue EB	B - Church Hill	C - Vale Avenue WB	D - Site access
From	A - Vale Avenue EB	0	3	191	0
	B - Church Hill	2	0	5	0
	C - Vale Avenue WB	105	19	0	0
	D - Site access	1	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Vale Avenue EB	B - Church Hill	C - Vale Avenue WB	D - Site access
From	A - Vale Avenue EB	0	0	0	0
	B - Church Hill	0	0	0	0
	C - Vale Avenue WB	1	0	0	0
	D - Site access	0	0	0	0

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
06:45-07:00	A - Vale Avenue EB	146	146
	B - Church Hill	5	5
	C - Vale Avenue WB	93	93
	D - Site access	0	0
07:00-07:15	A - Vale Avenue EB	174	174
	B - Church Hill	6	6
	C - Vale Avenue WB	111	111
	D - Site access	0	0
07:15-07:30	A - Vale Avenue EB	214	214
	B - Church Hill	8	8
	C - Vale Avenue WB	137	137
	D - Site access	0	0
07:30-07:45	A - Vale Avenue EB	214	214
	B - Church Hill	8	8
	C - Vale Avenue WB	137	137
	D - Site access	0	0
07:45-08:00	A - Vale Avenue EB	174	174
	B - Church Hill	6	6
	C - Vale Avenue WB	111	111
	D - Site access	0	0
08:00-08:15	A - Vale Avenue EB	146	146
	B - Church Hill	5	5
	C - Vale Avenue WB	93	93
	D - Site access	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-CD	0.01	5.28	0.0	A
B-AD	0.00	8.02	0.0	A
A-BCD	0.00	0.00	0.0	A
A-B				
A-C				
D-ABC	0.00	0.00	0.0	A
C-ABD	0.04	5.53	0.1	A
C-D				
C-A				

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	4	706	0.005	4	0.0	5.129	A
B-AD	2	473	0.003	1	0.0	7.638	A
A-BCD	0	590	0.000	0	0.0	0.000	A
A-B	2			2			
A-C	144			144			
D-ABC	0	595	0.000	0	0.0	0.000	A
C-ABD	16	668	0.024	16	0.0	5.531	A
C-D	0			0			
C-A	77			77			

07:00 - 07:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	4	698	0.006	4	0.0	5.191	A
B-AD	2	464	0.004	2	0.0	7.794	A
A-BCD	0	586	0.000	0	0.0	0.000	A
A-B	3			3			
A-C	172			172			
D-ABC	0	587	0.000	0	0.0	0.000	A
C-ABD	20	672	0.030	20	0.0	5.529	A
C-D	0			0			
C-A	92			92			

07:15 - 07:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	6	688	0.008	5	0.0	5.277	A
B-AD	2	451	0.005	2	0.0	8.020	A
A-BCD	0	580	0.000	0	0.0	0.000	A
A-B	3			3			
A-C	210			210			
D-ABC	0	575	0.000	0	0.0	0.000	A
C-ABD	25	677	0.037	25	0.1	5.529	A
C-D	0			0			
C-A	111			111			

07:30 - 07:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	6	688	0.008	6	0.0	5.278	A
B-AD	2	451	0.005	2	0.0	8.020	A
A-BCD	0	580	0.000	0	0.0	0.000	A
A-B	3			3			
A-C	210			210			
D-ABC	0	575	0.000	0	0.0	0.000	A
C-ABD	25	677	0.037	25	0.1	5.530	A
C-D	0			0			
C-A	111			111			

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	4	698	0.006	5	0.0	5.191	A
B-AD	2	464	0.004	2	0.0	7.796	A
A-BCD	0	586	0.000	0	0.0	0.000	A
A-B	3			3			
A-C	172			172			
D-ABC	0	587	0.000	0	0.0	0.000	A
C-ABD	20	672	0.030	20	0.0	5.534	A
C-D	0			0			
C-A	92			92			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	4	705	0.005	4	0.0	5.132	A
B-AD	2	473	0.003	2	0.0	7.641	A
A-BCD	0	590	0.000	0	0.0	0.000	A
A-B	2			2			
A-C	144			144			
D-ABC	0	595	0.000	0	0.0	0.000	A
C-ABD	16	668	0.024	16	0.0	5.533	A
C-D	0			0			
C-A	77			77			

(Default Analysis Set) - 2021 Baseline, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Existing Junction Access	Crossroads	Two-way		0.80	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

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	2021 Baseline	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	Average Demand (PCU/hr)	Scaling Factor (%)
A - Vale Avenue EB		✓	121	100.000
B - Church Hill		✓	17	100.000
C - Vale Avenue WB		✓	266	100.000
D - Site access		✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - Vale Avenue EB	B - Church Hill	C - Vale Avenue WB	D - Site access
From	A - Vale Avenue EB	0	10	111	0
	B - Church Hill	8	0	9	0
	C - Vale Avenue WB	236	30	0	0
	D - Site access	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Vale Avenue EB	B - Church Hill	C - Vale Avenue WB	D - Site access
From	A - Vale Avenue EB	0	0	1	0
	B - Church Hill	0	0	0	0
	C - Vale Avenue WB	0	0	0	0
	D - Site access	0	0	0	0

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
16:45-17:00	A - Vale Avenue EB	91	91
	B - Church Hill	13	13
	C - Vale Avenue WB	200	200
	D - Site access	0	0
17:00-17:15	A - Vale Avenue EB	109	109
	B - Church Hill	15	15
	C - Vale Avenue WB	239	239
	D - Site access	0	0
17:15-17:30	A - Vale Avenue EB	133	133
	B - Church Hill	19	19
	C - Vale Avenue WB	293	293
	D - Site access	0	0
17:30-17:45	A - Vale Avenue EB	133	133
	B - Church Hill	19	19
	C - Vale Avenue WB	293	293
	D - Site access	0	0
17:45-18:00	A - Vale Avenue EB	109	109
	B - Church Hill	15	15
	C - Vale Avenue WB	239	239
	D - Site access	0	0
18:00-18:15	A - Vale Avenue EB	91	91
	B - Church Hill	13	13
	C - Vale Avenue WB	200	200
	D - Site access	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-CD	0.01	5.41	0.0	A
B-AD	0.02	7.83	0.0	A
A-BCD	0.00	0.00	0.0	A
A-B				
A-C				
D-ABC	0.00	0.00	0.0	A
C-ABD	0.06	5.04	0.1	A
C-D				
C-A				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	7	687	0.010	7	0.0	5.294	A
B-AD	6	493	0.012	6	0.0	7.392	A
A-BCD	0	566	0.000	0	0.0	0.000	A
A-B	8			8			
A-C	84			84			
D-ABC	0	575	0.000	0	0.0	0.000	A
C-ABD	30	744	0.040	29	0.1	5.037	A
C-D	0			0			
C-A	171			171			

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	8	682	0.012	8	0.0	5.342	A
B-AD	7	483	0.015	7	0.0	7.569	A
A-BCD	0	557	0.000	0	0.0	0.000	A
A-B	9			9			
A-C	100			100			
D-ABC	0	563	0.000	0	0.0	0.000	A
C-ABD	37	763	0.049	37	0.1	4.962	A
C-D	0			0			
C-A	202			202			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	10	675	0.015	10	0.0	5.408	A
B-AD	9	468	0.019	9	0.0	7.831	A
A-BCD	0	545	0.000	0	0.0	0.000	A
A-B	11			11			
A-C	122			122			
D-ABC	0	545	0.000	0	0.0	0.000	A
C-ABD	49	789	0.063	49	0.1	4.865	A
C-D	0			0			
C-A	244			244			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	10	675	0.015	10	0.0	5.409	A
B-AD	9	468	0.019	9	0.0	7.831	A
A-BCD	0	545	0.000	0	0.0	0.000	A
A-B	11			11			
A-C	122			122			
D-ABC	0	545	0.000	0	0.0	0.000	A
C-ABD	49	789	0.063	49	0.1	4.868	A
C-D	0			0			
C-A	243			243			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	8	682	0.012	8	0.0	5.344	A
B-AD	7	483	0.015	7	0.0	7.573	A
A-BCD	0	557	0.000	0	0.0	0.000	A
A-B	9			9			
A-C	100			100			
D-ABC	0	563	0.000	0	0.0	0.000	A
C-ABD	37	763	0.049	38	0.1	4.966	A
C-D	0			0			
C-A	202			202			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	7	687	0.010	7	0.0	5.295	A
B-AD	6	493	0.012	6	0.0	7.395	A
A-BCD	0	566	0.000	0	0.0	0.000	A
A-B	8			8			
A-C	84			84			
D-ABC	0	575	0.000	0	0.0	0.000	A
C-ABD	30	744	0.040	30	0.1	5.041	A
C-D	0			0			
C-A	171			171			

(Default Analysis Set) - 2026 Future Baseline, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Existing Junction Access	Crossroads	Two-way		0.51	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

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	2026 Future Baseline	AM	ONE HOUR	06:45	08:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Vale Avenue EB		✓	203	100.000
B - Church Hill		✓	7	100.000
C - Vale Avenue WB		✓	130	100.000
D - Site access		✓	1	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - Vale Avenue EB	B - Church Hill	C - Vale Avenue WB	D - Site access
From	A - Vale Avenue EB	0	3	200	0
	B - Church Hill	2	0	5	0
	C - Vale Avenue WB	110	20	0	0
	D - Site access	1	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Vale Avenue EB	B - Church Hill	C - Vale Avenue WB	D - Site access
From	A - Vale Avenue EB	0	0	0	0
	B - Church Hill	0	0	0	0
	C - Vale Avenue WB	1	0	0	0
	D - Site access	0	0	0	0

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
06:45-07:00	A - Vale Avenue EB	153	153
	B - Church Hill	5	5
	C - Vale Avenue WB	98	98
	D - Site access	0	0
07:00-07:15	A - Vale Avenue EB	182	182
	B - Church Hill	6	6
	C - Vale Avenue WB	117	117
	D - Site access	0	0
07:15-07:30	A - Vale Avenue EB	224	224
	B - Church Hill	8	8
	C - Vale Avenue WB	143	143
	D - Site access	0	0
07:30-07:45	A - Vale Avenue EB	224	224
	B - Church Hill	8	8
	C - Vale Avenue WB	143	143
	D - Site access	0	0
07:45-08:00	A - Vale Avenue EB	182	182
	B - Church Hill	6	6
	C - Vale Avenue WB	117	117
	D - Site access	0	0
08:00-08:15	A - Vale Avenue EB	153	153
	B - Church Hill	5	5
	C - Vale Avenue WB	98	98
	D - Site access	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-CD	0.01	5.30	0.0	A
B-AD	0.00	8.08	0.0	A
A-BCD	0.00	0.00	0.0	A
A-B				
A-C				
D-ABC	0.00	0.00	0.0	A
C-ABD	0.04	5.53	0.1	A
C-D				
C-A				

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	4	704	0.005	4	0.0	5.142	A
B-AD	2	470	0.003	1	0.0	7.675	A
A-BCD	0	589	0.000	0	0.0	0.000	A
A-B	2			2			
A-C	151			151			
D-ABC	0	593	0.000	0	0.0	0.000	A
C-ABD	17	669	0.026	17	0.0	5.531	A
C-D	0			0			
C-A	81			81			

07:00 - 07:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	4	696	0.006	4	0.0	5.207	A
B-AD	2	461	0.004	2	0.0	7.840	A
A-BCD	0	585	0.000	0	0.0	0.000	A
A-B	3			3			
A-C	180			180			
D-ABC	0	584	0.000	0	0.0	0.000	A
C-ABD	21	673	0.031	21	0.0	5.530	A
C-D	0			0			
C-A	96			96			

07:15 - 07:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	6	685	0.008	5	0.0	5.298	A
B-AD	2	448	0.005	2	0.0	8.079	A
A-BCD	0	579	0.000	0	0.0	0.000	A
A-B	3			3			
A-C	220			220			
D-ABC	0	572	0.000	0	0.0	0.000	A
C-ABD	27	679	0.040	27	0.1	5.529	A
C-D	0			0			
C-A	116			116			

07:30 - 07:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	6	685	0.008	6	0.0	5.298	A
B-AD	2	448	0.005	2	0.0	8.079	A
A-BCD	0	579	0.000	0	0.0	0.000	A
A-B	3			3			
A-C	220			220			
D-ABC	0	572	0.000	0	0.0	0.000	A
C-ABD	27	679	0.040	27	0.1	5.533	A
C-D	0			0			
C-A	116			116			

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	4	696	0.006	5	0.0	5.209	A
B-AD	2	461	0.004	2	0.0	7.839	A
A-BCD	0	585	0.000	0	0.0	0.000	A
A-B	3			3			
A-C	180			180			
D-ABC	0	584	0.000	0	0.0	0.000	A
C-ABD	21	673	0.031	21	0.0	5.533	A
C-D	0			0			
C-A	96			96			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	4	704	0.005	4	0.0	5.143	A
B-AD	2	471	0.003	2	0.0	7.674	A
A-BCD	0	589	0.000	0	0.0	0.000	A
A-B	2			2			
A-C	151			151			
D-ABC	0	593	0.000	0	0.0	0.000	A
C-ABD	17	669	0.026	17	0.0	5.533	A
C-D	0			0			
C-A	81			81			

(Default Analysis Set) - 2026 Future Baseline, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Existing Junction Access	Crossroads	Two-way		0.80	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

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 Future Baseline	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	Average Demand (PCU/hr)	Scaling Factor (%)
A - Vale Avenue EB		✓	126	100.000
B - Church Hill		✓	17	100.000
C - Vale Avenue WB		✓	278	100.000
D - Site access		✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - Vale Avenue EB	B - Church Hill	C - Vale Avenue WB	D - Site access
From	A - Vale Avenue EB	0	10	116	0
	B - Church Hill	8	0	9	0
	C - Vale Avenue WB	247	31	0	0
	D - Site access	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Vale Avenue EB	B - Church Hill	C - Vale Avenue WB	D - Site access
From	A - Vale Avenue EB	0	0	1	0
	B - Church Hill	0	0	0	0
	C - Vale Avenue WB	0	0	0	0
	D - Site access	0	0	0	0

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
16:45-17:00	A - Vale Avenue EB	95	95
	B - Church Hill	13	13
	C - Vale Avenue WB	209	209
	D - Site access	0	0
17:00-17:15	A - Vale Avenue EB	113	113
	B - Church Hill	15	15
	C - Vale Avenue WB	250	250
	D - Site access	0	0
17:15-17:30	A - Vale Avenue EB	139	139
	B - Church Hill	19	19
	C - Vale Avenue WB	306	306
	D - Site access	0	0
17:30-17:45	A - Vale Avenue EB	139	139
	B - Church Hill	19	19
	C - Vale Avenue WB	306	306
	D - Site access	0	0
17:45-18:00	A - Vale Avenue EB	113	113
	B - Church Hill	15	15
	C - Vale Avenue WB	250	250
	D - Site access	0	0
18:00-18:15	A - Vale Avenue EB	95	95
	B - Church Hill	13	13
	C - Vale Avenue WB	209	209
	D - Site access	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-CD	0.01	5.42	0.0	A
B-AD	0.02	7.89	0.0	A
A-BCD	0.00	0.00	0.0	A
A-B				
A-C				
D-ABC	0.00	0.00	0.0	A
C-ABD	0.07	5.02	0.1	A
C-D				
C-A				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	7	686	0.010	7	0.0	5.301	A
B-AD	6	491	0.012	6	0.0	7.427	A
A-BCD	0	564	0.000	0	0.0	0.000	A
A-B	8			8			
A-C	87			87			
D-ABC	0	572	0.000	0	0.0	0.000	A
C-ABD	31	749	0.041	31	0.1	5.014	A
C-D	0			0			
C-A	178			178			

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	8	681	0.012	8	0.0	5.351	A
B-AD	7	480	0.015	7	0.0	7.614	A
A-BCD	0	555	0.000	0	0.0	0.000	A
A-B	9			9			
A-C	104			104			
D-ABC	0	559	0.000	0	0.0	0.000	A
C-ABD	39	768	0.051	39	0.1	4.938	A
C-D	0			0			
C-A	211			211			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	10	674	0.015	10	0.0	5.420	A
B-AD	9	465	0.019	9	0.0	7.889	A
A-BCD	0	542	0.000	0	0.0	0.000	A
A-B	11			11			
A-C	128			128			
D-ABC	0	541	0.000	0	0.0	0.000	A
C-ABD	52	796	0.065	52	0.1	4.839	A
C-D	0			0			
C-A	254			254			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	10	674	0.015	10	0.0	5.420	A
B-AD	9	465	0.019	9	0.0	7.889	A
A-BCD	0	542	0.000	0	0.0	0.000	A
A-B	11			11			
A-C	128			128			
D-ABC	0	541	0.000	0	0.0	0.000	A
C-ABD	52	796	0.065	52	0.1	4.841	A
C-D	0			0			
C-A	254			254			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	8	681	0.012	8	0.0	5.354	A
B-AD	7	480	0.015	7	0.0	7.614	A
A-BCD	0	555	0.000	0	0.0	0.000	A
A-B	9			9			
A-C	104			104			
D-ABC	0	559	0.000	0	0.0	0.000	A
C-ABD	39	768	0.051	39	0.1	4.941	A
C-D	0			0			
C-A	211			211			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	7	686	0.010	7	0.0	5.305	A
B-AD	6	491	0.012	6	0.0	7.430	A
A-BCD	0	564	0.000	0	0.0	0.000	A
A-B	8			8			
A-C	87			87			
D-ABC	0	572	0.000	0	0.0	0.000	A
C-ABD	31	749	0.042	31	0.1	5.018	A
C-D	0			0			
C-A	178			178			

(Default Analysis Set) - 2032 Future Baseline, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Existing Junction Access	Crossroads	Two-way		0.51	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

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	2032 Future Baseline	AM	ONE HOUR	06:45	08:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Vale Avenue EB		✓	213	100.000
B - Church Hill		✓	7	100.000
C - Vale Avenue WB		✓	136	100.000
D - Site access		✓	1	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - Vale Avenue EB	B - Church Hill	C - Vale Avenue WB	D - Site access
From	A - Vale Avenue EB	0	3	210	0
	B - Church Hill	2	0	5	0
	C - Vale Avenue WB	115	21	0	0
	D - Site access	1	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Vale Avenue EB	B - Church Hill	C - Vale Avenue WB	D - Site access
From	A - Vale Avenue EB	0	0	0	0
	B - Church Hill	0	0	0	0
	C - Vale Avenue WB	1	0	0	0
	D - Site access	0	0	0	0

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
06:45-07:00	A - Vale Avenue EB	160	160
	B - Church Hill	5	5
	C - Vale Avenue WB	102	102
	D - Site access	0	0
07:00-07:15	A - Vale Avenue EB	191	191
	B - Church Hill	6	6
	C - Vale Avenue WB	122	122
	D - Site access	0	0
07:15-07:30	A - Vale Avenue EB	235	235
	B - Church Hill	8	8
	C - Vale Avenue WB	150	150
	D - Site access	0	0
07:30-07:45	A - Vale Avenue EB	235	235
	B - Church Hill	8	8
	C - Vale Avenue WB	150	150
	D - Site access	0	0
07:45-08:00	A - Vale Avenue EB	191	191
	B - Church Hill	6	6
	C - Vale Avenue WB	122	122
	D - Site access	0	0
08:00-08:15	A - Vale Avenue EB	160	160
	B - Church Hill	5	5
	C - Vale Avenue WB	102	102
	D - Site access	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-CD	0.01	5.32	0.0	A
B-AD	0.00	8.14	0.0	A
A-BCD	0.00	0.00	0.0	A
A-B				
A-C				
D-ABC	0.00	0.00	0.0	A
C-ABD	0.04	5.54	0.1	A
C-D				
C-A				

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	4	702	0.005	4	0.0	5.157	A
B-AD	2	468	0.003	1	0.0	7.715	A
A-BCD	0	588	0.000	0	0.0	0.000	A
A-B	2			2			
A-C	158			158			
D-ABC	0	591	0.000	0	0.0	0.000	A
C-ABD	18	670	0.027	18	0.0	5.533	A
C-D	0			0			
C-A	84			84			

07:00 - 07:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	4	693	0.006	4	0.0	5.225	A
B-AD	2	458	0.004	2	0.0	7.889	A
A-BCD	0	583	0.000	0	0.0	0.000	A
A-B	3			3			
A-C	189			189			
D-ABC	0	582	0.000	0	0.0	0.000	A
C-ABD	22	674	0.033	22	0.0	5.532	A
C-D	0			0			
C-A	100			100			

07:15 - 07:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	6	682	0.008	5	0.0	5.320	A
B-AD	2	444	0.005	2	0.0	8.143	A
A-BCD	0	577	0.000	0	0.0	0.000	A
A-B	3			3			
A-C	231			231			
D-ABC	0	569	0.000	0	0.0	0.000	A
C-ABD	28	680	0.042	28	0.1	5.535	A
C-D	0			0			
C-A	121			121			

07:30 - 07:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	6	682	0.008	6	0.0	5.321	A
B-AD	2	444	0.005	2	0.0	8.143	A
A-BCD	0	577	0.000	0	0.0	0.000	A
A-B	3			3			
A-C	231			231			
D-ABC	0	569	0.000	0	0.0	0.000	A
C-ABD	28	680	0.042	28	0.1	5.537	A
C-D	0			0			
C-A	121			121			

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	4	693	0.006	5	0.0	5.225	A
B-AD	2	458	0.004	2	0.0	7.890	A
A-BCD	0	583	0.000	0	0.0	0.000	A
A-B	3			3			
A-C	189			189			
D-ABC	0	582	0.000	0	0.0	0.000	A
C-ABD	22	674	0.033	22	0.0	5.538	A
C-D	0			0			
C-A	100			100			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	4	702	0.005	4	0.0	5.158	A
B-AD	2	468	0.003	2	0.0	7.716	A
A-BCD	0	588	0.000	0	0.0	0.000	A
A-B	2			2			
A-C	158			158			
D-ABC	0	591	0.000	0	0.0	0.000	A
C-ABD	18	670	0.027	18	0.0	5.535	A
C-D	0			0			
C-A	84			84			

(Default Analysis Set) - 2032 Future Baseline, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Existing Junction Access	Crossroads	Two-way		0.83	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

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	2032 Future Baseline	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	Average Demand (PCU/hr)	Scaling Factor (%)
A - Vale Avenue EB		✓	133	100.000
B - Church Hill		✓	19	100.000
C - Vale Avenue WB		✓	292	100.000
D - Site access		✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - Vale Avenue EB	B - Church Hill	C - Vale Avenue WB	D - Site access
From	A - Vale Avenue EB	0	11	122	0
	B - Church Hill	9	0	10	0
	C - Vale Avenue WB	259	33	0	0
	D - Site access	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Vale Avenue EB	B - Church Hill	C - Vale Avenue WB	D - Site access
From	A - Vale Avenue EB	0	0	1	0
	B - Church Hill	0	0	0	0
	C - Vale Avenue WB	0	0	0	0
	D - Site access	0	0	0	0

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
16:45-17:00	A - Vale Avenue EB	100	100
	B - Church Hill	14	14
	C - Vale Avenue WB	220	220
	D - Site access	0	0
17:00-17:15	A - Vale Avenue EB	120	120
	B - Church Hill	17	17
	C - Vale Avenue WB	263	263
	D - Site access	0	0
17:15-17:30	A - Vale Avenue EB	146	146
	B - Church Hill	21	21
	C - Vale Avenue WB	321	321
	D - Site access	0	0
17:30-17:45	A - Vale Avenue EB	146	146
	B - Church Hill	21	21
	C - Vale Avenue WB	321	321
	D - Site access	0	0
17:45-18:00	A - Vale Avenue EB	120	120
	B - Church Hill	17	17
	C - Vale Avenue WB	263	263
	D - Site access	0	0
18:00-18:15	A - Vale Avenue EB	100	100
	B - Church Hill	14	14
	C - Vale Avenue WB	220	220
	D - Site access	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-CD	0.02	5.45	0.0	A
B-AD	0.02	7.98	0.0	A
A-BCD	0.00	0.00	0.0	A
A-B				
A-C				
D-ABC	0.00	0.00	0.0	A
C-ABD	0.07	5.00	0.1	A
C-D				
C-A				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	8	684	0.011	7	0.0	5.323	A
B-AD	7	488	0.014	7	0.0	7.477	A
A-BCD	0	562	0.000	0	0.0	0.000	A
A-B	8			8			
A-C	92			92			
D-ABC	0	569	0.000	0	0.0	0.000	A
C-ABD	34	753	0.044	33	0.1	4.998	A
C-D	0			0			
C-A	186			186			

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	9	678	0.013	9	0.0	5.376	A
B-AD	8	477	0.017	8	0.0	7.678	A
A-BCD	0	552	0.000	0	0.0	0.000	A
A-B	10			10			
A-C	110			110			
D-ABC	0	555	0.000	0	0.0	0.000	A
C-ABD	43	774	0.055	42	0.1	4.921	A
C-D	0			0			
C-A	220			220			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	11	671	0.016	11	0.0	5.451	A
B-AD	10	461	0.021	10	0.0	7.976	A
A-BCD	0	539	0.000	0	0.0	0.000	A
A-B	12			12			
A-C	134			134			
D-ABC	0	536	0.000	0	0.0	0.000	A
C-ABD	56	803	0.070	56	0.1	4.820	A
C-D	0			0			
C-A	265			265			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	11	671	0.016	11	0.0	5.451	A
B-AD	10	461	0.021	10	0.0	7.976	A
A-BCD	0	539	0.000	0	0.0	0.000	A
A-B	12			12			
A-C	134			134			
D-ABC	0	536	0.000	0	0.0	0.000	A
C-ABD	57	803	0.070	57	0.1	4.822	A
C-D	0			0			
C-A	265			265			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	9	678	0.013	9	0.0	5.379	A
B-AD	8	477	0.017	8	0.0	7.681	A
A-BCD	0	552	0.000	0	0.0	0.000	A
A-B	10			10			
A-C	110			110			
D-ABC	0	555	0.000	0	0.0	0.000	A
C-ABD	43	774	0.055	43	0.1	4.924	A
C-D	0			0			
C-A	220			220			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	8	684	0.011	8	0.0	5.327	A
B-AD	7	488	0.014	7	0.0	7.480	A
A-BCD	0	562	0.000	0	0.0	0.000	A
A-B	8			8			
A-C	92			92			
D-ABC	0	569	0.000	0	0.0	0.000	A
C-ABD	34	753	0.045	34	0.1	5.002	A
C-D	0			0			
C-A	186			186			

Junctions 9
PICADY 9 - Priority Intersection Module
Version: 9.5.1.7462 © Copyright TRL Limited, 2019
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Filename: Junction 1 Vale Avenue - Proposed Site Access junction - 4 arms.j9
Path: C:\Users\WRI87273\Mott MacDonald\B RMF Brighton DO - T Transport\Junction models\Junction 1 Vale Avenue - Existing Site Access\05. Model Updates 2023\01. Model
Report generation date: 30/03/2023 16:05:44

- »2026 Do Something, AM
- »2026 Do Something, PM
- »2032 Do Something, AM
- »2032 Do Something, PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
2026 Do Something										
1 - Vale Avenue/Proposed Site Access - Stream B-CD	D1	0.0	5.75	0.01	A	D2	0.0	0.00	0.00	A
1 - Vale Avenue/Proposed Site Access - Stream B-AD		0.0	8.19	0.02	A		0.0	0.00	0.00	A
1 - Vale Avenue/Proposed Site Access - Stream A-BCD		0.0	0.00	0.00	A		0.0	0.00	0.00	A
1 - Vale Avenue/Proposed Site Access - Stream D-AB		0.0	0.00	0.00	A		0.0	0.00	0.00	A
1 - Vale Avenue/Proposed Site Access - Stream D-BC		0.0	0.00	0.00	A		0.0	6.65	0.03	A
1 - Vale Avenue/Proposed Site Access - Stream C-ABD		0.0	5.24	0.00	A		0.0	0.00	0.00	A
2 - Vale Avenue T junction - Stream B-C		0.0	6.31	0.01	A		0.0	6.00	0.01	A
2 - Vale Avenue T junction - Stream B-A		0.0	0.00	0.00	A		0.0	0.00	0.00	A
2 - Vale Avenue T junction - Stream C-AB		0.0	6.11	0.01	A		0.0	5.40	0.01	A
2032 Do Something										
1 - Vale Avenue/Proposed Site Access - Stream B-CD	D3	0.0	5.76	0.01	A	D4	0.0	0.00	0.00	A
1 - Vale Avenue/Proposed Site Access - Stream B-AD		0.0	8.24	0.02	A		0.0	0.00	0.00	A
1 - Vale Avenue/Proposed Site Access - Stream A-BCD		0.0	0.00	0.00	A		0.0	0.00	0.00	A
1 - Vale Avenue/Proposed Site Access - Stream D-AB		0.0	0.00	0.00	A		0.0	0.00	0.00	A
1 - Vale Avenue/Proposed Site Access - Stream D-BC		0.0	0.00	0.00	A		0.0	6.72	0.04	A
1 - Vale Avenue/Proposed Site Access - Stream C-ABD		0.0	5.21	0.00	A		0.0	0.00	0.00	A
2 - Vale Avenue T junction - Stream B-C		0.0	6.35	0.01	A		0.0	6.03	0.01	A
2 - Vale Avenue T junction - Stream B-A		0.0	0.00	0.00	A		0.0	0.00	0.00	A
2 - Vale Avenue T junction - Stream C-AB		0.0	6.10	0.01	A		0.0	5.37	0.01	A

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

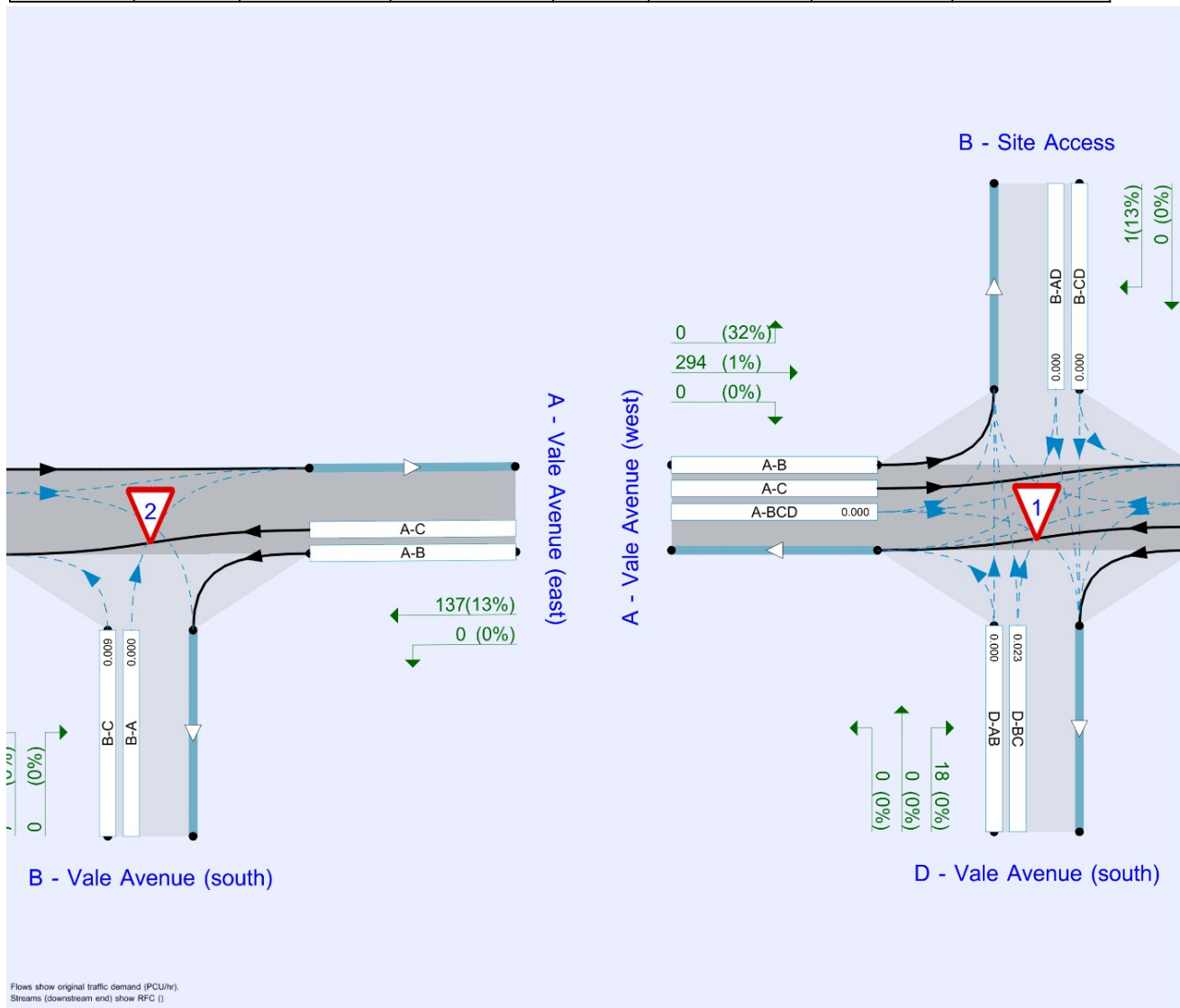
File summary

File Description

Title	
Location	
Site number	
Date	30/06/2022
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	MOTTMAC\WRI87273
Description	

Units

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



Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2026 Do Something	AM	ONE HOUR	06:45	08:15	15
D2	2026 Do Something	PM	ONE HOUR	16:45	18:15	15
D3	2032 Do Something	AM	ONE HOUR	06:45	08:15	15
D4	2032 Do Something	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2026 Do Something, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Vale Avenue/Proposed Site Access	Crossroads	Two-way		0.31	A
2	Vale Avenue T junction	T-Junction	Two-way		0.17	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Junction	Arm	Name	Description	Arm type
1 - Vale Avenue/Proposed Site Access	A	Vale Avenue (west)		Major
	B	Site Access		Minor
	C	Vale Avenue (east)		Major
	D	Vale Avenue (south)		Minor
2 - Vale Avenue T junction	A	Vale Avenue (east)		Major
	B	Vale Avenue (south)		Minor
	C	Vale Avenue (west)		Major

Major Arm Geometry

Junction	Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
1 - Vale Avenue/Proposed Site Access	A - Vale Avenue (west)	8.50			180.0	✓	0.00
	C - Vale Avenue (east)	8.50			55.0	✓	0.00
2 - Vale Avenue T junction	C - Vale Avenue (west)	6.40			0.0	✓	0.00

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

Minor Arm Geometry

Junction	Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
1 - Vale Avenue/Proposed Site Access	B - Site Access	One lane plus flare	10.00	8.00	6.00	4.00	4.00	✓	2.00	18	40
	D - Vale Avenue (south)	One lane plus flare	10.00	6.80	3.50	3.10	3.10	✓	1.00	68	180
2 - Vale Avenue T junction	B - Vale Avenue (south)	One lane plus flare	7.00	2.85	2.85	2.85	2.85		1.00	0	0

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
1 - Vale Avenue/Proposed Site Access	A-D	678	-	-	-	-	-	-	0.234	0.335	0.234	-	-	-
	B-A	575	0.093	0.236	0.236	-	-	-	0.148	0.337	-	0.236	0.236	0.118
	B-C	667	0.091	0.230	-	-	-	-	-	-	-	-	-	-
	B-D, nearside lane	517	0.084	0.212	0.212	-	-	-	0.134	0.303	0.134	-	-	-
	B-D, offside lane	575	0.093	0.236	0.236	-	-	-	0.148	0.337	0.148	-	-	-
	C-B	606	0.209	0.209	0.299	-	-	-	-	-	-	-	-	-
	D-A	826	-	-	-	-	-	-	0.285	-	0.113	-	-	-
	D-B, nearside lane	661	0.171	0.171	0.387	-	-	-	0.271	0.271	0.107	-	-	-
	D-B, offside lane	661	0.171	0.171	0.387	-	-	-	0.271	0.271	0.107	-	-	-
D-C	661	-	0.171	0.387	0.136	0.271	0.271	0.271	0.271	0.107	-	-	-	

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
2 - Vale Avenue T junction	B-A	430	0.077	0.195	0.122	0.278
	B-C	641	0.097	0.244	-	-
	C-B	574	0.219	0.219	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2026 Do Something	AM	ONE HOUR	06:45	08:15	15

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

Demand overview (Traffic)

Junction	Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Vale Avenue/Proposed Site Access	A - Vale Avenue (west)		✓	138	100.000
	B - Site Access		✓	13	100.000
	C - Vale Avenue (east)		✓	207	100.000
	D - Vale Avenue (south)		✓	3	100.000
2 - Vale Avenue T junction	A - Vale Avenue (east)		✓	238	100.000
	B - Vale Avenue (south)		✓	6	100.000
	C - Vale Avenue (west)		✓	182	100.000

Origin-Destination Data

Demand (PCU/hr)

1 - Vale Avenue/Proposed Site Access

		To			
		A - Vale Avenue (west)	B - Site Access	C - Vale Avenue (east)	D - Vale Avenue (south)
From	A - Vale Avenue (west)	0	8	130	0
	B - Site Access	9	0	4	0
	C - Vale Avenue (east)	202	2	0	3
	D - Vale Avenue (south)	0	0	3	0

Demand (PCU/hr)
2 - Vale Avenue T junction

		To		
		A - Vale Avenue (east)	B - Vale Avenue (south)	C - Vale Avenue (west)
From	A - Vale Avenue (east)	0	0	238
	B - Vale Avenue (south)	0	0	6
	C - Vale Avenue (west)	178	4	0

Vehicle Mix

Heavy Vehicle Percentages
1 - Vale Avenue/Proposed Site Access

		To			
		A - Vale Avenue (west)	B - Site Access	C - Vale Avenue (east)	D - Vale Avenue (south)
From	A - Vale Avenue (west)	0	32	1	0
	B - Site Access	13	0	0	0
	C - Vale Avenue (east)	0	0	0	0
	D - Vale Avenue (south)	0	0	0	0

Heavy Vehicle Percentages
2 - Vale Avenue T junction

		To		
		A - Vale Avenue (east)	B - Vale Avenue (south)	C - Vale Avenue (west)
From	A - Vale Avenue (east)	0	0	13
	B - Vale Avenue (south)	0	0	0
	C - Vale Avenue (west)	32	0	0

Results

Results Summary for whole modelled period

Junction	Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - Vale Avenue/Proposed Site Access	B-CD	0.01	5.75	0.0	A
	B-AD	0.02	8.19	0.0	A
	A-BCD	0.00	0.00	0.0	A
	A-B				
	A-C				
	D-AB	0.00	0.00	0.0	A
	D-BC	0.00	0.00	0.0	A
	C-ABD	0.00	5.24	0.0	A
	C-D				
	C-A				
2 - Vale Avenue T junction	B-C	0.01	6.31	0.0	A
	B-A	0.00	0.00	0.0	A
	C-AB	0.01	6.11	0.0	A
	C-A				
	A-B				

Main Results for each time segment

06:45 - 07:00

Junction	Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vale Avenue/Proposed Site Access	B-CD	3	642	0.005	3	0.0	5.630	A
	B-AD	7	528	0.013	7	0.0	7.797	A
	A-BCD	0	642	0.000	0	0.0	0.000	A
	A-B	6			6			
	A-C	98			98			
	D-AB	0	680	0.000	0	0.0	0.000	A
	D-BC	0	601	0.000	0	0.0	0.000	A
	C-ABD	2	688	0.003	2	0.0	5.244	A
	C-D	2			2			
C-A	152			152				
2 - Vale Avenue T junction	B-C	5	598	0.008	4	0.0	6.068	A
	B-A	0	378	0.000	0	0.0	0.000	A
	C-AB	4	629	0.006	4	0.0	6.071	A
	C-A	133			133			
	A-B	0			0			
	A-C	179			179			

07:00 - 07:15

Junction	Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vale Avenue/Proposed Site Access	B-CD	4	637	0.006	4	0.0	5.680	A
	B-AD	8	519	0.016	8	0.0	7.957	A
	A-BCD	0	634	0.000	0	0.0	0.000	A
	A-B	7			7			
	A-C	117			117			
	D-AB	0	669	0.000	0	0.0	0.000	A
	D-BC	0	589	0.000	0	0.0	0.000	A
	C-ABD	2	705	0.003	2	0.0	5.125	A
	C-D	3			3			
C-A	181			181				
2 - Vale Avenue T junction	B-C	5	589	0.009	5	0.0	6.165	A
	B-A	0	368	0.000	0	0.0	0.000	A
	C-AB	5	640	0.008	5	0.0	6.004	A
	C-A	159			159			
	A-B	0			0			
	A-C	214			214			

07:15 - 07:30

Junction	Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vale Avenue/Proposed Site Access	B-C-D	4	630	0.007	4	0.0	5.749	A
	B-AD	10	507	0.020	10	0.0	8.187	A
	A-BCD	0	625	0.000	0	0.0	0.000	A
	A-B	9			9			
	A-C	143			143			
	D-AB	0	655	0.000	0	0.0	0.000	A
	D-BC	0	573	0.000	0	0.0	0.000	A
	C-ABD	3	728	0.004	3	0.0	4.968	A
	C-D	3			3			
C-A	221			221				
2 - Vale Avenue T junction	B-C	7	577	0.011	7	0.0	6.305	A
	B-A	0	354	0.000	0	0.0	0.000	A
	C-AB	6	656	0.010	6	0.0	5.937	A
	C-A	194			194			
	A-B	0			0			
	A-C	262			262			

07:30 - 07:45

Junction	Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vale Avenue/Proposed Site Access	B-C-D	4	630	0.007	4	0.0	5.749	A
	B-AD	10	507	0.020	10	0.0	8.187	A
	A-BCD	0	625	0.000	0	0.0	0.000	A
	A-B	9			9			
	A-C	143			143			
	D-AB	0	655	0.000	0	0.0	0.000	A
	D-BC	0	573	0.000	0	0.0	0.000	A
	C-ABD	3	728	0.004	3	0.0	4.969	A
	C-D	3			3			
C-A	221			221				
2 - Vale Avenue T junction	B-C	7	577	0.011	7	0.0	6.305	A
	B-A	0	354	0.000	0	0.0	0.000	A
	C-AB	6	656	0.010	6	0.0	5.973	A
	C-A	194			194			
	A-B	0			0			
	A-C	262			262			

07:45 - 08:00

Junction	Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vale Avenue/Proposed Site Access	B-C-D	4	637	0.006	4	0.0	5.683	A
	B-AD	8	519	0.016	8	0.0	7.957	A
	A-BCD	0	634	0.000	0	0.0	0.000	A
	A-B	7			7			
	A-C	117			117			
	D-AB	0	669	0.000	0	0.0	0.000	A
	D-BC	0	589	0.000	0	0.0	0.000	A
	C-ABD	2	705	0.003	2	0.0	5.125	A
	C-D	3			3			
C-A	181			181				
2 - Vale Avenue T junction	B-C	5	589	0.009	5	0.0	6.166	A
	B-A	0	368	0.000	0	0.0	0.000	A
	C-AB	5	640	0.008	5	0.0	6.075	A
	C-A	159			159			
	A-B	0			0			
	A-C	214			214			

08:00 - 08:15

Junction	Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vale Avenue/Proposed Site Access	B-C-D	3	642	0.005	3	0.0	5.634	A
	B-AD	7	528	0.013	7	0.0	7.800	A
	A-BCD	0	642	0.000	0	0.0	0.000	A
	A-B	6			6			
	A-C	98			98			
	D-AB	0	680	0.000	0	0.0	0.000	A
	D-B-C	0	601	0.000	0	0.0	0.000	A
	C-ABD	2	688	0.003	2	0.0	5.244	A
	C-D	2			2			
C-A	152			152				
2 - Vale Avenue T junction	B-C	5	598	0.008	5	0.0	6.068	A
	B-A	0	378	0.000	0	0.0	0.000	A
	C-AB	4	629	0.006	4	0.0	6.106	A
	C-A	133			133			
	A-B	0			0			
	A-C	179			179			

2026 Do Something, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Vale Avenue/Proposed Site Access	Crossroads	Two-way		0.27	A
2	Vale Avenue T junction	T-Junction	Two-way		0.17	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

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	2026 Do Something	PM	ONE HOUR	16:45	18:15	15

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

Demand overview (Traffic)

Junction	Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Vale Avenue/Proposed Site Access	A - Vale Avenue (west)		✓	280	100.000
	B - Site Access		✓	1	100.000
	C - Vale Avenue (east)		✓	124	100.000
	D - Vale Avenue (south)		✓	17	100.000
2 - Vale Avenue T junction	A - Vale Avenue (east)		✓	130	100.000
	B - Vale Avenue (south)		✓	6	100.000
	C - Vale Avenue (west)		✓	373	100.000

Origin-Destination Data

Demand (PCU/hr)

1 - Vale Avenue/Proposed Site Access

		To			
		A - Vale Avenue (west)	B - Site Access	C - Vale Avenue (east)	D - Vale Avenue (south)
From	A - Vale Avenue (west)	0	0	280	0
	B - Site Access	1	0	0	0
	C - Vale Avenue (east)	114	0	0	10
	D - Vale Avenue (south)	0	0	17	0

Demand (PCU/hr)
2 - Vale Avenue T junction

		To		
		A - Vale Avenue (east)	B - Vale Avenue (south)	C - Vale Avenue (west)
From	A - Vale Avenue (east)	0	0	130
	B - Vale Avenue (south)	0	0	6
	C - Vale Avenue (west)	368	5	0

Vehicle Mix

Heavy Vehicle Percentages
1 - Vale Avenue/Proposed Site Access

		To			
		A - Vale Avenue (west)	B - Site Access	C - Vale Avenue (east)	D - Vale Avenue (south)
From	A - Vale Avenue (west)	0	32	1	0
	B - Site Access	13	0	0	0
	C - Vale Avenue (east)	0	0	0	0
	D - Vale Avenue (south)	0	0	0	0

Heavy Vehicle Percentages
2 - Vale Avenue T junction

		To		
		A - Vale Avenue (east)	B - Vale Avenue (south)	C - Vale Avenue (west)
From	A - Vale Avenue (east)	0	0	13
	B - Vale Avenue (south)	0	0	0
	C - Vale Avenue (west)	32	0	0

Results

Results Summary for whole modelled period

Junction	Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - Vale Avenue/Proposed Site Access	B-CD	0.00	0.00	0.0	A
	B-AD	0.00	0.00	0.0	A
	A-BCD	0.00	0.00	0.0	A
	A-B				
	A-C				
	D-AB	0.00	0.00	0.0	A
	D-BC	0.03	6.65	0.0	A
	C-ABD	0.00	0.00	0.0	A
	C-D				
	C-A				
2 - Vale Avenue T junction	B-C	0.01	6.00	0.0	A
	B-A	0.00	0.00	0.0	A
	C-AB	0.01	5.40	0.0	A
	C-A				
	A-B				
	A-C				

Main Results for each time segment

16:45 - 17:00

Junction	Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vale Avenue/Proposed Site Access	B-CD	0	565	0.000	0	0.0	0.000	A
	B-AD	0	492	0.000	0	0.0	0.000	A
	A-BCD	0	656	0.000	0	0.0	0.000	A
	A-B	0			0			
	A-C	211			211			
	D-AB	0	634	0.000	0	0.0	0.000	A
	D-BC	13	587	0.022	13	0.0	6.270	A
	C-ABD	0	562	0.000	0	0.0	0.000	A
	C-D	8			8			
C-A	86			86				
2 - Vale Avenue T junction	B-C	5	618	0.007	4	0.0	5.872	A
	B-A	0	376	0.000	0	0.0	0.000	A
	C-AB	6	745	0.008	6	0.0	5.356	A
	C-A	275			275			
	A-B	0			0			
	A-C	98			98			

17:00 - 17:15

Junction	Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vale Avenue/Proposed Site Access	B-CD	0	553	0.000	0	0.0	0.000	A
	B-AD	0	480	0.000	0	0.0	0.000	A
	A-BCD	0	652	0.000	0	0.0	0.000	A
	A-B	0			0			
	A-C	252			252			
	D-AB	0	624	0.000	0	0.0	0.000	A
	D-BC	15	575	0.027	15	0.0	6.425	A
	C-ABD	0	553	0.000	0	0.0	0.000	A
	C-D	9			9			
C-A	102			102				
2 - Vale Avenue T junction	B-C	5	613	0.009	5	0.0	5.925	A
	B-A	0	366	0.000	0	0.0	0.000	A
	C-AB	8	778	0.010	8	0.0	5.176	A
	C-A	327			327			
	A-B	0			0			
	A-C	117			117			

17:15 - 17:30

Junction	Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vale Avenue/Proposed Site Access	B-C-D	0	537	0.000	0	0.0	0.000	A
	B-AD	0	464	0.000	0	0.0	0.000	A
	A-BCD	0	646	0.000	0	0.0	0.000	A
	A-B	0			0			
	A-C	308			308			
	D-AB	0	611	0.000	0	0.0	0.000	A
	D-BC	19	560	0.033	19	0.0	6.653	A
	C-ABD	0	541	0.000	0	0.0	0.000	A
	C-D	11			11			
C-A	126			126				
2 - Vale Avenue T junction	B-C	7	606	0.011	7	0.0	6.000	A
	B-A	0	351	0.000	0	0.0	0.000	A
	C-AB	11	826	0.013	11	0.0	4.977	A
	C-A	400			400			
	A-B	0			0			
	A-C	143			143			

17:30 - 17:45

Junction	Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vale Avenue/Proposed Site Access	B-C-D	0	537	0.000	0	0.0	0.000	A
	B-AD	0	464	0.000	0	0.0	0.000	A
	A-BCD	0	646	0.000	0	0.0	0.000	A
	A-B	0			0			
	A-C	308			308			
	D-AB	0	611	0.000	0	0.0	0.000	A
	D-BC	19	560	0.033	19	0.0	6.653	A
	C-ABD	0	541	0.000	0	0.0	0.000	A
	C-D	11			11			
C-A	126			126				
2 - Vale Avenue T junction	B-C	7	606	0.011	7	0.0	6.000	A
	B-A	0	351	0.000	0	0.0	0.000	A
	C-AB	11	826	0.013	11	0.0	5.017	A
	C-A	400			400			
	A-B	0			0			
	A-C	143			143			

17:45 - 18:00

Junction	Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vale Avenue/Proposed Site Access	B-C-D	0	553	0.000	0	0.0	0.000	A
	B-AD	0	480	0.000	0	0.0	0.000	A
	A-BCD	0	652	0.000	0	0.0	0.000	A
	A-B	0			0			
	A-C	252			252			
	D-AB	0	624	0.000	0	0.0	0.000	A
	D-BC	15	575	0.027	15	0.0	6.429	A
	C-ABD	0	553	0.000	0	0.0	0.000	A
	C-D	9			9			
C-A	102			102				
2 - Vale Avenue T junction	B-C	5	613	0.009	5	0.0	5.925	A
	B-A	0	366	0.000	0	0.0	0.000	A
	C-AB	8	778	0.010	8	0.0	5.267	A
	C-A	327			327			
	A-B	0			0			
	A-C	117			117			

18:00 - 18:15

Junction	Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vale Avenue/Proposed Site Access	B-C-D	0	565	0.000	0	0.0	0.000	A
	B-AD	0	492	0.000	0	0.0	0.000	A
	A-BCD	0	656	0.000	0	0.0	0.000	A
	A-B	0			0			
	A-C	211			211			
	D-AB	0	634	0.000	0	0.0	0.000	A
	D-BC	13	587	0.022	13	0.0	6.271	A
	C-ABD	0	562	0.000	0	0.0	0.000	A
	C-D	8			8			
C-A	86			86				
2 - Vale Avenue T junction	B-C	5	618	0.007	5	0.0	5.872	A
	B-A	0	376	0.000	0	0.0	0.000	A
	C-AB	6	745	0.008	6	0.0	5.405	A
	C-A	275			275			
	A-B	0			0			
	A-C	98			98			

2032 Do Something, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Vale Avenue/Proposed Site Access	Crossroads	Two-way		0.30	A
2	Vale Avenue T junction	T-Junction	Two-way		0.17	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

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	2032 Do Something	AM	ONE HOUR	06:45	08:15	15

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

Demand overview (Traffic)

Junction	Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Vale Avenue/Proposed Site Access	A - Vale Avenue (west)		✓	144	100.000
	B - Site Access		✓	13	100.000
	C - Vale Avenue (east)		✓	217	100.000
	D - Vale Avenue (south)		✓	3	100.000
2 - Vale Avenue T junction	A - Vale Avenue (east)		✓	249	100.000
	B - Vale Avenue (south)		✓	7	100.000
	C - Vale Avenue (west)		✓	190	100.000

Origin-Destination Data

Demand (PCU/hr)

1 - Vale Avenue/Proposed Site Access

		To			
		A - Vale Avenue (west)	B - Site Access	C - Vale Avenue (east)	D - Vale Avenue (south)
From	A - Vale Avenue (west)	0	8	136	0
	B - Site Access	9	0	4	0
	C - Vale Avenue (east)	212	2	0	3
	D - Vale Avenue (south)	0	0	3	0

Demand (PCU/hr)
2 - Vale Avenue T junction

		To		
		A - Vale Avenue (east)	B - Vale Avenue (south)	C - Vale Avenue (west)
From	A - Vale Avenue (east)	0	0	249
	B - Vale Avenue (south)	0	0	7
	C - Vale Avenue (west)	186	4	0

Vehicle Mix

Heavy Vehicle Percentages
1 - Vale Avenue/Proposed Site Access

		To			
		A - Vale Avenue (west)	B - Site Access	C - Vale Avenue (east)	D - Vale Avenue (south)
From	A - Vale Avenue (west)	0	32	1	0
	B - Site Access	13	0	0	0
	C - Vale Avenue (east)	0	0	0	0
	D - Vale Avenue (south)	0	0	0	0

Heavy Vehicle Percentages
2 - Vale Avenue T junction

		To		
		A - Vale Avenue (east)	B - Vale Avenue (south)	C - Vale Avenue (west)
From	A - Vale Avenue (east)	0	0	13
	B - Vale Avenue (south)	0	0	0
	C - Vale Avenue (west)	32	0	0

Results

Results Summary for whole modelled period

Junction	Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - Vale Avenue/Proposed Site Access	B-CD	0.01	5.76	0.0	A
	B-AD	0.02	8.24	0.0	A
	A-BCD	0.00	0.00	0.0	A
	A-B				
	A-C				
	D-AB	0.00	0.00	0.0	A
	D-BC	0.00	0.00	0.0	A
	C-ABD	0.00	5.21	0.0	A
	C-D				
	C-A				
2 - Vale Avenue T junction	B-C	0.01	6.35	0.0	A
	B-A	0.00	0.00	0.0	A
	C-AB	0.01	6.10	0.0	A
	C-A				
	A-B				
	A-C				

Main Results for each time segment

06:45 - 07:00

Junction	Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vale Avenue/Proposed Site Access	B-CD	3	641	0.005	3	0.0	5.640	A
	B-AD	7	526	0.013	7	0.0	7.830	A
	A-BCD	0	640	0.000	0	0.0	0.000	A
	A-B	6			6			
	A-C	102			102			
	D-AB	0	677	0.000	0	0.0	0.000	A
	D-BC	0	598	0.000	0	0.0	0.000	A
	C-ABD	2	693	0.003	2	0.0	5.212	A
	C-D	2			2			
C-A	159			159				
2 - Vale Avenue T junction	B-C	5	596	0.009	5	0.0	6.097	A
	B-A	0	376	0.000	0	0.0	0.000	A
	C-AB	4	632	0.006	4	0.0	6.060	A
	C-A	139			139			
	A-B	0			0			
	A-C	187			187			

07:00 - 07:15

Junction	Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vale Avenue/Proposed Site Access	B-CD	4	636	0.006	4	0.0	5.691	A
	B-AD	8	517	0.016	8	0.0	7.998	A
	A-BCD	0	632	0.000	0	0.0	0.000	A
	A-B	7			7			
	A-C	122			122			
	D-AB	0	666	0.000	0	0.0	0.000	A
	D-BC	0	586	0.000	0	0.0	0.000	A
	C-ABD	2	710	0.003	2	0.0	5.088	A
	C-D	3			3			
C-A	190			190				
2 - Vale Avenue T junction	B-C	6	587	0.011	6	0.0	6.201	A
	B-A	0	365	0.000	0	0.0	0.000	A
	C-AB	5	643	0.008	5	0.0	5.990	A
	C-A	166			166			
	A-B	0			0			
	A-C	224			224			

07:15 - 07:30

Junction	Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vale Avenue/Proposed Site Access	B-C-D	4	629	0.007	4	0.0	5.763	A
	B-AD	10	504	0.020	10	0.0	8.240	A
	A-BCD	0	622	0.000	0	0.0	0.000	A
	A-B	9			9			
	A-C	150			150			
	D-AB	0	651	0.000	0	0.0	0.000	A
	D-BC	0	569	0.000	0	0.0	0.000	A
	C-ABD	3	734	0.004	3	0.0	4.925	A
	C-D	3			3			
C-A	232			232				
2 - Vale Avenue T junction	B-C	8	574	0.013	8	0.0	6.351	A
	B-A	0	350	0.000	0	0.0	0.000	A
	C-AB	6	660	0.010	6	0.0	5.919	A
	C-A	203			203			
	A-B	0			0			
	A-C	274			274			

07:30 - 07:45

Junction	Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vale Avenue/Proposed Site Access	B-C-D	4	629	0.007	4	0.0	5.763	A
	B-AD	10	504	0.020	10	0.0	8.240	A
	A-BCD	0	622	0.000	0	0.0	0.000	A
	A-B	9			9			
	A-C	150			150			
	D-AB	0	651	0.000	0	0.0	0.000	A
	D-BC	0	569	0.000	0	0.0	0.000	A
	C-ABD	3	734	0.004	3	0.0	4.927	A
	C-D	3			3			
C-A	232			232				
2 - Vale Avenue T junction	B-C	8	574	0.013	8	0.0	6.351	A
	B-A	0	350	0.000	0	0.0	0.000	A
	C-AB	6	660	0.010	6	0.0	5.953	A
	C-A	203			203			
	A-B	0			0			
	A-C	274			274			

07:45 - 08:00

Junction	Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vale Avenue/Proposed Site Access	B-C-D	4	636	0.006	4	0.0	5.692	A
	B-AD	8	517	0.016	8	0.0	7.999	A
	A-BCD	0	632	0.000	0	0.0	0.000	A
	A-B	7			7			
	A-C	122			122			
	D-AB	0	666	0.000	0	0.0	0.000	A
	D-BC	0	586	0.000	0	0.0	0.000	A
	C-ABD	2	710	0.003	2	0.0	5.088	A
	C-D	3			3			
C-A	190			190				
2 - Vale Avenue T junction	B-C	6	587	0.011	6	0.0	6.203	A
	B-A	0	365	0.000	0	0.0	0.000	A
	C-AB	5	643	0.008	5	0.0	6.063	A
	C-A	166			166			
	A-B	0			0			
	A-C	224			224			

08:00 - 08:15

Junction	Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vale Avenue/Proposed Site Access	B-CD	3	641	0.005	3	0.0	5.641	A
	B-AD	7	526	0.013	7	0.0	7.831	A
	A-BCD	0	640	0.000	0	0.0	0.000	A
	A-B	6			6			
	A-C	102			102			
	D-AB	0	677	0.000	0	0.0	0.000	A
	D-BC	0	598	0.000	0	0.0	0.000	A
	C-ABD	2	693	0.003	2	0.0	5.214	A
	C-D	2			2			
C-A	159			159				
2 - Vale Avenue T junction	B-C	5	596	0.009	5	0.0	6.099	A
	B-A	0	376	0.000	0	0.0	0.000	A
	C-AB	4	632	0.006	4	0.0	6.098	A
	C-A	139			139			
	A-B	0			0			
	A-C	187			187			

2032 Do Something, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Vale Avenue/Proposed Site Access	Crossroads	Two-way		0.27	A
2	Vale Avenue T junction	T-Junction	Two-way		0.17	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

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	2032 Do Something	PM	ONE HOUR	16:45	18:15	15

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

Demand overview (Traffic)

Junction	Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Vale Avenue/Proposed Site Access	A - Vale Avenue (west)		✓	294	100.000
	B - Site Access		✓	1	100.000
	C - Vale Avenue (east)		✓	131	100.000
	D - Vale Avenue (south)		✓	18	100.000
2 - Vale Avenue T junction	A - Vale Avenue (east)		✓	137	100.000
	B - Vale Avenue (south)		✓	7	100.000
	C - Vale Avenue (west)		✓	391	100.000

Origin-Destination Data

Demand (PCU/hr)

1 - Vale Avenue/Proposed Site Access

		To			
		A - Vale Avenue (west)	B - Site Access	C - Vale Avenue (east)	D - Vale Avenue (south)
From	A - Vale Avenue (west)	0	0	294	0
	B - Site Access	1	0	0	0
	C - Vale Avenue (east)	120	0	0	11
	D - Vale Avenue (south)	0	0	18	0

Demand (PCU/hr)
2 - Vale Avenue T junction

		To		
		A - Vale Avenue (east)	B - Vale Avenue (south)	C - Vale Avenue (west)
From	A - Vale Avenue (east)	0	0	137
	B - Vale Avenue (south)	0	0	7
	C - Vale Avenue (west)	386	5	0

Vehicle Mix

Heavy Vehicle Percentages
1 - Vale Avenue/Proposed Site Access

		To			
		A - Vale Avenue (west)	B - Site Access	C - Vale Avenue (east)	D - Vale Avenue (south)
From	A - Vale Avenue (west)	0	32	1	0
	B - Site Access	13	0	0	0
	C - Vale Avenue (east)	0	0	0	0
	D - Vale Avenue (south)	0	0	0	0

Heavy Vehicle Percentages
2 - Vale Avenue T junction

		To		
		A - Vale Avenue (east)	B - Vale Avenue (south)	C - Vale Avenue (west)
From	A - Vale Avenue (east)	0	0	13
	B - Vale Avenue (south)	0	0	0
	C - Vale Avenue (west)	32	0	0

Results

Results Summary for whole modelled period

Junction	Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - Vale Avenue/Proposed Site Access	B-CD	0.00	0.00	0.0	A
	B-AD	0.00	0.00	0.0	A
	A-BCD	0.00	0.00	0.0	A
	A-B				
	A-C				
	D-AB	0.00	0.00	0.0	A
	D-BC	0.04	6.72	0.0	A
	C-ABD	0.00	0.00	0.0	A
	C-D				
	C-A				
2 - Vale Avenue T junction	B-C	0.01	6.03	0.0	A
	B-A	0.00	0.00	0.0	A
	C-AB	0.01	5.37	0.0	A
	C-A				
	A-B				
	A-C				

Main Results for each time segment

16:45 - 17:00

Junction	Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vale Avenue/Proposed Site Access	B-CD	0	562	0.000	0	0.0	0.000	A
	B-AD	0	489	0.000	0	0.0	0.000	A
	A-BCD	0	655	0.000	0	0.0	0.000	A
	A-B	0			0			
	A-C	221			221			
	D-AB	0	631	0.000	0	0.0	0.000	A
	D-BC	14	584	0.023	13	0.0	6.312	A
	C-ABD	0	560	0.000	0	0.0	0.000	A
	C-D	8			8			
C-A	90			90				
2 - Vale Avenue T junction	B-C	5	616	0.009	5	0.0	5.891	A
	B-A	0	373	0.000	0	0.0	0.000	A
	C-AB	6	753	0.008	6	0.0	5.317	A
	C-A	288			288			
	A-B	0			0			
	A-C	103			103			

17:00 - 17:15

Junction	Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vale Avenue/Proposed Site Access	B-CD	0	550	0.000	0	0.0	0.000	A
	B-AD	0	476	0.000	0	0.0	0.000	A
	A-BCD	0	651	0.000	0	0.0	0.000	A
	A-B	0			0			
	A-C	264			264			
	D-AB	0	621	0.000	0	0.0	0.000	A
	D-BC	16	572	0.028	16	0.0	6.478	A
	C-ABD	0	551	0.000	0	0.0	0.000	A
	C-D	10			10			
C-A	108			108				
2 - Vale Avenue T junction	B-C	6	611	0.010	6	0.0	5.949	A
	B-A	0	362	0.000	0	0.0	0.000	A
	C-AB	8	789	0.010	8	0.0	5.130	A
	C-A	343			343			
	A-B	0			0			
	A-C	123			123			

17:15 - 17:30

Junction	Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vale Avenue/Proposed Site Access	B-C-D	0	533	0.000	0	0.0	0.000	A
	B-AD	0	459	0.000	0	0.0	0.000	A
	A-BCD	0	644	0.000	0	0.0	0.000	A
	A-B	0			0			
	A-C	324			324			
	D-AB	0	607	0.000	0	0.0	0.000	A
	D-BC	20	555	0.036	20	0.0	6.722	A
	C-ABD	0	538	0.000	0	0.0	0.000	A
	C-D	12			12			
C-A	132			132				
2 - Vale Avenue T junction	B-C	8	605	0.013	8	0.0	6.030	A
	B-A	0	347	0.000	0	0.0	0.000	A
	C-AB	11	838	0.013	11	0.0	4.925	A
	C-A	419			419			
	A-B	0			0			
	A-C	151			151			

17:30 - 17:45

Junction	Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vale Avenue/Proposed Site Access	B-C-D	0	533	0.000	0	0.0	0.000	A
	B-AD	0	459	0.000	0	0.0	0.000	A
	A-BCD	0	644	0.000	0	0.0	0.000	A
	A-B	0			0			
	A-C	324			324			
	D-AB	0	607	0.000	0	0.0	0.000	A
	D-BC	20	555	0.036	20	0.0	6.722	A
	C-ABD	0	538	0.000	0	0.0	0.000	A
	C-D	12			12			
C-A	132			132				
2 - Vale Avenue T junction	B-C	8	605	0.013	8	0.0	6.030	A
	B-A	0	347	0.000	0	0.0	0.000	A
	C-AB	11	838	0.013	11	0.0	4.966	A
	C-A	419			419			
	A-B	0			0			
	A-C	151			151			

17:45 - 18:00

Junction	Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vale Avenue/Proposed Site Access	B-C-D	0	550	0.000	0	0.0	0.000	A
	B-AD	0	476	0.000	0	0.0	0.000	A
	A-BCD	0	651	0.000	0	0.0	0.000	A
	A-B	0			0			
	A-C	264			264			
	D-AB	0	621	0.000	0	0.0	0.000	A
	D-BC	16	572	0.028	16	0.0	6.481	A
	C-ABD	0	551	0.000	0	0.0	0.000	A
	C-D	10			10			
C-A	108			108				
2 - Vale Avenue T junction	B-C	6	611	0.010	6	0.0	5.949	A
	B-A	0	362	0.000	0	0.0	0.000	A
	C-AB	8	789	0.010	8	0.0	5.222	A
	C-A	343			343			
	A-B	0			0			
	A-C	123			123			

18:00 - 18:15

Junction	Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vale Avenue/Proposed Site Access	B-C-D	0	562	0.000	0	0.0	0.000	A
	B-AD	0	489	0.000	0	0.0	0.000	A
	A-BCD	0	655	0.000	0	0.0	0.000	A
	A-B	0			0			
	A-C	221			221			
	D-AB	0	631	0.000	0	0.0	0.000	A
	D-B-C	14	584	0.023	14	0.0	6.312	A
	C-ABD	0	560	0.000	0	0.0	0.000	A
	C-D	8			8			
C-A	90			90				
2 - Vale Avenue T junction	B-C	5	616	0.009	5	0.0	5.894	A
	B-A	0	373	0.000	0	0.0	0.000	A
	C-AB	6	753	0.008	6	0.0	5.366	A
	C-A	288			288			
	A-B	0			0			
	A-C	103			103			

Junctions 9
PICADY 9 - Priority Intersection Module
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Filename: Validation - Junction 2 - A27 Link Road - Vale Avenue (Rev 2).j9
Path: C:\Users\DUF97633\Mott MacDonald\B RMF Brighton DO - T Transport\Junction models\Junction 2 A27 Link Road - Vale Avenue\05. Model Updates 2023\01. Models
Report generation date: 21/06/2023 09:37:14

- »(Default Analysis Set) - 2021 Baseline, AM
- »(Default Analysis Set) - 2021 Baseline, PM
- »(Default Analysis Set) - 2026 Future Baseline, AM
- »(Default Analysis Set) - 2026 Future Baseline, PM
- »(Default Analysis Set) - 2026 Do Something, AM
- »(Default Analysis Set) - 2026 Do Something, PM
- »(Default Analysis Set) - 2032 Future Baseline, AM
- »(Default Analysis Set) - 2032 Future Baseline, PM
- »(Default Analysis Set) - 2032 Do Something, AM
- »(Default Analysis Set) - 2032 Do Something, PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
A1 - 2021 Baseline										
Stream B-C	D1	0.6	9.98	0.37	A	D2	0.3	7.75	0.22	A
Stream B-A		0.0	0.00	0.00	A		0.0	0.00	0.00	A
Stream C-AB		0.0	0.00	0.00	A		0.0	0.00	0.00	A
A1 - 2026 Future Baseline										
Stream B-C	D3	0.6	10.57	0.39	B	D4	0.3	8.00	0.23	A
Stream B-A		0.0	0.00	0.00	A		0.0	0.00	0.00	A
Stream C-AB		0.0	0.00	0.00	A		0.0	0.00	0.00	A
A1 - 2026 Do Something										
Stream B-C	D5	0.7	11.15	0.42	B	D6	0.3	8.00	0.23	A
Stream B-A		0.0	0.00	0.00	A		0.0	0.00	0.00	A
Stream C-AB		0.0	0.00	0.00	A		0.0	0.00	0.00	A
A1 - 2032 Future Baseline										
Stream B-C	D7	0.7	11.31	0.42	B	D8	0.3	8.30	0.24	A
Stream B-A		0.0	0.00	0.00	A		0.0	0.00	0.00	A
Stream C-AB		0.0	0.00	0.00	A		0.0	0.00	0.00	A
A1 - 2032 Do Something										
Stream B-C	D9	0.8	11.88	0.44	B	D10	0.3	8.30	0.24	A
Stream B-A		0.0	0.00	0.00	A		0.0	0.00	0.00	A
Stream C-AB		0.0	0.00	0.00	A		0.0	0.00	0.00	A

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

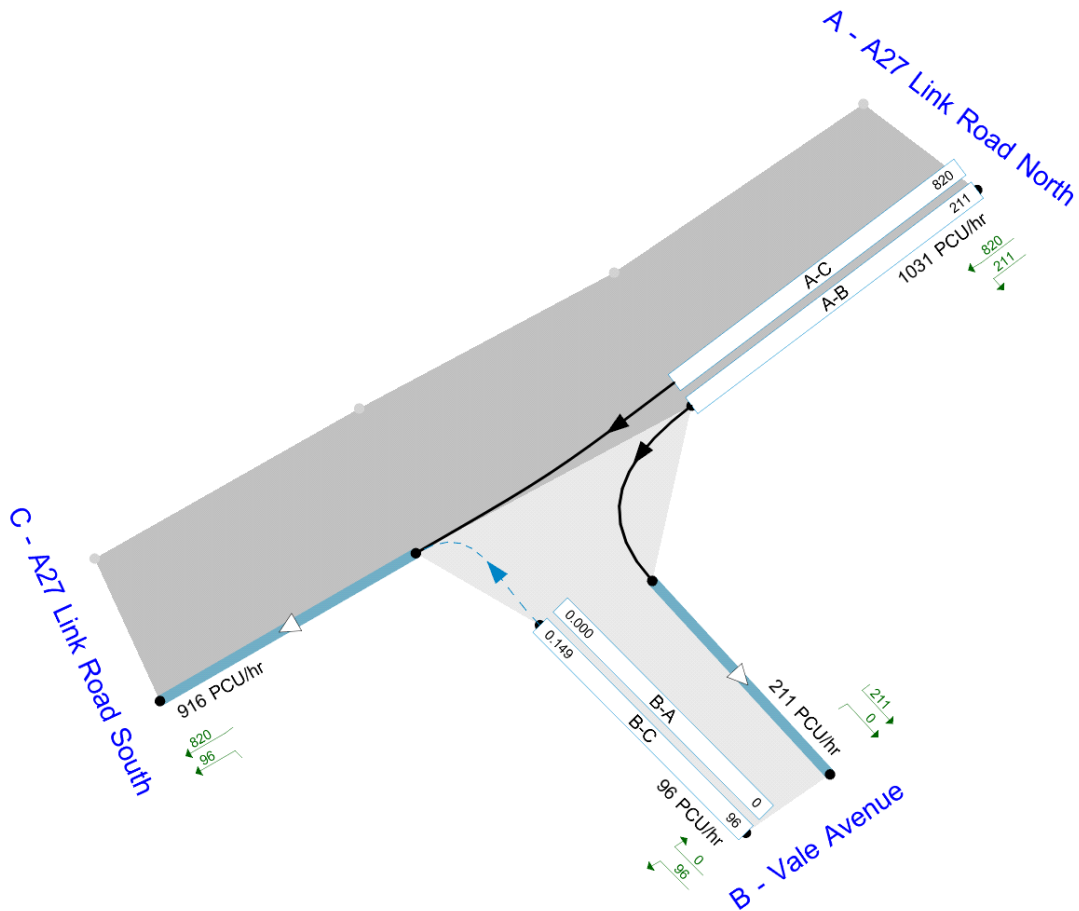
File summary

File Description

Title	(untitled)
Location	
Site number	
Date	25/01/2022
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	
Description	

Units

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



Flows show modelled flow through junction (PCU/hr).
Streams (upstream end) show Total Demand (PCU/hr); Streams (downstream end) show RFC ()

Time Segment: 16:45-17:00

The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				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)	Run automatically
D1	2021 Baseline	AM	ONE HOUR	06:45	08:15	15	✓
D2	2021 Baseline	PM	ONE HOUR	16:45	18:15	15	✓
D3	2026 Future Baseline	AM	ONE HOUR	06:45	08:15	15	✓
D4	2026 Future Baseline	PM	ONE HOUR	16:45	18:15	15	✓
D5	2026 Do Something	AM	ONE HOUR	06:45	08:15	15	✓
D6	2026 Do Something	PM	ONE HOUR	16:45	18:15	15	✓
D7	2032 Future Baseline	AM	ONE HOUR	06:45	08:15	15	✓
D8	2032 Future Baseline	PM	ONE HOUR	16:45	18:15	15	✓
D9	2032 Do Something	AM	ONE HOUR	06:45	08:15	15	✓
D10	2032 Do Something	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

ID	Name	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	(Default Analysis Set)	✓	100.000	100.000

(Default Analysis Set) - 2021 Baseline, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	One-way from A to C		1.27	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	A27 Link Road North		Major
B	Vale Avenue		Minor
C	A27 Link Road South		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - A27 Link Road South	8.50	✓	1.00			✓	

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

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B - Vale Avenue	One lane plus flare	10.00	6.80	4.77	3.90	3.76	✓	2.00	65	100

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	520	0.048	0.122	0.077	0.174
B-C	789	0.063	0.159	-	-
C-B	574	0.116	0.116	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2021 Baseline	AM	ONE HOUR	06:45	08:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A27 Link Road North		ONE HOUR	✓	1311	100.000
B - Vale Avenue		ONE HOUR	✓	192	100.000
C - A27 Link Road South		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - A27 Link Road North	B - Vale Avenue	C - A27 Link Road South
From	A - A27 Link Road North	0	123	1188
	B - Vale Avenue	0	0	192
	C - A27 Link Road South	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A27 Link Road North	B - Vale Avenue	C - A27 Link Road South
From	A - A27 Link Road North	0	1	6
	B - Vale Avenue	0	0	0
	C - A27 Link Road South	8	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.37	9.98	0.6	A	176	264
B-A	0.00	0.00	0.0	A	0	0
C-AB	0.00	0.00	0.0	A	0	0
C-A					0	0
A-B					113	169
A-C					1090	1635

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	145	36	641	0.226	143	0.0	0.3	7.224	A
B-A	0	0	406	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	460	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	93	23			93				
A-C	894	224			894				

07:00 - 07:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	173	43	612	0.282	172	0.3	0.4	8.181	A
B-A	0	0	384	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	437	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	111	28			111				
A-C	1068	267			1068				

07:15 - 07:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	211	53	572	0.370	211	0.4	0.6	9.941	A
B-A	0	0	354	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	407	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	135	34			135				
A-C	1308	327			1308				

07:30 - 07:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	211	53	572	0.370	211	0.6	0.6	9.980	A
B-A	0	0	354	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	407	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	135	34			135				
A-C	1308	327			1308				

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	173	43	612	0.282	173	0.6	0.4	8.224	A
B-A	0	0	384	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	437	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	111	28			111				
A-C	1068	267			1068				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	145	36	641	0.226	145	0.4	0.3	7.267	A
B-A	0	0	406	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	460	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	93	23			93				
A-C	894	224			894				

(Default Analysis Set) - 2021 Baseline, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	One-way from A to C		0.66	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2021 Baseline	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A27 Link Road North		ONE HOUR	✓	1248	100.000
B - Vale Avenue		ONE HOUR	✓	117	100.000
C - A27 Link Road South		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - A27 Link Road North	B - Vale Avenue	C - A27 Link Road South
From	A - A27 Link Road North	0	255	993
	B - Vale Avenue	0	0	117
	C - A27 Link Road South	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A27 Link Road North	B - Vale Avenue	C - A27 Link Road South
From	A - A27 Link Road North	0	0	3
	B - Vale Avenue	0	0	1
	C - A27 Link Road South	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.22	7.75	0.3	A	107	161
B-A	0.00	0.00	0.0	A	0	0
C-AB	0.00	0.00	0.0	A	0	0
C-A					0	0
A-B					234	351
A-C					911	1367

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	88	22	658	0.134	87	0.0	0.2	6.360	A
B-A	0	0	419	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	465	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	192	48			192				
A-C	748	187			748				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	105	26	632	0.166	105	0.2	0.2	6.884	A
B-A	0	0	400	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	444	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	229	57			229				
A-C	893	223			893				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	129	32	597	0.216	129	0.2	0.3	7.744	A
B-A	0	0	373	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	415	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	281	70			281				
A-C	1093	273			1093				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	129	32	597	0.216	129	0.3	0.3	7.754	A
B-A	0	0	373	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	415	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	281	70			281				
A-C	1093	273			1093				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	105	26	632	0.166	105	0.3	0.2	6.895	A
B-A	0	0	400	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	444	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	229	57			229				
A-C	893	223			893				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	88	22	658	0.134	88	0.2	0.2	6.376	A
B-A	0	0	419	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	465	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	192	48			192				
A-C	748	187			748				

(Default Analysis Set) - 2026 Future Baseline, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	One-way from A to C		1.35	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2026 Future Baseline	AM	ONE HOUR	06:45	08:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A27 Link Road North		ONE HOUR	✓	1372	100.000
B - Vale Avenue		ONE HOUR	✓	201	100.000
C - A27 Link Road South		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - A27 Link Road North	B - Vale Avenue	C - A27 Link Road South
From	A - A27 Link Road North	0	129	1243
	B - Vale Avenue	0	0	201
	C - A27 Link Road South	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A27 Link Road North	B - Vale Avenue	C - A27 Link Road South
From	A - A27 Link Road North	0	1	6
	B - Vale Avenue	0	0	0
	C - A27 Link Road South	8	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.39	10.57	0.6	B	184	277
B-A	0.00	0.00	0.0	A	0	0
C-AB	0.00	0.00	0.0	A	0	0
C-A					0	0
A-B					118	178
A-C					1141	1711

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	151	38	634	0.239	150	0.0	0.3	7.426	A
B-A	0	0	401	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	454	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	97	24			97				
A-C	936	234			936				

07:00 - 07:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	181	45	604	0.299	180	0.3	0.4	8.493	A
B-A	0	0	378	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	431	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	116	29			116				
A-C	1117	279			1117				

07:15 - 07:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	221	55	562	0.394	220	0.4	0.6	10.514	B
B-A	0	0	346	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	399	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	142	36			142				
A-C	1369	342			1369				

07:30 - 07:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	221	55	562	0.394	221	0.6	0.6	10.565	B
B-A	0	0	346	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	399	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	142	36			142				
A-C	1369	342			1369				

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	181	45	604	0.299	182	0.6	0.4	8.547	A
B-A	0	0	378	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	431	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	116	29			116				
A-C	1117	279			1117				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	151	38	634	0.239	152	0.4	0.3	7.475	A
B-A	0	0	401	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	454	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	97	24			97				
A-C	936	234			936				

(Default Analysis Set) - 2026 Future Baseline, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	One-way from A to C		0.68	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2026 Future Baseline	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A27 Link Road North		ONE HOUR	✓	1305	100.000
B - Vale Avenue		ONE HOUR	✓	122	100.000
C - A27 Link Road South		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - A27 Link Road North	B - Vale Avenue	C - A27 Link Road South
From	A - A27 Link Road North	0	267	1038
	B - Vale Avenue	0	0	122
	C - A27 Link Road South	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A27 Link Road North	B - Vale Avenue	C - A27 Link Road South
From	A - A27 Link Road North	0	0	3
	B - Vale Avenue	0	0	1
	C - A27 Link Road South	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.23	8.00	0.3	A	112	168
B-A	0.00	0.00	0.0	A	0	0
C-AB	0.00	0.00	0.0	A	0	0
C-A					0	0
A-B					245	368
A-C					952	1429

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	92	23	652	0.141	91	0.0	0.2	6.470	A
B-A	0	0	415	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	460	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	201	50			201				
A-C	781	195			781				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	110	27	625	0.175	109	0.2	0.2	7.041	A
B-A	0	0	394	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	438	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	240	60			240				
A-C	933	233			933				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	134	34	588	0.228	134	0.2	0.3	7.986	A
B-A	0	0	366	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	407	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	294	73			294				
A-C	1143	286			1143				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	134	34	588	0.228	134	0.3	0.3	7.997	A
B-A	0	0	366	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	407	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	294	73			294				
A-C	1143	286			1143				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	110	27	625	0.175	110	0.3	0.2	7.051	A
B-A	0	0	394	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	438	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	240	60			240				
A-C	933	233			933				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	92	23	652	0.141	92	0.2	0.2	6.490	A
B-A	0	0	415	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	460	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	201	50			201				
A-C	781	195			781				

(Default Analysis Set) - 2026 Do Something, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	One-way from A to C		1.50	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2026 Do Something	AM	ONE HOUR	06:45	08:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A27 Link Road North		ONE HOUR	✓	1380	100.000
B - Vale Avenue		ONE HOUR	✓	214	100.000
C - A27 Link Road South		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - A27 Link Road North	B - Vale Avenue	C - A27 Link Road South
From	A - A27 Link Road North	0	137	1243
	B - Vale Avenue	0	0	214
	C - A27 Link Road South	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A27 Link Road North	B - Vale Avenue	C - A27 Link Road South
From	A - A27 Link Road North	0	2	6
	B - Vale Avenue	0	0	1
	C - A27 Link Road South	8	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.42	11.15	0.7	B	196	295
B-A	0.00	0.00	0.0	A	0	0
C-AB	0.00	0.00	0.0	A	0	0
C-A					0	0
A-B					126	189
A-C					1141	1711

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	161	40	633	0.254	160	0.0	0.3	7.650	A
B-A	0	0	401	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	453	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	103	26			103				
A-C	936	234			936				

07:00 - 07:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	192	48	603	0.319	192	0.3	0.5	8.825	A
B-A	0	0	377	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	430	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	123	31			123				
A-C	1117	279			1117				

07:15 - 07:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	236	59	561	0.420	235	0.5	0.7	11.086	B
B-A	0	0	345	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	398	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	151	38			151				
A-C	1369	342			1369				

07:30 - 07:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	236	59	561	0.420	236	0.7	0.7	11.152	B
B-A	0	0	345	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	398	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	151	38			151				
A-C	1369	342			1369				

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	192	48	603	0.319	193	0.7	0.5	8.888	A
B-A	0	0	377	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	430	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	123	31			123				
A-C	1117	279			1117				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	161	40	633	0.254	162	0.5	0.3	7.711	A
B-A	0	0	401	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	453	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	103	26			103				
A-C	936	234			936				

(Default Analysis Set) - 2026 Do Something, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	One-way from A to C		0.68	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2026 Do Something	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A27 Link Road North		ONE HOUR	✓	1305	100.000
B - Vale Avenue		ONE HOUR	✓	122	100.000
C - A27 Link Road South		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - A27 Link Road North	B - Vale Avenue	C - A27 Link Road South
From	A - A27 Link Road North	0	267	1038
	B - Vale Avenue	0	0	122
	C - A27 Link Road South	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A27 Link Road North	B - Vale Avenue	C - A27 Link Road South
From	A - A27 Link Road North	0	0	3
	B - Vale Avenue	0	0	1
	C - A27 Link Road South	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.23	8.00	0.3	A	112	168
B-A	0.00	0.00	0.0	A	0	0
C-AB	0.00	0.00	0.0	A	0	0
C-A					0	0
A-B					245	368
A-C					952	1429

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	92	23	652	0.141	91	0.0	0.2	6.470	A
B-A	0	0	415	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	460	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	201	50			201				
A-C	781	195			781				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	110	27	625	0.175	109	0.2	0.2	7.041	A
B-A	0	0	394	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	438	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	240	60			240				
A-C	933	233			933				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	134	34	588	0.228	134	0.2	0.3	7.986	A
B-A	0	0	366	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	407	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	294	73			294				
A-C	1143	286			1143				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	134	34	588	0.228	134	0.3	0.3	7.997	A
B-A	0	0	366	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	407	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	294	73			294				
A-C	1143	286			1143				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	110	27	625	0.175	110	0.3	0.2	7.051	A
B-A	0	0	394	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	438	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	240	60			240				
A-C	933	233			933				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	92	23	652	0.141	92	0.2	0.2	6.490	A
B-A	0	0	415	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	460	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	201	50			201				
A-C	781	195			781				

(Default Analysis Set) - 2032 Future Baseline, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	One-way from A to C		1.44	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2032 Future Baseline	AM	ONE HOUR	06:45	08:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A27 Link Road North		ONE HOUR	✓	1440	100.000
B - Vale Avenue		ONE HOUR	✓	211	100.000
C - A27 Link Road South		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - A27 Link Road North	B - Vale Avenue	C - A27 Link Road South
From	A - A27 Link Road North	0	135	1305
	B - Vale Avenue	0	0	211
	C - A27 Link Road South	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A27 Link Road North	B - Vale Avenue	C - A27 Link Road South
From	A - A27 Link Road North	0	1	6
	B - Vale Avenue	0	0	0
	C - A27 Link Road South	9	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.42	11.31	0.7	B	194	290
B-A	0.00	0.00	0.0	A	0	0
C-AB	0.00	0.00	0.0	A	0	0
C-A					0	0
A-B					124	186
A-C					1197	1796

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	159	40	626	0.254	158	0.0	0.3	7.663	A
B-A	0	0	395	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	448	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	102	25			102				
A-C	982	246			982				

07:00 - 07:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	190	47	594	0.319	189	0.3	0.5	8.872	A
B-A	0	0	371	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	424	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	121	30			121				
A-C	1173	293			1173				

07:15 - 07:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	232	58	551	0.422	231	0.5	0.7	11.237	B
B-A	0	0	337	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	390	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	149	37			149				
A-C	1437	359			1437				

07:30 - 07:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	232	58	551	0.422	232	0.7	0.7	11.306	B
B-A	0	0	337	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	390	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	149	37			149				
A-C	1437	359			1437				

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	190	47	594	0.319	191	0.7	0.5	8.940	A
B-A	0	0	371	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	424	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	121	30			121				
A-C	1173	293			1173				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	159	40	626	0.254	159	0.5	0.3	7.724	A
B-A	0	0	395	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	448	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	102	25			102				
A-C	982	246			982				

(Default Analysis Set) - 2032 Future Baseline, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	One-way from A to C		0.71	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2032 Future Baseline	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A27 Link Road North		ONE HOUR	✓	1369	100.000
B - Vale Avenue		ONE HOUR	✓	128	100.000
C - A27 Link Road South		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - A27 Link Road North	B - Vale Avenue	C - A27 Link Road South
From	A - A27 Link Road North	0	280	1089
	B - Vale Avenue	0	0	128
	C - A27 Link Road South	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A27 Link Road North	B - Vale Avenue	C - A27 Link Road South
From	A - A27 Link Road North	0	0	3
	B - Vale Avenue	0	0	1
	C - A27 Link Road South	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.24	8.30	0.3	A	117	176
B-A	0.00	0.00	0.0	A	0	0
C-AB	0.00	0.00	0.0	A	0	0
C-A					0	0
A-B					257	385
A-C					999	1499

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	96	24	645	0.149	96	0.0	0.2	6.600	A
B-A	0	0	409	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	454	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	211	53			211				
A-C	820	205			820				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	115	29	617	0.186	115	0.2	0.2	7.225	A
B-A	0	0	388	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	431	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	252	63			252				
A-C	979	245			979				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	141	35	578	0.244	141	0.2	0.3	8.285	A
B-A	0	0	358	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	399	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	308	77			308				
A-C	1199	300			1199				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	141	35	578	0.244	141	0.3	0.3	8.298	A
B-A	0	0	358	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	399	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	308	77			308				
A-C	1199	300			1199				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	115	29	617	0.186	115	0.3	0.2	7.244	A
B-A	0	0	388	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	431	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	252	63			252				
A-C	979	245			979				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	96	24	645	0.149	97	0.2	0.2	6.621	A
B-A	0	0	409	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	454	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	211	53			211				
A-C	820	205			820				

(Default Analysis Set) - 2032 Do Something, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	One-way from A to C		1.57	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2032 Do Something	AM	ONE HOUR	06:45	08:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A27 Link Road North		ONE HOUR	✓	1455	100.000
B - Vale Avenue		ONE HOUR	✓	221	100.000
C - A27 Link Road South		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - A27 Link Road North	B - Vale Avenue	C - A27 Link Road South
From	A - A27 Link Road North	0	143	1312
	B - Vale Avenue	0	0	221
	C - A27 Link Road South	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A27 Link Road North	B - Vale Avenue	C - A27 Link Road South
From	A - A27 Link Road North	0	2	7
	B - Vale Avenue	0	0	1
	C - A27 Link Road South	9	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.44	11.88	0.8	B	203	304
B-A	0.00	0.00	0.0	A	0	0
C-AB	0.00	0.00	0.0	A	0	0
C-A					0	0
A-B					131	197
A-C					1204	1806

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	166	42	625	0.266	165	0.0	0.4	7.876	A
B-A	0	0	394	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	447	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	108	27			108				
A-C	988	247			988				

07:00 - 07:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	199	50	593	0.335	198	0.4	0.5	9.188	A
B-A	0	0	370	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	422	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	129	32			129				
A-C	1179	295			1179				

07:15 - 07:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	243	61	549	0.443	242	0.5	0.8	11.801	B
B-A	0	0	336	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	388	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	157	39			157				
A-C	1445	361			1445				

07:30 - 07:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	243	61	549	0.443	243	0.8	0.8	11.884	B
B-A	0	0	336	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	388	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	157	39			157				
A-C	1445	361			1445				

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	199	50	593	0.335	200	0.8	0.5	9.267	A
B-A	0	0	370	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	422	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	129	32			129				
A-C	1179	295			1179				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	166	42	625	0.266	167	0.5	0.4	7.944	A
B-A	0	0	394	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	447	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	108	27			108				
A-C	988	247			988				

(Default Analysis Set) - 2032 Do Something, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	One-way from A to C		0.71	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2032 Do Something	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A27 Link Road North		ONE HOUR	✓	1369	100.000
B - Vale Avenue		ONE HOUR	✓	128	100.000
C - A27 Link Road South		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - A27 Link Road North	B - Vale Avenue	C - A27 Link Road South
From	A - A27 Link Road North	0	280	1089
	B - Vale Avenue	0	0	128
	C - A27 Link Road South	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A27 Link Road North	B - Vale Avenue	C - A27 Link Road South
From	A - A27 Link Road North	0	0	3
	B - Vale Avenue	0	0	1
	C - A27 Link Road South	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.24	8.30	0.3	A	117	176
B-A	0.00	0.00	0.0	A	0	0
C-AB	0.00	0.00	0.0	A	0	0
C-A					0	0
A-B					257	385
A-C					999	1499

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	96	24	645	0.149	96	0.0	0.2	6.600	A
B-A	0	0	409	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	454	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	211	53			211				
A-C	820	205			820				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	115	29	617	0.186	115	0.2	0.2	7.225	A
B-A	0	0	388	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	431	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	252	63			252				
A-C	979	245			979				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	141	35	578	0.244	141	0.2	0.3	8.285	A
B-A	0	0	358	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	399	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	308	77			308				
A-C	1199	300			1199				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	141	35	578	0.244	141	0.3	0.3	8.298	A
B-A	0	0	358	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	399	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	308	77			308				
A-C	1199	300			1199				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	115	29	617	0.186	115	0.3	0.2	7.244	A
B-A	0	0	388	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	431	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	252	63			252				
A-C	979	245			979				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	96	24	645	0.149	97	0.2	0.2	6.621	A
B-A	0	0	409	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	454	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	211	53			211				
A-C	820	205			820				

<h1>Junctions 9</h1>
<h2>ARCADY 9 - Roundabout Module</h2>
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Filename: Validation - Import of Junction 3 A23 London Road - A27 Link Road - Mill Road.j9

Path: C:\Users\DUF97633\Mott MacDonald\B RMF Brighton DO - T Transport\Junction models\Junction 3 A23 London Road - A27 Link Road\05. Model Updates\01. Model

Report generation date: 21/06/2023 09:43:59

-
- »(Default Analysis Set) - 2021 Baseline, AM
 - »(Default Analysis Set) - 2021 Baseline, PM
 - »(Default Analysis Set) - 2026 Future Baseline, AM
 - »(Default Analysis Set) - 2026 Future Baseline, PM
 - »(Default Analysis Set) - 2026 Do Something, AM
 - »(Default Analysis Set) - 2026 Do Something, PM
 - »(Default Analysis Set) - 2032 Future Baseline, AM
 - »(Default Analysis Set) - 2032 Future Baseline, PM
 - »(Default Analysis Set) - 2032 Do Something, AM
 - »(Default Analysis Set) - 2032 Do Something, PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
A1 - 2021 Baseline										
1 - A27 Link Road	D1	43.4	96.19	1.03	F	D2	7.4	22.99	0.89	C
2 - A23 London Road South		13.3	50.94	0.96	F		3.4	13.39	0.78	B
3 - Mill Road		1.1	20.97	0.53	C		0.4	10.33	0.31	B
4 - A23 London Road North		1.6	5.28	0.60	A		2.2	6.60	0.69	A
A1 - 2026 Future Baseline										
1 - A27 Link Road	D3	85.9	173.25	1.11	F	D4	14.0	41.86	0.95	E
2 - A23 London Road South		21.7	75.90	1.00	F		4.8	18.23	0.83	C
3 - Mill Road		1.3	22.75	0.57	C		0.5	11.79	0.35	B
4 - A23 London Road North		1.8	5.70	0.63	A		2.6	7.45	0.73	A
A1 - 2026 Do Something										
1 - A27 Link Road	D5	91.2	182.23	1.11	F	D6	13.8	41.44	0.95	E
2 - A23 London Road South		20.1	71.77	0.99	F		4.8	18.24	0.83	C
3 - Mill Road		1.3	22.45	0.56	C		0.5	11.80	0.35	B
4 - A23 London Road North		1.7	5.66	0.63	A		2.6	7.41	0.72	A
A1 - 2032 Future Baseline										
1 - A27 Link Road	D7	141.2	285.48	1.19	F	D8	36.4	92.39	1.03	F
2 - A23 London Road South		34.9	110.61	1.04	F		7.1	26.02	0.89	D
3 - Mill Road		1.4	23.86	0.59	C		0.6	13.25	0.39	B
4 - A23 London Road North		2.0	6.26	0.66	A		3.2	8.65	0.76	A
A1 - 2032 Do Something										
1 - A27 Link Road	D9	147.2	301.49	1.20	F	D10	35.6	90.61	1.03	F
2 - A23 London Road South		32.4	104.51	1.03	F		7.0	25.70	0.89	D
3 - Mill Road		1.4	23.77	0.59	C		0.6	13.28	0.39	B
4 - A23 London Road North		2.0	6.23	0.66	A		3.2	8.69	0.76	A

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

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

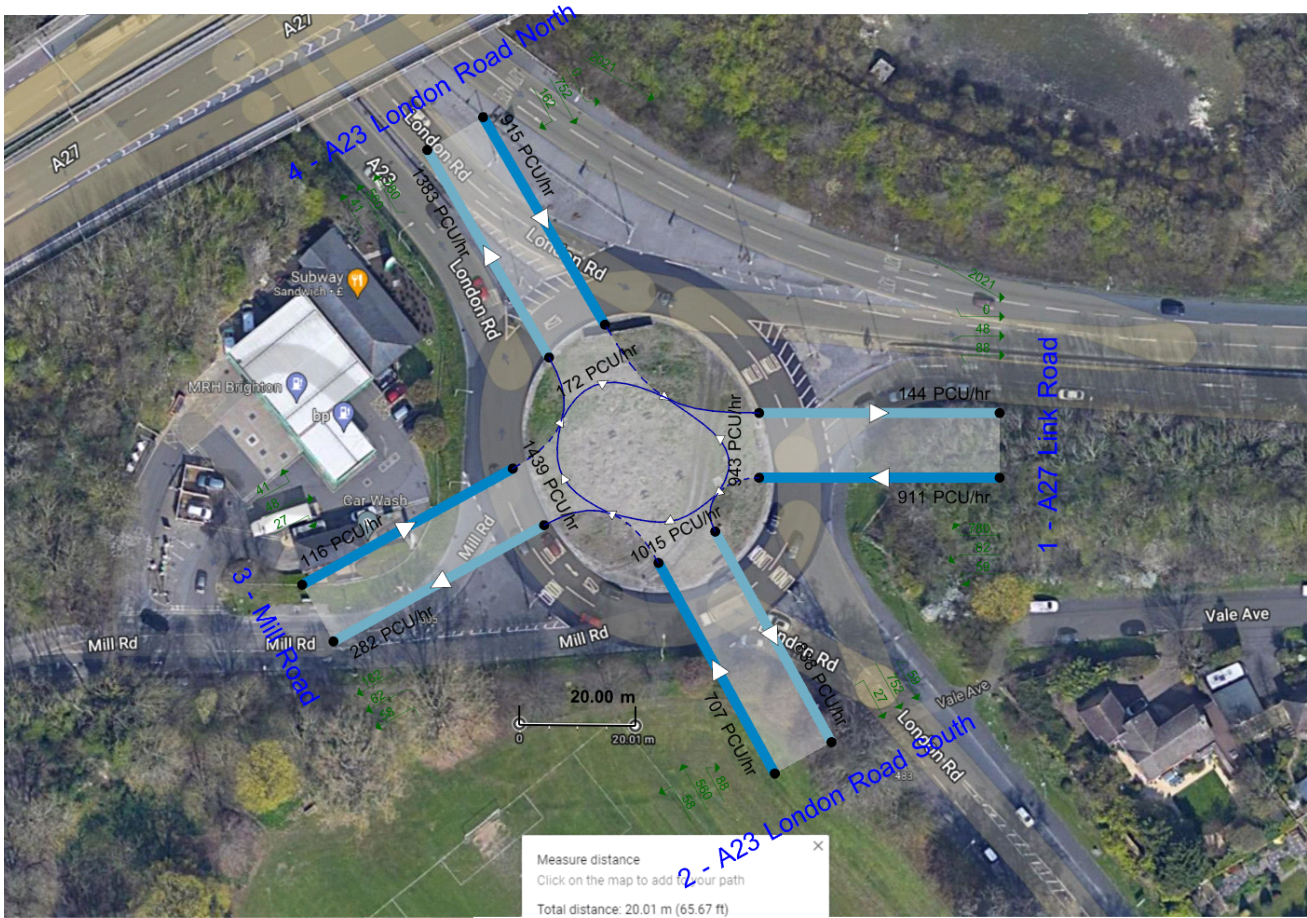
File summary

File Description

Title	(untitled)
Location	
Site number	
Date	31/01/2022
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	
Description	

Units

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



Flows show modelled flow through junction (PCU/hr).
Time Segment: 16:45-17:00

The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75	✓			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)	Run automatically
D1	2021 Baseline	AM	ONE HOUR	06:45	08:15	15	✓
D2	2021 Baseline	PM	ONE HOUR	16:45	18:15	15	✓
D3	2026 Future Baseline	AM	ONE HOUR	06:45	08:15	15	✓
D4	2026 Future Baseline	PM	ONE HOUR	16:45	18:15	15	✓
D5	2026 Do Something	AM	ONE HOUR	06:45	08:15	15	✓
D6	2026 Do Something	PM	ONE HOUR	16:45	18:15	15	✓
D7	2032 Future Baseline	AM	ONE HOUR	06:45	08:15	15	✓
D8	2032 Future Baseline	PM	ONE HOUR	16:45	18:15	15	✓
D9	2032 Do Something	AM	ONE HOUR	06:45	08:15	15	✓
D10	2032 Do Something	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

ID	Name	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	(Default Analysis Set)	✓	100.000	100.000

(Default Analysis Set) - 2021 Baseline, AM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	(untitled)	Standard Roundabout		1, 2, 3, 4	36.37	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	A27 Link Road	
2	A23 London Road South	
3	Mill Road	
4	A23 London Road North	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - A27 Link Road	7.47	7.97	1.4	18.1	62.7	32.1	
2 - A23 London Road South	6.59	7.46	2.0	37.2	60.6	14.7	
3 - Mill Road	2.54	7.04	16.6	119.9	66.6	3.7	
4 - A23 London Road North	6.12	6.35	28.6	80.1	62.8	10.7	

Bypass

Arm	Arm has bypass	Bypass utilisation (%)
1 - A27 Link Road		
2 - A23 London Road South		
3 - Mill Road		
4 - A23 London Road North	✓	100

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - A27 Link Road	0.641	2305
2 - A23 London Road South	0.671	2268
3 - Mill Road	0.553	1696
4 - A23 London Road North	0.639	2122

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

Arm Capacity Adjustments

Arm	Type	Reason	Percentage capacity adjustment (%)
1 - A27 Link Road	Percentage		92.00
2 - A23 London Road South	Percentage		90.00
3 - Mill Road	Percentage		80.00
4 - A23 London Road North	Percentage		90.00

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2021 Baseline	AM	ONE HOUR	06:45	08:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A27 Link Road		ONE HOUR	✓	1380	100.000
2 - A23 London Road South		ONE HOUR	✓	898	100.000
3 - Mill Road		ONE HOUR	✓	180	100.000
4 - A23 London Road North		ONE HOUR	✓	2986	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
	1 - A27 Link Road	2 - A23 London Road South	3 - Mill Road	4 - A23 London Road North
1 - A27 Link Road	16	51	57	1256
2 - A23 London Road South	116	3	83	696
3 - Mill Road	33	31	1	115
4 - A23 London Road North	2016	724	243	3

Proportions

From	To			
	1 - A27 Link Road	2 - A23 London Road South	3 - Mill Road	4 - A23 London Road North
1 - A27 Link Road	0.01	0.04	0.04	0.91
2 - A23 London Road South	0.13	0.00	0.09	0.78
3 - Mill Road	0.18	0.17	0.01	0.64
4 - A23 London Road North	0.68	0.24	0.08	0.00

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	1 - A27 Link Road	2 - A23 London Road South	3 - Mill Road	4 - A23 London Road North
1 - A27 Link Road	0	0	0	6
2 - A23 London Road South	4	50	1	2
3 - Mill Road	0	0	0	2
4 - A23 London Road North	9	6	2	50

Average PCU Per Veh

From	To			
	1 - A27 Link Road	2 - A23 London Road South	3 - Mill Road	4 - A23 London Road North
1 - A27 Link Road	1.000	1.000	1.000	1.057
2 - A23 London Road South	1.036	1.500	1.012	1.024
3 - Mill Road	1.000	1.000	1.000	1.018
4 - A23 London Road North	1.086	1.060	1.021	1.500

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
06:45-07:00	1 - A27 Link Road	1039	1039
	2 - A23 London Road South	676	676
	3 - Mill Road	136	136
	4 - A23 London Road North	2248	2248
07:00-07:15	1 - A27 Link Road	1241	1241
	2 - A23 London Road South	807	807
	3 - Mill Road	162	162
	4 - A23 London Road North	2684	2684
07:15-07:30	1 - A27 Link Road	1519	1519
	2 - A23 London Road South	989	989
	3 - Mill Road	198	198
	4 - A23 London Road North	3288	3288
07:30-07:45	1 - A27 Link Road	1519	1519
	2 - A23 London Road South	989	989
	3 - Mill Road	198	198
	4 - A23 London Road North	3288	3288
07:45-08:00	1 - A27 Link Road	1241	1241
	2 - A23 London Road South	807	807
	3 - Mill Road	162	162
	4 - A23 London Road North	2684	2684
08:00-08:15	1 - A27 Link Road	1039	1039
	2 - A23 London Road South	676	676
	3 - Mill Road	136	136
	4 - A23 London Road North	2248	2248

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A27 Link Road	1.03	96.19	43.4	114.0	F	1266	1899
2 - A23 London Road South	0.96	50.94	13.3	63.6	F	824	1236
3 - Mill Road	0.53	20.97	1.1	5.7	C	165	248
4 - A23 London Road North	0.60	5.28	1.6	2.0	A	2740	1335

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	1039	1039	260	0	1518	754	1676	0.620	1032	123	0.0	1.7	5.820
2 - A23 London Road South	676	676	169	0	0	1179	1329	0.509	672	607	0.0	1.0	5.578
3 - Mill Road	136	136	34	0	0	1563	665	0.204	134	288	0.0	0.3	6.849
4 - A23 London Road North	2248	730	183	1518	0	150	1824	0.400	727	1548	0.0	0.7	3.443

07:00 - 07:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	1241	1241	310	0	1812	902	1589	0.781	1233	148	1.7	3.6	10.43
2 - A23 London Road South	807	807	202	0	0	1409	1190	0.678	803	726	1.0	2.1	9.42
3 - Mill Road	162	162	40	0	0	1868	530	0.305	161	344	0.3	0.4	9.84
4 - A23 London Road North	2684	872	218	1812	0	179	1807	0.483	871	1850	0.7	1.0	4.03

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	1519	1519	380	0	2220	1104	1470	1.034	1425	176	3.6	27.1	49.79
2 - A23 London Road South	989	989	247	0	0	1644	1049	0.943	957	885	2.1	9.9	32.99
3 - Mill Road	198	198	50	0	0	2186	389	0.509	196	415	0.4	1.0	18.59
4 - A23 London Road North	3288	1068	267	2220	0	214	1786	0.598	1066	2168	1.0	1.5	5.23

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	1519	1519	380	0	2220	1106	1468	1.035	1454	179	27.1	43.4	96.18
2 - A23 London Road South	989	989	247	0	0	1672	1032	0.959	975	888	9.9	13.3	50.93
3 - Mill Road	198	198	50	0	0	2228	371	0.535	198	419	1.0	1.1	20.96
4 - A23 London Road North	3288	1068	267	2220	0	217	1785	0.598	1068	2209	1.5	1.6	5.27

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	1241	1241	310	0	1812	906	1586	0.782	1398	156	43.4	4.1	34.25
2 - A23 London Road South	807	807	202	0	0	1569	1094	0.738	848	735	13.3	3.1	17.26
3 - Mill Road	162	162	40	0	0	2061	445	0.364	164	356	1.1	0.6	13.05
4 - A23 London Road North	2684	872	218	1812	0	188	1802	0.484	874	2037	1.6	1.0	4.09

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	1039	1039	260	0	1518	758	1674	0.621	1048	126	4.1	1.8	6.145
2 - A23 London Road South	676	676	169	0	0	1196	1319	0.512	684	611	3.1	1.1	5.877
3 - Mill Road	136	136	34	0	0	1589	654	0.207	137	291	0.6	0.3	7.063
4 - A23 London Road North	2248	730	183	1518	0	152	1822	0.401	731	1574	1.0	0.7	3.474

Queue Variation Results for each time segment
06:45 - 07:00

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 - A27 Link Road	1.69	0.18	1.42	2.92	3.71			N/A	N/A
2 - A23 London Road South	1.05	0.48	1.06	1.11	1.59			N/A	N/A
3 - Mill Road	0.26	0.00	0.00	0.26	0.26			N/A	N/A
4 - A23 London Road North	0.70	0.58	1.05	1.47	1.52			N/A	N/A

07:00 - 07:15

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 - A27 Link Road	3.57	0.05	0.52	10.06	16.85			N/A	N/A
2 - A23 London Road South	2.09	0.05	0.48	5.67	9.27			N/A	N/A
3 - Mill Road	0.44	0.00	0.00	0.44	0.44			N/A	N/A
4 - A23 London Road North	0.97	0.08	0.88	1.67	2.05			N/A	N/A

07:15 - 07:30

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 - A27 Link Road	27.11	2.20	20.36	57.27	72.37			N/A	N/A
2 - A23 London Road South	9.90	0.09	2.40	28.06	42.67			N/A	N/A
3 - Mill Road	1.01	0.03	0.27	1.01	1.17			N/A	N/A
4 - A23 London Road North	1.54	0.03	0.27	1.54	1.54			N/A	N/A

07:30 - 07:45

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 - A27 Link Road	43.43	4.27	33.42	90.79	114.00			N/A	N/A
2 - A23 London Road South	13.34	0.07	1.69	39.13	63.57			N/A	N/A
3 - Mill Road	1.12	0.03	0.32	2.02	5.69			N/A	N/A
4 - A23 London Road North	1.55	0.03	0.28	1.55	1.55			N/A	N/A

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 - A27 Link Road	4.11	0.04	0.41	10.84	21.91			N/A	N/A
2 - A23 London Road South	3.05	0.05	0.60	8.49	13.78			N/A	N/A
3 - Mill Road	0.59	0.07	0.71	1.36	1.44			N/A	N/A
4 - A23 London Road North	0.99	0.28	1.04	1.48	1.48			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 - A27 Link Road	1.75	0.03	0.30	1.75	6.07			N/A	N/A
2 - A23 London Road South	1.09	0.03	0.30	1.33	4.59			N/A	N/A
3 - Mill Road	0.27	0.03	0.28	0.56	1.04			N/A	N/A
4 - A23 London Road North	0.71	0.07	0.78	1.45	1.53			N/A	N/A

(Default Analysis Set) - 2021 Baseline, PM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	(untitled)	Standard Roundabout		1, 2, 3, 4	10.93	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2021 Baseline	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A27 Link Road		ONE HOUR	✓	1110	100.000
2 - A23 London Road South		ONE HOUR	✓	861	100.000
3 - Mill Road		ONE HOUR	✓	141	100.000
4 - A23 London Road North		ONE HOUR	✓	3563	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
	1 - A27 Link Road	2 - A23 London Road South	3 - Mill Road	4 - A23 London Road North
1 - A27 Link Road	11	72	76	951
2 - A23 London Road South	107	1	71	682
3 - Mill Road	58	33	0	50
4 - A23 London Road North	2448	916	197	2

Proportions

From	To			
	1 - A27 Link Road	2 - A23 London Road South	3 - Mill Road	4 - A23 London Road North
1 - A27 Link Road	0.01	0.06	0.07	0.86
2 - A23 London Road South	0.12	0.00	0.08	0.79
3 - Mill Road	0.41	0.23	0.00	0.35
4 - A23 London Road North	0.69	0.26	0.06	0.00

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	1 - A27 Link Road	2 - A23 London Road South	3 - Mill Road	4 - A23 London Road North
1 - A27 Link Road	0	1	0	3
2 - A23 London Road South	2	0	0	2
3 - Mill Road	0	0	0	0
4 - A23 London Road North	2	1	1	0

Average PCU Per Veh

From	To			
	1 - A27 Link Road	2 - A23 London Road South	3 - Mill Road	4 - A23 London Road North
1 - A27 Link Road	1.000	1.014	1.000	1.028
2 - A23 London Road South	1.019	1.000	1.000	1.024
3 - Mill Road	1.000	1.000	1.000	1.000
4 - A23 London Road North	1.019	1.008	1.005	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
16:45-17:00	1 - A27 Link Road	836	836
	2 - A23 London Road South	648	648
	3 - Mill Road	106	106
	4 - A23 London Road North	2682	2682
17:00-17:15	1 - A27 Link Road	998	998
	2 - A23 London Road South	774	774
	3 - Mill Road	127	127
	4 - A23 London Road North	3203	3203
17:15-17:30	1 - A27 Link Road	1222	1222
	2 - A23 London Road South	948	948
	3 - Mill Road	155	155
	4 - A23 London Road North	3923	3923
17:30-17:45	1 - A27 Link Road	1222	1222
	2 - A23 London Road South	948	948
	3 - Mill Road	155	155
	4 - A23 London Road North	3923	3923
17:45-18:00	1 - A27 Link Road	998	998
	2 - A23 London Road South	774	774
	3 - Mill Road	127	127
	4 - A23 London Road North	3203	3203
18:00-18:15	1 - A27 Link Road	836	836
	2 - A23 London Road South	648	648
	3 - Mill Road	106	106
	4 - A23 London Road North	2682	2682

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A27 Link Road	0.89	22.99	7.4	39.1	C	1019	1528
2 - A23 London Road South	0.78	13.39	3.4	14.7	B	790	1185
3 - Mill Road	0.31	10.33	0.4	1.6	B	129	194
4 - A23 London Road North	0.69	6.60	2.2	4.1	A	3269	1535

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	836	836	209	0	1843	861	1613	0.518	831	132	0.0	1.1	4.696
2 - A23 London Road South	648	648	162	0	0	927	1482	0.437	645	766	0.0	0.8	4.377
3 - Mill Road	106	106	27	0	0	1314	776	0.137	106	258	0.0	0.2	5.369
4 - A23 London Road North	2682	839	210	1843	0	157	1819	0.461	836	1262	0.0	0.9	3.676

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	998	998	249	0	2201	1031	1513	0.660	994	158	1.1	1.9	7.076
2 - A23 London Road South	774	774	194	0	0	1109	1372	0.564	772	917	0.8	1.3	6.107
3 - Mill Road	127	127	32	0	0	1572	661	0.192	126	309	0.2	0.2	6.728
4 - A23 London Road North	3203	1002	251	2201	0	188	1801	0.556	1001	1510	0.9	1.2	4.520

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	1222	1222	306	0	2695	1261	1377	0.888	1203	192	1.9	6.8	19.37
2 - A23 London Road South	948	948	237	0	0	1343	1230	0.771	940	1121	1.3	3.2	12.36
3 - Mill Road	155	155	39	0	0	1907	513	0.303	154	376	0.2	0.4	10.02
4 - A23 London Road North	3923	1228	307	2695	0	230	1778	0.691	1224	1832	1.2	2.2	6.50

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	1222	1222	306	0	2695	1265	1375	0.889	1220	194	6.8	7.4	22.98
2 - A23 London Road South	948	948	237	0	0	1360	1220	0.777	947	1125	3.2	3.4	13.38
3 - Mill Road	155	155	39	0	0	1928	503	0.308	155	379	0.4	0.4	10.33
4 - A23 London Road North	3923	1228	307	2695	0	231	1777	0.691	1228	1853	2.2	2.2	6.59

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	998	998	249	0	2201	1037	1509	0.661	1019	160	7.4	2.0	7.843
2 - A23 London Road South	774	774	194	0	0	1133	1357	0.570	782	923	3.4	1.4	6.478
3 - Mill Road	127	127	32	0	0	1603	648	0.196	128	312	0.4	0.2	6.933
4 - A23 London Road North	3203	1002	251	2201	0	191	1800	0.557	1006	1540	2.2	1.3	4.589

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	836	836	209	0	1843	867	1610	0.519	839	133	2.0	1.1	4.813
2 - A23 London Road South	648	648	162	0	0	935	1477	0.439	650	771	1.4	0.8	4.461
3 - Mill Road	106	106	27	0	0	1326	770	0.138	106	260	0.2	0.2	5.428
4 - A23 London Road North	2682	839	210	1843	0	159	1818	0.462	841	1274	1.3	0.9	3.718

Queue 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 - A27 Link Road	1.09	0.56	1.06	1.26	1.26			N/A	N/A
2 - A23 London Road South	0.79	0.56	1.02	1.43	1.48			N/A	N/A
3 - Mill Road	0.16	0.00	0.00	0.16	0.16			N/A	N/A
4 - A23 London Road North	0.86	0.55	1.01	1.41	1.46			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 - A27 Link Road	1.94	0.05	0.46	5.22	8.74			N/A	N/A
2 - A23 London Road South	1.30	0.05	0.54	3.06	4.68			N/A	N/A
3 - Mill Road	0.24	0.00	0.00	0.24	0.24			N/A	N/A
4 - A23 London Road North	1.25	0.06	0.69	2.83	4.08			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 - A27 Link Road	6.76	0.04	0.44	18.46	36.28			N/A	N/A
2 - A23 London Road South	3.24	0.03	0.31	3.24	14.72			N/A	N/A
3 - Mill Road	0.43	0.03	0.26	0.46	0.49			N/A	N/A
4 - A23 London Road North	2.20	0.03	0.27	2.20	2.27			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 - A27 Link Road	7.38	0.03	0.35	13.18	39.06			N/A	N/A
2 - A23 London Road South	3.42	0.03	0.29	3.42	9.69			N/A	N/A
3 - Mill Road	0.44	0.03	0.33	1.38	1.60			N/A	N/A
4 - A23 London Road North	2.22	0.03	0.27	2.22	2.22			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 - A27 Link Road	2.05	0.04	0.43	5.55	9.66			N/A	N/A
2 - A23 London Road South	1.38	0.06	0.73	3.17	4.69			N/A	N/A
3 - Mill Road	0.25	0.00	0.00	0.25	0.25			N/A	N/A
4 - A23 London Road North	1.28	0.11	1.10	2.21	2.88			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 - A27 Link Road	1.12	0.03	0.32	1.96	5.66			N/A	N/A
2 - A23 London Road South	0.81	0.04	0.37	1.90	3.43			N/A	N/A
3 - Mill Road	0.16	0.00	0.00	0.16	0.16			N/A	N/A
4 - A23 London Road North	0.87	0.05	0.62	1.69	2.32			N/A	N/A

(Default Analysis Set) - 2026 Future Baseline, AM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	(untitled)	Standard Roundabout		1, 2, 3, 4	60.32	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2026 Future Baseline	AM	ONE HOUR	06:45	08:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A27 Link Road		ONE HOUR	✓	1444	100.000
2 - A23 London Road South		ONE HOUR	✓	939	100.000
3 - Mill Road		ONE HOUR	✓	188	100.000
4 - A23 London Road North		ONE HOUR	✓	3124	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - A27 Link Road	2 - A23 London Road South	3 - Mill Road	4 - A23 London Road North
From	1 - A27 Link Road	17	53	60	1314
	2 - A23 London Road South	121	3	87	728
	3 - Mill Road	35	32	1	120
	4 - A23 London Road North	2109	758	254	3

Proportions

		To			
		1 - A27 Link Road	2 - A23 London Road South	3 - Mill Road	4 - A23 London Road North
From	1 - A27 Link Road	0.01	0.04	0.04	0.91
	2 - A23 London Road South	0.13	0.00	0.09	0.78
	3 - Mill Road	0.19	0.17	0.01	0.64
	4 - A23 London Road North	0.68	0.24	0.08	0.00

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	1 - A27 Link Road	2 - A23 London Road South	3 - Mill Road	4 - A23 London Road North
1 - A27 Link Road	0	0	0	6
2 - A23 London Road South	4	50	1	2
3 - Mill Road	0	0	0	2
4 - A23 London Road North	9	6	2	50

Average PCU Per Veh

From	To			
	1 - A27 Link Road	2 - A23 London Road South	3 - Mill Road	4 - A23 London Road North
1 - A27 Link Road	1.000	1.000	1.000	1.057
2 - A23 London Road South	1.036	1.500	1.012	1.024
3 - Mill Road	1.000	1.000	1.000	1.018
4 - A23 London Road North	1.086	1.060	1.021	1.500

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
06:45-07:00	1 - A27 Link Road	1087	1087
	2 - A23 London Road South	707	707
	3 - Mill Road	142	142
	4 - A23 London Road North	2352	2352
07:00-07:15	1 - A27 Link Road	1298	1298
	2 - A23 London Road South	844	844
	3 - Mill Road	169	169
	4 - A23 London Road North	2808	2808
07:15-07:30	1 - A27 Link Road	1590	1590
	2 - A23 London Road South	1034	1034
	3 - Mill Road	207	207
	4 - A23 London Road North	3440	3440
07:30-07:45	1 - A27 Link Road	1590	1590
	2 - A23 London Road South	1034	1034
	3 - Mill Road	207	207
	4 - A23 London Road North	3440	3440
07:45-08:00	1 - A27 Link Road	1298	1298
	2 - A23 London Road South	844	844
	3 - Mill Road	169	169
	4 - A23 London Road North	2808	2808
08:00-08:15	1 - A27 Link Road	1087	1087
	2 - A23 London Road South	707	707
	3 - Mill Road	142	142
	4 - A23 London Road North	2352	2352

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A27 Link Road	1.11	173.25	85.9	155.3	F	1325	1988
2 - A23 London Road South	1.00	75.90	21.7	78.3	F	862	1292
3 - Mill Road	0.57	22.75	1.3	6.3	C	173	259
4 - A23 London Road North	0.63	5.70	1.8	2.7	A	2867	1397

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	1087	1087	272	0	1588	788	1656	0.656	1079	129	0.0	2.0	6.481
2 - A23 London Road South	707	707	177	0	0	1233	1297	0.545	702	634	0.0	1.2	6.157
3 - Mill Road	142	142	35	0	0	1634	634	0.223	140	301	0.0	0.3	7.362
4 - A23 London Road North	2352	764	191	1588	0	156	1820	0.420	761	1618	0.0	0.8	3.563

07:00 - 07:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	1298	1298	325	0	1896	943	1564	0.830	1287	154	2.0	4.7	13.15
2 - A23 London Road South	844	844	211	0	0	1471	1153	0.732	838	759	1.2	2.7	11.52
3 - Mill Road	169	169	42	0	0	1950	494	0.342	168	360	0.3	0.5	11.13
4 - A23 London Road North	2808	912	228	1896	0	187	1802	0.506	911	1931	0.8	1.1	4.23

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	1590	1590	397	0	2322	1154	1440	1.104	1419	182	4.7	47.3	76.66
2 - A23 London Road South	1034	1034	258	0	0	1651	1045	0.990	985	923	2.7	14.8	44.18
3 - Mill Road	207	207	52	0	0	2206	381	0.544	204	430	0.5	1.1	20.36
4 - A23 London Road North	3440	1118	279	2322	0	221	1783	0.627	1115	2189	1.1	1.7	5.64

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	1590	1590	397	0	2322	1157	1438	1.105	1435	185	47.3	85.9	173.2
2 - A23 London Road South	1034	1034	258	0	0	1667	1035	0.999	1006	926	14.8	21.7	75.9
3 - Mill Road	207	207	52	0	0	2239	366	0.566	207	434	1.1	1.3	22.7
4 - A23 London Road North	3440	1118	279	2322	0	224	1781	0.628	1117	2222	1.7	1.8	5.70

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	1298	1298	325	0	1896	948	1562	0.831	1543	167	85.9	24.8	132.6
2 - A23 London Road South	844	844	211	0	0	1719	1003	0.841	905	772	21.7	6.4	45.9
3 - Mill Road	169	169	42	0	0	2246	363	0.466	170	378	1.3	0.9	19.0
4 - A23 London Road North	2808	912	228	1896	0	199	1795	0.508	915	2217	1.8	1.1	4.31

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	1087	1087	272	0	1588	793	1653	0.658	1178	134	24.8	2.1	9.598
2 - A23 London Road South	707	707	177	0	0	1329	1239	0.571	727	642	6.4	1.4	7.486
3 - Mill Road	142	142	35	0	0	1748	583	0.243	144	309	0.9	0.3	8.323
4 - A23 London Road North	2352	764	191	1588	0	162	1817	0.421	765	1730	1.1	0.8	3.605

Queue Variation Results for each time segment

06:45 - 07:00

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 - A27 Link Road	1.97	0.11	1.40	4.07	5.46			N/A	N/A
2 - A23 London Road South	1.21	0.21	1.14	1.78	2.01			N/A	N/A
3 - Mill Road	0.29	0.00	0.00	0.29	0.29			N/A	N/A
4 - A23 London Road North	0.76	0.58	1.05	1.47	1.52			N/A	N/A

07:00 - 07:15

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 - A27 Link Road	4.73	0.06	1.00	13.43	21.64			N/A	N/A
2 - A23 London Road South	2.68	0.05	0.56	7.37	11.88			N/A	N/A
3 - Mill Road	0.52	0.05	0.54	1.32	1.42			N/A	N/A
4 - A23 London Road North	1.07	0.07	0.86	1.96	2.72			N/A	N/A

07:15 - 07:30

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 - A27 Link Road	47.33	14.72	42.61	79.89	93.32			N/A	N/A
2 - A23 London Road South	14.80	0.30	7.97	36.89	50.40			N/A	N/A
3 - Mill Road	1.15	0.03	0.28	1.15	2.80			N/A	N/A
4 - A23 London Road North	1.74	0.03	0.28	1.74	1.74			N/A	N/A

07:30 - 07:45

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 - A27 Link Road	85.95	34.21	80.03	135.85	155.34			N/A	N/A
2 - A23 London Road South	21.68	0.28	10.68	56.24	78.32			N/A	N/A
3 - Mill Road	1.27	0.03	0.31	1.97	6.33			N/A	N/A
4 - A23 London Road North	1.76	0.03	0.28	1.76	1.76			N/A	N/A

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 - A27 Link Road	24.78	4.71	20.82	46.07	55.67			N/A	N/A
2 - A23 London Road South	6.42	0.14	2.80	16.32	22.90			N/A	N/A
3 - Mill Road	0.91	0.30	0.99	1.46	1.52			N/A	N/A
4 - A23 London Road North	1.10	0.20	1.08	1.56	1.88			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 - A27 Link Road	2.07	0.03	0.29	2.07	5.12			N/A	N/A
2 - A23 London Road South	1.39	0.03	0.29	1.39	5.48			N/A	N/A
3 - Mill Road	0.33	0.03	0.32	1.05	1.30			N/A	N/A
4 - A23 London Road North	0.77	0.07	0.76	1.42	1.42			N/A	N/A

(Default Analysis Set) - 2026 Future Baseline, PM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	(untitled)	Standard Roundabout		1, 2, 3, 4	15.92	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2026 Future Baseline	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A27 Link Road		ONE HOUR	✓	1160	100.000
2 - A23 London Road South		ONE HOUR	✓	900	100.000
3 - Mill Road		ONE HOUR	✓	148	100.000
4 - A23 London Road North		ONE HOUR	✓	3726	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
	1 - A27 Link Road	2 - A23 London Road South	3 - Mill Road	4 - A23 London Road North
1 - A27 Link Road	12	75	79	994
2 - A23 London Road South	112	1	74	713
3 - Mill Road	61	35	0	52
4 - A23 London Road North	2560	958	206	2

Proportions

From	To			
	1 - A27 Link Road	2 - A23 London Road South	3 - Mill Road	4 - A23 London Road North
1 - A27 Link Road	0.01	0.06	0.07	0.86
2 - A23 London Road South	0.12	0.00	0.08	0.79
3 - Mill Road	0.41	0.24	0.00	0.35
4 - A23 London Road North	0.69	0.26	0.06	0.00

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	1 - A27 Link Road	2 - A23 London Road South	3 - Mill Road	4 - A23 London Road North
1 - A27 Link Road	0	1	0	3
2 - A23 London Road South	2	0	0	2
3 - Mill Road	0	0	0	0
4 - A23 London Road North	2	1	1	0

Average PCU Per Veh

From	To			
	1 - A27 Link Road	2 - A23 London Road South	3 - Mill Road	4 - A23 London Road North
1 - A27 Link Road	1.000	1.014	1.000	1.028
2 - A23 London Road South	1.019	1.000	1.000	1.024
3 - Mill Road	1.000	1.000	1.000	1.000
4 - A23 London Road North	1.019	1.008	1.005	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
16:45-17:00	1 - A27 Link Road	873	873
	2 - A23 London Road South	678	678
	3 - Mill Road	111	111
	4 - A23 London Road North	2805	2805
17:00-17:15	1 - A27 Link Road	1043	1043
	2 - A23 London Road South	809	809
	3 - Mill Road	133	133
	4 - A23 London Road North	3350	3350
17:15-17:30	1 - A27 Link Road	1277	1277
	2 - A23 London Road South	991	991
	3 - Mill Road	163	163
	4 - A23 London Road North	4102	4102
17:30-17:45	1 - A27 Link Road	1277	1277
	2 - A23 London Road South	991	991
	3 - Mill Road	163	163
	4 - A23 London Road North	4102	4102
17:45-18:00	1 - A27 Link Road	1043	1043
	2 - A23 London Road South	809	809
	3 - Mill Road	133	133
	4 - A23 London Road North	3350	3350
18:00-18:15	1 - A27 Link Road	873	873
	2 - A23 London Road South	678	678
	3 - Mill Road	111	111
	4 - A23 London Road North	2805	2805

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A27 Link Road	0.95	41.86	14.0	70.0	E	1064	1597
2 - A23 London Road South	0.83	18.23	4.8	23.4	C	826	1239
3 - Mill Road	0.35	11.79	0.5	2.1	B	136	204
4 - A23 London Road North	0.73	7.45	2.6	5.1	A	3419	1605

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	873	873	218	0	1927	901	1589	0.549	868	139	0.0	1.2	5.084
2 - A23 London Road South	678	678	169	0	0	968	1457	0.465	674	801	0.0	0.9	4.677
3 - Mill Road	111	111	28	0	0	1373	749	0.149	111	269	0.0	0.2	5.632
4 - A23 London Road North	2805	878	219	1927	0	165	1815	0.484	874	1319	0.0	0.9	3.840

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	1043	1043	261	0	2301	1079	1485	0.702	1038	166	1.2	2.3	8.187
2 - A23 London Road South	809	809	202	0	0	1158	1342	0.603	807	959	0.9	1.5	6.830
3 - Mill Road	133	133	33	0	0	1643	630	0.211	133	322	0.2	0.3	7.234
4 - A23 London Road North	3350	1048	262	2301	0	198	1796	0.584	1046	1577	0.9	1.4	4.827

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	1277	1277	319	0	2819	1318	1343	0.951	1241	202	2.3	11.4	29.23
2 - A23 London Road South	991	991	248	0	0	1389	1203	0.824	980	1171	1.5	4.3	15.74
3 - Mill Road	163	163	41	0	0	1977	482	0.338	162	391	0.3	0.5	11.22
4 - A23 London Road North	4102	1284	321	2819	0	241	1771	0.725	1279	1898	1.4	2.6	7.30

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	1277	1277	319	0	2819	1323	1340	0.953	1267	203	11.4	14.0	41.86
2 - A23 London Road South	991	991	248	0	0	1414	1188	0.834	989	1176	4.3	4.8	18.22
3 - Mill Road	163	163	41	0	0	2009	468	0.348	163	394	0.5	0.5	11.79
4 - A23 London Road North	4102	1284	321	2819	0	243	1770	0.725	1284	1929	2.6	2.6	7.44

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	1043	1043	261	0	2301	1086	1480	0.704	1089	169	14.0	2.5	10.48
2 - A23 London Road South	809	809	202	0	0	1206	1313	0.616	822	968	4.8	1.7	7.66
3 - Mill Road	133	133	33	0	0	1700	605	0.220	134	328	0.5	0.3	7.66
4 - A23 London Road North	3350	1048	262	2301	0	201	1794	0.584	1053	1633	2.6	1.4	4.92

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	873	873	218	0	1927	907	1586	0.551	878	140	2.5	1.3	5.252
2 - A23 London Road South	678	678	169	0	0	978	1451	0.467	681	807	1.7	0.9	4.793
3 - Mill Road	111	111	28	0	0	1388	743	0.150	112	271	0.3	0.2	5.711
4 - A23 London Road North	2805	878	219	1927	0	167	1814	0.484	880	1333	1.4	1.0	3.890

Queue 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 - A27 Link Road	1.23	0.51	1.17	1.69	1.91			N/A	N/A
2 - A23 London Road South	0.88	0.56	1.02	1.43	1.48			N/A	N/A
3 - Mill Road	0.17	0.00	0.00	0.17	0.17			N/A	N/A
4 - A23 London Road North	0.94	0.55	1.01	1.41	1.46			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 - A27 Link Road	2.35	0.05	0.45	6.46	11.03			N/A	N/A
2 - A23 London Road South	1.52	0.05	0.49	3.88	6.05			N/A	N/A
3 - Mill Road	0.27	0.00	0.00	0.27	0.27			N/A	N/A
4 - A23 London Road North	1.39	0.05	0.59	3.39	5.04			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 - A27 Link Road	11.44	0.09	2.77	32.58	49.65			N/A	N/A
2 - A23 London Road South	4.35	0.03	0.35	8.65	23.37			N/A	N/A
3 - Mill Road	0.50	0.03	0.26	0.50	0.50			N/A	N/A
4 - A23 London Road North	2.58	0.03	0.28	2.58	5.07			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 - A27 Link Road	13.99	0.06	1.42	41.01	70.04			N/A	N/A
2 - A23 London Road South	4.79	0.03	0.31	4.79	20.82			N/A	N/A
3 - Mill Road	0.53	0.03	0.33	1.05	2.12			N/A	N/A
4 - A23 London Road North	2.62	0.03	0.27	2.62	2.62			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 - A27 Link Road	2.52	0.04	0.40	6.69	12.94			N/A	N/A
2 - A23 London Road South	1.67	0.05	0.51	4.30	6.71			N/A	N/A
3 - Mill Road	0.29	0.00	0.00	0.29	0.29			N/A	N/A
4 - A23 London Road North	1.43	0.08	1.08	2.87	3.87			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 - A27 Link Road	1.27	0.03	0.30	1.27	5.68			N/A	N/A
2 - A23 London Road South	0.90	0.03	0.34	1.99	4.40			N/A	N/A
3 - Mill Road	0.18	0.00	0.00	0.18	0.18			N/A	N/A
4 - A23 London Road North	0.95	0.05	0.48	2.02	3.03			N/A	N/A

(Default Analysis Set) - 2026 Do Something, AM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	(untitled)	Standard Roundabout		1, 2, 3, 4	62.14	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2026 Do Something	AM	ONE HOUR	06:45	08:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A27 Link Road		ONE HOUR	✓	1457	100.000
2 - A23 London Road South		ONE HOUR	✓	931	100.000
3 - Mill Road		ONE HOUR	✓	189	100.000
4 - A23 London Road North		ONE HOUR	✓	3124	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - A27 Link Road	2 - A23 London Road South	3 - Mill Road	4 - A23 London Road North
From	1 - A27 Link Road	19	53	66	1319
	2 - A23 London Road South	121	3	87	720
	3 - Mill Road	36	32	1	120
	4 - A23 London Road North	2114	753	254	3

Proportions

		To			
		1 - A27 Link Road	2 - A23 London Road South	3 - Mill Road	4 - A23 London Road North
From	1 - A27 Link Road	0.01	0.04	0.05	0.91
	2 - A23 London Road South	0.13	0.00	0.09	0.77
	3 - Mill Road	0.19	0.17	0.01	0.63
	4 - A23 London Road North	0.68	0.24	0.08	0.00

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	1 - A27 Link Road	2 - A23 London Road South	3 - Mill Road	4 - A23 London Road North
1 - A27 Link Road	0	0	0	6
2 - A23 London Road South	4	50	1	2
3 - Mill Road	0	0	0	2
4 - A23 London Road North	9	6	2	50

Average PCU Per Veh

From	To			
	1 - A27 Link Road	2 - A23 London Road South	3 - Mill Road	4 - A23 London Road North
1 - A27 Link Road	1.000	1.000	1.000	1.059
2 - A23 London Road South	1.036	1.500	1.012	1.018
3 - Mill Road	1.000	1.000	1.000	1.018
4 - A23 London Road North	1.087	1.057	1.021	1.500

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
06:45-07:00	1 - A27 Link Road	1097	1097
	2 - A23 London Road South	701	701
	3 - Mill Road	142	142
	4 - A23 London Road North	2352	2352
07:00-07:15	1 - A27 Link Road	1310	1310
	2 - A23 London Road South	837	837
	3 - Mill Road	170	170
	4 - A23 London Road North	2808	2808
07:15-07:30	1 - A27 Link Road	1604	1604
	2 - A23 London Road South	1025	1025
	3 - Mill Road	208	208
	4 - A23 London Road North	3440	3440
07:30-07:45	1 - A27 Link Road	1604	1604
	2 - A23 London Road South	1025	1025
	3 - Mill Road	208	208
	4 - A23 London Road North	3440	3440
07:45-08:00	1 - A27 Link Road	1310	1310
	2 - A23 London Road South	837	837
	3 - Mill Road	170	170
	4 - A23 London Road North	2808	2808
08:00-08:15	1 - A27 Link Road	1097	1097
	2 - A23 London Road South	701	701
	3 - Mill Road	142	142
	4 - A23 London Road North	2352	2352

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A27 Link Road	1.11	182.23	91.2	160.6	F	1337	2005
2 - A23 London Road South	0.99	71.77	20.1	76.2	F	854	1281
3 - Mill Road	0.56	22.45	1.3	6.2	C	173	260
4 - A23 London Road North	0.63	5.66	1.7	2.7	A	2867	1390

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	1097	1097	274	0	1592	784	1658	0.662	1089	132	0.0	2.0	6.566
2 - A23 London Road South	701	701	175	0	0	1243	1291	0.543	696	630	0.0	1.2	6.129
3 - Mill Road	142	142	36	0	0	1633	634	0.224	141	306	0.0	0.3	7.368
4 - A23 London Road North	2352	760	190	1592	0	158	1819	0.418	757	1616	0.0	0.7	3.548

07:00 - 07:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	1310	1310	327	0	1900	939	1567	0.836	1298	157	2.0	4.9	13.54
2 - A23 London Road South	837	837	209	0	0	1483	1146	0.730	831	755	1.2	2.6	11.46
3 - Mill Road	170	170	42	0	0	1948	495	0.343	169	365	0.3	0.5	11.14
4 - A23 London Road North	2808	908	227	1900	0	189	1801	0.504	907	1928	0.7	1.1	4.21

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	1604	1604	401	0	2328	1148	1443	1.111	1424	185	4.9	49.9	79.83
2 - A23 London Road South	1025	1025	256	0	0	1656	1041	0.984	979	917	2.6	14.1	42.72
3 - Mill Road	208	208	52	0	0	2199	384	0.542	206	436	0.5	1.1	20.16
4 - A23 London Road North	3440	1112	278	2328	0	224	1781	0.624	1109	2181	1.1	1.7	5.60

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	1604	1604	401	0	2328	1151	1442	1.113	1439	188	49.9	91.2	182.2
2 - A23 London Road South	1025	1025	256	0	0	1671	1032	0.993	1001	920	14.1	20.1	71.7
3 - Mill Road	208	208	52	0	0	2232	369	0.564	208	439	1.1	1.3	22.4
4 - A23 London Road North	3440	1112	278	2328	0	228	1779	0.625	1112	2212	1.7	1.7	5.66

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	1310	1310	327	0	1900	943	1564	0.837	1546	169	91.2	32.0	146.2
2 - A23 London Road South	837	837	209	0	0	1723	1001	0.836	893	767	20.1	6.1	41.8
3 - Mill Road	170	170	42	0	0	2233	369	0.461	171	383	1.3	0.9	18.5
4 - A23 London Road North	2808	908	227	1900	0	202	1794	0.506	911	2202	1.7	1.1	4.28

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	1097	1097	274	0	1592	789	1655	0.663	1217	137	32.0	2.1	11.30
2 - A23 London Road South	701	701	175	0	0	1367	1216	0.576	720	639	6.1	1.4	7.66
3 - Mill Road	142	142	36	0	0	1772	573	0.248	145	315	0.9	0.3	8.54
4 - A23 London Road North	2352	760	190	1592	0	164	1815	0.419	762	1752	1.1	0.8	3.58

Queue Variation Results for each time segment

06:45 - 07:00

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 - A27 Link Road	2.01	0.11	1.40	4.20	5.74			N/A	N/A
2 - A23 London Road South	1.19	0.22	1.13	1.75	1.98			N/A	N/A
3 - Mill Road	0.29	0.00	0.00	0.29	0.29			N/A	N/A
4 - A23 London Road North	0.75	0.58	1.05	1.47	1.52			N/A	N/A

07:00 - 07:15

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 - A27 Link Road	4.92	0.06	1.09	13.98	22.36			N/A	N/A
2 - A23 London Road South	2.64	0.05	0.57	7.25	11.68			N/A	N/A
3 - Mill Road	0.52	0.05	0.56	1.33	1.42			N/A	N/A
4 - A23 London Road North	1.06	0.07	0.86	1.94	2.67			N/A	N/A

07:15 - 07:30

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 - A27 Link Road	49.91	16.57	45.33	82.85	96.30			N/A	N/A
2 - A23 London Road South	14.05	0.25	7.11	35.71	49.34			N/A	N/A
3 - Mill Road	1.14	0.03	0.28	1.14	2.74			N/A	N/A
4 - A23 London Road North	1.72	0.03	0.28	1.72	1.72			N/A	N/A

07:30 - 07:45

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 - A27 Link Road	91.20	38.49	85.49	141.32	160.56			N/A	N/A
2 - A23 London Road South	20.13	0.21	8.84	53.69	76.17			N/A	N/A
3 - Mill Road	1.26	0.03	0.31	1.91	6.25			N/A	N/A
4 - A23 London Road North	1.73	0.03	0.28	1.73	1.73			N/A	N/A

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 - A27 Link Road	32.03	9.61	28.60	54.14	63.35			N/A	N/A
2 - A23 London Road South	6.07	0.12	2.44	15.67	22.23			N/A	N/A
3 - Mill Road	0.89	0.25	0.98	1.45	1.51			N/A	N/A
4 - A23 London Road North	1.09	0.20	1.08	1.52	1.85			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 - A27 Link Road	2.13	0.03	0.29	2.13	5.14			N/A	N/A
2 - A23 London Road South	1.42	0.03	0.30	1.48	5.92			N/A	N/A
3 - Mill Road	0.34	0.03	0.32	1.07	1.31			N/A	N/A
4 - A23 London Road North	0.76	0.07	0.76	1.36	1.36			N/A	N/A

(Default Analysis Set) - 2026 Do Something, PM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	(untitled)	Standard Roundabout		1, 2, 3, 4	15.82	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2026 Do Something	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A27 Link Road		ONE HOUR	✓	1160	100.000
2 - A23 London Road South		ONE HOUR	✓	900	100.000
3 - Mill Road		ONE HOUR	✓	148	100.000
4 - A23 London Road North		ONE HOUR	✓	3724	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
	1 - A27 Link Road	2 - A23 London Road South	3 - Mill Road	4 - A23 London Road North
1 - A27 Link Road	12	75	79	994
2 - A23 London Road South	112	1	74	713
3 - Mill Road	61	35	0	52
4 - A23 London Road North	2560	956	206	2

Proportions

From	To			
	1 - A27 Link Road	2 - A23 London Road South	3 - Mill Road	4 - A23 London Road North
1 - A27 Link Road	0.01	0.06	0.07	0.86
2 - A23 London Road South	0.12	0.00	0.08	0.79
3 - Mill Road	0.41	0.24	0.00	0.35
4 - A23 London Road North	0.69	0.26	0.06	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A27 Link Road	2 - A23 London Road South	3 - Mill Road	4 - A23 London Road North
From	1 - A27 Link Road	0	1	0	3
	2 - A23 London Road South	2	0	0	2
	3 - Mill Road	0	0	0	0
	4 - A23 London Road North	2	1	1	0

Average PCU Per Veh

		To			
		1 - A27 Link Road	2 - A23 London Road South	3 - Mill Road	4 - A23 London Road North
From	1 - A27 Link Road	1.000	1.014	1.000	1.028
	2 - A23 London Road South	1.019	1.000	1.000	1.024
	3 - Mill Road	1.000	1.000	1.000	1.000
	4 - A23 London Road North	1.019	1.007	1.005	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
16:45-17:00	1 - A27 Link Road	873	873
	2 - A23 London Road South	678	678
	3 - Mill Road	111	111
	4 - A23 London Road North	2804	2804
17:00-17:15	1 - A27 Link Road	1043	1043
	2 - A23 London Road South	809	809
	3 - Mill Road	133	133
	4 - A23 London Road North	3348	3348
17:15-17:30	1 - A27 Link Road	1277	1277
	2 - A23 London Road South	991	991
	3 - Mill Road	163	163
	4 - A23 London Road North	4100	4100
17:30-17:45	1 - A27 Link Road	1277	1277
	2 - A23 London Road South	991	991
	3 - Mill Road	163	163
	4 - A23 London Road North	4100	4100
17:45-18:00	1 - A27 Link Road	1043	1043
	2 - A23 London Road South	809	809
	3 - Mill Road	133	133
	4 - A23 London Road North	3348	3348
18:00-18:15	1 - A27 Link Road	873	873
	2 - A23 London Road South	678	678
	3 - Mill Road	111	111
	4 - A23 London Road North	2804	2804

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A27 Link Road	0.95	41.44	13.8	69.7	E	1064	1597
2 - A23 London Road South	0.83	18.24	4.8	23.4	C	826	1239
3 - Mill Road	0.35	11.80	0.5	2.1	B	136	204
4 - A23 London Road North	0.72	7.41	2.6	5.0	A	3417	1602

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	873	873	218	0	1927	900	1590	0.549	868	139	0.0	1.2	5.078
2 - A23 London Road South	678	678	169	0	0	968	1457	0.465	674	800	0.0	0.9	4.677
3 - Mill Road	111	111	28	0	0	1373	749	0.149	111	269	0.0	0.2	5.632
4 - A23 London Road North	2804	876	219	1927	0	165	1815	0.483	873	1319	0.0	0.9	3.831

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	1043	1043	261	0	2301	1077	1486	0.702	1038	166	1.2	2.3	8.169
2 - A23 London Road South	809	809	202	0	0	1158	1342	0.603	807	957	0.9	1.5	6.831
3 - Mill Road	133	133	33	0	0	1643	630	0.211	133	322	0.2	0.3	7.234
4 - A23 London Road North	3348	1046	262	2301	0	198	1796	0.583	1045	1577	0.9	1.4	4.811

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	1277	1277	319	0	2819	1316	1344	0.950	1241	202	2.3	11.3	29.04
2 - A23 London Road South	991	991	248	0	0	1389	1203	0.824	980	1168	1.5	4.3	15.75
3 - Mill Road	163	163	41	0	0	1978	482	0.338	162	391	0.3	0.5	11.22
4 - A23 London Road North	4100	1282	320	2819	0	241	1771	0.724	1277	1899	1.4	2.6	7.26

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	1277	1277	319	0	2819	1321	1342	0.952	1267	203	11.3	13.8	41.44
2 - A23 London Road South	991	991	248	0	0	1414	1187	0.835	989	1174	4.3	4.8	18.23
3 - Mill Road	163	163	41	0	0	2009	468	0.348	163	394	0.5	0.5	11.79
4 - A23 London Road North	4100	1282	320	2819	0	243	1770	0.724	1281	1929	2.6	2.6	7.40

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	1043	1043	261	0	2301	1084	1482	0.704	1088	169	13.8	2.5	10.41
2 - A23 London Road South	809	809	202	0	0	1206	1313	0.616	822	966	4.8	1.7	7.65
3 - Mill Road	133	133	33	0	0	1699	605	0.220	134	328	0.5	0.3	7.66
4 - A23 London Road North	3348	1046	262	2301	0	201	1794	0.583	1051	1632	2.6	1.4	4.90

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	873	873	218	0	1927	905	1587	0.550	878	140	2.5	1.3	5.243
2 - A23 London Road South	678	678	169	0	0	978	1451	0.467	681	805	1.7	0.9	4.793
3 - Mill Road	111	111	28	0	0	1388	743	0.150	112	271	0.3	0.2	5.709
4 - A23 London Road North	2804	876	219	1927	0	167	1814	0.483	878	1333	1.4	0.9	3.882

Queue 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 - A27 Link Road	1.23	0.51	1.17	1.69	1.91			N/A	N/A
2 - A23 London Road South	0.88	0.56	1.02	1.43	1.48			N/A	N/A
3 - Mill Road	0.17	0.00	0.00	0.17	0.17			N/A	N/A
4 - A23 London Road North	0.93	0.55	1.01	1.41	1.46			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 - A27 Link Road	2.34	0.05	0.45	6.44	11.00			N/A	N/A
2 - A23 London Road South	1.52	0.05	0.49	3.88	6.05			N/A	N/A
3 - Mill Road	0.27	0.00	0.00	0.27	0.27			N/A	N/A
4 - A23 London Road North	1.39	0.05	0.59	3.36	5.01			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 - A27 Link Road	11.34	0.09	2.68	32.38	49.50			N/A	N/A
2 - A23 London Road South	4.35	0.03	0.35	8.67	23.39			N/A	N/A
3 - Mill Road	0.50	0.03	0.26	0.50	0.50			N/A	N/A
4 - A23 London Road North	2.56	0.03	0.28	2.56	4.94			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 - A27 Link Road	13.84	0.06	1.35	40.58	69.71			N/A	N/A
2 - A23 London Road South	4.80	0.03	0.31	4.80	20.85			N/A	N/A
3 - Mill Road	0.53	0.03	0.33	1.05	2.13			N/A	N/A
4 - A23 London Road North	2.60	0.03	0.27	2.60	2.60			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 - A27 Link Road	2.52	0.04	0.40	6.67	12.89			N/A	N/A
2 - A23 London Road South	1.67	0.05	0.51	4.30	6.72			N/A	N/A
3 - Mill Road	0.29	0.00	0.00	0.29	0.29			N/A	N/A
4 - A23 London Road North	1.43	0.08	1.08	2.84	3.83			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 - A27 Link Road	1.27	0.03	0.30	1.27	5.68			N/A	N/A
2 - A23 London Road South	0.90	0.03	0.34	1.99	4.41			N/A	N/A
3 - Mill Road	0.18	0.00	0.00	0.18	0.18			N/A	N/A
4 - A23 London Road North	0.95	0.05	0.49	2.00	3.00			N/A	N/A

(Default Analysis Set) - 2032 Future Baseline, AM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	(untitled)	Standard Roundabout		1, 2, 3, 4	94.85	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2032 Future Baseline	AM	ONE HOUR	06:45	08:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A27 Link Road		ONE HOUR	✓	1516	100.000
2 - A23 London Road South		ONE HOUR	✓	985	100.000
3 - Mill Road		ONE HOUR	✓	197	100.000
4 - A23 London Road North		ONE HOUR	✓	3279	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - A27 Link Road	2 - A23 London Road South	3 - Mill Road	4 - A23 London Road North
From	1 - A27 Link Road	18	56	63	1379
	2 - A23 London Road South	127	3	91	764
	3 - Mill Road	36	34	1	126
	4 - A23 London Road North	2214	795	267	3

Proportions

		To			
		1 - A27 Link Road	2 - A23 London Road South	3 - Mill Road	4 - A23 London Road North
From	1 - A27 Link Road	0.01	0.04	0.04	0.91
	2 - A23 London Road South	0.13	0.00	0.09	0.78
	3 - Mill Road	0.18	0.17	0.01	0.64
	4 - A23 London Road North	0.68	0.24	0.08	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A27 Link Road	2 - A23 London Road South	3 - Mill Road	4 - A23 London Road North
From	1 - A27 Link Road	0	0	0	6
	2 - A23 London Road South	4	50	1	2
	3 - Mill Road	0	0	0	2
	4 - A23 London Road North	9	6	2	50

Average PCU Per Veh

		To			
		1 - A27 Link Road	2 - A23 London Road South	3 - Mill Road	4 - A23 London Road North
From	1 - A27 Link Road	1.000	1.000	1.000	1.057
	2 - A23 London Road South	1.036	1.500	1.012	1.024
	3 - Mill Road	1.000	1.000	1.000	1.018
	4 - A23 London Road North	1.086	1.060	1.021	1.500

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
06:45-07:00	1 - A27 Link Road	1141	1141
	2 - A23 London Road South	742	742
	3 - Mill Road	148	148
	4 - A23 London Road North	2469	2469
07:00-07:15	1 - A27 Link Road	1363	1363
	2 - A23 London Road South	885	885
	3 - Mill Road	177	177
	4 - A23 London Road North	2948	2948
07:15-07:30	1 - A27 Link Road	1669	1669
	2 - A23 London Road South	1085	1085
	3 - Mill Road	217	217
	4 - A23 London Road North	3610	3610
07:30-07:45	1 - A27 Link Road	1669	1669
	2 - A23 London Road South	1085	1085
	3 - Mill Road	217	217
	4 - A23 London Road North	3610	3610
07:45-08:00	1 - A27 Link Road	1363	1363
	2 - A23 London Road South	885	885
	3 - Mill Road	177	177
	4 - A23 London Road North	2948	2948
08:00-08:15	1 - A27 Link Road	1141	1141
	2 - A23 London Road South	742	742
	3 - Mill Road	148	148
	4 - A23 London Road North	2469	2469

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A27 Link Road	1.19	285.48	141.2	210.4	F	1391	2087
2 - A23 London Road South	1.04	110.61	34.9	93.3	F	904	1356
3 - Mill Road	0.59	23.86	1.4	6.4	C	181	271
4 - A23 London Road North	0.66	6.26	2.0	3.4	A	3009	1466

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	1141	1141	285	0	1667	827	1633	0.699	1132	135	0.0	2.4	7.421
2 - A23 London Road South	742	742	185	0	0	1293	1261	0.588	736	665	0.0	1.4	6.959
3 - Mill Road	148	148	37	0	0	1713	599	0.248	147	316	0.0	0.3	8.034
4 - A23 London Road North	2469	802	200	1667	0	164	1816	0.442	798	1697	0.0	0.8	3.707

07:00 - 07:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	1363	1363	341	0	1990	990	1537	0.887	1344	161	2.4	7.0	18.15
2 - A23 London Road South	885	885	221	0	0	1538	1113	0.796	876	796	1.4	3.7	15.07
3 - Mill Road	177	177	44	0	0	2037	455	0.389	176	377	0.3	0.6	12.97
4 - A23 London Road North	2948	957	239	1990	0	195	1797	0.533	956	2018	0.8	1.2	4.48

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	1669	1669	417	0	2438	1211	1407	1.186	1398	186	7.0	74.9	115.0
2 - A23 London Road South	1085	1085	271	0	0	1644	1049	1.034	1012	965	3.7	21.8	58.5
3 - Mill Road	217	217	54	0	0	2210	379	0.572	214	446	0.6	1.3	21.7
4 - A23 London Road North	3610	1173	293	2438	0	227	1779	0.659	1169	2197	1.2	2.0	6.17

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	1669	1669	417	0	2438	1214	1405	1.188	1404	189	74.9	141.2	278.2
2 - A23 London Road South	1085	1085	271	0	0	1650	1045	1.038	1032	968	21.8	34.9	110.6
3 - Mill Road	217	217	54	0	0	2234	368	0.589	216	449	1.3	1.4	23.8
4 - A23 London Road North	3610	1173	293	2438	0	231	1777	0.660	1172	2219	2.0	2.0	6.25

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	1363	1363	341	0	1990	995	1534	0.889	1522	177	141.2	101.3	285.4
2 - A23 London Road South	885	885	221	0	0	1711	1008	0.878	980	807	34.9	11.2	91.4
3 - Mill Road	177	177	44	0	0	2296	341	0.519	178	396	1.4	1.1	22.5
4 - A23 London Road North	2948	957	239	1990	0	212	1788	0.535	961	2262	2.0	1.2	4.59

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	1141	1141	285	0	1667	832	1630	0.700	1535	146	101.3	2.8	101.5
2 - A23 London Road South	742	742	185	0	0	1683	1025	0.724	775	685	11.2	2.8	16.5
3 - Mill Road	148	148	37	0	0	2120	418	0.354	151	338	1.1	0.6	13.7
4 - A23 London Road North	2469	802	200	1667	0	175	1809	0.443	803	2096	1.2	0.8	3.76

Queue Variation Results for each time segment

06:45 - 07:00

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 - A27 Link Road	2.38	0.08	1.28	5.76	8.20			N/A	N/A
2 - A23 London Road South	1.44	0.11	1.19	2.63	3.38			N/A	N/A
3 - Mill Road	0.33	0.00	0.00	0.33	0.33			N/A	N/A
4 - A23 London Road North	0.82	0.58	1.05	1.47	1.52			N/A	N/A

07:00 - 07:15

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 - A27 Link Road	6.99	0.09	1.83	19.36	29.01			N/A	N/A
2 - A23 London Road South	3.70	0.06	1.10	10.19	15.80			N/A	N/A
3 - Mill Road	0.63	0.10	0.85	1.38	1.45			N/A	N/A
4 - A23 London Road North	1.19	0.06	0.82	2.45	3.42			N/A	N/A

07:15 - 07:30

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 - A27 Link Road	74.87	36.68	71.25	109.73	122.68			N/A	N/A
2 - A23 London Road South	21.83	1.53	16.14	46.46	58.95			N/A	N/A
3 - Mill Road	1.28	0.03	0.29	1.28	4.51			N/A	N/A
4 - A23 London Road North	1.99	0.03	0.28	1.99	1.99			N/A	N/A

07:30 - 07:45

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 - A27 Link Road	141.19	>199	>199	>199	>199			N/A	N/A
2 - A23 London Road South	34.91	3.00	26.40	73.90	93.34			N/A	N/A
3 - Mill Road	1.39	0.03	0.30	1.56	6.43			N/A	N/A
4 - A23 London Road North	2.02	0.03	0.28	2.02	2.02			N/A	N/A

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 - A27 Link Road	101.29	66.48	99.07	130.80	140.86			N/A	N/A
2 - A23 London Road South	11.17	0.19	5.28	28.66	39.97			N/A	N/A
3 - Mill Road	1.14	0.23	1.10	1.65	1.90			N/A	N/A
4 - A23 London Road North	1.22	0.14	1.13	1.91	2.36			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 - A27 Link Road	2.77	0.03	0.29	2.77	6.61			N/A	N/A
2 - A23 London Road South	2.83	0.03	0.35	5.98	15.15			N/A	N/A
3 - Mill Road	0.57	0.05	0.45	1.39	1.51			N/A	N/A
4 - A23 London Road North	0.84	0.06	0.72	1.42	1.90			N/A	N/A

(Default Analysis Set) - 2032 Future Baseline, PM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	(untitled)	Standard Roundabout		1, 2, 3, 4	27.77	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2032 Future Baseline	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A27 Link Road		ONE HOUR	✓	1217	100.000
2 - A23 London Road South		ONE HOUR	✓	944	100.000
3 - Mill Road		ONE HOUR	✓	155	100.000
4 - A23 London Road North		ONE HOUR	✓	3908	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	1 - A27 Link Road	2 - A23 London Road South	3 - Mill Road	4 - A23 London Road North
From				
1 - A27 Link Road	12	79	83	1043
2 - A23 London Road South	117	1	78	748
3 - Mill Road	64	36	0	55
4 - A23 London Road North	2685	1005	216	2

Proportions

	To			
	1 - A27 Link Road	2 - A23 London Road South	3 - Mill Road	4 - A23 London Road North
From				
1 - A27 Link Road	0.01	0.06	0.07	0.86
2 - A23 London Road South	0.12	0.00	0.08	0.79
3 - Mill Road	0.41	0.23	0.00	0.35
4 - A23 London Road North	0.69	0.26	0.06	0.00

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	1 - A27 Link Road	2 - A23 London Road South	3 - Mill Road	4 - A23 London Road North
1 - A27 Link Road	0	1	0	3
2 - A23 London Road South	2	0	0	2
3 - Mill Road	0	0	0	0
4 - A23 London Road North	2	1	1	0

Average PCU Per Veh

From	To			
	1 - A27 Link Road	2 - A23 London Road South	3 - Mill Road	4 - A23 London Road North
1 - A27 Link Road	1.000	1.014	1.000	1.028
2 - A23 London Road South	1.019	1.000	1.000	1.024
3 - Mill Road	1.000	1.000	1.000	1.000
4 - A23 London Road North	1.019	1.008	1.005	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
16:45-17:00	1 - A27 Link Road	916	916
	2 - A23 London Road South	711	711
	3 - Mill Road	117	117
	4 - A23 London Road North	2942	2942
17:00-17:15	1 - A27 Link Road	1094	1094
	2 - A23 London Road South	849	849
	3 - Mill Road	139	139
	4 - A23 London Road North	3513	3513
17:15-17:30	1 - A27 Link Road	1340	1340
	2 - A23 London Road South	1039	1039
	3 - Mill Road	171	171
	4 - A23 London Road North	4303	4303
17:30-17:45	1 - A27 Link Road	1340	1340
	2 - A23 London Road South	1039	1039
	3 - Mill Road	171	171
	4 - A23 London Road North	4303	4303
17:45-18:00	1 - A27 Link Road	1094	1094
	2 - A23 London Road South	849	849
	3 - Mill Road	139	139
	4 - A23 London Road North	3513	3513
18:00-18:15	1 - A27 Link Road	916	916
	2 - A23 London Road South	711	711
	3 - Mill Road	117	117
	4 - A23 London Road North	2942	2942

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A27 Link Road	1.03	92.39	36.4	101.6	F	1117	1675
2 - A23 London Road South	0.89	26.02	7.1	38.3	D	866	1299
3 - Mill Road	0.39	13.25	0.6	2.8	B	142	213
4 - A23 London Road North	0.76	8.65	3.2	9.8	A	3586	1683

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	916	916	229	0	2021	944	1564	0.586	911	144	0.0	1.4	5.601
2 - A23 London Road South	711	711	178	0	0	1015	1429	0.497	707	840	0.0	1.0	5.066
3 - Mill Road	117	117	29	0	0	1439	720	0.162	116	282	0.0	0.2	5.951
4 - A23 London Road North	2942	921	230	2021	0	172	1811	0.509	917	1383	0.0	1.0	4.037

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	1094	1094	274	0	2414	1130	1454	0.752	1088	173	1.4	3.0	9.909
2 - A23 London Road South	849	849	212	0	0	1213	1309	0.648	845	1005	1.0	1.8	7.871
3 - Mill Road	139	139	35	0	0	1720	596	0.234	139	338	0.2	0.3	7.876
4 - A23 London Road North	3513	1099	275	2414	0	206	1791	0.614	1097	1653	1.0	1.6	5.208

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	1340	1340	335	0	2956	1381	1306	1.026	1260	209	3.0	23.0	48.72
2 - A23 London Road South	1039	1039	260	0	0	1417	1186	0.877	1022	1224	1.8	6.1	20.65
3 - Mill Road	171	171	43	0	0	2032	458	0.373	170	407	0.3	0.6	12.45
4 - A23 London Road North	4303	1347	337	2956	0	250	1766	0.762	1340	1952	1.6	3.1	8.39

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	1340	1340	335	0	2956	1387	1303	1.029	1287	211	23.0	36.4	92.38
2 - A23 London Road South	1039	1039	260	0	0	1443	1170	0.888	1035	1231	6.1	7.1	26.02
3 - Mill Road	171	171	43	0	0	2067	442	0.386	171	411	0.6	0.6	13.25
4 - A23 London Road North	4303	1347	337	2956	0	252	1765	0.763	1346	1986	3.1	3.2	8.65

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	1094	1094	274	0	2414	1139	1449	0.755	1226	178	36.4	3.4	26.28
2 - A23 London Road South	849	849	212	0	0	1343	1230	0.690	868	1022	7.1	2.3	10.63
3 - Mill Road	139	139	35	0	0	1860	534	0.261	140	351	0.6	0.4	9.17
4 - A23 London Road North	3513	1099	275	2414	0	211	1788	0.615	1106	1790	3.2	1.6	5.36

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	916	916	229	0	2021	951	1560	0.587	924	146	3.4	1.5	5.867
2 - A23 London Road South	711	711	178	0	0	1028	1420	0.500	716	846	2.3	1.0	5.256
3 - Mill Road	117	117	29	0	0	1459	711	0.164	117	285	0.4	0.2	6.067
4 - A23 London Road North	2942	921	230	2021	0	174	1809	0.509	923	1402	1.6	1.1	4.101

Queue 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 - A27 Link Road	1.43	0.17	1.26	2.33	2.92			N/A	N/A
2 - A23 London Road South	1.00	0.56	1.03	1.44	1.50			N/A	N/A
3 - Mill Road	0.19	0.00	0.00	0.19	0.19			N/A	N/A
4 - A23 London Road North	1.03	0.55	1.01	1.41	1.46			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 - A27 Link Road	2.99	0.05	0.47	8.32	14.25			N/A	N/A
2 - A23 London Road South	1.84	0.05	0.48	4.88	7.84			N/A	N/A
3 - Mill Road	0.30	0.00	0.00	0.30	0.30			N/A	N/A
4 - A23 London Road North	1.58	0.05	0.50	4.00	6.25			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 - A27 Link Road	23.04	1.24	16.50	50.35	64.51			N/A	N/A
2 - A23 London Road South	6.10	0.04	0.43	16.54	32.68			N/A	N/A
3 - Mill Road	0.58	0.03	0.26	0.58	0.58			N/A	N/A
4 - A23 London Road North	3.11	0.03	0.29	3.11	9.82			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 - A27 Link Road	36.36	2.33	26.44	79.48	101.61			N/A	N/A
2 - A23 London Road South	7.07	0.04	0.36	14.11	38.28			N/A	N/A
3 - Mill Road	0.62	0.03	0.32	1.31	2.81			N/A	N/A
4 - A23 London Road North	3.18	0.03	0.27	3.18	3.18			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 - A27 Link Road	3.37	0.04	0.38	8.60	18.01			N/A	N/A
2 - A23 London Road South	2.35	0.05	0.63	6.32	9.98			N/A	N/A
3 - Mill Road	0.36	0.00	0.00	0.36	0.36			N/A	N/A
4 - A23 London Road North	1.63	0.07	0.99	3.74	5.28			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 - A27 Link Road	1.48	0.03	0.29	1.48	4.80			N/A	N/A
2 - A23 London Road South	1.03	0.03	0.31	1.79	5.17			N/A	N/A
3 - Mill Road	0.20	0.00	0.00	0.20	0.20			N/A	N/A
4 - A23 London Road North	1.05	0.04	0.43	2.58	4.05			N/A	N/A

(Default Analysis Set) - 2032 Do Something, AM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	(untitled)	Standard Roundabout		1, 2, 3, 4	98.30	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2032 Do Something	AM	ONE HOUR	06:45	08:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A27 Link Road		ONE HOUR	✓	1529	100.000
2 - A23 London Road South		ONE HOUR	✓	977	100.000
3 - Mill Road		ONE HOUR	✓	199	100.000
4 - A23 London Road North		ONE HOUR	✓	3279	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
	1 - A27 Link Road	2 - A23 London Road South	3 - Mill Road	4 - A23 London Road North
1 - A27 Link Road	20	56	69	1384
2 - A23 London Road South	127	3	91	756
3 - Mill Road	38	34	1	126
4 - A23 London Road North	2218	791	267	3

Proportions

From	To			
	1 - A27 Link Road	2 - A23 London Road South	3 - Mill Road	4 - A23 London Road North
1 - A27 Link Road	0.01	0.04	0.05	0.91
2 - A23 London Road South	0.13	0.00	0.09	0.77
3 - Mill Road	0.19	0.17	0.01	0.63
4 - A23 London Road North	0.68	0.24	0.08	0.00

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	1 - A27 Link Road	2 - A23 London Road South	3 - Mill Road	4 - A23 London Road North
1 - A27 Link Road	0	0	0	6
2 - A23 London Road South	4	50	1	2
3 - Mill Road	0	0	0	2
4 - A23 London Road North	9	6	2	50

Average PCU Per Veh

From	To			
	1 - A27 Link Road	2 - A23 London Road South	3 - Mill Road	4 - A23 London Road North
1 - A27 Link Road	1.000	1.000	1.000	1.059
2 - A23 London Road South	1.036	1.500	1.012	1.018
3 - Mill Road	1.000	1.000	1.000	1.018
4 - A23 London Road North	1.087	1.058	1.021	1.500

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
06:45-07:00	1 - A27 Link Road	1151	1151
	2 - A23 London Road South	736	736
	3 - Mill Road	150	150
	4 - A23 London Road North	2469	2469
07:00-07:15	1 - A27 Link Road	1375	1375
	2 - A23 London Road South	878	878
	3 - Mill Road	179	179
	4 - A23 London Road North	2948	2948
07:15-07:30	1 - A27 Link Road	1683	1683
	2 - A23 London Road South	1076	1076
	3 - Mill Road	219	219
	4 - A23 London Road North	3610	3610
07:30-07:45	1 - A27 Link Road	1683	1683
	2 - A23 London Road South	1076	1076
	3 - Mill Road	219	219
	4 - A23 London Road North	3610	3610
07:45-08:00	1 - A27 Link Road	1375	1375
	2 - A23 London Road South	878	878
	3 - Mill Road	179	179
	4 - A23 London Road North	2948	2948
08:00-08:15	1 - A27 Link Road	1151	1151
	2 - A23 London Road South	736	736
	3 - Mill Road	150	150
	4 - A23 London Road North	2469	2469

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A27 Link Road	1.20	301.49	147.2	210.6	F	1403	2105
2 - A23 London Road South	1.03	104.51	32.4	90.7	F	897	1345
3 - Mill Road	0.59	23.77	1.4	6.4	C	183	274
4 - A23 London Road North	0.66	6.23	2.0	3.4	A	3009	1460

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	1151	1151	288	0	1670	824	1635	0.704	1141	138	0.0	2.4	7.539
2 - A23 London Road South	736	736	184	0	0	1303	1255	0.586	730	662	0.0	1.4	6.931
3 - Mill Road	150	150	37	0	0	1712	599	0.250	148	320	0.0	0.3	8.054
4 - A23 London Road North	2469	799	200	1670	0	167	1814	0.440	795	1694	0.0	0.8	3.695

07:00 - 07:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	1375	1375	344	0	1994	986	1539	0.893	1355	165	2.4	7.3	18.85
2 - A23 London Road South	878	878	220	0	0	1549	1106	0.794	869	793	1.4	3.6	14.98
3 - Mill Road	179	179	45	0	0	2035	456	0.392	178	383	0.3	0.6	13.01
4 - A23 London Road North	2948	954	238	1994	0	199	1795	0.531	952	2014	0.8	1.2	4.47

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	1683	1683	421	0	2442	1206	1409	1.194	1401	191	7.3	78.0	119.1
2 - A23 London Road South	1076	1076	269	0	0	1647	1047	1.028	1008	960	3.6	20.7	56.4
3 - Mill Road	219	219	55	0	0	2203	382	0.574	216	451	0.6	1.3	21.6
4 - A23 London Road North	3610	1168	292	2442	0	232	1776	0.658	1165	2188	1.2	2.0	6.14

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	1683	1683	421	0	2442	1210	1407	1.196	1407	194	78.0	147.2	288.9
2 - A23 London Road South	1076	1076	269	0	0	1653	1043	1.031	1029	963	20.7	32.4	104.5
3 - Mill Road	219	219	55	0	0	2228	371	0.591	219	454	1.3	1.4	23.7
4 - A23 London Road North	3610	1168	292	2442	0	235	1774	0.658	1168	2211	2.0	2.0	6.22

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	1375	1375	344	0	1994	992	1536	0.895	1525	180	147.2	109.6	301.4
2 - A23 London Road South	878	878	220	0	0	1714	1007	0.873	969	803	32.4	9.8	82.3
3 - Mill Road	179	179	45	0	0	2282	347	0.515	180	401	1.4	1.1	21.9
4 - A23 London Road North	2948	954	238	1994	0	215	1786	0.534	957	2247	2.0	1.2	4.57

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	1151	1151	288	0	1670	829	1632	0.706	1577	149	109.6	3.0	120.3
2 - A23 London Road South	736	736	184	0	0	1724	1000	0.735	763	683	9.8	3.0	17.0
3 - Mill Road	150	150	37	0	0	2142	409	0.367	152	344	1.1	0.6	14.2
4 - A23 London Road North	2469	799	200	1670	0	178	1807	0.442	800	2116	1.2	0.8	3.75

Queue Variation Results for each time segment

06:45 - 07:00

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 - A27 Link Road	2.44	0.08	1.27	5.97	8.53			N/A	N/A
2 - A23 London Road South	1.42	0.11	1.18	2.58	3.30			N/A	N/A
3 - Mill Road	0.33	0.00	0.00	0.33	0.33			N/A	N/A
4 - A23 London Road North	0.82	0.58	1.05	1.47	1.52			N/A	N/A

07:00 - 07:15

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 - A27 Link Road	7.35	0.10	2.08	20.18	29.96			N/A	N/A
2 - A23 London Road South	3.64	0.06	1.09	10.05	15.57			N/A	N/A
3 - Mill Road	0.64	0.11	0.86	1.39	1.45			N/A	N/A
4 - A23 London Road North	1.18	0.06	0.82	2.42	3.36			N/A	N/A

07:15 - 07:30

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 - A27 Link Road	77.99	39.22	74.43	113.18	126.16			N/A	N/A
2 - A23 London Road South	20.67	1.11	14.82	44.95	57.53			N/A	N/A
3 - Mill Road	1.29	0.03	0.29	1.29	4.58			N/A	N/A
4 - A23 London Road North	1.98	0.03	0.28	1.98	1.98			N/A	N/A

07:30 - 07:45

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 - A27 Link Road	147.22	>199	>199	>199	>199			N/A	N/A
2 - A23 London Road South	32.45	2.01	23.51	70.91	90.68			N/A	N/A
3 - Mill Road	1.40	0.03	0.30	1.51	6.42			N/A	N/A
4 - A23 London Road North	2.00	0.03	0.28	2.00	2.00			N/A	N/A

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 - A27 Link Road	109.60	73.36	107.40	140.22	150.61			N/A	N/A
2 - A23 London Road South	9.79	0.12	3.38	26.69	38.94			N/A	N/A
3 - Mill Road	1.12	0.19	1.08	1.65	1.91			N/A	N/A
4 - A23 London Road North	1.21	0.14	1.13	1.89	2.30			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 - A27 Link Road	3.03	0.03	0.30	3.03	8.70			N/A	N/A
2 - A23 London Road South	3.00	0.04	0.36	6.98	16.07			N/A	N/A
3 - Mill Road	0.60	0.05	0.48	1.13	1.13			N/A	N/A
4 - A23 London Road North	0.84	0.06	0.72	1.40	1.88			N/A	N/A

(Default Analysis Set) - 2032 Do Something, PM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	(untitled)	Standard Roundabout		1, 2, 3, 4	27.41	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2032 Do Something	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A27 Link Road		ONE HOUR	✓	1217	100.000
2 - A23 London Road South		ONE HOUR	✓	944	100.000
3 - Mill Road		ONE HOUR	✓	155	100.000
4 - A23 London Road North		ONE HOUR	✓	3906	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
	1 - A27 Link Road	2 - A23 London Road South	3 - Mill Road	4 - A23 London Road North
1 - A27 Link Road	12	79	83	1043
2 - A23 London Road South	117	1	78	748
3 - Mill Road	64	36	0	55
4 - A23 London Road North	2685	1003	216	2

Proportions

From	To			
	1 - A27 Link Road	2 - A23 London Road South	3 - Mill Road	4 - A23 London Road North
1 - A27 Link Road	0.01	0.06	0.07	0.86
2 - A23 London Road South	0.12	0.00	0.08	0.79
3 - Mill Road	0.41	0.23	0.00	0.35
4 - A23 London Road North	0.69	0.26	0.06	0.00

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	1 - A27 Link Road	2 - A23 London Road South	3 - Mill Road	4 - A23 London Road North
1 - A27 Link Road	0	0	1	0
2 - A23 London Road South	2	2	0	0
3 - Mill Road	0	0	0	0
4 - A23 London Road North	2	2	1	1

Average PCU Per Veh

From	To			
	1 - A27 Link Road	2 - A23 London Road South	3 - Mill Road	4 - A23 London Road North
1 - A27 Link Road	1.000	1.000	1.014	1.000
2 - A23 London Road South	1.021	1.019	1.000	1.000
3 - Mill Road	1.000	1.000	1.000	1.000
4 - A23 London Road North	1.021	1.019	1.007	1.005

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
16:45-17:00	1 - A27 Link Road	916	916
	2 - A23 London Road South	711	711
	3 - Mill Road	117	117
	4 - A23 London Road North	2941	2941
17:00-17:15	1 - A27 Link Road	1094	1094
	2 - A23 London Road South	849	849
	3 - Mill Road	139	139
	4 - A23 London Road North	3511	3511
17:15-17:30	1 - A27 Link Road	1340	1340
	2 - A23 London Road South	1039	1039
	3 - Mill Road	171	171
	4 - A23 London Road North	4301	4301
17:30-17:45	1 - A27 Link Road	1340	1340
	2 - A23 London Road South	1039	1039
	3 - Mill Road	171	171
	4 - A23 London Road North	4301	4301
17:45-18:00	1 - A27 Link Road	1094	1094
	2 - A23 London Road South	849	849
	3 - Mill Road	139	139
	4 - A23 London Road North	3511	3511
18:00-18:15	1 - A27 Link Road	916	916
	2 - A23 London Road South	711	711
	3 - Mill Road	117	117
	4 - A23 London Road North	2941	2941

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A27 Link Road	1.03	90.61	35.6	100.4	F	1117	1675
2 - A23 London Road South	0.89	25.70	7.0	37.8	D	866	1299
3 - Mill Road	0.39	13.28	0.6	2.8	B	142	213
4 - A23 London Road North	0.76	8.69	3.2	9.8	A	3584	1681

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	916	916	229	0	2021	943	1565	0.586	911	144	0.0	1.4	5.464
2 - A23 London Road South	711	711	178	0	0	1015	1429	0.497	707	838	0.0	1.0	4.973
3 - Mill Road	117	117	29	0	0	1439	720	0.162	116	282	0.0	0.2	5.952
4 - A23 London Road North	2941	919	230	2021	0	172	1811	0.508	915	1383	0.0	1.0	4.068

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	1094	1094	274	0	2414	1129	1455	0.752	1088	173	1.4	2.9	9.658
2 - A23 London Road South	849	849	212	0	0	1213	1309	0.648	845	1004	1.0	1.8	7.729
3 - Mill Road	139	139	35	0	0	1720	596	0.234	139	338	0.2	0.3	7.877
4 - A23 London Road North	3511	1098	274	2414	0	206	1791	0.613	1095	1653	1.0	1.6	5.243

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	1340	1340	335	0	2956	1379	1308	1.025	1261	209	2.9	22.6	47.82
2 - A23 London Road South	1039	1039	260	0	0	1418	1185	0.877	1022	1222	1.8	6.0	20.40
3 - Mill Road	171	171	43	0	0	2033	457	0.373	170	407	0.3	0.6	12.48
4 - A23 London Road North	4301	1344	336	2956	0	250	1766	0.761	1338	1953	1.6	3.1	8.43

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	1340	1340	335	0	2956	1385	1304	1.028	1288	211	22.6	35.6	90.61
2 - A23 London Road South	1039	1039	260	0	0	1444	1169	0.889	1036	1228	6.0	7.0	25.69
3 - Mill Road	171	171	43	0	0	2069	441	0.387	171	411	0.6	0.6	13.27
4 - A23 London Road North	4301	1344	336	2956	0	252	1765	0.762	1344	1987	3.1	3.2	8.68

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	1094	1094	274	0	2414	1137	1450	0.755	1224	178	35.6	3.3	25.09
2 - A23 London Road South	849	849	212	0	0	1341	1232	0.689	867	1020	7.0	2.3	10.38
3 - Mill Road	139	139	35	0	0	1858	535	0.261	140	350	0.6	0.4	9.15
4 - A23 London Road North	3511	1098	274	2414	0	211	1788	0.614	1104	1787	3.2	1.6	5.39

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	916	916	229	0	2021	950	1561	0.587	924	146	3.3	1.4	5.720
2 - A23 London Road South	711	711	178	0	0	1028	1421	0.500	716	845	2.3	1.0	5.156
3 - Mill Road	117	117	29	0	0	1459	711	0.164	117	285	0.4	0.2	6.068
4 - A23 London Road North	2941	919	230	2021	0	174	1809	0.508	922	1402	1.6	1.1	4.133

Queue 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 - A27 Link Road	1.39	0.16	1.22	2.28	2.86			N/A	N/A
2 - A23 London Road South	0.98	0.55	1.01	1.42	1.47			N/A	N/A
3 - Mill Road	0.19	0.00	0.00	0.19	0.19			N/A	N/A
4 - A23 London Road North	1.04	0.56	1.02	1.42	1.47			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 - A27 Link Road	2.91	0.05	0.45	8.10	13.94			N/A	N/A
2 - A23 London Road South	1.81	0.05	0.47	4.80	7.76			N/A	N/A
3 - Mill Road	0.30	0.00	0.00	0.30	0.30			N/A	N/A
4 - A23 London Road North	1.59	0.05	0.50	4.01	6.24			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 - A27 Link Road	22.62	1.17	16.13	49.66	63.76			N/A	N/A
2 - A23 London Road South	6.02	0.04	0.42	16.31	32.33			N/A	N/A
3 - Mill Road	0.58	0.03	0.26	0.58	0.58			N/A	N/A
4 - A23 London Road North	3.12	0.03	0.29	3.12	9.84			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 - A27 Link Road	35.64	2.19	25.77	78.34	100.39			N/A	N/A
2 - A23 London Road South	6.98	0.03	0.35	13.83	37.76			N/A	N/A
3 - Mill Road	0.62	0.03	0.32	1.31	2.81			N/A	N/A
4 - A23 London Road North	3.19	0.03	0.27	3.19	3.19			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 - A27 Link Road	3.28	0.04	0.37	8.34	17.49			N/A	N/A
2 - A23 London Road South	2.30	0.05	0.60	6.18	9.76			N/A	N/A
3 - Mill Road	0.36	0.00	0.00	0.36	0.36			N/A	N/A
4 - A23 London Road North	1.64	0.07	1.00	3.75	5.29			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 - A27 Link Road	1.44	0.03	0.28	1.44	4.69			N/A	N/A
2 - A23 London Road South	1.01	0.03	0.31	1.75	5.07			N/A	N/A
3 - Mill Road	0.20	0.00	0.00	0.20	0.20			N/A	N/A
4 - A23 London Road North	1.06	0.04	0.43	2.59	4.06			N/A	N/A

Junctions 9
ARCADY 9 - Roundabout Module
Version: 9.5.1.7462 © Copyright TRL Limited, 2019
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Filename: Junction 4 A27 exit slip west - A27 Link Road - A27 entry slip west.j9
Path: C:\Users\WR187273\Mott MacDonald\B RMF Brighton DO - T Transport\Junction models\Junction 4 A27 Link Road - A27 exit slip west - A27 entry slip west\05. Model Updates 2023\01. Models
Report generation date: 30/03/2023 16:48:42

- »(Default Analysis Set) - 2021 Baseline, AM
- »(Default Analysis Set) - 2021 Baseline, PM
- »(Default Analysis Set) - 2026 Future Baseline, AM
- »(Default Analysis Set) - 2026 Future Baseline, PM
- »(Default Analysis Set) - 2026 Do Something, AM
- »(Default Analysis Set) - 2026 Do Something, PM
- »(Default Analysis Set) - 2032 Future Baseline, AM
- »(Default Analysis Set) - 2032 Future Baseline, PM
- »(Default Analysis Set) - 2032 Do Something, AM
- »(Default Analysis Set) - 2032 Do Something, PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
A1 - 2021 Baseline										
1 - A23 WBx	D1	7.0	20.18	0.88	C	D2	3.5	11.67	0.78	B
2 - A27 Link Road		5.1	15.78	0.83	C		9.9	28.08	0.92	D
4 - Local Road		0.1	3.55	0.12	A		0.2	3.82	0.17	A
A1 - 2026 Future Baseline										
1 - A23 WBx	D3	10.2	28.70	0.92	D	D4	4.4	14.17	0.82	B
2 - A27 Link Road		6.8	20.23	0.87	C		15.9	43.08	0.96	E
4 - Local Road		0.1	3.58	0.12	A		0.2	3.86	0.18	A
A1 - 2026 Do Something										
1 - A23 WBx	D5	10.8	30.18	0.92	D	D6	4.4	14.17	0.82	B
2 - A27 Link Road		7.2	21.27	0.88	C		15.9	43.08	0.96	E
4 - Local Road		0.1	3.60	0.13	A		0.2	3.86	0.18	A
A1 - 2032 Future Baseline										
1 - A23 WBx	D7	18.1	47.77	0.97	E	D8	6.0	18.54	0.86	C
2 - A27 Link Road		10.0	28.64	0.92	D		30.9	74.03	1.01	F
4 - Local Road		0.2	3.60	0.13	A		0.2	3.91	0.19	A
A1 - 2032 Do Something										
1 - A23 WBx	D9	19.4	50.74	0.97	F	D10	6.0	18.54	0.86	C
2 - A27 Link Road		10.7	30.50	0.92	D		30.9	74.03	1.01	F
4 - Local Road		0.2	3.62	0.13	A		0.2	3.91	0.19	A

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

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

File summary

File Description

Title	(untitled)
Location	
Site number	
Date	31/01/2022
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	
Description	

Units

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

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75	✓			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)	Run automatically
D1	2021 Baseline	AM	ONE HOUR	06:45	08:15	15	✓
D2	2021 Baseline	PM	ONE HOUR	16:45	18:15	15	✓
D3	2026 Future Baseline	AM	ONE HOUR	06:45	08:15	15	✓
D4	2026 Future Baseline	PM	ONE HOUR	16:45	18:15	15	✓
D5	2026 Do Something	AM	ONE HOUR	06:45	08:15	15	✓
D6	2026 Do Something	PM	ONE HOUR	16:45	18:15	15	✓
D7	2032 Future Baseline	AM	ONE HOUR	06:45	08:15	15	✓
D8	2032 Future Baseline	PM	ONE HOUR	16:45	18:15	15	✓
D9	2032 Do Something	AM	ONE HOUR	06:45	08:15	15	✓
D10	2032 Do Something	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

ID	Name	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	(Default Analysis Set)	✓	100.000	100.000

(Default Analysis Set) - 2021 Baseline, AM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	(untitled)	Standard Roundabout		1, 2, 3, 4	16.83	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	A23 WBx	
2	A27 Link Road	
3	A23 WBe	
4	Local Road	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - A23 WBx	5.83	8.17	18.3	55.0	40.0	32.7	
2 - A27 Link Road	7.21	7.48	18.0	50.7	40.0	23.4	
3 - A23 WBe							✓
4 - Local Road	3.60	3.75	3.7	12.0	40.0	5.4	

Bypass

Arm	Arm has bypass	Bypass utilisation (%)
1 - A23 WBx		
2 - A27 Link Road	✓	95
3 - A23 WBe		
4 - Local Road		

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - A23 WBx	0.772	2319
2 - A27 Link Road	0.794	2382
3 - A23 WBe		
4 - Local Road	0.556	1191

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

Arm Capacity Adjustments

Arm	Type	Reason	Percentage capacity adjustment (%)
1 - A23 WBx	Percentage		68.00
2 - A27 Link Road	Percentage		62.00

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2021 Baseline	AM	ONE HOUR	06:45	08:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A23 WBx		ONE HOUR	✓	1187	100.000
2 - A27 Link Road		ONE HOUR	✓	2181	100.000
3 - A23 WBe					
4 - Local Road		ONE HOUR	✓	127	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - A23 WBx	2 - A27 Link Road	3 - A23 WBe	4 - Local Road
From	1 - A23 WBx	0	1174	7	6
	2 - A27 Link Road	0	23	1132	1026
	3 - A23 WBe	Exit-only	Exit-only	Exit-only	Exit-only
	4 - Local Road	0	114	13	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A23 WBx	2 - A27 Link Road	3 - A23 WBe	4 - Local Road
From	1 - A23 WBx	0	6	17	0
	2 - A27 Link Road	0	0	7	9
	3 - A23 WBe	Exit-only	Exit-only	Exit-only	Exit-only
	4 - Local Road	0	1	18	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A23 WBx	0.88	20.18	7.0	35.5	C	1089	1634
2 - A27 Link Road	0.83	15.78	5.1	26.4	C	2001	1522
3 - A23 WBe							
4 - Local Road	0.12	3.55	0.1	0.5	A	117	175

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsign level servi
1 - A23 WBx	894	894	223	0	0	112	1518	0.589	888	0	0.0	1.5	6.009	A
2 - A27 Link Road	1642	832	208	810	0	19	1467	0.567	827	981	0.0	1.4	6.070	A
3 - A23 WBe						789				57				
4 - Local Road	96	96	24	0	0	17	1181	0.081	95	772	0.0	0.1	3.395	A

07:00 - 07:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsign level servi
1 - A23 WBx	1067	1067	267	0	0	135	1506	0.708	1063	0	1.5	2.5	8.545	A
2 - A27 Link Road	1961	994	248	967	0	23	1465	0.678	991	1174	1.4	2.2	8.199	A
3 - A23 WBe						945				69				
4 - Local Road	114	114	29	0	0	21	1179	0.097	114	925	0.1	0.1	3.460	A

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsign level servi
1 - A23 WBx	1307	1307	327	0	0	165	1490	0.877	1291	0	2.5	6.5	17.853	C
2 - A27 Link Road	2401	1217	304	1184	0	28	1463	0.832	1206	1427	2.2	4.9	14.706	B
3 - A23 WBe						1151				84				
4 - Local Road	140	140	35	0	0	25	1177	0.119	140	1126	0.1	0.1	3.554	A

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsign level servi
1 - A23 WBx	1307	1307	327	0	0	165	1490	0.877	1305	0	6.5	7.0	20.176	C
2 - A27 Link Road	2401	1217	304	1184	0	29	1462	0.832	1216	1442	4.9	5.1	15.784	C
3 - A23 WBe						1161				84				
4 - Local Road	140	140	35	0	0	25	1177	0.119	140	1135	0.1	0.1	3.555	A

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsign level servi
1 - A23 WBx	1067	1067	267	0	0	135	1506	0.709	1084	0	7.0	2.7	9.411	A
2 - A27 Link Road	1961	994	248	967	0	24	1465	0.678	1005	1196	5.1	2.4	8.718	A
3 - A23 WBe						959				70				
4 - Local Road	114	114	29	0	0	21	1179	0.097	114	938	0.1	0.1	3.462	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsign level servi
1 - A23 WBx	894	894	223	0	0	113	1518	0.589	898	0	2.7	1.5	6.216	A
2 - A27 Link Road	1642	832	208	810	0	20	1467	0.567	836	992	2.4	1.4	6.245	A
3 - A23 WBe						798				58				
4 - Local Road	96	96	24	0	0	17	1181	0.081	96	780	0.1	0.1	3.399	A

Queue Variation Results for each time segment

06:45 - 07:00

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 - A23 WBx	1.50	0.61	1.37	1.85	1.99			N/A	N/A
2 - A27 Link Road	1.41	0.60	1.09	1.52	1.58			N/A	N/A
3 - A23 WBe									
4 - Local Road	0.09	0.00	0.00	0.09	0.09			N/A	N/A

07:00 - 07:15

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 - A23 WBx	2.50	0.06	0.66	6.76	10.64			N/A	N/A
2 - A27 Link Road	2.24	0.06	0.78	5.85	8.96			N/A	N/A
3 - A23 WBe									
4 - Local Road	0.11	0.00	0.00	0.11	0.11			N/A	N/A

07:15 - 07:30

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 - A23 WBx	6.52	0.04	0.42	16.69	35.48			N/A	N/A
2 - A27 Link Road	4.94	0.04	0.36	9.40	26.37			N/A	N/A
3 - A23 WBe									
4 - Local Road	0.14	0.03	0.26	0.47	0.50			N/A	N/A

07:30 - 07:45

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 - A23 WBx	6.97	0.03	0.34	9.06	33.88			N/A	N/A
2 - A27 Link Road	5.15	0.03	0.32	5.15	18.33			N/A	N/A
3 - A23 WBe									
4 - Local Road	0.14	0.00	0.00	0.14	0.14			N/A	N/A

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 - A23 WBx	2.67	0.05	0.47	7.36	12.61			N/A	N/A
2 - A27 Link Road	2.36	0.05	0.53	6.40	10.39			N/A	N/A
3 - A23 WBe									
4 - Local Road	0.11	0.00	0.00	0.11	0.11			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 - A23 WBx	1.55	0.04	0.35	3.43	7.95			N/A	N/A
2 - A27 Link Road	1.45	0.04	0.39	3.61	7.15			N/A	N/A
3 - A23 WBe									
4 - Local Road	0.09	0.00	0.00	0.09	0.09			N/A	N/A

(Default Analysis Set) - 2021 Baseline, PM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	(untitled)	Standard Roundabout		1, 2, 3, 4	22.58	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2021 Baseline	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A23 WBx		ONE HOUR	✓	1013	100.000
2 - A27 Link Road		ONE HOUR	✓	2624	100.000
3 - A23 WBe					
4 - Local Road		ONE HOUR	✓	180	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - A23 WBx	2 - A27 Link Road	3 - A23 WBe	4 - Local Road
From	1 - A23 WBx	0	1004	3	6
	2 - A27 Link Road	0	74	1473	1077
	3 - A23 WBe	Exit-only	Exit-only	Exit-only	Exit-only
	4 - Local Road	0	170	10	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A23 WBx	2 - A27 Link Road	3 - A23 WBe	4 - Local Road
From	1 - A23 WBx	0	3	0	0
	2 - A27 Link Road	0	0	2	2
	3 - A23 WBe	Exit-only	Exit-only	Exit-only	Exit-only
	4 - Local Road	0	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A23 WBx	0.78	11.67	3.5	15.0	B	930	1394
2 - A27 Link Road	0.92	28.08	9.9	54.4	D	2408	1686
3 - A23 WBe							
4 - Local Road	0.17	3.82	0.2	0.5	A	165	248

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsign level serv
1 - A23 WBx	763	763	191	0	0	190	1477	0.516	758	0	0.0	1.1	5.105	A
2 - A27 Link Road	1975	922	230	1054	0	14	1470	0.627	915	934	0.0	1.7	6.538	A
3 - A23 WBe						865				65				
4 - Local Road	136	136	34	0	0	55	1160	0.117	135	809	0.0	0.1	3.530	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsign level serv
1 - A23 WBx	911	911	228	0	0	228	1457	0.625	908	0	1.1	1.7	6.694	A
2 - A27 Link Road	2359	1101	275	1258	0	17	1468	0.750	1096	1119	1.7	2.9	9.717	A
3 - A23 WBe						1035				78				
4 - Local Road	162	162	40	0	0	66	1154	0.140	162	969	0.1	0.2	3.648	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsign level serv
1 - A23 WBx	1115	1115	279	0	0	278	1431	0.779	1108	0	1.7	3.4	11.198	B
2 - A27 Link Road	2889	1348	337	1541	0	21	1466	0.920	1325	1366	2.9	8.8	22.821	C
3 - A23 WBe						1252				94				
4 - Local Road	198	198	50	0	0	80	1146	0.173	198	1172	0.2	0.2	3.817	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsign level serv
1 - A23 WBx	1115	1115	279	0	0	279	1430	0.780	1115	0	3.4	3.5	11.670	B
2 - A27 Link Road	2889	1348	337	1541	0	21	1466	0.920	1344	1373	8.8	9.9	28.077	D
3 - A23 WBe						1270				95				
4 - Local Road	198	198	50	0	0	81	1146	0.173	198	1189	0.2	0.2	3.820	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsign level serv
1 - A23 WBx	911	911	228	0	0	230	1456	0.625	918	0	3.5	1.7	6.946	A
2 - A27 Link Road	2359	1101	275	1258	0	17	1468	0.750	1128	1131	9.9	3.2	11.540	B
3 - A23 WBe						1065				80				
4 - Local Road	162	162	40	0	0	68	1153	0.140	162	997	0.2	0.2	3.656	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsign level serv
1 - A23 WBx	763	763	191	0	0	192	1476	0.517	765	0	1.7	1.1	5.210	A
2 - A27 Link Road	1975	922	230	1054	0	14	1469	0.627	928	943	3.2	1.7	6.840	A
3 - A23 WBe						876				66				
4 - Local Road	136	136	34	0	0	56	1160	0.117	136	820	0.2	0.1	3.535	A

Queue 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 - A23 WBx	1.08	0.56	1.03	1.44	1.49			N/A	N/A
2 - A27 Link Road	1.68	0.62	1.14	2.01	2.50			N/A	N/A
3 - A23 WBe									
4 - Local Road	0.13	0.00	0.00	0.13	0.13			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 - A23 WBx	1.68	0.06	0.68	4.17	6.33			N/A	N/A
2 - A27 Link Road	2.93	0.06	0.77	8.04	12.72			N/A	N/A
3 - A23 WBe									
4 - Local Road	0.16	0.00	0.00	0.16	0.16			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 - A23 WBx	3.43	0.03	0.31	3.43	15.02			N/A	N/A
2 - A27 Link Road	8.83	0.05	0.85	25.65	44.50			N/A	N/A
3 - A23 WBe									
4 - Local Road	0.21	0.03	0.26	0.46	0.49			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 - A23 WBx	3.53	0.03	0.28	3.53	6.62			N/A	N/A
2 - A27 Link Road	9.87	0.04	0.40	23.93	54.39			N/A	N/A
3 - A23 WBe									
4 - Local Road	0.21	0.03	0.26	0.46	0.49			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 - A23 WBx	1.75	0.06	0.78	4.33	6.47			N/A	N/A
2 - A27 Link Road	3.19	0.04	0.44	8.86	15.95			N/A	N/A
3 - A23 WBe									
4 - Local Road	0.16	0.00	0.00	0.16	0.16			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 - A23 WBx	1.11	0.04	0.40	2.80	4.82			N/A	N/A
2 - A27 Link Road	1.75	0.03	0.33	3.43	9.14			N/A	N/A
3 - A23 WBe									
4 - Local Road	0.13	0.00	0.00	0.13	0.13			N/A	N/A

(Default Analysis Set) - 2026 Future Baseline, AM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	(untitled)	Standard Roundabout		1, 2, 3, 4	22.50	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2026 Future Baseline	AM	ONE HOUR	06:45	08:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A23 WBx		ONE HOUR	✓	1241	100.000
2 - A27 Link Road		ONE HOUR	✓	2282	100.000
3 - A23 WBe					
4 - Local Road		ONE HOUR	✓	133	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - A23 WBx	2 - A27 Link Road	3 - A23 WBe	4 - Local Road
From	1 - A23 WBx	0	1228	7	6
	2 - A27 Link Road	0	24	1184	1074
	3 - A23 WBe	Exit-only	Exit-only	Exit-only	Exit-only
	4 - Local Road	0	119	14	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A23 WBx	2 - A27 Link Road	3 - A23 WBe	4 - Local Road
From	1 - A23 WBx	0	6	17	0
	2 - A27 Link Road	0	0	7	9
	3 - A23 WBe	Exit-only	Exit-only	Exit-only	Exit-only
	4 - Local Road	0	1	18	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A23 WBx	0.92	28.70	10.2	56.2	D	1139	1708
2 - A27 Link Road	0.87	20.23	6.8	34.8	C	2094	1593
3 - A23 WBe							
4 - Local Road	0.12	3.58	0.1	0.5	A	122	183

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsign level serv
1 - A23 WBx	934	934	234	0	0	118	1515	0.617	928	0	0.0	1.7	6.435	A
2 - A27 Link Road	1718	871	218	847	0	20	1467	0.594	865	1025	0.0	1.6	6.449	A
3 - A23 WBe						825				60				
4 - Local Road	100	100	25	0	0	18	1181	0.085	100	807	0.0	0.1	3.412	A

07:00 - 07:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsign level serv
1 - A23 WBx	1116	1116	279	0	0	141	1503	0.742	1111	0	1.7	2.9	9.616	A
2 - A27 Link Road	2051	1040	260	1011	0	24	1465	0.710	1036	1227	1.6	2.6	9.059	A
3 - A23 WBe						989				72				
4 - Local Road	120	120	30	0	0	21	1179	0.101	119	967	0.1	0.1	3.481	A

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsign level serv
1 - A23 WBx	1366	1366	342	0	0	172	1486	0.919	1342	0	2.9	9.1	23.211	C
2 - A27 Link Road	2513	1274	319	1238	0	29	1462	0.871	1259	1485	2.6	6.4	18.041	C
3 - A23 WBe						1201				87				
4 - Local Road	146	146	37	0	0	26	1176	0.125	146	1175	0.1	0.1	3.581	A

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsign level serv
1 - A23 WBx	1366	1366	342	0	0	173	1486	0.919	1362	0	9.1	10.2	28.703	D
2 - A27 Link Road	2513	1274	319	1238	0	30	1462	0.872	1272	1505	6.4	6.8	20.234	C
3 - A23 WBe						1214				88				
4 - Local Road	146	146	37	0	0	26	1176	0.125	146	1188	0.1	0.1	3.581	A

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsign level serv
1 - A23 WBx	1116	1116	279	0	0	142	1503	0.742	1144	0	10.2	3.2	11.414	B
2 - A27 Link Road	2051	1040	260	1011	0	25	1464	0.710	1057	1261	6.8	2.8	9.964	A
3 - A23 WBe						1008				73				
4 - Local Road	120	120	30	0	0	22	1179	0.101	120	986	0.1	0.1	3.485	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsign level serv
1 - A23 WBx	934	934	234	0	0	118	1515	0.617	940	0	3.2	1.7	6.715	A
2 - A27 Link Road	1718	871	218	847	0	20	1466	0.594	876	1038	2.8	1.6	6.685	A
3 - A23 WBe						836				61				
4 - Local Road	100	100	25	0	0	18	1181	0.085	100	817	0.1	0.1	3.416	A

Queue Variation Results for each time segment

06:45 - 07:00

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 - A23 WBx	1.68	0.63	1.09	2.04	2.38			N/A	N/A
2 - A27 Link Road	1.56	0.63	1.45	1.91	2.05			N/A	N/A
3 - A23 WBe									
4 - Local Road	0.09	0.00	0.00	0.09	0.09			N/A	N/A

07:00 - 07:15

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 - A23 WBx	2.94	0.06	0.74	8.08	12.78			N/A	N/A
2 - A27 Link Road	2.58	0.06	0.80	6.93	10.74			N/A	N/A
3 - A23 WBe									
4 - Local Road	0.12	0.00	0.00	0.12	0.12			N/A	N/A

07:15 - 07:30

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 - A23 WBx	9.12	0.06	0.93	26.50	45.74			N/A	N/A
2 - A27 Link Road	6.40	0.04	0.42	16.15	34.78			N/A	N/A
3 - A23 WBe									
4 - Local Road	0.15	0.03	0.26	0.47	0.50			N/A	N/A

07:30 - 07:45

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 - A23 WBx	10.22	0.04	0.42	25.03	56.24			N/A	N/A
2 - A27 Link Road	6.82	0.03	0.34	8.39	32.71			N/A	N/A
3 - A23 WBe									
4 - Local Road	0.15	0.03	0.26	0.46	0.49			N/A	N/A

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 - A23 WBx	3.19	0.05	0.45	8.84	15.95			N/A	N/A
2 - A27 Link Road	2.76	0.05	0.49	7.62	13.04			N/A	N/A
3 - A23 WBe									
4 - Local Road	0.12	0.00	0.00	0.12	0.12			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 - A23 WBx	1.74	0.03	0.34	3.26	9.06			N/A	N/A
2 - A27 Link Road	1.62	0.04	0.37	3.73	8.35			N/A	N/A
3 - A23 WBe									
4 - Local Road	0.10	0.00	0.00	0.10	0.10			N/A	N/A

(Default Analysis Set) - 2026 Future Baseline, PM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	(untitled)	Standard Roundabout		1, 2, 3, 4	33.56	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2026 Future Baseline	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A23 WBx		ONE HOUR	✓	1059	100.000
2 - A27 Link Road		ONE HOUR	✓	2743	100.000
3 - A23 WBe					
4 - Local Road		ONE HOUR	✓	188	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - A23 WBx	2 - A27 Link Road	3 - A23 WBe	4 - Local Road
From	1 - A23 WBx	0	1050	3	6
	2 - A27 Link Road	0	77	1540	1126
	3 - A23 WBe	Exit-only	Exit-only	Exit-only	Exit-only
	4 - Local Road	0	178	10	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A23 WBx	2 - A27 Link Road	3 - A23 WBe	4 - Local Road
From	1 - A23 WBx	0	3	0	0
	2 - A27 Link Road	0	0	2	2
	3 - A23 WBe	Exit-only	Exit-only	Exit-only	Exit-only
	4 - Local Road	0	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A23 WBx	0.82	14.17	4.4	21.9	B	972	1458
2 - A27 Link Road	0.96	43.08	15.9	77.9	E	2517	1762
3 - A23 WBe							
4 - Local Road	0.18	3.86	0.2	0.5	A	173	259

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsign level serv
1 - A23 WBx	797	797	199	0	0	198	1473	0.541	792	0	0.0	1.2	5.389	A
2 - A27 Link Road	2065	964	241	1101	0	14	1470	0.656	956	977	0.0	1.9	7.043	A
3 - A23 WBe						903				67				
4 - Local Road	142	142	35	0	0	58	1159	0.122	141	846	0.0	0.1	3.555	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsign level serv
1 - A23 WBx	952	952	238	0	0	238	1452	0.656	949	0	1.2	1.9	7.296	A
2 - A27 Link Road	2466	1151	288	1315	0	17	1468	0.784	1144	1170	1.9	3.5	11.101	B
3 - A23 WBe						1081				81				
4 - Local Road	169	169	42	0	0	69	1152	0.147	169	1012	0.1	0.2	3.680	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsign level serv
1 - A23 WBx	1166	1166	291	0	0	289	1425	0.818	1157	0	1.9	4.3	13.292	B
2 - A27 Link Road	3020	1409	352	1611	0	21	1466	0.961	1371	1425	3.5	13.0	30.501	D
3 - A23 WBe						1295				97				
4 - Local Road	207	207	52	0	0	82	1145	0.181	207	1213	0.2	0.2	3.858	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsign level serv
1 - A23 WBx	1166	1166	291	0	0	291	1424	0.819	1165	0	4.3	4.4	14.167	B
2 - A27 Link Road	3020	1409	352	1611	0	21	1466	0.961	1398	1435	13.0	15.9	43.084	E
3 - A23 WBe						1320				98				
4 - Local Road	207	207	52	0	0	84	1144	0.181	207	1236	0.2	0.2	3.863	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsign level serv
1 - A23 WBx	952	952	238	0	0	241	1450	0.656	962	0	4.4	2.0	7.702	A
2 - A27 Link Road	2466	1151	288	1315	0	17	1468	0.784	1199	1186	15.9	3.9	15.735	C
3 - A23 WBe						1132				84				
4 - Local Road	169	169	42	0	0	72	1151	0.147	169	1060	0.2	0.2	3.688	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsign level serv
1 - A23 WBx	797	797	199	0	0	200	1472	0.542	800	0	2.0	1.2	5.523	A
2 - A27 Link Road	2065	964	241	1101	0	14	1469	0.656	971	986	3.9	2.0	7.471	A
3 - A23 WBe						918				68				
4 - Local Road	142	142	35	0	0	58	1158	0.122	142	859	0.2	0.1	3.563	A

Queue 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 - A23 WBx	1.19	0.56	1.03	1.44	1.49			N/A	N/A
2 - A27 Link Road	1.90	0.60	1.30	2.73	3.06			N/A	N/A
3 - A23 WBe									
4 - Local Road	0.14	0.00	0.00	0.14	0.14			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 - A23 WBx	1.91	0.05	0.62	4.96	7.68			N/A	N/A
2 - A27 Link Road	3.50	0.06	0.96	9.69	15.17			N/A	N/A
3 - A23 WBe									
4 - Local Road	0.17	0.00	0.00	0.17	0.17			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 - A23 WBx	4.28	0.03	0.33	6.76	21.88			N/A	N/A
2 - A27 Link Road	13.01	0.11	3.81	36.58	54.67			N/A	N/A
3 - A23 WBe									
4 - Local Road	0.22	0.03	0.26	0.46	0.48			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 - A23 WBx	4.44	0.03	0.29	4.44	13.47			N/A	N/A
2 - A27 Link Road	15.94	0.07	1.68	47.05	77.91			N/A	N/A
3 - A23 WBe									
4 - Local Road	0.22	0.03	0.26	0.47	0.50			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 - A23 WBx	2.00	0.05	0.53	5.31	8.36			N/A	N/A
2 - A27 Link Road	3.92	0.04	0.43	10.86	20.10			N/A	N/A
3 - A23 WBe									
4 - Local Road	0.17	0.00	0.00	0.17	0.17			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 - A23 WBx	1.23	0.04	0.37	3.04	5.89			N/A	N/A
2 - A27 Link Road	1.98	0.03	0.32	3.19	10.10			N/A	N/A
3 - A23 WBe									
4 - Local Road	0.14	0.00	0.00	0.14	0.14			N/A	N/A

(Default Analysis Set) - 2026 Do Something, AM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	(untitled)	Standard Roundabout		1, 2, 3, 4	23.64	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2026 Do Something	AM	ONE HOUR	06:45	08:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A23 WBx		ONE HOUR	✓	1244	100.000
2 - A27 Link Road		ONE HOUR	✓	2292	100.000
3 - A23 WBe					
4 - Local Road		ONE HOUR	✓	135	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - A23 WBx	2 - A27 Link Road	3 - A23 WBe	4 - Local Road
From	1 - A23 WBx	0	1231	7	6
	2 - A27 Link Road	0	30	1185	1077
	3 - A23 WBe	Exit-only	Exit-only	Exit-only	Exit-only
	4 - Local Road	0	121	14	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A23 WBx	2 - A27 Link Road	3 - A23 WBe	4 - Local Road
From	1 - A23 WBx	0	6	17	0
	2 - A27 Link Road	0	7	7	9
	3 - A23 WBe	Exit-only	Exit-only	Exit-only	Exit-only
	4 - Local Road	0	1	18	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A23 WBx	0.92	30.18	10.8	59.0	D	1142	1712
2 - A27 Link Road	0.88	21.27	7.2	36.5	C	2103	1605
3 - A23 WBe							
4 - Local Road	0.13	3.60	0.1	0.5	A	124	186

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsign level serv
1 - A23 WBx	937	937	234	0	0	124	1512	0.619	930	0	0.0	1.7	6.492	A
2 - A27 Link Road	1726	878	220	848	0	20	1467	0.599	872	1033	0.0	1.6	6.526	A
3 - A23 WBe						832				60				
4 - Local Road	102	102	25	0	0	22	1178	0.086	101	809	0.0	0.1	3.424	A

07:00 - 07:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsign level serv
1 - A23 WBx	1118	1118	280	0	0	148	1499	0.746	1113	0	1.7	3.0	9.766	A
2 - A27 Link Road	2060	1048	262	1012	0	24	1465	0.716	1044	1237	1.6	2.7	9.236	A
3 - A23 WBe						997				72				
4 - Local Road	121	121	30	0	0	27	1176	0.103	121	970	0.1	0.1	3.496	A

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsign level serv
1 - A23 WBx	1370	1370	342	0	0	181	1482	0.924	1344	0	3.0	9.5	24.049	C
2 - A27 Link Road	2524	1284	321	1239	0	29	1462	0.878	1268	1495	2.7	6.7	18.770	C
3 - A23 WBe						1210				87				
4 - Local Road	149	149	37	0	0	33	1173	0.127	149	1177	0.1	0.1	3.600	A

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsign level serv
1 - A23 WBx	1370	1370	342	0	0	182	1482	0.924	1365	0	9.5	10.8	30.183	D
2 - A27 Link Road	2524	1284	321	1239	0	30	1462	0.878	1282	1517	6.7	7.2	21.272	C
3 - A23 WBe						1224				88				
4 - Local Road	149	149	37	0	0	33	1172	0.127	149	1191	0.1	0.1	3.601	A

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsign level serv
1 - A23 WBx	1118	1118	280	0	0	149	1499	0.746	1148	0	10.8	3.3	11.758	B
2 - A27 Link Road	2060	1048	262	1012	0	25	1464	0.716	1066	1273	7.2	2.8	10.246	B
3 - A23 WBe						1017				73				
4 - Local Road	121	121	30	0	0	27	1175	0.103	121	990	0.1	0.1	3.500	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsign level serv
1 - A23 WBx	937	937	234	0	0	124	1512	0.620	943	0	3.3	1.8	6.783	A
2 - A27 Link Road	1726	878	220	848	0	20	1466	0.599	883	1047	2.8	1.7	6.774	A
3 - A23 WBe						842				61				
4 - Local Road	102	102	25	0	0	23	1178	0.086	102	820	0.1	0.1	3.425	A

Queue Variation Results for each time segment

06:45 - 07:00

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 - A23 WBx	1.70	0.63	1.11	2.06	2.50			N/A	N/A
2 - A27 Link Road	1.60	0.64	1.50	1.94	2.07			N/A	N/A
3 - A23 WBe									
4 - Local Road	0.10	0.00	0.00	0.10	0.10			N/A	N/A

07:00 - 07:15

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 - A23 WBx	2.99	0.06	0.76	8.23	13.04			N/A	N/A
2 - A27 Link Road	2.65	0.06	0.82	7.14	11.09			N/A	N/A
3 - A23 WBe									
4 - Local Road	0.12	0.00	0.00	0.12	0.12			N/A	N/A

07:15 - 07:30

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 - A23 WBx	9.52	0.06	1.17	27.76	46.91			N/A	N/A
2 - A27 Link Road	6.73	0.04	0.44	17.60	36.53			N/A	N/A
3 - A23 WBe									
4 - Local Road	0.15	0.03	0.26	0.47	0.50			N/A	N/A

07:30 - 07:45

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 - A23 WBx	10.76	0.04	0.43	27.56	59.02			N/A	N/A
2 - A27 Link Road	7.21	0.04	0.35	10.15	35.79			N/A	N/A
3 - A23 WBe									
4 - Local Road	0.15	0.03	0.26	0.46	0.49			N/A	N/A

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 - A23 WBx	3.26	0.05	0.45	9.02	16.37			N/A	N/A
2 - A27 Link Road	2.84	0.05	0.49	7.87	13.57			N/A	N/A
3 - A23 WBe									
4 - Local Road	0.12	0.00	0.00	0.12	0.12			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 - A23 WBx	1.76	0.03	0.34	3.21	9.14			N/A	N/A
2 - A27 Link Road	1.66	0.04	0.37	3.72	8.53			N/A	N/A
3 - A23 WBe									
4 - Local Road	0.10	0.00	0.00	0.10	0.10			N/A	N/A

(Default Analysis Set) - 2026 Do Something, PM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	(untitled)	Standard Roundabout		1, 2, 3, 4	33.56	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2026 Do Something	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A23 WBx		ONE HOUR	✓	1059	100.000
2 - A27 Link Road		ONE HOUR	✓	2743	100.000
3 - A23 WBe					
4 - Local Road		ONE HOUR	✓	188	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - A23 WBx	2 - A27 Link Road	3 - A23 WBe	4 - Local Road
From	1 - A23 WBx	0	1050	3	6
	2 - A27 Link Road	0	77	1540	1126
	3 - A23 WBe	Exit-only	Exit-only	Exit-only	Exit-only
	4 - Local Road	0	178	10	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A23 WBx	2 - A27 Link Road	3 - A23 WBe	4 - Local Road
From	1 - A23 WBx	0	3	0	0
	2 - A27 Link Road	0	0	2	2
	3 - A23 WBe	Exit-only	Exit-only	Exit-only	Exit-only
	4 - Local Road	0	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A23 WBx	0.82	14.17	4.4	21.9	B	972	1458
2 - A27 Link Road	0.96	43.08	15.9	77.9	E	2517	1762
3 - A23 WBe							
4 - Local Road	0.18	3.86	0.2	0.5	A	173	259

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsign level serv
1 - A23 WBx	797	797	199	0	0	198	1473	0.541	792	0	0.0	1.2	5.389	A
2 - A27 Link Road	2065	964	241	1101	0	14	1470	0.656	956	977	0.0	1.9	7.043	A
3 - A23 WBe						903				67				
4 - Local Road	142	142	35	0	0	58	1159	0.122	141	846	0.0	0.1	3.555	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsign level serv
1 - A23 WBx	952	952	238	0	0	238	1452	0.656	949	0	1.2	1.9	7.296	A
2 - A27 Link Road	2466	1151	288	1315	0	17	1468	0.784	1144	1170	1.9	3.5	11.101	B
3 - A23 WBe						1081				81				
4 - Local Road	169	169	42	0	0	69	1152	0.147	169	1012	0.1	0.2	3.680	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsign level serv
1 - A23 WBx	1166	1166	291	0	0	289	1425	0.818	1157	0	1.9	4.3	13.292	B
2 - A27 Link Road	3020	1409	352	1611	0	21	1466	0.961	1371	1425	3.5	13.0	30.501	D
3 - A23 WBe						1295				97				
4 - Local Road	207	207	52	0	0	82	1145	0.181	207	1213	0.2	0.2	3.858	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsign level serv
1 - A23 WBx	1166	1166	291	0	0	291	1424	0.819	1165	0	4.3	4.4	14.167	B
2 - A27 Link Road	3020	1409	352	1611	0	21	1466	0.961	1398	1435	13.0	15.9	43.084	E
3 - A23 WBe						1320				98				
4 - Local Road	207	207	52	0	0	84	1144	0.181	207	1236	0.2	0.2	3.863	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsign level serv
1 - A23 WBx	952	952	238	0	0	241	1450	0.656	962	0	4.4	2.0	7.702	A
2 - A27 Link Road	2466	1151	288	1315	0	17	1468	0.784	1199	1186	15.9	3.9	15.735	C
3 - A23 WBe						1132				84				
4 - Local Road	169	169	42	0	0	72	1151	0.147	169	1060	0.2	0.2	3.688	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsign level serv
1 - A23 WBx	797	797	199	0	0	200	1472	0.542	800	0	2.0	1.2	5.523	A
2 - A27 Link Road	2065	964	241	1101	0	14	1469	0.656	971	986	3.9	2.0	7.471	A
3 - A23 WBe						918				68				
4 - Local Road	142	142	35	0	0	58	1158	0.122	142	859	0.2	0.1	3.563	A

Queue 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 - A23 WBx	1.19	0.56	1.03	1.44	1.49			N/A	N/A
2 - A27 Link Road	1.90	0.60	1.30	2.73	3.06			N/A	N/A
3 - A23 WBe									
4 - Local Road	0.14	0.00	0.00	0.14	0.14			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 - A23 WBx	1.91	0.05	0.62	4.96	7.68			N/A	N/A
2 - A27 Link Road	3.50	0.06	0.96	9.69	15.17			N/A	N/A
3 - A23 WBe									
4 - Local Road	0.17	0.00	0.00	0.17	0.17			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 - A23 WBx	4.28	0.03	0.33	6.76	21.88			N/A	N/A
2 - A27 Link Road	13.01	0.11	3.81	36.58	54.67			N/A	N/A
3 - A23 WBe									
4 - Local Road	0.22	0.03	0.26	0.46	0.48			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 - A23 WBx	4.44	0.03	0.29	4.44	13.47			N/A	N/A
2 - A27 Link Road	15.94	0.07	1.68	47.05	77.91			N/A	N/A
3 - A23 WBe									
4 - Local Road	0.22	0.03	0.26	0.47	0.50			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 - A23 WBx	2.00	0.05	0.53	5.31	8.36			N/A	N/A
2 - A27 Link Road	3.92	0.04	0.43	10.86	20.10			N/A	N/A
3 - A23 WBe									
4 - Local Road	0.17	0.00	0.00	0.17	0.17			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 - A23 WBx	1.23	0.04	0.37	3.04	5.89			N/A	N/A
2 - A27 Link Road	1.98	0.03	0.32	3.19	10.10			N/A	N/A
3 - A23 WBe									
4 - Local Road	0.14	0.00	0.00	0.14	0.14			N/A	N/A

(Default Analysis Set) - 2032 Future Baseline, AM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	(untitled)	Standard Roundabout		1, 2, 3, 4	34.24	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2032 Future Baseline	AM	ONE HOUR	06:45	08:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A23 WBx		ONE HOUR	✓	1304	100.000
2 - A27 Link Road		ONE HOUR	✓	2395	100.000
3 - A23 WBe					
4 - Local Road		ONE HOUR	✓	139	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - A23 WBx	2 - A27 Link Road	3 - A23 WBe	4 - Local Road
From	1 - A23 WBx	0	1289	8	7
	2 - A27 Link Road	0	25	1243	1127
	3 - A23 WBe	Exit-only	Exit-only	Exit-only	Exit-only
	4 - Local Road	0	125	14	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A23 WBx	2 - A27 Link Road	3 - A23 WBe	4 - Local Road
From	1 - A23 WBx	0	6	17	0
	2 - A27 Link Road	0	0	7	9
	3 - A23 WBe	Exit-only	Exit-only	Exit-only	Exit-only
	4 - Local Road	0	1	18	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A23 WBx	0.97	47.77	18.1	84.1	E	1197	1795
2 - A27 Link Road	0.92	28.64	10.0	55.0	D	2198	1671
3 - A23 WBe							
4 - Local Road	0.13	3.60	0.2	0.5	A	128	191

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsign level serv
1 - A23 WBx	982	982	245	0	0	123	1512	0.649	974	0	0.0	1.9	7.004	A
2 - A27 Link Road	1803	914	229	889	0	22	1466	0.624	907	1075	0.0	1.8	6.928	A
3 - A23 WBe						866				63				
4 - Local Road	105	105	26	0	0	19	1180	0.089	104	847	0.0	0.1	3.426	A

07:00 - 07:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsign level serv
1 - A23 WBx	1172	1172	293	0	0	147	1500	0.782	1166	0	1.9	3.6	11.214	B
2 - A27 Link Road	2153	1091	273	1062	0	26	1464	0.746	1086	1287	1.8	3.1	10.243	B
3 - A23 WBe						1037				75				
4 - Local Road	125	125	31	0	0	22	1178	0.106	125	1015	0.1	0.1	3.498	A

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsign level serv
1 - A23 WBx	1436	1436	359	0	0	180	1482	0.968	1392	0	3.6	14.4	32.667	D
2 - A27 Link Road	2637	1337	334	1300	0	31	1461	0.915	1313	1541	3.1	8.9	23.439	C
3 - A23 WBe						1254				91				
4 - Local Road	153	153	38	0	0	27	1176	0.130	153	1226	0.1	0.2	3.603	A

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsign level serv
1 - A23 WBx	1436	1436	359	0	0	180	1482	0.969	1421	0	14.4	18.1	47.775	E
2 - A27 Link Road	2637	1337	334	1300	0	32	1461	0.915	1333	1570	8.9	10.0	28.645	D
3 - A23 WBe						1272				92				
4 - Local Road	153	153	38	0	0	27	1175	0.130	153	1245	0.2	0.2	3.604	A

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsign level serv
1 - A23 WBx	1172	1172	293	0	0	148	1499	0.782	1229	0	18.1	4.1	16.701	C
2 - A27 Link Road	2153	1091	273	1062	0	27	1463	0.746	1118	1350	10.0	3.3	12.140	B
3 - A23 WBe						1067				77				
4 - Local Road	125	125	31	0	0	23	1178	0.106	125	1044	0.2	0.1	3.503	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsign level serv
1 - A23 WBx	982	982	245	0	0	124	1512	0.649	990	0	4.1	2.0	7.430	A
2 - A27 Link Road	1803	914	229	889	0	22	1466	0.624	920	1092	3.3	1.8	7.260	A
3 - A23 WBe						878				64				
4 - Local Road	105	105	26	0	0	19	1180	0.089	105	859	0.1	0.1	3.429	A

Queue Variation Results for each time segment
06:45 - 07:00

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 - A23 WBx	1.92	0.60	1.29	2.81	3.17			N/A	N/A
2 - A27 Link Road	1.77	0.66	1.20	2.10	2.47			N/A	N/A
3 - A23 WBe									
4 - Local Road	0.10	0.00	0.00	0.10	0.10			N/A	N/A

07:00 - 07:15

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 - A23 WBx	3.60	0.06	0.96	9.99	15.69			N/A	N/A
2 - A27 Link Road	3.06	0.06	0.90	8.35	13.00			N/A	N/A
3 - A23 WBe									
4 - Local Road	0.12	0.00	0.00	0.12	0.12			N/A	N/A

07:15 - 07:30

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 - A23 WBx	14.42	0.14	5.13	39.62	57.79			N/A	N/A
2 - A27 Link Road	8.95	0.06	0.82	25.95	45.25			N/A	N/A
3 - A23 WBe									
4 - Local Road	0.15	0.03	0.26	0.47	0.50			N/A	N/A

07:30 - 07:45

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 - A23 WBx	18.15	0.09	3.19	53.13	84.11			N/A	N/A
2 - A27 Link Road	9.98	0.04	0.42	23.90	55.03			N/A	N/A
3 - A23 WBe									
4 - Local Road	0.15	0.03	0.26	0.46	0.49			N/A	N/A

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 - A23 WBx	4.05	0.04	0.45	11.14	20.82			N/A	N/A
2 - A27 Link Road	3.34	0.05	0.47	9.28	16.68			N/A	N/A
3 - A23 WBe									
4 - Local Road	0.12	0.00	0.00	0.12	0.12			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 - A23 WBx	2.01	0.03	0.33	2.92	9.98			N/A	N/A
2 - A27 Link Road	1.84	0.04	0.35	3.67	9.63			N/A	N/A
3 - A23 WBe									
4 - Local Road	0.10	0.00	0.00	0.10	0.10			N/A	N/A

(Default Analysis Set) - 2032 Future Baseline, PM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	(untitled)	Standard Roundabout		1, 2, 3, 4	56.01	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2032 Future Baseline	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A23 WBx		ONE HOUR	✓	1111	100.000
2 - A27 Link Road		ONE HOUR	✓	2878	100.000
3 - A23 WBe					
4 - Local Road		ONE HOUR	✓	197	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - A23 WBx	2 - A27 Link Road	3 - A23 WBe	4 - Local Road
From	1 - A23 WBx	0	1101	3	7
	2 - A27 Link Road	0	81	1616	1181
	3 - A23 WBe	Exit-only	Exit-only	Exit-only	Exit-only
	4 - Local Road	0	186	11	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A23 WBx	2 - A27 Link Road	3 - A23 WBe	4 - Local Road
From	1 - A23 WBx	0	3	0	0
	2 - A27 Link Road	0	0	2	2
	3 - A23 WBe	Exit-only	Exit-only	Exit-only	Exit-only
	4 - Local Road	0	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A23 WBx	0.86	18.54	6.0	31.0	C	1019	1529
2 - A27 Link Road	1.01	74.03	30.9	101.1	F	2641	1848
3 - A23 WBe							
4 - Local Road	0.19	3.91	0.2	0.8	A	181	271

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsign level serv
1 - A23 WBx	836	836	209	0	0	208	1468	0.570	831	0	0.0	1.3	5.751	A
2 - A27 Link Road	2167	1011	253	1156	0	16	1469	0.688	1002	1024	0.0	2.2	7.721	A
3 - A23 WBe						947				71				
4 - Local Road	148	148	37	0	0	60	1157	0.128	148	887	0.0	0.1	3.584	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsign level serv
1 - A23 WBx	999	999	250	0	0	249	1446	0.691	995	0	1.3	2.2	8.122	A
2 - A27 Link Road	2587	1207	302	1380	0	19	1467	0.823	1198	1226	2.2	4.4	13.212	B
3 - A23 WBe						1133				85				
4 - Local Road	177	177	44	0	0	72	1151	0.154	177	1060	0.1	0.2	3.718	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsign level serv
1 - A23 WBx	1223	1223	306	0	0	302	1418	0.862	1209	0	2.2	5.7	16.649	C
2 - A27 Link Road	3169	1478	370	1690	0	23	1465	1.009	1411	1488	4.4	21.3	43.320	E
3 - A23 WBe						1334				100				
4 - Local Road	217	217	54	0	0	85	1143	0.190	217	1249	0.2	0.2	3.905	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsign level serv
1 - A23 WBx	1223	1223	306	0	0	304	1417	0.863	1222	0	5.7	6.0	18.544	C
2 - A27 Link Road	3169	1478	370	1690	0	23	1465	1.009	1440	1502	21.3	30.9	74.035	F
3 - A23 WBe						1361				102				
4 - Local Road	217	217	54	0	0	87	1142	0.190	217	1274	0.2	0.2	3.911	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsign level serv
1 - A23 WBx	999	999	250	0	0	256	1442	0.692	1013	0	6.0	2.4	8.879	A
2 - A27 Link Road	2587	1207	302	1380	0	19	1467	0.823	1310	1251	30.9	5.3	32.837	D
3 - A23 WBe						1237				91				
4 - Local Road	177	177	44	0	0	79	1147	0.154	177	1158	0.2	0.2	3.733	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsign level serv
1 - A23 WBx	836	836	209	0	0	210	1467	0.570	840	0	2.4	1.4	5.933	A
2 - A27 Link Road	2167	1011	253	1156	0	16	1469	0.688	1023	1035	5.3	2.3	8.431	A
3 - A23 WBe						967				72				
4 - Local Road	148	148	37	0	0	62	1156	0.128	148	905	0.2	0.1	3.594	A

Queue 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 - A23 WBx	1.34	0.58	1.18	1.62	1.84			N/A	N/A
2 - A27 Link Road	2.19	0.53	1.46	3.57	4.30			N/A	N/A
3 - A23 WBe									
4 - Local Road	0.15	0.00	0.00	0.15	0.15			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 - A23 WBx	2.23	0.05	0.59	5.96	9.40			N/A	N/A
2 - A27 Link Road	4.38	0.07	1.32	12.12	18.60			N/A	N/A
3 - A23 WBe									
4 - Local Road	0.18	0.00	0.00	0.18	0.18			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 - A23 WBx	5.67	0.04	0.38	13.44	30.98			N/A	N/A
2 - A27 Link Road	21.26	0.82	13.54	49.88	65.90			N/A	N/A
3 - A23 WBe									
4 - Local Road	0.23	0.03	0.26	0.46	0.48			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 - A23 WBx	6.02	0.03	0.32	6.02	27.22			N/A	N/A
2 - A27 Link Road	30.91	0.79	18.55	75.32	101.11			N/A	N/A
3 - A23 WBe									
4 - Local Road	0.23	0.03	0.27	0.48	0.75			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 - A23 WBx	2.38	0.05	0.47	6.54	10.93			N/A	N/A
2 - A27 Link Road	5.29	0.05	0.46	14.91	27.18			N/A	N/A
3 - A23 WBe									
4 - Local Road	0.18	0.00	0.00	0.18	0.18			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 - A23 WBx	1.38	0.03	0.34	3.14	7.05			N/A	N/A
2 - A27 Link Road	2.31	0.03	0.31	2.93	11.11			N/A	N/A
3 - A23 WBe									
4 - Local Road	0.15	0.00	0.00	0.15	0.15			N/A	N/A

(Default Analysis Set) - 2032 Do Something, AM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	(untitled)	Standard Roundabout		1, 2, 3, 4	36.38	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2032 Do Something	AM	ONE HOUR	06:45	08:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A23 WBx		ONE HOUR	✓	1307	100.000
2 - A27 Link Road		ONE HOUR	✓	2404	100.000
3 - A23 WBe					
4 - Local Road		ONE HOUR	✓	141	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - A23 WBx	2 - A27 Link Road	3 - A23 WBe	4 - Local Road
From	1 - A23 WBx	0	1292	8	7
	2 - A27 Link Road	0	31	1243	1130
	3 - A23 WBe	Exit-only	Exit-only	Exit-only	Exit-only
	4 - Local Road	0	127	14	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A23 WBx	2 - A27 Link Road	3 - A23 WBe	4 - Local Road
From	1 - A23 WBx	0	6	17	0
	2 - A27 Link Road	0	7	7	9
	3 - A23 WBe	Exit-only	Exit-only	Exit-only	Exit-only
	4 - Local Road	0	1	18	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A23 WBx	0.97	50.74	19.4	86.6	F	1199	1799
2 - A27 Link Road	0.92	30.50	10.7	58.6	D	2206	1684
3 - A23 WBe							
4 - Local Road	0.13	3.62	0.2	0.5	A	129	194

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsign level serv
1 - A23 WBx	984	984	246	0	0	129	1509	0.652	976	0	0.0	1.9	7.070	A
2 - A27 Link Road	1810	921	230	889	0	22	1466	0.628	914	1083	0.0	1.8	7.017	A
3 - A23 WBe						872				63				
4 - Local Road	106	106	27	0	0	23	1178	0.090	106	849	0.0	0.1	3.437	A

07:00 - 07:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsign level serv
1 - A23 WBx	1175	1175	294	0	0	154	1496	0.785	1168	0	1.9	3.7	11.415	B
2 - A27 Link Road	2161	1100	275	1062	0	26	1464	0.751	1094	1296	1.8	3.1	10.460	B
3 - A23 WBe						1045				75				
4 - Local Road	127	127	32	0	0	28	1175	0.108	127	1017	0.1	0.1	3.513	A

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsign level serv
1 - A23 WBx	1439	1439	360	0	0	189	1478	0.974	1393	0	3.7	15.2	33.968	D
2 - A27 Link Road	2647	1347	337	1300	0	31	1461	0.922	1321	1550	3.1	9.5	24.511	C
3 - A23 WBe						1262				91				
4 - Local Road	155	155	39	0	0	33	1172	0.132	155	1228	0.1	0.2	3.623	A

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsign level serv
1 - A23 WBx	1439	1439	360	0	0	189	1478	0.974	1422	0	15.2	19.4	50.737	F
2 - A27 Link Road	2647	1347	337	1300	0	32	1461	0.922	1342	1580	9.5	10.7	30.499	D
3 - A23 WBe						1281				92				
4 - Local Road	155	155	39	0	0	34	1172	0.132	155	1247	0.2	0.2	3.624	A

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsign level serv
1 - A23 WBx	1175	1175	294	0	0	155	1495	0.786	1236	0	19.4	4.2	17.746	C
2 - A27 Link Road	2161	1100	275	1062	0	27	1463	0.751	1129	1365	10.7	3.5	12.630	B
3 - A23 WBe						1078				78				
4 - Local Road	127	127	32	0	0	29	1175	0.108	127	1049	0.2	0.1	3.518	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsign level serv
1 - A23 WBx	984	984	246	0	0	130	1509	0.652	992	0	4.2	2.0	7.517	A
2 - A27 Link Road	1810	921	230	889	0	22	1466	0.628	927	1100	3.5	1.9	7.368	A
3 - A23 WBe						885				64				
4 - Local Road	106	106	27	0	0	23	1178	0.090	106	862	0.1	0.1	3.441	A

Queue Variation Results for each time segment

06:45 - 07:00

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 - A23 WBx	1.94	0.60	1.30	2.87	3.30			N/A	N/A
2 - A27 Link Road	1.80	0.66	1.23	2.15	2.66			N/A	N/A
3 - A23 WBe									
4 - Local Road	0.10	0.00	0.00	0.10	0.10			N/A	N/A

07:00 - 07:15

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 - A23 WBx	3.68	0.06	0.99	10.19	15.98			N/A	N/A
2 - A27 Link Road	3.15	0.06	0.93	8.59	13.41			N/A	N/A
3 - A23 WBe									
4 - Local Road	0.12	0.00	0.00	0.12	0.12			N/A	N/A

07:15 - 07:30

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 - A23 WBx	15.17	0.16	6.02	40.98	58.92			N/A	N/A
2 - A27 Link Road	9.48	0.06	1.14	27.62	46.80			N/A	N/A
3 - A23 WBe									
4 - Local Road	0.16	0.03	0.26	0.47	0.50			N/A	N/A

07:30 - 07:45

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 - A23 WBx	19.43	0.10	4.47	56.19	86.61			N/A	N/A
2 - A27 Link Road	10.69	0.04	0.44	27.12	58.60			N/A	N/A
3 - A23 WBe									
4 - Local Road	0.16	0.03	0.26	0.46	0.49			N/A	N/A

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 - A23 WBx	4.16	0.04	0.45	11.43	21.39			N/A	N/A
2 - A27 Link Road	3.45	0.05	0.47	9.58	17.33			N/A	N/A
3 - A23 WBe									
4 - Local Road	0.12	0.00	0.00	0.12	0.12			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 - A23 WBx	2.04	0.03	0.33	2.86	10.03			N/A	N/A
2 - A27 Link Road	1.88	0.04	0.35	3.64	9.81			N/A	N/A
3 - A23 WBe									
4 - Local Road	0.10	0.00	0.00	0.10	0.10			N/A	N/A

(Default Analysis Set) - 2032 Do Something, PM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	(untitled)	Standard Roundabout		1, 2, 3, 4	56.01	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2032 Do Something	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A23 WBx		ONE HOUR	✓	1111	100.000
2 - A27 Link Road		ONE HOUR	✓	2878	100.000
3 - A23 WBe					
4 - Local Road		ONE HOUR	✓	197	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - A23 WBx	2 - A27 Link Road	3 - A23 WBe	4 - Local Road
From	1 - A23 WBx	0	1101	3	7
	2 - A27 Link Road	0	81	1616	1181
	3 - A23 WBe	Exit-only	Exit-only	Exit-only	Exit-only
	4 - Local Road	0	186	11	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A23 WBx	2 - A27 Link Road	3 - A23 WBe	4 - Local Road
From	1 - A23 WBx	0	3	0	0
	2 - A27 Link Road	0	0	2	2
	3 - A23 WBe	Exit-only	Exit-only	Exit-only	Exit-only
	4 - Local Road	0	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A23 WBx	0.86	18.54	6.0	31.0	C	1019	1529
2 - A27 Link Road	1.01	74.03	30.9	101.1	F	2641	1848
3 - A23 WBe							
4 - Local Road	0.19	3.91	0.2	0.8	A	181	271

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsign level serv
1 - A23 WBx	836	836	209	0	0	208	1468	0.570	831	0	0.0	1.3	5.751	A
2 - A27 Link Road	2167	1011	253	1156	0	16	1469	0.688	1002	1024	0.0	2.2	7.721	A
3 - A23 WBe						947				71				
4 - Local Road	148	148	37	0	0	60	1157	0.128	148	887	0.0	0.1	3.584	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsign level serv
1 - A23 WBx	999	999	250	0	0	249	1446	0.691	995	0	1.3	2.2	8.122	A
2 - A27 Link Road	2587	1207	302	1380	0	19	1467	0.823	1198	1226	2.2	4.4	13.212	B
3 - A23 WBe						1133				85				
4 - Local Road	177	177	44	0	0	72	1151	0.154	177	1060	0.1	0.2	3.718	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsign level serv
1 - A23 WBx	1223	1223	306	0	0	302	1418	0.862	1209	0	2.2	5.7	16.649	C
2 - A27 Link Road	3169	1478	370	1690	0	23	1465	1.009	1411	1488	4.4	21.3	43.320	E
3 - A23 WBe						1334				100				
4 - Local Road	217	217	54	0	0	85	1143	0.190	217	1249	0.2	0.2	3.905	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsign level serv
1 - A23 WBx	1223	1223	306	0	0	304	1417	0.863	1222	0	5.7	6.0	18.544	C
2 - A27 Link Road	3169	1478	370	1690	0	23	1465	1.009	1440	1502	21.3	30.9	74.035	F
3 - A23 WBe						1361				102				
4 - Local Road	217	217	54	0	0	87	1142	0.190	217	1274	0.2	0.2	3.911	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsign level serv
1 - A23 WBx	999	999	250	0	0	256	1442	0.692	1013	0	6.0	2.4	8.879	A
2 - A27 Link Road	2587	1207	302	1380	0	19	1467	0.823	1310	1251	30.9	5.3	32.837	D
3 - A23 WBe						1237				91				
4 - Local Road	177	177	44	0	0	79	1147	0.154	177	1158	0.2	0.2	3.733	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsign level serv
1 - A23 WBx	836	836	209	0	0	210	1467	0.570	840	0	2.4	1.4	5.933	A
2 - A27 Link Road	2167	1011	253	1156	0	16	1469	0.688	1023	1035	5.3	2.3	8.431	A
3 - A23 WBe						967				72				
4 - Local Road	148	148	37	0	0	62	1156	0.128	148	905	0.2	0.1	3.594	A

Queue 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 - A23 WBx	1.34	0.58	1.18	1.62	1.84			N/A	N/A
2 - A27 Link Road	2.19	0.53	1.46	3.57	4.30			N/A	N/A
3 - A23 WBe									
4 - Local Road	0.15	0.00	0.00	0.15	0.15			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 - A23 WBx	2.23	0.05	0.59	5.96	9.40			N/A	N/A
2 - A27 Link Road	4.38	0.07	1.32	12.12	18.60			N/A	N/A
3 - A23 WBe									
4 - Local Road	0.18	0.00	0.00	0.18	0.18			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 - A23 WBx	5.67	0.04	0.38	13.44	30.98			N/A	N/A
2 - A27 Link Road	21.26	0.82	13.54	49.88	65.90			N/A	N/A
3 - A23 WBe									
4 - Local Road	0.23	0.03	0.26	0.46	0.48			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 - A23 WBx	6.02	0.03	0.32	6.02	27.22			N/A	N/A
2 - A27 Link Road	30.91	0.79	18.55	75.32	101.11			N/A	N/A
3 - A23 WBe									
4 - Local Road	0.23	0.03	0.27	0.48	0.75			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 - A23 WBx	2.38	0.05	0.47	6.54	10.93			N/A	N/A
2 - A27 Link Road	5.29	0.05	0.46	14.91	27.18			N/A	N/A
3 - A23 WBe									
4 - Local Road	0.18	0.00	0.00	0.18	0.18			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 - A23 WBx	1.38	0.03	0.34	3.14	7.05			N/A	N/A
2 - A27 Link Road	2.31	0.03	0.31	2.93	11.11			N/A	N/A
3 - A23 WBe									
4 - Local Road	0.15	0.00	0.00	0.15	0.15			N/A	N/A

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Junctions 9
ARCADY 9 - Roundabout Module
Version: 9.5.1.7462 © Copyright TRL Limited, 2019
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Filename: Junction 5 Braypool Lane.j9

Path: C:\Users\WRI87273\Mott MacDonald\B RMF Brighton DO - T Transport\Junction models\Junction 5 Braypool Lane - A27 entry slip east - unnamed road - A27 exit slip east\05. Model Updates 2023\01. Model

Report generation date: 30/03/2023 16:51:59

- »(Default Analysis Set) - 2021 Baseline, AM
- »(Default Analysis Set) - 2021 Baseline, PM
- »(Default Analysis Set) - 2026 Future Baseline, AM
- »(Default Analysis Set) - 2026 Future Baseline, PM
- »(Default Analysis Set) - 2026 Do Something, AM
- »(Default Analysis Set) - 2026 Do Something, PM
- »(Default Analysis Set) - 2032 Future Baseline, AM
- »(Default Analysis Set) - 2032 Future Baseline, PM
- »(Default Analysis Set) - 2032 Do Something, AM
- »(Default Analysis Set) - 2032 Do Something, PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
A1 - 2021 Baseline										
2 - A27 Overbridge	D1	3.7	11.93	0.78	B	D2	2.6	8.91	0.72	A
3 - A27 eastbound offslip		1.8	52.23	0.65	F		7.2	141.17	0.94	F
4 - Braypool Lane		0.1	8.40	0.07	A		0.1	7.92	0.05	A
A1 - 2026 Future Baseline										
2 - A27 Overbridge	D3	4.5	14.17	0.81	B	D4	3.0	10.09	0.75	B
3 - A27 eastbound offslip		2.2	62.27	0.70	F		10.4	191.41	1.01	F
4 - Braypool Lane		0.1	9.08	0.08	A		0.1	8.45	0.06	A
A1 - 2026 Do Something										
2 - A27 Overbridge	D5	4.2	13.37	0.80	B	D6	3.0	10.09	0.75	B
3 - A27 eastbound offslip		2.1	60.20	0.70	F		10.4	191.41	1.01	F
4 - Braypool Lane		0.1	8.86	0.08	A		0.1	8.45	0.06	A
A1 - 2032 Future Baseline										
2 - A27 Overbridge	D7	5.9	17.79	0.85	C	D8	3.7	11.81	0.79	B
3 - A27 eastbound offslip		2.8	78.74	0.77	F		16.9	285.25	1.11	F
4 - Braypool Lane		0.1	9.96	0.09	A		0.1	9.08	0.07	A
A1 - 2032 Do Something										
2 - A27 Overbridge	D9	6.0	17.96	0.85	C	D10	3.7	11.81	0.79	B
3 - A27 eastbound offslip		3.0	82.41	0.78	F		16.9	285.25	1.11	F
4 - Braypool Lane		0.1	10.02	0.09	B		0.1	9.08	0.07	A

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

File summary

File Description

Title	(untitled)
Location	
Site number	
Date	29/04/2022
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	
Description	

Units

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

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				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)	Run automatically
D1	2021 Baseline	AM	ONE HOUR	06:45	08:15	15	✓
D2	2021 Baseline	PM	ONE HOUR	16:45	18:15	15	✓
D3	2026 Future Baseline	AM	ONE HOUR	06:45	08:15	15	✓
D4	2026 Future Baseline	PM	ONE HOUR	16:45	18:15	15	✓
D5	2026 Do Something	AM	ONE HOUR	06:45	08:15	15	✓
D6	2026 Do Something	PM	ONE HOUR	16:45	18:15	15	✓
D7	2032 Future Baseline	AM	ONE HOUR	06:45	08:15	15	✓
D8	2032 Future Baseline	PM	ONE HOUR	16:45	18:15	15	✓
D9	2032 Do Something	AM	ONE HOUR	06:45	08:15	15	✓
D10	2032 Do Something	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

ID	Name	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	(Default Analysis Set)	✓	100.000	100.000

(Default Analysis Set) - 2021 Baseline, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	(untitled)	Standard Roundabout		1, 2, 3, 4	15.83	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	A27 Eastbound onslip	
2	A27 Overbridge	
3	A27 eastbound offslip	
4	Braypool Lane	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - A27 Eastbound onslip							✓
2 - A27 Overbridge	3.64	4.19	0.6	10.4	40.0	15.8	
3 - A27 eastbound offslip	5.50	6.10	4.3	140.0	40.0	27.0	
4 - Braypool Lane	2.50	4.30	8.2	70.0	40.0	20.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final slope	Final intercept (PCU/hr)
1 - A27 Eastbound onslip					
2 - A27 Overbridge	✓	0.600	1220	0.600	1220
3 - A27 eastbound offslip				0.695	1886
4 - Braypool Lane				0.554	1153

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

Arm Capacity Adjustments

Arm	Type	Reason	Percentage capacity adjustment (%)
2 - A27 Overbridge	Percentage		120.00
3 - A27 eastbound offslip	Percentage		18.00

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2021 Baseline	AM	ONE HOUR	06:45	08:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A27 Eastbound onslip					
2 - A27 Overbridge		ONE HOUR	✓	1032	100.000
3 - A27 eastbound offslip		ONE HOUR	✓	117	100.000
4 - Braypool Lane		ONE HOUR	✓	32	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - A27 Eastbound onslip	2 - A27 Overbridge	3 - A27 eastbound offslip	4 - Braypool Lane
From	1 - A27 Eastbound onslip	Exit-only	Exit-only	Exit-only	Exit-only
	2 - A27 Overbridge	998	0	0	34
	3 - A27 eastbound offslip	4	106	0	7
	4 - Braypool Lane	11	21	0	0

Proportions

		To	
		1 - A27 Eastbound onslip	2 - A27 Overbridge
From	1 - A27 Eastbound onslip	0.25	0.25
	2 - A27 Overbridge	0.97	0.00
	3 - A27 eastbound offslip	0.03	0.91
	4 - Braypool Lane	0.34	0.66

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A27 Eastbound onslip	2 - A27 Overbridge	3 - A27 eastbound offslip	4 - Braypool Lane
From	1 - A27 Eastbound onslip	Exit-only	Exit-only	Exit-only	Exit-only
	2 - A27 Overbridge	9	0	0	6
	3 - A27 eastbound offslip	0	2	0	0
	4 - Braypool Lane	0	5	0	0

Average PCU Per Veh

		To	
		1 - A27 Eastbound onslip	2 - A27 Overbridge
From	1 - A27 Eastbound onslip	Exit-only	Exit-only
	2 - A27 Overbridge	1.092	1.000
	3 - A27 eastbound offslip	1.000	1.019
	4 - Braypool Lane	1.000	1.050

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
06:45-07:00	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	777	777
	3 - A27 eastbound offslip	88	88
	4 - Braypool Lane	24	24
07:00-07:15	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	928	928
	3 - A27 eastbound offslip	105	105
	4 - Braypool Lane	29	29
07:15-07:30	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	1136	1136
	3 - A27 eastbound offslip	129	129
	4 - Braypool Lane	35	35
07:30-07:45	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	1136	1136
	3 - A27 eastbound offslip	129	129
	4 - Braypool Lane	35	35
07:45-08:00	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	928	928
	3 - A27 eastbound offslip	105	105
	4 - Braypool Lane	29	29
08:00-08:15	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	777	777
	3 - A27 eastbound offslip	88	88
	4 - Braypool Lane	24	24

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A27 Eastbound onslip						
2 - A27 Overbridge	0.78	11.93	3.7	B	947	1420
3 - A27 eastbound offslip	0.65	52.23	1.8	F	107	161
4 - Braypool Lane	0.07	8.40	0.1	A	29	44

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			93				758				
2 - A27 Overbridge	777	194	0	1464	0.531	772	93	0.0	1.2	5.637	A
3 - A27 eastbound offslip	88	22	772	243	0.363	86	0	0.0	0.6	23.024	C
4 - Braypool Lane	24	6	827	695	0.035	24	31	0.0	0.0	5.538	A

07:00 - 07:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			113				908				
2 - A27 Overbridge	928	232	0	1464	0.634	925	113	1.2	1.8	7.253	A
3 - A27 eastbound offslip	105	26	925	224	0.470	104	0	0.6	0.9	30.287	D
4 - Braypool Lane	29	7	993	603	0.048	29	37	0.0	0.1	6.467	A

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			137				1108				
2 - A27 Overbridge	1136	284	0	1464	0.776	1129	137	1.8	3.6	11.495	B
3 - A27 eastbound offslip	129	32	1129	198	0.650	126	0	0.9	1.7	48.356	E
4 - Braypool Lane	35	9	1210	483	0.073	35	45	0.1	0.1	8.299	A

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			139				1115				
2 - A27 Overbridge	1136	284	0	1464	0.776	1136	139	3.6	3.7	11.929	B
3 - A27 eastbound offslip	129	32	1136	197	0.653	128	0	1.7	1.8	52.232	F
4 - Braypool Lane	35	9	1219	478	0.074	35	45	0.1	0.1	8.395	A

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			117				918				
2 - A27 Overbridge	928	232	0	1464	0.634	935	117	3.7	1.9	7.517	A
3 - A27 eastbound offslip	105	26	935	223	0.473	108	0	1.8	1.0	32.888	D
4 - Braypool Lane	29	7	1006	596	0.048	29	37	0.1	0.1	6.556	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			97				765				
2 - A27 Overbridge	777	194	0	1464	0.531	780	97	1.9	1.2	5.763	A
3 - A27 eastbound offslip	88	22	780	242	0.364	90	0	1.0	0.6	24.250	C
4 - Braypool Lane	24	6	838	689	0.035	24	31	0.1	0.0	5.591	A

(Default Analysis Set) - 2021 Baseline, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	(untitled)	Standard Roundabout		1, 2, 3, 4	29.24	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2021 Baseline	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A27 Eastbound onslip					
2 - A27 Overbridge		ONE HOUR	✓	955	100.000
3 - A27 eastbound offslip		ONE HOUR	✓	178	100.000
4 - Braypool Lane		ONE HOUR	✓	24	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - A27 Eastbound onslip	2 - A27 Overbridge	3 - A27 eastbound offslip	4 - Braypool Lane
From	1 - A27 Eastbound onslip	Exit-only	Exit-only	Exit-only	Exit-only
	2 - A27 Overbridge	935	3	0	17
	3 - A27 eastbound offslip	7	163	0	8
	4 - Braypool Lane	10	14	0	0

Proportions

		To	
		1 - A27 Eastbound onslip	2 - A27 Overbridge
From	1 - A27 Eastbound onslip	0.25	0.25
	2 - A27 Overbridge	0.98	0.00
	3 - A27 eastbound offslip	0.04	0.92
	4 - Braypool Lane	0.42	0.58

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	1 - A27 Eastbound onslip	2 - A27 Overbridge	3 - A27 eastbound offslip	4 - Braypool Lane
1 - A27 Eastbound onslip	Exit-only	Exit-only	Exit-only	Exit-only
2 - A27 Overbridge	2	0	0	0
3 - A27 eastbound offslip	0	1	0	0
4 - Braypool Lane	0	0	0	0

Average PCU Per Veh

From	To	
	1 - A27 Eastbound onslip	2 - A27 Overbridge
1 - A27 Eastbound onslip	Exit-only	Exit-only
2 - A27 Overbridge	1.023	1.000
3 - A27 eastbound offslip	1.000	1.006
4 - Braypool Lane	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
16:45-17:00	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	719	719
	3 - A27 eastbound offslip	134	134
	4 - Braypool Lane	18	18
17:00-17:15	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	859	859
	3 - A27 eastbound offslip	160	160
	4 - Braypool Lane	22	22
17:15-17:30	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	1051	1051
	3 - A27 eastbound offslip	196	196
	4 - Braypool Lane	26	26
17:30-17:45	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	1051	1051
	3 - A27 eastbound offslip	196	196
	4 - Braypool Lane	26	26
17:45-18:00	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	859	859
	3 - A27 eastbound offslip	160	160
	4 - Braypool Lane	22	22
18:00-18:15	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	719	719
	3 - A27 eastbound offslip	134	134
	4 - Braypool Lane	18	18

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A27 Eastbound onslip						
2 - A27 Overbridge	0.72	8.91	2.6	A	876	1314
3 - A27 eastbound offslip	0.94	141.17	7.2	F	163	245
4 - Braypool Lane	0.05	7.92	0.1	A	22	33

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			131				713				
2 - A27 Overbridge	719	180	0	1464	0.491	715	131	0.0	1.0	4.890	A
3 - A27 eastbound offslip	134	34	715	250	0.536	130	0	0.0	1.1	29.154	D
4 - Braypool Lane	18	5	826	695	0.026	18	19	0.0	0.0	5.314	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			159				854				
2 - A27 Overbridge	859	215	0	1464	0.586	857	159	1.0	1.4	6.043	A
3 - A27 eastbound offslip	160	40	857	232	0.689	157	0	1.1	1.9	45.718	E
4 - Braypool Lane	22	5	991	604	0.036	22	22	0.0	0.0	6.178	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			185				1043				
2 - A27 Overbridge	1051	263	0	1464	0.718	1047	185	1.4	2.5	8.736	A
3 - A27 eastbound offslip	196	49	1047	209	0.940	182	0	1.9	5.5	101.120	F
4 - Braypool Lane	26	7	1202	487	0.054	26	27	0.0	0.1	7.808	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			192				1048				
2 - A27 Overbridge	1051	263	0	1464	0.718	1051	192	2.5	2.6	8.910	A
3 - A27 eastbound offslip	196	49	1051	208	0.942	189	0	5.5	7.2	141.170	F
4 - Braypool Lane	26	7	1214	481	0.055	26	27	0.1	0.1	7.920	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			178				861				
2 - A27 Overbridge	859	215	0	1464	0.586	863	178	2.6	1.5	6.166	A
3 - A27 eastbound offslip	160	40	863	232	0.691	178	0	7.2	2.6	78.102	F
4 - Braypool Lane	22	5	1018	589	0.037	22	23	0.1	0.0	6.340	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			141				719				
2 - A27 Overbridge	719	180	0	1464	0.491	721	141	1.5	1.0	4.967	A
3 - A27 eastbound offslip	134	34	721	249	0.538	140	0	2.6	1.2	34.422	D
4 - Braypool Lane	18	5	841	687	0.026	18	19	0.0	0.0	5.383	A

(Default Analysis Set) - 2026 Future Baseline, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	(untitled)	Standard Roundabout		1, 2, 3, 4	18.78	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2026 Future Baseline	AM	ONE HOUR	06:45	08:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A27 Eastbound onslip					
2 - A27 Overbridge		ONE HOUR	✓	1080	100.000
3 - A27 eastbound offslip		ONE HOUR	✓	122	100.000
4 - Braypool Lane		ONE HOUR	✓	34	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
	1 - A27 Eastbound onslip	2 - A27 Overbridge	3 - A27 eastbound offslip	4 - Braypool Lane
1 - A27 Eastbound onslip	Exit-only	Exit-only	Exit-only	Exit-only
2 - A27 Overbridge	1044	0	0	36
3 - A27 eastbound offslip	4	111	0	7
4 - Braypool Lane	12	22	0	0

Proportions

From	To	
	1 - A27 Eastbound onslip	2 - A27 Overbridge
1 - A27 Eastbound onslip	0.25	0.25
2 - A27 Overbridge	0.97	0.00
3 - A27 eastbound offslip	0.03	0.91
4 - Braypool Lane	0.35	0.65

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	1 - A27 Eastbound onslip	2 - A27 Overbridge	3 - A27 eastbound offslip	4 - Braypool Lane
1 - A27 Eastbound onslip	Exit-only	Exit-only	Exit-only	Exit-only
2 - A27 Overbridge	9	0	0	6
3 - A27 eastbound offslip	0	2	0	0
4 - Braypool Lane	0	5	0	0

Average PCU Per Veh

From	To	
	1 - A27 Eastbound onslip	2 - A27 Overbridge
1 - A27 Eastbound onslip	Exit-only	Exit-only
2 - A27 Overbridge	1.092	1.000
3 - A27 eastbound offslip	1.000	1.019
4 - Braypool Lane	1.000	1.051

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
06:45-07:00	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	813	813
	3 - A27 eastbound offslip	92	92
	4 - Braypool Lane	26	26
07:00-07:15	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	971	971
	3 - A27 eastbound offslip	110	110
	4 - Braypool Lane	31	31
07:15-07:30	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	1189	1189
	3 - A27 eastbound offslip	134	134
	4 - Braypool Lane	37	37
07:30-07:45	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	1189	1189
	3 - A27 eastbound offslip	134	134
	4 - Braypool Lane	37	37
07:45-08:00	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	971	971
	3 - A27 eastbound offslip	110	110
	4 - Braypool Lane	31	31
08:00-08:15	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	813	813
	3 - A27 eastbound offslip	92	92
	4 - Braypool Lane	26	26

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A27 Eastbound onslip						
2 - A27 Overbridge	0.81	14.17	4.5	B	991	1487
3 - A27 eastbound offslip	0.70	62.27	2.2	F	112	168
4 - Braypool Lane	0.08	9.08	0.1	A	31	47

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			98				793				
2 - A27 Overbridge	813	203	0	1464	0.555	808	98	0.0	1.3	5.938	A
3 - A27 eastbound offslip	92	23	808	238	0.385	89	0	0.0	0.6	24.211	C
4 - Braypool Lane	26	6	865	674	0.038	25	32	0.0	0.0	5.731	A

07:00 - 07:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			118				950				
2 - A27 Overbridge	971	243	0	1464	0.663	968	118	1.3	2.1	7.867	A
3 - A27 eastbound offslip	110	27	968	218	0.502	108	0	0.6	1.0	32.809	D
4 - Braypool Lane	31	8	1038	578	0.053	30	38	0.0	0.1	6.786	A

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			143				1158				
2 - A27 Overbridge	1189	297	0	1464	0.812	1180	143	2.1	4.4	13.403	B
3 - A27 eastbound offslip	134	34	1180	192	0.700	130	0	1.0	2.0	55.875	F
4 - Braypool Lane	37	9	1263	453	0.083	37	47	0.1	0.1	8.932	A

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			146				1166				
2 - A27 Overbridge	1189	297	0	1464	0.812	1188	146	4.4	4.5	14.168	B
3 - A27 eastbound offslip	134	34	1188	191	0.704	134	0	2.0	2.2	62.272	F
4 - Braypool Lane	37	9	1275	447	0.084	37	47	0.1	0.1	9.076	A

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			124				962				
2 - A27 Overbridge	971	243	0	1464	0.663	980	124	4.5	2.2	8.267	A
3 - A27 eastbound offslip	110	27	980	217	0.506	114	0	2.2	1.1	36.840	E
4 - Braypool Lane	31	8	1055	569	0.054	31	39	0.1	0.1	6.910	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			102				801				
2 - A27 Overbridge	813	203	0	1464	0.555	816	102	2.2	1.4	6.093	A
3 - A27 eastbound offslip	92	23	816	237	0.387	94	0	1.1	0.7	25.783	D
4 - Braypool Lane	26	6	877	667	0.038	26	33	0.1	0.0	5.798	A

(Default Analysis Set) - 2026 Future Baseline, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	(untitled)	Standard Roundabout		1, 2, 3, 4	37.80	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2026 Future Baseline	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A27 Eastbound onslip					
2 - A27 Overbridge		ONE HOUR	✓	999	100.000
3 - A27 eastbound offslip		ONE HOUR	✓	185	100.000
4 - Braypool Lane		ONE HOUR	✓	25	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
	1 - A27 Eastbound onslip	2 - A27 Overbridge	3 - A27 eastbound offslip	4 - Braypool Lane
1 - A27 Eastbound onslip	Exit-only	Exit-only	Exit-only	Exit-only
2 - A27 Overbridge	978	3	0	18
3 - A27 eastbound offslip	7	170	0	8
4 - Braypool Lane	10	15	0	0

Proportions

From	To	
	1 - A27 Eastbound onslip	2 - A27 Overbridge
1 - A27 Eastbound onslip	0.25	0.25
2 - A27 Overbridge	0.98	0.00
3 - A27 eastbound offslip	0.04	0.92
4 - Braypool Lane	0.40	0.60

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	1 - A27 Eastbound onslip	2 - A27 Overbridge	3 - A27 eastbound offslip	4 - Braypool Lane
1 - A27 Eastbound onslip	Exit-only	Exit-only	Exit-only	Exit-only
2 - A27 Overbridge	2	0	0	0
3 - A27 eastbound offslip	0	1	0	0
4 - Braypool Lane	0	0	0	0

Average PCU Per Veh

From	To	
	1 - A27 Eastbound onslip	2 - A27 Overbridge
1 - A27 Eastbound onslip	Exit-only	Exit-only
2 - A27 Overbridge	1.023	1.000
3 - A27 eastbound offslip	1.000	1.006
4 - Braypool Lane	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
16:45-17:00	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	752	752
	3 - A27 eastbound offslip	139	139
	4 - Braypool Lane	19	19
17:00-17:15	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	898	898
	3 - A27 eastbound offslip	166	166
	4 - Braypool Lane	22	22
17:15-17:30	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	1100	1100
	3 - A27 eastbound offslip	204	204
	4 - Braypool Lane	28	28
17:30-17:45	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	1100	1100
	3 - A27 eastbound offslip	204	204
	4 - Braypool Lane	28	28
17:45-18:00	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	898	898
	3 - A27 eastbound offslip	166	166
	4 - Braypool Lane	22	22
18:00-18:15	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	752	752
	3 - A27 eastbound offslip	139	139
	4 - Braypool Lane	19	19

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A27 Eastbound onslip						
2 - A27 Overbridge	0.75	10.09	3.0	B	917	1375
3 - A27 eastbound offslip	1.01	191.41	10.4	F	170	255
4 - Braypool Lane	0.06	8.45	0.1	A	23	34

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			137				745				
2 - A27 Overbridge	752	188	0	1464	0.514	748	137	0.0	1.1	5.108	A
3 - A27 eastbound offslip	139	35	748	246	0.566	134	0	0.0	1.2	31.288	D
4 - Braypool Lane	19	5	863	675	0.028	19	19	0.0	0.0	5.485	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			165				892				
2 - A27 Overbridge	898	225	0	1464	0.613	896	165	1.1	1.6	6.455	A
3 - A27 eastbound offslip	166	42	896	227	0.731	162	0	1.2	2.3	51.996	F
4 - Braypool Lane	22	6	1035	580	0.039	22	23	0.0	0.0	6.457	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			188				1089				
2 - A27 Overbridge	1100	275	0	1464	0.751	1094	188	1.6	3.0	9.813	A
3 - A27 eastbound offslip	204	51	1094	203	1.005	184	0	2.3	7.3	125.311	F
4 - Braypool Lane	28	7	1250	461	0.060	27	28	0.0	0.1	8.310	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			196				1095				
2 - A27 Overbridge	1100	275	0	1464	0.751	1100	196	3.0	3.0	10.086	B
3 - A27 eastbound offslip	204	51	1100	202	1.009	191	0	7.3	10.4	191.405	F
4 - Braypool Lane	28	7	1263	454	0.061	28	28	0.1	0.1	8.450	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			194				901				
2 - A27 Overbridge	898	225	0	1464	0.613	904	194	3.0	1.7	6.632	A
3 - A27 eastbound offslip	166	42	904	226	0.734	194	0	10.4	3.6	121.006	F
4 - Braypool Lane	22	6	1073	559	0.040	23	25	0.1	0.0	6.711	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			149				752				
2 - A27 Overbridge	752	188	0	1464	0.514	754	149	1.7	1.1	5.204	A
3 - A27 eastbound offslip	139	35	754	245	0.568	148	0	3.6	1.4	39.771	E
4 - Braypool Lane	19	5	882	664	0.028	19	20	0.0	0.0	5.578	A

(Default Analysis Set) - 2026 Do Something, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	(untitled)	Standard Roundabout		1, 2, 3, 4	17.93	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2026 Do Something	AM	ONE HOUR	06:45	08:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A27 Eastbound onslip					
2 - A27 Overbridge		ONE HOUR	✓	1064	100.000
3 - A27 eastbound offslip		ONE HOUR	✓	122	100.000
4 - Braypool Lane		ONE HOUR	✓	33	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
	1 - A27 Eastbound onslip	2 - A27 Overbridge	3 - A27 eastbound offslip	4 - Braypool Lane
1 - A27 Eastbound onslip	Exit-only	Exit-only	Exit-only	Exit-only
2 - A27 Overbridge	1029	0	0	35
3 - A27 eastbound offslip	4	111	0	7
4 - Braypool Lane	11	22	0	0

Proportions

From	To	
	1 - A27 Eastbound onslip	2 - A27 Overbridge
1 - A27 Eastbound onslip	0.25	0.25
2 - A27 Overbridge	0.97	0.00
3 - A27 eastbound offslip	0.03	0.91
4 - Braypool Lane	0.33	0.67

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	1 - A27 Eastbound onslip	2 - A27 Overbridge	3 - A27 eastbound offslip	4 - Braypool Lane
1 - A27 Eastbound onslip	Exit-only	Exit-only	Exit-only	Exit-only
2 - A27 Overbridge	9	0	0	6
3 - A27 eastbound offslip	0	2	0	0
4 - Braypool Lane	0	5	0	0

Average PCU Per Veh

From	To	
	1 - A27 Eastbound onslip	2 - A27 Overbridge
1 - A27 Eastbound onslip	Exit-only	Exit-only
2 - A27 Overbridge	1.094	1.000
3 - A27 eastbound offslip	1.000	1.019
4 - Braypool Lane	1.000	1.051

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
06:45-07:00	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	801	801
	3 - A27 eastbound offslip	92	92
	4 - Braypool Lane	25	25
07:00-07:15	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	957	957
	3 - A27 eastbound offslip	110	110
	4 - Braypool Lane	30	30
07:15-07:30	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	1171	1171
	3 - A27 eastbound offslip	134	134
	4 - Braypool Lane	36	36
07:30-07:45	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	1171	1171
	3 - A27 eastbound offslip	134	134
	4 - Braypool Lane	36	36
07:45-08:00	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	957	957
	3 - A27 eastbound offslip	110	110
	4 - Braypool Lane	30	30
08:00-08:15	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	801	801
	3 - A27 eastbound offslip	92	92
	4 - Braypool Lane	25	25

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A27 Eastbound onslip						
2 - A27 Overbridge	0.80	13.37	4.2	B	976	1465
3 - A27 eastbound offslip	0.70	60.20	2.1	F	112	168
4 - Braypool Lane	0.08	8.86	0.1	A	30	45

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			98				781				
2 - A27 Overbridge	801	200	0	1464	0.547	796	98	0.0	1.3	5.845	A
3 - A27 eastbound offslip	92	23	796	240	0.383	89	0	0.0	0.6	23.988	C
4 - Braypool Lane	25	6	854	680	0.037	25	31	0.0	0.0	5.676	A

07:00 - 07:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			118				936				
2 - A27 Overbridge	957	239	0	1464	0.653	954	118	1.3	2.0	7.669	A
3 - A27 eastbound offslip	110	27	954	220	0.498	108	0	0.6	0.9	32.321	D
4 - Braypool Lane	30	7	1024	586	0.051	30	38	0.0	0.1	6.692	A

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			143				1141				
2 - A27 Overbridge	1171	293	0	1464	0.800	1163	143	2.0	4.1	12.734	B
3 - A27 eastbound offslip	134	34	1163	194	0.692	130	0	0.9	1.9	54.373	F
4 - Braypool Lane	36	9	1248	462	0.079	36	46	0.1	0.1	8.737	A

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			146				1149				
2 - A27 Overbridge	1171	293	0	1464	0.800	1171	146	4.1	4.2	13.369	B
3 - A27 eastbound offslip	134	34	1171	193	0.696	134	0	1.9	2.1	60.202	F
4 - Braypool Lane	36	9	1258	456	0.080	36	46	0.1	0.1	8.865	A

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			123				947				
2 - A27 Overbridge	957	239	0	1464	0.653	965	123	4.2	2.1	8.015	A
3 - A27 eastbound offslip	110	27	965	219	0.501	114	0	2.1	1.1	36.045	E
4 - Braypool Lane	30	7	1040	577	0.051	30	38	0.1	0.1	6.804	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			102				789				
2 - A27 Overbridge	801	200	0	1464	0.547	804	102	2.1	1.3	5.991	A
3 - A27 eastbound offslip	92	23	804	239	0.384	94	0	1.1	0.7	25.496	D
4 - Braypool Lane	25	6	866	673	0.037	25	32	0.1	0.0	5.737	A

(Default Analysis Set) - 2026 Do Something, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	(untitled)	Standard Roundabout		1, 2, 3, 4	37.80	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2026 Do Something	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A27 Eastbound onslip					
2 - A27 Overbridge		ONE HOUR	✓	999	100.000
3 - A27 eastbound offslip		ONE HOUR	✓	185	100.000
4 - Braypool Lane		ONE HOUR	✓	25	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - A27 Eastbound onslip	2 - A27 Overbridge	3 - A27 eastbound offslip	4 - Braypool Lane
From	1 - A27 Eastbound onslip	Exit-only	Exit-only	Exit-only	Exit-only
	2 - A27 Overbridge	978	3	0	18
	3 - A27 eastbound offslip	7	170	0	8
	4 - Braypool Lane	10	15	0	0

Proportions

		To	
		1 - A27 Eastbound onslip	2 - A27 Overbridge
From	1 - A27 Eastbound onslip	0.25	0.25
	2 - A27 Overbridge	0.98	0.00
	3 - A27 eastbound offslip	0.04	0.92
	4 - Braypool Lane	0.40	0.60

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	1 - A27 Eastbound onslip	2 - A27 Overbridge	3 - A27 eastbound offslip	4 - Braypool Lane
1 - A27 Eastbound onslip	Exit-only	Exit-only	Exit-only	Exit-only
2 - A27 Overbridge	2	0	0	0
3 - A27 eastbound offslip	0	1	0	0
4 - Braypool Lane	0	0	0	0

Average PCU Per Veh

From	To	
	1 - A27 Eastbound onslip	2 - A27 Overbridge
1 - A27 Eastbound onslip	Exit-only	Exit-only
2 - A27 Overbridge	1.023	1.000
3 - A27 eastbound offslip	1.000	1.006
4 - Braypool Lane	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
16:45-17:00	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	752	752
	3 - A27 eastbound offslip	139	139
	4 - Braypool Lane	19	19
17:00-17:15	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	898	898
	3 - A27 eastbound offslip	166	166
	4 - Braypool Lane	22	22
17:15-17:30	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	1100	1100
	3 - A27 eastbound offslip	204	204
	4 - Braypool Lane	28	28
17:30-17:45	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	1100	1100
	3 - A27 eastbound offslip	204	204
	4 - Braypool Lane	28	28
17:45-18:00	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	898	898
	3 - A27 eastbound offslip	166	166
	4 - Braypool Lane	22	22
18:00-18:15	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	752	752
	3 - A27 eastbound offslip	139	139
	4 - Braypool Lane	19	19

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A27 Eastbound onslip						
2 - A27 Overbridge	0.75	10.09	3.0	B	917	1375
3 - A27 eastbound offslip	1.01	191.41	10.4	F	170	255
4 - Braypool Lane	0.06	8.45	0.1	A	23	34

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			137				745				
2 - A27 Overbridge	752	188	0	1464	0.514	748	137	0.0	1.1	5.108	A
3 - A27 eastbound offslip	139	35	748	246	0.566	134	0	0.0	1.2	31.288	D
4 - Braypool Lane	19	5	863	675	0.028	19	19	0.0	0.0	5.485	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			165				892				
2 - A27 Overbridge	898	225	0	1464	0.613	896	165	1.1	1.6	6.455	A
3 - A27 eastbound offslip	166	42	896	227	0.731	162	0	1.2	2.3	51.996	F
4 - Braypool Lane	22	6	1035	580	0.039	22	23	0.0	0.0	6.457	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			188				1089				
2 - A27 Overbridge	1100	275	0	1464	0.751	1094	188	1.6	3.0	9.813	A
3 - A27 eastbound offslip	204	51	1094	203	1.005	184	0	2.3	7.3	125.311	F
4 - Braypool Lane	28	7	1250	461	0.060	27	28	0.0	0.1	8.310	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			196				1095				
2 - A27 Overbridge	1100	275	0	1464	0.751	1100	196	3.0	3.0	10.086	B
3 - A27 eastbound offslip	204	51	1100	202	1.009	191	0	7.3	10.4	191.405	F
4 - Braypool Lane	28	7	1263	454	0.061	28	28	0.1	0.1	8.450	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			194				901				
2 - A27 Overbridge	898	225	0	1464	0.613	904	194	3.0	1.7	6.632	A
3 - A27 eastbound offslip	166	42	904	226	0.734	194	0	10.4	3.6	121.006	F
4 - Braypool Lane	22	6	1073	559	0.040	23	25	0.1	0.0	6.711	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			149				752				
2 - A27 Overbridge	752	188	0	1464	0.514	754	149	1.7	1.1	5.204	A
3 - A27 eastbound offslip	139	35	754	245	0.568	148	0	3.6	1.4	39.771	E
4 - Braypool Lane	19	5	882	664	0.028	19	20	0.0	0.0	5.578	A

(Default Analysis Set) - 2032 Future Baseline, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	(untitled)	Standard Roundabout		1, 2, 3, 4	23.60	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2032 Future Baseline	AM	ONE HOUR	06:45	08:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A27 Eastbound onslip					
2 - A27 Overbridge		ONE HOUR	✓	1133	100.000
3 - A27 eastbound offslip		ONE HOUR	✓	128	100.000
4 - Braypool Lane		ONE HOUR	✓	35	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
	1 - A27 Eastbound onslip	2 - A27 Overbridge	3 - A27 eastbound offslip	4 - Braypool Lane
1 - A27 Eastbound onslip	Exit-only	Exit-only	Exit-only	Exit-only
2 - A27 Overbridge	1096	0	0	37
3 - A27 eastbound offslip	4	116	0	8
4 - Braypool Lane	12	23	0	0

Proportions

From	To	
	1 - A27 Eastbound onslip	2 - A27 Overbridge
1 - A27 Eastbound onslip	0.25	0.25
2 - A27 Overbridge	0.97	0.00
3 - A27 eastbound offslip	0.03	0.91
4 - Braypool Lane	0.34	0.66

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	1 - A27 Eastbound onslip	2 - A27 Overbridge	3 - A27 eastbound offslip	4 - Braypool Lane
1 - A27 Eastbound onslip	Exit-only	Exit-only	Exit-only	Exit-only
2 - A27 Overbridge	9	0	0	6
3 - A27 eastbound offslip	0	2	0	0
4 - Braypool Lane	0	5	0	0

Average PCU Per Veh

From	To	
	1 - A27 Eastbound onslip	2 - A27 Overbridge
1 - A27 Eastbound onslip	Exit-only	Exit-only
2 - A27 Overbridge	1.092	1.000
3 - A27 eastbound offslip	1.000	1.019
4 - Braypool Lane	1.000	1.055

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
06:45-07:00	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	853	853
	3 - A27 eastbound offslip	96	96
	4 - Braypool Lane	26	26
07:00-07:15	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	1019	1019
	3 - A27 eastbound offslip	115	115
	4 - Braypool Lane	31	31
07:15-07:30	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	1247	1247
	3 - A27 eastbound offslip	141	141
	4 - Braypool Lane	39	39
07:30-07:45	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	1247	1247
	3 - A27 eastbound offslip	141	141
	4 - Braypool Lane	39	39
07:45-08:00	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	1019	1019
	3 - A27 eastbound offslip	115	115
	4 - Braypool Lane	31	31
08:00-08:15	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	853	853
	3 - A27 eastbound offslip	96	96
	4 - Braypool Lane	26	26

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A27 Eastbound onslip						
2 - A27 Overbridge	0.85	17.79	5.9	C	1040	1559
3 - A27 eastbound offslip	0.77	78.74	2.8	F	117	176
4 - Braypool Lane	0.09	9.96	0.1	A	32	48

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			102				831				
2 - A27 Overbridge	853	213	0	1464	0.583	847	102	0.0	1.5	6.306	A
3 - A27 eastbound offslip	96	24	847	234	0.413	94	0	0.0	0.7	25.725	D
4 - Braypool Lane	26	7	907	651	0.041	26	34	0.0	0.0	5.968	A

07:00 - 07:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			123				996				
2 - A27 Overbridge	1019	255	0	1464	0.696	1015	123	1.5	2.4	8.671	A
3 - A27 eastbound offslip	115	29	1015	213	0.541	113	0	0.7	1.1	36.260	E
4 - Braypool Lane	31	8	1088	550	0.057	31	40	0.0	0.1	7.181	A

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			148				1212				
2 - A27 Overbridge	1247	312	0	1464	0.852	1235	148	2.4	5.6	16.270	C
3 - A27 eastbound offslip	141	35	1235	185	0.762	135	0	1.1	2.5	67.029	F
4 - Braypool Lane	39	10	1321	421	0.091	38	49	0.1	0.1	9.730	A

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			152				1223				
2 - A27 Overbridge	1247	312	0	1464	0.852	1246	152	5.6	5.9	17.790	C
3 - A27 eastbound offslip	141	35	1246	184	0.768	140	0	2.5	2.8	78.743	F
4 - Braypool Lane	39	10	1336	413	0.093	39	49	0.1	0.1	9.957	A

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			131				1013				
2 - A27 Overbridge	1019	255	0	1464	0.696	1032	131	5.9	2.6	9.354	A
3 - A27 eastbound offslip	115	29	1032	210	0.547	121	0	2.8	1.3	43.253	E
4 - Braypool Lane	31	8	1112	537	0.059	32	41	0.1	0.1	7.375	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			107				841				
2 - A27 Overbridge	853	213	0	1464	0.583	857	107	2.6	1.5	6.515	A
3 - A27 eastbound offslip	96	24	857	232	0.415	99	0	1.3	0.8	27.855	D
4 - Braypool Lane	26	7	922	643	0.041	26	34	0.1	0.0	6.052	A

(Default Analysis Set) - 2032 Future Baseline, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	(untitled)	Standard Roundabout		1, 2, 3, 4	53.96	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2032 Future Baseline	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A27 Eastbound onslip					
2 - A27 Overbridge		ONE HOUR	✓	1048	100.000
3 - A27 eastbound offslip		ONE HOUR	✓	196	100.000
4 - Braypool Lane		ONE HOUR	✓	26	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
	1 - A27 Eastbound onslip	2 - A27 Overbridge	3 - A27 eastbound offslip	4 - Braypool Lane
1 - A27 Eastbound onslip	Exit-only	Exit-only	Exit-only	Exit-only
2 - A27 Overbridge	1026	3	0	19
3 - A27 eastbound offslip	8	179	0	9
4 - Braypool Lane	11	15	0	0

Proportions

From	To	
	1 - A27 Eastbound onslip	2 - A27 Overbridge
1 - A27 Eastbound onslip	0.25	0.25
2 - A27 Overbridge	0.98	0.00
3 - A27 eastbound offslip	0.04	0.91
4 - Braypool Lane	0.42	0.58

Vehicle Mix

Heavy Vehicle Percentages

From		To			
		1 - A27 Eastbound onslip	2 - A27 Overbridge	3 - A27 eastbound offslip	4 - Braypool Lane
	1 - A27 Eastbound onslip	Exit-only	Exit-only	Exit-only	Exit-only
	2 - A27 Overbridge	2	0	0	0
	3 - A27 eastbound offslip	0	1	0	0
	4 - Braypool Lane	0	0	0	0

Average PCU Per Veh

From		To	
		1 - A27 Eastbound onslip	2 - A27 Overbridge
	1 - A27 Eastbound onslip	Exit-only	Exit-only
	2 - A27 Overbridge	1.023	1.000
	3 - A27 eastbound offslip	1.000	1.006
	4 - Braypool Lane	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
16:45-17:00	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	789	789
	3 - A27 eastbound offslip	148	148
	4 - Braypool Lane	20	20
17:00-17:15	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	942	942
	3 - A27 eastbound offslip	176	176
	4 - Braypool Lane	23	23
17:15-17:30	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	1154	1154
	3 - A27 eastbound offslip	216	216
	4 - Braypool Lane	29	29
17:30-17:45	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	1154	1154
	3 - A27 eastbound offslip	216	216
	4 - Braypool Lane	29	29
17:45-18:00	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	942	942
	3 - A27 eastbound offslip	176	176
	4 - Braypool Lane	23	23
18:00-18:15	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	789	789
	3 - A27 eastbound offslip	148	148
	4 - Braypool Lane	20	20

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A27 Eastbound onslip						
2 - A27 Overbridge	0.79	11.81	3.7	B	962	1442
3 - A27 eastbound offslip	1.11	285.25	16.9	F	180	270
4 - Braypool Lane	0.07	9.08	0.1	A	24	36

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			143				782				
2 - A27 Overbridge	789	197	0	1464	0.539	784	143	0.0	1.2	5.380	A
3 - A27 eastbound offslip	148	37	784	241	0.611	142	0	0.0	1.4	34.684	D
4 - Braypool Lane	20	5	905	652	0.030	19	21	0.0	0.0	5.695	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			171				937				
2 - A27 Overbridge	942	236	0	1464	0.644	940	171	1.2	1.8	6.986	A
3 - A27 eastbound offslip	176	44	940	222	0.794	170	0	1.4	3.0	63.106	F
4 - Braypool Lane	23	6	1085	552	0.042	23	25	0.0	0.0	6.806	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			189				1142				
2 - A27 Overbridge	1154	288	0	1464	0.788	1147	189	1.8	3.6	11.346	B
3 - A27 eastbound offslip	216	54	1147	196	1.101	185	0	3.0	10.7	167.824	F
4 - Braypool Lane	29	7	1302	432	0.066	29	29	0.0	0.1	8.925	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			194				1149				
2 - A27 Overbridge	1154	288	0	1464	0.788	1153	194	3.6	3.7	11.812	B
3 - A27 eastbound offslip	216	54	1153	195	1.106	191	0	10.7	16.9	285.246	F
4 - Braypool Lane	29	7	1315	425	0.067	29	30	0.1	0.1	9.084	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			207				948				
2 - A27 Overbridge	942	236	0	1464	0.644	949	207	3.7	1.9	7.248	A
3 - A27 eastbound offslip	176	44	949	221	0.798	208	0	16.9	8.9	231.908	F
4 - Braypool Lane	23	6	1131	527	0.044	23	27	0.1	0.0	7.157	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			174				791				
2 - A27 Overbridge	789	197	0	1464	0.539	792	174	1.9	1.2	5.496	A
3 - A27 eastbound offslip	148	37	792	240	0.614	176	0	8.9	1.8	70.454	F
4 - Braypool Lane	20	5	945	630	0.031	20	22	0.0	0.0	5.902	A

(Default Analysis Set) - 2032 Do Something, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	(untitled)	Standard Roundabout		1, 2, 3, 4	24.19	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2032 Do Something	AM	ONE HOUR	06:45	08:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A27 Eastbound onslip					
2 - A27 Overbridge		ONE HOUR	✓	1135	100.000
3 - A27 eastbound offslip		ONE HOUR	✓	130	100.000
4 - Braypool Lane		ONE HOUR	✓	35	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
	1 - A27 Eastbound onslip	2 - A27 Overbridge	3 - A27 eastbound offslip	4 - Braypool Lane
1 - A27 Eastbound onslip	Exit-only	Exit-only	Exit-only	Exit-only
2 - A27 Overbridge	1098	0	0	37
3 - A27 eastbound offslip	4	118	0	8
4 - Braypool Lane	12	23	0	0

Proportions

From	To	
	1 - A27 Eastbound onslip	2 - A27 Overbridge
1 - A27 Eastbound onslip	0.25	0.25
2 - A27 Overbridge	0.97	0.00
3 - A27 eastbound offslip	0.03	0.91
4 - Braypool Lane	0.34	0.66

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	1 - A27 Eastbound onslip	2 - A27 Overbridge	3 - A27 eastbound offslip	4 - Braypool Lane
1 - A27 Eastbound onslip	Exit-only	Exit-only	Exit-only	Exit-only
2 - A27 Overbridge	9	0	0	6
3 - A27 eastbound offslip	0	2	0	0
4 - Braypool Lane	0	5	0	0

Average PCU Per Veh

From	To	
	1 - A27 Eastbound onslip	2 - A27 Overbridge
1 - A27 Eastbound onslip	Exit-only	Exit-only
2 - A27 Overbridge	1.092	1.000
3 - A27 eastbound offslip	1.000	1.019
4 - Braypool Lane	1.000	1.055

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
06:45-07:00	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	854	854
	3 - A27 eastbound offslip	98	98
	4 - Braypool Lane	26	26
07:00-07:15	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	1020	1020
	3 - A27 eastbound offslip	117	117
	4 - Braypool Lane	31	31
07:15-07:30	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	1250	1250
	3 - A27 eastbound offslip	143	143
	4 - Braypool Lane	39	39
07:30-07:45	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	1250	1250
	3 - A27 eastbound offslip	143	143
	4 - Braypool Lane	39	39
07:45-08:00	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	1020	1020
	3 - A27 eastbound offslip	117	117
	4 - Braypool Lane	31	31
08:00-08:15	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	854	854
	3 - A27 eastbound offslip	98	98
	4 - Braypool Lane	26	26

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A27 Eastbound onslip						
2 - A27 Overbridge	0.85	17.96	6.0	C	1041	1562
3 - A27 eastbound offslip	0.78	82.41	3.0	F	119	179
4 - Braypool Lane	0.09	10.02	0.1	B	32	48

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			103				833				
2 - A27 Overbridge	854	214	0	1464	0.584	848	103	0.0	1.5	6.320	A
3 - A27 eastbound offslip	98	24	848	233	0.419	95	0	0.0	0.7	26.004	D
4 - Braypool Lane	26	7	910	649	0.041	26	34	0.0	0.0	5.983	A

07:00 - 07:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			125				998				
2 - A27 Overbridge	1020	255	0	1464	0.697	1017	125	1.5	2.4	8.703	A
3 - A27 eastbound offslip	117	29	1017	212	0.550	115	0	0.7	1.1	36.934	E
4 - Braypool Lane	31	8	1091	549	0.057	31	40	0.0	0.1	7.208	A

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			150				1214				
2 - A27 Overbridge	1250	312	0	1464	0.854	1237	150	2.4	5.7	16.396	C
3 - A27 eastbound offslip	143	36	1237	185	0.775	137	0	1.1	2.6	69.352	F
4 - Braypool Lane	39	10	1325	419	0.092	38	49	0.1	0.1	9.785	A

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			154				1225				
2 - A27 Overbridge	1250	312	0	1464	0.854	1248	154	5.7	6.0	17.958	C
3 - A27 eastbound offslip	143	36	1248	183	0.781	142	0	2.6	3.0	82.413	F
4 - Braypool Lane	39	10	1341	411	0.094	39	49	0.1	0.1	10.020	B

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			133				1015				
2 - A27 Overbridge	1020	255	0	1464	0.697	1034	133	6.0	2.6	9.399	A
3 - A27 eastbound offslip	117	29	1034	210	0.556	123	0	3.0	1.4	44.706	E
4 - Braypool Lane	31	8	1116	535	0.059	32	41	0.1	0.1	7.410	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			108				843				
2 - A27 Overbridge	854	214	0	1464	0.584	859	108	2.6	1.6	6.531	A
3 - A27 eastbound offslip	98	24	859	232	0.422	100	0	1.4	0.8	28.266	D
4 - Braypool Lane	26	7	925	641	0.041	26	34	0.1	0.0	6.066	A

(Default Analysis Set) - 2032 Do Something, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	(untitled)	Standard Roundabout		1, 2, 3, 4	53.96	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2032 Do Something	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A27 Eastbound onslip					
2 - A27 Overbridge		ONE HOUR	✓	1048	100.000
3 - A27 eastbound offslip		ONE HOUR	✓	196	100.000
4 - Braypool Lane		ONE HOUR	✓	26	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
	1 - A27 Eastbound onslip	2 - A27 Overbridge	3 - A27 eastbound offslip	4 - Braypool Lane
1 - A27 Eastbound onslip	Exit-only	Exit-only	Exit-only	Exit-only
2 - A27 Overbridge	1026	3	0	19
3 - A27 eastbound offslip	8	179	0	9
4 - Braypool Lane	11	15	0	0

Proportions

From	To	
	1 - A27 Eastbound onslip	2 - A27 Overbridge
1 - A27 Eastbound onslip	0.25	0.25
2 - A27 Overbridge	0.98	0.00
3 - A27 eastbound offslip	0.04	0.91
4 - Braypool Lane	0.42	0.58

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	1 - A27 Eastbound onslip	2 - A27 Overbridge	3 - A27 eastbound offslip	4 - Braypool Lane
1 - A27 Eastbound onslip	Exit-only	Exit-only	Exit-only	Exit-only
2 - A27 Overbridge	2	0	0	0
3 - A27 eastbound offslip	0	1	0	0
4 - Braypool Lane	0	0	0	0

Average PCU Per Veh

From	To	
	1 - A27 Eastbound onslip	2 - A27 Overbridge
1 - A27 Eastbound onslip	Exit-only	Exit-only
2 - A27 Overbridge	1.023	1.000
3 - A27 eastbound offslip	1.000	1.006
4 - Braypool Lane	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
16:45-17:00	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	789	789
	3 - A27 eastbound offslip	148	148
	4 - Braypool Lane	20	20
17:00-17:15	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	942	942
	3 - A27 eastbound offslip	176	176
	4 - Braypool Lane	23	23
17:15-17:30	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	1154	1154
	3 - A27 eastbound offslip	216	216
	4 - Braypool Lane	29	29
17:30-17:45	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	1154	1154
	3 - A27 eastbound offslip	216	216
	4 - Braypool Lane	29	29
17:45-18:00	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	942	942
	3 - A27 eastbound offslip	176	176
	4 - Braypool Lane	23	23
18:00-18:15	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	789	789
	3 - A27 eastbound offslip	148	148
	4 - Braypool Lane	20	20

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A27 Eastbound onslip						
2 - A27 Overbridge	0.79	11.81	3.7	B	962	1442
3 - A27 eastbound offslip	1.11	285.25	16.9	F	180	270
4 - Braypool Lane	0.07	9.08	0.1	A	24	36

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			143				782				
2 - A27 Overbridge	789	197	0	1464	0.539	784	143	0.0	1.2	5.380	A
3 - A27 eastbound offslip	148	37	784	241	0.611	142	0	0.0	1.4	34.684	D
4 - Braypool Lane	20	5	905	652	0.030	19	21	0.0	0.0	5.695	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			171				937				
2 - A27 Overbridge	942	236	0	1464	0.644	940	171	1.2	1.8	6.986	A
3 - A27 eastbound offslip	176	44	940	222	0.794	170	0	1.4	3.0	63.106	F
4 - Braypool Lane	23	6	1085	552	0.042	23	25	0.0	0.0	6.806	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			189				1142				
2 - A27 Overbridge	1154	288	0	1464	0.788	1147	189	1.8	3.6	11.346	B
3 - A27 eastbound offslip	216	54	1147	196	1.101	185	0	3.0	10.7	167.824	F
4 - Braypool Lane	29	7	1302	432	0.066	29	29	0.0	0.1	8.925	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			194				1149				
2 - A27 Overbridge	1154	288	0	1464	0.788	1153	194	3.6	3.7	11.812	B
3 - A27 eastbound offslip	216	54	1153	195	1.106	191	0	10.7	16.9	285.246	F
4 - Braypool Lane	29	7	1315	425	0.067	29	30	0.1	0.1	9.084	A

17:45 - 18:00

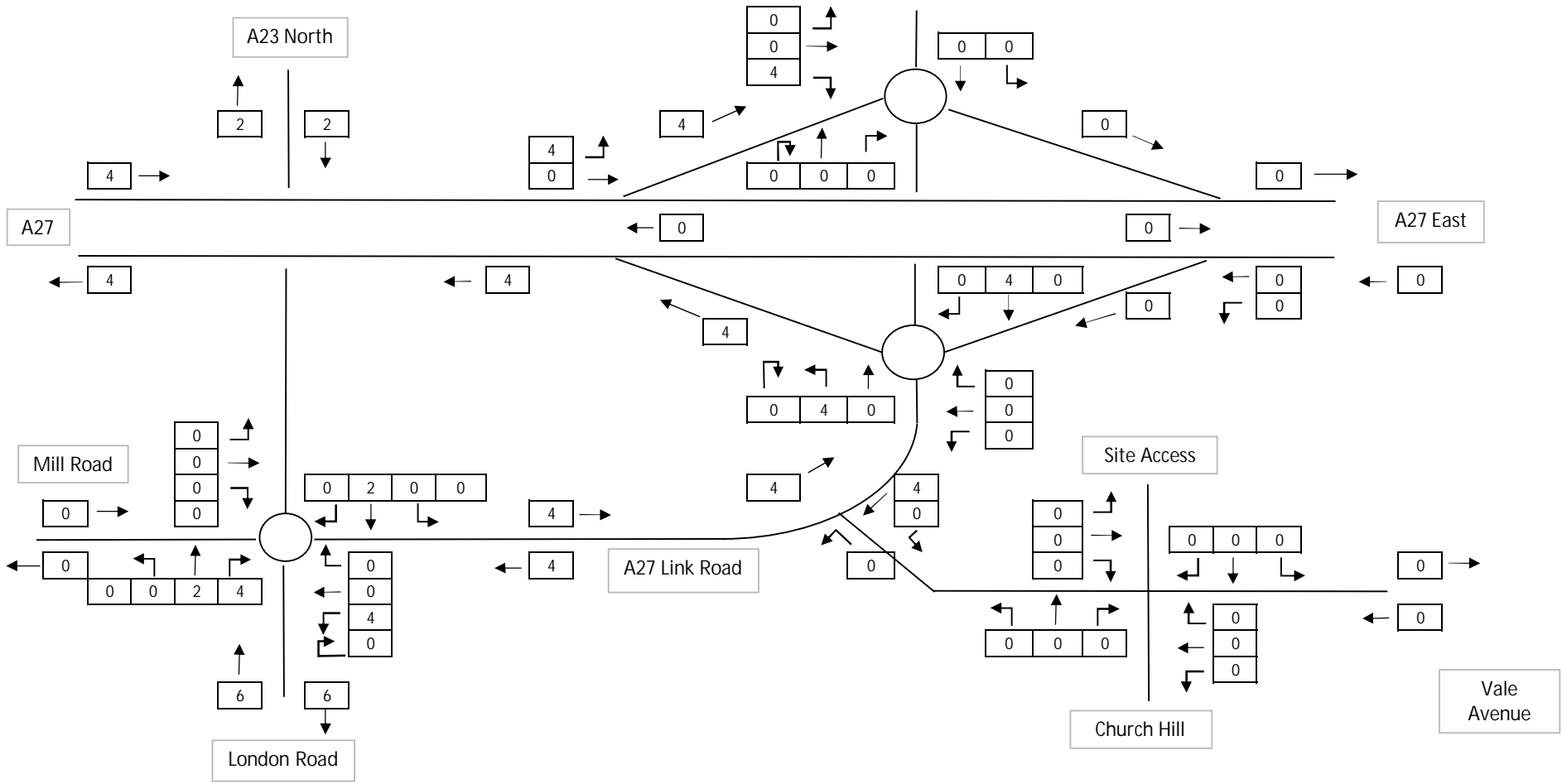
Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			207				948				
2 - A27 Overbridge	942	236	0	1464	0.644	949	207	3.7	1.9	7.248	A
3 - A27 eastbound offslip	176	44	949	221	0.798	208	0	16.9	8.9	231.908	F
4 - Braypool Lane	23	6	1131	527	0.044	23	27	0.1	0.0	7.157	A

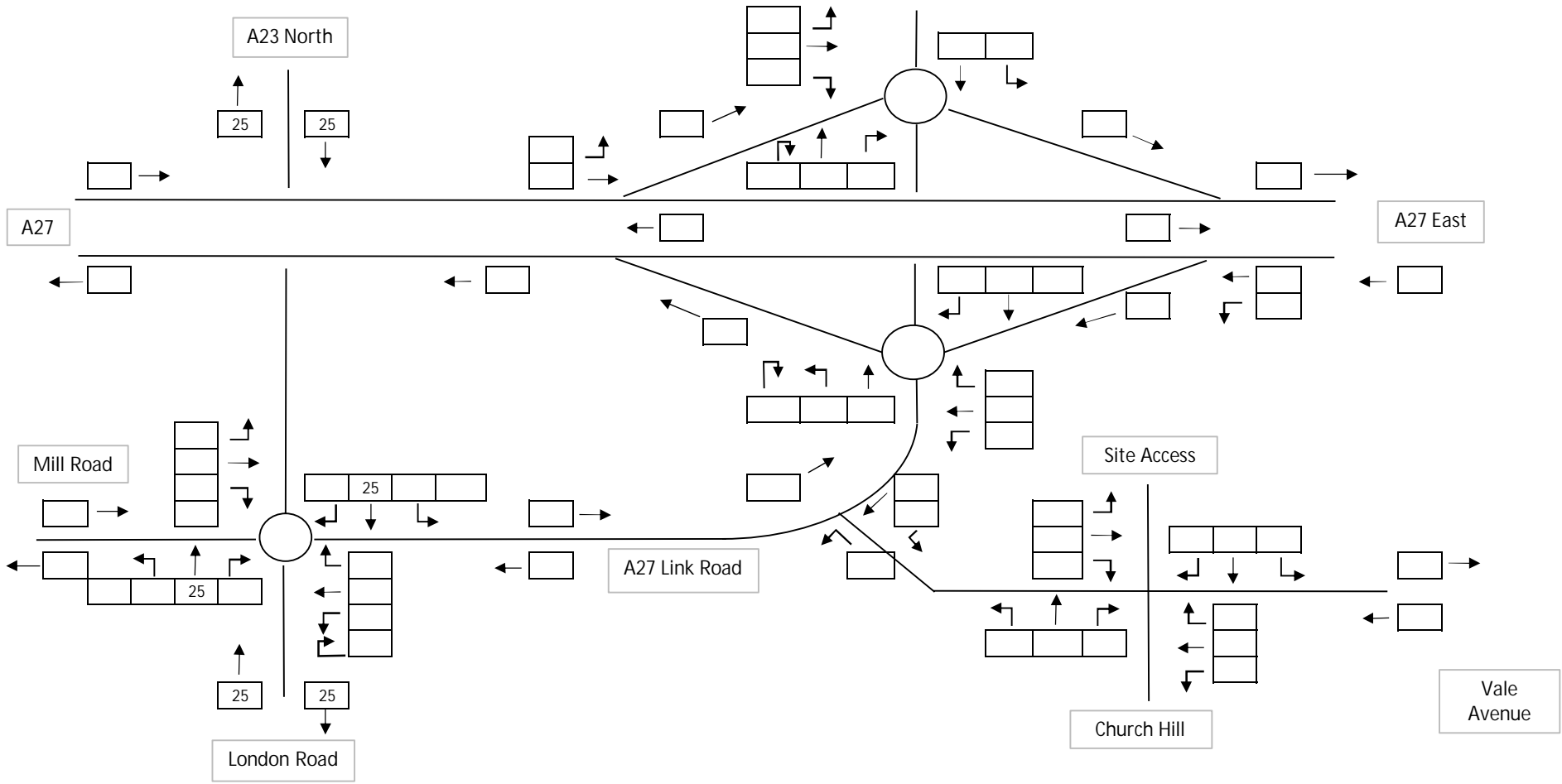
18:00 - 18:15

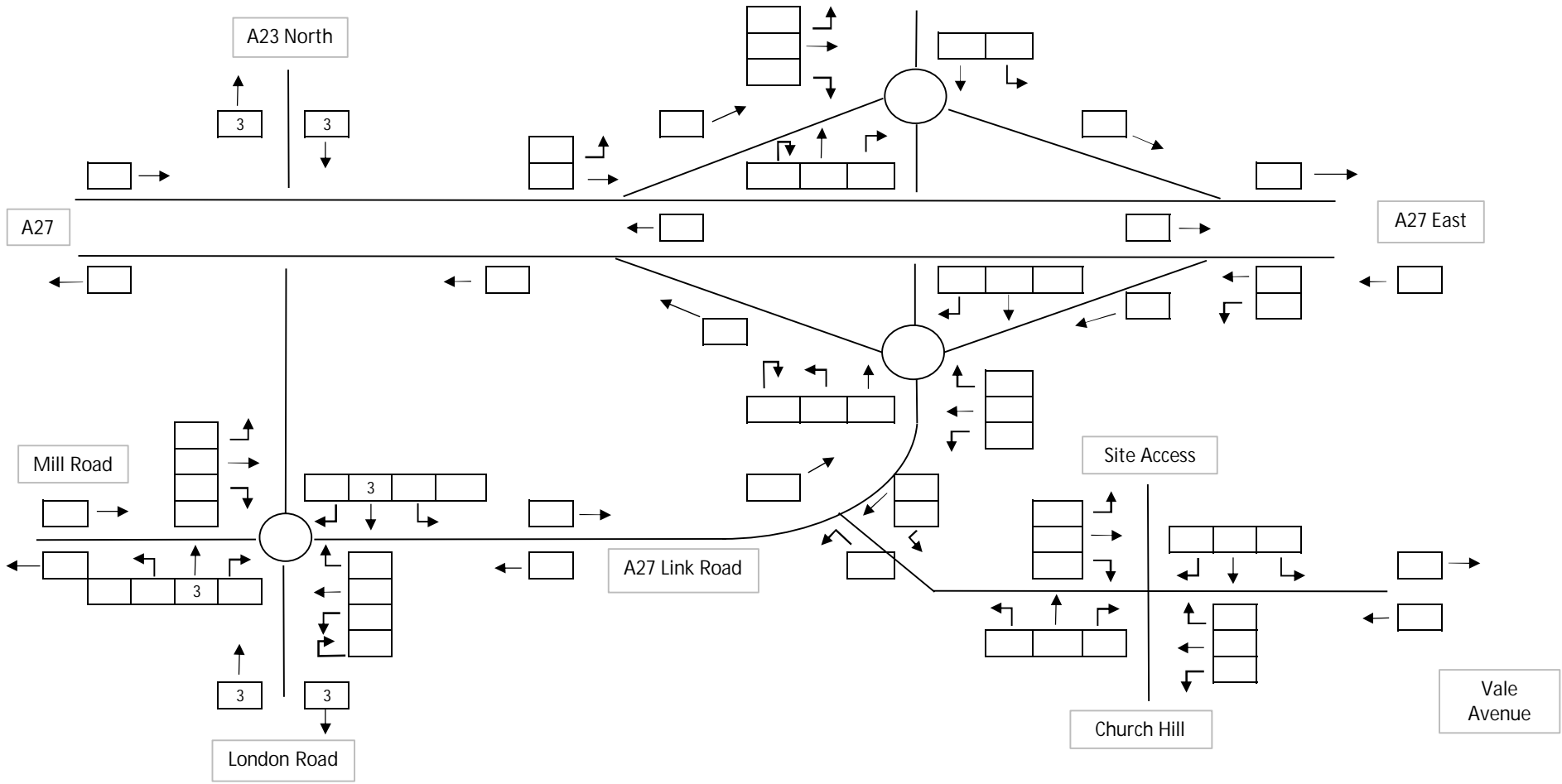
Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			174				791				
2 - A27 Overbridge	789	197	0	1464	0.539	792	174	1.9	1.2	5.496	A
3 - A27 eastbound offslip	148	37	792	240	0.614	176	0	8.9	1.8	70.454	F
4 - Braypool Lane	20	5	945	630	0.031	20	22	0.0	0.0	5.902	A

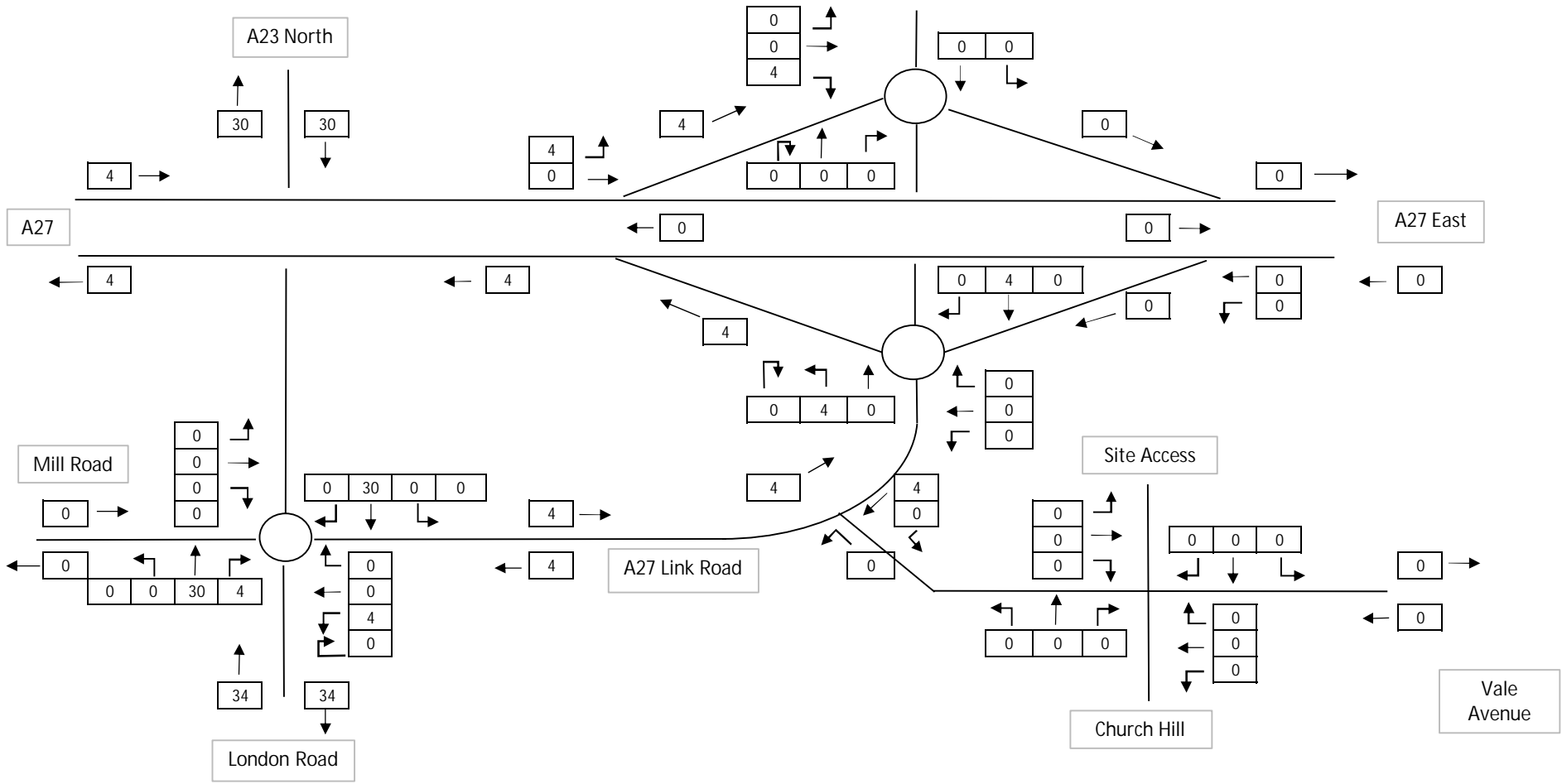


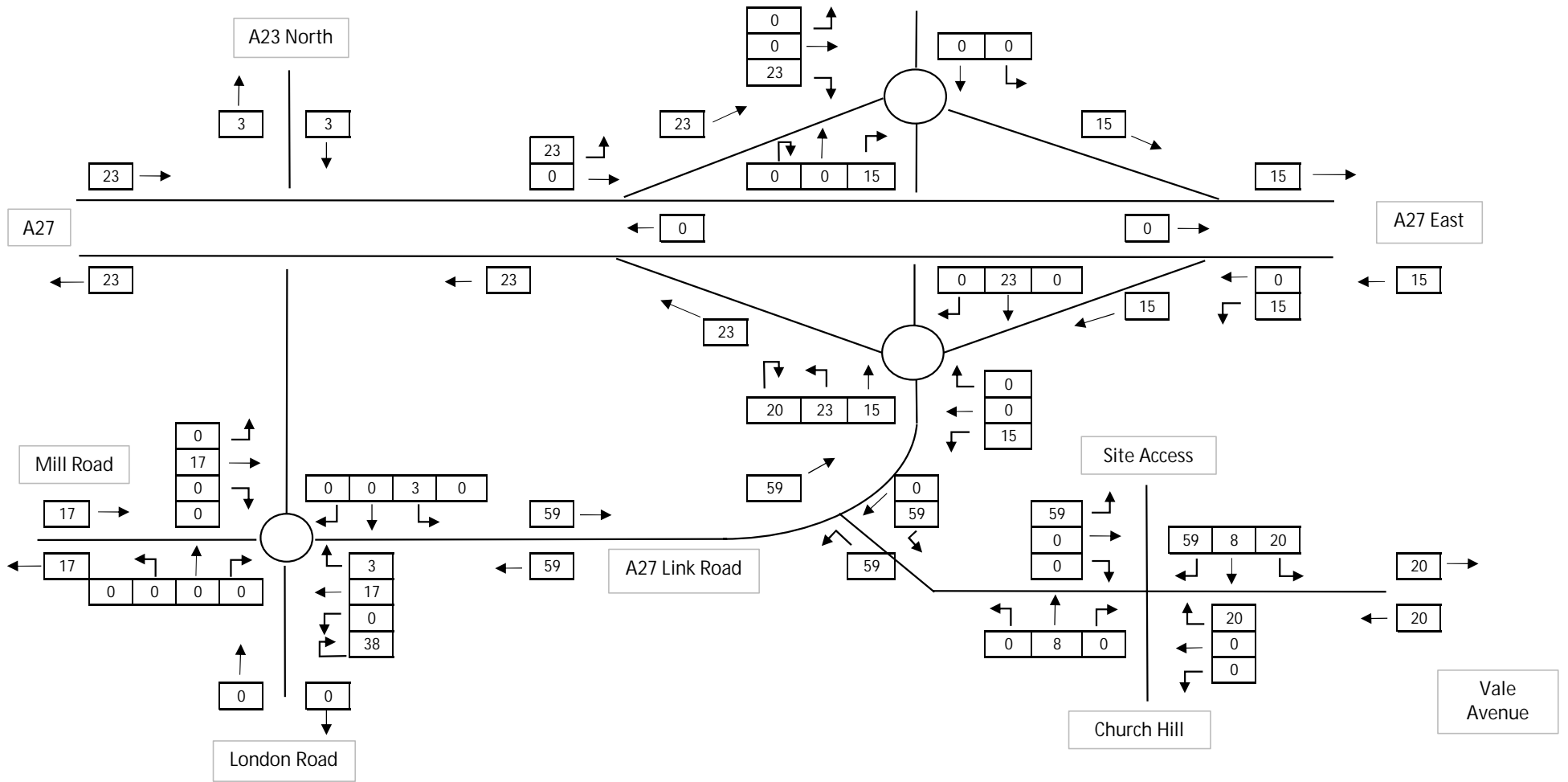
I. Sensitivity Test – Trip Generation

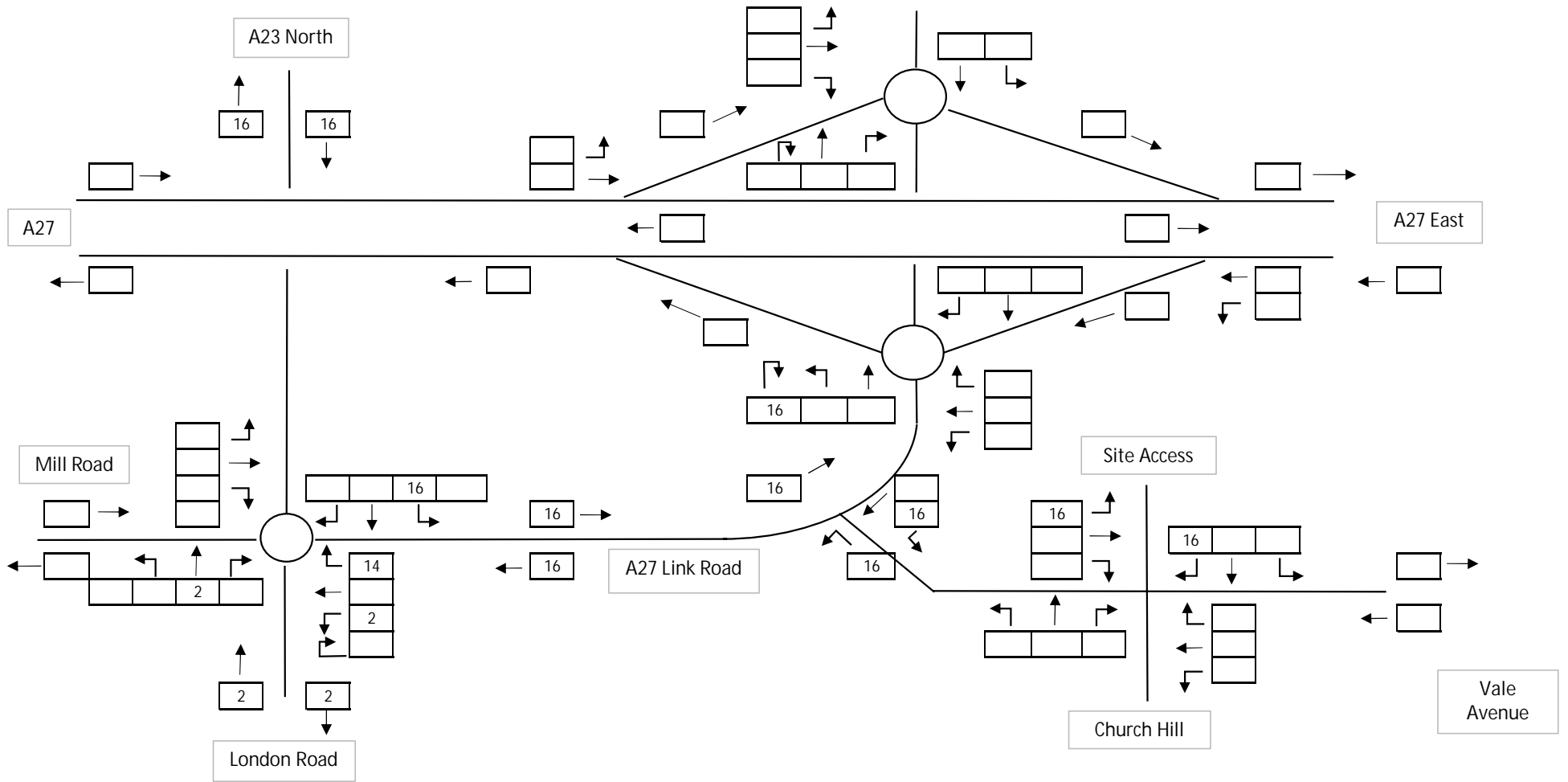


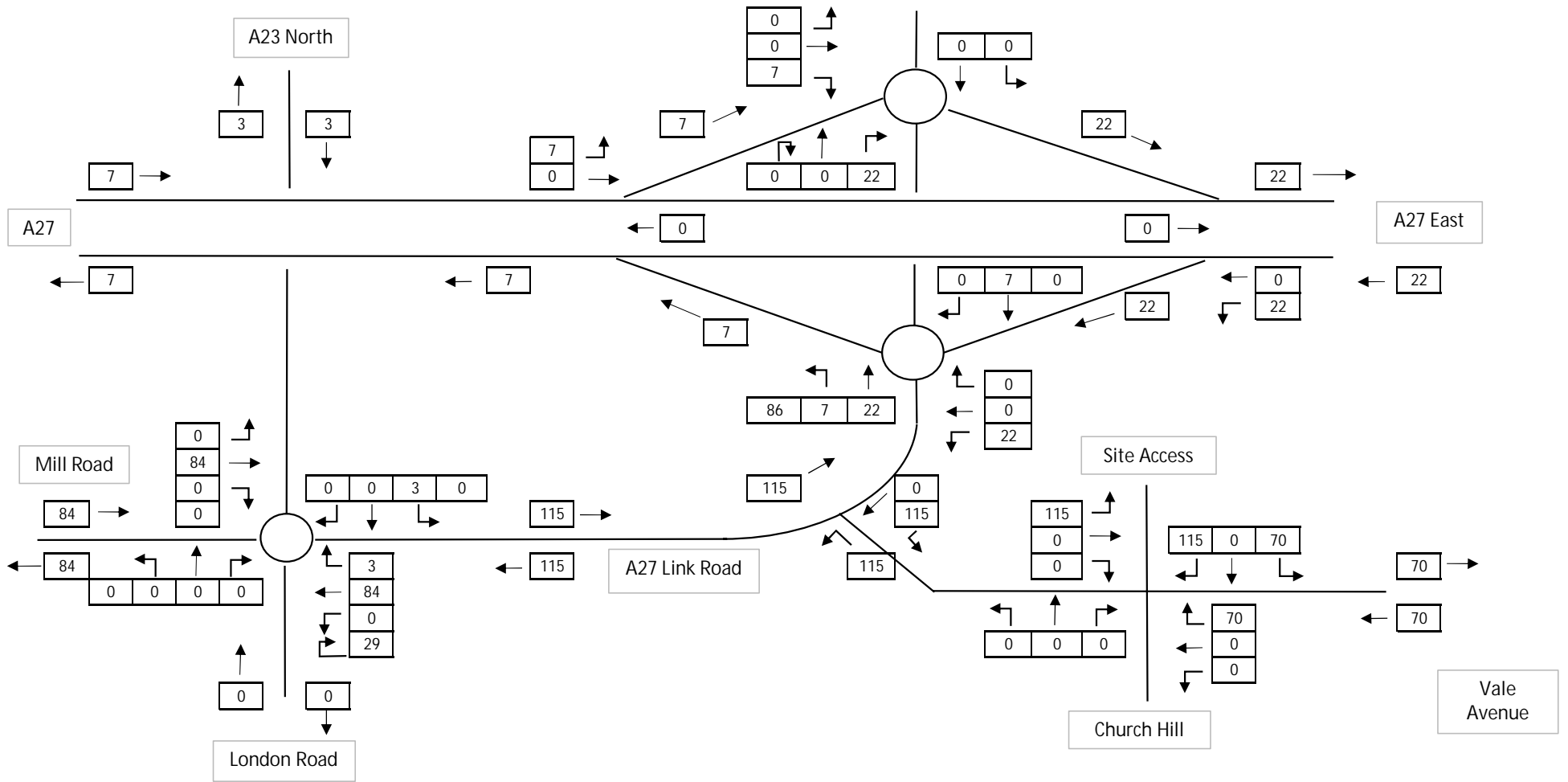


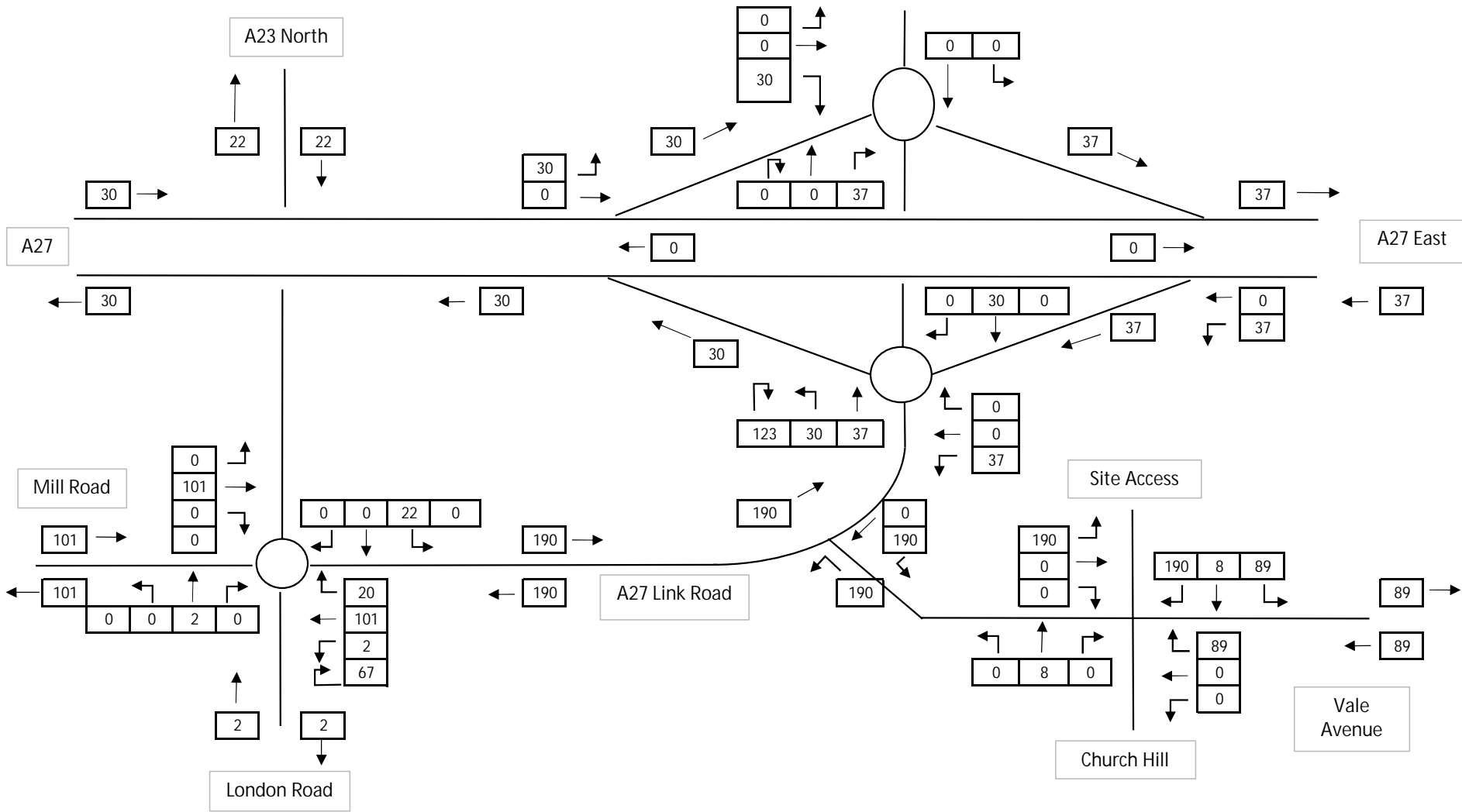


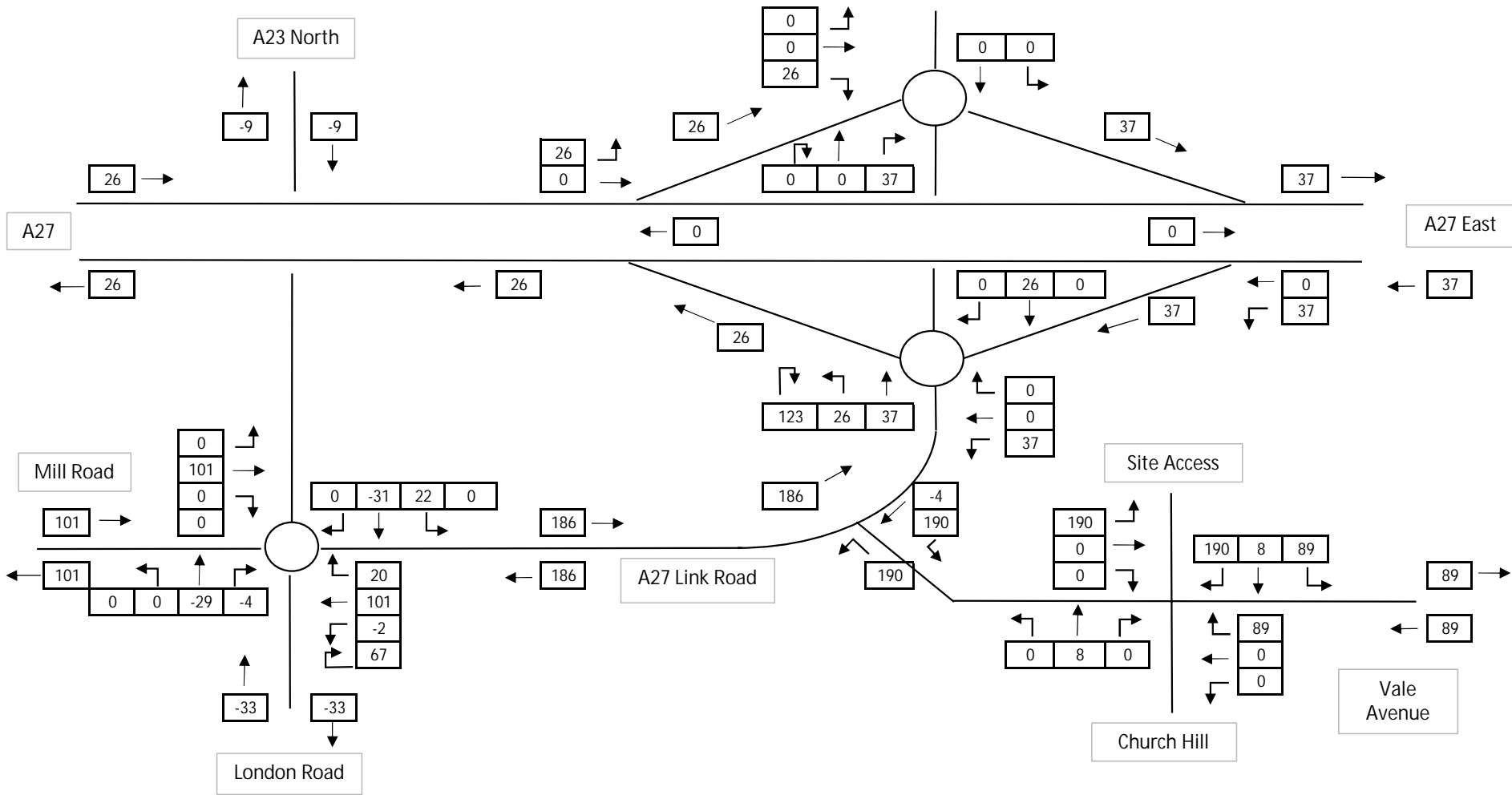




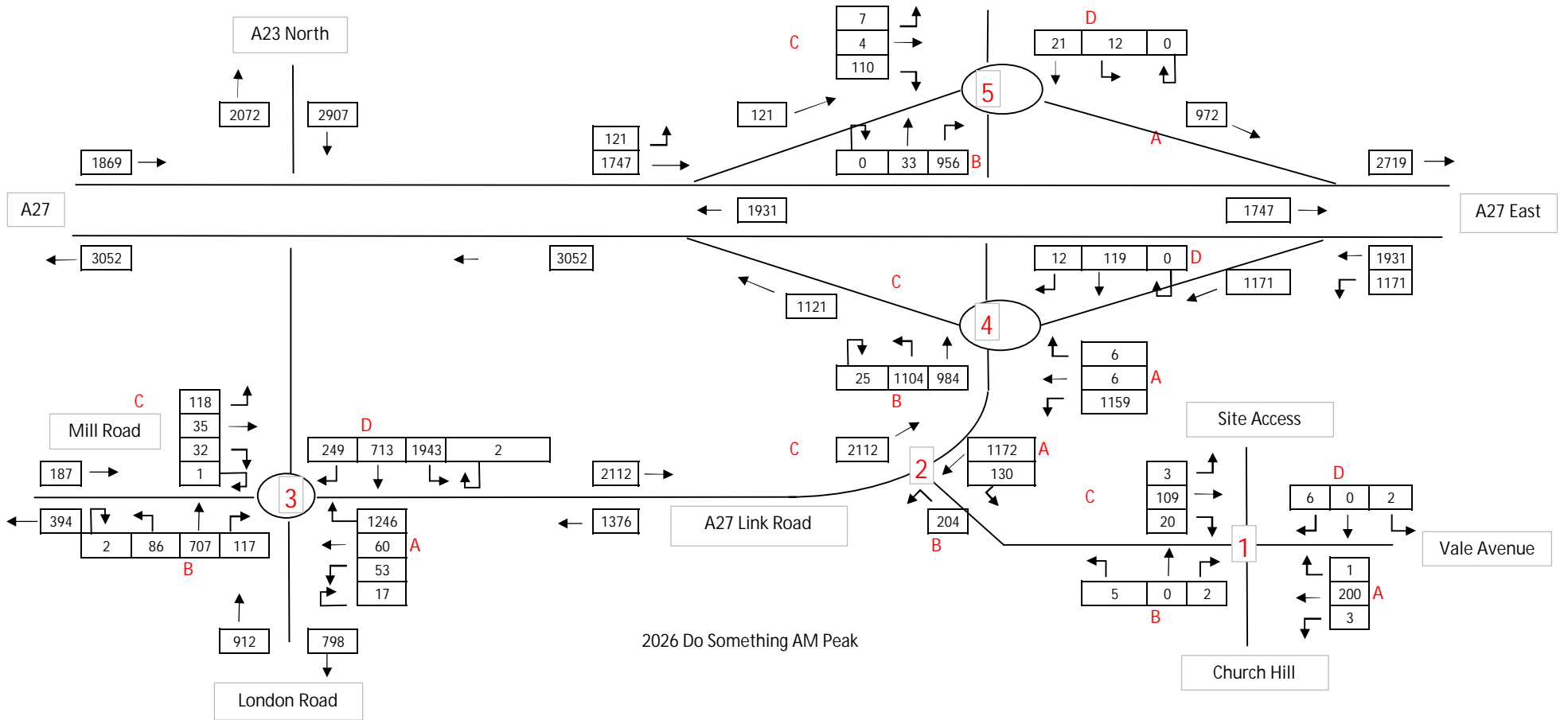


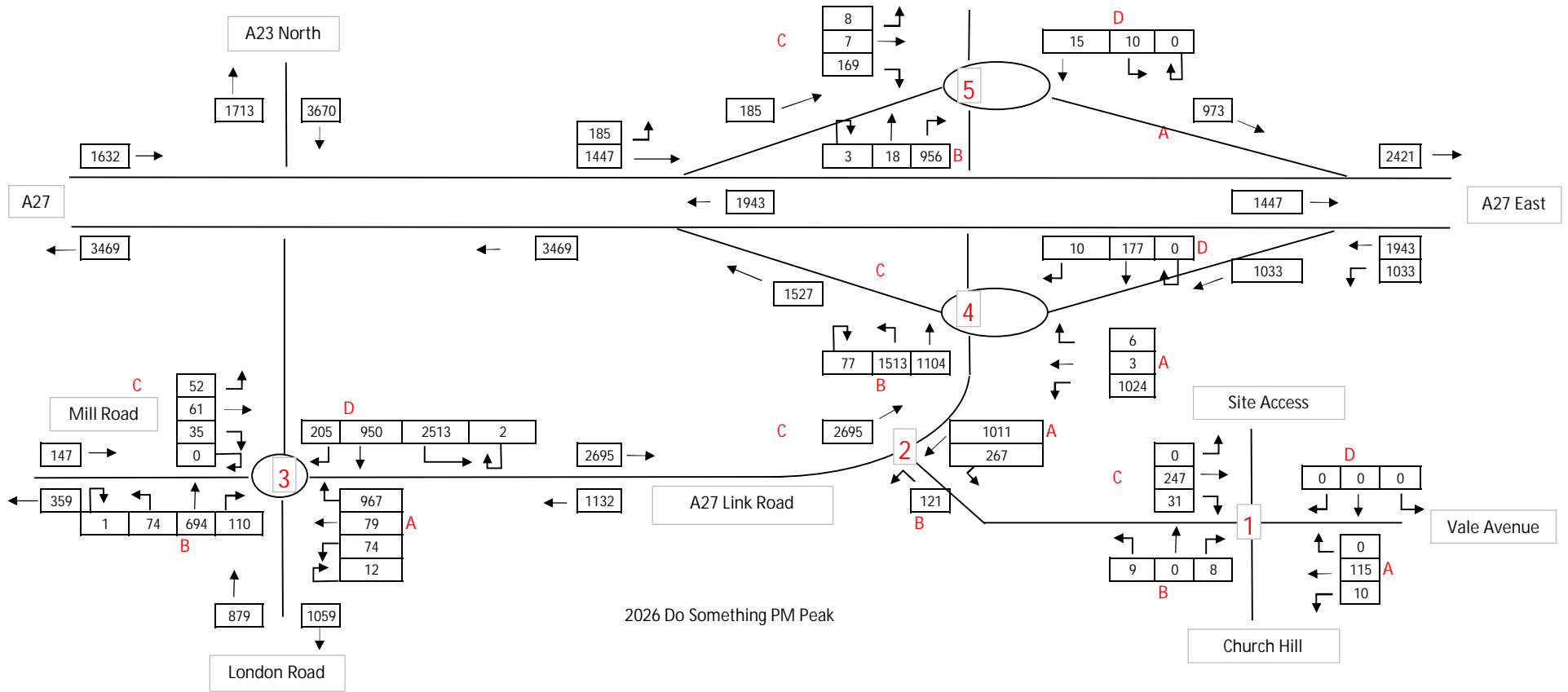


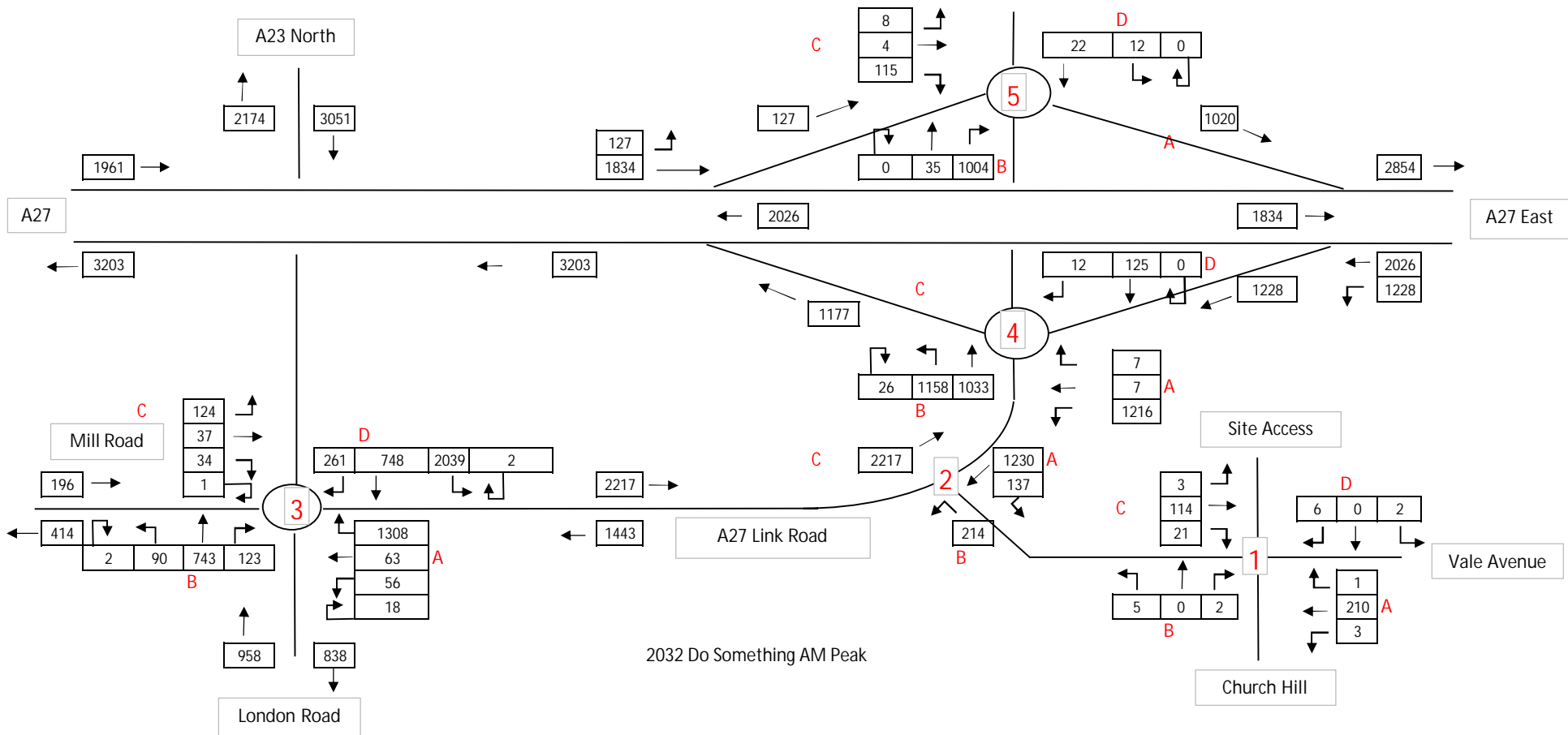


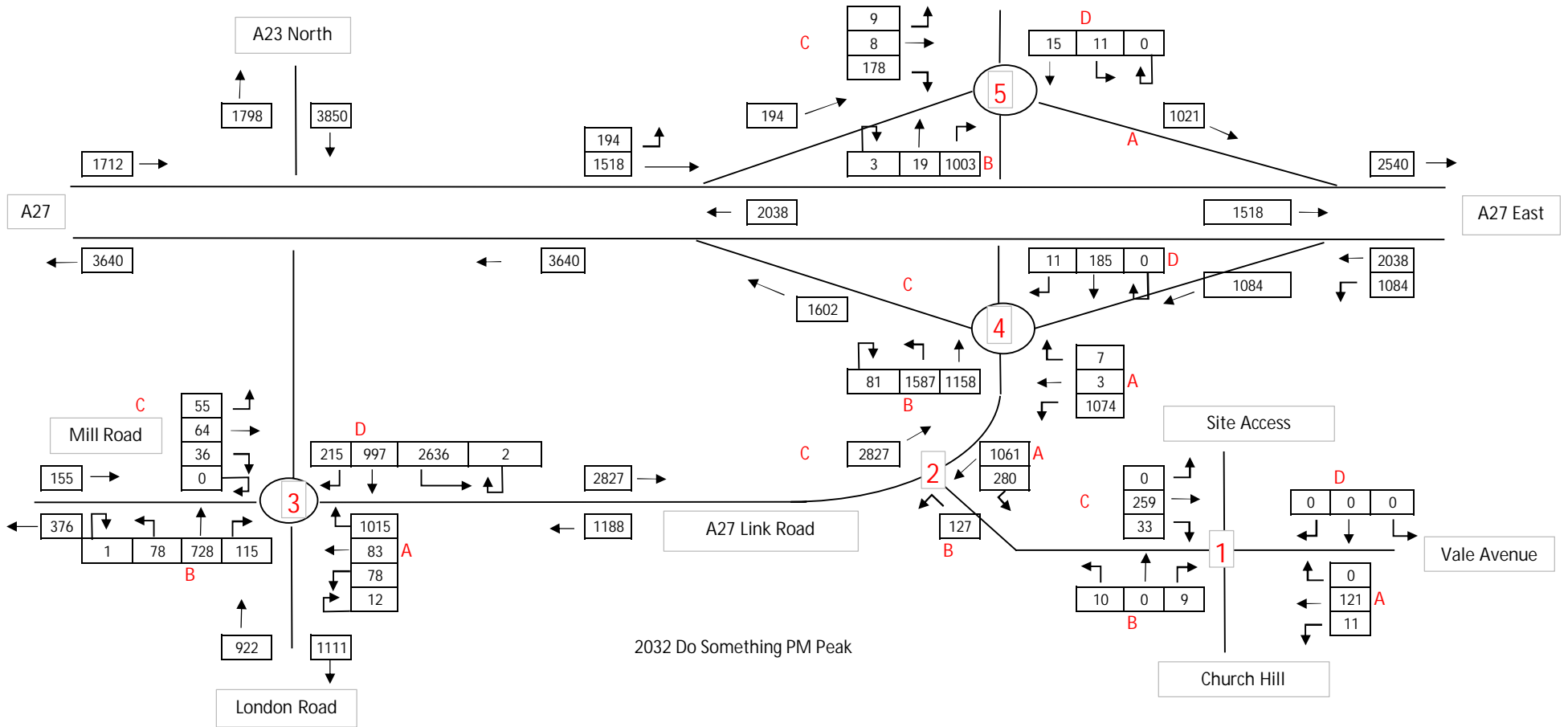


J. Sensitivity Test – Network Flow Diagrams









K. Sensitivity Test – Junction Capacity Assessment Output Reports

Junctions 9
PICADY 9 - Priority Intersection Module
Version: 9.5.1.7462 © Copyright TRL Limited, 2019
For sales and distribution information, program advice and maintenance, contact TRL: +44 (0)1344 379777 software@trl.co.uk www.trlsoftware.co.uk
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Filename: Junction 1 Vale Avenue - Existing Site Access T-junction.j9
Path: C:\Users\WRI87273\Mott MacDonald\B RMF Brighton DO - T Transport\Junction models\Sensitivity Test (+90mins) \Junction 1 Vale Avenue - Existing Site Access\05. Model Updates 2023\01. Model
Report generation date: 01/06/2023 11:23:08

- »(Default Analysis Set) - 2021 Baseline, AM
- »(Default Analysis Set) - 2021 Baseline, PM
- »(Default Analysis Set) - 2026 Future Baseline, AM
- »(Default Analysis Set) - 2026 Future Baseline, PM
- »(Default Analysis Set) - 2032 Future Baseline, AM
- »(Default Analysis Set) - 2032 Future Baseline, PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
A1 - 2021 Baseline										
Stream B-CD	D1	0.0	5.28	0.01	A	D2	0.0	5.41	0.01	A
Stream B-AD		0.0	8.02	0.00	A		0.0	7.83	0.02	A
Stream A-BCD		0.0	0.00	0.00	A		0.0	0.00	0.00	A
Stream D-ABC		0.0	0.00	0.00	A		0.0	0.00	0.00	A
Stream C-ABD		0.1	5.53	0.04	A		0.1	5.04	0.06	A
A1 - 2026 Future Baseline										
Stream B-CD	D3	0.0	5.30	0.01	A	D4	0.0	5.42	0.01	A
Stream B-AD		0.0	8.08	0.00	A		0.0	7.89	0.02	A
Stream A-BCD		0.0	0.00	0.00	A		0.0	0.00	0.00	A
Stream D-ABC		0.0	0.00	0.00	A		0.0	0.00	0.00	A
Stream C-ABD		0.1	5.53	0.04	A		0.1	5.02	0.07	A
A1 - 2032 Future Baseline										
Stream B-CD	D7	0.0	5.32	0.01	A	D8	0.0	5.45	0.02	A
Stream B-AD		0.0	8.14	0.00	A		0.0	7.98	0.02	A
Stream A-BCD		0.0	0.00	0.00	A		0.0	0.00	0.00	A
Stream D-ABC		0.0	0.00	0.00	A		0.0	0.00	0.00	A
Stream C-ABD		0.1	5.54	0.04	A		0.1	5.00	0.07	A

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

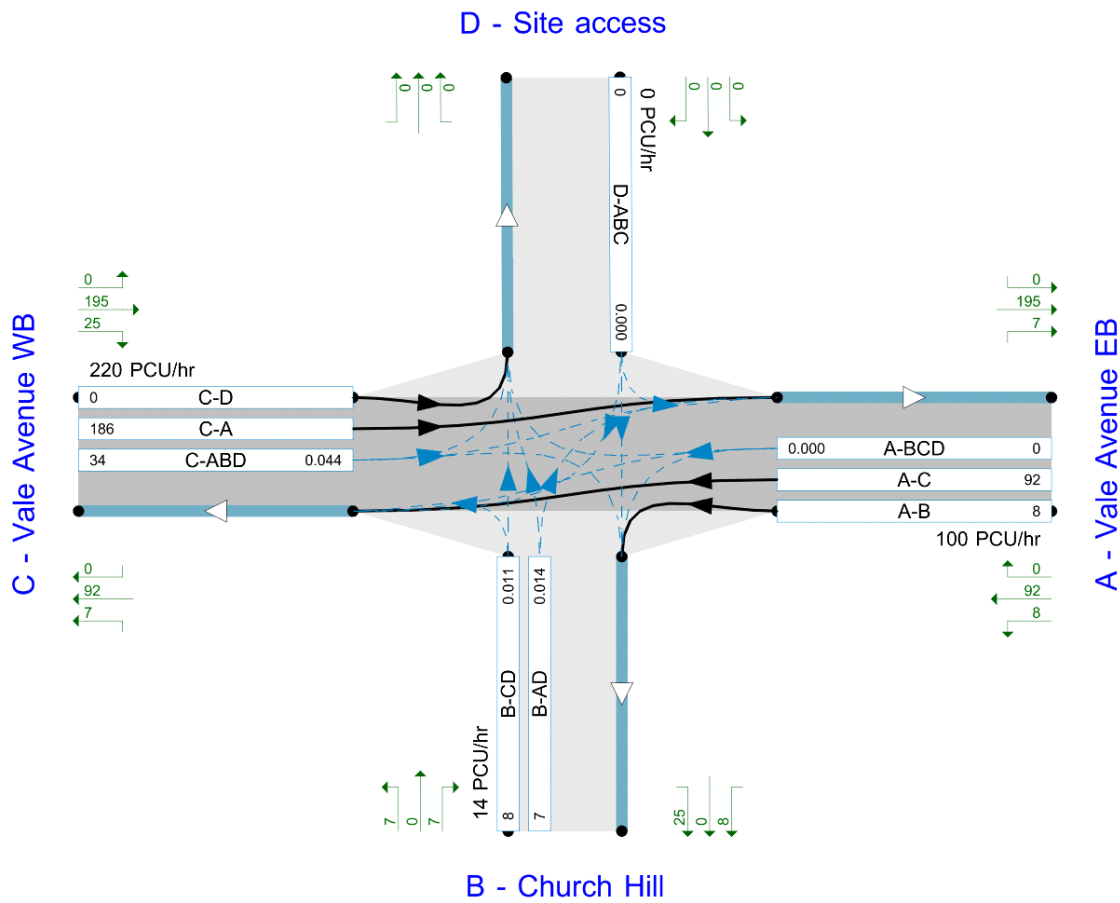
File summary

File Description

Title	(untitled)
Location	
Site number	
Date	10/02/2022
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	
Description	

Units

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



Flows show modelled flow through junction (PCU/hr).
Streams (upstream end) show Total Demand (PCU/hr); Streams (downstream end) show RFC ()

Time Segment: 16:45-17:00

The junction diagram reflects the last run of Junctions.

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2021 Baseline	AM	ONE HOUR	06:45	08:15	15
D2	2021 Baseline	PM	ONE HOUR	16:45	18:15	15
D3	2026 Future Baseline	AM	ONE HOUR	06:45	08:15	15
D4	2026 Future Baseline	PM	ONE HOUR	16:45	18:15	15
D7	2032 Future Baseline	AM	ONE HOUR	06:45	08:15	15
D8	2032 Future Baseline	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Name	Network flow scaling factor (%)
A1	(Default Analysis Set)	100.000

(Default Analysis Set) - 2021 Baseline, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Existing Junction Access	Crossroads	Two-way		0.51	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Vale Avenue EB		Major
B	Church Hill		Minor
C	Vale Avenue WB		Major
D	Site access		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A - Vale Avenue EB	8.00			65.0	✓	0.00
C - Vale Avenue WB	8.00			130.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B - Church Hill	One lane plus flare		10.00	5.62	4.06	2.89	2.25	✓	1.00	28	36
D - Site access	One lane	5.00								29	33

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
A-D	612	-	-	-	-	-	-	0.216	0.309	0.216	-	-	-
B-A	520	0.086	0.218	0.218	-	-	-	0.137	0.312	-	0.218	0.218	0.109
B-C	744	0.104	0.263	-	-	-	-	-	-	-	-	-	-
B-D, nearside lane	580	0.097	0.244	0.244	-	-	-	0.153	0.349	0.153	-	-	-
B-D, offside lane	520	0.086	0.218	0.218	-	-	-	0.137	0.312	0.137	-	-	-
C-B	649	0.230	0.230	0.328	-	-	-	-	-	-	-	-	-
D-A	774	-	-	-	-	-	-	0.274	-	0.108	-	-	-
D-B, nearside lane	604	0.160	0.160	0.363	-	-	-	0.254	0.254	0.100	-	-	-
D-B, offside lane	604	0.160	0.160	0.363	-	-	-	0.254	0.254	0.100	-	-	-
D-C	604	-	0.160	0.363	0.127	0.254	0.254	0.254	0.254	0.100	-	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.
Streams may be combined, in which case capacity will be adjusted.
Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2021 Baseline	AM	ONE HOUR	06:45	08:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Vale Avenue EB		✓	194	100.000
B - Church Hill		✓	7	100.000
C - Vale Avenue WB		✓	124	100.000
D - Site access		✓	1	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - Vale Avenue EB	B - Church Hill	C - Vale Avenue WB	D - Site access
From	A - Vale Avenue EB	0	3	191	0
	B - Church Hill	2	0	5	0
	C - Vale Avenue WB	105	19	0	0
	D - Site access	1	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Vale Avenue EB	B - Church Hill	C - Vale Avenue WB	D - Site access
From	A - Vale Avenue EB	0	0	0	0
	B - Church Hill	0	0	0	0
	C - Vale Avenue WB	1	0	0	0
	D - Site access	0	0	0	0

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
06:45-07:00	A - Vale Avenue EB	146	146
	B - Church Hill	5	5
	C - Vale Avenue WB	93	93
	D - Site access	0	0
07:00-07:15	A - Vale Avenue EB	174	174
	B - Church Hill	6	6
	C - Vale Avenue WB	111	111
	D - Site access	0	0
07:15-07:30	A - Vale Avenue EB	214	214
	B - Church Hill	8	8
	C - Vale Avenue WB	137	137
	D - Site access	0	0
07:30-07:45	A - Vale Avenue EB	214	214
	B - Church Hill	8	8
	C - Vale Avenue WB	137	137
	D - Site access	0	0
07:45-08:00	A - Vale Avenue EB	174	174
	B - Church Hill	6	6
	C - Vale Avenue WB	111	111
	D - Site access	0	0
08:00-08:15	A - Vale Avenue EB	146	146
	B - Church Hill	5	5
	C - Vale Avenue WB	93	93
	D - Site access	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-CD	0.01	5.28	0.0	A
B-AD	0.00	8.02	0.0	A
A-BCD	0.00	0.00	0.0	A
A-B				
A-C				
D-ABC	0.00	0.00	0.0	A
C-ABD	0.04	5.53	0.1	A
C-D				
C-A				

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	4	706	0.005	4	0.0	5.129	A
B-AD	2	473	0.003	1	0.0	7.638	A
A-BCD	0	590	0.000	0	0.0	0.000	A
A-B	2			2			
A-C	144			144			
D-ABC	0	595	0.000	0	0.0	0.000	A
C-ABD	16	668	0.024	16	0.0	5.531	A
C-D	0			0			
C-A	77			77			

07:00 - 07:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	4	698	0.006	4	0.0	5.191	A
B-AD	2	464	0.004	2	0.0	7.794	A
A-BCD	0	586	0.000	0	0.0	0.000	A
A-B	3			3			
A-C	172			172			
D-ABC	0	587	0.000	0	0.0	0.000	A
C-ABD	20	672	0.030	20	0.0	5.529	A
C-D	0			0			
C-A	92			92			

07:15 - 07:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	6	688	0.008	5	0.0	5.277	A
B-AD	2	451	0.005	2	0.0	8.020	A
A-BCD	0	580	0.000	0	0.0	0.000	A
A-B	3			3			
A-C	210			210			
D-ABC	0	575	0.000	0	0.0	0.000	A
C-ABD	25	677	0.037	25	0.1	5.529	A
C-D	0			0			
C-A	111			111			

07:30 - 07:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	6	688	0.008	6	0.0	5.278	A
B-AD	2	451	0.005	2	0.0	8.020	A
A-BCD	0	580	0.000	0	0.0	0.000	A
A-B	3			3			
A-C	210			210			
D-ABC	0	575	0.000	0	0.0	0.000	A
C-ABD	25	677	0.037	25	0.1	5.530	A
C-D	0			0			
C-A	111			111			

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	4	698	0.006	5	0.0	5.191	A
B-AD	2	464	0.004	2	0.0	7.796	A
A-BCD	0	586	0.000	0	0.0	0.000	A
A-B	3			3			
A-C	172			172			
D-ABC	0	587	0.000	0	0.0	0.000	A
C-ABD	20	672	0.030	20	0.0	5.534	A
C-D	0			0			
C-A	92			92			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	4	705	0.005	4	0.0	5.132	A
B-AD	2	473	0.003	2	0.0	7.641	A
A-BCD	0	590	0.000	0	0.0	0.000	A
A-B	2			2			
A-C	144			144			
D-ABC	0	595	0.000	0	0.0	0.000	A
C-ABD	16	668	0.024	16	0.0	5.533	A
C-D	0			0			
C-A	77			77			

(Default Analysis Set) - 2021 Baseline, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Existing Junction Access	Crossroads	Two-way		0.80	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

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	2021 Baseline	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	Average Demand (PCU/hr)	Scaling Factor (%)
A - Vale Avenue EB		✓	121	100.000
B - Church Hill		✓	17	100.000
C - Vale Avenue WB		✓	266	100.000
D - Site access		✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - Vale Avenue EB	B - Church Hill	C - Vale Avenue WB	D - Site access
From	A - Vale Avenue EB	0	10	111	0
	B - Church Hill	8	0	9	0
	C - Vale Avenue WB	236	30	0	0
	D - Site access	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Vale Avenue EB	B - Church Hill	C - Vale Avenue WB	D - Site access
From	A - Vale Avenue EB	0	0	1	0
	B - Church Hill	0	0	0	0
	C - Vale Avenue WB	0	0	0	0
	D - Site access	0	0	0	0

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
16:45-17:00	A - Vale Avenue EB	91	91
	B - Church Hill	13	13
	C - Vale Avenue WB	200	200
	D - Site access	0	0
17:00-17:15	A - Vale Avenue EB	109	109
	B - Church Hill	15	15
	C - Vale Avenue WB	239	239
	D - Site access	0	0
17:15-17:30	A - Vale Avenue EB	133	133
	B - Church Hill	19	19
	C - Vale Avenue WB	293	293
	D - Site access	0	0
17:30-17:45	A - Vale Avenue EB	133	133
	B - Church Hill	19	19
	C - Vale Avenue WB	293	293
	D - Site access	0	0
17:45-18:00	A - Vale Avenue EB	109	109
	B - Church Hill	15	15
	C - Vale Avenue WB	239	239
	D - Site access	0	0
18:00-18:15	A - Vale Avenue EB	91	91
	B - Church Hill	13	13
	C - Vale Avenue WB	200	200
	D - Site access	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-CD	0.01	5.41	0.0	A
B-AD	0.02	7.83	0.0	A
A-BCD	0.00	0.00	0.0	A
A-B				
A-C				
D-ABC	0.00	0.00	0.0	A
C-ABD	0.06	5.04	0.1	A
C-D				
C-A				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	7	687	0.010	7	0.0	5.294	A
B-AD	6	493	0.012	6	0.0	7.392	A
A-BCD	0	566	0.000	0	0.0	0.000	A
A-B	8			8			
A-C	84			84			
D-ABC	0	575	0.000	0	0.0	0.000	A
C-ABD	30	744	0.040	29	0.1	5.037	A
C-D	0			0			
C-A	171			171			

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	8	682	0.012	8	0.0	5.342	A
B-AD	7	483	0.015	7	0.0	7.569	A
A-BCD	0	557	0.000	0	0.0	0.000	A
A-B	9			9			
A-C	100			100			
D-ABC	0	563	0.000	0	0.0	0.000	A
C-ABD	37	763	0.049	37	0.1	4.962	A
C-D	0			0			
C-A	202			202			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	10	675	0.015	10	0.0	5.408	A
B-AD	9	468	0.019	9	0.0	7.831	A
A-BCD	0	545	0.000	0	0.0	0.000	A
A-B	11			11			
A-C	122			122			
D-ABC	0	545	0.000	0	0.0	0.000	A
C-ABD	49	789	0.063	49	0.1	4.865	A
C-D	0			0			
C-A	244			244			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	10	675	0.015	10	0.0	5.409	A
B-AD	9	468	0.019	9	0.0	7.831	A
A-BCD	0	545	0.000	0	0.0	0.000	A
A-B	11			11			
A-C	122			122			
D-ABC	0	545	0.000	0	0.0	0.000	A
C-ABD	49	789	0.063	49	0.1	4.868	A
C-D	0			0			
C-A	243			243			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	8	682	0.012	8	0.0	5.344	A
B-AD	7	483	0.015	7	0.0	7.573	A
A-BCD	0	557	0.000	0	0.0	0.000	A
A-B	9			9			
A-C	100			100			
D-ABC	0	563	0.000	0	0.0	0.000	A
C-ABD	37	763	0.049	38	0.1	4.966	A
C-D	0			0			
C-A	202			202			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	7	687	0.010	7	0.0	5.295	A
B-AD	6	493	0.012	6	0.0	7.395	A
A-BCD	0	566	0.000	0	0.0	0.000	A
A-B	8			8			
A-C	84			84			
D-ABC	0	575	0.000	0	0.0	0.000	A
C-ABD	30	744	0.040	30	0.1	5.041	A
C-D	0			0			
C-A	171			171			

(Default Analysis Set) - 2026 Future Baseline, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Existing Junction Access	Crossroads	Two-way		0.51	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

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	2026 Future Baseline	AM	ONE HOUR	06:45	08:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Vale Avenue EB		✓	203	100.000
B - Church Hill		✓	7	100.000
C - Vale Avenue WB		✓	130	100.000
D - Site access		✓	1	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - Vale Avenue EB	B - Church Hill	C - Vale Avenue WB	D - Site access
From	A - Vale Avenue EB	0	3	200	0
	B - Church Hill	2	0	5	0
	C - Vale Avenue WB	110	20	0	0
	D - Site access	1	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Vale Avenue EB	B - Church Hill	C - Vale Avenue WB	D - Site access
From	A - Vale Avenue EB	0	0	0	0
	B - Church Hill	0	0	0	0
	C - Vale Avenue WB	1	0	0	0
	D - Site access	0	0	0	0

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
06:45-07:00	A - Vale Avenue EB	153	153
	B - Church Hill	5	5
	C - Vale Avenue WB	98	98
	D - Site access	0	0
07:00-07:15	A - Vale Avenue EB	182	182
	B - Church Hill	6	6
	C - Vale Avenue WB	117	117
	D - Site access	0	0
07:15-07:30	A - Vale Avenue EB	224	224
	B - Church Hill	8	8
	C - Vale Avenue WB	143	143
	D - Site access	0	0
07:30-07:45	A - Vale Avenue EB	224	224
	B - Church Hill	8	8
	C - Vale Avenue WB	143	143
	D - Site access	0	0
07:45-08:00	A - Vale Avenue EB	182	182
	B - Church Hill	6	6
	C - Vale Avenue WB	117	117
	D - Site access	0	0
08:00-08:15	A - Vale Avenue EB	153	153
	B - Church Hill	5	5
	C - Vale Avenue WB	98	98
	D - Site access	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-CD	0.01	5.30	0.0	A
B-AD	0.00	8.08	0.0	A
A-BCD	0.00	0.00	0.0	A
A-B				
A-C				
D-ABC	0.00	0.00	0.0	A
C-ABD	0.04	5.53	0.1	A
C-D				
C-A				

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	4	704	0.005	4	0.0	5.142	A
B-AD	2	470	0.003	1	0.0	7.675	A
A-BCD	0	589	0.000	0	0.0	0.000	A
A-B	2			2			
A-C	151			151			
D-ABC	0	593	0.000	0	0.0	0.000	A
C-ABD	17	669	0.026	17	0.0	5.531	A
C-D	0			0			
C-A	81			81			

07:00 - 07:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	4	696	0.006	4	0.0	5.207	A
B-AD	2	461	0.004	2	0.0	7.840	A
A-BCD	0	585	0.000	0	0.0	0.000	A
A-B	3			3			
A-C	180			180			
D-ABC	0	584	0.000	0	0.0	0.000	A
C-ABD	21	673	0.031	21	0.0	5.530	A
C-D	0			0			
C-A	96			96			

07:15 - 07:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	6	685	0.008	5	0.0	5.298	A
B-AD	2	448	0.005	2	0.0	8.079	A
A-BCD	0	579	0.000	0	0.0	0.000	A
A-B	3			3			
A-C	220			220			
D-ABC	0	572	0.000	0	0.0	0.000	A
C-ABD	27	679	0.040	27	0.1	5.529	A
C-D	0			0			
C-A	116			116			

07:30 - 07:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	6	685	0.008	6	0.0	5.298	A
B-AD	2	448	0.005	2	0.0	8.079	A
A-BCD	0	579	0.000	0	0.0	0.000	A
A-B	3			3			
A-C	220			220			
D-ABC	0	572	0.000	0	0.0	0.000	A
C-ABD	27	679	0.040	27	0.1	5.533	A
C-D	0			0			
C-A	116			116			

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	4	696	0.006	5	0.0	5.209	A
B-AD	2	461	0.004	2	0.0	7.839	A
A-BCD	0	585	0.000	0	0.0	0.000	A
A-B	3			3			
A-C	180			180			
D-ABC	0	584	0.000	0	0.0	0.000	A
C-ABD	21	673	0.031	21	0.0	5.533	A
C-D	0			0			
C-A	96			96			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	4	704	0.005	4	0.0	5.143	A
B-AD	2	471	0.003	2	0.0	7.674	A
A-BCD	0	589	0.000	0	0.0	0.000	A
A-B	2			2			
A-C	151			151			
D-ABC	0	593	0.000	0	0.0	0.000	A
C-ABD	17	669	0.026	17	0.0	5.533	A
C-D	0			0			
C-A	81			81			

(Default Analysis Set) - 2026 Future Baseline, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Existing Junction Access	Crossroads	Two-way		0.80	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

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 Future Baseline	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	Average Demand (PCU/hr)	Scaling Factor (%)
A - Vale Avenue EB		✓	126	100.000
B - Church Hill		✓	17	100.000
C - Vale Avenue WB		✓	278	100.000
D - Site access		✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - Vale Avenue EB	B - Church Hill	C - Vale Avenue WB	D - Site access
From	A - Vale Avenue EB	0	10	116	0
	B - Church Hill	8	0	9	0
	C - Vale Avenue WB	247	31	0	0
	D - Site access	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Vale Avenue EB	B - Church Hill	C - Vale Avenue WB	D - Site access
From	A - Vale Avenue EB	0	0	1	0
	B - Church Hill	0	0	0	0
	C - Vale Avenue WB	0	0	0	0
	D - Site access	0	0	0	0

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
16:45-17:00	A - Vale Avenue EB	95	95
	B - Church Hill	13	13
	C - Vale Avenue WB	209	209
	D - Site access	0	0
17:00-17:15	A - Vale Avenue EB	113	113
	B - Church Hill	15	15
	C - Vale Avenue WB	250	250
	D - Site access	0	0
17:15-17:30	A - Vale Avenue EB	139	139
	B - Church Hill	19	19
	C - Vale Avenue WB	306	306
	D - Site access	0	0
17:30-17:45	A - Vale Avenue EB	139	139
	B - Church Hill	19	19
	C - Vale Avenue WB	306	306
	D - Site access	0	0
17:45-18:00	A - Vale Avenue EB	113	113
	B - Church Hill	15	15
	C - Vale Avenue WB	250	250
	D - Site access	0	0
18:00-18:15	A - Vale Avenue EB	95	95
	B - Church Hill	13	13
	C - Vale Avenue WB	209	209
	D - Site access	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-CD	0.01	5.42	0.0	A
B-AD	0.02	7.89	0.0	A
A-BCD	0.00	0.00	0.0	A
A-B				
A-C				
D-ABC	0.00	0.00	0.0	A
C-ABD	0.07	5.02	0.1	A
C-D				
C-A				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	7	686	0.010	7	0.0	5.301	A
B-AD	6	491	0.012	6	0.0	7.427	A
A-BCD	0	564	0.000	0	0.0	0.000	A
A-B	8			8			
A-C	87			87			
D-ABC	0	572	0.000	0	0.0	0.000	A
C-ABD	31	749	0.041	31	0.1	5.014	A
C-D	0			0			
C-A	178			178			

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	8	681	0.012	8	0.0	5.351	A
B-AD	7	480	0.015	7	0.0	7.614	A
A-BCD	0	555	0.000	0	0.0	0.000	A
A-B	9			9			
A-C	104			104			
D-ABC	0	559	0.000	0	0.0	0.000	A
C-ABD	39	768	0.051	39	0.1	4.938	A
C-D	0			0			
C-A	211			211			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	10	674	0.015	10	0.0	5.420	A
B-AD	9	465	0.019	9	0.0	7.889	A
A-BCD	0	542	0.000	0	0.0	0.000	A
A-B	11			11			
A-C	128			128			
D-ABC	0	541	0.000	0	0.0	0.000	A
C-ABD	52	796	0.065	52	0.1	4.839	A
C-D	0			0			
C-A	254			254			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	10	674	0.015	10	0.0	5.420	A
B-AD	9	465	0.019	9	0.0	7.889	A
A-BCD	0	542	0.000	0	0.0	0.000	A
A-B	11			11			
A-C	128			128			
D-ABC	0	541	0.000	0	0.0	0.000	A
C-ABD	52	796	0.065	52	0.1	4.841	A
C-D	0			0			
C-A	254			254			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	8	681	0.012	8	0.0	5.354	A
B-AD	7	480	0.015	7	0.0	7.614	A
A-BCD	0	555	0.000	0	0.0	0.000	A
A-B	9			9			
A-C	104			104			
D-ABC	0	559	0.000	0	0.0	0.000	A
C-ABD	39	768	0.051	39	0.1	4.941	A
C-D	0			0			
C-A	211			211			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	7	686	0.010	7	0.0	5.305	A
B-AD	6	491	0.012	6	0.0	7.430	A
A-BCD	0	564	0.000	0	0.0	0.000	A
A-B	8			8			
A-C	87			87			
D-ABC	0	572	0.000	0	0.0	0.000	A
C-ABD	31	749	0.042	31	0.1	5.018	A
C-D	0			0			
C-A	178			178			

(Default Analysis Set) - 2032 Future Baseline, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Existing Junction Access	Crossroads	Two-way		0.51	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

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	2032 Future Baseline	AM	ONE HOUR	06:45	08:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Vale Avenue EB		✓	213	100.000
B - Church Hill		✓	7	100.000
C - Vale Avenue WB		✓	136	100.000
D - Site access		✓	1	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - Vale Avenue EB	B - Church Hill	C - Vale Avenue WB	D - Site access
From	A - Vale Avenue EB	0	3	210	0
	B - Church Hill	2	0	5	0
	C - Vale Avenue WB	115	21	0	0
	D - Site access	1	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Vale Avenue EB	B - Church Hill	C - Vale Avenue WB	D - Site access
From	A - Vale Avenue EB	0	0	0	0
	B - Church Hill	0	0	0	0
	C - Vale Avenue WB	1	0	0	0
	D - Site access	0	0	0	0

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
06:45-07:00	A - Vale Avenue EB	160	160
	B - Church Hill	5	5
	C - Vale Avenue WB	102	102
	D - Site access	0	0
07:00-07:15	A - Vale Avenue EB	191	191
	B - Church Hill	6	6
	C - Vale Avenue WB	122	122
	D - Site access	0	0
07:15-07:30	A - Vale Avenue EB	235	235
	B - Church Hill	8	8
	C - Vale Avenue WB	150	150
	D - Site access	0	0
07:30-07:45	A - Vale Avenue EB	235	235
	B - Church Hill	8	8
	C - Vale Avenue WB	150	150
	D - Site access	0	0
07:45-08:00	A - Vale Avenue EB	191	191
	B - Church Hill	6	6
	C - Vale Avenue WB	122	122
	D - Site access	0	0
08:00-08:15	A - Vale Avenue EB	160	160
	B - Church Hill	5	5
	C - Vale Avenue WB	102	102
	D - Site access	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-CD	0.01	5.32	0.0	A
B-AD	0.00	8.14	0.0	A
A-BCD	0.00	0.00	0.0	A
A-B				
A-C				
D-ABC	0.00	0.00	0.0	A
C-ABD	0.04	5.54	0.1	A
C-D				
C-A				

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	4	702	0.005	4	0.0	5.157	A
B-AD	2	468	0.003	1	0.0	7.715	A
A-BCD	0	588	0.000	0	0.0	0.000	A
A-B	2			2			
A-C	158			158			
D-ABC	0	591	0.000	0	0.0	0.000	A
C-ABD	18	670	0.027	18	0.0	5.532	A
C-D	0			0			
C-A	84			84			

07:00 - 07:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	4	693	0.006	4	0.0	5.225	A
B-AD	2	458	0.004	2	0.0	7.889	A
A-BCD	0	583	0.000	0	0.0	0.000	A
A-B	3			3			
A-C	189			189			
D-ABC	0	582	0.000	0	0.0	0.000	A
C-ABD	22	674	0.033	22	0.0	5.534	A
C-D	0			0			
C-A	100			100			

07:15 - 07:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	6	682	0.008	5	0.0	5.320	A
B-AD	2	444	0.005	2	0.0	8.143	A
A-BCD	0	577	0.000	0	0.0	0.000	A
A-B	3			3			
A-C	231			231			
D-ABC	0	569	0.000	0	0.0	0.000	A
C-ABD	28	680	0.042	28	0.1	5.532	A
C-D	0			0			
C-A	121			121			

07:30 - 07:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	6	682	0.008	6	0.0	5.321	A
B-AD	2	444	0.005	2	0.0	8.143	A
A-BCD	0	577	0.000	0	0.0	0.000	A
A-B	3			3			
A-C	231			231			
D-ABC	0	569	0.000	0	0.0	0.000	A
C-ABD	28	680	0.042	28	0.1	5.536	A
C-D	0			0			
C-A	121			121			

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	4	693	0.006	5	0.0	5.227	A
B-AD	2	458	0.004	2	0.0	7.890	A
A-BCD	0	583	0.000	0	0.0	0.000	A
A-B	3			3			
A-C	189			189			
D-ABC	0	582	0.000	0	0.0	0.000	A
C-ABD	22	674	0.033	22	0.0	5.537	A
C-D	0			0			
C-A	100			100			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	4	702	0.005	4	0.0	5.158	A
B-AD	2	468	0.003	2	0.0	7.716	A
A-BCD	0	588	0.000	0	0.0	0.000	A
A-B	2			2			
A-C	158			158			
D-ABC	0	591	0.000	0	0.0	0.000	A
C-ABD	18	670	0.027	18	0.0	5.534	A
C-D	0			0			
C-A	84			84			

(Default Analysis Set) - 2032 Future Baseline, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Existing Junction Access	Crossroads	Two-way		0.83	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

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	2032 Future Baseline	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	Average Demand (PCU/hr)	Scaling Factor (%)
A - Vale Avenue EB		✓	133	100.000
B - Church Hill		✓	19	100.000
C - Vale Avenue WB		✓	292	100.000
D - Site access		✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - Vale Avenue EB	B - Church Hill	C - Vale Avenue WB	D - Site access
From	A - Vale Avenue EB	0	11	122	0
	B - Church Hill	9	0	10	0
	C - Vale Avenue WB	259	33	0	0
	D - Site access	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Vale Avenue EB	B - Church Hill	C - Vale Avenue WB	D - Site access
From	A - Vale Avenue EB	0	0	1	0
	B - Church Hill	0	0	0	0
	C - Vale Avenue WB	0	0	0	0
	D - Site access	0	0	0	0

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
16:45-17:00	A - Vale Avenue EB	100	100
	B - Church Hill	14	14
	C - Vale Avenue WB	220	220
	D - Site access	0	0
17:00-17:15	A - Vale Avenue EB	120	120
	B - Church Hill	17	17
	C - Vale Avenue WB	263	263
	D - Site access	0	0
17:15-17:30	A - Vale Avenue EB	146	146
	B - Church Hill	21	21
	C - Vale Avenue WB	321	321
	D - Site access	0	0
17:30-17:45	A - Vale Avenue EB	146	146
	B - Church Hill	21	21
	C - Vale Avenue WB	321	321
	D - Site access	0	0
17:45-18:00	A - Vale Avenue EB	120	120
	B - Church Hill	17	17
	C - Vale Avenue WB	263	263
	D - Site access	0	0
18:00-18:15	A - Vale Avenue EB	100	100
	B - Church Hill	14	14
	C - Vale Avenue WB	220	220
	D - Site access	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-CD	0.02	5.45	0.0	A
B-AD	0.02	7.98	0.0	A
A-BCD	0.00	0.00	0.0	A
A-B				
A-C				
D-ABC	0.00	0.00	0.0	A
C-ABD	0.07	5.00	0.1	A
C-D				
C-A				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	8	684	0.011	7	0.0	5.323	A
B-AD	7	488	0.014	7	0.0	7.477	A
A-BCD	0	562	0.000	0	0.0	0.000	A
A-B	8			8			
A-C	92			92			
D-ABC	0	569	0.000	0	0.0	0.000	A
C-ABD	34	753	0.044	33	0.1	4.998	A
C-D	0			0			
C-A	186			186			

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	9	678	0.013	9	0.0	5.376	A
B-AD	8	477	0.017	8	0.0	7.678	A
A-BCD	0	552	0.000	0	0.0	0.000	A
A-B	10			10			
A-C	110			110			
D-ABC	0	555	0.000	0	0.0	0.000	A
C-ABD	43	774	0.055	42	0.1	4.921	A
C-D	0			0			
C-A	220			220			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	11	671	0.016	11	0.0	5.451	A
B-AD	10	461	0.021	10	0.0	7.976	A
A-BCD	0	539	0.000	0	0.0	0.000	A
A-B	12			12			
A-C	134			134			
D-ABC	0	536	0.000	0	0.0	0.000	A
C-ABD	56	803	0.070	56	0.1	4.820	A
C-D	0			0			
C-A	265			265			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	11	671	0.016	11	0.0	5.451	A
B-AD	10	461	0.021	10	0.0	7.976	A
A-BCD	0	539	0.000	0	0.0	0.000	A
A-B	12			12			
A-C	134			134			
D-ABC	0	536	0.000	0	0.0	0.000	A
C-ABD	57	803	0.070	57	0.1	4.822	A
C-D	0			0			
C-A	265			265			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	9	678	0.013	9	0.0	5.379	A
B-AD	8	477	0.017	8	0.0	7.681	A
A-BCD	0	552	0.000	0	0.0	0.000	A
A-B	10			10			
A-C	110			110			
D-ABC	0	555	0.000	0	0.0	0.000	A
C-ABD	43	774	0.055	43	0.1	4.924	A
C-D	0			0			
C-A	220			220			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	8	684	0.011	8	0.0	5.327	A
B-AD	7	488	0.014	7	0.0	7.480	A
A-BCD	0	562	0.000	0	0.0	0.000	A
A-B	8			8			
A-C	92			92			
D-ABC	0	569	0.000	0	0.0	0.000	A
C-ABD	34	753	0.045	34	0.1	5.002	A
C-D	0			0			
C-A	186			186			

Junctions 9
PICADY 9 - Priority Intersection Module
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Filename: Junction 1 Vale Avenue - Proposed Site Access junction - 4 arms.j9
Path: C:\Users\WRI87273\Mott MacDonald\B RMF Brighton DO - T Transport\Junction models\Junction 1 Vale Avenue - Existing Site Access\05. Model Updates 2023\01. Model
Report generation date: 20/06/2023 10:29:38

- »2026 Do Something, AM
- »2026 Do Something, PM
- »2032 Do Something, AM
- »2032 Do Something, PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
2026 Do Something										
1 - Vale Avenue/Proposed Site Access - Stream B-CD	D1	0.0	5.82	0.01	A	D2	0.0	0.00	0.00	A
1 - Vale Avenue/Proposed Site Access - Stream B-AD		0.0	11.01	0.03	B		0.0	0.00	0.00	A
1 - Vale Avenue/Proposed Site Access - Stream A-BCD		0.0	0.00	0.00	A		0.0	0.00	0.00	A
1 - Vale Avenue/Proposed Site Access - Stream D-AB		0.0	0.00	0.00	A		0.0	0.00	0.00	A
1 - Vale Avenue/Proposed Site Access - Stream D-BC		0.0	0.00	0.00	A		0.0	6.65	0.03	A
1 - Vale Avenue/Proposed Site Access - Stream C-ABD		0.0	5.24	0.00	A		0.0	0.00	0.00	A
2 - Vale Avenue T junction - Stream B-C		0.0	6.56	0.01	A		0.0	5.96	0.01	A
2 - Vale Avenue T junction - Stream B-A		0.0	0.00	0.00	A		0.0	0.00	0.00	A
2 - Vale Avenue T junction - Stream C-AB		0.0	6.11	0.01	A		0.0	5.19	0.01	A
2032 Do Something										
1 - Vale Avenue/Proposed Site Access - Stream B-CD	D3	0.0	5.84	0.01	A	D4	0.0	0.00	0.00	A
1 - Vale Avenue/Proposed Site Access - Stream B-AD		0.0	11.08	0.03	B		0.0	0.00	0.00	A
1 - Vale Avenue/Proposed Site Access - Stream A-BCD		0.0	0.00	0.00	A		0.0	0.00	0.00	A
1 - Vale Avenue/Proposed Site Access - Stream D-AB		0.0	0.00	0.00	A		0.0	0.00	0.00	A
1 - Vale Avenue/Proposed Site Access - Stream D-BC		0.0	0.00	0.00	A		0.0	6.72	0.04	A
1 - Vale Avenue/Proposed Site Access - Stream C-ABD		0.0	5.21	0.00	A		0.0	0.00	0.00	A
2 - Vale Avenue T junction - Stream B-C		0.0	6.60	0.01	A		0.0	5.99	0.01	A
2 - Vale Avenue T junction - Stream B-A		0.0	0.00	0.00	A		0.0	0.00	0.00	A
2 - Vale Avenue T junction - Stream C-AB		0.0	5.46	0.01	A		0.0	5.14	0.01	A

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

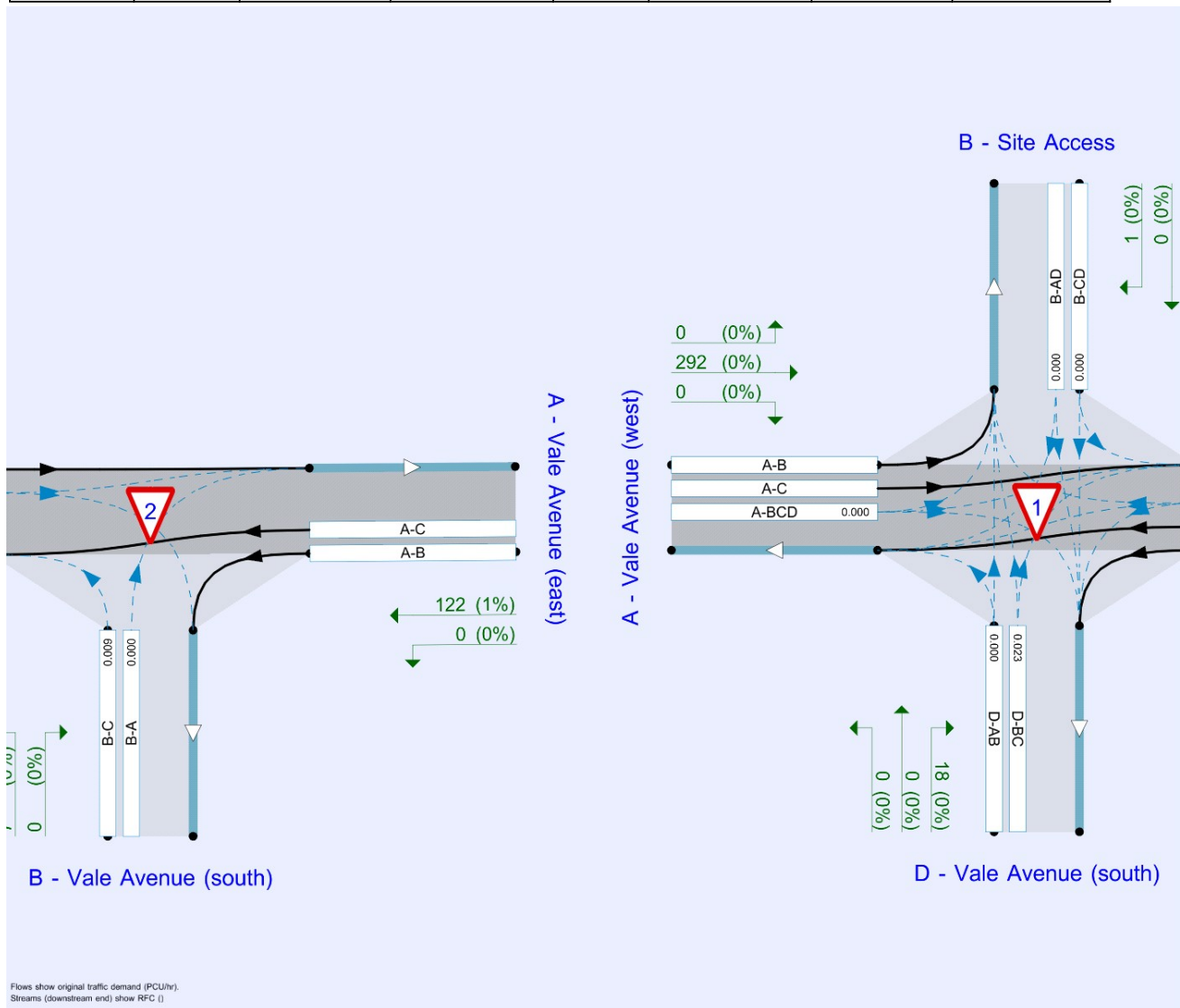
File summary

File Description

Title	
Location	
Site number	
Date	30/06/2022
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	MOTTMAC\WRI87273
Description	

Units

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



Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2026 Do Something	AM	ONE HOUR	06:45	08:15	15
D2	2026 Do Something	PM	ONE HOUR	16:45	18:15	15
D3	2032 Do Something	AM	ONE HOUR	06:45	08:15	15
D4	2032 Do Something	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2026 Do Something, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Vale Avenue/Proposed Site Access	Crossroads	Two-way		0.47	A
2	Vale Avenue T junction	T-Junction	Two-way		0.15	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Junction	Arm	Name	Description	Arm type
1 - Vale Avenue/Proposed Site Access	A	Vale Avenue (west)		Major
	B	Site Access		Minor
	C	Vale Avenue (east)		Major
	D	Vale Avenue (south)		Minor
2 - Vale Avenue T junction	A	Vale Avenue (east)		Major
	B	Vale Avenue (south)		Minor
	C	Vale Avenue (west)		Major

Major Arm Geometry

Junction	Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
1 - Vale Avenue/Proposed Site Access	A - Vale Avenue (west)	8.50			180.0	✓	0.00
	C - Vale Avenue (east)	8.50			55.0	✓	0.00
2 - Vale Avenue T junction	C - Vale Avenue (west)	6.40			0.0	✓	0.00

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

Minor Arm Geometry

Junction	Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
1 - Vale Avenue/Proposed Site Access	B - Site Access	One lane plus flare	10.00	8.00	6.00	4.00	4.00	✓	2.00	18	40
	D - Vale Avenue (south)	One lane plus flare	10.00	6.80	3.50	3.10	3.10	✓	1.00	68	180
2 - Vale Avenue T junction	B - Vale Avenue (south)	One lane plus flare	7.00	2.85	2.85	2.85	2.85		1.00	0	0

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
1 - Vale Avenue/Proposed Site Access	A-D	678	-	-	-	-	-	-	0.234	0.335	0.234	-	-	-
	B-A	579	0.094	0.237	0.237	-	-	-	0.149	0.339	-	0.237	0.237	0.119
	B-C	660	0.090	0.228	-	-	-	-	-	-	-	-	-	-
	B-D, nearside lane	511	0.083	0.210	0.210	-	-	-	0.132	0.300	0.132	-	-	-
	B-D, offside lane	579	0.094	0.237	0.237	-	-	-	0.149	0.339	0.149	-	-	-
	C-B	606	0.209	0.209	0.299	-	-	-	-	-	-	-	-	-
	D-A	826	-	-	-	-	-	-	0.285	-	0.113	-	-	-
	D-B, nearside lane	661	0.171	0.171	0.387	-	-	-	0.271	0.271	0.107	-	-	-
	D-B, offside lane	661	0.171	0.171	0.387	-	-	-	0.271	0.271	0.107	-	-	-
D-C	661	-	0.171	0.387	0.136	0.271	0.271	0.271	0.271	0.107	-	-	-	

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
2 - Vale Avenue T junction	B-A	430	0.077	0.195	0.122	0.278
	B-C	641	0.097	0.244	-	-
	C-B	574	0.219	0.219	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2026 Do Something	AM	ONE HOUR	06:45	08:15	15

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

Demand overview (Traffic)

Junction	Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Vale Avenue/Proposed Site Access	A - Vale Avenue (west)		✓	136	100.000
	B - Site Access		✓	16	100.000
	C - Vale Avenue (east)		✓	207	100.000
	D - Vale Avenue (south)		✓	3	100.000
2 - Vale Avenue T junction	A - Vale Avenue (east)		✓	319	100.000
	B - Vale Avenue (south)		✓	6	100.000
	C - Vale Avenue (west)		✓	140	100.000

Origin-Destination Data

Demand (PCU/hr)

1 - Vale Avenue/Proposed Site Access

		To			
		A - Vale Avenue (west)	B - Site Access	C - Vale Avenue (east)	D - Vale Avenue (south)
From	A - Vale Avenue (west)	0	6	130	0
	B - Site Access	12	0	4	0
	C - Vale Avenue (east)	202	2	0	3
	D - Vale Avenue (south)	0	0	3	0

Demand (PCU/hr)

2 - Vale Avenue T junction

		To		
		A - Vale Avenue (east)	B - Vale Avenue (south)	C - Vale Avenue (west)
From	A - Vale Avenue (east)	0	0	319
	B - Vale Avenue (south)	0	0	6
	C - Vale Avenue (west)	136	4	0

Vehicle Mix

Heavy Vehicle Percentages

1 - Vale Avenue/Proposed Site Access

		To			
		A - Vale Avenue (west)	B - Site Access	C - Vale Avenue (east)	D - Vale Avenue (south)
From	A - Vale Avenue (west)	0	0	1	0
	B - Site Access	52	0	0	0
	C - Vale Avenue (east)	0	0	0	0
	D - Vale Avenue (south)	0	0	0	0

Heavy Vehicle Percentages

2 - Vale Avenue T junction

		To		
		A - Vale Avenue (east)	B - Vale Avenue (south)	C - Vale Avenue (west)
From	A - Vale Avenue (east)	0	0	52
	B - Vale Avenue (south)	0	0	0
	C - Vale Avenue (west)	1	0	0

Results

Results Summary for whole modelled period

Junction	Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - Vale Avenue/Proposed Site Access	B-CD	0.01	5.82	0.0	A
	B-AD	0.03	11.01	0.0	B
	A-BCD	0.00	0.00	0.0	A
	A-B				
	A-C				
	D-AB	0.00	0.00	0.0	A
	D-BC	0.00	0.00	0.0	A
	C-ABD	0.00	5.24	0.0	A
	C-D				
	C-A				
2 - Vale Avenue T junction	B-C	0.01	6.56	0.0	A
	B-A	0.00	0.00	0.0	A
	C-AB	0.01	6.11	0.0	A
	C-A				
	A-B				
A-C					

Main Results for each time segment

06:45 - 07:00

Junction	Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vale Avenue/Proposed Site Access	B-CD	3	635	0.005	3	0.0	5.699	A
	B-AD	9	532	0.017	9	0.0	10.463	B
	A-BCD	0	642	0.000	0	0.0	0.000	A
	A-B	5			5			
	A-C	98			98			
	D-AB	0	680	0.000	0	0.0	0.000	A
	D-BC	0	601	0.000	0	0.0	0.000	A
	C-ABD	2	689	0.003	2	0.0	5.242	A
	C-D	2			2			
C-A	152			152				
2 - Vale Avenue T junction	B-C	5	583	0.008	4	0.0	6.224	A
	B-A	0	370	0.000	0	0.0	0.000	A
	C-AB	4	594	0.006	4	0.0	6.105	A
	C-A	102			102			
	A-B	0			0			
	A-C	240			240			

07:00 - 07:15

Junction	Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vale Avenue/Proposed Site Access	B-CD	4	629	0.006	4	0.0	5.751	A
	B-AD	11	523	0.021	11	0.0	10.690	B
	A-BCD	0	634	0.000	0	0.0	0.000	A
	A-B	5			5			
	A-C	117			117			
	D-AB	0	669	0.000	0	0.0	0.000	A
	D-BC	0	589	0.000	0	0.0	0.000	A
	C-ABD	2	705	0.003	2	0.0	5.122	A
	C-D	3			3			
C-A	181			181				
2 - Vale Avenue T junction	B-C	5	571	0.009	5	0.0	6.359	A
	B-A	0	358	0.000	0	0.0	0.000	A
	C-AB	5	599	0.008	5	0.0	6.068	A
	C-A	121			121			
	A-B	0			0			
	A-C	287			287			

07:15 - 07:30

Junction	Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vale Avenue/Proposed Site Access	B-C-D	4	623	0.007	4	0.0	5.823	A
	B-AD	13	510	0.026	13	0.0	11.012	B
	A-BCD	0	625	0.000	0	0.0	0.000	A
	A-B	7			7			
	A-C	143			143			
	D-AB	0	655	0.000	0	0.0	0.000	A
	D-BC	0	573	0.000	0	0.0	0.000	A
	C-ABD	3	728	0.004	3	0.0	4.965	A
	C-D	3			3			
C-A	221			221				
2 - Vale Avenue T junction	B-C	7	556	0.012	7	0.0	6.555	A
	B-A	0	342	0.000	0	0.0	0.000	A
	C-AB	6	606	0.010	6	0.0	6.015	A
	C-A	148			148			
	A-B	0			0			
	A-C	351			351			

07:30 - 07:45

Junction	Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vale Avenue/Proposed Site Access	B-C-D	4	622	0.007	4	0.0	5.823	A
	B-AD	13	510	0.026	13	0.0	11.012	B
	A-BCD	0	625	0.000	0	0.0	0.000	A
	A-B	7			7			
	A-C	143			143			
	D-AB	0	655	0.000	0	0.0	0.000	A
	D-BC	0	573	0.000	0	0.0	0.000	A
	C-ABD	3	728	0.004	3	0.0	4.965	A
	C-D	3			3			
C-A	221			221				
2 - Vale Avenue T junction	B-C	7	556	0.012	7	0.0	6.555	A
	B-A	0	342	0.000	0	0.0	0.000	A
	C-AB	6	606	0.010	6	0.0	6.019	A
	C-A	148			148			
	A-B	0			0			
	A-C	351			351			

07:45 - 08:00

Junction	Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vale Avenue/Proposed Site Access	B-C-D	4	629	0.006	4	0.0	5.754	A
	B-AD	11	523	0.021	11	0.0	10.692	B
	A-BCD	0	634	0.000	0	0.0	0.000	A
	A-B	5			5			
	A-C	117			117			
	D-AB	0	669	0.000	0	0.0	0.000	A
	D-BC	0	589	0.000	0	0.0	0.000	A
	C-ABD	2	705	0.003	2	0.0	5.124	A
	C-D	3			3			
C-A	181			181				
2 - Vale Avenue T junction	B-C	5	571	0.009	5	0.0	6.362	A
	B-A	0	358	0.000	0	0.0	0.000	A
	C-AB	5	599	0.008	5	0.0	6.073	A
	C-A	121			121			
	A-B	0			0			
	A-C	287			287			

08:00 - 08:15

Junction	Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vale Avenue/Proposed Site Access	B-CD	3	634	0.005	3	0.0	5.701	A
	B-AD	9	532	0.017	9	0.0	10.470	B
	A-BCD	0	642	0.000	0	0.0	0.000	A
	A-B	5			5			
	A-C	98			98			
	D-AB	0	680	0.000	0	0.0	0.000	A
	D-BC	0	601	0.000	0	0.0	0.000	A
	C-ABD	2	689	0.003	2	0.0	5.244	A
	C-D	2			2			
C-A	152			152				
2 - Vale Avenue T junction	B-C	5	583	0.008	5	0.0	6.224	A
	B-A	0	370	0.000	0	0.0	0.000	A
	C-AB	4	594	0.006	4	0.0	6.109	A
	C-A	102			102			
	A-B	0			0			
	A-C	240			240			

2026 Do Something, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Vale Avenue/Proposed Site Access	Crossroads	Two-way		0.27	A
2	Vale Avenue T junction	T-Junction	Two-way		0.19	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

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	2026 Do Something	PM	ONE HOUR	16:45	18:15	15

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

Demand overview (Traffic)

Junction	Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Vale Avenue/Proposed Site Access	A - Vale Avenue (west)		✓	278	100.000
	B - Site Access		✓	1	100.000
	C - Vale Avenue (east)		✓	125	100.000
	D - Vale Avenue (south)		✓	17	100.000
2 - Vale Avenue T junction	A - Vale Avenue (east)		✓	116	100.000
	B - Vale Avenue (south)		✓	6	100.000
	C - Vale Avenue (west)		✓	283	100.000

Origin-Destination Data

Demand (PCU/hr)

1 - Vale Avenue/Proposed Site Access

		To			
		A - Vale Avenue (west)	B - Site Access	C - Vale Avenue (east)	D - Vale Avenue (south)
From	A - Vale Avenue (west)	0	0	278	0
	B - Site Access	1	0	0	0
	C - Vale Avenue (east)	115	0	0	10
	D - Vale Avenue (south)	0	0	17	0

Demand (PCU/hr)
2 - Vale Avenue T junction

		To		
		A - Vale Avenue (east)	B - Vale Avenue (south)	C - Vale Avenue (west)
From	A - Vale Avenue (east)	0	0	116
	B - Vale Avenue (south)	0	0	6
	C - Vale Avenue (west)	278	5	0

Vehicle Mix
Heavy Vehicle Percentages
1 - Vale Avenue/Proposed Site Access

		To			
		A - Vale Avenue (west)	B - Site Access	C - Vale Avenue (east)	D - Vale Avenue (south)
From	A - Vale Avenue (west)	0	0	0	0
	B - Site Access	0	0	0	0
	C - Vale Avenue (east)	1	0	0	0
	D - Vale Avenue (south)	0	0	0	0

Heavy Vehicle Percentages
2 - Vale Avenue T junction

		To		
		A - Vale Avenue (east)	B - Vale Avenue (south)	C - Vale Avenue (west)
From	A - Vale Avenue (east)	0	0	1
	B - Vale Avenue (south)	0	0	0
	C - Vale Avenue (west)	0	0	0

Results
Results Summary for whole modelled period

Junction	Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - Vale Avenue/Proposed Site Access	B-CD	0.00	0.00	0.0	A
	B-AD	0.00	0.00	0.0	A
	A-BCD	0.00	0.00	0.0	A
	A-B				
	A-C				
	D-AB	0.00	0.00	0.0	A
	D-BC	0.03	6.65	0.0	A
	C-ABD	0.00	0.00	0.0	A
	C-D				
	C-A				
2 - Vale Avenue T junction	B-C	0.01	5.96	0.0	A
	B-A	0.00	0.00	0.0	A
	C-AB	0.01	5.19	0.0	A
	C-A				
	A-B				
	A-C				

Main Results for each time segment

16:45 - 17:00

Junction	Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vale Avenue/Proposed Site Access	B-CD	0	565	0.000	0	0.0	0.000	A
	B-AD	0	492	0.000	0	0.0	0.000	A
	A-BCD	0	656	0.000	0	0.0	0.000	A
	A-B	0			0			
	A-C	209			209			
	D-AB	0	634	0.000	0	0.0	0.000	A
	D-BC	13	587	0.022	13	0.0	6.270	A
	C-ABD	0	562	0.000	0	0.0	0.000	A
	C-D	8			8			
C-A	87			87				
2 - Vale Avenue T junction	B-C	5	620	0.007	4	0.0	5.847	A
	B-A	0	386	0.000	0	0.0	0.000	A
	C-AB	5	700	0.008	5	0.0	5.184	A
	C-A	208			208			
	A-B	0			0			
	A-C	87			87			

17:00 - 17:15

Junction	Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vale Avenue/Proposed Site Access	B-CD	0	554	0.000	0	0.0	0.000	A
	B-AD	0	480	0.000	0	0.0	0.000	A
	A-BCD	0	652	0.000	0	0.0	0.000	A
	A-B	0			0			
	A-C	250			250			
	D-AB	0	624	0.000	0	0.0	0.000	A
	D-BC	15	576	0.027	15	0.0	6.425	A
	C-ABD	0	554	0.000	0	0.0	0.000	A
	C-D	9			9			
C-A	103			103				
2 - Vale Avenue T junction	B-C	5	616	0.009	5	0.0	5.895	A
	B-A	0	378	0.000	0	0.0	0.000	A
	C-AB	7	725	0.009	7	0.0	5.015	A
	C-A	248			248			
	A-B	0			0			
	A-C	104			104			

17:15 - 17:30

Junction	Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vale Avenue/Proposed Site Access	B-C-D	0	538	0.000	0	0.0	0.000	A
	B-AD	0	464	0.000	0	0.0	0.000	A
	A-BCD	0	646	0.000	0	0.0	0.000	A
	A-B	0			0			
	A-C	306			306			
	D-AB	0	611	0.000	0	0.0	0.000	A
	D-BC	19	560	0.033	19	0.0	6.652	A
	C-ABD	0	542	0.000	0	0.0	0.000	A
	C-D	11			11			
C-A	127			127				
2 - Vale Avenue T junction	B-C	7	610	0.011	7	0.0	5.963	A
	B-A	0	366	0.000	0	0.0	0.000	A
	C-AB	9	759	0.012	9	0.0	4.799	A
	C-A	302			302			
	A-B	0			0			
	A-C	128			128			

17:30 - 17:45

Junction	Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vale Avenue/Proposed Site Access	B-C-D	0	538	0.000	0	0.0	0.000	A
	B-AD	0	464	0.000	0	0.0	0.000	A
	A-BCD	0	646	0.000	0	0.0	0.000	A
	A-B	0			0			
	A-C	306			306			
	D-AB	0	611	0.000	0	0.0	0.000	A
	D-BC	19	560	0.033	19	0.0	6.652	A
	C-ABD	0	542	0.000	0	0.0	0.000	A
	C-D	11			11			
C-A	127			127				
2 - Vale Avenue T junction	B-C	7	610	0.011	7	0.0	5.963	A
	B-A	0	366	0.000	0	0.0	0.000	A
	C-AB	9	759	0.012	9	0.0	4.801	A
	C-A	302			302			
	A-B	0			0			
	A-C	128			128			

17:45 - 18:00

Junction	Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vale Avenue/Proposed Site Access	B-C-D	0	554	0.000	0	0.0	0.000	A
	B-AD	0	480	0.000	0	0.0	0.000	A
	A-BCD	0	652	0.000	0	0.0	0.000	A
	A-B	0			0			
	A-C	250			250			
	D-AB	0	624	0.000	0	0.0	0.000	A
	D-BC	15	576	0.027	15	0.0	6.428	A
	C-ABD	0	554	0.000	0	0.0	0.000	A
	C-D	9			9			
C-A	103			103				
2 - Vale Avenue T junction	B-C	5	616	0.009	5	0.0	5.895	A
	B-A	0	378	0.000	0	0.0	0.000	A
	C-AB	7	725	0.009	7	0.0	5.015	A
	C-A	248			248			
	A-B	0			0			
	A-C	104			104			

18:00 - 18:15

Junction	Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vale Avenue/Proposed Site Access	B-C-D	0	565	0.000	0	0.0	0.000	A
	B-AD	0	492	0.000	0	0.0	0.000	A
	A-BCD	0	656	0.000	0	0.0	0.000	A
	A-B	0			0			
	A-C	209			209			
	D-AB	0	634	0.000	0	0.0	0.000	A
	D-B-C	13	587	0.022	13	0.0	6.270	A
	C-ABD	0	562	0.000	0	0.0	0.000	A
	C-D	8			8			
C-A	87			87				
2 - Vale Avenue T junction	B-C	5	620	0.007	5	0.0	5.849	A
	B-A	0	386	0.000	0	0.0	0.000	A
	C-AB	5	700	0.008	5	0.0	5.186	A
	C-A	208			208			
	A-B	0			0			
	A-C	87			87			

2032 Do Something, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Vale Avenue/Proposed Site Access	Crossroads	Two-way		0.46	A
2	Vale Avenue T junction	T-Junction	Two-way		0.13	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

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	2032 Do Something	AM	ONE HOUR	06:45	08:15	15

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

Demand overview (Traffic)

Junction	Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Vale Avenue/Proposed Site Access	A - Vale Avenue (west)		✓	142	100.000
	B - Site Access		✓	16	100.000
	C - Vale Avenue (east)		✓	217	100.000
	D - Vale Avenue (south)		✓	3	100.000
2 - Vale Avenue T junction	A - Vale Avenue (east)		✓	334	100.000
	B - Vale Avenue (south)		✓	6	100.000
	C - Vale Avenue (west)		✓	280	100.000

Origin-Destination Data

Demand (PCU/hr)

1 - Vale Avenue/Proposed Site Access

		To			
		A - Vale Avenue (west)	B - Site Access	C - Vale Avenue (east)	D - Vale Avenue (south)
From	A - Vale Avenue (west)	0	6	136	0
	B - Site Access	12	0	4	0
	C - Vale Avenue (east)	212	2	0	3
	D - Vale Avenue (south)	0	0	3	0

Demand (PCU/hr)

2 - Vale Avenue T junction

		To		
		A - Vale Avenue (east)	B - Vale Avenue (south)	C - Vale Avenue (west)
From	A - Vale Avenue (east)	0	0	334
	B - Vale Avenue (south)	0	0	6
	C - Vale Avenue (west)	275	5	0

Vehicle Mix

Heavy Vehicle Percentages

1 - Vale Avenue/Proposed Site Access

		To			
		A - Vale Avenue (west)	B - Site Access	C - Vale Avenue (east)	D - Vale Avenue (south)
From	A - Vale Avenue (west)	0	0	1	0
	B - Site Access	52	0	0	0
	C - Vale Avenue (east)	0	0	0	0
	D - Vale Avenue (south)	0	0	0	0

Heavy Vehicle Percentages

2 - Vale Avenue T junction

		To		
		A - Vale Avenue (east)	B - Vale Avenue (south)	C - Vale Avenue (west)
From	A - Vale Avenue (east)	0	0	52
	B - Vale Avenue (south)	0	0	0
	C - Vale Avenue (west)	1	0	0

Results

Results Summary for whole modelled period

Junction	Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - Vale Avenue/Proposed Site Access	B-CD	0.01	5.84	0.0	A
	B-AD	0.03	11.08	0.0	B
	A-BCD	0.00	0.00	0.0	A
	A-B				
	A-C				
	D-AB	0.00	0.00	0.0	A
	D-BC	0.00	0.00	0.0	A
	C-ABD	0.00	5.21	0.0	A
	C-D				
	C-A				
2 - Vale Avenue T junction	B-C	0.01	6.60	0.0	A
	B-A	0.00	0.00	0.0	A
	C-AB	0.01	5.46	0.0	A
	C-A				
	A-B				
	A-C				

Main Results for each time segment

06:45 - 07:00

Junction	Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vale Avenue/Proposed Site Access	B-CD	3	633	0.005	3	0.0	5.709	A
	B-AD	9	530	0.017	9	0.0	10.507	B
	A-BCD	0	640	0.000	0	0.0	0.000	A
	A-B	5			5			
	A-C	102			102			
	D-AB	0	677	0.000	0	0.0	0.000	A
	D-BC	0	598	0.000	0	0.0	0.000	A
	C-ABD	2	693	0.003	2	0.0	5.210	A
	C-D	2			2			
C-A	159			159				
2 - Vale Avenue T junction	B-C	5	580	0.008	4	0.0	6.254	A
	B-A	0	355	0.000	0	0.0	0.000	A
	C-AB	5	666	0.008	5	0.0	5.463	A
	C-A	205			205			
	A-B	0			0			
	A-C	251			251			

07:00 - 07:15

Junction	Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vale Avenue/Proposed Site Access	B-CD	4	628	0.006	4	0.0	5.763	A
	B-AD	11	520	0.021	11	0.0	10.745	B
	A-BCD	0	632	0.000	0	0.0	0.000	A
	A-B	5			5			
	A-C	122			122			
	D-AB	0	666	0.000	0	0.0	0.000	A
	D-BC	0	586	0.000	0	0.0	0.000	A
	C-ABD	2	710	0.003	2	0.0	5.086	A
	C-D	3			3			
C-A	190			190				
2 - Vale Avenue T junction	B-C	5	568	0.009	5	0.0	6.396	A
	B-A	0	340	0.000	0	0.0	0.000	A
	C-AB	7	686	0.010	7	0.0	5.321	A
	C-A	245			245			
	A-B	0			0			
	A-C	300			300			

07:15 - 07:30

Junction	Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vale Avenue/Proposed Site Access	B-C-D	4	621	0.007	4	0.0	5.837	A
	B-AD	13	507	0.026	13	0.0	11.084	B
	A-BCD	0	622	0.000	0	0.0	0.000	A
	A-B	7			7			
	A-C	150			150			
	D-AB	0	651	0.000	0	0.0	0.000	A
	D-BC	0	569	0.000	0	0.0	0.000	A
	C-ABD	3	734	0.004	3	0.0	4.922	A
	C-D	3			3			
C-A	232			232				
2 - Vale Avenue T junction	B-C	7	552	0.012	7	0.0	6.604	A
	B-A	0	320	0.000	0	0.0	0.000	A
	C-AB	10	713	0.013	10	0.0	5.134	A
	C-A	299			299			
	A-B	0			0			
	A-C	368			368			

07:30 - 07:45

Junction	Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vale Avenue/Proposed Site Access	B-C-D	4	621	0.007	4	0.0	5.838	A
	B-AD	13	507	0.026	13	0.0	11.084	B
	A-BCD	0	622	0.000	0	0.0	0.000	A
	A-B	7			7			
	A-C	150			150			
	D-AB	0	651	0.000	0	0.0	0.000	A
	D-BC	0	569	0.000	0	0.0	0.000	A
	C-ABD	3	734	0.004	3	0.0	4.924	A
	C-D	3			3			
C-A	232			232				
2 - Vale Avenue T junction	B-C	7	552	0.012	7	0.0	6.604	A
	B-A	0	320	0.000	0	0.0	0.000	A
	C-AB	10	713	0.013	10	0.0	5.138	A
	C-A	299			299			
	A-B	0			0			
	A-C	368			368			

07:45 - 08:00

Junction	Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vale Avenue/Proposed Site Access	B-C-D	4	628	0.006	4	0.0	5.763	A
	B-AD	11	520	0.021	11	0.0	10.747	B
	A-BCD	0	632	0.000	0	0.0	0.000	A
	A-B	5			5			
	A-C	122			122			
	D-AB	0	666	0.000	0	0.0	0.000	A
	D-BC	0	586	0.000	0	0.0	0.000	A
	C-ABD	2	710	0.003	2	0.0	5.088	A
	C-D	3			3			
C-A	190			190				
2 - Vale Avenue T junction	B-C	5	568	0.009	5	0.0	6.399	A
	B-A	0	340	0.000	0	0.0	0.000	A
	C-AB	7	686	0.010	7	0.0	5.326	A
	C-A	245			245			
	A-B	0			0			
	A-C	300			300			

08:00 - 08:15

Junction	Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vale Avenue/Proposed Site Access	B-C-D	3	633	0.005	3	0.0	5.711	A
	B-AD	9	530	0.017	9	0.0	10.512	B
	A-BCD	0	640	0.000	0	0.0	0.000	A
	A-B	5			5			
	A-C	102			102			
	D-AB	0	677	0.000	0	0.0	0.000	A
	D-B-C	0	598	0.000	0	0.0	0.000	A
	C-ABD	2	693	0.003	2	0.0	5.210	A
	C-D	2			2			
C-A	159			159				
2 - Vale Avenue T junction	B-C	5	580	0.008	5	0.0	6.257	A
	B-A	0	355	0.000	0	0.0	0.000	A
	C-AB	5	666	0.008	5	0.0	5.465	A
	C-A	205			205			
	A-B	0			0			
	A-C	251			251			

2032 Do Something, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Vale Avenue/Proposed Site Access	Crossroads	Two-way		0.27	A
2	Vale Avenue T junction	T-Junction	Two-way		0.19	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

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	2032 Do Something	PM	ONE HOUR	16:45	18:15	15

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

Demand overview (Traffic)

Junction	Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Vale Avenue/Proposed Site Access	A - Vale Avenue (west)		✓	292	100.000
	B - Site Access		✓	1	100.000
	C - Vale Avenue (east)		✓	132	100.000
	D - Vale Avenue (south)		✓	18	100.000
2 - Vale Avenue T junction	A - Vale Avenue (east)		✓	122	100.000
	B - Vale Avenue (south)		✓	7	100.000
	C - Vale Avenue (west)		✓	297	100.000

Origin-Destination Data

Demand (PCU/hr)

1 - Vale Avenue/Proposed Site Access

		To			
		A - Vale Avenue (west)	B - Site Access	C - Vale Avenue (east)	D - Vale Avenue (south)
From	A - Vale Avenue (west)	0	0	292	0
	B - Site Access	1	0	0	0
	C - Vale Avenue (east)	121	0	0	11
	D - Vale Avenue (south)	0	0	18	0

Demand (PCU/hr)

2 - Vale Avenue T junction

		To		
		A - Vale Avenue (east)	B - Vale Avenue (south)	C - Vale Avenue (west)
From	A - Vale Avenue (east)	0	0	122
	B - Vale Avenue (south)	0	0	7
	C - Vale Avenue (west)	292	5	0

Vehicle Mix

Heavy Vehicle Percentages

1 - Vale Avenue/Proposed Site Access

		To			
		A - Vale Avenue (west)	B - Site Access	C - Vale Avenue (east)	D - Vale Avenue (south)
From	A - Vale Avenue (west)	0	0	0	0
	B - Site Access	0	0	0	0
	C - Vale Avenue (east)	1	0	0	0
	D - Vale Avenue (south)	0	0	0	0

Heavy Vehicle Percentages

2 - Vale Avenue T junction

		To		
		A - Vale Avenue (east)	B - Vale Avenue (south)	C - Vale Avenue (west)
From	A - Vale Avenue (east)	0	0	1
	B - Vale Avenue (south)	0	0	0
	C - Vale Avenue (west)	0	0	0

Results

Results Summary for whole modelled period

Junction	Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - Vale Avenue/Proposed Site Access	B-CD	0.00	0.00	0.0	A
	B-AD	0.00	0.00	0.0	A
	A-BCD	0.00	0.00	0.0	A
	A-B				
	A-C				
	D-AB	0.00	0.00	0.0	A
	D-BC	0.04	6.72	0.0	A
	C-ABD	0.00	0.00	0.0	A
	C-D				
	C-A				
2 - Vale Avenue T junction	B-C	0.01	5.99	0.0	A
	B-A	0.00	0.00	0.0	A
	C-AB	0.01	5.14	0.0	A
	C-A				
	A-B				
	A-C				

Main Results for each time segment

16:45 - 17:00

Junction	Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vale Avenue/Proposed Site Access	B-CD	0	562	0.000	0	0.0	0.000	A
	B-AD	0	489	0.000	0	0.0	0.000	A
	A-BCD	0	655	0.000	0	0.0	0.000	A
	A-B	0			0			
	A-C	220			220			
	D-AB	0	631	0.000	0	0.0	0.000	A
	D-BC	14	584	0.023	13	0.0	6.311	A
	C-ABD	0	560	0.000	0	0.0	0.000	A
	C-D	8			8			
C-A	91			91				
2 - Vale Avenue T junction	B-C	5	619	0.009	5	0.0	5.865	A
	B-A	0	384	0.000	0	0.0	0.000	A
	C-AB	5	706	0.008	5	0.0	5.137	A
	C-A	218			218			
	A-B	0			0			
	A-C	92			92			

17:00 - 17:15

Junction	Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vale Avenue/Proposed Site Access	B-CD	0	550	0.000	0	0.0	0.000	A
	B-AD	0	477	0.000	0	0.0	0.000	A
	A-BCD	0	650	0.000	0	0.0	0.000	A
	A-B	0			0			
	A-C	263			263			
	D-AB	0	621	0.000	0	0.0	0.000	A
	D-BC	16	572	0.028	16	0.0	6.477	A
	C-ABD	0	551	0.000	0	0.0	0.000	A
	C-D	10			10			
C-A	109			109				
2 - Vale Avenue T junction	B-C	6	615	0.010	6	0.0	5.916	A
	B-A	0	375	0.000	0	0.0	0.000	A
	C-AB	7	732	0.010	7	0.0	4.963	A
	C-A	260			260			
	A-B	0			0			
	A-C	110			110			

17:15 - 17:30

Junction	Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vale Avenue/Proposed Site Access	B-C-D	0	533	0.000	0	0.0	0.000	A
	B-AD	0	459	0.000	0	0.0	0.000	A
	A-BCD	0	644	0.000	0	0.0	0.000	A
	A-B	0			0			
	A-C	321			321			
	D-AB	0	607	0.000	0	0.0	0.000	A
	D-BC	20	555	0.036	20	0.0	6.721	A
	C-ABD	0	539	0.000	0	0.0	0.000	A
	C-D	12			12			
C-A	133			133				
2 - Vale Avenue T junction	B-C	8	609	0.013	8	0.0	5.990	A
	B-A	0	363	0.000	0	0.0	0.000	A
	C-AB	9	769	0.012	9	0.0	4.740	A
	C-A	318			318			
	A-B	0			0			
	A-C	134			134			

17:30 - 17:45

Junction	Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vale Avenue/Proposed Site Access	B-C-D	0	533	0.000	0	0.0	0.000	A
	B-AD	0	459	0.000	0	0.0	0.000	A
	A-BCD	0	644	0.000	0	0.0	0.000	A
	A-B	0			0			
	A-C	321			321			
	D-AB	0	607	0.000	0	0.0	0.000	A
	D-BC	20	555	0.036	20	0.0	6.721	A
	C-ABD	0	539	0.000	0	0.0	0.000	A
	C-D	12			12			
C-A	133			133				
2 - Vale Avenue T junction	B-C	8	609	0.013	8	0.0	5.990	A
	B-A	0	363	0.000	0	0.0	0.000	A
	C-AB	9	769	0.012	9	0.0	4.740	A
	C-A	318			318			
	A-B	0			0			
	A-C	134			134			

17:45 - 18:00

Junction	Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vale Avenue/Proposed Site Access	B-C-D	0	550	0.000	0	0.0	0.000	A
	B-AD	0	477	0.000	0	0.0	0.000	A
	A-BCD	0	650	0.000	0	0.0	0.000	A
	A-B	0			0			
	A-C	263			263			
	D-AB	0	621	0.000	0	0.0	0.000	A
	D-BC	16	572	0.028	16	0.0	6.480	A
	C-ABD	0	551	0.000	0	0.0	0.000	A
	C-D	10			10			
C-A	109			109				
2 - Vale Avenue T junction	B-C	6	615	0.010	6	0.0	5.917	A
	B-A	0	375	0.000	0	0.0	0.000	A
	C-AB	7	732	0.010	7	0.0	4.965	A
	C-A	260			260			
	A-B	0			0			
	A-C	110			110			

18:00 - 18:15

Junction	Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Vale Avenue/Proposed Site Access	B-C-D	0	562	0.000	0	0.0	0.000	A
	B-AD	0	489	0.000	0	0.0	0.000	A
	A-BCD	0	655	0.000	0	0.0	0.000	A
	A-B	0			0			
	A-C	220			220			
	D-AB	0	631	0.000	0	0.0	0.000	A
	D-B-C	14	584	0.023	14	0.0	6.314	A
	C-ABD	0	560	0.000	0	0.0	0.000	A
	C-D	8			8			
C-A	91			91				
2 - Vale Avenue T junction	B-C	5	619	0.009	5	0.0	5.867	A
	B-A	0	384	0.000	0	0.0	0.000	A
	C-AB	5	706	0.008	5	0.0	5.140	A
	C-A	218			218			
	A-B	0			0			
	A-C	92			92			

Junctions 9
PICADY 9 - Priority Intersection Module
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Filename: Validation - Junction 2 - A27 Link Road - Vale Avenue (Rev 2).j9
Path: C:\Users\DUF97633\Mott MacDonald\B RMF Brighton DO - T Transport\Junction models\Sensitivity Test (+90mins)\Junction 2 A27 Link Road - Vale Avenue\05. Model Updates 2023\01. Models
Report generation date: 21/06/2023 08:59:41

- »(Default Analysis Set) - 2021 Baseline, AM
- »(Default Analysis Set) - 2021 Baseline, PM
- »(Default Analysis Set) - 2026 Future Baseline, AM
- »(Default Analysis Set) - 2026 Future Baseline, PM
- »(Default Analysis Set) - 2026 Do Something, AM
- »(Default Analysis Set) - 2026 Do Something, PM
- »(Default Analysis Set) - 2032 Future Baseline, AM
- »(Default Analysis Set) - 2032 Future Baseline, PM
- »(Default Analysis Set) - 2032 Do Something, AM
- »(Default Analysis Set) - 2032 Do Something, PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
A1 - 2021 Baseline										
Stream B-C	D1	0.6	9.98	0.37	A	D2	0.3	7.75	0.22	A
Stream B-A		0.0	0.00	0.00	A		0.0	0.00	0.00	A
Stream C-AB		0.0	0.00	0.00	A		0.0	0.00	0.00	A
A1 - 2026 Future Baseline										
Stream B-C	D3	0.6	10.57	0.39	B	D4	0.3	8.00	0.23	A
Stream B-A		0.0	0.00	0.00	A		0.0	0.00	0.00	A
Stream C-AB		0.0	0.00	0.00	A		0.0	0.00	0.00	A
A1 - 2026 Do Something										
Stream B-C	D5	0.7	10.94	0.41	B	D6	0.3	8.00	0.23	A
Stream B-A		0.0	0.00	0.00	A		0.0	0.00	0.00	A
Stream C-AB		0.0	0.00	0.00	A		0.0	0.00	0.00	A
A1 - 2032 Future Baseline										
Stream B-C	D7	0.7	11.31	0.42	B	D8	0.3	8.30	0.24	A
Stream B-A		0.0	0.00	0.00	A		0.0	0.00	0.00	A
Stream C-AB		0.0	0.00	0.00	A		0.0	0.00	0.00	A
A1 - 2032 Do Something										
Stream B-C	D9	0.8	11.71	0.43	B	D10	0.3	8.30	0.24	A
Stream B-A		0.0	0.00	0.00	A		0.0	0.00	0.00	A
Stream C-AB		0.0	0.00	0.00	A		0.0	0.00	0.00	A

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

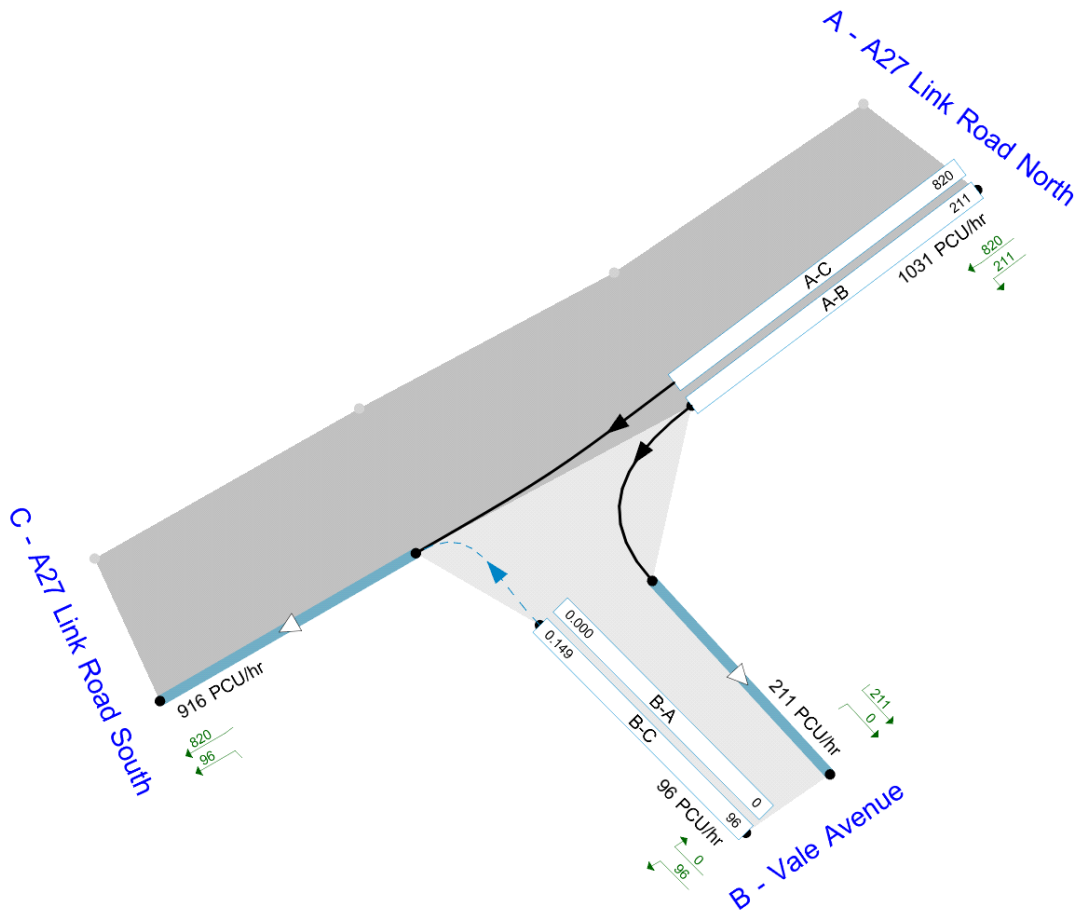
File summary

File Description

Title	(untitled)
Location	
Site number	
Date	25/01/2022
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	
Description	

Units

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



Flows show modelled flow through junction (PCU/hr).
Streams (upstream end) show Total Demand (PCU/hr); Streams (downstream end) show RFC ()

Time Segment: 16:45-17:00

The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				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)	Run automatically
D1	2021 Baseline	AM	ONE HOUR	06:45	08:15	15	✓
D2	2021 Baseline	PM	ONE HOUR	16:45	18:15	15	✓
D3	2026 Future Baseline	AM	ONE HOUR	06:45	08:15	15	✓
D4	2026 Future Baseline	PM	ONE HOUR	16:45	18:15	15	✓
D5	2026 Do Something	AM	ONE HOUR	06:45	08:15	15	✓
D6	2026 Do Something	PM	ONE HOUR	16:45	18:15	15	✓
D7	2032 Future Baseline	AM	ONE HOUR	06:45	08:15	15	✓
D8	2032 Future Baseline	PM	ONE HOUR	16:45	18:15	15	✓
D9	2032 Do Something	AM	ONE HOUR	06:45	08:15	15	✓
D10	2032 Do Something	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

ID	Name	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	(Default Analysis Set)	✓	100.000	100.000

(Default Analysis Set) - 2021 Baseline, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	One-way from A to C		1.27	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	A27 Link Road North		Major
B	Vale Avenue		Minor
C	A27 Link Road South		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - A27 Link Road South	8.50	✓	1.00			✓	

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

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B - Vale Avenue	One lane plus flare	10.00	6.80	4.77	3.90	3.76	✓	2.00	65	100

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	520	0.048	0.122	0.077	0.174
B-C	789	0.063	0.159	-	-
C-B	574	0.116	0.116	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2021 Baseline	AM	ONE HOUR	06:45	08:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A27 Link Road North		ONE HOUR	✓	1311	100.000
B - Vale Avenue		ONE HOUR	✓	192	100.000
C - A27 Link Road South		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A - A27 Link Road North	B - Vale Avenue	C - A27 Link Road South	
From	A - A27 Link Road North	0	123	1188
	B - Vale Avenue	0	0	192
	C - A27 Link Road South	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	A - A27 Link Road North	B - Vale Avenue	C - A27 Link Road South	
From	A - A27 Link Road North	0	1	6
	B - Vale Avenue	0	0	0
	C - A27 Link Road South	8	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.37	9.98	0.6	A	176	264
B-A	0.00	0.00	0.0	A	0	0
C-AB	0.00	0.00	0.0	A	0	0
C-A					0	0
A-B					113	169
A-C					1090	1635

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	145	36	641	0.226	143	0.0	0.3	7.224	A
B-A	0	0	406	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	460	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	93	23			93				
A-C	894	224			894				

07:00 - 07:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	173	43	612	0.282	172	0.3	0.4	8.181	A
B-A	0	0	384	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	437	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	111	28			111				
A-C	1068	267			1068				

07:15 - 07:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	211	53	572	0.370	211	0.4	0.6	9.941	A
B-A	0	0	354	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	407	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	135	34			135				
A-C	1308	327			1308				

07:30 - 07:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	211	53	572	0.370	211	0.6	0.6	9.980	A
B-A	0	0	354	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	407	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	135	34			135				
A-C	1308	327			1308				

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	173	43	612	0.282	173	0.6	0.4	8.224	A
B-A	0	0	384	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	437	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	111	28			111				
A-C	1068	267			1068				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	145	36	641	0.226	145	0.4	0.3	7.267	A
B-A	0	0	406	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	460	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	93	23			93				
A-C	894	224			894				

(Default Analysis Set) - 2021 Baseline, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	One-way from A to C		0.66	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2021 Baseline	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A27 Link Road North		ONE HOUR	✓	1248	100.000
B - Vale Avenue		ONE HOUR	✓	117	100.000
C - A27 Link Road South		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - A27 Link Road North	B - Vale Avenue	C - A27 Link Road South
From	A - A27 Link Road North	0	255	993
	B - Vale Avenue	0	0	117
	C - A27 Link Road South	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A27 Link Road North	B - Vale Avenue	C - A27 Link Road South
From	A - A27 Link Road North	0	0	3
	B - Vale Avenue	0	0	1
	C - A27 Link Road South	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.22	7.75	0.3	A	107	161
B-A	0.00	0.00	0.0	A	0	0
C-AB	0.00	0.00	0.0	A	0	0
C-A					0	0
A-B					234	351
A-C					911	1367

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	88	22	658	0.134	87	0.0	0.2	6.360	A
B-A	0	0	419	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	465	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	192	48			192				
A-C	748	187			748				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	105	26	632	0.166	105	0.2	0.2	6.884	A
B-A	0	0	400	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	444	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	229	57			229				
A-C	893	223			893				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	129	32	597	0.216	129	0.2	0.3	7.744	A
B-A	0	0	373	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	415	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	281	70			281				
A-C	1093	273			1093				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	129	32	597	0.216	129	0.3	0.3	7.754	A
B-A	0	0	373	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	415	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	281	70			281				
A-C	1093	273			1093				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	105	26	632	0.166	105	0.3	0.2	6.895	A
B-A	0	0	400	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	444	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	229	57			229				
A-C	893	223			893				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	88	22	658	0.134	88	0.2	0.2	6.376	A
B-A	0	0	419	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	465	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	192	48			192				
A-C	748	187			748				

(Default Analysis Set) - 2026 Future Baseline, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	One-way from A to C		1.35	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2026 Future Baseline	AM	ONE HOUR	06:45	08:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A27 Link Road North		ONE HOUR	✓	1372	100.000
B - Vale Avenue		ONE HOUR	✓	201	100.000
C - A27 Link Road South		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - A27 Link Road North	B - Vale Avenue	C - A27 Link Road South
From	A - A27 Link Road North	0	129	1243
	B - Vale Avenue	0	0	201
	C - A27 Link Road South	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A27 Link Road North	B - Vale Avenue	C - A27 Link Road South
From	A - A27 Link Road North	0	1	6
	B - Vale Avenue	0	0	0
	C - A27 Link Road South	8	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.39	10.57	0.6	B	184	277
B-A	0.00	0.00	0.0	A	0	0
C-AB	0.00	0.00	0.0	A	0	0
C-A					0	0
A-B					118	178
A-C					1141	1711

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	151	38	634	0.239	150	0.0	0.3	7.426	A
B-A	0	0	401	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	454	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	97	24			97				
A-C	936	234			936				

07:00 - 07:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	181	45	604	0.299	180	0.3	0.4	8.493	A
B-A	0	0	378	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	431	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	116	29			116				
A-C	1117	279			1117				

07:15 - 07:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	221	55	562	0.394	220	0.4	0.6	10.514	B
B-A	0	0	346	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	399	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	142	36			142				
A-C	1369	342			1369				

07:30 - 07:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	221	55	562	0.394	221	0.6	0.6	10.565	B
B-A	0	0	346	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	399	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	142	36			142				
A-C	1369	342			1369				

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	181	45	604	0.299	182	0.6	0.4	8.547	A
B-A	0	0	378	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	431	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	116	29			116				
A-C	1117	279			1117				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	151	38	634	0.239	152	0.4	0.3	7.475	A
B-A	0	0	401	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	454	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	97	24			97				
A-C	936	234			936				

(Default Analysis Set) - 2026 Future Baseline, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	One-way from A to C		0.68	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2026 Future Baseline	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A27 Link Road North		ONE HOUR	✓	1305	100.000
B - Vale Avenue		ONE HOUR	✓	122	100.000
C - A27 Link Road South		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - A27 Link Road North	B - Vale Avenue	C - A27 Link Road South
From	A - A27 Link Road North	0	267	1038
	B - Vale Avenue	0	0	122
	C - A27 Link Road South	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A27 Link Road North	B - Vale Avenue	C - A27 Link Road South
From	A - A27 Link Road North	0	0	3
	B - Vale Avenue	0	0	1
	C - A27 Link Road South	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.23	8.00	0.3	A	112	168
B-A	0.00	0.00	0.0	A	0	0
C-AB	0.00	0.00	0.0	A	0	0
C-A					0	0
A-B					245	368
A-C					952	1429

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	92	23	652	0.141	91	0.0	0.2	6.470	A
B-A	0	0	415	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	460	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	201	50			201				
A-C	781	195			781				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	110	27	625	0.175	109	0.2	0.2	7.041	A
B-A	0	0	394	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	438	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	240	60			240				
A-C	933	233			933				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	134	34	588	0.228	134	0.2	0.3	7.986	A
B-A	0	0	366	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	407	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	294	73			294				
A-C	1143	286			1143				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	134	34	588	0.228	134	0.3	0.3	7.997	A
B-A	0	0	366	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	407	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	294	73			294				
A-C	1143	286			1143				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	110	27	625	0.175	110	0.3	0.2	7.051	A
B-A	0	0	394	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	438	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	240	60			240				
A-C	933	233			933				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	92	23	652	0.141	92	0.2	0.2	6.490	A
B-A	0	0	415	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	460	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	201	50			201				
A-C	781	195			781				

(Default Analysis Set) - 2026 Do Something, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	One-way from A to C		1.43	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2026 Do Something	AM	ONE HOUR	06:45	08:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A27 Link Road North		ONE HOUR	✓	1375	100.000
B - Vale Avenue		ONE HOUR	✓	207	100.000
C - A27 Link Road South		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - A27 Link Road North	B - Vale Avenue	C - A27 Link Road South
From	A - A27 Link Road North	0	132	1243
	B - Vale Avenue	0	0	207
	C - A27 Link Road South	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A27 Link Road North	B - Vale Avenue	C - A27 Link Road South
From	A - A27 Link Road North	0	1	6
	B - Vale Avenue	0	0	2
	C - A27 Link Road South	8	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.41	10.94	0.7	B	190	285
B-A	0.00	0.00	0.0	A	0	0
C-AB	0.00	0.00	0.0	A	0	0
C-A					0	0
A-B					121	182
A-C					1141	1711

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	156	39	634	0.246	155	0.0	0.3	7.607	A
B-A	0	0	401	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	454	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	99	25			99				
A-C	936	234			936				

07:00 - 07:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	186	47	603	0.308	186	0.3	0.4	8.738	A
B-A	0	0	378	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	431	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	119	30			119				
A-C	1117	279			1117				

07:15 - 07:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	228	57	562	0.406	227	0.4	0.7	10.885	B
B-A	0	0	346	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	398	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	145	36			145				
A-C	1369	342			1369				

07:30 - 07:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	228	57	562	0.406	228	0.7	0.7	10.943	B
B-A	0	0	346	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	398	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	145	36			145				
A-C	1369	342			1369				

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	186	47	603	0.308	187	0.7	0.5	8.794	A
B-A	0	0	378	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	431	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	119	30			119				
A-C	1117	279			1117				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	156	39	634	0.246	156	0.5	0.3	7.665	A
B-A	0	0	401	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	454	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	99	25			99				
A-C	936	234			936				

(Default Analysis Set) - 2026 Do Something, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	One-way from A to C		0.68	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2026 Do Something	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A27 Link Road North		ONE HOUR	✓	1305	100.000
B - Vale Avenue		ONE HOUR	✓	122	100.000
C - A27 Link Road South		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - A27 Link Road North	B - Vale Avenue	C - A27 Link Road South
From	A - A27 Link Road North	0	267	1038
	B - Vale Avenue	0	0	122
	C - A27 Link Road South	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A27 Link Road North	B - Vale Avenue	C - A27 Link Road South
From	A - A27 Link Road North	0	0	3
	B - Vale Avenue	0	0	1
	C - A27 Link Road South	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.23	8.00	0.3	A	112	168
B-A	0.00	0.00	0.0	A	0	0
C-AB	0.00	0.00	0.0	A	0	0
C-A					0	0
A-B					245	368
A-C					952	1429

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	92	23	652	0.141	91	0.0	0.2	6.473	A
B-A	0	0	415	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	460	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	201	50			201				
A-C	781	195			781				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	110	27	625	0.175	109	0.2	0.2	7.044	A
B-A	0	0	394	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	438	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	240	60			240				
A-C	933	233			933				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	134	34	588	0.228	134	0.2	0.3	7.989	A
B-A	0	0	366	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	407	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	294	73			294				
A-C	1143	286			1143				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	134	34	588	0.228	134	0.3	0.3	8.000	A
B-A	0	0	366	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	407	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	294	73			294				
A-C	1143	286			1143				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	110	27	625	0.175	110	0.3	0.2	7.054	A
B-A	0	0	394	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	438	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	240	60			240				
A-C	933	233			933				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	92	23	652	0.141	92	0.2	0.2	6.490	A
B-A	0	0	415	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	460	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	201	50			201				
A-C	781	195			781				

(Default Analysis Set) - 2032 Future Baseline, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	One-way from A to C		1.44	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2032 Future Baseline	AM	ONE HOUR	06:45	08:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A27 Link Road North		ONE HOUR	✓	1440	100.000
B - Vale Avenue		ONE HOUR	✓	211	100.000
C - A27 Link Road South		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - A27 Link Road North	B - Vale Avenue	C - A27 Link Road South
From	A - A27 Link Road North	0	135	1305
	B - Vale Avenue	0	0	211
	C - A27 Link Road South	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A27 Link Road North	B - Vale Avenue	C - A27 Link Road South
From	A - A27 Link Road North	0	1	6
	B - Vale Avenue	0	0	0
	C - A27 Link Road South	9	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.42	11.31	0.7	B	194	290
B-A	0.00	0.00	0.0	A	0	0
C-AB	0.00	0.00	0.0	A	0	0
C-A					0	0
A-B					124	186
A-C					1197	1796

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	159	40	626	0.254	158	0.0	0.3	7.663	A
B-A	0	0	395	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	448	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	102	25			102				
A-C	982	246			982				

07:00 - 07:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	190	47	594	0.319	189	0.3	0.5	8.872	A
B-A	0	0	371	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	424	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	121	30			121				
A-C	1173	293			1173				

07:15 - 07:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	232	58	551	0.422	231	0.5	0.7	11.237	B
B-A	0	0	337	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	390	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	149	37			149				
A-C	1437	359			1437				

07:30 - 07:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	232	58	551	0.422	232	0.7	0.7	11.306	B
B-A	0	0	337	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	390	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	149	37			149				
A-C	1437	359			1437				

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	190	47	594	0.319	191	0.7	0.5	8.940	A
B-A	0	0	371	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	424	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	121	30			121				
A-C	1173	293			1173				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	159	40	626	0.254	159	0.5	0.3	7.724	A
B-A	0	0	395	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	448	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	102	25			102				
A-C	982	246			982				

(Default Analysis Set) - 2032 Future Baseline, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	One-way from A to C		0.71	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2032 Future Baseline	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A27 Link Road North		ONE HOUR	✓	1369	100.000
B - Vale Avenue		ONE HOUR	✓	128	100.000
C - A27 Link Road South		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - A27 Link Road North	B - Vale Avenue	C - A27 Link Road South
From	A - A27 Link Road North	0	280	1089
	B - Vale Avenue	0	0	128
	C - A27 Link Road South	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A27 Link Road North	B - Vale Avenue	C - A27 Link Road South
From	A - A27 Link Road North	0	0	3
	B - Vale Avenue	0	0	1
	C - A27 Link Road South	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.24	8.30	0.3	A	117	176
B-A	0.00	0.00	0.0	A	0	0
C-AB	0.00	0.00	0.0	A	0	0
C-A					0	0
A-B					257	385
A-C					999	1499

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	96	24	645	0.149	96	0.0	0.2	6.600	A
B-A	0	0	409	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	454	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	211	53			211				
A-C	820	205			820				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	115	29	617	0.186	115	0.2	0.2	7.225	A
B-A	0	0	388	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	431	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	252	63			252				
A-C	979	245			979				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	141	35	578	0.244	141	0.2	0.3	8.285	A
B-A	0	0	358	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	399	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	308	77			308				
A-C	1199	300			1199				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	141	35	578	0.244	141	0.3	0.3	8.298	A
B-A	0	0	358	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	399	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	308	77			308				
A-C	1199	300			1199				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	115	29	617	0.186	115	0.3	0.2	7.244	A
B-A	0	0	388	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	431	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	252	63			252				
A-C	979	245			979				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	96	24	645	0.149	97	0.2	0.2	6.621	A
B-A	0	0	409	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	454	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	211	53			211				
A-C	820	205			820				

(Default Analysis Set) - 2032 Do Something, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	One-way from A to C		1.53	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2032 Do Something	AM	ONE HOUR	06:45	08:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A27 Link Road North		ONE HOUR	✓	1442	100.000
B - Vale Avenue		ONE HOUR	✓	217	100.000
C - A27 Link Road South		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - A27 Link Road North	B - Vale Avenue	C - A27 Link Road South
From	A - A27 Link Road North	0	138	1304
	B - Vale Avenue	0	0	217
	C - A27 Link Road South	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A27 Link Road North	B - Vale Avenue	C - A27 Link Road South
From	A - A27 Link Road North	0	1	6
	B - Vale Avenue	0	0	1
	C - A27 Link Road South	9	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.43	11.71	0.8	B	199	299
B-A	0.00	0.00	0.0	A	0	0
C-AB	0.00	0.00	0.0	A	0	0
C-A					0	0
A-B					127	190
A-C					1197	1795

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	163	41	626	0.261	162	0.0	0.4	7.843	A
B-A	0	0	395	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	448	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	104	26			104				
A-C	982	245			982				

07:00 - 07:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	195	49	594	0.328	195	0.4	0.5	9.115	A
B-A	0	0	371	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	424	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	124	31			124				
A-C	1172	293			1172				

07:15 - 07:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	239	60	551	0.434	238	0.5	0.8	11.628	B
B-A	0	0	337	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	390	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	152	38			152				
A-C	1436	359			1436				

07:30 - 07:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	239	60	551	0.434	239	0.8	0.8	11.706	B
B-A	0	0	337	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	390	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	152	38			152				
A-C	1436	359			1436				

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	195	49	594	0.328	196	0.8	0.5	9.192	A
B-A	0	0	371	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	424	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	124	31			124				
A-C	1172	293			1172				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	163	41	626	0.261	164	0.5	0.4	7.909	A
B-A	0	0	395	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	448	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	104	26			104				
A-C	982	245			982				

(Default Analysis Set) - 2032 Do Something, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	One-way from A to C		0.71	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2032 Do Something	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A27 Link Road North		ONE HOUR	✓	1369	100.000
B - Vale Avenue		ONE HOUR	✓	128	100.000
C - A27 Link Road South		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - A27 Link Road North	B - Vale Avenue	C - A27 Link Road South
From	A - A27 Link Road North	0	280	1089
	B - Vale Avenue	0	0	128
	C - A27 Link Road South	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A27 Link Road North	B - Vale Avenue	C - A27 Link Road South
From	A - A27 Link Road North	0	0	3
	B - Vale Avenue	0	0	1
	C - A27 Link Road South	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.24	8.30	0.3	A	117	176
B-A	0.00	0.00	0.0	A	0	0
C-AB	0.00	0.00	0.0	A	0	0
C-A					0	0
A-B					257	385
A-C					999	1499

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	96	24	645	0.149	96	0.0	0.2	6.603	A
B-A	0	0	409	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	454	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	211	53			211				
A-C	820	205			820				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	115	29	617	0.186	115	0.2	0.2	7.228	A
B-A	0	0	388	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	431	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	252	63			252				
A-C	979	245			979				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	141	35	578	0.244	141	0.2	0.3	8.288	A
B-A	0	0	358	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	399	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	308	77			308				
A-C	1199	300			1199				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	141	35	578	0.244	141	0.3	0.3	8.301	A
B-A	0	0	358	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	399	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	308	77			308				
A-C	1199	300			1199				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	115	29	617	0.186	115	0.3	0.2	7.247	A
B-A	0	0	388	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	431	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	252	63			252				
A-C	979	245			979				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	96	24	645	0.149	97	0.2	0.2	6.624	A
B-A	0	0	409	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	454	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	211	53			211				
A-C	820	205			820				

<h1>Junctions 9</h1>
<h2>ARCADY 9 - Roundabout Module</h2>
Version: 9.5.1.7462 © Copyright TRL Limited, 2019
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Filename: Validation - Import of Junction 3 A23 London Road - A27 Link Road - Mill Road.j9

Path: C:\Users\DUF97633\Mott MacDonald\B RMF Brighton DO - T Transport\Junction models\Sensitivity Test (+90mins)
\Junction 3 A23 London Road - A27 Link Road\05. Model Updates\01. Model

Report generation date: 21/06/2023 09:09:03

-
- »(Default Analysis Set) - 2021 Baseline, AM
 - »(Default Analysis Set) - 2021 Baseline, PM
 - »(Default Analysis Set) - 2026 Future Baseline, AM
 - »(Default Analysis Set) - 2026 Future Baseline, PM
 - »(Default Analysis Set) - 2026 Do Something, AM
 - »(Default Analysis Set) - 2026 Do Something, PM
 - »(Default Analysis Set) - 2032 Future Baseline, AM
 - »(Default Analysis Set) - 2032 Future Baseline, PM
 - »(Default Analysis Set) - 2032 Do Something, AM
 - »(Default Analysis Set) - 2032 Do Something, PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
A1 - 2021 Baseline										
1 - A27 Link Road	D1	43.4	96.19	1.03	F	D2	7.4	22.99	0.89	C
2 - A23 London Road South		13.3	50.94	0.96	F		3.4	13.39	0.78	B
3 - Mill Road		1.1	20.97	0.53	C		0.4	10.33	0.31	B
4 - A23 London Road North		1.6	5.28	0.60	A		2.2	6.60	0.69	A
A1 - 2026 Future Baseline										
1 - A27 Link Road	D3	85.9	173.25	1.11	F	D4	14.0	41.86	0.95	E
2 - A23 London Road South		21.7	75.90	1.00	F		4.8	18.23	0.83	C
3 - Mill Road		1.3	22.75	0.57	C		0.5	11.79	0.35	B
4 - A23 London Road North		1.8	5.70	0.63	A		2.6	7.45	0.73	A
A1 - 2026 Do Something										
1 - A27 Link Road	D5	87.6	175.77	1.11	F	D6	13.9	41.68	0.95	E
2 - A23 London Road South		20.0	71.41	0.99	F		4.7	17.82	0.83	C
3 - Mill Road		1.3	22.61	0.56	C		0.5	11.72	0.35	B
4 - A23 London Road North		1.7	5.65	0.62	A		2.6	7.43	0.72	A
A1 - 2032 Future Baseline										
1 - A27 Link Road	D7	141.2	285.48	1.19	F	D8	36.4	92.39	1.03	F
2 - A23 London Road South		34.9	110.61	1.04	F		7.1	26.02	0.89	D
3 - Mill Road		1.4	23.86	0.59	C		0.6	13.25	0.39	B
4 - A23 London Road North		2.0	6.26	0.66	A		3.2	8.65	0.76	A
A1 - 2032 Do Something										
1 - A27 Link Road	D9	143.3	290.74	1.19	F	D10	36.4	92.42	1.03	F
2 - A23 London Road South		32.3	104.19	1.03	F		6.8	25.28	0.88	D
3 - Mill Road		1.4	23.95	0.59	C		0.6	13.16	0.38	B
4 - A23 London Road North		2.0	6.21	0.66	A		3.2	8.65	0.76	A

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

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

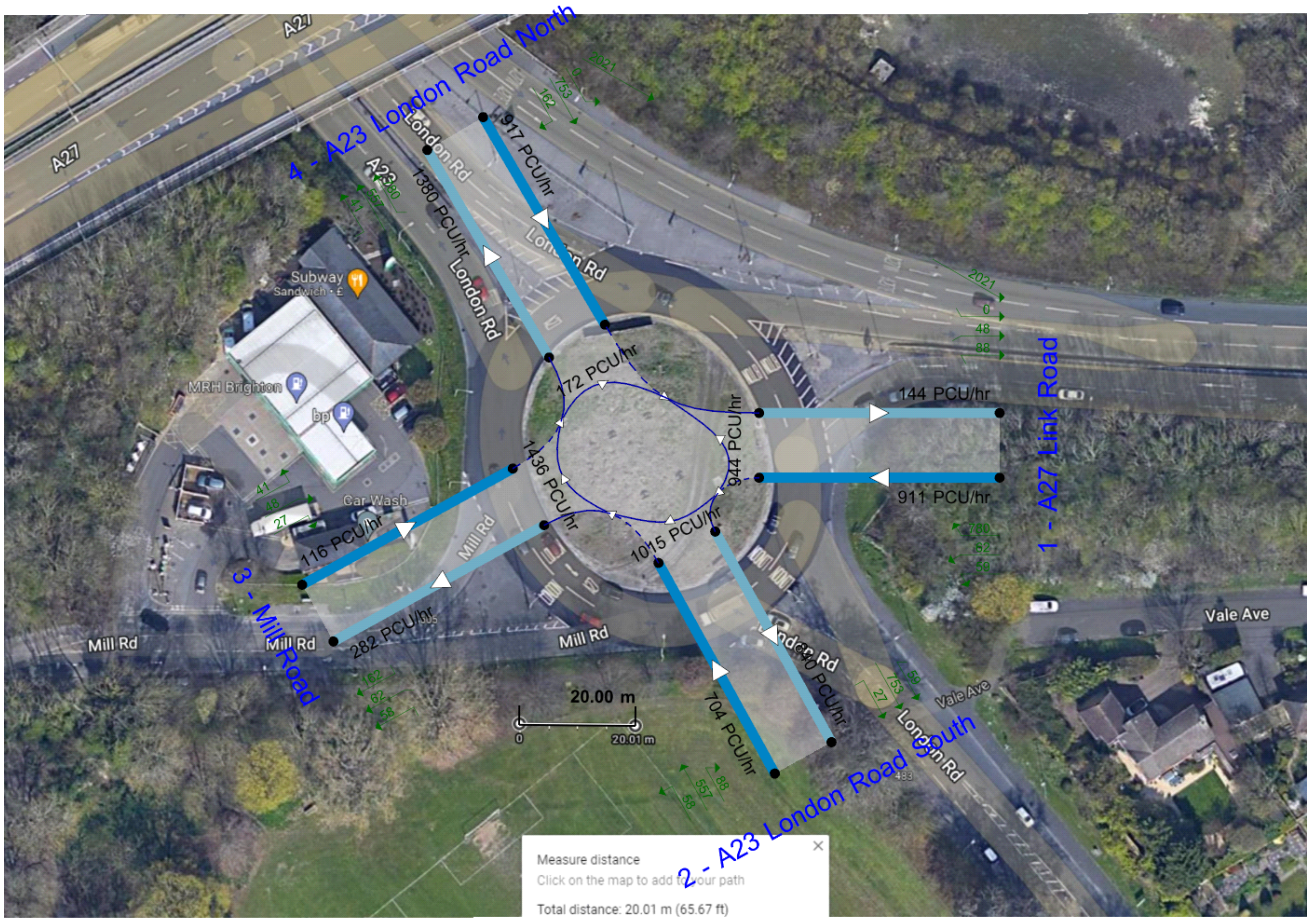
File summary

File Description

Title	(untitled)
Location	
Site number	
Date	31/01/2022
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	
Description	

Units

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



Flows show modelled flow through junction (PCU/hr).
Time Segment: 16:45-17:00

The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75	✓			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)	Run automatically
D1	2021 Baseline	AM	ONE HOUR	06:45	08:15	15	✓
D2	2021 Baseline	PM	ONE HOUR	16:45	18:15	15	✓
D3	2026 Future Baseline	AM	ONE HOUR	06:45	08:15	15	✓
D4	2026 Future Baseline	PM	ONE HOUR	16:45	18:15	15	✓
D5	2026 Do Something	AM	ONE HOUR	06:45	08:15	15	✓
D6	2026 Do Something	PM	ONE HOUR	16:45	18:15	15	✓
D7	2032 Future Baseline	AM	ONE HOUR	06:45	08:15	15	✓
D8	2032 Future Baseline	PM	ONE HOUR	16:45	18:15	15	✓
D9	2032 Do Something	AM	ONE HOUR	06:45	08:15	15	✓
D10	2032 Do Something	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

ID	Name	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	(Default Analysis Set)	✓	100.000	100.000

(Default Analysis Set) - 2021 Baseline, AM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	(untitled)	Standard Roundabout		1, 2, 3, 4	36.37	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	A27 Link Road	
2	A23 London Road South	
3	Mill Road	
4	A23 London Road North	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - A27 Link Road	7.47	7.97	1.4	18.1	62.7	32.1	
2 - A23 London Road South	6.59	7.46	2.0	37.2	60.6	14.7	
3 - Mill Road	2.54	7.04	16.6	119.9	66.6	3.7	
4 - A23 London Road North	6.12	6.35	28.6	80.1	62.8	10.7	

Bypass

Arm	Arm has bypass	Bypass utilisation (%)
1 - A27 Link Road		
2 - A23 London Road South		
3 - Mill Road		
4 - A23 London Road North	✓	100

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - A27 Link Road	0.641	2305
2 - A23 London Road South	0.671	2268
3 - Mill Road	0.553	1696
4 - A23 London Road North	0.639	2122

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

Arm Capacity Adjustments

Arm	Type	Reason	Percentage capacity adjustment (%)
1 - A27 Link Road	Percentage		92.00
2 - A23 London Road South	Percentage		90.00
3 - Mill Road	Percentage		80.00
4 - A23 London Road North	Percentage		90.00

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2021 Baseline	AM	ONE HOUR	06:45	08:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A27 Link Road		ONE HOUR	✓	1380	100.000
2 - A23 London Road South		ONE HOUR	✓	898	100.000
3 - Mill Road		ONE HOUR	✓	180	100.000
4 - A23 London Road North		ONE HOUR	✓	2986	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
	1 - A27 Link Road	2 - A23 London Road South	3 - Mill Road	4 - A23 London Road North
1 - A27 Link Road	16	51	57	1256
2 - A23 London Road South	116	3	83	696
3 - Mill Road	33	31	1	115
4 - A23 London Road North	2016	724	243	3

Proportions

From	To			
	1 - A27 Link Road	2 - A23 London Road South	3 - Mill Road	4 - A23 London Road North
1 - A27 Link Road	0.01	0.04	0.04	0.91
2 - A23 London Road South	0.13	0.00	0.09	0.78
3 - Mill Road	0.18	0.17	0.01	0.64
4 - A23 London Road North	0.68	0.24	0.08	0.00

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	1 - A27 Link Road	2 - A23 London Road South	3 - Mill Road	4 - A23 London Road North
1 - A27 Link Road	0	0	0	6
2 - A23 London Road South	4	50	1	2
3 - Mill Road	0	0	0	2
4 - A23 London Road North	9	6	2	50

Average PCU Per Veh

From	To			
	1 - A27 Link Road	2 - A23 London Road South	3 - Mill Road	4 - A23 London Road North
1 - A27 Link Road	1.000	1.000	1.000	1.057
2 - A23 London Road South	1.036	1.500	1.012	1.024
3 - Mill Road	1.000	1.000	1.000	1.018
4 - A23 London Road North	1.086	1.060	1.021	1.500

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
06:45-07:00	1 - A27 Link Road	1039	1039
	2 - A23 London Road South	676	676
	3 - Mill Road	136	136
	4 - A23 London Road North	2248	2248
07:00-07:15	1 - A27 Link Road	1241	1241
	2 - A23 London Road South	807	807
	3 - Mill Road	162	162
	4 - A23 London Road North	2684	2684
07:15-07:30	1 - A27 Link Road	1519	1519
	2 - A23 London Road South	989	989
	3 - Mill Road	198	198
	4 - A23 London Road North	3288	3288
07:30-07:45	1 - A27 Link Road	1519	1519
	2 - A23 London Road South	989	989
	3 - Mill Road	198	198
	4 - A23 London Road North	3288	3288
07:45-08:00	1 - A27 Link Road	1241	1241
	2 - A23 London Road South	807	807
	3 - Mill Road	162	162
	4 - A23 London Road North	2684	2684
08:00-08:15	1 - A27 Link Road	1039	1039
	2 - A23 London Road South	676	676
	3 - Mill Road	136	136
	4 - A23 London Road North	2248	2248

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A27 Link Road	1.03	96.19	43.4	114.0	F	1266	1899
2 - A23 London Road South	0.96	50.94	13.3	63.6	F	824	1236
3 - Mill Road	0.53	20.97	1.1	5.7	C	165	248
4 - A23 London Road North	0.60	5.28	1.6	2.0	A	2740	1335

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	1039	1039	260	0	1518	754	1676	0.620	1032	123	0.0	1.7	5.820
2 - A23 London Road South	676	676	169	0	0	1179	1329	0.509	672	607	0.0	1.0	5.578
3 - Mill Road	136	136	34	0	0	1563	665	0.204	134	288	0.0	0.3	6.849
4 - A23 London Road North	2248	730	183	1518	0	150	1824	0.400	727	1548	0.0	0.7	3.443

07:00 - 07:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	1241	1241	310	0	1812	902	1589	0.781	1233	148	1.7	3.6	10.43
2 - A23 London Road South	807	807	202	0	0	1409	1190	0.678	803	726	1.0	2.1	9.42
3 - Mill Road	162	162	40	0	0	1868	530	0.305	161	344	0.3	0.4	9.84
4 - A23 London Road North	2684	872	218	1812	0	179	1807	0.483	871	1850	0.7	1.0	4.03

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	1519	1519	380	0	2220	1104	1470	1.034	1425	176	3.6	27.1	49.79
2 - A23 London Road South	989	989	247	0	0	1644	1049	0.943	957	885	2.1	9.9	32.99
3 - Mill Road	198	198	50	0	0	2186	389	0.509	196	415	0.4	1.0	18.59
4 - A23 London Road North	3288	1068	267	2220	0	214	1786	0.598	1066	2168	1.0	1.5	5.23

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	1519	1519	380	0	2220	1106	1468	1.035	1454	179	27.1	43.4	96.18
2 - A23 London Road South	989	989	247	0	0	1672	1032	0.959	975	888	9.9	13.3	50.93
3 - Mill Road	198	198	50	0	0	2228	371	0.535	198	419	1.0	1.1	20.96
4 - A23 London Road North	3288	1068	267	2220	0	217	1785	0.598	1068	2209	1.5	1.6	5.27

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	1241	1241	310	0	1812	906	1586	0.782	1398	156	43.4	4.1	34.25
2 - A23 London Road South	807	807	202	0	0	1569	1094	0.738	848	735	13.3	3.1	17.26
3 - Mill Road	162	162	40	0	0	2061	445	0.364	164	356	1.1	0.6	13.05
4 - A23 London Road North	2684	872	218	1812	0	188	1802	0.484	874	2037	1.6	1.0	4.09

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	1039	1039	260	0	1518	758	1674	0.621	1048	126	4.1	1.8	6.145
2 - A23 London Road South	676	676	169	0	0	1196	1319	0.512	684	611	3.1	1.1	5.877
3 - Mill Road	136	136	34	0	0	1589	654	0.207	137	291	0.6	0.3	7.063
4 - A23 London Road North	2248	730	183	1518	0	152	1822	0.401	731	1574	1.0	0.7	3.474

Queue Variation Results for each time segment
06:45 - 07:00

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 - A27 Link Road	1.69	0.18	1.42	2.92	3.71			N/A	N/A
2 - A23 London Road South	1.05	0.48	1.06	1.11	1.59			N/A	N/A
3 - Mill Road	0.26	0.00	0.00	0.26	0.26			N/A	N/A
4 - A23 London Road North	0.70	0.58	1.05	1.47	1.52			N/A	N/A

07:00 - 07:15

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 - A27 Link Road	3.57	0.05	0.52	10.06	16.85			N/A	N/A
2 - A23 London Road South	2.09	0.05	0.48	5.67	9.27			N/A	N/A
3 - Mill Road	0.44	0.00	0.00	0.44	0.44			N/A	N/A
4 - A23 London Road North	0.97	0.08	0.88	1.67	2.05			N/A	N/A

07:15 - 07:30

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 - A27 Link Road	27.11	2.20	20.36	57.27	72.37			N/A	N/A
2 - A23 London Road South	9.90	0.09	2.40	28.06	42.67			N/A	N/A
3 - Mill Road	1.01	0.03	0.27	1.01	1.17			N/A	N/A
4 - A23 London Road North	1.54	0.03	0.27	1.54	1.54			N/A	N/A

07:30 - 07:45

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 - A27 Link Road	43.43	4.27	33.42	90.79	114.00			N/A	N/A
2 - A23 London Road South	13.34	0.07	1.69	39.13	63.57			N/A	N/A
3 - Mill Road	1.12	0.03	0.32	2.02	5.69			N/A	N/A
4 - A23 London Road North	1.55	0.03	0.28	1.55	1.55			N/A	N/A

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 - A27 Link Road	4.11	0.04	0.41	10.84	21.91			N/A	N/A
2 - A23 London Road South	3.05	0.05	0.60	8.49	13.78			N/A	N/A
3 - Mill Road	0.59	0.07	0.71	1.36	1.44			N/A	N/A
4 - A23 London Road North	0.99	0.28	1.04	1.48	1.48			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 - A27 Link Road	1.75	0.03	0.30	1.75	6.07			N/A	N/A
2 - A23 London Road South	1.09	0.03	0.30	1.33	4.59			N/A	N/A
3 - Mill Road	0.27	0.03	0.28	0.56	1.04			N/A	N/A
4 - A23 London Road North	0.71	0.07	0.78	1.45	1.53			N/A	N/A

(Default Analysis Set) - 2021 Baseline, PM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	(untitled)	Standard Roundabout		1, 2, 3, 4	10.93	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2021 Baseline	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A27 Link Road		ONE HOUR	✓	1110	100.000
2 - A23 London Road South		ONE HOUR	✓	861	100.000
3 - Mill Road		ONE HOUR	✓	141	100.000
4 - A23 London Road North		ONE HOUR	✓	3563	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	1 - A27 Link Road	2 - A23 London Road South	3 - Mill Road	4 - A23 London Road North
From				
1 - A27 Link Road	11	72	76	951
2 - A23 London Road South	107	1	71	682
3 - Mill Road	58	33	0	50
4 - A23 London Road North	2448	916	197	2

Proportions

	To			
	1 - A27 Link Road	2 - A23 London Road South	3 - Mill Road	4 - A23 London Road North
From				
1 - A27 Link Road	0.01	0.06	0.07	0.86
2 - A23 London Road South	0.12	0.00	0.08	0.79
3 - Mill Road	0.41	0.23	0.00	0.35
4 - A23 London Road North	0.69	0.26	0.06	0.00

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	1 - A27 Link Road	2 - A23 London Road South	3 - Mill Road	4 - A23 London Road North
1 - A27 Link Road	0	1	0	3
2 - A23 London Road South	2	0	0	2
3 - Mill Road	0	0	0	0
4 - A23 London Road North	2	1	1	0

Average PCU Per Veh

From	To			
	1 - A27 Link Road	2 - A23 London Road South	3 - Mill Road	4 - A23 London Road North
1 - A27 Link Road	1.000	1.014	1.000	1.028
2 - A23 London Road South	1.019	1.000	1.000	1.024
3 - Mill Road	1.000	1.000	1.000	1.000
4 - A23 London Road North	1.019	1.008	1.005	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
16:45-17:00	1 - A27 Link Road	836	836
	2 - A23 London Road South	648	648
	3 - Mill Road	106	106
	4 - A23 London Road North	2682	2682
17:00-17:15	1 - A27 Link Road	998	998
	2 - A23 London Road South	774	774
	3 - Mill Road	127	127
	4 - A23 London Road North	3203	3203
17:15-17:30	1 - A27 Link Road	1222	1222
	2 - A23 London Road South	948	948
	3 - Mill Road	155	155
	4 - A23 London Road North	3923	3923
17:30-17:45	1 - A27 Link Road	1222	1222
	2 - A23 London Road South	948	948
	3 - Mill Road	155	155
	4 - A23 London Road North	3923	3923
17:45-18:00	1 - A27 Link Road	998	998
	2 - A23 London Road South	774	774
	3 - Mill Road	127	127
	4 - A23 London Road North	3203	3203
18:00-18:15	1 - A27 Link Road	836	836
	2 - A23 London Road South	648	648
	3 - Mill Road	106	106
	4 - A23 London Road North	2682	2682

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A27 Link Road	0.89	22.99	7.4	39.1	C	1019	1528
2 - A23 London Road South	0.78	13.39	3.4	14.7	B	790	1185
3 - Mill Road	0.31	10.33	0.4	1.6	B	129	194
4 - A23 London Road North	0.69	6.60	2.2	4.1	A	3269	1535

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	836	836	209	0	1843	861	1613	0.518	831	132	0.0	1.1	4.696
2 - A23 London Road South	648	648	162	0	0	927	1482	0.437	645	766	0.0	0.8	4.377
3 - Mill Road	106	106	27	0	0	1314	776	0.137	106	258	0.0	0.2	5.369
4 - A23 London Road North	2682	839	210	1843	0	157	1819	0.461	836	1262	0.0	0.9	3.676

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	998	998	249	0	2201	1031	1513	0.660	994	158	1.1	1.9	7.076
2 - A23 London Road South	774	774	194	0	0	1109	1372	0.564	772	917	0.8	1.3	6.107
3 - Mill Road	127	127	32	0	0	1572	661	0.192	126	309	0.2	0.2	6.728
4 - A23 London Road North	3203	1002	251	2201	0	188	1801	0.556	1001	1510	0.9	1.2	4.520

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	1222	1222	306	0	2695	1261	1377	0.888	1203	192	1.9	6.8	19.37
2 - A23 London Road South	948	948	237	0	0	1343	1230	0.771	940	1121	1.3	3.2	12.36
3 - Mill Road	155	155	39	0	0	1907	513	0.303	154	376	0.2	0.4	10.02
4 - A23 London Road North	3923	1228	307	2695	0	230	1778	0.691	1224	1832	1.2	2.2	6.50

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	1222	1222	306	0	2695	1265	1375	0.889	1220	194	6.8	7.4	22.98
2 - A23 London Road South	948	948	237	0	0	1360	1220	0.777	947	1125	3.2	3.4	13.38
3 - Mill Road	155	155	39	0	0	1928	503	0.308	155	379	0.4	0.4	10.33
4 - A23 London Road North	3923	1228	307	2695	0	231	1777	0.691	1228	1853	2.2	2.2	6.59

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	998	998	249	0	2201	1037	1509	0.661	1019	160	7.4	2.0	7.843
2 - A23 London Road South	774	774	194	0	0	1133	1357	0.570	782	923	3.4	1.4	6.478
3 - Mill Road	127	127	32	0	0	1603	648	0.196	128	312	0.4	0.2	6.933
4 - A23 London Road North	3203	1002	251	2201	0	191	1800	0.557	1006	1540	2.2	1.3	4.589

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	836	836	209	0	1843	867	1610	0.519	839	133	2.0	1.1	4.813
2 - A23 London Road South	648	648	162	0	0	935	1477	0.439	650	771	1.4	0.8	4.461
3 - Mill Road	106	106	27	0	0	1326	770	0.138	106	260	0.2	0.2	5.428
4 - A23 London Road North	2682	839	210	1843	0	159	1818	0.462	841	1274	1.3	0.9	3.718

Queue 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 - A27 Link Road	1.09	0.56	1.06	1.26	1.26			N/A	N/A
2 - A23 London Road South	0.79	0.56	1.02	1.43	1.48			N/A	N/A
3 - Mill Road	0.16	0.00	0.00	0.16	0.16			N/A	N/A
4 - A23 London Road North	0.86	0.55	1.01	1.41	1.46			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 - A27 Link Road	1.94	0.05	0.46	5.22	8.74			N/A	N/A
2 - A23 London Road South	1.30	0.05	0.54	3.06	4.68			N/A	N/A
3 - Mill Road	0.24	0.00	0.00	0.24	0.24			N/A	N/A
4 - A23 London Road North	1.25	0.06	0.69	2.83	4.08			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 - A27 Link Road	6.76	0.04	0.44	18.46	36.28			N/A	N/A
2 - A23 London Road South	3.24	0.03	0.31	3.24	14.72			N/A	N/A
3 - Mill Road	0.43	0.03	0.26	0.46	0.49			N/A	N/A
4 - A23 London Road North	2.20	0.03	0.27	2.20	2.27			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 - A27 Link Road	7.38	0.03	0.35	13.18	39.06			N/A	N/A
2 - A23 London Road South	3.42	0.03	0.29	3.42	9.69			N/A	N/A
3 - Mill Road	0.44	0.03	0.33	1.38	1.60			N/A	N/A
4 - A23 London Road North	2.22	0.03	0.27	2.22	2.22			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 - A27 Link Road	2.05	0.04	0.43	5.55	9.66			N/A	N/A
2 - A23 London Road South	1.38	0.06	0.73	3.17	4.69			N/A	N/A
3 - Mill Road	0.25	0.00	0.00	0.25	0.25			N/A	N/A
4 - A23 London Road North	1.28	0.11	1.10	2.21	2.88			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 - A27 Link Road	1.12	0.03	0.32	1.96	5.66			N/A	N/A
2 - A23 London Road South	0.81	0.04	0.37	1.90	3.43			N/A	N/A
3 - Mill Road	0.16	0.00	0.00	0.16	0.16			N/A	N/A
4 - A23 London Road North	0.87	0.05	0.62	1.69	2.32			N/A	N/A

(Default Analysis Set) - 2026 Future Baseline, AM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	(untitled)	Standard Roundabout		1, 2, 3, 4	60.32	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2026 Future Baseline	AM	ONE HOUR	06:45	08:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A27 Link Road		ONE HOUR	✓	1444	100.000
2 - A23 London Road South		ONE HOUR	✓	939	100.000
3 - Mill Road		ONE HOUR	✓	188	100.000
4 - A23 London Road North		ONE HOUR	✓	3124	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - A27 Link Road	2 - A23 London Road South	3 - Mill Road	4 - A23 London Road North
From	1 - A27 Link Road	17	53	60	1314
	2 - A23 London Road South	121	3	87	728
	3 - Mill Road	35	32	1	120
	4 - A23 London Road North	2109	758	254	3

Proportions

		To			
		1 - A27 Link Road	2 - A23 London Road South	3 - Mill Road	4 - A23 London Road North
From	1 - A27 Link Road	0.01	0.04	0.04	0.91
	2 - A23 London Road South	0.13	0.00	0.09	0.78
	3 - Mill Road	0.19	0.17	0.01	0.64
	4 - A23 London Road North	0.68	0.24	0.08	0.00

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	1 - A27 Link Road	2 - A23 London Road South	3 - Mill Road	4 - A23 London Road North
1 - A27 Link Road	0	0	0	6
2 - A23 London Road South	4	50	1	2
3 - Mill Road	0	0	0	2
4 - A23 London Road North	9	6	2	50

Average PCU Per Veh

From	To			
	1 - A27 Link Road	2 - A23 London Road South	3 - Mill Road	4 - A23 London Road North
1 - A27 Link Road	1.000	1.000	1.000	1.057
2 - A23 London Road South	1.036	1.500	1.012	1.024
3 - Mill Road	1.000	1.000	1.000	1.018
4 - A23 London Road North	1.086	1.060	1.021	1.500

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
06:45-07:00	1 - A27 Link Road	1087	1087
	2 - A23 London Road South	707	707
	3 - Mill Road	142	142
	4 - A23 London Road North	2352	2352
07:00-07:15	1 - A27 Link Road	1298	1298
	2 - A23 London Road South	844	844
	3 - Mill Road	169	169
	4 - A23 London Road North	2808	2808
07:15-07:30	1 - A27 Link Road	1590	1590
	2 - A23 London Road South	1034	1034
	3 - Mill Road	207	207
	4 - A23 London Road North	3440	3440
07:30-07:45	1 - A27 Link Road	1590	1590
	2 - A23 London Road South	1034	1034
	3 - Mill Road	207	207
	4 - A23 London Road North	3440	3440
07:45-08:00	1 - A27 Link Road	1298	1298
	2 - A23 London Road South	844	844
	3 - Mill Road	169	169
	4 - A23 London Road North	2808	2808
08:00-08:15	1 - A27 Link Road	1087	1087
	2 - A23 London Road South	707	707
	3 - Mill Road	142	142
	4 - A23 London Road North	2352	2352

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A27 Link Road	1.11	173.25	85.9	155.3	F	1325	1988
2 - A23 London Road South	1.00	75.90	21.7	78.3	F	862	1292
3 - Mill Road	0.57	22.75	1.3	6.3	C	173	259
4 - A23 London Road North	0.63	5.70	1.8	2.7	A	2867	1397

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	1087	1087	272	0	1588	788	1656	0.656	1079	129	0.0	2.0	6.481
2 - A23 London Road South	707	707	177	0	0	1233	1297	0.545	702	634	0.0	1.2	6.157
3 - Mill Road	142	142	35	0	0	1634	634	0.223	140	301	0.0	0.3	7.362
4 - A23 London Road North	2352	764	191	1588	0	156	1820	0.420	761	1618	0.0	0.8	3.563

07:00 - 07:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	1298	1298	325	0	1896	943	1564	0.830	1287	154	2.0	4.7	13.15
2 - A23 London Road South	844	844	211	0	0	1471	1153	0.732	838	759	1.2	2.7	11.52
3 - Mill Road	169	169	42	0	0	1950	494	0.342	168	360	0.3	0.5	11.13
4 - A23 London Road North	2808	912	228	1896	0	187	1802	0.506	911	1931	0.8	1.1	4.23

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	1590	1590	397	0	2322	1154	1440	1.104	1419	182	4.7	47.3	76.66
2 - A23 London Road South	1034	1034	258	0	0	1651	1045	0.990	985	923	2.7	14.8	44.18
3 - Mill Road	207	207	52	0	0	2206	381	0.544	204	430	0.5	1.1	20.36
4 - A23 London Road North	3440	1118	279	2322	0	221	1783	0.627	1115	2189	1.1	1.7	5.64

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	1590	1590	397	0	2322	1157	1438	1.105	1435	185	47.3	85.9	173.2
2 - A23 London Road South	1034	1034	258	0	0	1667	1035	0.999	1006	926	14.8	21.7	75.9
3 - Mill Road	207	207	52	0	0	2239	366	0.566	207	434	1.1	1.3	22.7
4 - A23 London Road North	3440	1118	279	2322	0	224	1781	0.628	1117	2222	1.7	1.8	5.70

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	1298	1298	325	0	1896	948	1562	0.831	1543	167	85.9	24.8	132.6
2 - A23 London Road South	844	844	211	0	0	1719	1003	0.841	905	772	21.7	6.4	45.9
3 - Mill Road	169	169	42	0	0	2246	363	0.466	170	378	1.3	0.9	19.0
4 - A23 London Road North	2808	912	228	1896	0	199	1795	0.508	915	2217	1.8	1.1	4.31

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	1087	1087	272	0	1588	793	1653	0.658	1178	134	24.8	2.1	9.598
2 - A23 London Road South	707	707	177	0	0	1329	1239	0.571	727	642	6.4	1.4	7.486
3 - Mill Road	142	142	35	0	0	1748	583	0.243	144	309	0.9	0.3	8.323
4 - A23 London Road North	2352	764	191	1588	0	162	1817	0.421	765	1730	1.1	0.8	3.605

Queue Variation Results for each time segment

06:45 - 07:00

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 - A27 Link Road	1.97	0.11	1.40	4.07	5.46			N/A	N/A
2 - A23 London Road South	1.21	0.21	1.14	1.78	2.01			N/A	N/A
3 - Mill Road	0.29	0.00	0.00	0.29	0.29			N/A	N/A
4 - A23 London Road North	0.76	0.58	1.05	1.47	1.52			N/A	N/A

07:00 - 07:15

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 - A27 Link Road	4.73	0.06	1.00	13.43	21.64			N/A	N/A
2 - A23 London Road South	2.68	0.05	0.56	7.37	11.88			N/A	N/A
3 - Mill Road	0.52	0.05	0.54	1.32	1.42			N/A	N/A
4 - A23 London Road North	1.07	0.07	0.86	1.96	2.72			N/A	N/A

07:15 - 07:30

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 - A27 Link Road	47.33	14.72	42.61	79.89	93.32			N/A	N/A
2 - A23 London Road South	14.80	0.30	7.97	36.89	50.40			N/A	N/A
3 - Mill Road	1.15	0.03	0.28	1.15	2.80			N/A	N/A
4 - A23 London Road North	1.74	0.03	0.28	1.74	1.74			N/A	N/A

07:30 - 07:45

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 - A27 Link Road	85.95	34.21	80.03	135.85	155.34			N/A	N/A
2 - A23 London Road South	21.68	0.28	10.68	56.24	78.32			N/A	N/A
3 - Mill Road	1.27	0.03	0.31	1.97	6.33			N/A	N/A
4 - A23 London Road North	1.76	0.03	0.28	1.76	1.76			N/A	N/A

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 - A27 Link Road	24.78	4.71	20.82	46.07	55.67			N/A	N/A
2 - A23 London Road South	6.42	0.14	2.80	16.32	22.90			N/A	N/A
3 - Mill Road	0.91	0.30	0.99	1.46	1.52			N/A	N/A
4 - A23 London Road North	1.10	0.20	1.08	1.56	1.88			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 - A27 Link Road	2.07	0.03	0.29	2.07	5.12			N/A	N/A
2 - A23 London Road South	1.39	0.03	0.29	1.39	5.48			N/A	N/A
3 - Mill Road	0.33	0.03	0.32	1.05	1.30			N/A	N/A
4 - A23 London Road North	0.77	0.07	0.76	1.42	1.42			N/A	N/A

(Default Analysis Set) - 2026 Future Baseline, PM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	(untitled)	Standard Roundabout		1, 2, 3, 4	15.92	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2026 Future Baseline	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A27 Link Road		ONE HOUR	✓	1160	100.000
2 - A23 London Road South		ONE HOUR	✓	900	100.000
3 - Mill Road		ONE HOUR	✓	148	100.000
4 - A23 London Road North		ONE HOUR	✓	3726	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
	1 - A27 Link Road	2 - A23 London Road South	3 - Mill Road	4 - A23 London Road North
1 - A27 Link Road	12	75	79	994
2 - A23 London Road South	112	1	74	713
3 - Mill Road	61	35	0	52
4 - A23 London Road North	2560	958	206	2

Proportions

From	To			
	1 - A27 Link Road	2 - A23 London Road South	3 - Mill Road	4 - A23 London Road North
1 - A27 Link Road	0.01	0.06	0.07	0.86
2 - A23 London Road South	0.12	0.00	0.08	0.79
3 - Mill Road	0.41	0.24	0.00	0.35
4 - A23 London Road North	0.69	0.26	0.06	0.00

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	1 - A27 Link Road	2 - A23 London Road South	3 - Mill Road	4 - A23 London Road North
1 - A27 Link Road	0	1	0	3
2 - A23 London Road South	2	0	0	2
3 - Mill Road	0	0	0	0
4 - A23 London Road North	2	1	1	0

Average PCU Per Veh

From	To			
	1 - A27 Link Road	2 - A23 London Road South	3 - Mill Road	4 - A23 London Road North
1 - A27 Link Road	1.000	1.014	1.000	1.028
2 - A23 London Road South	1.019	1.000	1.000	1.024
3 - Mill Road	1.000	1.000	1.000	1.000
4 - A23 London Road North	1.019	1.008	1.005	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
16:45-17:00	1 - A27 Link Road	873	873
	2 - A23 London Road South	678	678
	3 - Mill Road	111	111
	4 - A23 London Road North	2805	2805
17:00-17:15	1 - A27 Link Road	1043	1043
	2 - A23 London Road South	809	809
	3 - Mill Road	133	133
	4 - A23 London Road North	3350	3350
17:15-17:30	1 - A27 Link Road	1277	1277
	2 - A23 London Road South	991	991
	3 - Mill Road	163	163
	4 - A23 London Road North	4102	4102
17:30-17:45	1 - A27 Link Road	1277	1277
	2 - A23 London Road South	991	991
	3 - Mill Road	163	163
	4 - A23 London Road North	4102	4102
17:45-18:00	1 - A27 Link Road	1043	1043
	2 - A23 London Road South	809	809
	3 - Mill Road	133	133
	4 - A23 London Road North	3350	3350
18:00-18:15	1 - A27 Link Road	873	873
	2 - A23 London Road South	678	678
	3 - Mill Road	111	111
	4 - A23 London Road North	2805	2805

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A27 Link Road	0.95	41.86	14.0	70.0	E	1064	1597
2 - A23 London Road South	0.83	18.23	4.8	23.4	C	826	1239
3 - Mill Road	0.35	11.79	0.5	2.1	B	136	204
4 - A23 London Road North	0.73	7.45	2.6	5.1	A	3419	1605

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	873	873	218	0	1927	901	1589	0.549	868	139	0.0	1.2	5.084
2 - A23 London Road South	678	678	169	0	0	968	1457	0.465	674	801	0.0	0.9	4.677
3 - Mill Road	111	111	28	0	0	1373	749	0.149	111	269	0.0	0.2	5.632
4 - A23 London Road North	2805	878	219	1927	0	165	1815	0.484	874	1319	0.0	0.9	3.840

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	1043	1043	261	0	2301	1079	1485	0.702	1038	166	1.2	2.3	8.187
2 - A23 London Road South	809	809	202	0	0	1158	1342	0.603	807	959	0.9	1.5	6.830
3 - Mill Road	133	133	33	0	0	1643	630	0.211	133	322	0.2	0.3	7.234
4 - A23 London Road North	3350	1048	262	2301	0	198	1796	0.584	1046	1577	0.9	1.4	4.827

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	1277	1277	319	0	2819	1318	1343	0.951	1241	202	2.3	11.4	29.23
2 - A23 London Road South	991	991	248	0	0	1389	1203	0.824	980	1171	1.5	4.3	15.74
3 - Mill Road	163	163	41	0	0	1977	482	0.338	162	391	0.3	0.5	11.22
4 - A23 London Road North	4102	1284	321	2819	0	241	1771	0.725	1279	1898	1.4	2.6	7.30

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	1277	1277	319	0	2819	1323	1340	0.953	1267	203	11.4	14.0	41.86
2 - A23 London Road South	991	991	248	0	0	1414	1188	0.834	989	1176	4.3	4.8	18.22
3 - Mill Road	163	163	41	0	0	2009	468	0.348	163	394	0.5	0.5	11.79
4 - A23 London Road North	4102	1284	321	2819	0	243	1770	0.725	1284	1929	2.6	2.6	7.44

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	1043	1043	261	0	2301	1086	1480	0.704	1089	169	14.0	2.5	10.48
2 - A23 London Road South	809	809	202	0	0	1206	1313	0.616	822	968	4.8	1.7	7.66
3 - Mill Road	133	133	33	0	0	1700	605	0.220	134	328	0.5	0.3	7.66
4 - A23 London Road North	3350	1048	262	2301	0	201	1794	0.584	1053	1633	2.6	1.4	4.92

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	873	873	218	0	1927	907	1586	0.551	878	140	2.5	1.3	5.252
2 - A23 London Road South	678	678	169	0	0	978	1451	0.467	681	807	1.7	0.9	4.793
3 - Mill Road	111	111	28	0	0	1388	743	0.150	112	271	0.3	0.2	5.711
4 - A23 London Road North	2805	878	219	1927	0	167	1814	0.484	880	1333	1.4	1.0	3.890

Queue 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 - A27 Link Road	1.23	0.51	1.17	1.69	1.91			N/A	N/A
2 - A23 London Road South	0.88	0.56	1.02	1.43	1.48			N/A	N/A
3 - Mill Road	0.17	0.00	0.00	0.17	0.17			N/A	N/A
4 - A23 London Road North	0.94	0.55	1.01	1.41	1.46			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 - A27 Link Road	2.35	0.05	0.45	6.46	11.03			N/A	N/A
2 - A23 London Road South	1.52	0.05	0.49	3.88	6.05			N/A	N/A
3 - Mill Road	0.27	0.00	0.00	0.27	0.27			N/A	N/A
4 - A23 London Road North	1.39	0.05	0.59	3.39	5.04			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 - A27 Link Road	11.44	0.09	2.77	32.58	49.65			N/A	N/A
2 - A23 London Road South	4.35	0.03	0.35	8.65	23.37			N/A	N/A
3 - Mill Road	0.50	0.03	0.26	0.50	0.50			N/A	N/A
4 - A23 London Road North	2.58	0.03	0.28	2.58	5.07			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 - A27 Link Road	13.99	0.06	1.42	41.01	70.04			N/A	N/A
2 - A23 London Road South	4.79	0.03	0.31	4.79	20.82			N/A	N/A
3 - Mill Road	0.53	0.03	0.33	1.05	2.12			N/A	N/A
4 - A23 London Road North	2.62	0.03	0.27	2.62	2.62			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 - A27 Link Road	2.52	0.04	0.40	6.69	12.94			N/A	N/A
2 - A23 London Road South	1.67	0.05	0.51	4.30	6.71			N/A	N/A
3 - Mill Road	0.29	0.00	0.00	0.29	0.29			N/A	N/A
4 - A23 London Road North	1.43	0.08	1.08	2.87	3.87			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 - A27 Link Road	1.27	0.03	0.30	1.27	5.68			N/A	N/A
2 - A23 London Road South	0.90	0.03	0.34	1.99	4.40			N/A	N/A
3 - Mill Road	0.18	0.00	0.00	0.18	0.18			N/A	N/A
4 - A23 London Road North	0.95	0.05	0.48	2.02	3.03			N/A	N/A

(Default Analysis Set) - 2026 Do Something, AM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	(untitled)	Standard Roundabout		1, 2, 3, 4	60.33	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2026 Do Something	AM	ONE HOUR	06:45	08:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A27 Link Road		ONE HOUR	✓	1450	100.000
2 - A23 London Road South		ONE HOUR	✓	931	100.000
3 - Mill Road		ONE HOUR	✓	188	100.000
4 - A23 London Road North		ONE HOUR	✓	3120	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - A27 Link Road	2 - A23 London Road South	3 - Mill Road	4 - A23 London Road North
From	1 - A27 Link Road	17	53	60	1320
	2 - A23 London Road South	121	3	87	720
	3 - Mill Road	35	32	1	120
	4 - A23 London Road North	2110	753	254	3

Proportions

		To			
		1 - A27 Link Road	2 - A23 London Road South	3 - Mill Road	4 - A23 London Road North
From	1 - A27 Link Road	0.01	0.04	0.04	0.91
	2 - A23 London Road South	0.13	0.00	0.09	0.77
	3 - Mill Road	0.19	0.17	0.01	0.64
	4 - A23 London Road North	0.68	0.24	0.08	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A27 Link Road	2 - A23 London Road South	3 - Mill Road	4 - A23 London Road North
From	1 - A27 Link Road	0	0	0	6
	2 - A23 London Road South	4	50	1	2
	3 - Mill Road	0	0	0	2
	4 - A23 London Road North	9	6	2	50

Average PCU Per Veh

		To			
		1 - A27 Link Road	2 - A23 London Road South	3 - Mill Road	4 - A23 London Road North
From	1 - A27 Link Road	1.000	1.000	1.000	1.058
	2 - A23 London Road South	1.036	1.500	1.012	1.018
	3 - Mill Road	1.000	1.000	1.000	1.018
	4 - A23 London Road North	1.086	1.057	1.021	1.500

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
06:45-07:00	1 - A27 Link Road	1092	1092
	2 - A23 London Road South	701	701
	3 - Mill Road	142	142
	4 - A23 London Road North	2349	2349
07:00-07:15	1 - A27 Link Road	1304	1304
	2 - A23 London Road South	837	837
	3 - Mill Road	169	169
	4 - A23 London Road North	2805	2805
07:15-07:30	1 - A27 Link Road	1596	1596
	2 - A23 London Road South	1025	1025
	3 - Mill Road	207	207
	4 - A23 London Road North	3435	3435
07:30-07:45	1 - A27 Link Road	1596	1596
	2 - A23 London Road South	1025	1025
	3 - Mill Road	207	207
	4 - A23 London Road North	3435	3435
07:45-08:00	1 - A27 Link Road	1304	1304
	2 - A23 London Road South	837	837
	3 - Mill Road	169	169
	4 - A23 London Road North	2805	2805
08:00-08:15	1 - A27 Link Road	1092	1092
	2 - A23 London Road South	701	701
	3 - Mill Road	142	142
	4 - A23 London Road North	2349	2349

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A27 Link Road	1.11	175.77	87.6	157.0	F	1331	1996
2 - A23 London Road South	0.99	71.41	20.0	76.0	F	854	1281
3 - Mill Road	0.56	22.61	1.3	6.3	C	173	259
4 - A23 London Road North	0.62	5.65	1.7	2.7	A	2863	1390

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	1092	1092	273	0	1589	784	1658	0.658	1084	129	0.0	2.0	6.509
2 - A23 London Road South	701	701	175	0	0	1238	1294	0.542	696	630	0.0	1.2	6.099
3 - Mill Road	142	142	35	0	0	1633	634	0.223	140	301	0.0	0.3	7.353
4 - A23 London Road North	2349	760	190	1589	0	156	1820	0.418	757	1617	0.0	0.7	3.543

07:00 - 07:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	1304	1304	326	0	1897	939	1567	0.832	1292	154	2.0	4.8	13.27
2 - A23 London Road South	837	837	209	0	0	1477	1150	0.728	831	755	1.2	2.6	11.34
3 - Mill Road	169	169	42	0	0	1948	495	0.342	168	360	0.3	0.5	11.10
4 - A23 London Road North	2805	908	227	1897	0	187	1802	0.504	907	1929	0.7	1.1	4.21

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	1596	1596	399	0	2323	1148	1443	1.106	1423	182	4.8	48.1	77.55
2 - A23 London Road South	1025	1025	256	0	0	1655	1042	0.983	980	917	2.6	14.0	42.47
3 - Mill Road	207	207	52	0	0	2204	382	0.542	204	431	0.5	1.1	20.26
4 - A23 London Road North	3435	1112	278	2323	0	221	1782	0.624	1109	2187	1.1	1.7	5.58

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	1596	1596	399	0	2323	1151	1442	1.107	1439	185	48.1	87.6	175.7
2 - A23 London Road South	1025	1025	256	0	0	1670	1033	0.993	1001	920	14.0	20.0	71.4
3 - Mill Road	207	207	52	0	0	2237	367	0.564	207	434	1.1	1.3	22.6
4 - A23 London Road North	3435	1112	278	2323	0	225	1780	0.625	1112	2219	1.7	1.7	5.64

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	1304	1304	326	0	1897	943	1564	0.833	1546	166	87.6	27.0	136.6
2 - A23 London Road South	837	837	209	0	0	1722	1002	0.836	893	767	20.0	6.0	41.4
3 - Mill Road	169	169	42	0	0	2237	367	0.461	170	377	1.3	0.9	18.6
4 - A23 London Road North	2805	908	227	1897	0	199	1795	0.506	911	2209	1.7	1.1	4.28

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	1092	1092	273	0	1589	789	1655	0.660	1191	134	27.0	2.1	10.07
2 - A23 London Road South	701	701	175	0	0	1342	1231	0.569	720	638	6.0	1.4	7.44
3 - Mill Road	142	142	35	0	0	1753	581	0.244	144	309	0.9	0.3	8.36
4 - A23 London Road North	2349	760	190	1589	0	162	1817	0.419	762	1735	1.1	0.8	3.58

Queue Variation Results for each time segment

06:45 - 07:00

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 - A27 Link Road	1.99	0.11	1.40	4.12	5.56			N/A	N/A
2 - A23 London Road South	1.19	0.23	1.13	1.73	1.97			N/A	N/A
3 - Mill Road	0.29	0.00	0.00	0.29	0.29			N/A	N/A
4 - A23 London Road North	0.75	0.58	1.05	1.47	1.52			N/A	N/A

07:00 - 07:15

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 - A27 Link Road	4.79	0.06	1.03	13.61	21.88			N/A	N/A
2 - A23 London Road South	2.61	0.05	0.55	7.16	11.58			N/A	N/A
3 - Mill Road	0.51	0.05	0.53	1.32	1.42			N/A	N/A
4 - A23 London Road North	1.06	0.07	0.86	1.93	2.66			N/A	N/A

07:15 - 07:30

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 - A27 Link Road	48.13	15.26	43.44	80.82	94.26			N/A	N/A
2 - A23 London Road South	13.96	0.24	7.01	35.57	49.22			N/A	N/A
3 - Mill Road	1.14	0.03	0.28	1.14	2.74			N/A	N/A
4 - A23 London Road North	1.71	0.03	0.28	1.71	1.71			N/A	N/A

07:30 - 07:45

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 - A27 Link Road	87.56	35.48	81.69	137.56	156.96			N/A	N/A
2 - A23 London Road South	20.03	0.21	8.72	53.49	75.98			N/A	N/A
3 - Mill Road	1.26	0.03	0.31	1.95	6.29			N/A	N/A
4 - A23 London Road North	1.73	0.03	0.28	1.73	1.73			N/A	N/A

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 - A27 Link Road	27.00	6.12	23.21	48.56	58.00			N/A	N/A
2 - A23 London Road South	6.04	0.12	2.48	15.50	21.91			N/A	N/A
3 - Mill Road	0.89	0.27	0.98	1.45	1.51			N/A	N/A
4 - A23 London Road North	1.08	0.20	1.08	1.51	1.85			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 - A27 Link Road	2.09	0.03	0.29	2.09	5.15			N/A	N/A
2 - A23 London Road South	1.37	0.03	0.29	1.39	5.61			N/A	N/A
3 - Mill Road	0.33	0.03	0.32	1.05	1.30			N/A	N/A
4 - A23 London Road North	0.76	0.07	0.76	1.35	1.35			N/A	N/A

(Default Analysis Set) - 2026 Do Something, PM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	(untitled)	Standard Roundabout		1, 2, 3, 4	15.81	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2026 Do Something	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A27 Link Road		ONE HOUR	✓	1160	100.000
2 - A23 London Road South		ONE HOUR	✓	896	100.000
3 - Mill Road		ONE HOUR	✓	148	100.000
4 - A23 London Road North		ONE HOUR	✓	3725	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - A27 Link Road	2 - A23 London Road South	3 - Mill Road	4 - A23 London Road North
From	1 - A27 Link Road	12	75	79	994
	2 - A23 London Road South	112	1	74	709
	3 - Mill Road	61	35	0	52
	4 - A23 London Road North	2560	957	206	2

Proportions

		To			
		1 - A27 Link Road	2 - A23 London Road South	3 - Mill Road	4 - A23 London Road North
From	1 - A27 Link Road	0.01	0.06	0.07	0.86
	2 - A23 London Road South	0.13	0.00	0.08	0.79
	3 - Mill Road	0.41	0.24	0.00	0.35
	4 - A23 London Road North	0.69	0.26	0.06	0.00

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	1 - A27 Link Road	2 - A23 London Road South	3 - Mill Road	4 - A23 London Road North
1 - A27 Link Road	0	1	0	3
2 - A23 London Road South	2	0	0	2
3 - Mill Road	0	0	0	0
4 - A23 London Road North	2	1	1	0

Average PCU Per Veh

From	To			
	1 - A27 Link Road	2 - A23 London Road South	3 - Mill Road	4 - A23 London Road North
1 - A27 Link Road	1.000	1.014	1.000	1.029
2 - A23 London Road South	1.019	1.000	1.000	1.021
3 - Mill Road	1.000	1.000	1.000	1.000
4 - A23 London Road North	1.019	1.008	1.005	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
16:45-17:00	1 - A27 Link Road	873	873
	2 - A23 London Road South	675	675
	3 - Mill Road	111	111
	4 - A23 London Road North	2804	2804
17:00-17:15	1 - A27 Link Road	1043	1043
	2 - A23 London Road South	805	805
	3 - Mill Road	133	133
	4 - A23 London Road North	3349	3349
17:15-17:30	1 - A27 Link Road	1277	1277
	2 - A23 London Road South	987	987
	3 - Mill Road	163	163
	4 - A23 London Road North	4101	4101
17:30-17:45	1 - A27 Link Road	1277	1277
	2 - A23 London Road South	987	987
	3 - Mill Road	163	163
	4 - A23 London Road North	4101	4101
17:45-18:00	1 - A27 Link Road	1043	1043
	2 - A23 London Road South	805	805
	3 - Mill Road	133	133
	4 - A23 London Road North	3349	3349
18:00-18:15	1 - A27 Link Road	873	873
	2 - A23 London Road South	675	675
	3 - Mill Road	111	111
	4 - A23 London Road North	2804	2804

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A27 Link Road	0.95	41.68	13.9	69.9	E	1064	1597
2 - A23 London Road South	0.83	17.82	4.7	22.7	C	822	1233
3 - Mill Road	0.35	11.72	0.5	2.1	B	136	204
4 - A23 London Road North	0.72	7.43	2.6	5.0	A	3418	1604

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	873	873	218	0	1927	900	1590	0.549	868	139	0.0	1.2	5.085
2 - A23 London Road South	675	675	169	0	0	968	1457	0.463	671	800	0.0	0.9	4.649
3 - Mill Road	111	111	28	0	0	1370	751	0.148	111	269	0.0	0.2	5.620
4 - A23 London Road North	2804	877	219	1927	0	165	1815	0.483	873	1316	0.0	0.9	3.837

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	1043	1043	261	0	2301	1078	1485	0.702	1038	166	1.2	2.3	8.184
2 - A23 London Road South	805	805	201	0	0	1158	1342	0.600	803	958	0.9	1.5	6.761
3 - Mill Road	133	133	33	0	0	1639	632	0.211	133	322	0.2	0.3	7.211
4 - A23 London Road North	3349	1047	262	2301	0	198	1796	0.583	1045	1574	0.9	1.4	4.821

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	1277	1277	319	0	2819	1317	1344	0.950	1241	202	2.3	11.4	29.15
2 - A23 London Road South	987	987	247	0	0	1389	1203	0.820	976	1169	1.5	4.2	15.46
3 - Mill Road	163	163	41	0	0	1973	484	0.337	162	391	0.3	0.5	11.16
4 - A23 London Road North	4101	1283	321	2819	0	241	1771	0.724	1278	1894	1.4	2.6	7.28

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	1277	1277	319	0	2819	1322	1341	0.952	1267	203	11.4	13.9	41.67
2 - A23 London Road South	987	987	247	0	0	1414	1187	0.831	985	1175	4.2	4.7	17.82
3 - Mill Road	163	163	41	0	0	2005	470	0.347	163	394	0.5	0.5	11.72
4 - A23 London Road North	4101	1283	321	2819	0	243	1770	0.725	1283	1924	2.6	2.6	7.43

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	1043	1043	261	0	2301	1085	1481	0.704	1088	169	13.9	2.5	10.46
2 - A23 London Road South	805	805	201	0	0	1206	1313	0.613	818	967	4.7	1.6	7.57
3 - Mill Road	133	133	33	0	0	1696	606	0.219	134	328	0.5	0.3	7.63
4 - A23 London Road North	3349	1047	262	2301	0	201	1794	0.584	1052	1628	2.6	1.4	4.91

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	873	873	218	0	1927	906	1586	0.551	878	140	2.5	1.3	5.251
2 - A23 London Road South	675	675	169	0	0	978	1451	0.465	678	806	1.6	0.9	4.765
3 - Mill Road	111	111	28	0	0	1385	744	0.150	112	271	0.3	0.2	5.697
4 - A23 London Road North	2804	877	219	1927	0	167	1814	0.484	879	1330	1.4	1.0	3.887

Queue 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 - A27 Link Road	1.23	0.51	1.17	1.69	1.91			N/A	N/A
2 - A23 London Road South	0.87	0.56	1.02	1.43	1.48			N/A	N/A
3 - Mill Road	0.17	0.00	0.00	0.17	0.17			N/A	N/A
4 - A23 London Road North	0.93	0.55	1.01	1.41	1.46			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 - A27 Link Road	2.35	0.05	0.45	6.45	11.02			N/A	N/A
2 - A23 London Road South	1.50	0.05	0.49	3.82	5.94			N/A	N/A
3 - Mill Road	0.26	0.00	0.00	0.26	0.26			N/A	N/A
4 - A23 London Road North	1.39	0.05	0.59	3.38	5.03			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 - A27 Link Road	11.40	0.09	2.73	32.50	49.60			N/A	N/A
2 - A23 London Road South	4.25	0.03	0.34	8.16	22.70			N/A	N/A
3 - Mill Road	0.50	0.03	0.26	0.50	0.50			N/A	N/A
4 - A23 London Road North	2.57	0.03	0.28	2.57	5.01			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 - A27 Link Road	13.92	0.06	1.39	40.82	69.91			N/A	N/A
2 - A23 London Road South	4.67	0.03	0.31	4.67	19.85			N/A	N/A
3 - Mill Road	0.52	0.03	0.33	1.04	2.10			N/A	N/A
4 - A23 London Road North	2.61	0.03	0.27	2.61	2.61			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 - A27 Link Road	2.52	0.04	0.40	6.69	12.93			N/A	N/A
2 - A23 London Road South	1.65	0.05	0.51	4.21	6.55			N/A	N/A
3 - Mill Road	0.28	0.00	0.00	0.28	0.28			N/A	N/A
4 - A23 London Road North	1.43	0.08	1.08	2.86	3.86			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 - A27 Link Road	1.27	0.03	0.30	1.27	5.68			N/A	N/A
2 - A23 London Road South	0.89	0.03	0.34	1.99	4.33			N/A	N/A
3 - Mill Road	0.18	0.00	0.00	0.18	0.18			N/A	N/A
4 - A23 London Road North	0.95	0.05	0.49	2.01	3.01			N/A	N/A

(Default Analysis Set) - 2032 Future Baseline, AM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	(untitled)	Standard Roundabout		1, 2, 3, 4	94.85	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2032 Future Baseline	AM	ONE HOUR	06:45	08:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A27 Link Road		ONE HOUR	✓	1516	100.000
2 - A23 London Road South		ONE HOUR	✓	985	100.000
3 - Mill Road		ONE HOUR	✓	197	100.000
4 - A23 London Road North		ONE HOUR	✓	3279	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	1 - A27 Link Road	2 - A23 London Road South	3 - Mill Road	4 - A23 London Road North
From				
1 - A27 Link Road	18	56	63	1379
2 - A23 London Road South	127	3	91	764
3 - Mill Road	36	34	1	126
4 - A23 London Road North	2214	795	267	3

Proportions

	To			
	1 - A27 Link Road	2 - A23 London Road South	3 - Mill Road	4 - A23 London Road North
From				
1 - A27 Link Road	0.01	0.04	0.04	0.91
2 - A23 London Road South	0.13	0.00	0.09	0.78
3 - Mill Road	0.18	0.17	0.01	0.64
4 - A23 London Road North	0.68	0.24	0.08	0.00

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	1 - A27 Link Road	2 - A23 London Road South	3 - Mill Road	4 - A23 London Road North
1 - A27 Link Road	0	0	0	6
2 - A23 London Road South	4	50	1	2
3 - Mill Road	0	0	0	2
4 - A23 London Road North	9	6	2	50

Average PCU Per Veh

From	To			
	1 - A27 Link Road	2 - A23 London Road South	3 - Mill Road	4 - A23 London Road North
1 - A27 Link Road	1.000	1.000	1.000	1.057
2 - A23 London Road South	1.036	1.500	1.012	1.024
3 - Mill Road	1.000	1.000	1.000	1.018
4 - A23 London Road North	1.086	1.060	1.021	1.500

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
06:45-07:00	1 - A27 Link Road	1141	1141
	2 - A23 London Road South	742	742
	3 - Mill Road	148	148
	4 - A23 London Road North	2469	2469
07:00-07:15	1 - A27 Link Road	1363	1363
	2 - A23 London Road South	885	885
	3 - Mill Road	177	177
	4 - A23 London Road North	2948	2948
07:15-07:30	1 - A27 Link Road	1669	1669
	2 - A23 London Road South	1085	1085
	3 - Mill Road	217	217
	4 - A23 London Road North	3610	3610
07:30-07:45	1 - A27 Link Road	1669	1669
	2 - A23 London Road South	1085	1085
	3 - Mill Road	217	217
	4 - A23 London Road North	3610	3610
07:45-08:00	1 - A27 Link Road	1363	1363
	2 - A23 London Road South	885	885
	3 - Mill Road	177	177
	4 - A23 London Road North	2948	2948
08:00-08:15	1 - A27 Link Road	1141	1141
	2 - A23 London Road South	742	742
	3 - Mill Road	148	148
	4 - A23 London Road North	2469	2469

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A27 Link Road	1.19	285.48	141.2	210.4	F	1391	2087
2 - A23 London Road South	1.04	110.61	34.9	93.3	F	904	1356
3 - Mill Road	0.59	23.86	1.4	6.4	C	181	271
4 - A23 London Road North	0.66	6.26	2.0	3.4	A	3009	1466

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	1141	1141	285	0	1667	827	1633	0.699	1132	135	0.0	2.4	7.421
2 - A23 London Road South	742	742	185	0	0	1293	1261	0.588	736	665	0.0	1.4	6.959
3 - Mill Road	148	148	37	0	0	1713	599	0.248	147	316	0.0	0.3	8.034
4 - A23 London Road North	2469	802	200	1667	0	164	1816	0.442	798	1697	0.0	0.8	3.707

07:00 - 07:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	1363	1363	341	0	1990	990	1537	0.887	1344	161	2.4	7.0	18.15
2 - A23 London Road South	885	885	221	0	0	1538	1113	0.796	876	796	1.4	3.7	15.07
3 - Mill Road	177	177	44	0	0	2037	455	0.389	176	377	0.3	0.6	12.97
4 - A23 London Road North	2948	957	239	1990	0	195	1797	0.533	956	2018	0.8	1.2	4.48

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	1669	1669	417	0	2438	1211	1407	1.186	1398	186	7.0	74.9	115.0
2 - A23 London Road South	1085	1085	271	0	0	1644	1049	1.034	1012	965	3.7	21.8	58.5
3 - Mill Road	217	217	54	0	0	2210	379	0.572	214	446	0.6	1.3	21.7
4 - A23 London Road North	3610	1173	293	2438	0	227	1779	0.659	1169	2197	1.2	2.0	6.17

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	1669	1669	417	0	2438	1214	1405	1.188	1404	189	74.9	141.2	278.2
2 - A23 London Road South	1085	1085	271	0	0	1650	1045	1.038	1032	968	21.8	34.9	110.6
3 - Mill Road	217	217	54	0	0	2234	368	0.589	216	449	1.3	1.4	23.8
4 - A23 London Road North	3610	1173	293	2438	0	231	1777	0.660	1172	2219	2.0	2.0	6.25

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	1363	1363	341	0	1990	995	1534	0.889	1522	177	141.2	101.3	285.4
2 - A23 London Road South	885	885	221	0	0	1711	1008	0.878	980	807	34.9	11.2	91.4
3 - Mill Road	177	177	44	0	0	2296	341	0.519	178	396	1.4	1.1	22.5
4 - A23 London Road North	2948	957	239	1990	0	212	1788	0.535	961	2262	2.0	1.2	4.59

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	1141	1141	285	0	1667	832	1630	0.700	1535	146	101.3	2.8	101.5
2 - A23 London Road South	742	742	185	0	0	1683	1025	0.724	775	685	11.2	2.8	16.5
3 - Mill Road	148	148	37	0	0	2120	418	0.354	151	338	1.1	0.6	13.7
4 - A23 London Road North	2469	802	200	1667	0	175	1809	0.443	803	2096	1.2	0.8	3.76

Queue Variation Results for each time segment

06:45 - 07:00

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 - A27 Link Road	2.38	0.08	1.28	5.76	8.20			N/A	N/A
2 - A23 London Road South	1.44	0.11	1.19	2.63	3.38			N/A	N/A
3 - Mill Road	0.33	0.00	0.00	0.33	0.33			N/A	N/A
4 - A23 London Road North	0.82	0.58	1.05	1.47	1.52			N/A	N/A

07:00 - 07:15

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 - A27 Link Road	6.99	0.09	1.83	19.36	29.01			N/A	N/A
2 - A23 London Road South	3.70	0.06	1.10	10.19	15.80			N/A	N/A
3 - Mill Road	0.63	0.10	0.85	1.38	1.45			N/A	N/A
4 - A23 London Road North	1.19	0.06	0.82	2.45	3.42			N/A	N/A

07:15 - 07:30

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 - A27 Link Road	74.87	36.68	71.25	109.73	122.68			N/A	N/A
2 - A23 London Road South	21.83	1.53	16.14	46.46	58.95			N/A	N/A
3 - Mill Road	1.28	0.03	0.29	1.28	4.51			N/A	N/A
4 - A23 London Road North	1.99	0.03	0.28	1.99	1.99			N/A	N/A

07:30 - 07:45

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 - A27 Link Road	141.19	>199	>199	>199	>199			N/A	N/A
2 - A23 London Road South	34.91	3.00	26.40	73.90	93.34			N/A	N/A
3 - Mill Road	1.39	0.03	0.30	1.56	6.43			N/A	N/A
4 - A23 London Road North	2.02	0.03	0.28	2.02	2.02			N/A	N/A

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 - A27 Link Road	101.29	66.48	99.07	130.80	140.86			N/A	N/A
2 - A23 London Road South	11.17	0.19	5.28	28.66	39.97			N/A	N/A
3 - Mill Road	1.14	0.23	1.10	1.65	1.90			N/A	N/A
4 - A23 London Road North	1.22	0.14	1.13	1.91	2.36			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 - A27 Link Road	2.77	0.03	0.29	2.77	6.61			N/A	N/A
2 - A23 London Road South	2.83	0.03	0.35	5.98	15.15			N/A	N/A
3 - Mill Road	0.57	0.05	0.45	1.39	1.51			N/A	N/A
4 - A23 London Road North	0.84	0.06	0.72	1.42	1.90			N/A	N/A

(Default Analysis Set) - 2032 Future Baseline, PM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	(untitled)	Standard Roundabout		1, 2, 3, 4	27.77	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2032 Future Baseline	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A27 Link Road		ONE HOUR	✓	1217	100.000
2 - A23 London Road South		ONE HOUR	✓	944	100.000
3 - Mill Road		ONE HOUR	✓	155	100.000
4 - A23 London Road North		ONE HOUR	✓	3908	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	1 - A27 Link Road	2 - A23 London Road South	3 - Mill Road	4 - A23 London Road North
From				
1 - A27 Link Road	12	79	83	1043
2 - A23 London Road South	117	1	78	748
3 - Mill Road	64	36	0	55
4 - A23 London Road North	2685	1005	216	2

Proportions

	To			
	1 - A27 Link Road	2 - A23 London Road South	3 - Mill Road	4 - A23 London Road North
From				
1 - A27 Link Road	0.01	0.06	0.07	0.86
2 - A23 London Road South	0.12	0.00	0.08	0.79
3 - Mill Road	0.41	0.23	0.00	0.35
4 - A23 London Road North	0.69	0.26	0.06	0.00

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	1 - A27 Link Road	2 - A23 London Road South	3 - Mill Road	4 - A23 London Road North
1 - A27 Link Road	0	1	0	3
2 - A23 London Road South	2	0	0	2
3 - Mill Road	0	0	0	0
4 - A23 London Road North	2	1	1	0

Average PCU Per Veh

From	To			
	1 - A27 Link Road	2 - A23 London Road South	3 - Mill Road	4 - A23 London Road North
1 - A27 Link Road	1.000	1.014	1.000	1.028
2 - A23 London Road South	1.019	1.000	1.000	1.024
3 - Mill Road	1.000	1.000	1.000	1.000
4 - A23 London Road North	1.019	1.008	1.005	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
16:45-17:00	1 - A27 Link Road	916	916
	2 - A23 London Road South	711	711
	3 - Mill Road	117	117
	4 - A23 London Road North	2942	2942
17:00-17:15	1 - A27 Link Road	1094	1094
	2 - A23 London Road South	849	849
	3 - Mill Road	139	139
	4 - A23 London Road North	3513	3513
17:15-17:30	1 - A27 Link Road	1340	1340
	2 - A23 London Road South	1039	1039
	3 - Mill Road	171	171
	4 - A23 London Road North	4303	4303
17:30-17:45	1 - A27 Link Road	1340	1340
	2 - A23 London Road South	1039	1039
	3 - Mill Road	171	171
	4 - A23 London Road North	4303	4303
17:45-18:00	1 - A27 Link Road	1094	1094
	2 - A23 London Road South	849	849
	3 - Mill Road	139	139
	4 - A23 London Road North	3513	3513
18:00-18:15	1 - A27 Link Road	916	916
	2 - A23 London Road South	711	711
	3 - Mill Road	117	117
	4 - A23 London Road North	2942	2942

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A27 Link Road	1.03	92.39	36.4	101.6	F	1117	1675
2 - A23 London Road South	0.89	26.02	7.1	38.3	D	866	1299
3 - Mill Road	0.39	13.25	0.6	2.8	B	142	213
4 - A23 London Road North	0.76	8.65	3.2	9.8	A	3586	1683

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	916	916	229	0	2021	944	1564	0.586	911	144	0.0	1.4	5.601
2 - A23 London Road South	711	711	178	0	0	1015	1429	0.497	707	840	0.0	1.0	5.066
3 - Mill Road	117	117	29	0	0	1439	720	0.162	116	282	0.0	0.2	5.951
4 - A23 London Road North	2942	921	230	2021	0	172	1811	0.509	917	1383	0.0	1.0	4.037

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	1094	1094	274	0	2414	1130	1454	0.752	1088	173	1.4	3.0	9.909
2 - A23 London Road South	849	849	212	0	0	1213	1309	0.648	845	1005	1.0	1.8	7.871
3 - Mill Road	139	139	35	0	0	1720	596	0.234	139	338	0.2	0.3	7.876
4 - A23 London Road North	3513	1099	275	2414	0	206	1791	0.614	1097	1653	1.0	1.6	5.208

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	1340	1340	335	0	2956	1381	1306	1.026	1260	209	3.0	23.0	48.72
2 - A23 London Road South	1039	1039	260	0	0	1417	1186	0.877	1022	1224	1.8	6.1	20.65
3 - Mill Road	171	171	43	0	0	2032	458	0.373	170	407	0.3	0.6	12.45
4 - A23 London Road North	4303	1347	337	2956	0	250	1766	0.762	1340	1952	1.6	3.1	8.39

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	1340	1340	335	0	2956	1387	1303	1.029	1287	211	23.0	36.4	92.38
2 - A23 London Road South	1039	1039	260	0	0	1443	1170	0.888	1035	1231	6.1	7.1	26.02
3 - Mill Road	171	171	43	0	0	2067	442	0.386	171	411	0.6	0.6	13.25
4 - A23 London Road North	4303	1347	337	2956	0	252	1765	0.763	1346	1986	3.1	3.2	8.65

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	1094	1094	274	0	2414	1139	1449	0.755	1226	178	36.4	3.4	26.28
2 - A23 London Road South	849	849	212	0	0	1343	1230	0.690	868	1022	7.1	2.3	10.63
3 - Mill Road	139	139	35	0	0	1860	534	0.261	140	351	0.6	0.4	9.17
4 - A23 London Road North	3513	1099	275	2414	0	211	1788	0.615	1106	1790	3.2	1.6	5.36

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	916	916	229	0	2021	951	1560	0.587	924	146	3.4	1.5	5.867
2 - A23 London Road South	711	711	178	0	0	1028	1420	0.500	716	846	2.3	1.0	5.256
3 - Mill Road	117	117	29	0	0	1459	711	0.164	117	285	0.4	0.2	6.067
4 - A23 London Road North	2942	921	230	2021	0	174	1809	0.509	923	1402	1.6	1.1	4.101

Queue 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 - A27 Link Road	1.43	0.17	1.26	2.33	2.92			N/A	N/A
2 - A23 London Road South	1.00	0.56	1.03	1.44	1.50			N/A	N/A
3 - Mill Road	0.19	0.00	0.00	0.19	0.19			N/A	N/A
4 - A23 London Road North	1.03	0.55	1.01	1.41	1.46			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 - A27 Link Road	2.99	0.05	0.47	8.32	14.25			N/A	N/A
2 - A23 London Road South	1.84	0.05	0.48	4.88	7.84			N/A	N/A
3 - Mill Road	0.30	0.00	0.00	0.30	0.30			N/A	N/A
4 - A23 London Road North	1.58	0.05	0.50	4.00	6.25			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 - A27 Link Road	23.04	1.24	16.50	50.35	64.51			N/A	N/A
2 - A23 London Road South	6.10	0.04	0.43	16.54	32.68			N/A	N/A
3 - Mill Road	0.58	0.03	0.26	0.58	0.58			N/A	N/A
4 - A23 London Road North	3.11	0.03	0.29	3.11	9.82			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 - A27 Link Road	36.36	2.33	26.44	79.48	101.61			N/A	N/A
2 - A23 London Road South	7.07	0.04	0.36	14.11	38.28			N/A	N/A
3 - Mill Road	0.62	0.03	0.32	1.31	2.81			N/A	N/A
4 - A23 London Road North	3.18	0.03	0.27	3.18	3.18			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 - A27 Link Road	3.37	0.04	0.38	8.60	18.01			N/A	N/A
2 - A23 London Road South	2.35	0.05	0.63	6.32	9.98			N/A	N/A
3 - Mill Road	0.36	0.00	0.00	0.36	0.36			N/A	N/A
4 - A23 London Road North	1.63	0.07	0.99	3.74	5.28			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 - A27 Link Road	1.48	0.03	0.29	1.48	4.80			N/A	N/A
2 - A23 London Road South	1.03	0.03	0.31	1.79	5.17			N/A	N/A
3 - Mill Road	0.20	0.00	0.00	0.20	0.20			N/A	N/A
4 - A23 London Road North	1.05	0.04	0.43	2.58	4.05			N/A	N/A

(Default Analysis Set) - 2032 Do Something, AM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	(untitled)	Standard Roundabout		1, 2, 3, 4	95.34	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2032 Do Something	AM	ONE HOUR	06:45	08:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A27 Link Road		ONE HOUR	✓	1522	100.000
2 - A23 London Road South		ONE HOUR	✓	977	100.000
3 - Mill Road		ONE HOUR	✓	198	100.000
4 - A23 London Road North		ONE HOUR	✓	3275	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
	1 - A27 Link Road	2 - A23 London Road South	3 - Mill Road	4 - A23 London Road North
1 - A27 Link Road	18	56	63	1385
2 - A23 London Road South	127	3	91	756
3 - Mill Road	37	34	1	126
4 - A23 London Road North	2214	791	267	3

Proportions

From	To			
	1 - A27 Link Road	2 - A23 London Road South	3 - Mill Road	4 - A23 London Road North
1 - A27 Link Road	0.01	0.04	0.04	0.91
2 - A23 London Road South	0.13	0.00	0.09	0.77
3 - Mill Road	0.19	0.17	0.01	0.64
4 - A23 London Road North	0.68	0.24	0.08	0.00

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	1 - A27 Link Road	2 - A23 London Road South	3 - Mill Road	4 - A23 London Road North
1 - A27 Link Road	0	0	0	6
2 - A23 London Road South	4	50	1	2
3 - Mill Road	0	0	0	2
4 - A23 London Road North	9	6	2	50

Average PCU Per Veh

From	To			
	1 - A27 Link Road	2 - A23 London Road South	3 - Mill Road	4 - A23 London Road North
1 - A27 Link Road	1.000	1.000	1.000	1.058
2 - A23 London Road South	1.036	1.500	1.012	1.018
3 - Mill Road	1.000	1.000	1.000	1.018
4 - A23 London Road North	1.086	1.058	1.021	1.500

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
06:45-07:00	1 - A27 Link Road	1146	1146
	2 - A23 London Road South	736	736
	3 - Mill Road	149	149
	4 - A23 London Road North	2466	2466
07:00-07:15	1 - A27 Link Road	1368	1368
	2 - A23 London Road South	878	878
	3 - Mill Road	178	178
	4 - A23 London Road North	2944	2944
07:15-07:30	1 - A27 Link Road	1676	1676
	2 - A23 London Road South	1076	1076
	3 - Mill Road	218	218
	4 - A23 London Road North	3606	3606
07:30-07:45	1 - A27 Link Road	1676	1676
	2 - A23 London Road South	1076	1076
	3 - Mill Road	218	218
	4 - A23 London Road North	3606	3606
07:45-08:00	1 - A27 Link Road	1368	1368
	2 - A23 London Road South	878	878
	3 - Mill Road	178	178
	4 - A23 London Road North	2944	2944
08:00-08:15	1 - A27 Link Road	1146	1146
	2 - A23 London Road South	736	736
	3 - Mill Road	149	149
	4 - A23 London Road North	2466	2466

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A27 Link Road	1.19	290.74	143.3	210.5	F	1397	2095
2 - A23 London Road South	1.03	104.19	32.3	90.5	F	897	1345
3 - Mill Road	0.59	23.95	1.4	6.5	C	182	273
4 - A23 London Road North	0.66	6.21	2.0	3.3	A	3005	1460

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	1146	1146	286	0	1667	824	1635	0.701	1136	136	0.0	2.4	7.463
2 - A23 London Road South	736	736	184	0	0	1298	1258	0.585	730	662	0.0	1.4	6.890
3 - Mill Road	149	149	37	0	0	1712	599	0.249	148	316	0.0	0.3	8.036
4 - A23 London Road North	2466	799	200	1667	0	164	1815	0.440	796	1695	0.0	0.8	3.691

07:00 - 07:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	1368	1368	342	0	1990	986	1539	0.889	1349	162	2.4	7.1	18.38
2 - A23 London Road South	878	878	220	0	0	1543	1110	0.792	870	793	1.4	3.6	14.79
3 - Mill Road	178	178	44	0	0	2035	456	0.390	177	377	0.3	0.6	12.96
4 - A23 London Road North	2944	954	238	1990	0	196	1797	0.531	952	2016	0.8	1.2	4.46

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	1676	1676	419	0	2438	1206	1409	1.189	1400	188	7.1	75.9	116.3
2 - A23 London Road South	1076	1076	269	0	0	1646	1047	1.027	1008	960	3.6	20.6	56.2
3 - Mill Road	218	218	55	0	0	2208	380	0.574	215	446	0.6	1.3	21.8
4 - A23 London Road North	3606	1168	292	2438	0	229	1778	0.657	1165	2194	1.2	2.0	6.12

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	1676	1676	419	0	2438	1210	1407	1.191	1406	191	75.9	143.3	281.6
2 - A23 London Road South	1076	1076	269	0	0	1653	1043	1.031	1029	963	20.6	32.3	104.1
3 - Mill Road	218	218	55	0	0	2233	369	0.591	218	449	1.3	1.4	23.9
4 - A23 London Road North	3606	1168	292	2438	0	233	1776	0.658	1168	2218	2.0	2.0	6.21

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	1368	1368	342	0	1990	992	1536	0.891	1525	177	143.3	104.1	290.7
2 - A23 London Road South	878	878	220	0	0	1713	1007	0.872	969	803	32.3	9.7	81.8
3 - Mill Road	178	178	44	0	0	2287	345	0.516	179	395	1.4	1.1	22.1
4 - A23 London Road North	2944	954	238	1990	0	212	1788	0.534	957	2254	2.0	1.2	4.56

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	1146	1146	286	0	1667	829	1632	0.702	1551	146	104.1	2.8	107.8
2 - A23 London Road South	736	736	184	0	0	1698	1016	0.724	763	682	9.7	2.8	15.9
3 - Mill Road	149	149	37	0	0	2124	417	0.358	151	337	1.1	0.6	13.8
4 - A23 London Road North	2466	799	200	1667	0	175	1809	0.442	800	2101	1.2	0.8	3.74

Queue Variation Results for each time segment

06:45 - 07:00

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 - A27 Link Road	2.40	0.08	1.28	5.84	8.31			N/A	N/A
2 - A23 London Road South	1.41	0.12	1.19	2.54	3.20			N/A	N/A
3 - Mill Road	0.33	0.00	0.00	0.33	0.33			N/A	N/A
4 - A23 London Road North	0.82	0.58	1.05	1.47	1.52			N/A	N/A

07:00 - 07:15

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 - A27 Link Road	7.11	0.09	1.92	19.66	29.36			N/A	N/A
2 - A23 London Road South	3.60	0.06	1.07	9.93	15.39			N/A	N/A
3 - Mill Road	0.63	0.10	0.85	1.38	1.45			N/A	N/A
4 - A23 London Road North	1.17	0.06	0.82	2.41	3.34			N/A	N/A

07:15 - 07:30

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 - A27 Link Road	75.95	37.54	72.34	110.94	123.91			N/A	N/A
2 - A23 London Road South	20.59	1.09	14.73	44.81	57.36			N/A	N/A
3 - Mill Road	1.29	0.03	0.29	1.29	4.59			N/A	N/A
4 - A23 London Road North	1.97	0.03	0.28	1.97	1.97			N/A	N/A

07:30 - 07:45

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 - A27 Link Road	143.27	>199	>199	>199	>199			N/A	N/A
2 - A23 London Road South	32.35	1.99	23.41	70.76	90.53			N/A	N/A
3 - Mill Road	1.40	0.03	0.30	1.57	6.49			N/A	N/A
4 - A23 London Road North	2.00	0.03	0.28	2.00	2.00			N/A	N/A

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 - A27 Link Road	104.15	68.83	101.93	134.05	144.22			N/A	N/A
2 - A23 London Road South	9.74	0.13	3.67	26.17	37.73			N/A	N/A
3 - Mill Road	1.12	0.20	1.09	1.64	1.90			N/A	N/A
4 - A23 London Road North	1.21	0.14	1.13	1.88	2.27			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 - A27 Link Road	2.84	0.03	0.29	2.84	7.14			N/A	N/A
2 - A23 London Road South	2.82	0.03	0.35	6.19	15.14			N/A	N/A
3 - Mill Road	0.58	0.05	0.46	1.05	1.05			N/A	N/A
4 - A23 London Road North	0.84	0.06	0.72	1.38	1.87			N/A	N/A

(Default Analysis Set) - 2032 Do Something, PM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	(untitled)	Standard Roundabout		1, 2, 3, 4	27.67	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2032 Do Something	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A27 Link Road		ONE HOUR	✓	1217	100.000
2 - A23 London Road South		ONE HOUR	✓	940	100.000
3 - Mill Road		ONE HOUR	✓	155	100.000
4 - A23 London Road North		ONE HOUR	✓	3908	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
	1 - A27 Link Road	2 - A23 London Road South	3 - Mill Road	4 - A23 London Road North
1 - A27 Link Road	12	79	83	1043
2 - A23 London Road South	117	1	78	744
3 - Mill Road	64	36	0	55
4 - A23 London Road North	2685	1005	216	2

Proportions

From	To			
	1 - A27 Link Road	2 - A23 London Road South	3 - Mill Road	4 - A23 London Road North
1 - A27 Link Road	0.01	0.06	0.07	0.86
2 - A23 London Road South	0.12	0.00	0.08	0.79
3 - Mill Road	0.41	0.23	0.00	0.35
4 - A23 London Road North	0.69	0.26	0.06	0.00

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	1 - A27 Link Road	2 - A23 London Road South	3 - Mill Road	4 - A23 London Road North
1 - A27 Link Road	0	1	0	3
2 - A23 London Road South	2	0	0	2
3 - Mill Road	0	0	0	0
4 - A23 London Road North	2	1	1	0

Average PCU Per Veh

From	To			
	1 - A27 Link Road	2 - A23 London Road South	3 - Mill Road	4 - A23 London Road North
1 - A27 Link Road	1.000	1.014	1.000	1.029
2 - A23 London Road South	1.019	1.000	1.000	1.021
3 - Mill Road	1.000	1.000	1.000	1.000
4 - A23 London Road North	1.019	1.008	1.005	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
16:45-17:00	1 - A27 Link Road	916	916
	2 - A23 London Road South	708	708
	3 - Mill Road	117	117
	4 - A23 London Road North	2942	2942
17:00-17:15	1 - A27 Link Road	1094	1094
	2 - A23 London Road South	845	845
	3 - Mill Road	139	139
	4 - A23 London Road North	3513	3513
17:15-17:30	1 - A27 Link Road	1340	1340
	2 - A23 London Road South	1035	1035
	3 - Mill Road	171	171
	4 - A23 London Road North	4303	4303
17:30-17:45	1 - A27 Link Road	1340	1340
	2 - A23 London Road South	1035	1035
	3 - Mill Road	171	171
	4 - A23 London Road North	4303	4303
17:45-18:00	1 - A27 Link Road	1094	1094
	2 - A23 London Road South	845	845
	3 - Mill Road	139	139
	4 - A23 London Road North	3513	3513
18:00-18:15	1 - A27 Link Road	916	916
	2 - A23 London Road South	708	708
	3 - Mill Road	117	117
	4 - A23 London Road North	2942	2942

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A27 Link Road	1.03	92.42	36.4	101.6	F	1117	1675
2 - A23 London Road South	0.88	25.28	6.8	36.7	D	863	1294
3 - Mill Road	0.38	13.16	0.6	2.8	B	142	213
4 - A23 London Road North	0.76	8.65	3.2	9.8	A	3586	1683

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	916	916	229	0	2021	944	1564	0.586	911	144	0.0	1.4	5.605
2 - A23 London Road South	708	708	177	0	0	1015	1429	0.495	704	840	0.0	1.0	5.035
3 - Mill Road	117	117	29	0	0	1436	721	0.162	116	282	0.0	0.2	5.938
4 - A23 London Road North	2942	921	230	2021	0	172	1811	0.509	917	1380	0.0	1.0	4.037

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	1094	1094	274	0	2414	1130	1454	0.752	1088	173	1.4	3.0	9.917
2 - A23 London Road South	845	845	211	0	0	1213	1309	0.646	842	1005	1.0	1.8	7.797
3 - Mill Road	139	139	35	0	0	1717	597	0.233	139	338	0.2	0.3	7.848
4 - A23 London Road North	3513	1099	275	2414	0	206	1791	0.614	1097	1650	1.0	1.6	5.208

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	1340	1340	335	0	2956	1381	1306	1.026	1260	209	3.0	23.0	48.74
2 - A23 London Road South	1035	1035	259	0	0	1417	1186	0.873	1018	1224	1.8	5.9	20.21
3 - Mill Road	171	171	43	0	0	2028	459	0.372	170	407	0.3	0.6	12.37
4 - A23 London Road North	4303	1347	337	2956	0	250	1766	0.762	1340	1948	1.6	3.1	8.39

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	1340	1340	335	0	2956	1387	1303	1.029	1287	211	23.0	36.4	92.41
2 - A23 London Road South	1035	1035	259	0	0	1443	1170	0.885	1031	1231	5.9	6.8	25.28
3 - Mill Road	171	171	43	0	0	2063	444	0.385	171	411	0.6	0.6	13.16
4 - A23 London Road North	4303	1347	337	2956	0	252	1765	0.763	1346	1982	3.1	3.2	8.65

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	1094	1094	274	0	2414	1139	1449	0.755	1226	177	36.4	3.4	26.30
2 - A23 London Road South	845	845	211	0	0	1344	1230	0.687	863	1022	6.8	2.3	10.46
3 - Mill Road	139	139	35	0	0	1856	535	0.260	140	351	0.6	0.4	9.13
4 - A23 London Road North	3513	1099	275	2414	0	211	1788	0.615	1106	1786	3.2	1.6	5.35

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - A27 Link Road	916	916	229	0	2021	951	1560	0.587	924	146	3.4	1.5	5.872
2 - A23 London Road South	708	708	177	0	0	1028	1420	0.498	713	846	2.3	1.0	5.221
3 - Mill Road	117	117	29	0	0	1456	713	0.164	117	285	0.4	0.2	6.053
4 - A23 London Road North	2942	921	230	2021	0	174	1809	0.509	923	1399	1.6	1.1	4.102

Queue 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 - A27 Link Road	1.43	0.17	1.26	2.33	2.92			N/A	N/A
2 - A23 London Road South	0.99	0.56	1.02	1.44	1.49			N/A	N/A
3 - Mill Road	0.19	0.00	0.00	0.19	0.19			N/A	N/A
4 - A23 London Road North	1.03	0.55	1.01	1.41	1.46			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 - A27 Link Road	2.99	0.05	0.47	8.33	14.25			N/A	N/A
2 - A23 London Road South	1.81	0.05	0.48	4.80	7.71			N/A	N/A
3 - Mill Road	0.30	0.00	0.00	0.30	0.30			N/A	N/A
4 - A23 London Road North	1.58	0.05	0.50	4.00	6.25			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 - A27 Link Road	23.05	1.24	16.50	50.36	64.54			N/A	N/A
2 - A23 London Road South	5.93	0.04	0.42	15.88	31.95			N/A	N/A
3 - Mill Road	0.58	0.03	0.26	0.58	0.58			N/A	N/A
4 - A23 London Road North	3.11	0.03	0.29	3.11	9.82			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 - A27 Link Road	36.37	2.33	26.44	79.50	101.64			N/A	N/A
2 - A23 London Road South	6.85	0.03	0.35	13.05	36.74			N/A	N/A
3 - Mill Road	0.61	0.03	0.32	1.30	2.78			N/A	N/A
4 - A23 London Road North	3.18	0.03	0.27	3.18	3.18			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 - A27 Link Road	3.38	0.04	0.38	8.61	18.02			N/A	N/A
2 - A23 London Road South	2.31	0.05	0.64	6.20	9.76			N/A	N/A
3 - Mill Road	0.36	0.00	0.00	0.36	0.36			N/A	N/A
4 - A23 London Road North	1.63	0.07	0.99	3.74	5.28			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 - A27 Link Road	1.48	0.03	0.29	1.48	4.81			N/A	N/A
2 - A23 London Road South	1.02	0.03	0.31	1.81	5.12			N/A	N/A
3 - Mill Road	0.20	0.00	0.00	0.20	0.20			N/A	N/A
4 - A23 London Road North	1.05	0.04	0.43	2.58	4.05			N/A	N/A



<h1>Junctions 9</h1>
<h2>ARCADY 9 - Roundabout Module</h2>
Version: 9.5.1.7462 © Copyright TRL Limited, 2019
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Filename: Junction 4.j9
Path: C:\Users\DUF97633\Mott MacDonald\B RMF Brighton DO - T Transport\Junction models\Sensitivity Test (+90mins)\Junction 4 A27 Link Road - A27 exit slip west - A27 entry slip west\05. Model Updates 2023\01. Models
Report generation date: 21/06/2023 09:25:48

- »(Default Analysis Set) - 2021 Baseline, AM
- »(Default Analysis Set) - 2021 Baseline, PM
- »(Default Analysis Set) - 2026 Future Baseline, AM
- »(Default Analysis Set) - 2026 Future Baseline, PM
- »(Default Analysis Set) - 2026 Do Something, AM
- »(Default Analysis Set) - 2026 Do Something, PM
- »(Default Analysis Set) - 2032 Future Baseline, AM
- »(Default Analysis Set) - 2032 Future Baseline, PM
- »(Default Analysis Set) - 2032 Do Something, AM
- »(Default Analysis Set) - 2032 Do Something, PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
A1 - 2021 Baseline										
1 - A27 WBx	D1	7.0	20.18	0.88	C	D2	3.5	11.67	0.78	B
2 - A27 Link Road		5.1	15.78	0.83	C		9.9	28.08	0.92	D
4 - A27 Overbridge		0.1	3.55	0.12	A		0.2	3.82	0.17	A
A1 - 2026 Future Baseline										
1 - A27 WBx	D3	10.2	28.70	0.92	D	D4	4.4	14.17	0.82	B
2 - A27 Link Road		6.8	20.23	0.87	C		15.9	43.08	0.96	E
4 - A27 Overbridge		0.1	3.58	0.12	A		0.2	3.86	0.18	A
A1 - 2026 Do Something										
1 - A27 WBx	D5	10.4	29.32	0.92	D	D6	4.4	14.17	0.82	B
2 - A27 Link Road		6.9	20.36	0.87	C		15.9	43.08	0.96	E
4 - A27 Overbridge		0.1	3.59	0.13	A		0.2	3.86	0.18	A
A1 - 2032 Future Baseline										
1 - A27 WBx	D7	18.1	47.77	0.97	E	D8	6.0	18.54	0.86	C
2 - A27 Link Road		10.0	28.64	0.92	D		30.9	74.03	1.01	F
4 - A27 Overbridge		0.2	3.60	0.13	A		0.2	3.91	0.19	A
A1 - 2032 Do Something										
1 - A27 WBx	D9	18.7	49.00	0.97	E	D10	6.0	18.54	0.86	C
2 - A27 Link Road		10.1	28.83	0.92	D		30.9	74.03	1.01	F
4 - A27 Overbridge		0.2	3.61	0.13	A		0.2	3.91	0.19	A

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

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

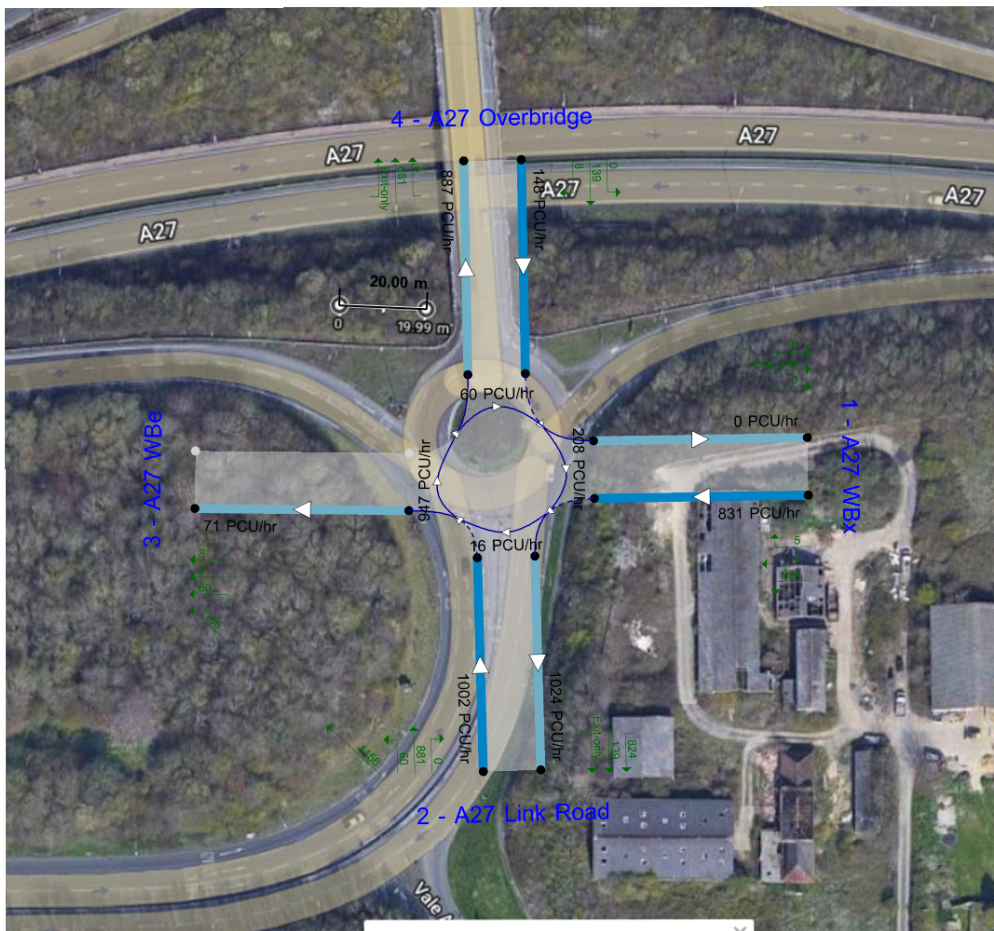
File summary

File Description

Title	(untitled)
Location	
Site number	
Date	31/01/2022
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	
Description	

Units

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



Flows show modelled flow through junction (PCU/hr).
Time Segment: 16:45-17:00

The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75	✓			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)	Run automatically
D1	2021 Baseline	AM	ONE HOUR	06:45	08:15	15	✓
D2	2021 Baseline	PM	ONE HOUR	16:45	18:15	15	✓
D3	2026 Future Baseline	AM	ONE HOUR	06:45	08:15	15	✓
D4	2026 Future Baseline	PM	ONE HOUR	16:45	18:15	15	✓
D5	2026 Do Something	AM	ONE HOUR	06:45	08:15	15	✓
D6	2026 Do Something	PM	ONE HOUR	16:45	18:15	15	✓
D7	2032 Future Baseline	AM	ONE HOUR	06:45	08:15	15	✓
D8	2032 Future Baseline	PM	ONE HOUR	16:45	18:15	15	✓
D9	2032 Do Something	AM	ONE HOUR	06:45	08:15	15	✓
D10	2032 Do Something	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

ID	Name	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	(Default Analysis Set)	✓	100.000	100.000

(Default Analysis Set) - 2021 Baseline, AM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	(untitled)	Standard Roundabout		1, 2, 3, 4	16.83	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	A27 WBx	
2	A27 Link Road	
3	A27 WBe	
4	A27 Overbridge	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - A27 WBx	5.83	8.17	18.3	55.0	40.0	32.7	
2 - A27 Link Road	7.21	7.48	18.0	50.7	40.0	23.4	
3 - A27 WBe							✓
4 - A27 Overbridge	3.60	3.75	3.7	12.0	40.0	5.4	

Bypass

Arm	Arm has bypass	Bypass utilisation (%)
1 - A27 WBx		
2 - A27 Link Road	✓	95
3 - A27 WBe		
4 - A27 Overbridge		

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - A27 WBx	0.772	2319
2 - A27 Link Road	0.794	2382
3 - A27 WBe		
4 - A27 Overbridge	0.556	1191

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

Arm Capacity Adjustments

Arm	Type	Reason	Percentage capacity adjustment (%)
1 - A27 WBx	Percentage		68.00
2 - A27 Link Road	Percentage		62.00

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2021 Baseline	AM	ONE HOUR	06:45	08:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A27 WBx		ONE HOUR	✓	1187	100.000
2 - A27 Link Road		ONE HOUR	✓	2181	100.000
3 - A27 WBe					
4 - A27 Overbridge		ONE HOUR	✓	127	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - A27 WBx	2 - A27 Link Road	3 - A27 WBe	4 - A27 Overbridge
From	1 - A27 WBx	0	1174	7	6
	2 - A27 Link Road	0	23	1132	1026
	3 - A27 WBe	Exit-only	Exit-only	Exit-only	Exit-only
	4 - A27 Overbridge	0	114	13	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A27 WBx	2 - A27 Link Road	3 - A27 WBe	4 - A27 Overbridge
From	1 - A27 WBx	0	6	17	0
	2 - A27 Link Road	0	0	7	9
	3 - A27 WBe	Exit-only	Exit-only	Exit-only	Exit-only
	4 - A27 Overbridge	0	1	18	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A27 WBx	0.88	20.18	7.0	35.5	C	1089	1634
2 - A27 Link Road	0.83	15.78	5.1	26.4	C	2001	1522
3 - A27 WBe							
4 - A27 Overbridge	0.12	3.55	0.1	0.5	A	117	175

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsign level serv
1 - A27 WBx	894	894	223	0	0	112	1518	0.589	888	0	0.0	1.5	6.009	A
2 - A27 Link Road	1642	832	208	810	0	19	1467	0.567	827	981	0.0	1.4	6.070	A
3 - A27 WBe						789				57				
4 - A27 Overbridge	96	96	24	0	0	17	1181	0.081	95	772	0.0	0.1	3.395	A

07:00 - 07:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsign level serv
1 - A27 WBx	1067	1067	267	0	0	135	1506	0.708	1063	0	1.5	2.5	8.545	A
2 - A27 Link Road	1961	994	248	967	0	23	1465	0.678	991	1174	1.4	2.2	8.199	A
3 - A27 WBe						945				69				
4 - A27 Overbridge	114	114	29	0	0	21	1179	0.097	114	925	0.1	0.1	3.460	A

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsign level serv
1 - A27 WBx	1307	1307	327	0	0	165	1490	0.877	1291	0	2.5	6.5	17.853	
2 - A27 Link Road	2401	1217	304	1184	0	28	1463	0.832	1206	1427	2.2	4.9	14.706	
3 - A27 WBe						1151				84				
4 - A27 Overbridge	140	140	35	0	0	25	1177	0.119	140	1126	0.1	0.1	3.554	

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsign level serv
1 - A27 WBx	1307	1307	327	0	0	165	1490	0.877	1305	0	6.5	7.0	20.176	
2 - A27 Link Road	2401	1217	304	1184	0	29	1462	0.832	1216	1442	4.9	5.1	15.784	
3 - A27 WBe						1161				84				
4 - A27 Overbridge	140	140	35	0	0	25	1177	0.119	140	1135	0.1	0.1	3.555	

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsign level serv
1 - A27 WBx	1067	1067	267	0	0	135	1506	0.709	1084	0	7.0	2.7	9.411	A
2 - A27 Link Road	1961	994	248	967	0	24	1465	0.678	1005	1196	5.1	2.4	8.718	A
3 - A27 WBe						959				70				
4 - A27 Overbridge	114	114	29	0	0	21	1179	0.097	114	938	0.1	0.1	3.462	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsign level serv
1 - A27 WBx	894	894	223	0	0	113	1518	0.589	898	0	2.7	1.5	6.216	A
2 - A27 Link Road	1642	832	208	810	0	20	1467	0.567	836	992	2.4	1.4	6.245	A
3 - A27 WBe						798				58				
4 - A27 Overbridge	96	96	24	0	0	17	1181	0.081	96	780	0.1	0.1	3.399	A

Queue Variation Results for each time segment

06:45 - 07:00

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 - A27 WBx	1.50	0.61	1.37	1.85	1.99			N/A	N/A
2 - A27 Link Road	1.41	0.60	1.09	1.52	1.58			N/A	N/A
3 - A27 WBe									
4 - A27 Overbridge	0.09	0.00	0.00	0.09	0.09			N/A	N/A

07:00 - 07:15

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 - A27 WBx	2.50	0.06	0.66	6.76	10.64			N/A	N/A
2 - A27 Link Road	2.24	0.06	0.78	5.85	8.96			N/A	N/A
3 - A27 WBe									
4 - A27 Overbridge	0.11	0.00	0.00	0.11	0.11			N/A	N/A

07:15 - 07:30

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 - A27 WBx	6.52	0.04	0.42	16.69	35.48			N/A	N/A
2 - A27 Link Road	4.94	0.04	0.36	9.40	26.37			N/A	N/A
3 - A27 WBe									
4 - A27 Overbridge	0.14	0.03	0.26	0.47	0.50			N/A	N/A

07:30 - 07:45

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 - A27 WBx	6.97	0.03	0.34	9.06	33.88			N/A	N/A
2 - A27 Link Road	5.15	0.03	0.32	5.15	18.33			N/A	N/A
3 - A27 WBe									
4 - A27 Overbridge	0.14	0.00	0.00	0.14	0.14			N/A	N/A

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 - A27 WBx	2.67	0.05	0.47	7.36	12.61			N/A	N/A
2 - A27 Link Road	2.36	0.05	0.53	6.40	10.39			N/A	N/A
3 - A27 WBe									
4 - A27 Overbridge	0.11	0.00	0.00	0.11	0.11			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 - A27 WBx	1.55	0.04	0.35	3.43	7.95			N/A	N/A
2 - A27 Link Road	1.45	0.04	0.39	3.61	7.15			N/A	N/A
3 - A27 WBe									
4 - A27 Overbridge	0.09	0.00	0.00	0.09	0.09			N/A	N/A

(Default Analysis Set) - 2021 Baseline, PM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	(untitled)	Standard Roundabout		1, 2, 3, 4	22.58	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2021 Baseline	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A27 WBx		ONE HOUR	✓	1013	100.000
2 - A27 Link Road		ONE HOUR	✓	2624	100.000
3 - A27 WBe					
4 - A27 Overbridge		ONE HOUR	✓	180	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - A27 WBx	2 - A27 Link Road	3 - A27 WBe	4 - A27 Overbridge
From	1 - A27 WBx	0	1004	3	6
	2 - A27 Link Road	0	74	1473	1077
	3 - A27 WBe	Exit-only	Exit-only	Exit-only	Exit-only
	4 - A27 Overbridge	0	170	10	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A27 WBx	2 - A27 Link Road	3 - A27 WBe	4 - A27 Overbridge
From	1 - A27 WBx	0	3	0	0
	2 - A27 Link Road	0	0	2	2
	3 - A27 WBe	Exit-only	Exit-only	Exit-only	Exit-only
	4 - A27 Overbridge	0	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A27 WBx	0.78	11.67	3.5	15.0	B	930	1394
2 - A27 Link Road	0.92	28.08	9.9	54.4	D	2408	1686
3 - A27 WBe							
4 - A27 Overbridge	0.17	3.82	0.2	0.5	A	165	248

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsign lev serv
1 - A27 WBx	763	763	191	0	0	190	1477	0.516	758	0	0.0	1.1	5.105	A
2 - A27 Link Road	1975	922	230	1054	0	14	1470	0.627	915	934	0.0	1.7	6.538	A
3 - A27 WBe						865				65				
4 - A27 Overbridge	136	136	34	0	0	55	1160	0.117	135	809	0.0	0.1	3.530	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsign lev serv
1 - A27 WBx	911	911	228	0	0	228	1457	0.625	908	0	1.1	1.7	6.694	A
2 - A27 Link Road	2359	1101	275	1258	0	17	1468	0.750	1096	1119	1.7	2.9	9.717	A
3 - A27 WBe						1035				78				
4 - A27 Overbridge	162	162	40	0	0	66	1154	0.140	162	969	0.1	0.2	3.648	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsign lev serv
1 - A27 WBx	1115	1115	279	0	0	278	1431	0.779	1108	0	1.7	3.4	11.198	
2 - A27 Link Road	2889	1348	337	1541	0	21	1466	0.920	1325	1366	2.9	8.8	22.821	
3 - A27 WBe						1252				94				
4 - A27 Overbridge	198	198	50	0	0	80	1146	0.173	198	1172	0.2	0.2	3.817	

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsign lev serv
1 - A27 WBx	1115	1115	279	0	0	279	1430	0.780	1115	0	3.4	3.5	11.670	
2 - A27 Link Road	2889	1348	337	1541	0	21	1466	0.920	1344	1373	8.8	9.9	28.077	
3 - A27 WBe						1270				95				
4 - A27 Overbridge	198	198	50	0	0	81	1146	0.173	198	1189	0.2	0.2	3.820	

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsign level
1 - A27 WBx	911	911	228	0	0	230	1456	0.625	918	0	3.5	1.7	6.946	
2 - A27 Link Road	2359	1101	275	1258	0	17	1468	0.750	1128	1131	9.9	3.2	11.540	
3 - A27 WBe						1065				80				
4 - A27 Overbridge	162	162	40	0	0	68	1153	0.140	162	997	0.2	0.2	3.656	

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsign level
1 - A27 WBx	763	763	191	0	0	192	1476	0.517	765	0	1.7	1.1	5.210	A
2 - A27 Link Road	1975	922	230	1054	0	14	1469	0.627	928	943	3.2	1.7	6.840	A
3 - A27 WBe						876				66				
4 - A27 Overbridge	136	136	34	0	0	56	1160	0.117	136	820	0.2	0.1	3.535	A

Queue 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 - A27 WBx	1.08	0.56	1.03	1.44	1.49			N/A	N/A
2 - A27 Link Road	1.68	0.62	1.14	2.01	2.50			N/A	N/A
3 - A27 WBe									
4 - A27 Overbridge	0.13	0.00	0.00	0.13	0.13			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 - A27 WBx	1.68	0.06	0.68	4.17	6.33			N/A	N/A
2 - A27 Link Road	2.93	0.06	0.77	8.04	12.72			N/A	N/A
3 - A27 WBe									
4 - A27 Overbridge	0.16	0.00	0.00	0.16	0.16			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 - A27 WBx	3.43	0.03	0.31	3.43	15.02			N/A	N/A
2 - A27 Link Road	8.83	0.05	0.85	25.65	44.50			N/A	N/A
3 - A27 WBe									
4 - A27 Overbridge	0.21	0.03	0.26	0.46	0.49			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 - A27 WBx	3.53	0.03	0.28	3.53	6.62			N/A	N/A
2 - A27 Link Road	9.87	0.04	0.40	23.93	54.39			N/A	N/A
3 - A27 WBe									
4 - A27 Overbridge	0.21	0.03	0.26	0.46	0.49			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 - A27 WBx	1.75	0.06	0.78	4.33	6.47			N/A	N/A
2 - A27 Link Road	3.19	0.04	0.44	8.86	15.95			N/A	N/A
3 - A27 WBe									
4 - A27 Overbridge	0.16	0.00	0.00	0.16	0.16			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 - A27 WBx	1.11	0.04	0.40	2.80	4.82			N/A	N/A
2 - A27 Link Road	1.75	0.03	0.33	3.43	9.14			N/A	N/A
3 - A27 WBe									
4 - A27 Overbridge	0.13	0.00	0.00	0.13	0.13			N/A	N/A

(Default Analysis Set) - 2026 Future Baseline, AM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	(untitled)	Standard Roundabout		1, 2, 3, 4	22.50	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2026 Future Baseline	AM	ONE HOUR	06:45	08:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A27 WBx		ONE HOUR	✓	1241	100.000
2 - A27 Link Road		ONE HOUR	✓	2282	100.000
3 - A27 WBe					
4 - A27 Overbridge		ONE HOUR	✓	133	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - A27 WBx	2 - A27 Link Road	3 - A27 WBe	4 - A27 Overbridge
From	1 - A27 WBx	0	1228	7	6
	2 - A27 Link Road	0	24	1184	1074
	3 - A27 WBe	Exit-only	Exit-only	Exit-only	Exit-only
	4 - A27 Overbridge	0	119	14	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A27 WBx	2 - A27 Link Road	3 - A27 WBe	4 - A27 Overbridge
From	1 - A27 WBx	0	6	17	0
	2 - A27 Link Road	0	0	7	9
	3 - A27 WBe	Exit-only	Exit-only	Exit-only	Exit-only
	4 - A27 Overbridge	0	1	18	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A27 WBx	0.92	28.70	10.2	56.2	D	1139	1708
2 - A27 Link Road	0.87	20.23	6.8	34.8	C	2094	1593
3 - A27 WBe							
4 - A27 Overbridge	0.12	3.58	0.1	0.5	A	122	183

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsign lev serv
1 - A27 WBx	934	934	234	0	0	118	1515	0.617	928	0	0.0	1.7	6.435	A
2 - A27 Link Road	1718	871	218	847	0	20	1467	0.594	865	1025	0.0	1.6	6.449	A
3 - A27 WBe						825				60				
4 - A27 Overbridge	100	100	25	0	0	18	1181	0.085	100	807	0.0	0.1	3.412	A

07:00 - 07:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsign lev serv
1 - A27 WBx	1116	1116	279	0	0	141	1503	0.742	1111	0	1.7	2.9	9.616	A
2 - A27 Link Road	2051	1040	260	1011	0	24	1465	0.710	1036	1227	1.6	2.6	9.059	A
3 - A27 WBe						989				72				
4 - A27 Overbridge	120	120	30	0	0	21	1179	0.101	119	967	0.1	0.1	3.481	A

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsign lev serv
1 - A27 WBx	1366	1366	342	0	0	172	1486	0.919	1342	0	2.9	9.1	23.211	
2 - A27 Link Road	2513	1274	319	1238	0	29	1462	0.871	1259	1485	2.6	6.4	18.041	
3 - A27 WBe						1201				87				
4 - A27 Overbridge	146	146	37	0	0	26	1176	0.125	146	1175	0.1	0.1	3.581	

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsign lev serv
1 - A27 WBx	1366	1366	342	0	0	173	1486	0.919	1362	0	9.1	10.2	28.703	
2 - A27 Link Road	2513	1274	319	1238	0	30	1462	0.872	1272	1505	6.4	6.8	20.234	
3 - A27 WBe						1214				88				
4 - A27 Overbridge	146	146	37	0	0	26	1176	0.125	146	1188	0.1	0.1	3.581	

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsign level
1 - A27 WBx	1116	1116	279	0	0	142	1503	0.742	1144	0	10.2	3.2	11.414	
2 - A27 Link Road	2051	1040	260	1011	0	25	1464	0.710	1057	1261	6.8	2.8	9.964	
3 - A27 WBe						1008				73				
4 - A27 Overbridge	120	120	30	0	0	22	1179	0.101	120	986	0.1	0.1	3.485	

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsign level
1 - A27 WBx	934	934	234	0	0	118	1515	0.617	940	0	3.2	1.7	6.715	A
2 - A27 Link Road	1718	871	218	847	0	20	1466	0.594	876	1038	2.8	1.6	6.685	A
3 - A27 WBe						836				61				
4 - A27 Overbridge	100	100	25	0	0	18	1181	0.085	100	817	0.1	0.1	3.416	A

Queue Variation Results for each time segment
06:45 - 07:00

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 - A27 WBx	1.68	0.63	1.09	2.04	2.38			N/A	N/A
2 - A27 Link Road	1.56	0.63	1.45	1.91	2.05			N/A	N/A
3 - A27 WBe									
4 - A27 Overbridge	0.09	0.00	0.00	0.09	0.09			N/A	N/A

07:00 - 07:15

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 - A27 WBx	2.94	0.06	0.74	8.08	12.78			N/A	N/A
2 - A27 Link Road	2.58	0.06	0.80	6.93	10.74			N/A	N/A
3 - A27 WBe									
4 - A27 Overbridge	0.12	0.00	0.00	0.12	0.12			N/A	N/A

07:15 - 07:30

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 - A27 WBx	9.12	0.06	0.93	26.50	45.74			N/A	N/A
2 - A27 Link Road	6.40	0.04	0.42	16.15	34.78			N/A	N/A
3 - A27 WBe									
4 - A27 Overbridge	0.15	0.03	0.26	0.47	0.50			N/A	N/A

07:30 - 07:45

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 - A27 WBx	10.22	0.04	0.42	25.03	56.24			N/A	N/A
2 - A27 Link Road	6.82	0.03	0.34	8.39	32.71			N/A	N/A
3 - A27 WBe									
4 - A27 Overbridge	0.15	0.03	0.26	0.46	0.49			N/A	N/A

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 - A27 WBx	3.19	0.05	0.45	8.84	15.95			N/A	N/A
2 - A27 Link Road	2.76	0.05	0.49	7.62	13.04			N/A	N/A
3 - A27 WBe									
4 - A27 Overbridge	0.12	0.00	0.00	0.12	0.12			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 - A27 WBx	1.74	0.03	0.34	3.26	9.06			N/A	N/A
2 - A27 Link Road	1.62	0.04	0.37	3.73	8.35			N/A	N/A
3 - A27 WBe									
4 - A27 Overbridge	0.10	0.00	0.00	0.10	0.10			N/A	N/A

(Default Analysis Set) - 2026 Future Baseline, PM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	(untitled)	Standard Roundabout		1, 2, 3, 4	33.56	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2026 Future Baseline	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A27 WBx		ONE HOUR	✓	1059	100.000
2 - A27 Link Road		ONE HOUR	✓	2743	100.000
3 - A27 WBe					
4 - A27 Overbridge		ONE HOUR	✓	188	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - A27 WBx	2 - A27 Link Road	3 - A27 WBe	4 - A27 Overbridge
From	1 - A27 WBx	0	1050	3	6
	2 - A27 Link Road	0	77	1540	1126
	3 - A27 WBe	Exit-only	Exit-only	Exit-only	Exit-only
	4 - A27 Overbridge	0	178	10	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A27 WBx	2 - A27 Link Road	3 - A27 WBe	4 - A27 Overbridge
From	1 - A27 WBx	0	3	0	0
	2 - A27 Link Road	0	0	2	2
	3 - A27 WBe	Exit-only	Exit-only	Exit-only	Exit-only
	4 - A27 Overbridge	0	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A27 WBx	0.82	14.17	4.4	21.9	B	972	1458
2 - A27 Link Road	0.96	43.08	15.9	77.9	E	2517	1762
3 - A27 WBe							
4 - A27 Overbridge	0.18	3.86	0.2	0.5	A	173	259

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsig lev ser
1 - A27 WBx	797	797	199	0	0	198	1473	0.541	792	0	0.0	1.2	5.389	A
2 - A27 Link Road	2065	964	241	1101	0	14	1470	0.656	956	977	0.0	1.9	7.043	A
3 - A27 WBe						903				67				
4 - A27 Overbridge	142	142	35	0	0	58	1159	0.122	141	846	0.0	0.1	3.555	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsig lev ser
1 - A27 WBx	952	952	238	0	0	238	1452	0.656	949	0	1.2	1.9	7.296	
2 - A27 Link Road	2466	1151	288	1315	0	17	1468	0.784	1144	1170	1.9	3.5	11.101	
3 - A27 WBe						1081				81				
4 - A27 Overbridge	169	169	42	0	0	69	1152	0.147	169	1012	0.1	0.2	3.680	

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsig lev ser
1 - A27 WBx	1166	1166	291	0	0	289	1425	0.818	1157	0	1.9	4.3	13.292	
2 - A27 Link Road	3020	1409	352	1611	0	21	1466	0.961	1371	1425	3.5	13.0	30.501	
3 - A27 WBe						1295				97				
4 - A27 Overbridge	207	207	52	0	0	82	1145	0.181	207	1213	0.2	0.2	3.858	

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsig lev ser
1 - A27 WBx	1166	1166	291	0	0	291	1424	0.819	1165	0	4.3	4.4	14.167	
2 - A27 Link Road	3020	1409	352	1611	0	21	1466	0.961	1398	1435	13.0	15.9	43.084	
3 - A27 WBe						1320				98				
4 - A27 Overbridge	207	207	52	0	0	84	1144	0.181	207	1236	0.2	0.2	3.863	

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsign level
1 - A27 WBx	952	952	238	0	0	241	1450	0.656	962	0	4.4	2.0	7.702	
2 - A27 Link Road	2466	1151	288	1315	0	17	1468	0.784	1199	1186	15.9	3.9	15.735	
3 - A27 WBe						1132				84				
4 - A27 Overbridge	169	169	42	0	0	72	1151	0.147	169	1060	0.2	0.2	3.688	

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsign level
1 - A27 WBx	797	797	199	0	0	200	1472	0.542	800	0	2.0	1.2	5.523	A
2 - A27 Link Road	2065	964	241	1101	0	14	1469	0.656	971	986	3.9	2.0	7.471	A
3 - A27 WBe						918				68				
4 - A27 Overbridge	142	142	35	0	0	58	1158	0.122	142	859	0.2	0.1	3.563	A

Queue 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 - A27 WBx	1.19	0.56	1.03	1.44	1.49			N/A	N/A
2 - A27 Link Road	1.90	0.60	1.30	2.73	3.06			N/A	N/A
3 - A27 WBe									
4 - A27 Overbridge	0.14	0.00	0.00	0.14	0.14			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 - A27 WBx	1.91	0.05	0.62	4.96	7.68			N/A	N/A
2 - A27 Link Road	3.50	0.06	0.96	9.69	15.17			N/A	N/A
3 - A27 WBe									
4 - A27 Overbridge	0.17	0.00	0.00	0.17	0.17			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 - A27 WBx	4.28	0.03	0.33	6.76	21.88			N/A	N/A
2 - A27 Link Road	13.01	0.11	3.81	36.58	54.67			N/A	N/A
3 - A27 WBe									
4 - A27 Overbridge	0.22	0.03	0.26	0.46	0.48			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 - A27 WBx	4.44	0.03	0.29	4.44	13.47			N/A	N/A
2 - A27 Link Road	15.94	0.07	1.68	47.05	77.91			N/A	N/A
3 - A27 WBe									
4 - A27 Overbridge	0.22	0.03	0.26	0.47	0.50			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 - A27 WBx	2.00	0.05	0.53	5.31	8.36			N/A	N/A
2 - A27 Link Road	3.92	0.04	0.43	10.86	20.10			N/A	N/A
3 - A27 WBe									
4 - A27 Overbridge	0.17	0.00	0.00	0.17	0.17			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 - A27 WBx	1.23	0.04	0.37	3.04	5.89			N/A	N/A
2 - A27 Link Road	1.98	0.03	0.32	3.19	10.10			N/A	N/A
3 - A27 WBe									
4 - A27 Overbridge	0.14	0.00	0.00	0.14	0.14			N/A	N/A

(Default Analysis Set) - 2026 Do Something, AM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	(untitled)	Standard Roundabout		1, 2, 3, 4	22.78	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2026 Do Something	AM	ONE HOUR	06:45	08:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A27 WBx		ONE HOUR	✓	1243	100.000
2 - A27 Link Road		ONE HOUR	✓	2283	100.000
3 - A27 WBe					
4 - A27 Overbridge		ONE HOUR	✓	134	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - A27 WBx	2 - A27 Link Road	3 - A27 WBe	4 - A27 Overbridge
From	1 - A27 WBx	0	1230	7	6
	2 - A27 Link Road	0	25	1184	1074
	3 - A27 WBe	Exit-only	Exit-only	Exit-only	Exit-only
	4 - A27 Overbridge	0	120	14	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A27 WBx	2 - A27 Link Road	3 - A27 WBe	4 - A27 Overbridge
From	1 - A27 WBx	0	6	17	0
	2 - A27 Link Road	0	4	7	9
	3 - A27 WBe	Exit-only	Exit-only	Exit-only	Exit-only
	4 - A27 Overbridge	0	1	18	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A27 WBx	0.92	29.32	10.4	57.3	D	1141	1711
2 - A27 Link Road	0.87	20.36	6.9	35.0	C	2095	1594
3 - A27 WBe							
4 - A27 Overbridge	0.13	3.59	0.1	0.5	A	123	184

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsign lev serv
1 - A27 WBx	936	936	234	0	0	119	1514	0.618	929	0	0.0	1.7	6.457	A
2 - A27 Link Road	1719	872	218	847	0	20	1467	0.595	866	1028	0.0	1.6	6.459	A
3 - A27 WBe						826				60				
4 - A27 Overbridge	101	101	25	0	0	19	1180	0.085	101	807	0.0	0.1	3.415	A

07:00 - 07:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsign lev serv
1 - A27 WBx	1117	1117	279	0	0	143	1502	0.744	1112	0	1.7	3.0	9.680	A
2 - A27 Link Road	2052	1041	260	1011	0	24	1465	0.711	1037	1231	1.6	2.6	9.083	A
3 - A27 WBe						989				72				
4 - A27 Overbridge	120	120	30	0	0	22	1178	0.102	120	967	0.1	0.1	3.485	A

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsign lev serv
1 - A27 WBx	1369	1369	342	0	0	175	1485	0.921	1343	0	3.0	9.3	23.560	
2 - A27 Link Road	2514	1275	319	1238	0	29	1462	0.872	1260	1488	2.6	6.4	18.129	
3 - A27 WBe						1202				87				
4 - A27 Overbridge	148	148	37	0	0	27	1176	0.126	147	1175	0.1	0.1	3.586	

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsign lev serv
1 - A27 WBx	1369	1369	342	0	0	175	1485	0.922	1364	0	9.3	10.4	29.315	
2 - A27 Link Road	2514	1275	319	1238	0	30	1462	0.872	1273	1509	6.4	6.9	20.355	
3 - A27 WBe						1215				88				
4 - A27 Overbridge	148	148	37	0	0	27	1175	0.126	148	1187	0.1	0.1	3.587	

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsign level
1 - A27 WBx	1117	1117	279	0	0	143	1502	0.744	1146	0	10.4	3.2	11.556	
2 - A27 Link Road	2052	1041	260	1011	0	25	1464	0.711	1058	1265	6.9	2.8	10.001	
3 - A27 WBe						1009				73				
4 - A27 Overbridge	120	120	30	0	0	23	1178	0.102	121	986	0.1	0.1	3.490	

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsign level
1 - A27 WBx	936	936	234	0	0	120	1514	0.618	942	0	3.2	1.8	6.744	A
2 - A27 Link Road	1719	872	218	847	0	20	1466	0.595	877	1041	2.8	1.6	6.699	A
3 - A27 WBe						836				61				
4 - A27 Overbridge	101	101	25	0	0	19	1180	0.085	101	817	0.1	0.1	3.416	A

Queue Variation Results for each time segment

06:45 - 07:00

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 - A27 WBx	1.69	0.63	1.10	2.05	2.43			N/A	N/A
2 - A27 Link Road	1.57	0.64	1.45	1.92	2.05			N/A	N/A
3 - A27 WBe									
4 - A27 Overbridge	0.10	0.00	0.00	0.10	0.10			N/A	N/A

07:00 - 07:15

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 - A27 WBx	2.96	0.06	0.75	8.15	12.90			N/A	N/A
2 - A27 Link Road	2.59	0.06	0.81	6.95	10.78			N/A	N/A
3 - A27 WBe									
4 - A27 Overbridge	0.12	0.00	0.00	0.12	0.12			N/A	N/A

07:15 - 07:30

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 - A27 WBx	9.29	0.06	1.03	27.01	46.17			N/A	N/A
2 - A27 Link Road	6.44	0.04	0.42	16.31	34.99			N/A	N/A
3 - A27 WBe									
4 - A27 Overbridge	0.15	0.03	0.26	0.47	0.50			N/A	N/A

07:30 - 07:45

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 - A27 WBx	10.45	0.04	0.42	26.07	57.33			N/A	N/A
2 - A27 Link Road	6.86	0.03	0.34	8.58	33.06			N/A	N/A
3 - A27 WBe									
4 - A27 Overbridge	0.15	0.03	0.26	0.46	0.49			N/A	N/A

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 - A27 WBx	3.22	0.05	0.45	8.92	16.14			N/A	N/A
2 - A27 Link Road	2.77	0.05	0.49	7.65	13.11			N/A	N/A
3 - A27 WBe									
4 - A27 Overbridge	0.12	0.00	0.00	0.12	0.12			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 - A27 WBx	1.75	0.03	0.34	3.24	9.10			N/A	N/A
2 - A27 Link Road	1.63	0.04	0.37	3.73	8.38			N/A	N/A
3 - A27 WBe									
4 - A27 Overbridge	0.10	0.00	0.00	0.10	0.10			N/A	N/A

(Default Analysis Set) - 2026 Do Something, PM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	(untitled)	Standard Roundabout		1, 2, 3, 4	33.56	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2026 Do Something	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A27 WBx		ONE HOUR	✓	1059	100.000
2 - A27 Link Road		ONE HOUR	✓	2743	100.000
3 - A27 WBe					
4 - A27 Overbridge		ONE HOUR	✓	188	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - A27 WBx	2 - A27 Link Road	3 - A27 WBe	4 - A27 Overbridge
From	1 - A27 WBx	0	1050	3	6
	2 - A27 Link Road	0	77	1540	1126
	3 - A27 WBe	Exit-only	Exit-only	Exit-only	Exit-only
	4 - A27 Overbridge	0	178	10	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A27 WBx	2 - A27 Link Road	3 - A27 WBe	4 - A27 Overbridge
From	1 - A27 WBx	0	3	0	0
	2 - A27 Link Road	0	0	2	2
	3 - A27 WBe	Exit-only	Exit-only	Exit-only	Exit-only
	4 - A27 Overbridge	0	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A27 WBx	0.82	14.17	4.4	21.9	B	972	1458
2 - A27 Link Road	0.96	43.08	15.9	77.9	E	2517	1762
3 - A27 WBe							
4 - A27 Overbridge	0.18	3.86	0.2	0.5	A	173	259

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsig lev ser
1 - A27 WBx	797	797	199	0	0	198	1473	0.541	792	0	0.0	1.2	5.389	A
2 - A27 Link Road	2065	964	241	1101	0	14	1470	0.656	956	977	0.0	1.9	7.043	A
3 - A27 WBe						903				67				
4 - A27 Overbridge	142	142	35	0	0	58	1159	0.122	141	846	0.0	0.1	3.555	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsig lev ser
1 - A27 WBx	952	952	238	0	0	238	1452	0.656	949	0	1.2	1.9	7.296	
2 - A27 Link Road	2466	1151	288	1315	0	17	1468	0.784	1144	1170	1.9	3.5	11.100	
3 - A27 WBe						1081				81				
4 - A27 Overbridge	169	169	42	0	0	69	1152	0.147	169	1012	0.1	0.2	3.680	

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsig lev ser
1 - A27 WBx	1166	1166	291	0	0	289	1425	0.818	1157	0	1.9	4.3	13.292	
2 - A27 Link Road	3020	1409	352	1611	0	21	1466	0.961	1371	1425	3.5	13.0	30.502	
3 - A27 WBe						1295				97				
4 - A27 Overbridge	207	207	52	0	0	82	1145	0.181	207	1213	0.2	0.2	3.858	

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsig lev ser
1 - A27 WBx	1166	1166	291	0	0	291	1424	0.819	1165	0	4.3	4.4	14.167	
2 - A27 Link Road	3020	1409	352	1611	0	21	1466	0.961	1398	1435	13.0	15.9	43.083	
3 - A27 WBe						1320				98				
4 - A27 Overbridge	207	207	52	0	0	84	1144	0.181	207	1236	0.2	0.2	3.863	

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsign level
1 - A27 WBx	952	952	238	0	0	241	1450	0.656	962	0	4.4	2.0	7.702	
2 - A27 Link Road	2466	1151	288	1315	0	17	1468	0.784	1199	1186	15.9	3.9	15.736	
3 - A27 WBe						1132				84				
4 - A27 Overbridge	169	169	42	0	0	72	1151	0.147	169	1060	0.2	0.2	3.691	

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsign level
1 - A27 WBx	797	797	199	0	0	200	1472	0.542	800	0	2.0	1.2	5.521	A
2 - A27 Link Road	2065	964	241	1101	0	14	1469	0.656	971	986	3.9	2.0	7.471	A
3 - A27 WBe						918				68				
4 - A27 Overbridge	142	142	35	0	0	58	1158	0.122	142	859	0.2	0.1	3.560	A

Queue 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 - A27 WBx	1.19	0.56	1.03	1.44	1.49			N/A	N/A
2 - A27 Link Road	1.90	0.60	1.30	2.73	3.06			N/A	N/A
3 - A27 WBe									
4 - A27 Overbridge	0.14	0.00	0.00	0.14	0.14			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 - A27 WBx	1.91	0.05	0.62	4.96	7.68			N/A	N/A
2 - A27 Link Road	3.50	0.06	0.96	9.69	15.17			N/A	N/A
3 - A27 WBe									
4 - A27 Overbridge	0.17	0.00	0.00	0.17	0.17			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 - A27 WBx	4.28	0.03	0.33	6.76	21.87			N/A	N/A
2 - A27 Link Road	13.01	0.11	3.81	36.58	54.67			N/A	N/A
3 - A27 WBe									
4 - A27 Overbridge	0.22	0.03	0.26	0.46	0.48			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 - A27 WBx	4.44	0.03	0.29	4.44	13.46			N/A	N/A
2 - A27 Link Road	15.94	0.07	1.68	47.05	77.91			N/A	N/A
3 - A27 WBe									
4 - A27 Overbridge	0.22	0.03	0.26	0.47	0.50			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 - A27 WBx	2.00	0.05	0.53	5.31	8.36			N/A	N/A
2 - A27 Link Road	3.92	0.04	0.43	10.85	20.10			N/A	N/A
3 - A27 WBe									
4 - A27 Overbridge	0.17	0.00	0.00	0.17	0.17			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 - A27 WBx	1.23	0.04	0.37	3.04	5.89			N/A	N/A
2 - A27 Link Road	1.98	0.03	0.32	3.19	10.10			N/A	N/A
3 - A27 WBe									
4 - A27 Overbridge	0.14	0.00	0.00	0.14	0.14			N/A	N/A

(Default Analysis Set) - 2032 Future Baseline, AM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	(untitled)	Standard Roundabout		1, 2, 3, 4	34.24	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2032 Future Baseline	AM	ONE HOUR	06:45	08:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A27 WBx		ONE HOUR	✓	1304	100.000
2 - A27 Link Road		ONE HOUR	✓	2395	100.000
3 - A27 WBe					
4 - A27 Overbridge		ONE HOUR	✓	139	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - A27 WBx	2 - A27 Link Road	3 - A27 WBe	4 - A27 Overbridge
From	1 - A27 WBx	0	1289	8	7
	2 - A27 Link Road	0	25	1243	1127
	3 - A27 WBe	Exit-only	Exit-only	Exit-only	Exit-only
	4 - A27 Overbridge	0	125	14	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A27 WBx	2 - A27 Link Road	3 - A27 WBe	4 - A27 Overbridge
From	1 - A27 WBx	0	6	17	0
	2 - A27 Link Road	0	0	7	9
	3 - A27 WBe	Exit-only	Exit-only	Exit-only	Exit-only
	4 - A27 Overbridge	0	1	18	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A27 WBx	0.97	47.77	18.1	84.1	E	1197	1795
2 - A27 Link Road	0.92	28.64	10.0	55.0	D	2198	1671
3 - A27 WBe							
4 - A27 Overbridge	0.13	3.60	0.2	0.5	A	128	191

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsig lev ser
1 - A27 WBx	982	982	245	0	0	123	1512	0.649	974	0	0.0	1.9	7.004	A
2 - A27 Link Road	1803	914	229	889	0	22	1466	0.624	907	1075	0.0	1.8	6.928	A
3 - A27 WBe						866				63				
4 - A27 Overbridge	105	105	26	0	0	19	1180	0.089	104	847	0.0	0.1	3.426	A

07:00 - 07:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsig lev ser
1 - A27 WBx	1172	1172	293	0	0	147	1500	0.782	1166	0	1.9	3.6	11.214	
2 - A27 Link Road	2153	1091	273	1062	0	26	1464	0.746	1086	1287	1.8	3.1	10.243	
3 - A27 WBe						1037				75				
4 - A27 Overbridge	125	125	31	0	0	22	1178	0.106	125	1015	0.1	0.1	3.498	

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsig lev ser
1 - A27 WBx	1436	1436	359	0	0	180	1482	0.968	1392	0	3.6	14.4	32.667	
2 - A27 Link Road	2637	1337	334	1300	0	31	1461	0.915	1313	1541	3.1	8.9	23.439	
3 - A27 WBe						1254				91				
4 - A27 Overbridge	153	153	38	0	0	27	1176	0.130	153	1226	0.1	0.2	3.603	

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsig lev ser
1 - A27 WBx	1436	1436	359	0	0	180	1482	0.969	1421	0	14.4	18.1	47.775	
2 - A27 Link Road	2637	1337	334	1300	0	32	1461	0.915	1333	1570	8.9	10.0	28.645	
3 - A27 WBe						1272				92				
4 - A27 Overbridge	153	153	38	0	0	27	1175	0.130	153	1245	0.2	0.2	3.604	

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsign level
1 - A27 WBx	1172	1172	293	0	0	148	1499	0.782	1229	0	18.1	4.1	16.701	
2 - A27 Link Road	2153	1091	273	1062	0	27	1463	0.746	1118	1350	10.0	3.3	12.140	
3 - A27 WBe						1067				77				
4 - A27 Overbridge	125	125	31	0	0	23	1178	0.106	125	1044	0.2	0.1	3.503	

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsign level
1 - A27 WBx	982	982	245	0	0	124	1512	0.649	990	0	4.1	2.0	7.430	A
2 - A27 Link Road	1803	914	229	889	0	22	1466	0.624	920	1092	3.3	1.8	7.260	A
3 - A27 WBe						878				64				
4 - A27 Overbridge	105	105	26	0	0	19	1180	0.089	105	859	0.1	0.1	3.429	A

Queue Variation Results for each time segment

06:45 - 07:00

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 - A27 WBx	1.92	0.60	1.29	2.81	3.17			N/A	N/A
2 - A27 Link Road	1.77	0.66	1.20	2.10	2.47			N/A	N/A
3 - A27 WBe									
4 - A27 Overbridge	0.10	0.00	0.00	0.10	0.10			N/A	N/A

07:00 - 07:15

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 - A27 WBx	3.60	0.06	0.96	9.99	15.69			N/A	N/A
2 - A27 Link Road	3.06	0.06	0.90	8.35	13.00			N/A	N/A
3 - A27 WBe									
4 - A27 Overbridge	0.12	0.00	0.00	0.12	0.12			N/A	N/A

07:15 - 07:30

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 - A27 WBx	14.42	0.14	5.13	39.62	57.79			N/A	N/A
2 - A27 Link Road	8.95	0.06	0.82	25.95	45.25			N/A	N/A
3 - A27 WBe									
4 - A27 Overbridge	0.15	0.03	0.26	0.47	0.50			N/A	N/A

07:30 - 07:45

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 - A27 WBx	18.15	0.09	3.19	53.13	84.11			N/A	N/A
2 - A27 Link Road	9.98	0.04	0.42	23.90	55.03			N/A	N/A
3 - A27 WBe									
4 - A27 Overbridge	0.15	0.03	0.26	0.46	0.49			N/A	N/A

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 - A27 WBx	4.05	0.04	0.45	11.14	20.82			N/A	N/A
2 - A27 Link Road	3.34	0.05	0.47	9.28	16.68			N/A	N/A
3 - A27 WBe									
4 - A27 Overbridge	0.12	0.00	0.00	0.12	0.12			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 - A27 WBx	2.01	0.03	0.33	2.92	9.98			N/A	N/A
2 - A27 Link Road	1.84	0.04	0.35	3.67	9.63			N/A	N/A
3 - A27 WBe									
4 - A27 Overbridge	0.10	0.00	0.00	0.10	0.10			N/A	N/A

(Default Analysis Set) - 2032 Future Baseline, PM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	(untitled)	Standard Roundabout		1, 2, 3, 4	56.01	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2032 Future Baseline	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A27 WBx		ONE HOUR	✓	1111	100.000
2 - A27 Link Road		ONE HOUR	✓	2878	100.000
3 - A27 WBe					
4 - A27 Overbridge		ONE HOUR	✓	197	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - A27 WBx	2 - A27 Link Road	3 - A27 WBe	4 - A27 Overbridge
From	1 - A27 WBx	0	1101	3	7
	2 - A27 Link Road	0	81	1616	1181
	3 - A27 WBe	Exit-only	Exit-only	Exit-only	Exit-only
	4 - A27 Overbridge	0	186	11	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A27 WBx	2 - A27 Link Road	3 - A27 WBe	4 - A27 Overbridge
From	1 - A27 WBx	0	3	0	0
	2 - A27 Link Road	0	0	2	2
	3 - A27 WBe	Exit-only	Exit-only	Exit-only	Exit-only
	4 - A27 Overbridge	0	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A27 WBx	0.86	18.54	6.0	31.0	C	1019	1529
2 - A27 Link Road	1.01	74.03	30.9	101.1	F	2641	1848
3 - A27 WBe							
4 - A27 Overbridge	0.19	3.91	0.2	0.8	A	181	271

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsig lev ser
1 - A27 WBx	836	836	209	0	0	208	1468	0.570	831	0	0.0	1.3	5.751	A
2 - A27 Link Road	2167	1011	253	1156	0	16	1469	0.688	1002	1024	0.0	2.2	7.721	A
3 - A27 WBe						947				71				
4 - A27 Overbridge	148	148	37	0	0	60	1157	0.128	148	887	0.0	0.1	3.584	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsig lev ser
1 - A27 WBx	999	999	250	0	0	249	1446	0.691	995	0	1.3	2.2	8.122	
2 - A27 Link Road	2587	1207	302	1380	0	19	1467	0.823	1198	1226	2.2	4.4	13.212	
3 - A27 WBe						1133				85				
4 - A27 Overbridge	177	177	44	0	0	72	1151	0.154	177	1060	0.1	0.2	3.718	

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsig lev ser
1 - A27 WBx	1223	1223	306	0	0	302	1418	0.862	1209	0	2.2	5.7	16.649	
2 - A27 Link Road	3169	1478	370	1690	0	23	1465	1.009	1411	1488	4.4	21.3	43.320	
3 - A27 WBe						1334				100				
4 - A27 Overbridge	217	217	54	0	0	85	1143	0.190	217	1249	0.2	0.2	3.905	

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsig lev ser
1 - A27 WBx	1223	1223	306	0	0	304	1417	0.863	1222	0	5.7	6.0	18.544	
2 - A27 Link Road	3169	1478	370	1690	0	23	1465	1.009	1440	1502	21.3	30.9	74.035	
3 - A27 WBe						1361				102				
4 - A27 Overbridge	217	217	54	0	0	87	1142	0.190	217	1274	0.2	0.2	3.911	

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsign level
1 - A27 WBx	999	999	250	0	0	256	1442	0.692	1013	0	6.0	2.4	8.879	
2 - A27 Link Road	2587	1207	302	1380	0	19	1467	0.823	1310	1251	30.9	5.3	32.837	
3 - A27 WBe						1237				91				
4 - A27 Overbridge	177	177	44	0	0	79	1147	0.154	177	1158	0.2	0.2	3.733	

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsign level
1 - A27 WBx	836	836	209	0	0	210	1467	0.570	840	0	2.4	1.4	5.933	A
2 - A27 Link Road	2167	1011	253	1156	0	16	1469	0.688	1023	1035	5.3	2.3	8.431	A
3 - A27 WBe						967				72				
4 - A27 Overbridge	148	148	37	0	0	62	1156	0.128	148	905	0.2	0.1	3.594	A

Queue 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 - A27 WBx	1.34	0.58	1.18	1.62	1.84			N/A	N/A
2 - A27 Link Road	2.19	0.53	1.46	3.57	4.30			N/A	N/A
3 - A27 WBe									
4 - A27 Overbridge	0.15	0.00	0.00	0.15	0.15			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 - A27 WBx	2.23	0.05	0.59	5.96	9.40			N/A	N/A
2 - A27 Link Road	4.38	0.07	1.32	12.12	18.60			N/A	N/A
3 - A27 WBe									
4 - A27 Overbridge	0.18	0.00	0.00	0.18	0.18			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 - A27 WBx	5.67	0.04	0.38	13.44	30.98			N/A	N/A
2 - A27 Link Road	21.26	0.82	13.54	49.88	65.90			N/A	N/A
3 - A27 WBe									
4 - A27 Overbridge	0.23	0.03	0.26	0.46	0.48			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 - A27 WBx	6.02	0.03	0.32	6.02	27.22			N/A	N/A
2 - A27 Link Road	30.91	0.79	18.55	75.32	101.11			N/A	N/A
3 - A27 WBe									
4 - A27 Overbridge	0.23	0.03	0.27	0.48	0.75			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 - A27 WBx	2.38	0.05	0.47	6.54	10.93			N/A	N/A
2 - A27 Link Road	5.29	0.05	0.46	14.91	27.18			N/A	N/A
3 - A27 WBe									
4 - A27 Overbridge	0.18	0.00	0.00	0.18	0.18			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 - A27 WBx	1.38	0.03	0.34	3.14	7.05			N/A	N/A
2 - A27 Link Road	2.31	0.03	0.31	2.93	11.11			N/A	N/A
3 - A27 WBe									
4 - A27 Overbridge	0.15	0.00	0.00	0.15	0.15			N/A	N/A

(Default Analysis Set) - 2032 Do Something, AM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	(untitled)	Standard Roundabout		1, 2, 3, 4	34.77	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2032 Do Something	AM	ONE HOUR	06:45	08:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A27 WBx		ONE HOUR	✓	1306	100.000
2 - A27 Link Road		ONE HOUR	✓	2396	100.000
3 - A27 WBe					
4 - A27 Overbridge		ONE HOUR	✓	140	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - A27 WBx	2 - A27 Link Road	3 - A27 WBe	4 - A27 Overbridge
From	1 - A27 WBx	0	1291	8	7
	2 - A27 Link Road	0	26	1243	1127
	3 - A27 WBe	Exit-only	Exit-only	Exit-only	Exit-only
	4 - A27 Overbridge	0	126	14	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A27 WBx	2 - A27 Link Road	3 - A27 WBe	4 - A27 Overbridge
From	1 - A27 WBx	0	6	17	0
	2 - A27 Link Road	0	0	7	9
	3 - A27 WBe	Exit-only	Exit-only	Exit-only	Exit-only
	4 - A27 Overbridge	0	1	18	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A27 WBx	0.97	49.00	18.7	85.2	E	1198	1798
2 - A27 Link Road	0.92	28.83	10.1	55.4	D	2199	1673
3 - A27 WBe							
4 - A27 Overbridge	0.13	3.61	0.2	0.5	A	128	193

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsig lev ser
1 - A27 WBx	983	983	246	0	0	124	1512	0.650	975	0	0.0	1.9	7.031	A
2 - A27 Link Road	1804	915	229	889	0	22	1466	0.624	908	1078	0.0	1.8	6.937	A
3 - A27 WBe						867				63				
4 - A27 Overbridge	105	105	26	0	0	19	1180	0.089	105	847	0.0	0.1	3.429	A

07:00 - 07:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsig lev ser
1 - A27 WBx	1174	1174	294	0	0	149	1499	0.783	1167	0	1.9	3.6	11.297	
2 - A27 Link Road	2154	1092	273	1062	0	26	1464	0.746	1087	1290	1.8	3.1	10.261	
3 - A27 WBe						1038				75				
4 - A27 Overbridge	126	126	31	0	0	23	1178	0.107	126	1015	0.1	0.1	3.502	

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsig lev ser
1 - A27 WBx	1438	1438	359	0	0	182	1481	0.971	1394	0	3.6	14.7	33.207	
2 - A27 Link Road	2638	1338	334	1300	0	31	1461	0.916	1314	1544	3.1	9.0	23.550	
3 - A27 WBe						1254				91				
4 - A27 Overbridge	154	154	39	0	0	28	1175	0.131	154	1226	0.1	0.2	3.609	

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsig lev ser
1 - A27 WBx	1438	1438	359	0	0	183	1481	0.971	1422	0	14.7	18.7	48.999	
2 - A27 Link Road	2638	1338	334	1300	0	32	1461	0.916	1334	1573	9.0	10.1	28.834	
3 - A27 WBe						1273				92				
4 - A27 Overbridge	154	154	39	0	0	29	1175	0.131	154	1245	0.2	0.2	3.609	

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsign level
1 - A27 WBx	1174	1174	294	0	0	150	1498	0.784	1232	0	18.7	4.1	17.124	
2 - A27 Link Road	2154	1092	273	1062	0	27	1463	0.746	1119	1356	10.1	3.4	12.187	
3 - A27 WBe						1069				77				
4 - A27 Overbridge	126	126	31	0	0	24	1177	0.107	126	1045	0.2	0.1	3.504	

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsign level
1 - A27 WBx	983	983	246	0	0	125	1511	0.651	992	0	4.1	2.0	7.469	A
2 - A27 Link Road	1804	915	229	889	0	22	1466	0.624	921	1095	3.4	1.8	7.267	A
3 - A27 WBe						879				64				
4 - A27 Overbridge	105	105	26	0	0	20	1180	0.089	105	859	0.1	0.1	3.432	A

Queue Variation Results for each time segment

06:45 - 07:00

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 - A27 WBx	1.93	0.60	1.29	2.84	3.22			N/A	N/A
2 - A27 Link Road	1.77	0.66	1.20	2.11	2.50			N/A	N/A
3 - A27 WBe									
4 - A27 Overbridge	0.10	0.00	0.00	0.10	0.10			N/A	N/A

07:00 - 07:15

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 - A27 WBx	3.64	0.06	0.98	10.08	15.82			N/A	N/A
2 - A27 Link Road	3.07	0.06	0.91	8.37	13.04			N/A	N/A
3 - A27 WBe									
4 - A27 Overbridge	0.12	0.00	0.00	0.12	0.12			N/A	N/A

07:15 - 07:30

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 - A27 WBx	14.74	0.15	5.50	40.16	58.17			N/A	N/A
2 - A27 Link Road	9.00	0.06	0.85	26.12	45.41			N/A	N/A
3 - A27 WBe									
4 - A27 Overbridge	0.15	0.03	0.26	0.47	0.50			N/A	N/A

07:30 - 07:45

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 - A27 WBx	18.68	0.10	3.72	54.43	85.16			N/A	N/A
2 - A27 Link Road	10.05	0.04	0.42	24.24	55.40			N/A	N/A
3 - A27 WBe									
4 - A27 Overbridge	0.15	0.03	0.26	0.46	0.49			N/A	N/A

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 - A27 WBx	4.10	0.04	0.45	11.27	21.07			N/A	N/A
2 - A27 Link Road	3.35	0.05	0.47	9.31	16.75			N/A	N/A
3 - A27 WBe									
4 - A27 Overbridge	0.12	0.00	0.00	0.12	0.12			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 - A27 WBx	2.02	0.03	0.33	2.89	10.01			N/A	N/A
2 - A27 Link Road	1.84	0.04	0.35	3.66	9.65			N/A	N/A
3 - A27 WBe									
4 - A27 Overbridge	0.10	0.00	0.00	0.10	0.10			N/A	N/A

(Default Analysis Set) - 2032 Do Something, PM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	(untitled)	Standard Roundabout		1, 2, 3, 4	56.01	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2032 Do Something	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A27 WBx		ONE HOUR	✓	1111	100.000
2 - A27 Link Road		ONE HOUR	✓	2878	100.000
3 - A27 WBe					
4 - A27 Overbridge		ONE HOUR	✓	197	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - A27 WBx	2 - A27 Link Road	3 - A27 WBe	4 - A27 Overbridge
From	1 - A27 WBx	0	1101	3	7
	2 - A27 Link Road	0	81	1616	1181
	3 - A27 WBe	Exit-only	Exit-only	Exit-only	Exit-only
	4 - A27 Overbridge	0	186	11	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A27 WBx	2 - A27 Link Road	3 - A27 WBe	4 - A27 Overbridge
From	1 - A27 WBx	0	3	0	0
	2 - A27 Link Road	0	0	2	2
	3 - A27 WBe	Exit-only	Exit-only	Exit-only	Exit-only
	4 - A27 Overbridge	0	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A27 WBx	0.86	18.54	6.0	31.0	C	1019	1529
2 - A27 Link Road	1.01	74.03	30.9	101.1	F	2641	1848
3 - A27 WBe							
4 - A27 Overbridge	0.19	3.91	0.2	0.8	A	181	271

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsig lev ser
1 - A27 WBx	836	836	209	0	0	208	1468	0.570	831	0	0.0	1.3	5.750	A
2 - A27 Link Road	2167	1011	253	1156	0	16	1469	0.688	1002	1024	0.0	2.2	7.721	A
3 - A27 WBe						947				71				
4 - A27 Overbridge	148	148	37	0	0	60	1157	0.128	148	887	0.0	0.1	3.584	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsig lev ser
1 - A27 WBx	999	999	250	0	0	249	1446	0.691	995	0	1.3	2.2	8.122	
2 - A27 Link Road	2587	1207	302	1380	0	19	1467	0.823	1198	1226	2.2	4.4	13.211	
3 - A27 WBe						1133				85				
4 - A27 Overbridge	177	177	44	0	0	72	1151	0.154	177	1060	0.1	0.2	3.718	

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsig lev ser
1 - A27 WBx	1223	1223	306	0	0	302	1418	0.862	1209	0	2.2	5.7	16.648	
2 - A27 Link Road	3169	1478	370	1690	0	23	1465	1.009	1411	1488	4.4	21.3	43.319	
3 - A27 WBe						1334				100				
4 - A27 Overbridge	217	217	54	0	0	85	1143	0.190	217	1249	0.2	0.2	3.905	

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsig lev ser
1 - A27 WBx	1223	1223	306	0	0	304	1417	0.863	1222	0	5.7	6.0	18.544	
2 - A27 Link Road	3169	1478	370	1690	0	23	1465	1.009	1440	1502	21.3	30.9	74.034	
3 - A27 WBe						1361				102				
4 - A27 Overbridge	217	217	54	0	0	87	1142	0.190	217	1274	0.2	0.2	3.911	

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsign level
1 - A27 WBx	999	999	250	0	0	256	1442	0.692	1013	0	6.0	2.4	8.880	
2 - A27 Link Road	2587	1207	302	1380	0	19	1467	0.823	1310	1251	30.9	5.3	32.838	
3 - A27 WBe						1237				91				
4 - A27 Overbridge	177	177	44	0	0	79	1147	0.154	177	1158	0.2	0.2	3.733	

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsign level
1 - A27 WBx	836	836	209	0	0	210	1467	0.570	840	0	2.4	1.4	5.933	A
2 - A27 Link Road	2167	1011	253	1156	0	16	1469	0.688	1023	1035	5.3	2.3	8.432	A
3 - A27 WBe						967				72				
4 - A27 Overbridge	148	148	37	0	0	62	1156	0.128	148	905	0.2	0.1	3.591	A

Queue 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 - A27 WBx	1.34	0.58	1.18	1.62	1.84			N/A	N/A
2 - A27 Link Road	2.19	0.53	1.46	3.57	4.30			N/A	N/A
3 - A27 WBe									
4 - A27 Overbridge	0.15	0.00	0.00	0.15	0.15			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 - A27 WBx	2.23	0.05	0.59	5.96	9.40			N/A	N/A
2 - A27 Link Road	4.38	0.07	1.32	12.12	18.60			N/A	N/A
3 - A27 WBe									
4 - A27 Overbridge	0.18	0.00	0.00	0.18	0.18			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 - A27 WBx	5.67	0.04	0.38	13.44	30.98			N/A	N/A
2 - A27 Link Road	21.26	0.82	13.54	49.88	65.90			N/A	N/A
3 - A27 WBe									
4 - A27 Overbridge	0.23	0.03	0.26	0.46	0.48			N/A	N/A

17:30 - 17:45

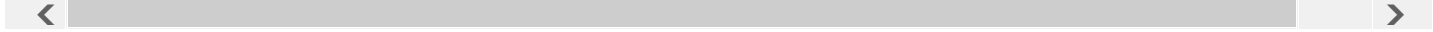
Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A27 WBx	6.02	0.03	0.32	6.02	27.22			N/A	N/A
2 - A27 Link Road	30.91	0.79	18.55	75.32	101.11			N/A	N/A
3 - A27 WBe									
4 - A27 Overbridge	0.23	0.03	0.27	0.48	0.75			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 - A27 WBx	2.38	0.05	0.47	6.54	10.93			N/A	N/A
2 - A27 Link Road	5.29	0.05	0.46	14.91	27.18			N/A	N/A
3 - A27 WBe									
4 - A27 Overbridge	0.18	0.00	0.00	0.18	0.18			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 - A27 WBx	1.38	0.03	0.34	3.14	7.05			N/A	N/A
2 - A27 Link Road	2.31	0.03	0.31	2.93	11.11			N/A	N/A
3 - A27 WBe									
4 - A27 Overbridge	0.15	0.00	0.00	0.15	0.15			N/A	N/A



Junctions 9
ARCADY 9 - Roundabout Module
Version: 9.5.1.7462 © Copyright TRL Limited, 2019
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Filename: Junction 5 Braypool Lane.j9
Path: C:\Users\WRI87273\Mott MacDonald\B RMF Brighton DO - T Transport\Junction models\Sensitivity Test (+90mins) \Junction 5 Braypool Lane - A27 entry slip east - unnamed road - A27 exit slip east\05. Model Updates 2023\01. Model
Report generation date: 20/06/2023 11:14:05

- »(Default Analysis Set) - 2021 Baseline, AM
- »(Default Analysis Set) - 2021 Baseline, AM
- »(Default Analysis Set) - 2026 Future Baseline, AM
- »(Default Analysis Set) - 2026 Future Baseline, PM
- »(Default Analysis Set) - 2026 Do Something, AM
- »(Default Analysis Set) - 2026 Do Something, PM
- »(Default Analysis Set) - 2032 Future Baseline, AM
- »(Default Analysis Set) - 2032 Future Baseline, PM
- »(Default Analysis Set) - 2032 Do Something, AM
- »(Default Analysis Set) - 2032 Do Something, PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
A1 - 2021 Baseline										
2 - A27 Overbridge	D1	3.7	11.93	0.78	B	D2	3.7	11.93	0.78	B
3 - A27 eastbound offslip		1.8	52.23	0.65	F		1.8	52.23	0.65	F
4 - Braypool Lane		0.1	8.40	0.07	A		0.1	8.40	0.07	A
A1 - 2026 Future Baseline										
2 - A27 Overbridge	D3	4.5	14.17	0.81	B	D4	3.0	10.09	0.75	B
3 - A27 eastbound offslip		2.2	62.27	0.70	F		10.4	191.41	1.01	F
4 - Braypool Lane		0.1	9.08	0.08	A		0.1	8.45	0.06	A
A1 - 2026 Do Something										
2 - A27 Overbridge	D5	4.5	14.17	0.81	B	D6	3.0	10.09	0.75	B
3 - A27 eastbound offslip		2.2	63.34	0.71	F		10.4	191.40	1.01	F
4 - Braypool Lane		0.1	9.09	0.08	A		0.1	8.45	0.06	A
A1 - 2032 Future Baseline										
2 - A27 Overbridge	D7	5.9	17.79	0.85	C	D8	3.7	11.81	0.79	B
3 - A27 eastbound offslip		2.8	78.74	0.77	F		16.9	285.25	1.11	F
4 - Braypool Lane		0.1	9.96	0.09	A		0.1	9.08	0.07	A
A1 - 2032 Do Something										
2 - A27 Overbridge	D9	5.9	17.79	0.85	C	D10	3.7	11.81	0.79	B
3 - A27 eastbound offslip		2.9	80.34	0.77	F		16.9	285.25	1.11	F
4 - Braypool Lane		0.1	9.97	0.09	A		0.1	9.08	0.07	A

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

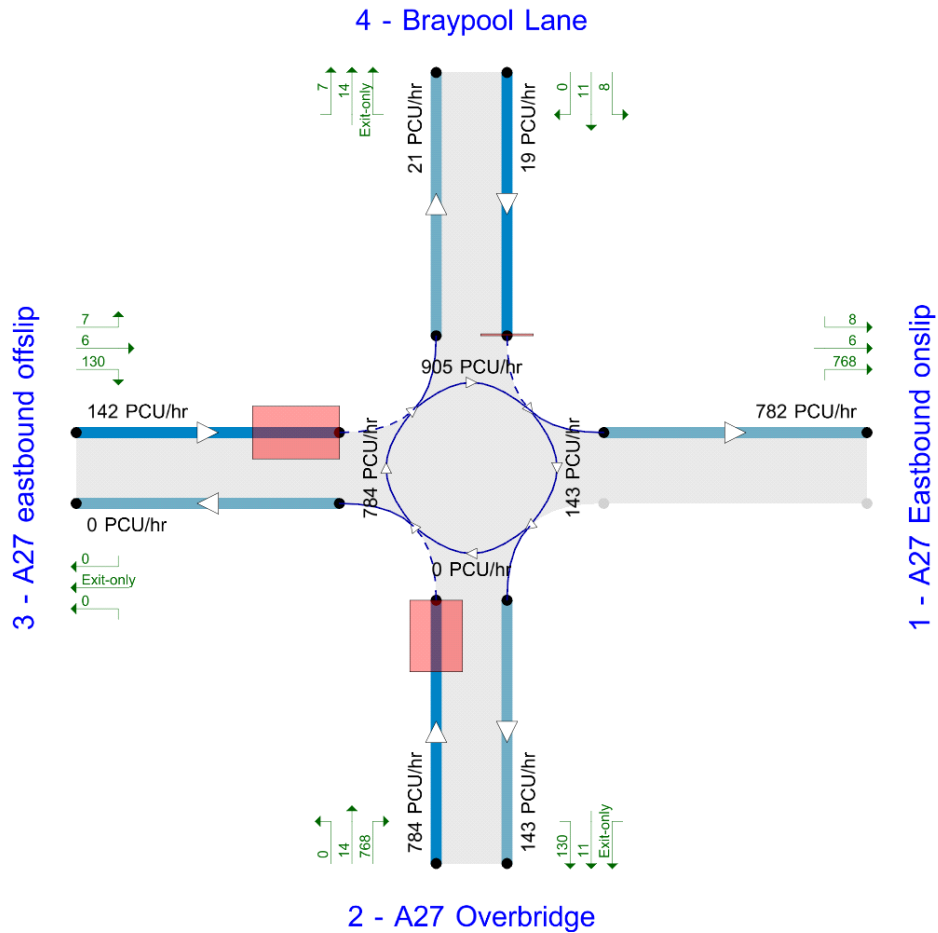
File summary

File Description

Title	(untitled)
Location	
Site number	
Date	29/04/2022
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	
Description	

Units

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



End Queues
Flows show modelled flow through junction (PCU/hr).
Time Segment: 16:45-17:00

The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				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)	Run automatically
D1	2021 Baseline	AM	ONE HOUR	06:45	08:15	15	✓
D2	2021 Baseline	PM	ONE HOUR	16:45	18:15	15	✓
D3	2026 Future Baseline	AM	ONE HOUR	06:45	08:15	15	✓
D4	2026 Future Baseline	PM	ONE HOUR	16:45	18:15	15	✓
D5	2026 Do Something	AM	ONE HOUR	06:45	08:15	15	✓
D6	2026 Do Something	PM	ONE HOUR	16:45	18:15	15	✓
D7	2032 Future Baseline	AM	ONE HOUR	06:45	08:15	15	✓
D8	2032 Future Baseline	PM	ONE HOUR	16:45	18:15	15	✓
D9	2032 Do Something	AM	ONE HOUR	06:45	08:15	15	✓
D10	2032 Do Something	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

ID	Name	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	(Default Analysis Set)	✓	100.000	100.000

(Default Analysis Set) - 2021 Baseline, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	(untitled)	Standard Roundabout		1, 2, 3, 4	15.83	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	A27 Eastbound onslip	
2	A27 Overbridge	
3	A27 eastbound offslip	
4	Braypool Lane	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - A27 Eastbound onslip							✓
2 - A27 Overbridge	3.64	4.19	0.6	10.4	40.0	15.8	
3 - A27 eastbound offslip	5.50	6.10	4.3	140.0	40.0	27.0	
4 - Braypool Lane	2.50	4.30	8.2	70.0	40.0	20.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final slope	Final intercept (PCU/hr)
1 - A27 Eastbound onslip					
2 - A27 Overbridge	✓	0.600	1220	0.600	1220
3 - A27 eastbound offslip				0.695	1886
4 - Braypool Lane				0.554	1153

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

Arm Capacity Adjustments

Arm	Type	Reason	Percentage capacity adjustment (%)
2 - A27 Overbridge	Percentage		120.00
3 - A27 eastbound offslip	Percentage		18.00

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2021 Baseline	AM	ONE HOUR	06:45	08:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A27 Eastbound onslip					
2 - A27 Overbridge		ONE HOUR	✓	1032	100.000
3 - A27 eastbound offslip		ONE HOUR	✓	117	100.000
4 - Braypool Lane		ONE HOUR	✓	32	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - A27 Eastbound onslip	2 - A27 Overbridge	3 - A27 eastbound offslip	4 - Braypool Lane
From	1 - A27 Eastbound onslip	Exit-only	Exit-only	Exit-only	Exit-only
	2 - A27 Overbridge	998	0	0	34
	3 - A27 eastbound offslip	4	106	0	7
	4 - Braypool Lane	11	21	0	0

Proportions

		To	
		1 - A27 Eastbound onslip	2 - A27 Overbridge
From	1 - A27 Eastbound onslip	0.25	0.25
	2 - A27 Overbridge	0.97	0.00
	3 - A27 eastbound offslip	0.03	0.91
	4 - Braypool Lane	0.34	0.66

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A27 Eastbound onslip	2 - A27 Overbridge	3 - A27 eastbound offslip	4 - Braypool Lane
From	1 - A27 Eastbound onslip	Exit-only	Exit-only	Exit-only	Exit-only
	2 - A27 Overbridge	9	0	0	6
	3 - A27 eastbound offslip	0	2	0	0
	4 - Braypool Lane	0	5	0	0

Average PCU Per Veh

		To	
		1 - A27 Eastbound onslip	2 - A27 Overbridge
From	1 - A27 Eastbound onslip	Exit-only	Exit-only
	2 - A27 Overbridge	1.092	1.000
	3 - A27 eastbound offslip	1.000	1.019
	4 - Braypool Lane	1.000	1.050

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
06:45-07:00	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	777	777
	3 - A27 eastbound offslip	88	88
	4 - Braypool Lane	24	24
07:00-07:15	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	928	928
	3 - A27 eastbound offslip	105	105
	4 - Braypool Lane	29	29
07:15-07:30	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	1136	1136
	3 - A27 eastbound offslip	129	129
	4 - Braypool Lane	35	35
07:30-07:45	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	1136	1136
	3 - A27 eastbound offslip	129	129
	4 - Braypool Lane	35	35
07:45-08:00	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	928	928
	3 - A27 eastbound offslip	105	105
	4 - Braypool Lane	29	29
08:00-08:15	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	777	777
	3 - A27 eastbound offslip	88	88
	4 - Braypool Lane	24	24

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A27 Eastbound onslip						
2 - A27 Overbridge	0.78	11.93	3.7	B	947	1420
3 - A27 eastbound offslip	0.65	52.23	1.8	F	107	161
4 - Braypool Lane	0.07	8.40	0.1	A	29	44

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			93				758				
2 - A27 Overbridge	777	194	0	1464	0.531	772	93	0.0	1.2	5.637	A
3 - A27 eastbound offslip	88	22	772	243	0.363	86	0	0.0	0.6	23.024	C
4 - Braypool Lane	24	6	827	695	0.035	24	31	0.0	0.0	5.538	A

07:00 - 07:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			113				908				
2 - A27 Overbridge	928	232	0	1464	0.634	925	113	1.2	1.8	7.253	A
3 - A27 eastbound offslip	105	26	925	224	0.470	104	0	0.6	0.9	30.287	D
4 - Braypool Lane	29	7	993	603	0.048	29	37	0.0	0.1	6.467	A

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			137				1108				
2 - A27 Overbridge	1136	284	0	1464	0.776	1129	137	1.8	3.6	11.495	B
3 - A27 eastbound offslip	129	32	1129	198	0.650	126	0	0.9	1.7	48.356	E
4 - Braypool Lane	35	9	1210	483	0.073	35	45	0.1	0.1	8.299	A

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			139				1115				
2 - A27 Overbridge	1136	284	0	1464	0.776	1136	139	3.6	3.7	11.929	B
3 - A27 eastbound offslip	129	32	1136	197	0.653	128	0	1.7	1.8	52.232	F
4 - Braypool Lane	35	9	1219	478	0.074	35	45	0.1	0.1	8.395	A

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			117				918				
2 - A27 Overbridge	928	232	0	1464	0.634	935	117	3.7	1.9	7.517	A
3 - A27 eastbound offslip	105	26	935	223	0.473	108	0	1.8	1.0	32.888	D
4 - Braypool Lane	29	7	1006	596	0.048	29	37	0.1	0.1	6.556	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			97				765				
2 - A27 Overbridge	777	194	0	1464	0.531	780	97	1.9	1.2	5.763	A
3 - A27 eastbound offslip	88	22	780	242	0.364	90	0	1.0	0.6	24.250	C
4 - Braypool Lane	24	6	838	689	0.035	24	31	0.1	0.0	5.591	A

(Default Analysis Set) - 2021 Baseline, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	(untitled)	Standard Roundabout		1, 2, 3, 4	15.83	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2021 Baseline	AM	ONE HOUR	06:45	08:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A27 Eastbound onslip					
2 - A27 Overbridge		ONE HOUR	✓	955	100.000
3 - A27 eastbound offslip		ONE HOUR	✓	178	100.000
4 - Braypool Lane		ONE HOUR	✓	24	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
	1 - A27 Eastbound onslip	2 - A27 Overbridge	3 - A27 eastbound offslip	4 - Braypool Lane
1 - A27 Eastbound onslip	Exit-only	Exit-only	Exit-only	Exit-only
2 - A27 Overbridge	935	3	0	17
3 - A27 eastbound offslip	7	163	0	8
4 - Braypool Lane	10	14	0	0

Proportions

From	To	
	1 - A27 Eastbound onslip	2 - A27 Overbridge
1 - A27 Eastbound onslip	0.25	0.25
2 - A27 Overbridge	0.97	0.00
3 - A27 eastbound offslip	0.03	0.91
4 - Braypool Lane	0.34	0.66

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	1 - A27 Eastbound onslip	2 - A27 Overbridge	3 - A27 eastbound offslip	4 - Braypool Lane
1 - A27 Eastbound onslip	Exit-only	Exit-only	Exit-only	Exit-only
2 - A27 Overbridge	2	0	0	0
3 - A27 eastbound offslip	0	1	0	0
4 - Braypool Lane	0	0	0	0

Average PCU Per Veh

From	To	
	1 - A27 Eastbound onslip	2 - A27 Overbridge
1 - A27 Eastbound onslip	Exit-only	Exit-only
2 - A27 Overbridge	1.023	1.000
3 - A27 eastbound offslip	1.000	1.006
4 - Braypool Lane	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
16:45-17:00	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	719	719
	3 - A27 eastbound offslip	134	134
	4 - Braypool Lane	18	18
17:00-17:15	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	859	859
	3 - A27 eastbound offslip	160	160
	4 - Braypool Lane	22	22
17:15-17:30	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	1051	1051
	3 - A27 eastbound offslip	196	196
	4 - Braypool Lane	26	26
17:30-17:45	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	1051	1051
	3 - A27 eastbound offslip	196	196
	4 - Braypool Lane	26	26
17:45-18:00	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	859	859
	3 - A27 eastbound offslip	160	160
	4 - Braypool Lane	22	22
18:00-18:15	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	719	719
	3 - A27 eastbound offslip	134	134
	4 - Braypool Lane	18	18

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A27 Eastbound onslip						
2 - A27 Overbridge	0.78	11.93	3.7	B	947	1420
3 - A27 eastbound offslip	0.65	52.23	1.8	F	107	161
4 - Braypool Lane	0.07	8.40	0.1	A	29	44

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			93				758				
2 - A27 Overbridge	777	194	0	1464	0.531	772	93	0.0	1.2	5.637	A
3 - A27 eastbound offslip	88	22	772	243	0.363	86	0	0.0	0.6	23.024	C
4 - Braypool Lane	24	6	827	695	0.035	24	31	0.0	0.0	5.538	A

07:00 - 07:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			113				908				
2 - A27 Overbridge	928	232	0	1464	0.634	925	113	1.2	1.8	7.253	A
3 - A27 eastbound offslip	105	26	925	224	0.470	104	0	0.6	0.9	30.287	D
4 - Braypool Lane	29	7	993	603	0.048	29	37	0.0	0.1	6.467	A

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			137				1108				
2 - A27 Overbridge	1136	284	0	1464	0.776	1129	137	1.8	3.6	11.495	B
3 - A27 eastbound offslip	129	32	1129	198	0.650	126	0	0.9	1.7	48.356	E
4 - Braypool Lane	35	9	1210	483	0.073	35	45	0.1	0.1	8.299	A

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			139				1115				
2 - A27 Overbridge	1136	284	0	1464	0.776	1136	139	3.6	3.7	11.929	B
3 - A27 eastbound offslip	129	32	1136	197	0.653	128	0	1.7	1.8	52.232	F
4 - Braypool Lane	35	9	1219	478	0.074	35	45	0.1	0.1	8.395	A

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			117				918				
2 - A27 Overbridge	928	232	0	1464	0.634	935	117	3.7	1.9	7.517	A
3 - A27 eastbound offslip	105	26	935	223	0.473	108	0	1.8	1.0	32.888	D
4 - Braypool Lane	29	7	1006	596	0.048	29	37	0.1	0.1	6.556	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			97				765				
2 - A27 Overbridge	777	194	0	1464	0.531	780	97	1.9	1.2	5.763	A
3 - A27 eastbound offslip	88	22	780	242	0.364	90	0	1.0	0.6	24.250	C
4 - Braypool Lane	24	6	838	689	0.035	24	31	0.1	0.0	5.591	A

(Default Analysis Set) - 2026 Future Baseline, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	(untitled)	Standard Roundabout		1, 2, 3, 4	18.78	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2026 Future Baseline	AM	ONE HOUR	06:45	08:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A27 Eastbound onslip					
2 - A27 Overbridge		ONE HOUR	✓	1080	100.000
3 - A27 eastbound offslip		ONE HOUR	✓	122	100.000
4 - Braypool Lane		ONE HOUR	✓	34	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
	1 - A27 Eastbound onslip	2 - A27 Overbridge	3 - A27 eastbound offslip	4 - Braypool Lane
1 - A27 Eastbound onslip	Exit-only	Exit-only	Exit-only	Exit-only
2 - A27 Overbridge	1044	0	0	36
3 - A27 eastbound offslip	4	111	0	7
4 - Braypool Lane	12	22	0	0

Proportions

From	To	
	1 - A27 Eastbound onslip	2 - A27 Overbridge
1 - A27 Eastbound onslip	0.25	0.25
2 - A27 Overbridge	0.97	0.00
3 - A27 eastbound offslip	0.03	0.91
4 - Braypool Lane	0.35	0.65

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	1 - A27 Eastbound onslip	2 - A27 Overbridge	3 - A27 eastbound offslip	4 - Braypool Lane
1 - A27 Eastbound onslip	Exit-only	Exit-only	Exit-only	Exit-only
2 - A27 Overbridge	9	0	0	6
3 - A27 eastbound offslip	0	2	0	0
4 - Braypool Lane	0	5	0	0

Average PCU Per Veh

From	To	
	1 - A27 Eastbound onslip	2 - A27 Overbridge
1 - A27 Eastbound onslip	Exit-only	Exit-only
2 - A27 Overbridge	1.092	1.000
3 - A27 eastbound offslip	1.000	1.019
4 - Braypool Lane	1.000	1.051

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
06:45-07:00	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	813	813
	3 - A27 eastbound offslip	92	92
	4 - Braypool Lane	26	26
07:00-07:15	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	971	971
	3 - A27 eastbound offslip	110	110
	4 - Braypool Lane	31	31
07:15-07:30	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	1189	1189
	3 - A27 eastbound offslip	134	134
	4 - Braypool Lane	37	37
07:30-07:45	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	1189	1189
	3 - A27 eastbound offslip	134	134
	4 - Braypool Lane	37	37
07:45-08:00	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	971	971
	3 - A27 eastbound offslip	110	110
	4 - Braypool Lane	31	31
08:00-08:15	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	813	813
	3 - A27 eastbound offslip	92	92
	4 - Braypool Lane	26	26

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A27 Eastbound onslip						
2 - A27 Overbridge	0.81	14.17	4.5	B	991	1487
3 - A27 eastbound offslip	0.70	62.27	2.2	F	112	168
4 - Braypool Lane	0.08	9.08	0.1	A	31	47

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			98				793				
2 - A27 Overbridge	813	203	0	1464	0.555	808	98	0.0	1.3	5.938	A
3 - A27 eastbound offslip	92	23	808	238	0.385	89	0	0.0	0.6	24.211	C
4 - Braypool Lane	26	6	865	674	0.038	25	32	0.0	0.0	5.731	A

07:00 - 07:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			118				950				
2 - A27 Overbridge	971	243	0	1464	0.663	968	118	1.3	2.1	7.867	A
3 - A27 eastbound offslip	110	27	968	218	0.502	108	0	0.6	1.0	32.809	D
4 - Braypool Lane	31	8	1038	578	0.053	30	38	0.0	0.1	6.786	A

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			143				1158				
2 - A27 Overbridge	1189	297	0	1464	0.812	1180	143	2.1	4.4	13.403	B
3 - A27 eastbound offslip	134	34	1180	192	0.700	130	0	1.0	2.0	55.875	F
4 - Braypool Lane	37	9	1263	453	0.083	37	47	0.1	0.1	8.932	A

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			146				1166				
2 - A27 Overbridge	1189	297	0	1464	0.812	1188	146	4.4	4.5	14.168	B
3 - A27 eastbound offslip	134	34	1188	191	0.704	134	0	2.0	2.2	62.272	F
4 - Braypool Lane	37	9	1275	447	0.084	37	47	0.1	0.1	9.076	A

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			124				962				
2 - A27 Overbridge	971	243	0	1464	0.663	980	124	4.5	2.2	8.267	A
3 - A27 eastbound offslip	110	27	980	217	0.506	114	0	2.2	1.1	36.840	E
4 - Braypool Lane	31	8	1055	569	0.054	31	39	0.1	0.1	6.910	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			102				801				
2 - A27 Overbridge	813	203	0	1464	0.555	816	102	2.2	1.4	6.093	A
3 - A27 eastbound offslip	92	23	816	237	0.387	94	0	1.1	0.7	25.783	D
4 - Braypool Lane	26	6	877	667	0.038	26	33	0.1	0.0	5.798	A

(Default Analysis Set) - 2026 Future Baseline, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	(untitled)	Standard Roundabout		1, 2, 3, 4	37.80	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2026 Future Baseline	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A27 Eastbound onslip					
2 - A27 Overbridge		ONE HOUR	✓	999	100.000
3 - A27 eastbound offslip		ONE HOUR	✓	185	100.000
4 - Braypool Lane		ONE HOUR	✓	25	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
	1 - A27 Eastbound onslip	2 - A27 Overbridge	3 - A27 eastbound offslip	4 - Braypool Lane
1 - A27 Eastbound onslip	Exit-only	Exit-only	Exit-only	Exit-only
2 - A27 Overbridge	978	3	0	18
3 - A27 eastbound offslip	7	170	0	8
4 - Braypool Lane	10	15	0	0

Proportions

From	To	
	1 - A27 Eastbound onslip	2 - A27 Overbridge
1 - A27 Eastbound onslip	0.25	0.25
2 - A27 Overbridge	0.98	0.00
3 - A27 eastbound offslip	0.04	0.92
4 - Braypool Lane	0.40	0.60

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	1 - A27 Eastbound onslip	2 - A27 Overbridge	3 - A27 eastbound offslip	4 - Braypool Lane
1 - A27 Eastbound onslip	Exit-only	Exit-only	Exit-only	Exit-only
2 - A27 Overbridge	2	0	0	0
3 - A27 eastbound offslip	0	1	0	0
4 - Braypool Lane	0	0	0	0

Average PCU Per Veh

From	To	
	1 - A27 Eastbound onslip	2 - A27 Overbridge
1 - A27 Eastbound onslip	Exit-only	Exit-only
2 - A27 Overbridge	1.023	1.000
3 - A27 eastbound offslip	1.000	1.006
4 - Braypool Lane	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
16:45-17:00	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	752	752
	3 - A27 eastbound offslip	139	139
	4 - Braypool Lane	19	19
17:00-17:15	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	898	898
	3 - A27 eastbound offslip	166	166
	4 - Braypool Lane	22	22
17:15-17:30	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	1100	1100
	3 - A27 eastbound offslip	204	204
	4 - Braypool Lane	28	28
17:30-17:45	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	1100	1100
	3 - A27 eastbound offslip	204	204
	4 - Braypool Lane	28	28
17:45-18:00	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	898	898
	3 - A27 eastbound offslip	166	166
	4 - Braypool Lane	22	22
18:00-18:15	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	752	752
	3 - A27 eastbound offslip	139	139
	4 - Braypool Lane	19	19

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A27 Eastbound onslip						
2 - A27 Overbridge	0.75	10.09	3.0	B	917	1375
3 - A27 eastbound offslip	1.01	191.41	10.4	F	170	255
4 - Braypool Lane	0.06	8.45	0.1	A	23	34

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			137				745				
2 - A27 Overbridge	752	188	0	1464	0.514	748	137	0.0	1.1	5.108	A
3 - A27 eastbound offslip	139	35	748	246	0.566	134	0	0.0	1.2	31.288	D
4 - Braypool Lane	19	5	863	675	0.028	19	19	0.0	0.0	5.485	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			165				892				
2 - A27 Overbridge	898	225	0	1464	0.613	896	165	1.1	1.6	6.455	A
3 - A27 eastbound offslip	166	42	896	227	0.731	162	0	1.2	2.3	51.996	F
4 - Braypool Lane	22	6	1035	580	0.039	22	23	0.0	0.0	6.457	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			188				1089				
2 - A27 Overbridge	1100	275	0	1464	0.751	1094	188	1.6	3.0	9.813	A
3 - A27 eastbound offslip	204	51	1094	203	1.005	184	0	2.3	7.3	125.311	F
4 - Braypool Lane	28	7	1250	461	0.060	27	28	0.0	0.1	8.310	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			196				1095				
2 - A27 Overbridge	1100	275	0	1464	0.751	1100	196	3.0	3.0	10.086	B
3 - A27 eastbound offslip	204	51	1100	202	1.009	191	0	7.3	10.4	191.405	F
4 - Braypool Lane	28	7	1263	454	0.061	28	28	0.1	0.1	8.450	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			194				901				
2 - A27 Overbridge	898	225	0	1464	0.613	904	194	3.0	1.7	6.632	A
3 - A27 eastbound offslip	166	42	904	226	0.734	194	0	10.4	3.6	121.006	F
4 - Braypool Lane	22	6	1073	559	0.040	23	25	0.1	0.0	6.711	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			149				752				
2 - A27 Overbridge	752	188	0	1464	0.514	754	149	1.7	1.1	5.204	A
3 - A27 eastbound offslip	139	35	754	245	0.568	148	0	3.6	1.4	39.771	E
4 - Braypool Lane	19	5	882	664	0.028	19	20	0.0	0.0	5.578	A

(Default Analysis Set) - 2026 Do Something, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	(untitled)	Standard Roundabout		1, 2, 3, 4	18.92	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2026 Do Something	AM	ONE HOUR	06:45	08:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A27 Eastbound onslip					
2 - A27 Overbridge		ONE HOUR	✓	1080	100.000
3 - A27 eastbound offslip		ONE HOUR	✓	123	100.000
4 - Braypool Lane		ONE HOUR	✓	34	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
	1 - A27 Eastbound onslip	2 - A27 Overbridge	3 - A27 eastbound offslip	4 - Braypool Lane
1 - A27 Eastbound onslip	Exit-only	Exit-only	Exit-only	Exit-only
2 - A27 Overbridge	1044	0	0	36
3 - A27 eastbound offslip	4	112	0	7
4 - Braypool Lane	12	22	0	0

Proportions

From	To	
	1 - A27 Eastbound onslip	2 - A27 Overbridge
1 - A27 Eastbound onslip	0.25	0.25
2 - A27 Overbridge	0.97	0.00
3 - A27 eastbound offslip	0.03	0.91
4 - Braypool Lane	0.35	0.65

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	1 - A27 Eastbound onslip	2 - A27 Overbridge	3 - A27 eastbound offslip	4 - Braypool Lane
1 - A27 Eastbound onslip	Exit-only	Exit-only	Exit-only	Exit-only
2 - A27 Overbridge	9	0	0	6
3 - A27 eastbound offslip	0	2	0	0
4 - Braypool Lane	0	5	0	0

Average PCU Per Veh

From	To	
	1 - A27 Eastbound onslip	2 - A27 Overbridge
1 - A27 Eastbound onslip	Exit-only	Exit-only
2 - A27 Overbridge	1.092	1.000
3 - A27 eastbound offslip	1.000	1.019
4 - Braypool Lane	1.000	1.051

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
06:45-07:00	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	813	813
	3 - A27 eastbound offslip	93	93
	4 - Braypool Lane	26	26
07:00-07:15	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	971	971
	3 - A27 eastbound offslip	111	111
	4 - Braypool Lane	31	31
07:15-07:30	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	1189	1189
	3 - A27 eastbound offslip	135	135
	4 - Braypool Lane	37	37
07:30-07:45	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	1189	1189
	3 - A27 eastbound offslip	135	135
	4 - Braypool Lane	37	37
07:45-08:00	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	971	971
	3 - A27 eastbound offslip	111	111
	4 - Braypool Lane	31	31
08:00-08:15	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	813	813
	3 - A27 eastbound offslip	93	93
	4 - Braypool Lane	26	26

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A27 Eastbound onslip						
2 - A27 Overbridge	0.81	14.17	4.5	B	991	1487
3 - A27 eastbound offslip	0.71	63.34	2.2	F	113	169
4 - Braypool Lane	0.08	9.09	0.1	A	31	47

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			99				793				
2 - A27 Overbridge	813	203	0	1464	0.555	808	99	0.0	1.3	5.938	A
3 - A27 eastbound offslip	93	23	808	238	0.388	90	0	0.0	0.6	24.321	C
4 - Braypool Lane	26	6	866	673	0.038	25	32	0.0	0.0	5.735	A

07:00 - 07:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			119				950				
2 - A27 Overbridge	971	243	0	1464	0.663	968	119	1.3	2.1	7.867	A
3 - A27 eastbound offslip	111	28	968	218	0.506	109	0	0.6	1.0	33.056	D
4 - Braypool Lane	31	8	1039	578	0.053	30	38	0.0	0.1	6.792	A

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			144				1158				
2 - A27 Overbridge	1189	297	0	1464	0.812	1180	144	2.1	4.4	13.403	B
3 - A27 eastbound offslip	135	34	1180	192	0.706	131	0	1.0	2.0	56.639	F
4 - Braypool Lane	37	9	1264	453	0.083	37	47	0.1	0.1	8.944	A

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			147				1166				
2 - A27 Overbridge	1189	297	0	1464	0.812	1188	147	4.4	4.5	14.168	B
3 - A27 eastbound offslip	135	34	1188	191	0.710	135	0	2.0	2.2	63.342	F
4 - Braypool Lane	37	9	1276	446	0.084	37	47	0.1	0.1	9.089	A

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			125				962				
2 - A27 Overbridge	971	243	0	1464	0.663	980	125	4.5	2.2	8.267	A
3 - A27 eastbound offslip	111	28	980	217	0.510	115	0	2.2	1.1	37.258	E
4 - Braypool Lane	31	8	1056	568	0.054	31	39	0.1	0.1	6.917	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			103				801				
2 - A27 Overbridge	813	203	0	1464	0.555	816	103	2.2	1.4	6.093	A
3 - A27 eastbound offslip	93	23	816	237	0.390	94	0	1.1	0.7	25.929	D
4 - Braypool Lane	26	6	878	667	0.038	26	33	0.1	0.0	5.800	A

(Default Analysis Set) - 2026 Do Something, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	(untitled)	Standard Roundabout		1, 2, 3, 4	37.80	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2026 Do Something	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A27 Eastbound onslip					
2 - A27 Overbridge		ONE HOUR	✓	999	100.000
3 - A27 eastbound offslip		ONE HOUR	✓	185	100.000
4 - Braypool Lane		ONE HOUR	✓	25	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
	1 - A27 Eastbound onslip	2 - A27 Overbridge	3 - A27 eastbound offslip	4 - Braypool Lane
1 - A27 Eastbound onslip	Exit-only	Exit-only	Exit-only	Exit-only
2 - A27 Overbridge	978	3	0	18
3 - A27 eastbound offslip	7	170	0	8
4 - Braypool Lane	10	15	0	0

Proportions

From	To	
	1 - A27 Eastbound onslip	2 - A27 Overbridge
1 - A27 Eastbound onslip	0.25	0.25
2 - A27 Overbridge	0.98	0.00
3 - A27 eastbound offslip	0.04	0.92
4 - Braypool Lane	0.40	0.60

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	1 - A27 Eastbound onslip	2 - A27 Overbridge	3 - A27 eastbound offslip	4 - Braypool Lane
1 - A27 Eastbound onslip	Exit-only	Exit-only	Exit-only	Exit-only
2 - A27 Overbridge	2	0	0	0
3 - A27 eastbound offslip	0	1	0	0
4 - Braypool Lane	0	0	0	0

Average PCU Per Veh

From	To	
	1 - A27 Eastbound onslip	2 - A27 Overbridge
1 - A27 Eastbound onslip	Exit-only	Exit-only
2 - A27 Overbridge	1.023	1.000
3 - A27 eastbound offslip	1.000	1.006
4 - Braypool Lane	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
16:45-17:00	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	752	752
	3 - A27 eastbound offslip	139	139
	4 - Braypool Lane	19	19
17:00-17:15	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	898	898
	3 - A27 eastbound offslip	166	166
	4 - Braypool Lane	22	22
17:15-17:30	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	1100	1100
	3 - A27 eastbound offslip	204	204
	4 - Braypool Lane	28	28
17:30-17:45	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	1100	1100
	3 - A27 eastbound offslip	204	204
	4 - Braypool Lane	28	28
17:45-18:00	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	898	898
	3 - A27 eastbound offslip	166	166
	4 - Braypool Lane	22	22
18:00-18:15	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	752	752
	3 - A27 eastbound offslip	139	139
	4 - Braypool Lane	19	19

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A27 Eastbound onslip						
2 - A27 Overbridge	0.75	10.09	3.0	B	917	1375
3 - A27 eastbound offslip	1.01	191.40	10.4	F	170	255
4 - Braypool Lane	0.06	8.45	0.1	A	23	34

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			137				745				
2 - A27 Overbridge	752	188	0	1464	0.514	748	137	0.0	1.1	5.108	A
3 - A27 eastbound offslip	139	35	748	246	0.566	134	0	0.0	1.2	31.287	D
4 - Braypool Lane	19	5	863	675	0.028	19	19	0.0	0.0	5.485	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			165				892				
2 - A27 Overbridge	898	225	0	1464	0.613	896	165	1.1	1.6	6.455	A
3 - A27 eastbound offslip	166	42	896	227	0.731	162	0	1.2	2.3	51.995	F
4 - Braypool Lane	22	6	1035	580	0.039	22	23	0.0	0.0	6.457	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			188				1089				
2 - A27 Overbridge	1100	275	0	1464	0.751	1094	188	1.6	3.0	9.813	A
3 - A27 eastbound offslip	204	51	1094	203	1.005	184	0	2.3	7.3	125.310	F
4 - Braypool Lane	28	7	1250	461	0.060	27	28	0.0	0.1	8.310	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			196				1095				
2 - A27 Overbridge	1100	275	0	1464	0.751	1100	196	3.0	3.0	10.085	B
3 - A27 eastbound offslip	204	51	1100	202	1.009	191	0	7.3	10.4	191.404	F
4 - Braypool Lane	28	7	1263	454	0.061	28	28	0.1	0.1	8.450	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			194				901				
2 - A27 Overbridge	898	225	0	1464	0.613	904	194	3.0	1.7	6.629	A
3 - A27 eastbound offslip	166	42	904	226	0.734	194	0	10.4	3.6	121.004	F
4 - Braypool Lane	22	6	1073	559	0.040	23	25	0.1	0.0	6.711	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			149				752				
2 - A27 Overbridge	752	188	0	1464	0.514	754	149	1.7	1.1	5.204	A
3 - A27 eastbound offslip	139	35	754	245	0.568	148	0	3.6	1.4	39.771	E
4 - Braypool Lane	19	5	882	664	0.028	19	20	0.0	0.0	5.576	A

(Default Analysis Set) - 2032 Future Baseline, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	(untitled)	Standard Roundabout		1, 2, 3, 4	23.60	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2032 Future Baseline	AM	ONE HOUR	06:45	08:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A27 Eastbound onslip					
2 - A27 Overbridge		ONE HOUR	✓	1133	100.000
3 - A27 eastbound offslip		ONE HOUR	✓	128	100.000
4 - Braypool Lane		ONE HOUR	✓	35	100.000

Origin-Destination Data

Demand (PCU/hr)

From		To			
		1 - A27 Eastbound onslip	2 - A27 Overbridge	3 - A27 eastbound offslip	4 - Braypool Lane
	1 - A27 Eastbound onslip	Exit-only	Exit-only	Exit-only	Exit-only
	2 - A27 Overbridge	1096	0	0	37
	3 - A27 eastbound offslip	4	116	0	8
	4 - Braypool Lane	12	23	0	0

Proportions

From		To	
		1 - A27 Eastbound onslip	2 - A27 Overbridge
	1 - A27 Eastbound onslip	0.25	0.25
	2 - A27 Overbridge	0.97	0.00
	3 - A27 eastbound offslip	0.03	0.91
	4 - Braypool Lane	0.34	0.66

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	1 - A27 Eastbound onslip	2 - A27 Overbridge	3 - A27 eastbound offslip	4 - Braypool Lane
1 - A27 Eastbound onslip	Exit-only	Exit-only	Exit-only	Exit-only
2 - A27 Overbridge	9	0	0	6
3 - A27 eastbound offslip	0	2	0	0
4 - Braypool Lane	0	5	0	0

Average PCU Per Veh

From	To	
	1 - A27 Eastbound onslip	2 - A27 Overbridge
1 - A27 Eastbound onslip	Exit-only	Exit-only
2 - A27 Overbridge	1.092	1.000
3 - A27 eastbound offslip	1.000	1.019
4 - Braypool Lane	1.000	1.055

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
06:45-07:00	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	853	853
	3 - A27 eastbound offslip	96	96
	4 - Braypool Lane	26	26
07:00-07:15	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	1019	1019
	3 - A27 eastbound offslip	115	115
	4 - Braypool Lane	31	31
07:15-07:30	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	1247	1247
	3 - A27 eastbound offslip	141	141
	4 - Braypool Lane	39	39
07:30-07:45	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	1247	1247
	3 - A27 eastbound offslip	141	141
	4 - Braypool Lane	39	39
07:45-08:00	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	1019	1019
	3 - A27 eastbound offslip	115	115
	4 - Braypool Lane	31	31
08:00-08:15	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	853	853
	3 - A27 eastbound offslip	96	96
	4 - Braypool Lane	26	26

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A27 Eastbound onslip						
2 - A27 Overbridge	0.85	17.79	5.9	C	1040	1559
3 - A27 eastbound offslip	0.77	78.74	2.8	F	117	176
4 - Braypool Lane	0.09	9.96	0.1	A	32	48

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			102				831				
2 - A27 Overbridge	853	213	0	1464	0.583	847	102	0.0	1.5	6.306	A
3 - A27 eastbound offslip	96	24	847	234	0.413	94	0	0.0	0.7	25.725	D
4 - Braypool Lane	26	7	907	651	0.041	26	34	0.0	0.0	5.968	A

07:00 - 07:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			123				996				
2 - A27 Overbridge	1019	255	0	1464	0.696	1015	123	1.5	2.4	8.671	A
3 - A27 eastbound offslip	115	29	1015	213	0.541	113	0	0.7	1.1	36.260	E
4 - Braypool Lane	31	8	1088	550	0.057	31	40	0.0	0.1	7.181	A

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			148				1212				
2 - A27 Overbridge	1247	312	0	1464	0.852	1235	148	2.4	5.6	16.270	C
3 - A27 eastbound offslip	141	35	1235	185	0.762	135	0	1.1	2.5	67.029	F
4 - Braypool Lane	39	10	1321	421	0.091	38	49	0.1	0.1	9.730	A

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			152				1223				
2 - A27 Overbridge	1247	312	0	1464	0.852	1246	152	5.6	5.9	17.790	C
3 - A27 eastbound offslip	141	35	1246	184	0.768	140	0	2.5	2.8	78.743	F
4 - Braypool Lane	39	10	1336	413	0.093	39	49	0.1	0.1	9.957	A

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			131				1013				
2 - A27 Overbridge	1019	255	0	1464	0.696	1032	131	5.9	2.6	9.354	A
3 - A27 eastbound offslip	115	29	1032	210	0.547	121	0	2.8	1.3	43.253	E
4 - Braypool Lane	31	8	1112	537	0.059	32	41	0.1	0.1	7.375	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			107				841				
2 - A27 Overbridge	853	213	0	1464	0.583	857	107	2.6	1.5	6.515	A
3 - A27 eastbound offslip	96	24	857	232	0.415	99	0	1.3	0.8	27.855	D
4 - Braypool Lane	26	7	922	643	0.041	26	34	0.1	0.0	6.052	A

(Default Analysis Set) - 2032 Future Baseline, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	(untitled)	Standard Roundabout		1, 2, 3, 4	53.96	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2032 Future Baseline	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A27 Eastbound onslip					
2 - A27 Overbridge		ONE HOUR	✓	1048	100.000
3 - A27 eastbound offslip		ONE HOUR	✓	196	100.000
4 - Braypool Lane		ONE HOUR	✓	26	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
	1 - A27 Eastbound onslip	2 - A27 Overbridge	3 - A27 eastbound offslip	4 - Braypool Lane
1 - A27 Eastbound onslip	Exit-only	Exit-only	Exit-only	Exit-only
2 - A27 Overbridge	1026	3	0	19
3 - A27 eastbound offslip	8	179	0	9
4 - Braypool Lane	11	15	0	0

Proportions

From	To	
	1 - A27 Eastbound onslip	2 - A27 Overbridge
1 - A27 Eastbound onslip	0.25	0.25
2 - A27 Overbridge	0.98	0.00
3 - A27 eastbound offslip	0.04	0.91
4 - Braypool Lane	0.42	0.58

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	1 - A27 Eastbound onslip	2 - A27 Overbridge	3 - A27 eastbound offslip	4 - Braypool Lane
1 - A27 Eastbound onslip	Exit-only	Exit-only	Exit-only	Exit-only
2 - A27 Overbridge	2	0	0	0
3 - A27 eastbound offslip	0	1	0	0
4 - Braypool Lane	0	0	0	0

Average PCU Per Veh

From	To	
	1 - A27 Eastbound onslip	2 - A27 Overbridge
1 - A27 Eastbound onslip	Exit-only	Exit-only
2 - A27 Overbridge	1.023	1.000
3 - A27 eastbound offslip	1.000	1.006
4 - Braypool Lane	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
16:45-17:00	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	789	789
	3 - A27 eastbound offslip	148	148
	4 - Braypool Lane	20	20
17:00-17:15	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	942	942
	3 - A27 eastbound offslip	176	176
	4 - Braypool Lane	23	23
17:15-17:30	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	1154	1154
	3 - A27 eastbound offslip	216	216
	4 - Braypool Lane	29	29
17:30-17:45	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	1154	1154
	3 - A27 eastbound offslip	216	216
	4 - Braypool Lane	29	29
17:45-18:00	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	942	942
	3 - A27 eastbound offslip	176	176
	4 - Braypool Lane	23	23
18:00-18:15	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	789	789
	3 - A27 eastbound offslip	148	148
	4 - Braypool Lane	20	20

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A27 Eastbound onslip						
2 - A27 Overbridge	0.79	11.81	3.7	B	962	1442
3 - A27 eastbound offslip	1.11	285.25	16.9	F	180	270
4 - Braypool Lane	0.07	9.08	0.1	A	24	36

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			143				782				
2 - A27 Overbridge	789	197	0	1464	0.539	784	143	0.0	1.2	5.380	A
3 - A27 eastbound offslip	148	37	784	241	0.611	142	0	0.0	1.4	34.684	D
4 - Braypool Lane	20	5	905	652	0.030	19	21	0.0	0.0	5.695	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			171				937				
2 - A27 Overbridge	942	236	0	1464	0.644	940	171	1.2	1.8	6.986	A
3 - A27 eastbound offslip	176	44	940	222	0.794	170	0	1.4	3.0	63.106	F
4 - Braypool Lane	23	6	1085	552	0.042	23	25	0.0	0.0	6.806	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			189				1142				
2 - A27 Overbridge	1154	288	0	1464	0.788	1147	189	1.8	3.6	11.346	B
3 - A27 eastbound offslip	216	54	1147	196	1.101	185	0	3.0	10.7	167.824	F
4 - Braypool Lane	29	7	1302	432	0.066	29	29	0.0	0.1	8.925	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			194				1149				
2 - A27 Overbridge	1154	288	0	1464	0.788	1153	194	3.6	3.7	11.812	B
3 - A27 eastbound offslip	216	54	1153	195	1.106	191	0	10.7	16.9	285.246	F
4 - Braypool Lane	29	7	1315	425	0.067	29	30	0.1	0.1	9.084	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			207				948				
2 - A27 Overbridge	942	236	0	1464	0.644	949	207	3.7	1.9	7.248	A
3 - A27 eastbound offslip	176	44	949	221	0.798	208	0	16.9	8.9	231.908	F
4 - Braypool Lane	23	6	1131	527	0.044	23	27	0.1	0.0	7.157	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			174				791				
2 - A27 Overbridge	789	197	0	1464	0.539	792	174	1.9	1.2	5.496	A
3 - A27 eastbound offslip	148	37	792	240	0.614	176	0	8.9	1.8	70.454	F
4 - Braypool Lane	20	5	945	630	0.031	20	22	0.0	0.0	5.902	A

(Default Analysis Set) - 2032 Do Something, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	(untitled)	Standard Roundabout		1, 2, 3, 4	23.80	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2032 Do Something	AM	ONE HOUR	06:45	08:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A27 Eastbound onslip					
2 - A27 Overbridge		ONE HOUR	✓	1133	100.000
3 - A27 eastbound offslip		ONE HOUR	✓	129	100.000
4 - Braypool Lane		ONE HOUR	✓	35	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
	1 - A27 Eastbound onslip	2 - A27 Overbridge	3 - A27 eastbound offslip	4 - Braypool Lane
1 - A27 Eastbound onslip	Exit-only	Exit-only	Exit-only	Exit-only
2 - A27 Overbridge	1096	0	0	37
3 - A27 eastbound offslip	4	117	0	8
4 - Braypool Lane	12	23	0	0

Proportions

From	To	
	1 - A27 Eastbound onslip	2 - A27 Overbridge
1 - A27 Eastbound onslip	0.25	0.25
2 - A27 Overbridge	0.97	0.00
3 - A27 eastbound offslip	0.03	0.91
4 - Braypool Lane	0.34	0.66

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	1 - A27 Eastbound onslip	2 - A27 Overbridge	3 - A27 eastbound offslip	4 - Braypool Lane
1 - A27 Eastbound onslip	Exit-only	Exit-only	Exit-only	Exit-only
2 - A27 Overbridge	9	0	0	6
3 - A27 eastbound offslip	0	2	0	0
4 - Braypool Lane	0	5	0	0

Average PCU Per Veh

From	To	
	1 - A27 Eastbound onslip	2 - A27 Overbridge
1 - A27 Eastbound onslip	Exit-only	Exit-only
2 - A27 Overbridge	1.092	1.000
3 - A27 eastbound offslip	1.000	1.019
4 - Braypool Lane	1.000	1.055

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
06:45-07:00	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	853	853
	3 - A27 eastbound offslip	97	97
	4 - Braypool Lane	26	26
07:00-07:15	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	1019	1019
	3 - A27 eastbound offslip	116	116
	4 - Braypool Lane	31	31
07:15-07:30	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	1247	1247
	3 - A27 eastbound offslip	142	142
	4 - Braypool Lane	39	39
07:30-07:45	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	1247	1247
	3 - A27 eastbound offslip	142	142
	4 - Braypool Lane	39	39
07:45-08:00	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	1019	1019
	3 - A27 eastbound offslip	116	116
	4 - Braypool Lane	31	31
08:00-08:15	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	853	853
	3 - A27 eastbound offslip	97	97
	4 - Braypool Lane	26	26

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A27 Eastbound onslip						
2 - A27 Overbridge	0.85	17.79	5.9	C	1040	1559
3 - A27 eastbound offslip	0.77	80.34	2.9	F	118	178
4 - Braypool Lane	0.09	9.97	0.1	A	32	48

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			103				831				
2 - A27 Overbridge	853	213	0	1464	0.583	847	103	0.0	1.5	6.306	A
3 - A27 eastbound offslip	97	24	847	234	0.416	94	0	0.0	0.7	25.845	D
4 - Braypool Lane	26	7	908	650	0.041	26	34	0.0	0.0	5.971	A

07:00 - 07:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			124				996				
2 - A27 Overbridge	1019	255	0	1464	0.696	1015	124	1.5	2.4	8.671	A
3 - A27 eastbound offslip	116	29	1015	213	0.546	114	0	0.7	1.1	36.557	E
4 - Braypool Lane	31	8	1089	550	0.057	31	40	0.0	0.1	7.187	A

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			149				1212				
2 - A27 Overbridge	1247	312	0	1464	0.852	1235	149	2.4	5.6	16.270	C
3 - A27 eastbound offslip	142	36	1235	185	0.768	136	0	1.1	2.6	68.012	F
4 - Braypool Lane	39	10	1322	421	0.092	38	49	0.1	0.1	9.743	A

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			153				1223				
2 - A27 Overbridge	1247	312	0	1464	0.852	1246	153	5.6	5.9	17.790	C
3 - A27 eastbound offslip	142	36	1246	184	0.774	141	0	2.6	2.9	80.338	F
4 - Braypool Lane	39	10	1338	412	0.093	39	49	0.1	0.1	9.972	A

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			132				1013				
2 - A27 Overbridge	1019	255	0	1464	0.696	1032	132	5.9	2.6	9.354	A
3 - A27 eastbound offslip	116	29	1032	210	0.551	122	0	2.9	1.4	43.881	E
4 - Braypool Lane	31	8	1113	537	0.059	32	41	0.1	0.1	7.384	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			108				841				
2 - A27 Overbridge	853	213	0	1464	0.583	857	108	2.6	1.5	6.515	A
3 - A27 eastbound offslip	97	24	857	232	0.418	99	0	1.4	0.8	28.035	D
4 - Braypool Lane	26	7	922	642	0.041	26	34	0.1	0.0	6.056	A

(Default Analysis Set) - 2032 Do Something, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	(untitled)	Standard Roundabout		1, 2, 3, 4	53.96	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2032 Do Something	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A27 Eastbound onslip					
2 - A27 Overbridge		ONE HOUR	✓	1048	100.000
3 - A27 eastbound offslip		ONE HOUR	✓	196	100.000
4 - Braypool Lane		ONE HOUR	✓	26	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
	1 - A27 Eastbound onslip	2 - A27 Overbridge	3 - A27 eastbound offslip	4 - Braypool Lane
1 - A27 Eastbound onslip	Exit-only	Exit-only	Exit-only	Exit-only
2 - A27 Overbridge	1026	3	0	19
3 - A27 eastbound offslip	8	179	0	9
4 - Braypool Lane	11	15	0	0

Proportions

From	To	
	1 - A27 Eastbound onslip	2 - A27 Overbridge
1 - A27 Eastbound onslip	0.25	0.25
2 - A27 Overbridge	0.98	0.00
3 - A27 eastbound offslip	0.04	0.91
4 - Braypool Lane	0.42	0.58

Vehicle Mix

Heavy Vehicle Percentages

From		To			
		1 - A27 Eastbound onslip	2 - A27 Overbridge	3 - A27 eastbound offslip	4 - Braypool Lane
	1 - A27 Eastbound onslip	Exit-only	Exit-only	Exit-only	Exit-only
	2 - A27 Overbridge	2	0	0	0
	3 - A27 eastbound offslip	0	1	0	0
	4 - Braypool Lane	0	0	0	0

Average PCU Per Veh

From		To	
		1 - A27 Eastbound onslip	2 - A27 Overbridge
	1 - A27 Eastbound onslip	Exit-only	Exit-only
	2 - A27 Overbridge	1.023	1.000
	3 - A27 eastbound offslip	1.000	1.006
	4 - Braypool Lane	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
16:45-17:00	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	789	789
	3 - A27 eastbound offslip	148	148
	4 - Braypool Lane	20	20
17:00-17:15	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	942	942
	3 - A27 eastbound offslip	176	176
	4 - Braypool Lane	23	23
17:15-17:30	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	1154	1154
	3 - A27 eastbound offslip	216	216
	4 - Braypool Lane	29	29
17:30-17:45	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	1154	1154
	3 - A27 eastbound offslip	216	216
	4 - Braypool Lane	29	29
17:45-18:00	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	942	942
	3 - A27 eastbound offslip	176	176
	4 - Braypool Lane	23	23
18:00-18:15	1 - A27 Eastbound onslip	0	0
	2 - A27 Overbridge	789	789
	3 - A27 eastbound offslip	148	148
	4 - Braypool Lane	20	20

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A27 Eastbound onslip						
2 - A27 Overbridge	0.79	11.81	3.7	B	962	1442
3 - A27 eastbound offslip	1.11	285.25	16.9	F	180	270
4 - Braypool Lane	0.07	9.08	0.1	A	24	36

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			143				782				
2 - A27 Overbridge	789	197	0	1464	0.539	784	143	0.0	1.2	5.380	A
3 - A27 eastbound offslip	148	37	784	241	0.611	142	0	0.0	1.4	34.684	D
4 - Braypool Lane	20	5	905	652	0.030	19	21	0.0	0.0	5.695	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			171				937				
2 - A27 Overbridge	942	236	0	1464	0.644	940	171	1.2	1.8	6.986	A
3 - A27 eastbound offslip	176	44	940	222	0.794	170	0	1.4	3.0	63.106	F
4 - Braypool Lane	23	6	1085	552	0.042	23	25	0.0	0.0	6.806	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			189				1142				
2 - A27 Overbridge	1154	288	0	1464	0.788	1147	189	1.8	3.6	11.346	B
3 - A27 eastbound offslip	216	54	1147	196	1.101	185	0	3.0	10.7	167.823	F
4 - Braypool Lane	29	7	1302	432	0.066	29	29	0.0	0.1	8.925	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			194				1149				
2 - A27 Overbridge	1154	288	0	1464	0.788	1153	194	3.6	3.7	11.812	B
3 - A27 eastbound offslip	216	54	1153	195	1.106	191	0	10.7	16.9	285.245	F
4 - Braypool Lane	29	7	1315	425	0.067	29	30	0.1	0.1	9.084	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			207				948				
2 - A27 Overbridge	942	236	0	1464	0.644	949	207	3.7	1.9	7.251	A
3 - A27 eastbound offslip	176	44	949	221	0.798	208	0	16.9	8.9	231.907	F
4 - Braypool Lane	23	6	1131	527	0.044	23	27	0.1	0.0	7.154	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A27 Eastbound onslip			174				791				
2 - A27 Overbridge	789	197	0	1464	0.539	792	174	1.9	1.2	5.496	A
3 - A27 eastbound offslip	148	37	792	240	0.614	176	0	8.9	1.8	70.452	F
4 - Braypool Lane	20	5	945	630	0.031	20	22	0.0	0.0	5.902	A



