



PINNACLE
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PROPOSED RESIDENTIAL DEVELOPMENT ON BOHERBOY ROAD.

PIN-RP-00-C002-V2

TRAFFIC & TRANSPORT ASSESSMENT

- BUILDING INFORMATION MODELLING (BIM)
- CIVIL DESIGN & ENGINEERING
- DUE DILIGENCE
- OFFSHORE & ONSHORE ENGINEERING
- PRE-DEVELOPMENT
- STRUCTURAL ENGINEERING
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1 INTRODUCTION

1.1 Introduction

This Traffic and Transport Assessment has been prepared by Pinnacle Consulting Engineers in support of a Stage 2 Submission for a Large-scale Residential Developments planning application to South Dublin County Council.

Kelland Homes Ltd. and Evara Developments Ltd. wish to apply for permission for a Large-scale Residential Development (LRD) on a site located at Boherboy, Saggart, County Dublin. To the immediate north of the site is the Carrigmore residential estate, to the west are agricultural lands and a single dwelling, to the east is the Corbally residential estate and Carrigmore Park, while to the south is the Boherboy Road.

The proposed development consists of 611 no. dwellings, comprised of 306 no. 2, 3, 4 & 4-5 bed, 2 & 3 storey, detached, semi-detached & terraced houses, 133 no. 1, 2 & 3 bed duplex units in 12 no. 2-3 storey blocks, and 172 no. 1, 2 & 3 bed apartments in 5 no. buildings ranging in height from 4-5 & 5 storeys. The proposed development also includes a 2-storey crèche (c.630m²).

Access to the development will be via one no. new vehicular access point from the Boherboy Road, along with new vehicular connections to adjoining developments at Corbally Heath to the east and Carrigmore Green to the north. Ten no. houses in the south-east part of the site will be accessed from Corbally Glade to the east. The proposed development includes for pedestrian and cyclist connections throughout the proposed development and accesses into adjoining lands at Carrigmore Park, Corbally Heath and Corbally Glade to the east and Carrigmore Green to the north.

Private amenity space for the residential units is provided in the form of rear gardens for houses and ground floor terraces / upper floor balconies for apartments and duplex units. The proposed development provides for a total of c. 2.3Ha of public open space, and c. 4,750sq.m of communal open space associated with proposed development.

The proposed development provides for (i) all associated site development works above and below ground, including surface water attenuation & an underground foul sewerage pumping station at the northern end of the site, (ii) public open spaces (c. 2.3Ha), (iii) communal open spaces (c. 4,750sq.m), (iv) hard & soft landscaping and boundary treatments, (v) surface car parking (861 no. car parking spaces), (vi) bicycle parking (711 no. bicycle parking spaces), (vii) bin & bicycle storage, (viii) diversion of all existing overhead ESB lines underground, (ix) public lighting, and (x), plant / PV panels (M&E), utility services & 8 no. ESB sub-stations, all on an overall application site area of c.18.7Hha. In accordance with the South Dublin County Development Plan (2022-2028), an area of c.1.03Ha within the site is reserved as a future school site.

The site has an area of 18.7Ha

The site is located approximately c. 13.7 Km southwest of Dublin City Centre and is bounded to the north by Carrigmore Estate; Corbally Estate to the east; agricultural land to the west and Boherboy Road to the south.

The site is currently a greenfield site.

The site location is shown in Figure 1.

In order to complete this report, Pinnacle Consulting Engineering has referred to the following documents:

- The Traffic Management Guidelines (2019);
- Guidance on Transport Assessment (2014);
- Design Manual for Urban Road and Streets (2019);
- Design Standards for New Apartments - Guidelines for Planning Authorities (2022);
- South Dublin County Development Plan 2022-2028;
- 2012 Fortunestown Local Area Plan (LAP)*;
- Sustainable Residential Development and Compact Settlements Guidelines for Planning Authorities From Department of Housing, Local Government and Heritage
- GDA Cycle Network Plan - National Transport Authority; and
- N81 Hollywood Cross to Tallaght Road Improvement Scheme – Kildare NRDO
- Cycle Design Manual (CDM) has been prepared by the National Transport Authority (NTA) (2023)
- South Dublin County Council's Part 8 Scheme for Carrigmore Park

* The 2012 Fortunestown Local Area Plan (LAP) has Now expired. Although the 2012 Fortunestown Local Area Plan (LAP) has expired, it is included as a reference to principles relevant to transportation, access, etc.

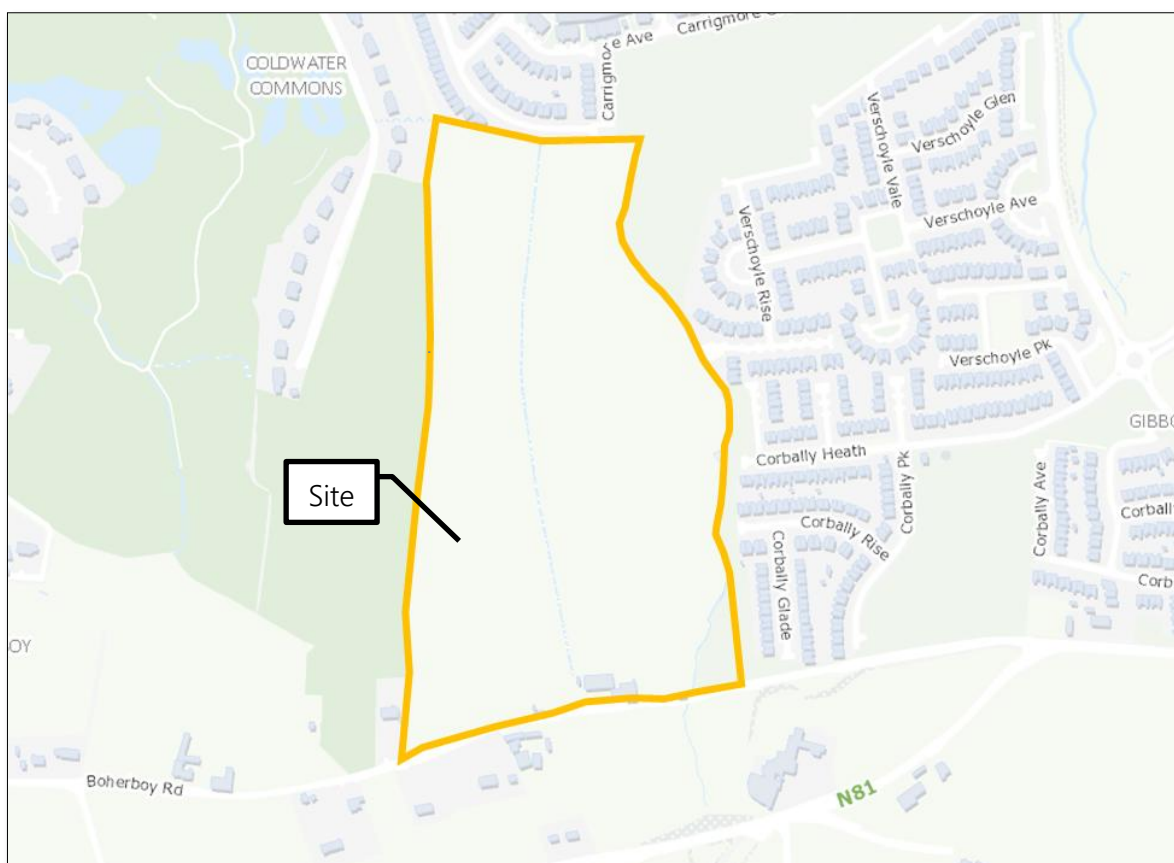


Figure 1 Site Location (Source: GeoHive)

1.2 Objectives

The main objective of this report is to examine the traffic impact of the proposed development and its access arrangements on the local area road network. The net change in traffic on the network due to the proposed development has been calculated and its impact on the local area road network has been determined.

The report will also review the proposed development in the context of existing active travel infrastructure for pedestrians and cyclists and propose new infrastructure where required.

These examinations will be done in the context of the principles set out in the Design Manual for Urban Roads And Streets.

1.3 Study Methodology

The methodology adopted for this report can be summarised as follows:

Existing Traffic Flow Assessment: - Baseline traffic counts were undertaken on the 23rd of May 2023

Existing Transport Infrastructure: - Pinnacle Consulting Engineering collected information on public transport, walking and cycling in the area of the proposed development.

Development Proposals: - Description of proposed development, including proposed improvements to the road accesses to the site and a review of parking and servicing provisions, and facilities for pedestrians and cyclists.

Development Trip Generation Figures: - Based on the schedule of accommodation of the proposed development, Pinnacle Consulting Engineering derived trip rate data for all land uses considered.

Summary: - A summary of the information collected will be provided.

1.4 Structure of Report

The remainder of this report is divided into the following sections:

- Section 2 considers the location of the site and existing traffic flows.
- Section 3 discusses the proposed development.
- Section 4 considers the traffic generation and potential impacts of the development.
- Section 5 provides a summary and conclusion.

2 EXISTING TRAFFIC CONDITIONS

2.1 Existing Conditions

The subject site forms the southern parts of two separate and contiguous landholdings at Boherboy, Co. Dublin and is currently in agricultural use.

The development site abuts Citywest/Carrigmore to the north, the Corbally Estates to the east, Boherboy Road to the south and farmland to the west. Boherboy Road links Saggart Village to the N81.

The location of the site is shown on the map extract at Figure 2 below.

The site is 18.7Ha in size.

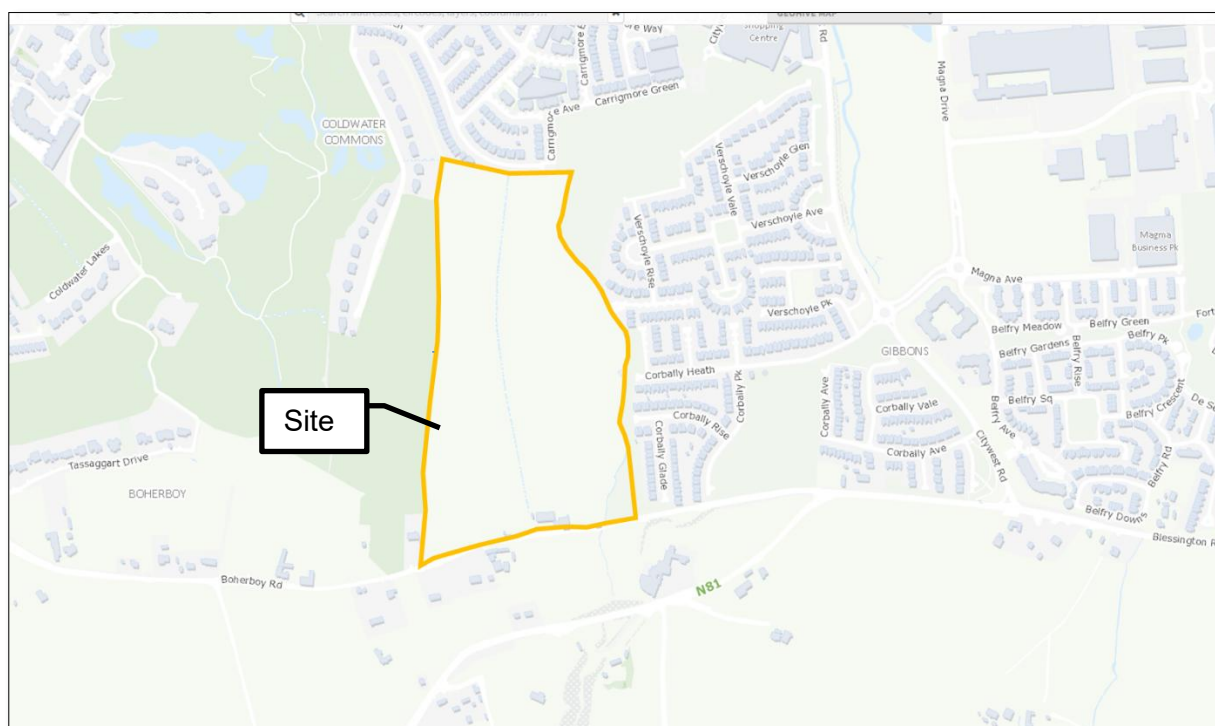


Figure 2 Site Location and Local Road Network (Source: GeoHive)

2.2 Existing Road Network

A summary of the existing road network is provided below:

The road network surrounding the site provides a variety of movement functions. Boherboy Road links Tallaght in the east with Saggart in the West. The N82 provides access to Dublin via the M7/N7 and to other inter urban motor ways via the M50.

Boherboy Road, Corbally Estate and Carrigmore Estate will be the primary access points into the proposed development.

These routes provide for pedestrians, cyclists and motorists alike and a general commentary on these facilities is presented below:

Boherboy Road

Boherboy Road is a local country road forming a priority-controlled junction with the N81 to the east and a signal-controlled junction with Church Street/Castle Street to the west.

The carriageway width is approximately 6.0m along the site frontage with no footpaths along the site frontage.

Boherboy Road has a country road character providing access to Saggart from the N81.

A speed limit of 60km/h was noted on Boherboy Road along the site frontage.

No cycle facilities were noted along Boherboy Road.

N81

The N81 road is a national secondary road starting at the M50 motorway and ending Tullow, County Carlow.

The carriageway width is approximately 11.0m at the junction with the Boherboy Road.

As the N81 leaves Tallaght the speed limit increases to 80km/h.

There is limited pedestrian infrastructure adjacent to the junction with the Boherboy Road. No cycle facilities were noted along the N81 in the vicinity of its junction with the Boherboy Road.

Carrigmore/Corbally Estates

The proposed development will be accessed via the Carrigmore/Corbally Estates. The location where the proposed development connects into these estates is fully taken in charge by South Dublin County Council.

The proposed development will connect into Corbally Heath, Corbally Glade, Carrigmore Avenue and Carrigmore Green.

These estate roads are typical of estates-built c. 30 years ago. Roads typically measure c. 8.0m wide, with grass verges and footpaths up to 2.5m wide.

Speed limits are typically 30km/h.

2.3 Traffic Counts

It is proposed that the subject site will be accessed directly from the Boherboy Road and 2 No. accesses through Carrigmore Estate to the north and Corbally estate to the east. Pedestrian access will coincide with the vehicular access with additional connectivity onto Boherboy Road and the Carrigmore District Park.

To quantify the volumes of traffic movements at key points on the road network adjacent to the site, a set of classified turning movement traffic counts were commissioned. The location of these counts was agreed in consultation with the senior executive engineer of South Dublin Council's Transportation Department.

Accordingly, classified counts were carried out on the 23rd of May 2023 at the following junction locations:

- Junction 1 – Citywest Road/Citywest Drive Singal Controlled Junction
- Junction 2 - Carrigmore Access
- Junction 3 – Garter Lane/Church Road Singal Controlled Junction
- Junction 4 – Mill Road/Slade Road Signal Controlled Junction

- Junction 5 – Site Access
- Junction 6 – Boherboy Road/N81
- Junction 7 – N81/N82 Signal Controlled Junction
- Junction 8 – N82/Corbally Roundabout

The surveys were carried out on the date identified above to ensure that flows were representative of normal term time and hence not affected by school holidays or other public holidays or events. As such they provide an appropriate and robust representation of a neutral month during a period of normal school and employment activity. The surveys are designed to provide representative values encompassing AM and PM peak periods during normal traffic conditions.

The results of the traffic surveys are also set out in Appendix A of this report.

The locations of the surveys are each pertinent to the proposal in terms of being at key nodes in the road network that would be affected by traffic assignment and distribution of flows associated with the development site.

The location of the survey points is depicted below at Figure 3.

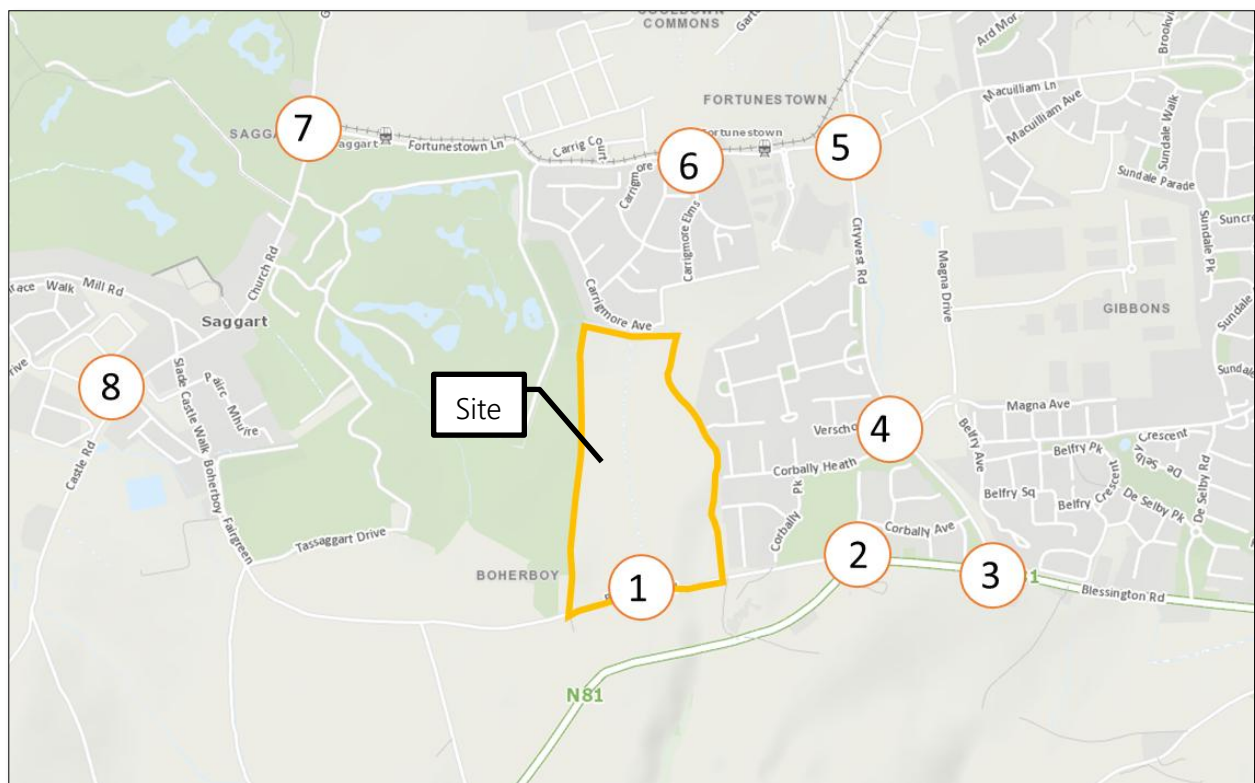


Figure 3 Survey Location

2.4 Public Transport

2.4.1 Background

Local public transport infrastructure is illustrated in Figure 4 below.

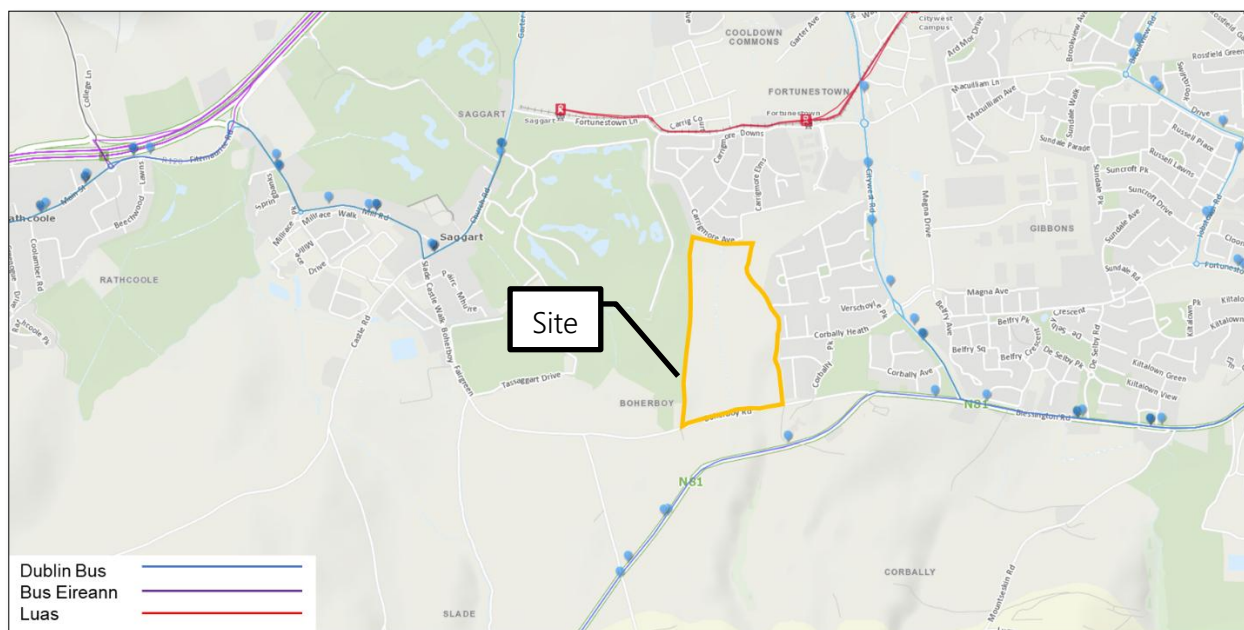


Figure 4 Local Public Transport Infrastructure

2.4.2 Bus

There are numerous bus operators providing a bus service locally and within walking distance to the site, with further details shown in the tables below.

Measured from the centre of the site, the nearest stop, located on the N82 Citywest Road, is located approximately 670m.

No.	Route	Service		Mon-Fri	Sat	Sun
65	Poolbeg Street - Valleymount Road	Poolbeg Street	First	05:30	05:40	08:00
			Last	23:0	23:15	23:15
		Valleymount Road	First	06:30	07:10	09:30
			Last	00:15	00:20	00:20
		Frequency		Up to 15/day	Up to 12/day	Up to 10/day

Table 1 Route 65

No.	Route	Service		Mon-Fri	Sat	Sun
65b	Poolbeg Street - Citywest	Poolbeg Street	First	05:50	05:50	09:00
			Last	23:30	23:30	23:30
		Citywest	First	06:50	07:00	08:30
			Last	23:30	23:30	23:30
		Frequency		Up to 18/day	Up to 17/day	Up to 15/day

Table 2 Route 65b

No.	Route	Service		Mon-Fri	Sat	Sun
69	Hawkins St. - Rathcoole	Hawkins St.	First	06:15	06:20	10:00
			Last	23:15	23:15	23:15
		Rathcoole	First	06:00	06:15	11:15
			Last	00:05	00:05	00:10
		Frequency		Up to 20/day	Up to 21/day	Up to 12/day

Table 3 Route 69

No.	Route	Service		Mon-Fri	Sat	Sun
77a	Ringsend Rd. - Citywest	Ringsend Rd	First	05:40	05:55	07:00
			Last	23:25	23:25	23:30
		Citywest	First	06:00	06:20	08:00
			Last	23:30	23:20	23:30
		Frequency		Up to 14/day	Up to 17/day	Up to 3/day

Table 4 Route 77a

No.	Route	Service		Mon-Fri	Sat	Sun
W62	The Square - Newcastle	Tallaght	First	05:35	05:35	07:35
			Last	23:35	23:35	23:35
		St Finian's NS	First	05:45	05:35	07:45
			Last	23:45	23:35	23:45
		Frequency		Up to 36/day	Up to 34/day	Up to 30/day

Table 5 Route W62

No.	Route	Service		Mon-Fri	Sat	Sun
S8	Kingswood Avenue - Dun Laoghaire Stn	Kingswood Avenue	First	05:00	05:00	07:00
			Last	23:30	23:30	23:30
		Dun Laoghaire Stn	First	05:00	05:00	07:00
			Last	23:30	23:30	23:30
		Frequency		Up to 60/day	Up to 38/day	Up to 34/day

Table 6 Route S8

A series of established pedestrian routes provide strong connectivity between the development site and the surrounding urban area. These routes extend in multiple directions and link the site to key residential, educational, commercial, and recreational destinations. The network is characterised by a combination of footpaths, internal estate roads, and off-street green corridors, creating a permeable and legible walking environment.

Northern Walking Route

To the north, a continuous pedestrian route extends from the development via existing residential streets and internal footpaths. This forms a direct connection to established neighbourhoods and local amenities located in the northern catchment. The route primarily follows low-speed residential roads, offering a comfortable and safe environment for walking.

North-Eastern Walking Route

A secondary route branches northeast from the site and follows a series of pedestrian paths through adjoining housing areas and pockets of open space. This connection links into a wider network serving mixed-use and employment lands, including retail and service destinations. The route provides convenient access to public transport stops and the broader urban network.

Eastern Walking Route

Another walking route extends eastwards, running along a combination of residential streets and off-road paths. This route provides direct access to schools, community facilities, and nearby residential clusters. The presence of green spaces and existing landscaping along sections of the route enhances the walking experience.

Southern and South-Eastern Walking Route

To the south and southeast, a well-defined walking route connects the development to neighbouring residential areas and open spaces. This forms an important link towards southern amenities and transport corridors. Several off-street footpaths and greenway-style connections are utilised, reducing interaction with vehicular traffic and providing a safe pedestrian environment.

Internal Site Connections

Within the development, a network of interconnected footpaths provides direct pedestrian links between residential blocks, public open spaces, and local activity centres. These internal connections feed into the external walking routes at multiple points, ensuring permeability and ease of movement in all directions.

Overall Pedestrian Connectivity

In summary:

- The site benefits from multiple pedestrian connections extending north, northeast, east, south, and southeast.
- Routes use a combination of shared residential streets and off-road pedestrian paths, offering safety and comfort.
- The walking network provides access to schools, public transport, shops, recreational areas, and existing residential neighbourhoods.
- The arrangement aligns with DMURS principles by providing short, direct, and well-connected walking routes.
- The overall pedestrian environment is consistent with expectations for a mature and expanding urban area, supporting active travel and reducing reliance on car travel.

2.4.3 Luas

Measured from the centre of the site, the Luas Red Line (Saggart/Tallaght to Conolly/The Point) calls at the Fortunestown Luas Stop which is located approximately 950m north of the subject site.

Luas Red Line					
Monday – Friday (05:30-00:00)		Saturday (06:30-00:00)		Sunday (07:00-23:00)	
Peak	Off Peak	Peak	Off Peak	Peak	Off Peak

3-6	6-15	7-8	10-15	11-12	-

Table 7 Luas Green Line Frequency (minutes) – (source www.luas.ie)

The Luas has a major terminus at the Square, Tallaght which is also a major terminus for Dublin Bus. The Square is served by Dublin Bus with several local routes. Currently timetabled bus services adjacent to the site include the 27 (which has approximately 80 services per day in each direction from Clarehall to Jobstown), the 49 (which has approximately 37 services per day in each direction from Pearse Street to Tallaght), the 54a (which has approximately 30 services per day in each direction from Pearse St. towards Ellensborough / Kiltipper Way), the 65 (which has approximately 14 services per day in each direction from Hawkins Street to Blessington/Ballymore), the 75 (which has approximately 38 services per day in each direction from the Square to Dun Laoghaire), the 76 (which has approximately 40 services per day in each direction from Tallaght to Chapelizod), the 76a (which has approximately 3 services per day in each direction from Tallaght to Blanchardstown Centre) and 77a (which has approximately 56 services per day in each direction from Ringsend to Citywest).

A direct and convenient walking route connects the development to the nearest Luas stop located to the north of the site. From the northern edge of the development, pedestrians can follow a continuous network of existing footpaths through an established residential area. This walking route utilises quiet local streets, characterised by low traffic volumes and strong passive surveillance from surrounding homes, creating a safe and comfortable pedestrian environment.

The route proceeds northwards through a series of interconnected residential streets with short blocks and multiple linking paths, ensuring that walking is straightforward and legible. The alignment passes through typical suburban cul-de-sacs and connecting paths that provide permeability and avoid the need to interact with any major roads. This promotes a safe and attractive walking experience suitable for all age groups.

As pedestrians approach the northern neighbourhood, the route continues along residential footpaths that lead directly toward the Luas stop situated at the edge of the surrounding residential area. The entire journey is supported by established paved footways, consistent public lighting, and a coherent suburban street network.

Key Characteristics of the Walking Route

- Direct and logical alignment, travelling north from the development to the Luas stop via existing residential streets.
- Full pedestrian continuity, with dedicated footpaths provided along the entire route.
- Safe walking environment due to low-speed roads, passive surveillance, and minimal interaction with higher-volume vehicular routes.
- High permeability, supported by multiple pedestrian links and short residential blocks that simplify navigation.
- Appropriate for daily use, offering convenient access to high-quality public transport and supporting sustainable travel choices.

pedestrian and cycle route through Carrigmore District Park to the north and a footpath linking the proposed development to the N81 in the east via the Boherboy Road.

Future connectivity has been allowed for via the Corbally and Carrigmore Estates which are both taken in charge by South Dublin County Council on lands owned by the Applicant.

The connectivity through Carrigmore District Park and Corbally Glade/Boherboy Road to local public transport services will reduce car dependency and will reduce the concerns regarding access and connectivity.



Figure 6 Pedestrian/Cyclist Permeability

A summary of the proposed pedestrian/cycle connectivity is provided below:

Fotutnestown Lane

The route to the Fotutnestown Lane measures approximately 1.2km to the Luas stop, another 250m to the bus stops (into town) and 350m to the next bus stop (out of town). This equates to approximately 10/15-minute walk time.

N82 Citywest Road

The route to the N82 Citywest Road measures approximately 650m to the bus stops located on the N82 Citywest Road via Corbally Estate. This equates to approximately 7/8-minute walk time.

N81

The route to the N81 measures approximately 1.15km to the nearest bus stop (into town) and another 200m to the next stop (out of town). This equates to approximately 10/15-minute walk time.

All pedestrian routes service the same bus routes. The route through Corbally, including via Corbally Glade, and Carrigmore offer a higher amenity value as it provides access to local shops, schools, Luas etc. These routes are also safer with passive surveillance and public lighting along these routes.

2.6 Permeability

Permeability for residents and visitors to the proposed development is a key factor in determining the long-term sustainability when considering modal choice.

To encourage a shift away from car dependency, residents and visitors to the development must have viable alternative choices such as walking routes and cycle routes public transport links.

2.6.1 Walking

Figure 7 outlines the walking distance covered by the average person in a 15-minute period. It illustrates the local amenities that are available to the proposed development. Local amenities within 15-minutes' walk of the proposed development include:

- Citywest Shopping Centre
- Fottutnestown Luas Stop
- Access to bus network
- School
- Carrigmore District Park

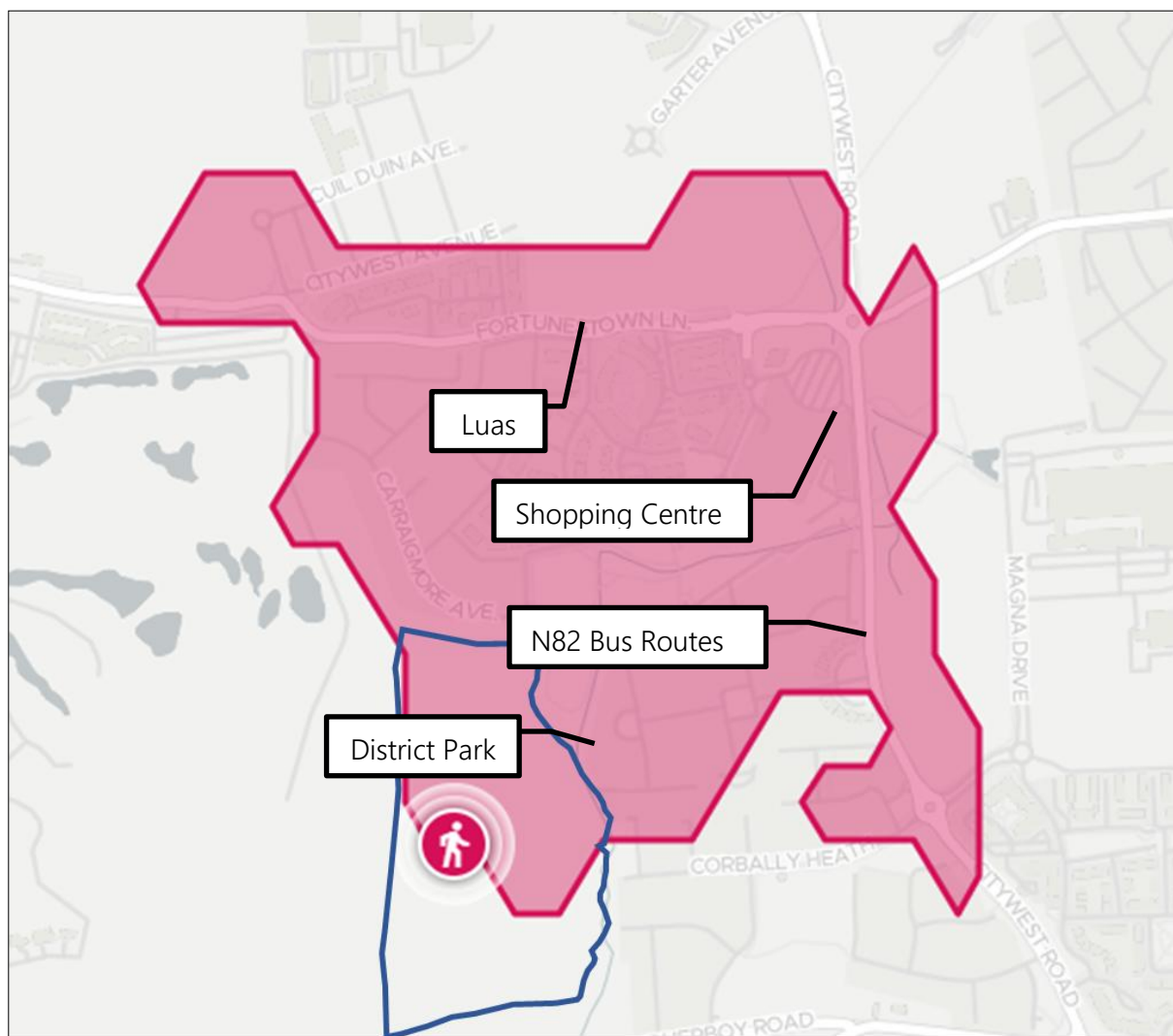


Figure 7 Walking Distance (15 Min Travel Time)

Note, there is currently no footpath along Boherboy Road. Section 4 of this report will outline the permeability strategy for Boherboy Road which includes an option for a new footpath along Boherboy Road or active travel options from the development lands via Corbally Glade along access to the N82 Citywest Road and the N81.

2.6.2 Cycling

Figure 8 outlines the cycling distance covered by the average person in a 30-minute period. These routes are a combination of cycle lanes and shared routes.

Figure 8 illustrates the local amenities that are available to the proposed development. Local amenities within 30-minutes cycle of the proposed development include:

- Citywest Shopping Centre
- Fotutnestown Luas Stop
- Access to bus network
- School
- Carrigmore District Park

- Access to areas of employment (Citywest Business Campus, Tallaght Village)
- Allows access to/from surrounding areas including:
 - Tallaght
 - Clondalkin
 - Firhouse
 - Rathchoole
 - Newcastle

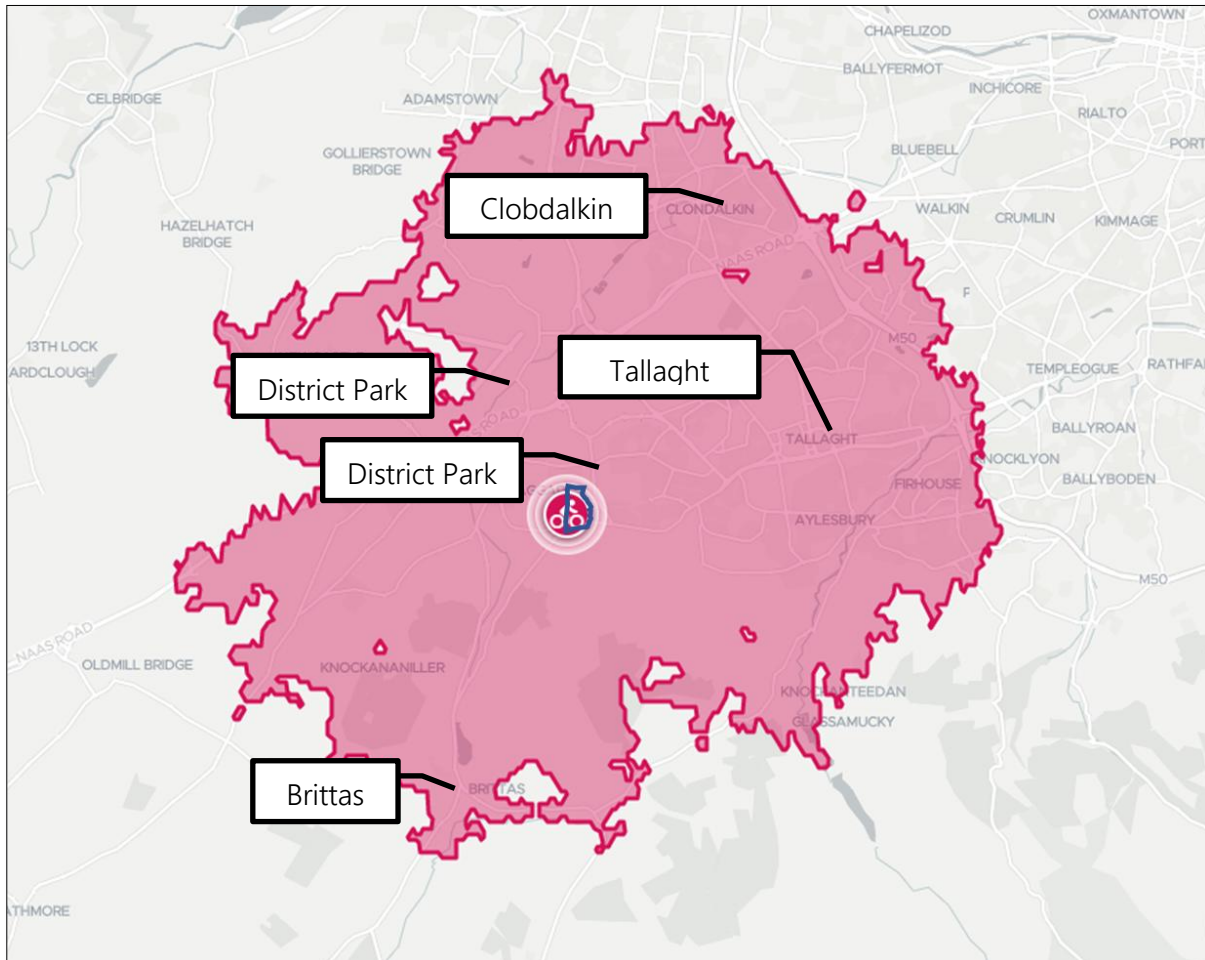


Figure 8 Cycle Distance (30 Min Travel Time)

2.6.3 Public Transport

Figure 9 outlines the distance that maybe covered on a 90minute public transport journey.

A 90-minute public transport journey allows access to areas of employment such as:

- Citywest Business Campus
- Tallaght
- Dublin City Centre
- IFCS

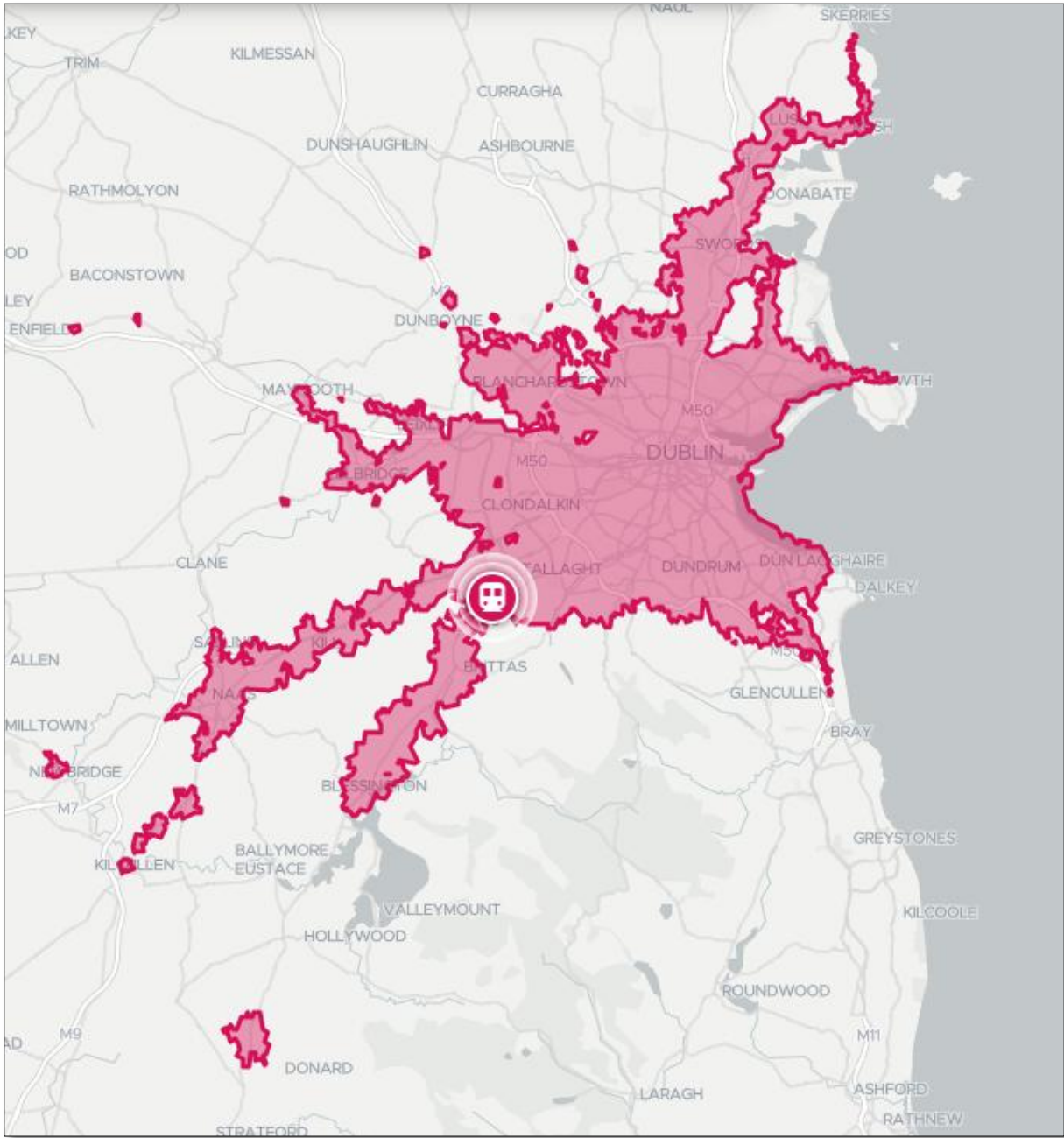


Figure 9 Public Transport (90min Travel Time)

A 90-minute public transport journey allows access from areas such as:

- Lusk (North County Dublin)
- Donard (North Wicklow)
- Dun Laoghaire (West Dublin)
- Maynooth (North Kildare)

This permeability opens up the site to all Third Level Institutions located within Dublin and Kildare (NUIM). It also offers permeability the major amenities located within Dublin City Centre (shopping, entertainment) and the gateway towns into Dublin where the likes of major retail parks are located.

The proposed site is located within 90-minute public transport link to all major Dublin sporting and event venues.

2.6.4 Driving

The site has strong permeability to local amenities via walking, cycling and public transport. This will help reduce, but not eliminate, car trips.

Where car-based trips are required, the proposed development has good access to the M50, M7/N7 and the N81.

For car heading north and east via the M50, the direct route is via Carrigmore and the N7. For car heading south and east via the M50, the direct route is via the N81. For car heading west via the M7, the direct route is via Carrigmore and the N7.

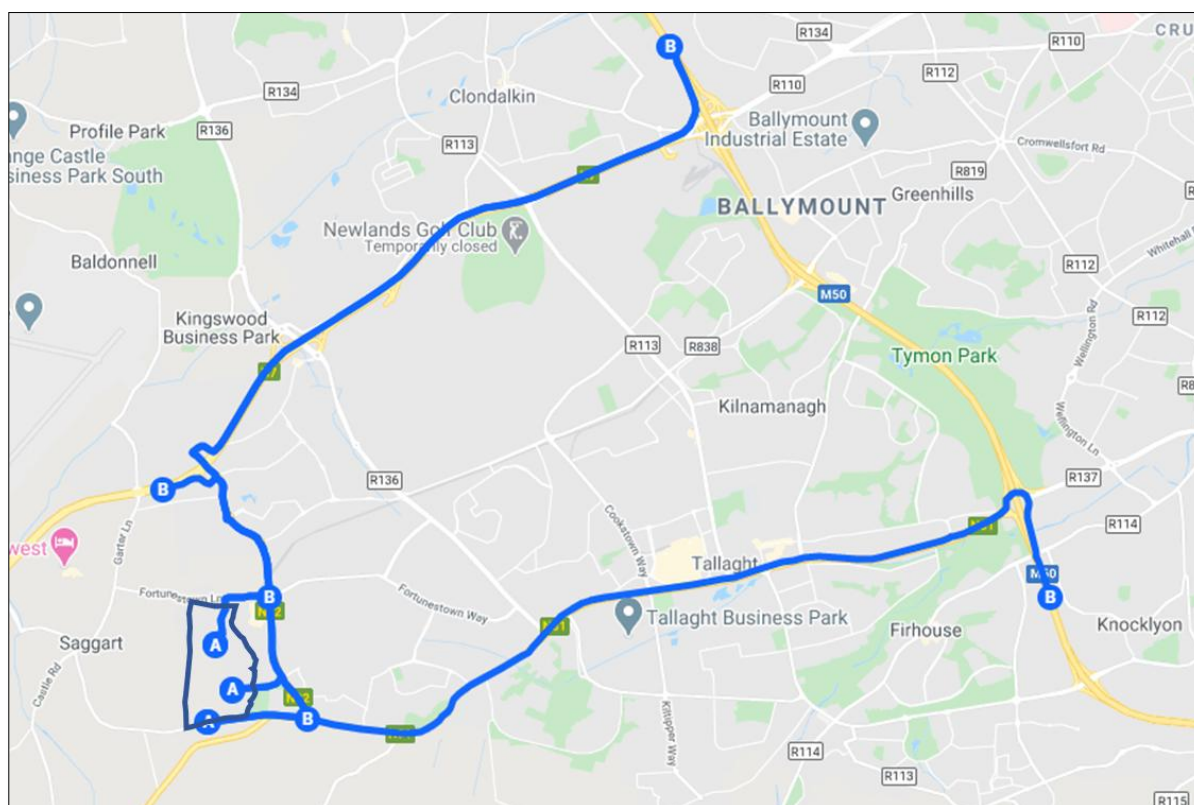


Figure 10 Road Accessibility

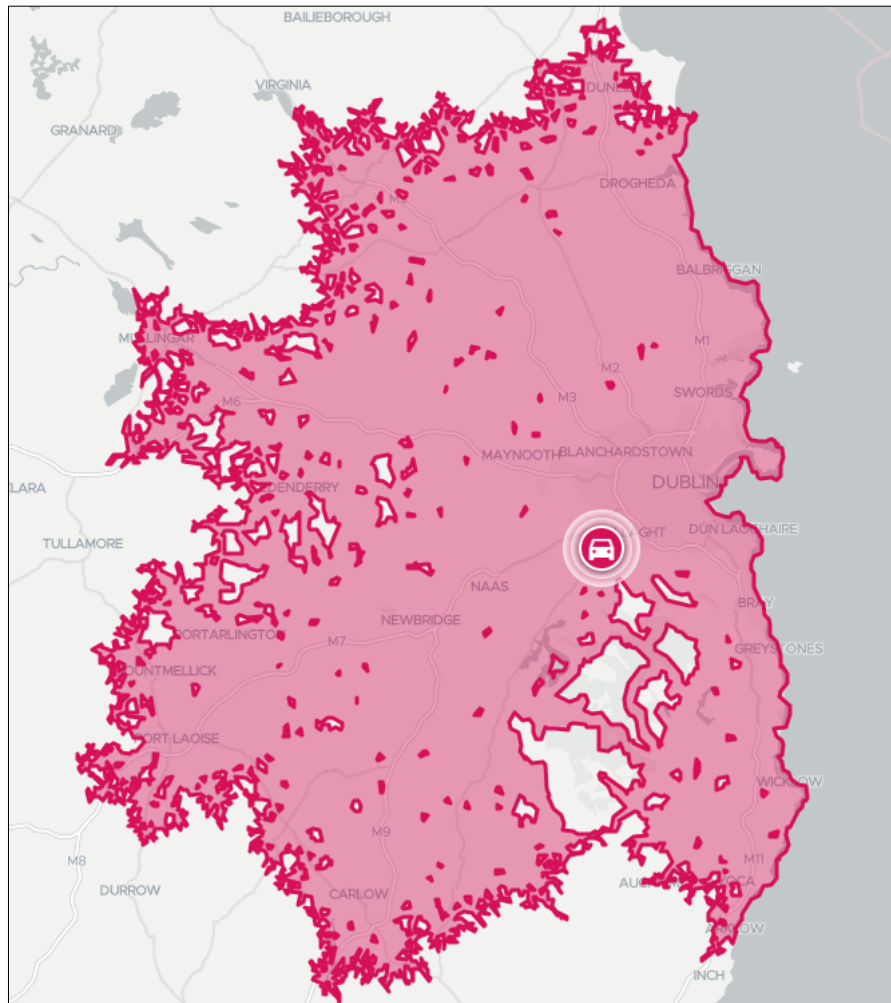


Figure 11 Road Travel Distance (60 min Travel Time)

Figure 11 outlines the travel distance by car for a 60 min travel time.

2.6.5 Summary

The proposed development will connect into Corbally Heath, Corbally Glade, Carrigmore Avenue and Carrigmore Green.

These links will provide a significant level of pedestrian, cyclist and public transport permeability to the site to established local amenities such as Citywest Shopping Centre, Citywest Business Campus and local schools.

2.7 Road Safety Data

A review of the Road Safety Authority (RSA) traffic collision database has been undertaken for the road network in the vicinity of the proposed site to identify any collision trends. This review will assist to identify and potential safety concerns in relation the existing road network.

Traffic collision data was obtained for the period 2005-2016 which is the most recent data available from the RSA website. These incidents are categorised into class of severity, which includes minor, serious or fatal collisions. The analysis is shown in Figure 12.

The analysis has 3 No. minor incidents along Boherboy Road adjacent to the proposed development frontage. These incidents were classed as 2 No. single vehicle collisions and 1 No. head on collision.

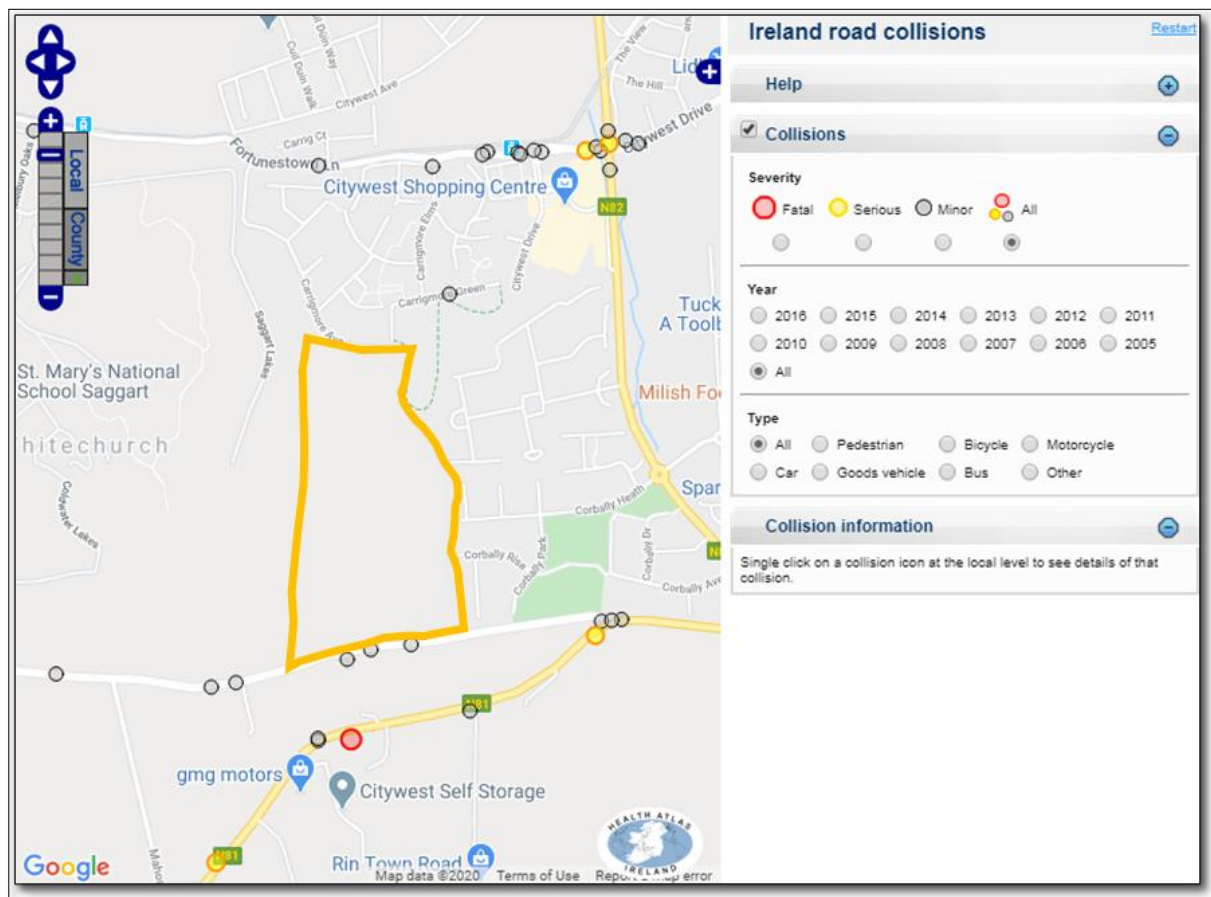


Figure 12 Road Collisions (Source: RSA)

Note, the RSA has stopped publishing crash data for GDPR reasons. The data above was sourced in 2020.

2.8 Planning Search

A planning search was undertaken to identify any developments that have planning permission but are not yet implemented or any schemes that are implemented but are as of yet occupied.

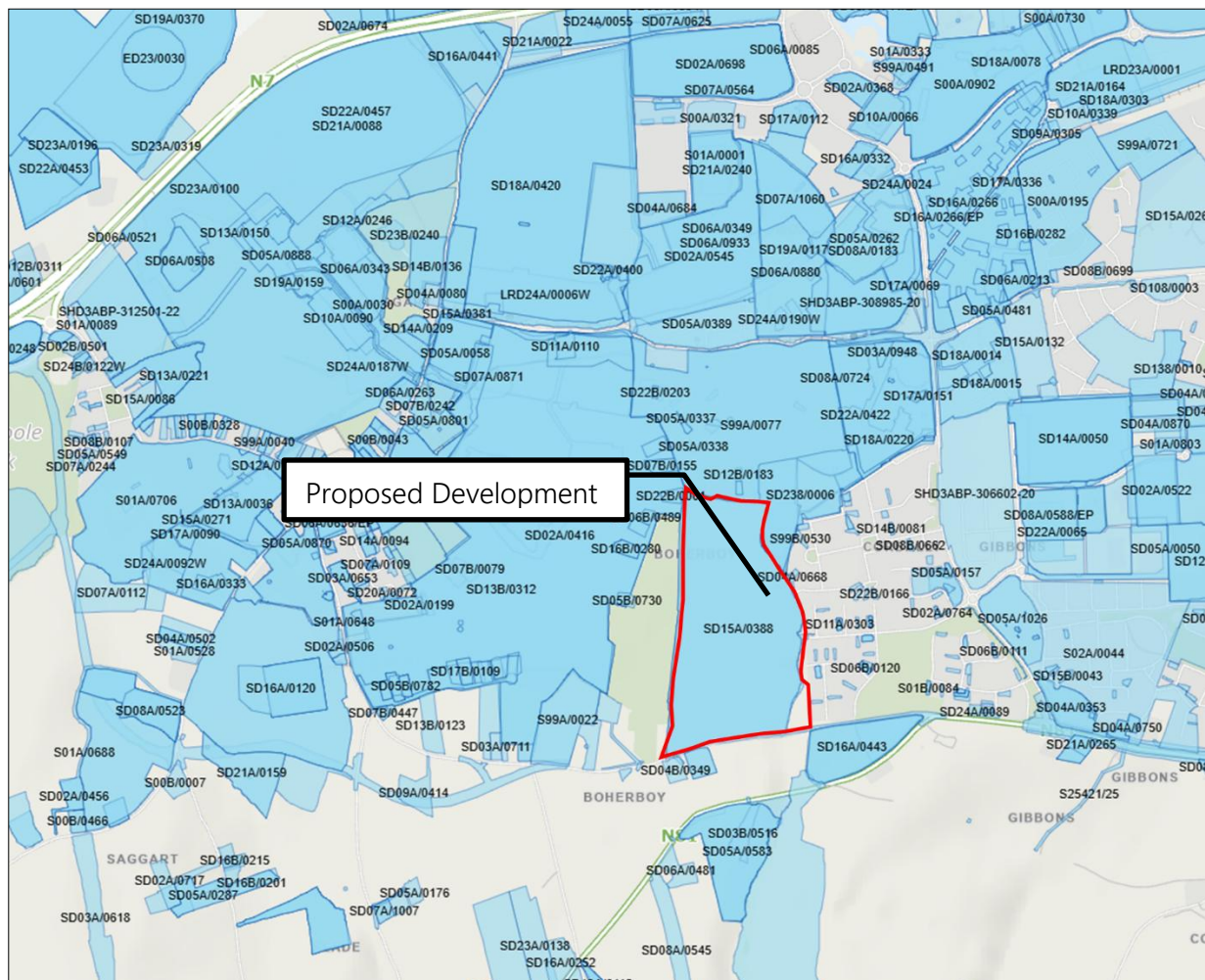


Figure 13 Planning Applications Overview (Source: South Dublin Council)

Figure 13 illustrates all planning applications in the vicinity of the proposed development as of January 2024. These applications will be reviewed prior to submitting the final planning application.

Any developments granted planning permission prior to this application been lodged or that are currently under construction but not yet occupied will be included in the baseline traffic data. These developments will be included the modelling of the impacted junctions. Where a Traffic & Transport Assessment is available the figures will be taken directly. If no Traffic & Transport Assessment is available Trip Rate Information Computing System (TRICS) will be used to estimate flows from the development and traffic surveys used for distribution.

Figure 14 outlines the planning applications that have been included in the assessment of this planning application.

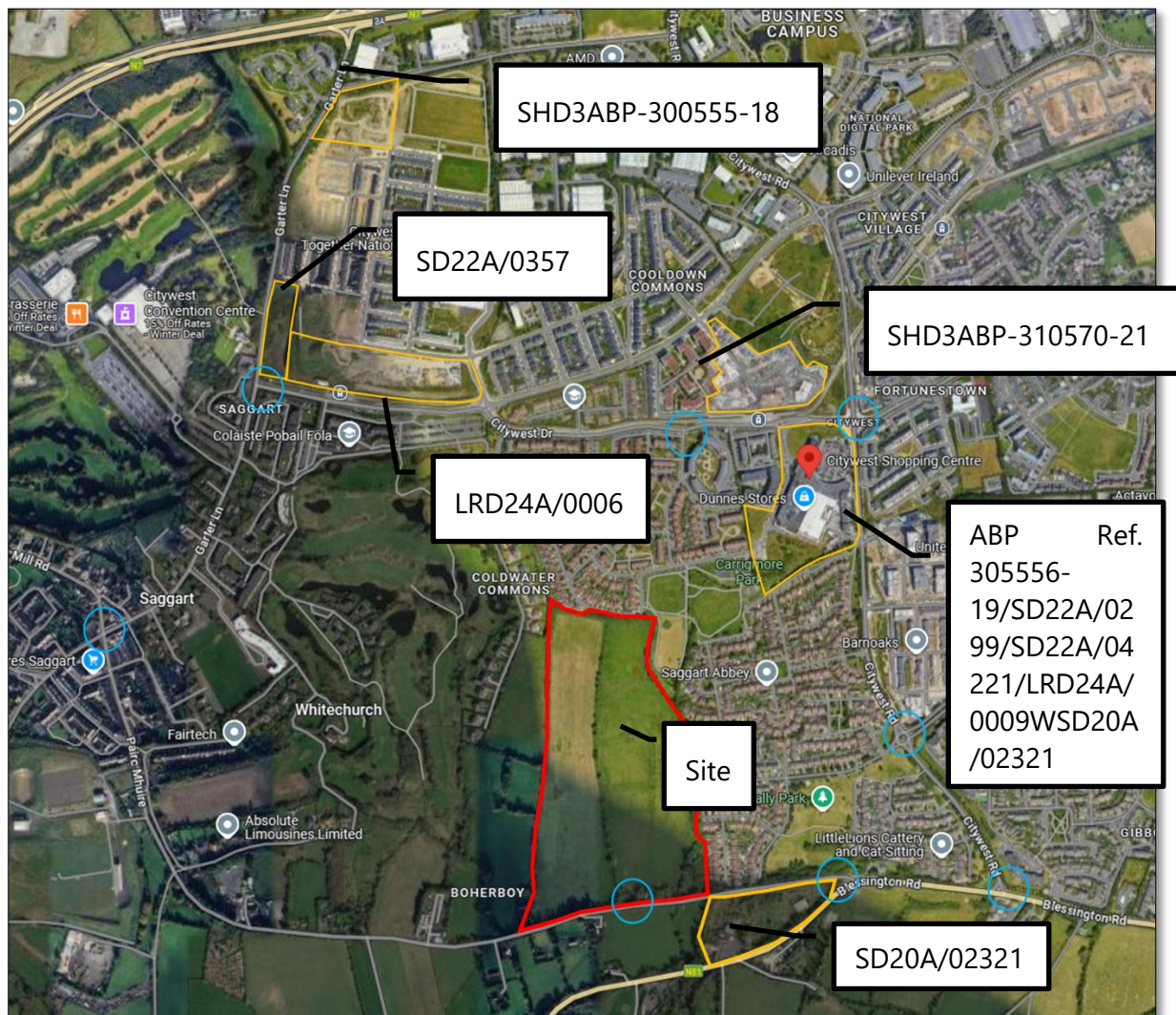


Figure 14 Planning Search Outcome

SHD3ABP-300555-18 (Part Built)

A residential development comprising: 526 residential units and all associated site and development works as follows: - 274 3-bed 2 storey terraced units, 185 4-bed 2 and 3 storey terraced and end of terrace units, 67 2-bed apartment/duplex units (37 2-storey, 2 bed terraced duplexes, 18 1-storey 2 bed terraced apartments and 12 1 storey 2 bed end of terrace apartments). The development also provides for a district park (4.58 ha) and a neighbourhood park (0.71 ha) in accordance with the Fortunestown Local Area Plan 2012. Permission is also sought for 789 car parking spaces, bin storage areas, ESB substations and all associated site development and infrastructural works. Vehicular access to serve the proposed development will be provided via two new access points off Garter Lane and via a new signalised junction at the southeastern corner of the site to replace the existing roundabout off Fortunestown Lane. Provision is made for a future access to Bianconi Avenue. In addition, an interim local square is proposed within the subject site providing a direct pedestrian link from the proposed development to the Saggart Luas stop. Two direct pedestrian links are proposed between the subject site and the adjoining school sites permitted under Reg Ref No SD16A/0255 providing a direct link between the school and the proposed district park and a direct link from the west of the school site to the proposed

residential development. Lands identified for future development are located along the southern boundary of the current application site adjacent to Fortunestown Lane/Saggart Luas Stop. These areas will be subject of a future planning application (Phase 2) and will include the final design and layout of the local square.

SD20A/02321

Demolition of existing Public House building and of existing incomplete buildings on the east side of the site; construction of a three storey hotel comprising of 129 bedrooms, reception and ancillary bar (136sq.m) at ground floor, restaurant (311sq.m) in single storey building; associated waste storage to the west of the site; 3 three storey Aparthotel buildings comprising 15 units each (45 units in total) comprising of studios, one bed, two bed and three bed units to the south and south east; 3 small balconies with small terraces under on the north façade of the Aparthotel Block A & B and the west façade of Block C; new vehicular and pedestrian entrance at Boherboy/Saggart Road (L2008); new footpath along the Boherboy/Saggart Road (L2008); parking area for 120 cars and 30 bicycles; extensive tree planting throughout; substation together with all associated site works, boundary treatments and landscaping; total floor area of buildings is 8,313sq.m; existing vehicular entrance to the site on the Blessington Road will remain for emergency use only; An Ecological Impact Assessment is submitted as part of this application.

ABP Ref. ABP-308088-20/SD22A/0357

The proposed development comprises amendments to a Strategic Housing Development scheme permitted under ABP Ref. ABP-308088-20. consisting of modifications to the previously permitted development (ABP Ref. ABP- 308088-20), comprising: replacement of 2 one bedroom unit with 1 two bedroom unit and an entrance lobby / concierge at ground floor level within permitted Block C; replacement of 3 three bedroom units with 3 two bedroom units and additional residential amenity spaces at first, third and fifth floor levels within permitted Block C; replacement of 2 two bedroom units with 2 one bedroom units and additional residential amenity spaces at ground and third floor levels within permitted Block D; and the provision of an enlarged stretcher lift through all floor levels of permitted Blocks C and D. The total number of residential units proposed will decrease from 224 to 223 as a result of the proposed amendments; The proposed development will also consist of: amendments to the permitted car parking areas at basement levels resulting in a total loss of 29 car parking spaces (151 car parking spaces are provided in total at basement level); the provision of c. 275sq.m of residential amenity space (incl. reception, office, staff amenities, multi-purpose spaces, meeting rooms and lobbies) at basement level of permitted Block C and D; minor elevation amendments to permitted Block D; the provision of a new external stair well to the eastern elevation of permitted Block D providing access from the ground floor level to the basement level; reduction of the roofed area above the basement ramp of permitted Block A and B; the provision of sprinkler tank rooms, landlord plants, comms room and attenuation tanks at basement level of permitted Blocks A, B, C and D; the provision of PV solar panel at all roof levels; amendments to hard and soft landscaping areas; and all associated site excavation and development works above and below ground.

SHD3ABP-310570-21

Construction of a residential scheme comprising 421 units, offices, retail units x3 and residential amenity areas x2, within 9 blocks ranging in height from 1-13 storeys. The proposal will include 289 car parking spaces along with 650 cycle parking spaces. The development will provide public and communal open spaces throughout including a public plaza adjoining Fortunestown Luas stop. Provision of vehicular, pedestrian, and cyclist accesses to the site, including pedestrian

bridge to the public park (under construction) to the east. The application includes for all landscaping, ESB substations, plant areas, bin storage, surface water attenuation and all other site development works, and site services required to facilitate the proposed development. The proposed development seeks to amend SHD permission ABP-302398 -18 (under construction to the west), replacing 32 permitted duplex apartments along with associated amendments to internal roads and open spaces. The current proposal also replaces permission SD16A/0078 previously granted on this site.

LRD24A/00062

488 apartment units comprising 118 1-bed units, 327 2-bed units and 43 3-bed units arranged in 5 blocks (Blocks A to E) and all associated public open spaces comprising landscaped courtyards and communal amenity spaces and private amenity spaces comprising terraces/balconies. The proposed Blocks A and B and Blocks C, D and E are arranged over separate single levels basements and comprise 5 storey blocks with a 9 storey element in Block B. Non-residential floorspace is proposed in the form of a creche of 431sq.m gross floor area, community space of 186sq.m and 472sq.m of retail/commercial floorspace divided across 3 units at ground floor level within Block B and 708sq.m of retail/commercial floorspace divided across 3 units and 1 café/bar/restaurant of 188sq.m within Block C all fronting onto a proposed landscaped local square located to the north of Saggart Luas stop. Vehicular access to serve the proposed development will be provided from a signalised junction at the south-eastern corner of the site replacing the existing roundabout off Fortunestown Lane and west of Cuil Duin and an east/west distributor road all as permitted under the neighbouring development (ABP Ref. 300555-18). Permission is also sought for 418 car parking spaces including 405 basement level spaces and 13 surface level spaces and a total of 706 cycle parking spaces including 620 basement level spaces and 86 surface level spaces, bin storage areas, ESB substations, public lighting, boundary treatments, surface water drainage infrastructure including modifications to the previously permitted flood conveyancing channel (ABP Ref: 300555-18) and all associated site development and infrastructure works.

SHD3ABP-305556-19/SD22A/0299/SD22A/04221/LRD24A/0009WSD20A/02321

Mixed use residential scheme (total GFA 26,929sq.m) comprising 6 blocks with balconies/terraces to be provided on all elevations at all levels for each block, to provide 290 apartment units and associated residential amenity facilities, a childcare facility, 4 retail units and 2 café/restaurant units. A total of 153 car parking spaces (including 2 car club spaces) are proposed at surface level and existing basement level of the Citywest Shopping Centre to serve the development to include the reallocation of 37 existing surface level spaces; 67 new surface level spaces and the reallocation of 49 spaces from commercial to residential use at existing basement level of the Citywest Shopping Centre.

2.9 Potential/Proposed/Committed Infrastructure Works

There are several potential new infrastructure schemes in the vicinity of the proposed development site. Consideration has been given to the impact that these infrastructure schemes may have on the development. This will ensure that provision is allowed for these schemes to be delivered in the future.

A summary of the potential road infrastructure schemes is outlined below.

2.9.1 Bus Connects

The emerging Bus Connects Dublin plan (Ref: Core Bus Corridors Project Report June 2018) proposes revisions to Dublin's bus system through: -

- building a network of new bus corridors on the busiest bus routes to make bus journeys faster, predictable and reliable;
- completely redesigning the network of bus routes to provide a more efficient network, connecting more places and carrying more passengers;
- developing a state-of-the-art ticketing system using credit and debit cards or mobile phones to link with payment accounts and making payment much more convenient;
- implementing a cashless payment system to vastly speed up passenger boarding times;
- revamping the fare system to provide a simpler fare structure, allowing seamless movement between different transport services without financial penalty;
- implementing a new bus livery providing a modern look and feel to the new bus system;
- rolling out new bus stops with better signage and information and increasing the provision of additional bus shelters; and
- transitioning - starting now - to a new bus fleet using low emission vehicle technologies.

Phase 5b of the BusConnects Network Redesign commenced on the 26th of November 2023 and involved the introduction of new Southern Orbital, Radial and Local routes. S2, 74 and L25 are operated by Dublin Bus and routes S4, S6, S8, W2 and L55 are operated by Go-Ahead Ireland, on behalf of TFI.

BusConnects is the National Transport Authority's programme to greatly improve bus services in Irish cities. It will provide additional capacity and increased frequency, especially at evenings and weekends. More 24-hour services will be introduced which will assist shift workers and support the night-time economy. The BusConnects Network Redesign in Dublin is introducing high frequency Spine and Radial routes that operate into Dublin City centre, new Orbital routes for faster crosssuburban trips, and new Local routes to provide important connections within local areas. Peak services will provide additional capacity at the busiest travel times.

The following routes will cease from 26th of November: 17/d, 18, 61, 75/a, 76/a and 175.



Figure 15 Bus Connects (Source: Map 2 of Bus Connects)

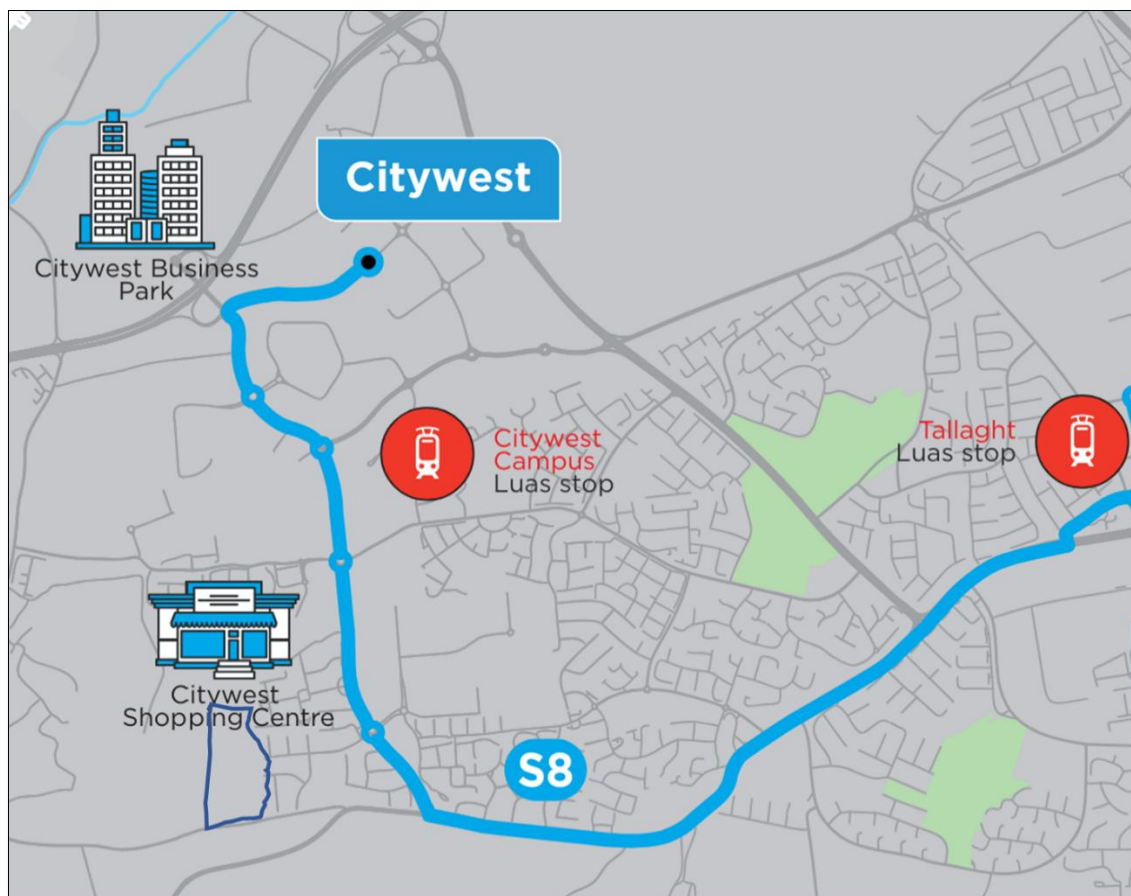


Figure 16 SB Bus Route

2.9.2 Cycle Network Improvements

Under the National Transport Authority's Cycle Network Plan for the Greater Dublin, the Dublin South- West Sector extends outward from the twin corridors of Camden Street and Clanbrassil Street in the city centre, through the inner suburbs of Rathmines and Harold's Cross, to serve the areas of Terenure, Kimmage, Walkinstown, Tallaght, Firhouse and Rathfarnham. There is considerable overlap between the West and South-West sectors, with interconnecting routes between the two. Some radial cycle routes originate in one sector at the city centre but end up in the neighbouring sector.

In accordance with the National Transport Authority's Cycle Network Plan for the Greater Dublin area the following improvements to the local cycle networks are proposed:

- Route 8A follows Crumlin Road past the Children's Hospital, Bunting Road to Walkinstown, through Ballymount to cross the M50 at Junction 10 and out to Citywest / Fortunestown via Belgard; Route 8B
- Route 9C is an alternative to the Harold's Cross route from Route 8C at Clogher Road via Stannaway Road west of Kimmage and then along Wellington Lane to join Route 9A at Spawell to connect to Tallaght. It also provides a continuation from Route 9A west of Tallaght via Fortunestown and Citywest to Saggart.
- Route 9D would provide a traffic-free option branching off Route 9A at Kimmage Cross Roads and following the River Poddle Greenway to Tymon Park where a new bridge is required over the M50 in the centre of the park to connect with Castletymon Road and rejoin Route 9A. West of Tallaght it provides a loop through Jobstown along the N81 and then northward into Citywest
- Slade Valley Trail: a potential route southward from the villages of Rathcoole and Saggart along the upper reaches of the Camac River to Brittas at the edge of the Dublin Mountains. This route is an alternative to the very busy N81 Blessington Road and opens up access to a network of quiet rural roads in West Wicklow.
- Saggart / Rathcoole / Newcastle: These 3 villages at the south-western edge of the city have grown substantially in recent decades and now form moderately significant dormitories. There is also a large logistics and warehouse park at Greenogue between Rathcoole and Newcastle that attracts trips by staff as well as numerous truck movements. Rural cycle route D5 is shown on Map RN10 as a link between these 3 satellite settlements along the R120 road and onward via city Route 8A to the greater Tallaght area at Fortunestown. This route continues north-westward along the R405 road from Newcastle to Hazelhatch railway station on the Dublin to Cork line, and from there connects into Celbridge in County Kildare. Route D6 links Newcastle north-eastward along the R120 road to Grange Castle and onward to either Clondalkin via Route 8C2 or to Lucan via Route SO7. These two regional roads (R120 and R405) are not comfortable for cycling due to narrow carriageway, bendy alignment and busy traffic including many trucks. Segregated cycle tracks would be required.

The proposed cycle routes are illustrated in Figure 17 below.

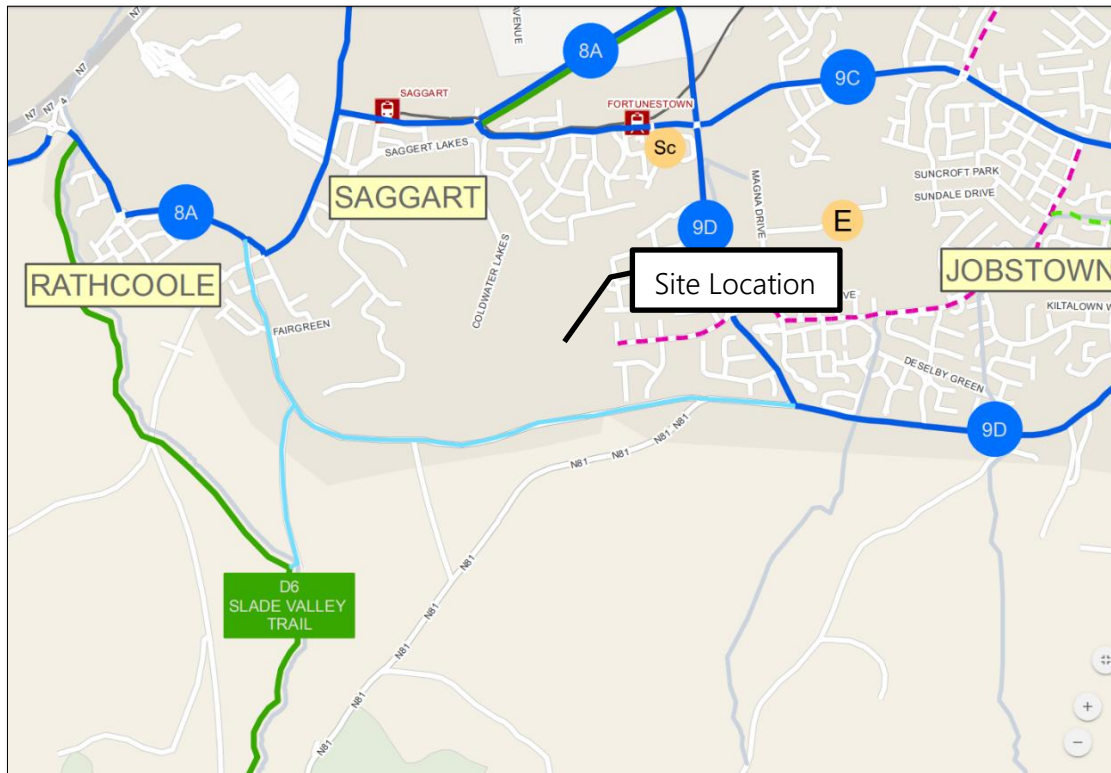


Figure 17 Proposed Cycle Network Upgrades (Source: NTA)

2.9.3 South Dublin County Council Active Travel Strategy

South Dublin County Council through its Active Travel programme will pursue the development and delivery of high-quality walking and cycling facilities for use by people of all age groups in there every-day travel.

South Dublin County Council short, medium and long term active travel strategy is shown in the figure below.

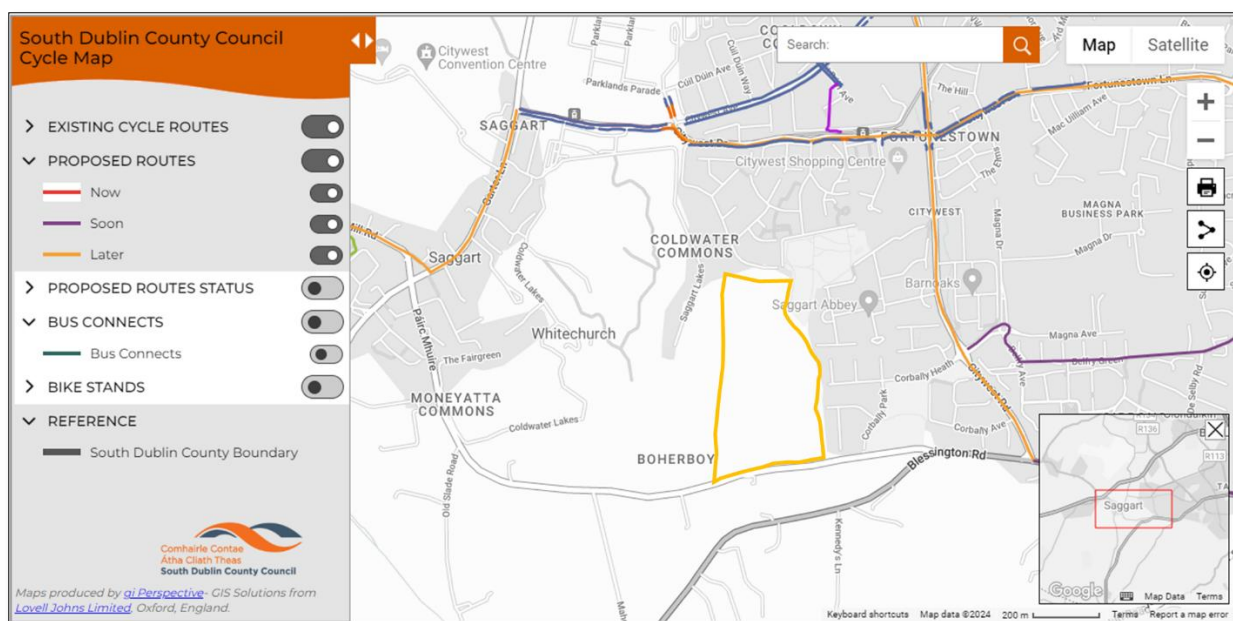


Figure 18 South Dublin County Council Active Travel Strategy

This project status is described as a '*Soon project*' – A project that will be within the next 5 years and Project Status on all of these will be 5 years or less to start.

2.9.4 Road Improvement Schemes

2.9.4.1 N81 Upgrade

In May 2016, Kildare NRDO published a route corridor option for the N81 Hollywood Cross to Tallaght Road Improvement Scheme. The road improvement scheme was not included in the Government's Capital Investment Plan (CIP), which provides the financial and strategic framework for TII's activities until 2021.

During the route selection process, the Applicant met with Kildare NRDO to discuss options and how it may affect either project. The Applicant is not proposing any changes to the carriageways of the N81 or Boherboy Road. Therefore, there is the potential to connect into the proposed roundabout on Boherboy Road as part of the Kildare NRDO scheme in the future.

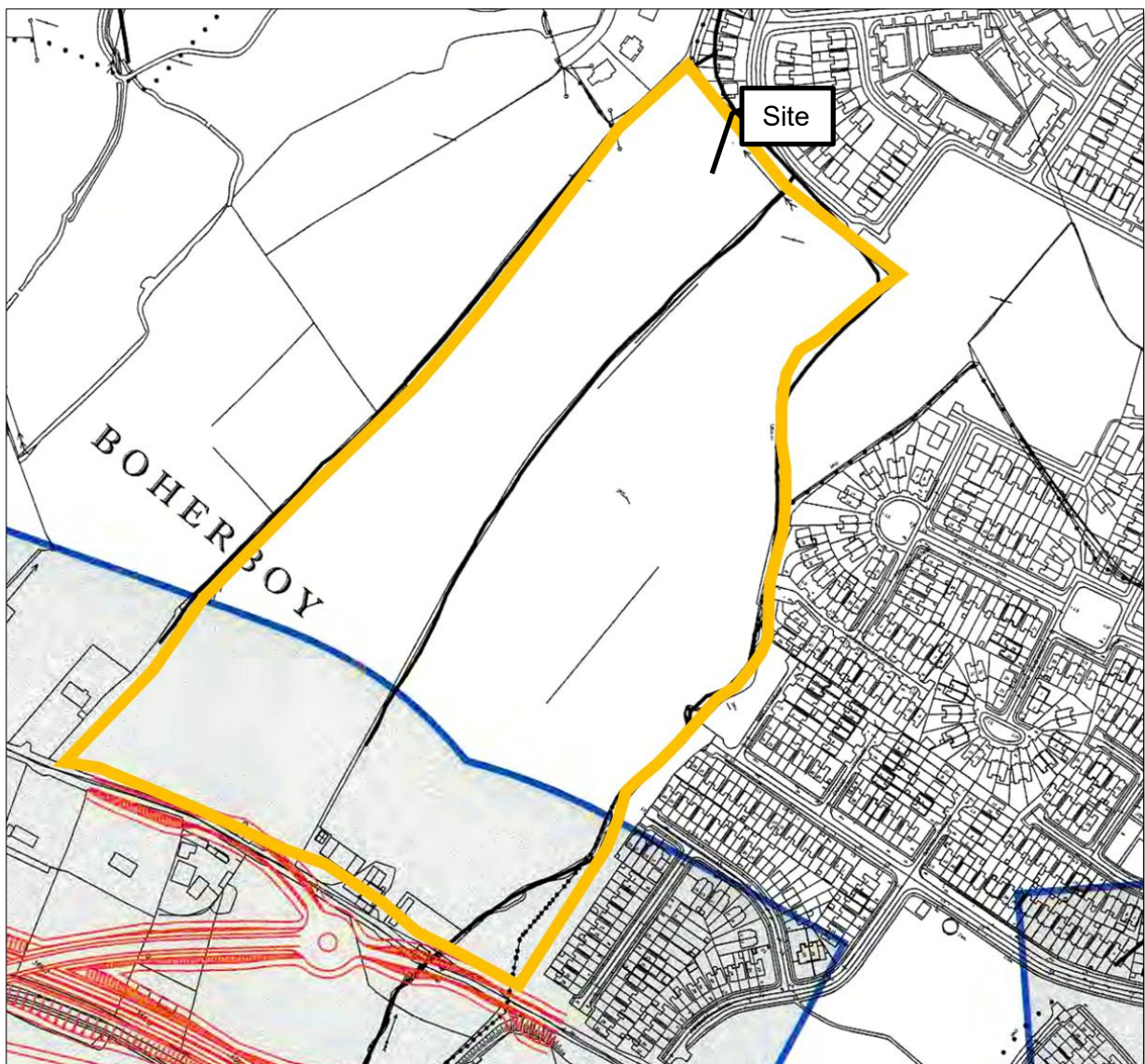


Figure 19 N81 Hollywood Cross to Tallaght Road Improvement Scheme Extract

2.10 Summary

In summary, the existing site benefits from good levels of existing public transport and walking/cycling infrastructure which will assist to encourage sustainable modes of travel for residents and visitors to/from the proposed development.

3 THE PROPOSED DEVELOPMENT

3.1 General

Kelland Homes Ltd. and Evara Developments Ltd. wish to apply for permission for a Large-scale Residential Development (LRD) on a site located at Boherboy, Saggart, County Dublin. To the immediate north of the site is the Carrigmore residential estate, to the west are agricultural lands and a single dwelling, to the east is the Corbally residential estate and Carrigmore Park, while to the south is the Boherboy Road.

The proposed development consists of 611 no. dwellings, comprised of 306 no. 2, 3, 4 & 4-5 bed, 2 & 3 storey, detached, semi-detached & terraced houses, 133 no. 1, 2 & 3 bed duplex units in 12 no. 2-3 storey blocks, and 172 no. 1, 2 & 3 bed apartments in 5 no. buildings ranging in height from 4-5 & 5 storeys. The proposed development also includes a 2-storey crèche (c.630m²).

Access to the development will be via one no. new vehicular access point from the Boherboy Road, along with new vehicular connections to adjoining developments at Corbally Heath to the east and Carrigmore Green to the north. Ten no. houses in the south-east part of the site will be accessed from Corbally Glade to the east. The proposed development includes for pedestrian and cyclist connections throughout the proposed development and accesses into adjoining lands at Carrigmore Park, Corbally Heath and Corbally Glade to the east and Carrigmore Green to the north.

Private amenity space for the residential units is provided in the form of rear gardens for houses and ground floor terraces / upper floor balconies for apartments and duplex units. The proposed development provides for a total of c. 2.3Ha of public open space, and c. 4,750sq.m of communal open space associated with proposed development.

The proposed development provides for (i) all associated site development works above and below ground, including surface water attenuation & an underground foul sewerage pumping station at the northern end of the site, (ii) public open spaces (c. 2.3Ha), (iii) communal open spaces (c. 4,750sq.m), (iv) hard & soft landscaping and boundary treatments, (v) surface car parking (861 no. car parking spaces), (vi) bicycle parking (711 no. bicycle parking spaces), (vii) bin & bicycle storage, (viii) diversion of all existing overhead ESB lines underground, (ix) public lighting, and (x), plant / PV panels (M&E), utility services & 8 no. ESB sub-stations, all on an overall application site area of c.18.7Hha. In accordance with the South Dublin County Development Plan (2022-2028), an area of c.1.03Ha within the site is reserved as a future school site.

The site has an area of 18.7Ha

It is proposed to develop this site based on the following schedule of accommodation:

Proposed Land Uses	
Land Use	Size
Houses	306
Duplex	133
Apartments	172
Total	611

Table 8 Proposed Land Uses

3.2 Site Access

The proposed site access points are illustrated in Figure 21 below.



Figure 20 Proposed Access

Primary vehicular access to the development will be via Boherboy Road (Access No. 1), via Corbally Estate (Access No. 2) and via Carrigmore (Access No. 3).

A fourth access will be provided via Corbally Glade (Access No. 4). This will not provide vehicular access to the entire development as this portion of the site is separated by local watercourse. Pedestrian and cyclist access will be provided to the entire development via a bridge crossing the stream.

Pedestrian access will coincide with the vehicular access with additional access points onto Boherboy Road and through the Carrigmore District Park.

3.3 Servicing

An AutoTrack analysis has been carried on the internal service access to demonstrate its capability to cater for residents and service vehicles such as refuse vehicles.

The results of this analysis show that the proposed development can accommodate the anticipated service vehicles that will serve the proposed development.

The auto tracking has been undertaken noting the following from DMURS: Tighter junction radii in accordance with section 4.3.3 of DMURS has been provided. This results in larger vehicles crossing the centre line of the intersecting street or road. Such manoeuvres are acceptable when turning into/or between local or lightly trafficked link streets as keeping vehicle speeds low is of higher priority.

3.4 Car Parking Provision

3.4.1 Background

There are various standards to consider when determining the appropriate car parking rate to meet the demand for future residents and visitors to the site while balancing the push to more sustainable modes of transport such as walking, cycling and public transport use.

1. The 3 main standards to consider are as follows:
2. South Dublin County Development Plan 2022-2028
3. Sustainable Urban Housing: Design Standards for New Apartments
4. Sustainable Urban Housing: Design Standards for New Apartments
5. Sustainable Residential Development and Compact Settlements Guidelines for Planning Authorities

3.4.2 South Dublin County Development Plan 2022-2028

Section 12.7.4 'Car Parking Standards' of South Dublin County Development Plan 2022-2028 sets out the car parking requirements for various types of development. The applicable parking rates are outlined below.

The parking rate is dependent on the developments accessibility to public transport nodes as follows:

- Zone 1: General rate applicable throughout the County.
- Zone 2: (Residential): More restrictive rates for application within town and village centres, lands zoned REGEN, and brownfield / infill sites within Dublin City and Suburbs settlement boundary within 400-500 metres of a high-quality public transport service (includes a train station, Luas station or bus stop with a high quality service).

It is assumed that the development is located in Zone 1.

South Dublin County Council's parking standards are described as maximum standards i.e. parking should not be provided over and above the figures outlined in Table 9.

It is the intention of the Applicant to provide car parking for the dwellings in line with the South Dublin County Council Development Plan standards, while striking an appropriate balance between compliance with the Plan and the provision of suitable parking levels, noting that the Plan sets maximum standards rather than fixed requirements.

The 'Sustainable Urban Housing – Design Standards for New Apartments' published by the Department of Housing, Planning and Local Government sets out alternative designer standards for apartments. Under the 'Sustainable Urban Housing – Design Standards for New Apartments', *'the quantum of car parking or the requirement for any such provision for apartment developments will vary, having regard to the types of location in cities and towns that may be suitable for apartment development, broadly based on proximity and accessibility criteria.'*

Therefore, the car parking provision for the site seeks to balance to maximum requirements, as described in the South Dublin County Council Development Plan, and what is sustainable based on the criteria outlined in the 'Sustainable Urban Housing – Design Standards for New Apartments'. This approach will be adopted for both the apartments and duplex in this development.

General Parking Standards			
Land Use		Standards	
		Z1	Z2
Apartment/Duplex	1 bed	1 space	0.75 spaces
	2 bed	1.25 spaces	1 space
	3 bed+	1.5 spaces	1.25 spaces
House	1 bed	1 space	1 space
	2 bed	1.5 spaces	1.25 spaces
	3+ bed	2 spaces	1.5 spaces
Creche		1 per classroom	0.5 per classroom

Table 9 Parking Standards

3.4.3 Sustainable Urban Housing: Design Standards for New Apartments

The Sustainable Urban Housing: Design Standards for New Apartments sets out the criteria for car parking based on the sites accessibility to public transport and location relative to centres of employment, amenities, etc.

The following definitions are used when determining car parking provision:

1. Central and/or Accessible Urban Locations

In larger scale and higher density developments, comprising wholly of apartments in more central locations that are well served by public transport, the default policy is for car parking provision to be minimised, substantially reduced or wholly eliminated in certain circumstances. The policies above would be particularly applicable in highly accessible areas such as in or adjoining city cores or at a confluence of public transport systems such rail and bus stations located in close proximity.

These locations are most likely to be in cities, especially in or adjacent to (i.e. within 15 minutes walking distance of) city centres or centrally located employment locations. This includes 10 minutes walking distance of DART, commuter rail or Luas stops or within 5 minutes walking distance of high frequency (min 10 minute peak hour frequency) bus services.

2. Intermediate Urban Locations

In suburban/urban locations served by public transport or close to town centres or employment areas and particularly for housing schemes with more than 45 dwellings per hectare net (18 per acre), planning authorities must consider a reduced overall car parking standard and apply an appropriate maximum car parking standard.

3. Peripheral and/or Less Accessible Urban Locations

As a benchmark guideline for apartments in relatively peripheral or less accessible urban locations, one car parking space per unit, together with an element of visitor parking, such as one space for every 3-4 apartments, should generally be required.

The centre of the proposed development, where the higher density elements of the development is located, is less than 10 minutes walking distance from the Fortunestown Luas Stop. It is a similar distance away from centres of employment such as Citywest Shopping Centre, Citywest Business Park and Magna Business Park. Therefore, the proposed development is considered to be a Central and/or Accessible Urban Location.

On that basis, it is proposed reduce the overall parking demand suggested in South Dublin County Development Plan 2022-2028 for apartments and duplexes within the development.

3.4.4 Sustainable Residential Development and Compact Settlements Guidelines for Planning Authorities

Under SPPR 3 - Car Parking, the Sustainable Residential Development and Compact Settlements Guidelines for Planning Authorities Sets out the quantum of car parking spaces for developments as follow:

It is a specific planning policy requirement of these Guidelines that:

- (i) *In city centres and urban neighbourhoods of the five cities, defined in Chapter 3 (Table 3.1 and Table 3.2) car-parking provision should be minimised, substantially reduced or wholly eliminated. The maximum rate of car parking provision for residential*

development at these locations, where such provision is justified to the satisfaction of the planning authority, shall be 1 no. space per dwelling.

- (ii) In accessible locations, defined in Chapter 3 (Table 3.8) car- parking provision should be substantially reduced. The maximum rate of car parking provision for residential development, where such provision is justified to the satisfaction of the planning authority, shall be 1.5 no. spaces per dwelling.*
- (iii) In intermediate and peripheral locations, defined in Chapter 3 (Table 3.8) the maximum rate of car parking provision for residential development, where such provision is justified to the satisfaction of the planning authority, shall be 2 no. spaces per dwelling*

The following definitions are relevant:

High Capacity Public Transport Node or Interchange

Lands within 1,000 metres (1km) walking distance of an existing or planned high capacity urban public transport node or interchange, namely an interchange or node that includes DART, high frequency Commuter Rail¹¹, light rail or MetroLink services; or locations within 500 metres walking distance of an existing or planned BusConnects 'Core Bus Corridor'¹² stop. Highest densities should be applied at the node or interchange and decrease with distance. 'Planned public transport' in these Guidelines refers to transport infrastructure and services identified in a Metropolitan Area Transport Strategy for the five cities and where a public authority (e.g. National Transport Authority, Transport Infrastructure Ireland or Irish Rail) has published the preferred route option and stop locations for the planned public transport.

Accessible Location

Lands within 500 metres (i.e. up to 5-6 minute walk) of existing or planned high frequency (i.e. 10 minute peak hour frequency) urban bus services.

Intermediate Location

Lands within 500-1,000 metres (i.e. 10-12 minute walk) of existing or planned high frequency (i.e. 10 minute peak hour frequency) urban bus services; and Lands within 500 metres (i.e. 6 minute walk) of a reasonably frequent (minimum 15 minute peak hour frequency) urban bus service.

Peripheral

Lands that do not meet the proximity or accessibility criteria detailed above. This includes all lands in Small and Medium Sized Towns and in Rural Towns and Villages.

The centre of the proposed development, where the higher density elements of the development is located, is less than 10 minutes walking distance from the Fortunestown Luas Stop. It is a similar distance away from centres of employment such as Citywest Shopping Centre, Citywest Business Park and Magna Business Park. Therefore, the proposed development is considered to be a Central and/or Accessible Urban Location.

On that basis, it is proposed reduce the overall parking demand suggested in South Dublin County Development Plan 2022-2028 for apartments and duplexes within the development.

3.4.5 Car Parking Provision – Creche

A total of 7 spaces will be provided for the creche.

3.4.6 Car Parking Provision - Houses

Parking provision for the houses has been determined in accordance with Table 12.26: Maximum Parking Rates (Residential Development) of the South Dublin County Development Plan 2022–2028.

The Plan defines Zone 1 as the general rate applicable throughout the County and Zone 2 as applying to sites within 400–500 metres of high-quality public transport. As the Boherboy site lies approximately 1 kilometre from the Fortunestown Luas Stop and is not within a REGEN or town-centre zoning, it is correctly classified as Zone 1 for parking purposes

Schedule of Accommodation – Houses	
Land Use	No
2 Bed House	30
3 Bed House	243
4 Bed House	26
4 / 5 Bed House	7
Total	306

Table 10 Schedule of Accommodation – Houses

Based on the schedule above, the applicable rates of car parking have been applied to each housing type as illustrated in Table 11.

Parking Provision – Houses			
Land Use	No.	Maximum Car Parking Requirement	Provided
2 Bed House	30	36	20
3 Bed House	243	498	498
4 Bed House	26	52	52
4 / 5 Bed House	7	14	14
Total		599	584

Table 11 Parking Provision - Houses

The proposed development provides a total of 584 car parking spaces to serve 306 houses, representing an overall provision of approximately 1.91 spaces per dwelling. This compares to the Zone 1 Development Plan maximum standard of 599 spaces (24 no. 2-bed houses × 1.5 spaces plus 282 no. 3-bed+ houses × 2.0 spaces). The proposed level of provision therefore represents a modest, policy-led reduction of 15 spaces relative to the maximum standards, reflecting a balanced approach aligned with national and local policy objectives promoting compact growth, sustainable mobility, and efficient land use.

The South Dublin County Development Plan 2022–2028 sets car-parking standards in Zone 1 areas as maximum thresholds, allowing flexibility where sites benefit from good accessibility by sustainable modes. The subject site forms part of the Boherboy Neighbourhood within the Fortunestown area, approximately 1 km (10–12 minutes' walk) from the Fortunestown Luas stop, and is connected to Citywest Shopping Centre and Citywest Business Park via established pedestrian and cycle routes. This accessibility enables residents to meet a significant proportion of daily travel needs without reliance on private cars.

The proposed parking ratio has been determined with reference to observed car-ownership levels in comparable outer-suburban locations with improving public-transport access, where household car ownership typically averages 1.7–2.0 vehicles per dwelling. Providing slightly below the Development Plan maximum ensures that parking supply meets practical demand while supporting the wider objectives of the Design Manual for Urban Roads and Streets (DMURS), the Sustainable Residential Development and Compact Settlements Guidelines (2024), and the National Sustainable Mobility Policy (2022), each of which encourages compact, low-carbon residential design and a shift toward active travel and public transport use.

To complement the parking provision, a series of design and management measures are incorporated to ensure effective operation. Parking for houses will be primarily in-curtilage or immediately adjacent to each dwelling, with clear allocation and wayfinding to minimise conflicts. A limited number of visitor spaces are distributed across the scheme and managed to prevent long-term resident storage. All spaces are EV-ready, and provision is made for car-sharing vehicles and secure cycle storage to encourage modal shift. A Residential Travel Plan will be implemented at occupation, including information packs, mobility credits, and personalised journey planning to reinforce sustainable travel behaviour.

The parking strategy also delivers wider benefits. It minimises localised congestion and trip generation, improves overall streetscape quality, and ensures compliance with DMURS principles by avoiding the over-dominance of parked cars within the public realm. It also allows for enhanced landscaping, biodiversity, and SuDS integration within the layout, improving both visual and environmental quality. A monitor-and-manage framework will be applied post-occupation, with surveys at approximately 6 and 18 months to confirm adequacy. Should a shortfall be demonstrated, limited contingency areas are identified within the layout to accommodate a modest increase (up to approximately 5–10%) without detriment to design or functionality.

In summary, the provision of 584 car-parking spaces for 306 houses in a Zone 1 location is compliant with the South Dublin County Development Plan 2022–2028 and consistent with national policy objectives promoting sustainable, compact, and low-carbon residential development. The approach is evidence-based, design-led, and supported by robust management measures, ensuring an appropriate balance between accessibility, liveability, and responsible car ownership within the Boherboy development.

3.4.7 Car Parking Standards – Duplex

Parking provision for the duplex units has been determined in accordance with Table 12.26: Maximum Parking Rates (Residential Development) of the South Dublin County Development Plan 2022–2028.

The proposed development is located more than 500 metres from the nearest bus stop or Luas station and is therefore considered to be located within Zone 1 for the purpose of applying Development Plan parking standards. The relevant South Dublin County Council Development Plan standards are summarised in Table 12 below.

Schedule of Accommodation - Duplex	
Land Use	No.
One Bed Duplex	11
Two Bed Duplex	46
One Bed Duplex	76
Total	133

Table 12 Schedule of Accommodation – Duplex

Based on the schedule above, the applicable rates of car parking have been applied to each housing type as illustrated in Table 13.

Parking Provision – Duplexes			
Land Use	No.	Maximum Car Parking Requirement	Provided
One Bed Duplex	11	17	11
One Bed Duplex	46	58	58
Three Bed Duplex	76	76	114
Total		151	155

Table 13 Parking Provision - Houses

The proposed provision of 155 car-parking spaces to serve 133 duplex units equates to an overall ratio of approximately 1.17 spaces per dwelling, marginally above the 151-space maximum set by

the applicable Zone 1 standards of the South Dublin County Development Plan 2022–2028. This level of provision ensures adequate parking capacity for residents while remaining broadly aligned with the Development Plan’s maximum thresholds and the sustainable-mobility objectives of both national and local policy. The ratio also appropriately reflects the site’s suburban context, where proximity to Citywest, the Fortunestown Luas stop, and established walking and cycling routes supports a reduced reliance on private car travel.

The parking layout has been developed in accordance with the principles of the Design Manual for Urban Roads and Streets (DMURS) and the Sustainable Residential Development and Compact Settlements Guidelines for Planning Authorities (2024), promoting attractive, pedestrian-friendly streets where car parking is integrated into the design but does not dominate the public realm.

Complementary measures—including a Residential Travel Plan Framework, distributed visitor parking, EV-ready infrastructure, and secure cycle storage—will further encourage sustainable travel behaviour and reduce long-term car dependency within the Boherboy neighbourhood.

In this context, the proposed 155 parking spaces, relative to the 151-space maximum permitted under Development Plan standards, represent a balanced, design-led, and context-sensitive level of provision that meets residential demand while supporting compact growth and sustainable transport objectives at both local and national levels.

3.4.8 Car Parking Standards – Apartment

Parking provision for the apartment units has been determined in accordance with Table 12.26: Maximum Parking Rates (Residential Development) of the South Dublin County Development Plan 2022–2028.

The proposed Boherboy development is located more than 500 metres from the nearest Luas stop or high-frequency bus service and is therefore classified as Zone 1 for the purposes of applying Development Plan parking standards.

Table 14 Schedule of Accommodation

Schedule of Accommodation	
Land Use	No
Apartment 1 Bed	46
Apartment 2 Bed	124
Apartment 3 Bed+	2
Total	172

Based on the accommodation schedule above, the applicable car parking rates have been applied in line with the Development Plan standards. The corresponding provision of parking for the apartment element of the development is summarised in Table 15.

Parking Provision – Apartment			
Land Use	No.	Maximum Car Parking Requirement	Provided
Apartment 1 Bed	46	69	19
Apartment 2 Bed	124	186	93
Apartment 3 Bed+	2	3	3
Total		258	115

Table 15 Parking Provision – Apartments

The proposed provision of 115 car-parking spaces to serve 172 apartments equates to an overall ratio of approximately 0.67 spaces per unit, which aligns with the Zone 1 maximum standards of the South Dublin County Development Plan 2022–2028. This level of provision reflects best practice for higher-density residential development in accessible suburban locations and supports the Plan’s objective of moderating car-parking supply where high-quality sustainable transport options are available.

The site benefits from proximity to Citywest, the Fortunestown Luas stop (approximately 10–12 minutes’ walk), and established pedestrian and cycle infrastructure, enabling residents to undertake a significant share of daily trips by sustainable modes. The proposed parking ratio therefore provides an appropriate balance between meeting resident demand and supporting national and local policy objectives related to compact growth, reduced car dependency, and sustainable mobility.

The apartment parking layout has been designed in accordance with the Design Manual for Urban Roads and Streets (DMURS) and the Sustainable Residential Development and Compact Settlements Guidelines for Planning Authorities (2024). Parking is located and arranged to ensure efficient operation, minimise visual impact, and maintain high-quality streets and open spaces. Car-parking areas are integrated with landscaping and SuDS features to enhance amenity and environmental performance.

A suite of complementary measures—including a Residential Travel Plan Framework, secure long- and short-stay cycle parking, allocated EV-ready spaces, and provision for car club vehicles—will further encourage sustainable travel behaviour and support a reduction in private car reliance over time.

In this context, the provision of 115 parking spaces for 172 apartments represents a policy-compliant, design-led, and context-responsive approach that supports compact, high-quality residential development while aligning with national and local sustainable transport objectives.

3.4.9 Visitor Parking / Car Sharing Spaces

The South Dublin County Development Plan 2022–2028 does not specify a separate quantitative standard for visitor car-parking spaces within residential developments.

The *Sustainable Urban Housing: Design Standards for New Apartments* (2023) advises that, as a benchmark, one visitor space per 3–4 apartments should generally be provided in less accessible suburban locations. Where reduced or car-free parking provision is proposed, developments should nonetheless include adequate drop-off, service, accessible, and visitor spaces, together with facilities for car-sharing vehicles, electric vehicle (EV) charging, and high-quality cycle parking to support sustainable mobility.

The *Sustainable Residential Development and Compact Settlements Guidelines for Planning Authorities* (2024) similarly state that applicants should justify the level of parking proposed and ensure that visitor spaces are provided within the overall maximum car-parking cap. These guidelines also clarify that bays reserved for car-club vehicles, short-stay EV charging, and accessible parking are not counted within residential parking maxima.

While the Development Plan does not impose a specific visitor-parking requirement, the applicant recognises the importance of providing a mix of non-residential parking types to support accessibility and sustainable travel choices. Accordingly, it is proposed to provide a total of 47 non-residential parking spaces, comprising:

- 7 No creche car parking spaces
- 40 No. visitor car parking spaces

No residential spaces may be used dual purposed for the following purpose

- Car-sharing club spaces
- Short-stay Electric Vehicle (EV) charging spaces; and
- Accessible parking spaces.

This balanced mix ensures that adequate short-stay and shared parking is available for residents, visitors, and service vehicles, consistent with both national and local policy objectives promoting sustainable, well-connected residential development.

3.4.10 Car Parking – Summary

A total of 861 car-parking spaces will be provided for the Boherboy residential development. Parking for houses will be accommodated within the curtilage of each dwelling, while a combination of on-street and courtyard parking will serve the apartments, duplex units, crèche, and visitor spaces.

In accordance with the Design Manual for Urban Roads and Streets (DMURS) and the Sustainable Urban Housing: Design Standards for New Apartments (2023), car parking has been designed to meet resident and visitor demand without allowing vehicles to dominate the site layout.

A total of 270 spaces are allocated to the apartment and duplex elements of the scheme (155 duplex, 115 apartments), providing sufficient capacity to meet anticipated demand while supporting the development's sustainable transport objectives. This calibrated level of provision also functions as a

demand-management tool, encouraging residents to use active and public transport modes for both local and commuter trips.

A balanced approach has therefore been achieved between the South Dublin County Development Plan 2022–2028 standards and anticipated parking demand, consistent with best practice and the overarching objectives of sustainable mobility, compact growth, and efficient urban design.

Overall Parking Provision			
Land Use	No. of Units	Parking Spaces Provided	Ratio (Spaces per Unit)
Houses	306	590	1.93
Duplex Unit	133	155	1.17
Apartment	172	115	0.67
Crèche	c. 630m ²	7	—
Total	611 units	861	1.41 (overall)

Table 16 Overall Parking Provision

In total, 861 no. parking spaces will be provided for the overall development.

The development provides an average of 1.40 spaces per residential unit, representing a balanced and context-sensitive approach in accordance with the South Dublin County Development Plan 2022–2028.

The reduced level of parking for the apartment and duplex units reflects the site's accessible suburban location within the Fortunestown / Citywest area, approximately 1 km from the Fortunestown Luas stop, and supported by high-quality pedestrian and cycle connections to nearby services, employment, and public transport.

This approach offers several key benefits:

- Reduced congestion and improved road safety through increased use of sustainable transport modes
- Lower pressure on the surrounding road network and fewer peak-period car trips
- Environmental improvements through lower carbon emissions, air pollution, and noise
- Enhanced visual quality and streetscape design, with less land dedicated to parking
- Greater opportunities for active, healthy travel such as walking and cycling
- More efficient land use, allowing additional landscaping, play space, and pedestrian routes
- Improved accessibility and travel choice for residents and visitors of all ages and abilities

Overall, the proposed car-parking strategy delivers a compliant, demand-led, and design-led solution, ensuring that the Boherboy development supports sustainable mobility and compact urban living while maintaining functional convenience for residents and visitors.

3.5 Cycle Parking Standards

3.5.1 Background

There are various standards to consider when determining appropriate cycle-parking provision for the Boherboy development, ensuring adequate capacity for future residents, staff, and visitors while supporting a shift toward more sustainable modes such as walking, cycling, and public transport.

The three main policy documents informing the proposed strategy are:

- South Dublin County Development Plan 2022–2028 (Section 12.7.1 – Bicycle Parking / Storage Standards);
- Sustainable Urban Housing: Design Standards for New Apartments (2023); and
- Sustainable Residential Development and Compact Settlements Guidelines for Planning Authorities (2024).

3.5.2 South Dublin County Development Plan 2022-2028

Section 12.7.1 (Bicycle Parking / Storage Standards) of the Development Plan, supported by Table 12.23, sets out the required quantum of long- and short-stay bicycle parking for different land uses. The applicable rates are summarised below:

Cycle Parking Standards		
Land Use	Long Term	Short Term
Apartment	1 per bedroom	1 per two apartments
Creche	1 space per 5 Staff	1 space per 10 children

Table 17 Parking Standards – Apartment / Duplex

Houses are generally expected to accommodate bicycle parking within the curtilage of each dwelling and are therefore excluded from the formal quantum calculation.

3.5.3 National Guidance

Both the Sustainable Urban Housing: Design Standards for New Apartments (2023) and the Sustainable Residential Development and Compact Settlements Guidelines (2024) reinforce the above approach. Each requires a minimum of one long-stay cycle space per bedroom and one short-stay space per two units, with flexibility to adjust based on site accessibility, quality of facilities, and potential for future expansion.

Both guidelines also highlight the importance of providing a mix of cycle parking types, including provision for larger cargo and electric bicycles, as well as lockers and charging outlets where possible.

3.5.4 Cycle Parking Provision

Based on the Boherboy unit mix and crèche floor area, the total cycle parking requirement under the South Dublin County Development Plan 2022–2028 is 721 spaces.

The scheme proposes 711 spaces, a slight shortfall of 10 spaces (1.4%) relative to the full standard. This modest variance results from design optimisation within the site layout and practical distribution across apartment, duplex, and crèche blocks. Despite this, the overall provision achieves full policy intent through quality, accessibility, and flexibility.

Cycle parking is distributed throughout the development to maximise convenience, visibility, and safety. Long-stay covered storage is provided adjacent to residential buildings, while short-stay visitor stands are located near building entrances, community spaces, and the crèche. Provision has been made for cargo and e-bike parking and for future expansion if required.

Cycle Parking Provision		
Use	Required (per SDCC Plan 2022–2028)	Proposed
Residential – Long Stay	556	544
Residential – Short Stay	40	40
Crèche – Long Stay	5	5
Crèche – Short Stay	15	15
Visitor / General (Short Stay)	105	107
Total	721	711

Table 18 Cycle Parking Provision

Accordingly, the proposed 711 high-quality cycle-parking spaces are considered policy-compliant, demand-responsive, and flexible, providing strong support for sustainable mobility in accordance with the South Dublin County Development Plan 2022–2028 and national sustainable transport policy.

3.5.5 Summary

A total of 861 car parking spaces and 711 cycle parking spaces are proposed within the Boherboy residential development. The overall parking strategy has been designed to balance the need for adequate resident and visitor parking while promoting sustainable travel choices, in accordance with the South Dublin County Development Plan 2022–2028, the Design Manual for Urban Roads and Streets (DMURS), and the Sustainable Urban Housing: Design Standards for New Apartments (2023).

Car Parking

Car parking will be provided both within the curtilage of houses and in on-street or courtyard areas serving the apartments, duplex units, crèche, and visitor spaces. The total residential car parking provision is 854 no. spaces, which equates to a ratio of 1.39 spaces per unit. In addition to all of the above, 7 no. car parking spaces are allocated to the proposed crèche.

The distribution of car parking across the site is as follows:

- Houses: 590 spaces (1.93spaces per unit)
- Duplex Units: 155 spaces (1.17 spaces per unit)
- Apartments: 115 spaces (0.67spaces per unit)
- Crèche: 7 spaces

The total residential car parking provision is 854 no. spaces, which equates to a ratio of 1.39 spaces per unit.

While the South Dublin County Development Plan 2022–2028 would typically indicate a higher parking standard for apartments and duplexes, the proposed provision ensures that parking does not dominate the development layout. The design supports compact, pedestrian- and cycle-friendly streets in line with DMURS and promotes a modal shift toward sustainable transport. The development's proximity to Fortunestown Luas stop, Citywest Shopping Centre, and Citywest Business Park ensures residents have strong access to public transport and employment within walking and cycling distance, further supporting reduced car dependency.

Cycle Parking

A total of 711 cycle parking spaces will be provided throughout the development, distributed between long-stay and short-stay facilities for residents, the crèche, and visitors. Provision has been designed in accordance with Section 12.7.1 – Bicycle Parking / Storage Standards of the South Dublin County Development Plan 2022–2028 and the Sustainable Residential Development and Compact Settlements Guidelines for Planning Authorities (2024), which emphasise enhanced cycle facilities where car-parking provision is moderated.

The breakdown of provision is as follows:

- Residential Long-Stay: 544 spaces
- Residential Short-Stay: 40 spaces
- Crèche Long-Stay: 5 spaces
- Crèche Short-Stay: 15 spaces
- Visitor / General Short-Stay: 107 spaces

This provides a total of 167 short-stay and 544 long-stay spaces, giving a combined total of 711 cycle parking spaces (equivalent to approximately 1.16 spaces per residential unit). All long-stay spaces will be secure, covered, and conveniently located adjacent to residential blocks or within internal storage areas. Short-stay cycle parking will be provided near entrances, communal areas, and the crèche to ensure easy access for visitors and short-duration trips.

Summary

The proposed parking strategy for the Boherboy development provides a balanced, policy-compliant, and sustainable approach to both car and cycle parking:

- 861 car parking spaces provided overall, including residential, crèche, and visitor/set-down spaces.
- 711 cycle parking spaces provided, broadly consistent with Development Plan standards.
- Layout supports walkable streets, active travel, and reduced car dependency.
- Fully consistent with DMURS, Apartment Design Guidelines, and the National Sustainable Mobility Policy.

Parking Summary			
Car Parking			
Land Use	No. of Units	No. of Spaces	Ratio (Spaces per Unit)
Houses	306	590	1.93
Duplex Units	133	155	1.17
Apartments	172	115	0.67
Crèche	c. 630m ²	7	—
Total	611 units	861	1.41 (overall)
Bicycle Parking			
Category	No. of Spaces		Ratio
Residential – Long Stay	544		0.89 per unit
Residential – Short Stay	40		0.07 per unit
Crèche – Long Stay	5		0.7 per classroom (approx.)
Crèche – Short Stay	15		2.1 per classroom (approx.)
Visitor / General (Short Stay)	107		0.17 per unit
Total Short Stay (All Uses)	167		0.27 per unit
Total Cycle Parking	711		1.16 per unit (overall)

Table 19 Parking Summary

Overall, the proposed car and cycle parking strategy at Boherboy achieves compliance with the South Dublin County Development Plan 2022–2028, ensuring an appropriate balance between accessibility, liveability, and sustainable mobility within a compact, well-connected urban neighbourhood.

3.6 Pedestrian and Cycle networks

3.6.1 Introduction

It is a necessary part of the design framework for a residential development such as this to ensure that there is good permeability for those residents and visitors to the development who choose not to travel by car. The development has been designed to ensure that there is good

permeability for pedestrians and cyclists. Connections between the internal layout and the external pedestrian and cycle networks form part of the overall access strategy for the site. With this development pedestrian movement is suitably catered for by footpath connections within and adjacent to the development up to the relevant boundaries i.e. through Carrigmore Estate, Carrigmore District Park and Corbally Estate. These provide good linkage to the surrounding urban areas.

The internal layout demands that all visitors to the site are catered for and so pedestrian routes between dwelling areas and key nodes within the layout are well designed and clearly delineated. This applicant is very experienced in creating safe environments that satisfy resident's requirements and convenience. Accordingly, every effort has been made to ensure that vehicular access will be restricted in areas where there are likely to be the highest concentrations of pedestrian/cycle movements.

The internal site layout will include several crossing facilities that are located along key desire lines and which coordinate well with the proposed car parking layouts to enhance the safety, visibility and convenience of those people on foot. These facilities will include features such as tactile paving and surface treatments that will benefit all users and assist those with impaired mobility.

Pedestrian linkage will be provided to the boundary of the local estates such as Corbally and Carrigmore residential developments and other future developments as part of the development. Pedestrian linkage to the lands that form part of the South Dublin County Development Plan 2022-2028 (and subsequent Local Area Plans) will be provided as part of subsequent stages of development.

Given the desire in current planning guidance to improve accessibility for non-car modes of travel, access by bicycle is increasingly important. Since the weather and topography inevitably have an influence on cycle use, the key to cycle accessibility is the existence of convenient and safe links associated with secure and carefully sited cycle parking.

3.6.2 Internal Cycle Network

It is intended that the proposed development will have a 30km/h speed limit.

Shared Streets - DMURS

Figure 4.52, from the NCM, provides an overview of the integration and segregation of cycle traffic within the carriageway based on vehicle speeds and traffic volumes. For

example:

1. On lightly-trafficked/low-speed streets, designers are generally directed to create Shared Streets where cyclists and motor vehicles share the carriageway
2. On busier/moderate speed streets, designers are generally directed to apply separate cycle lanes/cycle tracks. Designers must also have regard to the measures contained within this Manual when applying the NCM. For example:
3. To minimise the width of vehicular carriageways from kerb to kerb, preference should be given to the implementation of Raised Cycle Lanes or Raised Cycle Tracks over those design solutions where cyclists and vehicles are at grade.

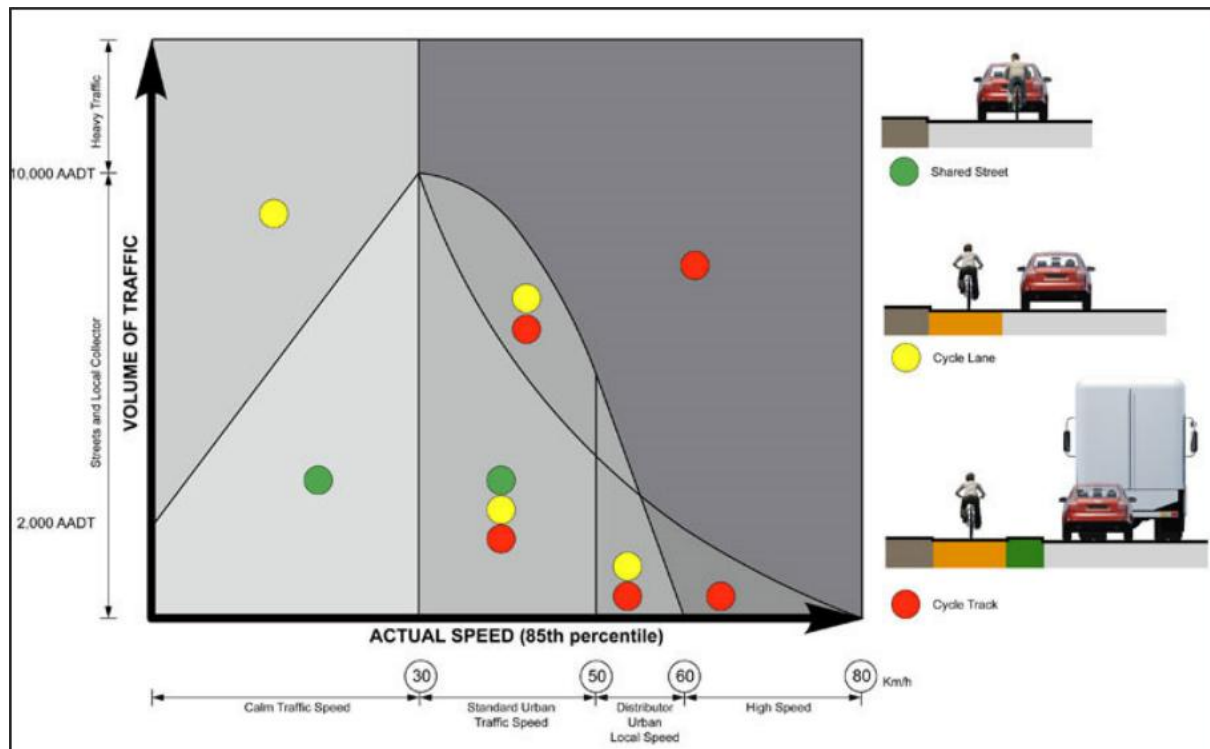


Figure 21 Extract From DMURS

Based on the above, the proposed development intends to create a shared space for lightly trafficked/low speed streets which will characterize the development.

Shared Streets – Cycle Design Manual

On local roads, residential streets and rural lanes, where traffic volumes and speeds are generally lower, many people are likely to be willing to cycle on-carriageway in mixed traffic or in unprotected cycle lanes as the perceived risk of injury is low. Designers may still choose to provide dedicated cycle facilities to address other requirements for cycle-friendly infrastructure, such as attractiveness or coherence. In some locations, a shared street may represent the best way to reconcile the conflicting needs of different users and different activities taking place within the street. Traffic management or calming techniques may be used to reduce traffic speed and/or volume to the point where cycling conditions are inclusive and suitable for most people. This may also be associated with the removal of non-local, through-traffic to reinforce the primary function of local access. Possible measures can range from a bypass for through-traffic at town or village level, to simple measures such as turning bans at a neighbourhood level.

Greenway

The western shared cycle tracks are defined as amenity cycle tracks that would cater for pleasure trips. A sample of the shared cycle track is shown in the figure below.

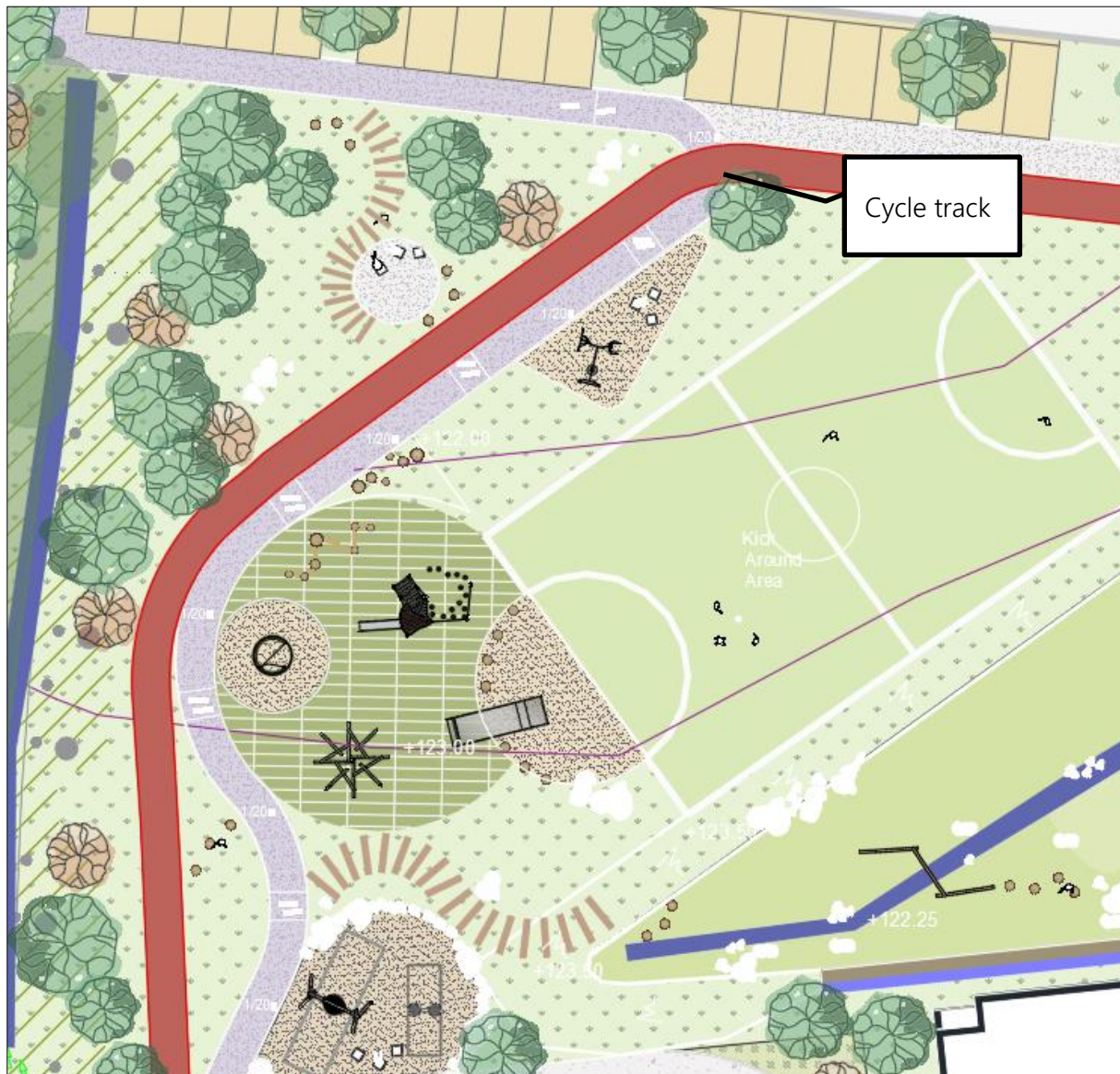


Figure 22 Cycle track

The greenway should be a two-way shared facility, for pedestrians and cyclists, along the respective boundaries. The cross-sectional width is determined on the likely level of usage. The usage will be less than 1500 users per day (assumed). Therefore, the greenway is a low volume facility and segregation between pedestrians and cyclists is not considered necessary.

The greenway will not be used by motorised vehicles, apart from maintenance and emergency vehicles.

As the volume is expected to be less than 1,500 users therefore the Greenway would be a low volume facility with 3m wide pavement as recommended by TII Rural Cycleway Design (offline) 2017, Table 4.1.

The proposed Greenway pavement shall be made up of 40mm bituminous surface laid on 150mm of crushed stone sub-base. The sub-base should be laid with a paving machine so as to give a high-quality surface level control which is a requirement for multi-user trails.



Figure 23 Typical Greenway Construction

3.6.3 Access Across the Stream

The SSFRA, prepared by Killgallen, analysis determined that the top water level from the 100-year event at the lower northern end of the site as 118.84mOD. The Flood Risk Management Guidelines recommends that a freeboard of 500mm and 250mm be applied for the Q100 event for floors and roads respectively.

Pedestrian and vehicular access connections between the proposed development to Carrigmore, Corbally and the District Park have been set above the minimum soffit levels as illustrated in the table below.

3.6.4 Facilities and access for those with impaired mobility

The design has sought to ensure that the environment created within this development will be accessible to residents and visitors with disabilities. Footpaths will be designed in accordance with the latest design criteria to ensure safe access for those that have a mobility impairment.

4 PERMEABILITY STRATEGY

4.1 Fortunestown Local Area Plan

4.1.1 Background

The Fortunestown Local Area Plan set the context and constraints for the development of the proposed lands when originally enacted. The Fortunestown Local Area Plan has lapsed but provides context for the planning history on this site with regards to the requirements for the upgrade of Boherboy Road to accommodate pedestrians.

Although the Fortunestown Local Area Plan is now out of date and its requirements no longer carry statutory weight, the guidance it previously provided played an important role in shaping the development of the Permeability Strategy for Boherboy. While references to the Fortunestown LAP are included for contextual purposes, any specific requirements contained within that plan are no longer applicable. Nonetheless, the overarching principles identified in the LAP—particularly regarding movement, connectivity, and integration with the wider Fortunestown area—have informed the approach taken, ensuring that the proposed permeability network aligns with best practice and supports effective, sustainable connections within and beyond the Boherboy neighbourhood.

4.2 Planning History

There has been a number of planning applications on this site as follows:

- SD15A/0388 – Status: Refused
- SHD3ABP-304828-19 – Status: Refused
- SHD3ABP-313145-22 – Status: Report prepared

Under Reg. Ref. SHD3ABP-304828-19, the application was refused planning permission. The reasons for refusal did not relate to the Boherboy Road upgrade. However, the Inspectors report noted the following:

Section 10.2.7

I also have significant concerns regarding the appropriateness of the Boherboy Road to facilitate a development of this scale. This is addressed further in section 10.6. The road is substandard in width and alignment, and would in my view, require significant upgrade to facilitate a development of this scale. This is confirmed in the Planning Authority Report and it is detailed that the preferred option would be that entry to the site is provided to the north and east of the site and the principal vehicular/egress points are not solely at the Boherboy Road.

Section 14

Having regard to the scale of the proposed development, and the resulting volumes of vehicular and pedestrian/cyclist traffic likely to be generated, it is considered that the proposed development would be premature by reference to existing deficiencies in the Boherboy Road in terms of capacity, width, alignment, public lighting, and pedestrian and cycle facilities, and where these deficiencies would render the network unsuitable to carry the increased road traffic likely to result from the development, and the period within which the constraints involved may reasonably be expected to cease. It is considered that the development is premature in the absence of agreements with third parties and confirmation that appropriate pedestrian connections can be achieved, together with the necessary upgrade works to the Boherboy Road to accommodate safe pedestrian, cyclist and vehicular safety towards the N81 and Saggart Village. It is considered that if developed prior to the

carrying out and completion of these improvement works, the proposed development would endanger public safety by reason of a traffic hazard, including hazard to pedestrians and cyclists. The proposed development would, therefore, be contrary to the proper planning and sustainable development of the area.

At the time Reg. Ref. SHD3ABP-304828-19 was submitted, the proposed development was reliant on Boherboy Road for access as there were no means to provide an access via Corbally or Carrigmore. The revised application will be able to provide these access points, as well as the access via Boherboy Road, with out the requirement for third party consents. This is fundamentally different to what was proposed under Reg. Ref. SHD3ABP-304828-19 where third-party consents were required.

Reg. Ref. SHD3ABP-313145-22 is still under consideration by An Bord Pleanala. South Dublin County Council's Planners Report is available and has been reviewed. The pertinent issues are copied below:

Notwithstanding this, the most appropriate solution to this issue is that the works to the Boherboy Road be the subject of future ecological surveys (aboricultural, biodiversity, bats, etc.), and that the final layout of the Boherboy Road, and decision on whether to carry out such works, should be subject to final agreement with the planning authority. This can be managed by condition of permission.

Updated tree surveys have been undertaken along Boherboy Road. It is the Applicant's view that should a footpath be required along Boherboy Road, all existing trees and hedges will be removed with suitable new landscaping to replace what would be removed.

4.2.1 Phasing

Phase 1 of development of the Boherboy lands may commence at the southern end of the lands with access off Boherboy Road provided that, prior to the occupation of any dwelling, Phase 1 of development of the Boherboy lands includes for the provision of a footpath along Boherboy Road, including the preservation of trees where possible. This is necessary due to the extremely narrow, sub-standard nature of Boherboy Road where there is no footpath access to the site at present.

Phase 2 of the development would allow for the northern half of the lands to be developed by providing connects to Carrigmore and Corbally.

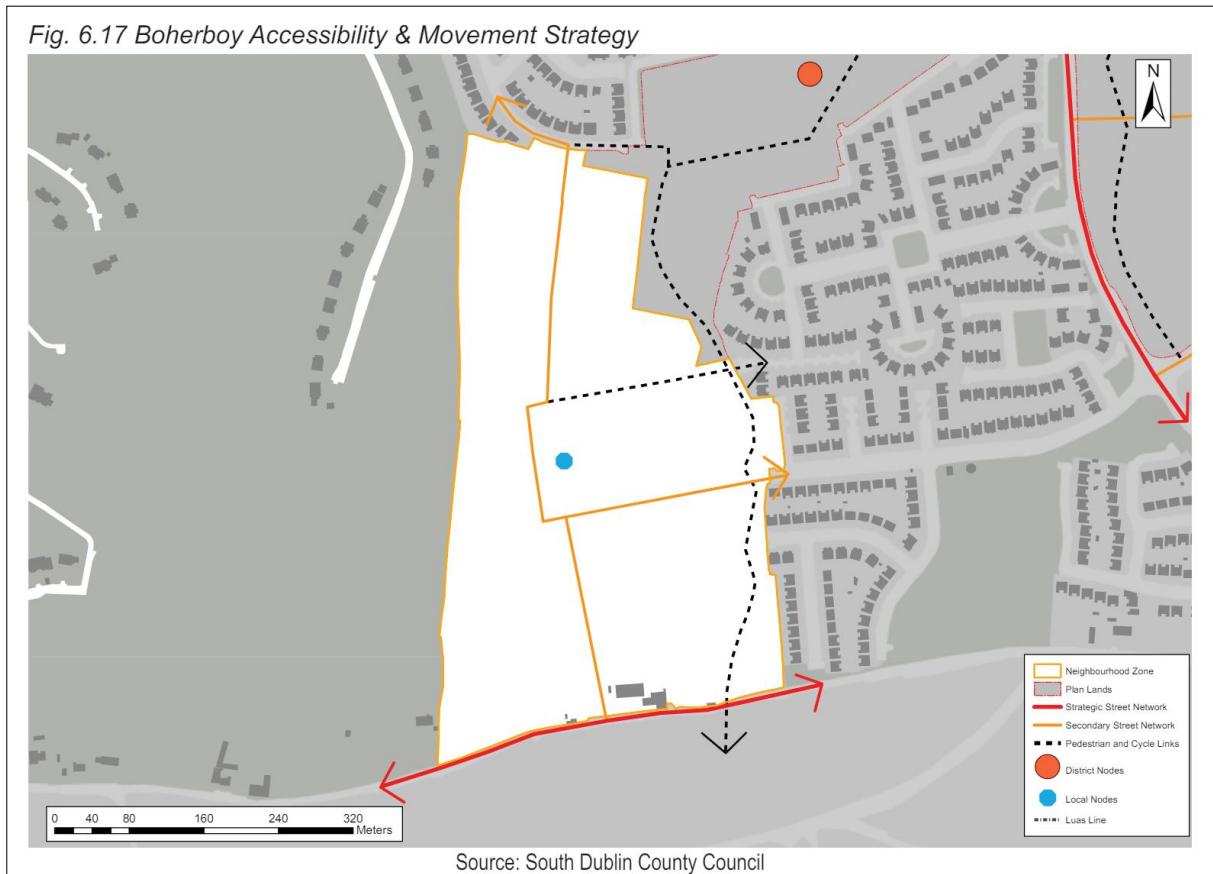


Figure 24 Proposed Access Strategy

4.3 Landownership/Taking in Charge Status

In each of the 3 planning applications referenced above, there were issues relating to the connection of the roads/footpath/cycle network proposed in the application to Corbally and Carrigmore Estates.

These issues included lands not been taken in charge or third-party land ownership issues.

At the time of writing, these issues no longer apply. The proposed development will connect in to Corbally and Carrigmore Estates on to lands taken in charge by South Dublin County Council over lands under the control of the Applicant.

4.4 Boherboy Road

The lands at Boherboy have a strong rural character with an undulating topography that slopes steeply near the Boherboy Road.

Boherboy Road has a rural character with high tree lines/hedges located on either side. A tree survey has been carried out to assess the potential impact of the construction of a proposed footpath along the northern edge of Boherboy Road. This is discussed on more detail later in this report.

4.5 Proposals

4.5.1 Context

In preparation for the Stage 2 Application, a site meeting was held on 24 October 2023 with representatives of the Parks Department and Roads Department of South Dublin County Council on Boherboy Road. The purpose of this meeting was to consider the following:

1. Whether the proposed Boherboy Road upgrade could be delivered without impacting existing hedges and trees; and
2. Whether the Boherboy Road upgrade remained necessary, given that connections to Corbally, Carrigmore and Boherboy Road could be provided from Day 1 of the development by the Applicants.

The original requirement for the Boherboy Road upgrade derived from the first-phase provisions of the Fortunestown Local Area Plan. As the LAP has now lapsed—and given that Corbally and Carrigmore have since been taken in charge—the primary pedestrian and cyclist desire line towards Citywest can now be achieved via these established connections, without the need to construct a footpath along Boherboy Road. In this scenario, all existing hedges and trees along Boherboy Road would be retained while still providing high-quality pedestrian and cyclist permeability.

At the meeting, it was agreed that the Applicants would assess the extent of impact that the proposed Boherboy Road upgrade would have on the existing hedgerow and tree line. If this impact proved significant, the Applicants were to examine an alternative connection from the southeast corner of the site to Corbally, facilitated through the newly acquired 'rectangle site', which did not form part of the original SHD application.

Drawings submitted at Stage 2 illustrated the direct impacts of the footpath proposal on the trees and hedges along Boherboy Road. The construction of the footpath—together with the installation of a fence/barrier and the associated regrading of the embankment—would likely require the removal of vegetation from the bottom to the top of the embankment. This would result in the loss of virtually all trees and hedges over a length of approximately 350 metres, not including the additional potential loss along the site frontage of c. 320 metres.

In their LRD Opinion, South Dublin County Council sought an alternative approach that would avoid significant impacts on Boherboy Road. Their preferred option was to provide a pedestrian and cyclist route through Corbally, enabling residents to access the N82 without the need to walk along Boherboy Road.

4.5.2 Proposal

Pinnacle Drawing No. P230400423-PIN-XX-DR-D-155-S1-P01- SITE PERMEABILITY outlines a proposed permeability links from the development including the 'triangle site' to Corbally Glade and illustrates the walking routes that would have been otherwise provided for via the Boherboy Road footpath. This is a more attractive route when compared to using Boherboy Road as it would have a higher amenity value, is safer and would have a higher standard of public lighting when compared to Boherboy Road either in its current form or its proposed upgrade.

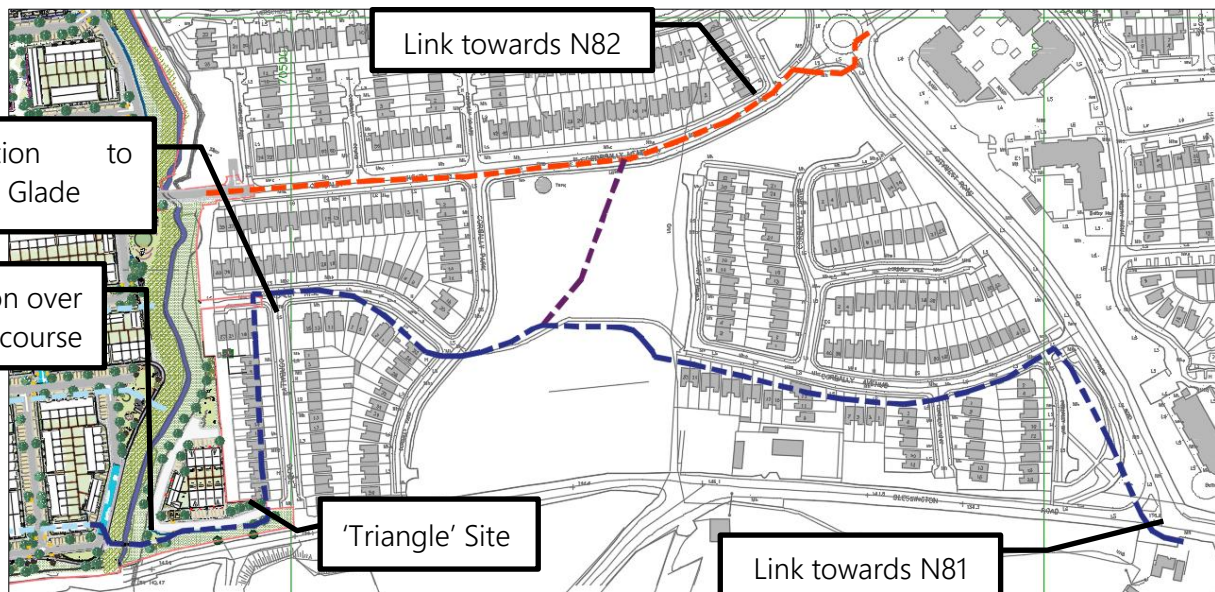


Figure 25 New Permeability Link

4.6 Summary

Acknowledging the fact that the Fortunestown Local Area Plan is no longer active and the restrictions of connecting into Corbally or Carrigmore. It is therefore proposed to provide a permeability link from the 'triangle site, located on the south eastern side of the development, to Corbally Glade. No improvements to Boherboy Road are proposed.

5 TRAFFIC GENERATION AND DISTRIBUTION

5.1 General

The methodology for assessing the traffic implications of this development involves quantifying the number and nature of trips that would be generated and reviewing these trips in the context of the prevailing conditions, the area of influence and the available infrastructure.

The nature of the development and its relative location to the catchment dictates that the modal choice to and from the site would primarily be via private car but with some elements of public transport use.

Accordingly, the development will attract private car, pedestrian and cycle visitation that will need to be catered for in terms of access routes and internal design. Visitation will also include residents and visitors using public transport connections.

A significant factor in trip attraction and hence resultant impact on the surrounding network is the relationship between trips that already utilise the road network which would choose to visit the development and those trips which would be newly generated onto the road network by the creation of the development in this location.

5.2 TRICS

The Trip Rate Information Computer System [TRICS] database has been interrogated to derive trip rates commensurate with developments of the character proposed in this case, notably a 584-unit residential development and school site.

The use of the TRICS database has also enabled the profile of arrivals and departures throughout the day to be assessed and this has served to confirm the choice of the highest respective peak hours for use in the analyses.

This database is a well-established and constantly updated tool used in the determination of generated traffic for developments since it is a substantial source of validated empirical data on the arrival and departure rates for a range of differing types and sizes of development in a variety of locations.

5.3 Dwellings

Using the TRICS database, the trip rates for houses was calculated. These trip rates are illustrated in Table 20 below.

Peak Hour Trip Rates					
Trip Generation from TRICS		Weekday AM 08:00-09:00		Weekday PM 17:00-18:00	
Usage	Units	Arrivals	Departures	Arrivals	Departures
Houses	Per Unit	0.204	0.591	0.476	0.249
Apartment/Duplex	Per Unit	0.061	0.248	0.185	0.055

Table 20 House Trip Rates

5.4 School Site

5.4.1 Trip Rates

Part of the wider Boherboy lands include a future school site.

Typically, the Department of Education has a requirement for schools with between 6 to 24 classrooms. It is understood, through the negotiations pertaining to the design of the site, that the site has been earmarked for a 16-classroom primary school.

According to the Department of Education, the Average Class Size in Primary Schools (2014/15 - 2018/19) ranges from 24.9 to 24.3 with an overall downward trend. Based on an average of 24 pupils per classroom there is a potential pupil population of 384.

According to the Census 2016 Summary Results - Part 1 published by the CSO, the average household size is 2.75. Census 2016 shows the population of the primary school age group (5-12) stood at 548,693. Census 2016 results show that Ireland's population stood at 4,761,865. Therefore, the primary school age group (5-12) equates to 11.5% of the overall population.

Based on 655 total units, it is estimated that up to 198 children from within the development will be of primary school going age.

Anticipated Number of Local Students			
Number of Units	Persons per dwelling	Total Population	Primary School Children Age
584	2.75	1,727	185

Table 21 Anticipated Number of Local Students

Based on a 16-classroom primary school, up to 384 students could be accommodated. There is the potential for up to 194 local students to cycle/walk to the school site from within the proposed development. Therefore, the total external school population would be up to 194 pupils.

It is reasonable to assume that not all local children from the proposed development will attend the local school. These trips will be included in the overall trip rate generated by the development and will be classed as link trip. These trips will have no additional impact on the external network.

The remainder of the students will have their origin outside the development. Accordingly, school site will be tested for an external pupil population of 190.

These assumptions will attract higher trips to the proposed development as the external population is bigger and therefore offers a robust assessment of the potential trip rates to/from the school site via the external road network.

5.5 Trip Rates

Using the TRICS database, the trip rates for a primary school was calculated. These trip rates are illustrated in Table 22 below.

Peak Hour Trip Rates					
Trip Generation from TRICS		Weekday AM 08:00-09:00		Weekday PM 17:00-18:00	
Usage	Units	Arrivals	Departures	Arrivals	Departures
Primary School	Per Pupil	0.176	0.094	0.022	0.019

Table 22 School Trip Rates

5.6 Trip Attraction

The chosen trip rates for the proposed development are outlined in Table 23 below.

Peak Hour Trip Rates					
Trip Generation from TRICS		Weekday AM 08:00-09:00		Weekday PM 17:00-18:00	
Usage	Units	Arrivals	Departures	Arrivals	Departures
Houses	Per Unit	0.204	0.591	0.476	0.249
Apartments	Per Unit	0.061	0.248	0.185	0.055
Primary School	Per pupil	0.176	0.094	0.022	0.019

Table 23 Peak Hour Trip Rates

These trip rates are used in conjunction with the proposed schedule of accommodation to determine the resultant total trips generated by the proposed development.

For the proposed development, these figures can be seen in Table 24 below.

Peak Hour Trips					
Trip Generation from TRICS		Weekday AM 08:00-09:00		Weekday PM 17:00-18:00	
Usage	Units	Arrivals	Departures	Arrivals	Departures
House1	306	62	181	146	76
Apartments/Duplex1	305	19	76	56	17
Peak Total		81	256	202	93
Two Way Total		338		295	

Table 24 Peak Hour Trips

It can be seen from the above that the total vehicle movements generated by the proposed development will be 81 arrivals and 256 departures in the AM peak (two-way total of 338). The total number of vehicle movements in the PM peak hour will be 202 arrivals and 93 departures (two-way total of 295).

Note the above does not take into account the reduced car parking provision, as outlined in Section 3.4. The above trip rates assume no restriction in car parking numbers and will produce a higher number of trips compared when parking is restricted. Restricting parking numbers is a well-known demand management tool.

The above trip rates were used in the junction modelling so as to offer a robust assessment of the development impact.

5.7 Baseline

These baseline conditions need to be established accurately to understand fully the context of this development proposal and other developments that are built but not yet occupied or those likely to be built during the lifetime of this development.

To determine the baseline transport data reference has been made to the following:

- The quantification of the vehicular trips generated from adjoining developments and their modal distribution, or, where the site is vacant or partially vacant, the vehicular trips which might realistically be generated by any extant planning permission or permitted uses;
- Current traffic flows on links and at junctions within the study area; and
- Zoned lands such as the school site

To that end, the baseline data for the development is based on the combined flows identified in the traffic surveys, the flows predicted in Section 2.6 and the flows estimated for the lands reserved for the school site.

6 JUNCTION ANALYSIS

6.1 General

To assess the resultant impact on the surrounding road network, the anticipated traffic generation and distribution through the network has been applied to the traffic model in order to assess comparative flow levels at the surveyed locations and to analyse resultant junction performance.

In addition to traffic generated due to the proposed development, there is also an expected increase in traffic flows due to general development and an increase in car ownership that needs to be considered. Using Table 5.5.1 of the Project Appraisal Guidelines – Unit 5.5 Link-Based Traffic Growth Forecasting published by the NRA, reference has been made to the percentage increase expected on all roads surrounding the site.

6.2 Growth Factors

The estimated that full occupancy will occur by 2032,. This has therefore been the focus of the road network assessment. These flows are shown in Appendix C and for the weekday AM and PM peaks respectively.

TII's Project Appraisal Guidelines for National Roads Unit 5.3- Travel Demand Project (PE-PAG-02017) sets out growth rates for forecasting future traffic. Growth rates have been extracted from Table 6.1 for the Dublin Metropolitan Area using central growth rates.

The factor used is outlined below:

Traffic Growth Rates, NRA Project Appraisal Guidelines		
Year	To Year	Table 5.5.1
2023	2025	1.032
2023	2032	1.124
2023	2037	1.149
2023	2047	1.195

Table 25 Growth Factors

6.3 Junction Capacity Analyses

Junction capacity analyses have been undertaken at the site access junction and at the key junctions at which existing flow data had been obtained. These tests have been carried out using industry standard and approved software for the existing junctions with no development and the assumed year of opening of the development, namely 2032, and for a 5-year design horizon, namely 2035 and for a 15-year design horizon, namely 2047 with development flows added. It may be the case at some nodes within the network that following the distribution and assignment of the traffic generated by the development, the actual proportional impact or change in traffic demand would not necessarily warrant further assessment. For the purpose of a robust assessment, all junctions have been put forward for assessment.

The use of the TRL capacity model programme JUNCTIONS 10 for the prediction of capacity and incurred delay at priority junctions, and roundabout junctions.

With these well-established methods the results are expressed in terms of a ratio of flow to capacity (RFC) on each approach and the maximum queue length on that approach during the period tested. If the RFC value approaches 1.0 then queuing and delay can be expected to increase. It is normal practice to ensure that the RFC is below 0.85 to achieve a theoretical reserve capacity of greater than 15%, although a value of 0.85 can be marginally exceeded in a future design year situation without any detrimental effect on the satisfactory and safe operation of the junction.

Signal controlled junctions' results are expressed in terms of queues generated and the 'Degree of Saturation' (DoS). A DoS value of 85% or below indicates that the junction is operating within capacity. A DoS value of between 85% and 100% indicates that the junction remains within capacity but is beginning to show signs of queuing and delay. A DoS value of less than 100% is desirable in urban areas during peak period traffic. However, values of greater than 100% are typical at many junctions. For the purpose of these calculations the results are reported in terms of maximising the capacity of the junction analysed.

It should be noted that all modelling represents a snapshot in time based on the best available data, traffic growth assumptions, and network conditions at the time of assessment. Actual operational performance may vary and will be subject to detailed design, post-construction monitoring, and the implementation of the mitigation measures outlined within this report. These refinements ensure that, where required, junction performance can be appropriately managed as part of the normal design and operational process.

6.4 Geometric Parameters

The geometric parameters used for the junctions have been ascertained from the topographical survey details of the junction and other relevant sources such as OS mapping. In this way a very good approximation of the relevant geometric inputs has been used. For the proposed junction, the geometry has been obtained by reference to the initial design drawing. This has also enabled an iterative process to be adopted, if necessary, to ensure that the junction is designed in accordance with relevant design standards and to achieve enough levels of capacity.

In this case, the surveyed junctions will each be analysed to determine the extent of resultant highway impact and the need, if any, for mitigating measures. It is anticipated that the capacity analyses will show how the proposal will be accommodated with a reasonable degree of reserve capacity.

6.5 Trip Distribution

The trips generated by the proposed development have been distributed on the surrounding road network using the directional flows on the surrounding road network. The proposed movements created by the development in the AM and PM peak hour are shown in Appendix C.

6.6 Junction Capacity Analysis

The junctions, as surveyed, have been put forward for analysis with the development traffic dispersed through the network as per the current follow conditions.

The results of this analysis are presented below.

6.6.1 Study Area

As part of the junction capacity assessments the following junctions were modelled in isolation:

- Junction 1 – Citywest Road/Citywest Drive Singal Controlled Junction
- Junction 2 – Carrigmore Access
- Junction 3 – Garter Lane/Church Road Singal Controlled Junction
- Junction 4 – Mill Road/Slade Road Signal Controlled Junction
- Junction 5 – Site Access
- Junction 6 – Boherboy Road/N81
- Junction 7 – N81/N82 Signal Controlled Junction
- Junction 8 – N82/Corbally Roundabout

6.6.2 Traffic Flows

Pinnacle Consulting collected traffic flows for the study area junctions the flows covered the morning and evening peak hours. As part of the junction analysis the following scenarios were modelled – 2025 Survey Year, 2025 Baseline, 2032 Opening Year, 2037 Opening Year + 5 Years and 2047 Opening Year + 15 Years. Each year was modelled with and without development.

6.6.3 Junction 1

The operation of the signalised junction was modelled using OSCADY software, and tested with the 2025 Survey Year, 2025 Baseline, 2032 Opening Year, 2037 Opening Year + 5 Years and 2047 Opening Year + 15 Years. Each year was modelled with and without development.

The results of the modelling are summarised in in Table 26.

The modelling illustrates that Junction 1 (signal-controlled) continues to operate under conditions that are typical of a busy urban network in the 2047 design scenario. In the AM peak period, the maximum recorded DoS is 123%, while in the PM peak period the maximum DoS is 119%. These results indicate that the junction is experiencing higher levels of demand during the busiest hours, which is not unusual in urban environments, particularly in long-range future design years where background traffic growth and committed developments combine to increase overall network pressure.

A DoS value of 85% or below indicates operation well within capacity, while values between 85% and 100% indicate a junction that remains functional but is beginning to show signs of queuing and delay. Values above 100% reflect periods of congestion; however, it is common for urban signalised junctions to experience such conditions during peak times, and these can often be effectively managed.

A range of mitigation measures are available and can be explored at detailed design or implementation stage, including:

- Optimisation of signal timings and staging, improving progression and reducing delay on higher-demand approaches.
- Refinement of lane allocations, including the potential introduction of short flares to increase stacking capacity.

- Provision of adaptive or MOVA-style signal control, which responds dynamically to real-time traffic fluctuations and can significantly reduce queues.
- Encouraging modal shift through active travel and public transport enhancements associated with the wider development, which can influence long-term trip patterns.
- Targeted approach-specific improvements, depending on observed turning movements.

With such measures in place, the junction can continue to operate effectively under future-year conditions despite the elevated demand typical of urban peak-period traffic.

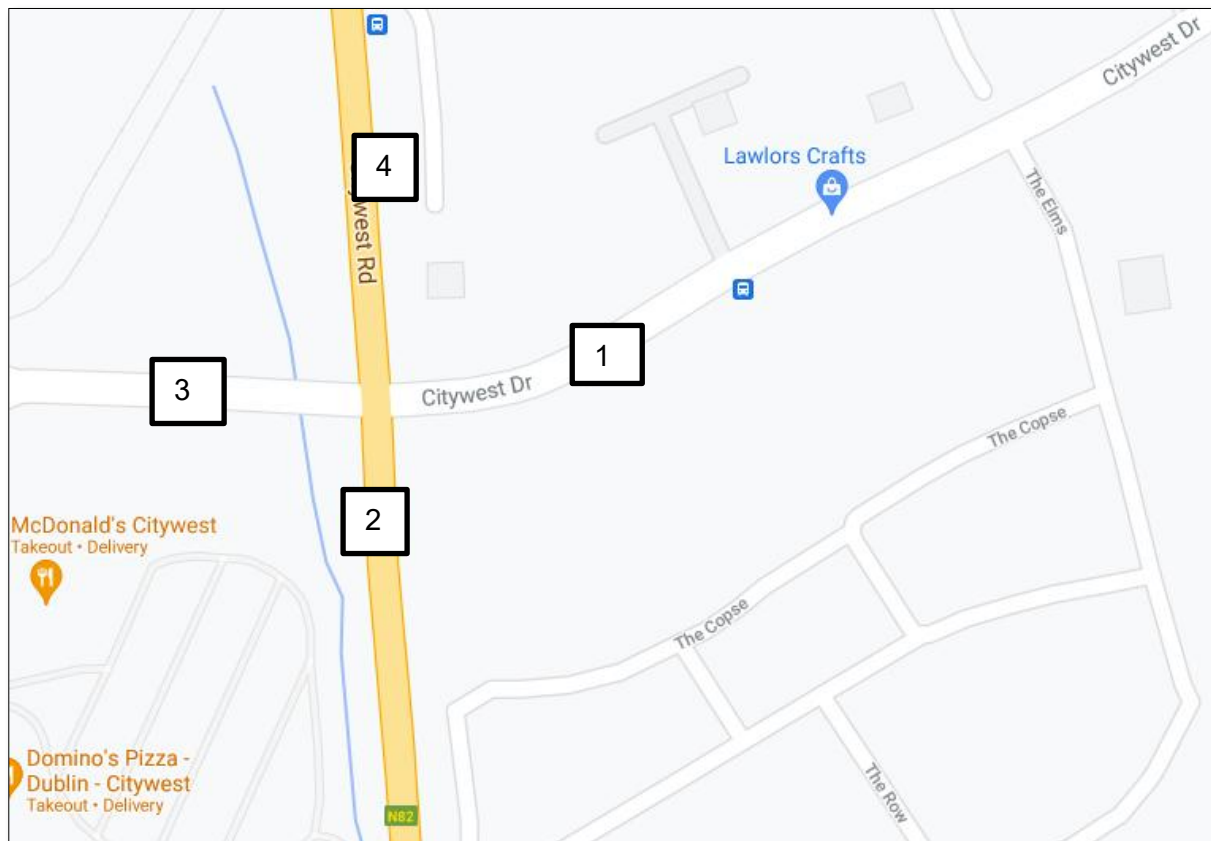


Figure 26 Site 5 N82/ Fortunestown Lane Signal Controlled Junction Layout

The following arm destinations are used:

- Arm1 – Citywest Drive
- Arm 2 – N82 Citywest Road South
- Arm 3 – Fortunestown Lane
- Arm 4 – N82 Citywest Road North

	AM			PM		
	Queue (PCU)	Delay (s)	DOS	Queue (PCU)	Delay (s)	DOS
2025 - Survey						
Arm A	14.8	60.04	0.82	14.7	50.81	0.90
Arm B	30.6	77.83	1.00	10.3	25.76	0.62
Arm C	29.0	91.70	0.94	23.8	75.14	1.01
Arm D	15.9	42.11	0.84	17.3	58.74	0.93
2025 - Committed						
Arm A	59.1	176.53	1.07	24.1	62.62	0.86
Arm B	64.4	138.39	1.04	22.8	57.15	0.80
Arm C	93.7	183.88	1.13	84.1	165.61	1.07
Arm D	55.5	142.71	1.04	50.9	169.93	1.06
2032 - ND						
Arm A	90.4	297.05	1.13	45.7	125.03	1.01
Arm B	109.5	269.95	1.12	31.3	68.44	0.77
Arm C	137.7	270.74	1.13	100.5	200.36	1.08
Arm D	92.1	229.41	1.15	64.7	190.74	1.05
2032 - WD						
Arm A	107.3	383.81	1.20	78.2	205.83	1.07
Arm B	142.8	373.78	1.18	59.4	113.81	0.89
Arm C	200.4	489.40	1.24	181.0	402.70	1.18
Arm D	67.5	168.34	1.18	122.2	447.84	1.17
2037 - ND						
Arm A	97.5	336.32	1.16	53.6	121.67	0.92
Arm B	121.8	318.03	1.14	49.1	102.84	0.81

Arm C	150.4	317.05	1.14	150.8	308.88	1.14
Arm D	99.3	259.53	1.13	91.7	291.75	1.09
2037 - WD						
Arm A	116.4	465.74	1.23	86.6	212.50	1.08
Arm B	159.7	421.97	1.21	56.0	98.90	0.82
Arm C	211.3	540.80	1.23	149.4	265.42	1.09
Arm D	113.2	330.91	1.20	96.3	274.10	1.09
2047 - ND						
Arm A	106.2	373.47	1.19	58.7	134.32	0.96
Arm B	140.2	381.65	1.18	51.7	107.11	0.85
Arm C	171.1	383.13	1.20	163.4	344.64	1.15
Arm D	113.4	321.67	1.18	111.9	401.06	1.14
2047 - WD						
Arm A	117.9	457.79	1.23	78.7	199.51	1.07
Arm B	159.7	421.97	1.21	61.2	117.40	0.87
Arm C	211.3	540.80	1.23	183.5	403.77	1.19
Arm D	115.9	342.70	1.20	125.3	473.46	1.17

Table 26 Junction 1

6.6.4 Junction 2

The operation of the priority-controlled junction was modelled using PICADY software, and tested with the 2025 Survey Year, 2025 Baseline, 2032 Opening Year, 2037 Opening Year + 5 Years and 2047 Opening Year + 15 Years. Each year was modelled with and without development.

The results of the modelling are summarised in in Table 27.

The modelling illustrates that Junction 2 (priority-controlled) continues to function largely as expected for a small priority junction within an urban setting in the 2047 design scenario. In the AM peak period, the maximum RFC recorded is 1.04, while in the PM peak period the maximum RFC is 0.54. This indicates that during the busiest hour of the morning peak, the main priority stream begins to experience higher levels of demand, whereas the PM peak remains comfortably within capacity.

An RFC value of 0.85 or below indicates that a junction is operating within capacity, while values between 0.85 and 1.0 indicate a junction that remains functional but is beginning to experience queuing and delay. RFC values at or slightly above 1.0 can occur in urban areas during peak periods and typically represent short periods of increased pressure rather than sustained operational issues.

It is not unusual in urban environments—particularly in future design years—for priority junctions to experience congestion on the minor arm during peak-hour traffic. These conditions generally represent predictable peak-period demand rather than a systemic issue.

A range of mitigation measures may be considered to support performance, including:

- Minor geometric enhancements such as local widening or the introduction of a short flare on the priority arm to increase stacking capacity.
- Improved visibility and approach alignment to maximise gap acceptance and reduce delay on the minor arm.
- Implementation of traffic calming or speed management to improve the availability of acceptable gaps without affecting overall network efficiency.
- Encouragement of modal shift through public transport, walking, and cycling improvements associated with the wider development.
- Monitoring of post-development traffic patterns to confirm actual behaviour and inform targeted, proportionate interventions if required.

With such measures, Junction 2 can continue to operate effectively within the normal performance expectations for a priority junction in a growing urban network.

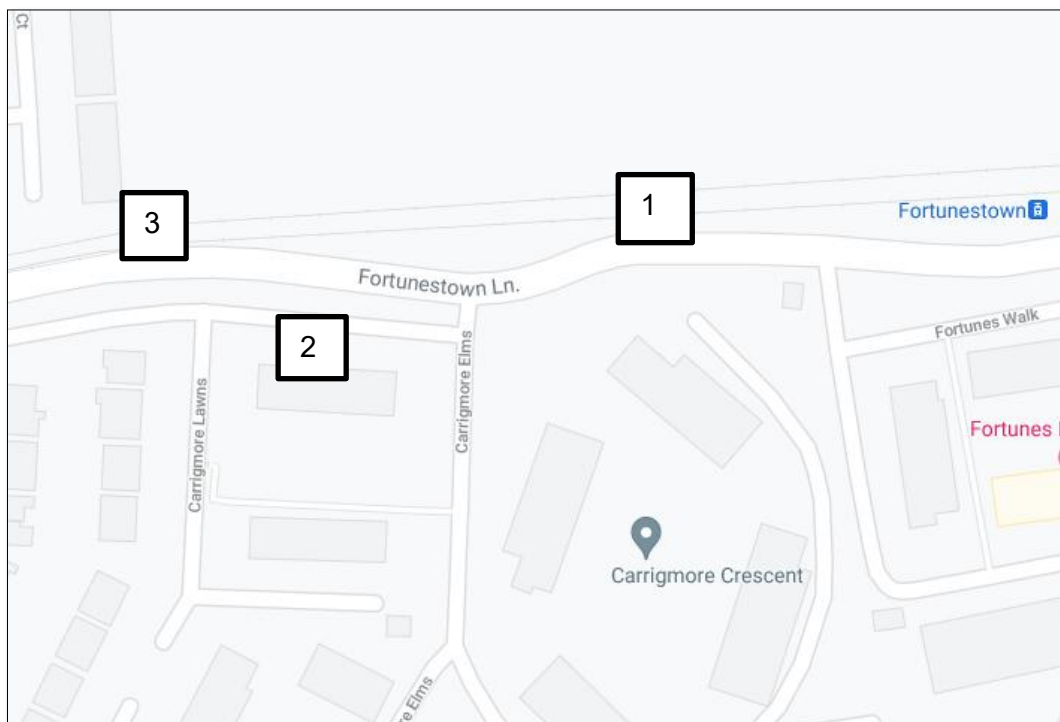


Figure 27 Site 6 Carrigmore Estate/Fortunestown Lane Priority Controlled Junction Layout

The following arm destinations are used:

- Arm1 – Fortunestown Lane - East
- Arm 2 – Carrigmore
- Arm 3 – Fortunestown Lane - West

	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
2025 - Survey						
Stream B-AC	0.8	19.61	0.44	0.4	15.33	0.27
Stream C-AB	0.1	6.11	0.07	0.2	6.56	0.09
2025 – Committed						
Stream B-AC	1.5	35.39	0.58	0.5	19.57	0.32
Stream C-AB	0.2	5.42	0.10	0.3	5.34	0.12
2032 - ND						
Stream B-AC	2.0	44.63	0.66	0.6	21.46	0.36
Stream C-AB	0.3	5.38	0.11	0.4	5.34	0.13
2032 - WD						
Stream B-AC	11.2	167.24	0.99	1.2	30.39	0.52
Stream C-AB	0.5	5.54	0.15	0.8	5.84	0.25
2037 - ND						
Stream B-AC	2.2	48.11	0.69	0.6	22.14	0.37
Stream C-AB	0.3	5.35	0.11	0.4	5.34	0.14
2037 - WD						

Stream B-AC	13.1	189.82	1.02	1.2	31.40	0.53
Stream C-AB	0.5	5.52	0.16	0.9	5.87	0.26
2047 - ND						
Stream B-AC	2.7	57.13	0.73	0.7	22.96	0.39
Stream C-AB	0.5	5.49	0.16	0.4	5.30	0.14
2047 - WD						
Stream B-AC	14.3	205.34	1.04	1.2	32.45	0.54
Stream C-AB	0.5	5.49	0.16	0.9	5.86	0.26

Table 27 Junction 2

6.6.5 Junction 3

The operation of the signalised junction was modelled using OSCADY software, and tested with the 2025 Survey Year, 2025 Baseline, 2032 Opening Year, 2037 Opening Year + 5 Years and 2047 Opening Year + 15 Years. Each year was modelled with and without development.

The results of the modelling are summarised in in Table 28.

The modelling illustrates that the N82/ Fortunestown Lane Signal Controlled Junction approaches capacity in the 2047 design scenario in the AM peak period. The maximum recorded DoS is 109.46% in 2047 with development added. For the same scenario, the maximum DoS in the PM peak period recorded is 89.13%.

A Dos value of 85% or below indicates that the junction is operating within capacity. A DoS value of between 85% and 100% indicates that the junction remains within capacity but is beginning to show signs of queuing and delay. A DoS value of less than 100% is desirable in urban areas during peak period traffic. However, values of greater than 100% are typical at many junctions.

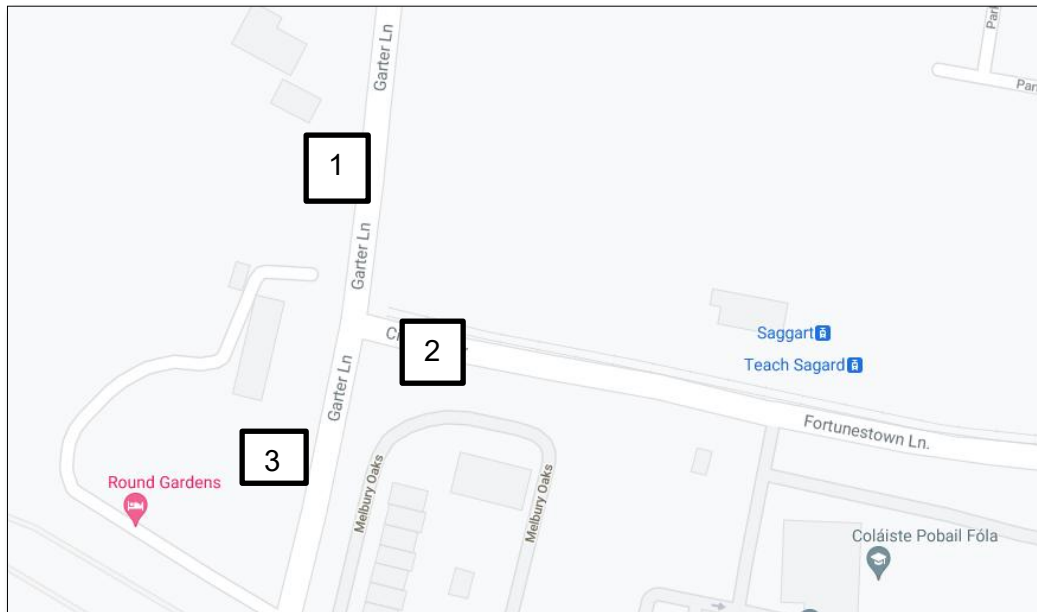


Figure 28 Site 7 Church Road/Fortunestown Lane Signal Controlled Junction Layout

The following arm destinations are used:

- Arm1 – Garters Lane – North
- Arm 2 – Citywest Drive/Fotutnestown Lane
- Arm 3 – Garters Lane – South

The modelling illustrates that Junction 3 (signal-controlled) continues to perform within expectations for an urban signalised junction in the 2047 design scenario. In the AM peak period, the maximum recorded DoS is 107%, while in the PM peak period, the maximum DoS is 96%. These results show that while the junction experiences some pressure during the busiest morning hour, the overall operation remains consistent with what is typically observed at similar urban junctions where peak-period congestion is expected.

A DoS value of 85% or below indicates operation well within capacity, while values between 85% and 100% indicate that the junction remains operational but is beginning to show queuing and delay. Values slightly above 100% can occur at many urban junctions during peak periods and often reflect short, manageable periods of higher demand rather than persistent or problematic congestion.

It is not unusual in urban areas for signal-controlled junctions to experience delays during peak hours, particularly in long-range design years where background traffic growth and committed development traffic combine to increase demand.

A number of practical and proportionate mitigation measures are available, including:

- Optimisation of signal timings to rebalance green time, particularly on approaches operating above 100% DoS during the AM peak.
- Introduction of adaptive/MOVA signal control, which can significantly reduce queues by responding dynamically to fluctuations in traffic patterns.

- Refinement of lane allocations or short-term flaring, increasing stacking capacity and improving discharge characteristics on higher-demand arms.
- Improved progression or signal coordination with upstream/downstream junctions to minimise stopping and delay.
- Support for sustainable travel modes, ensuring that public transport, cycling, and walking improvements associated with the wider development help moderate long-term traffic growth.

With such measures, Junction 3 can continue to operate effectively and accommodate future-year traffic demand in a manner consistent with urban peak-period conditions.

	AM			PM		
	Queue (PCU)	Delay (s)	DOS	Queue (PCU)	Delay (s)	DOS
2025						
Arm A	11.5	74.39	0.94	5.4	38.92	0.80
Arm B	10.5	78.64	0.93	6.1	39.79	0.84
Arm C	10.5	49.59	0.89	4.3	29.32	0.72
2025 – Committed						
Arm A	10.2	54.82	0.90	7.9	50.10	0.87
Arm B	8.4	55.95	0.88	8.2	52.30	0.88
Arm C	9.2	61.39	0.90	8.1	51.14	0.87
2032 - ND						
Arm A	20.3	104.38	0.99	6.0	34.82	0.78
Arm B	18.7	125.55	1.00	8.0	46.04	0.87
Arm C	23.2	105.27	1.00	12.8	97.44	0.97

2032 - WD						
Arm A	29.2	132.16	1.03	9.0	57.27	0.89
Arm B	23.2	150.78	1.03	9.8	54.77	0.90
Arm C	29.1	127.58	1.03	8.7	56.62	0.88
2037 - ND						
Arm A	26.9	134.80	1.03	8.7	57.08	0.89
Arm B	18.6	120.89	1.00	8.4	46.97	0.88
Arm C	25.7	113.10	1.01	8.1	54.67	0.88
2037 - WD						
Arm A	25.7	112.50	1.00	10.9	70.04	0.92
Arm B	22.6	141.99	1.02	13.4	77.01	0.95
Arm C	47.1	245.87	1.10	9.9	57.39	0.89
2047 - ND						
Arm A	32.0	152.45	1.05	10.5	68.57	0.92
Arm B	25.9	159.49	1.04	11.0	62.90	0.93
Arm C	29.2	122.02	1.02	7.8	48.21	0.85
2047 - WD						
Arm A	37.3	156.30	1.05	10.7	65.10	0.91
Arm B	31.1	191.87	1.06	14.0	77.51	0.96
Arm C	42.5	177.72	1.07	10.4	64.64	0.91

Table 28 Junction 3

6.6.6 Junction 4

The operation of the signalised junction was modelled using OSCADY software, and tested with the 2025 Survey Year, 2025 Baseline, 2032 Opening Year, 2037 Opening Year + 5 Years and 2047 Opening Year + 15 Years. Each year was modelled with and without development.

The results of the modelling are summarised in in Table 29.

The modelling illustrates that Junction 4 (signal-controlled) continues to operate in a manner consistent with a heavily used urban junction in the 2047 design scenario. In the AM peak period, the maximum DoS recorded is 125%, while in the PM peak period, the maximum DoS is 131%. These values indicate that the junction experiences strong demand on several approaches during the busiest hours of the day, which is common within mature urban networks, particularly in long-range future design years.

A DoS of 85% or below indicates operation within capacity, while values between 85% and 100% reflect a junction beginning to show queuing and delay. DoS values above 100% typically represent periods of peak-hour congestion, but these are not unusual for multi-arm urban signalised junctions, especially where multiple turning movements compete for green time. Such levels of demand often reflect the natural characteristics of peak-period traffic and do not preclude effective operational management.

Despite the increased demand observed in 2047, there are a number of proportionate and effective mitigation measures available, including:

- Signal optimisation, reallocating or extending green time to the most heavily loaded approaches at key periods.
- Adaptive signal control (e.g., MOVA or SCOOT), which can significantly reduce queueing by responding to real-time conditions.
- Improved lane utilisation, including the possibility of providing short flares or enhancing lane discipline to improve discharge rates.
- Enhanced coordination with nearby junctions, smoothing flow and reducing stop-start conditions that contribute to delay.
- Demand management and sustainable mode improvements, encouraging a modal shift that reduces reliance on private car trips during peak hours.
- Targeted geometric improvements should monitoring indicate a need post-occupation.

Overall, the modelling outcomes for Junction 4 are consistent with what would be expected for a key signalised junction in a growing urban area, and with appropriate operational refinements, the junction can continue to function effectively in the future design horizon.

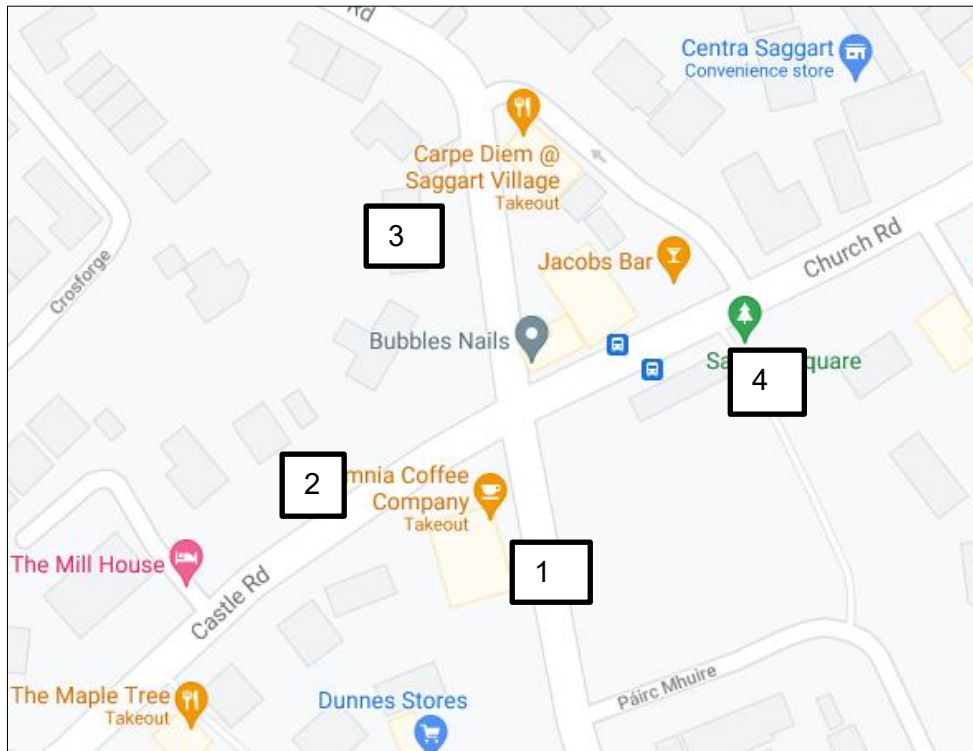


Figure 29 Site 8 Boherboy Road/Saggart Signal Controlled Junction Layout

The following arm destinations are used:

- Arm1 – Boherboy Road
- Arm 2 – Castle Road
- Arm 3 – Mill Road
- Arm 4 - Church Road

	AM			PM		
	Queue (PCU)	Delay (s)	DOS	Queue (PCU)	Delay (s)	DOS
2025 - Survey						
Arm A	33.3	187.25	1.07	52.5	209.90	1.08
Arm B	20.0	97.93	0.98	17.5	156.00	0.96
Arm C	28.5	152.96	1.05	45.7	188.21	1.07
Arm D	13.5	109.58	0.95	25.1	191.31	1.03
2025 - Committed						

Arm A	37.3	201.61	1.07	67.7	250.28	1.08
Arm B	28.7	134.16	1.02	30.1	243.85	1.02
Arm C	35.4	182.74	1.06	65.1	272.48	1.08
Arm D	24.5	167.39	1.03	39.1	285.00	1.06
2032 - ND						
Arm A	68.6	392.55	1.13	72.9	253.53	1.08
Arm B	77.0	425.53	1.14	42.9	333.76	1.06
Arm C	66.0	373.00	1.12	53.9	292.40	1.08
Arm D	46.6	312.73	1.08	41.3	271.53	1.06
2032 - WD						
Arm A	76.5	470.33	1.17	118.7	602.08	1.23
Arm B	78.2	426.60	1.14	55.0	527.52	1.17
Arm C	75.5	463.75	1.17	112.6	620.74	1.23
Arm D	62.4	446.96	1.15	60.1	513.58	1.18
2037 - ND						
Arm A	75.8	450.58	1.16	110.2	508.74	1.20
Arm B	73.5	373.10	1.12	46.2	468.63	1.14
Arm C	74.0	437.89	1.15	104.6	526.15	1.21
Arm D	55.0	422.95	1.13	58.4	523.38	1.18
2037 - WD						
Arm A	84.2	503.28	1.20	124.9	628.22	1.24
Arm B	85.4	481.46	1.17	51.4	552.26	1.17
Arm C	84.2	515.70	1.20	112.8	599.90	1.23
Arm D	66.2	482.91	1.17	64.1	565.92	1.20
2047 - ND						

Arm A	85.9	519.78	1.19	131.9	656.76	1.25
Arm B	97.4	578.90	1.21	52.2	549.78	1.18
Arm C	86.4	521.37	1.20	126.5	698.29	1.26
Arm D	60.3	469.54	1.16	66.8	645.42	1.22
2047 - WD						
Arm A	101.1	690.94	1.25	165.6	850.14	1.31
Arm B	98.7	609.01	1.21	63.7	763.14	1.26
Arm C	99.7	681.40	1.24	147.4	843.72	1.30
Arm D	74.9	553.53	1.21	76.9	751.22	1.26

Table 29 Junction 4

6.6.7 Junction 5

The operation of the priority-controlled junction was modelled using PICADY software, and tested with the 2025 Survey Year, 2025 Baseline, 2032 Opening Year, 2037 Opening Year + 5 Years and 2047 Opening Year + 15 Years. Each year was modelled with and without development.

The results of the modelling are summarised in in Table 30.

The modelling illustrates that Junction 5 (priority-controlled) continues to operate well within capacity in the 2047 design scenario. In the AM peak period, the maximum RFC recorded is 0.09, while in the PM peak period, the maximum RFC is 0.05. These values indicate very comfortable operating conditions with minimal queueing and delay.

An RFC value of 0.85 or below indicates that a junction is operating within capacity, and the results for Junction 5 remain far below this threshold in all scenarios. Such levels of performance demonstrate that the junction is expected to function efficiently even in long-range future design years.

It is common in urban networks for some junctions—particularly smaller priority junctions with modest turning demands—to maintain strong operational performance even as the wider network becomes busier. This is consistent with the results observed here.

Although no mitigation is required based on the modelling, a range of optional measures could support continued positive performance, including:

- Maintaining good visibility and road markings, ensuring ease of movement for all users.
- Periodic review of traffic conditions post-development to confirm that observed operation aligns with modelled behaviour.
- Supporting sustainable access modes, ensuring walking and cycling facilities remain attractive and convenient.

Overall, Junction 5 performs very favourably, with substantial reserve capacity available in both AM and PM peak periods in the 2047 design year.



Figure 30 Junction 5

The following arm destinations are used:

- Arm1 – Boherboy Road - West
- Arm 2 – Site Access
- Arm 3 – Boherboy Road - East

	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
2032 - WD						
Stream B-AC	0.1	8.92	0.09	0.0	8.61	0.04
Stream C-AB	0.0	5.60	0.02	0.1	5.74	0.04
2037 - WD						

Stream B-AC	0.1	8.98	0.09	0.0	8.66	0.04
Stream C-AB	0.0	5.59	0.02	0.1	5.72	0.04
2047 - WD						
Stream B-AC	0.1	9.07	0.09	0.0	8.75	0.04
Stream C-AB	0.0	5.56	0.02	0.1	5.69	0.05

Table 30 Junction 5

6.6.8 Junction 6

The operation of the priority-controlled junction was modelled using PICADY software, and tested with the 2025 Survey Year, 2025 Baseline, 2032 Opening Year, 2037 Opening Year + 5 Years and 2047 Opening Year + 15 Years. Each year was modelled with and without development.

The results of the modelling are summarised in in Table 31.

The modelling illustrates that Junction 6 (priority-controlled) continues to operate comfortably within capacity in the 2047 design scenario. In the AM peak period, the maximum RFC recorded is 0.57, while in the PM peak period, the maximum RFC is 0.74. These values remain well below the typical operational threshold of 0.85, indicating that the junction performs efficiently with modest queues and low delays across all movements.

An RFC value of 0.85 or below indicates that a priority junction is operating within capacity, and Junction 6 sits significantly beneath this threshold in both peak periods. This demonstrates that even with background growth and development-related traffic included, the junction retains substantial reserve capacity.

In busy urban environments, it is normal for priority junctions to encounter some delay on minor movements during peak periods. However, the results here show that the junction continues to perform strongly, with delays remaining low and queue lengths short.

Although no mitigation measures are required based on the modelling, a number of good-practice measures could be considered to maintain strong performance, including:

- Ensuring approach visibility remains unobstructed, helping drivers identify safe gaps and reducing hesitation on minor arms.
- Maintaining clear road markings and signage, reinforcing priority and improving operational consistency.
- Monitoring post-development traffic conditions, providing the opportunity for light-touch interventions if observed traffic patterns differ from forecasts.
- Supporting active travel and public transport, helping minimise long-term dependency on private car trips.

Overall, Junction 6 exhibits robust operational performance, with ample reserve capacity and no identified capacity-related concerns in the 2047 design year.

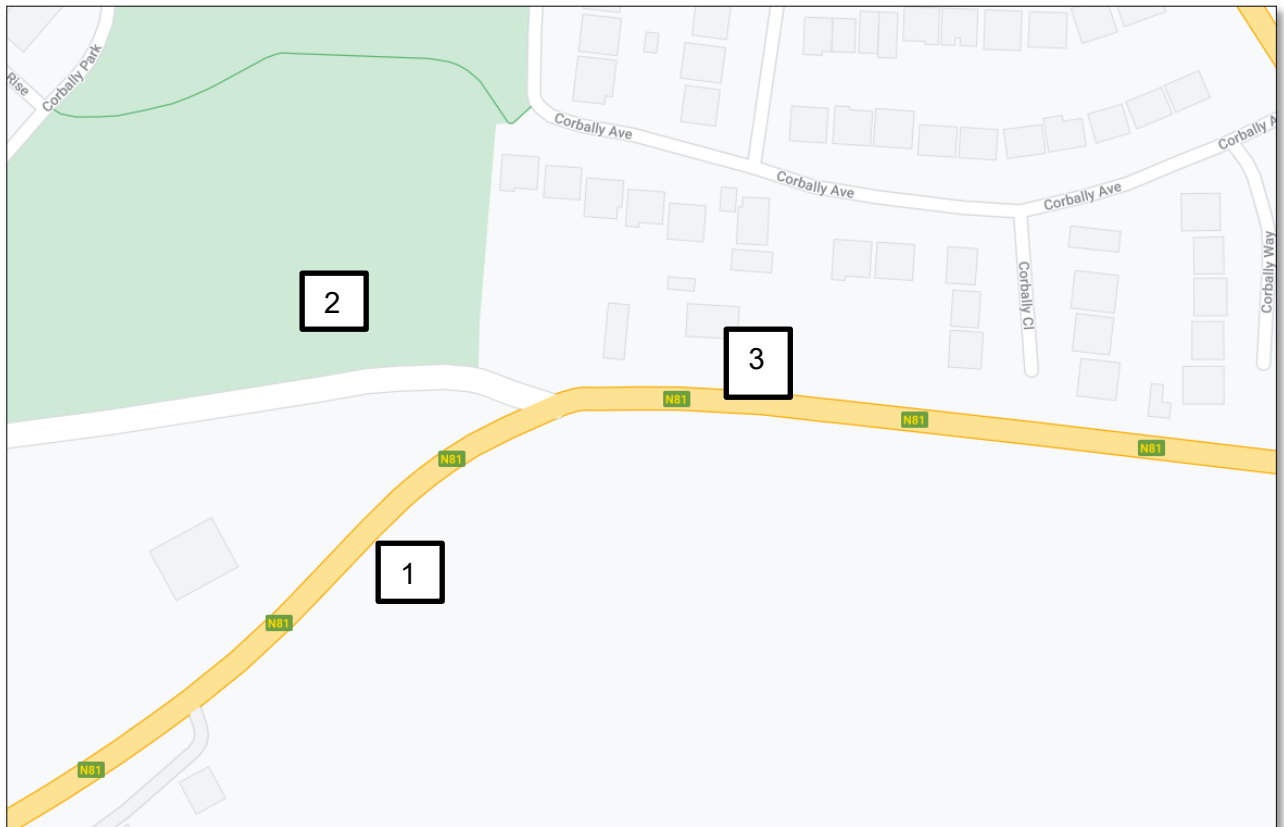


Figure 31 Site 2 – Boherboy Road/N81

The following arm destinations are used:

- Arm1 – N81 - West
- Arm 2 – Boherboy Road
- Arm 3 – N81 – East

	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
2025 - Survey						
Stream B-C	0.8	12.90	0.42	0.8	11.44	0.42
Stream B-A	0.0	13.35	0.04	0.0	13.74	0.03
Stream C-AB	0.9	13.31	0.45	1.5	15.70	0.58
2025 - Committed						
Stream B-C	0.9	13.35	0.44	0.8	11.74	0.43

Stream B-A	0.0	13.48	0.04	0.0	13.87	0.03
Stream C-AB	0.9	13.61	0.46	1.6	16.31	0.60
2032 - ND						
Stream B-C	1.1	14.97	0.49	1.1	14.97	0.49
Stream B-A	0.0	14.43	0.04	0.0	14.43	0.04
Stream C-AB	1.1	15.27	0.51	1.1	15.27	0.51
2032 - WD						
Stream B-C	1.2	16.21	0.53	1.0	13.19	0.49
Stream B-A	0.1	14.59	0.05	0.0	15.32	0.04
Stream C-AB	1.2	15.67	0.52	2.4	20.58	0.69
2037 - ND						
Stream B-C	1.1	15.56	0.51	1.0	13.20	0.49
Stream B-A	0.1	14.81	0.05	0.0	15.35	0.04
Stream C-AB	1.2	15.92	0.53	2.3	19.92	0.67
2037 - WD						
Stream B-C	1.3	16.83	0.55	1.1	13.56	0.50
Stream B-A	0.1	14.96	0.05	0.0	15.68	0.04
Stream C-AB	1.2	16.28	0.54	2.6	21.60	0.70
2047 - ND						
Stream B-C	1.2	16.49	0.53	1.1	13.84	0.51
Stream B-A	0.1	15.35	0.05	0.0	16.00	0.04
Stream C-AB	1.3	16.96	0.55	2.6	21.60	0.70
2047 - WD						
Stream B-C	1.4	18.10	0.57	1.2	14.26	0.52
Stream B-A	0.1	15.54	0.05	0.0	16.45	0.04

Stream C-AB	1.4	17.44	0.56	3.1	23.67	0.74

Table 31 Junction 6

6.6.9 Junction 7

The operation of the signalised junction was modelled using LinSig software, and tested with the 2025 Survey Year, 2025 Baseline, 2032 Opening Year, 2037 Opening Year + 5 Years and 2047 Opening Year + 15 Years. Each year was modelled with and without development.

The results of the modelling are summarised in in Table 32

The modelling illustrates that Junction 7 (signal-controlled) continues to operate within the range typically observed for busy urban junctions in the 2047 design scenario. In the AM peak period, the maximum DoS recorded is 91%, remaining within capacity with some evidence of peak-period queuing, which is normal for a junction of this type.

In the PM peak period, the maximum DoS increases to 119%, reflecting stronger evening peak demand on a number of approaches. DoS values above 100% often represent short-lived congestion during the busiest parts of the day, and such conditions are not unusual in established urban networks, particularly in long-range future design years where cumulative background traffic growth contributes to increased demand.

A DoS of 85% or below indicates operation well within capacity, while values between 85% and 100% indicate that the junction remains functional but is beginning to show queuing and delay. Values above 100% are common during peak hours at multi-arm signalised junctions and can generally be managed effectively through operational refinements.

To support continued efficient operation, a range of targeted and proportionate mitigation measures may be considered, including:

- Signal timing optimisation, particularly in the PM peak period, to rebalance green time towards the higher-demand movements.
- Adaptive/MOVA signal control, which has the potential to reduce queues significantly by responding dynamically to real-time traffic.
- Enhanced lane utilisation and short flares, increasing stacking and discharge capacity where demand is highest.
- Signal coordination with nearby junctions, minimising stop-start flow and improving progression along key corridors.
- Sustainable travel measures to encourage reduced reliance on private car use in the long term.
- Post-development monitoring, enabling fine-tuning of signal settings once actual traffic patterns are established.

Overall, Junction 7 performs in line with expectations for a signalised junction within a busy urban area, and the available mitigation measures provide robust opportunities to support effective performance in the 2047 future design year.

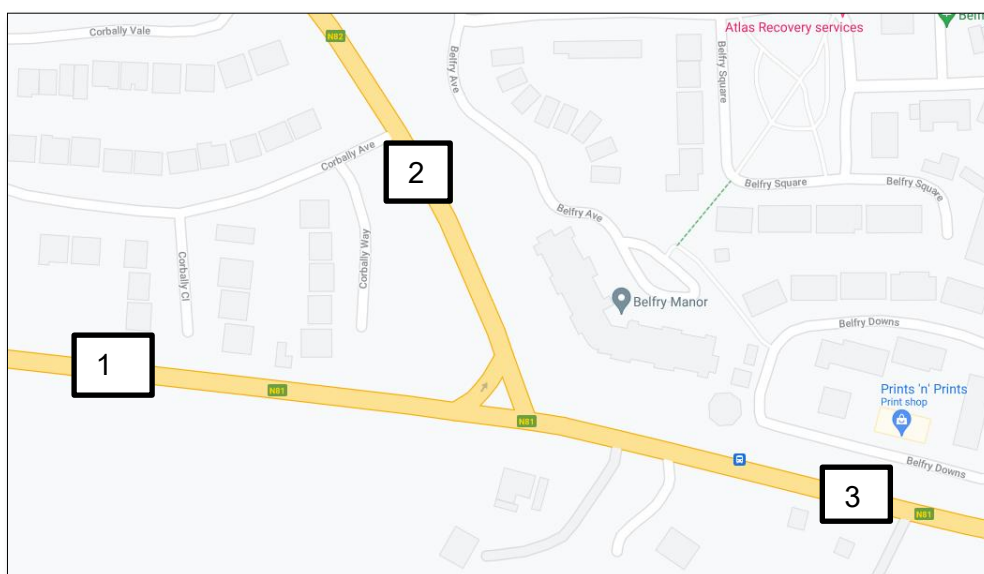


Figure 32 Site 3 N81/N82 Signal Controlled Junction Layout

The following arm destinations are used:

- Arm1 – N81 - West
- Arm 2 – N82
- Arm 3 – N81- East

	AM			PM		
	Queue (PCU)	Delay (s)	DOS	Queue (PCU)	Delay (s)	DOS
2025						
Arm A	12.8	34.98	0.86	10.7	45.69	0.84
Arm B	9.0	55.26	0.83	14.6	65.50	0.93
Arm C	5.1	21.67	0.62	13.0	30.88	0.82
2025 - Baseline						
Arm A	15.2	41.12	0.89	13.5	60.17	0.89
Arm B	11.1	64.57	0.87	13.5	54.84	0.90
Arm C	6.5	29.96	0.74	15.2	35.16	0.84
2032 - ND						
Arm A	24.6	54.60	0.90	28.5	101.47	0.90

Arm B	19.6	97.77	0.90	26.9	84.58	0.90
Arm C	13.1	56.67	0.87	36.9	72.54	0.90
2032 - WD						
Arm A	41.3	90.03	0.93	43.7	166.15	0.98
Arm B	33.7	142.57	0.94	42.1	128.88	0.97
Arm C	22.8	92.79	0.95	55.0	105.54	0.98
2037 - ND						
Arm A	37.6	75.79	0.90	37.2	128.12	0.92
Arm B	29.8	133.73	0.90	34.5	103.73	0.91
Arm C	20.9	82.87	0.92	48.2	90.83	0.92
2037 - WD						
Arm A	44.0	98.22	0.95	46.1	173.37	0.99
Arm B	35.7	151.44	0.95	47.2	147.01	1.00
Arm C	23.7	95.61	0.96	57.1	109.38	1.00
2047 - ND						
Arm A	40.6	84.57	0.93	40.1	137.56	0.94
Arm B	31.8	143.13	0.92	38.5	119.60	0.95
Arm C	22.2	86.64	0.94	51.2	95.64	0.95
2047 - WD						
Arm A	32.2	145.08	0.91	122.7	439.91	1.18
Arm B	31.8	120.18	0.90	96.5	453.25	1.18
Arm C	47.3	80.03	0.90	50.1	233.80	1.19

Table 32 Junction 7

6.6.10 Junction 8

The operation of the roundabout was modelled using ARCADY software, and tested with the 2025 Survey Year, 2025 Baseline, 2032 Opening Year, 2037 Opening Year + 5 Years and 2047 Opening Year + 15 Years. Each year was modelled with and without development.

The results of the modelling are summarised in in Table 33.

The modelling illustrates that Junction 8 (priority-controlled) continues to operate well within capacity in the 2047 design scenario. In the AM peak period, the maximum RFC recorded is 0.55, while in the PM peak period, the maximum RFC is 0.60. These values remain comfortably below the capacity threshold of 0.85, indicating smooth flow with minimal queuing and low delay across all arms.

An RFC value of 0.85 or below indicates operation within capacity, and Junction 8 remains significantly below this in both peaks. These results demonstrate that the junction continues to function efficiently across all future scenarios, with substantial reserve capacity even in the long-range 2047 horizon.

It is typical for priority junctions in urban areas to experience some minor delays during peak periods; however, the delays observed here are very low (measured in seconds per vehicle), indicating a strong and robust operational performance.

Although no mitigation is required based on the modelling results, a number of light-touch, good-practice measures can support continued performance into the future, including:

- Maintaining clear visibility splays, supporting efficient gap acceptance for all movements.
- Ensuring road markings and signage remain in good condition, aiding driver understanding and junction clarity.
- Monitoring post-development conditions, allowing for minor operational adjustments if needed.
- Promoting sustainable travel modes, helping to manage long-term demand patterns in the wider network.

Overall, Junction 8 exhibits excellent performance in both AM and PM peak periods in the 2047 design year, with ample reserve capacity and no capacity-related issues identified.

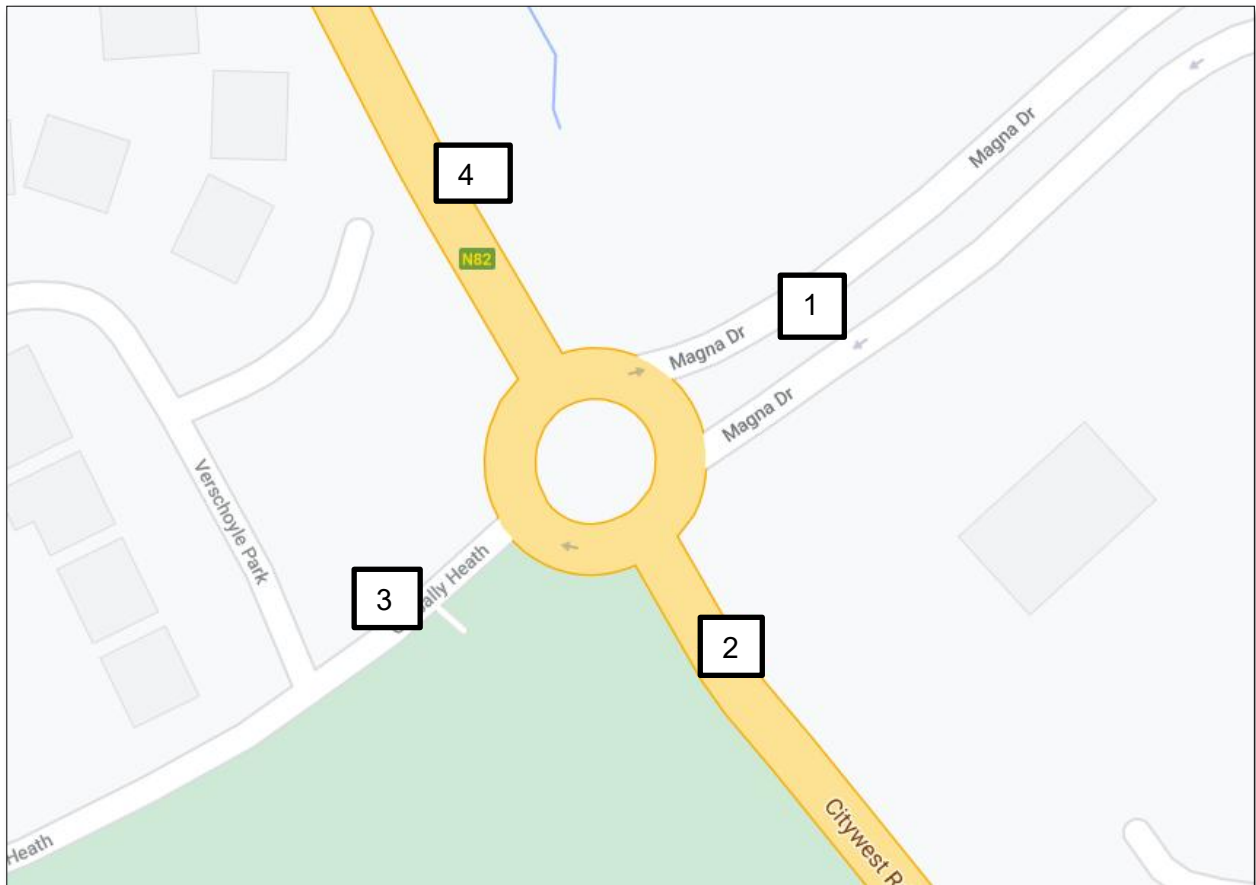


Figure 33 Site 4 N82/Corbally Heath Roundabout Junction Layout

The following arm destinations are used:

- Arm1 – Magna Drive
- Arm 2 – N82 South
- Arm 3 – Corbally Heath
- Arm 4 – N82 North

	AM			PM		
	Queue (PCU)	Delay (min)	RFC	Queue (PCU)	Delay (min)	RFC
Existing - 2025 Survey						
Arm 1	0.4	0.08	0.29	0.7	0.11	0.41
Arm 2	1.3	0.11	0.54	0.8	0.10	0.43
Arm 3	0.4	0.07	0.25	0.3	0.06	0.20
Arm 4	1.3	0.11	0.55	1.8	0.12	0.62
2025 Committed						
Arm 1	0.3	0.07	0.23	0.4	0.08	0.29
Arm 2	0.9	0.09	0.44	0.5	0.08	0.32
Arm 3	0.1	0.05	0.11	0.1	0.05	0.06
Arm 4	0.9	0.08	0.44	1.0	0.09	0.47
2032 - ND						
Arm 1	0.5	0.09	0.30	0.7	0.12	0.40
Arm 2	1.4	0.14	0.57	0.5	0.07	0.35
Arm 3	0.1	0.06	0.12	0.1	0.06	0.08
Arm 4	2.5	0.16	0.70	1.7	0.14	0.61
2032 - WD						
Arm 1	0.4	0.07	0.27	0.6	0.10	0.37
Arm 2	1.1	0.10	0.50	0.7	0.09	0.41
Arm 3	0.3	0.06	0.24	0.3	0.06	0.19
Arm 4	1.1	0.10	0.51	1.5	0.11	0.58
2037 - ND						
Arm 1	0.4	0.07	0.25	0.5	0.09	0.32
Arm 2	1.0	0.10	0.48	0.6	0.08	0.35

Arm 3	0.1	0.06	0.12	0.1	0.05	0.07
Arm 4	1.0	0.09	0.48	1.2	0.09	0.52
2037 - WD						
Arm 1	0.4	0.08	0.28	0.7	0.11	0.38
Arm 2	1.1	0.11	0.51	0.8	0.09	0.42
Arm 3	0.3	0.07	0.24	0.3	0.06	0.20
Arm 4	1.2	0.10	0.52	1.6	0.12	0.59
2047 - ND						
Arm 1	0.4	0.07	0.25	0.5	0.09	0.32
Arm 2	1.0	0.10	0.48	0.6	0.08	0.35
Arm 3	0.1	0.06	0.12	0.1	0.05	0.07
Arm 4	1.0	0.09	0.48	1.2	0.09	0.52
2047 - WD						
Arm 1	0.4	0.08	0.29	0.7	0.11	0.41
Arm 2	1.3	0.11	0.54	0.8	0.10	0.43
Arm 3	0.4	0.07	0.25	0.3	0.06	0.20
Arm 4	1.3	0.11	0.55	1.8	0.12	0.6

Table 33 Junction 8

6.7 Summary

6.7.1 Summary

The junction modelling undertaken for the study network demonstrates that the majority of junctions continue to operate within, or close to, typical urban performance levels across all future-year scenarios, including the 2047 With Development (WD) design horizon. The results are fully consistent with what would be expected in a busy, expanding urban environment that has undergone significant recent development, with multiple new residential, commercial, and transport-related projects adding to background demand.

Across the network:

- Several junctions retain substantial reserve capacity even in the longest-range scenario (such as Junctions 5, 6, and 8).

- Others experience peak-hour pressure, which is entirely typical of maturing urban areas with growing populations and evolving travel patterns.
- Where DoS or RFC values approach or exceed threshold levels, these conditions tend to arise only during the busiest AM or PM peak periods, and are characteristic of multi-arm signalised junctions operating in high-demand urban environments.
- Importantly, no junction exhibits failures that cannot be effectively managed through operational optimisation or minor, targeted interventions.
- The modelling confirms that the cumulative impact of development traffic is manageable within the context of an already busy urban network, and that with proportionate mitigation measures, the network will continue to function effectively into the future.

The results also reaffirm a key principle recognised in urban transport planning: It is not unusual for congestion, delay, or elevated RFC/DoS values to arise during peak hours in built-up areas. Such conditions typically represent short-duration peaks rather than systemic problems and are commonly addressed through routine traffic management practices.

6.7.2 Summary of Each Junction (2047 WD)

- Junction 1 (Signalised)

Experiences higher demand, with AM and PM DoS exceeding 100%. This is typical of a major urban junction during peak hours. With standard optimisation measures, effective operation can be maintained.

- Junction 2 (Priority)

Operates comfortably within or close to capacity. Only one stream approaches RFC ~1.0 in the AM peak, which is expected on minor arms in priority junctions. PM peak well below thresholds.

- Junction 3 (Signalised)

Displays DoS values of 107% (AM) and 96% (PM). These reflect typical peak-period pressures and remain manageable with operational adjustments.

- Junction 4 (Signalised)

A busy multi-arm junction with strong demand. DoS values exceed 100% in both peaks, which is characteristic of urban junctions in high-growth areas. Mitigation can effectively manage performance.

- Junction 5 (Priority)

Very low RFCs throughout (AM max ~0.09; PM max ~0.05). Junction retains excellent reserve capacity in all scenarios.

- Junction 6 (Priority)

All RFCs remain below 0.75, indicating very healthy operational performance with significant reserve capacity.

- Junction 7 (Signalised)

AM peak remains within capacity (DoS 91%). PM peak shows some pressure (DoS 119%), typical of evening peaks in urban areas. Readily addressed via timing adjustments.

- Junction 8 (Priority)

Strong performance with very low RFCs (<0.60). Ample reserve capacity in all periods.

6.7.3 Network-Wide Interpretation

When considered collectively, the results show a balanced network where:

- Signalised junctions exhibit the highest demand and greatest sensitivity to peak-hour fluctuations—expected in urban environments with converging flows and multiple competing movements.
- Priority junctions retain robust operational performance, with significant reserve capacity even in the 2047 WD scenario.
- The most constrained locations correspond directly with areas where cumulative development, population growth, and increased travel demand naturally concentrate, particularly in morning and evening peak periods.
- These patterns are fully aligned with observed conditions in modern, growing cities and towns, where junctions often operate near practical capacity during peaks without compromising safety or network stability.

6.7.4 Summary of Mitigation Measures

A suite of mitigation options is available and can be applied strategically and proportionately where needed. These include:

Signal-Control Mitigation Measures

- Signal timing optimisation (redistributing green time to heavier approaches).
- Adaptive or MOVA-style signal control, allowing junctions to dynamically respond to real-time flow.
- Improved progression and coordination between nearby signalised junctions.
- Review of staging and phasing, especially if specific turning movements show higher saturation.

Geometric and Capacity Enhancements

- Localised widening or addition of short flares on critical approaches.
- Improved lane utilisation or adjustments to lane designations.
- Enhancements to visibility and alignment at priority junctions to support efficient gap acceptance.

Traffic Management Measures

- Review of approach speeds (minor speed management can increase gap acceptance without affecting throughput).
- Refinement of markings and signage to aid lane discipline and reduce hesitation.
- Queue management interventions such as stacking optimisation or minor kerb realignments.

Demand-Management & Sustainable Transport

- Promotion of public transport, walking, and cycling, supported by improvements delivered through the wider development.
- Travel planning initiatives to encourage modal shift and reduce private car dependency.
- Staged occupation strategies, where appropriate, allowing monitoring and fine-tuning of junction operations.

Monitoring & Operational Review

- Post-development traffic monitoring to confirm real-world behaviour.
- Adjustment of signal timings following occupation based on observed trends.
- Targeted interventions only where needed and proportional to actual impacts.

6.7.5 Conclusion

Overall, the junction modelling shows that the network continues to function effectively in the context of a busy urban area undergoing substantial growth. While some signalised junctions experience peak-period pressures in the 2047 scenario, these are entirely normal, expected, and manageable in such environments. A range of well-established mitigation measures is available to ensure the network continues to operate safely and efficiently.

The analysis confirms that the proposed development can be accommodated within the future road network, with any localised impacts addressed through practical, proportionate, and easily implementable interventions.

7 SUMMARY

This Transport Statement has been prepared by Pinnacle Consulting Engineers in support of a Large-scale Residential Development application to South Dublin County Council.

The site has an area of 18.7Ha

The site is located approximately c. 13.7 Km southwest of Dublin City Centre and is bounded to the north by Carrigmore Estate; Corbally Estate to the east; agricultural land to the west and Boherboy Road to the south.

The site is currently a greenfield site.

7.1 Development Proposals

Kelland Homes Ltd. and Evara Developments Ltd. wish to apply for permission for a Large-scale Residential Development (LRD) on a site located at Boherboy, Saggart, County Dublin. To the immediate north of the site is the Carrigmore residential estate, to the west are agricultural lands and a single dwelling, to the east is the Corbally residential estate and Carrigmore Park, while to the south is the Boherboy Road.

The proposed development consists of 611 no. dwellings, comprised of 306 no. 2, 3, 4 & 4-5 bed, 2 & 3 storey, detached, semi-detached & terraced houses, 133 no. 1, 2 & 3 bed duplex units in 12 no. 2-3 storey blocks, and 172 no. 1, 2 & 3 bed apartments in 5 no. buildings ranging in height from 4-5 & 5 storeys. The proposed development also includes a 2-storey crèche (c.630m²).

Access to the development will be via one no. new vehicular access point from the Boherboy Road, along with new vehicular connections to adjoining developments at Corbally Heath to the east and Carrigmore Green to the north. Ten no. houses in the south-east part of the site will be accessed from Corbally Glade to the east. The proposed development includes for pedestrian and cyclist connections throughout the proposed development and accesses into adjoining lands at Carrigmore Park, Corbally Heath and Corbally Glade to the east and Carrigmore Green to the north.

Private amenity space for the residential units is provided in the form of rear gardens for houses and ground floor terraces / upper floor balconies for apartments and duplex units. The proposed development provides for a total of c. 2.3Ha of public open space, and c. 4,750sq.m of communal open space associated with proposed development.

The proposed development provides for (i) all associated site development works above and below ground, including surface water attenuation & an underground foul sewerage pumping station at the northern end of the site, (ii) public open spaces (c. 2.3Ha), (iii) communal open spaces (c. 4,750sq.m), (iv) hard & soft landscaping and boundary treatments, (v) surface car parking (861 no. car parking spaces), (vi) bicycle parking (711 no. bicycle parking spaces), (vii) bin & bicycle storage, (viii) diversion of all existing overhead ESB lines underground, (ix) public lighting, and (x), plant / PV panels (M&E), utility services & 8 no. ESB sub-stations, all on an overall application site area of c.18.7Hha. In accordance with the South Dublin County Development Plan (2022-2028), an area of c.1.03Ha within the site is reserved as a future school site.

The site has an area of 18.7Ha

7.2 Development Access

Access to the development will be via 4 No. accesses into the development via Boherboy Road, via the Corbally estate and via the Carrigmore estate.

A fourth access will be provided via Corbally Glade. This will not provide vehicular access to the entire development as this portion of the site is separated by local watercourse. Pedestrian and cyclist access will be provided to the entire development via a bridge crossing the stream.

Pedestrian access will be provided in conjunction with the vehicular access as well as access along the stream on the eastern boundary that will link the district park to Boherboy Road.

7.3 Parking

A total of 861 car-parking spaces will be provided for the Boherboy residential development. Parking for the houses will be accommodated within the curtilage of each dwelling, while on-street and courtyard parking will serve the apartments, duplex units, crèche, and visitor spaces.

In accordance with the Design Manual for Urban Roads and Streets (DMURS) and the Sustainable Urban Housing: Design Standards for New Apartments (2023), car parking has been designed to meet resident and visitor demand without allowing vehicles to dominate the site layout.

Therefore, 155 no. spaces will be provided for the duplex units and 115 no. spaces provided for the apartments, equating to a total of 270 parking spaces for the apartments and duplex elements of the proposed development. This equates to a rate of 1.1 space per unit. This quantum of car parking provides sufficient capacity to meet demand while supporting the development's sustainable transport objectives. This level of provision also functions as a demand-management tool, encouraging residents to use active and public transport modes for local and commuter trips.

A balanced approach has therefore been achieved between the South Dublin County Development Plan 2022–2028 standards and the anticipated parking demand, consistent with best practice and the overarching objectives of sustainable mobility, compact growth, and efficient urban design.

The overall development provides an average of 1.41 spaces per residential unit, representing a balanced and context-sensitive approach to parking provision in accordance with the South Dublin County Development Plan 2022–2028.

The reduced level of parking for the apartment and duplex units reflects the site's accessible suburban location within the Fortunestown / Citywest area, approximately 1 km from the Fortunestown Luas stop, and is supported by high-quality pedestrian and cycle links to nearby services and employment.

Overall, the proposed car-parking strategy delivers a compliant, demand-led, and design-led solution, ensuring that the Boherboy development supports sustainable mobility and compact urban living while maintaining functional convenience for residents and visitors.

7.4 Servicing

The proposed development has been designed such that service vehicles, including fire tenders and refuse vehicles, can circulate internally throughout the development.

7.5 Trip Generation

For the scale and type of development proposed, it is expected the total vehicle movements generated by the proposed development will be 81 arrivals and 256 departures in the AM peak (two-way total of 338). The total number of vehicle movements in the PM peak hour will be 202 arrivals and 93 departures (two-way total of 295).

7.6 Conclusion

This traffic assessment has confirmed that the proposed access arrangements would accommodate anticipated levels of traffic visitation and that as such the traffic generated by the development would have no material adverse impact on the operation of all junctions modelled.

It has been shown by the application of recognised assessment techniques that there is a slight increase in traffic levels arising from the development and the distribution of resultant flows around the adjacent road.

The results in terms of flows and movements can be accommodated by the neighbouring junctions with an anticipated slight uplift in congestion and delays at these locations.

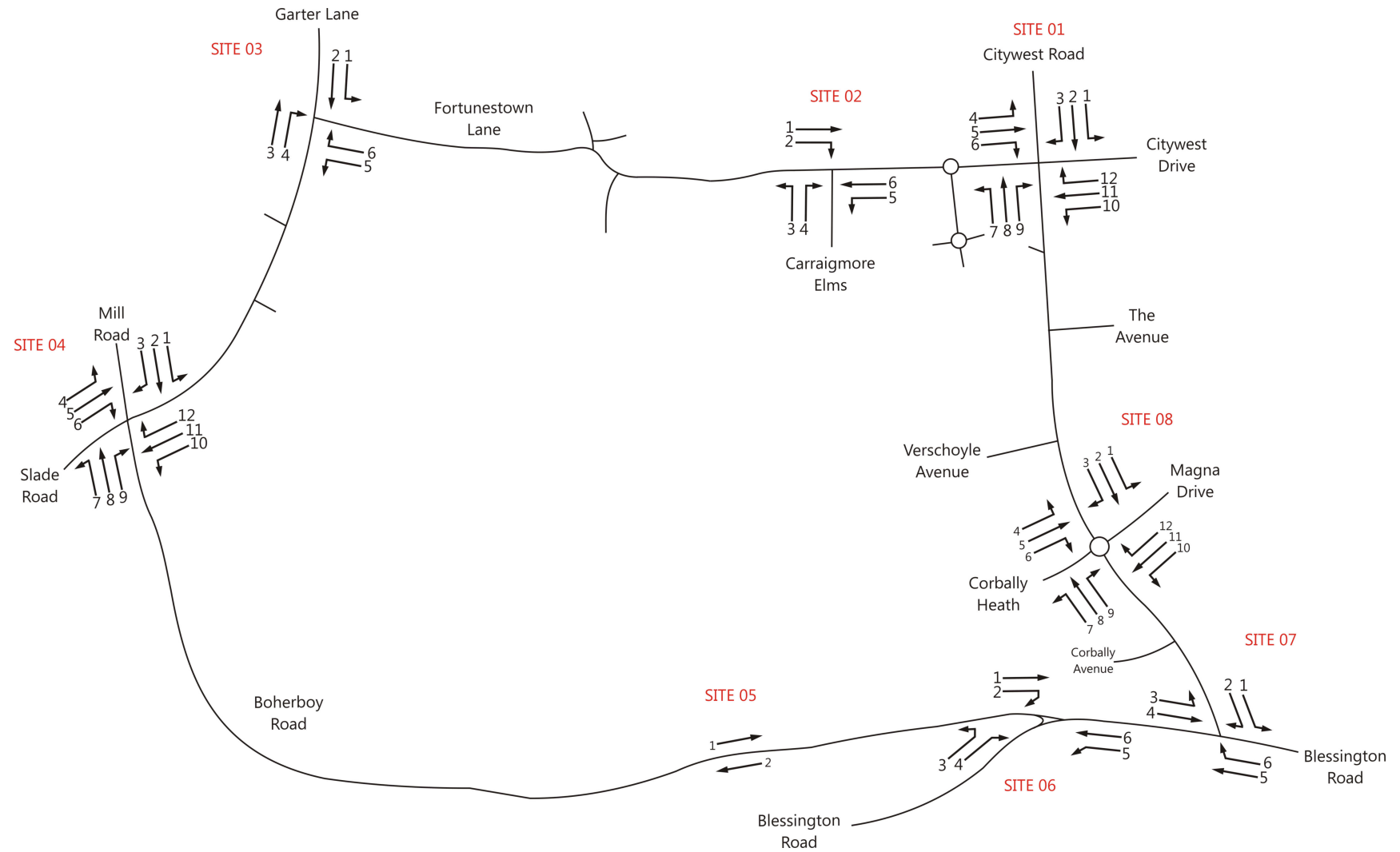
This assessment has also considered the transportation aspects of the internal arrangements of the development and has concluded that the proposals would provide enhanced facilities and improved accessibility for all users of the site.

Where applicable, the proposed development is also fully compliant with DMURS.

Accordingly, there are no reasons in relation to traffic and transportation aspects why this scheme should not be granted planning permission.

APPENDIX A TRAFFIC SURVEY

Site/Movement Numbering



Job number:
TRA/25/054

Client:
Pinnacle Consulting Engineers

Job Day:
Thursday

Job Date:
10th April 2025

Drawing No:
TRA/25/054-02

Author:
SPW

traffinomics
ie

TRAFFINOMICS LIMITED

BOHERBOY LRD III TRAFFIC COUNTS MANUAL CLASSIFIED JUNCTION TURNING COUNTS

APRIL 2025
TRA/25/054

SITE: 01

DATE: 10th April 2025

LOCATION: N82 Citywest Road/Fortunestown Lane

DAY: Thursday

TIME	MOVEMENT 1					TOT	PCU	MOVEMENT 2					TOT	PCU	MOVEMENT 3					TOT	PCU
	CAR	LGV	OGV1	OGV2	BUS			CAR	LGV	OGV1	OGV2	BUS			CAR	LGV	OGV1	OGV2	BUS		
07:00	6	0	0	0	1	7	8	30	15	1	6	2	54	64	9	5	0	0	0	14	14
07:15	17	1	0	0	1	19	20	31	20	2	7	3	63	76	11	5	0	1	2	19	22
07:30	11	5	1	0	1	18	20	39	9	3	8	5	64	81	8	2	0	1	0	11	12
07:45	11	2	0	0	1	14	15	42	23	2	6	3	76	88	12	2	0	1	0	15	16
H/TOT	45	8	1	0	4	58	63	142	67	8	27	13	257	309	40	14	0	3	2	59	65
08:00	14	4	0	0	0	18	18	28	9	4	8	3	52	67	15	1	0	0	0	16	16
08:15	14	0	0	0	0	14	14	43	8	1	10	3	65	82	17	1	0	0	0	18	18
08:30	17	0	2	0	2	21	24	43	12	3	12	1	71	89	17	1	1	0	0	19	20
08:45	18	1	0	0	1	20	21	41	11	0	11	2	65	81	22	3	0	1	0	26	27
H/TOT	63	5	2	0	3	73	77	155	40	8	41	9	253	319	71	6	1	1	0	79	81
09:00	10	1	0	0	1	12	13	26	6	5	6	2	45	57	20	2	0	0	0	22	22
09:15	11	2	1	0	1	15	17	44	9	3	18	2	76	103	25	3	0	0	0	28	28
09:30	18	5	0	0	0	23	23	29	18	3	5	0	55	63	17	1	0	0	0	18	18
09:45	11	0	0	1	1	13	15	20	7	3	7	4	41	56	28	2	0	1	0	31	32
H/TOT	50	8	1	1	3	63	68	119	40	14	36	8	217	279	90	8	0	1	0	99	100
P/TOT	158	21	4	1	10	194	207	416	147	30	104	30	727	907	201	28	1	5	2	237	246

TIME	MOVEMENT 1					TOT	PCU	MOVEMENT 2					TOT	PCU	MOVEMENT 3					TOT	PCU
	CAR	LGV	OGV1	OGV2	BUS			CAR	LGV	OGV1	OGV2	BUS			CAR	LGV	OGV1	OGV2	BUS		
16:00	14	1	0	0	1	16	17	54	16	1	12	2	85	103	27	4	0	0	0	31	31
16:15	11	2	1	0	0	14	15	62	12	2	5	3	84	95	21	6	0	0	0	27	27
16:30	20	0	0	0	1	21	22	58	16	4	5	0	83	92	20	4	0	0	0	24	24
16:45	11	2	0	0	0	13	13	71	13	1	5	2	92	101	23	2	0	0	0	25	25
H/TOT	56	5	1	0	2	64	67	245	57	8	27	7	344	390	91	16	0	0	0	107	107
17:00	20	4	0	0	1	25	26	39	9	4	2	1	55	61	21	3	0	0	0	24	24
17:15	16	4	1	0	0	21	22	52	8	4	0	2	66	70	11	3	0	0	0	14	14
17:30	8	1	0	0	1	10	11	44	10	4	7	2	67	80	18	1	0	0	0	19	19
17:45	7	1	0	0	0	8	8	49	10	2	4	3	68	77	26	1	0	0	0	27	27
H/TOT	51	10	1	0	2	64	67	184	37	14	13	8	256	288	76	8	0	0	0	84	84
18:00	25	3	1	0	1	30	32	76	12	4	2	1	95	101	22	1	0	0	0	23	23
18:15	15	2	0	0	1	18	19	69	16	0	0	3	88	91	32	0	0	0	0	32	32
18:30	18	2	0	0	0	20	20	56	4	1	2	1	64	68	22	5	0	0	0	27	27
18:45	18	4	0	0	1	23	24	48	6	1	0	2	57	60	28	2	0	0	0	30	30
H/TOT	76	11	1	0	3	91	95	249	38	6	4	7	304	319	104	8	0	0	0	112	112
P/TOT	183	26	3	0	7	219	228	678	132	28	44	22	904	997	271	32	0	0	0	303	303

TRAFFINOMICS LIMITED

BOHERBOY LRD III TRAFFIC COUNTS MANUAL CLASSIFIED JUNCTION TURNING COUNTS

APRIL 2025
TRA/25/054

SITE: 01

DATE: 10th April 2025

LOCATION: N82 Citywest Road/Fortunestown Lane

DAY: Thursday

TIME	MOVEMENT 4					TOT	PCU	MOVEMENT 5					TOT	PCU	MOVEMENT 6					TOT	PCU
	CAR	LGV	OGV1	OGV2	BUS			CAR	LGV	OGV1	OGV2	BUS			CAR	LGV	OGV1	OGV2	BUS		
07:00	26	8	0	0	0	34	34	20	7	0	0	0	27	27	0	0	0	0	0	0	0
07:15	15	5	0	0	0	20	20	45	7	0	0	1	53	54	4	0	0	0	0	4	4
07:30	17	5	0	1	0	23	24	41	2	0	0	2	45	47	1	0	0	0	1	2	3
07:45	20	3	0	0	0	23	23	36	5	1	0	0	42	43	5	1	0	0	0	6	6
H/TOT	78	21	0	1	0	100	101	142	21	1	0	3	167	171	10	1	0	0	1	12	13
08:00	32	6	0	1	0	39	40	28	8	0	0	3	39	42	17	2	0	0	0	19	19
08:15	37	5	0	0	0	42	42	47	2	0	0	1	50	51	22	2	0	0	0	24	24
08:30	39	5	0	1	0	45	46	43	0	2	0	1	46	48	34	3	1	0	0	38	39
08:45	20	6	0	0	1	27	28	51	3	1	0	1	56	58	37	3	1	0	0	41	42
H/TOT	128	22	0	2	1	153	157	169	13	3	0	6	191	199	110	10	2	0	0	122	123
09:00	20	5	1	0	0	26	27	43	2	0	0	0	45	45	26	0	0	0	0	26	26
09:15	28	2	0	0	0	30	30	40	4	0	0	0	44	44	18	5	1	0	0	24	25
09:30	25	3	0	0	0	28	28	40	2	2	0	0	44	45	11	1	1	0	0	13	14
09:45	18	4	1	0	0	23	24	40	3	1	0	0	44	45	21	1	0	0	0	22	22
H/TOT	91	14	2	0	0	107	108	163	11	3	0	0	177	179	76	7	2	0	0	85	86
P/TOT	297	57	2	3	1	360	366	474	45	7	0	9	535	548	196	18	4	0	1	219	222

TIME	MOVEMENT 4					TOT	PCU	MOVEMENT 5					TOT	PCU	MOVEMENT 6					TOT	PCU
	CAR	LGV	OGV1	OGV2	BUS			CAR	LGV	OGV1	OGV2	BUS			CAR	LGV	OGV1	OGV2	BUS		
16:00	16	5	0	0	0	21	21	39	6	0	0	0	45	45	28	3	0	1	0	32	33
16:15	23	3	0	0	0	26	26	51	5	0	0	0	56	56	24	1	0	0	0	25	25
16:30	19	1	0	0	0	20	20	51	2	0	0	0	53	53	26	5	0	0	0	31	31
16:45	33	5	0	0	0	38	38	48	3	0	0	0	51	51	24	5	0	0	0	29	29
H/TOT	91	14	0	0	0	105	105	189	16	0	0	0	205	205	102	14	0	1	0	117	118
17:00	31	4	0	0	0	35	35	59	3	0	0	1	63	64	35	2	0	0	0	37	37
17:15	21	0	0	0	0	21	21	51	6	0	0	0	57	57	29	5	0	0	1	35	36
17:30	24	7	0	0	0	31	31	47	2	0	0	0	49	49	38	3	0	0	0	41	41
17:45	20	3	0	0	0	23	23	37	0	0	0	0	37	37	27	7	0	0	0	34	34
H/TOT	96	14	0	0	0	110	110	194	11	0	0	1	206	207	129	17	0	0	1	147	148
18:00	26	3	2	0	0	31	32	32	3	0	0	0	35	35	26	2	0	0	0	28	28
18:15	33	2	0	0	0	35	35	48	2	2	0	0	52	53	35	3	0	0	0	38	38
18:30	33	2	1	0	0	36	37	50	3	0	0	0	53	53	27	2	0	0	0	29	29
18:45	19	3	0	0	0	22	22	48	4	0	0	0	52	52	30	2	0	0	0	32	32
H/TOT	111	10	3	0	0	124	126	178	12	2	0	0	192	193	118	9	0	0	0	127	127
P/TOT	298	38	3	0	0	339	341	561	39	2	0	1	603	605	349	40	0	1	1	391	393

TRAFFINOMICS LIMITED

BOHERBOY LRD III TRAFFIC COUNTS MANUAL CLASSIFIED JUNCTION TURNING COUNTS

APRIL 2025
TRA/25/054

SITE: 01

DATE: 10th April 2025

LOCATION: N82 Citywest Road/Fortunestown Lane

DAY: Thursday

TIME	MOVEMENT 7					TOT	PCU	MOVEMENT 8					TOT	PCU	MOVEMENT 9					TOT	PCU
	CAR	LGV	OGV1	OGV2	BUS			CAR	LGV	OGV1	OGV2	BUS			CAR	LGV	OGV1	OGV2	BUS		
07:00	0	1	0	0	0	1	1	87	31	11	14	3	146	173	6	0	0	0	0	6	6
07:15	4	3	0	0	0	7	7	64	27	3	10	2	106	123	5	0	0	0	0	5	5
07:30	3	1	0	0	0	4	4	103	22	4	16	1	146	170	8	1	0	0	0	9	9
07:45	1	2	0	0	0	3	3	60	14	0	15	2	91	113	6	1	0	0	1	8	9
H/TOT	8	7	0	0	0	15	15	314	94	18	55	8	489	578	25	2	0	0	1	28	29
08:00	8	0	0	0	2	10	12	87	15	2	7	3	114	127	10	2	1	0	1	14	16
08:15	5	0	0	0	1	6	7	91	27	4	7	1	130	142	6	1	1	0	0	8	9
08:30	7	1	0	0	0	8	8	87	38	3	12	2	142	161	14	1	0	0	0	15	15
08:45	5	3	0	0	1	9	10	58	12	2	4	1	77	84	7	0	0	0	0	7	7
H/TOT	25	4	0	0	4	33	37	323	92	11	30	7	463	515	37	4	2	0	1	44	46
09:00	9	3	0	0	0	12	12	79	13	4	8	2	106	120	5	0	0	0	0	5	5
09:15	6	1	0	0	0	7	7	67	22	6	9	3	107	125	16	0	0	0	0	16	16
09:30	8	2	0	0	0	10	10	61	20	7	9	2	99	116	11	5	0	0	0	16	16
09:45	17	2	0	0	0	19	19	62	13	4	10	2	91	108	9	4	0	0	0	13	13
H/TOT	40	8	0	0	0	48	48	269	68	21	36	9	403	469	41	9	0	0	0	50	50
P/TOT	73	19	0	0	4	96	100	906	254	50	121	24	1355	1561	103	15	2	0	2	122	125

TIME	MOVEMENT 7					TOT	PCU	MOVEMENT 8					TOT	PCU	MOVEMENT 9					TOT	PCU
	CAR	LGV	OGV1	OGV2	BUS			CAR	LGV	OGV1	OGV2	BUS			CAR	LGV	OGV1	OGV2	BUS		
16:00	23	4	1	0	1	29	31	57	11	3	6	2	79	90	12	0	1	0	0	13	14
16:15	17	1	0	0	0	18	18	52	6	2	5	1	66	75	6	1	1	0	0	8	9
16:30	28	1	0	0	0	29	29	64	6	0	3	3	76	83	14	0	0	0	0	14	14
16:45	29	3	0	0	0	32	32	52	10	3	0	2	67	71	10	3	0	0	0	13	13
H/TOT	97	9	1	0	1	108	110	225	33	8	14	8	288	318	42	4	2	0	0	48	49
17:00	27	3	0	0	0	30	30	46	10	1	2	0	59	62	23	0	0	0	0	23	23
17:15	21	0	0	0	1	22	23	38	7	2	0	3	50	54	10	3	1	0	0	14	15
17:30	22	0	1	0	0	23	24	52	11	1	1	0	65	67	13	1	0	0	0	14	14
17:45	20	2	0	0	0	22	22	37	5	3	4	2	51	60	10	1	0	0	0	11	11
H/TOT	90	5	1	0	1	97	99	173	33	7	7	5	225	243	56	5	1	0	0	62	63
18:00	27	1	0	0	0	28	28	56	6	0	2	3	67	73	14	5	0	0	0	19	19
18:15	8	0	0	0	0	8	8	63	14	0	3	3	83	90	7	3	0	0	0	10	10
18:30	18	1	0	0	0	19	19	51	7	1	2	1	62	66	15	3	0	0	0	18	18
18:45	22	1	0	0	0	23	23	59	11	0	0	4	74	78	10	2	0	0	0	12	12
H/TOT	75	3	0	0	0	78	78	229	38	1	7	11	286	307	46	13	0	0	0	59	59
P/TOT	262	17	2	0	2	283	286	627	104	16	28	24	799	867	144	22	3	0	0	169	171

TRAFFINOMICS LIMITED

**BOHERBOY LRD III TRAFFIC COUNTS
MANUAL CLASSIFIED JUNCTION TURNING COUNTS**

**APRIL 2025
TRA/25/054**

SITE: 01

DATE: 10th April 2025

LOCATION: N82 Citywest Road/Fortunestown Lane

DAY: Thursday

TIME	MOVEMENT 10					TOT	PCU	MOVEMENT 11					TOT	PCU	MOVEMENT 12					TOT	PCU
	CAR	LGV	OGV1	OGV2	BUS			CAR	LGV	OGV1	OGV2	BUS			CAR	LGV	OGV1	OGV2	BUS		
07:00	5	0	0	0	0	5	5	7	2	1	0	1	11	13	12	5	1	0	1	19	21
07:15	6	1	0	0	0	7	7	15	7	1	0	0	23	24	9	2	1	0	1	13	15
07:30	3	0	0	0	0	3	3	23	4	0	0	0	27	27	14	7	0	0	0	21	21
07:45	8	1	0	0	0	9	9	20	3	2	0	0	25	26	10	4	0	0	1	15	16
H/TOT	22	2	0	0	0	24	24	65	16	4	0	1	86	89	45	18	2	0	3	68	72
08:00	10	1	1	0	0	12	13	29	2	0	0	2	33	35	19	4	1	0	0	24	25
08:15	11	2	0	0	0	13	13	43	3	1	0	2	49	52	21	1	1	0	1	24	26
08:30	11	0	0	0	0	11	11	27	1	0	0	0	28	28	33	2	0	0	1	36	37
08:45	9	1	0	0	0	10	10	46	5	0	0	1	52	53	16	4	0	0	0	20	20
H/TOT	41	4	1	0	0	46	47	145	11	1	0	5	162	168	89	11	2	0	2	104	107
09:00	14	3	0	0	0	17	17	48	0	0	0	0	48	48	22	3	0	0	1	26	27
09:15	10	2	0	0	0	12	12	44	1	0	0	0	45	45	8	1	0	0	0	9	9
09:30	4	0	1	0	0	5	6	21	3	1	0	0	25	26	18	3	0	0	0	21	21
09:45	9	1	1	0	0	11	12	30	3	1	0	0	34	35	18	1	1	0	0	20	21
H/TOT	37	6	2	0	0	45	46	143	7	2	0	0	152	153	66	8	1	0	1	76	78
P/TOT	100	12	3	0	0	115	117	353	34	7	0	6	400	410	200	37	5	0	6	248	257

TIME	MOVEMENT 10					TOT	PCU	MOVEMENT 11					TOT	PCU	MOVEMENT 12					TOT	PCU
	CAR	LGV	OGV1	OGV2	BUS			CAR	LGV	OGV1	OGV2	BUS			CAR	LGV	OGV1	OGV2	BUS		
16:00	14	1	0	0	1	16	17	49	5	1	0	0	55	56	10	4	0	0	0	14	14
16:15	18	1	0	0	0	19	19	46	8	0	0	0	54	54	27	1	0	2	1	31	35
16:30	16	1	0	0	0	17	17	28	6	0	0	0	34	34	7	1	0	0	0	8	8
16:45	26	2	1	0	0	29	30	57	7	1	0	1	66	68	8	1	0	1	2	12	15
H/TOT	74	5	1	0	1	81	83	180	26	2	0	1	209	211	52	7	0	3	3	65	72
17:00	19	2	0	0	0	21	21	36	7	1	0	0	44	45	9	2	0	0	0	11	11
17:15	25	0	1	0	0	26	27	61	4	0	0	0	65	65	13	2	2	1	0	18	20
17:30	15	1	1	0	0	17	18	56	9	0	0	0	65	65	18	2	0	0	1	21	22
17:45	15	4	0	0	0	19	19	52	9	1	0	0	62	63	14	2	0	0	0	16	16
H/TOT	74	7	2	0	0	83	84	205	29	2	0	0	236	237	54	8	2	1	1	66	69
18:00	18	0	1	0	1	20	22	44	5	1	0	0	50	51	12	1	0	0	1	14	15
18:15	16	4	0	0	0	20	20	53	6	0	0	1	60	61	16	5	1	0	0	22	23
18:30	15	3	0	0	0	18	18	65	1	0	0	0	66	66	20	3	1	0	1	25	27
18:45	12	3	0	0	0	15	15	42	3	0	0	0	45	45	20	2	0	0	1	23	24
H/TOT	61	10	1	0	1	73	75	204	15	1	0	1	221	223	68	11	2	0	3	84	88
P/TOT	209	22	4	0	2	237	241	589	70	5	0	2	666	671	174	26	4	4	7	215	229

PCU's Through Junction
365
376
421
366
1528
429
478
526
441
1874
419
460
385
400
1663
5065

PCU's Through Junction
471
452
426
485
1834
438
423
440
396
1697
457
479
447
417
1800
5331

APPENDIX B TRICS

Calculation Reference: AUDIT-800401-250110-0145

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 06 - HOTEL, FOOD & DRINK
Category : A - HOTELS

TOTAL VEHICLES

Selected regions and areas:

15	GREATER DUBLIN	
DL	DUBLIN	3 days

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

Primary Filtering selection:

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

Parameter: Gross floor area
 Actual Range: 5815 to 10800 (units: sqm)
 Range Selected by User: 320 to 20000 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/16 to 06/11/20

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

Selected survey days:

Wednesday 1 days
 Thursday 1 days
 Friday 1 days

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

Selected survey types:

Manual count 3 days
 Directional ATC Count 0 days

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

Selected Locations:

Suburban Area (PPS6 Out of Centre) 2
 Edge of Town 1

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

Selected Location Sub Categories:

Industrial Zone 2
 Residential Zone 1

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

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included X days - Selected
 Servicing vehicles Excluded 3 days - Selected

Secondary Filtering selection:

Use Class:

C1 3 days

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

Population within 500m Range:

All Surveys Included

Secondary Filtering selection (Cont.):

Population within 1 mile:

5,001 to 10,000	1 days
20,001 to 25,000	2 days

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

Population within 5 miles:

250,001 to 500,000	1 days
500,001 or More	2 days

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

Car ownership within 5 miles:

0.6 to 1.0	2 days
1.6 to 2.0	1 days

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

Travel Plan:

No	3 days

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

PTAL Rating:

No PTAL Present	3 days

This data displays the number of selected surveys with PTAL Ratings.

Covid-19 Restrictions	Yes	At least one survey within the selected data set was undertaken at a time of Covid-19 restrictions

LIST OF SITES relevant to selection parameters

1	DL-06-A-05	BEST WESTERN	DUBLIN
	UPPER DRUMCONDRA ROAD		
	DUBLIN		
	DRUMCONDRA		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Gross floor area:	5815 sqm	
	Survey date: WEDNESDAY	23/11/16	Survey Type: MANUAL
2	DL-06-A-06	HOTEL	DUBLIN
	BEACON COURT		
	DUBLIN		
	SANDYFORD		
	Suburban Area (PPS6 Out of Centre)		
	Industrial Zone		
	Total Gross floor area:	9717 sqm	
	Survey date: THURSDAY	26/09/19	Survey Type: MANUAL
3	DL-06-A-07	CROWNE PLAZA	DUBLIN
	NORTHWOOD AVENUE		
	DUBLIN		
	NORTHWOOD		
	Edge of Town		
	Industrial Zone		
	Total Gross floor area:	10800 sqm	
	Survey date: FRIDAY	06/11/20	Survey Type: MANUAL

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/A - HOTELS
TOTAL VEHICLES
 Calculation factor: 100 sqm
 BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	8777	0.103	3	8777	0.182	3	8777	0.285
08:00 - 09:00	3	8777	0.141	3	8777	0.224	3	8777	0.365
09:00 - 10:00	3	8777	0.251	3	8777	0.254	3	8777	0.505
10:00 - 11:00	3	8777	0.243	3	8777	0.254	3	8777	0.497
11:00 - 12:00	3	8777	0.216	3	8777	0.308	3	8777	0.524
12:00 - 13:00	3	8777	0.213	3	8777	0.213	3	8777	0.426
13:00 - 14:00	3	8777	0.209	3	8777	0.190	3	8777	0.399
14:00 - 15:00	3	8777	0.319	3	8777	0.258	3	8777	0.577
15:00 - 16:00	3	8777	0.262	3	8777	0.213	3	8777	0.475
16:00 - 17:00	3	8777	0.258	3	8777	0.251	3	8777	0.509
17:00 - 18:00	3	8777	0.213	3	8777	0.209	3	8777	0.422
18:00 - 19:00	3	8777	0.285	3	8777	0.239	3	8777	0.524
19:00 - 20:00	3	8777	0.167	3	8777	0.163	3	8777	0.330
20:00 - 21:00	3	8777	0.152	3	8777	0.156	3	8777	0.308
21:00 - 22:00	3	8777	0.235	3	8777	0.182	3	8777	0.417
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			3.267			3.296			6.563

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

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

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Parameter summary

Trip rate parameter range selected:	5815 - 10800 (units: sqm)
Survey date range:	01/01/16 - 06/11/20
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/A - HOTELS
 OGVS
 Calculation factor: 100 sqm
 BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	8777	0.000	3	8777	0.000	3	8777	0.000
08:00 - 09:00	3	8777	0.004	3	8777	0.004	3	8777	0.008
09:00 - 10:00	3	8777	0.011	3	8777	0.008	3	8777	0.019
10:00 - 11:00	3	8777	0.004	3	8777	0.008	3	8777	0.012
11:00 - 12:00	3	8777	0.000	3	8777	0.000	3	8777	0.000
12:00 - 13:00	3	8777	0.004	3	8777	0.004	3	8777	0.008
13:00 - 14:00	3	8777	0.004	3	8777	0.004	3	8777	0.008
14:00 - 15:00	3	8777	0.008	3	8777	0.008	3	8777	0.016
15:00 - 16:00	3	8777	0.000	3	8777	0.000	3	8777	0.000
16:00 - 17:00	3	8777	0.000	3	8777	0.000	3	8777	0.000
17:00 - 18:00	3	8777	0.000	3	8777	0.000	3	8777	0.000
18:00 - 19:00	3	8777	0.000	3	8777	0.000	3	8777	0.000
19:00 - 20:00	3	8777	0.000	3	8777	0.000	3	8777	0.000
20:00 - 21:00	3	8777	0.000	3	8777	0.000	3	8777	0.000
21:00 - 22:00	3	8777	0.000	3	8777	0.000	3	8777	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.035			0.036			0.071

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

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

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/A - HOTELS
TAXIS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	8777	0.030	3	8777	0.030	3	8777	0.060
08:00 - 09:00	3	8777	0.065	3	8777	0.072	3	8777	0.137
09:00 - 10:00	3	8777	0.057	3	8777	0.053	3	8777	0.110
10:00 - 11:00	3	8777	0.049	3	8777	0.057	3	8777	0.106
11:00 - 12:00	3	8777	0.068	3	8777	0.072	3	8777	0.140
12:00 - 13:00	3	8777	0.034	3	8777	0.030	3	8777	0.064
13:00 - 14:00	3	8777	0.038	3	8777	0.038	3	8777	0.076
14:00 - 15:00	3	8777	0.038	3	8777	0.030	3	8777	0.068
15:00 - 16:00	3	8777	0.068	3	8777	0.068	3	8777	0.136
16:00 - 17:00	3	8777	0.046	3	8777	0.038	3	8777	0.084
17:00 - 18:00	3	8777	0.053	3	8777	0.057	3	8777	0.110
18:00 - 19:00	3	8777	0.091	3	8777	0.084	3	8777	0.175
19:00 - 20:00	3	8777	0.038	3	8777	0.046	3	8777	0.084
20:00 - 21:00	3	8777	0.027	3	8777	0.027	3	8777	0.054
21:00 - 22:00	3	8777	0.061	3	8777	0.049	3	8777	0.110
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.763			0.751			1.514

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

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

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/A - HOTELS
 PSVS
 Calculation factor: 100 sqm
 BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	8777	0.008	3	8777	0.008	3	8777	0.016
08:00 - 09:00	3	8777	0.008	3	8777	0.008	3	8777	0.016
09:00 - 10:00	3	8777	0.008	3	8777	0.008	3	8777	0.016
10:00 - 11:00	3	8777	0.008	3	8777	0.008	3	8777	0.016
11:00 - 12:00	3	8777	0.008	3	8777	0.008	3	8777	0.016
12:00 - 13:00	3	8777	0.008	3	8777	0.008	3	8777	0.016
13:00 - 14:00	3	8777	0.008	3	8777	0.008	3	8777	0.016
14:00 - 15:00	3	8777	0.008	3	8777	0.008	3	8777	0.016
15:00 - 16:00	3	8777	0.008	3	8777	0.008	3	8777	0.016
16:00 - 17:00	3	8777	0.011	3	8777	0.011	3	8777	0.022
17:00 - 18:00	3	8777	0.008	3	8777	0.008	3	8777	0.016
18:00 - 19:00	3	8777	0.004	3	8777	0.000	3	8777	0.004
19:00 - 20:00	3	8777	0.004	3	8777	0.004	3	8777	0.008
20:00 - 21:00	3	8777	0.004	3	8777	0.004	3	8777	0.008
21:00 - 22:00	3	8777	0.004	3	8777	0.004	3	8777	0.008
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.107			0.103			0.210

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

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

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/A - HOTELS
 CYCLISTS
 Calculation factor: 100 sqm
 BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	8777	0.008	3	8777	0.004	3	8777	0.012
08:00 - 09:00	3	8777	0.027	3	8777	0.000	3	8777	0.027
09:00 - 10:00	3	8777	0.011	3	8777	0.000	3	8777	0.011
10:00 - 11:00	3	8777	0.000	3	8777	0.004	3	8777	0.004
11:00 - 12:00	3	8777	0.008	3	8777	0.008	3	8777	0.016
12:00 - 13:00	3	8777	0.000	3	8777	0.000	3	8777	0.000
13:00 - 14:00	3	8777	0.000	3	8777	0.000	3	8777	0.000
14:00 - 15:00	3	8777	0.008	3	8777	0.008	3	8777	0.016
15:00 - 16:00	3	8777	0.015	3	8777	0.015	3	8777	0.030
16:00 - 17:00	3	8777	0.004	3	8777	0.004	3	8777	0.008
17:00 - 18:00	3	8777	0.000	3	8777	0.019	3	8777	0.019
18:00 - 19:00	3	8777	0.000	3	8777	0.015	3	8777	0.015
19:00 - 20:00	3	8777	0.000	3	8777	0.011	3	8777	0.011
20:00 - 21:00	3	8777	0.000	3	8777	0.000	3	8777	0.000
21:00 - 22:00	3	8777	0.004	3	8777	0.000	3	8777	0.004
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.085			0.088			0.173

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

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

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/A - HOTELS
 CARS
 Calculation factor: 100 sqm
 BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	8777	0.057	3	8777	0.118	3	8777	0.175
08:00 - 09:00	3	8777	0.046	3	8777	0.125	3	8777	0.171
09:00 - 10:00	3	8777	0.133	3	8777	0.167	3	8777	0.300
10:00 - 11:00	3	8777	0.148	3	8777	0.141	3	8777	0.289
11:00 - 12:00	3	8777	0.122	3	8777	0.201	3	8777	0.323
12:00 - 13:00	3	8777	0.141	3	8777	0.144	3	8777	0.285
13:00 - 14:00	3	8777	0.141	3	8777	0.118	3	8777	0.259
14:00 - 15:00	3	8777	0.235	3	8777	0.186	3	8777	0.421
15:00 - 16:00	3	8777	0.156	3	8777	0.110	3	8777	0.266
16:00 - 17:00	3	8777	0.178	3	8777	0.175	3	8777	0.353
17:00 - 18:00	3	8777	0.144	3	8777	0.129	3	8777	0.273
18:00 - 19:00	3	8777	0.175	3	8777	0.144	3	8777	0.319
19:00 - 20:00	3	8777	0.122	3	8777	0.110	3	8777	0.232
20:00 - 21:00	3	8777	0.110	3	8777	0.118	3	8777	0.228
21:00 - 22:00	3	8777	0.171	3	8777	0.125	3	8777	0.296
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.079			2.111			4.190

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

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

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/A - HOTELS
 LGVS
 Calculation factor: 100 sqm
 BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	8777	0.008	3	8777	0.027	3	8777	0.035
08:00 - 09:00	3	8777	0.019	3	8777	0.015	3	8777	0.034
09:00 - 10:00	3	8777	0.042	3	8777	0.019	3	8777	0.061
10:00 - 11:00	3	8777	0.034	3	8777	0.042	3	8777	0.076
11:00 - 12:00	3	8777	0.019	3	8777	0.027	3	8777	0.046
12:00 - 13:00	3	8777	0.023	3	8777	0.023	3	8777	0.046
13:00 - 14:00	3	8777	0.015	3	8777	0.019	3	8777	0.034
14:00 - 15:00	3	8777	0.030	3	8777	0.027	3	8777	0.057
15:00 - 16:00	3	8777	0.030	3	8777	0.027	3	8777	0.057
16:00 - 17:00	3	8777	0.023	3	8777	0.027	3	8777	0.050
17:00 - 18:00	3	8777	0.008	3	8777	0.011	3	8777	0.019
18:00 - 19:00	3	8777	0.011	3	8777	0.011	3	8777	0.022
19:00 - 20:00	3	8777	0.004	3	8777	0.004	3	8777	0.008
20:00 - 21:00	3	8777	0.011	3	8777	0.004	3	8777	0.015
21:00 - 22:00	3	8777	0.000	3	8777	0.004	3	8777	0.004
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.277			0.287			0.564

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

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

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/A - HOTELS
 MOTOR CYCLES
 Calculation factor: 100 sqm
 BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	8777	0.000	3	8777	0.000	3	8777	0.000
08:00 - 09:00	3	8777	0.000	3	8777	0.000	3	8777	0.000
09:00 - 10:00	3	8777	0.000	3	8777	0.000	3	8777	0.000
10:00 - 11:00	3	8777	0.000	3	8777	0.000	3	8777	0.000
11:00 - 12:00	3	8777	0.000	3	8777	0.000	3	8777	0.000
12:00 - 13:00	3	8777	0.004	3	8777	0.004	3	8777	0.008
13:00 - 14:00	3	8777	0.004	3	8777	0.004	3	8777	0.008
14:00 - 15:00	3	8777	0.000	3	8777	0.000	3	8777	0.000
15:00 - 16:00	3	8777	0.000	3	8777	0.000	3	8777	0.000
16:00 - 17:00	3	8777	0.000	3	8777	0.000	3	8777	0.000
17:00 - 18:00	3	8777	0.000	3	8777	0.004	3	8777	0.004
18:00 - 19:00	3	8777	0.004	3	8777	0.000	3	8777	0.004
19:00 - 20:00	3	8777	0.000	3	8777	0.000	3	8777	0.000
20:00 - 21:00	3	8777	0.000	3	8777	0.004	3	8777	0.004
21:00 - 22:00	3	8777	0.000	3	8777	0.000	3	8777	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.012			0.016			0.028

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

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

Calculation Reference: AUDIT-800401-190409-0459

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 04 - EDUCATION
 Category : A - PRIMARY
VEHICLES

Selected regions and areas:

12	CONNAUGHT	
	GA GALWAY	1 days
	RO ROSCOMMON	1 days
13	MUNSTER	
	LI LIMERICK	2 days
	TI TIPPERARY	1 days
14	LEINSTER	
	LU LOUTH	2 days

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

Secondary Filtering selection:

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

Parameter: Number of pupils
 Actual Range: 82 to 1020 (units:)
 Range Selected by User: 82 to 1020 (units:)

Parking Spaces Range: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/11 to 27/10/16

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

Selected survey days:

Thursday	6 days
Friday	1 days

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

Selected survey types:

Manual count	7 days
Directional ATC Count	0 days

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

Selected Locations:

Edge of Town Centre	4
Edge of Town	2
Neighbourhood Centre (PPS6 Local Centre)	1

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

Selected Location Sub Categories:

Residential Zone	5
Village	1
No Sub Category	1

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

Secondary Filtering selection:

Use Class:

D1	7 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 1 mile:

1,000 or Less	1 days
1,001 to 5,000	2 days
5,001 to 10,000	1 days
15,001 to 20,000	3 days

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

Population within 5 miles:

5,000 or Less	2 days
25,001 to 50,000	2 days
75,001 to 100,000	3 days

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

Car ownership within 5 miles:

0.6 to 1.0	1 days
1.1 to 1.5	6 days

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

Travel Plan:

Yes	1 days
No	6 days

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

PTAL Rating:

No PTAL Present	7 days

This data displays the number of selected surveys with PTAL Ratings.

LIST OF SITES relevant to selection parameters

1	GA-04-A-01	PRIMARY SCHOOL	GALWAY
	SALTHILL ROAD LOWER		
	GALWAY		
	Edge of Town Centre		
	Residential Zone		
	Total Number of pupils:	249	
	Survey date: THURSDAY	11/10/12	Survey Type: MANUAL
2	LI-04-A-02	PRIMARY SCHOOL	LIMERICK
	SHELBOURNE ROAD		
	LIMERICK		
	Edge of Town Centre		
	Residential Zone		
	Total Number of pupils:	180	
	Survey date: THURSDAY	07/11/13	Survey Type: MANUAL
3	LI-04-A-03	PRIMARY SCHOOL	LIMERICK
	DUBLIN ROAD		
	LIMERICK		
	QUARRY HILL		
	Edge of Town Centre		
	Residential Zone		
	Total Number of pupils:	225	
	Survey date: THURSDAY	07/11/13	Survey Type: MANUAL
4	LU-04-A-01	PRIMARY SCHOOL	LOUTH
	UNION STREET		
	DUNDALK		
	Edge of Town Centre		
	No Sub Category		
	Total Number of pupils:	324	
	Survey date: THURSDAY	12/09/13	Survey Type: MANUAL
5	LU-04-A-02	PRIMARY SCHOOL	LOUTH
	BRYANSTOWN		
	DROGHEDA		
	BRYANSTOWN MANOR		
	Edge of Town		
	Residential Zone		
	Total Number of pupils:	1020	
	Survey date: FRIDAY	19/06/15	Survey Type: MANUAL
6	RO-04-A-01	PRIMARY SCHOOL	ROSCOMMON
	WARREN ROAD		
	BOYLE		
	Edge of Town		
	Residential Zone		
	Total Number of pupils:	82	
	Survey date: THURSDAY	25/09/14	Survey Type: MANUAL
7	TI-04-A-01	PRIMARY SCHOOL	TIPPERARY
	OLD ROAD		
	NEAR NENAGH		
	SILVERMINES		
	Neighbourhood Centre (PPS6 Local Centre)		
	Village		
	Total Number of pupils:	84	
	Survey date: THURSDAY	26/05/16	Survey Type: MANUAL

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

TRIP RATE for Land Use 04 - EDUCATION/A - PRIMARY
VEHICLES

Calculation factor: 1 PUPILS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	7	309	0.012	7	309	0.003	7	309	0.015
08:00 - 09:00	7	309	0.176	7	309	0.094	7	309	0.270
09:00 - 10:00	7	309	0.094	7	309	0.115	7	309	0.209
10:00 - 11:00	7	309	0.008	7	309	0.010	7	309	0.018
11:00 - 12:00	7	309	0.005	7	309	0.006	7	309	0.011
12:00 - 13:00	7	309	0.011	7	309	0.007	7	309	0.018
13:00 - 14:00	7	309	0.053	7	309	0.042	7	309	0.095
14:00 - 15:00	7	309	0.098	7	309	0.086	7	309	0.184
15:00 - 16:00	7	309	0.032	7	309	0.104	7	309	0.136
16:00 - 17:00	7	309	0.005	7	309	0.016	7	309	0.021
17:00 - 18:00	7	309	0.022	7	309	0.019	7	309	0.041
18:00 - 19:00	7	309	0.004	7	309	0.015	7	309	0.019
19:00 - 20:00	2	672	0.000	2	672	0.001	2	672	0.001
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:		0.520			0.518			1.038	

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

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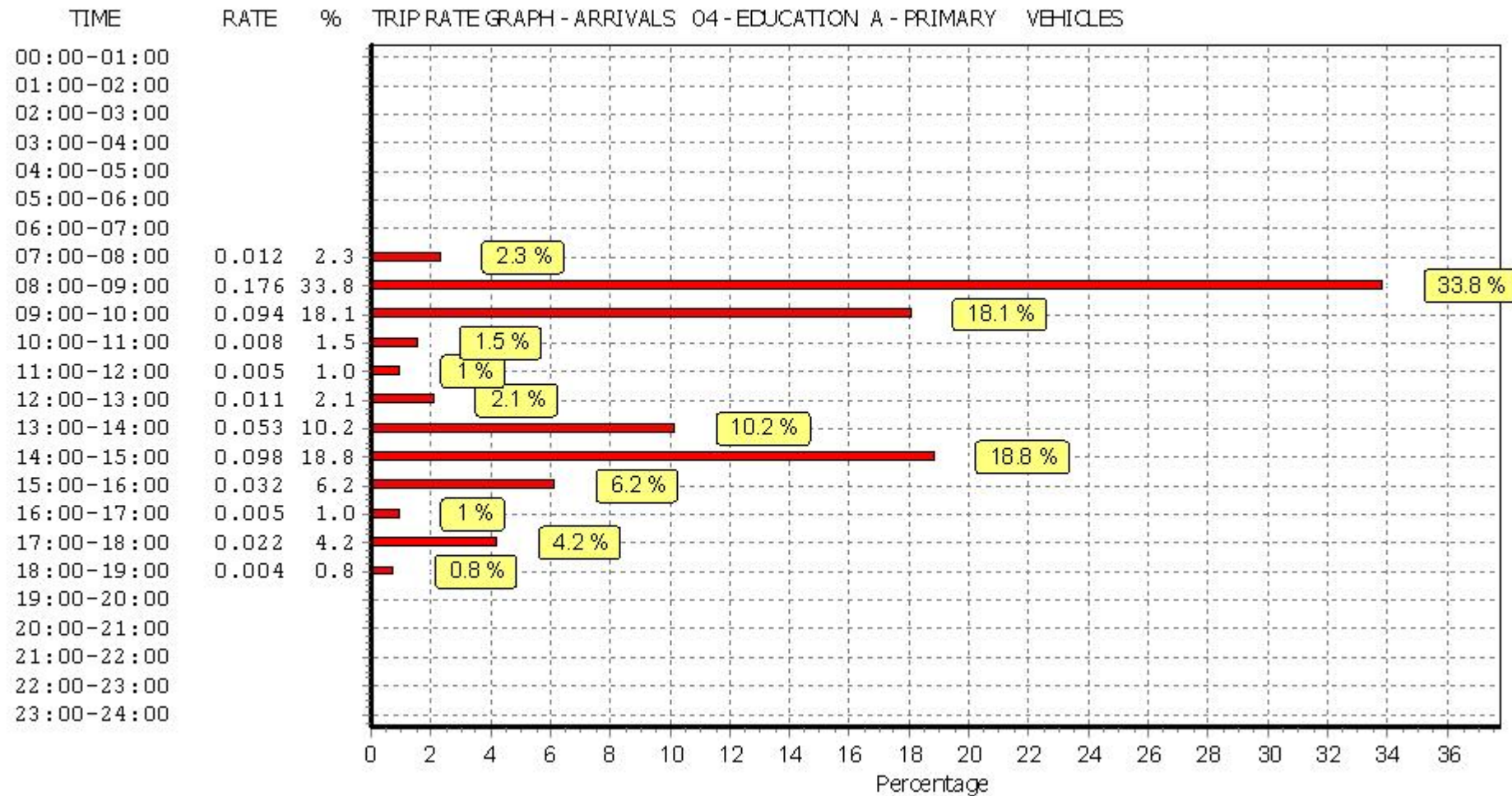
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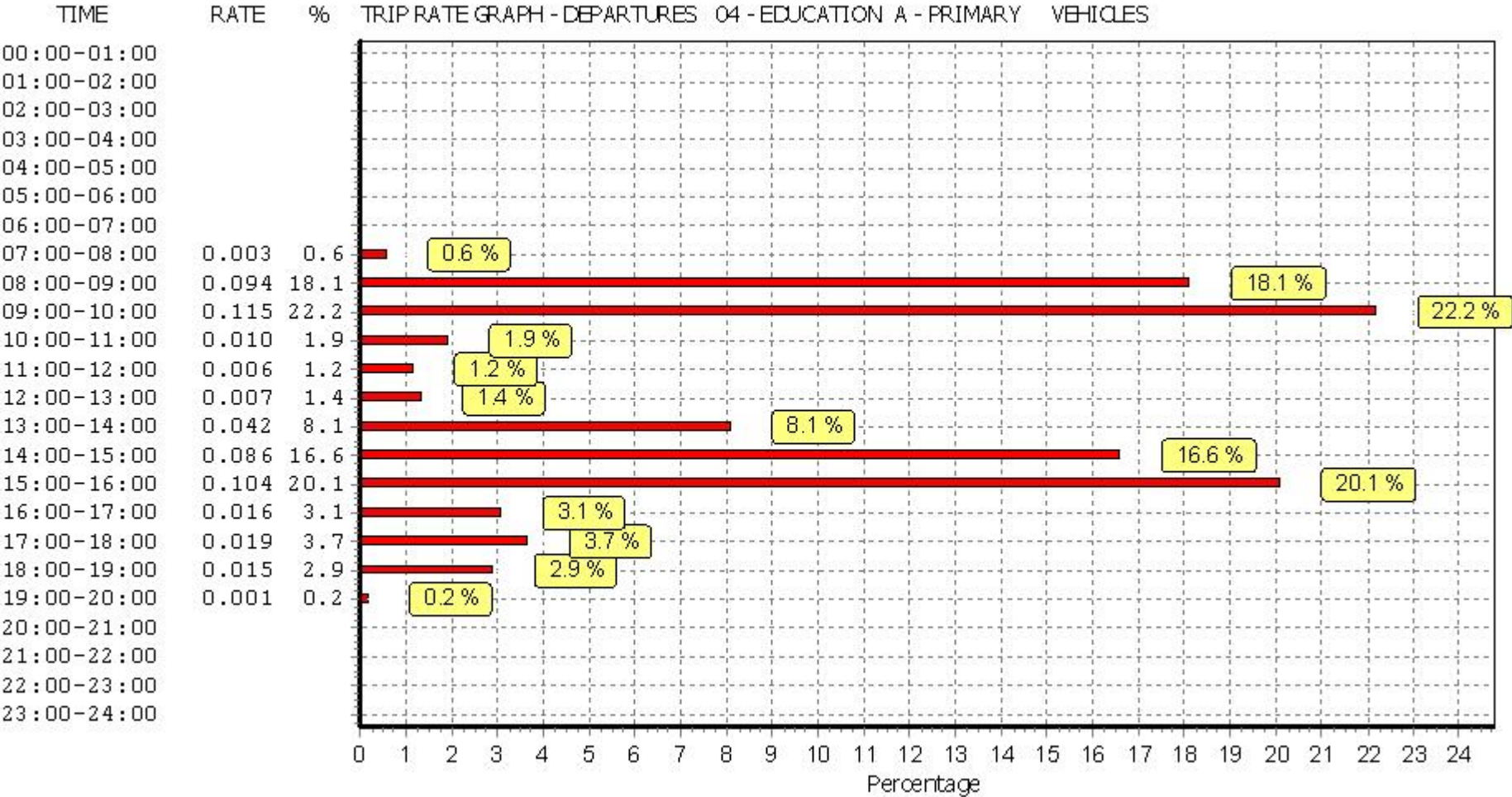
Parameter summary

Trip rate parameter range selected:	82 - 1020 (units:)
Survey date date range:	01/01/11 - 27/10/16
Number of weekdays (Monday-Friday):	7
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

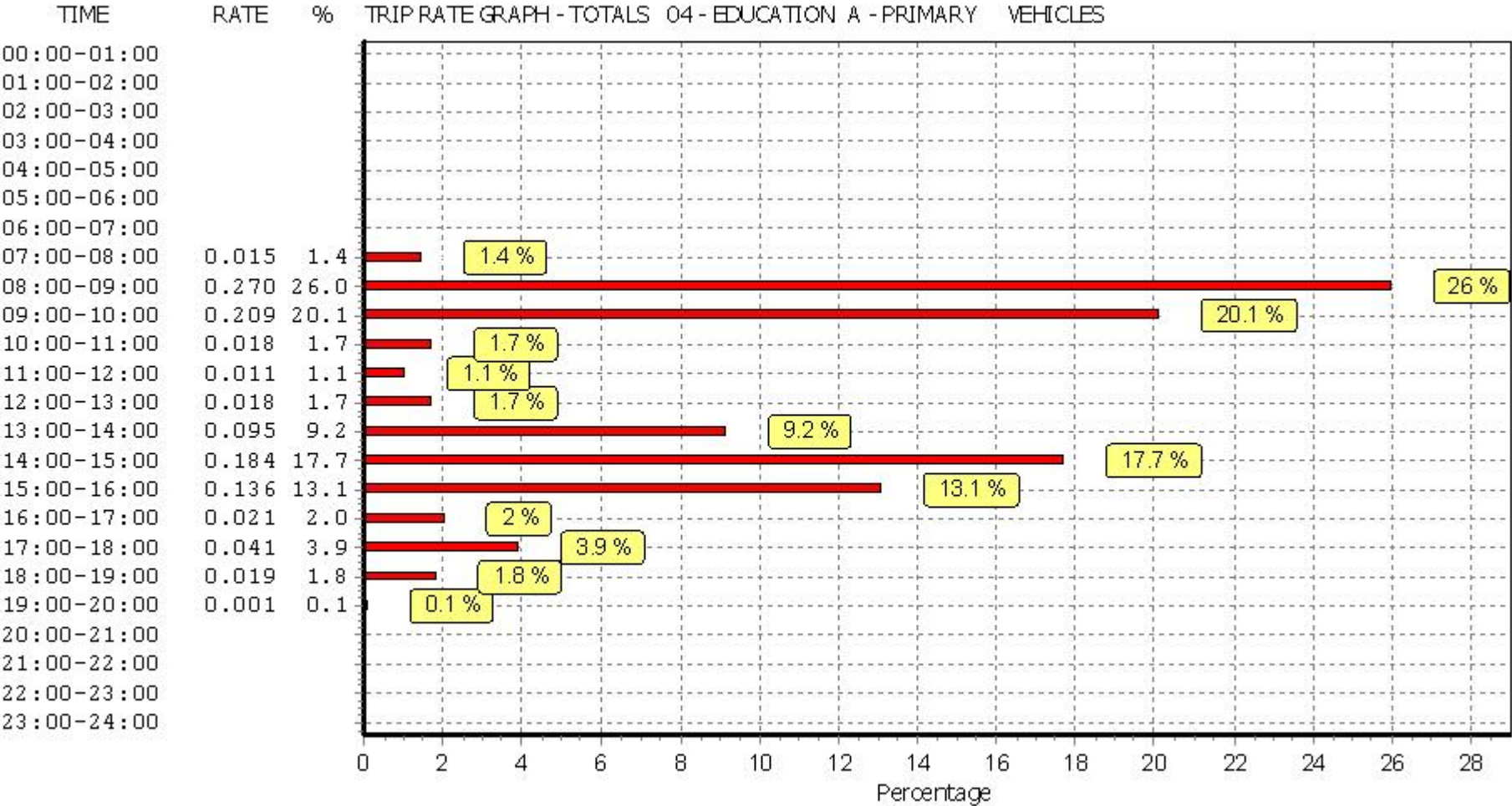
This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected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



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.

TRIP RATE for Land Use 04 - EDUCATION/A - PRIMARY
TAXIS

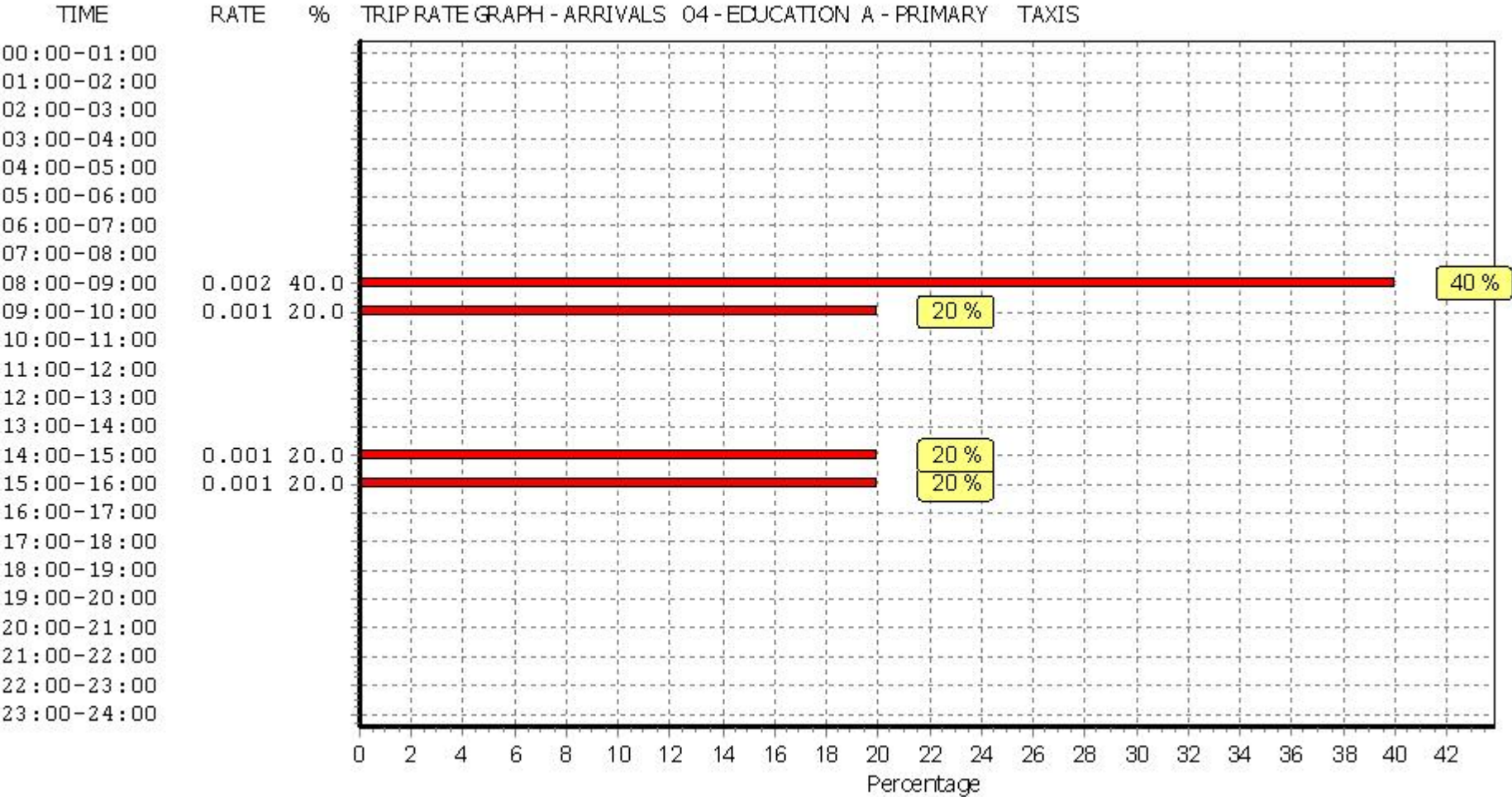
Calculation factor: 1 PUPILS

BOLD print indicates peak (busiest) period

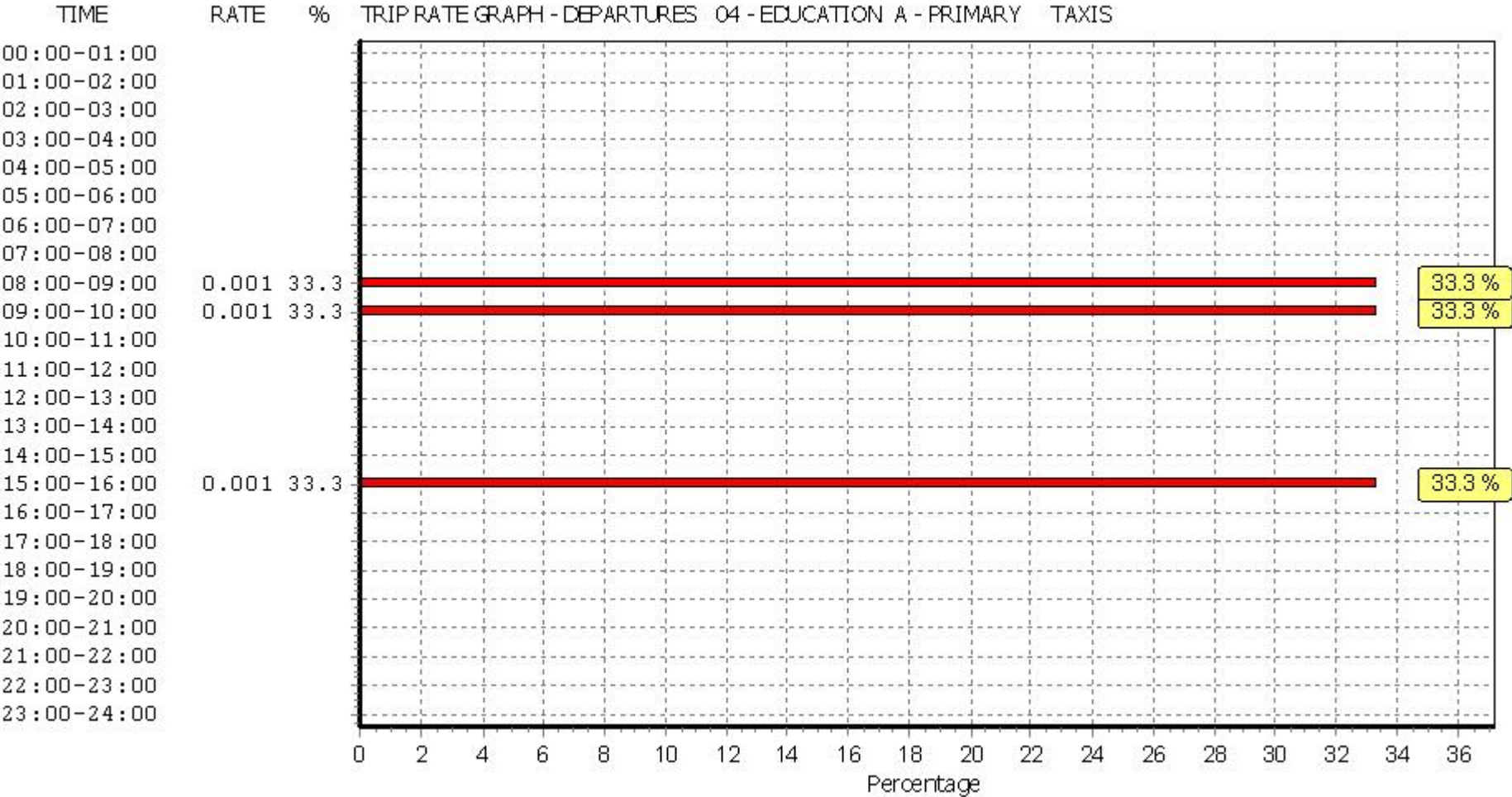
Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	7	309	0.000	7	309	0.000	7	309	0.000
08:00 - 09:00	7	309	0.002	7	309	0.001	7	309	0.003
09:00 - 10:00	7	309	0.001	7	309	0.001	7	309	0.002
10:00 - 11:00	7	309	0.000	7	309	0.000	7	309	0.000
11:00 - 12:00	7	309	0.000	7	309	0.000	7	309	0.000
12:00 - 13:00	7	309	0.000	7	309	0.000	7	309	0.000
13:00 - 14:00	7	309	0.000	7	309	0.000	7	309	0.000
14:00 - 15:00	7	309	0.001	7	309	0.000	7	309	0.001
15:00 - 16:00	7	309	0.001	7	309	0.001	7	309	0.002
16:00 - 17:00	7	309	0.000	7	309	0.000	7	309	0.000
17:00 - 18:00	7	309	0.000	7	309	0.000	7	309	0.000
18:00 - 19:00	7	309	0.000	7	309	0.000	7	309	0.000
19:00 - 20:00	2	672	0.000	2	672	0.000	2	672	0.000
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.005			0.003			0.008

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

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



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.

TRIP RATE for Land Use 04 - EDUCATION/A - PRIMARY

PSVS

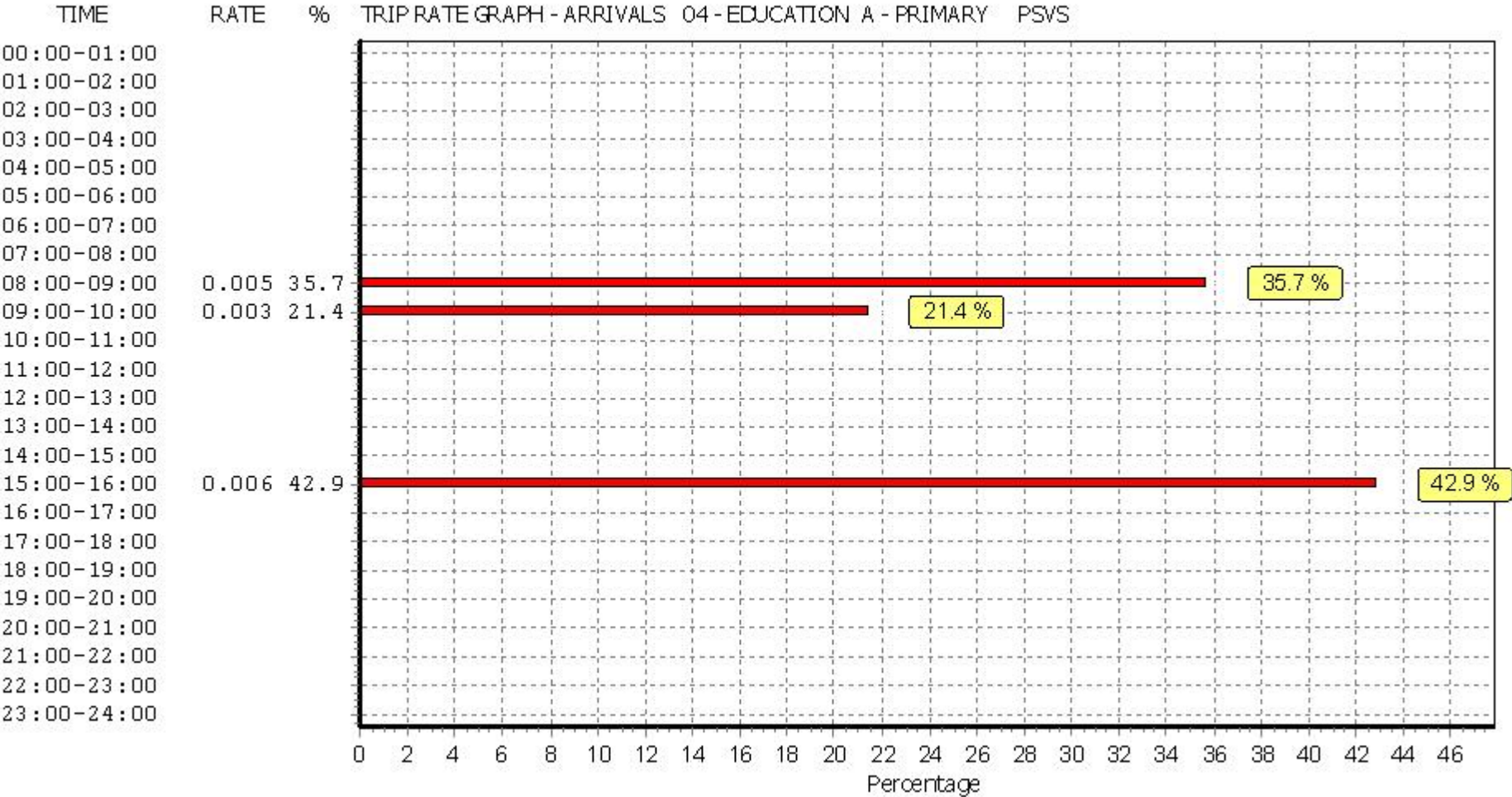
Calculation factor: 1 PUPILS

BOLD print indicates peak (busiest) period

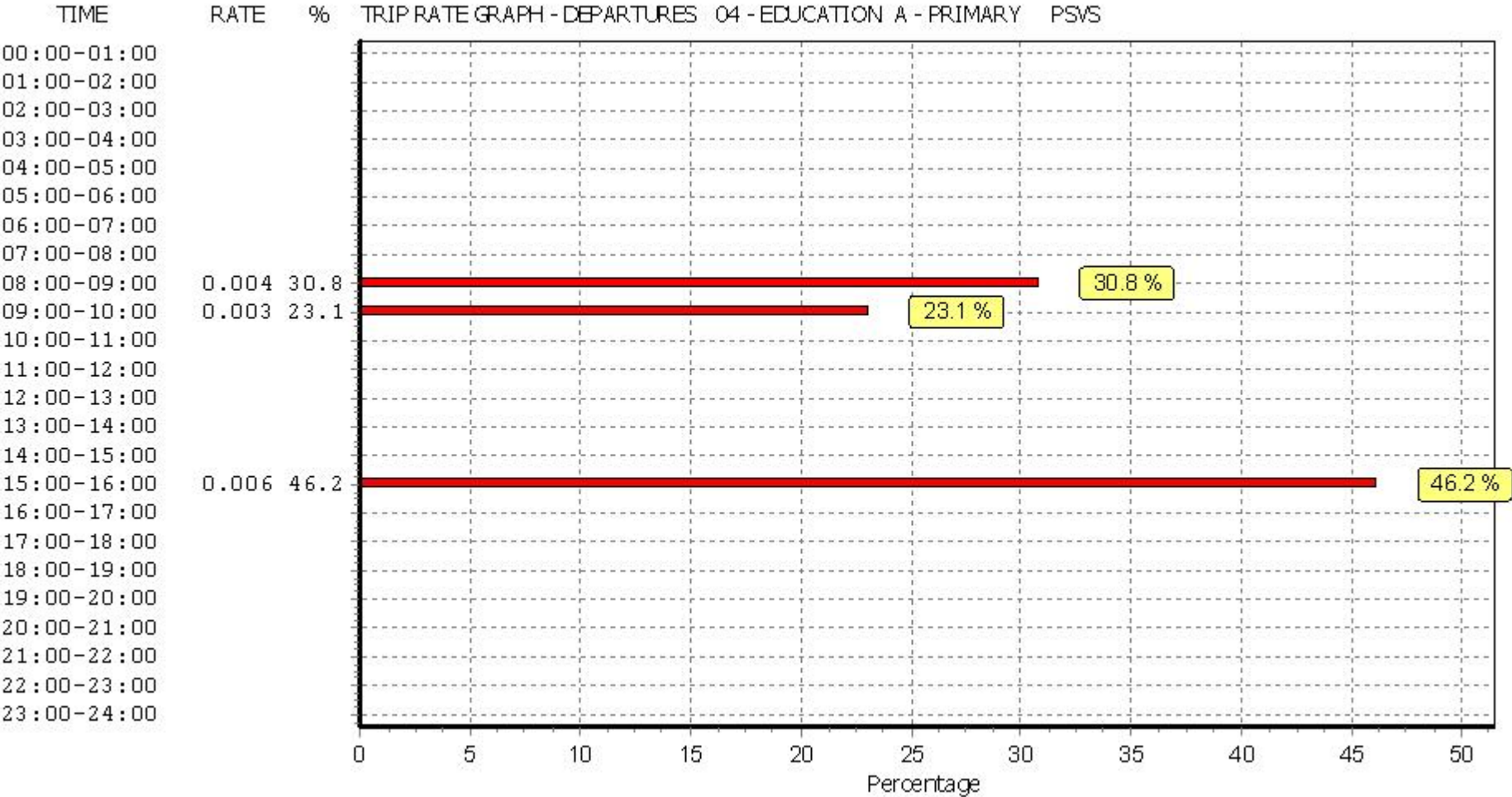
Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	7	309	0.000	7	309	0.000	7	309	0.000
08:00 - 09:00	7	309	0.005	7	309	0.004	7	309	0.009
09:00 - 10:00	7	309	0.003	7	309	0.003	7	309	0.006
10:00 - 11:00	7	309	0.000	7	309	0.000	7	309	0.000
11:00 - 12:00	7	309	0.000	7	309	0.000	7	309	0.000
12:00 - 13:00	7	309	0.000	7	309	0.000	7	309	0.000
13:00 - 14:00	7	309	0.000	7	309	0.000	7	309	0.000
14:00 - 15:00	7	309	0.000	7	309	0.000	7	309	0.000
15:00 - 16:00	7	309	0.006	7	309	0.006	7	309	0.012
16:00 - 17:00	7	309	0.000	7	309	0.000	7	309	0.000
17:00 - 18:00	7	309	0.000	7	309	0.000	7	309	0.000
18:00 - 19:00	7	309	0.000	7	309	0.000	7	309	0.000
19:00 - 20:00	2	672	0.000	2	672	0.000	2	672	0.000
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.014			0.013			0.027

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

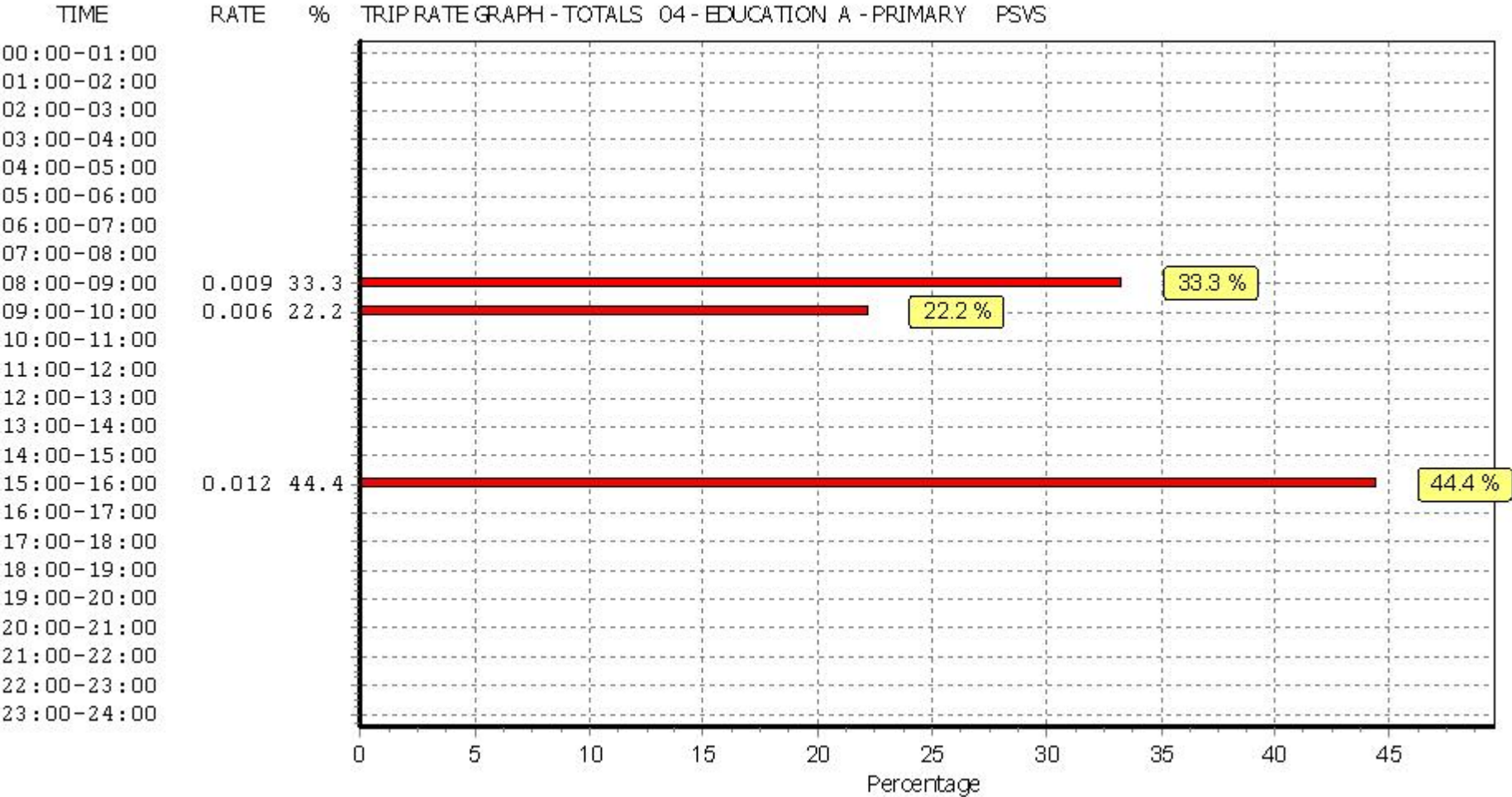
To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected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



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.

TRIP RATE for Land Use 04 - EDUCATION/A - PRIMARY
CYCLISTS

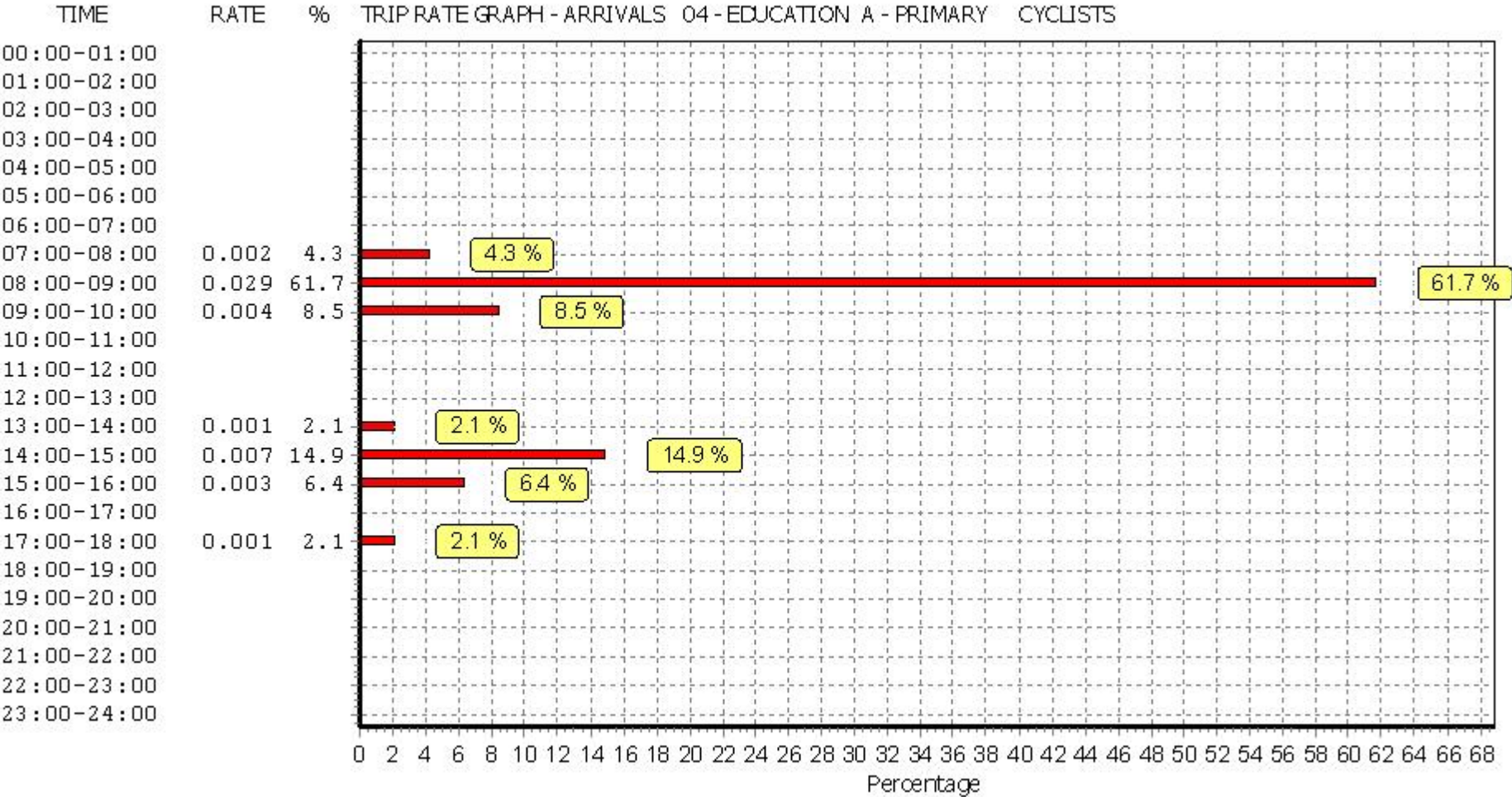
Calculation factor: 1 PUPILS

BOLD print indicates peak (busiest) period

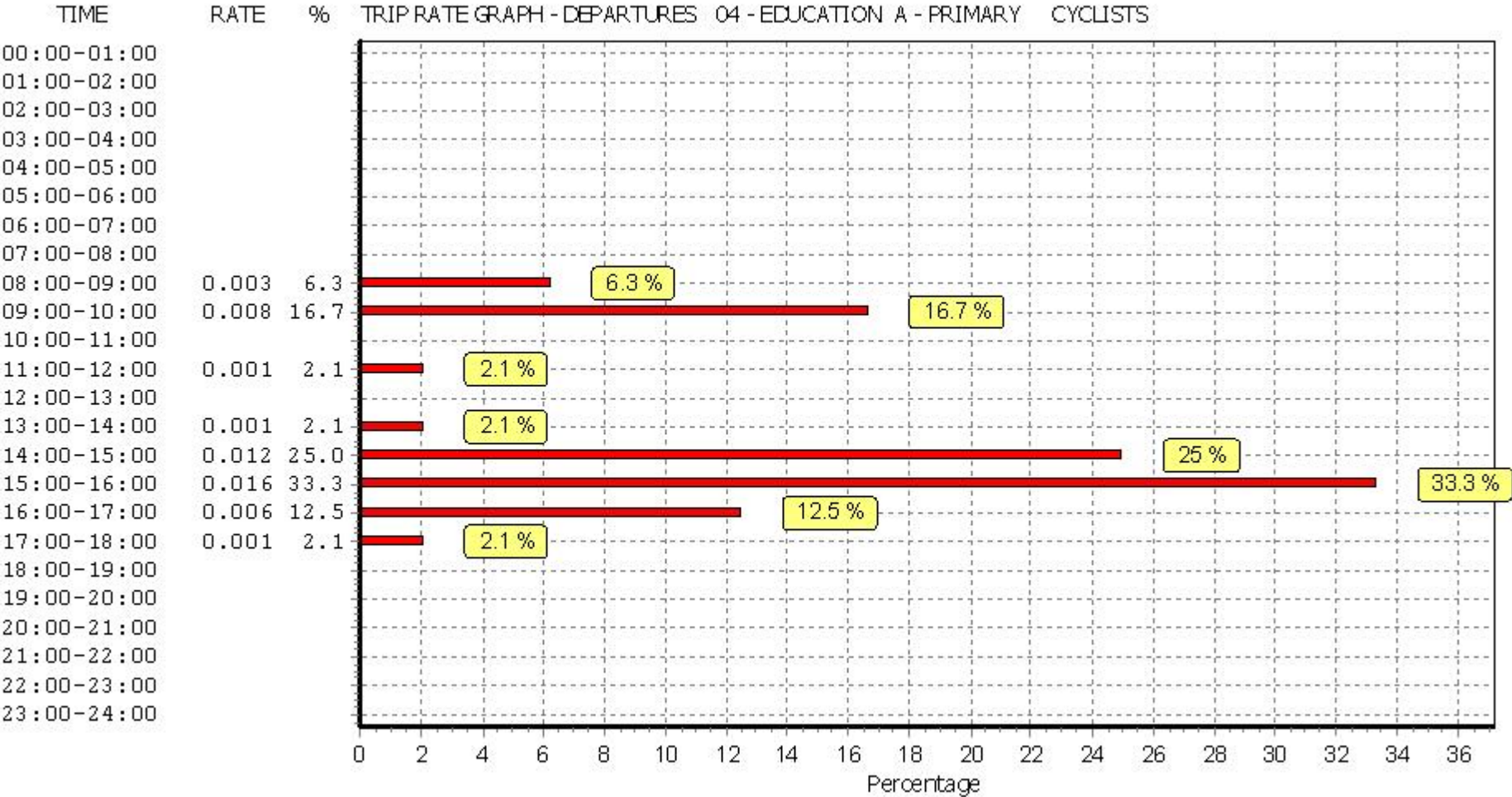
Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	7	309	0.002	7	309	0.000	7	309	0.002
08:00 - 09:00	7	309	0.029	7	309	0.003	7	309	0.032
09:00 - 10:00	7	309	0.004	7	309	0.008	7	309	0.012
10:00 - 11:00	7	309	0.000	7	309	0.000	7	309	0.000
11:00 - 12:00	7	309	0.000	7	309	0.001	7	309	0.001
12:00 - 13:00	7	309	0.000	7	309	0.000	7	309	0.000
13:00 - 14:00	7	309	0.001	7	309	0.001	7	309	0.002
14:00 - 15:00	7	309	0.007	7	309	0.012	7	309	0.019
15:00 - 16:00	7	309	0.003	7	309	0.016	7	309	0.019
16:00 - 17:00	7	309	0.000	7	309	0.006	7	309	0.006
17:00 - 18:00	7	309	0.001	7	309	0.001	7	309	0.002
18:00 - 19:00	7	309	0.000	7	309	0.000	7	309	0.000
19:00 - 20:00	2	672	0.000	2	672	0.000	2	672	0.000
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.047			0.048			0.095

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

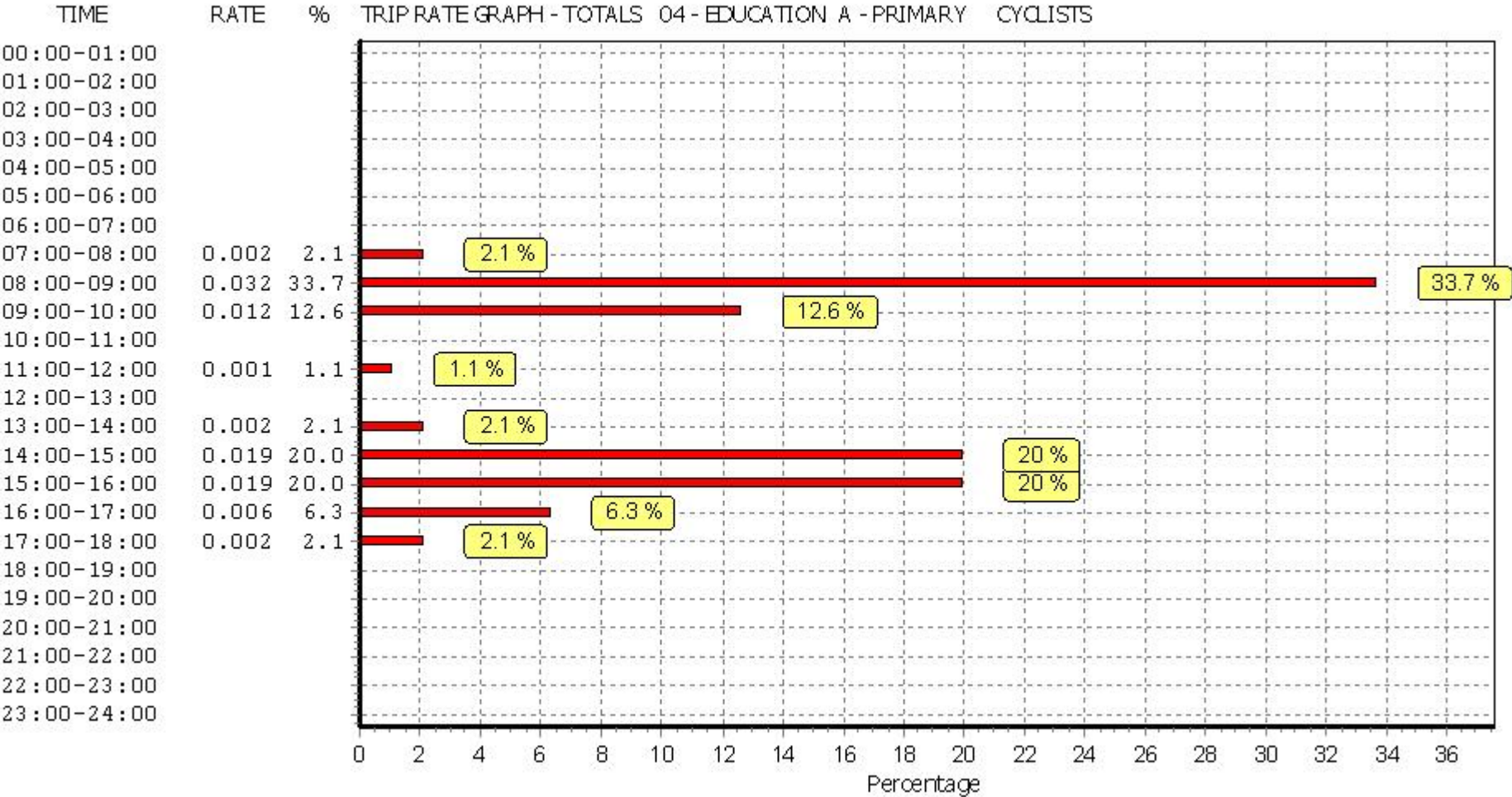
To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected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



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.

Calculation Reference: AUDIT-800401-200410-0404

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
 Category : C - FLATS PRIVATELY OWNED
 VEHICLES

Selected regions and areas:

14	LEINSTER	
	LU LOUTH	3 days
15	GREATER DUBLIN	
	DL DUBLIN	6 days

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

Primary Filtering selection:

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

Parameter: No of Dwellings
 Actual Range: 20 to 140 (units:)
 Range Selected by User: 18 to 372 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/12 to 22/11/16

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

Selected survey days:

Monday	2 days
Tuesday	5 days
Wednesday	1 days
Thursday	1 days

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

Selected survey types:

Manual count	9 days
Directional ATC Count	0 days

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

Selected Locations:

Edge of Town Centre	3
Suburban Area (PPS6 Out of Centre)	4
Neighbourhood Centre (PPS6 Local Centre)	2

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

Selected Location Sub Categories:

Residential Zone	8
Built-Up Zone	1

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

Secondary Filtering selection:

Use Class:

C3 9 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 1 mile:

5,001 to 10,000	2 days
15,001 to 20,000	1 days
20,001 to 25,000	1 days
25,001 to 50,000	5 days

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

Population within 5 miles:

25,001 to 50,000	3 days
250,001 to 500,000	1 days
500,001 or More	5 days

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

Car ownership within 5 miles:

0.6 to 1.0	2 days
1.1 to 1.5	7 days

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

Travel Plan:

No 9 days

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

PTAL Rating:

No PTAL Present 9 days

This data displays the number of selected surveys with PTAL Ratings.

LIST OF SITES relevant to selection parameters

1	DL-03-C-11	BLOCK OF FLATS	DUBLIN
	WYCKHAM WAY		
	DUBLIN		
	DUNDRUM		
	Neighbourhood Centre (PPS6 Local Centre)		
	Residential Zone		
	Total No of Dwellings:	96	
	Survey date: TUESDAY	10/09/13	Survey Type: MANUAL
2	DL-03-C-12	BLOCK OF FLATS	DUBLIN
	BOOTERSTOWN AVENUE		
	DUBLIN		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total No of Dwellings:	47	
	Survey date: TUESDAY	10/09/13	Survey Type: MANUAL
3	DL-03-C-13	BLOCK OF FLATS	DUBLIN
	SANDYFORD ROAD		
	DUBLIN		
	Neighbourhood Centre (PPS6 Local Centre)		
	Built-Up Zone		
	Total No of Dwellings:	52	
	Survey date: TUESDAY	10/09/13	Survey Type: MANUAL
4	DL-03-C-14	BLOCKS OF FLATS	DUBLIN
	BALLINTEER ROAD		
	DUBLIN		
	DUNDRUM		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total No of Dwellings:	140	
	Survey date: TUESDAY	10/09/13	Survey Type: MANUAL
5	DL-03-C-15	BLOCKS OF FLATS	DUBLIN
	MONKSTOWN ROAD		
	DUBLIN		
	MONKSTOWN		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total No of Dwellings:	20	
	Survey date: WEDNESDAY	01/10/14	Survey Type: MANUAL
6	DL-03-C-16	BLOCKS OF FLATS	DUBLIN
	BOTANIC AVENUE		
	DUBLIN		
	DRUMCONDRA		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total No of Dwellings:	31	
	Survey date: TUESDAY	22/11/16	Survey Type: MANUAL
7	LU-03-C-01	BLOCKS OF FLATS	LOUTH
	DONORE ROAD		
	DROGHEDA		
	Edge of Town Centre		
	Residential Zone		
	Total No of Dwellings:	52	
	Survey date: THURSDAY	12/09/13	Survey Type: MANUAL
8	LU-03-C-02	BLOCK OF FLATS	LOUTH
	NICHOLAS STREET		
	DUNDALK		
	Edge of Town Centre		
	Residential Zone		
	Total No of Dwellings:	33	
	Survey date: MONDAY	16/09/13	Survey Type: MANUAL
9	LU-03-C-03	BLOCK OF FLATS	LOUTH
	NICHOLAS STREET		
	DUNDALK		
	Edge of Town Centre		
	Residential Zone		
	Total No of Dwellings:	20	
	Survey date: MONDAY	16/09/13	Survey Type: MANUAL

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED
VEHICLES
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	9	55	0.053	9	55	0.248	9	55	0.301
08:00 - 09:00	9	55	0.061	9	55	0.248	9	55	0.309
09:00 - 10:00	9	55	0.053	9	55	0.096	9	55	0.149
10:00 - 11:00	9	55	0.022	9	55	0.069	9	55	0.091
11:00 - 12:00	9	55	0.035	9	55	0.051	9	55	0.086
12:00 - 13:00	9	55	0.061	9	55	0.086	9	55	0.147
13:00 - 14:00	9	55	0.075	9	55	0.053	9	55	0.128
14:00 - 15:00	9	55	0.096	9	55	0.053	9	55	0.149
15:00 - 16:00	9	55	0.088	9	55	0.049	9	55	0.137
16:00 - 17:00	9	55	0.094	9	55	0.057	9	55	0.151
17:00 - 18:00	9	55	0.185	9	55	0.055	9	55	0.240
18:00 - 19:00	9	55	0.230	9	55	0.084	9	55	0.314
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.053			1.149			2.202

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

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

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Parameter summary

Trip rate parameter range selected:	20 - 140 (units:)
Survey date date range:	01/01/12 - 22/11/16
Number of weekdays (Monday-Friday):	9
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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

Calculation Reference: AUDIT-800401-200410-0429

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
 Category : A - HOUSES PRIVATELY OWNED
 VEHICLES

Selected regions and areas:

14	LEINSTER	
	CC CARLOW	1 days
	WC WICKLOW	2 days
	WX WEXFORD	1 days
15	GREATER DUBLIN	
	DL DUBLIN	2 days

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

Primary Filtering selection:

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

Parameter: No of Dwellings
 Actual Range: 8 to 65 (units:)
 Range Selected by User: 8 to 437 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/12 to 20/06/18

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

Selected survey days:

Monday	2 days
Wednesday	2 days
Thursday	1 days
Friday	1 days

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

Selected survey types:

Manual count	6 days
Directional ATC Count	0 days

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

Selected Locations:

Edge of Town Centre	1
Suburban Area (PPS6 Out of Centre)	1
Edge of Town	3
Neighbourhood Centre (PPS6 Local Centre)	1

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

Selected Location Sub Categories:

Residential Zone	3
No Sub Category	3

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

Secondary Filtering selection:

Use Class:

C3

6 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 1 mile:

1,001 to 5,000

1 days

5,001 to 10,000

2 days

10,001 to 15,000

2 days

15,001 to 20,000

1 days

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

Population within 5 miles:

5,001 to 25,000

2 days

25,001 to 50,000

3 days

500,001 or More

1 days

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

Car ownership within 5 miles:

0.6 to 1.0

3 days

1.1 to 1.5

3 days

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

Travel Plan:

No

6 days

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

PTAL Rating:

No PTAL Present

6 days

This data displays the number of selected surveys with PTAL Ratings.

LIST OF SITES relevant to selection parameters

1	CC-03-A-01 R417 ANTHY ROAD CARLOW	DETACHED HOUSES		CARLOW
	Edge of Town Residential Zone Total No of Dwellings:		23	
	Survey date: WEDNESDAY		25/05/16	Survey Type: MANUAL
2	DL-03-A-09 RATHFARNHAM ROAD DUBLIN RATHFARNHAM Neighbourhood Centre (PPS6 Local Centre) No Sub Category Total No of Dwellings:	TERRACED	8	DUBLIN
	Survey date: FRIDAY		07/09/12	Survey Type: MANUAL
3	DL-03-A-10 R124 MALAHIDE SAINT HELENS Edge of Town Residential Zone Total No of Dwellings:	SEMI DETACHED & DETACHED	65	DUBLIN
	Survey date: WEDNESDAY		20/06/18	Survey Type: MANUAL
4	WC-03-A-01 STATION ROAD WICKLOW CORPORATION MURRAGH Edge of Town No Sub Category Total No of Dwellings:	DETACHED HOUSES	50	WICKLOW
	Survey date: MONDAY		28/05/18	Survey Type: MANUAL
5	WC-03-A-02 MARLTON ROAD WICKLOW FRIARSHILL Edge of Town Centre Residential Zone Total No of Dwellings:	DETACHED HOUSES	45	WICKLOW
	Survey date: MONDAY		28/05/18	Survey Type: MANUAL
6	WX-03-A-01 CLONARD ROAD WEXFORD	SEMI-DETACHED		WEXFORD
	Suburban Area (PPS6 Out of Centre) No Sub Category Total No of Dwellings:		34	
	Survey date: THURSDAY		25/09/14	Survey Type: MANUAL

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
VEHICLES

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	38	0.089	6	38	0.240	6	38	0.329
08:00 - 09:00	6	38	0.204	6	38	0.591	6	38	0.795
09:00 - 10:00	6	38	0.249	6	38	0.253	6	38	0.502
10:00 - 11:00	6	38	0.209	6	38	0.244	6	38	0.453
11:00 - 12:00	6	38	0.191	6	38	0.244	6	38	0.435
12:00 - 13:00	6	38	0.316	6	38	0.213	6	38	0.529
13:00 - 14:00	6	38	0.236	6	38	0.258	6	38	0.494
14:00 - 15:00	6	38	0.342	6	38	0.324	6	38	0.666
15:00 - 16:00	6	38	0.347	6	38	0.338	6	38	0.685
16:00 - 17:00	6	38	0.351	6	38	0.267	6	38	0.618
17:00 - 18:00	6	38	0.476	6	38	0.249	6	38	0.725
18:00 - 19:00	6	38	0.396	6	38	0.311	6	38	0.707
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			3.406			3.532			6.938

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

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

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Parameter summary

Trip rate parameter range selected:	8 - 65 (units:)
Survey date range:	01/01/12 - 20/06/18
Number of weekdays (Monday-Friday):	6
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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

APPENDIX C FLOW DIAGRAMS

Usage	Units	08:00-09:00		17:00-18:00	
		Arrivals	Departures	Arrivals	Departures
Houses	Per Unit	0.204	0.591	0.476	0.249
Apartments	Per Unit	0.061	0.248	0.185	0.055
Primary School	Per pupil	0.176	0.094	0.022	0.019
Hotel	Per Room	0.092	0.142	0.135	0.128

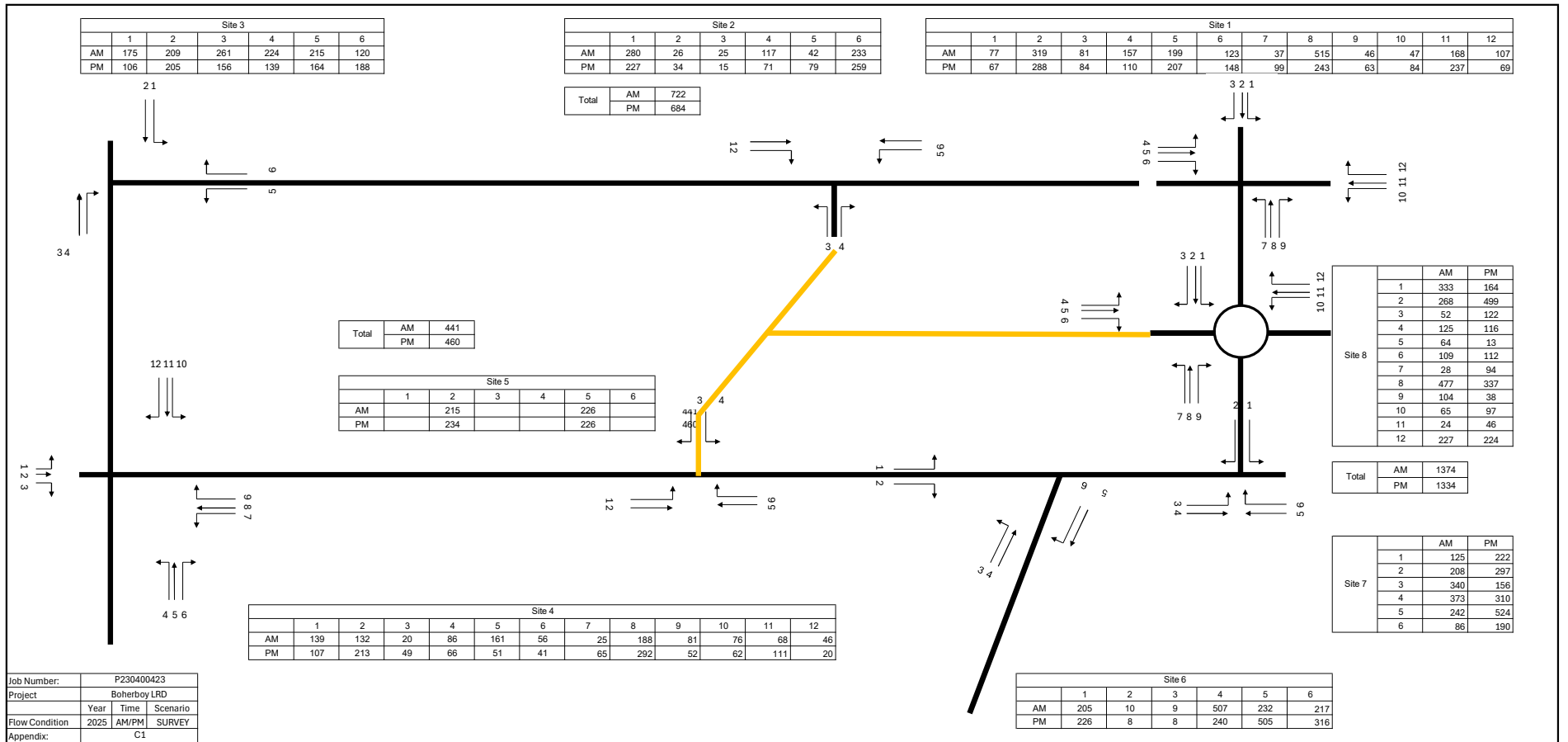
Usage	Units	08:00-09:00		17:00-18:00	
		Arrivals	Departures	Arrivals	Departures
Houses	306	62	181	146	76
Apartments	305	19	76	56	17
Total		81	256	202	93
Two Way			338		295

Primary School	185	33	17	4	4

Metropolitan Area	Central Growth Rates					
	2016-2030		2030-2040		2040-2050	
	LV	HV	LV	HV	LV	HV
Dublin	1.0162	1.0295	1.0051	1.0136	1.0044	1.0162

Year	To Year	Table 5.5.1
2025	2025	1.000
2025	2030	1.081
2025	2032	1.091
2025	2037	1.117
2025	2047	1.163

Job Number:	P230400423		
Project	Boherboy LRD		
	Year	Time	Scenario
Flow Condition	2023	AM/PM	SURVEY
Appendix:	C1		



Node 1
SHD3ABP-300555-18 Distributed via Site 3 - Northern Arm

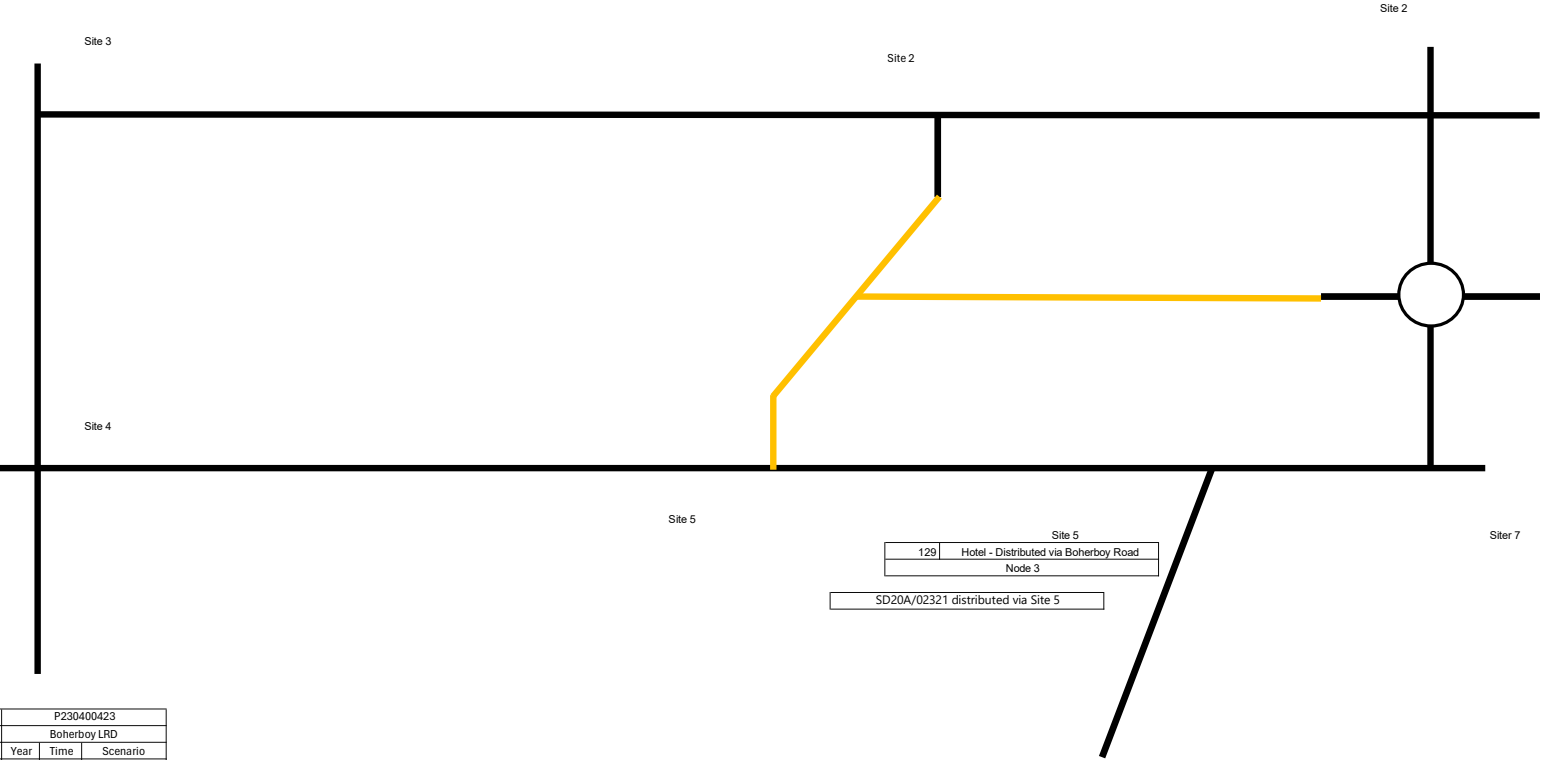
46 Houses

SD22A/0357 & LRD24A/00062 Distributed via Site 3 - Eastern Arm

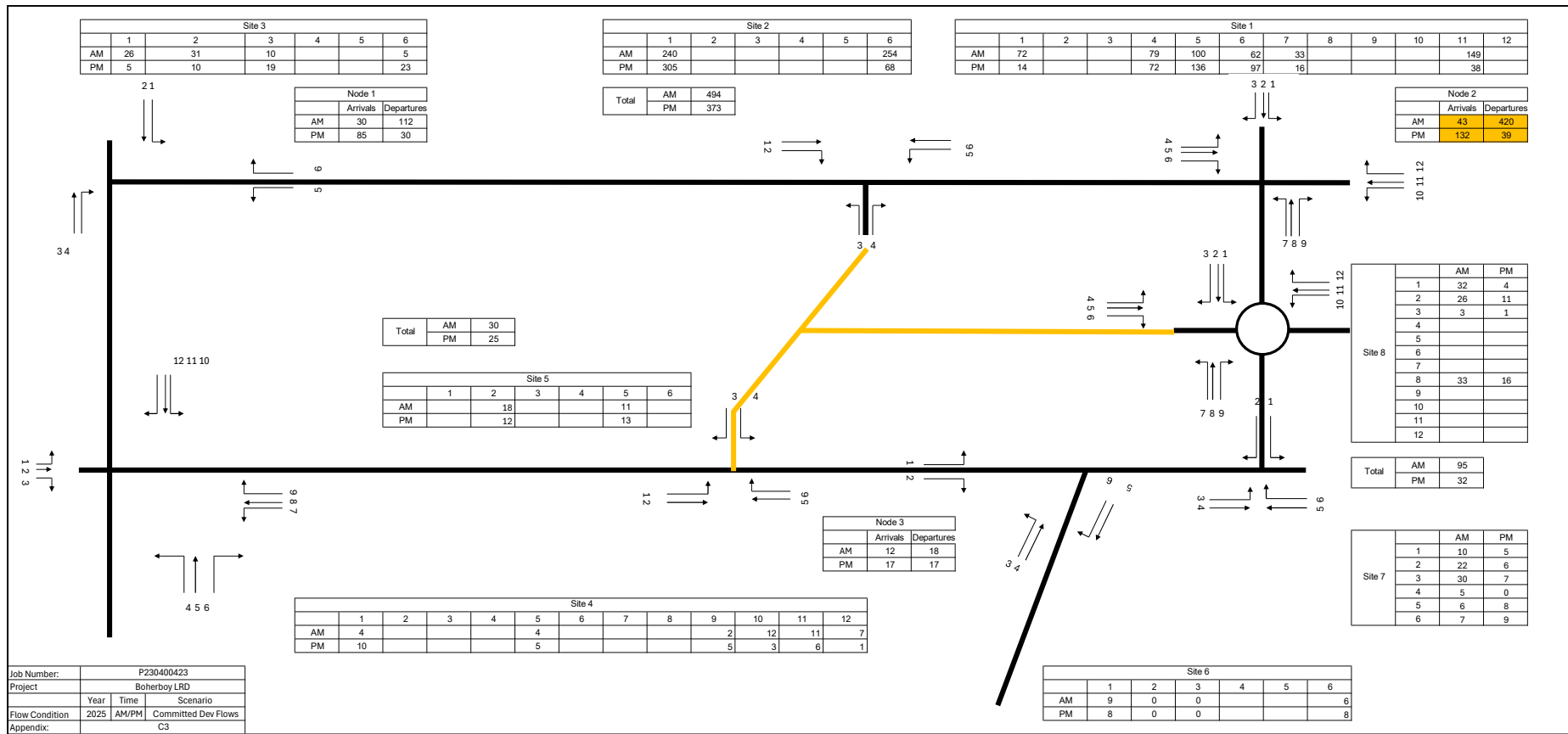
341 Apartments

Node 2
SHD3ABP-310570-21 ABP Ref. 305556-19/SD22A/0299/SD22A/04221/LRD24A/0009W Distributed Via Site 2

711 Apartments



Job Number:	P230400423		
Project	Boherboy LRD		
	Year	Time	Scenario
Flow Condition	2025	AM/PM	Committed Dev
Appendix:	C2		



Site 3						
	1	2	3	4	5	6
AM	200	205	185	175	175	180
PM	180	185	194	175	175	198

Site 2						
	1	2	3	4	5	6
AM	520	26	25	117	42	487
PM	532	34	15	71	79	326

Site 1												
	1	2	3	4	5	6	7	8	9	10	11	12
AM	149	319	81	235	298	185	70	515	46	47	317	107
PM	80	288	84	182	343	245	114	243	63	84	275	69

Total	AM	1216
	PM	1056

Total	AM	471
	PM	485

Site 5						
	1	2	3	4	5	6
AM	0	234	0	0	237	0
PM	0	246	0	0	239	0

Site 4												
		1	2	4	5	6	7	8	9	10	11	12
AM	143	132	20	86	165	56	25	188	84	88	79	53
PM	116	213	49	66	56	41	65	292	57	65	117	21

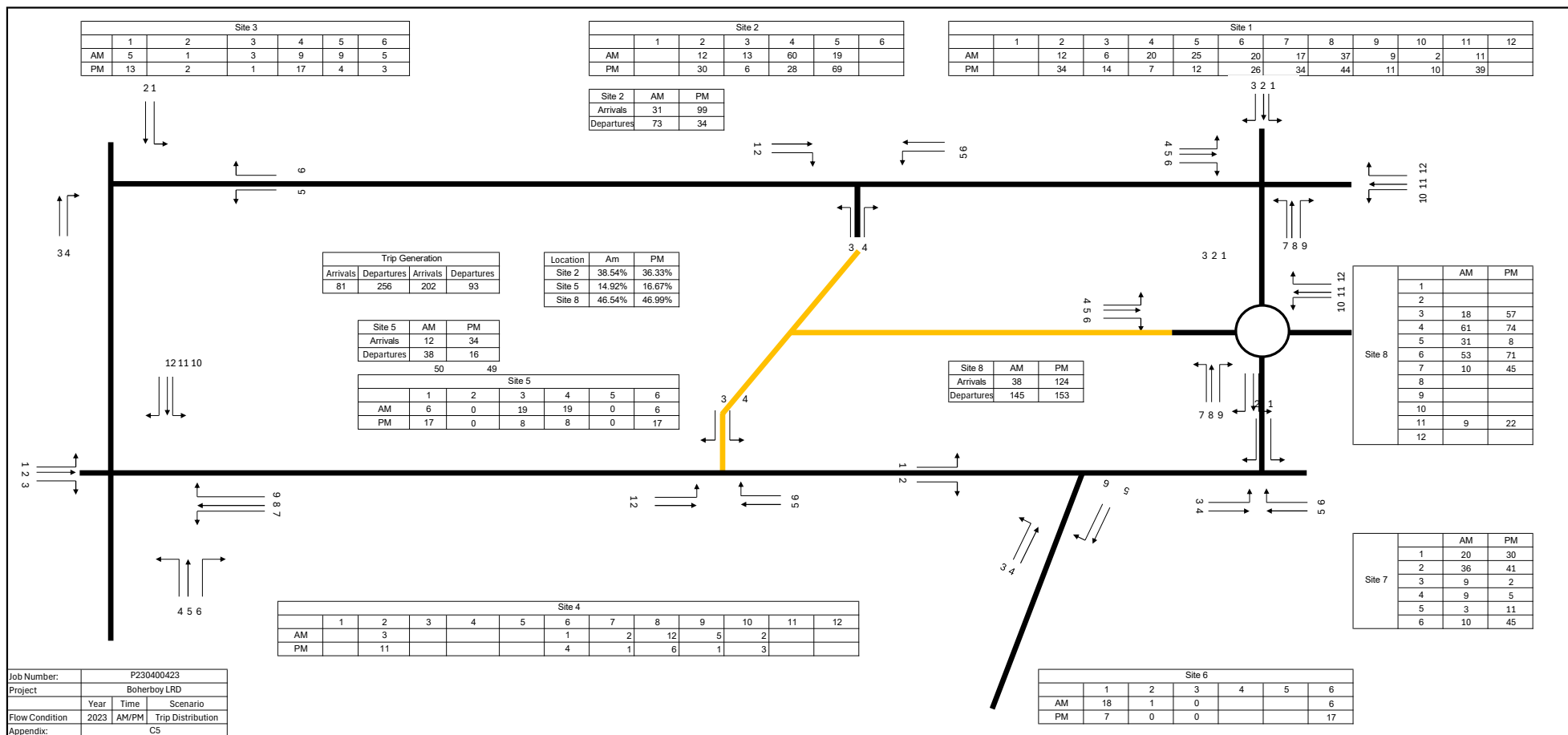
Site 6						
	1	2	3	4	5	6
AM	214	11	9	507	232	223
PM	234	8	8	240	505	325

Site 8		
	AM	PM
1	291	141
2	234	430
3	29	55
4	55	37
5	28	4
6	48	35
7	15	42
8	415	292
9	90	33
10	56	83
11	13	21
12	195	193

Total	AM	1468
	PM	1366

Site 7		
	AM	PM
1	135	226
2	229	303
3	370	163
4	377	310
5	247	533
6	92	199

Job Number:	P230400423		
Project	Boherboy LRD		
	Year	Time	Scenario
Flow Condition	2025	AM/PM	Baseline
Appendix:	C4		



Site 3						
	1	2	3	4	5	6
AM	216	259	295	244	234	135
PM	121	234	189	152	178	228

Site 2						
	1	2	3	4	5	6
AM	545	28	27	128	46	508
PM	552	37	16	77	86	350

Site 1												
	1	2	3	4	5	6	7	8	9	10	11	12
AM	156	348	88	249	316	196	73	561	50	51	332	117
PM	86	314	92	192	362	259	123	265	68	92	297	76

Site 5						
	1	2	3	4	5	6
AM	0	253	0	0	258	0
PM	0	267	0	0	260	0

Site 4												
	1	2	3	4	5	6	7	8	9	10	11	12
AM	155	144	21	94	180	61	27	205	91	95	86	57
PM	126	232	53	72	60	44	71	318	62	71	127	23

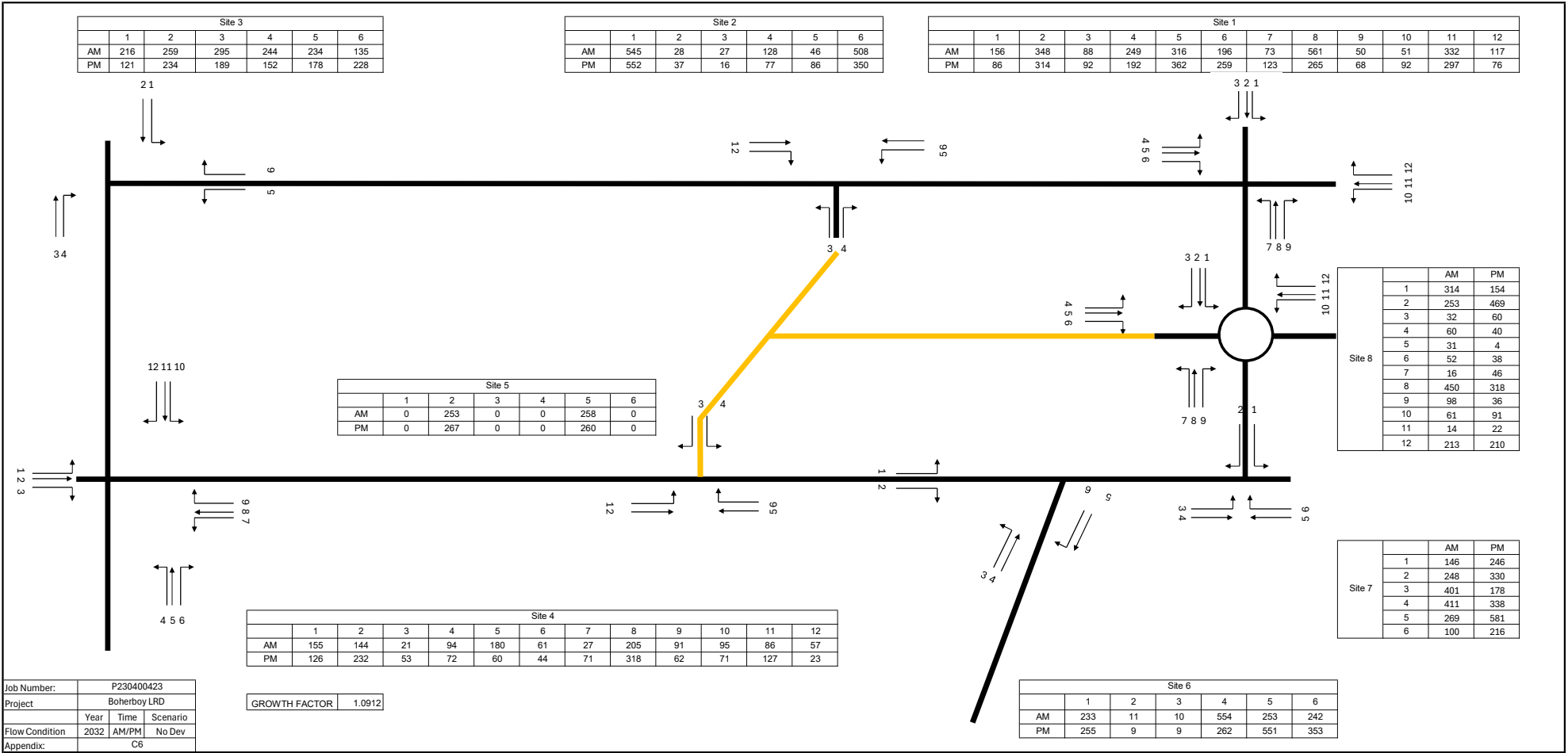
Site 6						
	1	2	3	4	5	6
AM	233	11	10	554	253	242
PM	255	9	9	262	551	353

Site 8		
	AM	PM
1	314	154
2	253	469
3	32	60
4	60	40
5	31	4
6	52	38
7	16	46
8	450	318
9	98	36
10	61	91
11	14	22
12	213	210

Site 7		
	AM	PM
1	146	246
2	248	330
3	401	178
4	411	338
5	269	581
6	100	216

GROWTH FACTOR 1.0912

Job Number:	P230400423		
Project	Boherboy LRD		
	Year	Time	Scenario
Flow Condition	2032	AM/PM	No Dev
Appendix:	C6		



Site 3						
	1	2	3	4	5	6
AM	242	290	305	244	234	140
PM	126	244	208	152	178	251

Site 2						
	1	2	3	4	5	6
AM	545	40	40	188	65	508
PM	552	67	22	106	155	350

Site 1												
	1	2	3	4	5	6	7	8	9	10	11	12
AM	156	360	94	269	341	216	91	598	60	52	343	117
PM	86	348	105	199	374	285	158	309	80	101	336	76

Site 5						
	1	2	3	4	5	6
AM	6	253	19	19	258	6
PM	17	267	8	8	260	17

Site 4												
	1	2	3	4	5	6	7	8	9	10	11	12
AM	159	144	21	94	184	61	27	205	93	108	97	64
PM	136	232	53	72	65	44	71	318	66	74	133	24

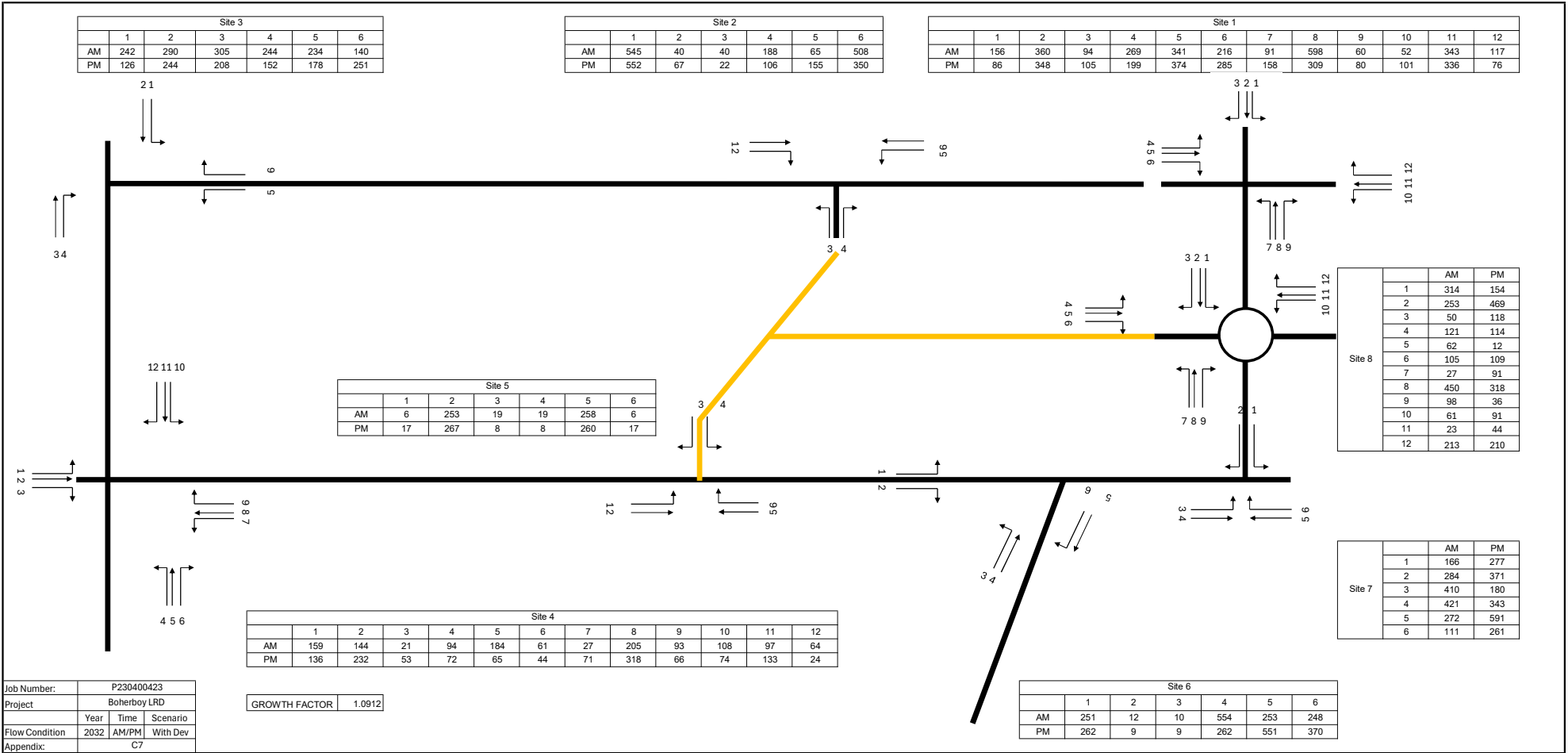
Site 6						
	1	2	3	4	5	6
AM	251	12	10	554	253	248
PM	262	9	9	262	551	370

Site 8		
	AM	PM
1	314	154
2	253	469
3	50	118
4	121	114
5	62	12
6	105	109
7	27	91
8	450	318
9	98	36
10	61	91
11	23	44
12	213	210

Site 7		
	AM	PM
1	166	277
2	284	371
3	410	180
4	421	343
5	272	591
6	111	261

GROWTH FACTOR 1.0912

Job Number:	P230400423		
Project	Boherboy LRD		
	Year	Time	Scenario
Flow Condition	2032	AM/PM	With Dev
Appendix:	C7		



Site 3						
	1	2	3	4	5	6
AM	221	264	301	250	240	138
PM	124	239	193	155	183	233

Site 2						
	1	2	3	4	5	6
AM	553	28	28	131	47	514
PM	558	38	16	79	88	357

Site 1												
	1	2	3	4	5	6	7	8	9	10	11	12
AM	158	357	90	253	321	199	74	575	51	52	336	119
PM	88	321	94	195	367	262	126	271	70	94	303	77

Site 5						
	1	2	3	4	5	6
AM	0	261	0	0	265	0
PM	0	274	0	0	267	0

Site 4												
	1	2	3	4	5	6	7	8	9	10	11	12
AM	159	148	22	96	184	62	28	210	93	97	87	58
PM	129	238	55	74	62	45	73	326	63	72	130	23

Site 6						
	1	2	3	4	5	6
AM	239	12	10	567	259	249
PM	261	9	9	268	564	362

Site 8		
	AM	PM
1	314	154
2	253	469
3	32	60
4	60	40
5	31	4
6	52	38
7	16	46
8	450	318
9	98	36
10	61	91
11	14	22
12	213	210

Site 7		
	AM	PM
1	150	253
2	256	339
3	414	183
4	421	346
5	276	595
6	103	222

GROWTH FACTOR 1.1167

Job Number:	P230400423		
Project	Boherboy LRD		
	Year	Time	Scenario
Flow Condition	2037	AM/PM	No Dev
Appendix:	C8		

Site 3						
	1	2	3	4	5	6
AM	246	295	312	250	240	143
PM	129	249	212	155	183	256

Site 2						
	1	2	3	4	5	6
AM	553	40	41	191	66	514
PM	558	68	22	107	157	357

Site 1												
	1	2	3	4	5	6	7	8	9	10	11	12
AM	158	368	96	273	346	219	92	611	61	54	348	119
PM	88	355	108	202	379	289	160	315	81	104	342	77

Site 5						
	1	2	3	4	5	6
AM	6	261	19	19	265	6
PM	17	274	8	8	267	17

Site 4												
	1	2	3	4	5	6	7	8	9	10	11	12
AM	163	148	22	96	189	62	28	210	95	110	98	65
PM	139	238	55	74	66	45	73	326	68	76	135	24

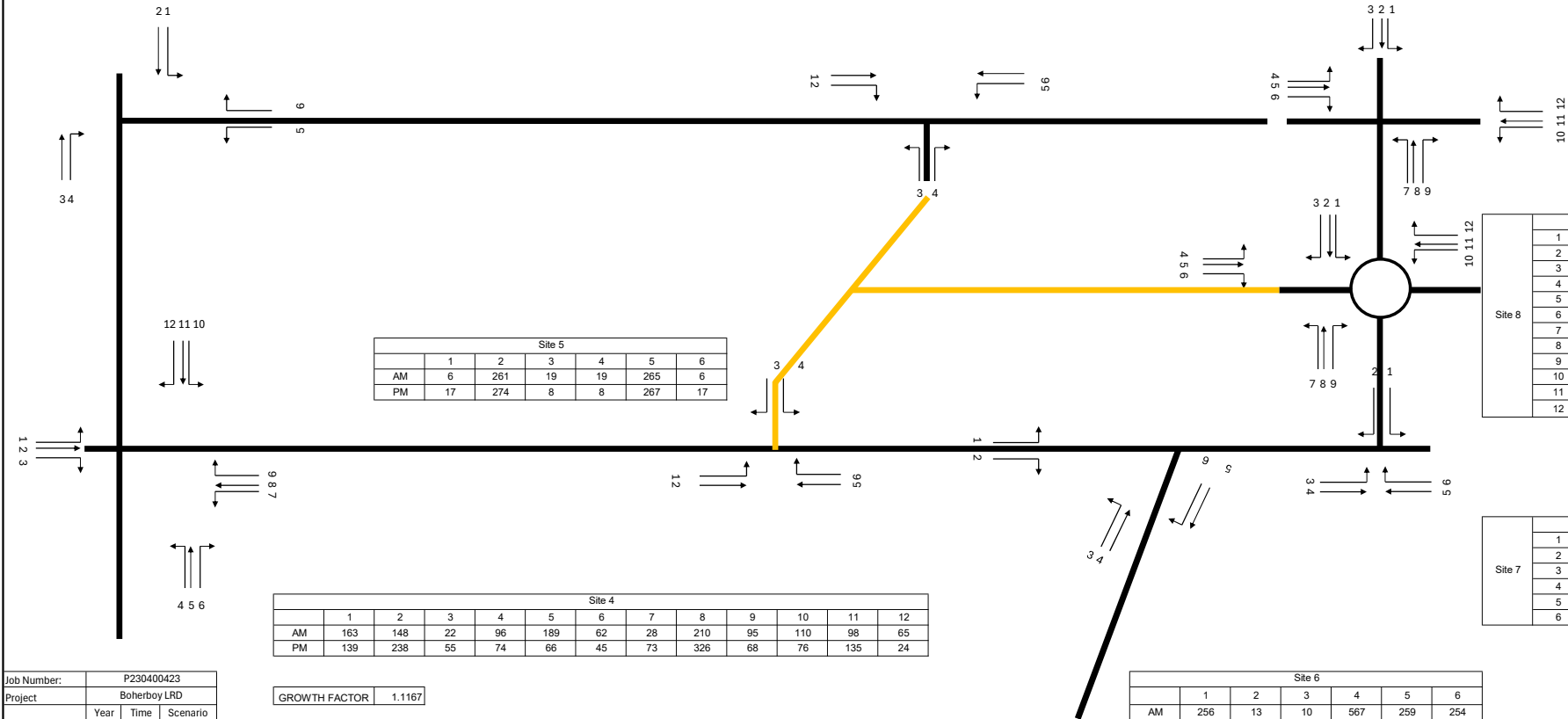
Site 6						
	1	2	3	4	5	6
AM	256	13	10	567	259	254
PM	268	9	10	268	564	378

Site 8		
	AM	PM
1	321	157
2	258	479
3	50	119
4	122	115
5	62	13
6	107	110
7	27	92
8	459	325
9	100	37
10	62	93
11	24	45
12	218	215

Site 7		
	AM	PM
1	169	282
2	290	379
3	419	184
4	430	351
5	279	605
6	113	266

GROWTH FACTOR 1.1167

Job Number:	P230400423		
Project	Boherboy LRD		
	Year	Time	Scenario
Flow Condition	2037	AM/PM	with Dev
Appendix:	C9		



Site 3						
	1	2	3	4	5	6
AM	229	274	313	280	249	144
PM	128	248	200	162	190	242

Site 2						
	1	2	3	4	5	6
AM	565	30	29	136	49	524
PM	569	40	17	83	91	368

Site 1												
	1	2	3	4	5	6	7	8	9	10	11	12
AM	161	371	94	261	330	205	76	598	53	54	344	124
PM	91	335	98	200	376	269	130	282	73	98	314	81

Site 5						
	1	2	3	4	5	6
AM	0	272	0	0	276	0
PM	0	286	0	0	278	0

Site 4												
	1	2	3	4	5	6	7	8	9	10	11	12
AM	165	154	23	100	192	65	29	219	97	101	90	60
PM	134	248	57	77	64	47	76	339	65	75	135	24

Site 6						
	1	2	3	4	5	6
AM	247	12	11	590	270	258
PM	271	9	10	279	588	376

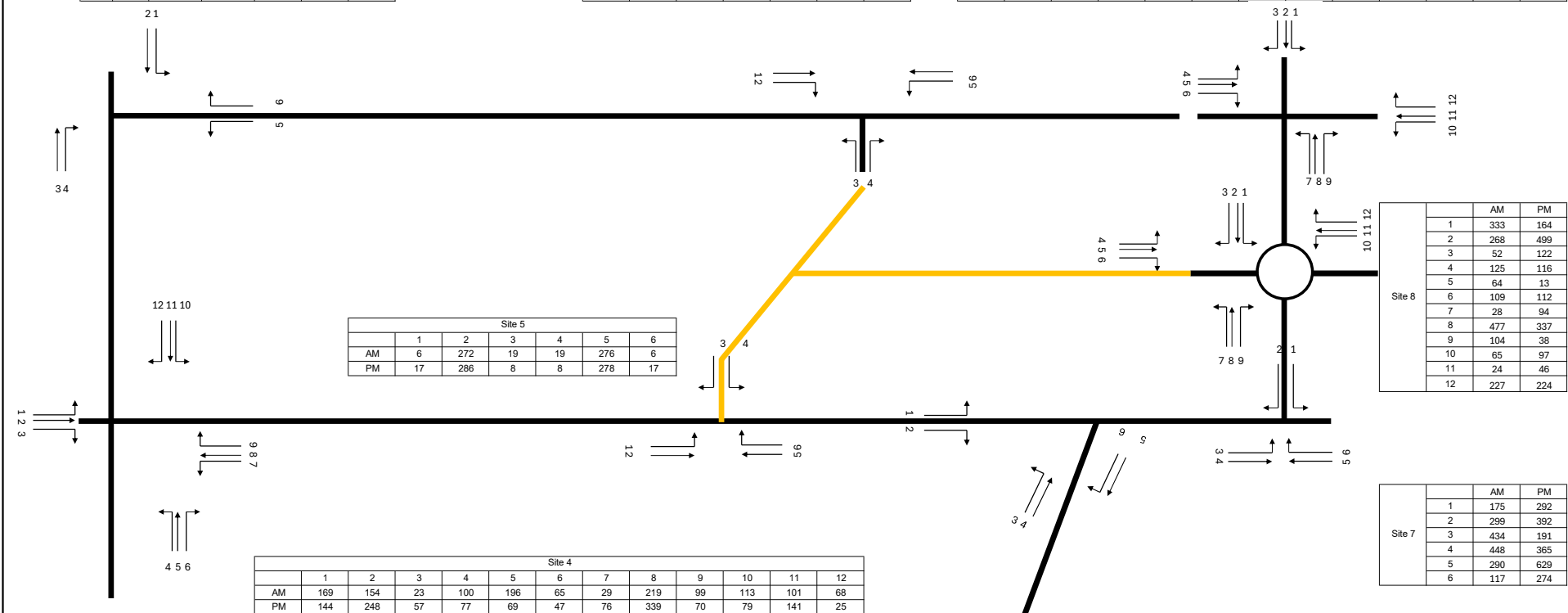
Site 8		
	AM	PM
1	314	154
2	253	469
3	32	60
4	60	40
5	31	4
6	52	38
7	16	46
8	450	318
9	98	36
10	61	91
11	14	22
12	213	210

Site 7		
	AM	PM
1	155	262
2	263	352
3	426	189
4	438	361
5	287	618
6	106	230

GROWTH FACTOR 1.1628

Job Number:	P230400423		
Project	Boherboy LRD		
	Year	Time	Scenario
Flow Condition	2047	AM/PM	No Dev
Appendix:	C10		

Site 1												
	1	2	3	4	5	6	7	8	9	10	11	12
AM	161	368	96	273	346	219	92	611	61	54	348	124
PM	91	355	108	202	379	289	160	315	81	104	342	81



Job Number:	P230400423		
Project	Boherboy LRD		
	Year	Time	Scenario
Flow Condition	2047	AM/PM	With Dev
Appendix:	C11		

GROWTH FACTOR	1.1628

Site 6						
	1	2	3	4	5	6
AM	266	13	11	590	270	264
PM	278	10	10	279	588	393

APPENDIX D MODELING RESULTS

Junctions 10		
OSCADY 10 - Signalised Intersection Module		
Version: 10.1.2.2275		
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For sales and distribution information, program advice and maintenance, contact TRL Software:		
+44 (0)1344 379777 software@trl.co.uk trlsoftware.com		
The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution		

Filename: Junction 1.j10

Path: C:\Users\kearn\OneDrive\2023 Projects\P230400423 - DUBLIN, Boherboy LRD\5.0 Calculations\5.3
Higways\Modelling\2023 Boherboy

Report generation date: 03/12/2025 21:20:10

»2025 - Survey , AM
 »2025 - Survey , PM
 »2025 - Committed, AM
 »2025 - Committed, PM
 »2032 - ND, AM
 »2032 - ND, PM
 »2032 - WD, AM
 »2032 - WD, PM
 »2037 - ND , AM
 »2037 - ND , PM
 »2037 - WD , AM
 »2037 - WD , PM
 »2047 - ND , AM
 »2047 - ND , PM
 »2047 - WD , AM
 »2047 - WD , PM

Summary of junction performance

	AM			PM		
	Queue (PCU)	Delay (s)	DOS	Queue (PCU)	Delay (s)	DOS
2025 - Survey						
Arm A	14.8	60.04	0.82	14.7	50.81	0.90
Arm B	30.6	77.83	1.00	10.3	25.76	0.62
Arm C	29.0	91.70	0.94	23.8	75.14	1.01
Arm D	15.9	42.11	0.84	17.3	58.74	0.93
2025 - Committed						
Arm A	59.1	176.53	1.07	24.1	62.62	0.86
Arm B	64.4	138.39	1.04	22.8	57.15	0.80
Arm C	93.7	183.88	1.13	84.1	165.61	1.07
Arm D	55.5	142.71	1.04	50.9	169.93	1.06
2032 - ND						
Arm A	90.4	297.05	1.13	45.7	125.03	1.01
Arm B	109.5	269.95	1.12	31.3	68.44	0.77
Arm C	137.7	270.74	1.13	100.5	200.36	1.08
Arm D	92.1	229.41	1.15	64.7	190.74	1.05
2032 - WD						
Arm A	107.3	383.81	1.20	78.2	205.83	1.07
Arm B	142.8	373.78	1.18	59.4	113.81	0.89
Arm C	200.4	489.40	1.24	181.0	402.70	1.18
Arm D	67.5	168.34	1.18	122.2	447.84	1.17
2037 - ND						
Arm A	97.5	336.32	1.16	53.6	121.67	0.92
Arm B	121.8	318.03	1.14	49.1	102.84	0.81
Arm C	150.4	317.05	1.14	150.8	308.88	1.14
Arm D	99.3	259.53	1.13	91.7	291.75	1.09
2037 - WD						
Arm A	116.4	465.74	1.23	86.6	212.50	1.08
Arm B	159.7	421.97	1.21	56.0	98.90	0.82
Arm C	211.3	540.80	1.23	149.4	265.42	1.09
Arm D	113.2	330.91	1.20	96.3	274.10	1.09
2047 - ND						
Arm A	106.2	373.47	1.19	58.7	134.32	0.96
Arm B	140.2	381.65	1.18	51.7	107.11	0.85
Arm C	171.1	383.13	1.20	163.4	344.64	1.15
Arm D	113.4	321.67	1.18	111.9	401.06	1.14
2047 - WD						
Arm A	117.9	457.79	1.23	78.7	199.51	1.07
Arm B	159.7	421.97	1.21	61.2	117.40	0.87
Arm C	211.3	540.80	1.23	183.5	403.77	1.19
Arm D	115.9	342.70	1.20	125.3	473.46	1.17

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

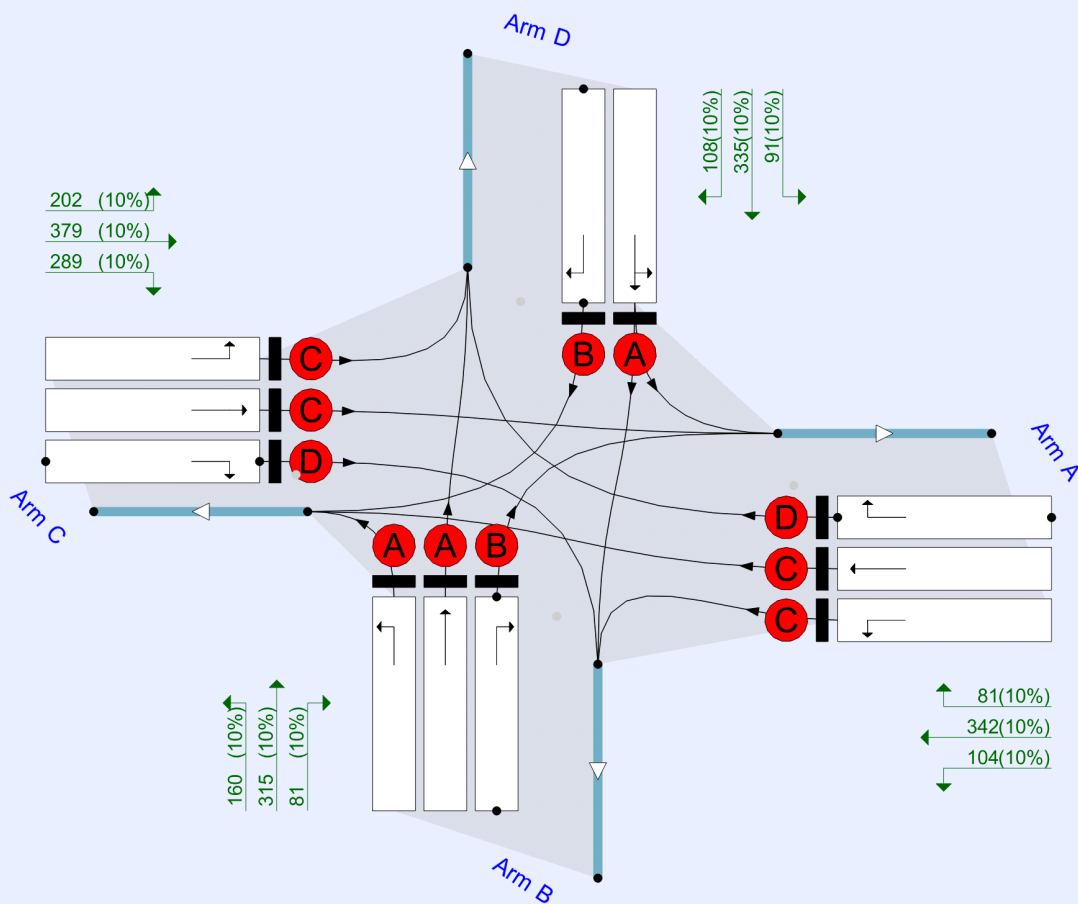
File summary

File Description

Title	P230400423 - DUBLIN, Boherboy LRD
Location	Junction 1
Site number	
Date	01/12/0205
Version	
Status	PLANNING
Identifier	
Client	
Jobnumber	
Enumerator	PINNACLE\JM
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 original traffic demand (PCU/hr).

The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	DOS Threshold	Average Delay threshold (s)	Queue threshold (PCU)	Use simulation for HCM roundabouts	Use iterations for HCM roundabouts
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	2025 - Survey	AM	ONE HOUR	08:00	09:30	15	✓
D2	2025 - Survey	PM	ONE HOUR	17:00	18:30	15	✓
D3	2025 - Committed	AM	ONE HOUR	08:00	09:30	15	✓
D4	2025 - Committed	PM	ONE HOUR	17:00	18:30	15	✓
D5	2032 - ND	AM	ONE HOUR	08:00	09:30	15	✓
D6	2032 - ND	PM	ONE HOUR	17:00	18:30	15	✓
D7	2032 - WD	AM	ONE HOUR	08:00	09:30	15	✓
D8	2032 - WD	PM	ONE HOUR	17:00	18:30	15	✓
D9	2037 - ND	AM	ONE HOUR	08:00	09:30	15	✓
D10	2037 - ND	PM	ONE HOUR	17:00	18:30	15	✓
D11	2037 - WD	AM	ONE HOUR	08:00	09:30	15	✓
D12	2037 - WD	PM	ONE HOUR	17:00	18:30	15	✓
D13	2047 - ND	AM	ONE HOUR	08:00	09:30	15	✓
D14	2047 - ND	PM	ONE HOUR	17:00	18:30	15	✓
D15	2047 - WD	AM	ONE HOUR	08:00	09:30	15	✓
D16	2047 - WD	PM	ONE HOUR	17:00	18:30	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	155.000	100.000

2025 - Survey , AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Signalised		69.24	E

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	69.24	E

Arms

Arms

Arm	Name	Description
A	Citywest Drive (E)	
B	Citywest Road (S)	
C	Citywest Drive (W)	
D	Citywest Road (N)	

OSCADY Traffic Streams

Arm	Traffic Stream	Phase	Destination arms	Straight move
A	1	C	B	C
	2	C	C	C
	3	D	D	C
B	1	A	C	D
	2	A	D	D
	3	B	A	D
C	1	C	D	A
	2	C	A	A
	3	D	B	A
D	1	A	A, B	B
	3	B	C	B

OSCADY Lanes

Arm	Traffic Stream	Destination arms	Gradient (%)	Width (m)	Turning radius (m)	Nearside lane	Has bay
A	1	B	0	3.00	10.00	✓	
	2	C	0	3.00		✓	
	3	D	0	3.00	10.00	✓	
B	1	C	0	3.00	10.00	✓	
	2	D	0	3.00		✓	
	3	A	0	3.00	10.00	✓	
C	1	D	0	3.00	10.00	✓	
	2	A	0	3.00		✓	
	3	B	0	3.00	10.00	✓	
D	1	A, B	0	3.00	10.00	✓	
	3	C	0	3.00	10.00	✓	

Signal Timings

Junction 1

Junction	Sequence to use	Cycle time (s)	Maximum cycle time (s)	Start displacement (s)	End displacement (s)
1	1	86	300	1.40	2.90

Optimisation options

Junction	Optimise stage lengths	Optimise cycle time	Optimiser demand source	Optimiser message
1	✓	✓	Average	Timings provide delay minimisation.

Phases

Junction	Phase	Name	Minimum green (s)
1	A		7
	B		7
	C		7
	D		7
	E		7

Library Stages

Junction	Library Stage	Phases in stage	User stage minimum (s)	Run every N cycles	Probability of running (%)
1	1	A	1		
	2	E, B	1		
	3	C	1		
	4	D	1		
	5	C	1		

Stage Sequences

Junction	Sequence	Name	Stage IDs	Stage ends
1	1		1, 2, 3, 4	38, 50, 70, 0

Intergreen Matrix for Junction 1

		To				
From		A	B	C	D	E
	A		5	5		
	B	8		5		
	C	5	5		6	6
	D			5		5
	E			5	5	

Interstage Matrix for Junction 1

		To				
From		1	2	3	4	5
	1	0	5	5	0	5
	2	8	0	5	5	5
	3	5	6	0	6	0
	4	0	5	5	0	5
	5	5	6	0	6	0

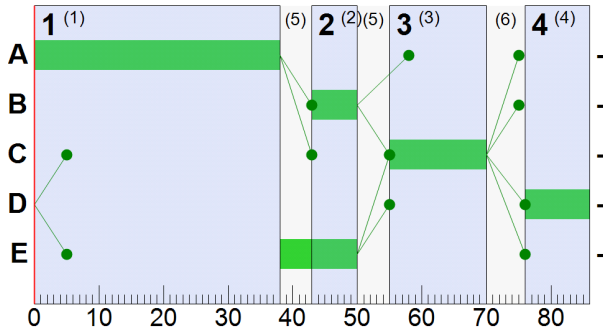
Resultant Stages

Junction	Resultant Stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	1	A	0	38	38	1	7
	2	2	E, B	43	50	7	1	7
	3	3	C	55	70	15	1	7
	4	4	D	76	0	10	1	7

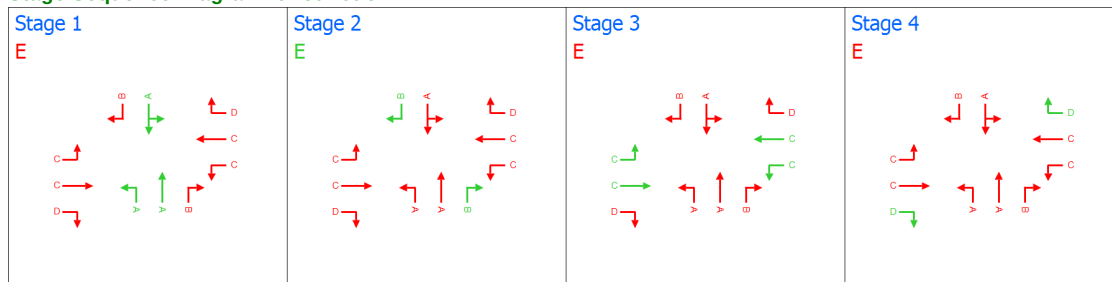
Resultant Phase Green Periods

Junction	Phase	Green period	Start time (s)	End time (s)	Duration (s)
1	A	1	0	38	38
	B	1	43	50	7
	C	1	55	70	15
	D	1	76	0	10
	E	1	38	50	12

Phase Timings Diagram for Junction 1



Stage Sequence Diagram for Junction 1



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	2025 - Survey	AM	ONE HOUR	08:00	09:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	322	100.000
B		ONE HOUR	✓	598	100.000
C		ONE HOUR	✓	479	100.000
D		ONE HOUR	✓	477	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	47	168	107
	B	46	0	37	515
	C	199	123	0	157
	D	77	319	81	0

Proportions

		To			
		A	B	C	D
From	A	0.00	0.15	0.52	0.33
	B	0.08	0.00	0.06	0.86
	C	0.42	0.26	0.00	0.33
	D	0.16	0.67	0.17	0.00

Vehicle Mix

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

Heavy Vehicle %

	To				
		A	B	C	D
	A	0	10	10	10
	B	10	0	10	10
	C	10	10	0	10
	D	10	10	10	0

Average PCU Per Veh

	To				
		A	B	C	D
	A	1.000	1.100	1.100	1.100
	B	1.100	1.000	1.100	1.100
	C	1.100	1.100	1.000	1.100
	D	1.100	1.100	1.100	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
08:00-08:15	A	242	242
	B	450	450
	C	361	361
	D	359	359
08:15-08:30	A	289	289
	B	538	538
	C	431	431
	D	429	429
08:30-08:45	A	355	355
	B	658	658
	C	527	527
	D	525	525
08:45-09:00	A	355	355
	B	658	658
	C	527	527
	D	525	525
09:00-09:15	A	289	289
	B	538	538
	C	431	431
	D	429	429
09:15-09:30	A	242	242
	B	450	450
	C	361	361
	D	359	359

Results

Results Summary for whole modelled period

Arm	Max DOS	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A	0.82	60.04	14.8	E	458	687
B	1.00	77.83	30.6	E	851	1276
C	0.94	91.70	29.0	F	681	1022
D	0.84	42.11	15.9	D	678	1018

Main Results for each time segment

08:00 - 08:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	1	55	14	1665	16.50	0.00	319	0.172	51	0.0	1.1	30.569	C
	2	196	49	1915	16.50	0.00	367	0.534	179	0.0	4.2	38.328	D
	3	125	31	1665	11.50	0.00	223	0.561	113	0.0	3.0	47.324	D
B	1	43	11	1665	39.50	0.00	765	0.056	41	0.0	0.6	13.092	B
	2	601	150	1915	39.50	0.00	880	0.683	566	0.0	8.7	23.858	C
	3	54	13	1665	8.50	0.00	165	0.326	49	0.0	1.3	42.814	D
C	1	183	46	1665	16.50	0.00	319	0.573	167	0.0	4.0	40.882	D
	2	232	58	1915	16.50	0.00	367	0.632	212	0.0	5.2	42.169	D
	3	144	36	1665	11.50	0.00	223	0.645	129	0.0	3.7	52.109	D
D	1	462	116	1861	39.50	0.00	855	0.541	437	0.0	6.4	19.925	B
	3	95	24	1665	8.50	0.00	165	0.574	84	0.0	2.5	54.161	D

08:15 - 08:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	1	65	16	1665	16.50	0.00	319	0.205	65	1.1	1.3	31.140	C
	2	234	59	1915	16.50	0.00	367	0.637	230	4.2	5.2	42.676	D
	3	149	37	1665	11.50	0.00	223	0.670	146	3.0	3.9	54.717	D
B	1	52	13	1665	39.50	0.00	765	0.067	51	0.6	0.7	13.197	B
	2	718	179	1915	39.50	0.00	880	0.816	707	8.7	11.5	30.732	C
	3	64	16	1665	8.50	0.00	165	0.389	63	1.3	1.5	45.245	D
C	1	219	55	1665	16.50	0.00	319	0.685	214	4.0	5.1	47.030	D
	2	277	69	1915	16.50	0.00	367	0.755	271	5.2	6.7	50.147	D
	3	171	43	1665	11.50	0.00	223	0.770	166	3.7	5.0	64.418	E
D	1	552	138	1861	39.50	0.00	855	0.646	546	6.4	7.9	22.785	C
	3	113	28	1665	8.50	0.00	165	0.686	110	2.5	3.3	64.280	E

08:30 - 08:45

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	1	80	20	1665	16.50	0.00	319	0.251	79	1.3	1.6	31.977	C
	2	287	72	1915	16.50	0.00	367	0.780	279	5.2	7.2	52.263	D
	3	183	46	1665	11.50	0.00	223	0.820	175	3.9	5.7	70.710	E
B	1	63	16	1665	39.50	0.00	765	0.083	63	0.7	0.8	13.346	B
	2	879	220	1915	39.50	0.00	880	0.999	833	11.5	23.0	57.731	E
	3	79	20	1665	8.50	0.00	165	0.477	77	1.5	2.0	49.137	D
C	1	268	67	1665	16.50	0.00	319	0.839	259	5.1	7.5	61.489	E
	2	340	85	1915	16.50	0.00	367	0.924	323	6.7	10.9	72.024	E
	3	210	52	1665	11.50	0.00	223	0.943	196	5.0	8.5	94.106	F
D	1	676	169	1861	39.50	0.00	855	0.791	665	7.9	10.6	29.258	C
	3	138	35	1665	8.50	0.00	165	0.840	131	3.3	5.0	85.057	F

08:45 - 09:00

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	1	80	20	1665	16.50	0.00	319	0.251	80	1.6	1.6	31.997	C
	2	287	72	1915	16.50	0.00	367	0.780	286	7.2	7.3	55.261	E
	3	183	46	1665	11.50	0.00	223	0.820	182	5.7	5.9	79.874	E
B	1	63	16	1665	39.50	0.00	765	0.083	63	0.8	0.8	13.346	B
	2	879	220	1915	39.50	0.00	880	0.999	860	23.0	27.8	84.976	F
	3	79	20	1665	8.50	0.00	165	0.477	78	2.0	2.0	49.760	D
C	1	268	67	1665	16.50	0.00	319	0.839	267	7.5	7.7	68.662	E
	2	340	85	1915	16.50	0.00	367	0.924	336	10.9	11.7	89.313	F
	3	210	52	1665	11.50	0.00	223	0.943	205	8.5	9.6	124.977	F
D	1	676	169	1861	39.50	0.00	855	0.791	676	10.6	10.6	30.135	C
	3	138	35	1665	8.50	0.00	165	0.840	137	5.0	5.3	100.629	F

09:00 - 09:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	1	65	16	1665	16.50	0.00	319	0.205	67	1.6	1.3	31.165	C
	2	234	59	1915	16.50	0.00	367	0.637	242	7.3	5.3	44.385	D
	3	149	37	1665	11.50	0.00	223	0.670	157	5.9	4.1	60.788	E
B	1	52	13	1665	39.50	0.00	765	0.067	52	0.8	0.7	13.198	B
	2	718	179	1915	39.50	0.00	880	0.816	781	27.8	11.9	45.445	D
	3	64	16	1665	8.50	0.00	165	0.389	66	2.0	1.5	45.935	D
C	1	219	55	1665	16.50	0.00	319	0.685	228	7.7	5.3	50.918	D
	2	277	69	1915	16.50	0.00	367	0.755	296	11.7	7.1	59.114	E
	3	171	43	1665	11.50	0.00	223	0.770	187	9.6	5.6	88.310	F
D	1	552	138	1861	39.50	0.00	855	0.646	563	10.6	7.9	23.168	C
	3	113	28	1665	8.50	0.00	165	0.686	120	5.3	3.5	76.402	E

09:15 - 09:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	1	55	14	1665	16.50	0.00	319	0.172	56	1.3	1.1	30.589	C
	2	196	49	1915	16.50	0.00	367	0.534	200	5.3	4.2	39.031	D
	3	125	31	1665	11.50	0.00	223	0.561	129	4.1	3.1	49.704	D
B	1	43	11	1665	39.50	0.00	765	0.056	44	0.7	0.6	13.092	B
	2	601	150	1915	39.50	0.00	880	0.683	614	11.9	8.8	24.517	C
	3	54	13	1665	8.50	0.00	165	0.326	55	1.5	1.3	43.280	D
C	1	183	46	1665	16.50	0.00	319	0.573	188	5.3	4.1	42.232	D
	2	232	58	1915	16.50	0.00	367	0.632	240	7.1	5.2	44.066	D
	3	144	36	1665	11.50	0.00	223	0.645	151	5.6	3.8	57.840	E
D	1	462	116	1861	39.50	0.00	855	0.541	468	7.9	6.4	20.069	C
	3	95	24	1665	8.50	0.00	165	0.574	98	3.5	2.6	58.940	E

2025 - Survey , PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Signalised		53.55	D

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	53.55	D

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	2025 - Survey	PM	ONE HOUR	17:00	18:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	390	100.000
B		ONE HOUR	✓	405	100.000
C		ONE HOUR	✓	465	100.000
D		ONE HOUR	✓	439	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
		A	B	C	D
From	A	0	84	237	69
	B	63	0	99	243
	C	207	148	0	110
	D	67	288	84	0

Proportions

	To				
		A	B	C	D
From	A	0.00	0.22	0.61	0.18
	B	0.16	0.00	0.24	0.60
	C	0.45	0.32	0.00	0.24
	D	0.15	0.66	0.19	0.00

Vehicle Mix

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

Heavy Vehicle %

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

Average PCU Per Veh

	To				
		A	B	C	D
From	A	1.000	1.100	1.100	1.100
	B	1.100	1.000	1.100	1.100
	C	1.100	1.100	1.000	1.100
	D	1.100	1.100	1.100	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
17:00-17:15	A	294	294
	B	305	305
	C	350	350
	D	331	331
17:15-17:30	A	351	351
	B	364	364
	C	418	418
	D	395	395
17:30-17:45	A	429	429
	B	446	446
	C	512	512
	D	483	483
17:45-18:00	A	429	429
	B	446	446
	C	512	512
	D	483	483
18:00-18:15	A	351	351
	B	364	364
	C	418	418
	D	395	395
18:15-18:30	A	294	294
	B	305	305
	C	350	350
	D	331	331

Results

Results Summary for whole modelled period

Arm	Max DOS	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A	0.90	50.81	14.7	D	555	832
B	0.62	25.76	10.3	C	576	864
C	1.01	75.14	23.8	E	661	992
D	0.93	58.74	17.3	E	624	937

Main Results for each time segment

17:00 - 17:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	1	98	25	1665	16.50	0.00	393	0.250	92	0.0	1.5	23.717	C
	2	277	69	1915	16.50	0.00	451	0.613	258	0.0	4.7	31.720	C
	3	81	20	1665	10.50	0.00	250	0.322	75	0.0	1.4	30.988	C
B	1	116	29	1665	24.50	0.00	583	0.198	110	0.0	1.5	16.893	B
	2	284	71	1915	24.50	0.00	670	0.423	268	0.0	3.8	19.917	B
	3	74	18	1665	8.50	0.00	202	0.364	68	0.0	1.4	34.732	C
C	1	128	32	1665	16.50	0.00	393	0.327	120	0.0	2.0	25.047	C
	2	242	60	1915	16.50	0.00	451	0.535	226	0.0	4.0	29.213	C
	3	173	43	1665	10.50	0.00	250	0.691	158	0.0	3.8	46.237	D
D	1	414	104	1862	24.50	0.00	652	0.636	390	0.0	5.9	25.063	C
	3	98	25	1665	8.50	0.00	202	0.485	90	0.0	2.0	39.036	D

17:15 - 17:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	1	117	29	1665	16.50	0.00	393	0.298	116	1.5	1.8	24.542	C
	2	330	83	1915	16.50	0.00	451	0.732	325	4.7	6.1	37.704	D
	3	96	24	1665	10.50	0.00	250	0.385	95	1.4	1.7	32.669	C
B	1	138	34	1665	24.50	0.00	583	0.237	137	1.5	1.8	17.383	B
	2	339	85	1915	24.50	0.00	670	0.505	335	3.8	4.6	21.527	C
	3	88	22	1665	8.50	0.00	202	0.434	86	1.4	1.7	37.245	D
C	1	153	38	1665	16.50	0.00	393	0.390	152	2.0	2.4	26.343	C
	2	288	72	1915	16.50	0.00	451	0.639	284	4.0	5.0	32.920	C
	3	206	52	1665	10.50	0.00	250	0.826	200	3.8	5.5	61.439	E
D	1	495	124	1862	24.50	0.00	652	0.759	488	5.9	7.7	30.619	C
	3	117	29	1665	8.50	0.00	202	0.579	115	2.0	2.5	44.081	D

17:30 - 17:45

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	1	143	36	1665	16.50	0.00	393	0.365	142	1.8	2.3	25.809	C
	2	404	101	1915	16.50	0.00	451	0.896	390	6.1	9.7	54.257	D
	3	118	29	1665	10.50	0.00	250	0.471	116	1.7	2.2	35.405	D
B	1	169	42	1665	24.50	0.00	583	0.290	167	1.8	2.2	18.112	B
	2	415	104	1915	24.50	0.00	670	0.619	410	4.6	5.9	24.441	C
	3	108	27	1665	8.50	0.00	202	0.532	105	1.7	2.2	41.460	D
C	1	188	47	1665	16.50	0.00	393	0.478	185	2.4	3.1	28.461	C
	2	353	88	1915	16.50	0.00	451	0.783	346	5.0	6.9	41.306	D
	3	253	63	1665	10.50	0.00	250	1.011	231	5.5	10.9	100.791	F
D	1	606	151	1862	24.50	0.00	652	0.929	585	7.7	12.9	48.155	D
	3	143	36	1665	8.50	0.00	202	0.709	139	2.5	3.5	53.781	D

17:45 - 18:00

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	1	143	36	1665	16.50	0.00	393	0.365	143	2.3	2.3	25.852	C
	2	404	101	1915	16.50	0.00	451	0.896	402	9.7	10.2	64.061	E
	3	118	29	1665	10.50	0.00	250	0.471	118	2.2	2.2	35.680	D
B	1	169	42	1665	24.50	0.00	583	0.290	169	2.2	2.2	18.121	B
	2	415	104	1915	24.50	0.00	670	0.619	415	5.9	5.9	24.619	C
	3	108	27	1665	8.50	0.00	202	0.532	107	2.2	2.2	42.159	D
C	1	188	47	1665	16.50	0.00	393	0.478	188	3.1	3.1	28.586	C
	2	353	88	1915	16.50	0.00	451	0.783	353	6.9	7.0	43.551	D
	3	253	63	1665	10.50	0.00	250	1.011	241	10.9	13.8	153.932	F
D	1	606	151	1862	24.50	0.00	652	0.929	602	12.9	13.8	59.086	E
	3	143	36	1665	8.50	0.00	202	0.709	143	3.5	3.5	57.301	E

18:00 - 18:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	1	117	29	1665	16.50	0.00	393	0.298	119	2.3	1.8	24.592	C
	2	330	83	1915	16.50	0.00	451	0.732	346	10.2	6.3	41.947	D
	3	96	24	1665	10.50	0.00	250	0.385	98	2.2	1.8	32.965	C
B	1	138	34	1665	24.50	0.00	583	0.237	140	2.2	1.8	17.394	B
	2	339	85	1915	24.50	0.00	670	0.505	344	5.9	4.6	21.666	C
	3	88	22	1665	8.50	0.00	202	0.434	90	2.2	1.7	37.960	D
C	1	153	38	1665	16.50	0.00	393	0.390	156	3.1	2.4	26.472	C
	2	288	72	1915	16.50	0.00	451	0.639	296	7.0	5.1	34.110	C
	3	206	52	1665	10.50	0.00	250	0.826	231	13.8	7.5	124.661	F
D	1	495	124	1862	24.50	0.00	652	0.759	518	13.8	7.9	34.549	C
	3	117	29	1665	8.50	0.00	202	0.579	121	3.5	2.6	46.888	D

18:15 - 18:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	1	98	25	1665	16.50	0.00	393	0.250	99	1.8	1.5	23.754	C
	2	277	69	1915	16.50	0.00	451	0.613	283	6.3	4.8	32.752	C
	3	81	20	1665	10.50	0.00	250	0.322	82	1.8	1.4	31.185	C
B	1	116	29	1665	24.50	0.00	583	0.198	117	1.8	1.5	16.901	B
	2	284	71	1915	24.50	0.00	670	0.423	287	4.6	3.8	19.992	B
	3	74	18	1665	8.50	0.00	202	0.364	75	1.7	1.4	35.182	D
C	1	128	32	1665	16.50	0.00	393	0.327	130	2.4	2.0	25.131	C
	2	242	60	1915	16.50	0.00	451	0.535	246	5.1	4.0	29.691	C
	3	173	43	1665	10.50	0.00	250	0.691	187	7.5	4.0	55.763	E
D	1	414	104	1862	24.50	0.00	652	0.636	422	7.9	6.0	25.712	C
	3	98	25	1665	8.50	0.00	202	0.485	100	2.6	2.0	40.449	D

2025 - Committed, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Signalised		160.76	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	160.76	F

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2025 - Committed	AM	ONE HOUR	08:00	09:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	471	100.000
B		ONE HOUR	✓	631	100.000
C		ONE HOUR	✓	718	100.000
D		ONE HOUR	✓	549	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
		A	B	C	D
From	A	0	47	317	107
	B	46	0	70	515
	C	298	185	0	235
	D	149	319	81	0

Proportions

	To				
		A	B	C	D
From	A	0.00	0.10	0.67	0.23
	B	0.07	0.00	0.11	0.82
	C	0.42	0.26	0.00	0.33
	D	0.27	0.58	0.15	0.00

Vehicle Mix

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

Heavy Vehicle %

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

Average PCU Per Veh

	To				
		A	B	C	D
From	A	1.000	1.100	1.100	1.100
	B	1.100	1.000	1.100	1.100
	C	1.100	1.100	1.000	1.100
	D	1.100	1.100	1.100	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
08:00-08:15	A	355	355
	B	475	475
	C	541	541
	D	413	413
08:15-08:30	A	423	423
	B	567	567
	C	645	645
	D	494	494
08:30-08:45	A	519	519
	B	695	695
	C	791	791
	D	604	604
08:45-09:00	A	519	519
	B	695	695
	C	791	791
	D	604	604
09:00-09:15	A	423	423
	B	567	567
	C	645	645
	D	494	494
09:15-09:30	A	355	355
	B	475	475
	C	541	541
	D	413	413

Results

Results Summary for whole modelled period

Arm	Max DOS	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A	1.07	176.53	59.1	F	670	1005
B	1.04	138.39	64.4	F	897	1346
C	1.13	183.88	93.7	F	1021	1532
D	1.04	142.71	55.5	F	781	1171

Main Results for each time segment

08:00 - 08:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	1	55	14	1665	54.50	0.00	441	0.124	46	0.0	2.3	58.371	E
	2	370	92	1915	54.50	0.00	507	0.730	303	0.0	16.8	80.340	F
	3	125	31	1665	34.50	0.00	279	0.448	100	0.0	6.2	83.801	F
B	1	82	20	1665	90.50	0.00	732	0.112	71	0.0	2.6	34.457	C
	2	601	150	1915	90.50	0.00	841	0.714	519	0.0	20.4	53.801	D
	3	54	13	1665	16.50	0.00	133	0.402	42	0.0	3.0	101.283	F
C	1	274	69	1665	54.50	0.00	441	0.622	225	0.0	12.2	75.005	E
	2	348	87	1915	54.50	0.00	507	0.686	285	0.0	15.6	77.478	E
	3	216	54	1665	34.50	0.00	279	0.774	169	0.0	11.8	104.517	F
D	1	546	137	1828	90.50	0.00	803	0.680	472	0.0	18.4	52.137	D
	3	95	24	1665	16.50	0.00	133	0.709	71	0.0	5.9	124.309	F

08:15 - 08:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	1	65	16	1665	54.50	0.00	441	0.149	64	2.3	2.8	58.929	E
	2	442	110	1915	54.50	0.00	507	0.872	422	16.8	21.7	95.473	F
	3	149	37	1665	34.50	0.00	279	0.535	144	6.2	7.5	87.791	F
B	1	98	24	1665	90.50	0.00	732	0.133	95	2.6	3.1	34.893	C
	2	718	179	1915	90.50	0.00	841	0.853	696	20.4	25.9	65.409	E
	3	64	16	1665	16.50	0.00	133	0.481	61	3.0	3.7	106.156	F
C	1	327	82	1665	54.50	0.00	441	0.743	316	12.2	15.1	83.331	F
	2	415	104	1915	54.50	0.00	507	0.820	399	15.6	19.6	88.754	F
	3	258	64	1665	34.50	0.00	279	0.924	240	11.8	16.3	130.945	F
D	1	652	163	1828	90.50	0.00	803	0.812	634	18.4	23.1	61.650	E
	3	113	28	1665	16.50	0.00	133	0.846	105	5.9	8.0	150.571	F

08:30 - 08:45

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	1	80	20	1665	54.50	0.00	441	0.182	78	2.8	3.4	59.725	E
	2	541	135	1915	54.50	0.00	507	1.068	482	21.7	36.5	137.688	F
	3	183	46	1665	34.50	0.00	279	0.655	175	7.5	9.5	94.931	F
B	1	119	30	1665	90.50	0.00	732	0.163	117	3.1	3.9	35.514	D
	2	879	220	1915	90.50	0.00	841	1.045	803	25.9	44.8	102.991	F
	3	79	20	1665	16.50	0.00	133	0.589	75	3.7	4.6	114.201	F
C	1	401	100	1665	54.50	0.00	441	0.910	378	15.1	20.9	104.467	F
	2	509	127	1915	54.50	0.00	507	1.004	465	19.6	30.5	122.839	F
	3	316	79	1665	34.50	0.00	279	1.132	269	16.3	28.0	187.947	F
D	1	799	200	1828	90.50	0.00	803	0.995	746	23.1	36.2	92.603	F
	3	138	35	1665	16.50	0.00	133	1.036	120	8.0	12.6	200.473	F

08:45 - 09:00

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	1	80	20	1665	54.50	0.00	441	0.182	80	3.4	3.4	59.729	E
	2	541	135	1915	54.50	0.00	507	1.068	502	36.5	46.2	208.303	F
	3	183	46	1665	34.50	0.00	279	0.655	183	9.5	9.5	96.176	F
B	1	119	30	1665	90.50	0.00	732	0.163	119	3.9	3.9	35.515	D
	2	879	220	1915	90.50	0.00	841	1.045	834	44.8	55.9	154.329	F
	3	79	20	1665	16.50	0.00	133	0.589	78	4.6	4.7	116.532	F
C	1	401	100	1665	54.50	0.00	441	0.910	398	20.9	21.6	116.662	F
	2	509	127	1915	54.50	0.00	507	1.004	493	30.5	34.4	159.944	F
	3	316	79	1665	34.50	0.00	279	1.132	277	28.0	37.7	303.071	F
D	1	799	200	1828	90.50	0.00	803	0.995	782	36.2	40.4	119.131	F
	3	138	35	1665	16.50	0.00	133	1.036	128	12.6	15.1	278.955	F

09:00 - 09:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	1	65	16	1665	54.50	0.00	441	0.149	68	3.4	2.8	58.935	E
	2	442	110	1915	54.50	0.00	507	0.872	494	46.2	33.2	223.585	F
	3	149	37	1665	34.50	0.00	279	0.535	157	9.5	7.5	88.800	F
B	1	98	24	1665	90.50	0.00	732	0.133	100	3.9	3.1	34.894	C
	2	718	179	1915	90.50	0.00	841	0.853	818	55.9	30.9	135.772	F
	3	64	16	1665	16.50	0.00	133	0.481	68	4.7	3.7	108.562	F
C	1	327	82	1665	54.50	0.00	441	0.743	353	21.6	15.3	88.765	F
	2	415	104	1915	54.50	0.00	507	0.820	464	34.4	22.2	126.546	F
	3	258	64	1665	34.50	0.00	279	0.924	272	37.7	34.2	397.039	F
D	1	652	163	1828	90.50	0.00	803	0.812	720	40.4	23.5	75.735	E
	3	113	28	1665	16.50	0.00	133	0.846	126	15.1	11.9	293.276	F

09:15 - 09:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	1	55	14	1665	54.50	0.00	441	0.124	57	2.8	2.3	58.376	E
	2	370	92	1915	54.50	0.00	507	0.730	435	33.2	17.0	98.640	F
	3	125	31	1665	34.50	0.00	279	0.448	130	7.5	6.2	84.336	F
B	1	82	20	1665	90.50	0.00	732	0.112	84	3.1	2.6	34.458	C
	2	601	150	1915	90.50	0.00	841	0.714	642	30.9	20.5	55.199	E
	3	54	13	1665	16.50	0.00	133	0.402	56	3.7	3.0	102.751	F
C	1	274	69	1665	54.50	0.00	441	0.622	287	15.3	12.2	76.207	E
	2	348	87	1915	54.50	0.00	507	0.686	374	22.2	15.7	79.561	E
	3	216	54	1665	34.50	0.00	279	0.774	283	34.2	17.5	299.862	F
D	1	546	137	1828	90.50	0.00	803	0.680	566	23.5	18.5	52.892	D
	3	95	24	1665	16.50	0.00	133	0.709	116	11.9	6.4	170.825	F

2025 - Committed, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Signalised		123.25	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	123.25	F

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2025 - Committed	PM	ONE HOUR	17:00	18:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	428	100.000
B		ONE HOUR	✓	420	100.000
C		ONE HOUR	✓	770	100.000
D		ONE HOUR	✓	452	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
		A	B	C	D
From	A	0	84	275	69
	B	63	0	114	243
	C	343	245	0	182
	D	80	288	84	0

Proportions

	To				
		A	B	C	D
From	A	0.00	0.20	0.64	0.16
	B	0.15	0.00	0.27	0.58
	C	0.45	0.32	0.00	0.24
	D	0.18	0.64	0.19	0.00

Vehicle Mix

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

Heavy Vehicle %

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

Average PCU Per Veh

	To				
		A	B	C	D
From	A	1.000	1.100	1.100	1.100
	B	1.100	1.000	1.100	1.100
	C	1.100	1.100	1.000	1.100
	D	1.100	1.100	1.100	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
17:00-17:15	A	322	322
	B	316	316
	C	580	580
	D	340	340
17:15-17:30	A	385	385
	B	378	378
	C	692	692
	D	406	406
17:30-17:45	A	471	471
	B	462	462
	C	848	848
	D	498	498
17:45-18:00	A	471	471
	B	462	462
	C	848	848
	D	498	498
18:00-18:15	A	385	385
	B	378	378
	C	692	692
	D	406	406
18:15-18:30	A	322	322
	B	316	316
	C	580	580
	D	340	340

Results

Results Summary for whole modelled period

Arm	Max DOS	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A	0.86	62.62	24.1	E	609	913
B	0.80	57.15	22.8	E	597	896
C	1.07	165.61	84.1	F	1095	1643
D	1.06	169.93	50.9	F	643	964

Main Results for each time segment

17:00 - 17:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	1	98	25	1665	40.50	0.00	475	0.206	87	0.0	2.8	39.837	D
	2	321	80	1915	40.50	0.00	546	0.588	283	0.0	9.6	49.502	D
	3	81	20	1665	33.50	0.00	393	0.205	71	0.0	2.5	45.105	D
B	1	133	33	1665	46.50	0.00	545	0.244	119	0.0	3.6	36.298	D
	2	284	71	1915	46.50	0.00	627	0.452	252	0.0	7.8	40.763	D
	3	74	18	1665	11.50	0.00	135	0.545	61	0.0	3.1	81.238	F
C	1	212	53	1665	40.50	0.00	475	0.447	187	0.0	6.2	45.526	D
	2	400	100	1915	40.50	0.00	546	0.733	350	0.0	12.5	56.539	E
	3	286	71	1665	33.50	0.00	393	0.728	247	0.0	9.8	64.053	E
D	1	429	107	1855	46.50	0.00	607	0.707	380	0.0	12.5	50.467	D
	3	98	25	1665	11.50	0.00	135	0.727	80	0.0	4.6	97.232	F

17:15 - 17:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	1	117	29	1665	40.50	0.00	475	0.246	115	2.8	3.4	40.646	D
	2	383	96	1915	40.50	0.00	546	0.702	374	9.6	11.8	54.915	D
	3	96	24	1665	33.50	0.00	393	0.245	94	2.5	2.9	45.940	D
B	1	159	40	1665	46.50	0.00	545	0.291	156	3.6	4.3	37.281	D
	2	339	85	1915	46.50	0.00	627	0.540	332	7.8	9.4	43.368	D
	3	88	22	1665	11.50	0.00	135	0.651	84	3.1	3.9	91.517	F
C	1	254	63	1665	40.50	0.00	475	0.534	248	6.2	7.5	48.379	D
	2	478	119	1915	40.50	0.00	546	0.875	461	12.5	16.7	70.443	E
	3	341	85	1665	33.50	0.00	393	0.869	328	9.8	13.2	79.911	E
D	1	513	128	1855	46.50	0.00	607	0.844	498	12.5	16.2	61.528	E
	3	117	29	1665	11.50	0.00	135	0.868	109	4.6	6.5	125.725	F

17:30 - 17:45

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	1	143	36	1665	40.50	0.00	475	0.302	140	3.4	4.1	41.840	D
	2	469	117	1915	40.50	0.00	546	0.859	452	11.8	16.1	68.181	E
	3	118	29	1665	33.50	0.00	393	0.300	115	2.9	3.6	47.172	D
B	1	195	49	1665	46.50	0.00	545	0.357	191	4.3	5.3	38.758	D
	2	415	104	1915	46.50	0.00	627	0.661	405	9.4	11.8	48.052	D
	3	108	27	1665	11.50	0.00	135	0.797	101	3.9	5.4	110.913	F
C	1	311	78	1665	40.50	0.00	475	0.654	303	7.5	9.5	53.525	D
	2	585	146	1915	40.50	0.00	546	1.072	525	16.7	31.9	113.483	F
	3	418	105	1665	33.50	0.00	393	1.064	374	13.2	24.3	123.887	F
D	1	628	157	1854	46.50	0.00	607	1.034	576	16.2	29.3	97.660	F
	3	143	36	1665	11.50	0.00	135	1.063	124	6.5	11.3	180.001	F

17:45 - 18:00

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	1	143	36	1665	40.50	0.00	475	0.302	143	4.1	4.1	41.855	D
	2	469	117	1915	40.50	0.00	546	0.859	468	16.1	16.4	72.830	E
	3	118	29	1665	33.50	0.00	393	0.300	118	3.6	3.6	47.195	D
B	1	195	49	1665	46.50	0.00	545	0.357	195	5.3	5.3	38.779	D
	2	415	104	1915	46.50	0.00	627	0.661	415	11.8	11.8	48.368	D
	3	108	27	1665	11.50	0.00	135	0.797	107	5.4	5.6	124.273	F
C	1	311	78	1665	40.50	0.00	475	0.654	311	9.5	9.6	54.010	D
	2	585	146	1915	40.50	0.00	546	1.072	542	31.9	42.7	185.604	F
	3	418	105	1665	33.50	0.00	393	1.064	388	24.3	31.8	195.707	F
D	1	628	157	1854	46.50	0.00	607	1.034	599	29.3	36.5	146.970	F
	3	143	36	1665	11.50	0.00	135	1.063	131	11.3	14.4	270.506	F

18:00 - 18:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	1	117	29	1665	40.50	0.00	475	0.246	120	4.1	3.4	40.665	D
	2	383	96	1915	40.50	0.00	546	0.702	401	16.4	11.9	56.793	E
	3	96	24	1665	33.50	0.00	393	0.245	99	3.6	3.0	45.967	D
B	1	159	40	1665	46.50	0.00	545	0.291	163	5.3	4.3	37.305	D
	2	339	85	1915	46.50	0.00	627	0.540	348	11.8	9.4	43.592	D
	3	88	22	1665	11.50	0.00	135	0.651	94	5.6	4.1	103.131	F
C	1	254	63	1665	40.50	0.00	475	0.534	262	9.6	7.6	48.741	D
	2	478	119	1915	40.50	0.00	546	0.875	534	42.7	28.8	199.367	F
	3	341	85	1665	33.50	0.00	393	0.869	381	31.8	22.0	205.170	F
D	1	513	128	1855	46.50	0.00	607	0.844	581	36.5	19.5	121.465	F
	3	117	29	1665	11.50	0.00	135	0.868	129	14.4	11.4	297.893	F

18:15 - 18:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	1	98	25	1665	40.50	0.00	475	0.206	100	3.4	2.8	39.852	D
	2	321	80	1915	40.50	0.00	546	0.588	330	11.9	9.6	50.052	D
	3	81	20	1665	33.50	0.00	393	0.205	82	3.0	2.5	45.126	D
B	1	133	33	1665	46.50	0.00	545	0.244	136	4.3	3.6	36.315	D
	2	284	71	1915	46.50	0.00	627	0.452	290	9.4	7.8	40.876	D
	3	74	18	1665	11.50	0.00	135	0.545	77	4.1	3.1	86.511	F
C	1	212	53	1665	40.50	0.00	475	0.447	218	7.6	6.2	45.713	D
	2	400	100	1915	40.50	0.00	546	0.733	465	28.8	12.7	76.692	E
	3	286	71	1665	33.50	0.00	393	0.728	334	22.0	10.0	86.378	F
D	1	429	107	1855	46.50	0.00	607	0.707	457	19.5	12.6	52.688	D
	3	98	25	1665	11.50	0.00	135	0.727	123	11.4	5.3	172.162	F

2032 - ND, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Signalised		266.07	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	266.07	F

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2032 - ND	AM	ONE HOUR	08:00	09:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	500	100.000
B		ONE HOUR	✓	684	100.000
C		ONE HOUR	✓	761	100.000
D		ONE HOUR	✓	592	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
		A	B	C	D
From	A	0	51	332	117
	B	50	0	73	561
	C	316	196	0	249
	D	156	348	88	0

Proportions

	To				
		A	B	C	D
From	A	0.00	0.10	0.66	0.23
	B	0.07	0.00	0.11	0.82
	C	0.42	0.26	0.00	0.33
	D	0.26	0.59	0.15	0.00

Vehicle Mix

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

Heavy Vehicle %

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

Average PCU Per Veh

	To				
		A	B	C	D
From	A	1.000	1.100	1.100	1.100
	B	1.100	1.000	1.100	1.100
	C	1.100	1.100	1.000	1.100
	D	1.100	1.100	1.100	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
08:00-08:15	A	376	376
	B	515	515
	C	573	573
	D	446	446
08:15-08:30	A	449	449
	B	615	615
	C	684	684
	D	532	532
08:30-08:45	A	551	551
	B	753	753
	C	838	838
	D	652	652
08:45-09:00	A	551	551
	B	753	753
	C	838	838
	D	652	652
09:00-09:15	A	449	449
	B	615	615
	C	684	684
	D	532	532
09:15-09:30	A	376	376
	B	515	515
	C	573	573
	D	446	446

Results

Results Summary for whole modelled period

Arm	Max DOS	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A	1.13	297.05	90.4	F	711	1067
B	1.12	269.95	109.5	F	973	1459
C	1.13	270.74	137.7	F	1082	1624
D	1.15	229.41	92.1	F	842	1263

Main Results for each time segment

08:00 - 08:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	1	60	15	1665	78.50	0.00	436	0.137	45	0.0	3.7	85.660	F
	2	387	97	1915	78.50	0.00	501	0.773	286	0.0	25.4	116.263	F
	3	137	34	1665	53.50	0.00	297	0.460	98	0.0	9.6	116.847	F
B	1	85	21	1665	134.50	0.00	747	0.114	69	0.0	3.9	48.521	D
	2	655	164	1915	134.50	0.00	859	0.762	528	0.0	31.6	77.461	E
	3	58	15	1665	23.50	0.00	130	0.447	40	0.0	4.7	145.585	F
C	1	291	73	1665	78.50	0.00	436	0.667	216	0.0	18.7	109.045	F
	2	369	92	1915	78.50	0.00	501	0.736	273	0.0	24.0	112.959	F
	3	229	57	1665	53.50	0.00	297	0.770	160	0.0	17.1	138.454	F
D	1	588	147	1830	134.50	0.00	820	0.717	475	0.0	28.2	74.115	E
	3	103	26	1665	23.50	0.00	130	0.787	65	0.0	9.3	177.232	F

08:15 - 08:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	1	71	18	1665	78.50	0.00	436	0.163	68	3.7	4.4	86.475	F
	2	463	116	1915	78.50	0.00	501	0.923	432	25.4	33.1	138.646	F
	3	163	41	1665	53.50	0.00	297	0.549	155	9.6	11.6	121.587	F
B	1	102	25	1665	134.50	0.00	747	0.136	99	3.9	4.7	49.122	D
	2	782	195	1915	134.50	0.00	859	0.910	746	31.6	40.7	96.315	F
	3	70	17	1665	23.50	0.00	130	0.534	66	4.7	5.7	152.215	F
C	1	347	87	1665	78.50	0.00	436	0.796	329	18.7	23.2	121.239	F
	2	440	110	1915	78.50	0.00	501	0.879	415	24.0	30.4	130.320	F
	3	273	68	1665	53.50	0.00	297	0.920	251	17.1	22.6	164.719	F
D	1	702	176	1830	134.50	0.00	821	0.856	674	28.2	35.2	88.237	F
	3	123	31	1665	23.50	0.00	130	0.940	109	9.3	12.8	218.539	F

08:30 - 08:45

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	1	87	22	1665	78.50	0.00	436	0.200	83	4.4	5.4	87.636	F
	2	567	142	1915	78.50	0.00	501	1.131	484	33.1	53.7	189.251	F
	3	200	50	1665	53.50	0.00	297	0.672	188	11.6	14.5	129.972	F
B	1	125	31	1665	134.50	0.00	747	0.167	120	4.7	5.7	49.978	D
	2	957	239	1915	134.50	0.00	859	1.115	835	40.7	71.3	146.029	F
	3	85	21	1665	23.50	0.00	130	0.654	79	5.7	7.3	163.453	F
C	1	425	106	1665	78.50	0.00	436	0.975	386	23.2	32.9	153.925	F
	2	539	135	1915	78.50	0.00	501	1.076	473	30.4	46.9	172.890	F
	3	334	84	1665	53.50	0.00	297	1.126	284	22.6	35.3	216.564	F
D	1	860	215	1830	134.50	0.00	820	1.048	778	35.2	55.8	128.241	F
	3	150	38	1665	23.50	0.00	130	1.151	124	12.8	19.4	280.277	F

08:45 - 09:00

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	1	87	22	1665	78.50	0.00	436	0.200	87	5.4	5.4	87.641	F
	2	567	142	1915	78.50	0.00	501	1.131	499	53.7	70.5	298.633	F
	3	200	50	1665	53.50	0.00	297	0.672	200	14.5	14.6	131.304	F
B	1	125	31	1665	134.50	0.00	747	0.167	125	5.7	5.7	49.979	D
	2	957	239	1915	134.50	0.00	859	1.115	857	71.3	96.4	242.464	F
	3	85	21	1665	23.50	0.00	130	0.654	85	7.3	7.3	167.639	F
C	1	425	106	1665	78.50	0.00	436	0.975	416	32.9	35.1	182.381	F
	2	539	135	1915	78.50	0.00	501	1.076	497	46.9	57.4	248.633	F
	3	334	84	1665	53.50	0.00	297	1.126	295	35.3	45.2	327.702	F
D	1	860	215	1830	134.50	0.00	820	1.048	814	55.8	67.3	181.989	F
	3	150	38	1665	23.50	0.00	130	1.151	129	19.4	24.8	416.032	F

09:00 - 09:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	1	71	18	1665	78.50	0.00	436	0.163	75	5.4	4.4	86.483	F
	2	463	116	1915	78.50	0.00	501	0.923	493	70.5	62.9	390.874	F
	3	163	41	1665	53.50	0.00	297	0.549	175	14.6	11.6	122.616	F
B	1	102	25	1665	134.50	0.00	747	0.136	106	5.7	4.7	49.123	D
	2	782	195	1915	134.50	0.00	859	0.910	849	96.4	79.6	308.818	F
	3	70	17	1665	23.50	0.00	130	0.534	76	7.3	5.8	156.309	F
C	1	347	87	1665	78.50	0.00	436	0.796	393	35.1	23.7	138.696	F
	2	440	110	1915	78.50	0.00	501	0.879	489	57.4	45.1	280.754	F
	3	273	68	1665	53.50	0.00	297	0.920	289	45.2	41.1	422.349	F
D	1	702	176	1830	134.50	0.00	821	0.856	803	67.3	42.2	171.792	F
	3	123	31	1665	23.50	0.00	130	0.940	125	24.8	24.2	559.404	F

09:15 - 09:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	1	60	15	1665	78.50	0.00	436	0.137	62	4.4	3.7	85.666	F
	2	387	97	1915	78.50	0.00	501	0.773	519	62.9	29.9	268.046	F
	3	137	34	1665	53.50	0.00	297	0.460	145	11.6	9.6	117.377	F
B	1	85	21	1665	134.50	0.00	747	0.114	88	4.7	3.9	48.522	D
	2	655	164	1915	134.50	0.00	859	0.762	845	79.6	32.0	158.773	F
	3	58	15	1665	23.50	0.00	130	0.447	63	5.8	4.7	147.905	F
C	1	291	73	1665	78.50	0.00	436	0.667	310	23.7	18.8	111.138	F
	2	369	92	1915	78.50	0.00	501	0.736	453	45.1	24.2	140.333	F
	3	229	57	1665	53.50	0.00	297	0.770	307	41.1	21.6	309.967	F
D	1	588	147	1830	134.50	0.00	820	0.717	644	42.2	28.3	75.786	E
	3	103	26	1665	23.50	0.00	130	0.787	133	24.2	16.6	512.561	F

2032 - ND, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Signalised		154.53	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	154.53	F

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2032 - ND	PM	ONE HOUR	17:00	18:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	465	100.000
B		ONE HOUR	✓	456	100.000
C		ONE HOUR	✓	767	100.000
D		ONE HOUR	✓	492	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
		A	B	C	D
From	A	0	92	297	76
	B	68	0	123	265
	C	316	259	0	192
	D	86	314	92	0

Proportions

	To				
		A	B	C	D
From	A	0.00	0.20	0.64	0.16
	B	0.15	0.00	0.27	0.58
	C	0.41	0.34	0.00	0.25
	D	0.17	0.64	0.19	0.00

Vehicle Mix

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

Heavy Vehicle %

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

Average PCU Per Veh

	To				
		A	B	C	D
From	A	1.000	1.100	1.100	1.100
	B	1.100	1.000	1.100	1.100
	C	1.100	1.100	1.000	1.100
	D	1.100	1.100	1.100	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
17:00-17:15	A	350	350
	B	343	343
	C	577	577
	D	370	370
17:15-17:30	A	418	418
	B	410	410
	C	690	690
	D	442	442
17:30-17:45	A	512	512
	B	502	502
	C	844	844
	D	542	542
17:45-18:00	A	512	512
	B	502	502
	C	844	844
	D	542	542
18:00-18:15	A	418	418
	B	410	410
	C	690	690
	D	442	442
18:15-18:30	A	350	350
	B	343	343
	C	577	577
	D	370	370

Results

Results Summary for whole modelled period

Arm	Max DOS	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A	1.01	125.03	45.7	F	661	992
B	0.77	68.44	31.3	E	649	973
C	1.08	200.36	100.5	F	1091	1636
D	1.05	190.74	64.7	F	700	1050

Main Results for each time segment

17:00 - 17:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	1	107	27	1665	50.50	0.00	436	0.246	90	0.0	4.3	57.999	E
	2	347	87	1915	50.50	0.00	501	0.692	288	0.0	14.7	73.944	E
	3	89	22	1665	47.50	0.00	410	0.216	74	0.0	3.6	59.519	E
B	1	144	36	1665	67.50	0.00	582	0.246	123	0.0	5.1	45.978	D
	2	309	77	1915	67.50	0.00	670	0.462	265	0.0	11.0	51.647	D
	3	79	20	1665	17.50	0.00	151	0.526	62	0.0	4.2	99.423	F
C	1	224	56	1665	50.50	0.00	436	0.514	187	0.0	9.2	66.343	E
	2	369	92	1915	50.50	0.00	501	0.736	305	0.0	15.9	76.842	E
	3	302	76	1665	47.50	0.00	410	0.737	248	0.0	13.5	81.058	F
D	1	467	117	1855	67.50	0.00	649	0.719	397	0.0	17.4	63.129	E
	3	107	27	1665	17.50	0.00	151	0.711	82	0.0	6.2	114.488	F

17:15 - 17:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	1	128	32	1665	50.50	0.00	436	0.294	125	4.3	5.2	59.252	E
	2	414	103	1915	50.50	0.00	501	0.826	398	14.7	18.6	85.466	F
	3	106	26	1665	47.50	0.00	410	0.258	103	3.6	4.3	60.578	E
B	1	171	43	1665	67.50	0.00	582	0.294	167	5.1	6.1	47.178	D
	2	369	92	1915	67.50	0.00	670	0.551	360	11.0	13.3	54.822	D
	3	95	24	1665	17.50	0.00	151	0.628	91	4.2	5.3	108.075	F
C	1	268	67	1665	50.50	0.00	436	0.614	260	9.2	11.2	70.967	E
	2	440	110	1915	50.50	0.00	501	0.879	421	15.9	20.7	92.453	F
	3	361	90	1665	47.50	0.00	410	0.881	344	13.5	17.8	98.504	F
D	1	557	139	1855	67.50	0.00	649	0.859	538	17.4	22.4	75.906	E
	3	128	32	1665	17.50	0.00	151	0.849	120	6.2	8.4	139.094	F

17:30 - 17:45

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	1	157	39	1665	50.50	0.00	436	0.360	152	5.2	6.3	61.121	E
	2	507	127	1915	50.50	0.00	501	1.012	463	18.6	29.6	120.159	F
	3	130	32	1665	47.50	0.00	410	0.316	126	4.3	5.3	62.138	E
B	1	210	52	1665	67.50	0.00	582	0.360	204	6.1	7.5	48.969	D
	2	452	113	1915	67.50	0.00	670	0.675	439	13.3	16.7	60.448	E
	3	116	29	1665	17.50	0.00	151	0.769	109	5.3	7.0	124.397	F
C	1	328	82	1665	50.50	0.00	436	0.752	315	11.2	14.4	80.101	F
	2	539	135	1915	50.50	0.00	501	1.076	479	20.7	35.9	136.198	F
	3	442	111	1665	47.50	0.00	410	1.078	390	17.8	30.7	144.101	F
D	1	683	171	1855	67.50	0.00	649	1.052	618	22.4	38.6	115.102	F
	3	157	39	1665	17.50	0.00	151	1.040	137	8.4	13.4	187.963	F

17:45 - 18:00

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	1	157	39	1665	50.50	0.00	436	0.360	157	6.3	6.3	61.155	E
	2	507	127	1915	50.50	0.00	501	1.012	489	29.6	34.0	160.911	F
	3	130	32	1665	47.50	0.00	410	0.316	130	5.3	5.3	62.162	E
B	1	210	52	1665	67.50	0.00	582	0.360	210	7.5	7.5	48.988	D
	2	452	113	1915	67.50	0.00	670	0.675	452	16.7	16.7	60.774	E
	3	116	29	1665	17.50	0.00	151	0.769	116	7.0	7.1	133.519	F
C	1	328	82	1665	50.50	0.00	436	0.752	327	14.4	14.4	81.753	F
	2	539	135	1915	50.50	0.00	501	1.076	497	35.9	46.4	211.963	F
	3	442	111	1665	47.50	0.00	410	1.078	406	30.7	39.7	223.512	F
D	1	683	171	1855	67.50	0.00	649	1.052	643	38.6	48.5	173.660	F
	3	157	39	1665	17.50	0.00	151	1.040	146	13.4	16.2	265.021	F

18:00 - 18:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	1	128	32	1665	50.50	0.00	436	0.294	133	6.3	5.2	59.291	E
	2	414	103	1915	50.50	0.00	501	0.826	464	34.0	21.4	129.337	F
	3	106	26	1665	47.50	0.00	410	0.258	110	5.3	4.3	60.607	E
B	1	171	43	1665	67.50	0.00	582	0.294	177	7.5	6.1	47.200	D
	2	369	92	1915	67.50	0.00	670	0.551	383	16.7	13.3	55.042	E
	3	95	24	1665	17.50	0.00	151	0.628	102	7.1	5.4	115.670	F
C	1	268	67	1665	50.50	0.00	436	0.614	280	14.4	11.3	71.930	E
	2	440	110	1915	50.50	0.00	501	0.879	489	46.4	34.1	235.876	F
	3	361	90	1665	47.50	0.00	410	0.881	399	39.7	30.2	252.226	F
D	1	557	139	1855	67.50	0.00	649	0.859	633	48.5	29.5	166.484	F
	3	128	32	1665	17.50	0.00	151	0.849	143	16.2	12.5	276.626	F

18:15 - 18:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	1	107	27	1665	50.50	0.00	436	0.246	111	5.2	4.3	58.027	E
	2	347	87	1915	50.50	0.00	501	0.692	373	21.4	14.8	76.282	E
	3	89	22	1665	47.50	0.00	410	0.216	92	4.3	3.6	59.541	E
B	1	144	36	1665	67.50	0.00	582	0.246	148	6.1	5.1	45.994	D
	2	309	77	1915	67.50	0.00	670	0.462	318	13.3	11.0	51.756	D
	3	79	20	1665	17.50	0.00	151	0.526	84	5.4	4.3	103.003	F
C	1	224	56	1665	50.50	0.00	436	0.514	232	11.3	9.2	66.762	E
	2	369	92	1915	50.50	0.00	501	0.736	441	34.1	16.1	104.259	F
	3	302	76	1665	47.50	0.00	410	0.737	368	30.2	13.8	118.273	F
D	1	467	117	1855	67.50	0.00	649	0.719	515	29.5	17.6	67.324	E
	3	107	27	1665	17.50	0.00	151	0.711	131	12.5	6.6	155.272	F

2032 - WD, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Signalised		369.86	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	369.86	F

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2032 - WD	AM	ONE HOUR	08:00	09:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	512	100.000
B		ONE HOUR	✓	749	100.000
C		ONE HOUR	✓	826	100.000
D		ONE HOUR	✓	540	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
		A	B	C	D
From	A	0	52	343	117
	B	60	0	91	598
	C	341	216	0	269
	D	86	360	94	0

Proportions

	To				
		A	B	C	D
From	A	0.00	0.10	0.67	0.23
	B	0.08	0.00	0.12	0.80
	C	0.41	0.26	0.00	0.33
	D	0.16	0.67	0.17	0.00

Vehicle Mix

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

Heavy Vehicle %

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

Average PCU Per Veh

	To				
		A	B	C	D
From	A	1.000	1.100	1.100	1.100
	B	1.100	1.000	1.100	1.100
	C	1.100	1.100	1.000	1.100
	D	1.100	1.100	1.100	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
08:00-08:15	A	385	385
	B	564	564
	C	622	622
	D	407	407
08:15-08:30	A	460	460
	B	673	673
	C	743	743
	D	485	485
08:30-08:45	A	564	564
	B	825	825
	C	909	909
	D	595	595
08:45-09:00	A	564	564
	B	825	825
	C	909	909
	D	595	595
09:00-09:15	A	460	460
	B	673	673
	C	743	743
	D	485	485
09:15-09:30	A	385	385
	B	564	564
	C	622	622
	D	407	407

Results

Results Summary for whole modelled period

Arm	Max DOS	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A	1.20	383.81	107.3	F	728	1092
B	1.18	373.78	142.8	F	1065	1598
C	1.24	489.40	200.4	F	1175	1762
D	1.18	168.34	67.5	F	768	1152

Main Results for each time segment

08:00 - 08:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	1	61	15	1665	76.50	0.00	425	0.143	46	0.0	3.8	87.331	F
	2	400	100	1915	76.50	0.00	488	0.820	292	0.0	27.0	122.637	F
	3	137	34	1665	53.50	0.00	297	0.460	98	0.0	9.6	116.847	F
B	1	106	27	1665	135.50	0.00	752	0.141	87	0.0	4.9	48.690	D
	2	698	174	1915	135.50	0.00	865	0.807	562	0.0	34.0	80.988	F
	3	70	18	1665	24.50	0.00	136	0.515	47	0.0	5.7	148.608	F
C	1	314	78	1665	76.50	0.00	425	0.739	231	0.0	20.8	116.316	F
	2	398	99	1915	76.50	0.00	488	0.815	291	0.0	26.8	122.092	F
	3	252	63	1665	53.50	0.00	297	0.849	173	0.0	19.7	148.237	F
D	1	520	130	1861	135.50	0.00	841	0.619	423	0.0	24.4	67.038	E
	3	110	27	1665	24.50	0.00	136	0.807	70	0.0	10.0	178.166	F

08:15 - 08:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	1	72	18	1665	76.50	0.00	425	0.171	70	3.8	4.5	88.189	F
	2	478	119	1915	76.50	0.00	488	0.979	438	27.0	37.1	153.896	F
	3	163	41	1665	53.50	0.00	297	0.549	155	9.6	11.6	121.587	F
B	1	127	32	1665	135.50	0.00	752	0.169	123	4.9	5.8	49.457	D
	2	833	208	1915	135.50	0.00	865	0.963	785	34.0	46.0	107.300	F
	3	84	21	1665	24.50	0.00	136	0.615	78	5.7	7.0	157.834	F
C	1	375	94	1665	76.50	0.00	425	0.883	352	20.8	26.6	135.460	F
	2	475	119	1915	76.50	0.00	488	0.973	436	26.8	36.5	152.313	F
	3	301	75	1665	53.50	0.00	297	1.014	268	19.7	27.9	189.334	F
D	1	621	155	1861	135.50	0.00	841	0.739	600	24.4	29.7	75.249	E
	3	131	33	1665	24.50	0.00	136	0.963	115	10.0	13.9	222.997	F

08:30 - 08:45

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	1	89	22	1665	76.50	0.00	425	0.209	85	4.5	5.5	89.412	F
	2	585	146	1915	76.50	0.00	488	1.199	482	37.1	62.8	218.161	F
	3	200	50	1665	53.50	0.00	297	0.672	188	11.6	14.5	129.972	F
B	1	155	39	1665	135.50	0.00	752	0.206	150	5.8	7.1	50.559	D
	2	1021	255	1915	135.50	0.00	865	1.180	855	46.0	87.4	169.913	F
	3	102	26	1665	24.50	0.00	136	0.753	94	7.0	9.1	174.549	F
C	1	459	115	1665	76.50	0.00	425	1.081	401	26.6	41.1	179.878	F
	2	582	145	1915	76.50	0.00	488	1.192	481	36.5	61.7	214.980	F
	3	369	92	1665	53.50	0.00	297	1.241	295	27.9	46.4	266.433	F
D	1	761	190	1861	135.50	0.00	841	0.905	723	29.7	39.3	95.023	F
	3	160	40	1665	24.50	0.00	136	1.180	131	13.9	21.3	288.931	F

08:45 - 09:00

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	1	89	22	1665	76.50	0.00	425	0.209	89	5.5	5.5	89.419	F
	2	585	146	1915	76.50	0.00	488	1.199	488	62.8	87.2	369.379	F
	3	200	50	1665	53.50	0.00	297	0.672	200	14.5	14.6	131.304	F
B	1	155	39	1665	135.50	0.00	752	0.206	155	7.1	7.1	50.561	D
	2	1021	255	1915	135.50	0.00	865	1.180	864	87.4	126.5	308.253	F
	3	102	26	1665	24.50	0.00	136	0.753	102	9.1	9.2	183.645	F
C	1	459	115	1665	76.50	0.00	425	1.081	421	41.1	50.6	260.397	F
	2	582	145	1915	76.50	0.00	488	1.192	488	61.7	85.3	362.014	F
	3	369	92	1665	53.50	0.00	297	1.241	296	46.4	64.5	443.837	F
D	1	761	190	1861	135.50	0.00	841	0.905	759	39.3	39.7	100.539	F
	3	160	40	1665	24.50	0.00	136	1.180	135	21.3	27.7	438.929	F

09:00 - 09:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	1	72	18	1665	76.50	0.00	425	0.171	77	5.5	4.5	88.197	F
	2	478	119	1915	76.50	0.00	488	0.979	498	87.2	82.3	517.720	F
	3	163	41	1665	53.50	0.00	297	0.549	175	14.6	11.6	122.616	F
B	1	127	32	1665	135.50	0.00	752	0.169	132	7.1	5.8	49.460	D
	2	833	208	1915	135.50	0.00	865	0.963	858	126.5	120.2	444.000	F
	3	84	21	1665	24.50	0.00	136	0.615	92	9.2	7.1	165.868	F
C	1	375	94	1665	76.50	0.00	425	0.883	414	50.6	40.9	299.750	F
	2	475	119	1915	76.50	0.00	488	0.973	483	85.3	83.4	518.712	F
	3	301	75	1665	53.50	0.00	297	1.014	295	64.5	65.9	679.315	F
D	1	621	155	1861	135.50	0.00	841	0.739	661	39.7	29.8	76.908	E
	3	131	33	1665	24.50	0.00	136	0.963	132	27.7	27.6	602.178	F

09:15 - 09:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	1	61	15	1665	76.50	0.00	425	0.143	64	4.5	3.8	87.338	F
	2	400	100	1915	76.50	0.00	488	0.820	504	82.3	56.3	473.762	F
	3	137	34	1665	53.50	0.00	297	0.460	145	11.6	9.6	117.377	F
B	1	106	27	1665	135.50	0.00	752	0.141	110	5.8	4.9	48.693	D
	2	698	174	1915	135.50	0.00	865	0.807	889	120.2	72.5	379.328	F
	3	70	18	1665	24.50	0.00	136	0.515	75	7.1	5.7	152.564	F
C	1	314	78	1665	76.50	0.00	425	0.739	393	40.9	21.1	155.813	F
	2	398	99	1915	76.50	0.00	488	0.815	505	83.4	56.7	483.170	F
	3	252	63	1665	53.50	0.00	297	0.849	293	65.9	55.7	715.166	F
D	1	520	130	1861	135.50	0.00	841	0.619	542	29.8	24.5	67.367	E
	3	110	27	1665	24.50	0.00	136	0.807	139	27.6	20.3	595.761	F

2032 - WD, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Signalised		307.06	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	307.06	F

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2032 - WD	PM	ONE HOUR	17:00	18:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	516	100.000
B		ONE HOUR	✓	547	100.000
C		ONE HOUR	✓	858	100.000
D		ONE HOUR	✓	539	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
		A	B	C	D
From	A	0	101	339	76
	B	80	0	158	309
	C	374	285	0	199
	D	86	348	105	0

Proportions

	To				
		A	B	C	D
From	A	0.00	0.20	0.66	0.15
	B	0.15	0.00	0.29	0.56
	C	0.44	0.33	0.00	0.23
	D	0.16	0.65	0.19	0.00

Vehicle Mix

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

Heavy Vehicle %

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

Average PCU Per Veh

	To				
		A	B	C	D
From	A	1.000	1.100	1.100	1.100
	B	1.100	1.000	1.100	1.100
	C	1.100	1.100	1.000	1.100
	D	1.100	1.100	1.100	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
17:00-17:15	A	388	388
	B	412	412
	C	646	646
	D	406	406
17:15-17:30	A	464	464
	B	492	492
	C	771	771
	D	485	485
17:30-17:45	A	568	568
	B	602	602
	C	945	945
	D	593	593
17:45-18:00	A	568	568
	B	602	602
	C	945	945
	D	593	593
18:00-18:15	A	464	464
	B	492	492
	C	771	771
	D	485	485
18:15-18:30	A	388	388
	B	412	412
	C	646	646
	D	406	406

Results

Results Summary for whole modelled period

Arm	Max DOS	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A	1.07	205.83	78.2	F	734	1101
B	0.89	113.81	59.4	F	778	1167
C	1.18	402.70	181.0	F	1220	1831
D	1.17	447.84	122.2	F	767	1150

Main Results for each time segment

17:00 - 17:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	1	118	29	1665	84.50	0.00	469	0.251	89	0.0	7.1	84.981	F
	2	396	99	1915	84.50	0.00	539	0.733	296	0.0	24.9	108.377	F
	3	89	22	1665	74.50	0.00	414	0.214	66	0.0	5.6	91.074	F
B	1	184	46	1665	103.50	0.00	575	0.321	144	0.0	10.2	74.300	E
	2	361	90	1915	103.50	0.00	661	0.546	280	0.0	20.1	83.476	F
	3	93	23	1665	27.50	0.00	153	0.612	63	0.0	7.6	151.895	F
C	1	232	58	1665	84.50	0.00	469	0.495	175	0.0	14.2	94.754	F
	2	436	109	1915	84.50	0.00	539	0.809	324	0.0	28.1	115.487	F
	3	333	83	1665	74.50	0.00	414	0.804	242	0.0	22.7	124.455	F
D	1	506	127	1860	103.50	0.00	642	0.789	389	0.0	29.4	100.388	F
	3	123	31	1665	27.50	0.00	153	0.803	79	0.0	10.9	172.627	F

17:15 - 17:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	1	141	35	1665	84.50	0.00	469	0.300	135	7.1	8.5	86.703	F
	2	472	118	1915	84.50	0.00	539	0.876	446	24.9	31.5	125.151	F
	3	106	26	1665	74.50	0.00	414	0.256	102	5.6	6.7	92.473	F
B	1	220	55	1665	103.50	0.00	575	0.383	212	10.2	12.2	76.705	E
	2	431	108	1915	103.50	0.00	661	0.652	414	20.1	24.3	89.488	F
	3	111	28	1665	27.50	0.00	153	0.730	104	7.6	9.5	166.310	F
C	1	277	69	1665	84.50	0.00	469	0.591	266	14.2	17.1	99.926	F
	2	521	130	1915	84.50	0.00	539	0.966	481	28.1	38.1	143.949	F
	3	397	99	1665	74.50	0.00	414	0.960	365	22.7	30.8	154.243	F
D	1	605	151	1860	103.50	0.00	642	0.943	567	29.4	38.9	124.488	F
	3	146	37	1665	27.50	0.00	153	0.958	130	10.9	15.0	214.331	F

17:30 - 17:45

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	1	172	43	1665	84.50	0.00	469	0.367	165	8.5	10.5	89.249	F
	2	579	145	1915	84.50	0.00	539	1.073	510	31.5	48.7	167.202	F
	3	130	32	1665	74.50	0.00	414	0.314	124	6.7	8.2	94.511	F
B	1	270	67	1665	103.50	0.00	575	0.469	258	12.2	15.0	80.389	F
	2	527	132	1915	103.50	0.00	661	0.798	502	24.3	30.7	101.288	F
	3	137	34	1665	27.50	0.00	153	0.894	122	9.5	13.1	195.547	F
C	1	340	85	1665	84.50	0.00	469	0.724	322	17.1	21.5	109.327	F
	2	638	160	1915	84.50	0.00	539	1.183	531	38.1	64.9	204.918	F
	3	486	122	1665	74.50	0.00	414	1.176	405	30.8	51.1	214.405	F
D	1	741	185	1860	103.50	0.00	642	1.154	628	38.9	67.1	180.227	F
	3	179	45	1665	27.50	0.00	153	1.174	147	15.0	23.1	278.300	F

17:45 - 18:00

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	1	172	43	1665	84.50	0.00	469	0.367	172	10.5	10.5	89.280	F
	2	579	145	1915	84.50	0.00	539	1.073	535	48.7	59.5	239.958	F
	3	130	32	1665	74.50	0.00	414	0.314	130	8.2	8.2	94.535	F
B	1	270	67	1665	103.50	0.00	575	0.469	270	15.0	15.0	80.444	F
	2	527	132	1915	103.50	0.00	661	0.798	527	30.7	30.8	102.780	F
	3	137	34	1665	27.50	0.00	153	0.894	134	13.1	13.6	222.307	F
C	1	340	85	1665	84.50	0.00	469	0.724	339	21.5	21.5	110.387	F
	2	638	160	1915	84.50	0.00	539	1.183	539	64.9	89.8	346.532	F
	3	486	122	1665	74.50	0.00	414	1.176	413	51.1	69.6	352.762	F
D	1	741	185	1860	103.50	0.00	642	1.154	641	67.1	92.2	303.304	F
	3	179	45	1665	27.50	0.00	153	1.174	151	23.1	30.1	423.749	F

18:00 - 18:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	1	141	35	1665	84.50	0.00	469	0.300	149	10.5	8.5	86.739	F
	2	472	118	1915	84.50	0.00	539	0.876	527	59.5	45.9	266.715	F
	3	106	26	1665	74.50	0.00	414	0.256	112	8.2	6.7	92.501	F
B	1	220	55	1665	103.50	0.00	575	0.383	231	15.0	12.2	76.762	E
	2	431	108	1915	103.50	0.00	661	0.652	456	30.8	24.3	90.163	F
	3	111	28	1665	27.50	0.00	153	0.730	126	13.6	10.0	189.388	F
C	1	277	69	1665	84.50	0.00	469	0.591	295	21.5	17.2	100.583	F
	2	521	130	1915	84.50	0.00	539	0.966	533	89.8	86.8	493.220	F
	3	397	99	1665	74.50	0.00	414	0.960	407	69.6	67.0	494.870	F
D	1	605	151	1860	103.50	0.00	642	0.943	634	92.2	84.8	416.964	F
	3	146	37	1665	27.50	0.00	153	0.958	147	30.1	30.0	575.463	F

18:15 - 18:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	1	118	29	1665	84.50	0.00	469	0.251	123	8.5	7.1	85.007	F
	2	396	99	1915	84.50	0.00	539	0.733	479	45.9	25.1	129.683	F
	3	89	22	1665	74.50	0.00	414	0.214	93	6.7	5.6	91.096	F
B	1	184	46	1665	103.50	0.00	575	0.321	192	12.2	10.2	74.337	E
	2	361	90	1915	103.50	0.00	661	0.546	377	24.3	20.1	83.727	F
	3	93	23	1665	27.50	0.00	153	0.612	102	10.0	7.8	159.883	F
C	1	232	58	1665	84.50	0.00	469	0.495	244	17.2	14.2	95.057	F
	2	436	109	1915	84.50	0.00	539	0.809	558	86.8	56.5	443.519	F
	3	333	83	1665	74.50	0.00	414	0.804	427	67.0	43.3	441.303	F
D	1	506	127	1860	103.50	0.00	642	0.789	663	84.8	45.7	321.860	F
	3	123	31	1665	27.50	0.00	153	0.803	157	30.0	21.4	564.387	F

2037 - ND , AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Signalised		307.63	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	307.63	F

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2037 - ND	AM	ONE HOUR	08:00	09:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	507	100.000
B		ONE HOUR	✓	700	100.000
C		ONE HOUR	✓	773	100.000
D		ONE HOUR	✓	605	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
		A	B	C	D
From	A	0	52	336	119
	B	51	0	74	575
	C	321	199	0	253
	D	158	357	90	0

Proportions

	To				
		A	B	C	D
From	A	0.00	0.10	0.66	0.23
	B	0.07	0.00	0.11	0.82
	C	0.42	0.26	0.00	0.33
	D	0.26	0.59	0.15	0.00

Vehicle Mix

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

Heavy Vehicle %

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

Average PCU Per Veh

	To				
		A	B	C	D
From	A	1.000	1.100	1.100	1.100
	B	1.100	1.000	1.100	1.100
	C	1.100	1.100	1.000	1.100
	D	1.100	1.100	1.100	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
08:00-08:15	A	382	382
	B	527	527
	C	582	582
	D	455	455
08:15-08:30	A	456	456
	B	629	629
	C	695	695
	D	544	544
08:30-08:45	A	558	558
	B	771	771
	C	851	851
	D	666	666
08:45-09:00	A	558	558
	B	771	771
	C	851	851
	D	666	666
09:00-09:15	A	456	456
	B	629	629
	C	695	695
	D	544	544
09:15-09:30	A	382	382
	B	527	527
	C	582	582
	D	455	455

Results

Results Summary for whole modelled period

Arm	Max DOS	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A	1.16	336.32	97.5	F	721	1082
B	1.14	318.03	121.8	F	996	1493
C	1.14	317.05	150.4	F	1099	1649
D	1.13	259.53	99.3	F	860	1291

Main Results for each time segment

08:00 - 08:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	1	61	15	1665	77.50	0.00	430	0.141	46	0.0	3.8	86.534	F
	2	392	98	1915	77.50	0.00	495	0.793	288	0.0	26.0	118.931	F
	3	139	35	1665	53.50	0.00	297	0.468	100	0.0	9.8	117.214	F
B	1	86	22	1665	134.50	0.00	747	0.116	70	0.0	4.0	48.563	D
	2	671	168	1915	134.50	0.00	859	0.782	541	0.0	32.6	79.157	E
	3	60	15	1665	24.50	0.00	136	0.438	40	0.0	4.8	143.762	F
C	1	295	74	1665	77.50	0.00	430	0.686	218	0.0	19.2	111.215	F
	2	375	94	1915	77.50	0.00	495	0.757	276	0.0	24.6	115.536	F
	3	232	58	1665	53.50	0.00	297	0.782	162	0.0	17.5	139.750	F
D	1	601	150	1831	134.50	0.00	821	0.732	485	0.0	28.9	75.284	E
	3	105	26	1665	24.50	0.00	136	0.772	68	0.0	9.4	173.446	F

08:15 - 08:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	1	72	18	1665	77.50	0.00	430	0.168	70	3.8	4.5	87.379	F
	2	468	117	1915	77.50	0.00	495	0.946	434	26.0	34.6	144.666	F
	3	166	41	1665	53.50	0.00	297	0.558	158	9.8	11.8	122.133	F
B	1	103	26	1665	134.50	0.00	747	0.138	100	4.0	4.8	49.173	D
	2	801	200	1915	134.50	0.00	859	0.933	761	32.6	42.7	100.842	F
	3	71	18	1665	24.50	0.00	136	0.523	67	4.8	5.8	149.884	F
C	1	353	88	1665	77.50	0.00	430	0.820	334	19.2	23.9	124.922	F
	2	447	112	1915	77.50	0.00	495	0.904	419	24.6	31.6	135.641	F
	3	277	69	1665	53.50	0.00	297	0.934	254	17.5	23.3	168.065	F
D	1	718	179	1831	134.50	0.00	821	0.874	688	28.9	36.4	90.879	F
	3	125	31	1665	24.50	0.00	136	0.922	112	9.4	12.7	210.825	F

08:30 - 08:45

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	1	89	22	1665	77.50	0.00	430	0.206	85	4.5	5.5	88.584	F
	2	573	143	1915	77.50	0.00	495	1.159	483	34.6	57.2	200.471	F
	3	203	51	1665	53.50	0.00	297	0.684	191	11.8	14.8	130.928	F
B	1	126	32	1665	134.50	0.00	747	0.169	122	4.8	5.8	50.043	D
	2	981	245	1915	134.50	0.00	859	1.143	841	42.7	77.7	155.675	F
	3	87	22	1665	24.50	0.00	136	0.640	81	5.8	7.3	160.224	F
C	1	432	108	1665	77.50	0.00	430	1.004	387	23.9	35.0	162.461	F
	2	548	137	1915	77.50	0.00	495	1.107	474	31.6	50.1	182.492	F
	3	340	85	1665	53.50	0.00	297	1.144	286	23.3	36.8	222.710	F
D	1	879	220	1831	134.50	0.00	821	1.071	786	36.4	59.7	133.856	F
	3	154	38	1665	24.50	0.00	136	1.129	128	12.7	19.2	268.968	F

08:45 - 09:00

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	1	89	22	1665	77.50	0.00	430	0.206	89	5.5	5.5	88.591	F
	2	573	143	1915	77.50	0.00	495	1.159	494	57.2	77.2	327.570	F
	3	203	51	1665	53.50	0.00	297	0.684	203	14.8	14.8	132.422	F
B	1	126	32	1665	134.50	0.00	747	0.169	126	5.8	5.8	50.045	D
	2	981	245	1915	134.50	0.00	859	1.143	858	77.7	108.6	270.397	F
	3	87	22	1665	24.50	0.00	136	0.640	87	7.3	7.4	163.712	F
C	1	432	108	1665	77.50	0.00	430	1.004	417	35.0	38.6	202.196	F
	2	548	137	1915	77.50	0.00	495	1.107	492	50.1	64.0	277.410	F
	3	340	85	1665	53.50	0.00	297	1.144	295	36.8	47.8	343.946	F
D	1	879	220	1831	134.50	0.00	821	1.071	817	59.7	75.2	201.591	F
	3	154	38	1665	24.50	0.00	136	1.129	134	19.2	24.1	392.611	F

09:00 - 09:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	1	72	18	1665	77.50	0.00	430	0.168	77	5.5	4.5	87.388	F
	2	468	117	1915	77.50	0.00	495	0.946	488	77.2	72.2	450.310	F
	3	166	41	1665	53.50	0.00	297	0.558	178	14.8	11.8	123.259	F
B	1	103	26	1665	134.50	0.00	747	0.138	107	5.8	4.8	49.175	D
	2	801	200	1915	134.50	0.00	859	0.933	851	108.6	96.3	367.247	F
	3	71	18	1665	24.50	0.00	136	0.523	77	7.4	5.8	153.300	F
C	1	353	88	1665	77.50	0.00	430	0.820	398	38.6	27.2	172.437	F
	2	447	112	1915	77.50	0.00	495	0.904	485	64.0	54.5	344.317	F
	3	277	69	1665	53.50	0.00	297	0.934	290	47.8	44.6	456.917	F
D	1	718	179	1831	134.50	0.00	821	0.874	807	75.2	52.9	217.947	F
	3	125	31	1665	24.50	0.00	136	0.922	134	24.1	21.9	497.469	F

09:15 - 09:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	1	61	15	1665	77.50	0.00	430	0.141	64	4.5	3.8	86.541	F
	2	392	98	1915	77.50	0.00	495	0.793	512	72.2	42.1	368.528	F
	3	139	35	1665	53.50	0.00	297	0.468	147	11.8	9.8	117.785	F
B	1	86	22	1665	134.50	0.00	747	0.116	89	4.8	4.0	48.564	D
	2	671	168	1915	134.50	0.00	859	0.782	883	96.3	43.2	249.443	F
	3	60	15	1665	24.50	0.00	136	0.438	64	5.8	4.8	145.722	F
C	1	295	74	1665	77.50	0.00	430	0.686	327	27.2	19.3	114.104	F
	2	375	94	1915	77.50	0.00	495	0.757	492	54.5	25.1	198.552	F
	3	232	58	1665	53.50	0.00	297	0.782	307	44.6	25.9	368.461	F
D	1	601	150	1831	134.50	0.00	821	0.732	697	52.9	29.0	86.790	F
	3	105	26	1665	24.50	0.00	136	0.772	138	21.9	13.5	395.605	F

2037 - ND , PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Signalised		223.42	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	223.42	F

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2037 - ND	PM	ONE HOUR	17:00	18:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	474	100.000
B		ONE HOUR	✓	469	100.000
C		ONE HOUR	✓	824	100.000
D		ONE HOUR	✓	503	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
		A	B	C	D
From	A	0	94	303	77
	B	70	0	128	271
	C	367	262	0	195
	D	88	321	94	0

Proportions

	To				
		A	B	C	D
From	A	0.00	0.20	0.64	0.16
	B	0.15	0.00	0.27	0.58
	C	0.45	0.32	0.00	0.24
	D	0.17	0.64	0.19	0.00

Vehicle Mix

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

Heavy Vehicle %

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

Average PCU Per Veh

	To				
		A	B	C	D
From	A	1.000	1.100	1.100	1.100
	B	1.100	1.000	1.100	1.100
	C	1.100	1.100	1.000	1.100
	D	1.100	1.100	1.100	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
17:00-17:15	A	357	357
	B	353	353
	C	620	620
	D	379	379
17:15-17:30	A	426	426
	B	422	422
	C	741	741
	D	452	452
17:30-17:45	A	522	522
	B	516	516
	C	907	907
	D	554	554
17:45-18:00	A	522	522
	B	516	516
	C	907	907
	D	554	554
18:00-18:15	A	426	426
	B	422	422
	C	741	741
	D	452	452
18:15-18:30	A	357	357
	B	353	353
	C	620	620
	D	379	379

Results

Results Summary for whole modelled period

Arm	Max DOS	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A	0.92	121.67	53.6	F	674	1011
B	0.81	102.84	49.1	F	667	1001
C	1.14	308.88	150.8	F	1172	1758
D	1.09	291.75	91.7	F	715	1073

Main Results for each time segment

17:00 - 17:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	1	110	27	1665	88.50	0.00	491	0.223	84	0.0	6.5	81.192	F
	2	354	88	1915	88.50	0.00	565	0.626	268	0.0	21.4	98.100	F
	3	90	22	1665	70.50	0.00	391	0.230	67	0.0	5.8	94.584	F
B	1	149	37	1665	104.50	0.00	580	0.258	117	0.0	8.2	71.387	E
	2	316	79	1915	104.50	0.00	667	0.474	246	0.0	17.5	79.447	E
	3	82	20	1665	26.50	0.00	147	0.555	55	0.0	6.6	148.841	F
C	1	228	57	1665	88.50	0.00	491	0.463	173	0.0	13.6	90.421	F
	2	428	107	1915	88.50	0.00	565	0.758	322	0.0	26.6	107.606	F
	3	306	76	1665	70.50	0.00	391	0.781	221	0.0	21.1	125.100	F
D	1	477	119	1855	104.50	0.00	646	0.739	368	0.0	27.2	95.172	F
	3	110	27	1665	26.50	0.00	147	0.746	72	0.0	9.5	166.818	F

17:15 - 17:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	1	131	33	1665	88.50	0.00	491	0.267	126	6.5	7.8	82.668	F
	2	422	106	1915	88.50	0.00	565	0.747	403	21.4	26.2	106.982	F
	3	107	27	1665	70.50	0.00	391	0.274	103	5.8	6.9	96.107	F
B	1	178	45	1665	104.50	0.00	580	0.307	172	8.2	9.8	73.150	E
	2	378	94	1915	104.50	0.00	667	0.566	363	17.5	21.0	83.890	F
	3	98	24	1665	26.50	0.00	147	0.663	91	6.6	8.2	159.711	F
C	1	272	68	1665	88.50	0.00	491	0.553	261	13.6	16.4	94.913	F
	2	511	128	1915	88.50	0.00	565	0.905	481	26.6	34.2	127.221	F
	3	365	91	1665	70.50	0.00	391	0.933	338	21.1	28.0	150.980	F
D	1	570	142	1855	104.50	0.00	646	0.882	541	27.2	34.5	112.051	F
	3	131	33	1665	26.50	0.00	147	0.890	119	9.5	12.6	197.888	F

17:30 - 17:45

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	1	160	40	1665	88.50	0.00	491	0.327	153	7.8	9.5	84.828	F
	2	517	129	1915	88.50	0.00	565	0.915	482	26.2	34.9	128.857	F
	3	131	33	1665	70.50	0.00	391	0.336	125	6.9	8.5	98.341	F
B	1	218	55	1665	104.50	0.00	580	0.377	209	9.8	12.0	75.770	E
	2	462	116	1915	104.50	0.00	667	0.693	442	21.0	26.1	91.604	F
	3	119	30	1665	26.50	0.00	147	0.812	109	8.2	10.8	180.480	F
C	1	333	83	1665	88.50	0.00	491	0.677	317	16.4	20.5	102.695	F
	2	626	157	1915	88.50	0.00	565	1.109	543	34.2	55.0	174.313	F
	3	447	112	1665	70.50	0.00	391	1.143	379	28.0	45.1	204.743	F
D	1	698	174	1855	104.50	0.00	646	1.080	616	34.5	54.9	155.444	F
	3	160	40	1665	26.50	0.00	147	1.091	135	12.6	18.9	250.405	F

17:45 - 18:00

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	1	160	40	1665	88.50	0.00	491	0.327	160	9.5	9.5	84.847	F
	2	517	129	1915	88.50	0.00	565	0.915	514	34.9	35.6	139.017	F
	3	131	33	1665	70.50	0.00	391	0.336	131	8.5	8.5	98.374	F
B	1	218	55	1665	104.50	0.00	580	0.377	218	12.0	12.0	75.793	E
	2	462	116	1915	104.50	0.00	667	0.693	462	26.1	26.1	92.006	F
	3	119	30	1665	26.50	0.00	147	0.812	119	10.8	11.0	194.244	F
C	1	333	83	1665	88.50	0.00	491	0.677	333	20.5	20.5	103.280	F
	2	626	157	1915	88.50	0.00	565	1.109	563	55.0	70.9	269.028	F
	3	447	112	1665	70.50	0.00	391	1.143	390	45.1	59.4	323.124	F
D	1	698	174	1855	104.50	0.00	646	1.080	643	54.9	68.7	231.064	F
	3	160	40	1665	26.50	0.00	147	1.091	144	18.9	23.0	352.613	F

18:00 - 18:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	1	131	33	1665	88.50	0.00	491	0.267	138	9.5	7.8	82.690	F
	2	422	106	1915	88.50	0.00	565	0.747	459	35.6	26.4	110.874	F
	3	107	27	1665	70.50	0.00	391	0.274	114	8.5	6.9	96.146	F
B	1	178	45	1665	104.50	0.00	580	0.307	187	12.0	9.8	73.176	E
	2	378	94	1915	104.50	0.00	667	0.566	398	26.1	21.0	84.147	F
	3	98	24	1665	26.50	0.00	147	0.663	108	11.0	8.4	171.107	F
C	1	272	68	1665	88.50	0.00	491	0.553	288	20.5	16.4	95.322	F
	2	511	128	1915	88.50	0.00	565	0.905	555	70.9	59.9	335.307	F
	3	365	91	1665	70.50	0.00	391	0.933	384	59.4	54.7	430.816	F
D	1	570	142	1855	104.50	0.00	646	0.882	634	68.7	52.7	262.812	F
	3	131	33	1665	26.50	0.00	147	0.890	140	23.0	20.8	417.637	F

18:15 - 18:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	1	110	27	1665	88.50	0.00	491	0.223	115	7.8	6.5	81.209	F
	2	354	88	1915	88.50	0.00	565	0.626	373	26.4	21.5	98.871	F
	3	90	22	1665	70.50	0.00	391	0.230	94	6.9	5.8	94.613	F
B	1	149	37	1665	104.50	0.00	580	0.258	156	9.8	8.2	71.406	E
	2	316	79	1915	104.50	0.00	667	0.474	330	21.0	17.5	79.570	E
	3	82	20	1665	26.50	0.00	147	0.555	88	8.4	6.7	153.769	F
C	1	228	57	1665	88.50	0.00	491	0.463	239	16.4	13.6	90.625	F
	2	428	107	1915	88.50	0.00	565	0.758	560	59.9	27.1	187.957	F
	3	306	76	1665	70.50	0.00	391	0.781	405	54.7	29.9	331.702	F
D	1	477	119	1855	104.50	0.00	646	0.739	578	52.7	27.4	120.368	F
	3	110	27	1665	26.50	0.00	147	0.746	150	20.8	10.8	301.982	F

2037 - WD , AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Signalised		445.92	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	445.92	F

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2037 - WD	AM	ONE HOUR	08:00	09:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	521	100.000
B		ONE HOUR	✓	764	100.000
C		ONE HOUR	✓	838	100.000
D		ONE HOUR	✓	622	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
		A	B	C	D
From	A	0	54	348	119
	B	61	0	92	611
	C	346	219	0	273
	D	158	368	96	0

Proportions

	To				
		A	B	C	D
From	A	0.00	0.10	0.67	0.23
	B	0.08	0.00	0.12	0.80
	C	0.41	0.26	0.00	0.33
	D	0.25	0.59	0.15	0.00

Vehicle Mix

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

Heavy Vehicle %

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

Average PCU Per Veh

	To				
		A	B	C	D
From	A	1.000	1.100	1.100	1.100
	B	1.100	1.000	1.100	1.100
	C	1.100	1.100	1.000	1.100
	D	1.100	1.100	1.100	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
08:00-08:15	A	392	392
	B	575	575
	C	631	631
	D	468	468
08:15-08:30	A	468	468
	B	687	687
	C	753	753
	D	559	559
08:30-08:45	A	574	574
	B	841	841
	C	923	923
	D	685	685
08:45-09:00	A	574	574
	B	841	841
	C	923	923
	D	685	685
09:00-09:15	A	468	468
	B	687	687
	C	753	753
	D	559	559
09:15-09:30	A	392	392
	B	575	575
	C	631	631
	D	468	468

Results

Results Summary for whole modelled period

Arm	Max DOS	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A	1.23	465.74	116.4	F	741	1112
B	1.21	421.97	159.7	F	1087	1630
C	1.23	540.80	211.3	F	1192	1788
D	1.20	330.91	113.2	F	885	1327

Main Results for each time segment

08:00 - 08:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	1	63	16	1665	75.50	0.00	419	0.150	47	0.0	3.9	88.303	F
	2	406	102	1915	75.50	0.00	482	0.843	295	0.0	27.8	126.191	F
	3	139	35	1665	55.50	0.00	308	0.451	100	0.0	9.7	114.790	F
B	1	107	27	1665	134.50	0.00	747	0.144	88	0.0	5.0	49.329	D
	2	713	178	1915	134.50	0.00	859	0.830	572	0.0	35.2	84.176	F
	3	71	18	1665	24.50	0.00	136	0.523	48	0.0	5.8	149.202	F
C	1	319	80	1665	75.50	0.00	419	0.760	233	0.0	21.3	119.033	F
	2	404	101	1915	75.50	0.00	482	0.838	293	0.0	27.6	125.579	F
	3	256	64	1665	55.50	0.00	308	0.830	178	0.0	19.5	143.704	F
D	1	614	153	1832	134.50	0.00	822	0.747	495	0.0	29.6	76.487	E
	3	112	28	1665	24.50	0.00	136	0.824	71	0.0	10.3	180.674	F

08:15 - 08:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	1	75	19	1665	75.50	0.00	419	0.180	72	3.9	4.7	89.212	F
	2	485	121	1915	75.50	0.00	482	1.006	439	27.8	39.3	162.061	F
	3	166	41	1665	55.50	0.00	308	0.538	158	9.7	11.7	119.295	F
B	1	128	32	1665	134.50	0.00	747	0.172	124	5.0	5.9	50.116	D
	2	851	213	1915	134.50	0.00	859	0.992	793	35.2	49.8	158.895	F
	3	85	21	1665	24.50	0.00	136	0.625	80	5.8	7.1	158.860	F
C	1	380	95	1665	75.50	0.00	419	0.908	355	21.3	27.7	141.087	F
	2	482	121	1915	75.50	0.00	482	1.000	437	27.6	38.9	161.098	F
	3	305	76	1665	55.50	0.00	308	0.991	274	19.5	27.3	181.587	F
D	1	733	183	1833	134.50	0.00	822	0.892	701	29.6	37.7	93.710	F
	3	134	33	1665	24.50	0.00	136	0.984	117	10.3	14.6	229.678	F

08:30 - 08:45

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	1	92	23	1665	75.50	0.00	419	0.220	88	4.7	5.8	90.512	F
	2	594	148	1915	75.50	0.00	482	1.232	480	39.3	67.9	235.470	F
	3	203	51	1665	55.50	0.00	308	0.659	191	11.7	14.6	127.160	F
B	1	157	39	1665	134.50	0.00	747	0.210	152	5.9	7.3	51.248	D
	2	1043	261	1915	134.50	0.00	859	1.215	855	49.8	96.9	186.826	F
	3	104	26	1665	24.50	0.00	136	0.765	96	7.1	9.3	176.498	F
C	1	466	116	1665	75.50	0.00	419	1.112	401	27.7	43.9	189.729	F
	2	590	148	1915	75.50	0.00	482	1.225	479	38.9	66.6	231.830	F
	3	374	93	1665	55.50	0.00	308	1.213	304	27.3	44.7	250.009	F
D	1	898	224	1832	134.50	0.00	822	1.093	793	37.7	63.9	139.955	F
	3	164	41	1665	24.50	0.00	136	1.205	132	14.6	22.4	300.134	F

08:45 - 09:00

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	1	92	23	1665	75.50	0.00	419	0.220	92	5.8	5.8	90.520	F
	2	594	148	1915	75.50	0.00	482	1.232	481	67.9	96.0	406.389	F
	3	203	51	1665	55.50	0.00	308	0.659	203	14.6	14.6	128.257	F
B	1	157	39	1665	134.50	0.00	747	0.210	157	7.3	7.3	51.250	D
	2	1043	261	1915	134.50	0.00	859	1.215	858	96.9	143.0	346.404	F
	3	104	26	1665	24.50	0.00	136	0.765	104	9.3	9.4	186.616	F
C	1	466	116	1665	75.50	0.00	419	1.112	417	43.9	56.2	288.769	F
	2	590	148	1915	75.50	0.00	482	1.225	481	66.6	93.9	398.665	F
	3	374	93	1665	55.50	0.00	308	1.213	307	44.7	61.3	411.453	F
D	1	898	224	1832	134.50	0.00	822	1.093	819	63.9	83.5	221.846	F
	3	164	41	1665	24.50	0.00	136	1.205	135	22.4	29.7	463.345	F

09:00 - 09:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	1	75	19	1665	75.50	0.00	419	0.180	80	5.8	4.7	89.222	F
	2	485	121	1915	75.50	0.00	482	1.006	480	96.0	97.2	627.843	F
	3	166	41	1665	55.50	0.00	308	0.538	177	14.6	11.7	120.160	F
B	1	128	32	1665	134.50	0.00	747	0.172	134	7.3	5.9	50.119	D
	2	851	213	1915	134.50	0.00	859	0.992	852	143.0	142.8	503.340	F
	3	85	21	1665	24.50	0.00	136	0.625	94	9.4	7.3	167.727	F
C	1	380	95	1665	75.50	0.00	419	0.908	410	56.2	48.7	362.040	F
	2	482	121	1915	75.50	0.00	482	1.000	480	93.9	94.5	620.113	F
	3	305	76	1665	55.50	0.00	308	0.991	305	61.3	61.4	638.329	F
D	1	733	183	1833	134.50	0.00	822	0.892	810	83.5	64.3	263.170	F
	3	134	33	1665	24.50	0.00	136	0.984	133	29.7	29.9	702.062	F

09:15 - 09:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	1	63	16	1665	75.50	0.00	419	0.150	66	4.7	3.9	88.311	F
	2	406	102	1915	75.50	0.00	482	0.843	477	97.2	79.4	644.156	F
	3	139	35	1665	55.50	0.00	308	0.451	147	11.7	9.7	115.243	F
B	1	107	27	1665	134.50	0.00	747	0.144	111	5.9	5.0	49.332	D
	2	713	178	1915	134.50	0.00	859	0.830	880	142.8	101.1	502.546	F
	3	71	18	1665	24.50	0.00	136	0.523	77	7.3	5.8	153.474	F
C	1	319	80	1665	75.50	0.00	419	0.760	425	48.7	22.1	221.805	F
	2	404	101	1915	75.50	0.00	482	0.838	477	94.5	76.2	621.817	F
	3	256	64	1665	55.50	0.00	308	0.830	317	61.4	45.9	595.765	F
D	1	614	153	1832	134.50	0.00	822	0.747	752	64.3	29.8	113.095	F
	3	112	28	1665	24.50	0.00	136	0.824	139	29.9	23.1	664.278	F

2037 - WD , PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Signalised		218.53	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	218.53	F

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2037 - WD	PM	ONE HOUR	17:00	18:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	565	100.000
B		ONE HOUR	✓	556	100.000
C		ONE HOUR	✓	838	100.000
D		ONE HOUR	✓	551	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
		A	B	C	D
From	A	0	104	342	119
	B	81	0	160	315
	C	346	219	0	273
	D	88	355	108	0

Proportions

	To				
		A	B	C	D
From	A	0.00	0.18	0.61	0.21
	B	0.15	0.00	0.29	0.57
	C	0.41	0.26	0.00	0.33
	D	0.16	0.64	0.20	0.00

Vehicle Mix

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

Heavy Vehicle %

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

Average PCU Per Veh

	To				
		A	B	C	D
From	A	1.000	1.100	1.100	1.100
	B	1.100	1.000	1.100	1.100
	C	1.100	1.100	1.000	1.100
	D	1.100	1.100	1.100	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
17:00-17:15	A	425	425
	B	419	419
	C	631	631
	D	415	415
17:15-17:30	A	508	508
	B	500	500
	C	753	753
	D	495	495
17:30-17:45	A	622	622
	B	612	612
	C	923	923
	D	607	607
17:45-18:00	A	622	622
	B	612	612
	C	923	923
	D	607	607
18:00-18:15	A	508	508
	B	500	500
	C	753	753
	D	495	495
18:15-18:30	A	425	425
	B	419	419
	C	631	631
	D	415	415

Results

Results Summary for whole modelled period

Arm	Max DOS	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A	1.08	212.50	86.6	F	804	1205
B	0.82	98.90	56.0	F	791	1186
C	1.09	265.42	149.4	F	1192	1788
D	1.09	274.10	96.3	F	784	1176

Main Results for each time segment

17:00 - 17:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	1	121	30	1665	84.50	0.00	469	0.259	92	0.0	7.3	85.237	F
	2	399	100	1915	84.50	0.00	539	0.740	298	0.0	25.2	108.911	F
	3	139	35	1665	61.50	0.00	341	0.407	101	0.0	9.4	108.071	F
B	1	187	47	1665	113.50	0.00	630	0.296	148	0.0	9.8	66.866	E
	2	368	92	1915	113.50	0.00	725	0.507	290	0.0	19.4	75.044	E
	3	95	24	1665	30.50	0.00	169	0.558	64	0.0	7.5	144.148	F
C	1	319	80	1665	84.50	0.00	469	0.679	239	0.0	20.0	105.521	F
	2	404	101	1915	84.50	0.00	539	0.749	302	0.0	25.5	109.642	F
	3	256	64	1665	61.50	0.00	341	0.749	183	0.0	18.3	129.202	F
D	1	517	129	1859	113.50	0.00	703	0.735	405	0.0	28.1	88.849	F
	3	126	32	1665	30.50	0.00	169	0.744	84	0.0	10.6	160.823	F

17:15 - 17:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	1	145	36	1665	84.50	0.00	469	0.309	139	7.3	8.8	87.027	F
	2	477	119	1915	84.50	0.00	539	0.883	449	25.2	32.0	126.423	F
	3	166	41	1665	61.50	0.00	341	0.486	158	9.4	11.3	111.690	F
B	1	223	56	1665	113.50	0.00	630	0.354	215	9.8	11.7	68.983	E
	2	439	110	1915	113.50	0.00	725	0.606	423	19.4	23.3	80.116	F
	3	113	28	1665	30.50	0.00	169	0.667	106	7.5	9.2	154.249	F
C	1	380	95	1665	84.50	0.00	469	0.811	361	20.0	24.8	118.375	F
	2	482	121	1915	84.50	0.00	539	0.894	454	25.5	32.6	128.204	F
	3	305	76	1665	61.50	0.00	341	0.894	284	18.3	23.6	150.982	F
D	1	617	154	1859	113.50	0.00	704	0.877	588	28.1	35.4	105.051	F
	3	150	38	1665	30.50	0.00	169	0.889	137	10.6	14.0	189.511	F

17:30 - 17:45

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	1	177	44	1665	84.50	0.00	469	0.378	169	8.8	10.8	89.683	F
	2	584	146	1915	84.50	0.00	539	1.082	512	32.0	49.9	169.681	F
	3	203	51	1665	61.50	0.00	341	0.595	192	11.3	14.0	117.667	F
B	1	273	68	1665	113.50	0.00	630	0.433	262	11.7	14.4	72.192	E
	2	538	134	1915	113.50	0.00	725	0.742	514	23.3	29.2	89.350	F
	3	138	35	1665	30.50	0.00	169	0.817	127	9.2	12.2	174.120	F
C	1	466	116	1665	84.50	0.00	469	0.993	421	24.8	36.0	154.096	F
	2	590	148	1915	84.50	0.00	539	1.095	515	32.6	51.5	173.193	F
	3	374	93	1665	61.50	0.00	341	1.095	323	23.6	36.4	197.764	F
D	1	756	189	1860	113.50	0.00	704	1.075	671	35.4	56.6	147.854	F
	3	184	46	1665	30.50	0.00	169	1.089	156	14.0	21.0	240.380	F

17:45 - 18:00

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	1	177	44	1665	84.50	0.00	469	0.378	177	10.8	10.8	89.717	F
	2	584	146	1915	84.50	0.00	539	1.082	536	49.9	61.8	248.200	F
	3	203	51	1665	61.50	0.00	341	0.595	203	14.0	14.0	118.156	F
B	1	273	68	1665	113.50	0.00	630	0.433	273	14.4	14.4	72.225	E
	2	538	134	1915	113.50	0.00	725	0.742	537	29.2	29.2	89.967	F
	3	138	35	1665	30.50	0.00	169	0.817	137	12.2	12.4	186.340	F
C	1	466	116	1665	84.50	0.00	469	0.993	453	36.0	39.1	188.056	F
	2	590	148	1915	84.50	0.00	539	1.095	537	51.5	65.0	259.524	F
	3	374	93	1665	61.50	0.00	341	1.095	338	36.4	45.3	288.910	F
D	1	756	189	1860	113.50	0.00	704	1.075	700	56.6	70.7	219.237	F
	3	184	46	1665	30.50	0.00	169	1.089	166	21.0	25.6	338.894	F

18:00 - 18:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	1	145	36	1665	84.50	0.00	469	0.309	153	10.8	8.8	87.067	F
	2	477	119	1915	84.50	0.00	539	0.883	528	61.8	49.0	285.579	F
	3	166	41	1665	61.50	0.00	341	0.486	177	14.0	11.3	112.118	F
B	1	223	56	1665	113.50	0.00	630	0.354	234	14.4	11.7	69.018	E
	2	439	110	1915	113.50	0.00	725	0.606	462	29.2	23.4	80.449	F
	3	113	28	1665	30.50	0.00	169	0.667	125	12.4	9.4	163.617	F
C	1	380	95	1665	84.50	0.00	469	0.811	435	39.1	25.5	142.016	F
	2	482	121	1915	84.50	0.00	539	0.894	529	65.0	53.3	311.040	F
	3	305	76	1665	61.50	0.00	341	0.894	332	45.3	38.6	347.170	F
D	1	617	154	1859	113.50	0.00	704	0.877	690	70.7	52.4	243.116	F
	3	150	38	1665	30.50	0.00	169	0.889	161	25.6	22.8	401.175	F

18:15 - 18:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	1	121	30	1665	84.50	0.00	469	0.259	127	8.8	7.3	85.265	F
	2	399	100	1915	84.50	0.00	539	0.740	493	49.0	25.4	141.429	F
	3	139	35	1665	61.50	0.00	341	0.407	146	11.3	9.4	108.315	F
B	1	187	47	1665	113.50	0.00	630	0.296	194	11.7	9.8	66.890	E
	2	368	92	1915	113.50	0.00	725	0.507	383	23.4	19.4	75.188	E
	3	95	24	1665	30.50	0.00	169	0.558	102	9.4	7.6	148.046	F
C	1	319	80	1665	84.50	0.00	469	0.679	340	25.5	20.1	107.685	F
	2	404	101	1915	84.50	0.00	539	0.749	513	53.3	25.8	162.203	F
	3	256	64	1665	61.50	0.00	341	0.749	335	38.6	18.8	203.376	F
D	1	517	129	1859	113.50	0.00	703	0.735	614	52.4	28.2	106.214	F
	3	126	32	1665	30.50	0.00	169	0.744	171	22.8	11.6	276.275	F

2047 - ND , AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Signalised		366.43	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	366.43	F

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2047 - ND	AM	ONE HOUR	08:00	09:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	522	100.000
B		ONE HOUR	✓	727	100.000
C		ONE HOUR	✓	796	100.000
D		ONE HOUR	✓	626	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
		A	B	C	D
From	A	0	54	344	124
	B	53	0	76	598
	C	330	205	0	261
	D	161	371	94	0

Proportions

	To				
		A	B	C	D
From	A	0.00	0.10	0.66	0.24
	B	0.07	0.00	0.10	0.82
	C	0.41	0.26	0.00	0.33
	D	0.26	0.59	0.15	0.00

Vehicle Mix

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

Heavy Vehicle %

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

Average PCU Per Veh

	To				
		A	B	C	D
From	A	1.000	1.100	1.100	1.100
	B	1.100	1.000	1.100	1.100
	C	1.100	1.100	1.000	1.100
	D	1.100	1.100	1.100	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
08:00-08:15	A	393	393
	B	547	547
	C	599	599
	D	471	471
08:15-08:30	A	469	469
	B	654	654
	C	716	716
	D	563	563
08:30-08:45	A	575	575
	B	800	800
	C	876	876
	D	689	689
08:45-09:00	A	575	575
	B	800	800
	C	876	876
	D	689	689
09:00-09:15	A	469	469
	B	654	654
	C	716	716
	D	563	563
09:15-09:30	A	393	393
	B	547	547
	C	599	599
	D	471	471

Results

Results Summary for whole modelled period

Arm	Max DOS	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A	1.19	373.47	106.2	F	742	1114
B	1.18	381.65	140.2	F	1034	1551
C	1.20	383.13	171.1	F	1132	1698
D	1.18	321.67	113.4	F	890	1336

Main Results for each time segment

08:00 - 08:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	1	63	16	1665	77.50	0.00	430	0.146	47	0.0	3.9	86.699	F
	2	401	100	1915	77.50	0.00	495	0.811	294	0.0	26.8	120.947	F
	3	145	36	1665	52.50	0.00	291	0.497	104	0.0	10.3	119.452	F
B	1	89	22	1665	135.50	0.00	752	0.118	72	0.0	4.1	48.059	D
	2	698	174	1915	135.50	0.00	865	0.807	562	0.0	34.0	80.988	F
	3	62	15	1665	24.50	0.00	136	0.455	42	0.0	5.0	144.767	F
C	1	305	76	1665	77.50	0.00	430	0.708	225	0.0	19.9	112.905	F
	2	385	96	1915	77.50	0.00	495	0.778	283	0.0	25.4	117.517	F
	3	239	60	1665	52.50	0.00	291	0.821	165	0.0	18.5	145.393	F
D	1	621	155	1832	135.50	0.00	827	0.750	502	0.0	29.8	76.132	E
	3	110	27	1665	24.50	0.00	136	0.807	70	0.0	10.0	178.166	F

08:15 - 08:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	1	75	19	1665	77.50	0.00	430	0.175	72	3.9	4.7	87.582	F
	2	479	120	1915	77.50	0.00	495	0.969	441	26.8	36.5	150.365	F
	3	173	43	1665	52.50	0.00	291	0.593	164	10.3	12.4	125.130	F
B	1	106	26	1665	135.50	0.00	752	0.141	103	4.1	4.9	48.680	D
	2	833	208	1915	135.50	0.00	865	0.963	785	34.0	46.0	107.300	F
	3	74	18	1665	24.50	0.00	136	0.543	70	5.0	6.1	151.472	F
C	1	364	91	1665	77.50	0.00	430	0.845	343	19.9	25.0	128.542	F
	2	460	115	1915	77.50	0.00	495	0.929	428	25.4	33.3	140.810	F
	3	286	71	1665	52.50	0.00	291	0.980	257	18.5	25.6	181.841	F
D	1	741	185	1832	135.50	0.00	827	0.896	708	29.8	38.0	93.712	F
	3	131	33	1665	24.50	0.00	136	0.963	115	10.0	13.9	222.997	F

08:30 - 08:45

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	1	92	23	1665	77.50	0.00	430	0.214	88	4.7	5.7	88.843	F
	2	587	147	1915	77.50	0.00	495	1.187	487	36.5	61.5	211.927	F
	3	212	53	1665	52.50	0.00	291	0.726	199	12.4	15.7	135.728	F
B	1	130	32	1665	135.50	0.00	752	0.172	125	4.9	6.0	49.567	D
	2	1021	255	1915	135.50	0.00	865	1.180	855	46.0	87.4	169.913	F
	3	90	23	1665	24.50	0.00	136	0.665	84	6.1	7.7	162.970	F
C	1	445	111	1665	77.50	0.00	430	1.035	396	25.0	37.4	168.197	F
	2	563	141	1915	77.50	0.00	495	1.138	479	33.3	54.3	192.751	F
	3	350	87	1665	52.50	0.00	291	1.201	286	25.6	41.5	247.556	F
D	1	908	227	1832	135.50	0.00	827	1.097	800	38.0	65.0	140.743	F
	3	160	40	1665	24.50	0.00	136	1.180	131	13.9	21.3	288.931	F

08:45 - 09:00

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	1	92	23	1665	77.50	0.00	430	0.214	92	5.7	5.7	88.850	F
	2	587	147	1915	77.50	0.00	495	1.187	494	61.5	84.8	355.888	F
	3	212	53	1665	52.50	0.00	291	0.726	211	15.7	15.8	138.101	F
B	1	130	32	1665	135.50	0.00	752	0.172	130	6.0	6.0	49.568	D
	2	1021	255	1915	135.50	0.00	865	1.180	864	87.4	126.5	308.253	F
	3	90	23	1665	24.50	0.00	136	0.665	90	7.7	7.7	167.284	F
C	1	445	111	1665	77.50	0.00	430	1.035	423	37.4	43.1	223.050	F
	2	563	141	1915	77.50	0.00	495	1.138	493	54.3	71.7	307.009	F
	3	350	87	1665	52.50	0.00	291	1.201	291	41.5	56.3	402.048	F
D	1	908	227	1832	135.50	0.00	827	1.097	825	65.0	85.7	225.647	F
	3	160	40	1665	24.50	0.00	136	1.180	135	21.3	27.7	438.929	F

09:00 - 09:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	1	75	19	1665	77.50	0.00	430	0.175	79	5.7	4.7	87.591	F
	2	479	120	1915	77.50	0.00	495	0.969	489	84.8	82.4	507.274	F
	3	173	43	1665	52.50	0.00	291	0.593	186	15.8	12.5	126.773	F
B	1	106	26	1665	135.50	0.00	752	0.141	110	6.0	4.9	48.682	D
	2	833	208	1915	135.50	0.00	865	0.963	858	126.5	120.2	444.000	F
	3	74	18	1665	24.50	0.00	136	0.543	80	7.7	6.1	155.597	F
C	1	364	91	1665	77.50	0.00	430	0.845	415	43.1	30.3	212.914	F
	2	460	115	1915	77.50	0.00	495	0.929	487	71.7	64.9	407.733	F
	3	286	71	1665	52.50	0.00	291	0.980	286	56.3	56.3	560.235	F
D	1	741	185	1832	135.50	0.00	827	0.896	816	85.7	66.9	272.105	F
	3	131	33	1665	24.50	0.00	136	0.963	132	27.7	27.6	602.178	F

09:15 - 09:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	1	63	16	1665	77.50	0.00	430	0.146	66	4.7	3.9	86.706	F
	2	401	100	1915	77.50	0.00	495	0.811	512	82.4	54.8	464.407	F
	3	145	36	1665	52.50	0.00	291	0.497	153	12.5	10.3	120.229	F
B	1	89	22	1665	135.50	0.00	752	0.118	92	4.9	4.1	48.060	D
	2	698	174	1915	135.50	0.00	865	0.807	889	120.2	72.5	379.328	F
	3	62	15	1665	24.50	0.00	136	0.455	66	6.1	5.0	147.061	F
C	1	305	76	1665	77.50	0.00	430	0.708	346	30.3	20.0	117.705	F
	2	385	96	1915	77.50	0.00	495	0.778	513	64.9	33.0	296.339	F
	3	239	60	1665	52.50	0.00	291	0.821	301	56.3	40.9	566.130	F
D	1	621	155	1832	135.50	0.00	827	0.750	769	66.9	30.0	120.280	F
	3	110	27	1665	24.50	0.00	136	0.807	139	27.6	20.3	595.761	F

2047 - ND , PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Signalised		263.98	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	263.98	F

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2047 - ND	PM	ONE HOUR	17:00	18:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	493	100.000
B		ONE HOUR	✓	485	100.000
C		ONE HOUR	✓	845	100.000
D		ONE HOUR	✓	524	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
		A	B	C	D
From	A	0	98	314	81
	B	73	0	130	282
	C	376	269	0	200
	D	91	335	98	0

Proportions

	To				
		A	B	C	D
From	A	0.00	0.20	0.64	0.16
	B	0.15	0.00	0.27	0.58
	C	0.44	0.32	0.00	0.24
	D	0.17	0.64	0.19	0.00

Vehicle Mix

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

Heavy Vehicle %

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

Average PCU Per Veh

	To				
		A	B	C	D
From	A	1.000	1.100	1.100	1.100
	B	1.100	1.000	1.100	1.100
	C	1.100	1.100	1.000	1.100
	D	1.100	1.100	1.100	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
17:00-17:15	A	371	371
	B	365	365
	C	636	636
	D	394	394
17:15-17:30	A	443	443
	B	436	436
	C	760	760
	D	471	471
17:30-17:45	A	543	543
	B	534	534
	C	930	930
	D	577	577
17:45-18:00	A	543	543
	B	534	534
	C	930	930
	D	577	577
18:00-18:15	A	443	443
	B	436	436
	C	760	760
	D	471	471
18:15-18:30	A	371	371
	B	365	365
	C	636	636
	D	394	394

Results

Results Summary for whole modelled period

Arm	Max DOS	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A	0.96	134.32	58.7	F	701	1052
B	0.85	107.11	51.7	F	690	1035
C	1.15	344.64	163.4	F	1202	1803
D	1.14	401.06	111.9	F	745	1118

Main Results for each time segment

17:00 - 17:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	1	114	29	1665	87.50	0.00	486	0.235	87	0.0	6.8	82.305	F
	2	366	92	1915	87.50	0.00	559	0.656	277	0.0	22.4	100.665	F
	3	95	24	1665	72.50	0.00	402	0.235	70	0.0	6.0	93.247	F
B	1	152	38	1665	103.50	0.00	575	0.264	118	0.0	8.3	72.276	E
	2	329	82	1915	103.50	0.00	661	0.498	256	0.0	18.3	81.194	F
	3	85	21	1665	26.50	0.00	147	0.579	57	0.0	7.0	150.627	F
C	1	233	58	1665	87.50	0.00	486	0.481	177	0.0	14.1	91.925	F
	2	439	110	1915	87.50	0.00	559	0.786	328	0.0	27.6	110.879	F
	3	314	78	1665	72.50	0.00	402	0.780	228	0.0	21.5	123.376	F
D	1	497	124	1856	103.50	0.00	640	0.776	382	0.0	28.8	99.177	F
	3	114	29	1665	26.50	0.00	147	0.777	74	0.0	10.1	170.809	F

17:15 - 17:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	1	137	34	1665	87.50	0.00	486	0.281	131	6.8	8.1	83.886	F
	2	438	109	1915	87.50	0.00	559	0.783	417	22.4	27.5	111.101	F
	3	113	28	1665	72.50	0.00	402	0.280	108	6.0	7.2	94.817	F
B	1	181	45	1665	103.50	0.00	575	0.315	175	8.3	10.0	74.102	E
	2	393	98	1915	103.50	0.00	661	0.595	378	18.3	22.0	86.104	F
	3	102	25	1665	26.50	0.00	147	0.692	95	7.0	8.6	162.991	F
C	1	279	70	1665	87.50	0.00	486	0.574	267	14.1	16.9	96.766	F
	2	524	131	1915	87.50	0.00	559	0.938	489	27.6	36.4	134.742	F
	3	375	94	1665	72.50	0.00	402	0.931	347	21.5	28.4	148.846	F
D	1	594	148	1855	103.50	0.00	640	0.927	559	28.8	37.6	121.161	F
	3	137	34	1665	26.50	0.00	147	0.928	122	10.1	13.7	207.796	F

17:30 - 17:45

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	1	167	42	1665	87.50	0.00	486	0.344	160	8.1	10.0	86.209	F
	2	536	134	1915	87.50	0.00	559	0.959	493	27.5	38.2	139.277	F
	3	138	35	1665	72.50	0.00	402	0.343	132	7.2	8.9	97.125	F
B	1	222	55	1665	103.50	0.00	575	0.386	213	10.0	12.3	76.822	E
	2	481	120	1915	103.50	0.00	661	0.728	459	22.0	27.5	94.928	F
	3	125	31	1665	26.50	0.00	147	0.847	113	8.6	11.5	187.150	F
C	1	341	85	1665	87.50	0.00	486	0.703	324	16.9	21.2	105.359	F
	2	642	160	1915	87.50	0.00	559	1.149	544	36.4	60.7	188.733	F
	3	459	115	1665	72.50	0.00	402	1.141	389	28.4	45.8	202.257	F
D	1	727	182	1856	103.50	0.00	640	1.136	623	37.6	63.6	173.347	F
	3	167	42	1665	26.50	0.00	147	1.137	139	13.7	20.7	266.221	F

17:45 - 18:00

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	1	167	42	1665	87.50	0.00	486	0.344	167	10.0	10.0	86.232	F
	2	536	134	1915	87.50	0.00	559	0.959	529	38.2	39.9	158.915	F
	3	138	35	1665	72.50	0.00	402	0.343	138	8.9	8.9	97.159	F
B	1	222	55	1665	103.50	0.00	575	0.386	222	12.3	12.3	76.847	E
	2	481	120	1915	103.50	0.00	661	0.728	481	27.5	27.5	95.543	F
	3	125	31	1665	26.50	0.00	147	0.847	123	11.5	11.9	205.707	F
C	1	341	85	1665	87.50	0.00	486	0.703	341	21.2	21.2	106.146	F
	2	642	160	1915	87.50	0.00	559	1.149	557	60.7	81.8	308.878	F
	3	459	115	1665	72.50	0.00	402	1.141	401	45.8	60.4	319.323	F
D	1	727	182	1856	103.50	0.00	640	1.136	639	63.6	85.6	284.454	F
	3	167	42	1665	26.50	0.00	147	1.137	145	20.7	26.3	392.516	F

18:00 - 18:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	1	137	34	1665	87.50	0.00	486	0.281	144	10.0	8.1	83.913	F
	2	438	109	1915	87.50	0.00	559	0.783	486	39.9	27.9	120.187	F
	3	113	28	1665	72.50	0.00	402	0.280	119	8.9	7.2	94.857	F
B	1	181	45	1665	103.50	0.00	575	0.315	190	12.3	10.0	74.130	E
	2	393	98	1915	103.50	0.00	661	0.595	415	27.5	22.0	86.458	F
	3	102	25	1665	26.50	0.00	147	0.692	114	11.9	8.9	178.475	F
C	1	279	70	1665	87.50	0.00	486	0.574	296	21.2	17.0	97.280	F
	2	524	131	1915	87.50	0.00	559	0.938	551	81.8	75.0	418.995	F
	3	375	94	1665	72.50	0.00	402	0.931	395	60.4	55.3	424.631	F
D	1	594	148	1855	103.50	0.00	640	0.927	632	85.6	76.0	377.969	F
	3	137	34	1665	26.50	0.00	147	0.928	146	26.3	23.9	501.441	F

18:15 - 18:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	1	114	29	1665	87.50	0.00	486	0.235	120	8.1	6.8	82.325	F
	2	366	92	1915	87.50	0.00	559	0.656	388	27.9	22.5	101.783	F
	3	95	24	1665	72.50	0.00	402	0.235	99	7.2	6.0	93.276	F
B	1	152	38	1665	103.50	0.00	575	0.264	158	10.0	8.3	72.297	E
	2	329	82	1915	103.50	0.00	661	0.498	344	22.0	18.3	81.352	F
	3	85	21	1665	26.50	0.00	147	0.579	93	8.9	7.0	156.795	F
C	1	233	58	1665	87.50	0.00	486	0.481	245	17.0	14.1	92.171	F
	2	439	110	1915	87.50	0.00	559	0.786	578	75.0	40.1	319.427	F
	3	314	78	1665	72.50	0.00	402	0.780	416	55.3	29.7	322.053	F
D	1	497	124	1856	103.50	0.00	640	0.776	661	76.0	34.9	255.765	F
	3	114	29	1665	26.50	0.00	147	0.777	150	23.9	15.0	405.860	F

2047 - WD , AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Signalised		447.01	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	447.01	F

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D15	2047 - WD	AM	ONE HOUR	08:00	09:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	533	100.000
B		ONE HOUR	✓	764	100.000
C		ONE HOUR	✓	838	100.000
D		ONE HOUR	✓	625	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
		A	B	C	D
From	A	0	61	348	124
	B	61	0	92	611
	C	346	219	0	273
	D	161	368	96	0

Proportions

	To				
		A	B	C	D
From	A	0.00	0.11	0.65	0.23
	B	0.08	0.00	0.12	0.80
	C	0.41	0.26	0.00	0.33
	D	0.26	0.59	0.15	0.00

Vehicle Mix

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

Heavy Vehicle %

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

Average PCU Per Veh

	To				
		A	B	C	D
From	A	1.000	1.100	1.100	1.100
	B	1.100	1.000	1.100	1.100
	C	1.100	1.100	1.000	1.100
	D	1.100	1.100	1.100	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
08:00-08:15	A	401	401
	B	575	575
	C	631	631
	D	471	471
08:15-08:30	A	479	479
	B	687	687
	C	753	753
	D	562	562
08:30-08:45	A	587	587
	B	841	841
	C	923	923
	D	688	688
08:45-09:00	A	587	587
	B	841	841
	C	923	923
	D	688	688
09:00-09:15	A	479	479
	B	687	687
	C	753	753
	D	562	562
09:15-09:30	A	401	401
	B	575	575
	C	631	631
	D	471	471

Results

Results Summary for whole modelled period

Arm	Max DOS	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A	1.23	457.79	117.9	F	758	1137
B	1.21	421.97	159.7	F	1087	1630
C	1.23	540.80	211.3	F	1192	1788
D	1.20	342.70	115.9	F	889	1333

Main Results for each time segment

08:00 - 08:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	1	71	18	1665	75.50	0.00	419	0.170	53	0.0	4.5	88.905	F
	2	406	102	1915	75.50	0.00	482	0.843	295	0.0	27.8	126.191	F
	3	145	36	1665	55.50	0.00	308	0.470	104	0.0	10.1	115.665	F
B	1	107	27	1665	134.50	0.00	747	0.144	88	0.0	5.0	49.329	D
	2	713	178	1915	134.50	0.00	859	0.830	572	0.0	35.2	84.176	F
	3	71	18	1665	24.50	0.00	136	0.523	48	0.0	5.8	149.202	F
C	1	319	80	1665	75.50	0.00	419	0.760	233	0.0	21.3	119.033	F
	2	404	101	1915	75.50	0.00	482	0.838	293	0.0	27.6	125.579	F
	3	256	64	1665	55.50	0.00	308	0.830	178	0.0	19.5	143.704	F
D	1	617	154	1831	134.50	0.00	821	0.752	498	0.0	29.8	76.888	E
	3	112	28	1665	24.50	0.00	136	0.824	71	0.0	10.3	180.674	F

08:15 - 08:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	1	85	21	1665	75.50	0.00	419	0.203	82	4.5	5.3	89.955	F
	2	485	121	1915	75.50	0.00	482	1.006	439	27.8	39.3	162.061	F
	3	173	43	1665	55.50	0.00	308	0.561	164	10.1	12.2	120.587	F
B	1	128	32	1665	134.50	0.00	747	0.172	124	5.0	5.9	50.116	D
	2	851	213	1915	134.50	0.00	859	0.992	793	35.2	49.8	115.895	F
	3	85	21	1665	24.50	0.00	136	0.625	80	5.8	7.1	158.860	F
C	1	380	95	1665	75.50	0.00	419	0.908	355	21.3	27.7	141.087	F
	2	482	121	1915	75.50	0.00	482	1.000	437	27.6	38.9	161.098	F
	3	305	76	1665	55.50	0.00	308	0.991	274	19.5	27.3	181.587	F
D	1	737	184	1832	134.50	0.00	821	0.898	704	29.8	38.1	94.671	F
	3	134	33	1665	24.50	0.00	136	0.984	117	10.3	14.6	229.678	F

08:30 - 08:45

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	1	104	26	1665	75.50	0.00	419	0.248	99	5.3	6.5	91.465	F
	2	594	148	1915	75.50	0.00	482	1.232	480	39.3	67.9	235.470	F
	3	212	53	1665	55.50	0.00	308	0.687	199	12.2	15.3	129.400	F
B	1	157	39	1665	134.50	0.00	747	0.210	152	5.9	7.3	51.248	D
	2	1043	261	1915	134.50	0.00	859	1.215	855	49.8	96.9	186.826	F
	3	104	26	1665	24.50	0.00	136	0.765	96	7.1	9.3	176.498	F
C	1	466	116	1665	75.50	0.00	419	1.112	401	27.7	43.9	189.729	F
	2	590	148	1915	75.50	0.00	482	1.225	479	38.9	66.6	231.830	F
	3	374	93	1665	55.50	0.00	308	1.213	304	27.3	44.7	250.009	F
D	1	903	226	1831	134.50	0.00	821	1.100	794	38.1	65.2	142.016	F
	3	164	41	1665	24.50	0.00	136	1.205	132	14.6	22.4	300.134	F

08:45 - 09:00

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	1	104	26	1665	75.50	0.00	419	0.248	104	6.5	6.5	91.476	F
	2	594	148	1915	75.50	0.00	482	1.232	481	67.9	96.0	406.389	F
	3	212	53	1665	55.50	0.00	308	0.687	211	15.3	15.3	130.848	F
B	1	157	39	1665	134.50	0.00	747	0.210	157	7.3	7.3	51.250	D
	2	1043	261	1915	134.50	0.00	859	1.215	858	96.9	143.0	346.404	F
	3	104	26	1665	24.50	0.00	136	0.765	104	9.3	9.4	186.616	F
C	1	466	116	1665	75.50	0.00	419	1.112	417	43.9	56.2	288.769	F
	2	590	148	1915	75.50	0.00	482	1.225	481	66.6	93.9	398.665	F
	3	374	93	1665	55.50	0.00	308	1.213	307	44.7	61.3	411.453	F
D	1	903	226	1831	134.50	0.00	821	1.100	819	65.2	86.2	228.405	F
	3	164	41	1665	24.50	0.00	136	1.205	135	22.4	29.7	463.345	F

09:00 - 09:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	1	85	21	1665	75.50	0.00	419	0.203	90	6.5	5.3	89.969	F
	2	485	121	1915	75.50	0.00	482	1.006	480	96.0	97.2	627.843	F
	3	173	43	1665	55.50	0.00	308	0.561	185	15.3	12.2	121.663	F
B	1	128	32	1665	134.50	0.00	747	0.172	134	7.3	5.9	50.119	D
	2	851	213	1915	134.50	0.00	859	0.992	852	143.0	142.8	503.340	F
	3	85	21	1665	24.50	0.00	136	0.625	94	9.4	7.3	167.727	F
C	1	380	95	1665	75.50	0.00	419	0.908	410	56.2	48.7	362.040	F
	2	482	121	1915	75.50	0.00	482	1.000	480	93.9	94.5	620.113	F
	3	305	76	1665	55.50	0.00	308	0.991	305	61.3	61.4	638.329	F
D	1	737	184	1832	134.50	0.00	821	0.898	810	86.2	67.9	277.479	F
	3	134	33	1665	24.50	0.00	136	0.984	133	29.7	29.9	702.062	F

09:15 - 09:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	1	71	18	1665	75.50	0.00	419	0.170	75	5.3	4.5	88.916	F
	2	406	102	1915	75.50	0.00	482	0.843	477	97.2	79.4	644.156	F
	3	145	36	1665	55.50	0.00	308	0.470	153	12.2	10.1	116.206	F
B	1	107	27	1665	134.50	0.00	747	0.144	111	5.9	5.0	49.332	D
	2	713	178	1915	134.50	0.00	859	0.830	880	142.8	101.1	502.546	F
	3	71	18	1665	24.50	0.00	136	0.523	77	7.3	5.8	153.474	F
C	1	319	80	1665	75.50	0.00	419	0.760	425	48.7	22.1	221.805	F
	2	404	101	1915	75.50	0.00	482	0.838	477	94.5	76.2	621.817	F
	3	256	64	1665	55.50	0.00	308	0.830	317	61.4	45.9	595.765	F
D	1	617	154	1831	134.50	0.00	821	0.752	769	67.9	30.0	125.176	F
	3	112	28	1665	24.50	0.00	136	0.824	139	29.9	23.1	664.278	F

2047 - WD , PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Signalised		311.43	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	311.43	F

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D16	2047 - WD	PM	ONE HOUR	17:00	18:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	527	100.000
B		ONE HOUR	✓	556	100.000
C		ONE HOUR	✓	870	100.000
D		ONE HOUR	✓	534	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
		A	B	C	D
From	A	0	104	342	81
	B	81	0	160	315
	C	379	289	0	202
	D	91	335	108	0

Proportions

	To				
		A	B	C	D
From	A	0.00	0.20	0.65	0.15
	B	0.15	0.00	0.29	0.57
	C	0.44	0.33	0.00	0.23
	D	0.17	0.63	0.20	0.00

Vehicle Mix

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

Heavy Vehicle %

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

Average PCU Per Veh

	To				
		A	B	C	D
From	A	1.000	1.100	1.100	1.100
	B	1.100	1.000	1.100	1.100
	C	1.100	1.100	1.000	1.100
	D	1.100	1.100	1.100	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
17:00-17:15	A	397	397
	B	419	419
	C	655	655
	D	402	402
17:15-17:30	A	474	474
	B	500	500
	C	782	782
	D	480	480
17:30-17:45	A	580	580
	B	612	612
	C	958	958
	D	588	588
17:45-18:00	A	580	580
	B	612	612
	C	958	958
	D	588	588
18:00-18:15	A	474	474
	B	500	500
	C	782	782
	D	480	480
18:15-18:30	A	397	397
	B	419	419
	C	655	655
	D	402	402

Results

Results Summary for whole modelled period

Arm	Max DOS	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A	1.07	199.51	78.7	F	750	1124
B	0.87	117.40	61.2	F	791	1186
C	1.19	403.77	183.5	F	1237	1856
D	1.17	473.46	125.3	F	760	1139

Main Results for each time segment

17:00 - 17:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	1	121	30	1665	85.50	0.00	475	0.256	92	0.0	7.3	84.417	F
	2	399	100	1915	85.50	0.00	546	0.731	299	0.0	25.0	107.483	F
	3	95	24	1665	75.50	0.00	419	0.226	71	0.0	5.9	90.693	F
B	1	187	47	1665	100.50	0.00	558	0.335	145	0.0	10.5	76.828	E
	2	368	92	1915	100.50	0.00	642	0.573	284	0.0	20.9	86.887	F
	3	95	24	1665	28.50	0.00	158	0.597	64	0.0	7.7	149.461	F
C	1	236	59	1665	85.50	0.00	475	0.497	178	0.0	14.4	94.114	F
	2	442	111	1915	85.50	0.00	546	0.810	329	0.0	28.4	114.891	F
	3	337	84	1665	75.50	0.00	419	0.805	245	0.0	22.9	123.726	F
D	1	497	124	1856	100.50	0.00	622	0.800	379	0.0	29.5	103.521	F
	3	126	32	1665	28.50	0.00	158	0.797	82	0.0	11.1	170.255	F

17:15 - 17:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	1	145	36	1665	85.50	0.00	475	0.305	139	7.3	8.7	86.179	F
	2	477	119	1915	85.50	0.00	546	0.873	450	25.0	31.6	123.975	F
	3	113	28	1665	75.50	0.00	419	0.269	108	5.9	7.1	92.184	F
B	1	223	56	1665	100.50	0.00	558	0.400	215	10.5	12.5	79.394	E
	2	439	110	1915	100.50	0.00	642	0.684	421	20.9	25.3	93.683	F
	3	113	28	1665	28.50	0.00	158	0.713	105	7.7	9.5	162.503	F
C	1	281	70	1665	85.50	0.00	475	0.593	270	14.4	17.3	99.316	F
	2	528	132	1915	85.50	0.00	546	0.968	488	28.4	38.5	143.546	F
	3	403	101	1665	75.50	0.00	419	0.961	370	22.9	31.1	153.521	F
D	1	594	148	1855	100.50	0.00	622	0.955	554	29.5	39.5	129.661	F
	3	150	38	1665	28.50	0.00	158	0.951	134	11.1	15.2	209.976	F

17:30 - 17:45

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	1	177	44	1665	85.50	0.00	475	0.374	169	8.7	10.7	88.790	F
	2	584	146	1915	85.50	0.00	546	1.069	515	31.6	48.7	165.634	F
	3	138	35	1665	75.50	0.00	419	0.330	132	7.1	8.7	94.368	F
B	1	273	68	1665	100.50	0.00	558	0.489	261	12.5	15.4	83.355	F
	2	538	134	1915	100.50	0.00	642	0.838	509	25.3	32.3	107.942	F
	3	138	35	1665	28.50	0.00	158	0.874	125	9.5	12.9	188.866	F
C	1	345	86	1665	85.50	0.00	475	0.726	327	17.3	21.7	108.790	F
	2	647	162	1915	85.50	0.00	546	1.185	538	38.5	65.8	204.939	F
	3	493	123	1665	75.50	0.00	419	1.177	411	31.1	51.7	213.834	F
D	1	727	182	1856	100.50	0.00	622	1.169	611	39.5	68.5	188.362	F
	3	184	46	1665	28.50	0.00	158	1.165	152	15.2	23.4	272.147	F

17:45 - 18:00

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	1	177	44	1665	85.50	0.00	475	0.374	177	10.7	10.7	88.822	F
	2	584	146	1915	85.50	0.00	546	1.069	542	48.7	59.2	236.363	F
	3	138	35	1665	75.50	0.00	419	0.330	138	8.7	8.7	94.395	F
B	1	273	68	1665	100.50	0.00	558	0.489	273	15.4	15.4	83.426	F
	2	538	134	1915	100.50	0.00	642	0.838	537	32.3	32.5	110.668	F
	3	138	35	1665	28.50	0.00	158	0.874	136	12.9	13.3	210.675	F
C	1	345	86	1665	85.50	0.00	475	0.726	345	21.7	21.8	109.857	F
	2	647	162	1915	85.50	0.00	546	1.185	545	65.8	91.2	347.608	F
	3	493	123	1665	75.50	0.00	419	1.177	418	51.7	70.5	352.554	F
D	1	727	182	1856	100.50	0.00	622	1.169	621	68.5	95.1	321.004	F
	3	184	46	1665	28.50	0.00	158	1.165	157	23.4	30.2	412.391	F

18:00 - 18:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	1	145	36	1665	85.50	0.00	475	0.305	153	10.7	8.7	86.216	F
	2	477	119	1915	85.50	0.00	546	0.873	533	59.2	45.2	259.371	F
	3	113	28	1665	75.50	0.00	419	0.269	119	8.7	7.1	92.216	F
B	1	223	56	1665	100.50	0.00	558	0.400	235	15.4	12.5	79.465	E
	2	439	110	1915	100.50	0.00	642	0.684	467	32.5	25.3	94.771	F
	3	113	28	1665	28.50	0.00	158	0.713	127	13.3	9.9	180.318	F
C	1	281	70	1665	85.50	0.00	475	0.593	299	21.8	17.4	99.972	F
	2	528	132	1915	85.50	0.00	546	0.968	540	91.2	88.3	495.971	F
	3	403	101	1665	75.50	0.00	419	0.961	413	70.5	67.9	495.201	F
D	1	594	148	1855	100.50	0.00	622	0.955	615	95.1	89.7	451.035	F
	3	150	38	1665	28.50	0.00	158	0.951	152	30.2	29.8	561.901	F

18:15 - 18:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	1	121	30	1665	85.50	0.00	475	0.256	127	8.7	7.3	84.443	F
	2	399	100	1915	85.50	0.00	546	0.731	479	45.2	25.2	125.431	F
	3	95	24	1665	75.50	0.00	419	0.226	99	7.1	5.9	90.717	F
B	1	187	47	1665	100.50	0.00	558	0.335	195	12.5	10.5	76.873	E
	2	368	92	1915	100.50	0.00	642	0.573	385	25.3	20.9	87.234	F
	3	95	24	1665	28.50	0.00	158	0.597	103	9.9	7.8	155.922	F
C	1	236	59	1665	85.50	0.00	475	0.497	248	17.4	14.4	94.414	F
	2	442	111	1915	85.50	0.00	546	0.810	564	88.3	57.8	448.510	F
	3	337	84	1665	75.50	0.00	419	0.805	433	67.9	44.0	442.256	F
D	1	497	124	1856	100.50	0.00	622	0.800	642	89.7	53.5	378.376	F
	3	126	32	1665	28.50	0.00	158	0.797	162	29.8	20.7	527.230	F

Junctions 10		
PICADY 10 - Priority Intersection Module		
Version: 10.1.2.2275		
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Filename: Junction 2.j10

Path: C:\Users\kearn\OneDrive\2023 Projects\P230400423 - DUBLIN, Boherboy LRD\5.0 Calculations\5.3
Higways\Modelling\2023 Boherboy

Report generation date: 03/12/2025 21:20:52

»2025 - Survey , AM
 »2025 - Survey , PM
 »2025 - Baseline, AM
 »2025 - Baseline, PM
 »2032 - ND, AM
 »2032 - ND, PM
 »2032 - WD, AM
 »2032 - WD, PM
 »2037 - ND , AM
 »2037 - ND , PM
 »2037 - WD, AM
 »2037 - WD, PM
 »2047 - ND, AM
 »2047 - ND , PM
 »2047 - WD, AM
 »2047 - WD, PM

Summary of junction performance

	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
	2025 - Survey					
Stream B-AC	0.8	19.61	0.44	0.4	15.33	0.27
Stream C-AB	0.1	6.11	0.07	0.2	6.56	0.09
	2025 - Baseline					
Stream B-AC	1.5	35.39	0.58	0.5	19.57	0.32
Stream C-AB	0.2	5.42	0.10	0.3	5.34	0.12
	2032 - ND					
Stream B-AC	2.0	44.63	0.66	0.6	21.46	0.36
Stream C-AB	0.3	5.38	0.11	0.4	5.34	0.13
	2032 - WD					
Stream B-AC	11.2	167.24	0.99	1.2	30.39	0.52
Stream C-AB	0.5	5.54	0.15	0.8	5.84	0.25
	2037 - ND					
Stream B-AC	2.2	48.11	0.69	0.6	22.14	0.37
Stream C-AB	0.3	5.35	0.11	0.4	5.34	0.14
	2037 - WD					
Stream B-AC	13.1	189.82	1.02	1.2	31.40	0.53
Stream C-AB	0.5	5.52	0.16	0.9	5.87	0.26
	2047 - ND					
Stream B-AC	2.7	57.13	0.73	0.7	22.96	0.39
Stream C-AB	0.5	5.49	0.16	0.4	5.30	0.14
	2047 - WD					
Stream B-AC	14.3	205.34	1.04	1.2	32.45	0.54
Stream C-AB	0.5	5.49	0.16	0.9	5.86	0.26

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

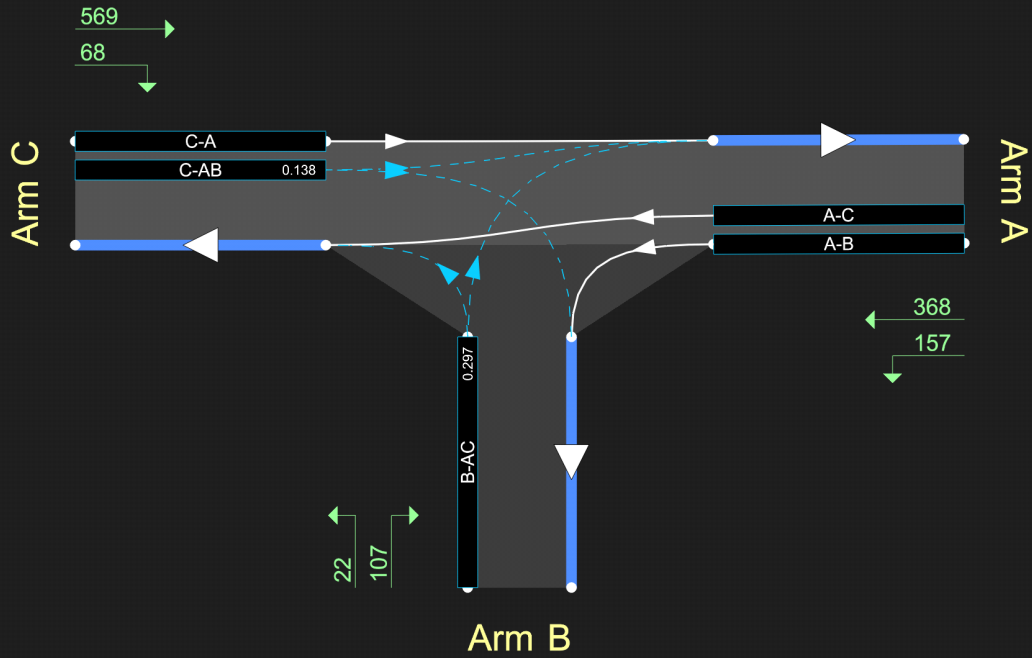
File summary

File Description

Title	P230400423 - DUBLIN, Boherboy LRD
Location	SITE 3
Site number	
Date	01/12/2025
Version	
Status	PLANNING
Identifier	
Client	
Jobnumber	
Enumerator	PINNACLE\JM
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 original traffic demand (PCU/hr).
Streams (downstream end) show RFC ()

The junction diagram reflects the last run of Junctions.

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2025 - Survey	AM	ONE HOUR	08:00	09:30	15
D2	2025 - Survey	PM	ONE HOUR	17:00	18:30	15
D3	2025 - Baseline	AM	ONE HOUR	08:00	09:30	15
D4	2025 - Baseline	PM	ONE HOUR	17:00	18:30	15
D5	2032 - ND	AM	ONE HOUR	08:00	09:30	15
D6	2032 - ND	PM	ONE HOUR	17:00	18:30	15
D7	2032 - WD	AM	ONE HOUR	08:00	09:30	15
D8	2032 - WD	PM	ONE HOUR	17:00	18:30	15
D9	2037 - ND	AM	ONE HOUR	08:00	09:30	15
D10	2037 - ND	PM	ONE HOUR	17:00	18:30	15
D11	2037 - WD	AM	ONE HOUR	08:00	09:30	15
D12	2037 - WD	PM	ONE HOUR	17:00	18:30	15
D13	2047 - ND	AM	ONE HOUR	08:00	09:30	15
D14	2047 - ND	PM	ONE HOUR	17:00	18:30	15
D15	2047 - WD	AM	ONE HOUR	08:00	09:30	15
D16	2047 - WD	PM	ONE HOUR	17:00	18:30	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2025 - Survey , AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		4.21	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.21	A

Arms

Arms

Arm	Name	Description	Arm type
A	Fortunestown Lane - E		Major
B	Carrigmore		Minor
C	Fortunestown Lane - W		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	6.00			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

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	2.20	0	0

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	440	0.080	0.202	0.127	0.289
B-C	574	0.088	0.222	-	-
C-B	574	0.222	0.222	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2025 - Survey	AM	ONE HOUR	08:00	09:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	275	100.000
B		✓	142	100.000
C		✓	306	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	42	233
	B	117	0	25
	C	280	26	0

Vehicle Mix

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.44	19.61	0.8	C
C-AB	0.07	6.11	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	107	390	0.274	105	0.4	13.829	B
C-AB	28	677	0.042	28	0.1	6.103	A
C-A	202			202			
A-B	32			32			
A-C	175			175			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	128	377	0.339	127	0.6	15.828	C
C-AB	37	698	0.053	37	0.1	5.985	A
C-A	238			238			
A-B	38			38			
A-C	209			209			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	156	358	0.437	155	0.8	19.417	C
C-AB	50	728	0.068	50	0.1	5.836	A
C-A	287			287			
A-B	46			46			
A-C	257			257			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	156	358	0.437	156	0.8	19.614	C
C-AB	50	728	0.068	50	0.1	5.841	A
C-A	287			287			
A-B	46			46			
A-C	257			257			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	128	377	0.339	129	0.6	16.039	C
C-AB	37	698	0.053	37	0.1	5.992	A
C-A	238			238			
A-B	38			38			
A-C	209			209			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	107	390	0.274	108	0.4	14.048	B
C-AB	29	677	0.042	29	0.1	6.111	A
C-A	202			202			
A-B	32			32			
A-C	175			175			

2025 - Survey , PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		2.41	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.41	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2025 - Survey	PM	ONE HOUR	17:00	18:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	338	100.000
B		✓	86	100.000
C		✓	261	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	79	259
	B	71	0	15
	C	227	34	0

Vehicle Mix

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.27	15.33	0.4	C
C-AB	0.09	6.56	0.2	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	65	387	0.167	64	0.2	12.236	B
C-AB	35	639	0.055	35	0.1	6.548	A
C-A	162			162			
A-B	59			59			
A-C	195			195			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	77	373	0.208	77	0.3	13.389	B
C-AB	45	653	0.068	44	0.1	6.510	A
C-A	190			190			
A-B	71			71			
A-C	233			233			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	95	353	0.268	94	0.4	15.272	C
C-AB	60	673	0.089	60	0.2	6.457	A
C-A	228			228			
A-B	87			87			
A-C	285			285			

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-AC	95	353	0.268	95	0.4	15.325	C
C-AB	60	673	0.089	60	0.2	6.464	A
C-A	228			228			
A-B	87			87			
A-C	285			285			

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-AC	77	372	0.208	78	0.3	13.455	B
C-AB	45	653	0.068	45	0.1	6.517	A
C-A	190			190			
A-B	71			71			
A-C	233			233			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	65	387	0.168	65	0.2	12.329	B
C-AB	35	639	0.055	35	0.1	6.559	A
C-A	161			161			
A-B	59			59			
A-C	195			195			

2025 - Baseline, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		4.42	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.42	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2025 - Baseline	AM	ONE HOUR	08:00	09:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	529	100.000
B		✓	142	100.000
C		✓	546	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
From		A	B	C
	A	0	42	487
	B	117	0	25
	C	520	26	0

Vehicle Mix

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.58	35.39	1.5	E
C-AB	0.10	5.42	0.2	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	107	329	0.325	105	0.5	17.521	C
C-AB	40	771	0.052	39	0.1	5.410	A
C-A	371			371			
A-B	32			32			
A-C	367			367			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	128	303	0.421	127	0.8	22.286	C
C-AB	55	814	0.068	55	0.1	5.218	A
C-A	436			436			
A-B	38			38			
A-C	438			438			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	156	267	0.585	154	1.4	34.020	D
C-AB	83	876	0.095	83	0.2	4.997	A
C-A	518			518			
A-B	46			46			
A-C	536			536			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	156	267	0.585	156	1.5	35.389	E
C-AB	83	876	0.095	83	0.2	5.001	A
C-A	518			518			
A-B	46			46			
A-C	536			536			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	128	303	0.421	130	0.8	23.225	C
C-AB	55	814	0.068	56	0.1	5.224	A
C-A	436			436			
A-B	38			38			
A-C	438			438			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	107	329	0.325	108	0.5	18.030	C
C-AB	40	772	0.052	40	0.1	5.416	A
C-A	371			371			
A-B	32			32			
A-C	367			367			

2025 - Baseline, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		2.01	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.01	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2025 - Baseline	PM	ONE HOUR	17:00	18:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	405	100.000
B		✓	86	100.000
C		✓	566	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
From		A	B	C
	A	0	79	326
	B	71	0	15
	C	532	34	0

Vehicle Mix

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.32	19.57	0.5	C
C-AB	0.12	5.34	0.3	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	65	349	0.186	64	0.2	13.840	B
C-AB	52	794	0.065	51	0.1	5.329	A
C-A	374			374			
A-B	59			59			
A-C	245			245			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	77	327	0.236	77	0.3	15.800	C
C-AB	71	840	0.085	71	0.2	5.148	A
C-A	438			438			
A-B	71			71			
A-C	293			293			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	95	297	0.319	94	0.5	19.440	C
C-AB	106	906	0.117	106	0.3	4.951	A
C-A	517			517			
A-B	87			87			
A-C	359			359			

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-AC	95	297	0.319	95	0.5	19.568	C
C-AB	107	907	0.118	107	0.3	4.957	A
C-A	516			516			
A-B	87			87			
A-C	359			359			

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-AC	77	327	0.236	78	0.3	15.933	C
C-AB	72	841	0.085	72	0.2	5.157	A
C-A	437			437			
A-B	71			71			
A-C	293			293			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	65	349	0.186	65	0.3	13.976	B
C-AB	52	794	0.065	52	0.1	5.341	A
C-A	374			374			
A-B	59			59			
A-C	245			245			

2032 - ND, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		5.70	A

Junction Network

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	2032 - ND	AM	ONE HOUR	08:00	09:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	554	100.000
B		✓	155	100.000
C		✓	573	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	46	508
	B	128	0	27
	C	545	28	0

Vehicle Mix

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.66	44.63	2.0	E
C-AB	0.11	5.38	0.3	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	117	322	0.362	114	0.6	18.822	C
C-AB	44	782	0.057	44	0.1	5.367	A
C-A	387			387			
A-B	35			35			
A-C	382			382			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	139	295	0.472	138	0.9	24.924	C
C-AB	62	827	0.075	62	0.1	5.177	A
C-A	453			453			
A-B	41			41			
A-C	457			457			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	171	258	0.662	167	1.9	41.728	E
C-AB	95	893	0.106	94	0.3	4.963	A
C-A	536			536			
A-B	51			51			
A-C	559			559			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	171	258	0.662	170	2.0	44.628	E
C-AB	95	893	0.106	95	0.3	4.970	A
C-A	536			536			
A-B	51			51			
A-C	559			559			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	139	295	0.472	143	1.0	26.642	D
C-AB	62	828	0.075	63	0.2	5.182	A
C-A	453			453			
A-B	41			41			
A-C	457			457			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	117	322	0.362	118	0.6	19.546	C
C-AB	45	782	0.057	45	0.1	5.376	A
C-A	387			387			
A-B	35			35			
A-C	382			382			

2032 - ND, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		2.24	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.24	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	2032 - ND	PM	ONE HOUR	17:00	18:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	436	100.000
B		✓	93	100.000
C		✓	589	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
From	A	0	86	350
	B	77	0	16
	C	552	37	0

Vehicle Mix

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.36	21.46	0.6	C
C-AB	0.13	5.34	0.4	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	70	342	0.205	69	0.3	14.445	B
C-AB	58	801	0.072	57	0.1	5.325	A
C-A	386			386			
A-B	65			65			
A-C	263			263			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	84	319	0.262	83	0.4	16.767	C
C-AB	80	849	0.095	80	0.2	5.153	A
C-A	449			449			
A-B	77			77			
A-C	315			315			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	102	287	0.357	102	0.6	21.276	C
C-AB	121	918	0.132	121	0.4	4.975	A
C-A	527			527			
A-B	95			95			
A-C	385			385			

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-AC	102	287	0.357	102	0.6	21.465	C
C-AB	122	918	0.133	122	0.4	4.984	A
C-A	527			527			
A-B	95			95			
A-C	385			385			

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-AC	84	319	0.262	84	0.4	16.954	C
C-AB	81	850	0.095	81	0.2	5.166	A
C-A	449			449			
A-B	77			77			
A-C	315			315			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	70	342	0.205	70	0.3	14.616	B
C-AB	58	801	0.073	59	0.1	5.337	A
C-A	385			385			
A-B	65			65			
A-C	263			263			

2032 - WD, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		27.93	D

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	27.93	D

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 - WD	AM	ONE HOUR	08:00	09:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	573	100.000
B		✓	228	100.000
C		✓	585	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
From		A	B	C
	A	0	65	508
	B	188	0	40
	C	545	40	0

Vehicle Mix

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.99	167.24	11.2	F
C-AB	0.15	5.54	0.5	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	172	319	0.538	167	1.2	25.313	D
C-AB	64	779	0.082	63	0.2	5.527	A
C-A	377			377			
A-B	49			49			
A-C	382			382			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	205	291	0.704	201	2.3	41.772	E
C-AB	89	825	0.108	89	0.3	5.388	A
C-A	437			437			
A-B	58			58			
A-C	457			457			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	251	253	0.994	228	8.0	109.869	F
C-AB	136	890	0.153	136	0.5	5.259	A
C-A	508			508			
A-B	72			72			
A-C	559			559			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	251	252	0.995	238	11.2	167.244	F
C-AB	137	890	0.154	137	0.5	5.272	A
C-A	507			507			
A-B	72			72			
A-C	559			559			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	205	291	0.704	237	3.1	88.363	F
C-AB	90	825	0.109	90	0.3	5.403	A
C-A	436			436			
A-B	58			58			
A-C	457			457			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	172	319	0.539	179	1.4	29.529	D
C-AB	64	780	0.082	64	0.2	5.542	A
C-A	376			376			
A-B	49			49			
A-C	382			382			

2032 - WD, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		3.92	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.92	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D8	2032 - WD	PM	ONE HOUR	17:00	18:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	505	100.000
B		✓	128	100.000
C		✓	619	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	155	350
	B	106	0	22
	C	552	67	0

Vehicle Mix

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.52	30.39	1.2	D
C-AB	0.25	5.84	0.8	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	96	331	0.291	95	0.4	16.599	C
C-AB	106	792	0.134	105	0.3	5.764	A
C-A	360			360			
A-B	117			117			
A-C	263			263			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	115	306	0.376	114	0.6	20.548	C
C-AB	148	839	0.177	148	0.5	5.737	A
C-A	408			408			
A-B	139			139			
A-C	315			315			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	141	271	0.520	139	1.1	29.578	D
C-AB	226	907	0.249	225	0.8	5.825	A
C-A	456			456			
A-B	171			171			
A-C	385			385			

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-AC	141	271	0.521	141	1.2	30.390	D
C-AB	227	908	0.250	227	0.8	5.843	A
C-A	455			455			
A-B	171			171			
A-C	385			385			

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-AC	115	306	0.376	117	0.7	21.168	C
C-AB	149	840	0.178	150	0.5	5.769	A
C-A	407			407			
A-B	139			139			
A-C	315			315			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	96	331	0.291	97	0.5	16.998	C
C-AB	107	793	0.135	108	0.4	5.796	A
C-A	359			359			
A-B	117			117			
A-C	263			263			

2037 - ND , AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		6.19	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.19	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D9	2037 - ND	AM	ONE HOUR	08:00	09:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	561	100.000
B		✓	159	100.000
C		✓	581	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
From	A	0	47	514
	B	131	0	28
	C	553	28	0

Vehicle Mix

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.69	48.11	2.2	E
C-AB	0.11	5.35	0.3	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	120	321	0.373	117	0.6	19.209	C
C-AB	45	785	0.057	44	0.1	5.345	A
C-A	393			393			
A-B	35			35			
A-C	387			387			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	143	294	0.487	142	1.0	25.767	D
C-AB	63	832	0.076	63	0.1	5.153	A
C-A	459			459			
A-B	42			42			
A-C	462			462			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	175	256	0.685	171	2.1	44.458	E
C-AB	96	898	0.107	96	0.3	4.939	A
C-A	543			543			
A-B	52			52			
A-C	566			566			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	175	256	0.685	175	2.2	48.110	E
C-AB	97	898	0.107	97	0.3	4.944	A
C-A	543			543			
A-B	52			52			
A-C	566			566			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	143	294	0.487	147	1.1	27.840	D
C-AB	63	832	0.076	64	0.2	5.159	A
C-A	459			459			
A-B	42			42			
A-C	462			462			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	120	321	0.373	121	0.7	20.019	C
C-AB	45	786	0.057	45	0.1	5.354	A
C-A	392			392			
A-B	35			35			
A-C	387			387			

2037 - ND , PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		2.31	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.31	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D10	2037 - ND	PM	ONE HOUR	17:00	18:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	445	100.000
B		✓	95	100.000
C		✓	596	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
From	A	0	88	357
	B	79	0	16
	C	558	38	0

Vehicle Mix

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.37	22.14	0.6	C
C-AB	0.14	5.34	0.4	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	72	340	0.211	70	0.3	14.653	B
C-AB	60	803	0.075	59	0.1	5.325	A
C-A	389			389			
A-B	66			66			
A-C	269			269			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	85	316	0.270	85	0.4	17.102	C
C-AB	84	852	0.098	83	0.2	5.158	A
C-A	452			452			
A-B	79			79			
A-C	321			321			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	105	283	0.369	104	0.6	21.926	C
C-AB	127	921	0.137	126	0.4	4.987	A
C-A	530			530			
A-B	97			97			
A-C	393			393			

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-AC	105	283	0.369	105	0.6	22.142	C
C-AB	127	921	0.138	127	0.4	4.993	A
C-A	529			529			
A-B	97			97			
A-C	393			393			

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-AC	85	316	0.270	86	0.4	17.310	C
C-AB	84	852	0.098	85	0.2	5.169	A
C-A	452			452			
A-B	79			79			
A-C	321			321			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	72	339	0.211	72	0.3	14.839	B
C-AB	60	803	0.075	61	0.2	5.337	A
C-A	388			388			
A-B	66			66			
A-C	269			269			

2037 - WD, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		31.76	D

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	31.76	D

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D11	2037 - WD	AM	ONE HOUR	08:00	09:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	580	100.000
B		✓	232	100.000
C		✓	593	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	66	514
	B	191	0	41
	C	553	40	0

Vehicle Mix

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	1.02	189.82	13.1	F
C-AB	0.16	5.52	0.5	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	175	317	0.550	170	1.3	26.008	D
C-AB	64	783	0.082	64	0.2	5.506	A
C-A	382			382			
A-B	50			50			
A-C	387			387			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	209	289	0.721	204	2.4	43.967	E
C-AB	90	829	0.109	90	0.3	5.365	A
C-A	443			443			
A-B	59			59			
A-C	462			462			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	255	250	1.021	229	9.1	120.061	F
C-AB	139	895	0.155	138	0.5	5.238	A
C-A	514			514			
A-B	73			73			
A-C	566			566			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	255	250	1.022	239	13.1	189.824	F
C-AB	139	896	0.155	139	0.5	5.251	A
C-A	514			514			
A-B	73			73			
A-C	566			566			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	209	289	0.721	247	3.6	108.530	F
C-AB	91	830	0.110	92	0.3	5.381	A
C-A	442			442			
A-B	59			59			
A-C	462			462			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	175	317	0.551	183	1.4	31.128	D
C-AB	65	783	0.083	65	0.2	5.521	A
C-A	382			382			
A-B	50			50			
A-C	387			387			

2037 - WD, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		4.02	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.02	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D12	2037 - WD	PM	ONE HOUR	17:00	18:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	514	100.000
B		✓	129	100.000
C		✓	626	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
From	A	0	157	357
	B	107	0	22
	C	558	68	0

Vehicle Mix

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.53	31.40	1.2	D
C-AB	0.26	5.87	0.9	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	97	329	0.295	95	0.4	16.801	C
C-AB	109	794	0.137	107	0.3	5.765	A
C-A	363			363			
A-B	118			118			
A-C	269			269			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	116	304	0.382	115	0.7	20.918	C
C-AB	152	842	0.181	152	0.5	5.747	A
C-A	410			410			
A-B	141			141			
A-C	321			321			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	142	268	0.530	140	1.2	30.499	D
C-AB	233	910	0.255	231	0.9	5.850	A
C-A	457			457			
A-B	173			173			
A-C	393			393			

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-AC	142	268	0.531	142	1.2	31.405	D
C-AB	233	911	0.256	233	0.9	5.874	A
C-A	456			456			
A-B	173			173			
A-C	393			393			

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-AC	116	303	0.382	118	0.7	21.594	C
C-AB	153	843	0.182	154	0.5	5.780	A
C-A	410			410			
A-B	141			141			
A-C	321			321			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	97	329	0.295	98	0.5	17.219	C
C-AB	110	795	0.138	110	0.4	5.803	A
C-A	362			362			
A-B	118			118			
A-C	269			269			

2047 - ND, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		7.49	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	7.49	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D13	2047 - ND	AM	ONE HOUR	08:00	09:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	573	100.000
B		✓	165	100.000
C		✓	599	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
From	A	0	49	524
	B	136	0	29
	C	559	40	0

Vehicle Mix

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.73	57.13	2.7	F
C-AB	0.16	5.49	0.5	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	124	316	0.393	121	0.7	20.073	C
C-AB	65	787	0.082	64	0.2	5.476	A
C-A	386			386			
A-B	37			37			
A-C	394			394			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	148	288	0.515	147	1.1	27.701	D
C-AB	91	834	0.109	91	0.3	5.333	A
C-A	447			447			
A-B	44			44			
A-C	471			471			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	182	248	0.731	176	2.5	51.208	F
C-AB	140	901	0.155	139	0.5	5.203	A
C-A	520			520			
A-B	54			54			
A-C	577			577			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	182	248	0.732	181	2.7	57.130	F
C-AB	140	902	0.156	140	0.5	5.214	A
C-A	519			519			
A-B	54			54			
A-C	577			577			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	148	288	0.516	154	1.2	30.794	D
C-AB	91	835	0.110	92	0.3	5.349	A
C-A	447			447			
A-B	44			44			
A-C	471			471			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	124	316	0.393	126	0.7	21.081	C
C-AB	65	788	0.083	66	0.2	5.494	A
C-A	386			386			
A-B	37			37			
A-C	394			394			

2047 - ND , PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		2.53	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.53	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D14	2047 - ND	PM	ONE HOUR	17:00	18:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	417	100.000
B		✓	100	100.000
C		✓	609	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
From		A	B	C
	A	0	49	368
	B	83	0	17
	C	569	40	0

Vehicle Mix

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.39	22.96	0.7	C
C-AB	0.14	5.30	0.4	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	75	339	0.222	74	0.3	14.878	B
C-AB	64	813	0.078	63	0.2	5.283	A
C-A	395			395			
A-B	37			37			
A-C	277			277			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	90	315	0.285	89	0.4	17.484	C
C-AB	89	863	0.103	88	0.2	5.118	A
C-A	459			459			
A-B	44			44			
A-C	331			331			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	110	282	0.390	109	0.7	22.703	C
C-AB	135	935	0.144	134	0.4	4.952	A
C-A	536			536			
A-B	54			54			
A-C	405			405			

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-AC	110	282	0.390	110	0.7	22.960	C
C-AB	135	935	0.144	135	0.4	4.960	A
C-A	536			536			
A-B	54			54			
A-C	405			405			

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-AC	90	315	0.285	91	0.5	17.725	C
C-AB	89	864	0.103	90	0.2	5.130	A
C-A	458			458			
A-B	44			44			
A-C	331			331			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	75	339	0.222	76	0.3	15.083	C
C-AB	64	813	0.079	64	0.2	5.298	A
C-A	394			394			
A-B	37			37			
A-C	277			277			

2047 - WD, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		33.80	D

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	33.80	D

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D15	2047 - WD	AM	ONE HOUR	08:00	09:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	590	100.000
B		✓	232	100.000
C		✓	605	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	66	524
	B	191	0	41
	C	565	40	0

Vehicle Mix

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	1.04	205.34	14.3	F
C-AB	0.16	5.49	0.5	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	175	315	0.555	170	1.3	26.445	D
C-AB	65	788	0.083	65	0.2	5.473	A
C-A	390			390			
A-B	50			50			
A-C	394			394			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	209	286	0.729	204	2.5	45.379	E
C-AB	92	836	0.110	92	0.3	5.331	A
C-A	452			452			
A-B	59			59			
A-C	471			471			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	255	246	1.038	227	9.7	127.115	F
C-AB	142	904	0.158	142	0.5	5.207	A
C-A	524			524			
A-B	73			73			
A-C	577			577			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	255	246	1.039	237	14.3	205.339	F
C-AB	143	904	0.158	143	0.5	5.218	A
C-A	523			523			
A-B	73			73			
A-C	577			577			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	209	286	0.730	250	3.8	123.021	F
C-AB	93	836	0.111	94	0.3	5.345	A
C-A	451			451			
A-B	59			59			
A-C	471			471			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	175	315	0.555	184	1.5	32.200	D
C-AB	66	789	0.084	66	0.2	5.488	A
C-A	390			390			
A-B	50			50			
A-C	394			394			

2047 - WD, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		4.08	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.08	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D16	2047 - WD	PM	ONE HOUR	17:00	18:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	525	100.000
B		✓	129	100.000
C		✓	637	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	157	368
	B	107	0	22
	C	569	68	0

Vehicle Mix

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.54	32.45	1.2	D
C-AB	0.26	5.86	0.9	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	97	327	0.297	95	0.5	16.994	C
C-AB	110	799	0.138	109	0.4	5.740	A
C-A	369			369			
A-B	118			118			
A-C	277			277			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	116	300	0.386	115	0.7	21.284	C
C-AB	155	848	0.183	155	0.5	5.727	A
C-A	417			417			
A-B	141			141			
A-C	331			331			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	142	264	0.539	140	1.2	31.437	D
C-AB	238	918	0.260	237	0.9	5.836	A
C-A	463			463			
A-B	173			173			
A-C	405			405			

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-AC	142	263	0.539	142	1.2	32.447	D
C-AB	239	919	0.260	239	0.9	5.862	A
C-A	462			462			
A-B	173			173			
A-C	405			405			

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-AC	116	300	0.387	118	0.7	22.013	C
C-AB	156	849	0.184	158	0.6	5.759	A
C-A	416			416			
A-B	141			141			
A-C	331			331			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	97	326	0.298	98	0.5	17.431	C
C-AB	111	800	0.139	112	0.4	5.777	A
C-A	368			368			
A-B	118			118			
A-C	277			277			

Junctions 10		
OSCADY 10 - Signalised Intersection Module		
Version: 10.1.2.2275		
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Filename: Junction 3.j10

Path: C:\Users\kearn\OneDrive\2023 Projects\P230400423 - DUBLIN, Boherboy LRD\5.0 Calculations\5.3
Higways\Modelling\2023 Boherboy

Report generation date: 03/12/2025 21:21:52

»2025, AM
 »2025 , PM
 »2025 - Baseline, AM
 »2025 - Baseline, PM
 »2032 - ND, AM
 »2032 - ND, PM
 »2032 - WD, AM
 »2032 - WD, PM
 »2037 - ND, AM
 »2037 - ND, PM
 »2037 - WD, AM
 »2037 - WD, PM
 »2047 - ND , AM
 »2047 - ND , PM
 »2047 - WD , AM
 »2047 - WD, PM

Summary of junction performance

	AM			PM		
	Queue (PCU)	Delay (s)	DOS	Queue (PCU)	Delay (s)	DOS
	2025					
Arm A	11.5	74.39	0.94	5.4	38.92	0.80
Arm B	10.5	78.64	0.93	6.1	39.79	0.84
Arm C	10.5	49.59	0.89	4.3	29.32	0.72
	2025 - Baseline					
Arm A	10.2	54.82	0.90	7.9	50.10	0.87
Arm B	8.4	55.95	0.88	8.2	52.30	0.88
Arm C	9.2	61.39	0.90	8.1	51.14	0.87
	2032 - ND					
Arm A	20.3	104.38	0.99	6.0	34.82	0.78
Arm B	18.7	125.55	1.00	8.0	46.04	0.87
Arm C	23.2	105.27	1.00	12.8	97.44	0.97
	2032 - WD					
Arm A	29.2	132.16	1.03	9.0	57.27	0.89
Arm B	23.2	150.78	1.03	9.8	54.77	0.90
Arm C	29.1	127.58	1.03	8.7	56.62	0.88
	2037 - ND					
Arm A	26.9	134.80	1.03	8.7	57.08	0.89
Arm B	18.6	120.89	1.00	8.4	46.97	0.88
Arm C	25.7	113.10	1.01	8.1	54.67	0.88
	2037 - WD					
Arm A	25.7	112.50	1.00	10.9	70.04	0.92
Arm B	22.6	141.99	1.02	13.4	77.01	0.95
Arm C	47.1	245.87	1.10	9.9	57.39	0.89
	2047 - ND					
Arm A	32.0	152.45	1.05	10.5	68.57	0.92
Arm B	25.9	159.49	1.04	11.0	62.90	0.93
Arm C	29.2	122.02	1.02	7.8	48.21	0.85
	2047 - WD					
Arm A	37.3	156.30	1.05	10.7	65.10	0.91
Arm B	31.1	191.87	1.06	14.0	77.51	0.96
Arm C	42.5	177.72	1.07	10.4	64.64	0.91

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

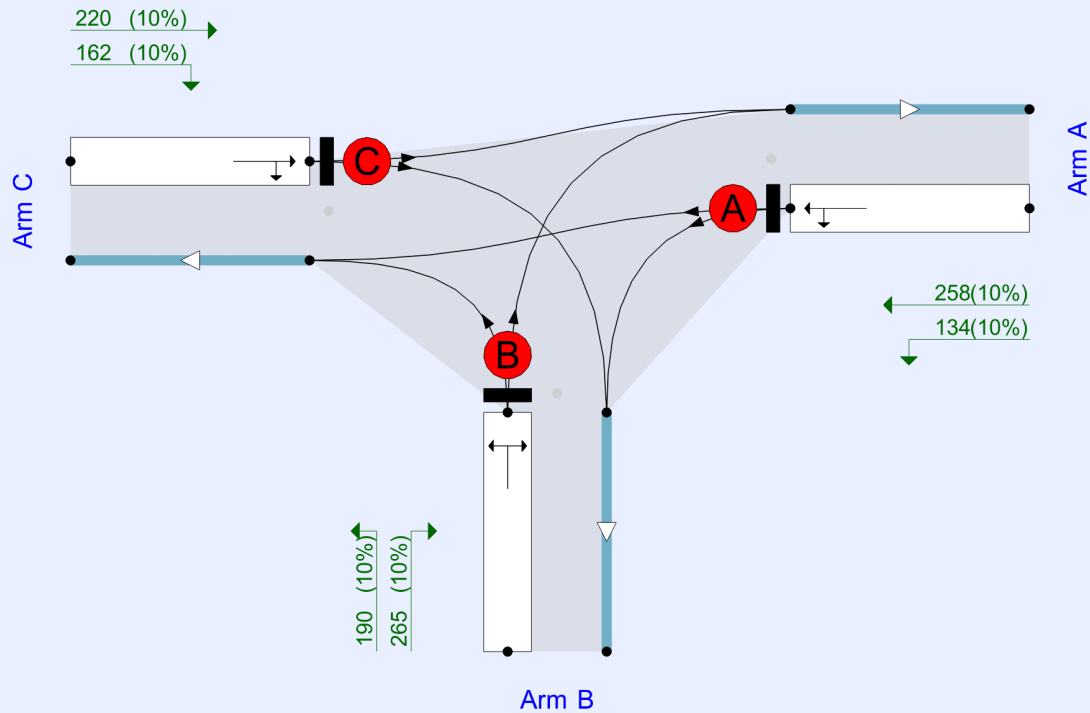
File summary

File Description

Title	P230400423 - DUBLIN, Boherboy LRD
Location	SITE 3
Site number	
Date	01/12/2025
Version	
Status	PLANNING
Identifier	
Client	
Jobnumber	
Enumerator	PINNACLEJM
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 original traffic demand (PCU/hr).

The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	DOS Threshold	Average Delay threshold (s)	Queue threshold (PCU)	Use simulation for HCM roundabouts	Use iterations for HCM roundabouts
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	2025	AM	ONE HOUR	08:00	09:30	15	✓
D2	2025	PM	ONE HOUR	17:00	18:30	15	✓
D3	2025 - Baseline	AM	ONE HOUR	08:00	09:30	15	✓
D4	2025 - Baseline	PM	ONE HOUR	17:00	18:30	15	✓
D5	2032 - ND	AM	ONE HOUR	08:00	09:30	15	✓
D6	2032 - ND	PM	ONE HOUR	17:00	18:30	15	✓
D7	2032 - WD	AM	ONE HOUR	08:00	09:30	15	✓
D8	2032 - WD	PM	ONE HOUR	17:00	18:30	15	✓
D9	2037 - ND	AM	ONE HOUR	08:00	09:30	15	✓
D10	2037 - ND	PM	ONE HOUR	17:00	18:30	15	✓
D11	2037 - WD	AM	ONE HOUR	08:00	09:30	15	✓
D12	2037 - WD	PM	ONE HOUR	17:00	18:30	15	✓
D13	2047 - ND	AM	ONE HOUR	08:00	09:30	15	✓
D14	2047 - ND	PM	ONE HOUR	17:00	18:30	15	✓
D15	2047 - WD	AM	ONE HOUR	08:00	09:30	15	✓
D16	2047 - WD	PM	ONE HOUR	17:00	18:30	15	✓

Analysis Set Details

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

2025, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Signalised		65.58	E

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	65.58	E

Arms

Arms

Arm	Name	Description
A	Carter Lane (S)	
B	Citywest Drive	
C	untitled	

OSCADY Traffic Streams

Arm	Traffic Stream	Phase	Destination arms	Straight move
A	2	A	B, C	C
B	2	B	A, C	
C	2	C	A, B	A

OSCADY Lanes

Arm	Traffic Stream	Destination arms	Gradient (%)	Width (m)	Turning radius (m)	Nearside lane	Has bay
A	2	C, B	0	3.00	5.00		
B	2	A, C	0	3.00	5.00		
C	2	B, A	0	3.00	5.00		

Signal Timings

Junction 1

Junction	Sequence to use	Cycle time (s)	Maximum cycle time (s)	Start displacement (s)	End displacement (s)
1	1	62	300	1.40	2.90

Optimisation options

Junction	Optimise stage lengths	Optimise cycle time	Optimiser demand source	Optimiser message
1	✓	✓	Average	Timings provide delay minimisation..

Phases

Junction	Phase	Name	Minimum green (s)
1	A		7
	B		7
	C		7

Library Stages

Junction	Library Stage	Phases in stage	User stage minimum (s)	Run every N cycles	Probability of running (%)
1	1	A	1		
	2	B	1		
	3	C	1		

Stage Sequences

Junction	Sequence	Name	Stage IDs	Stage ends
1	1		1, 2, 3	19, 38, 0

Intergreen Matrix for Junction 1

	To			
		A	B	C
	A		5	5
	B	5		5
	C	5	5	

Interstage Matrix for Junction 1

	To			
		1	2	3
	1	0	5	5
	2	5	0	5
	3	5	5	0

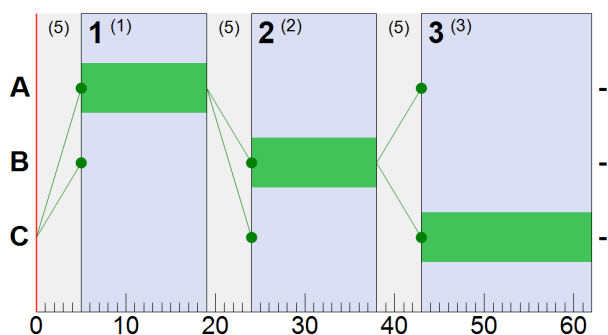
Resultant Stages

Junction	Resultant Stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	1	A	5	19	14	1	7
	2	2	B	24	38	14	1	7
	3	3	C	43	0	19	1	7

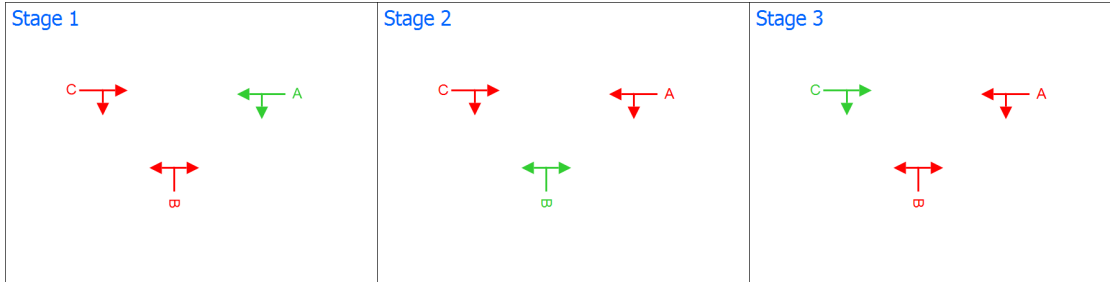
Resultant Phase Green Periods

Junction	Phase	Green period	Start time (s)	End time (s)	Duration (s)
1	A	1	5	19	14
	B	1	24	38	14
	C	1	43	0	19

Phase Timings Diagram for Junction 1



Stage Sequence Diagram for Junction 1



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	2025	AM	ONE HOUR	08:00	09:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	384	100.000
B		ONE HOUR	✓	335	100.000
C		ONE HOUR	✓	485	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	175	209
	B	120	0	215
	C	261	224	0

Vehicle Mix

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

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Arm	Max DOS	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
A	0.94	74.39	11.5	E	352	529	421.55	47.85	4.68	421.95	47.90
B	0.93	78.64	10.5	E	307	461	387.52	50.43	4.31	387.90	50.47
C	0.89	49.59	10.5	D	445	668	384.64	34.57	4.27	384.93	34.60

Main Results for each time segment

08:00 - 08:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	289	72	1807	15.50	0.00	452	0.640	271	0.0	4.5	29.444	C
B	2	252	63	1581	15.50	0.00	395	0.638	236	0.0	4.0	30.522	C
C	2	365	91	1804	20.50	0.00	597	0.612	346	0.0	4.8	23.403	C

08:15 - 08:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	345	86	1808	15.50	0.00	452	0.764	339	4.5	6.0	36.514	D
B	2	301	75	1581	15.50	0.00	395	0.762	296	4.0	5.4	38.291	D
C	2	436	109	1805	20.50	0.00	597	0.730	430	4.8	6.3	28.297	C

08:30 - 08:45

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	423	106	1808	15.50	0.00	452	0.936	405	6.0	10.5	57.674	E
B	2	369	92	1581	15.50	0.00	395	0.933	352	5.4	9.5	60.484	E
C	2	534	133	1805	20.50	0.00	597	0.895	519	6.3	10.0	42.561	D

08:45 - 09:00

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	423	106	1808	15.50	0.00	452	0.936	419	10.5	11.5	74.390	E
B	2	369	92	1581	15.50	0.00	395	0.933	365	9.5	10.5	78.645	E
C	2	534	133	1805	20.50	0.00	597	0.895	532	10.0	10.5	49.590	D

09:00 - 09:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	345	86	1808	15.50	0.00	452	0.764	366	11.5	6.3	44.338	D
B	2	301	75	1581	15.50	0.00	395	0.762	320	10.5	5.7	47.537	D
C	2	436	109	1805	20.50	0.00	597	0.730	452	10.5	6.4	30.869	C

09:15 - 09:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	289	72	1807	15.50	0.00	452	0.640	296	6.3	4.5	30.833	C
B	2	252	63	1581	15.50	0.00	395	0.638	259	5.7	4.0	32.291	C
C	2	365	91	1804	20.50	0.00	597	0.612	371	6.4	4.9	23.999	C

Queueing Delay Results for each time segment

08:00 - 08:15

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	35.47	2.36	29.444	C
B	2	32.07	2.14	30.522	C
C	2	35.61	2.37	23.403	C

08:15 - 08:30

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	52.52	3.50	36.514	D
B	2	48.05	3.20	38.291	D
C	2	51.41	3.43	28.297	C

08:30 - 08:45

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	101.60	6.77	57.674	E
B	2	92.95	6.20	60.484	E
C	2	94.70	6.31	42.561	D

08:45 - 09:00

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	131.05	8.74	74.390	E
B	2	120.86	8.06	78.645	E
C	2	110.34	7.36	49.590	D

09:00 - 09:15

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	63.77	4.25	44.338	D
B	2	59.65	3.98	47.537	D
C	2	56.08	3.74	30.869	C

09:15 - 09:30

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	37.14	2.48	30.833	C
B	2	33.93	2.26	32.291	C
C	2	36.51	2.43	23.999	C

2025 , PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Signalised		36.28	D

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	36.28	D

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	2025	PM	ONE HOUR	17:00	18:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	311	100.000
B		ONE HOUR	✓	352	100.000
C		ONE HOUR	✓	295	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	106	205
	B	188	0	164
	C	156	139	0

Vehicle Mix

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

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Arm	Max DOS	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
A	0.80	38.92	5.4	D	285	428	213.26	29.89	2.37	213.41	29.91
B	0.84	39.79	6.1	D	323	485	234.74	29.07	2.61	234.89	29.09
C	0.72	29.32	4.3	C	271	406	165.11	24.40	1.83	165.21	24.41

Main Results for each time segment

17:00 - 17:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	234	59	1864	10.50	0.00	425	0.550	223	0.0	2.7	22.189	C
B	2	265	66	1581	13.50	0.00	464	0.571	253	0.0	2.9	20.296	C
C	2	222	56	1800	11.50	0.00	450	0.494	212	0.0	2.4	19.740	B

17:15 - 17:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	280	70	1865	10.50	0.00	426	0.657	276	2.7	3.6	26.171	C
B	2	316	79	1581	13.50	0.00	464	0.682	313	2.9	3.8	24.629	C
C	2	265	66	1800	11.50	0.00	450	0.589	263	2.4	3.1	22.467	C

17:30 - 17:45

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	342	86	1864	10.50	0.00	426	0.805	335	3.6	5.3	35.703	D
B	2	388	97	1581	13.50	0.00	464	0.835	379	3.8	5.9	35.589	D
C	2	325	81	1801	11.50	0.00	450	0.722	320	3.1	4.3	28.211	C

17:45 - 18:00

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	342	86	1864	10.50	0.00	426	0.805	342	5.3	5.4	38.922	D
B	2	388	97	1581	13.50	0.00	464	0.835	387	5.9	6.1	39.789	D
C	2	325	81	1801	11.50	0.00	450	0.722	325	4.3	4.3	29.315	C

18:00 - 18:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	280	70	1865	10.50	0.00	426	0.657	287	5.4	3.6	27.811	C
B	2	316	79	1581	13.50	0.00	464	0.682	325	6.1	3.9	26.553	C
C	2	265	66	1800	11.50	0.00	450	0.589	270	4.3	3.1	23.163	C

18:15 - 18:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	234	59	1864	10.50	0.00	425	0.550	238	3.6	2.8	22.810	C
B	2	265	66	1581	13.50	0.00	464	0.571	269	3.9	2.9	20.939	C
C	2	222	56	1800	11.50	0.00	450	0.494	225	3.1	2.5	20.063	C

Queueing Delay Results for each time segment

17:00 - 17:15

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	21.65	1.44	22.189	C
B	2	22.41	1.49	20.296	C
C	2	18.27	1.22	19.740	B

17:15 - 17:30

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	30.49	2.03	26.171	C
B	2	32.47	2.16	24.629	C
C	2	24.83	1.66	22.467	C

17:30 - 17:45

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	50.94	3.40	35.703	D
B	2	57.47	3.83	35.589	D
C	2	38.18	2.55	28.211	C

17:45 - 18:00

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	55.53	3.70	38.922	D
B	2	64.25	4.28	39.789	D
C	2	39.67	2.64	29.315	C

18:00 - 18:15

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	32.40	2.16	27.811	C
B	2	35.01	2.33	26.553	C
C	2	25.60	1.71	23.163	C

18:15 - 18:30

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	22.25	1.48	22.810	C
B	2	23.12	1.54	20.939	C
C	2	18.57	1.24	20.063	C

2025 - Baseline, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Signalised		57.22	E

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	57.22	E

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2025 - Baseline	AM	ONE HOUR	08:00	09:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	440	100.000
B		ONE HOUR	✓	355	100.000
C		ONE HOUR	✓	360	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	200	240
	B	180	0	175
	C	185	175	0

Vehicle Mix

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

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Arm	Max DOS	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
A	0.90	54.82	10.2	D	404	606	377.19	37.37	4.19	377.49	37.40
B	0.88	55.95	8.4	E	326	489	317.46	38.98	3.53	317.73	39.01
C	0.90	61.39	9.2	E	330	496	347.26	42.05	3.86	347.58	42.09

Main Results for each time segment

08:00 - 08:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	331	83	1808	17.50	0.00	536	0.618	313	0.0	4.5	24.645	C
B	2	267	67	1581	16.50	0.00	442	0.605	252	0.0	3.7	26.155	C
C	2	271	68	1793	14.50	0.00	441	0.615	255	0.0	4.0	27.847	C

08:15 - 08:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	396	99	1808	17.50	0.00	536	0.737	390	4.5	5.8	30.060	C
B	2	319	80	1581	16.50	0.00	442	0.722	314	3.7	4.9	31.887	C
C	2	324	81	1793	14.50	0.00	441	0.734	319	4.0	5.2	33.917	C

08:30 - 08:45

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	484	121	1808	17.50	0.00	536	0.903	469	5.8	9.6	45.852	D
B	2	391	98	1581	16.50	0.00	442	0.884	379	4.9	8.0	47.403	D
C	2	396	99	1793	14.50	0.00	441	0.899	383	5.2	8.6	50.877	D

08:45 - 09:00

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	484	121	1808	17.50	0.00	536	0.903	482	9.6	10.2	54.823	D
B	2	391	98	1581	16.50	0.00	442	0.884	389	8.0	8.4	55.951	E
C	2	396	99	1793	14.50	0.00	441	0.899	394	8.6	9.2	61.388	E

09:00 - 09:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	396	99	1808	17.50	0.00	536	0.737	412	10.2	6.0	33.567	C
B	2	319	80	1581	16.50	0.00	442	0.722	332	8.4	5.1	35.631	D
C	2	324	81	1793	14.50	0.00	441	0.734	339	9.2	5.4	38.540	D

09:15 - 09:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	331	83	1808	17.50	0.00	536	0.618	337	6.0	4.5	25.424	C
B	2	267	67	1581	16.50	0.00	442	0.605	272	5.1	3.8	27.142	C
C	2	271	68	1793	14.50	0.00	441	0.615	277	5.4	4.0	28.956	C

Queueing Delay Results for each time segment

08:00 - 08:15

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	34.02	2.27	24.645	C
B	2	29.13	1.94	26.155	C
C	2	31.45	2.10	27.847	C

08:15 - 08:30

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	49.54	3.30	30.060	C
B	2	42.40	2.83	31.887	C
C	2	45.74	3.05	33.917	C

08:30 - 08:45

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	92.55	6.17	45.852	D
B	2	77.20	5.15	47.403	D
C	2	84.03	5.60	50.877	D

08:45 - 09:00

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	110.66	7.38	54.823	D
B	2	91.12	6.07	55.951	E
C	2	101.38	6.76	61.388	E

09:00 - 09:15

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	55.32	3.69	33.567	C
B	2	47.38	3.16	35.631	D
C	2	51.97	3.46	38.540	D

09:15 - 09:30

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	35.09	2.34	25.424	C
B	2	30.23	2.02	27.142	C
C	2	32.70	2.18	28.956	C

2025 - Baseline, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Signalised		51.19	D

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	51.19	D

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	2025 - Baseline	PM	ONE HOUR	17:00	18:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	365	100.000
B		ONE HOUR	✓	373	100.000
C		ONE HOUR	✓	369	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
From	A	0	180	185
	B	198	0	175
	C	194	175	0

Vehicle Mix

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

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Arm	Max DOS	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
A	0.87	50.10	7.9	D	335	502	302.44	36.12	3.36	302.69	36.15
B	0.88	52.30	8.2	D	342	513	311.03	36.35	3.46	311.27	36.38
C	0.87	51.14	8.1	D	339	508	309.41	36.55	3.44	309.67	36.58

Main Results for each time segment

17:00 - 17:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	275	69	1790	14.50	0.00	463	0.593	260	0.0	3.7	25.244	C
B	2	281	70	1581	16.50	0.00	466	0.603	266	0.0	3.7	24.255	C
C	2	278	69	1799	14.50	0.00	466	0.596	263	0.0	3.8	25.322	C

17:15 - 17:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	328	82	1790	14.50	0.00	463	0.708	324	3.7	4.9	30.296	C
B	2	335	84	1581	16.50	0.00	466	0.720	331	3.7	4.8	29.690	C
C	2	332	83	1799	14.50	0.00	466	0.712	327	3.8	4.9	30.467	C

17:30 - 17:45

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	402	100	1790	14.50	0.00	464	0.867	391	4.9	7.6	43.709	D
B	2	411	103	1581	16.50	0.00	466	0.882	399	4.8	7.8	44.510	D
C	2	406	102	1799	14.50	0.00	466	0.872	395	4.9	7.8	44.308	D

17:45 - 18:00

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	402	100	1790	14.50	0.00	464	0.867	401	7.6	7.9	50.101	D
B	2	411	103	1581	16.50	0.00	466	0.882	409	7.8	8.2	52.296	D
C	2	406	102	1799	14.50	0.00	466	0.872	405	7.8	8.1	51.138	D

18:00 - 18:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	328	82	1790	14.50	0.00	463	0.708	340	7.9	5.0	33.069	C
B	2	335	84	1581	16.50	0.00	466	0.720	348	8.2	5.0	33.003	C
C	2	332	83	1799	14.50	0.00	466	0.712	344	8.1	5.1	33.396	C

18:15 - 18:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	275	69	1790	14.50	0.00	463	0.593	280	5.0	3.8	26.045	C
B	2	281	70	1581	16.50	0.00	466	0.603	286	5.0	3.7	25.132	C
C	2	278	69	1799	14.50	0.00	466	0.596	283	5.1	3.8	26.142	C

Queueing Delay Results for each time segment

17:00 - 17:15

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	28.90	1.93	25.244	C
B	2	28.38	1.89	24.255	C
C	2	29.31	1.95	25.322	C

17:15 - 17:30

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	41.42	2.76	30.296	C
B	2	41.48	2.77	29.690	C
C	2	42.11	2.81	30.467	C

17:30 - 17:45

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	73.19	4.88	43.709	D
B	2	76.16	5.08	44.510	D
C	2	75.00	5.00	44.308	D

17:45 - 18:00

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	83.89	5.59	50.101	D
B	2	89.49	5.97	52.296	D
C	2	86.57	5.77	51.138	D

18:00 - 18:15

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	45.21	3.01	33.069	C
B	2	46.11	3.07	33.003	C
C	2	46.16	3.08	33.396	C

18:15 - 18:30

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	29.82	1.99	26.045	C
B	2	29.41	1.96	25.132	C
C	2	30.26	2.02	26.142	C

2032 - ND, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Signalised		110.38	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	110.38	F

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2032 - ND	AM	ONE HOUR	08:00	09:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	475	100.000
B		ONE HOUR	✓	369	100.000
C		ONE HOUR	✓	539	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	216	259
	B	135	0	234
	C	295	244	0

Vehicle Mix

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

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Arm	Max DOS	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
A	0.99	104.38	20.3	F	436	654	685.02	62.86	7.61	685.76	62.93
B	1.00	125.55	18.7	F	339	508	645.54	76.26	7.17	646.32	76.35
C	1.00	105.27	23.2	F	495	742	769.97	62.27	8.56	770.69	62.33

Main Results for each time segment

08:00 - 08:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	358	89	1808	24.50	0.00	527	0.678	330	0.0	6.8	35.035	D
B	2	278	69	1581	21.50	0.00	405	0.687	255	0.0	5.8	39.771	D
C	2	406	101	1809	27.50	0.00	592	0.685	377	0.0	7.3	32.598	C

08:15 - 08:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	427	107	1809	24.50	0.00	527	0.810	418	6.8	9.1	43.778	D
B	2	332	83	1581	21.50	0.00	405	0.820	323	5.8	7.9	50.794	D
C	2	485	121	1809	27.50	0.00	592	0.818	475	7.3	9.8	41.218	D

08:30 - 08:45

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	523	131	1808	24.50	0.00	527	0.992	491	9.1	17.1	72.961	E
B	2	406	102	1581	21.50	0.00	405	1.004	377	7.9	15.2	84.573	F
C	2	593	148	1809	27.50	0.00	592	1.002	556	9.8	19.1	71.374	E

08:45 - 09:00

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	523	131	1808	24.50	0.00	527	0.992	510	17.1	20.3	104.383	F
B	2	406	102	1581	21.50	0.00	405	1.004	392	15.2	18.7	125.554	F
C	2	593	148	1809	27.50	0.00	592	1.002	577	19.1	23.2	105.267	F

09:00 - 09:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	427	107	1809	24.50	0.00	527	0.810	470	20.3	9.7	63.939	E
B	2	332	83	1581	21.50	0.00	405	0.820	369	18.7	9.5	89.538	F
C	2	485	121	1809	27.50	0.00	592	0.818	533	23.2	11.2	67.963	E

09:15 - 09:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	358	89	1808	24.50	0.00	527	0.678	369	9.7	6.9	36.720	D
B	2	278	69	1581	21.50	0.00	405	0.687	292	9.5	5.9	43.056	D
C	2	406	101	1809	27.50	0.00	592	0.685	421	11.2	7.4	34.090	C

Queueing Delay Results for each time segment

08:00 - 08:15

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	52.20	3.48	35.035	D
B	2	46.04	3.07	39.771	D
C	2	55.12	3.67	32.598	C

08:15 - 08:30

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	77.89	5.19	43.778	D
B	2	70.21	4.68	50.794	D
C	2	83.22	5.55	41.218	D

08:30 - 08:45

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	158.99	10.60	72.961	E
B	2	143.17	9.54	84.573	F
C	2	176.49	11.77	71.374	E

08:45 - 09:00

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	227.46	15.16	104.383	F
B	2	212.54	14.17	125.554	F
C	2	260.29	17.35	105.267	F

09:00 - 09:15

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	113.76	7.58	63.939	E
B	2	123.76	8.25	89.538	F
C	2	137.21	9.15	67.963	E

09:15 - 09:30

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	54.71	3.65	36.720	D
B	2	49.84	3.32	43.056	D
C	2	57.64	3.84	34.090	C

2032 - ND, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Signalised		58.33	E

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	58.33	E

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2032 - ND	PM	ONE HOUR	17:00	18:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	355	100.000
B		ONE HOUR	✓	406	100.000
C		ONE HOUR	✓	341	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	121	234
	B	228	0	178
	C	189	152	0

Vehicle Mix

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

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Arm	Max DOS	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
A	0.78	34.82	6.0	C	326	489	228.89	28.11	2.54	229.05	28.13
B	0.87	46.04	8.0	D	373	559	301.52	32.37	3.35	301.73	32.40
C	0.97	97.44	12.8	F	313	469	453.08	57.92	5.03	453.49	57.97

Main Results for each time segment

17:00 - 17:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	267	67	1864	14.50	0.00	501	0.534	254	0.0	3.3	22.104	C
B	2	306	76	1581	17.50	0.00	512	0.597	291	0.0	3.7	21.816	C
C	2	257	64	1813	11.50	0.00	386	0.665	241	0.0	3.9	30.564	C

17:15 - 17:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	319	80	1864	14.50	0.00	501	0.638	316	3.3	4.2	25.406	C
B	2	365	91	1581	17.50	0.00	512	0.712	360	3.7	4.8	26.682	C
C	2	307	77	1812	11.50	0.00	386	0.794	300	3.9	5.4	39.879	D

17:30 - 17:45

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	391	98	1865	14.50	0.00	501	0.781	384	4.2	6.0	32.959	C
B	2	447	112	1581	17.50	0.00	512	0.873	435	4.8	7.7	39.937	D
C	2	375	94	1813	11.50	0.00	386	0.973	354	5.4	10.7	67.846	E

17:45 - 18:00

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	391	98	1865	14.50	0.00	501	0.781	391	6.0	6.0	34.817	C
B	2	447	112	1581	17.50	0.00	512	0.873	446	7.7	8.0	46.041	D
C	2	375	94	1813	11.50	0.00	386	0.973	367	10.7	12.8	97.441	F

18:00 - 18:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	319	80	1864	14.50	0.00	501	0.638	326	6.0	4.3	26.370	C
B	2	365	91	1581	17.50	0.00	512	0.712	377	8.0	4.9	29.170	C
C	2	307	77	1812	11.50	0.00	386	0.794	334	12.8	6.0	59.043	E

18:15 - 18:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	267	67	1864	14.50	0.00	501	0.534	271	4.3	3.3	22.490	C
B	2	306	76	1581	17.50	0.00	512	0.597	311	4.9	3.7	22.500	C
C	2	257	64	1813	11.50	0.00	386	0.665	265	6.0	3.9	33.151	C

Queueing Delay Results for each time segment

17:00 - 17:15

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	24.62	1.64	22.104	C
B	2	27.78	1.85	21.816	C
C	2	32.69	2.18	30.564	C

17:15 - 17:30

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	33.78	2.25	25.406	C
B	2	40.58	2.71	26.682	C
C	2	50.94	3.40	39.879	D

17:30 - 17:45

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	53.68	3.58	32.959	C
B	2	74.39	4.96	39.937	D
C	2	106.14	7.08	67.846	E

17:45 - 18:00

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	56.70	3.78	34.817	C
B	2	85.75	5.72	46.041	D
C	2	152.43	10.16	97.441	F

18:00 - 18:15

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	35.07	2.34	26.370	C
B	2	44.36	2.96	29.170	C
C	2	75.42	5.03	59.043	E

18:15 - 18:30

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	25.05	1.67	22.490	C
B	2	28.66	1.91	22.500	C
C	2	35.46	2.36	33.151	C

2032 - WD, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Signalised		135.22	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	135.22	F

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2032 - WD	AM	ONE HOUR	08:00	09:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	532	100.000
B		ONE HOUR	✓	374	100.000
C		ONE HOUR	✓	549	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
From	A	0	242	290
	B	140	0	234
	C	305	244	0

Vehicle Mix

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

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Arm	Max DOS	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
A	1.03	132.16	29.2	F	488	732	962.12	78.83	10.69	963.15	78.92
B	1.03	150.78	23.2	F	343	515	796.07	92.78	8.85	797.13	92.91
C	1.03	127.58	29.1	F	504	756	954.98	75.83	10.61	955.98	75.91

Main Results for each time segment

08:00 - 08:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	401	100	1808	30.50	0.00	569	0.704	367	0.0	8.5	38.402	D
B	2	282	70	1581	24.50	0.00	399	0.705	255	0.0	6.7	45.571	D
C	2	413	103	1813	31.50	0.00	589	0.702	379	0.0	8.6	37.381	D

08:15 - 08:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	478	120	1808	30.50	0.00	569	0.841	467	8.5	11.4	48.826	D
B	2	336	84	1581	24.50	0.00	399	0.842	326	6.7	9.2	58.440	E
C	2	494	123	1813	31.50	0.00	589	0.838	482	8.6	11.5	47.414	D

08:30 - 08:45

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	586	146	1808	30.50	0.00	569	1.030	540	11.4	22.7	84.134	F
B	2	412	103	1581	24.50	0.00	399	1.031	376	9.2	18.0	96.826	F
C	2	604	151	1813	31.50	0.00	589	1.027	559	11.5	22.8	81.886	F

08:45 - 09:00

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	586	146	1808	30.50	0.00	569	1.030	560	22.7	29.2	132.161	F
B	2	412	103	1581	24.50	0.00	399	1.031	391	18.0	23.2	150.781	F
C	2	604	151	1813	31.50	0.00	589	1.027	579	22.8	29.1	127.580	F

09:00 - 09:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	478	120	1808	30.50	0.00	569	0.841	540	29.2	13.9	102.774	F
B	2	336	84	1581	24.50	0.00	399	0.842	381	23.2	12.0	125.921	F
C	2	494	123	1813	31.50	0.00	589	0.838	555	29.1	13.8	96.089	F

09:15 - 09:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	401	100	1808	30.50	0.00	569	0.704	422	13.9	8.6	40.778	D
B	2	282	70	1581	24.50	0.00	399	0.705	302	12.0	6.9	50.712	D
C	2	413	103	1813	31.50	0.00	589	0.702	434	13.8	8.7	39.455	D

Queueing Delay Results for each time segment

08:00 - 08:15

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	64.09	4.27	38.402	D
B	2	53.46	3.56	45.571	D
C	2	64.38	4.29	37.381	D

08:15 - 08:30

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	97.30	6.49	48.826	D
B	2	81.87	5.46	58.440	E
C	2	97.50	6.50	47.414	D

08:30 - 08:45

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	205.34	13.69	84.134	F
B	2	166.13	11.08	96.826	F
C	2	206.24	13.75	81.886	F

08:45 - 09:00

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	322.55	21.50	132.161	F
B	2	258.70	17.25	150.781	F
C	2	321.32	21.42	127.580	F

09:00 - 09:15

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	204.80	13.65	102.774	F
B	2	176.40	11.76	125.921	F
C	2	197.60	13.17	96.089	F

09:15 - 09:30

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	68.05	4.54	40.778	D
B	2	59.49	3.97	50.712	D
C	2	67.95	4.53	39.455	D

2032 - WD, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Signalised		56.14	E

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	56.14	E

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2032 - WD	PM	ONE HOUR	17:00	18:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	370	100.000
B		ONE HOUR	✓	429	100.000
C		ONE HOUR	✓	360	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
From	A	0	126	244
	B	251	0	178
	C	208	152	0

Vehicle Mix

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

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Arm	Max DOS	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
A	0.89	57.27	9.0	E	340	509	340.48	40.11	3.78	340.79	40.15
B	0.90	54.77	9.8	D	394	590	361.52	36.73	4.02	361.79	36.76
C	0.88	56.62	8.7	E	330	496	329.80	39.93	3.66	330.10	39.97

Main Results for each time segment

17:00 - 17:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	279	70	1865	14.50	0.00	458	0.608	262	0.0	4.0	27.302	C
B	2	323	81	1581	19.50	0.00	522	0.618	306	0.0	4.2	23.580	C
C	2	271	68	1825	14.50	0.00	448	0.604	255	0.0	3.9	27.334	C

17:15 - 17:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	333	83	1865	14.50	0.00	458	0.726	328	4.0	5.3	32.930	C
B	2	386	96	1581	19.50	0.00	522	0.738	380	4.2	5.5	29.185	C
C	2	324	81	1824	14.50	0.00	448	0.722	319	3.9	5.2	32.959	C

17:30 - 17:45

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	407	102	1864	14.50	0.00	458	0.889	394	5.3	8.5	48.496	D
B	2	472	118	1581	19.50	0.00	522	0.904	458	5.5	9.2	45.414	D
C	2	396	99	1824	14.50	0.00	448	0.884	384	5.2	8.3	48.220	D

17:45 - 18:00

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	407	102	1864	14.50	0.00	458	0.889	406	8.5	9.0	57.266	E
B	2	472	118	1581	19.50	0.00	522	0.904	470	9.2	9.8	54.770	D
C	2	396	99	1824	14.50	0.00	448	0.884	395	8.3	8.7	56.625	E

18:00 - 18:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	333	83	1865	14.50	0.00	458	0.726	347	9.0	5.5	36.686	D
B	2	386	96	1581	19.50	0.00	522	0.738	402	9.8	5.7	32.904	C
C	2	324	81	1824	14.50	0.00	448	0.722	337	8.7	5.3	36.620	D

18:15 - 18:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	279	70	1865	14.50	0.00	458	0.608	284	5.5	4.1	28.255	C
B	2	323	81	1581	19.50	0.00	522	0.618	329	5.7	4.2	24.405	C
C	2	271	68	1825	14.50	0.00	448	0.604	276	5.3	4.0	28.293	C

Queueing Delay Results for each time segment

17:00 - 17:15

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	31.69	2.11	27.302	C
B	2	31.73	2.12	23.580	C
C	2	30.87	2.06	27.334	C

17:15 - 17:30

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	45.64	3.04	32.930	C
B	2	46.90	3.13	29.185	C
C	2	44.44	2.96	32.959	C

17:30 - 17:45

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	82.32	5.49	48.496	D
B	2	89.38	5.96	45.414	D
C	2	79.64	5.31	48.220	D

17:45 - 18:00

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	97.20	6.48	57.266	E
B	2	107.79	7.19	54.770	D
C	2	93.52	6.23	56.625	E

18:00 - 18:15

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	50.84	3.39	36.686	D
B	2	52.87	3.52	32.904	C
C	2	49.38	3.29	36.620	D

18:15 - 18:30

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	32.79	2.19	28.255	C
B	2	32.84	2.19	24.405	C
C	2	31.95	2.13	28.293	C

2037 - ND, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Signalised		122.63	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	122.63	F

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2037 - ND	AM	ONE HOUR	08:00	09:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	485	100.000
B		ONE HOUR	✓	378	100.000
C		ONE HOUR	✓	551	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	221	264
	B	138	0	240
	C	301	250	0

Vehicle Mix

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

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Arm	Max DOS	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
A	1.03	134.80	26.9	F	445	668	893.13	80.27	9.92	894.08	80.36
B	1.00	120.89	18.6	F	347	520	638.62	73.65	7.10	639.42	73.74
C	1.01	113.10	25.7	F	506	758	843.42	66.73	9.37	844.24	66.79

Main Results for each time segment

08:00 - 08:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	365	91	1808	25.50	0.00	518	0.705	335	0.0	7.5	38.328	D
B	2	285	71	1581	23.50	0.00	417	0.682	260	0.0	6.1	40.422	D
C	2	415	104	1809	29.50	0.00	600	0.692	383	0.0	7.8	34.038	C

08:15 - 08:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	436	109	1808	25.50	0.00	518	0.842	425	7.5	10.2	49.211	D
B	2	340	85	1581	23.50	0.00	417	0.814	331	6.1	8.2	50.956	D
C	2	495	124	1809	29.50	0.00	600	0.826	485	7.8	10.5	43.143	D

08:30 - 08:45

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	534	133	1808	25.50	0.00	518	1.031	492	10.2	20.7	85.151	F
B	2	416	104	1581	23.50	0.00	417	0.997	387	8.2	15.5	83.422	F
C	2	607	152	1809	29.50	0.00	600	1.012	566	10.5	20.7	74.900	E

08:45 - 09:00

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	534	133	1808	25.50	0.00	518	1.031	509	20.7	26.9	134.803	F
B	2	416	104	1581	23.50	0.00	417	0.997	404	15.5	18.6	120.894	F
C	2	607	152	1809	29.50	0.00	600	1.012	587	20.7	25.7	113.101	F

09:00 - 09:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	436	109	1808	25.50	0.00	518	0.842	493	26.9	12.8	106.375	F
B	2	340	85	1581	23.50	0.00	417	0.814	378	18.6	9.0	79.761	E
C	2	495	124	1809	29.50	0.00	600	0.826	549	25.7	12.2	76.882	E

09:15 - 09:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	365	91	1808	25.50	0.00	518	0.705	386	12.8	7.6	41.259	D
B	2	285	71	1581	23.50	0.00	417	0.682	296	9.0	6.2	43.266	D
C	2	415	104	1809	29.50	0.00	600	0.692	432	12.2	7.9	35.668	D

Queueing Delay Results for each time segment

08:00 - 08:15

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	58.31	3.89	38.328	D
B	2	47.93	3.20	40.422	D
C	2	58.83	3.92	34.038	C

08:15 - 08:30

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	89.40	5.96	49.211	D
B	2	72.15	4.81	50.956	D
C	2	89.04	5.94	43.143	D

08:30 - 08:45

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	189.46	12.63	85.151	F
B	2	144.66	9.64	83.422	F
C	2	189.33	12.62	74.900	E

08:45 - 09:00

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	299.93	20.00	134.803	F
B	2	209.64	13.98	120.894	F
C	2	285.89	19.06	113.101	F

09:00 - 09:15

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	193.25	12.88	106.375	F
B	2	112.93	7.53	79.761	E
C	2	158.68	10.58	76.882	E

09:15 - 09:30

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	62.77	4.18	41.259	D
B	2	51.30	3.42	43.266	D
C	2	61.65	4.11	35.668	D

2037 - ND, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Signalised		52.60	D

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	52.60	D

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	2037 - ND	PM	ONE HOUR	17:00	18:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	363	100.000
B		ONE HOUR	✓	416	100.000
C		ONE HOUR	✓	348	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	124	239
	B	233	0	183
	C	193	155	0

Vehicle Mix

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

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Arm	Max DOS	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
A	0.89	57.08	8.7	E	333	500	329.90	39.62	3.67	330.19	39.65
B	0.88	46.97	8.4	D	382	573	314.15	32.92	3.49	314.37	32.94
C	0.88	54.67	8.1	D	319	479	308.85	38.69	3.43	309.12	38.72

Main Results for each time segment

17:00 - 17:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	273	68	1864	13.50	0.00	449	0.608	258	0.0	3.8	26.613	C
B	2	313	78	1581	18.50	0.00	522	0.600	298	0.0	3.8	22.140	C
C	2	262	65	1812	13.50	0.00	437	0.600	247	0.0	3.7	26.529	C

17:15 - 17:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	326	82	1865	13.50	0.00	449	0.726	321	3.8	5.0	32.286	C
B	2	374	93	1581	18.50	0.00	522	0.716	369	3.8	5.0	27.068	C
C	2	313	78	1813	13.50	0.00	437	0.716	308	3.7	4.8	31.992	C

17:30 - 17:45

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	400	100	1864	13.50	0.00	449	0.890	387	5.0	8.2	48.037	D
B	2	458	115	1581	18.50	0.00	522	0.877	446	5.0	8.0	40.617	D
C	2	383	96	1812	13.50	0.00	437	0.877	372	4.8	7.7	46.782	D

17:45 - 18:00

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	400	100	1864	13.50	0.00	449	0.890	398	8.2	8.7	57.082	E
B	2	458	115	1581	18.50	0.00	522	0.877	457	8.0	8.4	46.967	D
C	2	383	96	1812	13.50	0.00	437	0.877	382	7.7	8.1	54.667	D

18:00 - 18:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	326	82	1865	13.50	0.00	449	0.726	340	8.7	5.2	36.191	D
B	2	374	93	1581	18.50	0.00	522	0.716	387	8.4	5.2	29.616	C
C	2	313	78	1813	13.50	0.00	437	0.716	325	8.1	5.0	35.461	D

18:15 - 18:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	273	68	1864	13.50	0.00	449	0.608	279	5.2	3.9	27.604	C
B	2	313	78	1581	18.50	0.00	522	0.600	318	5.2	3.9	22.820	C
C	2	262	65	1812	13.50	0.00	437	0.600	267	5.0	3.7	27.488	C

Queueing Delay Results for each time segment

17:00 - 17:15

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	30.30	2.02	26.613	C
B	2	28.89	1.93	22.140	C
C	2	28.96	1.93	26.529	C

17:15 - 17:30

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	43.90	2.93	32.286	C
B	2	42.18	2.81	27.068	C
C	2	41.70	2.78	31.992	C

17:30 - 17:45

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	80.00	5.33	48.037	D
B	2	77.52	5.17	40.617	D
C	2	74.69	4.98	46.782	D

17:45 - 18:00

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	95.06	6.34	57.082	E
B	2	89.63	5.98	46.967	D
C	2	87.27	5.82	54.667	D

18:00 - 18:15

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	49.21	3.28	36.191	D
B	2	46.15	3.08	29.616	C
C	2	46.22	3.08	35.461	D

18:15 - 18:30

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	31.43	2.10	27.604	C
B	2	29.78	1.99	22.820	C
C	2	30.01	2.00	27.488	C

2037 - WD, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Signalised		170.54	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	170.54	F

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2037 - WD	AM	ONE HOUR	08:00	09:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	541	100.000
B		ONE HOUR	✓	383	100.000
C		ONE HOUR	✓	562	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
From	A	0	246	295
	B	143	0	240
	C	312	250	0

Vehicle Mix

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

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Arm	Max DOS	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
A	1.00	112.50	25.7	F	496	745	857.25	69.07	9.53	858.26	69.15
B	1.02	141.99	22.6	F	351	527	776.06	88.33	8.62	777.18	88.45
C	1.10	245.87	47.1	F	516	774	1715.57	133.07	19.06	1717.26	133.20

Main Results for each time segment

08:00 - 08:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	407	102	1808	34.50	0.00	594	0.685	372	0.0	8.9	38.635	D
B	2	288	72	1581	27.50	0.00	414	0.696	260	0.0	7.2	46.762	D
C	2	423	106	1813	32.50	0.00	561	0.754	383	0.0	9.9	44.076	D

08:15 - 08:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	486	122	1808	34.50	0.00	594	0.819	475	8.9	11.7	47.643	D
B	2	344	86	1581	27.50	0.00	414	0.832	334	7.2	9.7	58.737	E
C	2	505	126	1813	32.50	0.00	561	0.900	488	9.9	14.2	59.644	E

08:30 - 08:45

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	596	149	1808	34.50	0.00	594	1.003	557	11.7	21.5	78.416	E
B	2	422	105	1581	27.50	0.00	414	1.019	388	9.7	18.2	94.871	F
C	2	619	155	1813	32.50	0.00	561	1.102	547	14.2	32.2	109.597	F

08:45 - 09:00

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	596	149	1808	34.50	0.00	594	1.003	579	21.5	25.7	112.503	F
B	2	422	105	1581	27.50	0.00	414	1.019	404	18.2	22.6	141.987	F
C	2	619	155	1813	32.50	0.00	561	1.102	559	32.2	47.1	200.442	F

09:00 - 09:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	486	122	1808	34.50	0.00	594	0.819	536	25.7	13.3	75.601	E
B	2	344	86	1581	27.50	0.00	414	0.832	387	22.6	11.9	110.618	F
C	2	505	126	1813	32.50	0.00	561	0.900	551	47.1	35.7	245.874	F

09:15 - 09:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	407	102	1808	34.50	0.00	594	0.685	424	13.3	9.0	40.126	D
B	2	288	72	1581	27.50	0.00	414	0.696	307	11.9	7.3	50.567	D
C	2	423	106	1813	32.50	0.00	561	0.754	525	35.7	10.3	110.818	F

Queueing Delay Results for each time segment

08:00 - 08:15

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	65.57	4.37	38.635	D
B	2	56.18	3.75	46.762	D
C	2	77.70	5.18	44.076	D

08:15 - 08:30

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	96.55	6.44	47.643	D
B	2	84.27	5.62	58.737	E
C	2	125.56	8.37	59.644	E

08:30 - 08:45

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	194.62	12.97	78.416	E
B	2	166.69	11.11	94.871	F
C	2	282.57	18.84	109.597	F

08:45 - 09:00

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	279.22	18.61	112.503	F
B	2	249.48	16.63	141.987	F
C	2	516.78	34.45	200.442	F

09:00 - 09:15

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	153.20	10.21	75.601	E
B	2	158.70	10.58	110.618	F
C	2	517.59	34.51	245.874	F

09:15 - 09:30

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	68.10	4.54	40.126	D
B	2	60.75	4.05	50.567	D
C	2	195.36	13.02	110.818	F

2037 - WD, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Signalised		68.40	E

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	68.40	E

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2037 - WD	PM	ONE HOUR	17:00	18:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	378	100.000
B		ONE HOUR	✓	439	100.000
C		ONE HOUR	✓	400	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	129	249
	B	256	0	183
	C	212	188	0

Vehicle Mix

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

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Arm	Max DOS	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
A	0.92	70.04	10.9	E	347	520	404.43	46.64	4.49	404.83	46.69
B	0.95	77.01	13.4	E	403	604	474.46	47.11	5.27	474.85	47.15
C	0.89	57.39	9.9	E	367	551	368.94	40.21	4.10	369.28	40.24

Main Results for each time segment

17:00 - 17:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	285	71	1864	15.50	0.00	451	0.630	267	0.0	4.5	30.067	C
B	2	331	83	1581	20.50	0.00	506	0.653	311	0.0	4.8	26.910	C
C	2	301	75	1801	17.50	0.00	492	0.612	283	0.0	4.5	27.459	C

17:15 - 17:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	340	85	1864	15.50	0.00	451	0.753	334	4.5	6.0	36.730	D
B	2	395	99	1581	20.50	0.00	506	0.779	388	4.8	6.4	34.229	C
C	2	360	90	1801	17.50	0.00	493	0.730	354	4.5	5.9	33.022	C

17:30 - 17:45

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	416	104	1864	15.50	0.00	451	0.922	400	6.0	10.1	56.129	E
B	2	483	121	1581	20.50	0.00	506	0.955	461	6.4	11.9	57.279	E
C	2	440	110	1801	17.50	0.00	492	0.894	426	5.9	9.4	48.687	D

17:45 - 18:00

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	416	104	1864	15.50	0.00	451	0.922	413	10.1	10.9	70.040	E
B	2	483	121	1581	20.50	0.00	506	0.955	477	11.9	13.4	77.014	E
C	2	440	110	1801	17.50	0.00	492	0.894	439	9.4	9.9	57.391	E

18:00 - 18:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	340	85	1864	15.50	0.00	451	0.753	359	10.9	6.2	42.974	D
B	2	395	99	1581	20.50	0.00	506	0.779	421	13.4	6.8	43.670	D
C	2	360	90	1801	17.50	0.00	493	0.730	375	9.9	6.0	36.589	D

18:15 - 18:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	285	71	1864	15.50	0.00	451	0.630	291	6.2	4.6	31.318	C
B	2	331	83	1581	20.50	0.00	506	0.653	338	6.8	4.8	28.210	C
C	2	301	75	1801	17.50	0.00	492	0.612	307	6.0	4.5	28.320	C

Queueing Delay Results for each time segment

17:00 - 17:15

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	35.65	2.38	30.067	C
B	2	37.06	2.47	26.910	C
C	2	34.45	2.30	27.459	C

17:15 - 17:30

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	52.01	3.47	36.730	D
B	2	56.29	3.75	34.229	C
C	2	49.48	3.30	33.022	C

17:30 - 17:45

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	97.33	6.49	56.129	E
B	2	115.36	7.69	57.279	E
C	2	89.34	5.96	48.687	D

17:45 - 18:00

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	121.46	8.10	70.040	E
B	2	155.10	10.34	77.014	E
C	2	105.31	7.02	57.391	E

18:00 - 18:15

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	60.85	4.06	42.974	D
B	2	71.81	4.79	43.670	D
C	2	54.82	3.65	36.589	D

18:15 - 18:30

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	37.14	2.48	31.318	C
B	2	38.85	2.59	28.210	C
C	2	35.53	2.37	28.320	C

2047 - ND , AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Signalised		142.46	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	142.46	F

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2047 - ND	AM	ONE HOUR	08:00	09:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	503	100.000
B		ONE HOUR	✓	393	100.000
C		ONE HOUR	✓	573	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	229	274
	B	144	0	249
	C	313	260	0

Vehicle Mix

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

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Arm	Max DOS	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
A	1.05	152.45	32.0	F	462	692	1071.25	92.84	11.90	1072.47	92.94
B	1.04	159.49	25.9	F	361	541	889.26	98.64	9.88	890.44	98.77
C	1.02	122.02	29.2	F	526	789	956.20	72.74	10.62	957.21	72.82

Main Results for each time segment

08:00 - 08:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	379	95	1808	29.50	0.00	528	0.717	344	0.0	8.7	42.301	D
B	2	296	74	1581	26.50	0.00	415	0.713	267	0.0	7.2	46.397	D
C	2	431	108	1809	34.50	0.00	618	0.698	395	0.0	9.0	36.975	D

08:15 - 08:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	452	113	1808	29.50	0.00	528	0.856	440	8.7	11.8	54.291	D
B	2	353	88	1581	26.50	0.00	415	0.852	342	7.2	9.9	59.815	E
C	2	515	129	1808	34.50	0.00	618	0.834	503	9.0	12.0	46.594	D

08:30 - 08:45

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	554	138	1808	29.50	0.00	528	1.049	505	11.8	24.0	93.417	F
B	2	433	108	1581	26.50	0.00	415	1.043	393	9.9	19.7	99.974	F
C	2	631	158	1809	34.50	0.00	618	1.021	586	12.0	23.3	79.865	E

08:45 - 09:00

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	554	138	1808	29.50	0.00	528	1.049	522	24.0	32.0	152.445	F
B	2	433	108	1581	26.50	0.00	415	1.043	408	19.7	25.9	159.493	F
C	2	631	158	1809	34.50	0.00	618	1.021	607	23.3	29.2	122.022	F

09:00 - 09:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	452	113	1808	29.50	0.00	528	0.856	514	32.0	16.4	138.147	F
B	2	353	88	1581	26.50	0.00	415	0.852	402	25.9	13.8	143.259	F
C	2	515	129	1808	34.50	0.00	618	0.834	576	29.2	14.0	88.272	F

09:15 - 09:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	379	95	1808	29.50	0.00	528	0.717	409	16.4	8.8	47.271	D
B	2	296	74	1581	26.50	0.00	415	0.713	322	13.8	7.4	52.991	D
C	2	431	108	1809	34.50	0.00	618	0.698	451	14.0	9.1	38.708	D

Queueing Delay Results for each time segment

08:00 - 08:15

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	66.75	4.45	42.301	D
B	2	57.20	3.81	46.397	D
C	2	66.46	4.43	36.975	D

08:15 - 08:30

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	102.29	6.82	54.291	D
B	2	88.05	5.87	59.815	E
C	2	100.01	6.67	46.594	D

08:30 - 08:45

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	215.57	14.37	93.417	F
B	2	180.24	12.02	99.974	F
C	2	209.94	14.00	79.865	E

08:45 - 09:00

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	351.78	23.45	152.445	F
B	2	287.55	19.17	159.493	F
C	2	320.76	21.38	122.022	F

09:00 - 09:15

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	260.28	17.35	138.147	F
B	2	210.89	14.06	143.259	F
C	2	189.46	12.63	88.272	F

09:15 - 09:30

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	74.59	4.97	47.271	D
B	2	65.33	4.36	52.991	D
C	2	69.57	4.64	38.708	D

2047 - ND , PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Signalised		60.18	E

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	60.18	E

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2047 - ND	PM	ONE HOUR	17:00	18:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	377	100.000
B		ONE HOUR	✓	432	100.000
C		ONE HOUR	✓	362	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
From	A	0	129	248
	B	242	0	190
	C	200	162	0

Vehicle Mix

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

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Arm	Max DOS	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
A	0.92	68.57	10.5	E	346	519	391.30	45.24	4.35	391.67	45.29
B	0.93	62.90	11.0	E	396	595	400.89	40.45	4.45	401.20	40.48
C	0.85	48.21	7.8	D	332	498	298.62	35.96	3.32	298.88	35.99

Main Results for each time segment

17:00 - 17:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	284	71	1864	14.50	0.00	450	0.630	267	0.0	4.3	28.737	C
B	2	325	81	1581	19.50	0.00	514	0.633	308	0.0	4.4	24.709	C
C	2	273	68	1812	15.50	0.00	468	0.582	257	0.0	3.9	26.146	C

17:15 - 17:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	339	85	1864	14.50	0.00	450	0.752	333	4.3	5.7	35.363	D
B	2	388	97	1581	19.50	0.00	514	0.756	383	4.4	5.8	30.986	C
C	2	325	81	1812	15.50	0.00	468	0.695	321	3.9	5.0	30.886	C

17:30 - 17:45

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	415	104	1864	14.50	0.00	450	0.922	399	5.7	9.7	54.677	D
B	2	476	119	1581	19.50	0.00	514	0.926	458	5.8	10.1	49.882	D
C	2	399	100	1812	15.50	0.00	468	0.852	388	5.0	7.6	43.077	D

17:45 - 18:00

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	415	104	1864	14.50	0.00	450	0.922	412	9.7	10.5	68.571	E
B	2	476	119	1581	19.50	0.00	514	0.926	472	10.1	11.0	62.898	E
C	2	399	100	1812	15.50	0.00	468	0.852	398	7.6	7.8	48.213	D

18:00 - 18:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	339	85	1864	14.50	0.00	450	0.752	357	10.5	5.9	41.608	D
B	2	388	97	1581	19.50	0.00	514	0.756	408	11.0	6.0	36.408	D
C	2	325	81	1812	15.50	0.00	468	0.695	336	7.8	5.1	33.154	C

18:15 - 18:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	284	71	1864	14.50	0.00	450	0.630	290	5.9	4.3	29.989	C
B	2	325	81	1581	19.50	0.00	514	0.633	332	6.0	4.4	25.712	C
C	2	273	68	1812	15.50	0.00	468	0.582	277	5.1	3.9	26.850	C

Queueing Delay Results for each time segment

17:00 - 17:15

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	33.98	2.27	28.737	C
B	2	33.48	2.23	24.709	C
C	2	29.69	1.98	26.146	C

17:15 - 17:30

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	49.94	3.33	35.363	D
B	2	50.14	3.34	30.986	C
C	2	41.88	2.79	30.886	C

17:30 - 17:45

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	94.56	6.30	54.677	D
B	2	98.86	6.59	49.882	D
C	2	71.54	4.77	43.077	D

17:45 - 18:00

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	118.59	7.91	68.571	E
B	2	124.65	8.31	62.898	E
C	2	80.07	5.34	48.213	D

18:00 - 18:15

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	58.76	3.92	41.608	D
B	2	58.91	3.93	36.408	D
C	2	44.96	3.00	33.154	C

18:15 - 18:30

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	35.47	2.36	29.989	C
B	2	34.84	2.32	25.712	C
C	2	30.49	2.03	26.850	C

2047 - WD , AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Signalised		173.59	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	173.59	F

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D15	2047 - WD	AM	ONE HOUR	08:00	09:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	559	100.000
B		ONE HOUR	✓	397	100.000
C		ONE HOUR	✓	584	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	254	305
	B	148	0	249
	C	324	260	0

Vehicle Mix

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

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Arm	Max DOS	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
A	1.05	156.30	37.3	F	513	769	1246.12	97.17	13.85	1247.74	97.30
B	1.06	191.87	31.1	F	364	546	1101.34	120.93	12.24	1103.10	121.12
C	1.07	177.72	42.5	F	536	804	1445.49	107.89	16.06	1447.22	108.02

Main Results for each time segment

08:00 - 08:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	421	105	1809	40.50	0.00	586	0.718	377	0.0	11.0	46.621	D
B	2	299	75	1581	32.50	0.00	411	0.727	263	0.0	8.9	55.640	E
C	2	440	110	1813	41.50	0.00	602	0.731	394	0.0	11.4	46.502	D

08:15 - 08:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	503	126	1809	40.50	0.00	586	0.858	488	11.0	14.7	58.527	E
B	2	357	89	1581	32.50	0.00	411	0.868	344	8.9	12.1	70.925	E
C	2	525	131	1813	41.50	0.00	602	0.872	509	11.4	15.4	59.408	E

08:30 - 08:45

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	615	154	1808	40.50	0.00	586	1.050	560	14.7	28.4	97.525	F
B	2	437	109	1581	32.50	0.00	411	1.064	392	12.1	23.4	114.741	F
C	2	643	161	1813	41.50	0.00	602	1.068	580	15.4	31.2	101.601	F

08:45 - 09:00

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	615	154	1808	40.50	0.00	586	1.050	580	28.4	37.3	156.297	F
B	2	437	109	1581	32.50	0.00	411	1.064	406	23.4	31.1	185.503	F
C	2	643	161	1813	41.50	0.00	602	1.068	598	31.2	42.5	170.565	F

09:00 - 09:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	503	126	1809	40.50	0.00	586	0.858	572	37.3	20.0	143.972	F
B	2	357	89	1581	32.50	0.00	411	0.868	399	31.1	20.7	191.869	F
C	2	525	131	1813	41.50	0.00	602	0.872	588	42.5	26.6	177.721	F

09:15 - 09:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	421	105	1809	40.50	0.00	586	0.718	456	20.0	11.2	51.011	D
B	2	299	75	1581	32.50	0.00	411	0.727	345	20.7	9.1	75.826	E
C	2	440	110	1813	41.50	0.00	602	0.731	500	26.6	11.6	61.357	E

Queueing Delay Results for each time segment

08:00 - 08:15

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	81.75	5.45	46.621	D
B	2	69.29	4.62	55.640	E
C	2	85.19	5.68	46.502	D

08:15 - 08:30

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	122.55	8.17	58.527	E
B	2	105.47	7.03	70.925	E
C	2	129.96	8.66	59.408	E

08:30 - 08:45

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	250.10	16.67	97.525	F
B	2	208.97	13.93	114.741	F
C	2	272.20	18.15	101.601	F

08:45 - 09:00

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	400.82	26.72	156.297	F
B	2	337.85	22.52	185.503	F
C	2	456.97	30.46	170.565	F

09:00 - 09:15

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	301.46	20.10	143.972	F
B	2	285.32	19.02	191.869	F
C	2	388.77	25.92	177.721	F

09:15 - 09:30

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	89.45	5.96	51.011	D
B	2	94.43	6.30	75.826	E
C	2	112.40	7.49	61.357	E

2047 - WD, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Signalised		69.55	E

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	69.55	E

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D16	2047 - WD	PM	ONE HOUR	17:00	18:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	392	100.000
B		ONE HOUR	✓	455	100.000
C		ONE HOUR	✓	382	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
From	A	0	134	258
	B	265	0	190
	C	220	162	0

Vehicle Mix

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

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Arm	Max DOS	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
A	0.91	65.10	10.7	E	360	540	398.06	44.27	4.42	398.45	44.31
B	0.96	77.51	14.0	E	418	626	491.40	47.08	5.46	491.80	47.12
C	0.91	64.64	10.4	E	351	526	387.26	44.19	4.30	387.64	44.23

Main Results for each time segment

17:00 - 17:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	295	74	1864	16.50	0.00	473	0.624	277	0.0	4.6	29.316	C
B	2	343	86	1581	21.50	0.00	523	0.655	323	0.0	4.9	26.635	C
C	2	288	72	1823	16.50	0.00	463	0.621	269	0.0	4.5	29.386	C

17:15 - 17:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	352	88	1864	16.50	0.00	473	0.745	347	4.6	6.1	35.493	D
B	2	409	102	1581	21.50	0.00	523	0.782	402	4.9	6.6	33.944	C
C	2	343	86	1823	16.50	0.00	463	0.742	338	4.5	5.9	35.599	D

17:30 - 17:45

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	432	108	1863	16.50	0.00	473	0.912	416	6.1	10.0	53.412	D
B	2	501	125	1581	21.50	0.00	523	0.958	478	6.6	12.4	57.280	E
C	2	421	105	1823	16.50	0.00	463	0.909	405	5.9	9.7	53.282	D

17:45 - 18:00

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	432	108	1863	16.50	0.00	473	0.912	429	10.0	10.7	65.100	E
B	2	501	125	1581	21.50	0.00	523	0.958	494	12.4	14.0	77.510	E
C	2	421	105	1823	16.50	0.00	463	0.909	418	9.7	10.4	64.642	E

18:00 - 18:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	352	88	1864	16.50	0.00	473	0.745	370	10.7	6.3	40.467	D
B	2	409	102	1581	21.50	0.00	523	0.782	437	14.0	7.0	43.636	D
C	2	343	86	1823	16.50	0.00	463	0.742	360	10.4	6.1	40.500	D

18:15 - 18:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	295	74	1864	16.50	0.00	473	0.624	302	6.3	4.7	30.379	C
B	2	343	86	1581	21.50	0.00	523	0.655	351	7.0	5.0	27.893	C
C	2	288	72	1823	16.50	0.00	463	0.621	294	6.1	4.6	30.466	C

Queueing Delay Results for each time segment

17:00 - 17:15

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	36.05	2.40	29.316	C
B	2	38.02	2.53	26.635	C
C	2	35.21	2.35	29.386	C

17:15 - 17:30

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	52.12	3.47	35.493	D
B	2	57.85	3.86	33.944	C
C	2	50.94	3.40	35.599	D

17:30 - 17:45

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	96.05	6.40	53.412	D
B	2	119.56	7.97	57.280	E
C	2	93.37	6.22	53.282	D

17:45 - 18:00

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	117.07	7.80	65.100	E
B	2	161.79	10.79	77.510	E
C	2	113.28	7.55	64.642	E

18:00 - 18:15

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	59.42	3.96	40.467	D
B	2	74.37	4.96	43.636	D
C	2	57.95	3.86	40.500	D

18:15 - 18:30

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	37.36	2.49	30.379	C
B	2	39.81	2.65	27.893	C
C	2	36.51	2.43	30.466	C

Junctions 10		
OSCADY 10 - Signalised Intersection Module		
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»2025 - Survey , AM
 »2025 - Survey , PM
 »2025 - Committed, AM
 »2025 - Committed, PM
 »2032 - ND, AM
 »2032 - ND, PM
 »2032 - WD, AM
 »2032 - WD, PM
 »2037 - ND , AM
 »2037 - ND , PM
 »2037 - WD , AM
 »2037 - WD , PM
 »2047 - ND , AM
 »2047 - ND , PM
 »2047 - WD , AM
 »2047 - WD , PM

Summary of junction performance

	AM			PM		
	Queue (PCU)	Delay (s)	DOS	Queue (PCU)	Delay (s)	DOS
2025 - Survey						
Arm A	33.3	187.25	1.07	52.5	209.90	1.08
Arm B	20.0	97.93	0.98	17.5	156.00	0.96
Arm C	28.5	152.96	1.05	45.7	188.21	1.07
Arm D	13.5	109.58	0.95	25.1	191.31	1.03
2025 - Committed						
Arm A	37.3	201.61	1.07	67.7	250.28	1.08
Arm B	28.7	134.16	1.02	30.1	243.85	1.02
Arm C	35.4	182.74	1.06	65.1	272.48	1.08
Arm D	24.5	167.39	1.03	39.1	285.00	1.06
2032 - ND						
Arm A	68.6	392.55	1.13	72.9	253.53	1.08
Arm B	77.0	425.53	1.14	42.9	333.76	1.06
Arm C	66.0	373.00	1.12	53.9	292.40	1.08
Arm D	46.6	312.73	1.08	41.3	271.53	1.06
2032 - WD						
Arm A	76.5	470.33	1.17	118.7	602.08	1.23
Arm B	78.2	426.60	1.14	55.0	527.52	1.17
Arm C	75.5	463.75	1.17	112.6	620.74	1.23
Arm D	62.4	446.96	1.15	60.1	513.58	1.18
2037 - ND						
Arm A	75.8	450.58	1.16	110.2	508.74	1.20
Arm B	73.5	373.10	1.12	46.2	468.63	1.14
Arm C	74.0	437.89	1.15	104.6	526.15	1.21
Arm D	55.0	422.95	1.13	58.4	523.38	1.18
2037 - WD						
Arm A	84.2	503.28	1.20	124.9	628.22	1.24
Arm B	85.4	481.46	1.17	51.4	552.26	1.17
Arm C	84.2	515.70	1.20	112.8	599.90	1.23
Arm D	66.2	482.91	1.17	64.1	565.92	1.20
2047 - ND						
Arm A	85.9	519.78	1.19	131.9	656.76	1.25
Arm B	97.4	578.90	1.21	52.2	549.78	1.18
Arm C	86.4	521.37	1.20	126.5	698.29	1.26
Arm D	60.3	469.54	1.16	66.8	645.42	1.22
2047 - WD						
Arm A	101.1	690.94	1.25	165.6	850.14	1.31
Arm B	98.7	609.01	1.21	63.7	763.14	1.26
Arm C	99.7	681.40	1.24	147.4	843.72	1.30
Arm D	74.9	553.53	1.21	76.9	751.22	1.26

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

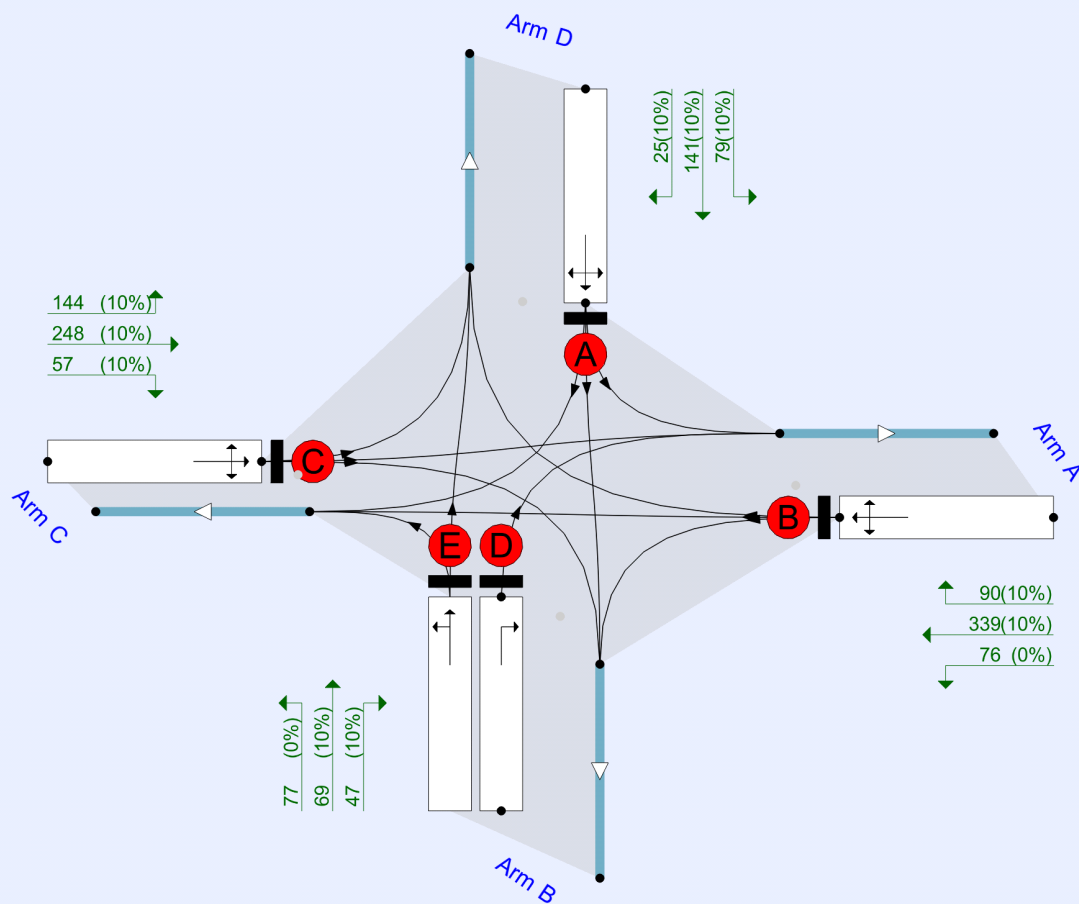
File summary

File Description

Title	P230400423 - DUBLIN, Boherboy LRD
Location	Junction 4
Site number	
Date	01/12/2025
Version	
Status	Planning
Identifier	
Client	
Jobnumber	
Enumerator	PINNACLE\JM
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 original traffic demand (PCU/hr).

The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	DOS Threshold	Average Delay threshold (s)	Queue threshold (PCU)	Use simulation for HCM roundabouts	Use iterations for HCM roundabouts
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	2025 - Survey	AM	ONE HOUR	08:00	09:30	15	✓
D2	2025 - Survey	PM	ONE HOUR	17:00	18:30	15	✓
D3	2025 - Committed	AM	ONE HOUR	08:00	09:30	15	✓
D4	2025 - Committed	PM	ONE HOUR	17:00	18:30	15	✓
D5	2032 - ND	AM	ONE HOUR	08:00	09:30	15	✓
D6	2032 - ND	PM	ONE HOUR	17:00	18:30	15	✓
D7	2032 - WD	AM	ONE HOUR	08:00	09:30	15	✓
D8	2032 - WD	PM	ONE HOUR	17:00	18:30	15	✓
D9	2037 - ND	AM	ONE HOUR	08:00	09:30	15	✓
D10	2037 - ND	PM	ONE HOUR	17:00	18:30	15	✓
D11	2037 - WD	AM	ONE HOUR	08:00	09:30	15	✓
D12	2037 - WD	PM	ONE HOUR	17:00	18:30	15	✓
D13	2047 - ND	AM	ONE HOUR	08:00	09:30	15	✓
D14	2047 - ND	PM	ONE HOUR	17:00	18:30	15	✓
D15	2047 - WD	AM	ONE HOUR	08:00	09:30	15	✓
D16	2047 - WD	PM	ONE HOUR	17:00	18:30	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	155.000	100.000

2025 - Survey , AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Signalised		139.20	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	139.20	F

Arms

Arms

Arm	Name	Description
A	Boherboy Road	
B	Citywest Road (S)	
C	Slade Road	
D	Mill Road	

OSCADY Traffic Streams

Arm	Traffic Stream	Phase	Destination arms	Straight move
A	2	B	B, C, D	C
B	1	E	C, D	D
	2	D	A	D
C	2	C	A, B, D	A
D	1	A	A, B, C	B

OSCADY Lanes

Arm	Traffic Stream	Destination arms	Gradient (%)	Width (m)	Turning radius (m)	Nearside lane	Has bay
A	2	B, C, D	0	3.00	10.00	✓	
B	1	C, D	0	3.00	10.00	✓	
	2	A	0	3.00	10.00	✓	
C	2	A, D, B	0	3.00	10.00	✓	
D	1	A, B, C	0	3.00	10.00	✓	

Signal Timings

Junction 1

Junction	Sequence to use	Cycle time (s)	Maximum cycle time (s)	Start displacement (s)	End displacement (s)
1	1	95	300	1.40	2.90

Optimisation options

Junction	Optimise stage lengths	Optimise cycle time	Optimiser demand source	Optimiser message
1	✓	✓	Average	Timings provide delay minimisation..

Phases

Junction	Phase	Name	Minimum green (s)
1	A		7
	B		7
	C		7
	D		7
	E		7

Library Stages

Junction	Library Stage	Phases in stage	User stage minimum (s)	Run every N cycles	Probability of running (%)
1	1	A	1		
	2	B	1		
	3	C	1		
	4	E	1		
	5	E, D	1		

Stage Sequences

Junction	Sequence	Name	Stage IDs	Stage ends
1	1		1, 2, 3, 4, 5	17, 45, 74, 82, 0

Intergreen Matrix for Junction 1

		To				
From		A	B	C	D	E
	A		5	5		
	B	8		5		
	C	5	5		6	
	D			5		
	E					

Interstage Matrix for Junction 1

		To					
From		1	2	3	4	5	
	1	0	5	5	0	0	
	2	8	0	5	0	0	
	3	5	5	0	0	6	
	4	0	0	0	0	0	
	5	0	0	5	0	0	

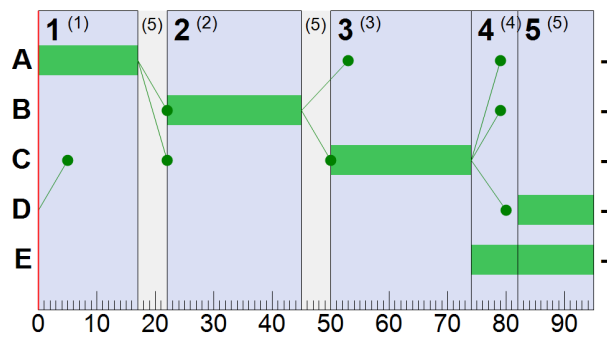
Resultant Stages

Junction	Resultant Stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	1	A	0	17	17	1	7
	2	2	B	22	45	23	1	7
	3	3	C	50	74	24	1	7
	4	4	E	74	82	8	1	6
	5	5	E, D	82	0	13	1	7

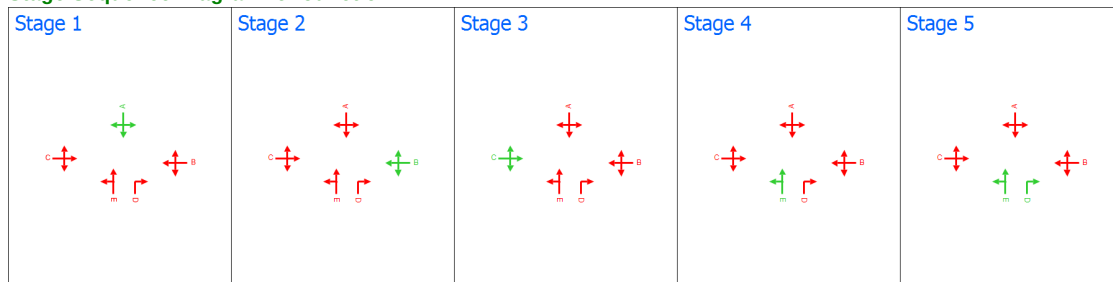
Resultant Phase Green Periods

Junction	Phase	Green period	Start time (s)	End time (s)	Duration (s)
1	A	1	0	17	17
	B	1	22	45	23
	C	1	50	74	24
	D	1	82	0	13
	E	1	74	0	21

Phase Timings Diagram for Junction 1



Stage Sequence Diagram for Junction 1



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	2025 - Survey	AM	ONE HOUR	08:00	09:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	294	100.000
B		ONE HOUR	✓	303	100.000
C		ONE HOUR	✓	291	100.000
D		ONE HOUR	✓	190	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
	A	B	C	D	
From	A	0	25	188	81
	B	56	0	86	161
	C	132	20	0	139
	D	76	68	46	0

Vehicle Mix

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

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Arm	Max DOS	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A	1.07	187.25	33.3	F	418	627
B	0.98	97.93	20.0	F	431	646
C	1.05	152.96	28.5	F	414	621
D	0.95	109.58	13.5	F	270	405

Main Results for each time segment

08:00 - 08:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	343	86	1816	24.50	0.00	468	0.732	311	0.0	8.0	44.475	D
B	1	288	72	1820	22.50	0.00	431	0.669	262	0.0	6.7	43.029	D
	2	65	16	1665	14.50	0.00	254	0.257	59	0.0	1.5	38.682	D
C	2	340	85	1770	25.50	0.00	475	0.715	309	0.0	7.7	42.668	D
D	1	222	55	1746	18.50	0.00	340	0.652	200	0.0	5.5	47.109	D

08:15 - 08:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	410	102	1817	24.50	0.00	469	0.874	397	8.0	11.2	58.646	E
B	1	344	86	1820	22.50	0.00	431	0.799	336	6.7	8.8	52.427	D
	2	78	20	1665	14.50	0.00	254	0.307	77	1.5	1.8	39.872	D
C	2	405	101	1770	25.50	0.00	475	0.854	394	7.7	10.5	55.048	E
D	1	265	66	1747	18.50	0.00	340	0.778	258	5.5	7.2	56.822	E

08:30 - 08:45

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	502	125	1817	24.50	0.00	469	1.071	451	11.2	23.9	102.892	F
B	1	422	105	1820	22.50	0.00	431	0.978	395	8.8	15.4	81.068	F
	2	96	24	1665	14.50	0.00	254	0.376	94	1.8	2.3	41.703	D
C	2	497	124	1770	25.50	0.00	475	1.045	453	10.5	21.5	94.315	F
D	1	324	81	1747	18.50	0.00	340	0.953	305	7.2	12.1	83.751	F

08:45 - 09:00

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	502	125	1817	24.50	0.00	469	1.071	464	23.9	33.3	176.233	F
B	1	422	105	1820	22.50	0.00	431	0.978	412	15.4	17.7	110.652	F
	2	96	24	1665	14.50	0.00	254	0.376	96	2.3	2.3	41.813	D
C	2	497	124	1770	25.50	0.00	475	1.045	469	21.5	28.5	152.959	F
D	1	324	81	1747	18.50	0.00	340	0.953	319	12.1	13.5	109.575	F

09:00 - 09:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	410	102	1817	24.50	0.00	469	0.874	456	33.3	21.6	187.249	F
B	1	344	86	1820	22.50	0.00	431	0.799	378	17.7	9.4	71.128	E
	2	78	20	1665	14.50	0.00	254	0.307	80	2.3	1.8	40.001	D
C	2	405	101	1770	25.50	0.00	475	0.854	461	28.5	14.5	136.443	F
D	1	265	66	1747	18.50	0.00	340	0.778	288	13.5	7.7	72.767	E

09:15 - 09:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	343	86	1816	24.50	0.00	468	0.732	397	21.6	8.2	67.949	E
B	1	288	72	1820	22.50	0.00	431	0.669	299	9.4	6.7	45.220	D
	2	65	16	1665	14.50	0.00	254	0.257	67	1.8	1.5	38.776	D
C	2	340	85	1770	25.50	0.00	475	0.715	366	14.5	7.8	47.948	D
D	1	222	55	1746	18.50	0.00	340	0.652	230	7.7	5.6	49.895	D

2025 - Survey , PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Signalised		192.09	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	192.09	F

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2025 - Survey	PM	ONE HOUR	17:00	18:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	409	100.000
B		ONE HOUR	✓	158	100.000
C		ONE HOUR	✓	369	100.000
D		ONE HOUR	✓	193	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
	A	B	C	D	
From	A	0	65	292	52
	B	41	0	66	51
	C	213	49	0	107
	D	62	111	20	0

Vehicle Mix

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

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Arm	Max DOS	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A	1.08	209.90	52.5	F	582	873
B	0.96	156.00	17.5	F	225	337
C	1.07	188.21	45.7	F	525	787
D	1.03	191.31	25.1	F	275	412

Main Results for each time segment

17:00 - 17:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	477	119	1836	58.50	0.00	647	0.738	415	0.0	15.6	56.386	E
B	1	137	34	1766	19.50	0.00	207	0.658	111	0.0	6.3	88.804	F
	2	48	12	1665	12.50	0.00	125	0.382	39	0.0	2.2	84.033	F
C	2	431	108	1801	54.50	0.00	591	0.728	372	0.0	14.6	58.956	E
D	1	225	56	1801	29.50	0.00	320	0.704	187	0.0	9.6	79.376	E

17:15 - 17:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	570	142	1836	58.50	0.00	647	0.881	550	15.6	20.5	70.398	E
B	1	163	41	1766	19.50	0.00	207	0.786	155	6.3	8.2	103.435	F
	2	57	14	1665	12.50	0.00	125	0.456	55	2.2	2.7	88.479	F
C	2	514	129	1801	54.50	0.00	591	0.870	496	14.6	19.1	72.531	E
D	1	269	67	1801	29.50	0.00	320	0.840	257	9.6	12.5	94.494	F

17:30 - 17:45

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	698	174	1836	58.50	0.00	647	1.079	624	20.5	38.9	114.237	F
B	1	200	50	1765	19.50	0.00	207	0.963	182	8.2	12.7	137.795	F
	2	70	17	1665	12.50	0.00	125	0.558	67	2.7	3.4	95.680	F
C	2	630	157	1801	54.50	0.00	591	1.065	566	19.1	34.9	114.239	F
D	1	329	82	1800	29.50	0.00	320	1.030	296	12.5	20.8	134.434	F

17:45 - 18:00

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	698	174	1836	58.50	0.00	647	1.079	644	38.9	52.5	188.984	F
B	1	200	50	1765	19.50	0.00	207	0.963	194	12.7	14.1	176.440	F
	2	70	17	1665	12.50	0.00	125	0.558	70	3.4	3.4	97.677	F
C	2	630	157	1801	54.50	0.00	591	1.065	587	34.9	45.7	181.572	F
D	1	329	82	1800	29.50	0.00	320	1.030	312	20.8	25.1	191.306	F

18:00 - 18:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	570	142	1836	58.50	0.00	647	0.881	635	52.5	36.3	209.904	F
B	1	163	41	1766	19.50	0.00	207	0.786	183	14.1	9.0	137.722	F
	2	57	14	1665	12.50	0.00	125	0.456	60	3.4	2.7	90.622	F
C	2	514	129	1801	54.50	0.00	591	0.870	578	45.7	29.8	188.211	F
D	1	269	67	1801	29.50	0.00	320	0.840	305	25.1	16.1	173.757	F

18:15 - 18:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	477	119	1836	58.50	0.00	647	0.738	560	36.3	15.7	79.837	E
B	1	137	34	1766	19.50	0.00	207	0.658	147	9.0	6.5	96.638	F
	2	48	12	1665	12.50	0.00	125	0.382	50	2.7	2.2	85.392	F
C	2	431	108	1801	54.50	0.00	591	0.728	491	29.8	14.7	71.627	E
D	1	225	56	1801	29.50	0.00	320	0.704	250	16.1	9.7	87.241	F

2025 - Committed, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Signalised		171.40	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	171.40	F

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2025 - Committed	AM	ONE HOUR	08:00	09:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	297	100.000
B		ONE HOUR	✓	307	100.000
C		ONE HOUR	✓	295	100.000
D		ONE HOUR	✓	220	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
	A	B	C	D	
From	A	0	25	188	84
	B	56	0	86	165
	C	132	20	0	143
	D	88	79	53	0

Vehicle Mix

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

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Arm	Max DOS	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A	1.07	201.61	37.3	F	422	634
B	1.02	134.16	28.7	F	437	655
C	1.06	182.74	35.4	F	420	629
D	1.03	167.39	24.5	F	313	469

Main Results for each time segment

08:00 - 08:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	347	87	1815	35.50	0.00	474	0.732	303	0.0	10.9	57.957	E
B	1	293	73	1822	31.50	0.00	422	0.694	255	0.0	9.5	59.313	E
	2	65	16	1665	23.50	0.00	288	0.227	57	0.0	2.1	50.828	D
C	2	344	86	1768	36.50	0.00	475	0.725	301	0.0	10.7	56.925	E
D	1	257	64	1747	28.50	0.00	366	0.701	222	0.0	8.7	63.215	E

08:15 - 08:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	414	103	1815	35.50	0.00	474	0.873	399	10.9	14.7	72.632	E
B	1	350	87	1821	31.50	0.00	422	0.829	338	9.5	12.4	71.247	E
	2	78	20	1665	23.50	0.00	288	0.271	76	2.1	2.5	51.862	D
C	2	411	103	1768	36.50	0.00	475	0.866	397	10.7	14.3	70.983	E
D	1	307	77	1747	28.50	0.00	366	0.837	295	8.7	11.5	76.751	E

08:30 - 08:45

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	507	127	1815	35.50	0.00	474	1.070	454	14.7	27.9	116.245	F
B	1	428	107	1821	31.50	0.00	422	1.015	392	12.4	21.4	106.847	F
	2	96	24	1665	23.50	0.00	288	0.332	93	2.5	3.1	53.412	D
C	2	503	126	1768	36.50	0.00	475	1.061	453	14.3	26.9	113.034	F
D	1	375	94	1747	28.50	0.00	366	1.025	341	11.5	20.1	114.935	F

08:45 - 09:00

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	507	127	1815	35.50	0.00	474	1.070	470	27.9	37.3	188.806	F
B	1	428	107	1821	31.50	0.00	422	1.015	411	21.4	25.6	152.162	F
	2	96	24	1665	23.50	0.00	288	0.332	96	3.1	3.1	53.469	D
C	2	503	126	1768	36.50	0.00	475	1.061	470	26.9	35.4	180.347	F
D	1	375	94	1747	28.50	0.00	366	1.025	358	20.1	24.5	167.385	F

09:00 - 09:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	414	103	1815	35.50	0.00	474	0.873	461	37.3	25.4	201.610	F
B	1	350	87	1821	31.50	0.00	422	0.829	393	25.6	14.8	121.218	F
	2	78	20	1665	23.50	0.00	288	0.271	80	3.1	2.5	51.931	D
C	2	411	103	1768	36.50	0.00	475	0.866	461	35.4	22.8	182.736	F
D	1	307	77	1747	28.50	0.00	366	0.837	347	24.5	14.4	142.958	F

09:15 - 09:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	347	87	1815	35.50	0.00	474	0.732	404	25.4	11.1	79.956	E
B	1	293	73	1822	31.50	0.00	422	0.694	314	14.8	9.6	62.805	E
	2	65	16	1665	23.50	0.00	288	0.227	67	2.5	2.1	50.879	D
C	2	344	86	1768	36.50	0.00	475	0.725	392	22.8	10.9	70.995	E
D	1	257	64	1747	28.50	0.00	366	0.701	279	14.4	8.8	68.729	E

2025 - Committed, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Signalised		262.71	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	262.71	F

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2025 - Committed	PM	ONE HOUR	17:00	18:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	414	100.000
B		ONE HOUR	✓	163	100.000
C		ONE HOUR	✓	378	100.000
D		ONE HOUR	✓	203	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
	A	B	C	D	
From	A	0	65	292	57
	B	41	0	66	56
	C	213	49	0	116
	D	65	117	21	0

Vehicle Mix

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

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Arm	Max DOS	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A	1.08	250.28	67.7	F	589	883
B	1.02	243.85	30.1	F	232	348
C	1.08	272.48	65.1	F	538	806
D	1.06	285.00	39.1	F	289	433

Main Results for each time segment

17:00 - 17:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	483	121	1834	107.50	0.00	657	0.735	375	0.0	27.1	92.975	F
B	1	142	36	1771	34.50	0.00	204	0.699	97	0.0	11.5	149.764	F
	2	48	12	1665	24.50	0.00	136	0.352	33	0.0	3.8	139.252	F
C	2	441	110	1798	99.50	0.00	596	0.740	338	0.0	25.9	98.842	F
D	1	237	59	1800	54.50	0.00	327	0.724	168	0.0	17.3	131.869	F

17:15 - 17:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	577	144	1834	107.50	0.00	657	0.878	548	27.1	34.3	109.457	F
B	1	170	42	1771	34.50	0.00	204	0.835	157	11.5	14.6	169.658	F
	2	57	14	1665	24.50	0.00	136	0.420	54	3.8	4.6	143.112	F
C	2	527	132	1797	99.50	0.00	596	0.884	499	25.9	32.8	116.175	F
D	1	283	71	1800	54.50	0.00	327	0.865	264	17.3	22.1	150.548	F

17:30 - 17:45

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	707	177	1834	107.50	0.00	657	1.075	626	34.3	54.4	152.322	F
B	1	208	52	1771	34.50	0.00	204	1.022	181	14.6	21.5	212.985	F
	2	70	17	1665	24.50	0.00	136	0.515	65	4.6	5.7	149.210	F
C	2	645	161	1797	99.50	0.00	596	1.082	568	32.8	52.1	159.922	F
D	1	346	87	1801	54.50	0.00	327	1.059	303	22.1	33.0	193.034	F

17:45 - 18:00

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	707	177	1834	107.50	0.00	657	1.075	653	54.4	67.7	224.672	F
B	1	208	52	1771	34.50	0.00	204	1.022	197	21.5	24.4	275.245	F
	2	70	17	1665	24.50	0.00	136	0.515	70	5.7	5.7	150.417	F
C	2	645	161	1797	99.50	0.00	596	1.082	593	52.1	65.1	237.440	F
D	1	346	87	1801	54.50	0.00	327	1.059	322	33.0	39.1	264.663	F

18:00 - 18:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	577	144	1834	107.50	0.00	657	0.878	644	67.7	50.8	250.278	F
B	1	170	42	1771	34.50	0.00	204	0.835	193	24.4	18.7	272.623	F
	2	57	14	1665	24.50	0.00	136	0.420	62	5.7	4.6	144.436	F
C	2	527	132	1797	99.50	0.00	596	0.884	584	65.1	50.7	272.482	F
D	1	283	71	1800	54.50	0.00	327	0.865	315	39.1	31.0	285.003	F

18:15 - 18:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	483	121	1834	107.50	0.00	657	0.735	577	50.8	27.3	112.247	F
B	1	142	36	1771	34.50	0.00	204	0.699	170	18.7	11.7	166.799	F
	2	48	12	1665	24.50	0.00	136	0.352	51	4.6	3.8	140.124	F
C	2	441	110	1798	99.50	0.00	596	0.740	540	50.7	26.1	128.234	F
D	1	237	59	1800	54.50	0.00	327	0.724	291	31.0	17.6	155.697	F

2032 - ND, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Signalised		380.87	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	380.87	F

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2032 - ND	AM	ONE HOUR	08:00	09:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	323	100.000
B		ONE HOUR	✓	335	100.000
C		ONE HOUR	✓	320	100.000
D		ONE HOUR	✓	238	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
	A	B	C	D	
From	A	0	27	205	91
	B	61	0	94	180
	C	144	21	0	155
	D	95	86	57	0

Vehicle Mix

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

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Arm	Max DOS	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A	1.13	392.55	68.6	F	459	689
B	1.14	425.53	77.0	F	476	715
C	1.12	373.00	66.0	F	455	683
D	1.08	312.73	46.6	F	339	508

Main Results for each time segment

08:00 - 08:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	377	94	1815	80.50	0.00	487	0.774	279	0.0	24.6	115.476	F
B	1	320	80	1821	68.50	0.00	416	0.769	231	0.0	22.1	124.186	F
	2	71	18	1665	16.50	0.00	92	0.777	44	0.0	6.8	190.929	F
C	2	373	93	1769	82.50	0.00	486	0.768	277	0.0	24.1	113.637	F
D	1	278	69	1747	64.50	0.00	376	0.739	200	0.0	19.4	125.176	F

08:15 - 08:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	450	113	1815	80.50	0.00	487	0.924	420	24.6	32.1	138.351	F
B	1	382	95	1821	68.50	0.00	416	0.918	355	22.1	28.8	147.216	F
	2	85	21	1665	16.50	0.00	92	0.928	75	6.8	9.4	237.989	F
C	2	446	111	1769	82.50	0.00	487	0.916	417	24.1	31.3	135.594	F
D	1	332	83	1748	64.50	0.00	376	0.882	310	19.4	24.9	144.807	F

08:30 - 08:45

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	551	138	1816	80.50	0.00	487	1.131	471	32.1	52.2	189.461	F
B	1	468	117	1821	68.50	0.00	416	1.124	400	28.8	45.8	197.231	F
	2	104	26	1665	16.50	0.00	92	1.137	85	9.4	14.1	301.738	F
C	2	546	137	1769	82.50	0.00	486	1.123	469	31.3	50.6	185.385	F
D	1	406	102	1748	64.50	0.00	376	1.081	353	24.9	38.1	189.214	F

08:45 - 09:00

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	551	138	1816	80.50	0.00	487	1.131	486	52.2	68.6	299.470	F
B	1	468	117	1821	68.50	0.00	416	1.124	414	45.8	59.2	304.045	F
	2	104	26	1665	16.50	0.00	92	1.137	90	14.1	17.8	436.724	F
C	2	546	137	1769	82.50	0.00	486	1.123	485	50.6	66.0	289.864	F
D	1	406	102	1748	64.50	0.00	376	1.081	372	38.1	46.6	271.092	F

09:00 - 09:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	450	113	1815	80.50	0.00	487	0.924	479	68.6	61.3	392.548	F
B	1	382	95	1821	68.50	0.00	416	0.918	408	59.2	52.7	391.862	F
	2	85	21	1665	16.50	0.00	92	0.928	86	17.8	17.6	576.745	F
C	2	446	111	1769	82.50	0.00	487	0.916	478	66.0	57.9	373.004	F
D	1	332	83	1748	64.50	0.00	376	0.882	365	46.6	38.2	312.728	F

09:15 - 09:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	377	94	1815	80.50	0.00	487	0.774	504	61.3	29.5	271.554	F
B	1	320	80	1821	68.50	0.00	416	0.769	430	52.7	25.0	265.535	F
	2	71	18	1665	16.50	0.00	92	0.777	93	17.6	12.2	536.267	F
C	2	373	93	1769	82.50	0.00	486	0.768	503	57.9	25.5	239.545	F
D	1	278	69	1747	64.50	0.00	376	0.739	352	38.2	19.8	169.476	F

2032 - ND, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Signalised		280.43	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	280.43	F

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2032 - ND	PM	ONE HOUR	17:00	18:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	451	100.000
B		ONE HOUR	✓	199	100.000
C		ONE HOUR	✓	291	100.000
D		ONE HOUR	✓	221	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
	A	B	C	D	
From	A	0	71	318	62
	B	44	0	94	61
	C	144	21	0	126
	D	71	127	23	0

Vehicle Mix

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

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Arm	Max DOS	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A	1.08	253.53	72.9	F	641	962
B	1.06	333.76	42.9	F	283	425
C	1.08	292.40	53.9	F	414	621
D	1.06	271.53	41.3	F	314	471

Main Results for each time segment

17:00 - 17:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	526	132	1834	116.50	0.00	712	0.739	414	0.0	28.1	87.326	F
B	1	181	45	1755	42.50	0.00	249	0.727	125	0.0	14.1	143.891	F
	2	51	13	1665	13.50	0.00	75	0.685	32	0.0	4.9	186.801	F
C	2	340	85	1780	77.50	0.00	460	0.738	251	0.0	22.3	114.638	F
D	1	258	64	1800	59.50	0.00	357	0.722	184	0.0	18.4	127.431	F

17:15 - 17:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	628	157	1834	116.50	0.00	712	0.882	598	28.1	35.6	104.007	F
B	1	216	54	1755	42.50	0.00	249	0.869	200	14.1	18.1	165.326	F
	2	61	15	1665	13.50	0.00	75	0.818	55	4.9	6.4	220.948	F
C	2	405	101	1780	77.50	0.00	460	0.882	381	22.3	28.4	132.922	F
D	1	308	77	1800	59.50	0.00	357	0.863	288	18.4	23.3	145.290	F

17:30 - 17:45

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	770	192	1834	116.50	0.00	712	1.081	681	35.6	57.7	147.851	F
B	1	265	66	1755	42.50	0.00	249	1.064	229	18.1	27.1	210.121	F
	2	75	19	1665	13.50	0.00	75	1.002	63	6.4	9.5	276.438	F
C	2	497	124	1780	77.50	0.00	460	1.080	435	28.4	43.9	176.524	F
D	1	377	94	1800	59.50	0.00	357	1.056	331	23.3	35.0	187.053	F

17:45 - 18:00

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	770	192	1834	116.50	0.00	712	1.081	709	57.7	72.9	223.050	F
B	1	265	66	1755	42.50	0.00	249	1.064	244	27.1	32.2	288.689	F
	2	75	19	1665	13.50	0.00	75	1.002	70	9.5	10.8	357.010	F
C	2	497	124	1780	77.50	0.00	460	1.080	456	43.9	53.9	255.340	F
D	1	377	94	1800	59.50	0.00	357	1.056	352	35.0	41.3	255.788	F

18:00 - 18:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	628	157	1834	116.50	0.00	712	0.882	700	72.9	55.0	253.530	F
B	1	216	54	1755	42.50	0.00	249	0.869	238	32.2	26.6	318.836	F
	2	61	15	1665	13.50	0.00	75	0.818	68	10.8	9.1	386.323	F
C	2	405	101	1780	77.50	0.00	460	0.882	449	53.9	43.2	292.399	F
D	1	308	77	1800	59.50	0.00	357	0.863	344	41.3	32.2	271.529	F

18:15 - 18:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	526	132	1834	116.50	0.00	712	0.739	633	55.0	28.3	110.957	F
B	1	181	45	1755	42.50	0.00	249	0.727	229	26.6	14.5	185.292	F
	2	51	13	1665	13.50	0.00	75	0.685	66	9.1	5.4	260.814	F
C	2	340	85	1780	77.50	0.00	460	0.738	422	43.2	22.5	149.242	F
D	1	258	64	1800	59.50	0.00	357	0.722	312	32.2	18.6	145.837	F

2032 - WD, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Signalised		451.84	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	451.84	F

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2032 - WD	AM	ONE HOUR	08:00	09:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	325	100.000
B		ONE HOUR	✓	339	100.000
C		ONE HOUR	✓	324	100.000
D		ONE HOUR	✓	269	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
	A	B	C	D	
From	A	0	27	205	93
	B	61	0	94	184
	C	144	21	0	159
	D	108	97	64	0

Vehicle Mix

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

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Arm	Max DOS	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A	1.17	470.33	76.5	F	462	693
B	1.14	426.60	78.2	F	482	723
C	1.17	463.75	75.5	F	461	691
D	1.15	446.96	62.4	F	383	574

Main Results for each time segment

08:00 - 08:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	379	95	1814	78.50	0.00	475	0.799	278	0.0	25.2	119.562	F
B	1	324	81	1822	68.50	0.00	416	0.780	234	0.0	22.5	125.237	F
	2	71	18	1665	17.50	0.00	97	0.733	45	0.0	6.6	182.287	F
C	2	378	95	1767	80.50	0.00	474	0.797	279	0.0	24.9	118.128	F
D	1	314	78	1747	68.50	0.00	399	0.787	226	0.0	21.9	126.594	F

08:15 - 08:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	453	113	1814	78.50	0.00	475	0.954	419	25.2	33.8	146.970	F
B	1	387	97	1822	68.50	0.00	416	0.931	359	22.5	29.6	150.009	F
	2	85	21	1665	17.50	0.00	97	0.875	76	6.6	8.8	218.906	F
C	2	451	113	1768	80.50	0.00	474	0.952	418	24.9	33.3	145.254	F
D	1	375	94	1747	68.50	0.00	399	0.939	346	21.9	29.1	153.069	F

08:30 - 08:45

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	555	139	1814	78.50	0.00	475	1.168	465	33.8	56.3	204.952	F
B	1	474	119	1823	68.50	0.00	416	1.140	402	29.6	47.6	202.639	F
	2	104	26	1665	17.50	0.00	97	1.072	87	8.8	13.1	274.695	F
C	2	553	138	1768	80.50	0.00	474	1.166	464	33.3	55.6	202.873	F
D	1	459	115	1748	68.50	0.00	399	1.150	387	29.1	47.1	207.892	F

08:45 - 09:00

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	555	139	1814	78.50	0.00	475	1.168	474	56.3	76.5	337.829	F
B	1	474	119	1823	68.50	0.00	416	1.140	415	47.6	62.6	318.974	F
	2	104	26	1665	17.50	0.00	97	1.072	94	13.1	15.7	377.262	F
C	2	553	138	1768	80.50	0.00	474	1.166	473	55.6	75.5	334.169	F
D	1	459	115	1748	68.50	0.00	399	1.150	398	47.1	62.4	330.885	F

09:00 - 09:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	453	113	1814	78.50	0.00	475	0.954	468	76.5	72.6	470.325	F
B	1	387	97	1822	68.50	0.00	416	0.931	409	62.6	57.2	423.599	F
	2	85	21	1665	17.50	0.00	97	0.875	93	15.7	13.7	440.274	F
C	2	451	113	1768	80.50	0.00	474	0.952	468	75.5	71.4	463.750	F
D	1	375	94	1747	68.50	0.00	399	0.939	392	62.4	58.1	446.961	F

09:15 - 09:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	379	95	1814	78.50	0.00	475	0.799	491	72.6	44.7	402.475	F
B	1	324	81	1822	68.50	0.00	416	0.780	431	57.2	30.5	319.405	F
	2	71	18	1665	17.50	0.00	97	0.733	96	13.7	7.6	303.370	F
C	2	378	95	1767	80.50	0.00	474	0.797	491	71.4	43.2	391.998	F
D	1	314	78	1747	68.50	0.00	399	0.787	413	58.1	33.3	358.723	F

2032 - WD, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Signalised		580.92	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	580.92	F

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2032 - WD	PM	ONE HOUR	17:00	18:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	455	100.000
B		ONE HOUR	✓	203	100.000
C		ONE HOUR	✓	421	100.000
D		ONE HOUR	✓	231	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
	A	B	C	D	
From	A	0	71	318	66
	B	44	0	94	65
	C	232	53	0	136
	D	74	133	24	0

Vehicle Mix

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

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Arm	Max DOS	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A	1.23	602.08	118.7	F	647	971
B	1.17	527.52	55.0	F	289	433
C	1.23	620.74	112.6	F	599	898
D	1.18	513.58	60.1	F	329	493

Main Results for each time segment

17:00 - 17:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	531	133	1832	103.50	0.00	632	0.840	405	0.0	31.5	106.176	F
B	1	186	46	1759	39.50	0.00	232	0.801	125	0.0	15.1	155.228	F
	2	51	13	1665	12.50	0.00	69	0.740	31	0.0	5.1	197.607	F
C	2	491	123	1794	97.50	0.00	583	0.843	371	0.0	30.2	110.780	F
D	1	270	67	1801	55.50	0.00	333	0.809	189	0.0	20.2	139.700	F

17:15 - 17:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	634	159	1832	103.50	0.00	632	1.003	581	31.5	44.8	140.871	F
B	1	222	55	1759	39.50	0.00	232	0.956	199	15.1	20.7	189.888	F
	2	61	15	1665	12.50	0.00	69	0.884	54	5.1	6.9	243.981	F
C	2	587	147	1794	97.50	0.00	583	1.006	536	30.2	42.9	145.987	F
D	1	322	80	1801	55.50	0.00	333	0.966	292	20.2	27.6	171.940	F

17:30 - 17:45

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	776	194	1832	103.50	0.00	632	1.228	630	44.8	81.5	214.221	F
B	1	271	68	1759	39.50	0.00	232	1.171	224	20.7	32.4	250.408	F
	2	75	19	1665	12.50	0.00	69	1.082	62	6.9	10.2	305.783	F
C	2	718	180	1794	97.50	0.00	583	1.232	581	42.9	77.3	220.510	F
D	1	394	99	1801	55.50	0.00	333	1.183	326	27.6	44.6	233.359	F

17:45 - 18:00

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	776	194	1832	103.50	0.00	632	1.228	632	81.5	117.7	382.405	F
B	1	271	68	1759	39.50	0.00	232	1.171	230	32.4	42.6	389.985	F
	2	75	19	1665	12.50	0.00	69	1.082	67	10.2	12.4	422.328	F
C	2	718	180	1794	97.50	0.00	583	1.232	583	77.3	111.3	390.924	F
D	1	394	99	1801	55.50	0.00	333	1.183	332	44.6	60.1	377.217	F

18:00 - 18:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	634	159	1832	103.50	0.00	632	1.003	630	117.7	118.7	597.284	F
B	1	222	55	1759	39.50	0.00	232	0.956	233	42.6	39.8	525.028	F
	2	61	15	1665	12.50	0.00	69	0.884	63	12.4	11.9	536.526	F
C	2	587	147	1794	97.50	0.00	583	1.006	581	111.3	112.6	607.006	F
D	1	322	80	1801	55.50	0.00	333	0.966	338	60.1	56.0	513.582	F

18:15 - 18:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	531	133	1832	103.50	0.00	632	0.840	627	118.7	94.6	602.078	F
B	1	186	46	1759	39.50	0.00	232	0.801	239	39.8	26.5	462.232	F
	2	51	13	1665	12.50	0.00	69	0.740	69	11.9	7.5	431.081	F
C	2	491	123	1794	97.50	0.00	583	0.843	578	112.6	90.8	620.738	F
D	1	270	67	1801	55.50	0.00	333	0.809	344	56.0	37.4	457.504	F

2037 - ND , AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Signalised		420.55	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	420.55	F

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2037 - ND	AM	ONE HOUR	08:00	09:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	331	100.000
B		ONE HOUR	✓	342	100.000
C		ONE HOUR	✓	329	100.000
D		ONE HOUR	✓	242	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
	A	B	C	D	
From	A	0	28	210	93
	B	62	0	96	184
	C	148	22	0	159
	D	97	87	58	0

Vehicle Mix

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

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Arm	Max DOS	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A	1.16	450.58	75.8	F	471	706
B	1.12	373.10	73.5	F	486	730
C	1.15	437.89	74.0	F	468	702
D	1.13	422.95	55.0	F	344	516

Main Results for each time segment

08:00 - 08:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	386	97	1815	80.50	0.00	487	0.793	285	0.0	25.4	117.419	F
B	1	327	82	1821	70.50	0.00	428	0.763	237	0.0	22.3	122.065	F
	2	72	18	1665	18.50	0.00	103	0.705	46	0.0	6.6	176.437	F
C	2	384	96	1769	82.50	0.00	486	0.789	284	0.0	24.9	115.778	F
D	1	282	71	1747	62.50	0.00	364	0.776	202	0.0	20.2	130.362	F

08:15 - 08:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	461	115	1815	80.50	0.00	487	0.947	428	25.4	33.8	143.557	F
B	1	390	98	1821	70.50	0.00	428	0.912	364	22.3	29.0	144.110	F
	2	86	22	1665	18.50	0.00	103	0.841	78	6.6	8.6	207.099	F
C	2	458	115	1769	82.50	0.00	486	0.942	426	24.9	33.1	141.343	F
D	1	337	84	1747	62.50	0.00	364	0.926	311	20.2	26.6	155.675	F

08:30 - 08:45

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	565	141	1815	80.50	0.00	487	1.160	476	33.8	56.1	199.866	F
B	1	478	119	1821	70.50	0.00	428	1.116	410	29.0	45.9	192.838	F
	2	106	26	1665	18.50	0.00	103	1.030	89	8.6	12.7	259.113	F
C	2	561	140	1769	82.50	0.00	487	1.154	474	33.1	54.9	196.716	F
D	1	413	103	1747	62.50	0.00	364	1.135	350	26.6	42.3	207.941	F

08:45 - 09:00

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	565	141	1815	80.50	0.00	487	1.160	486	56.1	75.8	327.416	F
B	1	478	119	1821	70.50	0.00	428	1.116	426	45.9	58.8	294.586	F
	2	106	26	1665	18.50	0.00	103	1.030	98	12.7	14.7	341.800	F
C	2	561	140	1769	82.50	0.00	487	1.154	485	54.9	74.0	320.771	F
D	1	413	103	1747	62.50	0.00	364	1.135	362	42.3	55.0	322.186	F

09:00 - 09:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	461	115	1815	80.50	0.00	487	0.947	480	75.8	71.0	450.582	F
B	1	390	98	1821	70.50	0.00	428	0.912	419	58.8	51.5	373.390	F
	2	86	22	1665	18.50	0.00	103	0.841	96	14.7	12.4	371.765	F
C	2	458	115	1769	82.50	0.00	486	0.942	479	74.0	68.7	437.892	F
D	1	337	84	1747	62.50	0.00	364	0.926	357	55.0	50.1	422.947	F

09:15 - 09:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	386	97	1815	80.50	0.00	487	0.793	504	71.0	41.6	369.807	F
B	1	327	82	1821	70.50	0.00	428	0.763	440	51.5	23.3	237.041	F
	2	72	18	1665	18.50	0.00	103	0.705	93	12.4	7.1	239.996	F
C	2	384	96	1769	82.50	0.00	486	0.789	503	68.7	38.8	349.135	F
D	1	282	71	1747	62.50	0.00	364	0.776	377	50.1	26.5	315.117	F

2037 - ND , PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Signalised		511.37	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	511.37	F

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2037 - ND	PM	ONE HOUR	17:00	18:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	462	100.000
B		ONE HOUR	✓	181	100.000
C		ONE HOUR	✓	422	100.000
D		ONE HOUR	✓	226	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
	A	B	C	D	
From	A	0	73	326	63
	B	45	0	74	62
	C	238	55	0	129
	D	73	130	23	0

Vehicle Mix

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

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Arm	Max DOS	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A	1.20	508.74	110.2	F	657	986
B	1.14	468.63	46.2	F	257	386
C	1.21	526.15	104.6	F	600	900
D	1.18	523.38	58.4	F	321	482

Main Results for each time segment

17:00 - 17:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	539	135	1834	107.50	0.00	657	0.820	415	0.0	31.1	101.119	F
B	1	159	40	1770	34.50	0.00	204	0.779	106	0.0	13.2	158.357	F
	2	53	13	1665	13.50	0.00	75	0.701	32	0.0	5.0	188.850	F
C	2	492	123	1797	99.50	0.00	596	0.826	374	0.0	29.7	107.343	F
D	1	264	66	1800	54.50	0.00	327	0.806	184	0.0	19.9	140.259	F

17:15 - 17:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	644	161	1834	107.50	0.00	657	0.980	597	31.1	42.9	131.422	F
B	1	190	47	1770	34.50	0.00	204	0.931	171	13.2	17.7	190.487	F
	2	63	16	1665	13.50	0.00	75	0.837	56	5.0	6.6	225.648	F
C	2	588	147	1797	99.50	0.00	596	0.986	542	29.7	41.3	139.297	F
D	1	315	79	1800	54.50	0.00	327	0.963	286	19.9	27.0	172.103	F

17:30 - 17:45

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	788	197	1834	107.50	0.00	657	1.200	651	42.9	77.2	197.325	F
B	1	232	58	1771	34.50	0.00	204	1.140	194	17.7	27.2	246.387	F
	2	77	19	1665	13.50	0.00	75	1.025	64	6.6	9.8	282.114	F
C	2	720	180	1797	99.50	0.00	596	1.208	591	41.3	73.5	206.842	F
D	1	386	96	1800	54.50	0.00	327	1.179	320	27.0	43.5	232.709	F

17:45 - 18:00

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	788	197	1834	107.50	0.00	657	1.200	657	77.2	110.2	348.499	F
B	1	232	58	1771	34.50	0.00	204	1.140	202	27.2	34.8	369.507	F
	2	77	19	1665	13.50	0.00	75	1.025	71	9.8	11.4	371.745	F
C	2	720	180	1797	99.50	0.00	596	1.208	596	73.5	104.6	363.105	F
D	1	386	96	1800	54.50	0.00	327	1.179	326	43.5	58.4	374.206	F

18:00 - 18:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	644	161	1834	107.50	0.00	657	0.980	651	110.2	108.3	508.741	F
B	1	190	47	1770	34.50	0.00	204	0.931	197	34.8	32.9	484.027	F
	2	63	16	1665	13.50	0.00	75	0.837	69	11.4	9.9	422.097	F
C	2	588	147	1797	99.50	0.00	596	0.986	591	104.6	103.9	526.153	F
D	1	315	79	1800	54.50	0.00	327	0.963	321	58.4	56.9	523.384	F

18:15 - 18:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	539	135	1834	107.50	0.00	657	0.820	677	108.3	73.9	477.459	F
B	1	159	40	1770	34.50	0.00	204	0.779	210	32.9	20.1	406.598	F
	2	53	13	1665	13.50	0.00	75	0.701	69	9.9	5.7	285.924	F
C	2	492	123	1797	99.50	0.00	596	0.826	614	103.9	73.6	514.440	F
D	1	264	66	1800	54.50	0.00	327	0.806	338	56.9	38.2	481.345	F

2037 - WD , AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Signalised		496.29	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	496.29	F

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2037 - WD	AM	ONE HOUR	08:00	09:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	333	100.000
B		ONE HOUR	✓	347	100.000
C		ONE HOUR	✓	333	100.000
D		ONE HOUR	✓	273	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
	A	B	C	D	
From	A	0	28	210	95
	B	62	0	96	189
	C	148	22	0	163
	D	110	98	65	0

Vehicle Mix

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

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Arm	Max DOS	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A	1.20	503.28	84.2	F	474	710
B	1.17	481.46	85.4	F	494	740
C	1.20	515.70	84.2	F	474	710
D	1.17	482.91	66.2	F	388	582

Main Results for each time segment

08:00 - 08:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	389	97	1814	78.50	0.00	475	0.819	284	0.0	26.0	121.754	F
B	1	333	83	1823	68.50	0.00	416	0.799	240	0.0	23.2	127.282	F
	2	72	18	1665	17.50	0.00	97	0.745	45	0.0	6.8	183.887	F
C	2	389	97	1768	80.50	0.00	474	0.819	285	0.0	25.8	120.593	F
D	1	319	80	1747	68.50	0.00	399	0.799	229	0.0	22.3	127.889	F

08:15 - 08:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	464	116	1815	78.50	0.00	475	0.977	425	26.0	35.8	153.160	F
B	1	397	99	1823	68.50	0.00	416	0.954	365	23.2	31.2	155.599	F
	2	86	22	1665	17.50	0.00	97	0.889	77	6.8	9.1	222.772	F
C	2	464	116	1768	80.50	0.00	474	0.978	425	25.8	35.5	152.301	F
D	1	380	95	1747	68.50	0.00	399	0.954	350	22.3	30.0	156.576	F

08:30 - 08:45

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	568	142	1814	78.50	0.00	475	1.197	469	35.8	60.7	217.369	F
B	1	486	122	1823	68.50	0.00	416	1.169	407	31.2	51.2	213.598	F
	2	106	26	1665	17.50	0.00	97	1.089	88	9.1	13.5	280.216	F
C	2	568	142	1768	80.50	0.00	474	1.198	468	35.5	60.5	216.922	F
D	1	466	116	1747	68.50	0.00	399	1.168	389	30.0	49.1	214.773	F

08:45 - 09:00

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	568	142	1814	78.50	0.00	475	1.197	474	60.7	84.2	367.662	F
B	1	486	122	1823	68.50	0.00	416	1.169	415	51.2	68.9	347.314	F
	2	106	26	1665	17.50	0.00	97	1.089	94	13.5	16.4	390.990	F
C	2	568	142	1768	80.50	0.00	474	1.198	474	60.5	84.2	367.825	F
D	1	466	116	1747	68.50	0.00	399	1.168	398	49.1	66.2	348.436	F

09:00 - 09:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	464	116	1815	78.50	0.00	475	0.977	491	84.2	77.6	503.283	F
B	1	397	99	1823	68.50	0.00	416	0.954	410	68.9	65.8	482.071	F
	2	86	22	1665	17.50	0.00	97	0.889	93	16.4	14.8	478.665	F
C	2	464	116	1768	80.50	0.00	474	0.978	483	84.2	79.4	515.699	F
D	1	380	95	1747	68.50	0.00	399	0.954	393	66.2	63.1	482.914	F

09:15 - 09:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	389	97	1814	78.50	0.00	475	0.819	490	77.6	52.3	452.131	F
B	1	333	83	1823	68.50	0.00	416	0.799	431	65.8	41.2	418.105	F
	2	72	18	1665	17.50	0.00	97	0.745	97	14.8	8.6	349.804	F
C	2	389	97	1768	80.50	0.00	474	0.819	489	79.4	54.2	471.201	F
D	1	319	80	1747	68.50	0.00	399	0.799	413	63.1	39.6	419.106	F

2037 - WD , PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Signalised		597.19	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	597.19	F

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2037 - WD	PM	ONE HOUR	17:00	18:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	467	100.000
B		ONE HOUR	✓	185	100.000
C		ONE HOUR	✓	432	100.000
D		ONE HOUR	✓	235	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
	A	B	C	D	
From	A	0	73	326	68
	B	45	0	74	66
	C	238	55	0	139
	D	76	135	24	0

Vehicle Mix

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

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Arm	Max DOS	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A	1.24	628.22	124.9	F	664	996
B	1.17	552.26	51.4	F	263	395
C	1.23	599.90	112.8	F	614	922
D	1.20	565.92	64.1	F	334	501

Main Results for each time segment

17:00 - 17:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	545	136	1832	105.50	0.00	644	0.846	417	0.0	32.1	105.536	F
B	1	163	41	1775	34.50	0.00	204	0.801	108	0.0	13.7	160.933	F
	2	53	13	1665	12.50	0.00	69	0.757	32	0.0	5.2	200.069	F
C	2	504	126	1794	100.50	0.00	601	0.839	382	0.0	30.4	108.193	F
D	1	274	69	1800	55.50	0.00	333	0.823	191	0.0	20.7	141.449	F

17:15 - 17:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	651	163	1832	105.50	0.00	644	1.010	595	32.1	45.9	140.687	F
B	1	195	49	1774	34.50	0.00	204	0.956	175	13.7	18.8	197.262	F
	2	63	16	1665	12.50	0.00	69	0.904	55	5.2	7.2	250.088	F
C	2	602	150	1794	100.50	0.00	601	1.002	551	30.4	43.2	142.994	F
D	1	327	82	1800	55.50	0.00	333	0.983	295	20.7	28.7	176.801	F

17:30 - 17:45

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	797	199	1832	105.50	0.00	644	1.237	642	45.9	84.7	217.552	F
B	1	239	60	1775	34.50	0.00	204	1.171	197	18.8	29.2	258.364	F
	2	77	19	1665	12.50	0.00	69	1.107	63	7.2	10.7	314.308	F
C	2	737	184	1794	100.50	0.00	601	1.227	599	43.2	77.8	215.546	F
D	1	401	100	1800	55.50	0.00	333	1.204	328	28.7	46.9	242.730	F

17:45 - 18:00

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	797	199	1832	105.50	0.00	644	1.237	644	84.7	122.9	390.763	F
B	1	239	60	1775	34.50	0.00	204	1.171	203	29.2	38.2	398.720	F
	2	77	19	1665	12.50	0.00	69	1.107	67	10.7	13.1	441.953	F
C	2	737	184	1794	100.50	0.00	601	1.227	601	77.8	112.0	382.753	F
D	1	401	100	1800	55.50	0.00	333	1.204	332	46.9	64.1	398.784	F

18:00 - 18:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	651	163	1832	105.50	0.00	644	1.010	643	122.9	124.9	605.712	F
B	1	195	49	1774	34.50	0.00	204	0.956	200	38.2	36.9	545.909	F
	2	63	16	1665	12.50	0.00	69	0.904	63	13.1	13.0	572.004	F
C	2	602	150	1794	100.50	0.00	601	1.002	599	112.0	112.8	598.773	F
D	1	327	82	1800	55.50	0.00	333	0.983	327	64.1	64.1	560.169	F

18:15 - 18:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	545	136	1832	105.50	0.00	644	0.846	640	124.9	101.2	628.220	F
B	1	163	41	1775	34.50	0.00	204	0.801	210	36.9	25.2	498.383	F
	2	53	13	1665	12.50	0.00	69	0.757	70	13.0	8.7	506.990	F
C	2	504	126	1794	100.50	0.00	601	0.839	596	112.8	89.7	599.903	F
D	1	274	69	1800	55.50	0.00	333	0.823	344	64.1	46.7	565.919	F

2047 - ND , AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Signalised		526.76	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	526.76	F

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2047 - ND	AM	ONE HOUR	08:00	09:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	345	100.000
B		ONE HOUR	✓	357	100.000
C		ONE HOUR	✓	342	100.000
D		ONE HOUR	✓	251	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
	A	B	C	D	
From	A	0	29	219	97
	B	65	0	100	192
	C	154	23	0	165
	D	101	90	60	0

Vehicle Mix

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

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Arm	Max DOS	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A	1.19	519.78	85.9	F	491	736
B	1.21	578.90	97.4	F	508	762
C	1.20	521.37	86.4	F	486	730
D	1.16	469.54	60.3	F	357	535

Main Results for each time segment

08:00 - 08:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	403	101	1816	81.50	0.00	493	0.816	296	0.0	26.5	119.207	F
B	1	341	85	1821	68.50	0.00	416	0.819	245	0.0	24.0	129.635	F
	2	76	19	1665	16.50	0.00	92	0.828	46	0.0	7.6	198.659	F
C	2	399	100	1769	82.50	0.00	486	0.820	294	0.0	26.3	119.212	F
D	1	293	73	1747	63.50	0.00	370	0.792	209	0.0	21.0	131.284	F

08:15 - 08:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	481	120	1816	81.50	0.00	493	0.975	442	26.5	36.3	149.926	F
B	1	407	102	1822	68.50	0.00	416	0.978	371	24.0	33.0	162.095	F
	2	91	23	1665	16.50	0.00	92	0.989	78	7.6	10.8	258.327	F
C	2	477	119	1769	82.50	0.00	487	0.979	437	26.3	36.2	150.967	F
D	1	350	87	1747	63.50	0.00	370	0.946	321	21.0	28.1	159.382	F

08:30 - 08:45

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	589	147	1816	81.50	0.00	493	1.194	487	36.3	61.9	213.449	F
B	1	498	125	1821	68.50	0.00	416	1.198	410	33.0	55.1	226.431	F
	2	111	28	1665	16.50	0.00	92	1.211	89	10.8	16.4	333.548	F
C	2	584	146	1769	82.50	0.00	487	1.200	481	36.2	61.9	215.994	F
D	1	428	107	1747	63.50	0.00	370	1.158	359	28.1	45.3	215.775	F

08:45 - 09:00

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	589	147	1816	81.50	0.00	493	1.194	493	61.9	85.9	361.637	F
B	1	498	125	1821	68.50	0.00	416	1.198	415	55.1	75.9	377.921	F
	2	111	28	1665	16.50	0.00	92	1.211	90	16.4	21.5	505.417	F
C	2	584	146	1769	82.50	0.00	487	1.200	486	61.9	86.4	367.774	F
D	1	428	107	1747	63.50	0.00	370	1.158	369	45.3	60.3	343.991	F

09:00 - 09:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	481	120	1816	81.50	0.00	493	0.975	488	85.9	84.2	519.781	F
B	1	407	102	1822	68.50	0.00	416	0.978	414	75.9	74.2	538.771	F
	2	91	23	1665	16.50	0.00	92	0.989	89	21.5	21.8	759.192	F
C	2	477	119	1769	82.50	0.00	487	0.979	492	86.4	82.5	521.367	F
D	1	350	87	1747	63.50	0.00	370	0.946	363	60.3	56.9	469.537	F

09:15 - 09:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	403	101	1816	81.50	0.00	493	0.816	509	84.2	57.5	486.392	F
B	1	341	85	1821	68.50	0.00	416	0.819	430	74.2	52.0	512.004	F
	2	76	19	1665	16.50	0.00	92	0.828	93	21.8	17.6	740.733	F
C	2	399	100	1769	82.50	0.00	486	0.820	502	82.5	56.8	482.464	F
D	1	293	73	1747	63.50	0.00	370	0.792	383	56.9	34.4	394.808	F

2047 - ND , PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Signalised		653.38	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	653.38	F

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2047 - ND	PM	ONE HOUR	17:00	18:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	480	100.000
B		ONE HOUR	✓	188	100.000
C		ONE HOUR	✓	439	100.000
D		ONE HOUR	✓	234	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
	A	B	C	D	
From	A	0	76	339	65
	B	47	0	77	64
	C	248	57	0	134
	D	75	135	24	0

Vehicle Mix

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

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Arm	Max DOS	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A	1.25	656.76	131.9	F	683	1024
B	1.18	549.78	52.2	F	267	401
C	1.26	698.29	126.5	F	624	937
D	1.22	645.42	66.8	F	333	499

Main Results for each time segment

17:00 - 17:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	560	140	1834	107.50	0.00	657	0.852	429	0.0	32.7	104.993	F
B	1	165	41	1770	34.50	0.00	204	0.808	109	0.0	13.9	161.998	F
	2	55	14	1665	13.50	0.00	75	0.732	34	0.0	5.3	193.112	F
C	2	512	128	1798	99.50	0.00	596	0.859	387	0.0	31.4	111.541	F
D	1	273	68	1801	54.50	0.00	327	0.835	190	0.0	20.9	143.819	F

17:15 - 17:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	669	167	1834	107.50	0.00	657	1.018	611	32.7	47.2	140.680	F
B	1	196	49	1770	34.50	0.00	204	0.965	175	13.9	19.1	200.040	F
	2	65	16	1665	13.50	0.00	75	0.874	58	5.3	7.2	235.744	F
C	2	612	153	1798	99.50	0.00	596	1.026	556	31.4	45.4	148.225	F
D	1	326	82	1801	54.50	0.00	327	0.997	292	20.9	29.3	182.027	F

17:30 - 17:45

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	819	205	1834	107.50	0.00	657	1.246	655	47.2	88.2	221.340	F
B	1	241	60	1770	34.50	0.00	204	1.182	198	19.1	29.9	263.276	F
	2	80	20	1665	13.50	0.00	75	1.070	66	7.2	10.6	295.284	F
C	2	749	187	1798	99.50	0.00	596	1.257	595	45.4	84.1	232.465	F
D	1	399	100	1801	54.50	0.00	327	1.221	324	29.3	48.1	251.748	F

17:45 - 18:00

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	819	205	1834	107.50	0.00	657	1.246	657	88.2	128.7	399.838	F
B	1	241	60	1770	34.50	0.00	204	1.182	202	29.9	39.4	410.025	F
	2	80	20	1665	13.50	0.00	75	1.070	72	10.6	12.7	404.343	F
C	2	749	187	1798	99.50	0.00	596	1.257	596	84.1	122.4	416.823	F
D	1	399	100	1801	54.50	0.00	327	1.221	326	48.1	66.4	417.274	F

18:00 - 18:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	669	167	1834	107.50	0.00	657	1.018	656	128.7	131.9	618.189	F
B	1	196	49	1770	34.50	0.00	204	0.965	198	39.4	39.2	565.806	F
	2	65	16	1665	13.50	0.00	75	0.874	69	12.7	11.9	501.687	F
C	2	612	153	1798	99.50	0.00	596	1.026	595	122.4	126.5	643.482	F
D	1	326	82	1801	54.50	0.00	327	0.997	324	66.4	66.8	645.420	F

18:15 - 18:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	560	140	1834	107.50	0.00	657	0.852	653	131.9	108.7	656.759	F
B	1	165	41	1770	34.50	0.00	204	0.808	210	39.2	27.9	551.294	F
	2	55	14	1665	13.50	0.00	75	0.732	74	11.9	7.0	374.502	F
C	2	512	128	1798	99.50	0.00	596	0.859	592	126.5	106.5	698.286	F
D	1	273	68	1801	54.50	0.00	327	0.835	337	66.8	50.8	615.575	F

2047 - WD , AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Signalised		637.33	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	637.33	F

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D15	2047 - WD	AM	ONE HOUR	08:00	09:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	347	100.000
B		ONE HOUR	✓	361	100.000
C		ONE HOUR	✓	346	100.000
D		ONE HOUR	✓	282	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
From	A	B	C	D	
	0	29	219	99	
	65	0	100	196	
	154	23	0	169	
	113	101	68	0	

Vehicle Mix

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

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Arm	Max DOS	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A	1.25	690.94	101.1	F	494	740
B	1.21	609.01	98.7	F	513	770
C	1.24	681.40	99.7	F	492	738
D	1.21	553.53	74.9	F	401	602

Main Results for each time segment

08:00 - 08:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	405	101	1814	78.50	0.00	475	0.853	295	0.0	27.6	126.070	F
B	1	345	86	1823	68.50	0.00	416	0.830	248	0.0	24.5	130.921	F
	2	76	19	1665	17.50	0.00	97	0.781	47	0.0	7.2	188.921	F
C	2	404	101	1768	80.50	0.00	474	0.851	295	0.0	27.3	124.606	F
D	1	329	82	1747	68.50	0.00	399	0.825	236	0.0	23.3	130.985	F

08:15 - 08:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	484	121	1815	78.50	0.00	475	1.018	437	27.6	39.3	163.195	F
B	1	412	103	1823	68.50	0.00	416	0.991	374	24.5	34.1	165.834	F
	2	91	23	1665	17.50	0.00	97	0.932	80	7.2	10.0	235.342	F
C	2	482	121	1768	80.50	0.00	474	1.016	436	27.3	38.8	161.653	F
D	1	393	98	1747	68.50	0.00	399	0.985	357	23.3	32.4	165.276	F

08:30 - 08:45

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	592	148	1815	78.50	0.00	475	1.247	473	39.3	69.2	242.618	F
B	1	505	126	1822	68.50	0.00	416	1.214	412	34.1	57.4	233.826	F
	2	111	28	1665	17.50	0.00	97	1.142	91	10.0	15.0	299.055	F
C	2	590	148	1768	80.50	0.00	474	1.245	472	38.8	68.4	240.278	F
D	1	481	120	1747	68.50	0.00	399	1.207	394	32.4	54.2	231.804	F

08:45 - 09:00

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	592	148	1815	78.50	0.00	475	1.247	474	69.2	98.6	421.974	F
B	1	505	126	1822	68.50	0.00	416	1.214	416	57.4	79.8	394.524	F
	2	111	28	1665	17.50	0.00	97	1.142	95	15.0	18.9	435.432	F
C	2	590	148	1768	80.50	0.00	474	1.245	474	68.4	97.5	418.253	F
D	1	481	120	1747	68.50	0.00	399	1.207	398	54.2	74.9	388.414	F

09:00 - 09:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	484	121	1815	78.50	0.00	475	1.018	474	98.6	101.1	648.761	F
B	1	412	103	1823	68.50	0.00	416	0.991	412	79.8	79.8	615.993	F
	2	91	23	1665	17.50	0.00	97	0.932	91	18.9	18.7	577.238	F
C	2	482	121	1768	80.50	0.00	474	1.016	473	97.5	99.7	643.543	F
D	1	393	98	1747	68.50	0.00	399	0.985	393	74.9	74.9	546.317	F

09:15 - 09:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	405	101	1814	78.50	0.00	475	0.853	471	101.1	84.7	690.942	F
B	1	345	86	1823	68.50	0.00	416	0.830	429	79.8	58.9	571.208	F
	2	76	19	1665	17.50	0.00	97	0.781	99	18.7	13.0	541.053	F
C	2	404	101	1768	80.50	0.00	474	0.851	470	99.7	83.1	681.405	F
D	1	329	82	1747	68.50	0.00	399	0.825	412	74.9	54.3	553.534	F

2047 - WD , PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Signalised		818.60	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	818.60	F

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D16	2047 - WD	PM	ONE HOUR	17:00	18:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	505	100.000
B		ONE HOUR	✓	193	100.000
C		ONE HOUR	✓	449	100.000
D		ONE HOUR	✓	245	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
	A	B	C	D	
From	A	0	76	339	90
	B	47	0	77	69
	C	248	57	0	144
	D	79	141	25	0

Vehicle Mix

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

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Arm	Max DOS	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A	1.31	850.14	165.6	F	718	1077
B	1.26	763.14	63.7	F	275	412
C	1.30	843.72	147.4	F	639	958
D	1.26	751.22	76.9	F	348	523

Main Results for each time segment

17:00 - 17:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	589	147	1825	108.50	0.00	660	0.893	449	0.0	35.1	110.038	F
B	1	170	43	1775	33.50	0.00	198	0.860	111	0.0	14.9	169.284	F
	2	55	14	1665	12.50	0.00	69	0.790	32	0.0	5.6	205.166	F
C	2	524	131	1794	98.50	0.00	589	0.889	392	0.0	33.0	116.891	F
D	1	286	71	1801	55.50	0.00	333	0.858	198	0.0	22.0	146.136	F

17:15 - 17:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	704	176	1825	108.50	0.00	660	1.066	631	35.1	53.4	151.130	F
B	1	203	51	1775	33.50	0.00	198	1.027	178	14.9	21.2	215.820	F
	2	65	16	1665	12.50	0.00	69	0.944	56	5.6	7.9	263.141	F
C	2	626	156	1795	98.50	0.00	589	1.062	560	33.0	49.4	157.856	F
D	1	341	85	1800	55.50	0.00	333	1.025	304	22.0	31.4	186.659	F

17:30 - 17:45

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	862	215	1825	108.50	0.00	660	1.306	659	53.4	104.1	256.245	F
B	1	249	62	1775	33.50	0.00	198	1.257	196	21.2	34.4	298.748	F
	2	80	20	1665	12.50	0.00	69	1.156	65	7.9	11.7	333.313	F
C	2	766	192	1794	98.50	0.00	589	1.301	588	49.4	93.9	260.003	F
D	1	418	105	1800	55.50	0.00	333	1.255	331	31.4	53.1	268.630	F

17:45 - 18:00

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	862	215	1825	108.50	0.00	660	1.306	660	104.1	154.6	467.223	F
B	1	249	62	1775	33.50	0.00	198	1.257	198	34.4	47.3	486.298	F
	2	80	20	1665	12.50	0.00	69	1.156	68	11.7	14.9	483.843	F
C	2	766	192	1794	98.50	0.00	589	1.301	589	93.9	138.3	468.300	F
D	1	418	105	1800	55.50	0.00	333	1.255	333	53.1	74.5	453.435	F

18:00 - 18:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	704	176	1825	108.50	0.00	660	1.066	660	154.6	165.6	731.528	F
B	1	203	51	1775	33.50	0.00	198	1.027	197	47.3	48.9	740.334	F
	2	65	16	1665	12.50	0.00	69	0.944	65	14.9	14.9	696.436	F
C	2	626	156	1795	98.50	0.00	589	1.062	589	138.3	147.4	730.240	F
D	1	341	85	1800	55.50	0.00	333	1.025	332	74.5	76.9	693.843	F

18:15 - 18:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	589	147	1825	108.50	0.00	660	0.893	657	165.6	148.7	850.136	F
B	1	170	43	1775	33.50	0.00	198	0.860	195	48.9	42.8	804.041	F
	2	55	14	1665	12.50	0.00	69	0.790	70	14.9	11.2	636.081	F
C	2	524	131	1794	98.50	0.00	589	0.889	586	147.4	132.0	843.723	F
D	1	286	71	1801	55.50	0.00	333	0.858	329	76.9	66.1	751.219	F

Junctions 10						
PICADY 10 - Priority Intersection Module						
Version: 10.1.2.2275 © Copyright TRL Software Limited, 2023						
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Filename: Junction 5.j10

Path: C:\Users\kearn\OneDrive\2023 Projects\P230400423 - DUBLIN, Boherboy LRD\5.0 Calculations\5.3
Highways\Modelling\2023 Boherboy

Report generation date: 03/12/2025 21:23:03

»2032 - WD, AM
»2032 - WD, PM
»2037 - WD, AM
»2037 - WD, PM
»2047 - WD, AM
»2047 - WD, PM

Summary of junction performance

	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
2032 - WD						
Stream B-AC	0.1	8.92	0.09	0.0	8.61	0.04
Stream C-AB	0.0	5.60	0.02	0.1	5.74	0.04
2037 - WD						
Stream B-AC	0.1	8.98	0.09	0.0	8.66	0.04
Stream C-AB	0.0	5.59	0.02	0.1	5.72	0.04
2047 - WD						
Stream B-AC	0.1	9.07	0.09	0.0	8.75	0.04
Stream C-AB	0.0	5.56	0.02	0.1	5.69	0.05

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

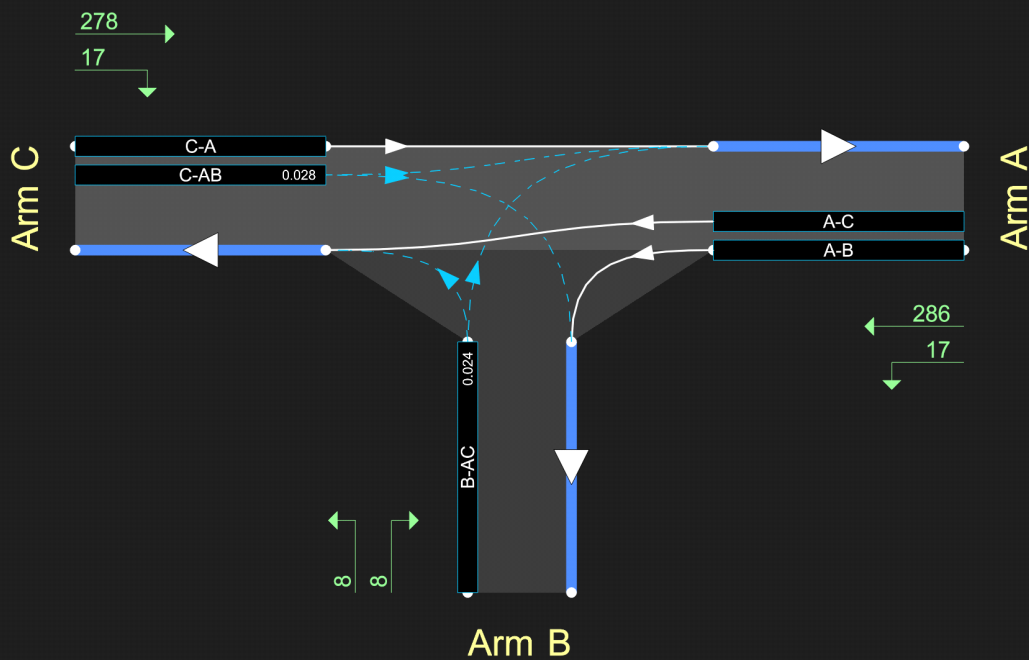
File summary

File Description

Title	P230400423 - DUBLIN, Boherboy LRD
Location	SITE 5
Site number	
Date	02/12/2025
Version	
Status	PLANNING
Identifier	
Client	
Jobnumber	
Enumerator	PINNACLE\JM
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 original traffic demand (PCU/hr).
Streams (downstream end) show RFC ()

The junction diagram reflects the last run of Junctions.

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2032 - WD	AM	ONE HOUR	08:00	09:30	15
D2	2032 - WD	PM	ONE HOUR	17:00	18:30	15
D3	2037 - WD	AM	ONE HOUR	08:00	09:30	15
D4	2037 - WD	PM	ONE HOUR	17:00	18:30	15
D5	2047 - WD	AM	ONE HOUR	08:00	09:30	15
D6	2047 - WD	PM	ONE HOUR	17:00	18:30	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2032 - WD, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		0.69	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.69	A

Arms

Arms

Arm	Name	Description	Arm type
A	Boherboy Road (W)		Major
B	Site Access		Minor
C	Boherboy Road (E)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	6.00			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

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	3.00	60	60

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	527	0.096	0.243	0.153	0.346
B-C	662	0.101	0.256	-	-
C-B	574	0.222	0.222	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2032 - WD	AM	ONE HOUR	08:00	09:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	259	100.000
B		✓	38	100.000
C		✓	266	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
From		A	B	C
	A	0	6	253
	B	19	0	19
	C	260	6	0

Vehicle Mix

Heavy Vehicle %

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

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
08:00-08:15	A	195	195
	B	29	29
	C	200	200
08:15-08:30	A	233	233
	B	34	34
	C	239	239
08:30-08:45	A	285	285
	B	42	42
	C	293	293
08:45-09:00	A	285	285
	B	42	42
	C	293	293
09:00-09:15	A	233	233
	B	34	34
	C	239	239
09:15-09:30	A	195	195
	B	29	29
	C	200	200

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.09	8.92	0.1	A
C-AB	0.02	5.60	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	29	518	0.055	28	0.1	8.083	A
C-AB	6	669	0.010	6	0.0	5.584	A
C-A	194			194			
A-B	5			5			
A-C	190			190			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	34	504	0.068	34	0.1	8.419	A
C-AB	8	688	0.012	8	0.0	5.452	A
C-A	231			231			
A-B	5			5			
A-C	227			227			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	42	486	0.086	42	0.1	8.921	A
C-AB	11	716	0.015	11	0.0	5.289	A
C-A	282			282			
A-B	7			7			
A-C	279			279			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	42	486	0.086	42	0.1	8.925	A
C-AB	11	716	0.015	11	0.0	5.302	A
C-A	282			282			
A-B	7			7			
A-C	279			279			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	34	504	0.068	34	0.1	8.424	A
C-AB	8	688	0.012	8	0.0	5.481	A
C-A	231			231			
A-B	5			5			
A-C	227			227			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	29	518	0.055	29	0.1	8.095	A
C-AB	6	669	0.010	6	0.0	5.599	A
C-A	194			194			
A-B	5			5			
A-C	190			190			

2032 - WD, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		0.50	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.50	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2032 - WD	PM	ONE HOUR	17:00	18:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	284	100.000
B		✓	16	100.000
C		✓	277	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
From		A	B	C
	A	0	17	267
	B	8	0	8
	C	260	17	0

Vehicle Mix

Heavy Vehicle %

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

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
17:00-17:15	A	214	214
	B	12	12
	C	209	209
17:15-17:30	A	255	255
	B	14	14
	C	249	249
17:30-17:45	A	313	313
	B	18	18
	C	305	305
17:45-18:00	A	313	313
	B	18	18
	C	305	305
18:00-18:15	A	255	255
	B	14	14
	C	249	249
18:15-18:30	A	214	214
	B	12	12
	C	209	209

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.04	8.61	0.0	A
C-AB	0.04	5.74	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	12	513	0.024	12	0.0	7.908	A
C-AB	18	665	0.027	18	0.0	5.718	A
C-A	190			190			
A-B	13			13			
A-C	201			201			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	14	498	0.029	14	0.0	8.190	A
C-AB	23	684	0.034	23	0.0	5.613	A
C-A	226			226			
A-B	15			15			
A-C	240			240			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	18	477	0.037	18	0.0	8.612	A
C-AB	31	711	0.044	31	0.1	5.488	A
C-A	274			274			
A-B	19			19			
A-C	294			294			

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-AC	18	477	0.037	18	0.0	8.612	A
C-AB	31	711	0.044	31	0.1	5.506	A
C-A	274			274			
A-B	19			19			
A-C	294			294			

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-AC	14	498	0.029	14	0.0	8.193	A
C-AB	23	684	0.034	23	0.0	5.648	A
C-A	226			226			
A-B	15			15			
A-C	240			240			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	12	513	0.024	12	0.0	7.913	A
C-AB	18	665	0.027	18	0.0	5.735	A
C-A	190			190			
A-B	13			13			
A-C	201			201			

2037 - WD, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		0.68	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.68	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2037 - WD	AM	ONE HOUR	08:00	09:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	267	100.000
B		✓	38	100.000
C		✓	271	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
From	A	0	6	261
	B	19	0	19
	C	265	6	0

Vehicle Mix

Heavy Vehicle %

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

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
08:00-08:15	A	201	201
	B	29	29
	C	204	204
08:15-08:30	A	240	240
	B	34	34
	C	244	244
08:30-08:45	A	294	294
	B	42	42
	C	298	298
08:45-09:00	A	294	294
	B	42	42
	C	298	298
09:00-09:15	A	240	240
	B	34	34
	C	244	244
09:15-09:30	A	201	201
	B	29	29
	C	204	204

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.09	8.98	0.1	A
C-AB	0.02	5.59	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	29	516	0.055	28	0.1	8.115	A
C-AB	6	670	0.010	6	0.0	5.574	A
C-A	198			198			
A-B	5			5			
A-C	196			196			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	34	502	0.068	34	0.1	8.460	A
C-AB	8	690	0.012	8	0.0	5.441	A
C-A	235			235			
A-B	5			5			
A-C	235			235			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	42	483	0.087	42	0.1	8.978	A
C-AB	11	718	0.016	11	0.0	5.275	A
C-A	287			287			
A-B	7			7			
A-C	287			287			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	42	483	0.087	42	0.1	8.982	A
C-AB	11	718	0.016	11	0.0	5.289	A
C-A	287			287			
A-B	7			7			
A-C	287			287			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	34	502	0.068	34	0.1	8.467	A
C-AB	8	690	0.012	8	0.0	5.473	A
C-A	235			235			
A-B	5			5			
A-C	235			235			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	29	516	0.055	29	0.1	8.127	A
C-AB	6	670	0.010	6	0.0	5.589	A
C-A	198			198			
A-B	5			5			
A-C	196			196			

2037 - WD, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		0.49	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.49	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2037 - WD	PM	ONE HOUR	17:00	18:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	291	100.000
B		✓	16	100.000
C		✓	284	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
From	A	0	17	274
	B	8	0	8
	C	267	17	0

Vehicle Mix

Heavy Vehicle %

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

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
17:00-17:15	A	219	219
	B	12	12
	C	214	214
17:15-17:30	A	262	262
	B	14	14
	C	255	255
17:30-17:45	A	320	320
	B	18	18
	C	313	313
17:45-18:00	A	320	320
	B	18	18
	C	313	313
18:00-18:15	A	262	262
	B	14	14
	C	255	255
18:15-18:30	A	219	219
	B	12	12
	C	214	214

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.04	8.66	0.0	A
C-AB	0.04	5.72	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	12	511	0.024	12	0.0	7.938	A
C-AB	18	668	0.027	18	0.0	5.699	A
C-A	195			195			
A-B	13			13			
A-C	206			206			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	14	496	0.029	14	0.0	8.228	A
C-AB	24	687	0.034	23	0.0	5.591	A
C-A	232			232			
A-B	15			15			
A-C	246			246			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	18	475	0.037	18	0.0	8.664	A
C-AB	32	715	0.045	32	0.1	5.463	A
C-A	281			281			
A-B	19			19			
A-C	302			302			

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-AC	18	475	0.037	18	0.0	8.665	A
C-AB	32	715	0.045	32	0.1	5.481	A
C-A	281			281			
A-B	19			19			
A-C	302			302			

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-AC	14	496	0.029	14	0.0	8.231	A
C-AB	24	687	0.034	24	0.0	5.627	A
C-A	232			232			
A-B	15			15			
A-C	246			246			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	12	511	0.024	12	0.0	7.942	A
C-AB	18	668	0.028	18	0.0	5.717	A
C-A	195			195			
A-B	13			13			
A-C	206			206			

2047 - WD, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		0.67	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.67	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	2047 - WD	AM	ONE HOUR	08:00	09:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	278	100.000
B		✓	38	100.000
C		✓	282	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	6	272
	B	19	0	19
	C	276	6	0

Vehicle Mix

Heavy Vehicle %

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

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
08:00-08:15	A	209	209
	B	29	29
	C	212	212
08:15-08:30	A	250	250
	B	34	34
	C	254	254
08:30-08:45	A	306	306
	B	42	42
	C	310	310
08:45-09:00	A	306	306
	B	42	42
	C	310	310
09:00-09:15	A	250	250
	B	34	34
	C	254	254
09:15-09:30	A	209	209
	B	29	29
	C	212	212

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.09	9.07	0.1	A
C-AB	0.02	5.56	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	29	513	0.056	28	0.1	8.164	A
C-AB	7	674	0.010	6	0.0	5.545	A
C-A	206			206			
A-B	5			5			
A-C	205			205			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	34	499	0.069	34	0.1	8.524	A
C-AB	8	695	0.012	8	0.0	5.407	A
C-A	245			245			
A-B	5			5			
A-C	245			245			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	42	478	0.087	42	0.1	9.068	A
C-AB	11	724	0.016	11	0.0	5.236	A
C-A	299			299			
A-B	7			7			
A-C	299			299			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	42	478	0.087	42	0.1	9.072	A
C-AB	11	724	0.016	11	0.0	5.249	A
C-A	299			299			
A-B	7			7			
A-C	299			299			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	34	499	0.069	34	0.1	8.529	A
C-AB	8	695	0.012	8	0.0	5.437	A
C-A	245			245			
A-B	5			5			
A-C	245			245			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	29	513	0.056	29	0.1	8.175	A
C-AB	7	674	0.010	7	0.0	5.563	A
C-A	206			206			
A-B	5			5			
A-C	205			205			

2047 - WD, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		0.48	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.48	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	2047 - WD	PM	ONE HOUR	17:00	18:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	303	100.000
B		✓	16	100.000
C		✓	295	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
From	A	0	17	286
	B	8	0	8
	C	278	17	0

Vehicle Mix

Heavy Vehicle %

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

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
17:00-17:15	A	228	228
	B	12	12
	C	222	222
17:15-17:30	A	272	272
	B	14	14
	C	265	265
17:30-17:45	A	334	334
	B	18	18
	C	325	325
17:45-18:00	A	334	334
	B	18	18
	C	325	325
18:00-18:15	A	272	272
	B	14	14
	C	265	265
18:15-18:30	A	228	228
	B	12	12
	C	222	222

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.04	8.75	0.0	A
C-AB	0.05	5.69	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	12	508	0.024	12	0.0	7.988	A
C-AB	19	672	0.028	18	0.0	5.672	A
C-A	204			204			
A-B	13			13			
A-C	215			215			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	14	492	0.029	14	0.0	8.293	A
C-AB	24	692	0.035	24	0.0	5.559	A
C-A	241			241			
A-B	15			15			
A-C	257			257			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	18	470	0.037	18	0.0	8.754	A
C-AB	33	721	0.045	33	0.1	5.426	A
C-A	292			292			
A-B	19			19			
A-C	315			315			

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-AC	18	470	0.037	18	0.0	8.754	A
C-AB	33	721	0.045	33	0.1	5.441	A
C-A	292			292			
A-B	19			19			
A-C	315			315			

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-AC	14	492	0.029	14	0.0	8.295	A
C-AB	24	692	0.035	24	0.0	5.596	A
C-A	241			241			
A-B	15			15			
A-C	257			257			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	12	507	0.024	12	0.0	7.993	A
C-AB	19	672	0.028	19	0.0	5.690	A
C-A	203			203			
A-B	13			13			
A-C	215			215			

Junctions 10		
PICADY 10 - Priority Intersection Module		
Version: 10.1.2.2275		
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Filename: Junction 6.j10

Path: C:\Users\kearn\OneDrive\2023 Projects\P230400423 - DUBLIN, Boherboy LRD\5.0 Calculations\5.3
Higways\Modelling\2023 Boherboy

Report generation date: 03/12/2025 21:24:00

»2025 - Survey , AM
 »2025 - Survey , PM
 »2025 - Committed , AM
 »2025 - Committed , PM
 »2032 - ND, AM
 »2032 - ND, PM
 »2032 - WD, AM
 »2032 - WD, PM
 »2037 - ND , AM
 »2037 - ND , PM
 »2037 - WD , AM
 »2037 - WD , PM
 »2047 - ND , AM
 »2047 - ND , PM
 »2047 - WD, AM
 »2047 - WD, PM

Summary of junction performance

	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
	2025 - Survey					
Stream B-C	0.8	12.90	0.42	0.8	11.44	0.42
Stream B-A	0.0	13.35	0.04	0.0	13.74	0.03
Stream C-AB	0.9	13.31	0.45	1.5	15.70	0.58
	2025 - Committed					
Stream B-C	0.9	13.35	0.44	0.8	11.74	0.43
Stream B-A	0.0	13.48	0.04	0.0	13.87	0.03
Stream C-AB	0.9	13.61	0.46	1.6	16.31	0.60
	2032 - ND					
Stream B-C	1.1	14.97	0.49	1.1	14.97	0.49
Stream B-A	0.0	14.43	0.04	0.0	14.43	0.04
Stream C-AB	1.1	15.27	0.51	1.1	15.27	0.51
	2032 - WD					
Stream B-C	1.2	16.21	0.53	1.0	13.19	0.49
Stream B-A	0.1	14.59	0.05	0.0	15.32	0.04
Stream C-AB	1.2	15.67	0.52	2.4	20.58	0.69
	2037 - ND					
Stream B-C	1.1	15.56	0.51	1.0	13.20	0.49
Stream B-A	0.1	14.81	0.05	0.0	15.35	0.04
Stream C-AB	1.2	15.92	0.53	2.3	19.92	0.67
	2037 - WD					
Stream B-C	1.3	16.83	0.55	1.1	13.56	0.50
Stream B-A	0.1	14.96	0.05	0.0	15.68	0.04
Stream C-AB	1.2	16.28	0.54	2.6	21.60	0.70
	2047 - ND					
Stream B-C	1.2	16.49	0.53	1.1	13.84	0.51
Stream B-A	0.1	15.35	0.05	0.0	16.00	0.04
Stream C-AB	1.3	16.96	0.55	2.6	21.60	0.70
	2047 - WD					
Stream B-C	1.4	18.10	0.57	1.2	14.26	0.52
Stream B-A	0.1	15.54	0.05	0.0	16.45	0.04
Stream C-AB	1.4	17.44	0.56	3.1	23.67	0.74

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

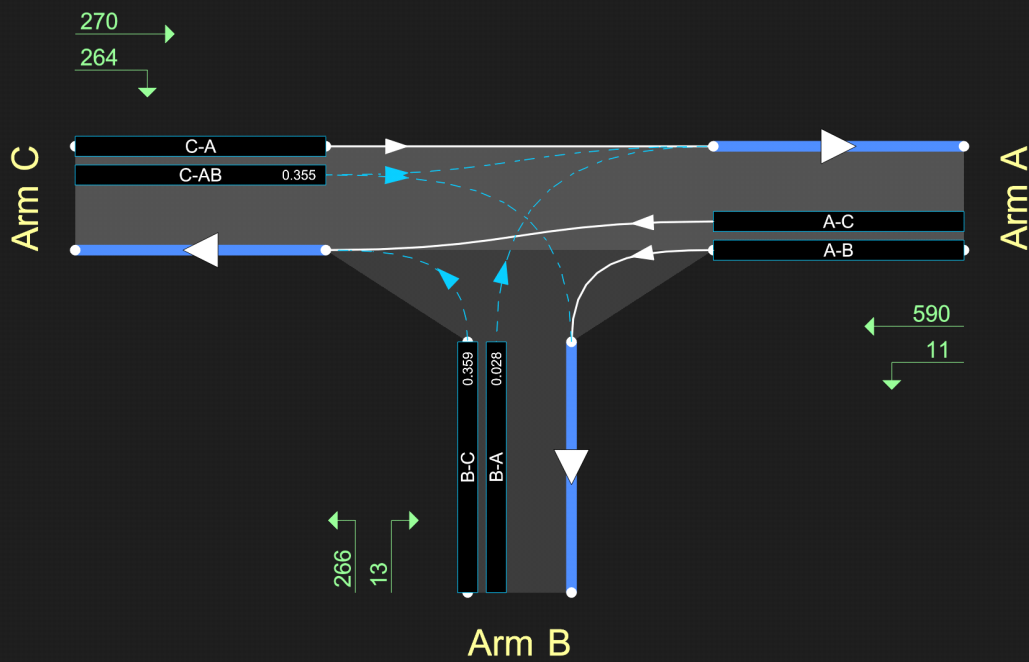
File summary

File Description

Title	P230400423 - DUBLIN, Boherboy LRD
Location	Site 1
Site number	
Date	03/12/2025
Version	
Status	PLANNING
Identifier	
Client	
Jobnumber	
Enumerator	PINNACLEJIM
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 original traffic demand (PCU/hr).
Streams (downstream end) show RFC (.)

The junction diagram reflects the last run of Junctions.

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2025 - Survey	AM	ONE HOUR	08:00	09:30	15
D2	2025 - Survey	PM	ONE HOUR	17:00	18:30	15
D3	2025 - Committed	AM	ONE HOUR	08:00	09:30	15
D4	2025 - Committed	PM	ONE HOUR	17:00	18:30	15
D5	2032 - ND	AM	ONE HOUR	08:00	09:30	15
D6	2032 - ND	PM	ONE HOUR	17:00	18:30	15
D7	2032 - WD	AM	ONE HOUR	08:00	09:30	15
D8	2032 - WD	PM	ONE HOUR	17:00	18:30	15
D9	2037 - ND	AM	ONE HOUR	08:00	09:30	15
D10	2037 - ND	PM	ONE HOUR	17:00	18:30	15
D11	2037 - WD	AM	ONE HOUR	08:00	09:30	15
D12	2037 - WD	PM	ONE HOUR	17:00	18:30	15
D13	2047 - ND	AM	ONE HOUR	08:00	09:30	15
D14	2047 - ND	PM	ONE HOUR	17:00	18:30	15
D15	2047 - WD	AM	ONE HOUR	08:00	09:30	15
D16	2047 - WD	PM	ONE HOUR	17:00	18:30	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2025 - Survey , AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		4.80	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.80	A

Arms

Arms

Arm	Name	Description	Arm type
A	N81 (E)		Major
B	Boherboy Road		Minor
C	N81 (W)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Width for right-turn storage (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	10.00		✓	3.00	50.0	✓	10.00

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 (Left) (m)	Lane Width (Right) (m)	Visibility to left (m)	Visibility to right (m)
B	Two lanes	3.00	3.00	50	50

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	519	0.078	0.197	0.124	0.282
B-C	655	0.083	0.210	-	-
C-B	655	0.210	0.210	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2025 - Survey	AM	ONE HOUR	08:00	09:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	516	100.000
B		✓	215	100.000
C		✓	449	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	9	507
	B	10	0	205
	C	232	217	0

Vehicle Mix

Heavy Vehicle %

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

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
08:00-08:15	A	388	388
	B	162	162
	C	338	338
08:15-08:30	A	464	464
	B	193	193
	C	404	404
08:30-08:45	A	568	568
	B	237	237
	C	494	494
08:45-09:00	A	568	568
	B	237	237
	C	494	494
09:00-09:15	A	464	464
	B	193	193
	C	404	404
09:15-09:30	A	388	388
	B	162	162
	C	338	338

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.42	12.90	0.8	B
B-A	0.04	13.35	0.0	B
C-AB	0.45	13.31	0.9	B
C-A				
A-B				
A-C				

Main Results for each time segment

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-C	154	572	0.270	153	0.4	9.412	A
B-A	8	375	0.020	7	0.0	10.770	B
C-AB	163	574	0.285	162	0.4	9.564	A
C-A	175			175			
A-B	7			7			
A-C	382			382			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	184	555	0.332	184	0.5	10.636	B
B-A	9	347	0.026	9	0.0	11.725	B
C-AB	195	558	0.350	194	0.6	10.870	B
C-A	209			209			
A-B	8			8			
A-C	456			456			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	226	533	0.424	225	0.8	12.815	B
B-A	11	308	0.036	11	0.0	13.328	B
C-AB	239	536	0.446	238	0.9	13.212	B
C-A	255			255			
A-B	10			10			
A-C	558			558			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	226	533	0.424	226	0.8	12.896	B
B-A	11	308	0.036	11	0.0	13.345	B
C-AB	239	536	0.446	239	0.9	13.308	B
C-A	255			255			
A-B	10			10			
A-C	558			558			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	184	555	0.332	185	0.6	10.725	B
B-A	9	346	0.026	9	0.0	11.747	B
C-AB	195	558	0.350	196	0.6	10.974	B
C-A	209			209			
A-B	8			8			
A-C	456			456			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	154	572	0.270	155	0.4	9.510	A
B-A	8	374	0.020	8	0.0	10.798	B
C-AB	163	574	0.285	164	0.4	9.676	A
C-A	175			175			
A-B	7			7			
A-C	382			382			

2025 - Survey , PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		5.89	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.89	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2025 - Survey	PM	ONE HOUR	17:00	18:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	248	100.000
B		✓	234	100.000
C		✓	821	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	8	240
	B	8	0	226
	C	505	316	0

Vehicle Mix

Heavy Vehicle %

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

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
17:00-17:15	A	187	187
	B	176	176
	C	618	618
17:15-17:30	A	223	223
	B	210	210
	C	738	738
17:30-17:45	A	273	273
	B	258	258
	C	904	904
17:45-18:00	A	273	273
	B	258	258
	C	904	904
18:00-18:15	A	223	223
	B	210	210
	C	738	738
18:15-18:30	A	187	187
	B	176	176
	C	618	618

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.42	11.44	0.8	B
B-A	0.03	13.74	0.0	B
C-AB	0.58	15.70	1.5	C
C-A				
A-B				
A-C				

Main Results for each time segment

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-C	170	614	0.277	168	0.4	8.847	A
B-A	6	368	0.016	6	0.0	10.926	B
C-AB	238	616	0.386	235	0.7	10.319	B
C-A	380			380			
A-B	6			6			
A-C	181			181			

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-C	203	606	0.335	203	0.5	9.797	A
B-A	7	338	0.021	7	0.0	11.958	B
C-AB	284	609	0.467	283	0.9	12.112	B
C-A	454			454			
A-B	7			7			
A-C	216			216			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	249	595	0.418	248	0.8	11.385	B
B-A	9	298	0.030	9	0.0	13.704	B
C-AB	350	602	0.582	348	1.5	15.455	C
C-A	554			554			
A-B	9			9			
A-C	264			264			

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-C	249	595	0.418	249	0.8	11.444	B
B-A	9	297	0.030	9	0.0	13.735	B
C-AB	350	602	0.582	350	1.5	15.698	C
C-A	554			554			
A-B	9			9			
A-C	264			264			

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-C	203	606	0.335	204	0.6	9.869	A
B-A	7	337	0.021	7	0.0	11.997	B
C-AB	284	609	0.467	286	1.0	12.348	B
C-A	454			454			
A-B	7			7			
A-C	216			216			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	170	614	0.277	171	0.4	8.936	A
B-A	6	367	0.016	6	0.0	10.967	B
C-AB	238	616	0.386	239	0.7	10.530	B
C-A	380			380			
A-B	6			6			
A-C	181			181			

2025 - Committed , AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		5.05	A

Junction Network

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2025 - Committed	AM	ONE HOUR	08:00	09:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	516	100.000
B		✓	225	100.000
C		✓	455	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	9	507
	B	11	0	214
	C	232	223	0

Vehicle Mix

Heavy Vehicle %

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

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
08:00-08:15	A	388	388
	B	169	169
	C	343	343
08:15-08:30	A	464	464
	B	202	202
	C	409	409
08:30-08:45	A	568	568
	B	248	248
	C	501	501
08:45-09:00	A	568	568
	B	248	248
	C	501	501
09:00-09:15	A	464	464
	B	202	202
	C	409	409
09:15-09:30	A	388	388
	B	169	169
	C	343	343

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.44	13.35	0.9	B
B-A	0.04	13.48	0.0	B
C-AB	0.46	13.61	0.9	B
C-A				
A-B				
A-C				

Main Results for each time segment

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-C	161	572	0.282	159	0.4	9.569	A
B-A	8	374	0.022	8	0.0	10.830	B
C-AB	168	574	0.293	166	0.4	9.668	A
C-A	175			175			
A-B	7			7			
A-C	382			382			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	192	555	0.347	192	0.6	10.880	B
B-A	10	345	0.029	10	0.0	11.810	B
C-AB	200	558	0.359	200	0.6	11.032	B
C-A	209			209			
A-B	8			8			
A-C	456			456			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	236	532	0.443	235	0.9	13.252	B
B-A	12	306	0.040	12	0.0	13.464	B
C-AB	246	536	0.458	244	0.9	13.503	B
C-A	255			255			
A-B	10			10			
A-C	558			558			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	236	532	0.443	236	0.9	13.350	B
B-A	12	306	0.040	12	0.0	13.482	B
C-AB	246	536	0.458	246	0.9	13.607	B
C-A	255			255			
A-B	10			10			
A-C	558			558			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	192	555	0.347	193	0.6	10.985	B
B-A	10	345	0.029	10	0.0	11.834	B
C-AB	200	558	0.359	202	0.6	11.143	B
C-A	209			209			
A-B	8			8			
A-C	456			456			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	161	572	0.282	162	0.4	9.679	A
B-A	8	373	0.022	8	0.0	10.857	B
C-AB	168	574	0.293	169	0.5	9.784	A
C-A	175			175			
A-B	7			7			
A-C	382			382			

2025 - Committed , PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		6.20	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.20	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2025 - Committed	PM	ONE HOUR	17:00	18:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	248	100.000
B		✓	242	100.000
C		✓	830	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
From	A	0	8	240
	B	8	0	234
	C	505	325	0

Vehicle Mix

Heavy Vehicle %

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

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
17:00-17:15	A	187	187
	B	182	182
	C	625	625
17:15-17:30	A	223	223
	B	218	218
	C	746	746
17:30-17:45	A	273	273
	B	266	266
	C	914	914
17:45-18:00	A	273	273
	B	266	266
	C	914	914
18:00-18:15	A	223	223
	B	218	218
	C	746	746
18:15-18:30	A	187	187
	B	182	182
	C	625	625

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.43	11.74	0.8	B
B-A	0.03	13.87	0.0	B
C-AB	0.60	16.31	1.6	C
C-A				
A-B				
A-C				

Main Results for each time segment

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-C	176	614	0.287	174	0.4	8.965	A
B-A	6	366	0.016	6	0.0	10.984	B
C-AB	245	616	0.397	242	0.7	10.499	B
C-A	380			380			
A-B	6			6			
A-C	181			181			

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-C	210	606	0.347	210	0.6	9.974	A
B-A	7	336	0.021	7	0.0	12.042	B
C-AB	292	609	0.480	291	1.0	12.409	B
C-A	454			454			
A-B	7			7			
A-C	216			216			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	258	595	0.433	257	0.8	11.677	B
B-A	9	295	0.030	9	0.0	13.840	B
C-AB	361	603	0.598	359	1.6	16.023	C
C-A	553			553			
A-B	9			9			
A-C	264			264			

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-C	258	595	0.433	258	0.8	11.743	B
B-A	9	294	0.030	9	0.0	13.875	B
C-AB	361	603	0.598	361	1.6	16.309	C
C-A	553			553			
A-B	9			9			
A-C	264			264			

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-C	210	606	0.347	211	0.6	10.051	B
B-A	7	335	0.021	7	0.0	12.085	B
C-AB	292	609	0.480	295	1.0	12.684	B
C-A	454			454			
A-B	7			7			
A-C	216			216			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	176	614	0.287	177	0.4	9.061	A
B-A	6	365	0.016	6	0.0	11.029	B
C-AB	245	616	0.397	246	0.7	10.725	B
C-A	380			380			
A-B	6			6			
A-C	181			181			

2032 - ND, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		5.64	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.64	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	2032 - ND	AM	ONE HOUR	08:00	09:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	564	100.000
B		✓	244	100.000
C		✓	495	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	10	554
	B	11	0	233
	C	253	242	0

Vehicle Mix

Heavy Vehicle %

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

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
08:00-08:15	A	425	425
	B	184	184
	C	373	373
08:15-08:30	A	507	507
	B	219	219
	C	445	445
08:30-08:45	A	621	621
	B	269	269
	C	545	545
08:45-09:00	A	621	621
	B	269	269
	C	545	545
09:00-09:15	A	507	507
	B	219	219
	C	445	445
09:15-09:30	A	425	425
	B	184	184
	C	373	373

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.49	14.97	1.1	B
B-A	0.04	14.43	0.0	B
C-AB	0.51	15.27	1.1	C
C-A				
A-B				
A-C				

Main Results for each time segment

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-C	175	564	0.311	173	0.5	10.089	B
B-A	8	361	0.023	8	0.0	11.230	B
C-AB	182	566	0.322	180	0.5	10.200	B
C-A	190			190			
A-B	8			8			
A-C	417			417			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	209	546	0.384	209	0.7	11.714	B
B-A	10	330	0.030	10	0.0	12.385	B
C-AB	218	549	0.396	217	0.7	11.887	B
C-A	227			227			
A-B	9			9			
A-C	498			498			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	257	521	0.492	255	1.0	14.809	B
B-A	12	287	0.042	12	0.0	14.400	B
C-AB	267	526	0.507	265	1.1	15.103	C
C-A	278			278			
A-B	11			11			
A-C	610			610			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	257	521	0.492	256	1.1	14.966	B
B-A	12	287	0.042	12	0.0	14.428	B
C-AB	267	526	0.507	267	1.1	15.273	C
C-A	278			278			
A-B	11			11			
A-C	610			610			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	209	546	0.384	211	0.7	11.865	B
B-A	10	329	0.030	10	0.0	12.418	B
C-AB	218	549	0.396	219	0.7	12.055	B
C-A	227			227			
A-B	9			9			
A-C	498			498			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	175	564	0.311	176	0.5	10.231	B
B-A	8	360	0.023	8	0.0	11.263	B
C-AB	182	566	0.322	183	0.5	10.354	B
C-A	190			190			
A-B	8			8			
A-C	417			417			

2032 - ND, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		5.64	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.64	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	2032 - ND	PM	ONE HOUR	17:00	18:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	564	100.000
B		✓	244	100.000
C		✓	495	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	10	554
	B	11	0	233
	C	253	242	0

Vehicle Mix

Heavy Vehicle %

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

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
17:00-17:15	A	425	425
	B	184	184
	C	373	373
17:15-17:30	A	507	507
	B	219	219
	C	445	445
17:30-17:45	A	621	621
	B	269	269
	C	545	545
17:45-18:00	A	621	621
	B	269	269
	C	545	545
18:00-18:15	A	507	507
	B	219	219
	C	445	445
18:15-18:30	A	425	425
	B	184	184
	C	373	373

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.49	14.97	1.1	B
B-A	0.04	14.43	0.0	B
C-AB	0.51	15.27	1.1	C
C-A				
A-B				
A-C				

Main Results for each time segment

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-C	175	564	0.311	173	0.5	10.089	B
B-A	8	361	0.023	8	0.0	11.230	B
C-AB	182	566	0.322	180	0.5	10.200	B
C-A	190			190			
A-B	8			8			
A-C	417			417			

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-C	209	546	0.384	209	0.7	11.714	B
B-A	10	330	0.030	10	0.0	12.385	B
C-AB	218	549	0.396	217	0.7	11.887	B
C-A	227			227			
A-B	9			9			
A-C	498			498			

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-C	257	521	0.492	255	1.0	14.809	B
B-A	12	287	0.042	12	0.0	14.400	B
C-AB	267	526	0.507	265	1.1	15.103	C
C-A	278			278			
A-B	11			11			
A-C	610			610			

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-C	257	521	0.492	256	1.1	14.966	B
B-A	12	287	0.042	12	0.0	14.428	B
C-AB	267	526	0.507	267	1.1	15.273	C
C-A	278			278			
A-B	11			11			
A-C	610			610			

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-C	209	546	0.384	211	0.7	11.865	B
B-A	10	329	0.030	10	0.0	12.418	B
C-AB	218	549	0.396	219	0.7	12.055	B
C-A	227			227			
A-B	9			9			
A-C	498			498			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	175	564	0.311	176	0.5	10.231	B
B-A	8	360	0.023	8	0.0	11.263	B
C-AB	182	566	0.322	183	0.5	10.354	B
C-A	190			190			
A-B	8			8			
A-C	417			417			

2032 - WD, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		6.12	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.12	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D7	2032 - WD	AM	ONE HOUR	08:00	09:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	564	100.000
B		✓	263	100.000
C		✓	501	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	10	554
	B	12	0	251
	C	253	248	0

Vehicle Mix

Heavy Vehicle %

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

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
08:00-08:15	A	425	425
	B	198	198
	C	377	377
08:15-08:30	A	507	507
	B	236	236
	C	450	450
08:30-08:45	A	621	621
	B	290	290
	C	552	552
08:45-09:00	A	621	621
	B	290	290
	C	552	552
09:00-09:15	A	507	507
	B	236	236
	C	450	450
09:15-09:30	A	425	425
	B	198	198
	C	377	377

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.53	16.21	1.2	C
B-A	0.05	14.59	0.1	B
C-AB	0.52	15.67	1.2	C
C-A				
A-B				
A-C				

Main Results for each time segment

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-C	189	564	0.335	187	0.5	10.448	B
B-A	9	359	0.025	9	0.0	11.292	B
C-AB	187	566	0.330	185	0.5	10.318	B
C-A	190			190			
A-B	8			8			
A-C	417			417			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	226	546	0.414	225	0.8	12.303	B
B-A	11	328	0.033	11	0.0	12.480	B
C-AB	223	549	0.406	222	0.7	12.079	B
C-A	227			227			
A-B	9			9			
A-C	498			498			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	276	520	0.531	275	1.2	15.990	C
B-A	13	285	0.046	13	0.1	14.558	B
C-AB	273	526	0.520	272	1.2	15.483	C
C-A	278			278			
A-B	11			11			
A-C	610			610			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	276	520	0.531	276	1.2	16.208	C
B-A	13	285	0.046	13	0.1	14.589	B
C-AB	273	526	0.520	273	1.2	15.668	C
C-A	278			278			
A-B	11			11			
A-C	610			610			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	226	546	0.414	227	0.8	12.512	B
B-A	11	327	0.033	11	0.0	12.516	B
C-AB	223	549	0.406	225	0.8	12.261	B
C-A	227			227			
A-B	9			9			
A-C	498			498			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	189	564	0.335	190	0.6	10.619	B
B-A	9	359	0.025	9	0.0	11.332	B
C-AB	187	566	0.330	188	0.5	10.480	B
C-A	190			190			
A-B	8			8			
A-C	417			417			

2032 - WD, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		7.74	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	7.74	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D8	2032 - WD	PM	ONE HOUR	17:00	18:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	271	100.000
B		✓	271	100.000
C		✓	921	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
From		A	B	C
	A	0	9	262
	B	9	0	262
	C	551	370	0

Vehicle Mix

Heavy Vehicle %

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

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
17:00-17:15	A	204	204
	B	204	204
	C	693	693
17:15-17:30	A	244	244
	B	244	244
	C	828	828
17:30-17:45	A	298	298
	B	298	298
	C	1014	1014
17:45-18:00	A	298	298
	B	298	298
	C	1014	1014
18:00-18:15	A	244	244
	B	244	244
	C	828	828
18:15-18:30	A	204	204
	B	204	204
	C	693	693

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.49	13.19	1.0	B
B-A	0.04	15.32	0.0	C
C-AB	0.69	20.58	2.4	C
C-A				
A-B				
A-C				

Main Results for each time segment

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-C	197	611	0.323	195	0.5	9.491	A
B-A	7	349	0.019	7	0.0	11.560	B
C-AB	279	613	0.455	275	0.9	11.604	B
C-A	415			415			
A-B	7			7			
A-C	197			197			

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-C	236	601	0.392	235	0.7	10.780	B
B-A	8	315	0.026	8	0.0	12.889	B
C-AB	334	606	0.550	332	1.3	14.346	B
C-A	494			494			
A-B	8			8			
A-C	236			236			

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-C	288	589	0.490	287	1.0	13.076	B
B-A	10	269	0.037	10	0.0	15.252	C
C-AB	421	613	0.687	417	2.3	19.850	C
C-A	593			593			
A-B	10			10			
A-C	288			288			

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-C	288	589	0.490	288	1.0	13.189	B
B-A	10	268	0.037	10	0.0	15.324	C
C-AB	421	613	0.687	421	2.4	20.582	C
C-A	593			593			
A-B	10			10			
A-C	288			288			

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-C	236	601	0.392	237	0.7	10.901	B
B-A	8	314	0.026	8	0.0	12.963	B
C-AB	334	606	0.550	338	1.4	14.955	B
C-A	494			494			
A-B	8			8			
A-C	236			236			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	197	610	0.323	198	0.5	9.620	A
B-A	7	348	0.019	7	0.0	11.622	B
C-AB	279	613	0.455	281	0.9	11.978	B
C-A	415			415			
A-B	7			7			
A-C	197			197			

2037 - ND , AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		5.89	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.89	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D9	2037 - ND	AM	ONE HOUR	08:00	09:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	577	100.000
B		✓	251	100.000
C		✓	508	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
From		A	B	C
	A	0	10	567
	B	12	0	239
	C	259	249	0

Vehicle Mix

Heavy Vehicle %

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

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
08:00-08:15	A	434	434
	B	189	189
	C	382	382
08:15-08:30	A	519	519
	B	226	226
	C	457	457
08:30-08:45	A	635	635
	B	276	276
	C	559	559
08:45-09:00	A	635	635
	B	276	276
	C	559	559
09:00-09:15	A	519	519
	B	226	226
	C	457	457
09:15-09:30	A	434	434
	B	189	189
	C	382	382

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.51	15.56	1.1	C
B-A	0.05	14.81	0.1	B
C-AB	0.53	15.92	1.2	C
C-A				
A-B				
A-C				

Main Results for each time segment

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-C	180	562	0.320	178	0.5	10.265	B
B-A	9	357	0.025	9	0.0	11.380	B
C-AB	187	564	0.332	185	0.5	10.392	B
C-A	195			195			
A-B	8			8			
A-C	427			427			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	215	543	0.396	214	0.7	12.004	B
B-A	11	325	0.033	11	0.0	12.608	B
C-AB	224	547	0.410	223	0.7	12.201	B
C-A	233			233			
A-B	9			9			
A-C	510			510			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	263	517	0.509	262	1.1	15.382	C
B-A	13	281	0.047	13	0.1	14.773	B
C-AB	275	523	0.525	273	1.2	15.721	C
C-A	285			285			
A-B	11			11			
A-C	624			624			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	263	517	0.509	263	1.1	15.564	C
B-A	13	281	0.047	13	0.1	14.806	B
C-AB	275	523	0.525	275	1.2	15.923	C
C-A	285			285			
A-B	11			11			
A-C	624			624			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	215	543	0.396	216	0.7	12.179	B
B-A	11	324	0.033	11	0.0	12.646	B
C-AB	224	547	0.410	226	0.8	12.396	B
C-A	233			233			
A-B	9			9			
A-C	510			510			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	180	562	0.320	181	0.5	10.422	B
B-A	9	356	0.025	9	0.0	11.418	B
C-AB	187	564	0.332	188	0.6	10.560	B
C-A	195			195			
A-B	8			8			
A-C	427			427			

2037 - ND , PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		7.39	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	7.39	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D10	2037 - ND	PM	ONE HOUR	17:00	18:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	277	100.000
B		✓	270	100.000
C		✓	926	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
From		A	B	C
	A	0	9	268
	B	9	0	261
	C	564	362	0

Vehicle Mix

Heavy Vehicle %

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

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
17:00-17:15	A	209	209
	B	203	203
	C	697	697
17:15-17:30	A	249	249
	B	243	243
	C	832	832
17:30-17:45	A	305	305
	B	297	297
	C	1020	1020
17:45-18:00	A	305	305
	B	297	297
	C	1020	1020
18:00-18:15	A	249	249
	B	243	243
	C	832	832
18:15-18:30	A	209	209
	B	203	203
	C	697	697

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.49	13.20	1.0	B
B-A	0.04	15.35	0.0	C
C-AB	0.67	19.92	2.3	C
C-A				
A-B				
A-C				

Main Results for each time segment

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-C	196	610	0.322	194	0.5	9.494	A
B-A	7	349	0.019	7	0.0	11.574	B
C-AB	273	612	0.446	269	0.9	11.439	B
C-A	424			424			
A-B	7			7			
A-C	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-C	235	600	0.391	234	0.7	10.787	B
B-A	8	315	0.026	8	0.0	12.908	B
C-AB	326	605	0.540	325	1.3	14.054	B
C-A	506			506			
A-B	8			8			
A-C	241			241			

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-C	287	587	0.489	286	1.0	13.088	B
B-A	10	269	0.037	10	0.0	15.284	C
C-AB	410	609	0.674	406	2.2	19.252	C
C-A	609			609			
A-B	10			10			
A-C	295			295			

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-C	287	587	0.489	287	1.0	13.202	B
B-A	10	268	0.037	10	0.0	15.351	C
C-AB	410	609	0.674	410	2.3	19.921	C
C-A	609			609			
A-B	10			10			
A-C	295			295			

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-C	235	600	0.391	236	0.7	10.907	B
B-A	8	313	0.026	8	0.0	12.979	B
C-AB	326	605	0.540	330	1.3	14.590	B
C-A	506			506			
A-B	8			8			
A-C	241			241			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	196	609	0.322	197	0.5	9.625	A
B-A	7	347	0.020	7	0.0	11.634	B
C-AB	273	612	0.446	274	0.9	11.792	B
C-A	424			424			
A-B	7			7			
A-C	202			202			

2037 - WD , AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		6.36	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.36	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D11	2037 - WD	AM	ONE HOUR	08:00	09:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	577	100.000
B		✓	269	100.000
C		✓	513	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	10	567
	B	13	0	256
	C	259	254	0

Vehicle Mix

Heavy Vehicle %

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

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
08:00-08:15	A	434	434
	B	203	203
	C	386	386
08:15-08:30	A	519	519
	B	242	242
	C	461	461
08:30-08:45	A	635	635
	B	296	296
	C	565	565
08:45-09:00	A	635	635
	B	296	296
	C	565	565
09:00-09:15	A	519	519
	B	242	242
	C	461	461
09:15-09:30	A	434	434
	B	203	203
	C	386	386

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.55	16.83	1.3	C
B-A	0.05	14.96	0.1	B
C-AB	0.54	16.28	1.2	C
C-A				
A-B				
A-C				

Main Results for each time segment

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-C	193	561	0.343	190	0.6	10.615	B
B-A	10	356	0.028	10	0.0	11.440	B
C-AB	191	564	0.339	189	0.6	10.491	B
C-A	195			195			
A-B	8			8			
A-C	427			427			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	230	543	0.424	229	0.8	12.592	B
B-A	12	323	0.036	12	0.0	12.697	B
C-AB	228	547	0.418	228	0.8	12.371	B
C-A	233			233			
A-B	9			9			
A-C	510			510			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	282	517	0.545	280	1.3	16.581	C
B-A	14	280	0.051	14	0.1	14.923	B
C-AB	280	523	0.536	278	1.2	16.055	C
C-A	285			285			
A-B	11			11			
A-C	624			624			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	282	517	0.545	282	1.3	16.835	C
B-A	14	279	0.051	14	0.1	14.957	B
C-AB	280	523	0.536	280	1.2	16.278	C
C-A	285			285			
A-B	11			11			
A-C	624			624			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	230	543	0.424	232	0.8	12.822	B
B-A	12	323	0.036	12	0.0	12.737	B
C-AB	228	547	0.418	230	0.8	12.577	B
C-A	233			233			
A-B	9			9			
A-C	510			510			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	193	561	0.343	194	0.6	10.803	B
B-A	10	355	0.028	10	0.0	11.482	B
C-AB	191	564	0.339	192	0.6	10.667	B
C-A	195			195			
A-B	8			8			
A-C	427			427			

2037 - WD , PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		8.08	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	8.08	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D12	2037 - WD	PM	ONE HOUR	17:00	18:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	278	100.000
B		✓	277	100.000
C		✓	942	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	10	268
	B	9	0	268
	C	564	378	0

Vehicle Mix

Heavy Vehicle %

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

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
17:00-17:15	A	209	209
	B	209	209
	C	709	709
17:15-17:30	A	250	250
	B	249	249
	C	847	847
17:30-17:45	A	306	306
	B	305	305
	C	1037	1037
17:45-18:00	A	306	306
	B	305	305
	C	1037	1037
18:00-18:15	A	250	250
	B	249	249
	C	847	847
18:15-18:30	A	209	209
	B	209	209
	C	709	709

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.50	13.56	1.1	B
B-A	0.04	15.68	0.0	C
C-AB	0.70	21.60	2.6	C
C-A				
A-B				
A-C				

Main Results for each time segment

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-C	202	609	0.331	200	0.5	9.613	A
B-A	7	345	0.020	7	0.0	11.692	B
C-AB	285	612	0.465	281	0.9	11.841	B
C-A	424			424			
A-B	8			8			
A-C	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-C	241	600	0.401	240	0.7	10.974	B
B-A	8	311	0.026	8	0.0	13.085	B
C-AB	341	606	0.564	340	1.4	14.775	B
C-A	505			505			
A-B	9			9			
A-C	241			241			

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-C	295	587	0.503	294	1.1	13.432	B
B-A	10	264	0.038	10	0.0	15.598	C
C-AB	434	617	0.704	430	2.5	20.715	C
C-A	603			603			
A-B	11			11			
A-C	295			295			

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-C	295	587	0.503	295	1.1	13.557	B
B-A	10	262	0.038	10	0.0	15.679	C
C-AB	434	617	0.704	434	2.6	21.601	C
C-A	603			603			
A-B	11			11			
A-C	295			295			

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-C	241	600	0.401	242	0.8	11.112	B
B-A	8	309	0.026	8	0.0	13.173	B
C-AB	341	606	0.564	346	1.5	15.495	C
C-A	505			505			
A-B	9			9			
A-C	241			241			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	202	609	0.331	203	0.6	9.752	A
B-A	7	344	0.020	7	0.0	11.756	B
C-AB	285	612	0.465	287	1.0	12.252	B
C-A	424			424			
A-B	8			8			
A-C	202			202			

2047 - ND , AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		6.22	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.22	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D13	2047 - ND	AM	ONE HOUR	08:00	09:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	601	100.000
B		✓	259	100.000
C		✓	528	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
From		A	B	C
	A	0	11	590
	B	12	0	247
	C	270	258	0

Vehicle Mix

Heavy Vehicle %

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

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
08:00-08:15	A	452	452
	B	195	195
	C	398	398
08:15-08:30	A	540	540
	B	233	233
	C	475	475
08:30-08:45	A	662	662
	B	285	285
	C	581	581
08:45-09:00	A	662	662
	B	285	285
	C	581	581
09:00-09:15	A	540	540
	B	233	233
	C	475	475
09:15-09:30	A	452	452
	B	195	195
	C	398	398

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.53	16.49	1.2	C
B-A	0.05	15.35	0.1	C
C-AB	0.55	16.96	1.3	C
C-A				
A-B				
A-C				

Main Results for each time segment

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-C	186	558	0.333	184	0.5	10.526	B
B-A	9	350	0.026	9	0.0	11.594	B
C-AB	194	561	0.347	192	0.6	10.679	B
C-A	203			203			
A-B	8			8			
A-C	444			444			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	222	539	0.412	221	0.8	12.437	B
B-A	11	317	0.034	11	0.0	12.925	B
C-AB	232	542	0.428	231	0.8	12.687	B
C-A	243			243			
A-B	10			10			
A-C	530			530			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	272	512	0.531	270	1.2	16.265	C
B-A	13	272	0.049	13	0.1	15.313	C
C-AB	285	518	0.550	283	1.3	16.700	C
C-A	297			297			
A-B	12			12			
A-C	650			650			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	272	512	0.531	272	1.2	16.491	C
B-A	13	271	0.049	13	0.1	15.352	C
C-AB	285	518	0.550	285	1.3	16.960	C
C-A	297			297			
A-B	12			12			
A-C	650			650			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	222	539	0.412	224	0.8	12.646	B
B-A	11	316	0.034	11	0.0	12.971	B
C-AB	232	542	0.428	234	0.8	12.922	B
C-A	243			243			
A-B	10			10			
A-C	530			530			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	186	558	0.333	187	0.6	10.702	B
B-A	9	349	0.026	9	0.0	11.636	B
C-AB	194	561	0.347	195	0.6	10.872	B
C-A	203			203			
A-B	8			8			
A-C	444			444			

2047 - ND , PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		7.94	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	7.94	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D14	2047 - ND	PM	ONE HOUR	17:00	18:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	289	100.000
B		✓	280	100.000
C		✓	964	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	10	279
	B	9	0	271
	C	588	376	0

Vehicle Mix

Heavy Vehicle %

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

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
17:00-17:15	A	218	218
	B	211	211
	C	726	726
17:15-17:30	A	260	260
	B	252	252
	C	867	867
17:30-17:45	A	318	318
	B	308	308
	C	1061	1061
17:45-18:00	A	318	318
	B	308	308
	C	1061	1061
18:00-18:15	A	260	260
	B	252	252
	C	867	867
18:15-18:30	A	218	218
	B	211	211
	C	726	726

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.51	13.84	1.1	B
B-A	0.04	16.00	0.0	C
C-AB	0.70	21.60	2.6	C
C-A				
A-B				
A-C				

Main Results for each time segment

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-C	204	608	0.336	202	0.5	9.704	A
B-A	7	342	0.020	7	0.0	11.812	B
C-AB	283	610	0.464	280	0.9	11.849	B
C-A	442			442			
A-B	8			8			
A-C	210			210			

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-C	244	598	0.407	243	0.7	11.122	B
B-A	8	307	0.026	8	0.0	13.265	B
C-AB	340	604	0.563	338	1.4	14.791	B
C-A	527			527			
A-B	9			9			
A-C	251			251			

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-C	298	584	0.511	297	1.1	13.700	B
B-A	10	259	0.038	10	0.0	15.914	C
C-AB	433	615	0.703	428	2.5	20.725	C
C-A	629			629			
A-B	11			11			
A-C	307			307			

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-C	298	584	0.511	298	1.1	13.838	B
B-A	10	257	0.038	10	0.0	15.998	C
C-AB	433	615	0.703	432	2.6	21.603	C
C-A	629			629			
A-B	11			11			
A-C	307			307			

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-C	244	598	0.407	245	0.8	11.266	B
B-A	8	305	0.027	8	0.0	13.354	B
C-AB	340	604	0.563	344	1.5	15.510	C
C-A	527			527			
A-B	9			9			
A-C	251			251			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	204	608	0.336	205	0.6	9.853	A
B-A	7	340	0.020	7	0.0	11.880	B
C-AB	283	610	0.464	285	1.0	12.260	B
C-A	442			442			
A-B	8			8			
A-C	210			210			

2047 - WD, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		6.81	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.81	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D15	2047 - WD	AM	ONE HOUR	08:00	09:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	601	100.000
B		✓	279	100.000
C		✓	534	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	11	590
	B	13	0	266
	C	270	264	0

Vehicle Mix

Heavy Vehicle %

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

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
08:00-08:15	A	452	452
	B	210	210
	C	402	402
08:15-08:30	A	540	540
	B	251	251
	C	480	480
08:30-08:45	A	662	662
	B	307	307
	C	588	588
08:45-09:00	A	662	662
	B	307	307
	C	588	588
09:00-09:15	A	540	540
	B	251	251
	C	480	480
09:15-09:30	A	452	452
	B	210	210
	C	402	402

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.57	18.10	1.4	C
B-A	0.05	15.54	0.1	C
C-AB	0.56	17.44	1.4	C
C-A				
A-B				
A-C				

Main Results for each time segment

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-C	200	558	0.359	198	0.6	10.935	B
B-A	10	349	0.028	10	0.0	11.663	B
C-AB	199	561	0.355	196	0.6	10.806	B
C-A	203			203			
A-B	8			8			
A-C	444			444			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	239	538	0.444	238	0.9	13.147	B
B-A	12	316	0.037	12	0.0	13.029	B
C-AB	237	542	0.438	236	0.8	12.906	B
C-A	243			243			
A-B	10			10			
A-C	530			530			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	293	511	0.573	291	1.4	17.770	C
B-A	14	270	0.053	14	0.1	15.490	C
C-AB	292	518	0.563	289	1.4	17.150	C
C-A	296			296			
A-B	12			12			
A-C	650			650			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	293	511	0.573	293	1.4	18.104	C
B-A	14	269	0.053	14	0.1	15.535	C
C-AB	292	518	0.563	291	1.4	17.442	C
C-A	296			296			
A-B	12			12			
A-C	650			650			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	239	538	0.444	241	0.9	13.432	B
B-A	12	315	0.037	12	0.0	13.079	B
C-AB	237	542	0.438	239	0.9	13.164	B
C-A	243			243			
A-B	10			10			
A-C	530			530			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	200	558	0.359	201	0.6	11.153	B
B-A	10	348	0.028	10	0.0	11.709	B
C-AB	199	561	0.355	200	0.6	11.009	B
C-A	203			203			
A-B	8			8			
A-C	444			444			

2047 - WD, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		8.80	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	8.80	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D16	2047 - WD	PM	ONE HOUR	17:00	18:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	289	100.000
B		✓	288	100.000
C		✓	981	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
From		A	B	C
	A	0	10	279
	B	10	0	278
	C	588	393	0

Vehicle Mix

Heavy Vehicle %

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

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
17:00-17:15	A	218	218
	B	217	217
	C	739	739
17:15-17:30	A	260	260
	B	259	259
	C	882	882
17:30-17:45	A	318	318
	B	317	317
	C	1080	1080
17:45-18:00	A	318	318
	B	317	317
	C	1080	1080
18:00-18:15	A	260	260
	B	259	259
	C	882	882
18:15-18:30	A	218	218
	B	217	217
	C	739	739

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.52	14.26	1.2	B
B-A	0.04	16.45	0.0	C
C-AB	0.74	23.67	3.1	C
C-A				
A-B				
A-C				

Main Results for each time segment

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-C	209	607	0.345	207	0.6	9.839	A
B-A	8	338	0.022	7	0.0	11.965	B
C-AB	296	610	0.485	292	1.0	12.294	B
C-A	442			442			
A-B	8			8			
A-C	210			210			

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-C	250	598	0.418	249	0.8	11.337	B
B-A	9	302	0.030	9	0.0	13.505	B
C-AB	356	605	0.588	354	1.5	15.622	C
C-A	526			526			
A-B	9			9			
A-C	251			251			

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-C	306	584	0.525	304	1.2	14.098	B
B-A	11	253	0.043	11	0.0	16.342	C
C-AB	462	628	0.735	456	2.9	22.405	C
C-A	618			618			
A-B	11			11			
A-C	307			307			

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-C	306	584	0.525	306	1.2	14.259	B
B-A	11	252	0.044	11	0.0	16.450	C
C-AB	462	628	0.735	461	3.1	23.673	C
C-A	618			618			
A-B	11			11			
A-C	307			307			

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-C	250	597	0.418	251	0.8	11.498	B
B-A	9	300	0.030	9	0.0	13.618	B
C-AB	356	605	0.588	361	1.6	16.614	C
C-A	526			526			
A-B	9			9			
A-C	251			251			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	209	607	0.345	210	0.6	9.996	A
B-A	8	336	0.022	8	0.0	12.045	B
C-AB	296	610	0.485	298	1.1	12.792	B
C-A	442			442			
A-B	8			8			
A-C	210			210			

Junctions 10		
OSCADY 10 - Signalised Intersection Module		
Version: 10.1.2.2275		
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Filename: Junction 7.j10

Path: C:\Users\kearn\OneDrive\2023 Projects\P230400423 - DUBLIN, Boherboy LRD\5.0 Calculations\5.3
Higways\Modelling\2023 Boherboy

Report generation date: 03/12/2025 21:25:13

»2025, AM
 »2025 , PM
 »2025 - Baseline, AM
 »2025 - Baseline, PM
 »2032 - ND, AM
 »2032 - ND, PM
 »2032 - WD, AM
 »2032 - WD, PM
 »2037 - ND, AM
 »2037 - ND, PM
 »2037 - WD, AM
 »2037 - WD, PM
 »2047 - ND , AM
 »2047 - ND , PM
 »2047 - WD , AM
 »2047 - WD, PM

Summary of junction performance

	AM				PM			
	Set ID	Queue (PCU)	Delay (s)	DOS	Set ID	Queue (PCU)	Delay (s)	DOS
	2025							
Arm A	D1	12.8	34.98	0.86	D2	10.7	45.69	0.84
Arm B		9.0	55.26	0.83		14.6	65.50	0.93
Arm C		5.1	21.67	0.62		13.0	30.88	0.82
	2025 - Baseline							
Arm A	D3	15.2	41.12	0.89	D4	13.5	60.17	0.89
Arm B		11.1	64.57	0.87		13.5	54.84	0.90
Arm C		6.5	29.96	0.74		15.2	35.16	0.84
	2032 - ND							
Arm A	D5	24.6	54.60	0.90	D6	28.5	101.47	0.90
Arm B		19.6	97.77	0.90		26.9	84.58	0.90
Arm C		13.1	56.67	0.87		36.9	72.54	0.90
	2032 - WD							
Arm A	D7	41.3	90.03	0.93	D8	43.7	166.15	0.98
Arm B		33.7	142.57	0.94		42.1	128.88	0.97
Arm C		22.8	92.79	0.95		55.0	105.54	0.98
	2037 - ND							
Arm A	D9	37.6	75.79	0.90	D10	37.2	128.12	0.92
Arm B		29.8	133.73	0.90		34.5	103.73	0.91
Arm C		20.9	82.87	0.92		48.2	90.83	0.92
	2037 - WD							
Arm A	D11	44.0	98.22	0.95	D12	46.1	173.37	0.99
Arm B		35.7	151.44	0.95		47.2	147.01	1.00
Arm C		23.7	95.61	0.96		57.1	109.38	1.00
	2047 - ND							
Arm A	D13	40.6	84.57	0.93	D14	40.1	137.56	0.94
Arm B		31.8	143.13	0.92		38.5	119.60	0.95
Arm C		22.2	86.64	0.94		51.2	95.64	0.95
	2047 - WD							
Arm A	D15	32.2	145.08	0.91	D16	122.7	439.91	1.18
Arm B		31.8	120.18	0.90		96.5	453.25	1.18
Arm C		47.3	80.03	0.90		50.1	233.80	1.19

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

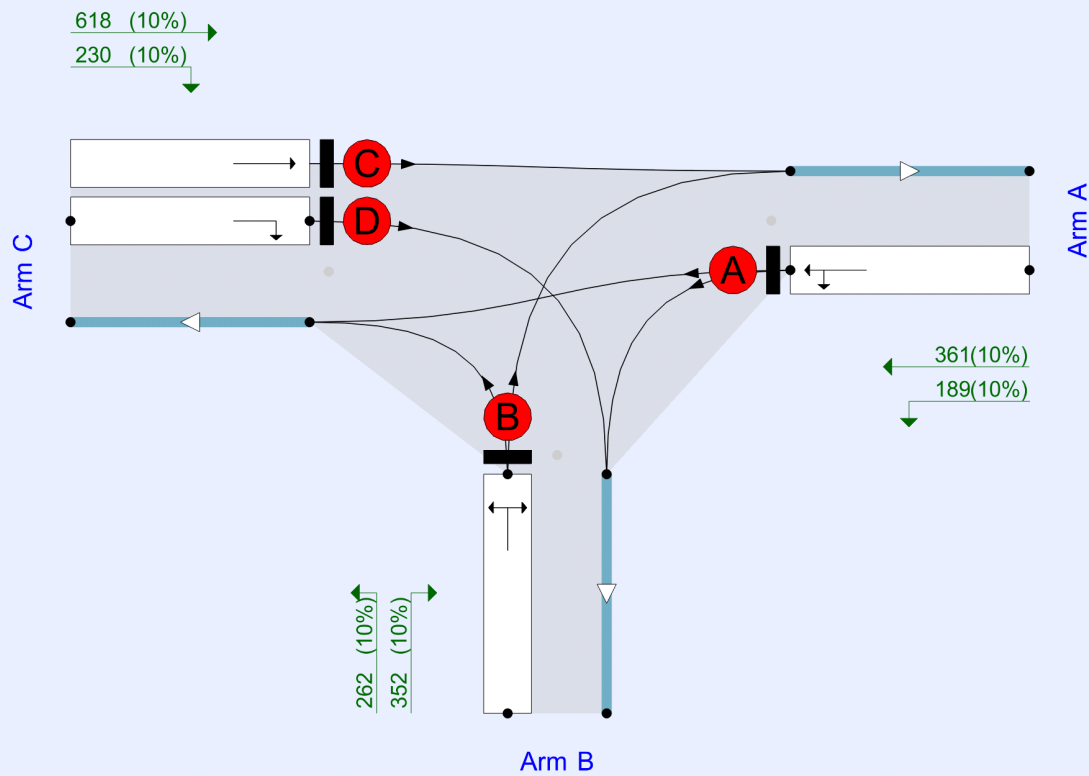
File summary

File Description

Title	P230400423 - DUBLIN, Boherboy LRD
Location	SITE 7
Site number	
Date	01/12/2025
Version	
Status	PLANNING
Identifier	
Client	
Jobnumber	
Enumerator	PINNACLEJMJ
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 original traffic demand (PCU/hr).

The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	DOS Threshold	Average Delay threshold (s)	Queue threshold (PCU)	Use simulation for HCM roundabouts	Use iterations for HCM roundabouts
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	2025	AM	ONE HOUR	08:00	09:30	15	✓
D2	2025	PM	ONE HOUR	17:00	18:30	15	✓
D3	2025 - Baseline	AM	ONE HOUR	08:00	09:30	15	✓
D4	2025 - Baseline	PM	ONE HOUR	17:00	18:30	15	✓
D5	2032 - ND	AM	ONE HOUR	08:00	09:30	15	✓
D6	2032 - ND	PM	ONE HOUR	17:00	18:30	15	✓
D7	2032 - WD	AM	ONE HOUR	08:00	09:30	15	✓
D8	2032 - WD	PM	ONE HOUR	17:00	18:30	15	✓
D9	2037 - ND	AM	ONE HOUR	08:00	09:30	15	✓
D10	2037 - ND	PM	ONE HOUR	17:00	18:30	15	✓
D11	2037 - WD	AM	ONE HOUR	08:00	09:30	15	✓
D12	2037 - WD	PM	ONE HOUR	17:00	18:30	15	✓
D13	2047 - ND	AM	ONE HOUR	08:00	09:30	15	✓
D14	2047 - ND	PM	ONE HOUR	17:00	18:30	15	✓
D15	2047 - WD	AM	ONE HOUR	08:00	09:30	15	✓
D16	2047 - WD	PM	ONE HOUR	17:00	18:30	15	✓

Analysis Set Details

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

2025, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Signalised		36.72	D

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	36.72	D

Arms

Arms

Arm	Name	Description
A	Carter Lane (S)	
B	Citywest Road	
C	N81 (E)	

OSCADY Traffic Streams

Arm	Traffic Stream	Phase	Destination arms	Straight move
A	2	A	B, C	C
B	2	B	A, C	
C	2	C	A	A
	3	D	B	A

OSCADY Lanes

Arm	Traffic Stream	Destination arms	Gradient (%)	Width (m)	Turning radius (m)	Nearside lane	Has bay
A	2	C, B	0	3.00	5.00		
B	2	A, C	0	3.00	5.00		
C	2	A	0	3.00			
	3	B	0	3.00	5.00		

Signal Timings

Junction 1

Junction	Sequence to use	Cycle time (s)	Maximum cycle time (s)	Start displacement (s)	End displacement (s)
1	1	88	300	1.40	2.90

Optimisation options

Junction	Optimise stage lengths	Optimise cycle time	Optimiser demand source	Optimiser message
1	✓	✓	All time segments	Timings provide delay minimisation..

Phases

Junction	Phase	Name	Minimum green (s)
1	A		7
	B		7
	C		7
	D		7

Library Stages

Junction	Library Stage	Phases in stage	User stage minimum (s)	Run every N cycles	Probability of running (%)
1	1	A, C	1		
	2	C, D	1		
	3	B	1		

Stage Sequences

Junction	Sequence	Name	Stage IDs	Stage ends
1	1		1, 2, 3	48, 60, 0

Intergreen Matrix for Junction 1

		To			
From		A	B	C	D
	A		5		5
	B	5		5	5
	C		5		
	D	5	5		

Interstage Matrix for Junction 1

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

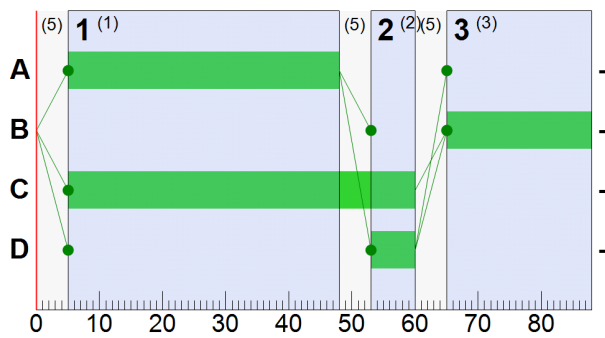
Resultant Stages

Junction	Resultant Stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	1	A, C	5	48	43	1	7
	2	2	C, D	53	60	7	1	7
	3	3	B	65	0	23	1	7

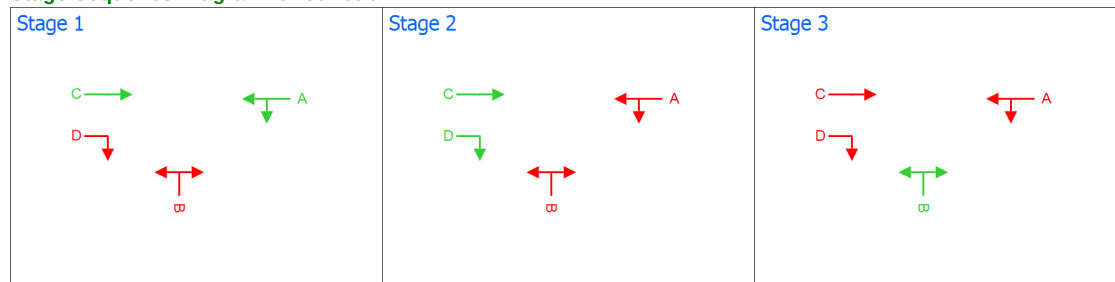
Resultant Phase Green Periods

Junction	Phase	Green period	Start time (s)	End time (s)	Duration (s)
1	A	1	5	48	43
	B	1	65	0	23
	C	1	5	60	55
	D	1	53	60	7

Phase Timings Diagram for Junction 1



Stage Sequence Diagram for Junction 1



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	2025	AM	ONE HOUR	08:00	09:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	713	100.000
B		ONE HOUR	✓	333	100.000
C		ONE HOUR	✓	328	100.000

Origin-Destination Data

Demand (PCU/hr)

	To		
	A	B	C
From	A	0	340
	B	208	0
	C	242	86

Proportions

	To		
	A	B	C
From	A	0.00	0.48
	B	0.62	0.00
	C	0.74	0.26

Vehicle Mix

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

Heavy Vehicle %

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

Average PCU Per Veh

	To			
		A	B	C
	A	1.000	1.100	1.100
	B	1.100	1.000	1.100
	C	1.100	1.100	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
A	08:00-08:15	537	537
	08:15-08:30	641	641
	08:30-08:45	785	785
	08:45-09:00	785	785
	09:00-09:15	641	641
	09:15-09:30	537	537
B	08:00-08:15	251	251
	08:15-08:30	299	299
	08:30-08:45	367	367
	08:45-09:00	367	367
	09:00-09:15	299	299
	09:15-09:30	251	251
C	08:00-08:15	247	247
	08:15-08:30	295	295
	08:30-08:45	361	361
	08:45-09:00	361	361
	09:00-09:15	295	295
	09:15-09:30	247	247

Results

Results Summary for whole modelled period

Arm	Max DOS	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
A	0.86	34.98	12.8	C	654	981	429.69	26.27	4.77	429.96	26.29
B	0.83	55.26	9.0	E	306	458	333.78	43.69	3.71	334.17	43.74
C	0.62	21.67	5.1	C	301	451	147.27	19.57	1.64	147.30	19.58

Main Results for each time segment

08:00 - 08:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	537	134	1798	44.50	0.00	909	0.590	509	0.0	7.0	18.991	B
B	2	251	63	1581	24.50	0.00	440	0.570	231	0.0	4.9	34.025	C
C	2	182	46	2055	56.50	0.00	1319	0.138	176	0.0	1.6	6.474	A
	3	65	16	1581	8.50	0.00	153	0.424	58	0.0	1.6	48.173	D

08:15 - 08:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	641	160	1798	44.50	0.00	909	0.705	634	7.0	8.8	22.695	C
B	2	299	75	1581	24.50	0.00	440	0.680	294	4.9	6.2	38.976	D
C	2	218	54	2055	56.50	0.00	1319	0.165	216	1.6	1.9	6.661	A
	3	77	19	1581	8.50	0.00	153	0.506	76	1.6	2.0	52.758	D

08:30 - 08:45

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	785	196	1798	44.50	0.00	909	0.863	770	8.8	12.7	32.578	C
B	2	367	92	1581	24.50	0.00	440	0.833	356	6.2	8.8	50.879	D
C	2	266	67	2055	56.50	0.00	1319	0.202	265	1.9	2.4	6.933	A
	3	95	24	1581	8.50	0.00	153	0.620	92	2.0	2.7	60.683	E

08:45 - 09:00

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	785	196	1798	44.50	0.00	909	0.863	784	12.7	12.8	34.982	C
B	2	367	92	1581	24.50	0.00	440	0.833	366	8.8	9.0	55.265	E
C	2	266	67	2055	56.50	0.00	1319	0.202	266	2.4	2.4	6.933	A
	3	95	24	1581	8.50	0.00	153	0.620	95	2.7	2.7	63.136	E

09:00 - 09:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	641	160	1798	44.50	0.00	909	0.705	657	12.8	8.9	23.468	C
B	2	299	75	1581	24.50	0.00	440	0.680	310	9.0	6.3	41.041	D
C	2	218	54	2055	56.50	0.00	1319	0.165	219	2.4	1.9	6.661	A
	3	77	19	1581	8.50	0.00	153	0.506	80	2.7	2.1	55.138	E

09:15 - 09:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	537	134	1798	44.50	0.00	909	0.590	544	8.9	7.1	19.200	B
B	2	251	63	1581	24.50	0.00	440	0.570	256	6.3	4.9	34.726	C
C	2	182	46	2055	56.50	0.00	1319	0.138	183	1.9	1.6	6.475	A
	3	65	16	1581	8.50	0.00	153	0.424	66	2.1	1.6	49.556	D

Queueing Delay Results for each time segment

08:00 - 08:15

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	42.48	2.83	18.991	B
B	2	35.54	2.37	34.025	C
C	2	4.91	0.33	6.474	A
	3	13.00	0.87	48.173	D

08:15 - 08:30

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	60.61	4.04	22.695	C
B	2	48.62	3.24	38.976	D
C	2	6.04	0.40	6.661	A
	3	17.00	1.13	52.758	D

08:30 - 08:45

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	106.56	7.10	32.578	C
B	2	77.73	5.18	50.879	D
C	2	7.70	0.51	6.933	A
	3	23.94	1.60	60.683	E

08:45 - 09:00

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	114.43	7.63	34.982	C
B	2	84.43	5.63	55.265	E
C	2	7.70	0.51	6.933	A
	3	24.91	1.66	63.136	E

09:00 - 09:15

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	62.68	4.18	23.468	C
B	2	51.19	3.41	41.041	D
C	2	6.04	0.40	6.661	A
	3	17.76	1.18	55.138	E

09:15 - 09:30

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	42.94	2.86	19.200	B
B	2	36.27	2.42	34.726	C
C	2	4.92	0.33	6.475	A
	3	13.37	0.89	49.556	D

2025 , PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Signalised		45.52	D

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	45.52	D

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	2025	PM	ONE HOUR	17:00	18:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	466	100.000
B		ONE HOUR	✓	519	100.000
C		ONE HOUR	✓	714	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
From		A	B	C
	A	0	156	310
	B	297	0	222
	C	524	190	0

Proportions

	To			
From		A	B	C
	A	0.00	0.33	0.67
	B	0.57	0.00	0.43
	C	0.73	0.27	0.00

Vehicle Mix

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

Heavy Vehicle %

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

Average PCU Per Veh

	To			
From		A	B	C
	A	1.000	1.100	1.100
	B	1.100	1.000	1.100
	C	1.100	1.100	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
A	17:00-17:15	351	351
	17:15-17:30	419	419
	17:30-17:45	513	513
	17:45-18:00	513	513
	18:00-18:15	419	419
	18:15-18:30	351	351
B	17:00-17:15	391	391
	17:15-17:30	467	467
	17:30-17:45	571	571
	17:45-18:00	571	571
	18:00-18:15	467	467
	18:15-18:30	391	391
C	17:00-17:15	538	538
	17:15-17:30	642	642
	17:30-17:45	786	786
	17:45-18:00	786	786
	18:00-18:15	642	642
	18:15-18:30	538	538

Results

Results Summary for whole modelled period

Arm	Max DOS	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
A	0.84	45.69	10.7	D	428	641	388.24	36.32	4.31	388.62	36.35
B	0.93	65.50	14.6	E	476	714	513.20	43.10	5.70	513.65	43.14
C	0.82	30.88	13.0	C	655	983	419.40	25.61	4.66	419.63	25.62

Main Results for each time segment

17:00 - 17:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	351	88	1868	27.50	0.00	611	0.574	327	0.0	6.0	28.435	C
B	2	391	98	1581	32.50	0.00	612	0.639	365	0.0	6.3	27.479	C
C	2	394	99	2055	44.50	0.00	1089	0.362	377	0.0	4.5	12.725	B
	3	143	36	1581	13.50	0.00	254	0.563	130	0.0	3.3	43.638	D

17:15 - 17:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	419	105	1868	27.50	0.00	611	0.685	413	6.0	7.5	32.508	C
B	2	467	117	1581	32.50	0.00	612	0.763	459	6.3	8.2	33.725	C
C	2	471	118	2055	44.50	0.00	1089	0.433	467	4.5	5.4	13.703	B
	3	171	43	1581	13.50	0.00	254	0.672	167	3.3	4.2	50.445	D

17:30 - 17:45

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	513	128	1867	27.50	0.00	611	0.839	501	7.5	10.6	42.699	D
B	2	571	143	1581	32.50	0.00	612	0.934	550	8.2	13.6	52.966	D
C	2	577	144	2055	44.50	0.00	1089	0.530	572	5.4	6.7	15.344	B
	3	209	52	1581	13.50	0.00	254	0.823	201	4.2	6.1	65.579	E

17:45 - 18:00

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	513	128	1867	27.50	0.00	611	0.839	512	10.6	10.7	45.687	D
B	2	571	143	1581	32.50	0.00	612	0.934	567	13.6	14.6	65.504	E
C	2	577	144	2055	44.50	0.00	1089	0.530	577	6.7	6.7	15.372	B
	3	209	52	1581	13.50	0.00	254	0.823	208	6.1	6.3	73.651	E

18:00 - 18:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	419	105	1868	27.50	0.00	611	0.685	432	10.7	7.6	33.714	C
B	2	467	117	1581	32.50	0.00	612	0.763	491	14.6	8.4	38.501	D
C	2	471	118	2055	44.50	0.00	1089	0.433	476	6.7	5.4	13.730	B
	3	171	43	1581	13.50	0.00	254	0.672	179	6.3	4.3	55.433	E

18:15 - 18:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	351	88	1868	27.50	0.00	611	0.574	357	7.6	6.0	28.820	C
B	2	391	98	1581	32.50	0.00	612	0.639	399	8.4	6.4	28.243	C
C	2	394	99	2055	44.50	0.00	1089	0.362	398	5.4	4.5	12.741	B
	3	143	36	1581	13.50	0.00	254	0.563	147	4.3	3.3	45.532	D

Queueing Delay Results for each time segment
17:00 - 17:15

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	41.57	2.77	28.435	C
B	2	44.74	2.98	27.479	C
C	2	20.92	1.39	12.725	B
	3	26.01	1.73	43.638	D

17:15 - 17:30

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	56.74	3.78	32.508	C
B	2	65.56	4.37	33.725	C
C	2	26.90	1.79	13.703	B
	3	35.90	2.39	50.445	D

17:30 - 17:45

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	91.28	6.09	42.699	D
B	2	126.11	8.41	52.966	D
C	2	36.88	2.46	15.344	B
	3	57.16	3.81	65.579	E

17:45 - 18:00

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	97.67	6.51	45.687	D
B	2	155.96	10.40	65.504	E
C	2	36.95	2.46	15.372	B
	3	64.20	4.28	73.651	E

18:00 - 18:15

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	58.85	3.92	33.714	C
B	2	74.85	4.99	38.501	D
C	2	26.95	1.80	13.730	B
	3	39.45	2.63	55.433	E

18:15 - 18:30

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	42.13	2.81	28.820	C
B	2	45.98	3.07	28.243	C
C	2	20.94	1.40	12.741	B
	3	27.14	1.81	45.532	D

2025 - Baseline, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Signalised		44.40	D

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	44.40	D

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	2025 - Baseline	AM	ONE HOUR	08:00	09:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	747	100.000
B		ONE HOUR	✓	364	100.000
C		ONE HOUR	✓	339	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	370	377
	B	229	0	135
	C	247	92	0

Proportions

	To			
		A	B	C
	A	0.00	0.50	0.50
	B	0.63	0.00	0.37
	C	0.73	0.27	0.00

Vehicle Mix

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

Heavy Vehicle %

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

Average PCU Per Veh

	To			
		A	B	C
	A	1.000	1.100	1.100
	B	1.100	1.000	1.100
	C	1.100	1.100	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
A	08:00-08:15	562	562
	08:15-08:30	672	672
	08:30-08:45	822	822
	08:45-09:00	822	822
	09:00-09:15	672	672
	09:15-09:30	562	562
B	08:00-08:15	274	274
	08:15-08:30	327	327
	08:30-08:45	401	401
	08:45-09:00	401	401
	09:00-09:15	327	327
	09:15-09:30	274	274
C	08:00-08:15	255	255
	08:15-08:30	305	305
	08:30-08:45	373	373
	08:45-09:00	373	373
	09:00-09:15	305	305
	09:15-09:30	255	255

Results

Results Summary for whole modelled period

Arm	Max DOS	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
A	0.89	41.12	15.2	D	685	1028	509.21	29.72	5.66	509.56	29.74
B	0.87	64.57	11.1	E	334	501	410.46	49.16	4.56	411.00	49.22
C	0.74	29.96	6.5	C	311	467	198.48	25.52	2.21	198.53	25.53

Main Results for each time segment

08:00 - 08:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	562	141	1789	50.50	0.00	922	0.610	530	0.0	8.0	20.698	C
B	2	274	69	1581	28.50	0.00	460	0.596	251	0.0	5.9	37.027	D
C	2	186	46	2055	62.50	0.00	1311	0.142	179	0.0	1.8	7.369	A
	3	69	17	1581	8.50	0.00	137	0.505	61	0.0	2.0	58.633	E

08:15 - 08:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	672	168	1789	50.50	0.00	922	0.728	663	8.0	10.1	24.994	C
B	2	327	82	1581	28.50	0.00	460	0.712	321	5.9	7.4	42.817	D
C	2	222	56	2055	62.50	0.00	1311	0.169	221	1.8	2.2	7.578	A
	3	83	21	1581	8.50	0.00	137	0.603	80	2.0	2.6	66.610	E

08:30 - 08:45

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	822	206	1789	50.50	0.00	922	0.892	803	10.1	14.9	37.258	D
B	2	401	100	1581	28.50	0.00	460	0.872	387	7.4	10.8	57.665	E
C	2	272	68	2055	62.50	0.00	1311	0.208	270	2.2	2.7	7.885	A
	3	101	25	1581	8.50	0.00	137	0.739	97	2.6	3.7	81.239	F

08:45 - 09:00

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	822	206	1789	50.50	0.00	922	0.892	821	14.9	15.2	41.119	D
B	2	401	100	1581	28.50	0.00	460	0.872	399	10.8	11.1	64.572	E
C	2	272	68	2055	62.50	0.00	1311	0.208	272	2.7	2.7	7.885	A
	3	101	25	1581	8.50	0.00	137	0.739	101	3.7	3.8	89.218	F

09:00 - 09:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	672	168	1789	50.50	0.00	922	0.728	692	15.2	10.2	26.126	C
B	2	327	82	1581	28.50	0.00	460	0.712	342	11.1	7.5	45.801	D
C	2	222	56	2055	62.50	0.00	1311	0.169	224	2.7	2.2	7.579	A
	3	83	21	1581	8.50	0.00	137	0.603	87	3.8	2.7	73.707	E

09:15 - 09:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	562	141	1789	50.50	0.00	922	0.610	571	10.2	8.1	20.947	C
B	2	274	69	1581	28.50	0.00	460	0.596	281	7.5	5.9	37.866	D
C	2	186	46	2055	62.50	0.00	1311	0.142	187	2.2	1.8	7.370	A
	3	69	17	1581	8.50	0.00	137	0.505	72	2.7	2.1	62.203	E

Queueing Delay Results for each time segment

08:00 - 08:15

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	48.50	3.23	20.698	C
B	2	42.28	2.82	37.027	D
C	2	5.71	0.38	7.369	A
	3	16.92	1.13	58.633	E

08:15 - 08:30

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	69.94	4.66	24.994	C
B	2	58.38	3.89	42.817	D
C	2	7.01	0.47	7.578	A
	3	22.95	1.53	66.610	E

08:30 - 08:45

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	127.68	8.51	37.258	D
B	2	96.29	6.42	57.665	E
C	2	8.93	0.60	7.885	A
	3	34.29	2.29	81.239	F

08:45 - 09:00

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	140.91	9.39	41.119	D
B	2	107.83	7.19	64.572	E
C	2	8.94	0.60	7.885	A
	3	37.66	2.51	89.218	F

09:00 - 09:15

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	73.10	4.87	26.126	C
B	2	62.45	4.16	45.801	D
C	2	7.01	0.47	7.579	A
	3	25.40	1.69	73.707	E

09:15 - 09:30

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	49.08	3.27	20.947	C
B	2	43.24	2.88	37.866	D
C	2	5.71	0.38	7.370	A
	3	17.95	1.20	62.203	E

2025 - Baseline, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Signalised		47.99	D

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	47.99	D

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	2025 - Baseline	PM	ONE HOUR	17:00	18:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	473	100.000
B		ONE HOUR	✓	529	100.000
C		ONE HOUR	✓	732	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	163	310
	B	303	0	226
	C	533	199	0

Proportions

	To			
		A	B	C
	A	0.00	0.34	0.66
	B	0.57	0.00	0.43
	C	0.73	0.27	0.00

Vehicle Mix

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

Heavy Vehicle %

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

Average PCU Per Veh

	To			
		A	B	C
	A	1.000	1.100	1.100
	B	1.100	1.000	1.100
	C	1.100	1.100	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
A	17:00-17:15	356	356
	17:15-17:30	425	425
	17:30-17:45	521	521
	17:45-18:00	521	521
	18:00-18:15	425	425
	18:15-18:30	356	356
B	17:00-17:15	398	398
	17:15-17:30	476	476
	17:30-17:45	582	582
	17:45-18:00	582	582
	18:00-18:15	476	476
	18:15-18:30	398	398
C	17:00-17:15	551	551
	17:15-17:30	658	658
	17:30-17:45	806	806
	17:45-18:00	806	806
	18:00-18:15	658	658
	18:15-18:30	551	551

Results

Results Summary for whole modelled period

Arm	Max DOS	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
A	0.89	60.17	13.5	E	434	651	488.18	44.99	5.42	488.76	45.04
B	0.90	54.84	13.5	D	485	728	476.71	39.28	5.30	477.15	39.32
C	0.84	35.16	15.2	D	672	1008	489.03	29.12	5.43	489.34	29.14

Main Results for each time segment

17:00 - 17:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	356	89	1862	29.50	0.00	584	0.609	328	0.0	7.0	33.409	C
B	2	398	100	1581	38.50	0.00	647	0.615	371	0.0	6.8	27.511	C
C	2	401	100	2055	48.50	0.00	1060	0.378	380	0.0	5.2	15.038	B
	3	150	37	1581	15.50	0.00	261	0.575	135	0.0	3.8	47.533	D

17:15 - 17:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	425	106	1862	29.50	0.00	584	0.728	418	7.0	8.8	38.733	D
B	2	476	119	1581	38.50	0.00	647	0.735	468	6.8	8.6	32.862	C
C	2	479	120	2055	48.50	0.00	1060	0.452	475	5.2	6.3	16.194	B
	3	179	45	1581	15.50	0.00	261	0.686	175	3.8	4.8	54.780	D

17:30 - 17:45

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	521	130	1863	29.50	0.00	585	0.891	504	8.8	13.0	53.394	D
B	2	582	146	1581	38.50	0.00	647	0.900	565	8.6	13.0	47.989	D
C	2	587	147	2055	48.50	0.00	1060	0.553	581	6.3	7.9	18.152	B
	3	219	55	1581	15.50	0.00	261	0.841	210	4.8	7.0	71.225	E

17:45 - 18:00

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	521	130	1863	29.50	0.00	585	0.891	519	13.0	13.5	60.166	E
B	2	582	146	1581	38.50	0.00	647	0.900	581	13.0	13.5	54.843	D
C	2	587	147	2055	48.50	0.00	1060	0.553	587	7.9	7.9	18.190	B
	3	219	55	1581	15.50	0.00	261	0.841	218	7.0	7.3	80.626	F

18:00 - 18:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	425	106	1862	29.50	0.00	584	0.728	443	13.5	9.0	41.259	D
B	2	476	119	1581	38.50	0.00	647	0.735	495	13.5	8.7	35.259	D
C	2	479	120	2055	48.50	0.00	1060	0.452	485	7.9	6.3	16.228	B
	3	179	45	1581	15.50	0.00	261	0.686	188	7.3	5.0	60.434	E

18:15 - 18:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	356	89	1862	29.50	0.00	584	0.609	364	9.0	7.0	34.013	C
B	2	398	100	1581	38.50	0.00	647	0.615	406	8.7	6.8	28.036	C
C	2	401	100	2055	48.50	0.00	1060	0.378	406	6.3	5.2	15.057	B
	3	150	37	1581	15.50	0.00	261	0.575	155	5.0	3.8	49.551	D

Queueing Delay Results for each time segment
17:00 - 17:15

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	49.57	3.30	33.409	C
B	2	45.65	3.04	27.511	C
C	2	25.14	1.68	15.038	B
	3	29.67	1.98	47.533	D

17:15 - 17:30

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	68.63	4.58	38.733	D
B	2	65.12	4.34	32.862	C
C	2	32.33	2.16	16.194	B
	3	40.83	2.72	54.780	D

17:30 - 17:45

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	115.86	7.72	53.394	D
B	2	116.46	7.76	47.989	D
C	2	44.39	2.96	18.152	B
	3	65.02	4.33	71.225	E

17:45 - 18:00

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	130.56	8.70	60.166	E
B	2	133.09	8.87	54.843	D
C	2	44.48	2.97	18.190	B
	3	73.61	4.91	80.626	F

18:00 - 18:15

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	73.10	4.87	41.259	D
B	2	69.87	4.66	35.259	D
C	2	32.40	2.16	16.228	B
	3	45.05	3.00	60.434	E

18:15 - 18:30

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	50.47	3.36	34.013	C
B	2	46.52	3.10	28.036	C
C	2	25.18	1.68	15.057	B
	3	30.93	2.06	49.551	D

2032 - ND, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Signalised		65.88	E

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	65.88	E

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2032 - ND	AM	ONE HOUR	08:00	09:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	812	100.000
B		ONE HOUR	✓	394	100.000
C		ONE HOUR	✓	369	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	From A	0	401	411
	From B	248	0	146
	From C	269	100	0

Proportions

	To			
		A	B	C
	From A	0.00	0.49	0.51
	From B	0.63	0.00	0.37
	From C	0.73	0.27	0.00

Vehicle Mix

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

Heavy Vehicle %

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

Average PCU Per Veh

	To			
		A	B	C
	From A	1.000	1.100	1.100
	From B	1.100	1.000	1.100
	From C	1.100	1.100	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
A	08:00-08:15	611	611
	08:15-08:30	730	730
	08:30-08:45	894	894
	08:45-09:00	894	894
	09:00-09:15	730	730
	09:15-09:30	611	611
B	08:00-08:15	297	297
	08:15-08:30	354	354
	08:30-08:45	434	434
	08:45-09:00	434	434
	09:00-09:15	354	354
	09:15-09:30	297	297
C	08:00-08:15	278	278
	08:15-08:30	332	332
	08:30-08:45	406	406
	08:45-09:00	406	406
	09:00-09:15	332	332
	09:15-09:30	278	278

Results

Results Summary for whole modelled period

Arm	Max DOS	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
A	0.90	54.60	24.6	D	745	1118	773.46	41.52	8.59	774.29	41.57
B	0.90	97.77	19.6	F	362	542	699.11	77.35	7.77	700.75	77.53
C	0.87	56.67	13.1	E	339	508	392.69	46.39	4.36	392.88	46.41

Main Results for each time segment

08:00 - 08:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	611	153	1790	101.50	0.00	998	0.613	554	0.0	14.3	30.694	C
B	2	297	74	1581	55.50	0.00	482	0.615	252	0.0	11.1	61.547	E
C	2	203	51	2055	119.50	0.00	1349	0.150	188	0.0	3.5	12.215	B
	3	75	19	1581	14.50	0.00	126	0.598	59	0.0	4.0	104.325	F

08:15 - 08:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	730	182	1790	101.50	0.00	998	0.731	717	14.3	17.6	36.232	D
B	2	354	89	1581	55.50	0.00	482	0.735	344	11.1	13.7	69.066	E
C	2	242	60	2055	119.50	0.00	1349	0.179	239	3.5	4.2	12.547	B
	3	90	22	1581	14.50	0.00	126	0.714	85	4.0	5.2	119.059	F

08:30 - 08:45

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	894	224	1790	101.50	0.00	998	0.896	868	17.6	24.2	50.896	D
B	2	434	108	1581	55.50	0.00	482	0.900	412	13.7	19.1	88.144	F
C	2	296	74	2055	119.50	0.00	1349	0.220	292	4.2	5.2	13.033	B
	3	110	28	1581	14.50	0.00	126	0.874	101	5.2	7.4	147.365	F

08:45 - 09:00

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	894	224	1790	101.50	0.00	998	0.896	893	24.2	24.6	54.600	D
B	2	434	108	1581	55.50	0.00	482	0.900	432	19.1	19.6	97.771	F
C	2	296	74	2055	119.50	0.00	1349	0.220	296	5.2	5.2	13.034	B
	3	110	28	1581	14.50	0.00	126	0.874	108	7.4	7.9	174.051	F

09:00 - 09:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	730	182	1790	101.50	0.00	998	0.731	758	24.6	17.7	37.267	D
B	2	354	89	1581	55.50	0.00	482	0.735	377	19.6	13.9	73.076	E
C	2	242	60	2055	119.50	0.00	1349	0.179	246	5.2	4.2	12.548	B
	3	90	22	1581	14.50	0.00	126	0.714	99	7.9	5.6	144.245	F

09:15 - 09:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	611	153	1790	101.50	0.00	998	0.613	625	17.7	14.3	30.913	C
B	2	297	74	1581	55.50	0.00	482	0.615	308	13.9	11.1	62.483	E
C	2	203	51	2055	119.50	0.00	1349	0.150	205	4.2	3.5	12.216	B
	3	75	19	1581	14.50	0.00	126	0.598	81	5.6	4.1	114.191	F

Queueing Delay Results for each time segment

08:00 - 08:15

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	78.18	5.21	30.694	C
B	2	76.07	5.07	61.547	E
C	2	10.31	0.69	12.215	B
	3	32.73	2.18	104.325	F

08:15 - 08:30

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	110.20	7.35	36.232	D
B	2	101.93	6.80	69.066	E
C	2	12.64	0.84	12.547	B
	3	44.60	2.97	119.059	F

08:30 - 08:45

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	189.59	12.64	50.896	D
B	2	159.32	10.62	88.144	F
C	2	16.08	1.07	13.033	B
	3	67.60	4.51	147.365	F

08:45 - 09:00

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	203.39	13.56	54.600	D
B	2	176.72	11.78	97.771	F
C	2	16.08	1.07	13.034	B
	3	79.85	5.32	174.051	F

09:00 - 09:15

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	113.35	7.56	37.267	D
B	2	107.85	7.19	73.076	E
C	2	12.64	0.84	12.548	B
	3	54.03	3.60	144.245	F

09:15 - 09:30

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	78.74	5.25	30.913	C
B	2	77.22	5.15	62.483	E
C	2	10.31	0.69	12.216	B
	3	35.82	2.39	114.191	F

2032 - ND, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Signalised		84.11	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	84.11	F

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2032 - ND	PM	ONE HOUR	17:00	18:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	516	100.000
B		ONE HOUR	✓	576	100.000
C		ONE HOUR	✓	797	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	178	338
	B	330	0	246
	C	581	216	0

Proportions

	To			
		A	B	C
	A	0.00	0.34	0.66
	B	0.57	0.00	0.43
	C	0.73	0.27	0.00

Vehicle Mix

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

Heavy Vehicle %

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

Average PCU Per Veh

	To			
		A	B	C
	A	1.000	1.100	1.100
	B	1.100	1.000	1.100
	C	1.100	1.100	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
A	17:00-17:15	388	388
	17:15-17:30	464	464
	17:30-17:45	568	568
	17:45-18:00	568	568
	18:00-18:15	464	464
	18:15-18:30	388	388
B	17:00-17:15	434	434
	17:15-17:30	518	518
	17:30-17:45	634	634
	17:45-18:00	634	634
	18:00-18:15	518	518
	18:15-18:30	434	434
C	17:00-17:15	600	600
	17:15-17:30	716	716
	17:30-17:45	878	878
	17:45-18:00	878	878
	18:00-18:15	716	716
	18:15-18:30	600	600

Results

Results Summary for whole modelled period

Arm	Max DOS	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
A	0.90	101.47	28.5	F	473	710	990.25	83.66	11.00	992.93	83.88
B	0.90	84.58	26.9	F	529	793	892.92	67.58	9.92	894.71	67.71
C	0.90	72.54	36.9	E	731	1097	1136.59	62.16	12.63	1138.41	62.26

Main Results for each time segment

17:00 - 17:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	388	97	1862	78.50	0.00	633	0.614	320	0.0	17.1	69.313	E
B	2	434	108	1581	103.50	0.00	708	0.612	370	0.0	16.0	53.575	D
C	2	437	109	2055	120.50	0.00	1072	0.408	383	0.0	13.6	35.090	D
	3	163	41	1581	38.50	0.00	263	0.617	125	0.0	9.3	102.500	F

17:15 - 17:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	464	116	1862	78.50	0.00	633	0.733	449	17.1	20.9	76.598	E
B	2	518	129	1581	103.50	0.00	708	0.731	503	16.0	19.6	60.860	E
C	2	522	131	2055	120.50	0.00	1072	0.487	511	13.6	16.3	37.523	D
	3	194	49	1581	38.50	0.00	263	0.737	185	9.3	11.6	113.022	F

17:30 - 17:45

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	568	142	1862	78.50	0.00	633	0.898	540	20.9	28.1	94.628	F
B	2	634	159	1581	103.50	0.00	708	0.895	607	19.6	26.5	78.829	E
C	2	640	160	2055	120.50	0.00	1072	0.597	624	16.3	20.2	41.595	D
	3	238	59	1581	38.50	0.00	263	0.903	220	11.6	16.1	137.491	F

17:45 - 18:00

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	568	142	1862	78.50	0.00	633	0.898	566	28.1	28.5	101.469	F
B	2	634	159	1581	103.50	0.00	708	0.895	633	26.5	26.9	84.578	F
C	2	640	160	2055	120.50	0.00	1072	0.597	640	20.2	20.2	41.653	D
	3	238	59	1581	38.50	0.00	263	0.903	235	16.1	16.7	155.634	F

18:00 - 18:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	464	116	1862	78.50	0.00	633	0.733	494	28.5	21.0	79.023	E
B	2	518	129	1581	103.50	0.00	708	0.731	546	26.9	19.7	62.777	E
C	2	522	131	2055	120.50	0.00	1072	0.487	538	20.2	16.3	37.569	D
	3	194	49	1581	38.50	0.00	263	0.737	213	16.7	11.9	124.167	F

18:15 - 18:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	388	97	1862	78.50	0.00	633	0.614	404	21.0	17.1	69.856	E
B	2	434	108	1581	103.50	0.00	708	0.612	448	19.7	16.0	54.003	D
C	2	437	109	2055	120.50	0.00	1072	0.408	448	16.3	13.6	35.115	D
	3	163	41	1581	38.50	0.00	263	0.617	173	11.9	9.4	105.544	F

Queueing Delay Results for each time segment

17:00 - 17:15

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	112.19	7.48	69.313	E
B	2	96.80	6.45	53.575	D
C	2	63.95	4.26	35.090	D
	3	69.45	4.63	102.500	F

17:15 - 17:30

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	148.05	9.87	76.598	E
B	2	131.31	8.75	60.860	E
C	2	81.66	5.44	37.523	D
	3	91.44	6.10	113.022	F

17:30 - 17:45

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	224.00	14.93	94.628	F
B	2	208.30	13.89	78.829	E
C	2	110.87	7.39	41.595	D
	3	136.24	9.08	137.491	F

17:45 - 18:00

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	240.20	16.01	101.469	F
B	2	223.49	14.90	84.578	F
C	2	111.02	7.40	41.653	D
	3	154.22	10.28	155.634	F

18:00 - 18:15

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	152.74	10.18	79.023	E
B	2	135.45	9.03	62.777	E
C	2	81.76	5.45	37.569	D
	3	100.46	6.70	124.167	F

18:15 - 18:30

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	113.07	7.54	69.856	E
B	2	97.58	6.51	54.003	D
C	2	64.00	4.27	35.115	D
	3	71.51	4.77	105.544	F

2032 - WD, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Signalised		104.88	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	104.88	F

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2032 - WD	AM	ONE HOUR	08:00	09:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	831	100.000
B		ONE HOUR	✓	450	100.000
C		ONE HOUR	✓	383	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	410	421
	B	284	0	166
	C	272	111	0

Proportions

	To			
		A	B	C
	A	0.00	0.49	0.51
	B	0.63	0.00	0.37
	C	0.71	0.29	0.00

Vehicle Mix

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

Heavy Vehicle %

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

Average PCU Per Veh

	To			
		A	B	C
	A	1.000	1.100	1.100
	B	1.100	1.000	1.100
	C	1.100	1.100	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
A	08:00-08:15	626	626
	08:15-08:30	747	747
	08:30-08:45	915	915
	08:45-09:00	915	915
	09:00-09:15	747	747
	09:15-09:30	626	626
B	08:00-08:15	339	339
	08:15-08:30	405	405
	08:30-08:45	495	495
	08:45-09:00	495	495
	09:00-09:15	405	405
	09:15-09:30	339	339
C	08:00-08:15	288	288
	08:15-08:30	344	344
	08:30-08:45	422	422
	08:45-09:00	422	422
	09:00-09:15	344	344
	09:15-09:30	288	288

Results

Results Summary for whole modelled period

Arm	Max DOS	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
A	0.93	90.03	41.3	F	763	1144	1303.88	68.40	14.49	1306.32	68.52
B	0.94	142.57	33.7	F	413	619	1174.17	113.74	13.05	1178.47	114.16
C	0.95	92.79	22.8	F	351	527	673.48	76.65	7.48	674.04	76.72

Main Results for each time segment

08:00 - 08:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	626	156	1790	164.50	0.00	981	0.637	529	0.0	24.3	51.155	D
B	2	339	85	1581	100.50	0.00	530	0.640	261	0.0	19.5	91.912	F
C	2	205	51	2055	192.50	0.00	1319	0.155	180	0.0	6.1	21.723	C
	3	84	21	1581	24.50	0.00	129	0.647	55	0.0	7.1	160.470	F

08:15 - 08:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	747	187	1790	164.50	0.00	981	0.761	726	24.3	29.7	59.761	E
B	2	405	101	1581	100.50	0.00	530	0.764	387	19.5	23.9	102.130	F
C	2	245	61	2055	192.50	0.00	1319	0.185	240	6.1	7.3	22.271	C
	3	100	25	1581	24.50	0.00	129	0.773	92	7.1	9.0	180.078	F

08:30 - 08:45

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	915	229	1790	164.50	0.00	982	0.932	872	29.7	40.4	82.532	F
B	2	495	124	1581	100.50	0.00	530	0.936	460	23.9	32.7	128.006	F
C	2	299	75	2055	192.50	0.00	1319	0.227	293	7.3	9.0	23.075	C
	3	122	31	1581	24.50	0.00	129	0.947	107	9.0	12.8	218.744	F

08:45 - 09:00

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	915	229	1790	164.50	0.00	982	0.932	912	40.4	41.3	90.031	F
B	2	495	124	1581	100.50	0.00	530	0.936	491	32.7	33.7	142.575	F
C	2	299	75	2055	192.50	0.00	1319	0.227	299	9.0	9.0	23.076	C
	3	122	31	1581	24.50	0.00	129	0.947	118	12.8	13.8	263.624	F

09:00 - 09:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	747	187	1790	164.50	0.00	981	0.761	793	41.3	29.8	61.853	E
B	2	405	101	1581	100.50	0.00	530	0.764	443	33.7	24.2	108.272	F
C	2	245	61	2055	192.50	0.00	1319	0.185	251	9.0	7.3	22.273	C
	3	100	25	1581	24.50	0.00	129	0.773	115	13.8	9.9	229.534	F

09:15 - 09:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	626	156	1790	164.50	0.00	981	0.637	648	29.8	24.3	51.453	D
B	2	339	85	1581	100.50	0.00	530	0.640	357	24.2	19.5	92.933	F
C	2	205	51	2055	192.50	0.00	1319	0.155	210	7.3	6.1	21.724	C
	3	84	21	1581	24.50	0.00	129	0.647	94	9.9	7.3	176.977	F

Queueing Delay Results for each time segment

08:00 - 08:15

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	133.35	8.89	51.155	D
B	2	129.74	8.65	91.912	F
C	2	18.53	1.24	21.723	C
	3	55.87	3.72	160.470	F

08:15 - 08:30

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	186.02	12.40	59.761	E
B	2	172.15	11.48	102.130	F
C	2	22.69	1.51	22.271	C
	3	74.87	4.99	180.078	F

08:30 - 08:45

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	314.63	20.98	82.532	F
B	2	264.26	17.62	128.006	F
C	2	28.79	1.92	23.075	C
	3	111.39	7.43	218.744	F

08:45 - 09:00

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	343.22	22.88	90.031	F
B	2	294.33	19.62	142.575	F
C	2	28.79	1.92	23.076	C
	3	134.24	8.95	263.624	F

09:00 - 09:15

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	192.53	12.84	61.853	E
B	2	182.50	12.17	108.272	F
C	2	22.69	1.51	22.273	C
	3	95.44	6.36	229.534	F

09:15 - 09:30

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	134.12	8.94	51.453	D
B	2	131.18	8.75	92.933	F
C	2	18.54	1.24	21.724	C
	3	61.62	4.11	176.977	F

2032 - WD, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Signalised		128.65	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	128.65	F

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2032 - WD	PM	ONE HOUR	17:00	18:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	523	100.000
B		ONE HOUR	✓	648	100.000
C		ONE HOUR	✓	855	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	180	343
	B	371	0	277
	C	594	261	0

Proportions

	To			
		A	B	C
	A	0.00	0.34	0.66
	B	0.57	0.00	0.43
	C	0.69	0.31	0.00

Vehicle Mix

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

Heavy Vehicle %

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

Average PCU Per Veh

	To			
		A	B	C
	A	1.000	1.100	1.100
	B	1.100	1.000	1.100
	C	1.100	1.100	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
A	17:00-17:15	394	394
	17:15-17:30	470	470
	17:30-17:45	576	576
	17:45-18:00	576	576
	18:00-18:15	470	470
	18:15-18:30	394	394
B	17:00-17:15	488	488
	17:15-17:30	583	583
	17:30-17:45	713	713
	17:45-18:00	713	713
	18:00-18:15	583	583
	18:15-18:30	488	488
C	17:00-17:15	644	644
	17:15-17:30	769	769
	17:30-17:45	941	941
	17:45-18:00	941	941
	18:00-18:15	769	769
	18:15-18:30	644	644

Results

Results Summary for whole modelled period

Arm	Max DOS	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
A	0.98	166.15	43.7	F	480	720	1507.35	125.64	16.75	1513.21	126.12
B	0.97	128.88	42.1	F	595	892	1391.25	93.59	15.46	1394.79	93.83
C	0.98	105.54	55.0	F	785	1177	1708.30	87.10	18.98	1712.11	87.29

Main Results for each time segment

17:00 - 17:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	394	98	1862	94.50	0.00	587	0.671	300	0.0	23.3	96.975	F
B	2	488	122	1581	139.50	0.00	735	0.664	397	0.0	22.6	68.146	E
C	2	447	112	2055	153.50	0.00	1051	0.425	374	0.0	18.4	47.375	D
	3	196	49	1581	55.50	0.00	292	0.672	140	0.0	14.2	128.382	F

17:15 - 17:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	470	118	1862	94.50	0.00	587	0.801	448	23.3	28.8	108.318	F
B	2	583	146	1581	139.50	0.00	735	0.793	562	22.6	27.8	79.051	E
C	2	534	133	2055	153.50	0.00	1051	0.508	519	18.4	22.1	50.637	D
	3	235	59	1581	55.50	0.00	292	0.802	220	14.2	17.8	142.914	F

17:30 - 17:45

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	576	144	1863	94.50	0.00	587	0.981	527	28.8	41.0	140.288	F
B	2	713	178	1581	139.50	0.00	735	0.971	665	27.8	39.8	109.723	F
C	2	654	164	2055	153.50	0.00	1051	0.622	633	22.1	27.3	56.106	E
	3	287	72	1581	55.50	0.00	292	0.983	256	17.8	25.5	179.469	F

17:45 - 18:00

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	576	144	1863	94.50	0.00	587	0.981	565	41.0	43.7	166.152	F
B	2	713	178	1581	139.50	0.00	735	0.971	704	39.8	42.1	128.879	F
C	2	654	164	2055	153.50	0.00	1051	0.622	654	27.3	27.3	56.184	E
	3	287	72	1581	55.50	0.00	292	0.983	279	25.5	27.7	217.858	F

18:00 - 18:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	470	118	1862	94.50	0.00	587	0.801	528	43.7	29.2	122.349	F
B	2	583	146	1581	139.50	0.00	735	0.793	639	42.1	28.1	87.164	F
C	2	534	133	2055	153.50	0.00	1051	0.508	555	27.3	22.1	50.696	D
	3	235	59	1581	55.50	0.00	292	0.802	271	27.7	18.6	174.428	F

18:15 - 18:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	394	98	1862	94.50	0.00	587	0.671	417	29.2	23.4	98.214	F
B	2	488	122	1581	139.50	0.00	735	0.664	510	28.1	22.6	68.865	E
C	2	447	112	2055	153.50	0.00	1051	0.425	462	22.1	18.4	47.406	D
	3	196	49	1581	55.50	0.00	292	0.672	214	18.6	14.3	133.298	F

Queueing Delay Results for each time segment

17:00 - 17:15

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	159.10	10.61	96.975	F
B	2	138.52	9.23	68.146	E
C	2	88.27	5.88	47.375	D
	3	105.11	7.01	128.382	F

17:15 - 17:30

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	212.20	14.15	108.318	F
B	2	191.88	12.79	79.051	E
C	2	112.67	7.51	50.637	D
	3	139.72	9.31	142.914	F

17:30 - 17:45

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	336.59	22.44	140.288	F
B	2	326.18	21.75	109.723	F
C	2	152.89	10.19	56.106	E
	3	214.89	14.33	179.469	F

17:45 - 18:00

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	398.65	26.58	166.152	F
B	2	383.13	25.54	128.879	F
C	2	153.10	10.21	56.184	E
	3	260.85	17.39	217.858	F

18:00 - 18:15

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	239.69	15.98	122.349	F
B	2	211.57	14.10	87.164	F
C	2	112.80	7.52	50.696	D
	3	170.53	11.37	174.428	F

18:15 - 18:30

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	161.13	10.74	98.214	F
B	2	139.98	9.33	68.865	E
C	2	88.33	5.89	47.406	D
	3	109.13	7.28	133.298	F

2037 - ND, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Signalised		91.96	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	91.96	F

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2037 - ND	AM	ONE HOUR	08:00	09:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	835	100.000
B		ONE HOUR	✓	406	100.000
C		ONE HOUR	✓	379	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	414	421
	B	256	0	150
	C	276	103	0

Proportions

	To			
		A	B	C
	A	0.00	0.50	0.50
	B	0.63	0.00	0.37
	C	0.73	0.27	0.00

Vehicle Mix

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

Heavy Vehicle %

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

Average PCU Per Veh

	To			
		A	B	C
	A	1.000	1.100	1.100
	B	1.100	1.000	1.100
	C	1.100	1.100	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
A	08:00-08:15	629	629
	08:15-08:30	751	751
	08:30-08:45	919	919
	08:45-09:00	919	919
	09:00-09:15	751	751
	09:15-09:30	629	629
B	08:00-08:15	306	306
	08:15-08:30	365	365
	08:30-08:45	447	447
	08:45-09:00	447	447
	09:00-09:15	365	365
	09:15-09:30	306	306
C	08:00-08:15	285	285
	08:15-08:30	341	341
	08:30-08:45	417	417
	08:45-09:00	417	417
	09:00-09:15	341	341
	09:15-09:30	285	285

Results

Results Summary for whole modelled period

Arm	Max DOS	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
A	0.90	75.79	37.6	E	766	1149	1145.83	59.82	12.73	1147.74	59.92
B	0.90	133.73	29.8	F	373	559	1043.25	112.01	11.59	1047.17	112.43
C	0.92	82.87	20.9	F	348	522	605.44	69.64	6.73	605.91	69.69

Main Results for each time segment

08:00 - 08:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	629	157	1789	171.50	0.00	1023	0.615	536	0.0	23.1	46.034	D
B	2	306	76	1581	94.50	0.00	498	0.614	233	0.0	18.1	94.420	F
C	2	208	52	2055	198.50	0.00	1360	0.153	184	0.0	5.9	19.417	B
	3	78	19	1581	23.50	0.00	124	0.626	51	0.0	6.6	160.011	F

08:15 - 08:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	751	188	1789	171.50	0.00	1023	0.734	731	23.1	28.1	53.524	D
B	2	365	91	1581	94.50	0.00	498	0.733	349	18.1	22.1	103.462	F
C	2	248	62	2055	198.50	0.00	1360	0.182	244	5.9	7.0	19.918	B
	3	93	23	1581	23.50	0.00	124	0.748	86	6.6	8.3	177.990	F

08:30 - 08:45

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	919	230	1789	171.50	0.00	1023	0.899	883	28.1	37.2	71.978	E
B	2	447	112	1581	94.50	0.00	498	0.898	418	22.1	29.3	124.718	F
C	2	304	76	2055	198.50	0.00	1360	0.223	298	7.0	8.6	20.652	C
	3	113	28	1581	23.50	0.00	124	0.916	100	8.3	11.6	212.627	F

08:45 - 09:00

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	919	230	1789	171.50	0.00	1023	0.899	918	37.2	37.6	75.787	E
B	2	447	112	1581	94.50	0.00	498	0.898	445	29.3	29.8	133.726	F
C	2	304	76	2055	198.50	0.00	1360	0.223	304	8.6	8.6	20.653	C
	3	113	28	1581	23.50	0.00	124	0.916	111	11.6	12.3	249.584	F

09:00 - 09:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	751	188	1789	171.50	0.00	1023	0.734	788	37.6	28.2	54.569	D
B	2	365	91	1581	94.50	0.00	498	0.733	395	29.8	22.3	107.139	F
C	2	248	62	2055	198.50	0.00	1360	0.182	254	8.6	7.0	19.919	B
	3	93	23	1581	23.50	0.00	124	0.748	106	12.3	8.9	216.186	F

09:15 - 09:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	629	157	1789	171.50	0.00	1023	0.615	649	28.2	23.1	46.248	D
B	2	306	76	1581	94.50	0.00	498	0.614	322	22.3	18.1	95.284	F
C	2	208	52	2055	198.50	0.00	1360	0.153	212	7.0	5.9	19.417	B
	3	78	19	1581	23.50	0.00	124	0.626	86	8.9	6.7	173.805	F

Queueing Delay Results for each time segment

08:00 - 08:15

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	120.58	8.04	46.034	D
B	2	120.25	8.02	94.420	F
C	2	16.81	1.12	19.417	B
	3	51.70	3.45	160.011	F

08:15 - 08:30

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	167.41	11.16	53.524	D
B	2	157.34	10.49	103.462	F
C	2	20.59	1.37	19.918	B
	3	68.67	4.58	177.990	F

08:30 - 08:45

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	275.72	18.38	71.978	E
B	2	232.30	15.49	124.718	F
C	2	26.15	1.74	20.652	C
	3	100.47	6.70	212.627	F

08:45 - 09:00

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	290.31	19.35	75.787	E
B	2	249.07	16.60	133.726	F
C	2	26.15	1.74	20.653	C
	3	117.93	7.86	249.584	F

09:00 - 09:15

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	170.68	11.38	54.569	D
B	2	162.93	10.86	107.139	F
C	2	20.59	1.37	19.919	B
	3	83.41	5.56	216.186	F

09:15 - 09:30

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	121.14	8.08	46.248	D
B	2	121.35	8.09	95.284	F
C	2	16.81	1.12	19.417	B
	3	56.16	3.74	173.805	F

2037 - ND, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Signalised		104.95	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	104.95	F

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2037 - ND	PM	ONE HOUR	17:00	18:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	529	100.000
B		ONE HOUR	✓	592	100.000
C		ONE HOUR	✓	817	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	183	346
	B	339	0	253
	C	595	222	0

Proportions

	To			
		A	B	C
	A	0.00	0.35	0.65
	B	0.57	0.00	0.43
	C	0.73	0.27	0.00

Vehicle Mix

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

Heavy Vehicle %

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

Average PCU Per Veh

	To			
		A	B	C
	A	1.000	1.100	1.100
	B	1.100	1.000	1.100
	C	1.100	1.100	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
A	17:00-17:15	398	398
	17:15-17:30	476	476
	17:30-17:45	582	582
	17:45-18:00	582	582
	18:00-18:15	476	476
	18:15-18:30	398	398
B	17:00-17:15	446	446
	17:15-17:30	532	532
	17:30-17:45	652	652
	17:45-18:00	652	652
	18:00-18:15	532	532
	18:15-18:30	446	446
C	17:00-17:15	615	615
	17:15-17:30	734	734
	17:30-17:45	900	900
	17:45-18:00	900	900
	18:00-18:15	734	734
	18:15-18:30	615	615

Results

Results Summary for whole modelled period

Arm	Max DOS	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
A	0.92	128.12	37.2	F	485	728	1288.11	106.14	14.31	1292.70	106.52
B	0.91	103.73	34.5	F	543	815	1137.23	83.74	12.64	1140.15	83.95
C	0.92	90.83	48.2	F	750	1125	1474.34	78.66	16.38	1477.46	78.83

Main Results for each time segment

17:00 - 17:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	398	100	1861	102.50	0.00	636	0.626	308	0.0	22.5	88.668	F
B	2	446	111	1581	136.50	0.00	719	0.620	362	0.0	20.9	67.210	E
C	2	448	112	2055	156.50	0.00	1072	0.418	376	0.0	18.1	45.463	D
	3	167	42	1581	50.50	0.00	266	0.628	118	0.0	12.2	129.521	F

17:15 - 17:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	476	119	1861	102.50	0.00	636	0.748	456	22.5	27.5	97.502	F
B	2	532	133	1581	136.50	0.00	719	0.740	514	20.9	25.5	75.924	E
C	2	535	134	2055	156.50	0.00	1072	0.499	521	18.1	21.6	48.583	D
	3	200	50	1581	50.50	0.00	266	0.750	188	12.2	15.1	141.292	F

17:30 - 17:45

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	582	146	1862	102.50	0.00	636	0.915	546	27.5	36.6	119.144	F
B	2	652	163	1581	136.50	0.00	719	0.906	618	25.5	34.0	96.995	F
C	2	655	164	2055	156.50	0.00	1072	0.611	635	21.6	26.7	53.795	D
	3	244	61	1581	50.50	0.00	266	0.919	222	15.1	20.7	168.617	F

17:45 - 18:00

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	582	146	1862	102.50	0.00	636	0.915	580	36.6	37.2	128.123	F
B	2	652	163	1581	136.50	0.00	719	0.906	650	34.0	34.5	103.733	F
C	2	655	164	2055	156.50	0.00	1072	0.611	655	26.7	26.7	53.862	D
	3	244	61	1581	50.50	0.00	266	0.919	241	20.7	21.5	189.898	F

18:00 - 18:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	476	119	1861	102.50	0.00	636	0.748	514	37.2	27.6	100.702	F
B	2	532	133	1581	136.50	0.00	719	0.740	568	34.5	25.6	78.138	E
C	2	535	134	2055	156.50	0.00	1072	0.499	555	26.7	21.7	48.635	D
	3	200	50	1581	50.50	0.00	266	0.750	223	21.5	15.5	154.760	F

18:15 - 18:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	398	100	1861	102.50	0.00	636	0.626	419	27.6	22.6	89.282	F
B	2	446	111	1581	136.50	0.00	719	0.620	465	25.6	20.9	67.660	E
C	2	448	112	2055	156.50	0.00	1072	0.418	462	21.7	18.1	45.491	D
	3	167	42	1581	50.50	0.00	266	0.628	180	15.5	12.3	132.887	F

Queueing Delay Results for each time segment

17:00 - 17:15

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	147.14	9.81	88.668	F
B	2	124.81	8.32	67.210	E
C	2	84.85	5.66	45.463	D
	3	90.20	6.01	129.521	F

17:15 - 17:30

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	193.20	12.88	97.502	F
B	2	168.36	11.22	75.924	E
C	2	108.28	7.22	48.583	D
	3	117.49	7.83	141.292	F

17:30 - 17:45

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	289.14	19.28	119.144	F
B	2	263.42	17.56	96.995	F
C	2	146.84	9.79	53.795	D
	3	171.73	11.45	168.617	F

17:45 - 18:00

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	310.93	20.73	128.123	F
B	2	281.72	18.78	103.733	F
C	2	147.02	9.80	53.862	D
	3	193.40	12.89	189.898	F

18:00 - 18:15

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	199.54	13.30	100.702	F
B	2	173.27	11.55	78.138	E
C	2	108.39	7.23	48.635	D
	3	128.69	8.58	154.760	F

18:15 - 18:30

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	148.16	9.88	89.282	F
B	2	125.65	8.38	67.660	E
C	2	84.91	5.66	45.491	D
	3	92.54	6.17	132.887	F

2037 - WD, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Signalised		111.99	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	111.99	F

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2037 - WD	AM	ONE HOUR	08:00	09:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	849	100.000
B		ONE HOUR	✓	459	100.000
C		ONE HOUR	✓	392	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	419	430
	B	290	0	169
	C	279	113	0

Proportions

	To			
		A	B	C
	A	0.00	0.49	0.51
	B	0.63	0.00	0.37
	C	0.71	0.29	0.00

Vehicle Mix

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

Heavy Vehicle %

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

Average PCU Per Veh

	To			
		A	B	C
	A	1.000	1.100	1.100
	B	1.100	1.000	1.100
	C	1.100	1.100	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
A	08:00-08:15	639	639
	08:15-08:30	763	763
	08:30-08:45	935	935
	08:45-09:00	935	935
	09:00-09:15	763	763
	09:15-09:30	639	639
B	08:00-08:15	346	346
	08:15-08:30	413	413
	08:30-08:45	505	505
	08:45-09:00	505	505
	09:00-09:15	413	413
	09:15-09:30	346	346
C	08:00-08:15	295	295
	08:15-08:30	352	352
	08:30-08:45	432	432
	08:45-09:00	432	432
	09:00-09:15	352	352
	09:15-09:30	295	295

Results

Results Summary for whole modelled period

Arm	Max DOS	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
A	0.95	98.22	44.0	F	779	1169	1399.51	71.86	15.55	1402.13	71.99
B	0.95	151.44	35.7	F	421	632	1238.34	117.61	13.76	1242.92	118.04
C	0.96	95.61	23.7	F	360	540	703.57	78.24	7.82	704.18	78.31

Main Results for each time segment

08:00 - 08:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	639	160	1790	164.50	0.00	982	0.651	540	0.0	24.8	51.944	D
B	2	346	86	1581	100.50	0.00	530	0.653	266	0.0	19.9	92.766	F
C	2	210	53	2055	192.50	0.00	1319	0.159	185	0.0	6.3	21.794	C
	3	85	21	1581	24.50	0.00	129	0.659	56	0.0	7.2	161.631	F

08:15 - 08:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	763	191	1790	164.50	0.00	982	0.778	741	24.8	30.4	61.201	E
B	2	413	103	1581	100.50	0.00	530	0.779	394	19.9	24.5	103.706	F
C	2	251	63	2055	192.50	0.00	1319	0.190	246	6.3	7.5	22.361	C
	3	102	25	1581	24.50	0.00	129	0.787	94	7.2	9.2	182.522	F

08:30 - 08:45

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	935	234	1790	164.50	0.00	981	0.952	886	30.4	42.5	87.144	F
B	2	505	126	1581	100.50	0.00	530	0.954	467	24.5	34.1	132.428	F
C	2	307	77	2055	192.50	0.00	1319	0.233	300	7.5	9.2	23.192	C
	3	124	31	1581	24.50	0.00	129	0.964	108	9.2	13.3	223.911	F

08:45 - 09:00

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	935	234	1790	164.50	0.00	981	0.952	929	42.5	44.0	98.225	F
B	2	505	126	1581	100.50	0.00	530	0.954	499	34.1	35.7	151.440	F
C	2	307	77	2055	192.50	0.00	1319	0.233	307	9.2	9.2	23.193	C
	3	124	31	1581	24.50	0.00	129	0.964	120	13.3	14.5	274.404	F

09:00 - 09:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	763	191	1790	164.50	0.00	982	0.778	817	44.0	30.6	64.553	E
B	2	413	103	1581	100.50	0.00	530	0.779	456	35.7	24.9	112.517	F
C	2	251	63	2055	192.50	0.00	1319	0.190	258	9.2	7.5	22.362	C
	3	102	25	1581	24.50	0.00	129	0.787	118	14.5	10.3	241.668	F

09:15 - 09:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	639	160	1790	164.50	0.00	982	0.651	662	30.6	24.9	52.293	D
B	2	346	86	1581	100.50	0.00	530	0.653	365	24.9	20.0	93.955	F
C	2	210	53	2055	192.50	0.00	1319	0.159	215	7.5	6.3	21.795	C
	3	85	21	1581	24.50	0.00	129	0.659	96	10.3	7.5	180.983	F

Queueing Delay Results for each time segment

08:00 - 08:15

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	138.34	9.22	51.944	D
B	2	133.57	8.90	92.766	F
C	2	19.07	1.27	21.794	C
	3	57.29	3.82	161.631	F

08:15 - 08:30

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	194.63	12.98	61.201	E
B	2	178.30	11.89	103.706	F
C	2	23.37	1.56	22.361	C
	3	77.26	5.15	182.522	F

08:30 - 08:45

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	339.41	22.63	87.144	F
B	2	278.85	18.59	132.428	F
C	2	29.68	1.98	23.192	C
	3	116.07	7.74	223.911	F

08:45 - 09:00

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	382.57	25.50	98.225	F
B	2	318.89	21.26	151.440	F
C	2	29.69	1.98	23.193	C
	3	142.25	9.48	274.404	F

09:00 - 09:15

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	205.29	13.69	64.553	E
B	2	193.45	12.90	112.517	F
C	2	23.37	1.56	22.362	C
	3	102.29	6.82	241.668	F

09:15 - 09:30

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	139.27	9.28	52.293	D
B	2	135.28	9.02	93.955	F
C	2	19.07	1.27	21.795	C
	3	64.15	4.28	180.983	F

2037 - WD, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Signalised		137.97	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	137.97	F

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2037 - WD	PM	ONE HOUR	17:00	18:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	535	100.000
B		ONE HOUR	✓	661	100.000
C		ONE HOUR	✓	871	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	184	351
	B	379	0	282
	C	605	266	0

Proportions

	To			
		A	B	C
	A	0.00	0.34	0.66
	B	0.57	0.00	0.43
	C	0.69	0.31	0.00

Vehicle Mix

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

Heavy Vehicle %

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

Average PCU Per Veh

	To			
		A	B	C
	A	1.000	1.100	1.100
	B	1.100	1.000	1.100
	C	1.100	1.100	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
A	17:00-17:15	403	403
	17:15-17:30	481	481
	17:30-17:45	589	589
	17:45-18:00	589	589
	18:00-18:15	481	481
	18:15-18:30	403	403
B	17:00-17:15	498	498
	17:15-17:30	594	594
	17:30-17:45	728	728
	17:45-18:00	728	728
	18:00-18:15	594	594
	18:15-18:30	498	498
C	17:00-17:15	656	656
	17:15-17:30	783	783
	17:30-17:45	959	959
	17:45-18:00	959	959
	18:00-18:15	783	783
	18:15-18:30	656	656

Results

Results Summary for whole modelled period

Arm	Max DOS	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
A	0.99	173.37	46.1	F	491	736	1576.68	128.47	17.52	1582.73	128.96
B	1.00	147.01	47.2	F	607	910	1544.18	101.83	17.16	1548.10	102.09
C	1.00	109.38	57.1	F	799	1199	1795.67	89.87	19.95	1799.64	90.07

Main Results for each time segment

17:00 - 17:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	403	101	1862	95.50	0.00	593	0.679	308	0.0	23.8	96.839	F
B	2	498	124	1581	138.50	0.00	730	0.682	405	0.0	23.3	70.013	E
C	2	455	114	2055	154.50	0.00	1058	0.430	381	0.0	18.6	47.010	D
	3	200	50	1581	55.50	0.00	292	0.685	142	0.0	14.5	129.420	F

17:15 - 17:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	481	120	1863	95.50	0.00	593	0.811	459	23.8	29.4	108.660	F
B	2	594	149	1581	138.50	0.00	730	0.814	572	23.3	28.8	82.108	F
C	2	544	136	2055	154.50	0.00	1058	0.514	529	18.6	22.3	50.332	D
	3	239	60	1581	55.50	0.00	292	0.818	224	14.5	18.2	145.101	F

17:30 - 17:45

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	589	147	1862	95.50	0.00	593	0.994	536	29.4	42.5	142.998	F
B	2	728	182	1581	138.50	0.00	730	0.997	671	28.8	43.0	118.124	F
C	2	666	167	2055	154.50	0.00	1058	0.629	645	22.3	27.6	55.933	E
	3	293	73	1581	55.50	0.00	292	1.001	259	18.2	26.7	184.909	F

17:45 - 18:00

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	589	147	1862	95.50	0.00	593	0.994	575	42.5	46.1	173.368	F
B	2	728	182	1581	138.50	0.00	730	0.997	711	43.0	47.2	147.008	F
C	2	666	167	2055	154.50	0.00	1058	0.629	666	27.6	27.6	56.016	E
	3	293	73	1581	55.50	0.00	292	1.001	282	26.7	29.5	230.738	F

18:00 - 18:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	481	120	1863	95.50	0.00	593	0.811	545	46.1	30.0	127.312	F
B	2	594	149	1581	138.50	0.00	730	0.814	666	47.2	29.3	98.797	F
C	2	544	136	2055	154.50	0.00	1058	0.514	565	27.6	22.3	50.394	D
	3	239	60	1581	55.50	0.00	292	0.818	272	29.5	21.4	206.104	F

18:15 - 18:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	403	101	1862	95.50	0.00	593	0.679	427	30.0	23.9	98.200	F
B	2	498	124	1581	138.50	0.00	730	0.682	522	29.3	23.3	70.950	E
C	2	455	114	2055	154.50	0.00	1058	0.430	470	22.3	18.6	47.042	D
	3	200	50	1581	55.50	0.00	292	0.685	227	21.4	14.7	135.511	F

Queueing Delay Results for each time segment

17:00 - 17:15

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	162.52	10.83	96.839	F
B	2	145.17	9.68	70.013	E
C	2	89.22	5.95	47.010	D
	3	107.99	7.20	129.420	F

17:15 - 17:30

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	217.75	14.52	108.660	F
B	2	203.30	13.55	82.108	F
C	2	114.06	7.60	50.332	D
	3	144.57	9.64	145.101	F

17:30 - 17:45

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	350.97	23.40	142.998	F
B	2	358.20	23.88	118.124	F
C	2	155.24	10.35	55.933	E
	3	225.64	15.04	184.909	F

17:45 - 18:00

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	425.51	28.37	173.368	F
B	2	445.79	29.72	147.008	F
C	2	155.47	10.36	56.016	E
	3	281.57	18.77	230.738	F

18:00 - 18:15

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	255.13	17.01	127.312	F
B	2	244.61	16.31	98.797	F
C	2	114.20	7.61	50.394	D
	3	205.36	13.69	206.104	F

18:15 - 18:30

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	164.80	10.99	98.200	F
B	2	147.11	9.81	70.950	E
C	2	89.28	5.95	47.042	D
	3	113.07	7.54	135.511	F

2047 - ND , AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Signalised		99.67	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	99.67	F

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2047 - ND	AM	ONE HOUR	08:00	09:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	864	100.000
B		ONE HOUR	✓	418	100.000
C		ONE HOUR	✓	393	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	426	438
	B	263	0	155
	C	287	106	0

Proportions

	To			
		A	B	C
	A	0.00	0.49	0.51
	B	0.63	0.00	0.37
	C	0.73	0.27	0.00

Vehicle Mix

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

Heavy Vehicle %

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

Average PCU Per Veh

	To			
		A	B	C
	A	1.000	1.100	1.100
	B	1.100	1.000	1.100
	C	1.100	1.100	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
A	08:00-08:15	650	650
	08:15-08:30	777	777
	08:30-08:45	951	951
	08:45-09:00	951	951
	09:00-09:15	777	777
	09:15-09:30	650	650
B	08:00-08:15	315	315
	08:15-08:30	376	376
	08:30-08:45	460	460
	08:45-09:00	460	460
	09:00-09:15	376	376
	09:15-09:30	315	315
C	08:00-08:15	296	296
	08:15-08:30	353	353
	08:30-08:45	433	433
	08:45-09:00	433	433
	09:00-09:15	353	353
	09:15-09:30	296	296

Results

Results Summary for whole modelled period

Arm	Max DOS	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
A	0.93	84.57	40.6	F	793	1189	1264.76	63.81	14.05	1266.90	63.92
B	0.92	143.13	31.8	F	384	575	1114.84	116.26	12.39	1119.12	116.71
C	0.94	86.64	22.2	F	361	541	646.20	71.68	7.18	646.71	71.73

Main Results for each time segment

08:00 - 08:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	650	163	1790	171.50	0.00	1023	0.636	555	0.0	23.9	47.147	D
B	2	315	79	1581	94.50	0.00	498	0.632	240	0.0	18.7	95.569	F
C	2	216	54	2055	198.50	0.00	1360	0.159	192	0.0	6.1	19.517	B
	3	80	20	1581	23.50	0.00	124	0.644	53	0.0	6.8	161.779	F

08:15 - 08:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	777	194	1790	171.50	0.00	1023	0.759	756	23.9	29.2	55.488	E
B	2	376	94	1581	94.50	0.00	498	0.755	359	18.7	22.9	105.493	F
C	2	258	65	2055	198.50	0.00	1360	0.190	253	6.1	7.3	20.044	C
	3	95	24	1581	23.50	0.00	124	0.770	88	6.8	8.6	181.616	F

08:30 - 08:45

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	951	238	1790	171.50	0.00	1023	0.930	909	29.2	39.8	77.739	E
B	2	460	115	1581	94.50	0.00	498	0.924	428	22.9	31.0	130.020	F
C	2	316	79	2055	198.50	0.00	1360	0.232	309	7.3	9.0	20.819	C
	3	117	29	1581	23.50	0.00	124	0.943	102	8.6	12.3	220.161	F

08:45 - 09:00

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	951	238	1790	171.50	0.00	1023	0.930	948	39.8	40.6	84.571	F
B	2	460	115	1581	94.50	0.00	498	0.924	457	31.0	31.8	143.132	F
C	2	316	79	2055	198.50	0.00	1360	0.232	316	9.0	9.0	20.819	C
	3	117	29	1581	23.50	0.00	124	0.943	113	12.3	13.2	264.836	F

09:00 - 09:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	777	194	1790	171.50	0.00	1023	0.759	822	40.6	29.4	57.333	E
B	2	376	94	1581	94.50	0.00	498	0.755	411	31.8	23.1	111.045	F
C	2	258	65	2055	198.50	0.00	1360	0.190	265	9.0	7.3	20.046	C
	3	95	24	1581	23.50	0.00	124	0.770	110	13.2	9.5	231.406	F

09:15 - 09:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	650	163	1790	171.50	0.00	1023	0.636	672	29.4	24.0	47.415	D
B	2	315	79	1581	94.50	0.00	498	0.632	332	23.1	18.7	96.622	F
C	2	216	54	2055	198.50	0.00	1360	0.159	221	7.3	6.1	19.518	B
	3	80	20	1581	23.50	0.00	124	0.644	90	9.5	7.0	178.957	F

Queueing Delay Results for each time segment

08:00 - 08:15

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	127.78	8.52	47.147	D
B	2	125.31	8.35	95.569	F
C	2	17.57	1.17	19.517	B
	3	53.79	3.59	161.779	F

08:15 - 08:30

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	179.58	11.97	55.488	E
B	2	165.17	11.01	105.493	F
C	2	21.55	1.44	20.044	C
	3	72.11	4.81	181.616	F

08:30 - 08:45

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	308.13	20.54	77.739	E
B	2	249.33	16.62	130.020	F
C	2	27.41	1.83	20.819	C
	3	107.06	7.14	220.161	F

08:45 - 09:00

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	335.21	22.35	84.571	F
B	2	274.47	18.30	143.132	F
C	2	27.41	1.83	20.819	C
	3	128.79	8.59	264.836	F

09:00 - 09:15

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	185.55	12.37	57.333	E
B	2	173.87	11.59	111.045	F
C	2	21.55	1.44	20.046	C
	3	91.88	6.13	231.406	F

09:15 - 09:30

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	128.51	8.57	47.415	D
B	2	126.69	8.45	96.622	F
C	2	17.57	1.17	19.518	B
	3	59.50	3.97	178.957	F

2047 - ND , PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Signalised		114.41	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	114.41	F

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2047 - ND	PM	ONE HOUR	17:00	18:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	550	100.000
B		ONE HOUR	✓	614	100.000
C		ONE HOUR	✓	848	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
From		A	B	C
	A	0	189	361
	B	352	0	262
	C	618	230	0

Proportions

	To			
From		A	B	C
	A	0.00	0.34	0.66
	B	0.57	0.00	0.43
	C	0.73	0.27	0.00

Vehicle Mix

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

Heavy Vehicle %

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

Average PCU Per Veh

	To			
From		A	B	C
	A	1.000	1.100	1.100
	B	1.100	1.000	1.100
	C	1.100	1.100	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
A	17:00-17:15	414	414
	17:15-17:30	494	494
	17:30-17:45	606	606
	17:45-18:00	606	606
	18:00-18:15	494	494
	18:15-18:30	414	414
B	17:00-17:15	462	462
	17:15-17:30	552	552
	17:30-17:45	676	676
	17:45-18:00	676	676
	18:00-18:15	552	552
	18:15-18:30	462	462
C	17:00-17:15	638	638
	17:15-17:30	762	762
	17:30-17:45	934	934
	17:45-18:00	934	934
	18:00-18:15	762	762
	18:15-18:30	638	638

Results

Results Summary for whole modelled period

Arm	Max DOS	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
A	0.94	137.56	40.1	F	505	757	1386.14	109.86	15.40	1391.10	110.25
B	0.95	119.60	38.5	F	563	845	1282.72	91.07	14.25	1286.12	91.31
C	0.95	95.64	51.2	F	778	1167	1574.14	80.92	17.49	1577.53	81.09

Main Results for each time segment

17:00 - 17:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	414	104	1863	103.50	0.00	643	0.644	321	0.0	23.3	89.082	F
B	2	462	116	1581	135.50	0.00	714	0.647	375	0.0	21.9	69.555	E
C	2	465	116	2055	157.50	0.00	1079	0.431	391	0.0	18.6	45.402	D
	3	173	43	1581	50.50	0.00	266	0.651	122	0.0	12.7	131.190	F

17:15 - 17:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	494	124	1863	103.50	0.00	643	0.769	474	23.3	28.6	98.757	F
B	2	552	138	1581	135.50	0.00	714	0.773	532	21.9	26.9	79.616	E
C	2	556	139	2055	157.50	0.00	1079	0.515	541	18.6	22.3	48.697	D
	3	207	52	1581	50.50	0.00	266	0.777	194	12.7	15.9	144.569	F

17:30 - 17:45

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	606	151	1863	103.50	0.00	643	0.942	564	28.6	38.9	123.996	F
B	2	676	169	1581	135.50	0.00	714	0.947	635	26.9	37.2	106.286	F
C	2	680	170	2055	157.50	0.00	1079	0.631	659	22.3	27.6	54.273	D
	3	253	63	1581	50.50	0.00	266	0.952	228	15.9	22.2	176.674	F

17:45 - 18:00

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	606	151	1863	103.50	0.00	643	0.942	601	38.9	40.1	137.558	F
B	2	676	169	1581	135.50	0.00	714	0.947	671	37.2	38.5	119.600	F
C	2	680	170	2055	157.50	0.00	1079	0.631	680	27.6	27.6	54.355	D
	3	253	63	1581	50.50	0.00	266	0.952	248	22.2	23.6	206.572	F

18:00 - 18:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	494	124	1863	103.50	0.00	643	0.769	540	40.1	28.8	103.915	F
B	2	552	138	1581	135.50	0.00	714	0.773	598	38.5	27.1	84.444	F
C	2	556	139	2055	157.50	0.00	1079	0.515	577	27.6	22.4	48.758	D
	3	207	52	1581	50.50	0.00	266	0.777	235	23.6	16.5	166.059	F

18:15 - 18:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	414	104	1863	103.50	0.00	643	0.644	436	28.8	23.4	89.819	F
B	2	462	116	1581	135.50	0.00	714	0.647	483	27.1	21.9	70.179	E
C	2	465	116	2055	157.50	0.00	1079	0.431	480	22.4	18.6	45.433	D
	3	173	43	1581	50.50	0.00	266	0.651	188	16.5	12.9	135.594	F

Queueing Delay Results for each time segment

17:00 - 17:15

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	153.69	10.25	89.082	F
B	2	133.97	8.93	69.555	E
C	2	88.02	5.87	45.402	D
	3	94.65	6.31	131.190	F

17:15 - 17:30

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	203.46	13.56	98.757	F
B	2	183.11	12.21	79.616	E
C	2	112.73	7.52	48.697	D
	3	124.55	8.30	144.569	F

17:30 - 17:45

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	312.86	20.86	123.996	F
B	2	299.38	19.96	106.286	F
C	2	153.87	10.26	54.273	D
	3	186.42	12.43	176.674	F

17:45 - 18:00

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	347.08	23.14	137.558	F
B	2	336.89	22.46	119.600	F
C	2	154.10	10.27	54.355	D
	3	217.96	14.53	206.572	F

18:00 - 18:15

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	214.08	14.27	103.915	F
B	2	194.21	12.95	84.444	F
C	2	112.87	7.52	48.758	D
	3	143.06	9.54	166.059	F

18:15 - 18:30

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	154.96	10.33	89.819	F
B	2	135.17	9.01	70.179	E
C	2	88.08	5.87	45.433	D
	3	97.83	6.52	135.594	F

2047 - WD , AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Signalised		105.84	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	105.84	F

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D15	2047 - WD	AM	ONE HOUR	08:00	09:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	407	100.000
B		ONE HOUR	✓	474	100.000
C		ONE HOUR	✓	882	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	From A	0	117	290
	From B	299	0	175
	From C	448	434	0

Proportions

	To			
		A	B	C
	From A	0.00	0.29	0.71
	From B	0.63	0.00	0.37
	From C	0.51	0.49	0.00

Vehicle Mix

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

Heavy Vehicle %

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

Average PCU Per Veh

	To			
		A	B	C
	From A	1.000	1.100	1.100
	From B	1.100	1.000	1.100
	From C	1.100	1.100	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
A	08:00-08:15	306	306
	08:15-08:30	366	366
	08:30-08:45	448	448
	08:45-09:00	448	448
	09:00-09:15	366	366
	09:15-09:30	306	306
B	08:00-08:15	357	357
	08:15-08:30	426	426
	08:30-08:45	522	522
	08:45-09:00	522	522
	09:00-09:15	426	426
	09:15-09:30	357	357
C	08:00-08:15	664	664
	08:15-08:30	793	793
	08:30-08:45	971	971
	08:45-09:00	971	971
	09:00-09:15	793	793
	09:15-09:30	664	664

Results

Results Summary for whole modelled period

Arm	Max DOS	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
A	0.91	145.08	32.2	F	373	560	1145.02	122.64	12.72	1149.92	123.16
B	0.90	120.18	31.8	F	435	652	1088.08	100.07	12.09	1091.65	100.39
C	0.90	80.03	47.3	F	809	1214	1384.97	68.45	15.39	1386.97	68.55

Main Results for each time segment

08:00 - 08:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	306	77	1892	78.50	0.00	495	0.619	228	0.0	19.5	104.925	F
B	2	357	89	1581	110.50	0.00	582	0.613	279	0.0	19.4	83.453	F
C	2	337	84	2055	182.50	0.00	1250	0.270	293	0.0	11.1	28.228	C
	3	327	82	1581	100.50	0.00	530	0.617	252	0.0	18.7	90.459	F

08:15 - 08:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	366	91	1892	78.50	0.00	495	0.739	349	19.5	23.8	113.708	F
B	2	426	107	1581	110.50	0.00	582	0.732	409	19.4	23.7	92.222	F
C	2	403	101	2055	182.50	0.00	1250	0.322	394	11.1	13.2	29.520	C
	3	390	98	1581	100.50	0.00	530	0.737	374	18.7	22.9	99.550	F

08:30 - 08:45

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	448	112	1892	78.50	0.00	495	0.905	417	23.8	31.6	134.977	F
B	2	522	130	1581	110.50	0.00	582	0.896	491	23.7	31.4	112.799	F
C	2	493	123	2055	182.50	0.00	1250	0.395	481	13.2	16.3	31.511	C
	3	478	119	1581	100.50	0.00	530	0.902	448	22.9	30.5	121.117	F

08:45 - 09:00

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	448	112	1892	78.50	0.00	495	0.905	446	31.6	32.2	145.078	F
B	2	522	130	1581	110.50	0.00	582	0.896	520	31.4	31.8	120.182	F
C	2	493	123	2055	182.50	0.00	1250	0.395	493	16.3	16.3	31.517	C
	3	478	119	1581	100.50	0.00	530	0.902	476	30.5	31.0	130.107	F

09:00 - 09:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	366	91	1892	78.50	0.00	495	0.739	399	32.2	24.0	117.854	F
B	2	426	107	1581	110.50	0.00	582	0.732	458	31.8	23.8	94.970	F
C	2	403	101	2055	182.50	0.00	1250	0.322	415	16.3	13.2	29.526	C
	3	390	98	1581	100.50	0.00	530	0.737	422	31.0	23.1	103.091	F

09:15 - 09:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	306	77	1892	78.50	0.00	495	0.619	324	24.0	19.5	105.848	F
B	2	357	89	1581	110.50	0.00	582	0.613	374	23.8	19.4	84.084	F
C	2	337	84	2055	182.50	0.00	1250	0.270	346	13.2	11.1	28.233	C
	3	327	82	1581	100.50	0.00	530	0.617	344	23.1	18.8	91.253	F

Queueing Delay Results for each time segment

08:00 - 08:15

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	133.96	8.93	104.925	F
B	2	124.08	8.27	83.453	F
C	2	39.67	2.64	28.228	C
	3	123.15	8.21	90.459	F

08:15 - 08:30

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	173.35	11.56	113.708	F
B	2	163.74	10.92	92.222	F
C	2	49.54	3.30	29.520	C
	3	161.83	10.79	99.550	F

08:30 - 08:45

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	252.02	16.80	134.977	F
B	2	245.28	16.35	112.799	F
C	2	64.76	4.32	31.511	C
	3	241.15	16.08	121.117	F

08:45 - 09:00

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	270.88	18.06	145.078	F
B	2	261.34	17.42	120.182	F
C	2	64.77	4.32	31.517	C
	3	259.05	17.27	130.107	F

09:00 - 09:15

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	179.67	11.98	117.854	F
B	2	168.62	11.24	94.970	F
C	2	49.55	3.30	29.526	C
	3	167.59	11.17	103.091	F

09:15 - 09:30

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	135.14	9.01	105.848	F
B	2	125.02	8.33	84.084	F
C	2	39.68	2.65	28.233	C
	3	124.23	8.28	91.253	F

2047 - WD, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Signalised		390.69	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	390.69	F

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D16	2047 - WD	PM	ONE HOUR	17:00	18:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	903	100.000
B		ONE HOUR	✓	684	100.000
C		ONE HOUR	✓	556	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
From		A	B	C
	A	0	274	629
	B	392	0	292
	C	365	191	0

Proportions

	To			
From		A	B	C
	A	0.00	0.30	0.70
	B	0.57	0.00	0.43
	C	0.66	0.34	0.00

Vehicle Mix

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

Heavy Vehicle %

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

Average PCU Per Veh

	To			
From		A	B	C
	A	1.000	1.100	1.100
	B	1.100	1.000	1.100
	C	1.100	1.100	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
A	17:00-17:15	680	680
	17:15-17:30	812	812
	17:30-17:45	994	994
	17:45-18:00	994	994
	18:00-18:15	812	812
	18:15-18:30	680	680
B	17:00-17:15	515	515
	17:15-17:30	615	615
	17:30-17:45	753	753
	17:45-18:00	753	753
	18:00-18:15	615	615
	18:15-18:30	515	515
C	17:00-17:15	419	419
	17:15-17:30	500	500
	17:30-17:45	612	612
	17:45-18:00	612	612
	18:00-18:15	500	500
	18:15-18:30	419	419

Results

Results Summary for whole modelled period

Arm	Max DOS	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
A	1.18	439.91	122.7	F	829	1243	5109.99	246.68	56.78	5203.86	251.21
B	1.18	453.25	96.5	F	628	941	4066.36	259.15	45.18	4147.68	264.33
C	1.19	233.80	50.1	F	510	765	1946.77	152.63	21.63	1958.85	153.58

Main Results for each time segment

17:00 - 17:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	680	170	1884	134.50	0.00	845	0.805	547	0.0	33.3	81.574	F
B	2	515	129	1581	121.50	0.00	640	0.804	405	0.0	27.5	91.641	F
C	2	275	69	2055	171.50	0.00	1175	0.234	235	0.0	9.9	32.384	C
	3	144	36	1581	33.50	0.00	177	0.815	94	0.0	12.4	166.936	F

17:15 - 17:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	812	203	1884	134.50	0.00	844	0.961	765	33.3	45.0	107.698	F
B	2	615	154	1581	121.50	0.00	640	0.960	575	27.5	37.5	119.535	F
C	2	328	82	2055	171.50	0.00	1175	0.279	320	9.9	11.8	33.532	C
	3	172	43	1581	33.50	0.00	177	0.973	152	12.4	17.3	208.945	F

17:30 - 17:45

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	994	249	1883	134.50	0.00	844	1.177	834	45.0	85.1	169.763	F
B	2	753	188	1581	121.50	0.00	640	1.176	631	37.5	68.0	181.502	F
C	2	402	100	2055	171.50	0.00	1175	0.342	391	11.8	14.5	35.258	D
	3	210	53	1581	33.50	0.00	177	1.191	172	17.3	27.0	275.169	F

17:45 - 18:00

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	994	249	1883	134.50	0.00	844	1.177	844	85.1	122.7	306.573	F
B	2	753	188	1581	121.50	0.00	640	1.176	639	68.0	96.5	318.308	F
C	2	402	100	2055	171.50	0.00	1175	0.342	402	14.5	14.5	35.262	D
	3	210	53	1581	33.50	0.00	177	1.191	175	27.0	35.7	428.398	F

18:00 - 18:15

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	812	203	1884	134.50	0.00	844	0.961	838	122.7	116.2	439.907	F
B	2	615	154	1581	121.50	0.00	640	0.960	634	96.5	91.7	453.248	F
C	2	328	82	2055	171.50	0.00	1175	0.279	339	14.5	11.8	33.536	C
	3	172	43	1581	33.50	0.00	177	0.973	172	35.7	35.7	616.509	F

18:15 - 18:30

Arm	Traffic Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Calculated saturation flow (PCU/hr)	Effective green time (s)	NEEG (s)	Capacity (PCU/hr)	DOS	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Signalised level of service
A	2	680	170	1884	134.50	0.00	845	0.805	868	116.2	69.2	371.894	F
B	2	515	129	1581	121.50	0.00	640	0.804	658	91.7	55.9	388.630	F
C	2	275	69	2055	171.50	0.00	1175	0.234	283	11.8	9.9	32.387	C
	3	144	36	1581	33.50	0.00	177	0.815	181	35.7	26.3	593.794	F

Queueing Delay Results for each time segment

17:00 - 17:15

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	231.07	15.40	81.574	F
B	2	196.63	13.11	91.641	F
C	2	37.08	2.47	32.384	C
	3	100.02	6.67	166.936	F

17:15 - 17:30

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	364.28	24.29	107.698	F
B	2	306.26	20.42	119.535	F
C	2	45.84	3.06	33.532	C
	3	149.49	9.97	208.945	F

17:30 - 17:45

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	703.26	46.88	169.763	F
B	2	569.54	37.97	181.502	F
C	2	59.04	3.94	35.258	D
	3	241.11	16.07	275.169	F

17:45 - 18:00

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	1270.01	84.67	306.573	F
B	2	998.82	66.59	318.308	F
C	2	59.05	3.94	35.262	D
	3	375.37	25.02	428.398	F

18:00 - 18:15

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	1487.94	99.20	439.907	F
B	2	1161.26	77.42	453.248	F
C	2	45.85	3.06	33.536	C
	3	441.07	29.40	616.509	F

18:15 - 18:30

Arm	Traffic Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Signalised level of service
A	2	1053.43	70.23	371.894	F
B	2	833.86	55.59	388.630	F
C	2	37.08	2.47	32.387	C
	3	355.77	23.72	593.794	F

Junctions 10		
ARCADY 10 - Roundabout Module		
Version: 10.1.2.2275		
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Filename: Junction 8.j10

Path: C:\Users\kearn\OneDrive\2023 Projects\P230400423 - DUBLIN, Boherboy LRD\5.0 Calculations\5.3
Higways\Modelling\2023 Boherboy

Report generation date: 03/12/2025 21:18:59

»Existing - 2025 Survey , AM
 »Existing - 2025 Committed , AM
 »Existing - 2032 - ND, AM
 »Existing - 2032 - WD, AM
 »Existing - 2037 - ND, AM
 »Existing - 2037 - WD, AM
 »Existing - 2047 - ND, AM
 »Existing - 2025 Survey , PM
 »Existing - 2025 Committed , PM
 »Existing - 2032 - ND, PM
 »Existing - 2032 - WD, PM
 »Existing - 2037 - ND, PM
 »Existing - 2037 - WD, PM
 »Existing - 2047 - ND, PM
 »Existing - 2047 - WD , AM
 »Existing - 2047 - WD, PM

Summary of junction performance

	AM			PM		
	Queue (PCU)	Delay (min)	RFC	Queue (PCU)	Delay (min)	RFC
Existing - 2025 Survey						
Arm 1	0.4	0.08	0.29	0.7	0.11	0.41
Arm 2	1.3	0.11	0.54	0.8	0.10	0.43
Arm 3	0.4	0.07	0.25	0.3	0.06	0.20
Arm 4	1.3	0.11	0.55	1.8	0.12	0.62
Existing - 2025 Committed						
Arm 1	0.3	0.07	0.23	0.4	0.08	0.29
Arm 2	0.9	0.09	0.44	0.5	0.08	0.32
Arm 3	0.1	0.05	0.11	0.1	0.05	0.06
Arm 4	0.9	0.08	0.44	1.0	0.09	0.47
Existing - 2032 - ND						
Arm 1	0.5	0.09	0.30	0.7	0.12	0.40
Arm 2	1.4	0.14	0.57	0.5	0.07	0.35
Arm 3	0.1	0.06	0.12	0.1	0.06	0.08
Arm 4	2.5	0.16	0.70	1.7	0.14	0.61
Existing - 2032 - WD						
Arm 1	0.4	0.07	0.27	0.6	0.10	0.37
Arm 2	1.1	0.10	0.50	0.7	0.09	0.41
Arm 3	0.3	0.06	0.24	0.3	0.06	0.19
Arm 4	1.1	0.10	0.51	1.5	0.11	0.58
Existing - 2037 - ND						
Arm 1	0.4	0.07	0.25	0.5	0.09	0.32
Arm 2	1.0	0.10	0.48	0.6	0.08	0.35
Arm 3	0.1	0.06	0.12	0.1	0.05	0.07
Arm 4	1.0	0.09	0.48	1.2	0.09	0.52
Existing - 2037 - WD						
Arm 1	0.4	0.08	0.28	0.7	0.11	0.38
Arm 2	1.1	0.11	0.51	0.8	0.09	0.42
Arm 3	0.3	0.07	0.24	0.3	0.06	0.20
Arm 4	1.2	0.10	0.52	1.6	0.12	0.59
Existing - 2047 - ND						
Arm 1	0.4	0.07	0.25	0.5	0.09	0.32
Arm 2	1.0	0.10	0.48	0.6	0.08	0.35
Arm 3	0.1	0.06	0.12	0.1	0.05	0.07
Arm 4	1.0	0.09	0.48	1.2	0.09	0.52
Existing - 2047 - WD						
Arm 1	0.4	0.08	0.29	0.7	0.11	0.41
Arm 2	1.3	0.11	0.54	0.8	0.10	0.43
Arm 3	0.4	0.07	0.25	0.3	0.06	0.20
Arm 4	1.3	0.11	0.55	1.8	0.12	0.62

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

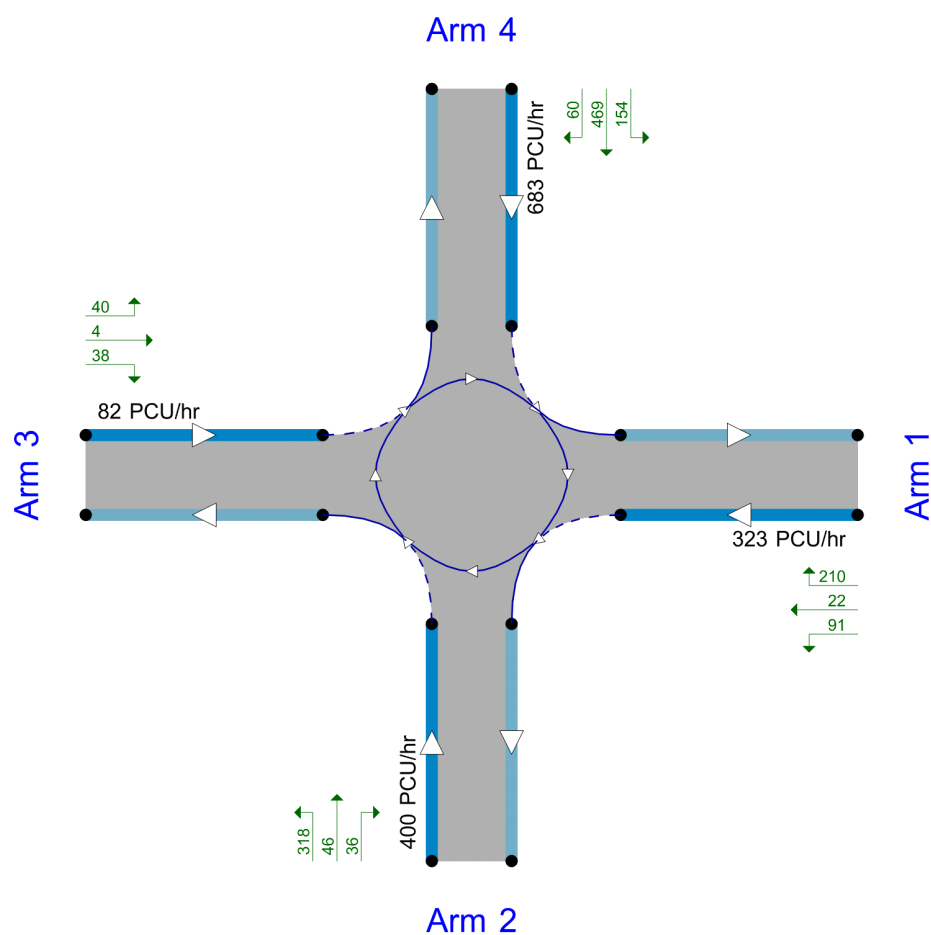
File summary

File Description

Title	P230400423 - DUBLIN, Boherboy LRD
Location	SITE 8
Site number	
Date	01/12/2025
Version	
Status	PLANNING
Identifier	
Client	
Jobnumber	
Enumerator	PINNACLE\JM
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	min	-Min	perMin



Flows show original traffic demand (PCU/hr).

The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	RFC Threshold	Average Delay threshold (min)	Queue threshold (PCU)	Use simulation for HCM roundabouts	Use iterations for HCM roundabouts
5.75						0.85	0.60	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	2025 Survey	AM	ONE HOUR	08:00	09:30	15	✓
D2	2025 Committed	AM	ONE HOUR	08:00	09:30	15	✓
D3	2032 - ND	AM	ONE HOUR	08:00	09:30	15	✓
D4	2032 - WD	AM	ONE HOUR	08:00	09:30	15	✓
D5	2037 - ND	AM	ONE HOUR	08:00	09:30	15	✓
D6	2037 - WD	AM	ONE HOUR	08:00	09:30	15	✓
D7	2047 - ND	AM	ONE HOUR	08:00	09:30	15	✓
D8	2025 Survey	PM	ONE HOUR	17:00	18:30	15	✓
D9	2025 Committed	PM	ONE HOUR	17:00	18:30	15	✓
D10	2032 - ND	PM	ONE HOUR	17:00	18:30	15	✓
D11	2032 - WD	PM	ONE HOUR	17:00	18:30	15	✓
D12	2037 - ND	PM	ONE HOUR	17:00	18:30	15	✓
D13	2037 - WD	PM	ONE HOUR	17:00	18:30	15	✓
D14	2047 - ND	PM	ONE HOUR	17:00	18:30	15	✓
D15	2047 - WD	AM	ONE HOUR	08:00	09:30	15	✓
D16	2047 - WD	PM	ONE HOUR	17:00	18:30	15	✓

Analysis Set Details

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

Existing - 2025 Survey , AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (min)	Junction LOS
1-1	(untitled)	Standard Roundabout		1, 2, 3, 4	0.10	A

Junction Network

Driving side	Lighting	Network delay (min)	Network LOS
Left	Normal/unknown	0.10	A

Arms

Arms

Arm	Name	Description	No give-way line
1	Magna Drive		
2	N82-S		
3	Corbally Access		
4	N82 - N		

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Entry only	Exit only
1	3.75	6.00	6.4	29.1	36.3	27.3		
2	3.75	6.22	5.0	21.7	40.2	26.2		
3	4.00	6.10	6.3	40.0	36.0	27.2		
4	3.75	6.04	6.8	29.6	36.2	27.3		

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.615	1494
2	0.597	1451
3	0.634	1571
4	0.619	1508

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2025 Survey	AM	ONE HOUR	08:00	09:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	316	100.000
2		ONE HOUR	✓	609	100.000
3		ONE HOUR	✓	298	100.000
4		ONE HOUR	✓	653	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
	1	2	3	4	
From	1	0	65	24	227
	2	104	0	477	28
	3	64	109	0	125
	4	333	268	52	0

Vehicle Mix

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

Heavy Vehicle %

	To				
	1	2	3	4	
From	1	0	10	10	10
	2	10	0	10	10
	3	10	10	0	10
	4	10	10	10	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (min)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.29	0.08	0.4	A	290	435
2	0.54	0.11	1.3	A	559	838
3	0.25	0.07	0.4	A	273	410
4	0.55	0.11	1.3	A	599	899

Main Results for each time segment

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 (min)	Unsignalised level of service
1	238	59	321	1296	0.184	237	375	0.0	0.2	0.062	A
2	458	115	227	1315	0.349	456	331	0.0	0.6	0.077	A
3	224	56	269	1400	0.160	224	414	0.0	0.2	0.056	A
4	492	123	208	1379	0.356	489	285	0.0	0.6	0.074	A

08:15 - 08:30

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 (min)	Unsignalised level of service
1	284	71	385	1257	0.226	284	450	0.2	0.3	0.068	A
2	547	137	272	1288	0.425	547	397	0.6	0.8	0.089	A
3	268	67	322	1366	0.196	268	496	0.2	0.3	0.060	A
4	587	147	249	1354	0.434	586	341	0.6	0.8	0.086	A

08:30 - 08:45

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 (min)	Unsignalised level of service
1	348	87	471	1204	0.289	347	550	0.3	0.4	0.077	A
2	671	168	333	1252	0.536	669	486	0.8	1.2	0.113	A
3	328	82	395	1320	0.249	328	607	0.3	0.4	0.066	A
4	719	180	304	1319	0.545	717	418	0.8	1.3	0.109	A

08:45 - 09:00

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 (min)	Unsignalised level of service
1	348	87	472	1203	0.289	348	552	0.4	0.4	0.077	A
2	671	168	334	1252	0.536	670	487	1.2	1.3	0.114	A
3	328	82	395	1320	0.249	328	609	0.4	0.4	0.067	A
4	719	180	305	1319	0.545	719	418	1.3	1.3	0.110	A

09:00 - 09:15

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 (min)	Unsignalised level of service
1	284	71	387	1256	0.226	285	452	0.4	0.3	0.068	A
2	547	137	273	1288	0.425	549	398	1.3	0.8	0.090	A
3	268	67	323	1365	0.196	268	499	0.4	0.3	0.060	A
4	587	147	250	1353	0.434	589	342	1.3	0.9	0.087	A

09:15 - 09:30

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 (min)	Unsignalised level of service
1	238	59	324	1295	0.184	238	378	0.3	0.2	0.062	A
2	458	115	228	1314	0.349	459	333	0.8	0.6	0.077	A
3	224	56	271	1399	0.160	225	417	0.3	0.2	0.056	A
4	492	123	209	1379	0.357	493	286	0.9	0.6	0.075	A

Existing - 2025 Committed , AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (min)	Junction LOS
1-1	(untitled)	Standard Roundabout		1, 2, 3, 4	0.08	A

Junction Network

Driving side	Lighting	Network delay (min)	Network LOS
Left	Normal/unknown	0.08	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2025 Committed	AM	ONE HOUR	08:00	09:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	264	100.000
2		ONE HOUR	✓	520	100.000
3		ONE HOUR	✓	131	100.000
4		ONE HOUR	✓	554	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
	1	2	3	4	
From	1	0	56	13	195
	2	90	0	415	15
	3	28	48	0	55
	4	291	234	29	0

Vehicle Mix

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

Heavy Vehicle %

	To				
	1	2	3	4	
From	1	0	10	10	10
	2	10	0	10	10
	3	10	10	0	10
	4	10	10	10	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (min)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.23	0.07	0.3	A	242	363
2	0.44	0.09	0.9	A	477	716
3	0.11	0.05	0.1	A	120	180
4	0.44	0.08	0.9	A	508	763

Main Results for each time segment

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 (min)	Unsignalised level of service
1	199	50	233	1350	0.147	198	307	0.0	0.2	0.057	A
2	391	98	178	1345	0.291	390	253	0.0	0.4	0.069	A
3	99	25	225	1428	0.069	98	342	0.0	0.1	0.050	A
4	417	104	124	1431	0.292	415	199	0.0	0.4	0.065	A

08:15 - 08:30

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 (min)	Unsignalised level of service
1	237	59	279	1322	0.180	237	367	0.2	0.2	0.061	A
2	467	117	213	1324	0.353	467	304	0.4	0.6	0.077	A
3	118	29	269	1400	0.084	118	410	0.1	0.1	0.051	A
4	498	125	149	1416	0.352	497	238	0.4	0.6	0.072	A

08:30 - 08:45

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 (min)	Unsignalised level of service
1	291	73	342	1284	0.226	290	450	0.2	0.3	0.066	A
2	573	143	261	1295	0.442	571	372	0.6	0.9	0.091	A
3	144	36	330	1361	0.106	144	502	0.1	0.1	0.054	A
4	610	152	183	1395	0.437	609	291	0.6	0.8	0.084	A

08:45 - 09:00

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 (min)	Unsignalised level of service
1	291	73	342	1283	0.227	291	450	0.3	0.3	0.066	A
2	573	143	261	1295	0.442	573	372	0.9	0.9	0.091	A
3	144	36	330	1361	0.106	144	503	0.1	0.1	0.054	A
4	610	152	183	1395	0.437	610	292	0.8	0.9	0.084	A

09:00 - 09:15

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 (min)	Unsignalised level of service
1	237	59	280	1322	0.180	238	368	0.3	0.2	0.061	A
2	467	117	213	1323	0.353	469	304	0.9	0.6	0.077	A
3	118	29	270	1399	0.084	118	412	0.1	0.1	0.051	A
4	498	125	149	1415	0.352	499	239	0.9	0.6	0.072	A

09:15 - 09:30

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 (min)	Unsignalised level of service
1	199	50	234	1350	0.147	199	308	0.2	0.2	0.057	A
2	391	98	179	1344	0.291	392	255	0.6	0.5	0.069	A
3	99	25	226	1427	0.069	99	345	0.1	0.1	0.050	A
4	417	104	125	1430	0.292	418	200	0.6	0.5	0.065	A

Existing - 2032 - ND, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (min)	Junction LOS
1-1	(untitled)	Standard Roundabout		1, 2, 3, 4	0.13	A

Junction Network

Driving side	Lighting	Network delay (min)	Network LOS
Left	Normal/unknown	0.13	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2032 - ND	AM	ONE HOUR	08:00	09:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	288	100.000
2		ONE HOUR	✓	564	100.000
3		ONE HOUR	✓	143	100.000
4		ONE HOUR	✓	881	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
	1	2	3	4	
From	1	0	61	14	213
	2	98	0	450	16
	3	31	52	0	60
	4	314	253	314	0

Vehicle Mix

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

Heavy Vehicle %

	To				
	1	2	3	4	
From	1	0	10	10	10
	2	10	0	10	10
	3	10	10	0	10
	4	10	10	10	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (min)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.30	0.09	0.5	A	264	396
2	0.57	0.14	1.4	A	518	776
3	0.12	0.06	0.1	A	131	197
4	0.70	0.16	2.5	A	808	1213

Main Results for each time segment

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 (min)	Unsignalised level of service
1	217	54	463	1209	0.179	216	332	0.0	0.2	0.066	A
2	425	106	405	1209	0.351	422	274	0.0	0.6	0.084	A
3	108	27	245	1415	0.076	107	582	0.0	0.1	0.050	A
4	663	166	136	1424	0.466	659	217	0.0	0.9	0.086	A

08:15 - 08:30

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 (min)	Unsignalised level of service
1	259	65	555	1152	0.225	259	397	0.2	0.3	0.074	A
2	507	127	485	1161	0.437	506	328	0.6	0.8	0.101	A
3	129	32	294	1384	0.093	128	698	0.1	0.1	0.053	A
4	792	198	162	1407	0.563	790	260	0.9	1.4	0.107	A

08:30 - 08:45

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 (min)	Unsignalised level of service
1	317	79	679	1076	0.295	317	486	0.3	0.5	0.087	A
2	621	155	594	1097	0.566	619	402	0.8	1.4	0.137	A
3	157	39	359	1343	0.117	157	853	0.1	0.1	0.056	A
4	970	242	199	1385	0.700	966	318	1.4	2.5	0.156	A

08:45 - 09:00

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 (min)	Unsignalised level of service
1	317	79	681	1075	0.295	317	488	0.5	0.5	0.087	A
2	621	155	596	1095	0.567	621	403	1.4	1.4	0.139	A
3	157	39	360	1342	0.117	157	856	0.1	0.1	0.056	A
4	970	242	199	1385	0.701	970	318	2.5	2.5	0.159	A

09:00 - 09:15

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 (min)	Unsignalised level of service
1	259	65	559	1150	0.225	259	400	0.5	0.3	0.074	A
2	507	127	488	1159	0.437	509	330	1.4	0.9	0.102	A
3	129	32	295	1384	0.093	129	703	0.1	0.1	0.053	A
4	792	198	163	1407	0.563	796	260	2.5	1.4	0.109	A

09:15 - 09:30

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 (min)	Unsignalised level of service
1	217	54	467	1206	0.180	217	334	0.3	0.2	0.067	A
2	425	106	408	1207	0.352	426	276	0.9	0.6	0.085	A
3	108	27	247	1414	0.076	108	587	0.1	0.1	0.051	A
4	663	166	137	1423	0.466	665	218	1.4	1.0	0.087	A

Existing - 2032 - WD, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (min)	Junction LOS
1-1	(untitled)	Standard Roundabout		1, 2, 3, 4	0.09	A

Junction Network

Driving side	Lighting	Network delay (min)	Network LOS
Left	Normal/unknown	0.09	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2032 - WD	AM	ONE HOUR	08:00	09:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	297	100.000
2		ONE HOUR	✓	575	100.000
3		ONE HOUR	✓	288	100.000
4		ONE HOUR	✓	617	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
	1	2	3	4	
From	1	0	61	23	213
	2	98	0	450	27
	3	62	105	0	121
	4	314	253	50	0

Vehicle Mix

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

Heavy Vehicle %

	To				
	1	2	3	4	
From	1	0	10	10	10
	2	10	0	10	10
	3	10	10	0	10
	4	10	10	10	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (min)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.27	0.07	0.4	A	273	409
2	0.50	0.10	1.1	A	528	791
3	0.24	0.06	0.3	A	264	396
4	0.51	0.10	1.1	A	566	849

Main Results for each time segment

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 (min)	Unsignalised level of service
1	224	56	306	1306	0.171	223	355	0.0	0.2	0.061	A
2	433	108	214	1323	0.327	431	314	0.0	0.5	0.074	A
3	217	54	253	1410	0.154	216	392	0.0	0.2	0.055	A
4	465	116	199	1385	0.335	462	271	0.0	0.6	0.071	A

08:15 - 08:30

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 (min)	Unsignalised level of service
1	267	67	366	1269	0.210	267	426	0.2	0.3	0.066	A
2	517	129	257	1298	0.398	516	376	0.5	0.7	0.084	A
3	259	65	304	1378	0.188	259	469	0.2	0.3	0.059	A
4	555	139	238	1361	0.408	554	324	0.6	0.8	0.082	A

08:30 - 08:45

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 (min)	Unsignalised level of service
1	327	82	448	1218	0.268	327	521	0.3	0.4	0.074	A
2	633	158	314	1263	0.501	632	460	0.7	1.1	0.104	A
3	317	79	372	1335	0.238	317	575	0.3	0.3	0.065	A
4	679	170	291	1328	0.512	678	397	0.8	1.1	0.101	A

08:45 - 09:00

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 (min)	Unsignalised level of service
1	327	82	449	1218	0.269	327	522	0.4	0.4	0.074	A
2	633	158	315	1263	0.501	633	461	1.1	1.1	0.105	A
3	317	79	372	1335	0.238	317	576	0.3	0.3	0.065	A
4	679	170	292	1327	0.512	679	397	1.1	1.1	0.102	A

09:00 - 09:15

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 (min)	Unsignalised level of service
1	267	67	368	1268	0.211	267	427	0.4	0.3	0.066	A
2	517	129	258	1297	0.399	518	378	1.1	0.7	0.085	A
3	259	65	304	1377	0.188	259	471	0.3	0.3	0.059	A
4	555	139	239	1360	0.408	556	325	1.1	0.8	0.082	A

09:15 - 09:30

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 (min)	Unsignalised level of service
1	224	56	308	1305	0.171	224	357	0.3	0.2	0.061	A
2	433	108	216	1322	0.327	434	316	0.7	0.5	0.074	A
3	217	54	255	1409	0.154	217	394	0.3	0.2	0.055	A
4	465	116	200	1384	0.336	465	272	0.8	0.6	0.072	A

Existing - 2037 - ND, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (min)	Junction LOS
1-1	(untitled)	Standard Roundabout		1, 2, 3, 4	0.09	A

Junction Network

Driving side	Lighting	Network delay (min)	Network LOS
Left	Normal/unknown	0.09	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2037 - ND	AM	ONE HOUR	08:00	09:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	288	100.000
2		ONE HOUR	✓	564	100.000
3		ONE HOUR	✓	143	100.000
4		ONE HOUR	✓	599	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
	1	2	3	4	
From	1	0	61	14	213
	2	98	0	450	16
	3	31	52	0	60
	4	314	253	32	0

Vehicle Mix

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

Heavy Vehicle %

	To				
	1	2	3	4	
From	1	0	10	10	10
	2	10	0	10	10
	3	10	10	0	10
	4	10	10	10	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (min)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.25	0.07	0.4	A	264	396
2	0.48	0.10	1.0	A	518	776
3	0.12	0.06	0.1	A	131	197
4	0.48	0.09	1.0	A	550	824

Main Results for each time segment

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 (min)	Unsignalised level of service
1	217	54	253	1339	0.162	216	332	0.0	0.2	0.059	A
2	425	106	194	1335	0.318	423	274	0.0	0.5	0.072	A
3	108	27	245	1415	0.076	107	372	0.0	0.1	0.050	A
4	451	113	136	1424	0.317	449	217	0.0	0.5	0.068	A

08:15 - 08:30

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 (min)	Unsignalised level of service
1	259	65	303	1308	0.198	259	398	0.2	0.3	0.063	A
2	507	127	233	1312	0.386	506	329	0.5	0.7	0.082	A
3	129	32	294	1384	0.093	128	445	0.1	0.1	0.053	A
4	538	135	163	1407	0.383	538	260	0.5	0.7	0.076	A

08:30 - 08:45

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 (min)	Unsignalised level of service
1	317	79	370	1266	0.250	317	487	0.3	0.4	0.069	A
2	621	155	285	1281	0.485	620	402	0.7	1.0	0.100	A
3	157	39	359	1343	0.117	157	545	0.1	0.1	0.056	A
4	660	165	199	1385	0.476	658	318	0.7	1.0	0.091	A

08:45 - 09:00

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 (min)	Unsignalised level of service
1	317	79	371	1266	0.251	317	488	0.4	0.4	0.070	A
2	621	155	285	1281	0.485	621	403	1.0	1.0	0.100	A
3	157	39	360	1342	0.117	157	546	0.1	0.1	0.056	A
4	660	165	199	1385	0.476	659	318	1.0	1.0	0.091	A

09:00 - 09:15

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 (min)	Unsignalised level of service
1	259	65	304	1307	0.198	259	399	0.4	0.3	0.063	A
2	507	127	233	1312	0.387	508	330	1.0	0.7	0.082	A
3	129	32	295	1384	0.093	129	447	0.1	0.1	0.053	A
4	538	135	163	1407	0.383	540	260	1.0	0.7	0.076	A

09:15 - 09:30

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 (min)	Unsignalised level of service
1	217	54	254	1338	0.162	217	334	0.3	0.2	0.059	A
2	425	106	195	1334	0.318	425	276	0.7	0.5	0.073	A
3	108	27	247	1414	0.076	108	374	0.1	0.1	0.051	A
4	451	113	136	1423	0.317	452	218	0.7	0.5	0.068	A

Existing - 2037 - WD, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (min)	Junction LOS
1-1	(untitled)	Standard Roundabout		1, 2, 3, 4	0.09	A

Junction Network

Driving side	Lighting	Network delay (min)	Network LOS
Left	Normal/unknown	0.09	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2037 - WD	AM	ONE HOUR	08:00	09:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	304	100.000
2		ONE HOUR	✓	586	100.000
3		ONE HOUR	✓	291	100.000
4		ONE HOUR	✓	629	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
	1	2	3	4	
From	1	0	62	24	218
	2	100	0	459	27
	3	62	107	0	122
	4	321	258	50	0

Vehicle Mix

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

Heavy Vehicle %

	To				
	1	2	3	4	
From	1	0	10	10	10
	2	10	0	10	10
	3	10	10	0	10
	4	10	10	10	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (min)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.28	0.08	0.4	A	279	418
2	0.51	0.11	1.1	A	538	807
3	0.24	0.07	0.3	A	267	401
4	0.52	0.10	1.2	A	577	866

Main Results for each time segment

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 (min)	Unsignalised level of service
1	229	57	311	1303	0.176	228	362	0.0	0.2	0.061	A
2	441	110	219	1320	0.334	439	320	0.0	0.5	0.075	A
3	219	55	259	1407	0.156	218	399	0.0	0.2	0.056	A
4	474	118	202	1383	0.342	471	275	0.0	0.6	0.072	A

08:15 - 08:30

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 (min)	Unsignalised level of service
1	273	68	373	1265	0.216	273	434	0.2	0.3	0.067	A
2	527	132	262	1294	0.407	526	383	0.5	0.7	0.086	A
3	262	65	310	1374	0.190	261	478	0.2	0.3	0.059	A
4	565	141	242	1358	0.416	565	330	0.6	0.8	0.083	A

08:30 - 08:45

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 (min)	Unsignalised level of service
1	335	84	456	1213	0.276	334	531	0.3	0.4	0.075	A
2	645	161	321	1259	0.512	644	469	0.7	1.1	0.107	A
3	320	80	379	1330	0.241	320	585	0.3	0.3	0.065	A
4	693	173	296	1325	0.523	691	404	0.8	1.2	0.104	A

08:45 - 09:00

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 (min)	Unsignalised level of service
1	335	84	457	1213	0.276	335	532	0.4	0.4	0.075	A
2	645	161	321	1259	0.512	645	470	1.1	1.1	0.108	A
3	320	80	380	1330	0.241	320	587	0.3	0.3	0.065	A
4	693	173	296	1325	0.523	693	404	1.2	1.2	0.104	A

09:00 - 09:15

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 (min)	Unsignalised level of service
1	273	68	374	1264	0.216	274	435	0.4	0.3	0.067	A
2	527	132	263	1294	0.407	528	385	1.1	0.8	0.086	A
3	262	65	311	1373	0.190	262	481	0.3	0.3	0.059	A
4	565	141	242	1358	0.416	567	330	1.2	0.8	0.084	A

09:15 - 09:30

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 (min)	Unsignalised level of service
1	229	57	313	1301	0.176	229	364	0.3	0.2	0.062	A
2	441	110	220	1319	0.334	442	322	0.8	0.6	0.075	A
3	219	55	260	1406	0.156	219	402	0.3	0.2	0.056	A
4	474	118	203	1382	0.343	474	277	0.8	0.6	0.073	A

Existing - 2047 - ND, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (min)	Junction LOS
1-1	(untitled)	Standard Roundabout		1, 2, 3, 4	0.09	A

Junction Network

Driving side	Lighting	Network delay (min)	Network LOS
Left	Normal/unknown	0.09	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2047 - ND	AM	ONE HOUR	08:00	09:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	288	100.000
2		ONE HOUR	✓	564	100.000
3		ONE HOUR	✓	143	100.000
4		ONE HOUR	✓	599	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
	1	2	3	4	
From	1	0	61	14	213
	2	98	0	450	16
	3	31	52	0	60
	4	314	253	32	0

Vehicle Mix

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

Heavy Vehicle %

	To				
	1	2	3	4	
From	1	0	10	10	10
	2	10	0	10	10
	3	10	10	0	10
	4	10	10	10	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (min)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.25	0.07	0.4	A	264	396
2	0.48	0.10	1.0	A	518	776
3	0.12	0.06	0.1	A	131	197
4	0.48	0.09	1.0	A	550	824

Main Results for each time segment

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 (min)	Unsignalised level of service
1	217	54	253	1339	0.162	216	332	0.0	0.2	0.059	A
2	425	106	194	1335	0.318	423	274	0.0	0.5	0.072	A
3	108	27	245	1415	0.076	107	372	0.0	0.1	0.050	A
4	451	113	136	1424	0.317	449	217	0.0	0.5	0.068	A

08:15 - 08:30

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 (min)	Unsignalised level of service
1	259	65	303	1308	0.198	259	398	0.2	0.3	0.063	A
2	507	127	233	1312	0.386	506	329	0.5	0.7	0.082	A
3	129	32	294	1384	0.093	128	445	0.1	0.1	0.053	A
4	538	135	163	1407	0.383	538	260	0.5	0.7	0.076	A

08:30 - 08:45

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 (min)	Unsignalised level of service
1	317	79	370	1266	0.250	317	487	0.3	0.4	0.069	A
2	621	155	285	1281	0.485	620	402	0.7	1.0	0.100	A
3	157	39	359	1343	0.117	157	545	0.1	0.1	0.056	A
4	660	165	199	1385	0.476	658	318	0.7	1.0	0.091	A

08:45 - 09:00

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 (min)	Unsignalised level of service
1	317	79	371	1266	0.251	317	488	0.4	0.4	0.070	A
2	621	155	285	1281	0.485	621	403	1.0	1.0	0.100	A
3	157	39	360	1342	0.117	157	546	0.1	0.1	0.056	A
4	660	165	199	1385	0.476	659	318	1.0	1.0	0.091	A

09:00 - 09:15

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 (min)	Unsignalised level of service
1	259	65	304	1307	0.198	259	399	0.4	0.3	0.063	A
2	507	127	233	1312	0.387	508	330	1.0	0.7	0.082	A
3	129	32	295	1384	0.093	129	447	0.1	0.1	0.053	A
4	538	135	163	1407	0.383	540	260	1.0	0.7	0.076	A

09:15 - 09:30

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 (min)	Unsignalised level of service
1	217	54	254	1338	0.162	217	334	0.3	0.2	0.059	A
2	425	106	195	1334	0.318	425	276	0.7	0.5	0.073	A
3	108	27	247	1414	0.076	108	374	0.1	0.1	0.051	A
4	451	113	136	1423	0.317	452	218	0.7	0.5	0.068	A

Existing - 2025 Survey , PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (min)	Junction LOS
1-1	(untitled)	Standard Roundabout		1, 2, 3, 4	0.11	A

Junction Network

Driving side	Lighting	Network delay (min)	Network LOS
Left	Normal/unknown	0.11	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2025 Survey	PM	ONE HOUR	17:00	18:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	367	100.000
2		ONE HOUR	✓	469	100.000
3		ONE HOUR	✓	241	100.000
4		ONE HOUR	✓	785	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
	1	2	3	4	
From	1	0	97	46	224
	2	38	0	337	94
	3	13	112	0	116
	4	164	499	122	0

Vehicle Mix

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

Heavy Vehicle %

	To				
	1	2	3	4	
From	1	0	10	10	10
	2	10	0	10	10
	3	10	10	0	10
	4	10	10	10	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (min)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.41	0.11	0.7	A	337	505
2	0.43	0.10	0.8	A	430	646
3	0.20	0.06	0.3	A	221	332
4	0.62	0.12	1.8	A	720	1080

Main Results for each time segment

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 (min)	Unsignalised level of service
1	276	69	549	1156	0.239	275	161	0.0	0.3	0.075	A
2	353	88	294	1276	0.277	351	530	0.0	0.4	0.071	A
3	181	45	267	1401	0.129	181	378	0.0	0.2	0.054	A
4	591	148	122	1432	0.413	588	325	0.0	0.8	0.078	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 (min)	Unsignalised level of service
1	330	82	658	1089	0.303	329	193	0.3	0.5	0.087	A
2	422	105	352	1241	0.340	421	635	0.4	0.6	0.080	A
3	217	54	320	1368	0.158	216	453	0.2	0.2	0.057	A
4	706	176	146	1417	0.498	704	390	0.8	1.1	0.092	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 (min)	Unsignalised level of service
1	404	101	805	999	0.405	403	236	0.5	0.7	0.111	A
2	516	129	430	1194	0.433	515	777	0.6	0.8	0.097	A
3	265	66	391	1323	0.201	265	555	0.2	0.3	0.062	A
4	864	216	179	1397	0.619	862	477	1.1	1.7	0.123	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 (min)	Unsignalised level of service
1	404	101	807	997	0.405	404	237	0.7	0.7	0.111	A
2	516	129	432	1193	0.433	516	779	0.8	0.8	0.097	A
3	265	66	392	1322	0.201	265	556	0.3	0.3	0.062	A
4	864	216	179	1397	0.619	864	478	1.7	1.8	0.124	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 (min)	Unsignalised level of service
1	330	82	661	1087	0.303	331	194	0.7	0.5	0.087	A
2	422	105	354	1240	0.340	423	639	0.8	0.6	0.081	A
3	217	54	321	1367	0.158	217	455	0.3	0.2	0.057	A
4	706	176	147	1417	0.498	708	391	1.8	1.1	0.094	A

18:15 - 18:30

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 (min)	Unsignalised level of service
1	276	69	553	1154	0.239	277	162	0.5	0.3	0.075	A
2	353	88	296	1274	0.277	354	534	0.6	0.4	0.072	A
3	181	45	269	1400	0.130	182	381	0.2	0.2	0.054	A
4	591	148	123	1432	0.413	592	327	1.1	0.8	0.079	A

Existing - 2025 Committed , PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (min)	Junction LOS
1-1	(untitled)	Standard Roundabout		1, 2, 3, 4	0.08	A

Junction Network

Driving side	Lighting	Network delay (min)	Network LOS
Left	Normal/unknown	0.08	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2025 Committed	PM	ONE HOUR	17:00	18:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	297	100.000
2		ONE HOUR	✓	367	100.000
3		ONE HOUR	✓	76	100.000
4		ONE HOUR	✓	626	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
		1	2	3	4
From	1	0	83	21	193
	2	33	0	292	42
	3	4	35	0	37
	4	141	430	55	0

Vehicle Mix

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

Heavy Vehicle %

	To				
		1	2	3	4
From	1	0	10	10	10
	2	10	0	10	10
	3	10	10	0	10
	4	10	10	10	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (min)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.29	0.08	0.4	A	273	409
2	0.32	0.08	0.5	A	337	505
3	0.06	0.05	0.1	A	70	105
4	0.47	0.09	1.0	A	574	862

Main Results for each time segment

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 (min)	Unsignalised level of service
1	224	56	390	1254	0.178	223	133	0.0	0.2	0.064	A
2	276	69	202	1330	0.208	275	411	0.0	0.3	0.062	A
3	57	14	201	1443	0.040	57	276	0.0	0.0	0.048	A
4	471	118	54	1474	0.320	469	204	0.0	0.5	0.066	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 (min)	Unsignalised level of service
1	267	67	467	1207	0.221	267	160	0.2	0.3	0.070	A
2	330	82	242	1307	0.252	330	492	0.3	0.4	0.068	A
3	68	17	241	1418	0.048	68	330	0.0	0.1	0.049	A
4	563	141	65	1468	0.383	562	244	0.5	0.7	0.073	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 (min)	Unsignalised level of service
1	327	82	572	1142	0.286	326	196	0.3	0.4	0.081	A
2	404	101	296	1274	0.317	404	602	0.4	0.5	0.076	A
3	84	21	295	1384	0.060	84	405	0.1	0.1	0.051	A
4	689	172	79	1459	0.472	688	299	0.7	1.0	0.086	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 (min)	Unsignalised level of service
1	327	82	573	1142	0.286	327	196	0.4	0.4	0.081	A
2	404	101	296	1274	0.317	404	603	0.5	0.5	0.076	A
3	84	21	295	1383	0.060	84	405	0.1	0.1	0.051	A
4	689	172	79	1459	0.472	689	299	1.0	1.0	0.086	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 (min)	Unsignalised level of service
1	267	67	468	1206	0.221	267	160	0.4	0.3	0.070	A
2	330	82	242	1306	0.253	330	494	0.5	0.4	0.068	A
3	68	17	241	1417	0.048	68	331	0.1	0.1	0.049	A
4	563	141	65	1468	0.383	564	245	1.0	0.7	0.073	A

18:15 - 18:30

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 (min)	Unsignalised level of service
1	224	56	392	1253	0.178	224	134	0.3	0.2	0.064	A
2	276	69	203	1330	0.208	277	413	0.4	0.3	0.063	A
3	57	14	202	1442	0.040	57	277	0.1	0.0	0.048	A
4	471	118	54	1474	0.320	472	205	0.7	0.5	0.066	A

Existing - 2032 - ND, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (min)	Junction LOS
1-1	(untitled)	Standard Roundabout		1, 2, 3, 4	0.11	A

Junction Network

Driving side	Lighting	Network delay (min)	Network LOS
Left	Normal/unknown	0.11	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2032 - ND	PM	ONE HOUR	17:00	18:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	323	100.000
2		ONE HOUR	✓	400	100.000
3		ONE HOUR	✓	82	100.000
4		ONE HOUR	✓	683	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
	1	2	3	4	
From	1	0	91	22	210
	2	36	318	0	46
	3	4	38	0	40
	4	154	469	60	0

Vehicle Mix

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

Heavy Vehicle %

	To				
	1	2	3	4	
From	1	0	10	10	10
	2	10	0	10	10
	3	10	10	0	10
	4	10	10	10	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (min)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.40	0.12	0.7	A	296	445
2	0.35	0.07	0.5	A	367	551
3	0.08	0.06	0.1	A	75	113
4	0.61	0.14	1.7	A	627	940

Main Results for each time segment

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 (min)	Unsignalised level of service
1	243	61	663	1086	0.224	242	145	0.0	0.3	0.078	A
2	301	75	219	1320	0.228	300	686	0.0	0.3	0.060	A
3	62	15	457	1281	0.048	62	61	0.0	0.1	0.054	A
4	514	129	297	1324	0.388	511	222	0.0	0.7	0.081	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 (min)	Unsignalised level of service
1	290	73	794	1005	0.289	290	174	0.3	0.4	0.092	A
2	360	90	262	1294	0.278	359	822	0.3	0.4	0.065	A
3	74	18	548	1223	0.060	74	74	0.1	0.1	0.057	A
4	614	154	356	1288	0.477	613	266	0.7	1.0	0.098	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 (min)	Unsignalised level of service
1	356	89	972	896	0.397	355	213	0.4	0.7	0.122	A
2	440	110	320	1260	0.350	440	1006	0.4	0.5	0.075	A
3	90	23	670	1145	0.079	90	90	0.1	0.1	0.063	A
4	752	188	435	1238	0.607	749	325	1.0	1.7	0.134	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 (min)	Unsignalised level of service
1	356	89	974	894	0.398	356	214	0.7	0.7	0.122	A
2	440	110	321	1259	0.350	440	1008	0.5	0.5	0.075	A
3	90	23	672	1145	0.079	90	90	0.1	0.1	0.063	A
4	752	188	436	1238	0.607	752	326	1.7	1.7	0.136	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 (min)	Unsignalised level of service
1	290	73	798	1003	0.290	291	175	0.7	0.5	0.093	A
2	360	90	264	1294	0.278	360	826	0.5	0.4	0.066	A
3	74	18	550	1222	0.060	74	74	0.1	0.1	0.058	A
4	614	154	357	1287	0.477	617	267	1.7	1.0	0.099	A

18:15 - 18:30

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 (min)	Unsignalised level of service
1	243	61	668	1083	0.224	244	146	0.5	0.3	0.079	A
2	301	75	220	1319	0.228	302	691	0.4	0.3	0.060	A
3	62	15	460	1279	0.048	62	62	0.1	0.1	0.054	A
4	514	129	298	1323	0.389	515	223	1.0	0.7	0.082	A

Existing - 2032 - WD, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (min)	Junction LOS
1-1	(untitled)	Standard Roundabout		1, 2, 3, 4	0.10	A

Junction Network

Driving side	Lighting	Network delay (min)	Network LOS
Left	Normal/unknown	0.10	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2032 - WD	PM	ONE HOUR	17:00	18:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	345	100.000
2		ONE HOUR	✓	445	100.000
3		ONE HOUR	✓	235	100.000
4		ONE HOUR	✓	741	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
	1	2	3	4	
From	1	0	91	44	210
	2	36	0	318	91
	3	12	109	0	114
	4	154	469	118	0

Vehicle Mix

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

Heavy Vehicle %

	To				
	1	2	3	4	
From	1	0	10	10	10
	2	10	0	10	10
	3	10	10	0	10
	4	10	10	10	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (min)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.37	0.10	0.6	A	317	475
2	0.41	0.09	0.7	A	408	613
3	0.19	0.06	0.3	A	216	323
4	0.58	0.11	1.5	A	680	1020

Main Results for each time segment

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 (min)	Unsignalised level of service
1	260	65	521	1173	0.221	258	151	0.0	0.3	0.072	A
2	335	84	279	1284	0.261	333	501	0.0	0.4	0.069	A
3	177	44	253	1410	0.125	176	360	0.0	0.2	0.053	A
4	558	139	118	1435	0.389	555	311	0.0	0.7	0.075	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 (min)	Unsignalised level of service
1	310	78	625	1110	0.280	310	181	0.3	0.4	0.082	A
2	400	100	334	1252	0.320	400	601	0.4	0.5	0.077	A
3	211	53	303	1379	0.153	211	431	0.2	0.2	0.057	A
4	666	167	141	1421	0.469	665	373	0.7	1.0	0.087	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 (min)	Unsignalised level of service
1	380	95	764	1024	0.371	379	222	0.4	0.6	0.102	A
2	490	122	409	1207	0.406	489	735	0.5	0.7	0.092	A
3	259	65	370	1336	0.194	258	527	0.2	0.3	0.061	A
4	816	204	173	1401	0.582	814	456	1.0	1.5	0.112	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 (min)	Unsignalised level of service
1	380	95	766	1022	0.372	380	222	0.6	0.6	0.103	A
2	490	122	410	1206	0.406	490	737	0.7	0.7	0.092	A
3	259	65	371	1335	0.194	259	528	0.3	0.3	0.061	A
4	816	204	173	1401	0.582	816	457	1.5	1.5	0.113	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 (min)	Unsignalised level of service
1	310	78	628	1108	0.280	311	182	0.6	0.4	0.083	A
2	400	100	335	1251	0.320	401	603	0.7	0.5	0.078	A
3	211	53	304	1378	0.153	212	433	0.3	0.2	0.057	A
4	666	167	141	1420	0.469	668	374	1.5	1.0	0.088	A

18:15 - 18:30

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 (min)	Unsignalised level of service
1	260	65	525	1171	0.222	260	152	0.4	0.3	0.072	A
2	335	84	281	1283	0.261	336	505	0.5	0.4	0.070	A
3	177	44	254	1409	0.126	177	362	0.2	0.2	0.054	A
4	558	139	118	1435	0.389	559	313	1.0	0.7	0.075	A

Existing - 2037 - ND, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (min)	Junction LOS
1-1	(untitled)	Standard Roundabout		1, 2, 3, 4	0.09	A

Junction Network

Driving side	Lighting	Network delay (min)	Network LOS
Left	Normal/unknown	0.09	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2037 - ND	PM	ONE HOUR	17:00	18:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	323	100.000
2		ONE HOUR	✓	400	100.000
3		ONE HOUR	✓	82	100.000
4		ONE HOUR	✓	683	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
	1	2	3	4	
From	1	0	91	22	210
	2	36	0	318	46
	3	4	38	0	40
	4	154	469	60	0

Vehicle Mix

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

Heavy Vehicle %

	To				
	1	2	3	4	
From	1	0	10	10	10
	2	10	0	10	10
	3	10	10	0	10
	4	10	10	10	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (min)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.32	0.09	0.5	A	296	445
2	0.35	0.08	0.6	A	367	551
3	0.07	0.05	0.1	A	75	113
4	0.52	0.09	1.2	A	627	940

Main Results for each time segment

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 (min)	Unsignalised level of service
1	243	61	425	1232	0.197	242	145	0.0	0.3	0.067	A
2	301	75	219	1320	0.228	300	448	0.0	0.3	0.065	A
3	62	15	219	1432	0.043	62	300	0.0	0.0	0.048	A
4	514	129	59	1472	0.349	512	222	0.0	0.6	0.069	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 (min)	Unsignalised level of service
1	290	73	509	1181	0.246	290	174	0.3	0.4	0.074	A
2	360	90	262	1294	0.278	359	537	0.3	0.4	0.071	A
3	74	18	262	1404	0.052	74	359	0.0	0.1	0.050	A
4	614	154	70	1464	0.419	613	266	0.6	0.8	0.077	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 (min)	Unsignalised level of service
1	356	89	623	1111	0.320	355	213	0.4	0.5	0.087	A
2	440	110	321	1259	0.350	440	657	0.4	0.6	0.080	A
3	90	23	321	1367	0.066	90	440	0.1	0.1	0.052	A
4	752	188	86	1455	0.517	750	325	0.8	1.2	0.094	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 (min)	Unsignalised level of service
1	356	89	624	1110	0.320	356	214	0.5	0.5	0.087	A
2	440	110	321	1259	0.350	440	658	0.6	0.6	0.081	A
3	90	23	321	1367	0.066	90	440	0.1	0.1	0.052	A
4	752	188	86	1455	0.517	752	326	1.2	1.2	0.094	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 (min)	Unsignalised level of service
1	290	73	511	1180	0.246	291	175	0.5	0.4	0.074	A
2	360	90	263	1294	0.278	360	539	0.6	0.4	0.071	A
3	74	18	263	1404	0.053	74	360	0.1	0.1	0.050	A
4	614	154	70	1464	0.419	615	267	1.2	0.8	0.078	A

18:15 - 18:30

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 (min)	Unsignalised level of service
1	243	61	428	1231	0.198	244	146	0.4	0.3	0.067	A
2	301	75	220	1319	0.228	302	451	0.4	0.3	0.065	A
3	62	15	220	1431	0.043	62	302	0.1	0.0	0.048	A
4	514	129	59	1471	0.349	515	223	0.8	0.6	0.069	A

Existing - 2037 - WD, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (min)	Junction LOS
1-1	(untitled)	Standard Roundabout		1, 2, 3, 4	0.10	A

Junction Network

Driving side	Lighting	Network delay (min)	Network LOS
Left	Normal/unknown	0.10	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2037 - WD	PM	ONE HOUR	17:00	18:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	353	100.000
2		ONE HOUR	✓	454	100.000
3		ONE HOUR	✓	238	100.000
4		ONE HOUR	✓	755	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
	1	2	3	4	
From	1	0	93	45	215
	2	37	0	325	92
	3	13	110	0	115
	4	157	479	119	0

Vehicle Mix

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

Heavy Vehicle %

	To				
	1	2	3	4	
From	1	0	10	10	10
	2	10	0	10	10
	3	10	10	0	10
	4	10	10	10	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (min)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.38	0.11	0.7	A	324	486
2	0.42	0.09	0.8	A	417	625
3	0.20	0.06	0.3	A	218	328
4	0.59	0.12	1.6	A	693	1039

Main Results for each time segment

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 (min)	Unsignalised level of service
1	266	66	530	1168	0.228	264	155	0.0	0.3	0.073	A
2	342	85	284	1281	0.267	340	511	0.0	0.4	0.070	A
3	179	45	258	1407	0.127	179	366	0.0	0.2	0.054	A
4	568	142	120	1434	0.396	566	316	0.0	0.7	0.076	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 (min)	Unsignalised level of service
1	317	79	636	1103	0.288	317	186	0.3	0.4	0.084	A
2	408	102	340	1248	0.327	408	612	0.4	0.5	0.079	A
3	214	53	309	1375	0.156	214	439	0.2	0.2	0.057	A
4	679	170	144	1419	0.478	678	379	0.7	1.0	0.089	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 (min)	Unsignalised level of service
1	389	97	778	1016	0.383	388	227	0.4	0.7	0.105	A
2	500	125	416	1202	0.416	499	749	0.5	0.8	0.094	A
3	262	66	378	1331	0.197	262	537	0.2	0.3	0.062	A
4	831	208	176	1399	0.594	829	464	1.0	1.6	0.115	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 (min)	Unsignalised level of service
1	389	97	779	1014	0.383	389	228	0.7	0.7	0.105	A
2	500	125	417	1202	0.416	500	751	0.8	0.8	0.094	A
3	262	66	379	1330	0.197	262	538	0.3	0.3	0.062	A
4	831	208	176	1399	0.594	831	465	1.6	1.6	0.116	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 (min)	Unsignalised level of service
1	317	79	638	1101	0.288	318	187	0.7	0.4	0.084	A
2	408	102	342	1247	0.327	409	615	0.8	0.5	0.079	A
3	214	53	310	1374	0.156	214	441	0.3	0.2	0.057	A
4	679	170	144	1419	0.478	681	380	1.6	1.0	0.090	A

18:15 - 18:30

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 (min)	Unsignalised level of service
1	266	66	534	1165	0.228	266	156	0.4	0.3	0.073	A
2	342	85	286	1280	0.267	342	514	0.5	0.4	0.070	A
3	179	45	259	1406	0.127	179	369	0.2	0.2	0.054	A
4	568	142	121	1433	0.397	570	318	1.0	0.7	0.077	A

Existing - 2047 - ND, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (min)	Junction LOS
1-1	(untitled)	Standard Roundabout		1, 2, 3, 4	0.09	A

Junction Network

Driving side	Lighting	Network delay (min)	Network LOS
Left	Normal/unknown	0.09	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2047 - ND	PM	ONE HOUR	17:00	18:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	323	100.000
2		ONE HOUR	✓	400	100.000
3		ONE HOUR	✓	82	100.000
4		ONE HOUR	✓	683	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
	1	2	3	4	
From	1	0	91	22	210
	2	36	0	318	46
	3	4	38	0	40
	4	154	469	60	0

Vehicle Mix

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

Heavy Vehicle %

	To				
	1	2	3	4	
From	1	0	10	10	10
	2	10	0	10	10
	3	10	10	0	10
	4	10	10	10	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (min)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.32	0.09	0.5	A	296	445
2	0.35	0.08	0.6	A	367	551
3	0.07	0.05	0.1	A	75	113
4	0.52	0.09	1.2	A	627	940

Main Results for each time segment

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 (min)	Unsignalised level of service
1	243	61	425	1232	0.197	242	145	0.0	0.3	0.067	A
2	301	75	219	1320	0.228	300	448	0.0	0.3	0.065	A
3	62	15	219	1432	0.043	62	300	0.0	0.0	0.048	A
4	514	129	59	1472	0.349	512	222	0.0	0.6	0.069	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 (min)	Unsignalised level of service
1	290	73	509	1181	0.246	290	174	0.3	0.4	0.074	A
2	360	90	262	1294	0.278	359	537	0.3	0.4	0.071	A
3	74	18	262	1404	0.052	74	359	0.0	0.1	0.050	A
4	614	154	70	1464	0.419	613	266	0.6	0.8	0.077	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 (min)	Unsignalised level of service
1	356	89	623	1111	0.320	355	213	0.4	0.5	0.087	A
2	440	110	321	1259	0.350	440	657	0.4	0.6	0.080	A
3	90	23	321	1367	0.066	90	440	0.1	0.1	0.052	A
4	752	188	86	1455	0.517	750	325	0.8	1.2	0.094	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 (min)	Unsignalised level of service
1	356	89	624	1110	0.320	356	214	0.5	0.5	0.087	A
2	440	110	321	1259	0.350	440	658	0.6	0.6	0.081	A
3	90	23	321	1367	0.066	90	440	0.1	0.1	0.052	A
4	752	188	86	1455	0.517	752	326	1.2	1.2	0.094	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 (min)	Unsignalised level of service
1	290	73	511	1180	0.246	291	175	0.5	0.4	0.074	A
2	360	90	263	1294	0.278	360	539	0.6	0.4	0.071	A
3	74	18	263	1404	0.053	74	360	0.1	0.1	0.050	A
4	614	154	70	1464	0.419	615	267	1.2	0.8	0.078	A

18:15 - 18:30

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 (min)	Unsignalised level of service
1	243	61	428	1231	0.198	244	146	0.4	0.3	0.067	A
2	301	75	220	1319	0.228	302	451	0.4	0.3	0.065	A
3	62	15	220	1431	0.043	62	302	0.1	0.0	0.048	A
4	514	129	59	1471	0.349	515	223	0.8	0.6	0.069	A

Existing - 2047 - WD , AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (min)	Junction LOS
1-1	(untitled)	Standard Roundabout		1, 2, 3, 4	0.10	A

Junction Network

Driving side	Lighting	Network delay (min)	Network LOS
Left	Normal/unknown	0.10	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D15	2047 - WD	AM	ONE HOUR	08:00	09:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	316	100.000
2		ONE HOUR	✓	609	100.000
3		ONE HOUR	✓	298	100.000
4		ONE HOUR	✓	653	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
	1	2	3	4	
From	1	0	65	24	227
	2	104	0	477	28
	3	64	109	0	125
	4	333	268	52	0

Vehicle Mix

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

Heavy Vehicle %

	To				
	1	2	3	4	
From	1	0	10	10	10
	2	10	0	10	10
	3	10	10	0	10
	4	10	10	10	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (min)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.29	0.08	0.4	A	290	435
2	0.54	0.11	1.3	A	559	838
3	0.25	0.07	0.4	A	273	410
4	0.55	0.11	1.3	A	599	899

Main Results for each time segment

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 (min)	Unsignalised level of service
1	238	59	321	1296	0.184	237	375	0.0	0.2	0.062	A
2	458	115	227	1315	0.349	456	331	0.0	0.6	0.077	A
3	224	56	269	1400	0.160	224	414	0.0	0.2	0.056	A
4	492	123	208	1379	0.356	489	285	0.0	0.6	0.074	A

08:15 - 08:30

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 (min)	Unsignalised level of service
1	284	71	385	1257	0.226	284	450	0.2	0.3	0.068	A
2	547	137	272	1288	0.425	547	397	0.6	0.8	0.089	A
3	268	67	322	1366	0.196	268	496	0.2	0.3	0.060	A
4	587	147	249	1354	0.434	586	341	0.6	0.8	0.086	A

08:30 - 08:45

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 (min)	Unsignalised level of service
1	348	87	471	1204	0.289	347	550	0.3	0.4	0.077	A
2	671	168	333	1252	0.536	669	486	0.8	1.2	0.113	A
3	328	82	395	1320	0.249	328	607	0.3	0.4	0.066	A
4	719	180	304	1319	0.545	717	418	0.8	1.3	0.109	A

08:45 - 09:00

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 (min)	Unsignalised level of service
1	348	87	472	1203	0.289	348	552	0.4	0.4	0.077	A
2	671	168	334	1252	0.536	670	487	1.2	1.3	0.114	A
3	328	82	395	1320	0.249	328	609	0.4	0.4	0.067	A
4	719	180	305	1319	0.545	719	418	1.3	1.3	0.110	A

09:00 - 09:15

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 (min)	Unsignalised level of service
1	284	71	387	1256	0.226	285	452	0.4	0.3	0.068	A
2	547	137	273	1288	0.425	549	398	1.3	0.8	0.090	A
3	268	67	323	1365	0.196	268	499	0.4	0.3	0.060	A
4	587	147	250	1353	0.434	589	342	1.3	0.9	0.087	A

09:15 - 09:30

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 (min)	Unsignalised level of service
1	238	59	324	1295	0.184	238	378	0.3	0.2	0.062	A
2	458	115	228	1314	0.349	459	333	0.8	0.6	0.077	A
3	224	56	271	1399	0.160	225	417	0.3	0.2	0.056	A
4	492	123	209	1379	0.357	493	286	0.9	0.6	0.075	A

Existing - 2047 - WD, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (min)	Junction LOS
1-1	(untitled)	Standard Roundabout		1, 2, 3, 4	0.11	A

Junction Network

Driving side	Lighting	Network delay (min)	Network LOS
Left	Normal/unknown	0.11	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D16	2047 - WD	PM	ONE HOUR	17:00	18:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	367	100.000
2		ONE HOUR	✓	469	100.000
3		ONE HOUR	✓	241	100.000
4		ONE HOUR	✓	785	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
	1	2	3	4	
From	1	0	97	46	224
	2	38	0	337	94
	3	13	112	0	116
	4	164	499	122	0

Vehicle Mix

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

Heavy Vehicle %

	To				
	1	2	3	4	
From	1	0	10	10	10
	2	10	0	10	10
	3	10	10	0	10
	4	10	10	10	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (min)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.41	0.11	0.7	A	337	505
2	0.43	0.10	0.8	A	430	646
3	0.20	0.06	0.3	A	221	332
4	0.62	0.12	1.8	A	720	1080

Main Results for each time segment

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 (min)	Unsignalised level of service
1	276	69	549	1156	0.239	275	161	0.0	0.3	0.075	A
2	353	88	294	1276	0.277	351	530	0.0	0.4	0.071	A
3	181	45	267	1401	0.129	181	378	0.0	0.2	0.054	A
4	591	148	122	1432	0.413	588	325	0.0	0.8	0.078	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 (min)	Unsignalised level of service
1	330	82	658	1089	0.303	329	193	0.3	0.5	0.087	A
2	422	105	352	1241	0.340	421	635	0.4	0.6	0.080	A
3	217	54	320	1368	0.158	216	453	0.2	0.2	0.057	A
4	706	176	146	1417	0.498	704	390	0.8	1.1	0.092	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 (min)	Unsignalised level of service
1	404	101	805	999	0.405	403	236	0.5	0.7	0.111	A
2	516	129	430	1194	0.433	515	777	0.6	0.8	0.097	A
3	265	66	391	1323	0.201	265	555	0.2	0.3	0.062	A
4	864	216	179	1397	0.619	862	477	1.1	1.7	0.123	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 (min)	Unsignalised level of service
1	404	101	807	997	0.405	404	237	0.7	0.7	0.111	A
2	516	129	432	1193	0.433	516	779	0.8	0.8	0.097	A
3	265	66	392	1322	0.201	265	556	0.3	0.3	0.062	A
4	864	216	179	1397	0.619	864	478	1.7	1.8	0.124	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 (min)	Unsignalised level of service
1	330	82	661	1087	0.303	331	194	0.7	0.5	0.087	A
2	422	105	354	1240	0.340	423	639	0.8	0.6	0.081	A
3	217	54	321	1367	0.158	217	455	0.3	0.2	0.057	A
4	706	176	147	1417	0.498	708	391	1.8	1.1	0.094	A

18:15 - 18:30

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 (min)	Unsignalised level of service
1	276	69	553	1154	0.239	277	162	0.5	0.3	0.075	A
2	353	88	296	1274	0.277	354	534	0.6	0.4	0.072	A
3	181	45	269	1400	0.130	182	381	0.2	0.2	0.054	A
4	591	148	123	1432	0.413	592	327	1.1	0.8	0.079	A



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