Waterman Moylan
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Traffic and Transport Assessment

Residential Development at Auburn, Malahide Road

March 2021

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Issue	Date	Prepared by	Checked by	Approved by
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Comments

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1. Introduction

1.1 Introduction

This Traffic and Transport Assessment (TTA) has been prepared by Waterman Moylan to accompany a planning application to An Bord Pleanála for a proposed Strategic Housing Development (SHD) in lands around Auburn House in Malahide, Co. Dublin.

The proposed development will consist of the following:

- The preservation and protection of the existing Protected Structure of Auburn House as 1 no. residential dwelling;
- The conversion of the existing stables of Auburn House to accommodate 4 no. dwellings;
- 97 no. Houses;
- 266 no. Apartments;
- 43 no. Duplexes;
- A 173sqm childcare facility at ground floor of Apartment Block 4.

The breakdown of the proposed development is set out in the schedule of accommodation below:

Description		1-Bed	2-Bed	3-Bed	4-Bed	5-Bed or more	Total	
Houses *(including Auburn house and converted stables)*		1	2	46	39	14	102 houses*	
Apartments	Block 1	27	22	2	-	-	51	266 Apartments
	Block 2	29	27	1	-	-	57	
	Block 3	27	22	2	-	-	51	
	Block 4	9	17	1	-	-	27	
	Block 5	6	22	-	-	-	28	
	Block 6	5	14	2	-	-	21	
	Block 7	-	6	-	-	-	6	
	Block 8	6	17	2	-	-	25	
Duplexes	Block 1	1	3	2	-	-	6	43 Duplexes
	Block 2A	6	2	-	-	-	8	
	Block 2B	8	3	-	-	-	11	
	Block 2C	7	2	-	-	-	9	
	Block 2D	5	4	-	-	-	9	
Total		**137**	**163**	**58**	**39**	**14**	**411***	

* = Total figure also accounts for Auburn House (to be preserved).

Table 1 | *Schedule of Accommodation*

A new vehicular entrance is to be constructed off Malahide Road, providing for a new signalised junction with Back Road and Malahide Road, and a secondary vehicular entrance is to be provided off Carey's Lane. The existing vehicular entrance access is to be utilised as a pedestrian and cycle route only, with vehicular access retained solely for existing residential use.

The development includes all associated site works, boundary treatments, drainage and service connections.

1.2 Scope

This TTA is a comprehensive review of all the potential transport impacts of the overall development, including a detailed assessment of the transportation systems provided and the impact of the proposed development on the surrounding environment and transportation network.

1.3 Standards

This Traffic and Transport Assessment has been prepared in accordance with the requirements of the Traffic and Transport Assessment Guidelines published by National Roads Authority in May 2014.

1.4 Threshold for Transport Assessment

Section 2.1 of the Traffic and Transport Assessment Guidelines (May 2014) requires submission of a Transport Assessment where a proposed development meets one or more of the following criteria:

1- Traffic to and from the development exceeds 10% of the traffic flow on the adjoining road;

2- Traffic to and from the development exceeds 5% of the traffic flow on the adjoining road where congestion exists, or the location is sensitive;

3- Residential development in excess of 200 dwellings;

4- Retail and leisure development in excess of 1,000sqm;

5- Office, education and hospital development in excess of 2,500sqm;

6- Industrial development in excess of 5,000sqm;

7- Distribution and warehousing in excess of 10,000sqm.

In the case of the subject development, thresholds No. 1 and 3 are exceeded.

1.5 Contents of the Transport Assessment

In compliance with Section 3.3 of the Traffic and Transport Assessment Guidelines (May 2014), the contents of this TTA include:

- Description of the existing and proposed traffic/transportation conditions including information on the current traffic, critical junctions, pedestrians, cycle and public transport facilities;
- A description of the proposed development;
- The traffic and transportation implications of the development including consideration of trip generation/attraction, modal split and trip distribution;
- The time periods applicable to the TTA;
- The impact of the development on the surrounding road network including analysis of junction's capacity;
- Description and analysis of committed/potential future developments in the area;
- Description of car and cycle parking requirements and proposals;
- Review of the historical data related to road safety.

1.6 Location of Development

The site is located between the existing Abington residential development and the Malahide Road. The existing site entrance is from the Malahide Road, adjacent to the Malahide Road/Back Road junction.

The subject lands form the western, northern, and eastern boundaries of Auburn House, an eighteenth century three-storey mansion located within a wooded demesne. Malahide Castle is approximately 900m north-east of the site.

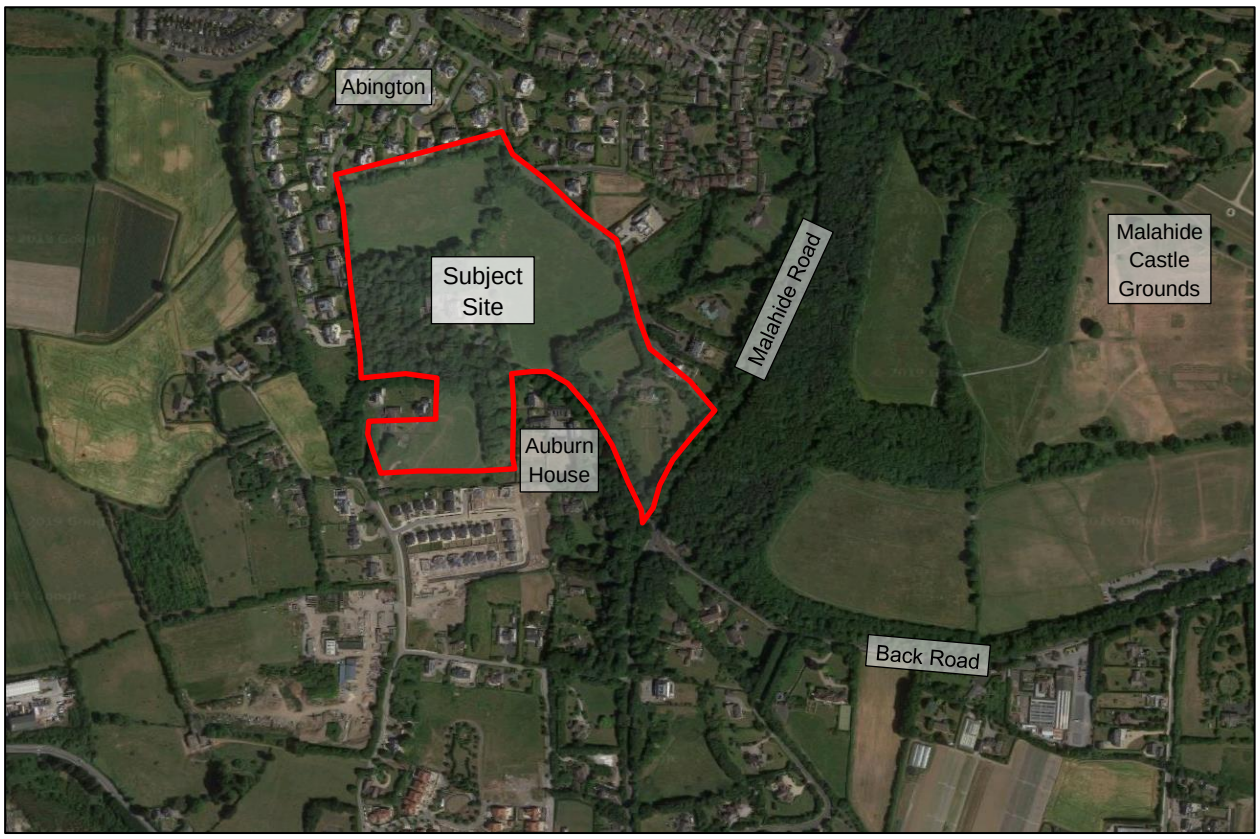


Figure 1 | *Site Location (Source: Google Maps).*

1.7 Methodology

The methodology for the preparation of this Traffic and Transport Assessment included: -

- Descriptions of the proposed and committed/potential future developments.
- Descriptions of the receiving environment including roads and junctions, public transport, cycle facilities and pedestrian facilities.
- Description of existing travel characteristics including traffic and public transport surveys.
- Descriptions of future/proposed transportation improvements to roads, junctions, public transport, cycle and pedestrian facilities.
- Calculation of trip generation and distribution for proposed and committed/potential future developments.
- Determination of future traffic movements in 2023, 2028 and 2038 (refer to Section 1.9 below).
- Estimation of public transport demand in 2028.

- Determination of transportation impact on roads, junctions, and public transport systems.

1.8 Programme

It is expected that construction of the proposed development will commence in 2021 for completion in c. 2025.

1.9 Assessment Years

The years that have been assessed within this TTA are the following:

Base Year	:	2020
Opening Year (With / Without Development)	:	2023
Opening Year + 5 Years Forecast (With / Without Development)	:	2028
Opening Year + 15 Years Forecast (With / Without Development):		2038

These assessment years are in line with the 'Transport Assessment Guidelines (May 2014)'.

Details of each assessment year is presented later in this report.

2. Policy Framework

2.1 Fingal Development Plan (2017 – 2023)

The Fingal Development Plan (2017 – 2023) sets out the policies and objectives for the development of the County for the period of 2017 to 2023. The Plan seeks to improve and expand in a sustainable manner the social, economic, cultural and environments assets of the county. In the perspective of the subject development site and the proposed residential scheme some pertinent policies include:

2.1.1 Strategic Policy

"Seek the development of a high quality public transport system throughout the County and linking to adjoining counties, including the development of the indicative route for New Metro North and Light Rail Corridor, improvements to railway infrastructure including the DART Expansion Programme, Quality Bus Corridors (QBCs) and Bus Rapid Transit (BRT) systems, together with enhanced facilities for walking and cycling."

"Promote, improve and develop a well-connected national, regional and local road and public transport infrastructure system, geared to meet the needs of the County and the Region, and providing for all road users, prioritising walking, cycling and public transport."

2.1.2 Integrated Land Use and Transportation

"***Objective MT05***: *Integrate land use with transportation by allowing higher density development along higher capacity public transport corridors."*

2.1.3 Parking

*"**Objective MT08**: Control on-street parking in the interests of the viability, vitality and amenity of commercial centres by maximising the supply of short stay parking for shoppers, while providing appropriate levels of long-term parking within a reasonable distance for employees."*

2.1.4 Walking and Cycling

*"**Objective MT13**: Promote walking and cycling as efficient, health, and environmentally-friendly modes of transport by securing the development of a network of direct, comfortable, convenient and safe cycle routes and footpaths, particularly in urban areas."*

*"**Objective MT19**: Design roads and promote the design of roads, including cycle infrastructure, in line with the Principals of Sustainable Safety in a manner consistent with the National Cycle Manual and the Design Manual for Urban Roads and Streets."*

*"**Objective MT22**: Improve pedestrian and cycle connectivity to stations and other public transport interchanges."*

2.1.5 Traffic Calming

*"**Objective MT37**: Implement traffic calming on particular roads and in appropriate areas of the County, especially residential areas, to reduce vehicle speeds in the interests of road safety and residential amenity. Ensure that where appropriate, traffic calming is included as a pre-condition as part of the development of all new estates or extensions to existing estates."*

2.1.6 Road Construction and Improvement Measures

*"**Objective MT40**: Implement a programme of road construction and improvement works closely integrated with existing and planned land uses, taking into account both car and non-car modes of transport whilst promoting road safety as a high priority. Major road construction and improvement works will include an appraisal of environmental impacts."*

2.1.7 Green Infrastructure and Planning

*"**Objective GI18**: Require all Local Area Plans to protect, enhance, provide and manage green infrastructure in an integrated and coherent manner addressing the five GI themes set out in the Development Plan – Biodiversity, Parks, Open Space and Recreation, Sustainable Water Management, Archaeological and Architectural Heritage, and Landscape."*

*"**Objective GI20**: Require all new development to contribute to the protection and enhancement of existing green infrastructure and the delivery of new green infrastructure, as appropriate."*

2.1.8 Malahide Development Plan Objectives

*"**Objective MALAHIDE 11**: Prepare and/or implement the following Masterplans during the lifetime of this Plan:*

- *Streamstown Masterplan (see Map Sheet 9, MP 9.A)*
- *Broomfield Masterplan (see Map Sheet 9, MP 9.B)"*

The proposed development falls within the Streams town Masterplan.

2.1.9 Streamstown Masterplan

"*The main elements to be included in the Streamstown Masterplan are provided below:*

- *Facilitate low density residential development reflective of the character of the area.*
- *Protect and preserve trees, woodlands and hedgerows within the Masterplan area.*
- *Preserve the tree lined approach to Malahide along the Dublin Road.*
- *Facilitate high quality sustainable development that protects and enhances the sensitive historic and natural setting of Auburn House and integrates new development with the conservation and preservation of the Protected Structure, its curtilage and protected trees.*
- *Retain visual corridors to/from Auburn House through the establishment of a visual buffer to the east of Auburn House.*
- *The area for development north of Auburn House is considered sensitive development zone, whereby a maximum ridge height of 6m should be applied.*
- *Provide for a pedestrian / cycle route along Auburn House Avenue to Malahide Road.*
- *Ensure pedestrian connectivity between Auburn House Avenue and Abington / Gaybrook.Castleheath.*
- *The lands will be the subject of a detailed flood risk assessment."*

3. Receiving Environment

3.1 Existing Roads and Junctions

3.1.1 Roads

Main vehicular access to the proposed development will be provided from south-east via a new access at the R107 Malahide Road / Back Road priority-controlled T-junction, which is proposed to be upgraded to a four-armed signalised junction with the western arm forming the Site Access Road. A secondary vehicular access is proposed off Carey's Lane to the west which will be accessed via Streamstown Lane.

R107 Malahide Road is a regional road in north Dublin which runs for approximately 10.5km from Fairview to Malahide. The speed limit along the R107 adjacent to the site is 60kph. This road is approximately 700m in length from the priority-controlled junction with Back Road through to a signalised junction with R106 Swords Road. Along this section, R107 Malahide Road comprises a carriageway of c. 7.5m wide with a narrow footpath provided on the western side and no cycle lanes.

Back Road is a single carriageway road running west-east for approximately 1.8km from the priority junction with R107 Malahide Road through to a priority junction with R124 The Hill. This road, which crosses the railway line via an existing bridge, currently comprises a carriageway of approximately 7.30m with footpaths running along both sides of the road for the majority of its length.

Carey's Lane is a local road running north-south for approximately 230m from the south-western boundary of the site through to a priority junction with Streamstown Lane. This road, which will provide vehicular access to the site, currently comprises a carriageway of approximately 5.50m with footpaths running along the eastern side.

Streamstown Lane is a single carriageway road located to the south of the subject site. This road is approximately 780m in length from the priority junction with R107 through to a priority junction with Feltrim Road. Along Streamstown Lane, an unconnected network of footpaths is provided with no pedestrian crossing points available. No cycle lanes are provided.

Feltrim Road is a single carriageway road located to the south of the subject site. This road is approximately 2.6km in length from the priority junction with R107 through to a three-way Roundabout connecting to Mountgory Way. The speed limit along Feltrim Road is 60kph. The road is c. 7.5m wide single carriageway with footpath on the north side of the road for the majority of its length and a narrow path on both sides of the road at some sections.

3.1.2 Junctions

The primary junctions which will provide access to the proposed development on Streamstown Masterplan lands are: -

- **Junction A (Existing Priority-controlled T-junction)**: R107 Malahide Road / Back Road;
- **Junction B (Existing Priority-controlled T-junction)**: Feltrim Road / Streamstown Lane.

An upgraded layout for Junction A - which will provide direct access to the proposed development site, is proposed under the subject application. Details of the proposed scheme is presented later in Section 4.1.1.

The existing road layout in the area surrounding the proposed development site is illustrated in Figure 2.

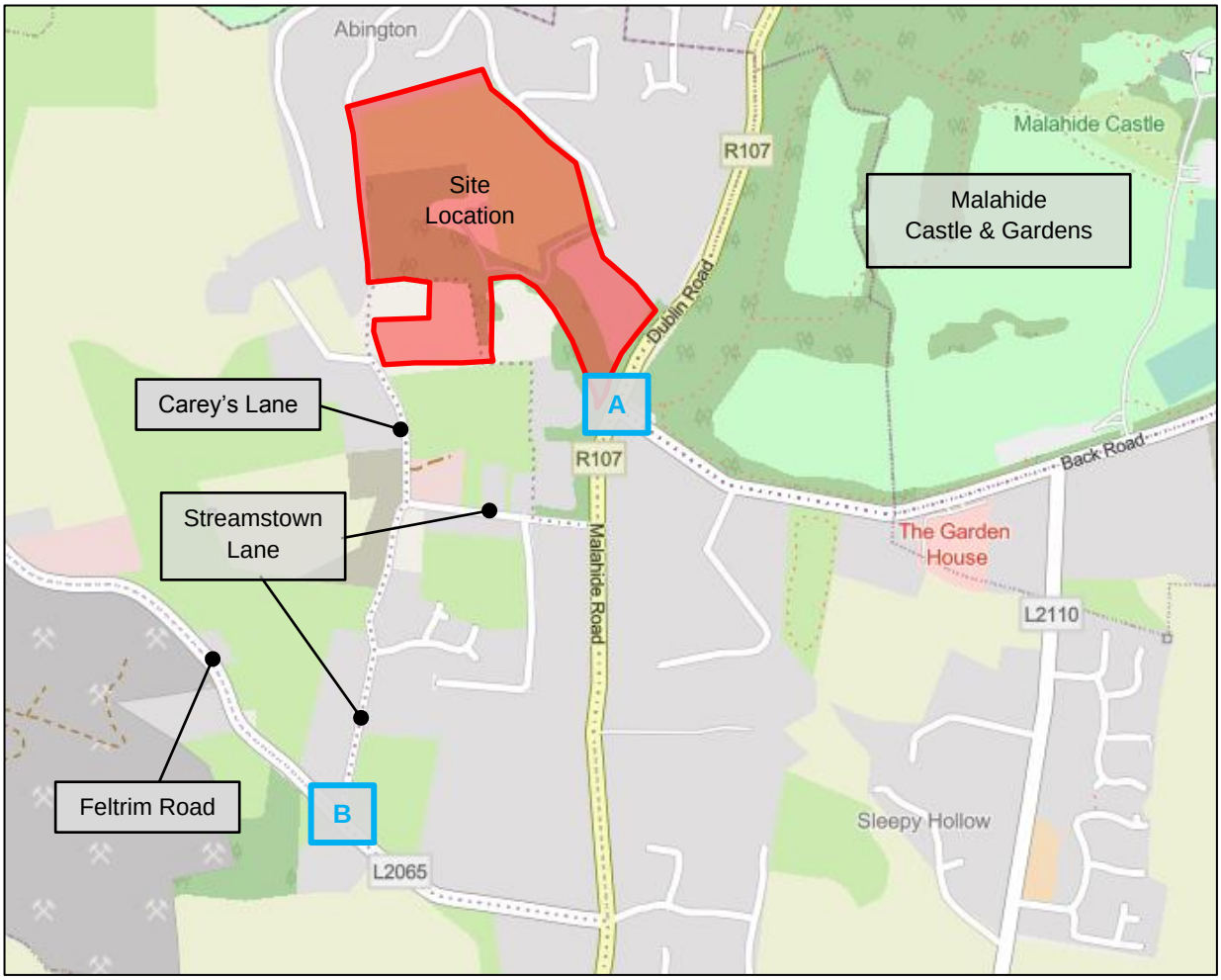


***Figure 2** | Existing Road Network Map.*

3.2 Existing Public Transport

3.2.1 Dublin Bus

The subject site is directly served by a public bus service. The closest bus stops are located on R107 Malahide Road just north of the junction with Back Road, being the Bus Stops No. 3579 (northbound) and No. 3645 (southbound). The subject bus stops are served by the Bus Route 42. This route is operated by Dublin Bus and runs from Talbot Street in Dublin City Centre through Malahide to Sand's Hotel in Portmarnock. A summary of Dublin Bus Route 42 frequency is presented in Table 2. The location of the subject bus stops in relation to the proposed development site is illustrated in Figure 3.

Route No.	From	To	Weekday Frequency	Saturday Frequency	Sunday Frequency
42	Talbot Street	Sand's Hotel (Portmarnock)	Every 15 to 30 minutes	Every 15 to 30 minutes	Every 30 to 60 minutes
42	Sand's Hotel (Portmarnock)	Talbot Street	Every 20 to 25 minutes	Every 15 to 30 minutes	Every 30 to 60 minutes

***Table 2** | Dublin Bus Route 42 – Weekday and Weekend Frequency.*

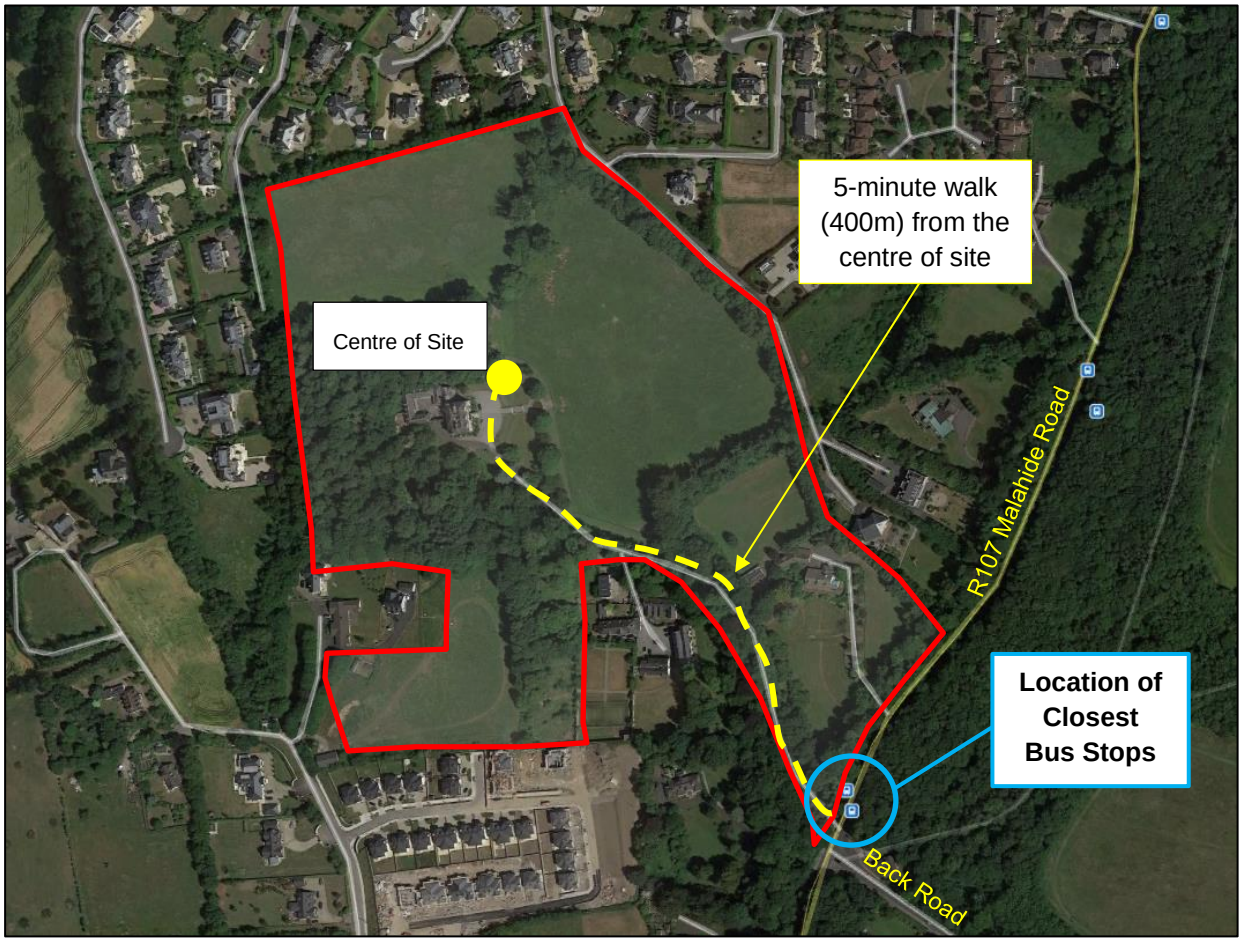


Figure 3 | *Location of Closest Bus Stops.*

Travel time from the subject bus stop on R107 Malahide Road (southbound) to Talbot Street in Dublin City Centre is approximately 32 minutes. On the opposite direction, the travel time from the subject bus stop on R107 Malahide Road (Northbound) to Malahide Centre is approximately 11 minutes, and to Sand's Hotel in Portmarnock is approximately 22 minutes.

The proposed internal layout will include pathways and pedestrian crossings throughout the site leading to the bus stops just outside the site. From the centre point of the site, it is approximately 400m (5-minute walk) to these bus stops.

The internal layout of the proposed development will provide pedestrian pathways on both sides of the road, often separated by a grass bank. All footpaths for the proposed development will be provided in accordance with Section 4.3.1 of the DMURS which suggests that a minimum 1.8m footpath should be provided.

3.2.2 Rail

The closest train station (Malahide) is located off R106 Dublin Road approximately 2.0km (24-minute walk/6-minute cycling) northeast of the existing site access off R107 Malahide Road – Refer to Figures 4 and 5. Walking access from the subject site access to the Malahide Station is via R107 Malahide Road and R106 Dublin Road. Along the route to the station, a narrow footpath, directly adjacent to the carriageway, is provided on the western side of R107 Malahide Road. On the R106 Dublin Road, a wider footpath is provided along the western side of the carriageway and on both sides of the road from Yellow Walls Road up until the Malahide Station. No cycle lanes are provided along the route.

The Malahide Station is served by Commuter Rail and DART services.

The Commuter Rail service through Malahide Station serves all stations from Dundalk through Dublin City Centre to Gorey. The service operates at 3 – 4 services per hour in both direction on weekdays.

The DART service through Malahide Station serves all station from Malahide through Dublin City Centre to Bray and Greystones. On weekdays, this service operates at a 20-minute frequency in both directions and at 40-to-60-minute frequency in both directions on weekends.

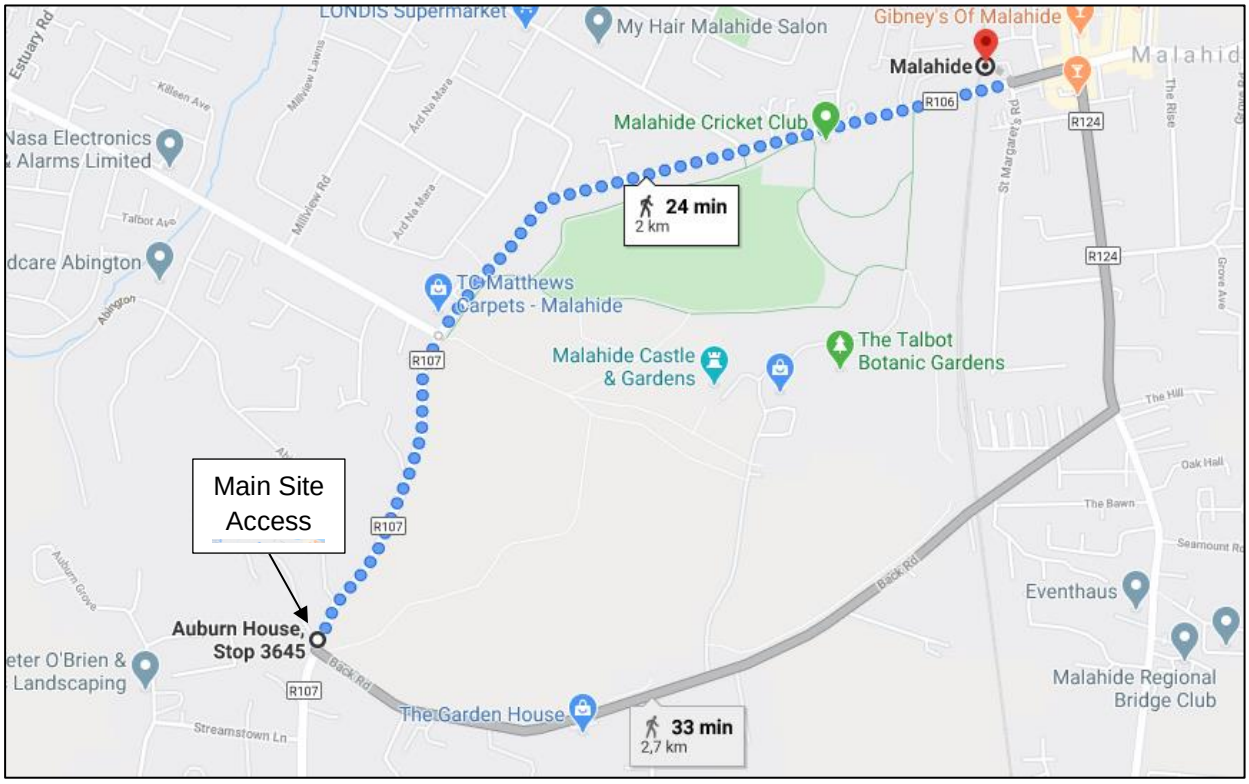


Figure 4 | *Walking Route to Malahide Station.*

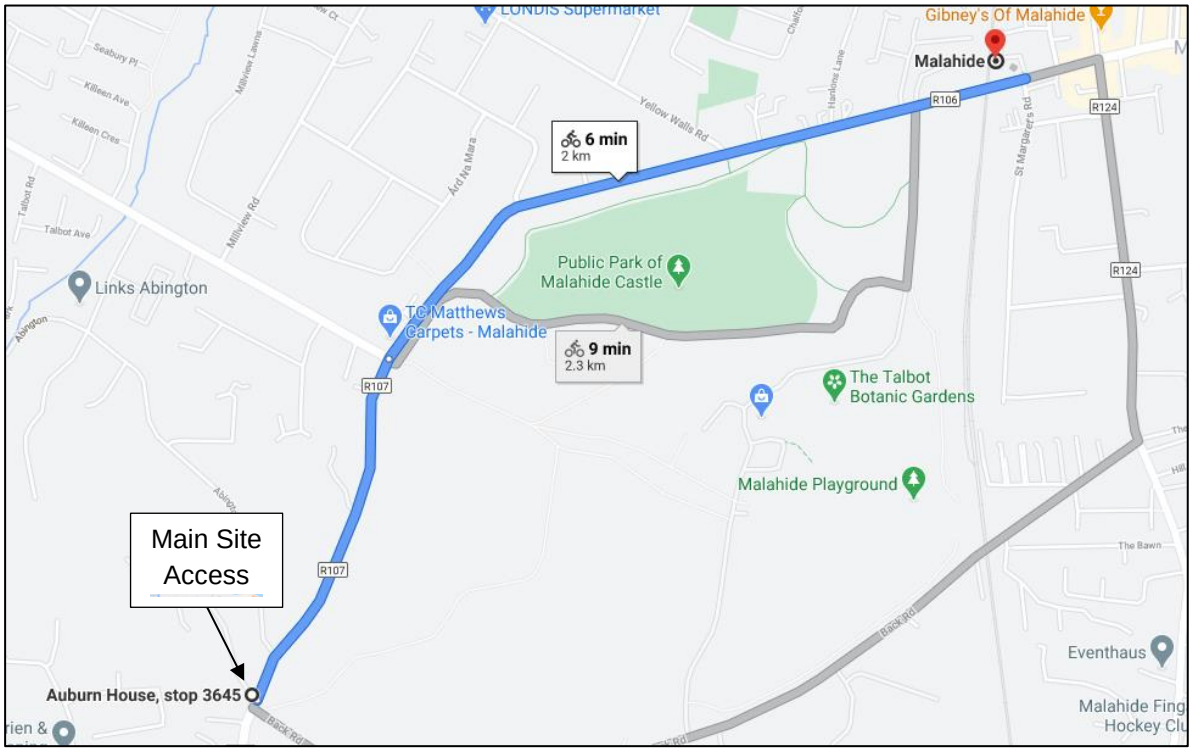


Figure 5 | *Cycling Route to Malahide Station.*

3.2.3 Car Sharing (GoCar)

The closest GoCar vehicles are located at Malahide Centre and at Ard Na Mara off Yellow Walls Road. See Figure 6. At the time of writing in March 2021 one vehicle is provided at each GoCar station, except for the Bridgefield Car Park Station which provides two.

Figure 6 | *Location of GoCar Stations (Source: www.gocar.ie)*

3.3 Existing Cycle Facilities

3.3.1 Greater Dublin Area Cycle Network Plan

In accordance with Existing Facilities Maps - Sheet E9 within the Greater Dublin Area Cycle Network Plan, Malahide town currently does not comprise any cycle tracks or cycle lane facilities. See Figure 7.

Figure 7 | *Existing Facilities Map – Sheet E9, Extracted from GDA Cycle Network Plan.*

3.3.2 Bike Parking

Sheltered bike parking is available at Malahide Station with 70 no. bike spaces provided. Alternatively, bikelocker.ie offer 20 no. additional bike lockers to rent. This existing bike parking at Malahide Station currently provides the opportunity for residents living in the surrounding area to commute to their destination (place of work, school, college, etc.) by a cycle-train combined travel and to shift away from the private car usage.

3.3.3 Bleeper Bike

Bleeper Bike scheme is Ireland's first stationless bike sharing scheme widely used in Dublin City. Stationless bikes are equipped with a smart lock fixed that controls usage of the bike by communicating with the app. Bleeper Bikes do not require custom build docking bays, however they must be parked at designated bike racks.

Three designated bike racks are provided at Malahide centre. The location of these racks is illustrated in Figure 8 below. The purple zone shown is a dedicated area where users will be able to find available Bleeper Bikes to use.

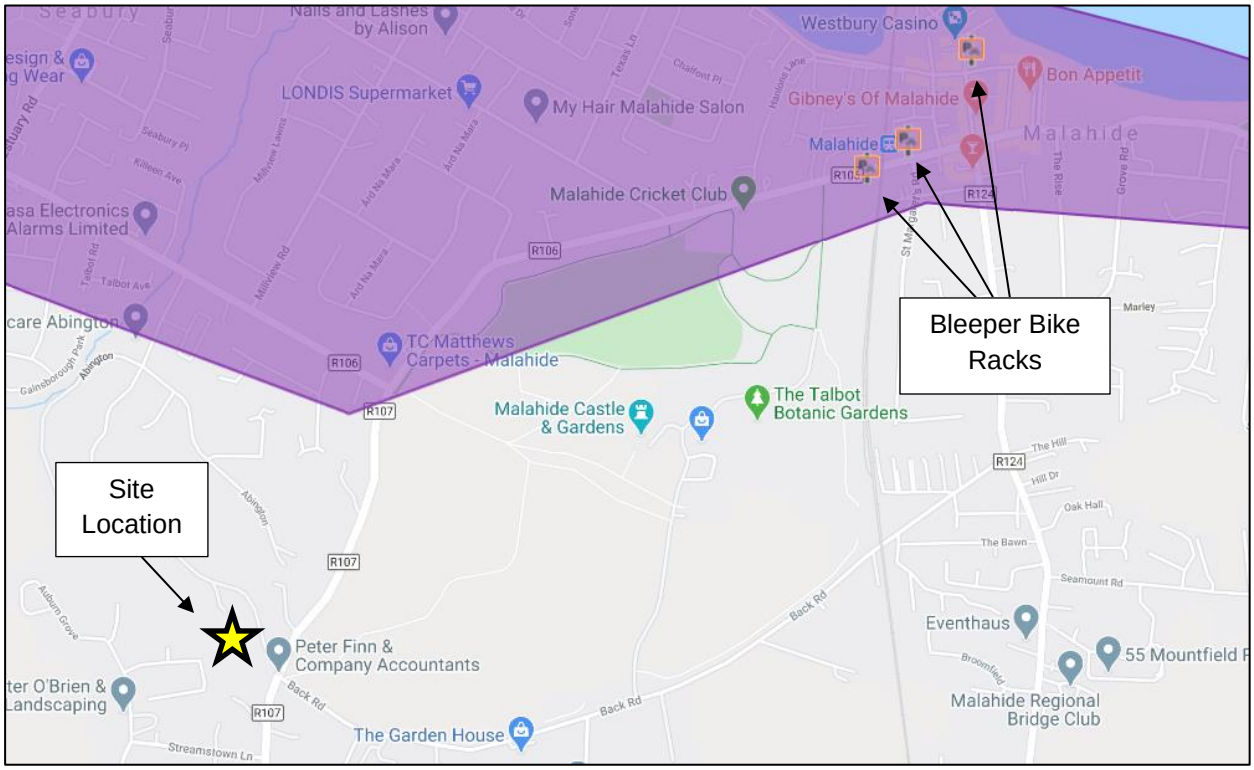


Figure 8 *| Bleeper Bike Designated Racks at Malahide.*

3.4 Existing Pedestrian Facilities

The existing pedestrian facilities in the surrounding area comprise a network of footpaths linking the various neighbourhoods to each other, to the existing schools, to the Malahide train station and village, to the Malahide Castle and Gardens and to the surrounding public network.

4. Transportation Improvements

4.1 Roads and Junctions

4.1.1 R107 Malahide Road / Back Road Junction Upgrade Scheme

As part of subject development works, it is proposed to upgrade the existing R107 Malahide Road / Back Road priority-controlled T-junction to a four-armed signalised junction. The additional fourth arm (western arm) of the proposed layout is the main vehicular access to the subject development site.

The proposed scheme will comprise:

- Construction of the fourth arm of the junction to provide controlled access to the proposed development site;
- Installation of a new traffic signal infrastructure with 4 normal traffic phases and 1 pedestrian phase;
- Provision of dedicated pedestrian crossings with dropped kerbs and tactile paving on Back Road (E) and R107 Malahide Road (N) approaches;
- Reconfiguration of the Back Road (E) approach to include a dedicated right-turning pocket lane;
- Reconfiguration of the R107 Malahide Road (S) approach to include a dedicated right-turning pocket lane;
- Improvements to the existing footpaths northeast, southwest and southeast of the junction;
- Provision of advanced stop lines for cyclists on the southern, eastern and northern approaches.
- Provision of MOVA control with loop detectors as per Fingal County Council requirements.

The proposed upgrade layout for this junction can be seen in Waterman Moylan Drawing No. 19-020-P110 accompanying the subject application.

4.2 Public Transport

4.2.1 DART Expansion Programme

The DART Expansion Programme is included within the 10-year horizon for the National Development Plan 2018 – 2027. It includes for an extension of the DART service to Balbriggan and an increased weekday frequency of 15 minutes in each direction.

4.2.2 Bus Connects

The Bus Connects project currently being promoted by the National Transport Authority aims to deliver a much-enhanced bus service to the Greater Dublin Area (GDA). The proposed route which will directly serve the subject development via R107 Malahide Road is the **Secondary Radial Routes 20** – See Figure 9. A summary of the frequency of this proposed route is presented in Table 3.

In addition to the above-mentioned route, the surrounding area will also be served by the **Secondary Radial Route 21 and** the **Peak Times Route X78**. The closest bus stops served by these routes will be located on R106 Swords Road to the north of the site and Feltrim Road to the south. A summary of the frequency of these routes is shown in Table 3.

Route No.	From	To	AM Weekday Frequency (07:00 to 09:00)	PM Weekday Frequency (17:00 to 19:00)
20	Malahide	City Centre	Every 30 minutes	Every 30 minutes
21	Swords Business Park	City Centre	Every 30 minutes	Every 30 minutes
X78	Malahide	UCD	2 Buses at 07:00	1 Bus at 16:00 1 Bus at 17:00

Table 3 | *Bus Connects Routes 20, 21 and X78 - AM and PM Weekday Frequency.*

For routes 20 and 21, the frequency of buses on weekends is 30-minutes except for hours between 06:00 – 08:00 which have a 60-minute frequency.

The nearest bus stops for Bus Route 20 are located just outside the Malahide Road access point. As illustrated in Figure 3 previously, these stops are roughly 5-minute walk from the centre of the proposed development site.

Figure 9 | *Bus Connects Routes Map.*

4.3 GoCar

It is expected that GoCar will provide 4-6 shared car club vehicles in the proposed SHD scheme. A letter to confirm GoCar's intention to provide these new car club vehicles is included in Appendix A.

4.4 Pedestrians

Additional pedestrian facilities, such as renovated footpaths and new dedicated pedestrian crossings will be provided on R107 Malahide Road / Back Road junction prior to the construction of the proposed development.

The internal layout of the site will include an interconnect network of footpaths. These footpaths will include greenways into the existing woodlands surround Auburn House and also connect to the site access point at Carey's Lane via a pathway alongside the road. The internal layout can be seen in the architect drawings accompanying the documentation package. A green route footpath will be used as another site access point connecting to the site entrance at R107 Malahide Road.

4.5 Cycle

Proposals for the Greater Dublin Area Cycle Network Plan were published by the National Transport Authority in December 2013. The plan sets out a vision and a strategy for the construction and/or designation of a comprehensive network of cycling routes throughout the Greater Dublin Area (Counties Dublin, Meath, Kildare and Wicklow).

An extract from Sheet N9 (Proposed Cycle Network Swords & Malahide) is reproduced in Figure 10 below.

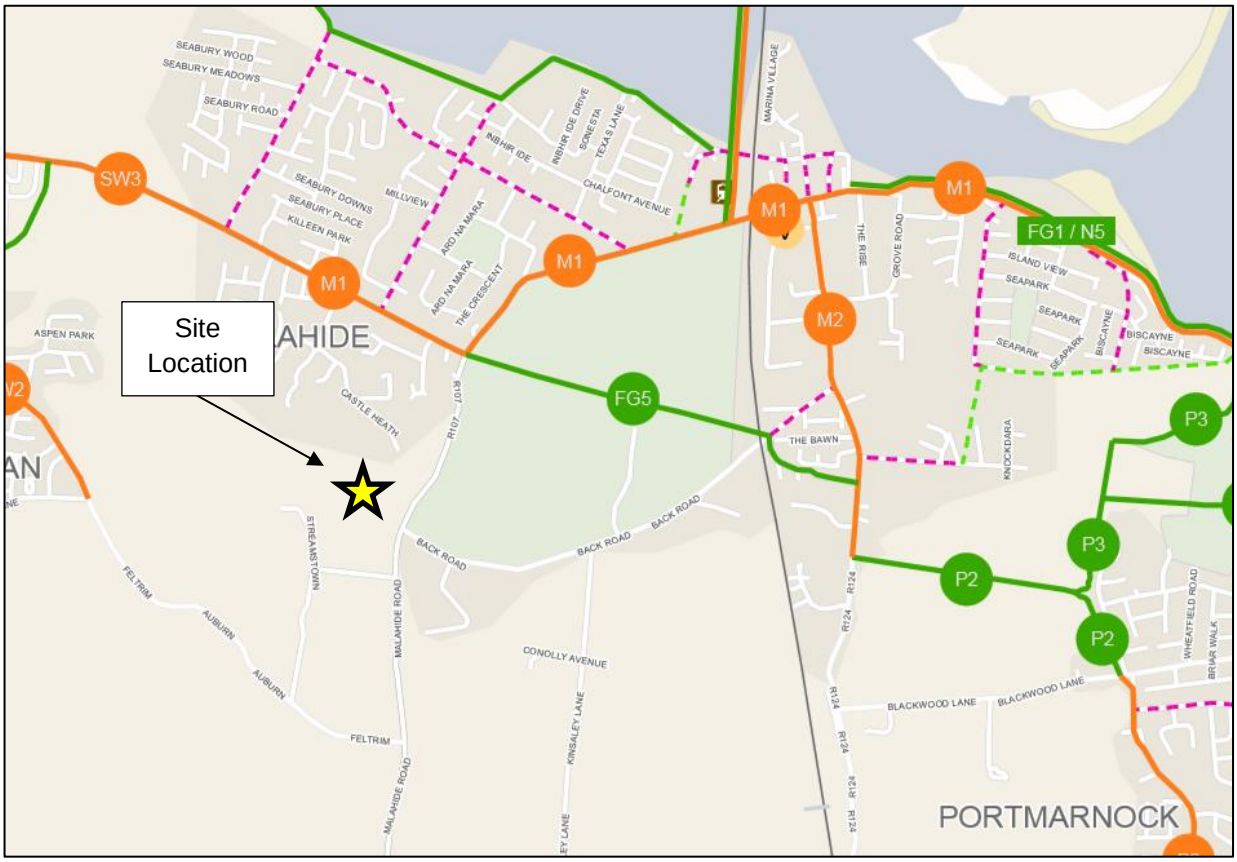


Figure 10 | *Proposed Cycle Network Upgrades.*

As can be seen from above, no cycle lanes are proposed on R107 Malahide Road and Back Road under the Cycle Network Plan. However, as previously described in Section 4.1.1, as part of the subject development works, it is proposed to provide advanced stop lines for cyclists on the southern, northern and eastern approaches of the proposed signalised junction between R107 Malahide Road / Back Road to provide with a safe area for cyclists in front of vehicular queues and help them position themselves correctly for their right/left turning movements.

5. Proposed Development at Streamstown Masterplan

5.1 Description

The development proposed as part of the subject application will be located on the northern portion of Streamstown Masterplan and will comprise:

- 102 house units (including the stables and the Auburn House);
- 43 duplex units;
- 266 apartment units over 8 apartment blocks
- A childcare facility with 173sqm of area.
- Total of 411 residential units.

As part of the proposed development works, it is also proposed to upgrade the R107 Malahide Road / Back Road from a priority-controlled T-junction to a signalised four-armed junction. The fourth arm of the proposed signalised junction (western arm) will be the main vehicular access to the proposed development site. A secondary vehicular entrance is proposed off Carey's Lane to the west which will be accessed via Streamstown Lane.

The overall proposed development is programmed to be fully constructed and occupied by the end of 2023.

5.2 Pedestrian and Cyclist Infrastructure

All footpaths for the proposed development will be provided in accordance with Section 4.3.1 of the DMURS which suggests that a minimum 1.8m footpath should be provided. The proposed internal pedestrian facility will connect to existing/planned facilities in the vicinity of the site and will provide a good quality and safe/secure network for pedestrians.

The proposed development includes a pathway around the site and woodlands surround Auburn House. This pathway will link up to the junction between Malahide Road and Back Road. The proposed development includes upgrading this junction to a signalised 4-armed junction. The upgrades include 3 sets of Toucan crossings for both pedestrians and cyclists which connect the proposed pathway to the existing pathways along Back Road and Malahide Road. The pathways along Back Road connect to the Malahide Castle and gardens which has a large network of pathways for pedestrians and cyclists connecting to Malahide Town and Malahide Train Station.

As part of the proposed development works, advanced stop lines for cyclists will be provided on the signalised junction between R107 Malahide Road and Back Road. These advanced stop lines will provide with a safe area for cyclists in front of vehicular queues and help them position themselves correctly for their right/left turning movements.

5.3 Proposed Development Population 2023

During the 2016 Census, the resident population in the areas surrounding the proposed development site (Figure 11) was 8,777 persons in 3,010 housing units equivalent to 2.92 persons per unit.

On the basis of 411 residential units and an average of 2.92 persons per unit as recorded by Census 2016, it is estimated that the proposed development will have a resident population of 1,200 persons when fully completed and occupied.

- Proposed Development: 411 units x 2.92 persons per unit : 1,200 persons

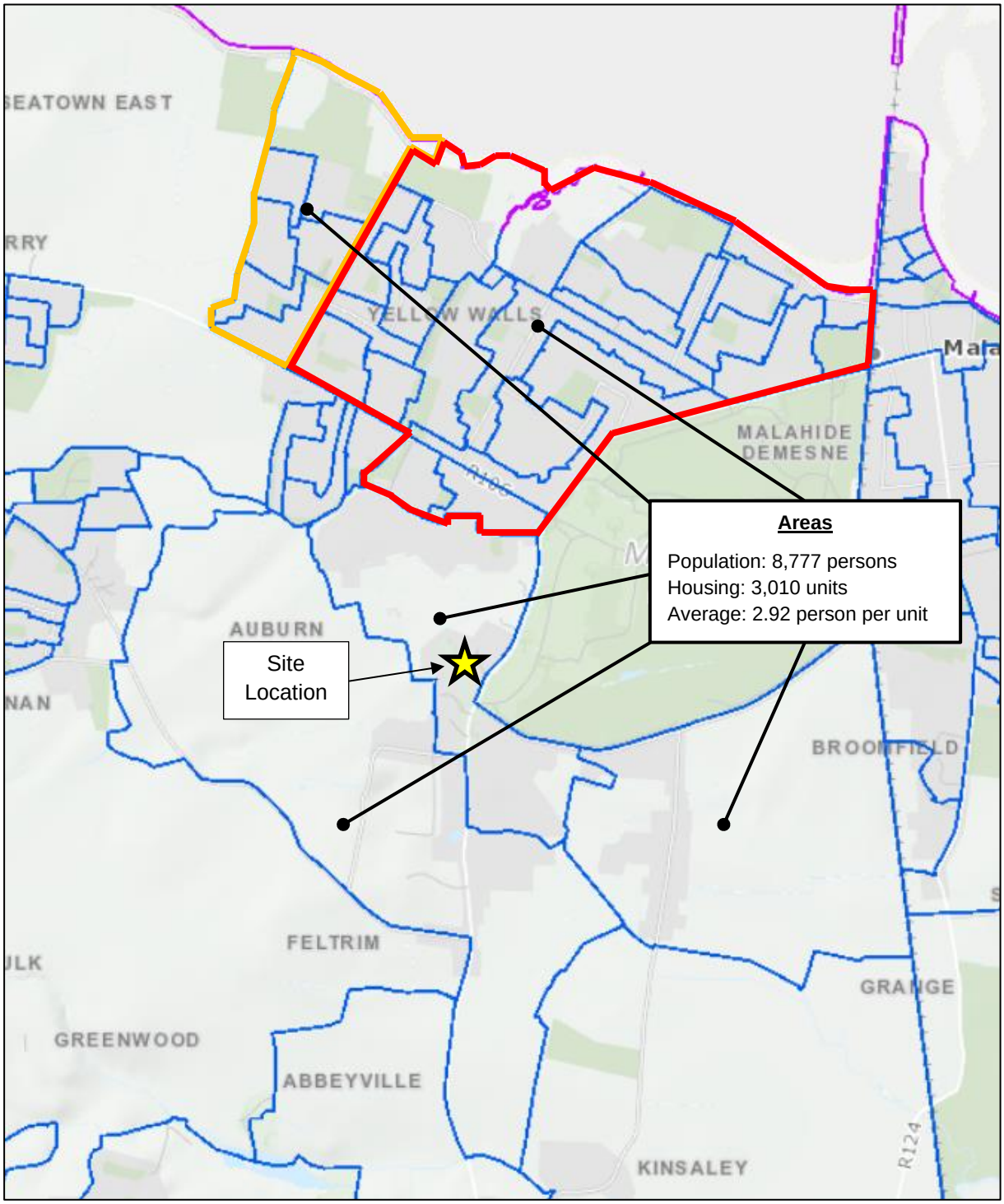


Figure 11 | *Areas for Census 2016 – Extracted from SAPMAPs.*

5.4 Site Access Points

The proposed development will have two vehicular access points. To the east of the development there is the primary vehicle access point leading to the junction between R107 Malahide Road and Back Road. This will also be an access point for pedestrians and cyclists using a green route through a woodland area which connects to the junction of R107 Malahide Road and Back Road. There will be a toucan crossing connecting the proposed development to pedestrian footpaths on both Malahide Road and Back Road. The other access point is on the west side of the site off Carey's Lane.

Each block of apartments will have undercroft parking. Apartment Blocks 1, 2 and 3 will share a single undercroft parking that will be accessed under Apartment Block 2 as shown on Waterman Moylan Drg No's 19-020-101. Apartment Block 8 will have undercroft parking accessed to the north of the block as shown on Waterman Moylan Drg No's 19-020-102. Apartment Blocks 4 and 5 will have a shared undecroft parking space. This is accessed between both apartment blocks as shown in Waterman Moylan Drg No's 19-020-P103.

5.5 Access to Refuse Vehicles/Fire Tenders

The proposed development will be accessible for refuse vehicles/fire tenders. Turning path layout for refuse vehicle and fire tender are shown on Waterman Moylan Drg No's 19-020-P140 and 19-120-P141 accompanying the subject application.

6. Site Accessibility

This section describes the accessibility of the proposed development site for pedestrians and cyclists. It is clear that high quality and extensive provision of walking and cycling facilities are key elements to support in the reduction of the private car usage.

6.1 Walking Accessibility

The national Transport Authority (NTA), formerly the Dublin Transport Office, have published the document "The Route to Sustainable Commuting" which describes acceptable walking distances for pedestrians without mobility impairment. This document states that 4,000m or approximately 50 minutes is the preferred maximum walking distance.

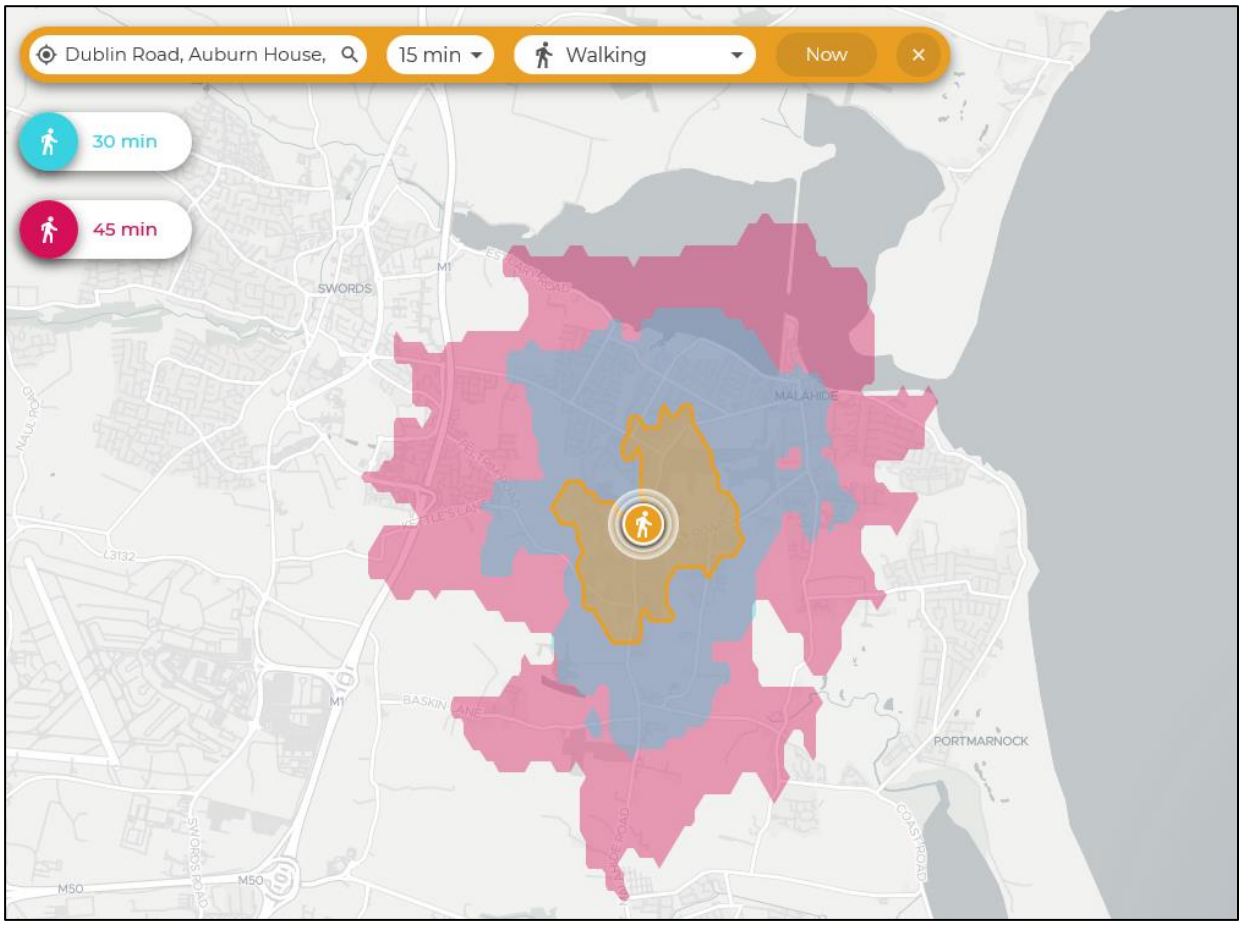


Figure 12 | *Walking Catchments from the Site.*

As illustrated in Figure 12, walkable distance from the development would allow residents to walk to Malahide Centre (northeast of the site), where currently comprises a number of facilities of all types, including leisure, retail and commercial developments within a walking time of approximately 30-45 minutes. The Malahide Rail Station is also reachable within the time range of 30-45 minutes and is currently a good option for those residents wishing to commute to Dublin City Centre.

A network of inter-connected footpaths is provided along the entire route from the subject site towards the Malahide Centre.

6.2 Cycling Accessibility

As per walking, the NTA document “The Route to Sustainable Commuting” mentioned above also describes acceptable cycling distances for cyclists without mobility impairment. According to this document, 10Km is the maximum distance people will travel by bike. There are a large number of commercial and employment areas within 10km or c.50min bike ride from the site. As show in Figure 13, those travelling by bike from the proposed development site could reach Malahide Centre within 15-minute cycling, Dublin Airport within 30-minute cycling and Dublin City Centre (North side) within 45-minute cycling.

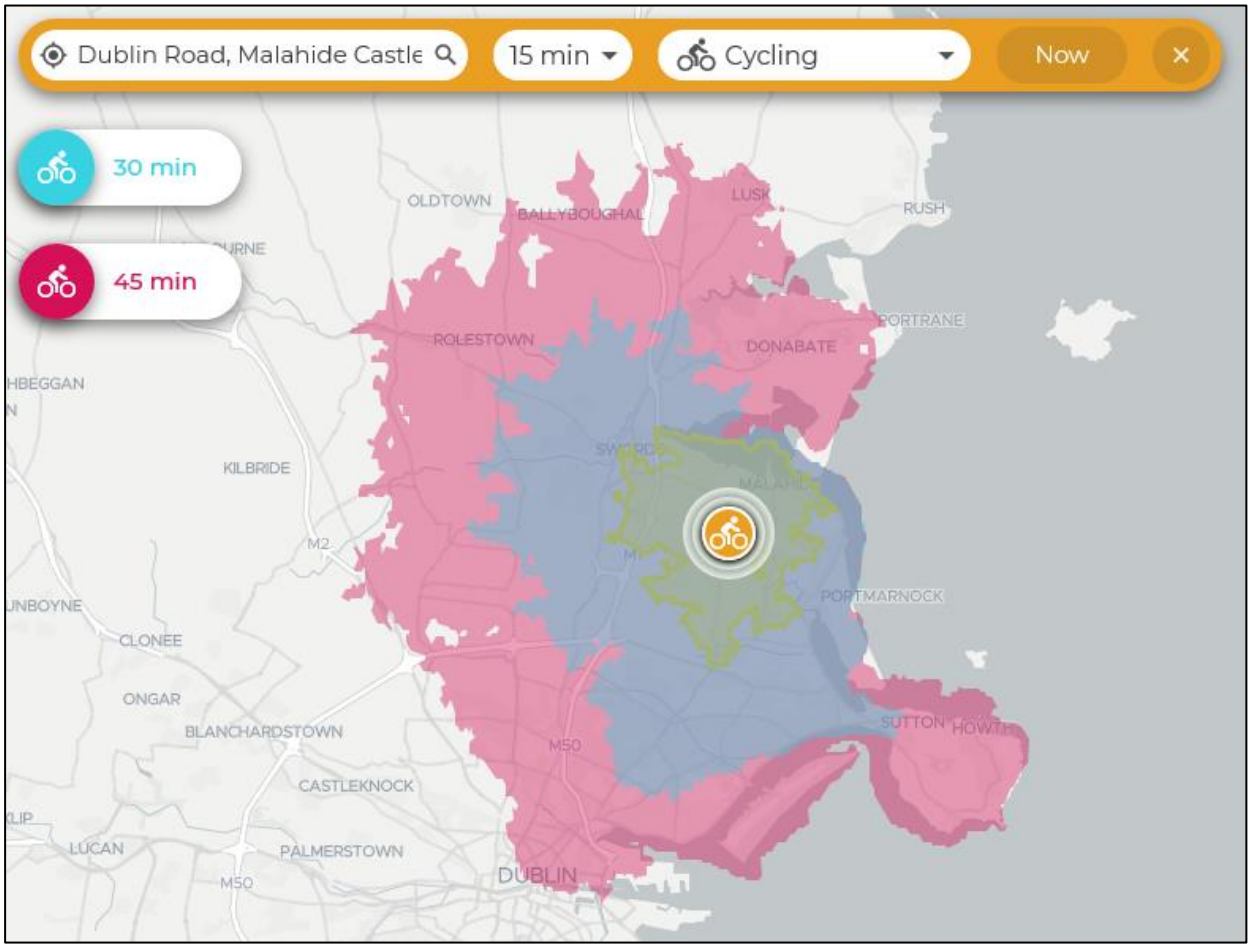


Figure 13 | *Cycle Catchments from the Site.*

7. Broomfield Masterplan

In order to provide a robust and conservative assessment of the transportation network in the local area, the Broomfield Masterplan was also analysed with regards to potential additional population and trip generation, to determine the cumulative impacts of the subject development and other proposed developments in the vicinity of the site. The location of Broomfield Masterplan is illustrated in Figure 14 – extracted from Fingal Development Plan (FDP), Sheet No. 9.

7.1 Description

In the Fingal Development Plan 2017 – 2023, Broomfield Masterplan falls within the zoning objective type of:

> "***RA – Residential Area****: provide for new residential communities subject to the provision of the necessary social and physical infrastructure.*
>
> *Ensure the provision of high quality new residential environments with good layout and design, with adequate public transport and cycle links within walking distance of community facilities. Provide an appropriate mix of house sizes, types and tenures in order to meet household needs and to promote balanced communities."*

At the time of writing in 2021, Phase 1 of Broomfield Masterplan, approved under Planning References F13A/0459 and F13A/0460, is under construction.

7.2 Phase 1 (Planning. Ref's. F13A/0459 and F13A/0460)

The under-construction Phase 1 development of Broomfield Masterplan comprises of a total of 149 residential units (61 dwelling under Planning Reference F13A/0459 and 88 dwellings under Planning Reference F13A/0460). It is expected that Phase 1 will be fully developed and occupied by 2023.

7.3 Future Phases

The subsequent phases of Broomfield Masterplan are estimated to comprise approximately 500 residential units. The last phase is assumed to be fully completed and occupied by 2028.

7.4 Overall Broomfield Masterplan Development

The overall Broomfield Masterplan development expected to be fully completed and occupied by 2028 is presented in Table 4.

Phase	Total Residential Houses + Apartments (Units)
Phase 1 (Under Construction)	149
Future Phases (Future Applications)	500
Overall Broomfield Masterplan	649

Table 4 | *Overall Broomfield Masterplan Development 2028.*

7.5 Overall Broomfield Masterplan Population 2028

On the basis of 649 residential units and an average of 2.92 persons per unit as recorded by Census 2016 (Figure 11), it is estimated that the overall Broomfield Masterplan will have a resident population of 1,895 persons when fully completed and occupied.

- Phase 1: 149 units x 2.92 persons per unit : 435 persons
- Future Phases: 500 units x 2.92 persons per unit : 1,460 persons

Broomfield Masterplan Development: 649 units x 2.92 person per unit : 1,895 persons

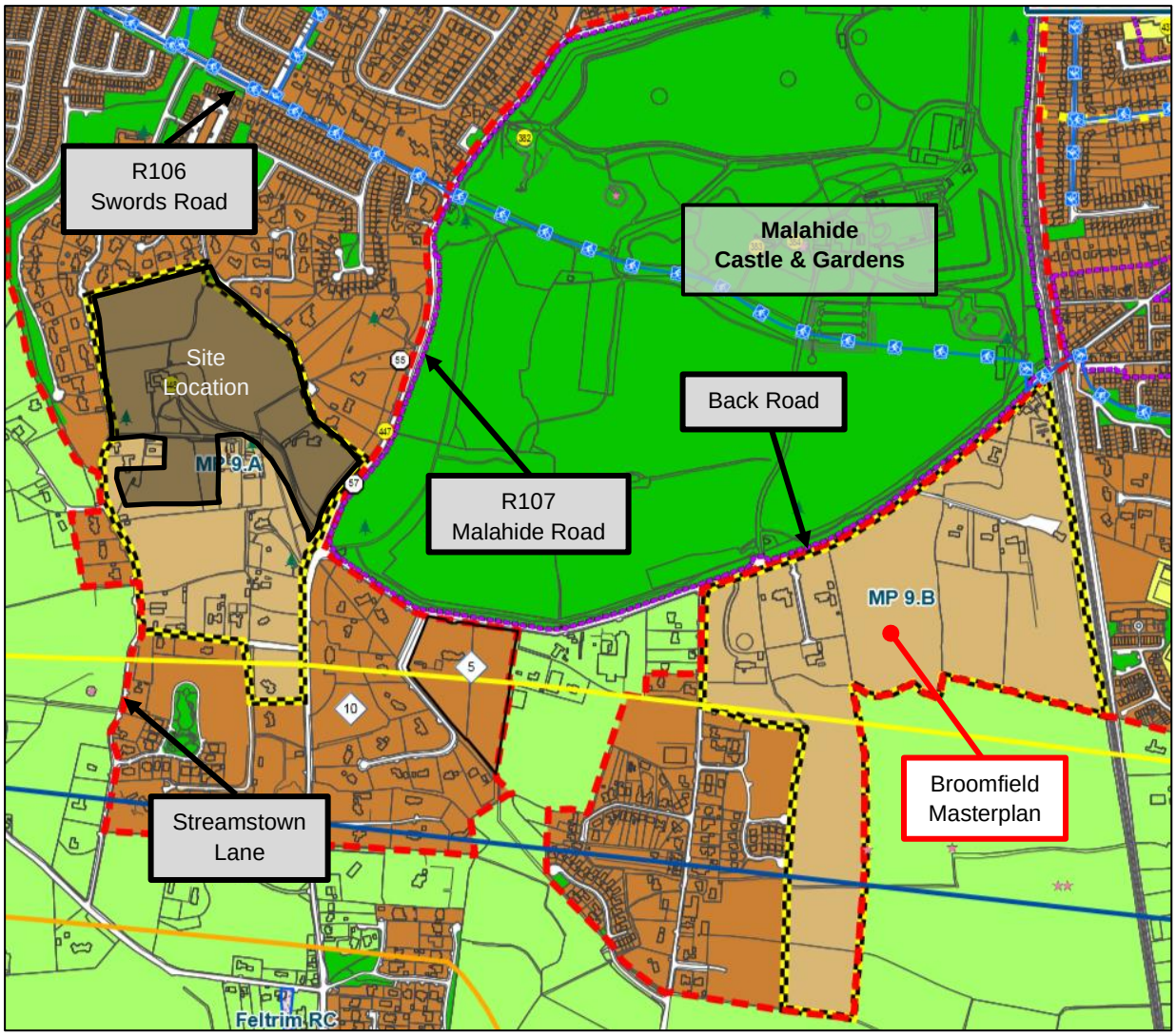


Figure 14 *| Location Map for Broomfield Masterplan – Extracted from Fingal Dev. Plan - Sheet 9.*

8. Travel Characteristics

8.1 Traffic Surveys

In order to identify the volumes of traffic movements at key points on the road network surrounding the subject site, three sets of classified turning movement traffic counts were commissioned.

A manual classified traffic survey was carried out by 'Traffinomics' on Wednesday 29th May 2019 at one priority-controlled T-junction over a period of 24 hours. The junction surveyed was:

- **Junction 1 (Priority T-junction):** R107 Malahide Road / Back Road.

A second manual classified traffic survey was also carried out by 'Traffinomics' on Tuesday 21st January 2020 at one priority-controlled T-junction over a period of 24 hours. The junction surveyed was:

- **Junction 2 (Priority T-junction):** Carrey's Lane / Streamstown Lane.

An additional manual classified traffic survey was carried out by 'IDASO' on Tuesday 24th November 2020 at two priority-controlled T-junctions over a period of 24 hours (as requested by Fingal County Council Transportation Department during the Tripartite meeting). The junctions surveyed were:

- **Junction 3 (Priority T-junction):** R107 Malahide Road / Streamstown Lane.
- **Junction 4 (Priority T-junction):** Feltrim Road / Streamstown Lane.

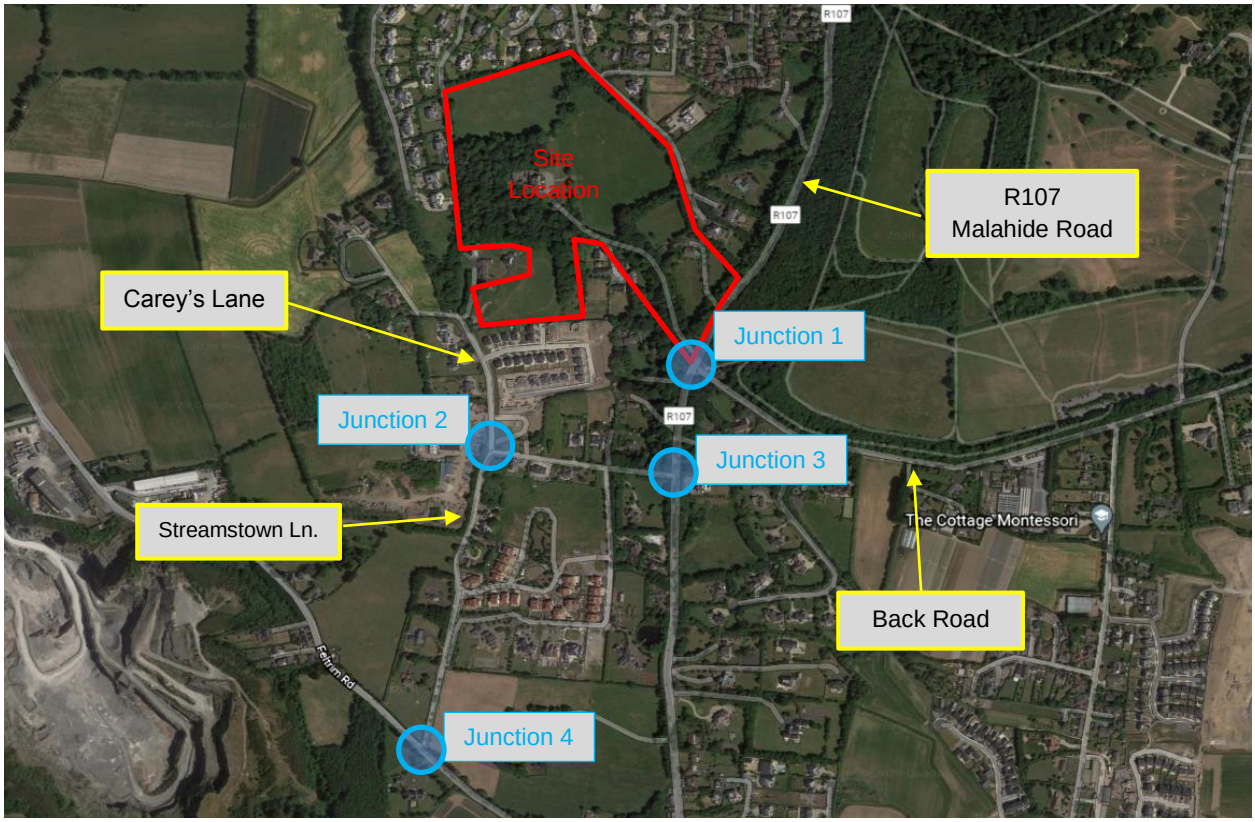


Figure 15 | *Location of Surveyed Junctions.*

As described above, the survey carried out by 'IDASO' for Junction 3 and Junction 4 was undertaken in November 2020. At that time, the country was at Lockdown Level 5 to restrict the spread of COVID-19 and as a result, the traffic flows surveyed for these junctions were considered not representative of a normal traffic day.

In order to account for the traffic reduction due to Lockdown Level 5 and identify typical traffic flows of a normal day, the surveyed flows for Junctions 3 and 4 have been factored up. To assist with the factoring up exercise, a one-page document named *'COVID-19 – Junction Turning Count Comparison'* has been provided by 'IDASO'. This document provides data of total vehicle flows surveyed at a random junction in the GDA (North Side) during each level of COVID-19 restriction (from April 2020 to November 2020) and compares them against the Pre COVID-19 scenario in February 2020. The random surveyed junction is the intersection between Oscar Traynor Road (R104), Malahide Road (R107) and Tonlegee Road (R107) in Coolock.

The results of the comparison exercise carried out by 'IDASO' identified that in November 2020 (during Level 5 restrictions), the volume of traffic getting through the surveyed junction was 14% lower when compared to the Pre COVID-19 scenario in February 2020. Based on that, the vehicle flows surveyed on Junctions 3 and 4 have been increased by a 14% factor.

It is acknowledged that the random junction is located in a distinct area in terms of traffic level and the identified traffic patterns may not be precisely representative of Junctions 3 and 4 patterns. However, given the lack of specific information for the subject junctions in this regard, the use of the patterns identified for the random junction was considered reasonable to extrapolated typical day volumes on Junctions 3 and 4.

The surveys identified different peak hours for all four junctions. For the purpose of this Traffic and Transport Assessment the assumed peak hours are 08h00 - 09h00 in the AM and 18h00 – 19h00 in the PM, being the most common among them. The AM and PM peak hour surveyed volumes are illustrated in Figure 16. The factored volumes for Junctions 3 and 4 are shown later in Figure 22 – Section 11.1.

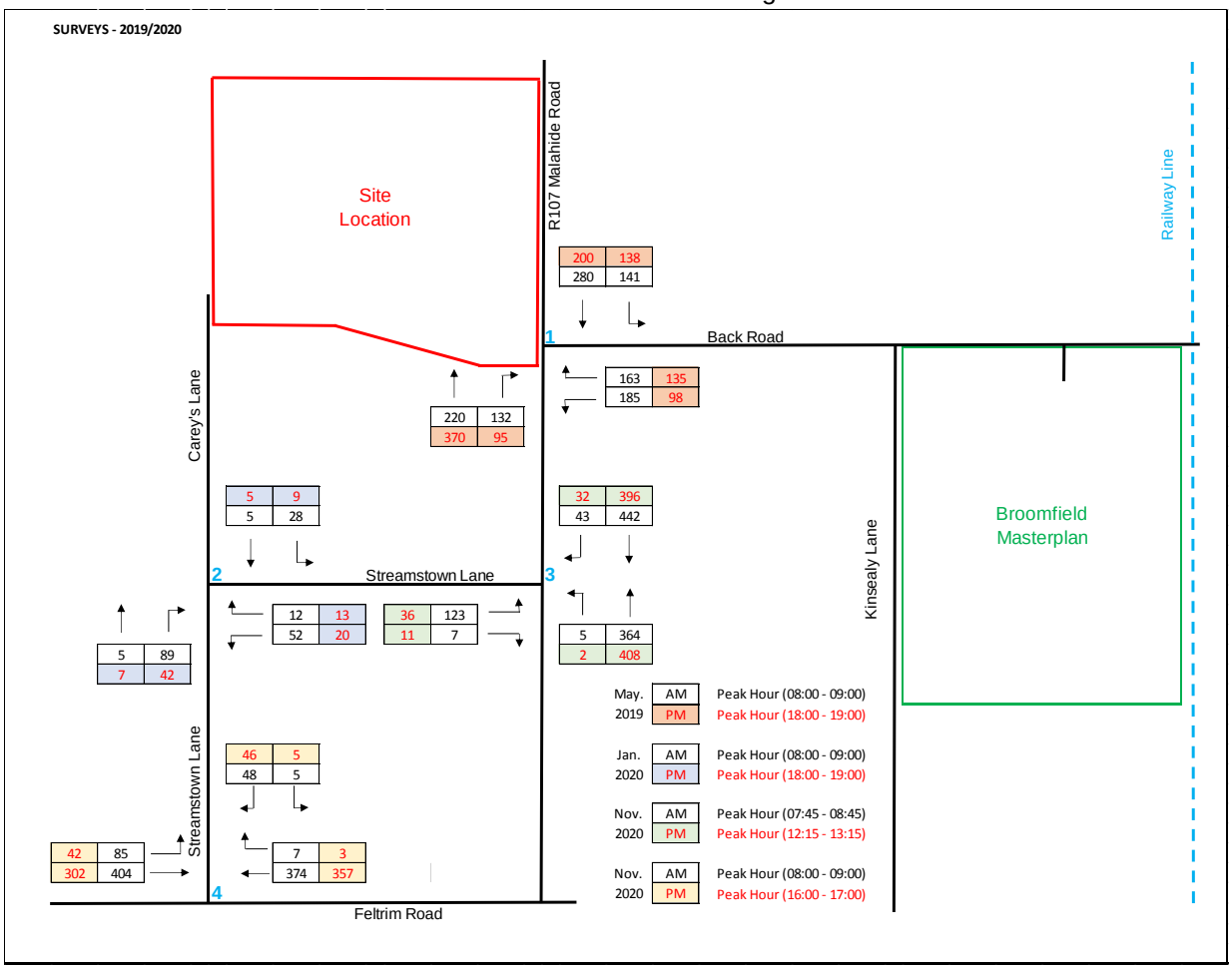


Figure 16 | *Surveyed Flows 2019 & 2020.*

8.2 Small Areas - Census 2016

Census 2016 was carried out by the Central Statistics Office (CSO) on 24th April 2016.

With the objective to obtain information regarding 'car ownership' and 'modal split for the journey to work, school or college', five areas surrounding the proposed development site have been consulted. Areas 1, 2 and 3 are Small Areas which have been defined by Central Statistics Office in 2016. Areas 4 and 5 are a grouping of some Small Areas defined by CSO. These consulted areas in relation to the proposed development site location is illustrated in Figure 17.

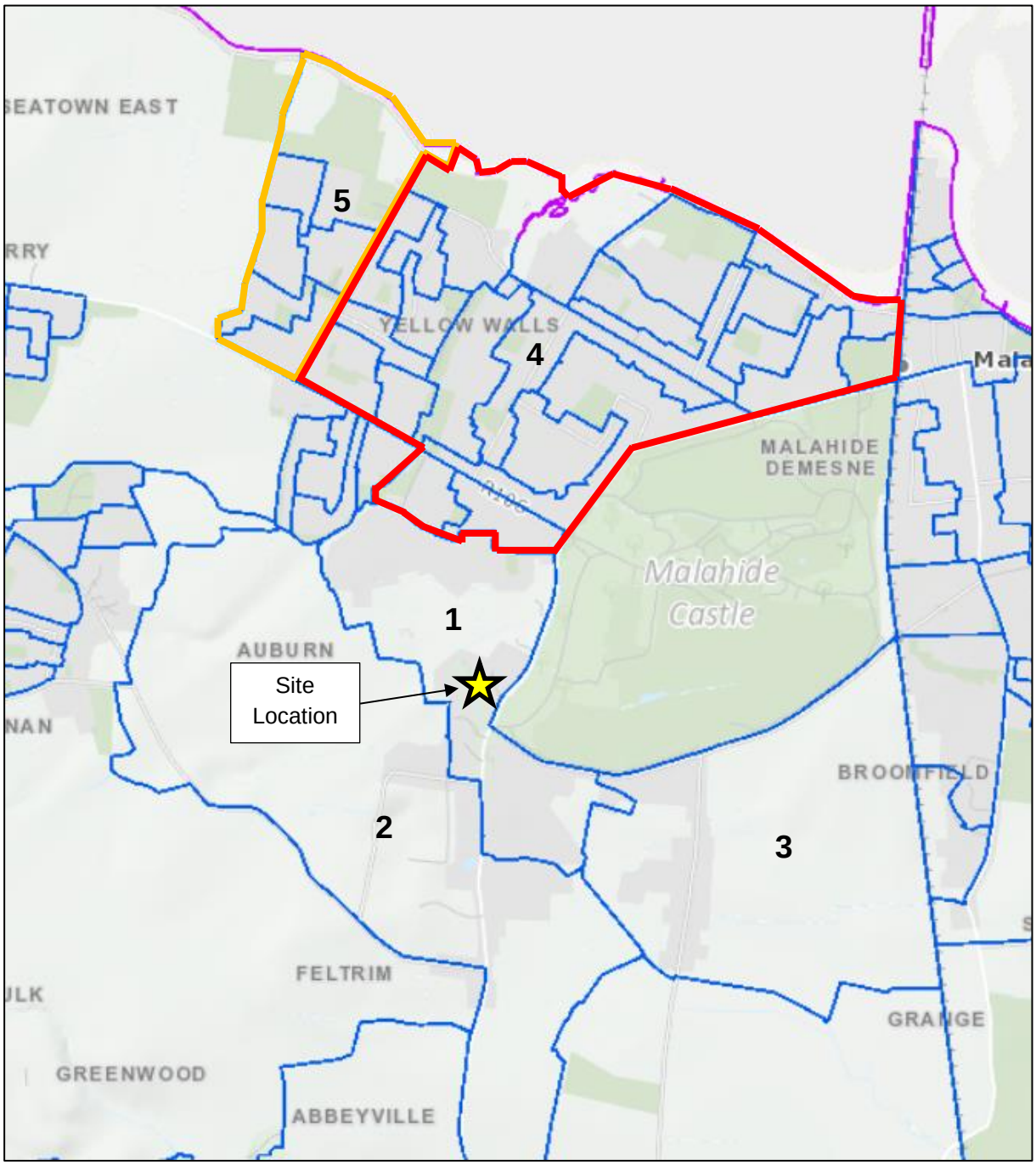


Figure 17 | *Areas for Census 2016 – Extracted from SAPMAPs.*

8.3 Car Ownership – Census 2016

The results of the census for car ownership in the consulted areas are presented in Table 5.

The survey recorded that the population of 8,777 persons living in these areas had a car ownership of 4,883 vehicles equivalent to 1 car per 1.80 persons or 1.62 car per residential unit.

CAR OWNERSHIP										
Area	Population	Housing	0	1	2	3	4+	Not Stated	Total No. Cars	Total No. Cars / Housing
1	328	89	1	15	38	19	13	3	200	2.25
2	325	88	5	17	46	13	7	0	176	2.00
3	353	107	2	35	55	8	5	2	189	1.77
4	6,224	2,148	141	850	921	175	39	22	3,373	1.57
5	1,547	578	36	198	265	55	13	11	945	1.63
TOTAL	8,777	3,010	185	1,115	1,325	270	77	38	4,883	1.62

Table 5 | *Surveyed Car Ownership - Census 2016.*

8.4 Rail Travel – Census 2019

The National Heavy Rail Census was carried out by Iarnrod Eireann in 2019 on behalf of the National Transport Authority (NTA).

The Final Report published in July 2020 recorded ongoing annual increases in passenger numbers at Malahide Station.

These increases are likely to continue for a number of years into the future.

The results of the Census for passenger numbers per day at Malahide Station are presented in Tables 6 and 7 below.

Station	Activity	2019	2018	2017	2016	2015	2014	2013	2012
Malahide	Boarding's	3,456	3,952	3,324	2,626	2,604	2,086	2,177	2,318
	Alighting's	3,597	3,629	3,030	2,158	2,508	1,992	2,178	2,302
	Total	6,953	7,581	6,354	4,784	5,112	4,078	4,355	4,620

Table 6 | *Daily Passenger Numbers at Malahide Station 2012 to 2019.*

Station	Activity	Northbound	Southbound	Total
Malahide	Boarding's	636	2,820	3,456
	Alighting's	3,101	496	3,597
	Total	3,737	3,316	7,053

Table 7 | *Daily Boarding's and Alighting's at Malahide Station 2019.*

8.5 Rail Passenger Forecasts 2020

For the purpose of forecasting future rail passenger numbers at Malahide, the methodology described below was used.

- Extraction of surveyed daily numbers from Rail Census 2019 published in 2020.
- Calculation of growth rate from the survey results for 2012 – 2019.
- Application of the growth rate to the 2019 survey results to generate the 2020 numbers.
- Calculation of passenger numbers that will be generated by the proposed residential development at Streamstown Masterplan and the overall (under-construction and potential future) development in Broomfield Masterplan. Refer to Section 13.1
- Addition of the new passenger numbers to the 2020 passenger numbers to forecast the 2028 passenger numbers (Streamstown and Broomfield Masterplans fully developed and occupied). Refer to Section 13.1.

8.6 Daily Rail Passenger Numbers 2020

The surveyed passenger numbers for Malahide Station show an average year on year increase of 7% per annum over the six years between 2012 and 2019.

This rate of increase was applied to the 2019 surveyed numbers to estimate the existing numbers in 2020. The results are presented in Table 8.

Station	Activity	Northbound	Southbound	Total
Malahide	Boarding's	681 (18%)	3,017 (82%)	3,698 (100%)
	Alighting's	3,318 (86%)	531 (14%)	3,849 (100%)
	Total	3,999	3,548	7,547

***Table 8** | Boarding's and Alighting's at Malahide Station 2020 (Existing).*

8.7 Peak Hour Rail Boardings and Alightings 2020

The hourly profile surveyed during the Census recorded that overall, 17% of daily passenger demand occurred during the AM Peak Hour and 15% of daily passenger demand occurred during the PM Peak Hour.

The proportion of passenger numbers during the AM Peak Hour and the PM Peak Hour varies significantly with the location of the rail station whether in the City Centre or the suburbs.

In the case of Malahide Station, outbound passenger numbers in the AM Peak Hour and inbound passenger numbers during the PM Peak Hour will be greater than the corresponding more balanced numbers in the City Centre. Similarly, inbound passenger numbers in the AM Peak Hour and outbound passenger numbers during the PM Peak Hour will be lower than the corresponding more balanced numbers in the City Centre.

For the purpose of this TTA, it was assumed that 20% of the daily boardings occur during the AM Peak Hour and 10% during the PM Peak Hour. It was also assumed that 10% of the alightings occur during the AM Peak Hour and 20% during the PM Peak Hour.

The Peak Hour passenger numbers estimated for Malahide in 2020 is presented in Table 9 below.

2020 (EXISTING) – MALAHIDE STATION				
Period	**Activity**	**Northbound**	**Southbound**	**Total**
AM Peak Hour	Boardings	136	603	739
	Alightings	332	53	385
PM Peak Hour	Boardings	68	302	370
	Alightings	664	106	770

Table 9 *| Peak Hours Boarding's and Alighting's at Malahide Station 2020 (Existing).*

8.8 Surveyed Modal Split – Census 2016

The surveyed 'modal split for the journey to work, school or college' by the residents at the five consulted areas as surveyed in Census 2016 recorded that 65% of 8,777 population generated 5,771 trips for the journey to work, school or college. Work trips made up for c. 60% of trips generated in the area, some 66% were by car, 17% by Train, 10% by Bus, 2% by Bicycle, 3% On foot and 2% were others or not stated. College trips made up c. 40% of the trips generated in the area, some 43% were by car (37% of these were car passenger), 11% by Train, 21% by Bus, 3% by Bicycle, 20% On Foot, and 2% were others or not stated.

The survey results for each consulted area are presented in Table 10 below.

Area	Pop.	Trip Attractor	Car Driver	Car Passenger	Train	Bus	Bicycle	On Foot	Others or Not Stated	Total
1	328	Work	92	3	8	3	2	1	4	113
			81%	3%	7%	3%	2%	1%	3%	100%
		College	18	50	17	14	3	6	2	110
			16%	45%	15%	13%	4%	5%	2%	100%
2	325	Work	78	1	14	4	3	2	3	105
			74%	1%	13%	4%	3%	2%	3%	100%
		College	6	64	8	18	1	6	3	106
			6%	60%	8%	17%	1%	6%	3%	100%
3	353	Work	90	3	19	5	3	3	5	131
			69%	2%	15%	4%	2%	2%	6%	100%
		College	5	66	3	12	7	5	2	100
			5%	66%	3%	12%	7%	5%	2%	100%
4	6,224	Work	1495	49	472	218	49	78	54	2415
			62%	2%	20%	9%	2%	3%	2%	100%
		College	75	458	169	289	34	360	31	1416
			5%	32%	12%	20%	2%	25%	2%	100%
5	1,547	Work	507	28	85	116	15	13	15	779
			65%	4%	11%	15%	2%	2%	2%	100%
		College	29	190	47	142	14	65	9	496
			6%	38%	9%	29%	3%	13%	2%	100%
Total	8,777	Work	2262	84	598	346	72	97	81	3543
			64%	2%	17%	10%	2%	3%	2%	100%
		College	133	828	244	475	59	442	47	2228
			6%	37%	11%	21%	3%	20%	2%	100%

Table 10 *| Surveyed Modal Split for the Journey to Work, School or College - Census 2016.*

9. Trip Generation

9.1 TRICS Car Trip Rates

In order to assess the likely impact of the traffic generation arising from the proposed development, TRICS software has been consulted. TRICS is the national standard of trip generation and analysis in Ireland. It is a database system which allows users to identify representative trip rates and to establish potential levels of trip generation for a wide variety of developments.

Full car trip rates, which were sourced from the TRICS Database version 7.7.3, have been provided in Appendix C and are summarised in Table 11 below.

Land Use Category	AM (08:00 – 09:00)		PM (18:00 – 19:00)	
	Trip Rates IN	Trip Rates OUT	Trip Rates IN	Trip Rates OUT
Mixed Private Residential Development (Flats and Houses)	**0.137** per unit	**0.297** per unit	**0.294** per unit	**0.159** per unit

Table 11 | *TRICS Car Trip Rates.*

Fingal County Council raised a concern in relation to the use of TRICS trip rates for 'mixed-use residential development (flats and houses)' as opposed to 'mixed-use residential development (apartments and houses)'. This concern was noted and a new consultation of TRICS Database was undertaken. In this consultation it was observed that, as per Figure 18 below, the 'apartment' typology of use is not an option for selection, and it appears that TRICS recognises flats and apartments as being the same.

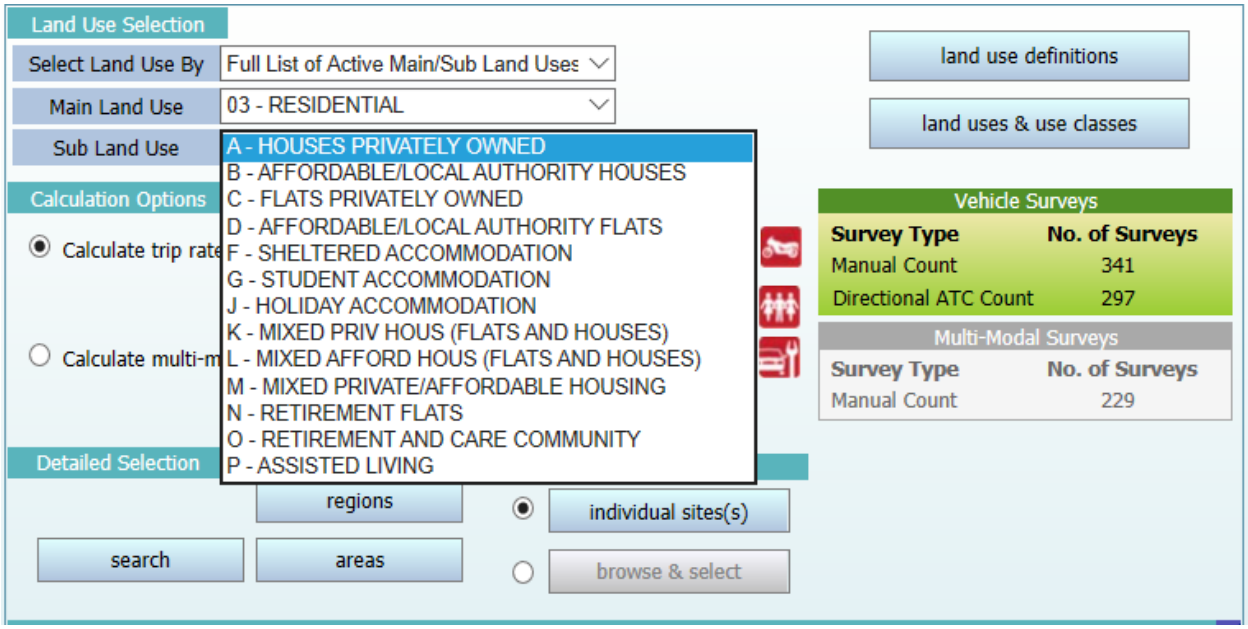


Figure 18 | *Land Use Selection – TRICS Database System.*

9.2 Peak Hour Car Trip Generation

9.2.1 2023 (Opening Year of Proposed Development)

Trip generation calculation for the assessment year of 2023 (Opening Year of Proposed Development at Streamstown Masterplan) is presented below. As described earlier in Section 5.1 and 7.4 of this report, it is expected that, by 2023, the following new developments will be in place:

- Proposed Development at Streamstown Masterplan (Subject Application) comprising 411 residential units.
- Under-construction Phase 1 of Broomfield Masterplan (Reg. Refs. F13A/0459 and F13A/0460) comprising a total of 149 residential units.

Proposed Development at Streamstown Masterplan (Subject Application)

The calculated car trips for the proposed development at the Streamstown Masterplan in 2023 is presented in Table 12. These have been based on:

- A proposed development of 411 residential units.
- A residential population of 1,200 persons.
- The car trip rates from Table 11.

As presented previously in this report, in addition to the 411 residential units proposed, as part of the subject development a Childcare Facility with 173sqm of area is also proposed in the scheme. However, given the size of this facility and the number of residential units proposed, it is assumed that the proposed Childcare Facility will primarily serve the proposed development's resident and in general will attract non-primary trips. Therefore, no additional car trips have been assumed for the Childcare Facility.

Proposed Development at Streamstown Masterplan	AM Peak Hour		PM Peak Hour	
	Car Trips In	Car Trips Out	Car Trips In	Car Trips Out
411 no. residential units	56	122	121	65

Table 12 *| AM&PM Car Trip Generation – Proposed Development at Streamstown Masterplan.*

From above, it can be seen that, in the opening year of 2023, the proposed development at Streamstown Masterplan is expected to generate a total of 178 car trips during the AM peak hour (56 inbound and 122 outbound) and a total of 186 car trips during the PM hour (121 peak hour and 65 outbound).

Under-construction Phase 1 of Broomfield Masterplan (Reg. Ref's F13A/0459 and F13A/0460)

The permission for the under-construction Phase 1 of Broomfield Masterplan provided for the construction of a total of 149 no. houses (61 no. houses under Planning Reference F13A/0459 and 88 no. houses under Planning Reference F13A/0460).

The AM and PM peak hour car trip generation to/from the under-construction Phase 1 of Broomfield – extracted from the Traffic Impact Assessment approved under Planning Reference F13A/0459, is presented in Table 13 below.

Phase 1 of Broomfield Masterplan	AM Peak Hour		PM Peak Hour	
	Car Trips In	Car Trips Out	Car Trips In	Car Trips Out
149 no. residential units	22	60	57	34

Table 13 | *AM&PM Car Trip Generation – Under-construction Broomfield Phase 1.*

As can be seen from the above, based on the TIA approved under Planning Reference F13A/0459, the under-construction Phase 1 of Broomfield Masterplan is expected to generate a total of 82 car trips during the AM peak hour (22 inbound and 60 outbound) and a total of 91 car trips during the PM peak hour (57 inbound and 34 outbound).

9.2.2 2028 (Opening Year of Proposed Development + 5 Years)

Car trip generation calculation for the assessment year of 2028 (Opening Year of Proposed Development + 5 Years) is presented below. It is expected that, in 2028, the following new developments will be in place:

- Proposed Development at Streamstown Masterplan (Subject Application) comprising 411 residential units – as per 2023.
- Broomfield Masterplan Phase 1 (Reg. Refs. F13A/0459 and F13A/0460) comprising a total of 149 residential units – as per 2023.
- Broomfield Masterplan Subsequent Phases (Potential Future Development) comprising a total of c. 500 residential units.

Subsequent Phases of Broomfield Masterplan (Potential Future Development)

The calculated car trips for the potential future development of the subsequent phases of Broomfield Masterplan is presented in Table 14. These have been based on:

- A future residential development comprising of c. 500 residential units.
- A residential population of c. 1,460 persons.
- The car trip rates from Table 11.

Subsequent Phases of Broomfield Masterplan	AM Peak Hour		PM Peak Hour	
	Car Trips In	Car Trips Out	Car Trips In	Car Trips Out
c. 500 no. residential units	69	149	147	80

Table 14 | *AM&PM Car Trip Generation – Potential Future Development at Broomfield.*

As can be seen from the above, for the future assessment year of 2028, the potential future residential development in Broomfield Masterplan is estimated to generate a total of 218 car trips during the AM peak hour (69 inbound and 149 outbound) and a total of 227 car trips during the PM peak hour (147 inbound and 80 outbound).

9.2.3 Summary of Peak Hour Car Trip Generation

Table 15 below shows a summary of the car trips estimated to be generated by the under-construction, proposed and potential future developments at Streamstown and Broomfield Masterplans in 2023 and 2028.

Development	No. units	Year	AM Peak Hour		PM Peak Hour	
			Car Trips In	Car Trips Out	Car Trips In	Car Trips Out
Proposed Development at Streamstown Masterplan (Subject Application)	411	2023	56	122	121	65
Phase 1 of Broomfield Masterplan (Under-construction)	149	2023	22	60	57	34
Subsequent Phases of Broomfield Masterplan (Potential Future)	500	2028	69	149	147	80

Table 15 | *Summary of Peak Hour Car Trip Generation – 2023 and 2028.*

10. Trip Distribution

10.1 Proposed Development at Streamstown Masterplan

In order to determine the amount of new car trips expected to travel through each surveyed junction in the vicinity of the proposed development site, the calculated car trips for the proposed development at Streamstown Masterplan presented in Table 15, have been distributed.

The estimated traffic to/from the proposed development has been divided between the following two proposed vehicle access points:

- **Access Point 1:** Proposed western arm of the proposed signalised junction between R107 Malahide Road and Back Road.
- **Access Point 2:** Proposed vehicular access via Carey's Lane.

Given its location providing more direct access to R107 Malahide Road, Access Point 1 is assumed to serve the majority of the proposed development trips (70%), whilst the Access Point 2 is assumed to serve the remaining 30%.

Generally, based on the location of the subject vehicular access points and the proposed development in relation to regional roads, to M1 motorway and to major employment and commercial centres, the estimated development car trips are assumed to have the following origin/destination distribution characteristics:

- 40% to/from south along R107 Malahide Road;
- 15% to/from north along R107 Malahide Road;
- 15% to/from east along Back Road;
- 20% to/from west along Feltrim Road

The distribution percentage of the car trips for the AM and PM peak hour is detailed in Figure 19 overleaf and the corresponding AM & PM peak hour traffic flows, based on the assumed distribution, are presented in Figure 22 – Section 11.2.

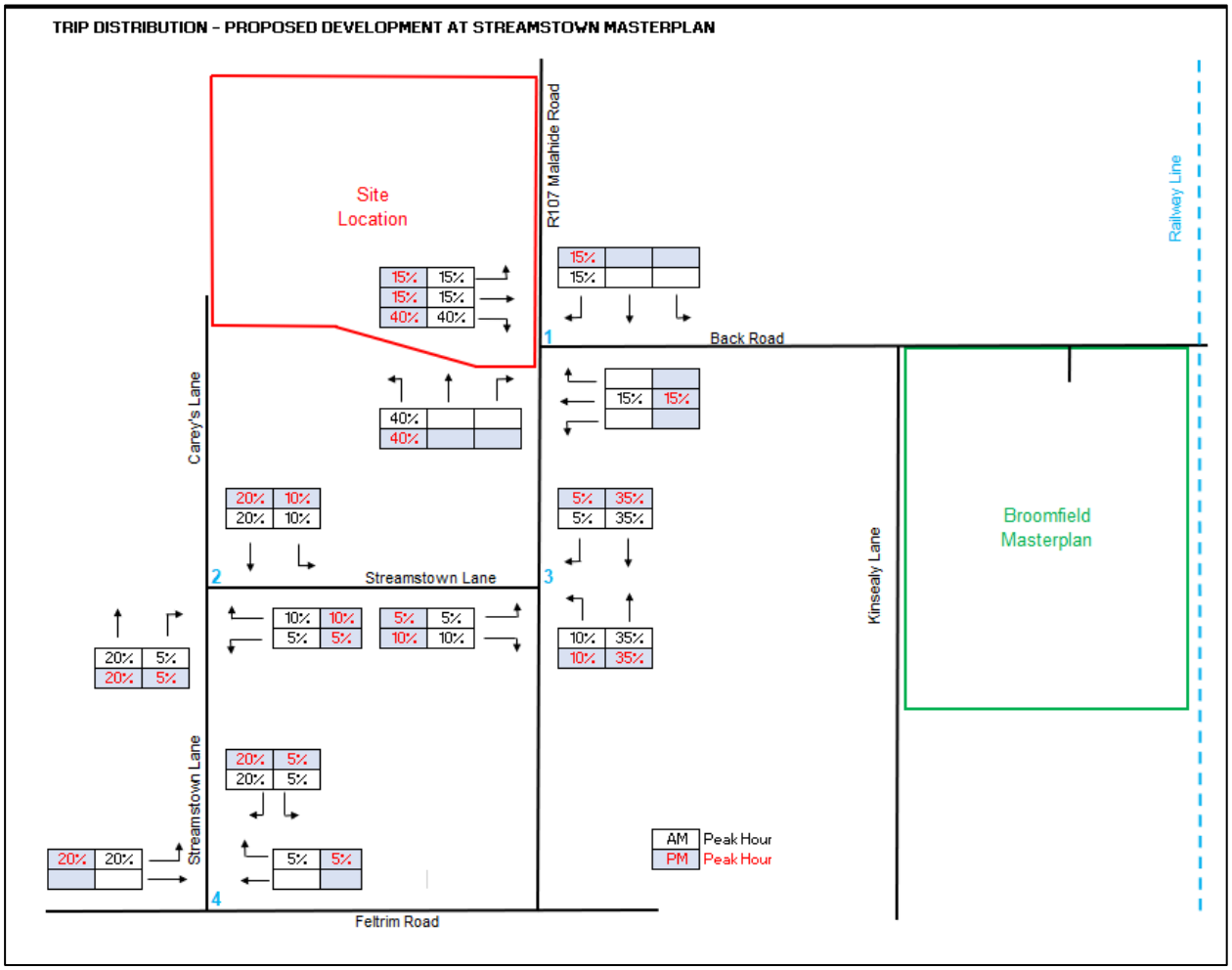


Figure 19 | *Car Trip Distribution AM & PM Peak Hours – Prop. Dev. At Streamstown Masterplan.*

10.2 Broomfield Masterplan

Similarly, with the objective to establish the amount of new car trips expected to travel through each surveyed junction, the calculated car trips for the Broomfield Masterplan development (under-construction Phase 1 in 2023 and potential future development in 2028), presented in Table 16, have been distributed.

The distribution percentage of the car trips for the AM and PM peak hour is detailed in Figure 20 and the corresponding AM & PM peak hour traffic flows, based on the assumed distribution, are presented in Section 11.3 - Figure 23 for the under-construction Phase 1 in 2023, and in Section 11.4 – Figure 24 for the potential future development in 2028. In summary, car trip distribution for Broomfield Masterplan developments was assumed as follows:

- 30% to/from east along Back Road towards R124 The Hill;
- 70% to/from west along Back Road towards R107 Malahide Road, of which:
    - 10% to/from south along Kinsealy Lane;
    - 20% to/from north along R107 Malahide Road;
    - 30% to/from south along R107 Malahide Road;
    - 10% to/from west along Streamstown Lane and Feltrim Road.

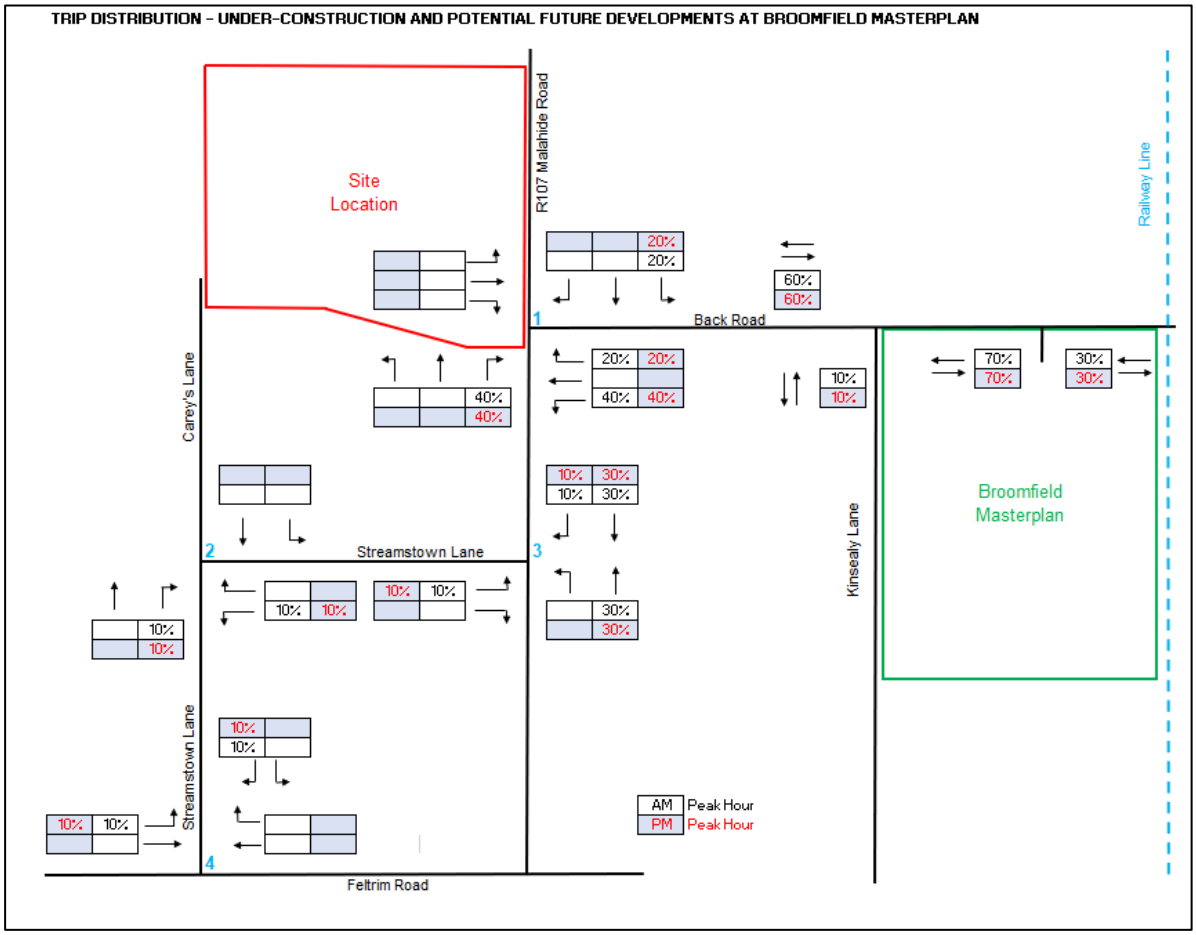


Figure 20 | *Car Trip Distribution AM & PM Peak Hours – Prop. Dev. at Broomfield Masterplan.*

11. Forecast Traffic

11.1 Base Year – 2020

For the purpose of establishing the baseline year of 2020, the 2019 peak hour flows of Junction 1 presented in Figure 16 have been factored up and the results are presented in Figure 21 below.

The background traffic growth used to factor up the 2019 surveyed traffic movements is in accordance with the *'Table 6.1: Link-Based Growth Rates: Metropolitan Area Annual Growth Rates'* within the TII Publications – Project Appraisal Guidelines for National Roads Unit 5.3 – Travel Demand Projections (May 2019). This is:

- 1.016 (Central Growth) growth factor from 2019 to 2020.

Note that only traffic flows on Junction 1 have been factored up by the above rate. Traffic surveys on Junctions 2, 3 and 4 were carried out in 2020 and therefore no growth factor was applied on these junctions' flows. However, as previously mentioned in Section 8.1, due to travel restrictions that were in place when Junctions 3 and 4 were surveyed in November 2020, both junctions' flows were factored up by 14% to account for COVID-19 restrictions.

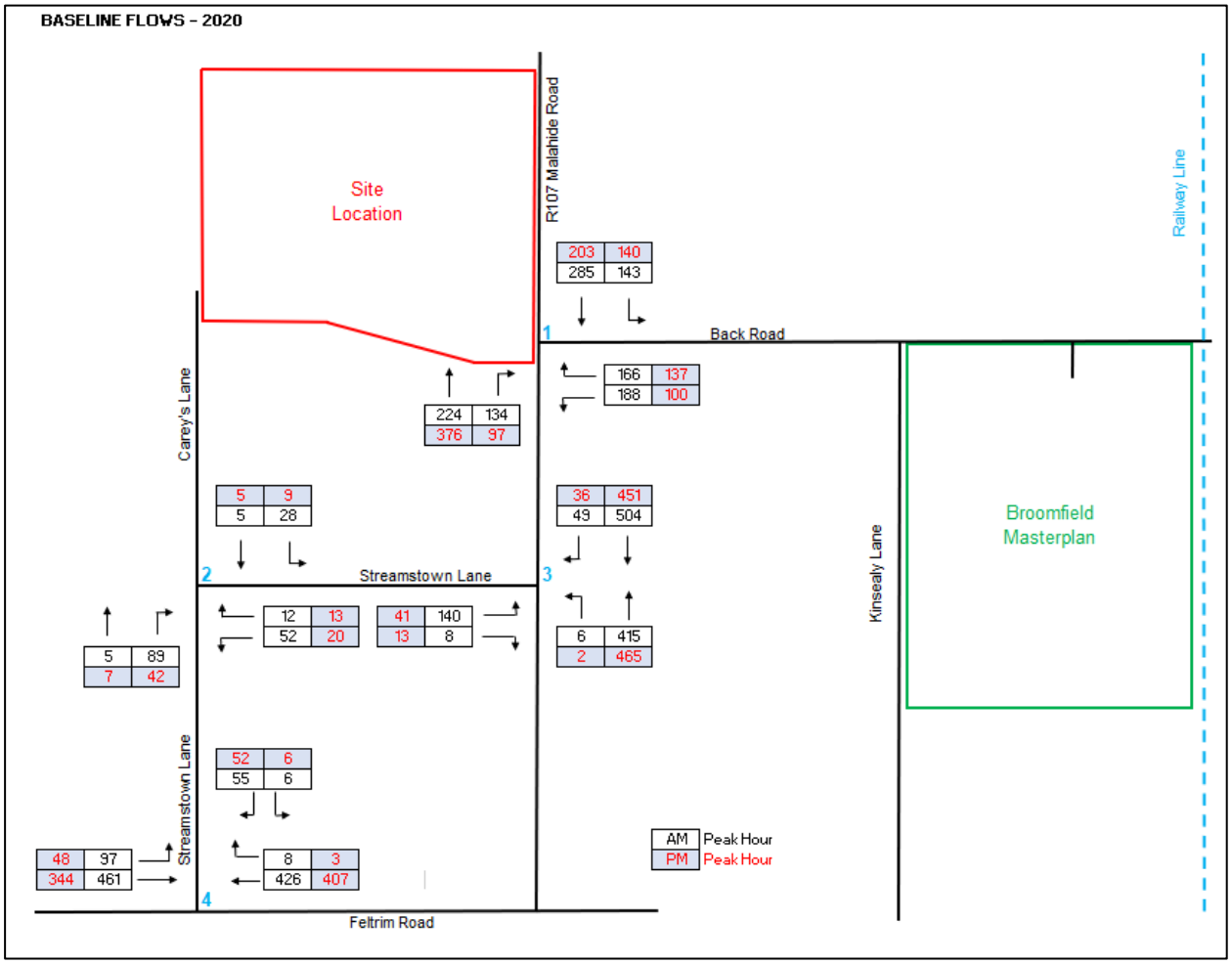


Figure 21 | *Baseline Flows 2020.*

11.2 Streamstown Masterplan – Proposed Development Traffic – 2023

Road traffic movements from/to the proposed residential development at the Streamstown Masterplan in 2023 (Opening Year) are presented in Figure 22.

These movements have been based on the car trips from Table 15 and the trip distribution from Figure 19.

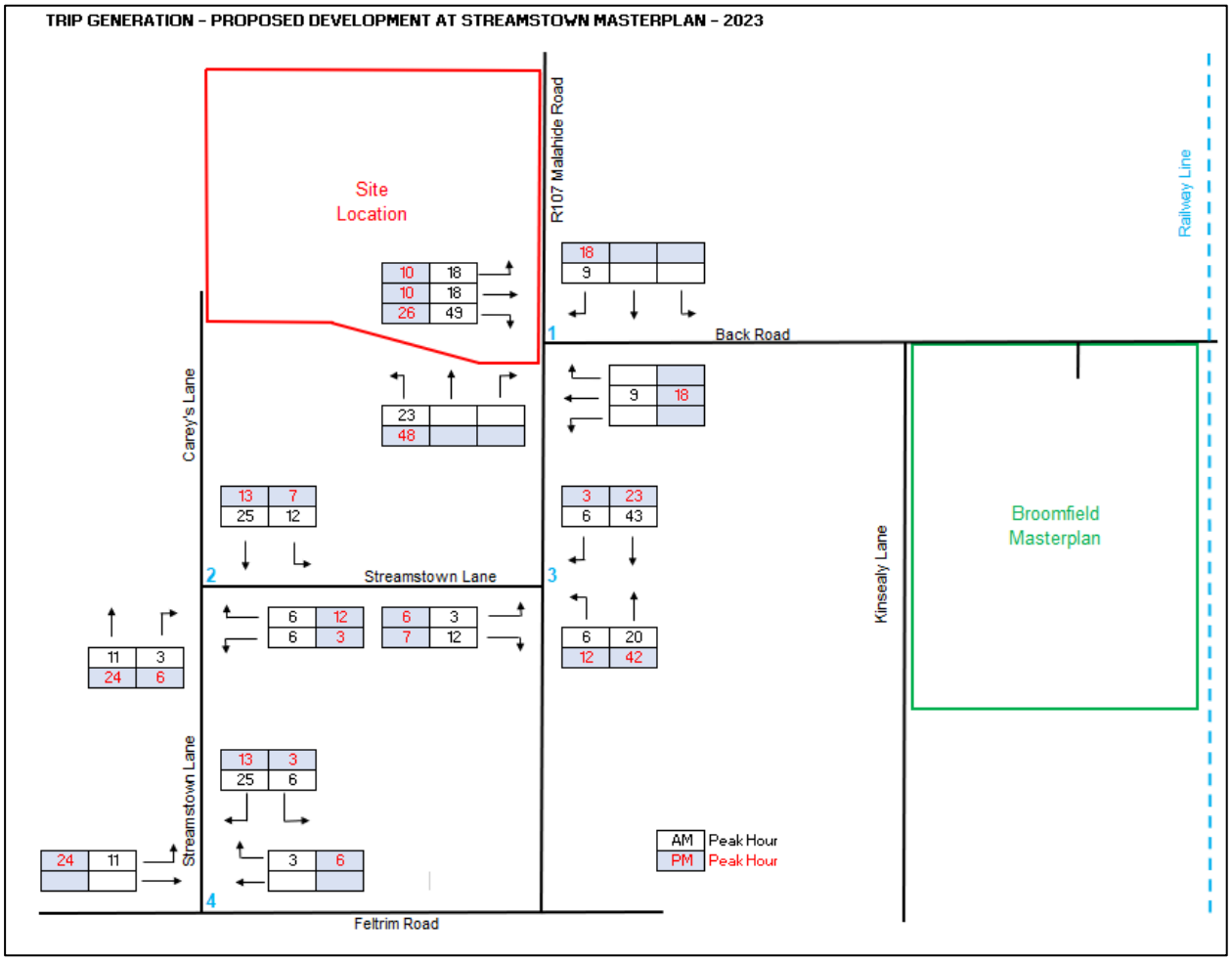


Figure 22 | *Traffic to/from the Prop. Dev. at Streamstown Masterplan – Opening Year 2023.*

11.3 Broomfield Masterplan – Phase 1 Traffic – 2023

Road traffic movements from/to the under-construction Phase 1 development at Broomfield Masterplan in 2023 are presented in Figure 23.

These movements have been based on the trips from Table 15 and the trip distribution from Figure 20.

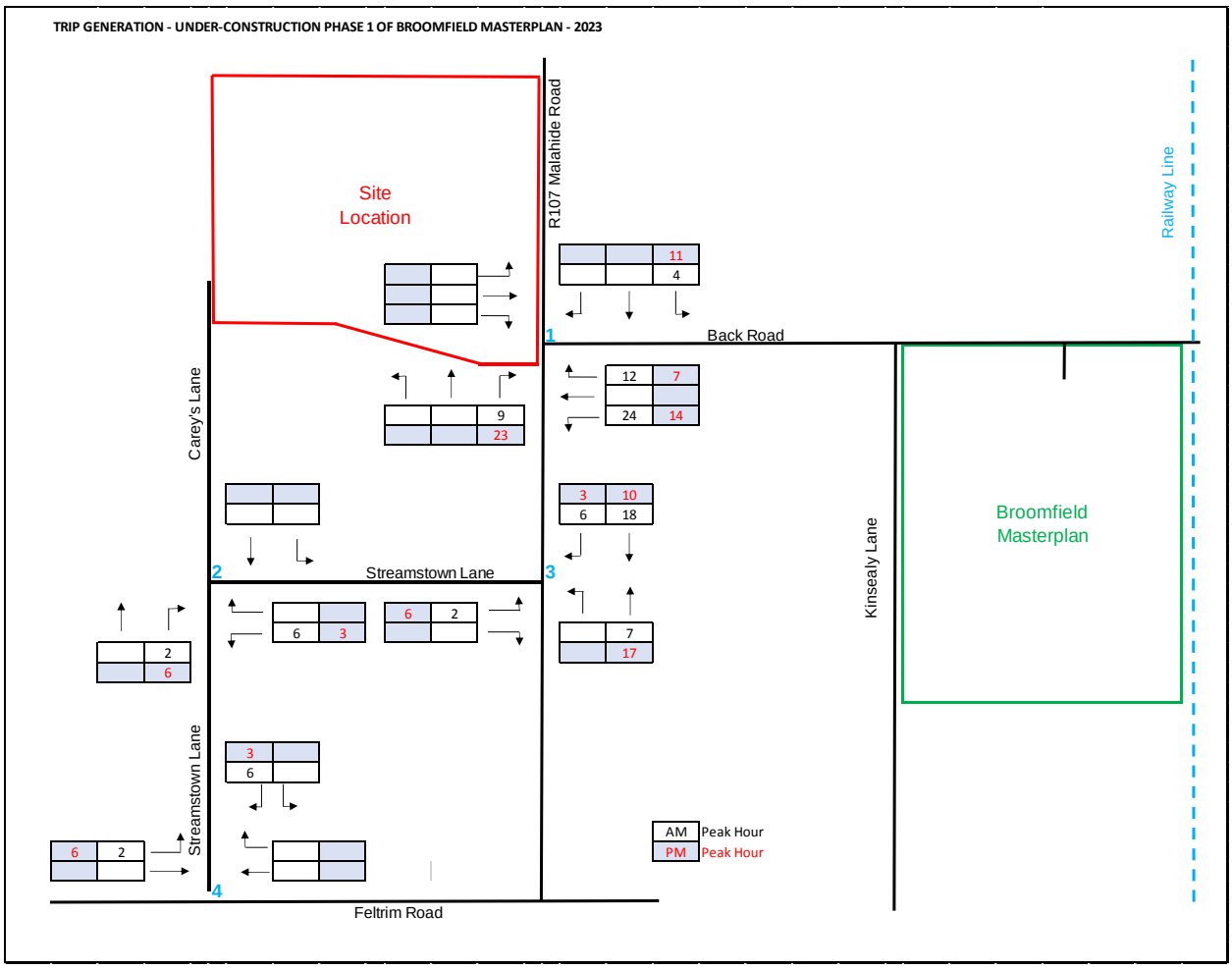


Figure 23 | *Traffic to/from the Under-construction Phase 1 of Broomfield Masterplan – 2023.*

11.4 Broomfield Masterplan – Potential Future Development Traffic – 2028

Road traffic movements from/to the potential future development at Broomfield Masterplan in 2028 are presented in Figure 24.

These movements have been based on the trips from Table 15 and the trip distribution from Figure 20.

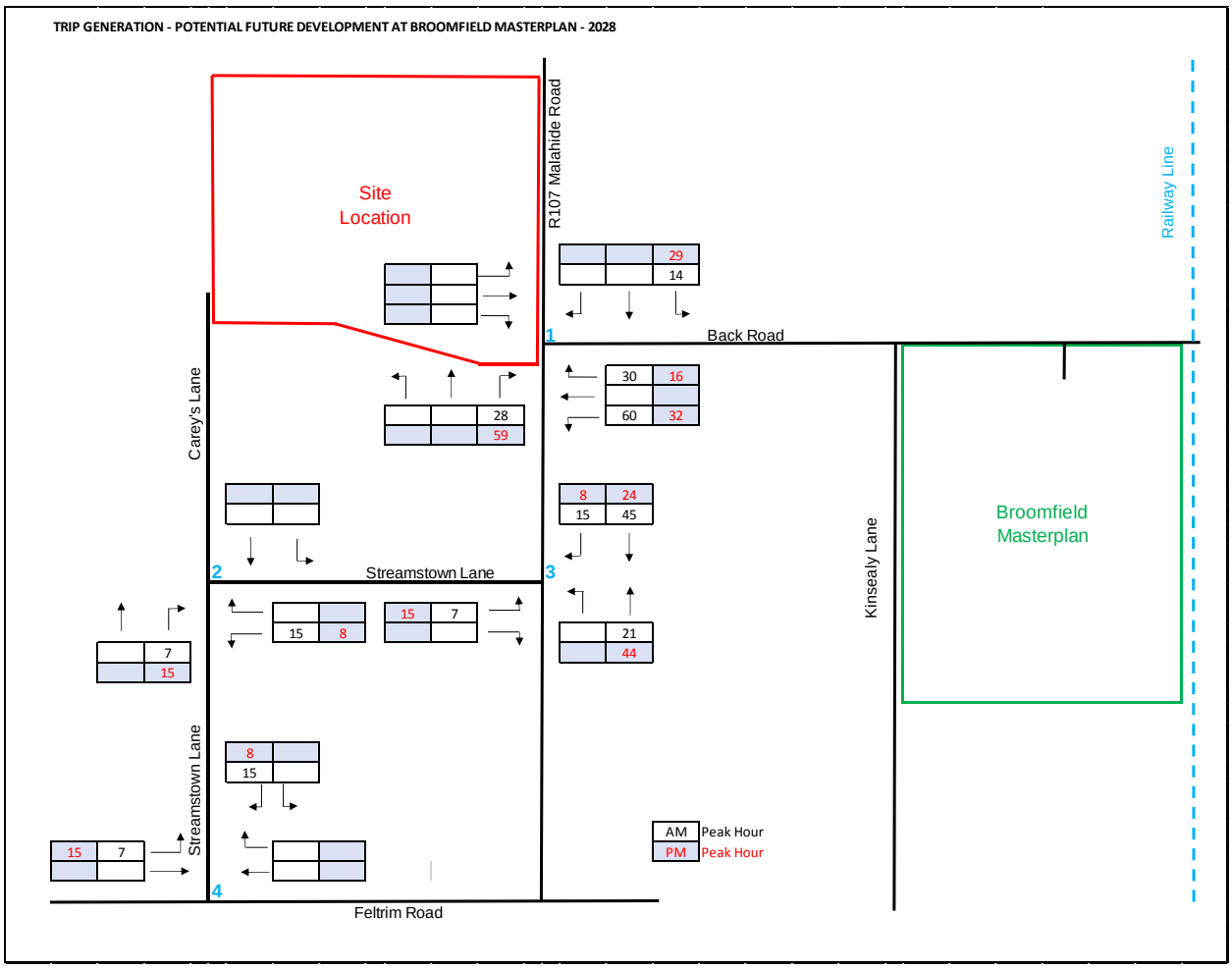


Figure 24 | *Traffic to/from the Potential Future Development at Broomfield Masterplan – 2028.*

11.5 Future Traffic 2023 (Opening Year of Proposed Development)

The future traffic on the surrounding road network in 2023 (Opening Year of Proposed Development at Streamstown Masterplan) is presented in Figure 25. It has been assumed within this TTA that the proposed development will be constructed over a period of approximately 2 years. Therefore, the assumed year of opening for the proposed development is 2023. It was also assumed that, by the year of 2023, Phase 1 of Broomfield Masterplan will also be fully occupied and operational.

Therefore, the movements illustrated in Figure 25 were obtained by factoring up the 2020 Base Year Traffic illustrated in Figure 21 and adding the movements from the proposed development in 2023 (Figure 22) and the movements from the under-construction development of Phase 1 of Broomfield Masterplan (Figure 23).

The background traffic growth used to factor up the 2020 Base Year traffic movements is in accordance with the *'Table 6.1: Link-Based Growth Rates: Metropolitan Area Annual Growth Rates'* within the TII Publications – Project Appraisal Guidelines for National Roads Unit 5.3 – Travel Demand Projections (May 2019). This is:

- 1.049 (Central Growth) growth factor from 2020 to 2023.

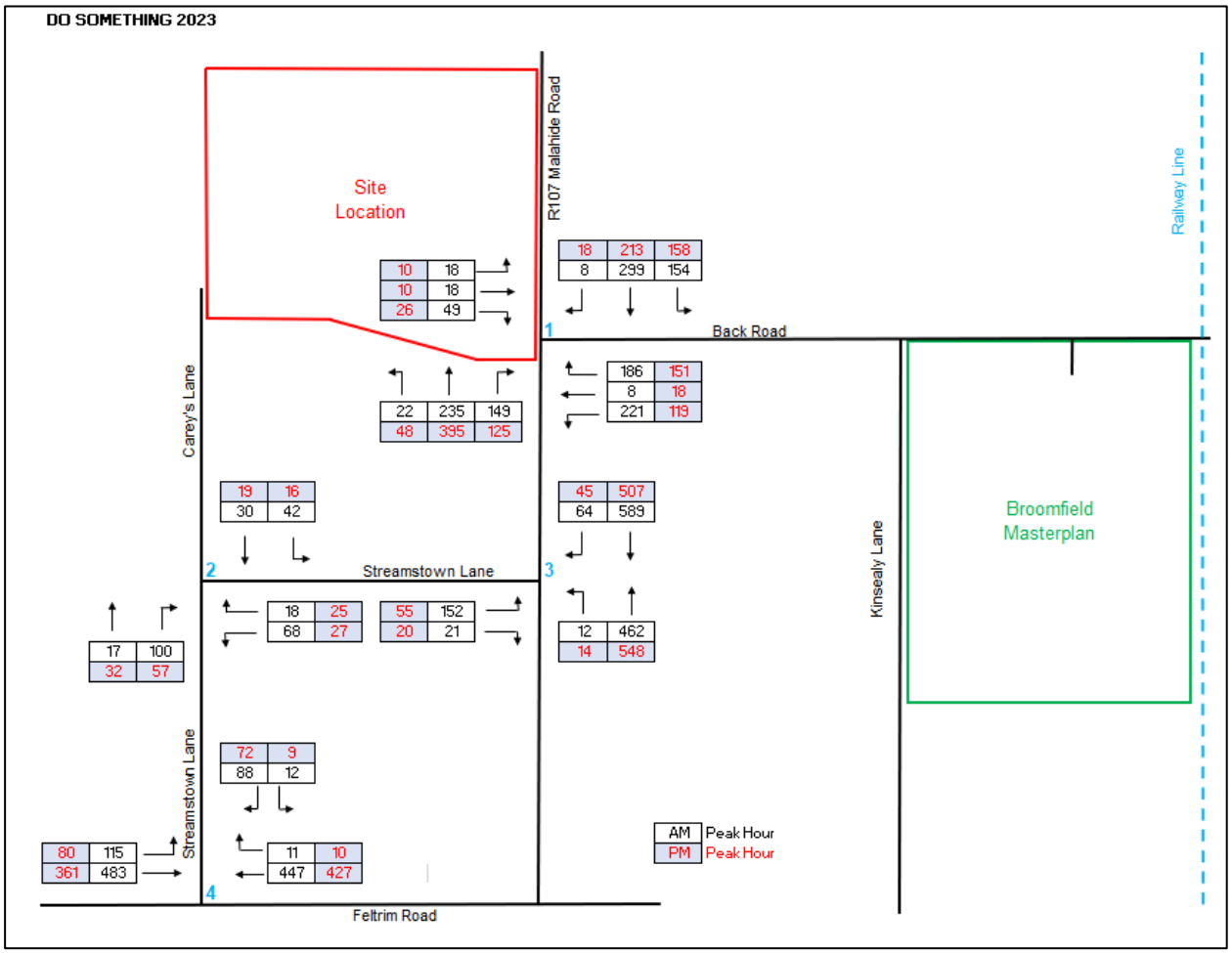


Figure 25 *| Future Traffic 2023 (Opening Year of Proposed Development).*

11.6 Future Traffic 2028 (Opening Year + 5 Years)

The future traffic on the surrounding road network in 2028 (+5 years after the Opening Year of the proposed development at Streamstown Masterplan) is presented in Figure 26. It has been assumed within this TTA that, by the future assessment year of 2028, the potential future development at Broomfield Masterplan comprising c. 500 new residential units will be completely constructed and occupied.

Therefore, the movements illustrated in Figure 26 were obtained by factoring up the 2020 Base Year Traffic illustrated in Figure 21 and adding the movements from the proposed development at Streamstown Masterplan (Figure 22), the movements from the under-construction Phase 1 development of Broomfield Masterplan (Figure 23) and the movements from the potential future development of Broomfield Masterplan (Figure 24).

The background traffic growth used to factor up the 2020 Base Year traffic movements is as follows:

- 1.137 (Central Growth) growth factor from 2020 to 2028.

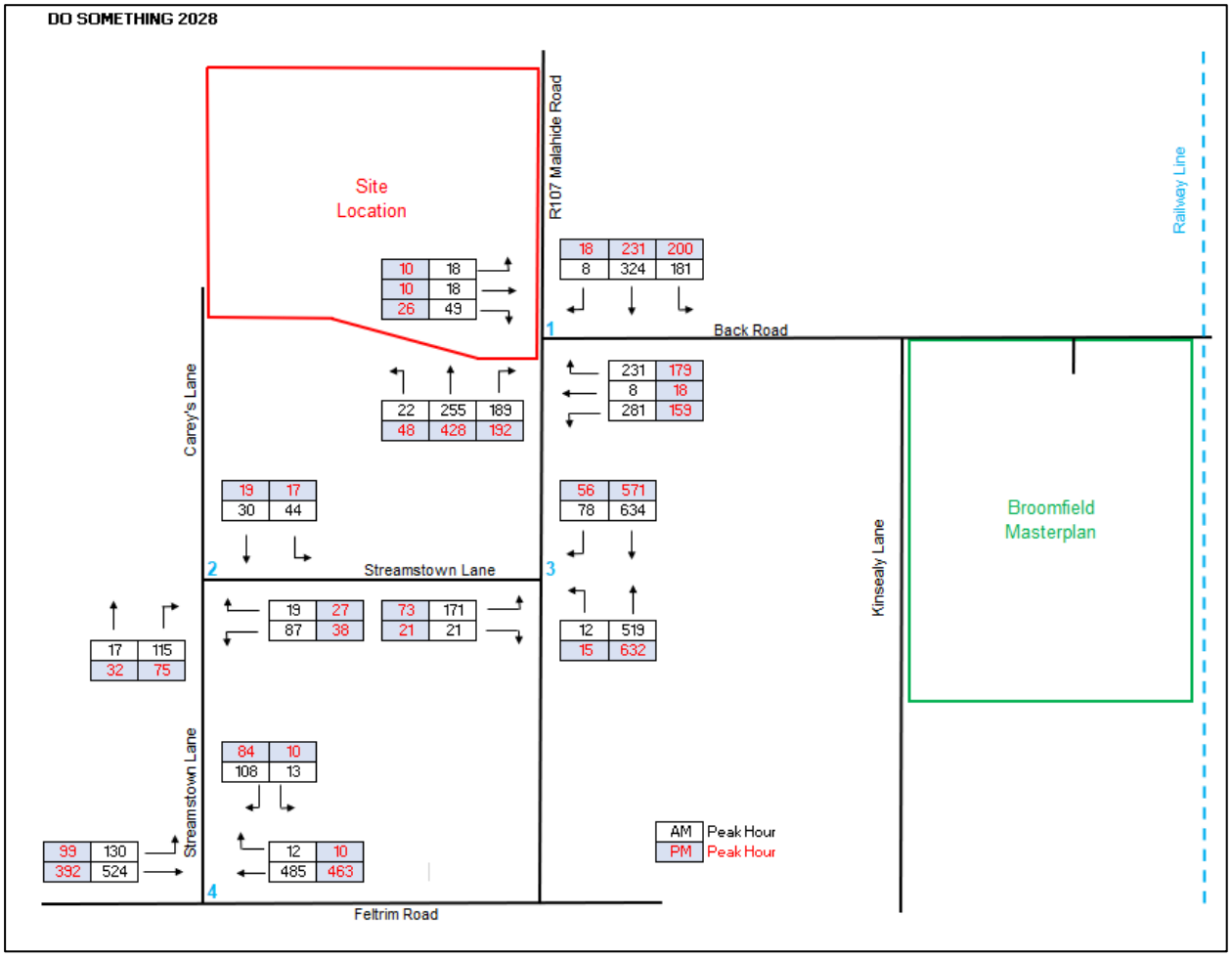


Figure 26 | *Future Traffic 2028 (Opening Year + 5 Years).*

11.7 Future Traffic 2038 (Opening Year + 15 Years)

The future traffic on the surrounding road network in 2038 (+15 years after the Opening Year of the proposed development at Streamstown Masterplan) is presented in Figure 27.

The movements illustrated in Figure 27 were obtained by factoring up the 2020 Base Year Traffic illustrated in Figure 21 and adding the movements from the proposed development at Streamstown Masterplan (Figure 22), the movements from the under-construction Phase 1 development at Broomfield Masterplan (Figure 23) and the movements from the potential future development of Broomfield Masterplan (Figure 24).

The background traffic growth used to factor up the 2020 Base Year traffic movements is as follows:

- 1.217 (Central Growth) growth factor from 2020 to 2038.

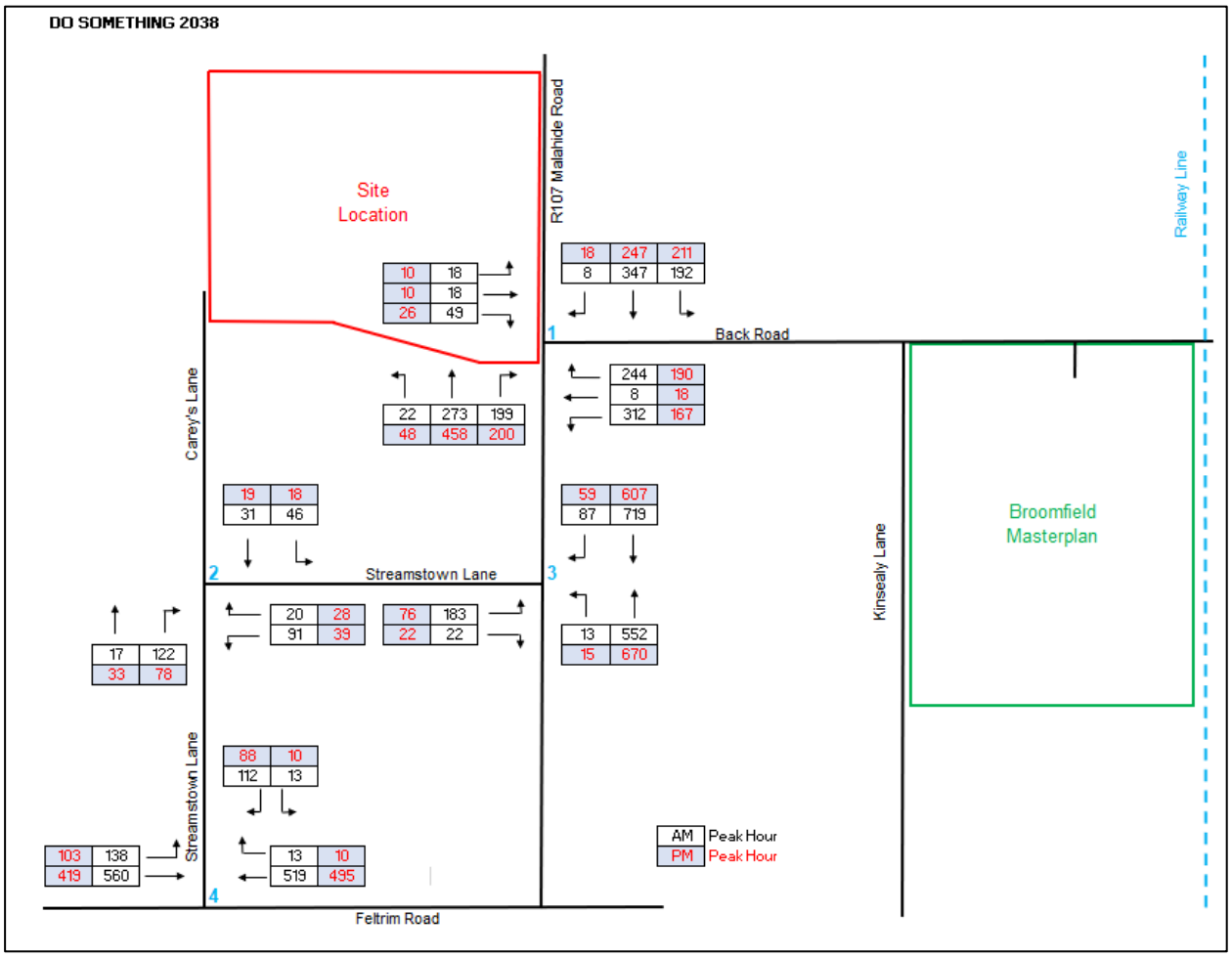


Figure 27 | *Future Traffic 2038 (Opening Year + 15 Years).*

12. Junction Assessment

12.1 Junctions Assessed

The junctions that have been assessed as part of this TTA are the following:

- **Junction 1**: R107 Malahide Road / Back Road (Existing Priority-controlled T-junction; Proposed Four-armed Signalised Junction)
- **Junction 2**: Carrey's Lane / Streamstown Lane (Priority-controlled T-junction).
- **Junction 3**: R107 Malahide Road / Streamstown Lane (Priority-controlled T-junction)
- **Junction 4**: Feltrim Road / Streamstown Lane (Priority-controlled T-junction)

12.2 Methodology

12.2.1 Cumulative Impact

The extent of traffic impact from the proposed development at Streamstown Masterplan and the under-construction and potential future developments at Broomfield Masterplan has been determined by initially checking where generated traffic would exceed 10% of the traffic flow on the adjoining road or 5% on the road where congestion exists, or the location is sensitive. This is in line with the NRA Transport Assessment Guidelines (2014). A summary of the existing two-way traffic and the expected traffic increase at each studied junction is presented below.

Junction	Junction Existing Flow (2020) - AM Peak Hour	Junction Existing Flow (2020) - PM Peak Hour	Additional Traffic Two-way Flow (AM)	Additional Traffic Two-way Flow (PM)	% Expected Increase (AM)	% Expected Increase (PM)
Junction 1	1,139	1,053	305	322	27%	31%
Junction 2	191	96	92	97	48%	101%
Junction 3	1,122	1,009	209	221	19%	22%
Junction 4	1,052	861	75	79	7%	9%

***Table 16** | Existing and Expected Two-way Flows.*

As can be seen from the above, all studied junctions are expected to receive a two-way traffic increase higher or close to 10%. Therefore, they have been modelled using, PICADY and TRANSYT.

12.2.2 Modelling Background

There are various modelling software packages available to assess every type of junction. Waterman Moylan uses TRANSYT and PICADY to analyse signalised and priority junctions, respectively.

TRANSYT (Traffic Network Study Tool) software is a widely accepted software for modelling signalled controlled junctions. This programme utilises the phases input by the user and optimises their timings over a selected cycle time. The outputs of a TRANSYT assessment include a Degree of Saturation percentage (DOS%) figure and queue length for each link on the road network.

PICADY is a software for modelling priority-controlled junctions. This programme utilises junction's geometry and traffic flows input by the user to determine Ratio of Flow to Capacity (RFC) and queue length for each link on the junction.

Typically, a junction is said to be working satisfactorily when the DOS% or RFC of each link does not exceed 85%/0.85. Acceptable DOS% or RFC values are considered to be in the range of 85%/0.85 to 100%/1.0 with higher values indicating restrained movements.

12.3 Assessment Scenarios

The performance of the junctions has been analysed for the critical AM and PM Peak Hours (08:00 – 09:00 and 18:00 – 19:00) for the following scenarios:

- **DO NOTHING - 2020 (Base Year)**: Existing road network with 2020 Base Year flows (Figure 21).
- **DO NOTHING - 2023**: Existing road network with 2020 baseline traffic flows factored up.
- **DO NOTHING - 2028**: Existing road network with 2020 baseline traffic flows factored up.
- **DO NOTHING - 2038**: Existing road network with 2020 baseline traffic flows factored up.
- **DO SOMETHING - 2023 (Opening Year)**: Proposed junction upgrades with 2020 baseline traffic flows factored up + traffic to/from proposed development at Streamstown Masterplan + traffic to/from under-construction Phase 1 development at Broomfield Masterplan (Figure 25).
- **DO SOMETHING - 2028 (Opening Year + 5 Years)**: Proposed junction upgrades with 2020 baseline traffic flows factored up + traffic to/from proposed development at Streamstown Masterplan + traffic to/from the under-construction Phase 1 development at Broomfield Masterplan + traffic to/from the potential future development at Broomfield Masterplan (Figure 26).
- **DO SOMETHING - 2038 (Opening Year + 15 Years)**: Proposed junction upgrades with 2020 baseline traffic flows factored up + traffic to/from proposed development at Streamstown Masterplan + traffic to/from the under-construction Phase 1 development at Broomfield Masterplan + traffic to/from the potential future development at Broomfield Masterplan (Figure 27).

12.4 Junction Assessment Results

12.4.1 Junction 1: R107 Malahide Road / Back Road – DO NOTHING

Junction 1 is an existing three-armed priority-controlled junction located immediately southeast of the proposed development site. For the DO NOTHING scenarios, this junction has been modelled based on its current configuration and the PICADY analysis results are summarise in Table 17. The arms of the junction were labelled as follows within the PICADY model:

- Arm A: R107 Malahide Road (N);
- Arm B: Back Road (E);
- Arm C: R107 Malahide Road (S).

Stream	AM (08:00 to 09:00)		PM (18:00 to 19:00)	
	Queue (veh.)	RFC	Queue (veh.)	RFC
2020 (BASE YEAR) – DO NOTHING				
Stream B-C	0.6	0.40	0.2	0.19
Stream B-A	0.8	0.46	0.6	0.36
Stream C-AB	0.7	0.33	0.6	0.26
2023 – DO NOTHING				
Stream B-C	0.8	0.44	0.2	0.20
Stream B-A	1.0	0.51	0.6	0.39
Stream C-AB	0.8	0.36	0.7	0.28
2028 – DO NOTHING				
Stream B-C	1.0	0.51	0.3	0.22
Stream B-A	1.4	0.59	0.7	0.43
Stream C-AB	0.9	0.40	0.8	0.32
2038 – DO NOTHING				
Stream B-C	1.5	0.61	0.3	0.26
Stream B-A	2.0	0.68	0.9	0.49
Stream C-AB	1.1	0.44	1.0	0.35

Table 17 | *Junction 1 – DO NOTHING - PICADY Analysis Results.*

The analysis results as shown above, indicate that the Junction 1 is currently operating well within capacity during both peak hour periods, with the highest RFC at 0.46 and a corresponding queue of 0.8 vehicle during the AM peak hour and a maximum RFC at 0.36 with a corresponding queue of 0.6 vehicle recorded for the PM.

For the future assessment year of 2038 - DO NOTHING, with the baseline flows factored up, the subject junction will continue to operate well within capacity during both peak hours, with the highest RFC at 0.68 and a corresponding queue of 2.0 vehicle during the AM and with the highest RFC at 0.49 and a corresponding queue of 0.9 vehicle recorded for the PM.

12.4.2 Junction 1: R107 Malahide Road / Back Road – DO SOMETHING

As described in Section 4.1.1 of this TTA, as part of the subject development works, Junction 1 is proposed to be upgraded from a priority-controlled T-junction to a four-armed signalised junction with dedicated right turning pocket lanes on the eastern and southern approaches and with the western arm forming the main access to the site. For the DO SOMETHING scenarios, the subject junction has been modelled based on the proposed layout and the TRANSYT analysis results are summarise in Table 18. The proposed upgraded scheme can be seen on Waterman Moylan Drawing No. 19-020-P110 accompanying the subject application. The arms of the proposed junction were labelled as follows within the TRANSYT model:

- Arm A: Back Road (E);
- Arm B: R107 Malahide Road (S);
- Arm C: Site Access Road (W);
- Arm D: R107 Malahide Road (N).

Arm	Mov.	AM		PM	
		Mean Max Queue (Veh.)	DOS%	Mean Max Queue (Veh.)	DOS%
2023 - DO SOMETHING					
A	S/L	3.37	48	2.95	41
	R	2.12	39	2.19	45
B	S/L	10.61	86	15.94	77
	R	2.25	15	3.33	22
C	S/L/R	4.20	81	2.16	60
D	S/L/R	12.38	71	15.13	78
2028 - DO SOMETHING					
A	S/L	5.11	60	4.79	55
	R	2.22	48	2.35	56
B	S/L	13.15	93	15.22	82
	R	2.86	19	4.08	33
C	S/L/R	4.20	81	2.16	60
D	S/L/R	21.14	93	19.29	87
2038 - DO SOMETHING					
A	S/L	6.25	67	5.17	58
	R	2.26	51	2.43	59
B	S/L	16.98	99	17.50	88
	R	3.01	20	4.09	35
C	S/L/R	4.20	81	2.00	51
D	S/L/R	27.72	99	23.92	95

Table 18 | *Junction 1 – DO SOMETHING - TRANSYT Analysis Results.*

The analysis results as shown above, indicate that Junction 1, when operating with its proposed configuration of a signalised crossroads, would operate within capacity for the future assessment year of 2023 – DO SOMETHING (Opening of Proposed Development) during both peak hours, with the highest DOS at 86% and a corresponding queue of 10.61 vehicles recorded in the AM and the highest DOS at 78% and a corresponding queue of 15.13 vehicles recorded in the PM.

For the future assessed year of 2038 – DO SOMETHING, the analysis results indicate that Junction 1 would operate with satisfactory (with restrained movements) capacity during both peak hours, with the highest DOS at 99% and a corresponding queue of 27.72 vehicles during the AM and a maximum DOS at 95% with a corresponding queue of 23.92 vehicles recorded in the PM.

Full assessment of Junction 1, including DO NOTHING and DO SOMETHING scenarios, has been provided in Appendix D.

12.4.3 Junction 2: Carrey's Lane / Streamstown Lane – DO NOTHING

Junction 2 is an existing priority-controlled T-junction located southwest of the proposed development site. For the DO NOTHING scenarios, this junction has been modelled with its current configuration and the PICADY analysis results are summarise in Table 19 below. The arms of the junction were labelled as follows within the PICADY model:

- Arm A: Streamstown Lane (S);
- Arm B: Carrey's Lane (N);
- Arm C: Streamstown Lane (E);

Stream	AM (08:00 to 09:00)		PM (18:00 to 19:00)	
	Queue (veh.)	RFC	Queue (veh.)	RFC
2020 (BASE YEAR) – DO NOTHING				
Stream B-AC	0.1	0.06	0.0	0.03
Stream C-AB	0.0	0.02	0.0	0.03
2023 – DO NOTHING				
Stream B-AC	0.1	0.07	0.0	0.03
Stream C-AB	0.0	0.03	0.0	0.03
2028 – DO NOTHING				
Stream B-AC	0.1	0.07	0.0	0.03
Stream C-AB	0.0	0.03	0.0	0.03
2038 – DO NOTHING				
Stream B-AC	0.1	0.08	0.0	0.03
Stream C-AB	0.0	0.03	0.0	0.03

Table 19 | *Junction 2 – DO NOTHING - PICADY Analysis Results.*

The analysis results in Table 19 indicate that the Junction 2 is currently operating well within capacity during both peak hour periods, with the highest RFC at 0.06 and a corresponding queue of 0.1 vehicle during the AM peak period and a maximum RFC at 0.03 with no queues recorded for the PM.

For the future assessed year of 2038 – DO NOTHING, the results indicate that the junction will continue to operate well within capacity during both peak hours, with the highest RFC at 0.08 and a corresponding queue of 0.1 vehicle during the AM, and with the highest RFC at 0.03 and no queues recorded for the PM.

12.4.4 Junction 2: Carrey's Lane / Streamstown Lane – DO SOMETHING

For the DO SOMETHING scenarios, Junction 2 has also been modelled with its current configuration and the PICADY analysis results are summarise in Table 20 below. The arms of the junction were labelled as follows within the PICADY model:

- Arm A: Streamstown Lane (S);
- Arm B: Carrey's Lane (N);
- Arm C: Streamstown Lane (E);

The analysis results in Table 20 indicate that, for the future assessed year of 2038 – DO SOMETHING, Junction 2 would continue to operate well within capacity during both peak hours, with the highest RFC at 0.16 and a corresponding queue of 0.2 vehicle during the AM and a maximum RFC at 0.08 with a corresponding queue of 0.1 vehicle recorded for the PM.

Full assessment of Junction 2, including DO NOTHING and DO SOMETHING scenarios, has been provided in Appendix D.

Stream	AM (08:00 to 09:00)		PM (18:00 to 19:00)	
	Queue (veh.)	RFC	Queue (veh.)	RFC
2023 – DO SOMETHING				
Stream B-AC	0.2	0.15	0.1	0.07
Stream C-AB	0.0	0.04	0.1	0.05
2028 – DO SOMETHING				
Stream B-AC	0.2	0.16	0.1	0.08
Stream C-AB	0.1	0.04	0.1	0.05
2038 – DO SOMETHING				
Stream B-AC	0.2	0.16	0.1	0.08
Stream C-AB	0.1	0.04	0.1	0.06

Table 20 | *Junction 2 – DO SOMETHING - PICADY Analysis Results.*

12.4.5 Junction 3: R017 Malahide Road / Streamstown Lane – DO NOTHING

Junction 3 is a priority-controlled junction located south east of the proposed development site. For the DO NOTHING scenarios, this junction has been modelled based on its current configuration and the PICADY analysis results are summarise in Table 21 below. The arms of the junction were labelled as followed within the PICADY model:

- Arm A: R107 Malahide Road (N);
- Arm B: Streamstown Lane (E);
- Arm C: R107 Malahide Road (S);

Stream	AM (08:00 to 09:00)		PM (18:00 to 19:00)	
	Queue (veh.)	RFC	Queue (veh.)	RFC
2020 - BASELINE				
Stream B-AC	0.4	0.27	0.1	0.11
Stream C-AB	0.3	0.13	0.2	0.09
2023 – DO NOTHING				
Stream B-AC	0.4	0.28	0.1	0.12
Stream C-AB	0.4	0.14	0.2	0.10
2028 – DO NOTHING				
Stream B-AC	0.5	0.31	0.2	0.13
Stream C-AB	0.5	0.16	0.3	0.12
2038 – DO NOTHING				
Stream B-AC	0.5	0.34	0.2	0.14
Stream C-AB	0.5	0.18	0.3	0.13

Table 21 | *Junction 3 - DO NOTHING - PICADY Analysis Results.*

The analysis as shown above, indicate that Junction 3 is currently operating well within capacity during both peak hours with the highest RFC of 0.27 and a corresponding queue of 0.4 vehicles during the AM peak period and the highest RFC of 0.11 and a corresponding queue of 0.1 vehicles in the PM period.

For the future assessment year of 2038 – DO NOTHING, the results indicate that the junction will continue to operate well within capacity during both peak hours, with the highest RFC of 0.34 and a corresponding queue length of 0.5 vehicles during the AM peak hour period and the highest RFC of 0.14 and a corresponding queue of 0.2 vehicles in the PM peak hour period.

12.4.6 Junction 3: R107 Malahide Road / Streamstown Lane – DO SOMETHING

For the DO SOMETHING scenarios, Junction 3 has also been modelled based on its current configuration and the PICADY analysis are summarised in Table 22 below. The arms of the junction were labelled as follows within the PICDAY model:

- Arm A: R107 Malahide Road (N);
- Arm B: Streamstown Lane (E);
- Arm C: R107 Malahide Road (S);

Stream	AM (08:00 to 09:00)		PM (18:00 to 19:00)	
	Queue (veh.)	RFC	Queue (veh.)	RFC
2023 – DO SOMETHING				
Stream B-AC	0.5	0.34	0.2	0.17
Stream C-AB	0.5	0.19	0.3	0.13
2028 – DO SOMETHING				
Stream B-AC	0.7	0.39	0.3	0.22
Stream C-AB	0.8	0.25	0.5	0.18
2038 – DO SOMETHING				
Stream B-AC	0.8	0.43	0.3	0.24
Stream C-AB	1.0	0.31	0.6	0.20

Table 22 | *Junction 3 - DO SOMETHING - PICADY Analysis Results.*

The analysis results as shown above indicate that, for the future assessed year of 2038 – DO SOMETHING, Junction 3 would continue to operate well within capacity during both peak hours, with the highest RFC at 0.43 and corresponding queue of 0.8 for the AM peak hour period and a maximum RFC 0.24 with a corresponding queue of 0.3 vehicle for the PM peak hour period.

Full assessment of Junction 3, including DO NOTHING and DO SOMETHING scenarios, has been provided in Appendix D.

12.4.7 Junction 4: Feltrim Road / Streamstown Lane – DO NOTHING

Junction 4 is a priority-controlled junction located south of the proposed development site. For the DO NOTHING scenarios, this has been modelled based on its current configuration and the PICADY analysis results are summarise in Table 23 below. The arms of the junction were labelled as follows within the PICADY model:

- Arm A: Feltrim Road (W);
- Arm B: Streamstown Lane (S);
- Arm C: Feltrim Road (E);

Stream	AM (08:00 to 09:00)		PM (18:00 to 19:00)	
	Queue (veh.)	RFC	Queue (veh.)	RFC
2020 - BASELINE				
Stream B-C	0.0	0.02	0.0	0.01
Stream B-A	0.2	0.17	0.2	0.15
Stream C-AB	0.0	0.02	0.0	0.1
2023 – DO NOTHING				
Stream B-C	0.0	0.02	0.0	0.01
Stream B-A	0.2	0.18	0.2	0.16
Stream C-AB	0.0	0.02	0.0	0.01
2028 – DO NOTHING				
Stream B-C	0.0	0.02	0.0	0.01
Stream B-A	0.3	0.21	0.2	0.18
Stream C-AB	0.0	0.03	0.0	0.01
2038 – DO NOTHING				
Stream B-C	0.0	0.02	0.0	0.02
Stream B-A	0.4	0.24	0.3	0.20
Stream C-AB	0.1	0.03	0.0	0.01

Table 23 | *Junction 4 - DO NOTHING - PICADY Analysis Results.*

The analysis results as shown above, indicate that Junction 4 is currently operating well within capacity during both peak hours, with the highest RFC of 0.17 and a corresponding queue of 0.2 vehicles during the AM peak period and the highest RFC of 0.15 and a corresponding queue of 0.2 during the PM peak hour period.

For the future assessment year of 2038 – DO NOTHING, the results indicate that Junction 4 will continue to operate well within capacity during both peak hours, the highest RFC of 0.24 and a corresponding queue length of 0.4 vehicles during the AM peak hour period and the highest RFC of 0.20 and a corresponding queue of 0.3 vehicles in the PM peak hour period.

12.4.8 Junction 4: Feltrim Road / Streamstown Lane – DO SOMETHING

For the DO SOMETHING scenarios, Junction 4 has also been modelled based on its current configuration and the PICADY analysis are summarised in Table 24 below. The arms of the junction were labelled as follows within the PICDAY model:

- Arm A: Feltrim Road (W);
- Arm B: Streamstown Lane (S);
- Arm C: Feltrim Road (E);

The analysis results in Table 24 below indicate that, for the future assessed year of 2038 – DO SOMETHING, Junction 4 would continue to operate well within capacity during both peak hours, with the highest RFC at 0.41 and corresponding queue of 0.8 for the AM peak hour period and a maximum RFC 0.28 with a corresponding queue of 0.4 vehicle for the PM peak hour period.

Full assessment of Junction 4, including DO NOTHING and DO SOMETHING scenarios, has been provided in Appendix D.

Stream	AM (08:00 to 09:00)		PM (18:00 to 19:00)	
	Queue (veh.)	RFC	Queue (veh.)	RFC
2023 – DO SOMETHING				
Stream B-C	0.0	0.03	0.0	0.02
Stream B-A	0.4	0.29	0.3	0.21
Stream C-AB	0.1	0.03	0.0	0.03
2028 – DO SOMETHING				
Stream B-C	0.0	0.04	0.0	0.03
Stream B-A	0.7	0.38	0.4	0.26
Stream C-AB	0.1	0.04	0.0	0.03
2038 – DO SOMETHING				
Stream B-C	0.0	0.04	0.0	0.03
Stream B-A	0.8	0.41	0.4	0.28
Stream C-AB	0.1	0.05	0.0	0.03

Table 24 | *Junction 4 - DO SOMETHING - PICADY Analysis Results.*

13. Construction Traffic

It is anticipated that the generation of HGV during the construction period of the proposed development will be evenly spread throughout the day and as such will not impact significantly during the peak traffic periods. An appropriate routing strategy for HGVs can also be implemented for the duration of site works if found necessary. Furthermore, during the construction phase, sufficient parking will be sought to be provided on site to accommodate the aforementioned construction generated vehicle movements, thereby ensuring that there is not an overspill of parked vehicles onto the surrounding local road network.

For the above reasons, we do not believe that construction traffic will generate any traffic concerns or impede upon the operational performance of the local road network and its surrounding junctions.

All construction traffic and transport will be managed strictly according to the proposed development management plan.

14. Public Transport Assessment

14.1 Additional Rail Passengers at Malahide Station

The additional rail passengers expected to be generated by the proposed development at Streamstown Masterplan and the under-construction/potential future developments at Broomfield Masterplan lands in Malahide Station during the AM and PM peak hours are presented in Table 25 and Table 26, respectively. Calculations were based on:

- Car Trip Generation presented in Table 15 (equivalent to 55% as per Census 2016 Modal Split to the journey to work, school of college – Table 10);
- 2016 Census Modal Split - Rail Use (equivalent to 14% as per Table 10), and;
- The estimated 2020 patterns of rail passengers shown in Tables 14 and 15.

It is recognised that census modal split data was obtained based on individual responses in 2016 and may not be an accurate and the most representative data for the proposed, under-construction and potential future developments in the studied area, as the use of each mode of transport is likely to change as a reflex of many factors along the years, such as the expansion of the local and surrounding areas providing for new employment/education centres; upgrades on public transport services; improvements on cycle/pedestrian facilities; amongst others. However, due to the absence of up-to-date information in this regard, it was considered reasonable to use the Census 2016 Modal Split to predict rail trips, as it represents the best available estimate of current modal split trends for the area.

PROPOSED DEVELOPMET AT STREAMSTOWN MASTERPLAN (411 RESIDENTIAL UNITS)				
Period	**Activity**	**Northbound**	**Southbound**	**Total**
AM Peak Hour	Boardings	6 (18%)	26 (82%)	32 (100%)
	Alightings	13 (86%)	2 (14%)	15 (100%)
PM Peak Hour	Boardings	3 (18%)	14 (82%)	17 (100%)
	Alightings	27 (86%)	4 (14%)	31 (100%)

Table 25 | *Additional Rail Passengers in Malahide Station - Proposed Dev. at Streamstown.*

OVERALL DEVELOPMENT AT BROOMFIELD MASTERPLAN (c. 649 RESIDENTIAL UNITS)				
Period	**Activity**	**Northbound**	**Southbound**	**Total**
AM Peak Hour	Boardings	9 (18%)	44 (82%)	53 (100%)
	Alightings	20 (86%)	3 (14%)	23 (100%)
PM Peak Hour	Boardings	5 (18%)	24 (82%)	29 (100%)
	Alightings	45 (86%)	7 (14%)	52 (100%)

Table 26 | *Additional Rail Passengers in Malahide Station – Broomfield Masterplan.*

14.2 Rail Services

Details of train capacity by type are set out in Appendix C of the National Rail Census 2018.

The commuter/DART train capacity table from Appendix C of the National Heavy Rail Census Report 2019 (NHRCR) is reproduced below.

Train Type		Capacity	
4-DART	(4 Car DART Set)	700	Seats + Standing Accommodation
6-DART	(6 Car DART Set)	1050	Seats + Standing Accommodation
8-DART	(8 Car DART Set)	1400	Seats + Standing Accommodation
2 x 2600	(2 Car Commuter Rail Car)	206	Seats + Standing Accommodation
2 x 2800	(2 Car Commuter Rail Car)	221	Seats + Standing Accommodation
4 x 29000	(4 Car Commuter Rail Car)	640	Seats + Standing Accommodation
8 x 29000	(8 Car Commuter Rail Car)	1280	Seats + Standing Accommodation
1 x 3ICR	(3 Car InterCity Rail Car)	190	Seats
1 x 6ICR	(6 Car Premier Class InterCity Rail Car)	376	Seats
1 x 6HCR	(6 Car High Capacity InterCity Rail Car)	406	Seats
7 x MkIV	(7 Car Mk IV Set)	348	Seats
7 x DD	(7 Car De Dietrich Set)	358	Seats

Table 27 | *Commuter and DART Train Capacities – Extracted from Appendix C of NHRCR.*

From Sections 3.2 and 4.2 of this TTA, it can be seen that the peak hour weekday rail service at Malahide Station will provide capacity for 6,760 – 9,440 passengers in each direction during both AM&PM peak hours.

This capacity will be provided by 2 – 3 x 8-car Commuter Rail services per hour (2,560 – 3,840 capacity) and 4 x 6 – 8 car DART services per hour (4,200 – 5,600 capacity).

These services will be adequate to cater for the estimated peak train demand of 129 passengers (to be generated by the proposed development at Streamstown Masterplan and the under-construction/potential future developments at Broomfield Masterplan) which is predicted to occur in the PM Peak Hour (Refer to Tables 25 and 26 – Section 13.1).

14.3 Additional Bus Passengers – 2028

As calculated for additional rail passengers, a similar exercise has been undertaken to estimate the additional bus passengers expected to be generated by the proposed, under-construction and potential future developments at Streamstown and Broomfield Masterplans. In carrying out the calculation the following has been used:

- Car Trip Generation presented in Table 15 (equivalent to 55% as per Census 2016 Modal Split to the journey to work, school of college – Table 10), and
- 2016 Census Modal Split - Bus Use (equivalent to 15% as per Table 10).

Development	AM Peak Hour		PM Peak Hour	
	Arrivals	Departures	Arrivals	Departures
Proposed Development at Streamstown Masterplan	16	34	34	18
Under-construction Development at Broomfield Masterplan	6	16	16	9
Potential Future Development at Broomfield Masterplan	19	41	40	22
Total	**41**	**91**	**90**	**49**

Table 28 | *Additional Bus Passengers.*

14.4 Bus Services

Services to and from the proposed development area will continue to be operated by double deck buses into the future. The passenger capacity of the double deck buses in the current Dublin Bus fleet is shown in the Table 29 below reproduced from Wikipedia.

For the purpose of this TTA, the capacity of each bus has been assumed to be 85 passengers.

Quantity	Manufacturer	Type	Fleet Code	Passengers
76	Volvo	B7TL with ALX400 bodywork	AV	91
70	Volvo	B9TLT (Euro 4) with Enviro500 bodywork	VT	119–124
192	Volvo	B7TL (Mk. II) with ALX400 bodywork	AX	91
97	Volvo	B9TL (Euro 4) with Enviro400 bodywork	EV	94
50	Volvo	B9TL (Euro 4) with Eclipse Gemini bodywork	VG	88
160	Volvo	B9TL (Euro 5) with Eclipse Gemini bodywork	GT	78–81
369	Volvo	B5TL (Euro 6) with Gemini 3 bodywork	SG	95
2	Wrightbus	StreetLite DF integral	WS	37

Table 29 | *Bus Capacity.*

Following implementation of Bus Connects, the weekday peak hour service to and from the proposed development area will comprise 5 services per direction per hour.

These services will provide capacity for 425 passengers per hour in each direction and will be adequate to cater for the expected peak hourly demand of 91 passengers (to be generated by the proposed, under-construction and potential future developments at Streamstown and Broomfield Masterplans) which is predicted to occur in the AM Peak Hour (Table 28).

It is expected that the vast majority of bus trips originating at Broomfield Masterplan would use bus routes along The Hill to the east instead of the bus routes on R107 Malahide Road which would spread the demand and not concentrate only on routes along R107 Malahide Road.

14.5 Go Car

The provision of GoCar vehicles at the proposed residential development at Streamstown Masterplan is expected to be 4 - 6 vehicles before 2023. A letter to confirm GoCar's intention to provide these new car club vehicles is included in Appendix A.

15. Car Parking

15.1 Fingal Development Plan 2017 – 2023 - Standards

Standards for car parking in new developments are set out in Table 12.8 of the Fingal Development Plan 2017 – 2023 (FDP). Based on that, Table 30 below sets out the parking requirements applicable to the subject proposed residential development at Streamstown Masterplan.

Land Use	FDP Standards	Norm or Max
House – Urban / Suburban (1 or 2 bedrooms)	1 - 2 spaces within the curtilage	Norm
House – Urban / Suburban (3 or more bedrooms)	2 spaces within the curtilage	Norm
Apartment / Townhouse (1 bedroom)	1 space per unit plus 1 visitor space per 5 units	Norm
Apartment / Townhouse (2 bedrooms)	1.5 space per unit plus 1 visitor space per 5 units	Norm
Apartment / Townhouse (3 bedrooms)	2 spaces per unit plus 1 visitor space per 5 units	Norm
Creche	0.5 space per classroom	Norm

Table 30 | *Fingal Development Plan 2017 – 2023 - Car Parking Standards.*

15.2 Car Parking Required

Based on the car parking standard set out in the FDP 2017 – 2023 (Table 30 above), the total car parking required to serve the proposed development within the Streamstown Masterplan is 667 spaces, 603 spaces for residents, 62 spaces for visitors and 3 spaces for the Creche, as calculated in Table 31.

There are no car parking standards set out for duplexes within the current Fingal Development Plan. Therefore, for the purpose of calculation, the car parking standards for apartment / townhouse have been applied for the duplex units.

Land Use	Units	FDP Standard	Required Car Parking Spaces
House – Urban / Suburban (1 or 2 bedrooms)	3	1 - 2 spaces within the curtilage	3 spaces for residents
House – Urban / Suburban (3 or more bedrooms)	99	2 spaces within the curtilage	198 spaces for residents
Apartment / Duplex (1 bedroom)	136	1 space per unit plus 1 visitor space per 5 units	136 spaces for residents + 27 spaces for visitors
Apartment / Duplex (2 bedrooms)	161	1.5 space per unit plus 1 visitor space per 5 units	242 spaces for residents + 32 spaces for visitors
Apartment / Duplex (3 bedrooms)	12	2 spaces per unit plus 1 visitor space per 5 units	24 spaces for residents + 2 spaces for visitors
Creche	6 class	0.5 spaces per classroom	3 spaces
Total	411 6 class	-	603 spaces for residents + 61 spaces for visitors + 3 spaces for the Creche

Table 31 | *Total Car Parking Spaces Required under FDP Standards.*

15.3 Design Standards for New Apartments – December 2020

In December 2020, a revised version of the document "Sustainable Urban Housing: Design Standard for New Apartments" was released. The parking standards set out in this document are considerably lower than those contained in the Fingal Development Plan 2017 – 2023 in respect to new apartment developments.

The following extracts from the "Design Standards for New Apartments – December 2020" summarise the guidelines for parking:

"*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."*

15.4 Car Parking Proposed

The number of car parking spaces projected to serve the proposed development at Streamstown Masterplan is presented in Table 32 below:

Block / Land Use		No. of Units	Under Croft / Under Podium	Podium/Street	Total
Residential Parking (Including Visitor Parking)	Apartment Blocks 1, 2 and 3	159	164	8	172
	Block 6	21	-	24	24
	Block 7	6	6	-	6
	Block 8	25	-	28	28
	Duplex Block 1	6	-	10	10
	Apartment Blocks 4 and 5	92	92	5	97
	Duplexes 2A, 2B, 2C, 2D				0
	Houses	97	-	194	194
	Auburn House and Stables	5	-	9	9
Crèche		6 classes	3 *(Staff Spaces)*	4 *(Drop-off Spaces)*	7
Total Residential Parking		**411 Units**	**262**	**278**	**540**
Total Commercial Parking/Dropoff		**6 classes**	**3 (Staff Spaces)**	**4 (Drop-off Spaces)**	**7**

Table 32 | *Proposed Car Parking – Proposed Development at Streamstown Masterplan.*

As can be seen from the above, it is proposed to provide a total of 540 residential car parking spaces. There are 262 residential/visitor spaces, plus an additional 3 staff car parking spaces, provided under croft / under podium. There are 278 podium / on-street spaces for residents and visitors, plus an additional 4 drop-off spaces for the crèche. Note that the four street level drop-off spaces provided for the crèche can also be used for residential visitor drop-off outside of crèche drop-off and pickup hours.

The reduced provision of 1 car parking space per apartment / duplex unit reflects the location of the development in relation to public transport services. This is in line with the Design Standards for New Apartments as outlined above and is considered adequate to serve the proposed development.

16. Cycle Parking

16.1 Fingal Development Plan 2017 – 2023 - Standards

Standards for bicycle parking in new developments are set out in Table 12.9 of the Fingal Development Plan 2017 - 2023. Based on that, Table 33 below sets out the cycle parking requirement applicable to the proposed residential development.

Land Use	FDP Standard	Norm or Max
Houses	N/A	-
Apartment / Townhouse	1 per bedroom + 1 visitor space per 5 units	Norm

Table 33 | *Fingal Development Plan 2017 – 2023 - Cycle Parking Standards.*

16.2 Cycle Parking Required

Based on the cycle parking standard set out in the Fingal Development Plan 2017 – 2023 (FDP), the total cycle parking required to serve the proposed development at Streamstown Masterplan is 544 spaces, 482 for residents and 62 for visitors, as calculated in Table 34.

As for car parking, the cycle parking standard for apartment / townhouse have been applied for the duplex units.

Land Use	Units	Bedrooms	FDP Standard	Required Cycle Parking Spaces
Houses	102	318+	N/A	N/A
Apartment / Duplex (1 bedroom)	136	136	1 space per unit bedroom	136 for residents
Apartment / Duplex (2 bedrooms)	161	322	1 space per unit bedroom	322 for residents
Apartment / Duplex (3 bedroom)	12	24	1 space per unit bedroom	24 for residents
Apartment / Duplex (Total Units)	309	-	1 space per 5 units	62 for visitors
Total	411	800+	-	482 for residents 62 for visitors

Table 34 | *Total Cycle Parking Spaces Required under FDP Standards.*

16.3 Design Standards for New Apartments – December 2020

Section 4.17 of the Design Standard for New Apartments (December 2020) sets out a minimum standard of cycle storage space for new apartments as follows:

"A general minimum standard of 1 cycle storage space per bedroom shall be applied. For studio units, at least 1 cycle storage space shall be provided. Visitor cycle parking shall also be provided at a standard of 1 space per 2 residential units."

Land Use	Units	Bedrooms	Design Standard for New Apartments	Required Cycle Parking Spaces
Apartment / Duplex (1 bedroom)	136	136	1 space per unit bedroom	136 for residents
Apartment / Duplex (2 bedrooms)	161	322	1 space per unit bedroom	322 for residents
Apartment / Duplex (3 bedroom)	12	24	1 space per unit bedroom	24 for residents
Apartment / Duplex (Total Units)	309	-	1 space per 2 units	155 for visitors
Total	309	482	-	482 for residents 155 for visitors

Table 35 | *Total Cycle Parking Spaces Required under Design Standards for New Apartments.*

16.4 Cycle Parking Proposed

The number of cycle parking spaces projected to serve the proposed development at Streamstown Masterplan is presented in Table 36 below.

Land Use	Units	Proposed Standard	Proposed Cycle Parking Spaces
Apartment / Duplex (1 bedroom)	136	2.32 spaces per apartment / duplex unit	716 spaces for residents and visitors
Apartment / Duplex (2 bedrooms)	161		
Apartment / Duplex (3 bedrooms)	12		
Total	309	-	716 spaces

Table 36 | *Proposed Cycle Parking – Proposed Development at Streamstown Masterplan.*

As can be seen from the above, the bicycle parking project to serve the proposed development exceeds both the Fingal Development Plan 2017 – 2023 and the Design Standard for New Apartments (December 2020) requirements.

17. Road Safety

17.1 Accidents

The Road Safety Authority's website (www.rsa.ie) shows that there were a number of minor injury vehicular collisions recorded at the R107 Malahide Road / Back Road junction and one fatal collision at R107 Malahide Road between the years of 2005 to 2016.

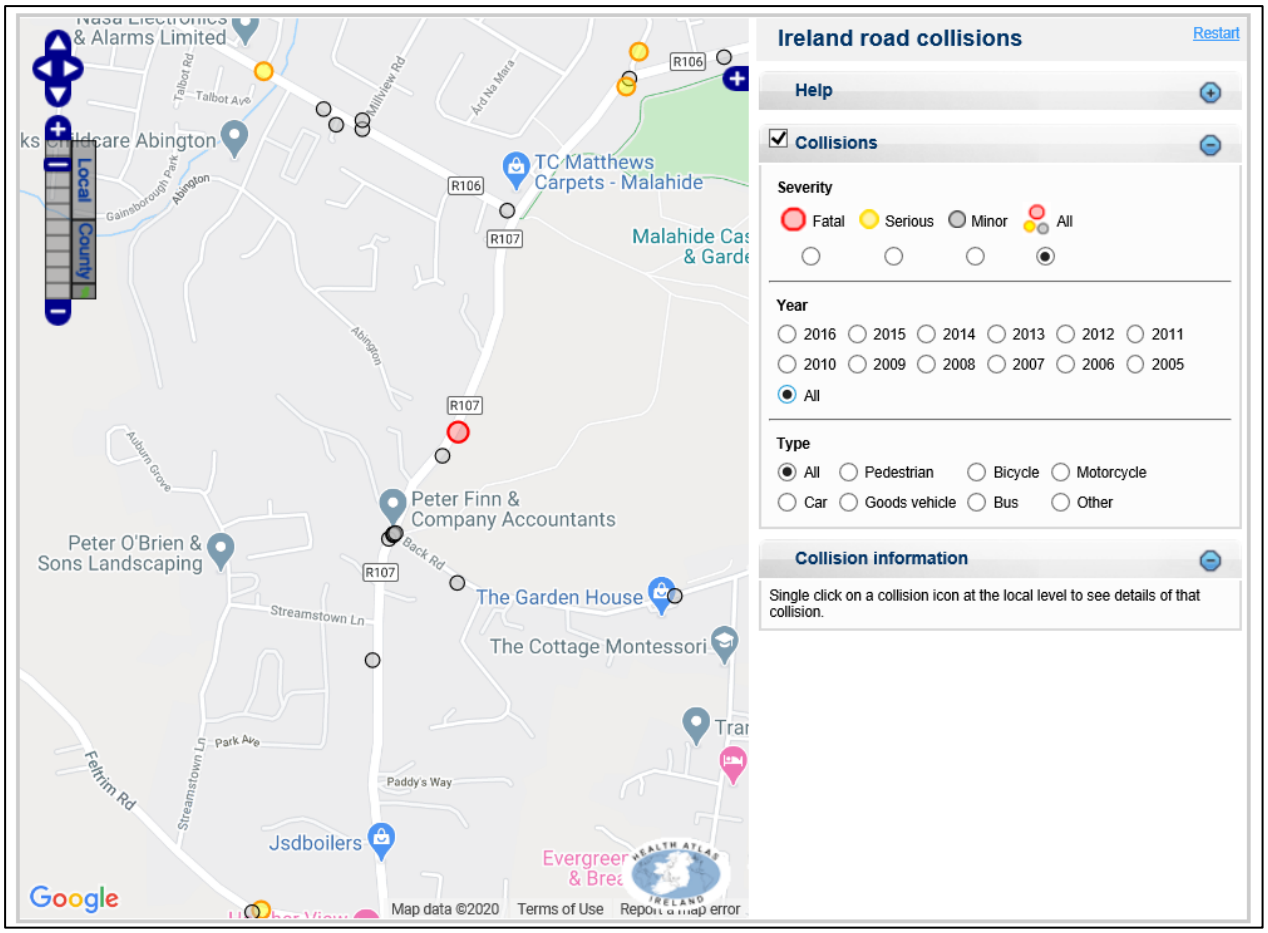


***Figure 28** | RSA Traffic Collision Data – 2005 to 2016.*

17.2 Stage 1 Road Safety Audit

A Stage 1 Road Safety Audit has been prepared by Bruton Consulting Engineers on behalf of Waterman Moylan for the strategic housing development proposed as part of the subject pre-planning submission. Details of this audit are contained within the Road Safety Audit Report included in Appendix C of the accompanying Engineering Assessment Report.

18. Conclusion

Waterman Moylan has been appointed by Kinwest Ltd. to prepare this Traffic and Transport Assessment for a proposed strategic housing development on lands around Auburn House in Malahide, Co. Dublin.

Main vehicular access to the proposed development will be provided from southeast via the R107 Malahide Road / Back Road junction, which is proposed to be upgraded to include the site access road. A secondary vehicular access is proposed off Carey's Lane to the west which will be accessed via Streamstown Lane.

It is estimated that the proposed development when fully developed and occupied will generate a total of 178 peak hour car trips during the AM (56 inbound and 122 outbound) and 186 during the PM (121 inbound and 65 outbound).

The following four junctions were modelled as part of the subject assessment:

Junction 1: R107 Malahide Road / Back Road;
Junction 2: Carrey's Lane / Streamstown Lane;
Junction 3: R107 Malahide Road / Streamstown Lane;
Junction 4: Feltirm Road / Streamstown Lane;

Junction 1 has been modelled based on its current configuration of a priority-controlled T-junction and the results indicate that it is currently operating well within capacity during both peak hour periods, with the highest RFC at 0.46 and a corresponding queue of 0.8 vehicles during the AM peak hour and a maximum RFC at 0.36 with a corresponding queue of 0.6 vehicles recorded for the PM.

Junction 1 has also been modelled based on its proposed configuration of a signalised four-armed junction and the results indicate that the proposed junction would work within capacity for the future assessed year of 2038 – DO SOMETHING during both peak hours, with the highest DOS at 99% and a corresponding queue of 27.72 vehicles during the AM and a maximum DOS at 95% with a corresponding queue of 23.92 vehicles recorded for the PM.

Junction 2 has been modelled based on its current configuration of a priority-controlled T-junction and the results indicate that this junction is currently operating well within capacity and will continue to do so for the future assessed year of 2038 – DO SOMETHING during both peak hours, with the highest RFC at 0.16 and a corresponding queue of 0.2 vehicle during the AM and a maximum RFC at 0.08 with a corresponding queue of 0.1 vehicles recorded for the PM.

Junction 3 has been modelled based on its current configuration of a priority-controlled T-junction and the results indicate that this junction is currently operating well within capacity and will continue to do so for the future assessed year of 2038 – DO SOMETHING during both peak hours, with the highest RFC at 0.43 and a corresponding queue of 0.8 vehicle during the AM and a maximum RFC at 0.24 with a corresponding queue of 0.2 vehicles recorded for the PM.

Junction 4 has been modelled based on its current configuration of a priority-controlled T-junction and the results indicate that this junction is currently operating well within capacity and will continue to do so for the future assessed year of 2038 – DO SOMETHING during both peak hours, with the highest RFC at 0.48 and a corresponding queue of 0.8 vehicle during the AM and a maximum RFC at 0.28 with a corresponding queue of 0.4 vehicles recorded for the PM.

The results of public transport assessment indicate that the capacities of both rail and bus services will be greater than demand forecast.

Based on the junction and public transport assessment, it can be confirmed that there is sufficient capacity in the road and public transport networks to facilitate the proposed development.

Appendices

A. GoCar Letter

Hatley Homes,
Kinvara House,
Northumberland Rd,
Ballsbridge,
Dublin 4

To Whom It May Concern,

This is a letter to confirm that GoCar intends to provide 4-6 shared car club vehicles in the proposed SHD scheme by Auburn House in Malahide. GoCar representatives have discussed the project with representatives of the transport engineers of the scheme at Waterman Moylan and are excited to provide a car club service at this location.

It is understood that the vehicle will be shared between residents of the scheme and residents of the surrounding areas. GoCar will work with the management company of the development to identify a need for greater numbers of vehicles if and when this might arise.

GoCar is Ireland's leading car sharing service with over 60,000 members and over 750 cars and vans on fleet. Each GoCar which is placed in a community has the potential to replace the journeys of up to 15 private cars. The Department of Housing's Design Standards for New Apartments - Guidelines for Planning Authorities 2018 outline: "For all types of location, where it is sought to eliminate or reduce car parking provision, it is necessary to ensure... provision is also to be made for alternative mobility solutions including facilities for car sharing club vehicles."

Carsharing is a sustainable service. By allowing multiple people to use the same vehicle at different times, car sharing reduces car ownership, car dependency, congestion, noise and air pollution. It frees up land which would otherwise be used for additional parking spaces. Most GoCar users only use a car when necessary, and walk and use public transport more often than car owners.

By having GoCar car club vehicles in a residential development such as this, residents will have access to pay-as-you-go driving, in close proximity to their homes, which will increase usership of the service.

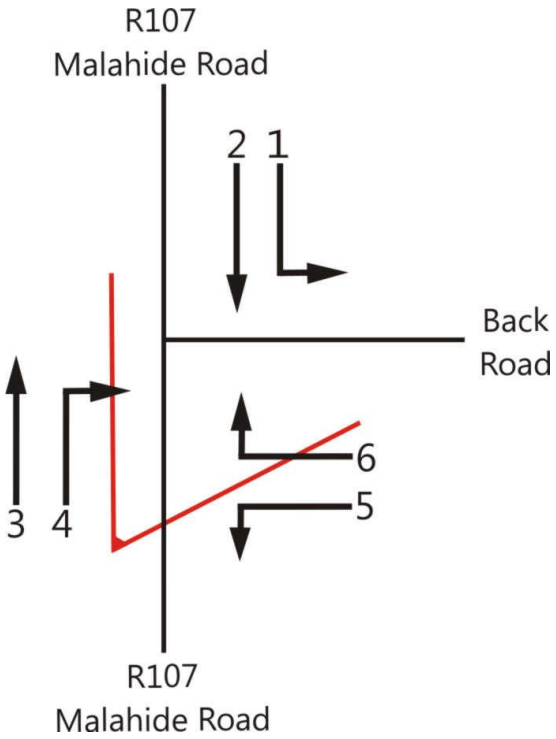
I trust that this information is satisfactory. For any queries, please do not hesitate to contact me.

Rob Kearns
Head of Growth
GoCar Carsharing Limited
M: 083 822 3924
E: rob.kearns@gocar.ie

B. Traffic Survey

Site Location

Movement Numbering



	Job number: TRA/19/138	Job Date: 29th May 2019	Drawing No: TRA/19/138-01	traffinomics.ie
	Client: Waterman-Moylan	Job Day: Wednesday	Author: SPW	

TRAFFINOMICS LIMITED

MALAHIDE ROAD TRAFFIC COUNT **MAY 2019**

MANUAL CLASSIFIED JUNCTION TURNING COUNT **TRA/19/138**

SITE: 01 DATE: 29th May 2019

LOCATION: Malahide Road/Back Road DAY: Wednesday

	MOVEMENT 1							MOVEMENT 2							MOVEMENT 3						
TIME	CAR	LGV	OGV1	OGV2	BUS	TOT	PCU	CAR	LGV	OGV1	OGV2	BUS	TOT	PCU	CAR	LGV	OGV1	OGV2	BUS	TOT	PCU
00:00	0	0	0	0	0	0	0	6	0	0	0	0	6	6	14	0	0	0	0	14	14
00:15	1	0	0	0	0	1	1	7	0	0	1	0	8	9	9	0	0	0	0	9	9
00:30	0	0	0	0	0	0	0	7	0	0	0	0	7	7	8	0	0	0	0	8	8
00:45	1	0	0	0	0	1	1	10	0	0	0	0	10	10	5	0	0	0	0	5	5
H/TOT	2	0	0	0	0	2	2	30	0	0	1	0	31	32	36	0	0	0	0	36	36
01:00	0	0	0	0	0	0	0	6	0	0	0	0	6	6	4	0	0	0	0	4	4
01:15	1	0	0	0	0	1	1	3	0	0	0	0	3	3	3	0	0	0	0	3	3
01:30	1	0	0	0	0	1	1	2	0	0	0	0	2	2	3	0	0	0	0	3	3
01:45	0	0	0	0	0	0	0	5	0	0	0	0	5	5	5	0	0	0	0	5	5
H/TOT	2	0	0	0	0	2	2	16	0	0	0	0	16	16	15	0	0	0	0	15	15
02:00	1	0	0	0	0	1	1	2	0	0	0	0	2	2	4	0	0	0	1	5	6
02:15	2	0	0	0	0	2	2	2	1	0	0	0	3	3	4	0	0	0	0	4	4
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02:45	2	0	0	0	1	3	4	1	1	0	0	0	2	2	1	0	0	0	0	1	1
H/TOT	5	0	0	0	1	6	7	7	2	0	0	0	9	9	9	0	0	0	1	10	11
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03:30	0	0	0	0	1	1	2	1	0	0	0	0	1	1	1	0	0	0	0	1	1
03:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
H/TOT	1	0	0	0	1	2	3	3	0	0	0	0	3	3	5	1	0	0	0	6	6
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04:15	1	0	0	0	0	1	1	4	0	0	0	0	4	4	5	0	0	0	0	5	5
04:30	0	0	0	0	0	0	0	3	0	0	0	0	3	3	1	0	0	0	0	1	1
04:45	0	0	0	0	0	0	0	2	0	0	0	0	2	2	2	0	0	0	0	2	2
H/TOT	1	0	0	0	0	1	1	12	0	0	0	0	12	12	10	0	0	0	0	10	10
05:00	0	0	0	0	0	0	0	2	0	1	0	0	3	4	0	0	0	0	0	0	0
05:15	1	0	0	0	0	1	1	6	0	0	0	0	6	6	5	1	0	0	0	6	6
05:30	1	0	0	0	0	1	1	9	1	1	0	0	11	12	1	0	2	1	0	4	6
05:45	5	0	1	0	0	6	7	13	1	0	0	0	14	14	5	2	0	0	0	7	7
H/TOT	7	0	1	0	0	8	9	30	2	2	0	0	34	35	11	3	2	1	0	17	19
06:00	3	0	0	0	0	3	3	13	1	1	0	0	15	16	5	0	0	1	0	6	7
06:15	4	0	0	0	0	4	4	23	1	0	0	1	25	26	5	1	0	0	0	6	6
06:30	5	1	0	0	0	6	6	44	3	0	0	1	48	49	6	4	0	0	1	11	12
06:45	11	4	1	0	0	16	17	56	4	0	0	1	61	62	19	4	0	0	0	23	23
H/TOT	23	5	1	0	0	29	30	136	9	1	0	3	149	153	35	9	0	1	1	46	48
07:00	6	3	0	0	0	9	9	59	10	1	0	0	70	71	20	3	0	0	1	24	25
07:15	10	4	1	0	0	15	16	75	7	1	0	2	85	88	25	5	0	0	2	32	34
07:30	20	4	0	0	0	24	24	78	1	1	0	5	85	91	25	9	4	0	3	41	46
07:45	33	7	0	0	1	41	42	77	5	0	0	0	82	82	29	9	1	0	1	40	42
H/TOT	69	18	1	0	1	89	91	289	23	3	0	7	322	331	99	26	5	0	7	137	147

TRAFFINOMICS LIMITED

MALAHIDE ROAD TRAFFIC COUNT **MAY 2019**

MANUAL CLASSIFIED JUNCTION TURNING COUNT **TRA/19/138**

SITE: 01 DATE: 29th May 2019

LOCATION: Malahide Road/Back Road DAY: Wednesday

	MOVEMENT 1							MOVEMENT 2							MOVEMENT 3						
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**BUS**	**TOT**	**PCU**	**CAR**	**LGV**	**OGV1**	**OGV2**	**BUS**	**TOT**	**PCU**	**CAR**	**LGV**	**OGV1**	**OGV2**	**BUS**	**TOT**	**PCU**
08:00	28	4	1	0	1	34	36	59	3	0	0	3	65	68	30	3	1	0	1	35	37
08:15	36	2	0	0	0	38	38	58	3	0	0	1	62	63	52	4	1	0	1	58	60
08:30	35	1	1	1	0	38	40	65	7	2	0	1	75	77	62	6	1	0	2	71	74
08:45	26	4	0	1	0	31	32	67	8	0	0	3	78	81	46	8	1	0	1	56	58
H/TOT	125	11	2	2	1	141	146	249	21	2	0	8	280	289	190	21	4	0	5	220	227
09:00	37	2	1	1	1	42	45	54	6	2	0	1	63	65	44	10	1	0	1	56	58
09:15	42	2	1	1	0	46	48	59	6	0	0	1	66	67	45	9	5	0	2	61	66
09:30	29	1	0	0	0	30	30	56	2	1	0	1	60	62	32	6	2	0	1	41	43
09:45	31	2	0	1	0	34	35	60	5	3	1	0	69	72	38	16	2	0	0	56	57
H/TOT	139	7	2	3	1	152	158	229	19	6	1	3	258	265	159	41	10	0	4	214	223
10:00	32	2	1	0	0	35	36	41	6	1	0	1	49	51	31	10	4	0	2	47	51
10:15	32	2	1	0	0	35	36	42	10	3	1	0	56	59	33	11	1	0	1	46	48
10:30	47	0	0	0	0	47	47	54	7	1	0	2	64	67	37	4	1	0	1	43	45
10:45	25	2	1	0	0	28	29	39	6	1	0	0	46	47	45	9	0	0	0	54	54
H/TOT	136	6	3	0	0	145	147	176	29	6	1	3	215	222	146	34	6	0	4	190	197
11:00	27	4	0	0	0	31	31	54	6	0	0	2	62	64	44	3	1	0	1	49	51
11:15	26	2	1	1	0	30	32	48	7	3	0	0	58	60	42	10	1	0	0	53	54
11:30	35	0	0	0	0	35	35	49	7	1	0	1	58	60	39	12	0	0	1	52	53
11:45	30	1	0	0	0	31	31	45	10	1	0	0	56	57	39	13	3	1	0	56	59
H/TOT	118	7	1	1	0	127	129	196	30	5	0	3	234	240	164	38	5	1	2	210	216
12:00	38	0	0	0	0	38	38	44	9	3	0	1	57	60	54	13	2	0	1	70	72
12:15	37	2	1	0	0	40	41	54	9	3	0	0	66	68	48	7	3	1	0	59	62
12:30	42	2	1	0	0	45	46	55	6	4	0	2	67	71	37	11	1	0	1	50	52
12:45	27	2	0	0	0	29	29	55	10	1	0	0	66	67	61	12	3	0	1	77	80
H/TOT	144	6	2	0	0	152	153	208	34	11	0	3	256	265	200	43	9	1	3	256	265
13:00	20	1	0	0	0	21	21	63	5	2	1	1	72	75	58	5	1	0	2	66	69
13:15	24	1	0	0	0	25	25	41	6	2	0	0	49	50	52	5	1	0	3	61	65
13:30	29	0	0	0	0	29	29	60	9	1	0	2	72	75	45	8	2	0	2	57	60
13:45	46	3	2	1	0	52	54	55	3	3	0	2	63	67	69	6	1	1	1	78	81
H/TOT	119	5	2	1	0	127	129	219	23	8	1	5	256	266	224	24	5	1	8	262	274
14:00	19	2	2	0	0	23	24	51	4	2	1	3	61	66	57	7	0	1	2	67	70
14:15	31	1	0	0	0	32	32	47	6	0	0	1	54	55	78	5	1	0	0	84	85
14:30	32	1	0	0	1	34	35	73	5	2	1	2	83	87	56	8	0	0	1	65	66
14:45	28	2	1	0	1	32	34	52	6	0	0	0	58	58	53	7	1	0	0	61	62
H/TOT	110	6	3	0	2	121	125	223	21	4	2	6	256	267	244	27	2	1	3	277	282
15:00	32	7	0	0	0	39	39	55	7	5	3	1	71	78	66	8	1	0	1	76	78
15:15	47	0	0	0	1	48	49	50	5	3	0	1	59	62	73	4	2	0	1	80	82
15:30	18	0	1	1	1	21	24	50	13	0	0	2	65	67	48	10	5	0	2	65	70
15:45	33	3	1	0	0	37	38	39	3	2	0	0	44	45	69	5	0	0	0	74	74
H/TOT	130	10	2	1	2	145	149	194	28	10	3	4	239	252	256	27	8	0	4	295	303

TRAFFINOMICS LIMITED

MALAHIDE ROAD TRAFFIC COUNT **MAY 2019**

MANUAL CLASSIFIED JUNCTION TURNING COUNT **TRA/19/138**

SITE: 01 DATE: 29th May 2019

LOCATION: Malahide Road/Back Road DAY: Wednesday

	MOVEMENT 1							MOVEMENT 2							MOVEMENT 3						
TIME	CAR	LGV	OGV1	OGV2	BUS	TOT	PCU	CAR	LGV	OGV1	OGV2	BUS	TOT	PCU	CAR	LGV	OGV1	OGV2	BUS	TOT	PCU
16:00	21	2	0	0	0	23	23	39	12	2	0	1	54	56	64	7	2	0	1	74	76
16:15	33	1	0	0	0	34	34	37	5	0	1	2	45	48	70	3	2	0	1	76	78
16:30	24	0	0	0	0	24	24	55	6	1	0	1	63	65	50	6	0	0	1	57	58
16:45	29	1	0	0	0	30	30	54	7	0	0	1	62	63	71	5	0	0	1	77	78
H/TOT	107	4	0	0	0	111	111	185	30	3	1	5	224	232	255	21	4	0	4	284	290
17:00	20	3	0	0	0	23	23	38	11	1	1	1	52	55	62	8	1	0	0	71	72
17:15	32	2	0	0	0	34	34	50	7	0	0	0	57	57	67	7	0	0	1	75	76
17:30	28	0	0	0	0	28	28	41	5	0	0	1	47	48	50	2	1	0	1	54	56
17:45	31	3	1	0	0	35	36	33	4	0	0	1	38	39	66	3	1	0	0	70	71
H/TOT	111	8	1	0	0	120	121	162	27	1	1	3	194	199	245	20	3	0	2	270	274
18:00	33	1	0	0	0	34	34	43	1	0	0	2	46	48	91	7	0	0	1	99	100
18:15	36	0	0	0	0	36	36	54	0	0	1	0	55	56	85	7	0	0	1	93	94
18:30	35	1	0	0	0	36	36	50	3	0	0	1	54	55	95	4	1	0	0	100	101
18:45	32	0	0	0	0	32	32	41	3	0	0	1	45	46	70	6	0	0	2	78	80
H/TOT	136	2	0	0	0	138	138	188	7	0	1	4	200	205	341	24	1	0	4	370	375
19:00	30	1	0	0	0	31	31	44	4	0	0	2	50	52	61	3	1	0	1	66	68
19:15	36	2	0	0	0	38	38	47	1	0	0	0	48	48	58	4	0	0	1	63	64
19:30	29	0	1	0	0	30	31	40	2	0	0	1	43	44	79	3	0	0	1	83	84
19:45	19	2	0	0	0	21	21	52	4	0	0	0	56	56	70	4	0	0	1	75	76
H/TOT	114	5	1	0	0	120	121	183	11	0	0	3	197	200	268	14	1	0	4	287	292
20:00	22	1	0	0	0	23	23	46	1	0	0	1	48	49	48	1	1	0	1	51	53
20:15	16	2	0	0	0	18	18	34	1	0	0	0	35	35	35	3	0	0	0	38	38
20:30	21	1	0	0	0	22	22	33	0	0	0	1	34	35	44	1	0	0	1	46	47
20:45	14	1	1	0	0	16	17	31	2	0	0	0	33	33	60	4	0	0	0	64	64
H/TOT	73	5	1	0	0	79	80	144	4	0	0	2	150	152	187	9	1	0	2	199	202
21:00	15	1	0	0	0	16	16	28	1	0	0	2	31	33	45	2	1	0	0	48	49
21:15	12	1	0	0	0	13	13	36	4	0	0	0	40	40	45	1	0	0	1	47	48
21:30	10	1	0	0	0	11	11	24	5	1	0	1	31	33	41	1	0	0	0	42	42
21:45	8	0	0	0	0	8	8	31	3	1	0	0	35	36	22	3	0	0	2	27	29
H/TOT	45	3	0	0	0	48	48	119	13	2	0	3	137	141	153	7	1	0	3	164	168
22:00	10	0	0	0	0	10	10	28	3	0	0	1	32	33	26	2	0	0	1	29	30
22:15	8	0	1	0	0	9	10	19	0	0	0	1	20	21	22	1	0	0	0	23	23
22:30	7	0	0	0	0	7	7	17	2	1	0	1	21	23	14	0	0	0	0	14	14
22:45	6	0	0	0	0	6	6	23	0	0	0	0	23	23	22	0	0	0	2	24	26
H/TOT	31	0	1	0	0	32	33	87	5	1	0	3	96	100	84	3	0	0	3	90	93
23:00	6	0	0	0	0	6	6	11	1	0	0	1	13	14	25	0	0	0	1	26	27
23:15	5	0	0	0	0	5	5	13	1	0	0	0	14	14	20	1	0	0	0	21	21
23:30	7	0	0	0	0	7	7	12	0	0	0	2	14	16	13	0	0	0	0	13	13
23:45	4	0	0	0	0	4	4	8	0	0	0	0	8	8	6	1	0	0	1	8	9
H/TOT	22	0	0	0	0	22	22	44	2	0	0	3	49	52	64	2	0	0	2	68	70
00:00 - 00:00	1770	108	24	8	9	1919	1950	3329	340	65	12	71	3817	3936	3400	394	67	6	66	3933	4040
06:00 - 22:00	1699	108	22	8	7	1844	1872	3100	329	62	11	65	3567	3677	3166	385	65	5	60	3681	3780

07:00 - 19:00	1444	90	19	8	7	1568	1595	2518	292	59	11	54	2934	3032	2523	346	62	4	50	2985	3071

TRAFFINOMICS LIMITED

MALAHIDE ROAD TRAFFIC COUNT **MAY 2019**

MANUAL CLASSIFIED JUNCTION TURNING COUNT **TRA/19/138**

SITE: 01 DATE: 29th May 2019

LOCATION: Malahide Road/Back Road DAY: Wednesday

	MOVEMENT 4							MOVEMENT 5							MOVEMENT 6						
TIME	CAR	LGV	OGV1	OGV2	BUS	TOT	PCU	CAR	LGV	OGV1	OGV2	BUS	TOT	PCU	CAR	LGV	OGV1	OGV2	BUS	TOT	PCU
00:00	3	0	0	0	0	3	3	0	0	0	0	0	0	0	2	0	0	0	0	2	2
00:15	0	0	0	0	0	0	0	5	0	0	0	0	5	5	2	0	0	0	0	2	2
00:30	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:45	0	0	0	0	0	0	0	1	0	0	0	0	1	1	1	0	0	0	0	1	1
H/TOT	5	0	0	0	0	5	5	6	0	0	0	0	6	6	5	0	0	0	0	5	5
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
01:15	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30	1	0	0	0	0	1	1	0	0	0	0	0	0	0	2	0	0	0	0	2	2
01:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	3	0	0	0	0	3	3	0	0	0	0	0	0	0	3	0	0	0	0	3	3
02:00	1	0	0	0	0	1	1	0	0	0	0	0	0	0	1	0	0	0	0	1	1
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
02:45	0	0	0	0	0	0	0	1	0	0	0	1	2	3	0	0	0	0	0	0	0
H/TOT	1	0	0	0	0	1	1	1	0	0	0	1	2	3	2	0	0	0	0	2	2
03:00	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0
03:15	1	0	0	0	0	1	1	0	0	0	0	0	0	0	2	0	0	0	0	2	2
03:30	0	0	0	0	0	0	0	1	0	0	0	0	1	1	1	0	0	0	0	1	1
03:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	1	0	0	0	0	1	1	2	0	0	0	0	2	2	3	0	0	0	0	3	3
04:00	1	0	0	0	0	1	1	1	1	0	0	0	2	2	0	0	0	0	0	0	0
04:15	0	0	0	0	0	0	0	4	0	0	0	0	4	4	0	0	0	0	0	0	0
04:30	2	0	0	0	0	2	2	2	0	0	0	0	2	2	1	0	0	0	0	1	1
04:45	1	0	0	0	0	1	1	4	0	0	0	0	4	4	0	0	0	0	0	0	0
H/TOT	4	0	0	0	0	4	4	11	1	0	0	0	12	12	1	0	0	0	0	1	1
05:00	0	0	0	0	0	0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0
05:15	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30	0	1	0	0	0	1	1	3	0	1	0	0	4	5	0	0	0	0	0	0	0
05:45	0	0	0	0	0	0	0	3	0	0	0	0	3	3	1	0	0	0	0	1	1
H/TOT	2	1	0	0	0	3	3	8	0	1	0	0	9	10	1	0	0	0	0	1	1
06:00	1	0	0	0	0	1	1	3	1	0	0	0	4	4	2	0	0	0	0	2	2
06:15	2	1	1	0	0	4	5	7	3	0	0	0	10	10	2	1	1	0	0	4	5
06:30	1	0	0	1	0	2	3	11	2	0	0	0	13	13	3	1	2	0	0	6	7
06:45	1	1	0	1	0	3	4	17	3	1	0	0	21	22	5	0	0	0	0	5	5
H/TOT	5	2	1	2	0	10	13	38	9	1	0	0	48	49	12	2	3	0	0	17	19
07:00	8	5	1	0	0	14	15	12	1	0	0	0	13	13	8	1	0	1	0	10	11
07:15	11	3	1	0	0	15	16	21	2	0	0	0	23	23	13	0	0	0	0	13	13
07:30	8	5	0	1	0	14	15	20	2	0	1	0	23	24	13	1	1	0	0	15	16
07:45	19	3	0	0	0	22	22	28	2	0	0	1	31	32	26	0	0	1	0	27	28
H/TOT	46	16	2	1	0	65	67	81	7	0	1	1	90	92	60	2	1	2	0	65	68

SITE: 01 DATE: 29th May 2019

LOCATION: Malahide Road/Back Road DAY: Wednesday

	MOVEMENT 4							MOVEMENT 5							MOVEMENT 6						
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**BUS**	**TOT**	**PCU**	**CAR**	**LGV**	**OGV1**	**OGV2**	**BUS**	**TOT**	**PCU**	**CAR**	**LGV**	**OGV1**	**OGV2**	**BUS**	**TOT**	**PCU**
08:00	18	3	1	0	1	23	25	36	1	1	0	0	38	39	24	5	2	0	0	31	32
08:15	31	8	0	0	1	40	41	40	4	0	0	0	44	44	36	2	0	0	0	38	38
08:30	33	2	3	0	0	38	40	52	0	1	0	1	54	56	41	2	1	0	0	44	45
08:45	27	2	1	1	0	31	33	47	1	0	0	1	49	50	48	1	1	0	0	50	51
H/TOT	109	15	5	1	2	132	138	175	6	2	0	2	185	188	149	10	4	0	0	163	165
09:00	19	3	0	0	1	23	24	67	6	1	0	0	74	75	52	2	1	0	0	55	56
09:15	21	3	0	1	0	25	26	33	7	2	0	0	42	43	38	4	0	0	1	43	44
09:30	15	2	1	0	1	19	21	24	2	0	0	0	26	26	27	1	0	0	0	28	28
09:45	26	2	0	0	0	28	28	26	2	1	0	0	29	30	40	1	1	0	0	42	43
H/TOT	81	10	1	1	2	95	99	150	17	4	0	0	171	173	157	8	2	0	1	168	170
10:00	21	4	0	0	1	26	27	20	1	0	0	0	21	21	29	1	0	1	0	31	32
10:15	18	1	1	0	0	20	21	15	7	2	0	0	24	25	24	2	0	0	0	26	26
10:30	26	3	0	0	1	30	31	30	4	0	0	0	34	34	35	0	0	0	0	35	35
10:45	28	1	1	0	0	30	31	32	0	1	0	0	33	34	54	1	1	0	1	57	59
H/TOT	93	9	2	0	2	106	109	97	12	3	0	0	112	114	142	4	1	1	1	149	152
11:00	29	4	0	0	0	33	33	31	3	0	1	0	35	36	33	1	3	0	1	38	41
11:15	22	1	2	0	0	25	26	27	3	2	0	0	32	33	36	3	0	0	0	39	39
11:30	20	2	1	0	0	23	24	27	1	1	0	0	29	30	30	2	1	0	0	33	34
11:45	32	2	2	0	1	37	39	29	2	0	0	1	32	33	34	2	1	0	1	38	40
H/TOT	103	9	5	0	1	118	122	114	9	3	1	1	128	132	133	8	5	0	2	148	153
12:00	22	2	0	0	0	24	24	27	6	1	0	0	34	35	24	4	2	0	0	30	31
12:15	30	0	1	0	0	31	32	36	5	1	0	0	42	43	38	0	1	0	0	39	40
12:30	20	1	0	0	0	21	21	25	1	1	0	0	27	28	31	2	0	0	0	33	33
12:45	26	3	0	0	0	29	29	30	1	2	0	0	33	34	31	0	0	0	0	31	31
H/TOT	98	6	1	0	0	105	106	118	13	5	0	0	136	139	124	6	3	0	0	133	135
13:00	18	3	0	0	0	21	21	28	3	0	0	1	32	33	45	5	1	0	1	52	54
13:15	23	3	0	0	0	26	26	18	5	0	0	0	23	23	27	4	1	0	1	33	35
13:30	24	1	0	0	0	25	25	27	3	0	0	1	31	32	32	0	0	0	0	32	32
13:45	31	2	2	0	1	36	38	31	1	1	0	1	34	36	41	3	0	0	0	44	44
H/TOT	96	9	2	0	1	108	110	104	12	1	0	3	120	124	145	12	2	0	2	161	164
14:00	33	4	0	0	1	38	39	33	3	1	0	0	37	38	37	2	0	0	0	39	39
14:15	24	3	0	0	1	28	29	32	4	0	0	0	36	36	32	2	1	0	0	35	36
14:30	25	0	1	0	0	26	27	26	3	0	0	0	29	29	28	1	1	0	1	31	33
14:45	33	0	1	0	0	34	35	44	2	1	1	1	49	52	42	1	0	0	0	43	43
H/TOT	115	7	2	0	2	126	129	135	12	2	1	1	151	154	139	6	2	0	1	148	150
15:00	26	1	0	0	0	27	27	32	2	1	2	1	38	42	25	1	0	0	1	27	28
15:15	15	3	0	0	0	18	18	27	2	1	0	0	30	31	25	0	0	0	0	25	25
15:30	30	2	0	0	1	33	34	25	3	0	0	0	28	28	31	1	0	0	1	33	34
15:45	23	2	1	0	1	27	29	25	2	2	0	0	29	30	27	4	0	0	0	31	31
H/TOT	94	8	1	0	2	105	108	109	9	4	2	1	125	131	108	6	0	0	2	116	118

TRAFFINOMICS LIMITED

MALAHIDE ROAD TRAFFIC COUNT **MAY 2019**

MANUAL CLASSIFIED JUNCTION TURNING COUNT **TRA/19/138**

SITE: 01 DATE: 29th May 2019

LOCATION: Malahide Road/Back Road DAY: Wednesday

	MOVEMENT 4							MOVEMENT 5							MOVEMENT 6						
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**BUS**	**TOT**	**PCU**	**CAR**	**LGV**	**OGV1**	**OGV2**	**BUS**	**TOT**	**PCU**	**CAR**	**LGV**	**OGV1**	**OGV2**	**BUS**	**TOT**	**PCU**
16:00	19	4	3	0	0	26	28	27	8	1	0	0	36	37	39	4	1	1	0	45	47
16:15	27	1	0	0	0	28	28	27	3	0	0	0	30	30	29	6	0	0	0	35	35
16:30	15	4	0	0	0	19	19	41	6	0	1	0	48	49	45	8	3	0	1	57	60
16:45	20	2	0	0	0	22	22	32	2	1	0	0	35	36	30	1	1	0	0	32	33
H/TOT	81	11	3	0	0	95	97	127	19	2	1	0	149	151	143	19	5	1	1	169	174
17:00	20	1	0	0	0	21	21	27	3	1	0	1	32	34	35	6	0	1	0	42	43
17:15	28	2	0	0	0	30	30	39	3	0	0	0	42	42	50	3	0	0	1	54	55
17:30	23	2	0	0	0	25	25	38	2	1	0	0	41	42	37	1	0	0	0	38	38
17:45	25	0	2	0	0	27	28	33	2	0	0	0	35	35	35	2	1	0	0	38	39
H/TOT	96	5	2	0	0	103	104	137	10	2	0	1	150	152	157	12	1	1	1	172	175
18:00	23	0	0	0	0	23	23	30	2	0	0	0	32	32	33	5	0	0	0	38	38
18:15	24	1	0	0	0	25	25	26	2	0	0	0	28	28	33	2	0	0	0	35	35
18:30	20	0	0	0	0	20	20	19	3	0	0	0	22	22	28	1	0	0	0	29	29
18:45	26	1	0	0	0	27	27	16	0	0	0	0	16	16	31	1	1	0	0	33	34
H/TOT	93	2	0	0	0	95	95	91	7	0	0	0	98	98	125	9	1	0	0	135	136
19:00	34	4	0	0	0	38	38	19	2	0	0	0	21	21	30	3	1	0	0	34	35
19:15	12	2	0	0	0	14	14	8	1	0	0	0	9	9	27	1	0	0	0	28	28
19:30	20	1	0	0	0	21	21	16	3	0	0	0	19	19	26	1	0	0	0	27	27
19:45	18	1	0	0	0	19	19	19	4	0	0	0	23	23	32	0	1	0	0	33	34
H/TOT	84	8	0	0	0	92	92	62	10	0	0	0	72	72	115	5	2	0	0	122	123
20:00	17	0	0	0	0	17	17	12	1	0	0	0	13	13	29	1	0	0	0	30	30
20:15	11	0	0	0	0	11	11	19	0	0	0	0	19	19	21	2	0	0	0	23	23
20:30	8	0	0	0	0	8	8	12	0	0	0	0	12	12	19	2	0	0	0	21	21
20:45	9	1	0	0	0	10	10	14	2	1	0	0	17	18	13	0	0	0	0	13	13
H/TOT	45	1	0	0	0	46	46	57	3	1	0	0	61	62	82	5	0	0	0	87	87
21:00	9	0	0	0	0	9	9	9	0	0	0	0	9	9	19	0	0	0	0	19	19
21:15	6	0	0	0	0	6	6	14	2	0	0	0	16	16	12	1	0	0	0	13	13
21:30	5	1	0	0	0	6	6	5	0	0	0	0	5	5	12	0	0	0	0	12	12
21:45	6	0	0	0	0	6	6	2	1	0	0	0	3	3	4	0	0	0	0	4	4
H/TOT	26	1	0	0	0	27	27	30	3	0	0	0	33	33	47	1	0	0	0	48	48
22:00	6	0	0	0	0	6	6	8	0	0	0	0	8	8	5	0	0	0	0	5	5
22:15	6	0	0	0	0	6	6	7	0	0	0	0	7	7	7	1	0	0	0	8	8
22:30	3	0	0	0	0	3	3	2	1	0	0	0	3	3	3	0	0	0	0	3	3
22:45	2	0	0	0	0	2	2	1	0	0	0	0	1	1	11	0	0	0	0	11	11
H/TOT	17	0	0	0	0	17	17	18	1	0	0	0	19	19	26	1	0	0	0	27	27
23:00	4	1	0	0	0	5	5	1	0	0	0	0	1	1	7	0	0	0	0	7	7
23:15	2	0	0	0	0	2	2	2	0	0	0	0	2	2	4	0	0	0	0	4	4
23:30	1	0	0	0	0	1	1	1	0	0	0	0	1	1	4	0	0	0	0	4	4
23:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	6	6
H/TOT	7	1	0	0	0	8	8	4	0	0	0	0	4	4	21	0	0	0	0	21	21
00:00 - 00:00	1305	121	27	5	12	1470	1502	1675	160	31	6	11	1883	1917	1900	116	32	5	11	2064	2098
06:00 - 22:00	1265	119	27	5	12	1428	1460	1625	158	30	6	10	1829	1862	1838	115	32	5	11	2001	2035

07:00 - 19:00	1105	107	26	3	12	1253	1282	1438	133	28	6	10	1615	1647	1582	102	27	5	11	1727	1758

PCU's Through Junction
25
26
17
18
86
11
9
9
10
39
11
9
3
10
33
4
6
6
2
18
8
14
9
9
40
6
15
24
32
76
33
55
90
132
310
143
189
216
248
795

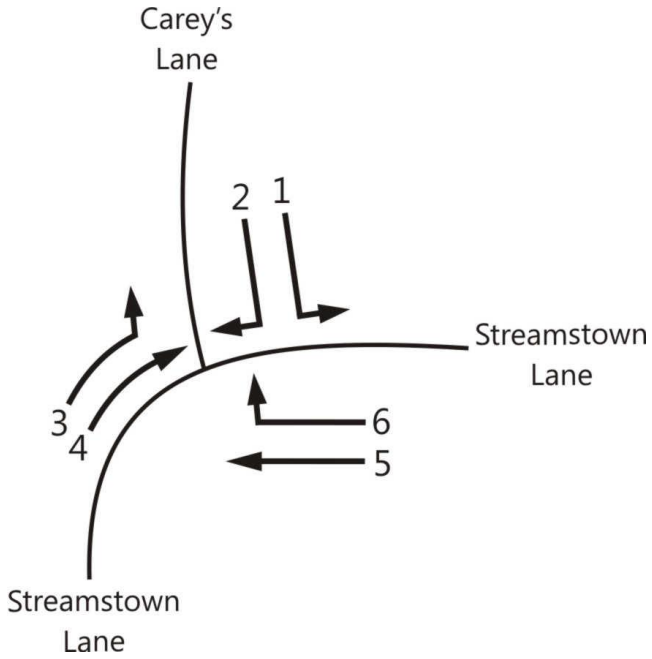
PCU's Through Junction
235
284
330
304
1152
321
294
209
264
1088
217
213
258
252
940
255
243
234
258
990
259
283
250
269
1061
272
223
253
319
1067
276
272
276
282
1107
292
266
256
246
1060

PCU's Through Junction
266
253
274
261
1054
247
294
236
247
1024
275
274
263
235
1046
244
201
226
229
899
185
144
145
154
628
135
136
109
86
465
92
75
53
69
288
60
48
42
27
177
15444
14686

12385

Site Location

Movement Numbering



Job number: TRA/20/017	Job Date: 21st January 2020	Drawing No: TRA/20/017-01	traffinomics.ie
Client: Waterman-Moylan	Job Day: Tuesday	Author: SPW	

TRAFFINOMICS LIMITED

AUBURN, MALAHIDE ROAD TRAFFIC COUNT **JANUARY 2020**

MANUAL CLASSIFIED JUNCTION TURNING COUNT **TRA/20/017**

SITE: 01 DATE: 21st January 2020

LOCATION: Carey's Lane/Streamstown Lane DAY: Tuesday

	MOVEMENT 1							MOVEMENT 2							MOVEMENT 3						
TIME	CAR	LGV	OGV1	OGV2	BUS	TOT	PCU	CAR	LGV	OGV1	OGV2	BUS	TOT	PCU	CAR	LGV	OGV1	OGV2	BUS	TOT	PCU
00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	1	0	0	0	0	1	1	0	0	0	0	0	0	0	1	0	0	0	0	1	1
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	1	0	0	0	0	1	1	0	0	0	0	0	0	0	1	0	0	0	0	1	1
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
04:30	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45	0	0	0	0	0	0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0
H/TOT	1	0	0	0	0	1	1	2	0	0	0	0	2	2	1	0	0	0	0	1	1
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
05:45	1	0	0	0	0	1	1	1	0	0	0	0	1	1	0	0	0	0	0	0	0
H/TOT	1	0	0	0	0	1	1	1	0	0	0	0	1	1	1	0	0	0	0	1	1
06:00	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:15	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:30	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	1	0	1	2
06:45	3	0	0	0	0	3	3	0	0	0	0	0	0	0	1	1	1	0	0	3	4
H/TOT	7	0	0	0	0	7	7	0	0	0	0	0	0	0	1	1	1	1	0	4	6
07:00	3	2	1	0	0	6	7	2	1	0	0	0	3	3	2	0	0	0	0	2	2
07:15	3	1	0	0	0	4	4	1	0	0	0	0	1	1	2	0	0	0	0	2	2
07:30	3	0	0	0	0	3	3	1	0	3	0	0	4	6	1	0	0	0	0	1	1
07:45	2	1	0	0	0	3	3	2	0	0	4	0	6	11	1	1	0	0	0	2	2
H/TOT	11	4	1	0	0	16	17	6	1	3	4	0	14	21	6	1	0	0	0	7	7

TRAFFINOMICS LIMITED

AUBURN, MALAHIDE ROAD TRAFFIC COUNT **JANUARY 2020**

MANUAL CLASSIFIED JUNCTION TURNING COUNT **TRA/20/017**

SITE: 01 DATE: 21st January 2020

LOCATION: Carey's Lane/Streamstown Lane DAY: Tuesday

	MOVEMENT 1							MOVEMENT 2							MOVEMENT 3						
TIME	CAR	LGV	OGV1	OGV2	BUS	TOT	PCU	CAR	LGV	OGV1	OGV2	BUS	TOT	PCU	CAR	LGV	OGV1	OGV2	BUS	TOT	PCU
08:00	5	0	0	0	0	5	5	2	0	0	0	0	2	2	0	1	1	0	0	2	3
08:15	6	1	2	0	0	9	10	1	0	0	0	0	1	1	1	0	0	0	0	1	1
08:30	8	0	0	0	0	8	8	1	1	0	0	0	2	2	0	2	0	0	0	2	2
08:45	4	1	1	0	0	6	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	23	2	3	0	0	28	30	4	1	0	0	0	5	5	1	3	1	0	0	5	6
09:00	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:15	10	0	0	0	0	10	10	3	0	0	0	0	3	3	0	0	0	0	0	0	0
09:30	3	0	0	0	0	3	3	2	0	0	0	0	2	2	0	0	0	0	0	0	0
09:45	1	1	1	0	0	3	4	0	1	0	0	0	1	1	0	0	0	0	0	0	0
H/TOT	15	1	1	0	0	17	18	5	1	0	0	0	6	6	0	0	0	0	0	0	0
10:00	1	1	0	0	0	2	2	0	0	1	0	0	1	2	0	1	1	0	0	2	3
10:15	1	0	0	0	0	1	1	0	0	1	0	0	1	2	0	0	1	0	0	1	2
10:30	1	0	0	0	0	1	1	0	0	0	0	0	0	0	1	1	1	0	0	3	4
10:45	1	0	1	0	0	2	3	1	0	0	0	0	1	1	1	1	0	0	0	2	2
H/TOT	4	1	1	0	0	6	7	1	0	2	0	0	3	4	2	3	3	0	0	8	10
11:00	0	3	0	0	0	3	3	1	0	0	0	0	1	1	1	1	1	0	0	3	4
11:15	3	0	0	0	0	3	3	2	0	0	0	0	2	2	3	0	0	0	0	3	3
11:30	0	1	0	0	0	1	1	1	1	1	0	0	3	4	2	0	0	0	0	2	2
11:45	1	0	0	0	0	1	1	3	0	0	1	0	4	5	2	0	0	0	0	2	2
H/TOT	4	4	0	0	0	8	8	7	1	1	1	0	10	12	8	1	1	0	0	10	11
12:00	2	0	0	0	0	2	2	0	0	2	0	0	2	3	0	0	0	0	0	0	0
12:15	1	1	1	0	0	3	4	0	0	0	0	0	0	0	0	1	1	0	0	2	3
12:30	2	0	2	0	0	4	5	0	0	0	0	0	0	0	0	0	0	1	0	1	2
12:45	1	0	0	0	0	1	1	0	0	0	0	0	0	0	2	1	0	0	0	3	3
H/TOT	6	1	3	0	0	10	12	0	0	2	0	0	2	3	2	2	1	1	0	6	8
13:00	5	0	0	0	0	5	5	1	0	0	0	0	1	1	2	0	0	0	0	2	2
13:15	2	0	0	0	0	2	2	1	1	1	0	0	3	4	1	0	0	1	0	2	3
13:30	2	1	0	0	0	3	3	0	0	0	1	0	1	2	2	0	0	0	0	2	2
13:45	4	0	1	0	0	5	6	2	1	0	0	0	3	3	1	0	2	0	0	3	4
H/TOT	13	1	1	0	0	15	16	4	2	1	1	0	8	10	6	0	2	1	0	9	11
14:00	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:15	0	1	0	0	0	1	1	0	1	0	0	0	1	1	1	0	0	0	0	1	1
14:30	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	1	0	0	1	2
14:45	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	1	0	0	1	2
H/TOT	6	1	0	0	0	7	7	0	1	0	0	0	1	1	1	0	2	0	0	3	4
15:00	0	0	0	0	0	0	0	0	1	0	0	0	1	1	1	1	1	0	0	3	4
15:15	4	1	0	0	0	5	5	0	1	0	0	0	1	1	1	0	0	0	0	1	1
15:30	4	2	3	0	0	9	11	1	4	1	0	0	6	7	0	1	0	0	0	1	1
15:45	1	0	0	0	0	1	1	0	0	0	0	0	0	0	1	0	1	0	0	2	3
H/TOT	9	3	3	0	0	15	17	1	6	1	0	0	8	9	3	2	2	0	0	7	8

SITE: 01 DATE: 21st January 2020

LOCATION: Carey's Lane/Streamstown Lane DAY: Tuesday

	MOVEMENT 1							MOVEMENT 2							MOVEMENT 3						
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**BUS**	**TOT**	**PCU**	**CAR**	**LGV**	**OGV1**	**OGV2**	**BUS**	**TOT**	**PCU**	**CAR**	**LGV**	**OGV1**	**OGV2**	**BUS**	**TOT**	**PCU**
16:00	0	0	0	0	0	0	0	2	0	1	0	0	3	4	0	1	1	0	0	2	3
16:15	2	0	0	0	0	2	2	1	0	0	0	0	1	1	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	3	3
16:45	3	1	0	0	0	4	4	0	1	0	0	0	1	1	0	1	0	0	0	1	1
H/TOT	5	1	0	0	0	6	6	3	1	1	0	0	5	6	2	3	1	0	0	6	7
17:00	3	1	0	0	0	4	4	1	0	1	0	0	2	3	1	0	2	0	0	3	4
17:15	4	0	0	0	0	4	4	1	1	1	0	0	3	4	1	0	1	0	0	2	3
17:30	2	1	0	0	0	3	3	1	0	0	0	0	1	1	3	0	0	1	0	4	5
17:45	0	0	0	0	0	0	0	1	0	0	0	0	1	1	1	0	0	0	0	1	1
H/TOT	9	2	0	0	0	11	11	4	1	2	0	0	7	8	6	0	3	1	0	10	13
18:00	3	0	0	0	0	3	3	3	0	0	0	0	3	3	1	1	1	0	0	3	4
18:15	1	1	0	0	0	2	2	1	0	1	0	0	2	3	2	0	0	0	0	2	2
18:30	1	0	0	0	0	1	1	0	0	0	0	0	0	0	1	0	0	0	0	1	1
18:45	2	1	0	0	0	3	3	0	0	0	0	0	0	0	0	1	0	0	0	1	1
H/TOT	7	2	0	0	0	9	9	4	0	1	0	0	5	6	4	2	1	0	0	7	8
19:00	2	0	0	0	0	2	2	0	0	0	0	0	0	0	1	0	0	0	0	1	1
19:15	6	0	0	0	0	6	6	0	0	0	0	0	0	0	1	0	0	0	0	1	1
19:30	2	0	1	0	0	3	4	1	0	0	0	0	1	1	1	0	0	0	0	1	1
19:45	4	1	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	14	1	1	0	0	16	17	1	0	0	0	0	1	1	3	0	0	0	0	3	3
20:00	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20:15	1	1	0	0	0	2	2	1	0	0	0	0	1	1	1	1	0	0	0	2	2
20:30	1	0	0	0	0	1	1	1	0	0	0	0	1	1	1	0	0	0	0	1	1
20:45	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	4	1	0	0	0	5	5	2	0	0	0	0	2	2	2	1	0	0	0	3	3
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
21:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:00 - 00:00	140	25	14	0	0	179	186	45	15	14	6	0	80	95	52	19	18	4	0	93	107
06:00 - 22:00	137	25	14	0	0	176	183	42	15	14	6	0	77	92	49	19	18	4	0	90	104
07:00 - 19:00	112	23	13	0	0	148	155	39	15	14	6	0	74	89	41	17	17	3	0	78	90

SITE: 01 DATE: 21st January 2020

LOCATION: Carey's Lane/Streamstown Lane DAY: Tuesday

	MOVEMENT 4							MOVEMENT 5							MOVEMENT 6						
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**BUS**	**TOT**	**PCU**	**CAR**	**LGV**	**OGV1**	**OGV2**	**BUS**	**TOT**	**PCU**	**CAR**	**LGV**	**OGV1**	**OGV2**	**BUS**	**TOT**	**PCU**
00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45	1	0	0	0	0	1	1	1	0	0	0	0	1	1	0	0	0	0	0	0	0
H/TOT	1	0	0	0	0	1	1	1	0	0	0	0	1	1	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:30	0	0	0	0	0	0	0	1	0	0	0	0	1	1	1	0	0	0	0	1	1
06:45	1	0	0	0	0	1	1	1	0	0	0	0	1	1	5	1	0	0	0	6	6
H/TOT	1	0	0	0	0	1	1	2	0	0	0	0	2	2	6	1	0	0	0	7	7
07:00	1	0	0	0	0	1	1	1	0	0	0	0	1	1	4	0	0	0	0	4	4
07:15	3	1	0	0	0	4	4	2	0	0	0	0	2	2	2	0	0	0	0	2	2
07:30	6	0	0	0	0	6	6	5	0	0	0	0	5	5	2	0	0	0	0	2	2
07:45	7	1	0	0	0	8	8	9	0	0	0	0	9	9	1	1	0	0	0	2	2
H/TOT	17	2	0	0	0	19	19	17	0	0	0	0	17	17	9	1	0	0	0	10	10

TRAFFINOMICS LIMITED

AUBURN, MALAHIDE ROAD TRAFFIC COUNT **JANUARY 2020**

MANUAL CLASSIFIED JUNCTION TURNING COUNT **TRA/20/017**

SITE: 01 DATE: 21st January 2020

LOCATION: Carey's Lane/Streamstown Lane DAY: Tuesday

	MOVEMENT 4							MOVEMENT 5							MOVEMENT 6						
TIME	CAR	LGV	OGV1	OGV2	BUS	TOT	PCU	CAR	LGV	OGV1	OGV2	BUS	TOT	PCU	CAR	LGV	OGV1	OGV2	BUS	TOT	PCU
08:00	16	1	0	0	0	17	17	16	0	0	0	0	16	16	1	0	0	0	0	1	1
08:15	25	2	0	0	1	28	29	11	0	0	0	0	11	11	2	0	0	0	0	2	2
08:30	30	0	0	0	0	30	30	6	3	0	0	0	9	9	1	1	0	0	0	2	2
08:45	13	1	0	0	0	14	14	15	1	0	0	0	16	16	6	0	1	0	0	7	8
H/TOT	84	4	0	0	1	89	90	48	4	0	0	0	52	52	10	1	1	0	0	12	13
09:00	6	0	0	0	0	6	6	8	0	0	0	0	8	8	6	0	0	0	0	6	6
09:15	3	0	0	0	0	3	3	5	0	0	0	0	5	5	4	1	2	0	0	7	8
09:30	3	0	0	0	0	3	3	6	0	0	0	0	6	6	1	0	0	0	0	1	1
09:45	1	0	0	0	0	1	1	3	0	0	0	0	3	3	2	1	0	0	0	3	3
H/TOT	13	0	0	0	0	13	13	22	0	0	0	0	22	22	13	2	2	0	0	17	18
10:00	3	0	0	0	0	3	3	6	0	0	0	0	6	6	0	0	0	0	0	0	0
10:15	4	1	0	0	0	5	5	2	0	0	0	0	2	2	2	0	0	0	0	2	2
10:30	1	0	0	0	0	1	1	0	0	0	0	0	0	0	1	0	0	0	0	1	1
10:45	2	0	0	0	0	2	2	2	1	0	0	0	3	3	2	0	0	0	0	2	2
H/TOT	10	1	0	0	0	11	11	10	1	0	0	0	11	11	5	0	0	0	0	5	5
11:00	1	0	0	0	0	1	1	2	0	0	0	0	2	2	1	0	0	0	0	1	1
11:15	4	0	0	0	0	4	4	1	0	0	0	0	1	1	2	0	0	0	0	2	2
11:30	1	0	0	0	0	1	1	3	0	0	0	0	3	3	2	0	0	0	0	2	2
11:45	2	0	1	0	0	3	4	5	0	0	0	0	5	5	0	1	1	0	0	2	3
H/TOT	8	0	1	0	0	9	10	11	0	0	0	0	11	11	5	1	1	0	0	7	8
12:00	2	0	0	0	0	2	2	3	0	0	0	0	3	3	1	0	0	1	0	2	3
12:15	4	0	0	0	0	4	4	0	1	0	0	0	1	1	3	1	0	0	0	4	4
12:30	2	2	0	0	0	4	4	3	0	0	0	0	3	3	2	0	0	0	0	2	2
12:45	7	2	0	0	0	9	9	3	1	0	0	0	4	4	1	1	0	0	0	2	2
H/TOT	15	4	0	0	0	19	19	9	2	0	0	0	11	11	7	2	0	1	0	10	11
13:00	7	0	0	0	0	7	7	6	0	0	0	0	6	6	2	0	0	0	0	2	2
13:15	2	0	0	0	0	2	2	2	0	0	0	0	2	2	3	1	0	0	0	4	4
13:30	5	0	0	0	0	5	5	3	0	0	0	0	3	3	2	2	0	0	0	4	4
13:45	1	1	0	0	0	2	2	4	1	0	0	0	5	5	1	0	0	0	0	1	1
H/TOT	15	1	0	0	0	16	16	15	1	0	0	0	16	16	8	3	0	0	0	11	11
14:00	8	0	0	0	0	8	8	4	0	0	0	0	4	4	0	0	0	0	0	0	0
14:15	6	1	0	0	0	7	7	3	0	0	0	0	3	3	3	1	0	0	0	4	4
14:30	5	0	0	0	0	5	5	6	0	0	0	0	6	6	2	0	0	0	0	2	2
14:45	2	0	0	0	0	2	2	5	0	0	0	0	5	5	1	1	0	0	0	2	2
H/TOT	21	1	0	0	0	22	22	18	0	0	0	0	18	18	6	2	0	0	0	8	8
15:00	4	0	0	0	0	4	4	5	0	0	0	0	5	5	3	1	0	0	0	4	4
15:15	4	0	1	0	0	5	6	6	2	0	0	0	8	8	0	3	2	0	0	5	6
15:30	6	1	0	0	0	7	7	2	0	0	0	0	2	2	2	0	1	0	0	3	4
15:45	5	3	0	0	0	8	8	3	0	0	0	0	3	3	0	0	0	0	0	0	0
H/TOT	19	4	1	0	0	24	25	16	2	0	0	0	18	18	5	4	3	0	0	12	14

AUBURN, MALAHIDE ROAD TRAFFIC COUNT **JANUARY 2020**

MANUAL CLASSIFIED JUNCTION TURNING COUNT **TRA/20/017**

SITE: 01 DATE: 21st January 2020

LOCATION: Carey's Lane/Streamstown Lane DAY: Tuesday

	MOVEMENT 4							MOVEMENT 5							MOVEMENT 6						
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**BUS**	**TOT**	**PCU**	**CAR**	**LGV**	**OGV1**	**OGV2**	**BUS**	**TOT**	**PCU**	**CAR**	**LGV**	**OGV1**	**OGV2**	**BUS**	**TOT**	**PCU**
16:00	3	1	0	0	0	4	4	7	1	0	0	0	8	8	4	0	0	0	0	4	4
16:15	5	0	0	0	0	5	5	11	2	0	0	0	13	13	4	0	0	0	0	4	4
16:30	8	0	0	0	0	8	8	4	0	0	0	0	4	4	0	0	0	0	0	0	0
16:45	10	2	0	0	0	12	12	7	2	0	0	0	9	9	2	0	0	0	0	2	2
H/TOT	26	3	0	0	0	29	29	29	5	0	0	0	34	34	10	0	0	0	0	10	10
17:00	13	2	0	0	0	15	15	6	1	0	0	0	7	7	2	0	0	0	0	2	2
17:15	12	3	0	0	0	15	15	4	0	0	0	0	4	4	7	0	0	0	0	7	7
17:30	5	0	0	0	0	5	5	5	0	0	0	0	5	5	2	0	0	0	0	2	2
17:45	9	2	0	0	0	11	11	8	0	0	0	0	8	8	7	0	0	0	0	7	7
H/TOT	39	7	0	0	0	46	46	23	1	0	0	0	24	24	18	0	0	0	0	18	18
18:00	12	4	0	0	0	16	16	6	0	0	0	0	6	6	5	1	0	0	0	6	6
18:15	12	1	0	0	0	13	13	3	1	0	0	0	4	4	4	0	0	0	0	4	4
18:30	8	0	0	0	0	8	8	6	0	0	0	0	6	6	0	0	0	0	0	0	0
18:45	4	1	0	0	0	5	5	4	0	0	0	0	4	4	3	0	0	0	0	3	3
H/TOT	36	6	0	0	0	42	42	19	1	0	0	0	20	20	12	1	0	0	0	13	13
19:00	10	1	0	0	0	11	11	4	0	0	0	0	4	4	3	0	0	0	0	3	3
19:15	5	0	0	0	0	5	5	2	0	0	0	0	2	2	1	0	0	0	0	1	1
19:30	1	0	0	0	0	1	1	2	0	0	0	0	2	2	3	0	1	0	0	4	5
19:45	2	0	0	0	0	2	2	2	0	0	0	0	2	2	5	0	0	0	0	5	5
H/TOT	18	1	0	0	0	19	19	10	0	0	0	0	10	10	12	0	1	0	0	13	14
20:00	1	0	0	0	0	1	1	3	0	0	0	0	3	3	1	0	0	0	0	1	1
20:15	3	0	0	0	0	3	3	5	0	0	0	0	5	5	2	0	0	0	0	2	2
20:30	2	0	0	0	0	2	2	1	0	0	0	0	1	1	0	0	0	0	0	0	0
20:45	0	0	0	0	0	0	0	2	0	0	0	0	2	2	1	0	0	0	0	1	1
H/TOT	6	0	0	0	0	6	6	11	0	0	0	0	11	11	4	0	0	0	0	4	4
21:00	1	0	0	0	0	1	1	1	0	0	0	0	1	1	1	0	0	0	0	1	1
21:15	0	0	0	0	0	0	0	2	0	0	0	0	2	2	1	0	0	0	0	1	1
21:30	1	0	0	0	0	1	1	1	0	0	0	0	1	1	0	0	0	0	0	0	0
21:45	0	0	0	1	0	1	2	0	0	0	0	0	0	0	1	0	0	0	0	1	1
H/TOT	2	0	0	1	0	3	4	4	0	0	0	0	4	4	3	0	0	0	0	3	3
22:00	0	0	0	0	0	0	0	3	0	0	0	0	3	3	2	0	0	0	0	2	2
22:15	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
22:45	1	0	0	0	0	1	1	0	0	0	0	0	0	0	1	0	0	0	0	1	1
H/TOT	2	0	0	0	0	2	2	3	0	0	0	0	3	3	5	0	0	0	0	5	5
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:15	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0
23:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0
00:00 - 00:00	333	34	2	1	1	371	374	269	17	0	0	0	286	286	138	18	8	1	0	165	170
06:00 - 22:00	330	34	2	1	1	368	371	264	17	0	0	0	281	281	133	18	8	1	0	160	165
07:00 - 19:00	303	33	2	0	1	339	341	237	17	0	0	0	254	254	108	17	7	1	0	133	138

PCU's Through Junction
0
0
0
0
0
0
0
0
0
0
0
0
0
2
0
0
0
2
0
1
1
4
6
0
0
1
2
3
1
1
6
15
23
18
15
23
35
90

PCU's Through Junction
44
54
53
44
195
21
29
15
12
77
15
13
7
13
47
12
15
13
19
58
13
15
16
19
64
23
17
19
21
80
15
17
17
12
60
18
27
31
15
89

PCU's Through Junction
22
25
15
29
91
35
36
21
28
120
38
28
16
16
97
21
15
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14
63
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31
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13
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2
10
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1
0
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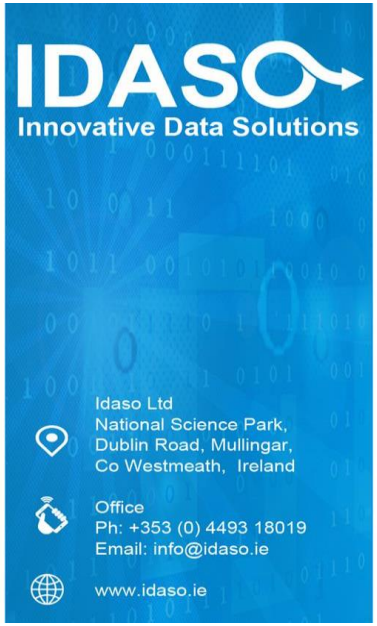
1
1219
1197
1067



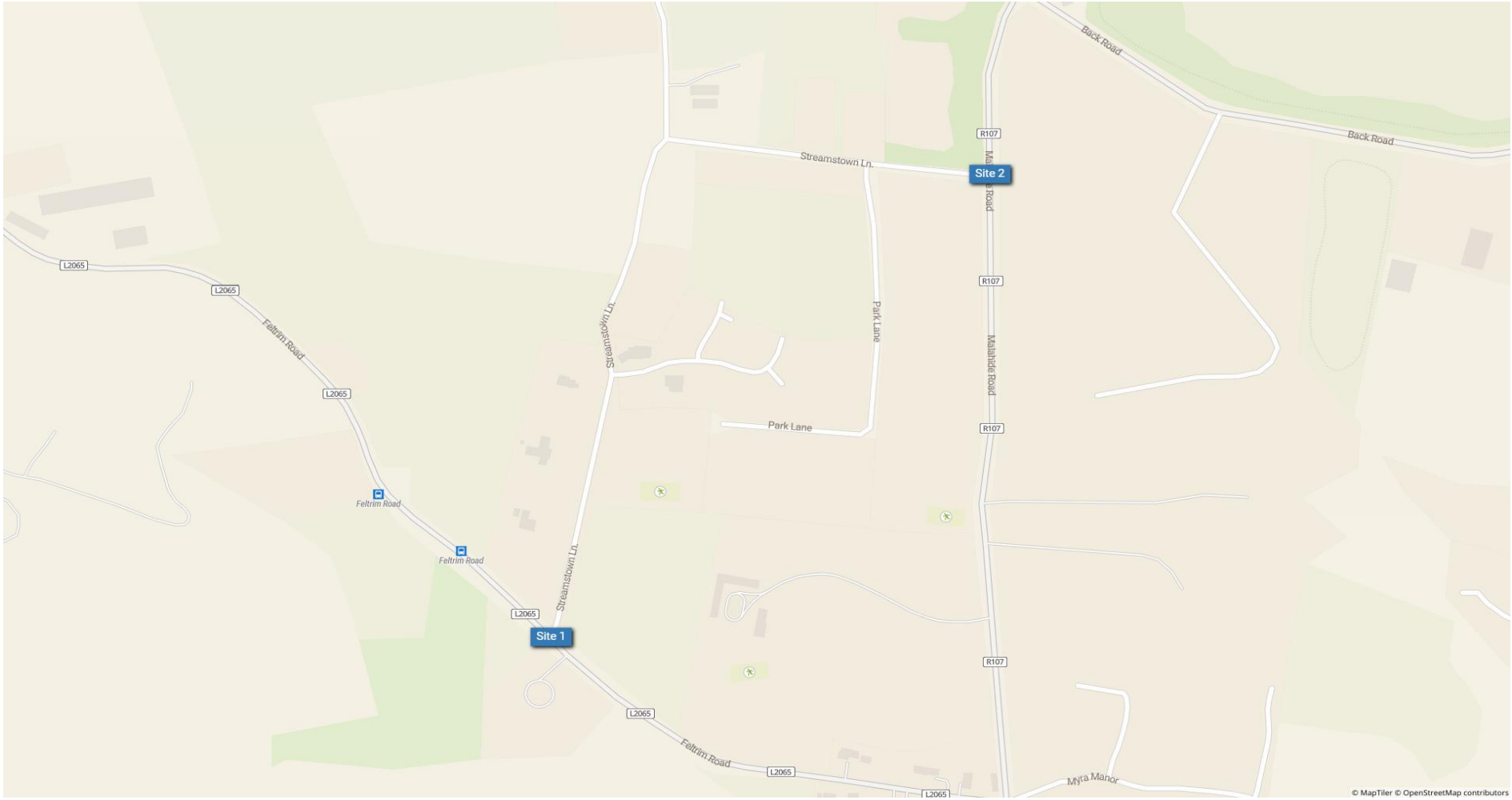
Data Analysis Services
Traffic-Transportation- Commercial-Innovation

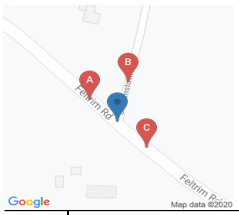
163 20352 Malahide traffic counts

with compliments

IDASO

Survey Name: 163 20352 Malahide traffic counts
Date: Tue 24 Nov 2020





IDASO

Survey Name: 163 20352 Malahide traffic counts
Site: Site 1
Location: Feltrim Road/ Streamstown Lane
Date: Tue 24-Nov-2020

	A => A										A => B										A => C									
TIME	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TAXI	TOT	PCU	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TAXI	TOT	PCU	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TAXI	TOT	PCU
00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	2	2
00:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2
00:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:45	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0	3	1	0	0	0	0	4	4
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
01:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	4	4
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
03:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
03:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	4	4
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
04:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	3
04:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
04:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	2	1	0	0	1	11	11.5
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	2	1	0	0	1	16	16.5
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2
05:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
05:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	4	4
05:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	1	1	0	0	0	15	15.5
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	1	1	0	0	0	22	22.5
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	10	10
06:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	13	0	0	0	0	1	15	14.2
06:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	18	1	1	0	1	0	23	22.9
06:45	0	0	0	0	0	0	0	0	0	0	0	0	4	1	0	0	0	0	5	5	0	0	21	4	0	1	0	1	27	28.3
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	4	1	0	0	0	0	5	5	3	0	62	5	1	1	1	2	75	75.4
07:00	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	6	6	1	0	46	3	2	0	0	1	53	53.2
07:15	0	0	0	0	0	0	0	0	0	0	0	0	3	2	0	0	0	0	5	5	2	0	44	5	0	0	1	4	56	55.4
07:30	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	4	4	1	1	88	12	0	1	6	2	111	116.9
07:45	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	6	6	1	1	106	4	1	1	2	0	116	118.4
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	19	2	0	0	0	0	21	21	5	2	284	24	3	2	9	7	336	343.9
08:00	0	0	0	0	0	0	0	0	0	0	0	0	27	2	0	0	0	2	31	31	0	1	112	9	0	3	1	1	127	131.3
08:15	0	0	0	0	0	0	0	0	0	0	0	0	37	0	0	0	0	0	37	37	0	1	96	10	3	1	0	3	114	116.2
08:30	0	0	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0	11	11	1	0	57	8	2	2	1	0	71	74.8
08:45	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	1	0	0	6	7.3	0	0	77	4	4	0	3	4	92	97
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	80	2	0	1	0	2	85	86.3	1	2	342	31	9	6	5	8	404	419.3
09:00	0	0	0	0	0	0	0	0	0	0	0	0	5	1	0	1	0	0	7	8.3	0	0	70	8	3	1	0	0	82	84.8
09:15	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0	0	0	0	6	6	1	0	43	8	1	1	1	1	56	58
09:30	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	1	0	0	5	6.3	0	0	47	4	0	0	1	0	52	53
09:45	0	0	0	0	0	0	0	0	0	0	0	0	4	0	1	0	0	0	5	5.5	0	0	48	6	3	2	2	0	61	67.1
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	14	6	1	2	0	0	23	26.1	1	0	208	26	7	4	4	1	251	262.9
10:00	0	0	0	0	0	0	0	0	0	0	0	0	5	0	1	2	0	0	8	11.1	0	0	44	5	2	0	0	1	52	53
10:15	0	0	0	0	0	0	0	0	0	0	0	0	3	1	1	0	0	0	5	5.5	0	0	45	4	3	0	0	0	52	53.5
10:30	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	5	5	1	0	45	11	1	2	1	0	61	64.3
10:45	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	3	3	0	0	34	8	5	3	0	3	53	59.4
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	15	2	2	2	0	0	21	24.6	1	0	168	28	11	5	1	4	218	230.2
11:00	0	0	0	0	0	0	0	0	0	0	1	0	5	2	0	0	0	0	8	7.2	0	0	53	9	0	3	1	0	66	70.9
11:15	0	0	0	0	0	0	0	0	0	0	0	0	2	0	1	1	0	0	4	5.8	0	1	47	12	3	0	0	2	65	65.9
11:30	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	5	5	0	1	55	5	1	0	1	3	66	66.9
11:45	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	3	0	0	49	6	0	3	0	3	61	64.9
H/TOT	0	0	0	0	0	0	0	0	0	0	1	0	15	2	1	1	0	0	20	21	0	2	204	32	4	6	2	8	258	268.6
12:00	0	0	0	0	0	0	0	0	0	0	0	0	8	1	0	0	0	0	9	9	0	0	47	3	2	2	0	3	57	60.6
12:15	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	5	5	0	0	51	3	1	0	0	2	57	57.5
12:30	0	0	0	0	0	0	0	0	0	0	0	0	5	2	0	0	0	0	7	7	0	0	67	9	0	1	1	1	79	81.3
12:45	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	4	4	0	0	59	4	1	0	0	3	67	67.5
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	22	3	0	0	0	0	25	25	0	0	224	19	4	3	1	9	260	266.9
13:00	0	0	0	0	0	0	0	0	0	0	0	0	9	2	1	0	0	0	12	12.5	0	0	84	4	3	0	0	3	94	95.5
13:15	0	0	0	0	0	0	0	0	0	0	0	0	7	1	0	0	0	0	8	8	0	0	59	5	1	1	1	2	69	71.8
13:30	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	6	6	1	1	87	11	0	2	0	2	104	105.2
13:45	0	0	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0	0	4	4	0	0	57	8	2	0	0	1	68	69
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	25	4	1	0	0	0	30	30.5	1	1	287	28	6	3	1	8	335	341.5
14:00	0	0	0	0	0	0	0	0	0	0	0	0	6	0	1	0	0	0	7	7.5	0	1	83	3	2	3	0	0	92	96.3
14:15	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	7	7	1	0	60	3	1	0	1	2	68	68.7
14:30	0	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	10	10	0	0	63	5	1	2	0	6	77	80.1
14:45	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	1	7	7	0	1	59	7	0	0	0	1	68	67.4
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	29	0	1	0	0	1	31	31.5	1	2	265	18	4	5	1	9	305	312.5
15:00	0	0	0	0	0	0	0	0	0	0	0	0	6	1	0	0	0	0	7	7	0	1	60	6	1	1	4	2	75	80.2
15:15	0	0	0	0	0	0	0	0	0	0	0	0	8	1	0	1	0	0	10	11.3	0	0	70	7	4	3	1	1	86	92.9
15:30	0	0	0	0	0	0	0	0	0	0	0	0	15	1	1	0	0	0	17	17.5	1	1	59	4	2	0	0	3	70	69.6
15:45	0	0	0	0	0	0	0	0	0	0	0	0	17	2	0	0	0	0	19	19	0	0	62	7	0	2	1	2	74	77.6
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	46	5	1	1	0	0	53	54.8	1	2	251	24	7	6	6	8	305	320.3
16:00	0	0	0	0	0	0	0	0	0	0	0	0	6	2	1	0	0	0	9	9.5	0	1	67	5	1	0	2	0	76	77.9
16:15	0	0	0	0	0	0	0	0	0	0	0	0	11	1	0	0	0	0	12	12	0	0	59	6	0	0	1	1	67	68
16:30	0	0	0	0	0	0	0	0	0	0	0	0	9	1	0	0	0	0	10	10	1	0	75	7	0	0	0	0	83	82.2
16:45	0	0	0	0	0	0	0	0	0	0	1	0	10	0	0	0	0	0	11	10.2	1	0	70	3	1	0	1	0	76	76.7
H/TOT	0	0	0	0	0	0	0	0	0	0	1	0	36	4	1	0	0	0	42	41.7	2	1	271	21	2	0	4	1	302	304.8
17:00	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	8	8	1	0	84	3	1	0	1	0	90	90.7
17:15	0	0	0	0	0	0	0	0	0	0	0	0	7	0	1	0	0	0	8	8.5	0	1	71	3	0	0	0	1	76	75.4
17:30	0	0	0	0	0	0	0	0	0	0	0	0	7	0	1	0	0	0	8	8.5	2	1	62	5	1	0	1	0	72	71.3
17:45	0	0	0	0	0	0	0	0	0	0	0	0	5	0	1	0	0	0	6	6.5	0	0	57	7	1	0	2	0	67	69.5
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	27	0	3	0	0	0	30	31.5	3	2	274	18	3	0	4	1	305	306.9
18:00	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	5	5	0	0	77	5	0	0	0	0	82	82
18:15	0	0	0	0	0	0	0	0	0	0	0	0	8	1	0	0	0	0	9	9	0	0	63	4	2	0	1	0	70	72
18:30	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	2	2	1	1	47	1	0	0	0	0	50	48.6
18:45	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	4	4	0	0	40	3	0	0	0	0	43	43
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	18	2	0	0	0	0	20	20	1	1	227	13	2	0	1	0	245	245.6

19:00	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	3	0	0	45	2	0	0	1	0	48	49
19:15	0	0	0	0	0	0	0	0	0	0	1	0	4	0	0	0	0	0	5	4.2	0	0	21	3	1	0	0	0	25	25.5
19:30	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	2	1.2	1	0	31	1	0	0	0	0	33	32.2
19:45	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0	29	2	0	0	0	0	31	31
H/TOT	0	0	0	0	0	0	0	0	0	0	2	0	9	0	0	0	0	0	11	9.4	1	0	126	8	1	0	1	0	137	137.7
20:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22	0	0	0	1	0	23	24
20:15	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	3	0	0	22	2	0	0	0	0	24	24
20:30	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0	17	4	1	0	0	0	22	22.5
20:45	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0	16	0	0	0	0	0	16	16
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	5	5	0	0	77	6	1	0	1	0	85	86.5
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	7	1	1	0	0	0	10	9.9
21:15	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	1	6	2	0	0	0	0	9	8.4
21:30	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0	13	0	0	0	0	0	13	13
21:45	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0	11	0	0	0	0	0	11	11
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	3	0	2	37	3	1	0	0	0	43	42.3
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	0	1	0	1	0	13	14.5
22:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0	0	12	12
22:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	7	7
22:45	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0	3	0	0	0	0	0	3	3
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0	33	0	1	0	1	0	35	36.5
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	1	0	5	6
23:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2
23:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
23:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	1	0	0	0	0	0	1	1
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	8	0	0	0	1	0	9	10
24 TOT	0	0	0	0	0	0	0	0	0	0	4	0	369	33	11	7	0	4	428	439.4	21	17	3393	308	69	41	44	67	3960	4064.8

B => A										B => B										B => C									
P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TAXI	TOT	PCU	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TAXI	TOT	PCU	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TAXI	TOT	PCU
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	1	285	49	8	6	0	1	354	362	0	0	0	0	0	0	0	0	0	0	0	0	24	9	5	1	0	0	39	42.8

C => A										C => B										C => C									
P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TAXI	TOT	PCU	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TAXI	TOT	PCU	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TAXI	TOT	PCU
0	0	4	0	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	4	0	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	10	0	0	0	0	0	10	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	1	1	0	0	0	2	2.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	1	1	0	0	0	2	2.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	1	0	0	0	0	0	3	1.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	2	0	0	0	0	0	4	2.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
0	0	3	0	0	0	0	0	3	3	0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
0	0	1	1	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	1	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	5	1	0	0	0	1	7	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	3	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	4	0	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	11	0	0	0	0	0	11	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	3	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0	14	0	0	0	1	2	18	18.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	20	4	0	0	1	0	25	26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	24	1	1	0	1	0	27	28.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0	61	5	1	0	3	2	73	75.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	21	0	0	0	1	0	22	23	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
1	0	28	3	0	0	2	2	36	37.2	0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
0	0	37	3	0	0	1	0	41	42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	70	6	0	0	3	0	79	82	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0	156	12	0	0	7	2	178	184.2	0	0	3	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0
2	0	62	4	0	1	1	1	71	71.7	0	0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
1	1	83	5	0	1	1	2	94	94.9	0	0	1	3	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0
1	1	99	2	2	2	1	2	110	113.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	92	5	0	1	0	1	99	100.3	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
4	2	336	16	2	5	3	6	374	380.1	0	0	2	5	0	0	0	0	7	7	0	0	0	0	0	0	0	0	0	0
1	0	95	5	0	0	1	1	103	103.2	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
0	0	63	5	3	2	1	2	76	81.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	40	7	0	2	1	2	52	55.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	41	6	4	1	0	4	56	59.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0	239	23	7	5	3	9	287	299.2	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
1	0	30	8	3	2	0	2	46	49.3	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
0	0	36	12	2	2	0	1	53	56.6	0	0	0	0	1	0	0	0	1	1.5	0	0	0	0	0	0	0	0	0	0
0	0	44	6	0	2	1	0	53	56.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	54	2	0	1	0	2	59	60.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0	164	28	5	7	1	5	211	222.8	0	0	0	1	1	0	0	0	2	2.5	0	0	0	0	0	0	0	0	0	0
0	0	41	7	0	0	0	2	50	50	0	0	1	1	1	1	0	0	4	5.8	0	0	0	0	0	0	0	0	0	0
0	0	40	9	0	2	0	2	53	55.6	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
0	0	43	10	1	2	1	0	57	61.1	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
2	0	54	2	1	0	0	2	61	59.9	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
2	0	178	28	2	4	1	6	221	226.6	0	0	4	1	1	1	0	0	7	8.8	0	0	0	0	0	0	0	0	0	0
0	0	59	4	2	2	0	0	67	70.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	47	9	3	1	1	2	63	66.8	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
1	0	64	4	2	0	0	1	72	72.2	0	0	0	0	1	0	0	0	1	1.5	0	0	0	0	0	0	0	0	0	0
0	0	46	12	3	1	0	3	65	67.8	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
1	0	216	29	10	4	1	6	267	277.4	0	0	1	0	1	0	0	0	2	2.5	0	0	0	1	0	0	0	0	1	1
0	0	65	11	0	1	0	2	79	80.3	0	0	1	1	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
2	1	54	7	2	0	1	5	72	71.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	1	48	5	4	1	0	0	59	61.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	59	5	1	0	0	0	65	65.5	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
2	2	226	28	7	2	1	7	275	279.3	0	0	1	2	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0
0	0	81	8	0	3	2	3	97	102.9	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
0	0	70	4	1	0	2	3	80	82.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	1	78	5	2	1	0	3	90	91.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	78	4	1	3	2	4	92	98.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	1	307	21	4	7	6	13	359	375.5	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
0	1	52	11	3	1	0	2	70	72.2	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
0	1	57	12	1	1	0	3	75	76.2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	56	5	1	1	4	0	67	72.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	50	7	1	2	1	1	62	66.1	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
0	2	215	35	6	5	5	6	274	287.3	0	0	2	0	0	0	0	0	2	2	0	0	0	1	0	0	0	0	1	1
0	0	74	7	2	0	1	1	85	87	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
0	0	90	11	2	2	1	1	107	111.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	66	11	2	1	1	1	82	85.3	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
1	1	74	6	1	0	0	0	83	82.1	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
1	1	304	35	7	3	3	3	357	366	0	0	2	1	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0
1	0	63	2	0	1	1	0	68	69.5	0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
0	0	79	3	3	0	1	0	86	88.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0	69	4	1	0	1	0	76	76.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	54	1	0	0	1	0	56	57	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	265	10	4	1	4	0	286	291.7	0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
1	0	50	1	0	0	1	0	53	53.2	0	0	1	1	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
2	0	60	3	1	0	0	0	66	64.9	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
1	0	44	1	0	0	1	0	47	47.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	34	3	1	0	0	0	38	38.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	188	8	2	0	2	0	204	203.8	0	0	1	1	0	0	0	0	2	2	0	0	1	0	0	0	0	0	1	1

0	0	32	0	1	0	0	0	33	33.5	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
0	0	30	1	1	0	1	0	33	34.5	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
0	0	32	3	1	0	0	0	36	36.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	33	0	1	0	0	0	34	34.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	127	4	4	0	1	0	136	139	0	0	1	1	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
1	0	31	0	0	0	0	0	32	31.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	31	0	2	0	1	0	34	36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	20	0	0	0	0	0	20	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	17	0	0	0	0	0	17	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0	99	0	2	0	1	0	103	104.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	21	0	0	0	0	0	21	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	19	0	1	0	1	0	21	22.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	19	0	0	0	0	0	19	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	10	0	0	0	0	0	10	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	69	0	1	0	1	0	71	72.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	13	0	0	0	0	0	13	13	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
0	0	7	0	0	0	1	0	8	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	7	0	0	0	0	0	7	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	7	0	0	0	0	0	7	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	34	0	0	0	1	0	35	36	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
0	0	5	0	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	4	0	0	0	1	0	5	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	5	0	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	16	0	0	0	1	0	17	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	8	3231	284	65	43	45	66	3765	3875.2	0	0	23	13	3	1	0	0	40	42.8	0	0	1	2	0	0	0	0	3	3

IDASO

Survey Name: 163 20352 Malahide traffic counts
Site: Site 2
Location: Malahide Road/ Streamstown Lane
Date: Tue 24-Nov-2020

	A => A										A => B										A => C									
TIME	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TAXI	TOT	PCU	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TAXI	TOT	PCU	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TAXI	TOT	PCU
00:00	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
00:15	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0
00:30	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
00:45	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	8	8	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
01:15	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
01:30	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
01:45	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	6	1	0	0	0	0	7	7	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
02:15	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
02:30	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
02:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0
04:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
04:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0
05:15	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0
05:30	0	0	0	0	0	0	0	0	0	0	0	0	6	1	0	0	0	0	7	7	0	0	0	0	0	0	0	0	0	0
05:45	0	0	0	0	0	0	0	0	0	0	0	1	15	1	0	0	0	0	17	16.4	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	1	26	3	0	0	0	0	30	29.4	0	0	0	0	0	0	0	0	0	0
06:00	0	0	0	0	0	0	0	0	0	0	1	0	16	3	0	0	0	0	20	19.2	0	0	0	0	0	0	0	0	0	0
06:15	0	0	0	0	0	0	0	0	0	0	0	0	27	4	1	0	1	0	33	34.5	0	0	2	0	0	0	0	0	2	2
06:30	0	0	0	0	0	0	0	0	0	0	1	1	41	1	1	0	1	0	46	46.1	0	0	1	0	0	0	0	0	1	1
06:45	0	0	0	0	0	0	0	0	0	0	0	0	41	5	0	0	1	0	47	48	0	0	1	0	0	0	0	0	1	1
H/TOT	0	0	0	0	0	0	0	0	0	0	2	1	125	13	2	0	3	0	146	147.8	0	0	4	0	0	0	0	0	4	4
07:00	0	0	0	0	0	0	0	0	0	0	2	0	54	1	1	0	0	0	58	56.9	0	0	3	0	0	0	0	0	3	3
07:15	0	0	0	0	0	0	0	0	0	0	1	0	62	5	3	0	1	0	72	73.7	0	0	3	0	0	0	0	0	3	3
07:30	0	0	0	0	0	0	0	0	0	0	1	0	96	6	1	0	0	0	104	103.7	0	0	5	0	0	0	0	0	5	5
07:45	0	0	0	0	0	0	0	0	0	0	2	0	89	9	1	0	4	0	105	107.9	0	0	7	0	0	0	0	0	7	7
H/TOT	0	0	0	0	0	0	0	0	0	0	6	0	301	21	6	0	5	0	339	342.2	0	0	18	0	0	0	0	0	18	18
08:00	0	0	0	0	0	0	0	0	0	0	8	0	105	6	1	0	0	0	120	114.1	1	0	7	0	0	0	0	0	8	7.2
08:15	0	0	0	0	0	0	0	0	0	0	0	0	87	7	1	1	1	1	98	100.8	0	0	11	2	1	0	0	0	14	14.5
08:30	0	0	0	0	0	0	0	0	0	0	2	0	108	5	2	1	0	1	119	119.7	0	0	10	3	1	0	0	0	14	14.5
08:45	0	0	0	0	0	0	0	0	0	0	0	0	73	3	0	2	2	0	80	84.6	0	0	12	1	0	0	0	0	13	13
H/TOT	0	0	0	0	0	0	0	0	0	0	10	0	373	21	4	4	3	2	417	419.2	1	0	40	6	2	0	0	0	49	49.2
09:00	0	0	0	0	0	0	0	0	0	0	2	0	99	6	1	0	2	0	110	110.9	0	0	10	0	0	0	0	0	10	10
09:15	0	0	0	0	0	0	0	0	0	0	2	0	78	9	3	2	1	0	95	98.5	0	0	10	0	1	0	0	0	11	11.5
09:30	0	0	0	0	0	0	0	0	0	0	1	0	71	8	5	2	1	1	89	94.3	0	0	10	0	0	0	0	0	10	10
09:45	0	0	0	0	0	0	0	0	0	0	1	0	61	10	4	1	1	0	78	81.5	3	0	5	1	0	0	0	0	9	6.6
H/TOT	0	0	0	0	0	0	0	0	0	0	6	0	309	33	13	5	5	1	372	385.2	3	0	35	1	1	0	0	0	40	38.1
10:00	0	0	0	0	0	0	0	0	0	0	0	0	61	13	1	1	0	0	76	77.8	0	0	5	2	0	0	0	0	7	7
10:15	0	0	0	0	0	0	0	0	0	0	0	0	56	14	0	1	0	1	72	73.3	0	0	4	0	1	0	0	0	5	5.5
10:30	0	0	0	0	0	0	0	0	0	0	1	0	81	7	1	0	1	0	91	91.7	0	0	2	1	0	0	0	0	3	3
10:45	0	0	0	0	0	0	0	0	0	0	0	1	77	8	1	1	1	1	90	92.2	0	0	8	0	0	0	0	0	8	8
H/TOT	0	0	0	0	0	0	0	0	0	0	1	1	275	42	3	3	2	2	329	335	0	0	19	3	1	0	0	0	23	23.5
11:00	0	0	0	0	0	0	0	0	0	0	2	0	76	3	3	1	0	0	85	86.2	0	0	4	1	0	0	0	0	5	5
11:15	0	0	0	0	0	0	0	0	0	0	1	0	81	10	0	0	0	0	92	91.2	0	0	2	3	0	0	0	0	5	5
11:30	0	0	0	0	0	0	0	0	0	0	1	1	67	13	1	1	1	0	85	86.4	0	0	8	0	0	0	0	0	8	8
11:45	0	0	0	0	0	0	0	0	0	0	2	0	68	5	2	0	0	0	77	76.4	0	0	7	0	1	0	0	0	8	8.5
H/TOT	0	0	0	0	0	0	0	0	0	0	6	1	292	31	6	2	1	0	339	340.2	0	0	21	4	1	0	0	0	26	26.5
12:00	0	0	0	0	0	0	0	0	0	0	0	1	78	10	0	1	1	1	92	93.7	0	0	1	1	0	0	0	0	2	2
12:15	0	0	0	0	0	0	0	0	0	0	0	0	80	9	2	0	1	0	92	94	0	0	9	0	0	0	0	0	9	9
12:30	0	0	0	0	0	0	0	0	0	0	3	0	91	8	3	0	0	2	107	106.1	0	0	6	0	0	0	0	0	6	6
12:45	0	0	0	0	0	0	0	0	0	0	0	2	81	12	4	2	0	2	103	106.4	0	0	7	0	0	0	0	0	7	7
H/TOT	0	0	0	0	0	0	0	0	0	0	3	3	330	39	9	3	2	5	394	400.2	0	0	23	1	0	0	0	0	24	24
13:00	0	0	0	0	0	0	0	0	0	0	1	1	77	12	0	0	1	2	94	93.6	0	0	10	0	0	0	0	0	10	10
13:15	0	0	0	0	0	0	0	0	0	0	1	1	72	6	1	0	0	2	83	82.1	1	0	6	0	2	0	0	0	9	9.2
13:30	0	0	0	0	0	0	0	0	0	0	0	0	82	7	4	1	1	0	95	99.3	2	0	7	1	0	0	0	0	10	8.4
13:45	0	0	0	0	0	0	0	0	0	0	0	0	81	10	1	1	0	0	93	94.8	0	0	10	1	0	0	0	0	11	11
H/TOT	0	0	0	0	0	0	0	0	0	0	2	2	312	35	6	2	2	4	365	369.8	3	0	33	2	2	0	0	0	40	38.6
14:00	0	0	0	0	0	0	0	0	0	0	0	0	98	9	0	0	3	0	110	113	0	0	8	1	0	0	0	0	9	9
14:15	0	0	0	0	0	0	0	0	0	0	0	0	87	10	3	0	2	3	105	108.5	0	0	3	1	0	0	0	0	4	4
14:30	0	0	0	0	0	0	0	0	0	0	0	0	73	9	1	0	1	1	85	86.5	0	0	10	0	0	0	0	1	11	11
14:45	0	0	0	0	0	0	0	0	0	0	0	0	76	9	0	1	0	0	86	87.3	0	0	7	0	0	0	0	0	7	7
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	334	37	4	1	6	4	386	395.3	0	0	28	2	0	0	0	1	31	31
15:00	0	0	0	0	0	0	0	0	0	0	0	0	75	8	0	0	2	1	86	88	0	0	10	1	0	0	0	0	11	11
15:15	0	0	0	0	0	0	0	0	0	0	0	1	75	6	2	0	0	0	84	84.4	0	0	5	1	1	0	0	0	7	7.5
15:30	0	0	0	0	0	0	0	0	0	0	1	0	80	4	1	0	1	0	87	87.7	0	0	10	0	1	0	0	0	11	11.5
15:45	0	0	0	0	0	0	0	0	0	0	0	0	60	5	1	0	0	0	66	66.5	2	0	1	0	0	0	0	0	3	1.4
H/TOT	0	0	0	0	0	0	0	0	0	0	1	1	290	23	4	0	3	1	323	326.6	2	0	26	2	2	0	0	0	32	31.4
16:00	0	0	0	0	0	0	0	0	0	0	0	0	83	10	0	1	2	0	96	99.3	0	0	18	0	0	0	0	0	18	18
16:15	0	0	0	0	0	0	0	0	0	0	0	0	107	9	2	0	2	0	120	123	1	0	19	3	1	0	0	0	24	23.7
16:30	0	0	0	0	0	0	0	0	0	0	0	0	84	4	0	0	2	0	90	92	0	0	10	0	0	0	0	0	10	10
16:45	0	0	0	0	0	0	0	0	0	0	1	0	57	5	0	0	2	0	65	66.2	0	0	7	1	0	0	0	0	8	8
H/TOT	0	0	0	0	0	0	0	0	0	0	1	0	331	28	2	1	8	0	371	380.5	1	0	54	4	1	0	0	0	60	59.7
17:00	0	0	0	0	0	0	0	0	0	0	0	0	67	4	0	0	1	0	72	73	0	0	4	0	0	0	0	0	4	4
17:15	0	0	0	0	0	0	0	0	0	0	0	0	65	7	0	0	2	0	74	76	0	0	8	0	0	0	0	0	8	8
17:30	0	0	0	0	0	0	0	0	0	0	0	0	44	2	1	0	0	0	47	47.5	0	0	10	0	0	0	0	0	10	10
17:45	0	0	0	0	0	0	0	0	0	0	0	0	40	2	0	0	2	0	44	46	0	0	5	0	0	0	0	0	5	5
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	216	15	1	0	5	0	237	242.5	0	0	27	0	0	0	0	0	27	27
18:00	0	0	0	0	0	0	0	0	0	0	0	0	49	3	1	0	1	0	54	55.5	0	0	4	0	0	0	0	0	4	4
18:15	0	0	0	0	0	0	0	0	0	0	0	0	52	5	0	0	1	0	58	59	0	0	3	1	0	0	0	0	4	4
18:30	0	0	0	0	0	0	0	0	0	0	0	1	43	2	0	0	2	0	48	49.4	0	0	3	0	0	0	0	0	3	3
18:45	0	0	0	0	0	0	0	0	0	0	0	0	39	2	0	0	1	0	42	43	0	0	3	1	0	0	0	0	4	4
H/TOT	0	0	0	0	0	0	0	0	0	0	0	1	183	12	1	0	5	0	202	206.9	0	0	13	2	0	0	0	0	15	15

19:00	0	0	0	0	0	0	0	0	0	0	0	0	52	2	0	1	0	0	55	56.3	0	0	5	0	0	0	0	0	5	5
19:15	0	0	0	0	0	0	0	0	0	0	1	0	31	0	0	0	1	0	33	33.2	0	0	3	0	0	0	0	0	3	3
19:30	0	0	0	0	0	0	0	0	0	0	0	0	39	0	0	0	1	0	40	41	0	0	5	0	0	0	0	0	5	5
19:45	0	0	0	0	0	0	0	0	0	0	0	0	33	2	0	0	0	0	35	35	1	0	2	0	0	0	0	0	3	2.2
H/TOT	0	0	0	0	0	0	0	0	0	0	1	0	155	4	0	1	2	0	163	165.5	1	0	15	0	0	0	0	0	16	15.2
20:00	0	0	0	0	0	0	0	0	0	0	0	0	30	0	0	0	1	0	31	32	0	0	4	0	0	0	0	0	4	4
20:15	0	0	0	0	0	0	0	0	0	0	0	0	37	0	0	0	0	0	37	37	0	0	3	0	0	0	0	0	3	3
20:30	0	0	0	0	0	0	0	0	0	0	0	0	26	1	0	0	1	0	28	29	0	0	1	0	0	0	0	0	1	1
20:45	0	0	0	0	0	0	0	0	0	0	0	0	37	1	0	0	0	0	38	38	0	0	3	0	0	0	0	0	3	3
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	130	2	0	0	2	0	134	136	0	0	11	0	0	0	0	0	11	11
21:00	0	0	0	0	0	0	0	0	0	0	0	0	17	2	0	0	1	0	20	21	0	0	0	0	0	0	0	0	0	0
21:15	0	0	0	0	0	0	0	0	0	0	0	0	23	0	0	0	0	0	23	23	0	0	0	0	0	0	0	0	0	0
21:30	0	0	0	0	0	0	0	0	0	0	0	0	9	1	0	0	1	0	11	12	0	0	1	0	0	0	0	0	1	1
21:45	0	0	0	0	0	0	0	0	0	0	0	0	16	0	0	0	0	0	16	16	0	0	1	0	0	0	0	0	1	1
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	65	3	0	0	2	0	70	72	0	0	2	0	0	0	0	0	2	2
22:00	0	0	0	0	0	0	0	0	0	0	1	0	18	0	0	0	1	0	20	20.2	1	0	1	0	0	0	0	0	2	1.2
22:15	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	8	8	0	0	1	0	0	0	0	0	1	1
22:30	0	0	0	0	0	0	0	0	0	0	0	0	13	0	0	0	1	0	14	15	0	0	0	0	0	0	0	0	0	0
22:45	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	1	0	7	8	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	1	0	45	0	0	0	3	0	49	51.2	1	0	2	0	0	0	0	0	3	2.2
23:00	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0
23:15	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	4	4	0	0	1	0	0	0	0	0	1	1
23:30	0	0	0	0	0	0	0	0	0	0	0	0	5	1	0	0	2	0	8	10	0	0	0	0	0	0	0	0	0	0
23:45	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	17	1	0	0	2	0	20	22	0	0	1	0	0	0	0	0	1	1
24 TOT	0	0	0	0	0	0	0	0	0	0	40	11	4132	366	61	22	61	19	4712	4793.5	12	0	372	27	10	0	0	1	422	417.4

B => A										B => B										B => C									
P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TAXI	TOT	PCU	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TAXI	TOT	PCU	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TAXI	TOT	PCU
0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0	5	0	0	0	0	0	6	5.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	2	0	1	1	0	0	4	5.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0	9	0	1	1	0	0	12	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	2	1	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	1	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	7	2	0	0	0	0	9	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	0	6	1	0	0	0	0	7	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	5	0	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	0	7	2	0	0	0	0	9	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	0	4	0	2	0	0	0	6	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	5	2	1	0	0	0	8	8.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	7	1	0	1	0	0	9	10.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	15	2	3	1	0	0	21	23.8	0	0	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0	0	4	4
0	0	31	5	6	2	0	0	44	49.6	0	0	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0	0	4	4
0	0	26	4	0	0	2	0	32	34	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
0	0	34	9	2	1	0	0	46	48.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	26	11	0	2	3	0	42	47.6	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
0	0	52	11	0	1	2	0	66	69.3	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	0	0	3	3
0	0	138	35	2	4	7	0	186	199.2	0	0	0	0	0	0	0	0	0	0	0	0	3	2	0	0	0	0	5	5
0	0	74	7	0	0	2	0	83	85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	1	110	15	1	2	2	0	132	135.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	68	6	6	0	2	1	83	88	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2
0	0	63	10	2	1	2	0	78	82.3	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
1	1	315	38	9	3	8	1	376	391	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	3
0	0	82	8	3	2	1	2	98	103.1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
1	0	71	8	3	0	0	0	83	83.7	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
0	0	57	12	1	0	1	0	71	72.5	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
1	1	56	13	3	3	1	0	78	83	0	0	0	0	0	0	0	0	0	0	0	0	2	0	1	0	0	0	3	3.5
2	1	266	41	10	5	3	2	330	342.3	0	0	0	0	0	0	0	0	0	0	0	0	5	0	1	0	0	0	6	6.5
0	0	62	11	1	0	0	0	74	74.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0	42	8	3	0	0	2	56	56.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	64	11	2	2	1	1	81	85.6	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	2	2
0	0	57	11	5	1	0	0	74	77.8	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
1	0	225	41	11	3	1	3	285	294.6	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	3	3
1	0	80	10	1	0	1	0	93	93.7	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	66	7	3	2	0	1	79	83.1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	2	56	8	2	1	1	2	72	74.1	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2
0	0	65	12	0	1	1	0	79	81.3	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	2	2.5
1	2	267	37	6	4	3	3	323	332.2	0	0	0	0	0	0	0	0	0	0	0	0	3	2	1	0	0	0	6	6.5
0	0	69	13	2	1	0	4	89	91.3	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	3	4.8
0	0	80	12	1	1	0	1	95	96.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	1	82	15	1	1	1	0	101	103.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	79	7	1	1	0	3	91	92.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1.5
0	1	310	47	5	4	1	8	376	384.1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2	1	0	0	4	6.3
0	1	110	4	3	0	1	2	121	122.9	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
0	1	80	10	2	1	3	1	98	102.7	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	2	2
0	1	82	11	0	0	0	0	94	93.4	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
1	2	76	9	2	0	0	0	90	89	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
1	5	348	34	7	1	4	3	403	408	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0	0	0	0	6	6
1	0	96	3	1	0	2	0	103	104.7	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	3	3
0	0	75	6	1	0	0	1	83	83.5	0	0	0	0	0	0	0	0	0	0	1	0	2	1	1	0	0	0	5	4.7
0	0	66	8	3	1	1	1	80	83.8	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
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1	0	316	27	7	1	3	3	358	365	0	0	0	0	0	0	0	0	0	0	1	0	6	2	1	0	0	0	10	9.7
0	0	72	10	1	0	1	0	84	85.5	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
1	0	89	9	1	1	0	0	101	102	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	3	4.5
1	0	94	7	2	1	2	0	107	110.5	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
0	2	75	8	0	0	2	0	87	87.8	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
2	2	330	34	4	2	5	0	379	385.8	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	0	0	0	6	7.5
0	0	75	8	0	0	1	0	84	85	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
0	0	63	4	1	0	1	0	69	70.5	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2
0	0	91	3	0	0	0	0	94	94	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	4	4
0	0	88	3	1	0	1	0	93	94.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	317	18	2	0	3	0	340	344	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	7	7
0	0	95	10	1	0	1	0	107	108.5	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
0	0	81	6	1	1	1	0	90	92.8	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
0	0	98	7	0	1	0	0	106	107.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	86	4	1	0	1	0	92	93.5	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
0	0	360	27	3	2	3	0	395	402.1	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	3
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0	0	81	4	0	0	1	0	86	87	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2
1	0	74	5	0	0	1	0	81	81.2	0	0	0	0	0	0	0	0	0	0	0	1	3	0	0	0	0	0	4	3.4
0	0	68	5	0	0	1	0	74	75	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	3
3	0	308	19	0	0	5	0	335	337.6	0	0	0	0	0	0	0	0	0	0	0	1	9	0	0	0	0	0	10	9.4

0	0	41	2	0	0	0	0	43	43	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	2	2
0	0	50	2	1	0	0	0	53	53.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	53	4	0	0	0	0	57	57	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
0	0	37	1	0	0	1	0	39	40	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
0	0	181	9	1	0	1	0	192	193.5	0	0	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0	0	4	4
0	0	36	0	0	0	1	0	37	38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	43	1	0	0	0	0	44	44	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	20	2	0	0	1	0	23	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	24	0	0	0	0	0	24	24	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
0	0	123	3	0	0	2	0	128	130	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
0	0	14	0	0	0	1	0	15	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	18	0	0	0	0	0	18	18	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
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0	0	56	1	0	0	2	0	59	61	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	3	3
0	0	13	2	0	0	0	0	15	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	13	0	0	0	0	0	13	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	8	0	0	0	1	0	9	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	11	0	0	0	0	0	11	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	45	2	0	0	1	0	48	49	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	5	1	0	0	1	0	7	8	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
0	0	8	0	0	0	0	0	8	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	11	0	0	0	0	0	11	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	1	0	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	25	1	0	0	2	0	28	30	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
13	12	3997	429	74	32	54	23	4634	4749	0	0	0	0	0	0	0	0	0	0	1	1	58	13	8	1	0	0	82	85.9

C => A										C => B										C => C									
P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TAXI	TOT	PCU	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TAXI	TOT	PCU	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TAXI	TOT	PCU
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	0	1	1	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	4	0	0	0	0	0	4	4	0	0	2	3	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0
0	0	4	0	1	0	0	0	5	5.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	7	3	0	0	0	0	10	10	0	0	4	0	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0
0	0	17	3	1	0	0	0	21	21.5	0	0	6	3	0	0	0	0	9	9	0	0	0	0	0	0	0	0	0	0
0	0	43	2	0	0	0	0	45	45	0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
0	0	48	0	1	0	0	0	49	49.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0	18	0	0	0	0	0	19	18.2	0	1	0	0	0	0	0	0	1	0.4	0	0	0	0	0	0	0	0	0	0
0	0	5	1	0	0	0	0	6	6	0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
1	0	114	3	1	0	0	0	119	118.7	0	1	4	0	0	0	0	0	5	4.4	0	0	0	0	0	0	0	0	0	0
0	0	7	2	0	0	0	0	9	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	6	2	1	0	0	0	9	9.5	0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
0	0	4	0	0	0	0	0	4	4	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
0	0	6	0	0	0	0	0	6	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	23	4	1	0	0	0	28	28.5	0	0	2	1	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0
0	0	2	0	1	1	0	0	4	5.8	0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
0	0	6	0	0	0	0	0	6	6	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
0	0	4	0	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	3	0	0	0	0	0	3	3	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
0	0	15	0	1	1	0	0	17	18.8	0	0	4	0	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0
0	0	7	0	1	0	0	0	8	8.5	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
1	0	6	0	0	0	0	0	7	6.2	0	0	0	1	1	0	0	0	2	2.5	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	0	1	1	0	0	2	1	1	0	0	0	4	4.5	0	0	0	0	0	0	0	0	0	0
0	0	4	1	0	0	0	0	5	5	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
1	0	18	1	1	0	0	0	21	20.7	0	0	3	3	2	0	0	0	8	9	0	0	0	0	0	0	0	0	0	0
0	0	10	0	2	0	0	0	12	13	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
0	0	9	0	0	0	0	0	9	9	0	0	1	0	1	1	0	0	3	4.8	0	0	0	0	0	0	0	0	0	0
0	0	6	2	0	0	0	0	8	8	0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
0	0	9	1	0	0	0	0	10	10	0	0	2	0	1	0	0	0	3	3.5	0	0	0	0	0	0	0	0	0	0
0	0	34	3	2	0	0	0	39	40	0	0	6	0	2	1	0	0	9	11.3	0	0	0	0	0	0	0	0	0	0
0	0	9	0	0	0	0	0	9	9	0	0	3	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0
0	0	8	1	0	0	0	0	9	9	0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
0	0	9	0	2	0	0	0	11	12	0	0	1	0	1	0	0	0	2	2.5	0	0	0	0	0	0	0	0	0	0
0	0	6	0	0	0	0	0	6	6	0	0	3	1	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0
0	0	32	1	2	0	0	0	35	36	0	0	9	1	1	0	0	0	11	11.5	0	0	0	0	0	0	0	0	0	0
0	0	7	0	0	0	0	0	7	7	0	0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
0	0	7	3	0	0	0	0	10	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	7	1	0	0	0	0	8	8	0	0	0	0	1	0	0	0	1	1.5	0	0	0	0	0	0	0	0	0	0
0	0	10	0	0	0	0	0	10	10	0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
0	0	31	4	0	0	0	0	35	35	0	0	2	2	1	0	0	0	5	5.5	0	0	0	0	0	0	0	0	0	0
0	0	8	1	0	0	0	0	9	9	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
1	0	13	1	0	0	0	0	15	14.2	0	0	0	0	1	0	0	0	1	1.5	0	0	0	0	0	0	0	0	0	0
0	0	11	0	1	0	0	0	12	12.5	0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
0	0	14	0	1	0	0	0	15	15.5	0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
1	0	46	2	2	0	0	0	51	51.2	0	0	5	0	1	0	0	0	6	6.5	0	0	0	0	0	0	0	0	0	0
0	0	8	1	0	0	0	0	9	9	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
0	0	17	0	0	0	0	0	17	17	0	0	2	1	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0
0	0	8	1	0	0	0	0	9	9	0	0	1	1	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
0	0	8	0	0	0	0	0	8	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	41	2	0	0	0	0	43	43	0	0	4	2	0	0	0	0	6	6	0	0	0	0	0	0	0	0	0	0
0	0	12	0	0	0	0	0	12	12	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
0	0	4	0	0	0	0	0	4	4	0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
0	0	9	0	1	0	0	0	10	10.5	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
0	0	3	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	28	0	1	0	0	0	29	29.5	0	0	3	1	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0
0	0	3	1	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

0	0	11	1	0	0	0	0	12	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	3	1	0	0	0	0	4	4	0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
0	0	5	0	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	22	3	0	0	0	0	25	25	0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0

0	0	4	0	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	5	0	0	0	0	0	5	5	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
1	0	4	0	0	0	0	0	5	4.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0	13	0	0	0	0	0	14	13.2	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
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0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	4	0	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	0	2	2	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	5	0	0	0	0	0	5	5	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	445	26	12	1	0	0	488	492.1	0	1	53	13	7	1	0	0	75	79.2	0	0	0	0	0	0	0	0	0	0

C. TRICS – Trip Rates

Calculation Reference: AUDIT-561501-201208-1229

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
Category : K - MIXED PRIV HOUS (FLATS AND HOUSES)
TOTAL VEHICLES

Selected regions and areas:

01	GREATER LONDON		
	BN	BARNET	1 days
02	SOUTH EAST		
	WS	WEST SUSSEX	1 days
15	GREATER DUBLIN		
	DL	DUBLIN	1 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: 322 to 479 (units:)
Range Selected by User: 300 to 500 (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 27/05/19

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	2 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 undertaking using machines.

Selected Locations:

Edge of Town	3

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	1
Residential Zone	2

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	3 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 500m Range:

All Surveys Included

Population within 1 mile:

10,001 to 15,000	1 days
25,001 to 50,000	1 days
50,001 to 100,000	1 days

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

Population within 5 miles:

75,001 to 100,000	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
1.1 to 1.5	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:

Yes	2 days
No	1 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	2 days
2 Poor	1 days

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

LIST OF SITES relevant to selection parameters

1	BN-03-K-02	HOUSES & FLATS		BARNET
	FRITH LANE			
	MILL HILL			
	MILL HILL EAST			
	Edge of Town			
	Residential Zone			
	Total No of Dwellings:		479	
	Survey date: THURSDAY		*07/07/16*	*Survey Type: MANUAL*
2	DL-03-K-03	HOUSES & FLATS		DUBLIN
	CHARLESTOWN			
	DUBLIN			
	Edge of Town			
	Industrial Zone			
	Total No of Dwellings:		322	
	Survey date: WEDNESDAY		*11/09/13*	*Survey Type: MANUAL*
3	WS-03-K-04	MIXED HOUSES & FLATS		WEST SUSSEX
	HILLS FARM LANE			
	HORSHAM			
	BROADBRIDGE HEATH			
	Edge of Town			
	Residential Zone			
	Total No of Dwellings:		371	
	Survey date: THURSDAY		*28/06/18*	*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/K - MIXED PRIV HOUS (FLATS AND HOUSES)
TOTAL VEHICLES
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	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	3	391	0.075	3	391	0.219	3	391	0.294
08:00 - 09:00	3	391	0.137	3	391	0.297	3	391	0.434
09:00 - 10:00	3	391	0.138	3	391	0.197	3	391	0.335
10:00 - 11:00	3	391	0.113	3	391	0.139	3	391	0.252
11:00 - 12:00	3	391	0.108	3	391	0.125	3	391	0.233
12:00 - 13:00	3	391	0.139	3	391	0.133	3	391	0.272
13:00 - 14:00	3	391	0.214	3	391	0.190	3	391	0.404
14:00 - 15:00	3	391	0.160	3	391	0.168	3	391	0.328
15:00 - 16:00	3	391	0.185	3	391	0.164	3	391	0.349
16:00 - 17:00	3	391	0.204	3	391	0.138	3	391	0.342
17:00 - 18:00	3	391	0.279	3	391	0.166	3	391	0.445
18:00 - 19:00	3	391	0.294	3	391	0.159	3	391	0.453
19:00 - 20:00	1	479	0.188	1	479	0.152	1	479	0.340
20:00 - 21:00	1	479	0.180	1	479	0.088	1	479	0.268
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.414			2.335			4.749

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

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

Parameter summary

Trip rate parameter range selected:	322 - 479 (units:)
Survey date date range:	01/01/12 - 27/05/19
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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

D. Junction Modelling Output Reports

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.5.1.7462

Filename: Junction 1 - DO NOTHING - AM-PM.j9
Path: M:\Projects\19\19-020 - Malahide Road\Design\Traffic\Junction Modelling\MODELLING MARCH 2021\Junction 1\Junction 1 - DO NOTHING
Report generation date: 09/03/2021 12:36:21

Summary of junction performance

	AM			PM		
	Set ID	Queue (Veh)	RFC	Set ID	Queue (Veh)	RFC
JUNCTION 1 - DO NOTHING - 2020						
Stream B-C	D1	0.6	0.40	D2	0.2	0.19
Stream B-A		0.8	0.46		0.6	0.36
Stream C-AB		0.7	0.33		0.6	0.26
JUNCTION 1 - DO NOTHING - 2023						
Stream B-C	D3	0.8	0.44	D4	0.2	0.20
Stream B-A		1.0	0.51		0.6	0.39
Stream C-AB		0.8	0.36		0.7	0.28
JUNCTION 1 - DO NOTHING - 2028						
Stream B-C	D5	1.0	0.51	D6	0.3	0.22
Stream B-A		1.4	0.59		0.7	0.43
Stream C-AB		0.9	0.40		0.8	0.32
JUNCTION 1 - DO NOTHING - 2038						
Stream B-C	D7	1.5	0.61	D8	0.3	0.26
Stream B-A		2.0	0.68		0.9	0.49
Stream C-AB		1.1	0.44		1.0	0.35

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

File summary

File Description

Title	
Location	
Site number	
Date	27/02/2020
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DOMAIN\f.silva
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	Veh	Veh	perHour	s	-Min	perMin

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2020	AM	ONE HOUR	08:00	09:30	15
D2	2020	PM	ONE HOUR	18:00	19:30	15
D3	2023	AM	ONE HOUR	08:00	09:30	15
D4	2023	PM	ONE HOUR	18:00	19:30	15
D5	2028	AM	ONE HOUR	08:00	09:30	15
D6	2028	PM	ONE HOUR	18:00	19:30	15
D7	2038	AM	ONE HOUR	08:00	09:30	15
D8	2038	PM	ONE HOUR	18:00	19:30	15

Analysis Set Details

ID	Name	Network flow scaling factor (%)
A1	JUNCTION 1 - DO NOTHING	100.000

JUNCTION 1 - DO NOTHING - 2020, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		5.58	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	R107 - Malahide Road (N)		Major
B	Back Road (E)		Minor
C	R107 - Malahide Road (S)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	9.40			85.0	✓	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	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B	One lane plus flare	10.00	10.00	8.00	4.00	3.30		1.00	50	50

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	601	0.093	0.236	0.148	0.337
B-C	741	0.097	0.245	-	-
C-B	623	0.206	0.206	-	-

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2020	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	428	100.000
B		✓	354	100.000
C		✓	358	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	143	285
	B	166	0	188
	C	224	134	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	5
	B	0	0	0
	C	5	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-C	0.40	11.41	0.6	B
B-A	0.46	17.01	0.8	C
C-AB	0.33	7.76	0.7	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	142	620	0.228	140	0.3	7.492	A
B-A	125	471	0.265	124	0.4	10.325	B
C-AB	135	669	0.202	134	0.3	6.718	A
C-A	135			135			
A-B	108			108			
A-C	215			215			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	169	585	0.289	169	0.4	8.644	A
B-A	149	441	0.339	149	0.5	12.296	B
C-AB	172	679	0.253	171	0.4	7.080	A
C-A	150			150			
A-B	129			129			
A-C	256			256			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	207	524	0.395	206	0.6	11.292	B
B-A	183	395	0.463	181	0.8	16.770	C
C-AB	230	695	0.330	229	0.7	7.721	A
C-A	165			165			
A-B	157			157			
A-C	314			314			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	207	522	0.396	207	0.6	11.415	B
B-A	183	394	0.464	183	0.8	17.015	C
C-AB	230	695	0.331	230	0.7	7.763	A
C-A	164			164			
A-B	157			157			
A-C	314			314			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	169	583	0.290	170	0.4	8.737	A
B-A	149	440	0.339	151	0.5	12.484	B
C-AB	172	680	0.253	173	0.5	7.145	A
C-A	150			150			
A-B	129			129			
A-C	256			256			

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	142	618	0.229	142	0.3	7.566	A
B-A	125	470	0.266	126	0.4	10.468	B
C-AB	135	669	0.202	136	0.3	6.775	A
C-A	134			134			
A-B	108			108			
A-C	215			215			

JUNCTION 1 - DO NOTHING - 2020, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		3.38	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2020	PM	ONE HOUR	18:00	19:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	343	100.000
B		✓	237	100.000
C		✓	473	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	140	203
	B	137	0	100
	C	376	97	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	5
	B	0	0	0
	C	5	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-C	0.19	7.50	0.2	A
B-A	0.36	13.46	0.6	B
C-AB	0.26	5.91	0.6	A
C-A				
A-B				
A-C				

Main Results for each time segment

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	75	657	0.115	75	0.1	6.179	A
B-A	103	475	0.217	102	0.3	9.628	A
C-AB	117	758	0.154	115	0.3	5.603	A
C-A	240			240			
A-B	105			105			
A-C	153			153			

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	90	632	0.142	90	0.2	6.640	A
B-A	123	451	0.273	123	0.4	10.939	B
C-AB	154	786	0.195	153	0.4	5.684	A
C-A	272			272			
A-B	126			126			
A-C	182			182			

18:30 - 18:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	110	591	0.186	110	0.2	7.486	A
B-A	151	418	0.360	150	0.6	13.377	B
C-AB	215	826	0.260	214	0.6	5.879	A
C-A	306			306			
A-B	154			154			
A-C	224			224			

18:45 - 19:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	110	590	0.187	110	0.2	7.504	A
B-A	151	418	0.361	151	0.6	13.458	B
C-AB	215	827	0.261	215	0.6	5.906	A
C-A	305			305			
A-B	154			154			
A-C	224			224			

19:00 - 19:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	90	631	0.143	90	0.2	6.663	A
B-A	123	451	0.273	124	0.4	11.023	B
C-AB	154	787	0.196	155	0.4	5.729	A
C-A	271			271			
A-B	126			126			
A-C	182			182			

19:15 - 19:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	75	656	0.115	75	0.1	6.204	A
B-A	103	475	0.217	104	0.3	9.713	A
C-AB	117	758	0.155	118	0.3	5.642	A
C-A	239			239			
A-B	105			105			
A-C	153			153			

JUNCTION 1 - DO NOTHING - 2023, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		6.12	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2023	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	449	100.000
B		✓	371	100.000
C		✓	406	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	150	299
	B	174	0	197
	C	265	141	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	5
	B	0	0	0
	C	5	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-C	0.44	12.77	0.8	B
B-A	0.51	19.59	1.0	C
C-AB	0.36	7.85	0.8	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	148	611	0.243	147	0.3	7.737	A
B-A	131	460	0.285	129	0.4	10.840	B
C-AB	150	687	0.218	148	0.4	6.676	A
C-A	156			156			
A-B	113			113			
A-C	225			225			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	177	572	0.310	177	0.4	9.099	A
B-A	156	427	0.366	156	0.6	13.231	B
C-AB	193	701	0.275	192	0.5	7.066	A
C-A	172			172			
A-B	135			135			
A-C	269			269			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	217	501	0.433	216	0.7	12.564	B
B-A	192	376	0.510	190	1.0	19.175	C
C-AB	262	722	0.362	260	0.8	7.791	A
C-A	185			185			
A-B	165			165			
A-C	329			329			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	217	499	0.435	217	0.8	12.772	B
B-A	192	375	0.511	191	1.0	19.593	C
C-AB	262	723	0.363	262	0.8	7.850	A
C-A	185			185			
A-B	165			165			
A-C	329			329			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	177	569	0.311	178	0.5	9.237	A
B-A	156	426	0.367	158	0.6	13.512	B
C-AB	193	702	0.275	194	0.5	7.145	A
C-A	172			172			
A-B	135			135			
A-C	269			269			

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	148	609	0.243	149	0.3	7.826	A
B-A	131	459	0.285	132	0.4	11.017	B
C-AB	150	687	0.219	151	0.4	6.744	A
C-A	155			155			
A-B	113			113			
A-C	225			225			

JUNCTION 1 - DO NOTHING - 2023, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		3.56	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2023	PM	ONE HOUR	18:00	19:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	360	100.000
B		✓	249	100.000
C		✓	496	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	147	213
	B	144	0	105
	C	395	101	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	5
	B	0	0	0
	C	5	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-C	0.20	7.82	0.2	A
B-A	0.39	14.35	0.6	B
C-AB	0.28	5.97	0.7	A
C-A				
A-B				
A-C				

Main Results for each time segment

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	79	651	0.121	79	0.1	6.284	A
B-A	108	469	0.231	107	0.3	9.915	A
C-AB	124	765	0.163	123	0.3	5.605	A
C-A	249			249			
A-B	111			111			
A-C	160			160			

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	94	623	0.151	94	0.2	6.801	A
B-A	129	444	0.291	129	0.4	11.395	B
C-AB	165	795	0.207	164	0.4	5.706	A
C-A	281			281			
A-B	132			132			
A-C	191			191			

18:30 - 18:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	116	577	0.200	115	0.2	7.789	A
B-A	159	410	0.387	158	0.6	14.242	B
C-AB	232	838	0.277	232	0.7	5.940	A
C-A	314			314			
A-B	162			162			
A-C	235			235			

18:45 - 19:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	116	576	0.201	116	0.2	7.815	A
B-A	159	409	0.387	159	0.6	14.347	B
C-AB	233	838	0.278	233	0.7	5.967	A
C-A	313			313			
A-B	162			162			
A-C	235			235			

19:00 - 19:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	94	622	0.152	95	0.2	6.826	A
B-A	129	444	0.291	130	0.4	11.497	B
C-AB	165	796	0.208	166	0.4	5.755	A
C-A	281			281			
A-B	132			132			
A-C	191			191			

19:15 - 19:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	79	650	0.122	79	0.1	6.311	A
B-A	108	469	0.231	109	0.3	10.014	B
C-AB	125	765	0.163	126	0.3	5.649	A
C-A	248			248			
A-B	111			111			
A-C	160			160			

JUNCTION 1 - DO NOTHING - 2028, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		7.61	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	2028	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	487	100.000
B		✓	402	100.000
C		✓	407	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	163	324
	B	188	0	214
	C	254	153	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	5
	B	0	0	0
	C	5	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-C	0.51	16.04	1.0	C
B-A	0.59	24.58	1.4	C
C-AB	0.40	8.49	0.9	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	161	597	0.270	160	0.4	8.207	A
B-A	142	450	0.314	140	0.5	11.532	B
C-AB	161	676	0.238	159	0.4	6.956	A
C-A	146			146			
A-B	123			123			
A-C	244			244			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	192	550	0.350	192	0.5	10.019	B
B-A	169	413	0.409	168	0.7	14.622	B
C-AB	206	688	0.300	206	0.6	7.462	A
C-A	159			159			
A-B	147			147			
A-C	291			291			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	236	464	0.508	234	1.0	15.515	C
B-A	207	354	0.584	204	1.3	23.609	C
C-AB	280	706	0.397	279	0.9	8.416	A
C-A	168			168			
A-B	179			179			
A-C	357			357			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	236	460	0.513	235	1.0	16.041	C
B-A	207	353	0.587	207	1.4	24.584	C
C-AB	281	707	0.397	281	0.9	8.487	A
C-A	168			168			
A-B	179			179			
A-C	357			357			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	192	546	0.352	194	0.6	10.278	B
B-A	169	412	0.410	172	0.7	15.135	C
C-AB	207	689	0.301	208	0.6	7.555	A
C-A	159			159			
A-B	147			147			
A-C	291			291			

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	161	595	0.271	162	0.4	8.334	A
B-A	142	449	0.315	143	0.5	11.781	B
C-AB	161	676	0.239	162	0.4	7.038	A
C-A	145			145			
A-B	123			123			
A-C	244			244			

JUNCTION 1 - DO NOTHING - 2028, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		3.90	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	2028	PM	ONE HOUR	18:00	19:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	390	100.000
B		✓	266	100.000
C		✓	538	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	159	231
	B	153	0	113
	C	428	110	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	5
	B	0	0	0
	C	5	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-C	0.22	8.39	0.3	A
B-A	0.43	16.04	0.7	C
C-AB	0.32	6.16	0.8	A
C-A				
A-B				
A-C				

Main Results for each time segment

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	85	642	0.133	84	0.2	6.453	A
B-A	115	458	0.251	114	0.3	10.408	B
C-AB	141	778	0.182	140	0.4	5.640	A
C-A	264			264			
A-B	120			120			
A-C	174			174			

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	102	610	0.167	101	0.2	7.075	A
B-A	138	431	0.319	137	0.5	12.207	B
C-AB	189	811	0.233	188	0.5	5.785	A
C-A	295			295			
A-B	143			143			
A-C	208			208			

18:30 - 18:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	124	555	0.224	124	0.3	8.345	A
B-A	168	393	0.429	167	0.7	15.879	C
C-AB	270	858	0.315	269	0.8	6.118	A
C-A	322			322			
A-B	175			175			
A-C	254			254			

18:45 - 19:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	124	554	0.225	124	0.3	8.386	A
B-A	168	393	0.429	168	0.7	16.044	C
C-AB	271	858	0.316	271	0.8	6.159	A
C-A	321			321			
A-B	175			175			
A-C	254			254			

19:00 - 19:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	102	609	0.167	102	0.2	7.109	A
B-A	138	431	0.319	139	0.5	12.353	B
C-AB	190	812	0.234	191	0.5	5.841	A
C-A	294			294			
A-B	143			143			
A-C	208			208			

19:15 - 19:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	85	640	0.133	85	0.2	6.490	A
B-A	115	458	0.252	116	0.3	10.537	B
C-AB	142	778	0.183	143	0.4	5.693	A
C-A	263			263			
A-B	120			120			
A-C	174			174			

JUNCTION 1 - DO NOTHING - 2038, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		10.24	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D7	2038	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	520	100.000
B		✓	431	100.000
C		✓	435	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	174	346
	B	202	0	229
	C	272	163	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	5
	B	0	0	0
	C	5	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-C	0.61	22.56	1.5	C
B-A	0.68	34.51	2.0	D
C-AB	0.44	8.98	1.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	172	582	0.296	171	0.4	8.726	A
B-A	152	438	0.347	150	0.5	12.403	B
C-AB	176	680	0.258	174	0.5	7.096	A
C-A	152			152			
A-B	131			131			
A-C	260			260			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	206	526	0.391	205	0.6	11.168	B
B-A	182	397	0.458	180	0.8	16.552	C
C-AB	227	694	0.327	226	0.7	7.693	A
C-A	164			164			
A-B	156			156			
A-C	311			311			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	252	419	0.602	249	1.4	20.798	C
B-A	222	328	0.678	218	1.9	31.559	D
C-AB	311	714	0.435	309	1.1	8.886	A
C-A	168			168			
A-B	192			192			
A-C	381			381			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	252	411	0.614	252	1.5	22.558	C
B-A	222	325	0.684	222	2.0	34.514	D
C-AB	311	715	0.436	311	1.1	8.982	A
C-A	168			168			
A-B	192			192			
A-C	381			381			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	206	519	0.397	209	0.7	11.745	B
B-A	182	394	0.461	186	0.9	17.662	C
C-AB	228	695	0.328	229	0.7	7.810	A
C-A	163			163			
A-B	156			156			
A-C	311			311			

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	172	578	0.298	173	0.4	8.906	A
B-A	152	437	0.348	153	0.5	12.766	B
C-AB	176	681	0.259	177	0.5	7.187	A
C-A	151			151			
A-B	131			131			
A-C	260			260			

JUNCTION 1 - DO NOTHING - 2038, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		4.42	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D8	2038	PM	ONE HOUR	18:00	19:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	418	100.000
B		✓	288	100.000
C		✓	575	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	171	247
	B	167	0	121
	C	458	117	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	5
	B	0	0	0
	C	5	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-C	0.26	9.28	0.3	A
B-A	0.49	18.56	0.9	C
C-AB	0.35	6.35	1.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	91	629	0.145	90	0.2	6.674	A
B-A	126	449	0.280	124	0.4	11.023	B
C-AB	156	789	0.198	155	0.4	5.671	A
C-A	276			276			
A-B	129			129			
A-C	186			186			

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	109	592	0.184	109	0.2	7.448	A
B-A	150	420	0.357	149	0.5	13.275	B
C-AB	211	825	0.256	210	0.6	5.854	A
C-A	306			306			
A-B	154			154			
A-C	222			222			

18:30 - 18:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	133	523	0.255	133	0.3	9.200	A
B-A	184	378	0.487	182	0.9	18.269	C
C-AB	306	876	0.349	304	1.0	6.299	A
C-A	327			327			
A-B	188			188			
A-C	272			272			

18:45 - 19:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	133	521	0.256	133	0.3	9.277	A
B-A	184	378	0.487	184	0.9	18.563	C
C-AB	306	877	0.349	306	1.0	6.349	A
C-A	327			327			
A-B	188			188			
A-C	272			272			

19:00 - 19:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	109	589	0.185	109	0.2	7.504	A
B-A	150	419	0.358	152	0.6	13.510	B
C-AB	212	826	0.256	213	0.6	5.925	A
C-A	305			305			
A-B	154			154			
A-C	222			222			

19:15 - 19:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	91	627	0.145	91	0.2	6.719	A
B-A	126	449	0.280	126	0.4	11.195	B
C-AB	157	790	0.199	158	0.4	5.729	A
C-A	275			275			
A-B	129			129			
A-C	186			186			

TRANSYT 16

Version: 16.0.1.8473

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Filename: Junction 1 - DO SOMETHING - AM.t16
Path: M:\Projects\19\19-020 - Malahide Road\Design\Traffic\Junction Modelling\MODELLING MARCH 2021\Junction 1\Junction 1 - DO SOMETHING - AM
Report generation date: 09/03/2021 12:39:16

»A1 - DO SOMETHING - 2023 (OPENING YEAR) : D1 - DO SOMETHING - 2023 (OPENING YEAR), :
»A2 - DO SOMETHING - 2028 (OPENING YEAR + 5 YEARS) : D2 - DO SOMETHING - 2028 (OPENING YEAR + 5 YEARS), :
»A3 - DO SOMETHING - 2038 (OPENING YEAR + 15 YEARS) : D3 - DO SOMETHING - 2038 (OPENING YEAR + 15 YEARS), :

Summary of network performance

	Set ID	PI (£ per hr)	Total delay (Veh-hr/hr)	Highest DOS	Number oversaturated
	DO SOMETHING - 2023 (OPENING YEAR) - DO SOMETHING - 2023 (OPENING YEAR)				
Network	A1 D1	421.16	28.54	86% (TS B/1)	0 (0%)

	Set ID	PI (£ per hr)	Total delay (Veh-hr/hr)	Highest DOS	Number oversaturated
	DO SOMETHING - 2028 (OPENING YEAR + 5 YEARS) - DO SOMETHING - 2028 (OPENING YEAR + 5 YEARS)				
Network	A2 D2	583.75	39.52	93% (TS B/1)	0 (0%)

	Set ID	PI (£ per hr)	Total delay (Veh-hr/hr)	Highest DOS	Number oversaturated
	DO SOMETHING - 2038 (OPENING YEAR + 15 YEARS) - DO SOMETHING - 2038 (OPENING YEAR + 15 YEARS)				
Network	A3 D3	744.04	50.48	99% (TS D/1)	0 (0%)

File summary

File description

File title	(untitled)
Location	
Site number	
UTCRegion	
Driving side	Left
Date	06/12/2011
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DOMAIN\f.silva
Description	

Model and Results

Enable controller offsets	Enable fuel consumption	Enable quick flares	Display journey time results	Display OD matrix distances	Display level of service results	Display blocking and starvation results	Display end of red and green queue results	Display excess queue results	Display separate uniform and random results	Display unweighted results	Display TRANSYT 12 style timings	Display effective greens in results	Display Red-With-Amber	Display End-Of-Green Amber	c	m
			✓			✓		✓	✓							

Units

Cost units	Speed units	Distance units	Fuel economy units	Fuel rate units	Mass units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
£	kph	m	mpg	l/h	kg	Veh	Veh	perHour	s	-Hour	perHour

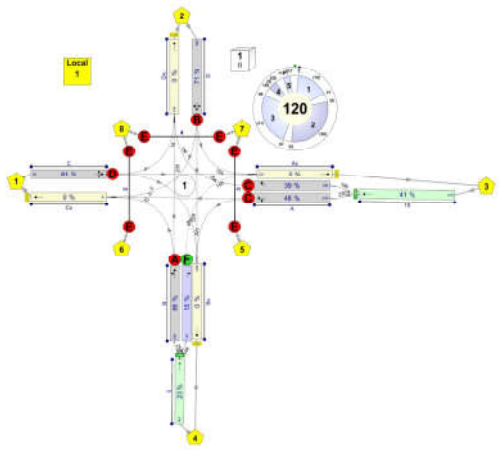
Sorting

Show names instead of IDs	Sorting direction	Sorting type	Ignore prefixes when sorting	Analysis/demand set sorting	Link grouping	Source grouping	Colour Analysis/Demand Sets
	Ascending	Numerical		ID	Normal	Normal	✓

Simulation options

Criteria type	Stop criteria (%)	Stop criteria time (s)	Stop criteria number of trials	Random seed	Results refresh speed (s)	Average animation capture interval (s)	Use quick response	Do flow sampling	Uniform vehicle generation	Last run random seed	Last run number of trials	Last run time taken (s)
Delay	3.00	999	200	-1	3	60	✓			0	0	0.00

Network Diagrams



A1 - DO SOMETHING - 2023 (OPENING YEAR)
D1 - DO SOMETHING - 2023 (OPENING YEAR),

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Run duration (s)	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (Veh-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item wi wors unsignal PRC
1	09/03/2021 12:37:35	09/03/2021 12:37:36	1.20	08:00	120	421.16	28.54	86.00	B/1	0	0	B/1	10/1

Analysis Set Details

Name	Use Simulation	Description	Use specific Demand Set(s)	Specific Demand Set(s)	Optimise specific Demand Set(s)	Include in report	Locked
DO SOMETHING - 2023 (OPENING YEAR)			✓	D1		✓	

Demand Set Details

Scenario name	Time Period name	Description	Composite	Demand sets	Start time (HH:mm)	Locked	Run automatically
DO SOMETHING - 2023 (OPENING YEAR)					08:00		✓

Network Options

Network timings

Network cycle time (s)	Minimum possible cycle time (s)	Absolute minimum possible cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
120	117	117		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)	Missing stage transition options
10000.00	10000.00	10000.00	2	Assume banned

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from traffic model	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	100	100	✓	✓			Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Offsets And Green Splits	

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy (%)	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Standard accuracy Hill Climb	15, 40, -1, 15, 40, 1, -1, 1	50, 50, 5, 5, 0.5, 0.5, 0.05, 0.05		✓	1			Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Traffic Nodes

Traffic Nodes

Traffic node	Name	Description
1	(untitled)	

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
A	(untitled)		1
Ax	(untitled)		
B	(untitled)		1
Bx	(untitled)		
C	(untitled)		1
Cx	(untitled)		
D	(untitled)		1
Dx	(untitled)		
9			1
10			1

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Auto-calculate cell saturation flow	Cell saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
A	1	(untitled)			100.00	✓	Sum of lanes	1800	✓	1800	✓		Normal	
	2				14.00	✓	Sum of lanes	1800			✓		Normal	
Ax	1	(untitled)		✓	135.48								Normal	
B	1	(untitled)			100.00	✓	Sum of lanes	1800			✓		Normal	
	2				18.00	✓	Sum of lanes	1800			✓	✓	Normal	
Bx	1	(untitled)		✓	139.32								Normal	
C	1	(untitled)			100.00	✓	Sum of lanes	1800			✓		Normal	
Cx	1	(untitled)		✓	139.64								Normal	
D	1	(untitled)			100.00	✓	Sum of lanes	1800			✓		Normal	
Dx	1	(untitled)		✓	134.86								Normal	
9	1			✓	43.24	✓	Sum of lanes	1800					Normal	
10	1			✓	63.04	✓	Sum of lanes	1800					Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Saturation flow (PCU/hr)
A	1	1	(untitled)			1800
	2	1	(untitled)			1800
Ax	1	1	(untitled)			
B	1	1	(untitled)			1800
	2	1	(untitled)			1800
Bx	1	1	(untitled)			
C	1	1	(untitled)			1800
Cx	1	1	(untitled)			
D	1	1	(untitled)			1800
Dx	1	1	(untitled)			
9	1	1	(untitled)			1800
10	1	1	(untitled)			1800

Modelling

Arm	Traffic Stream	Traffic model	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Queue limit (PCU)	Excess queue penalty (£)	Has degree of saturation limit
A	1	CTM	100	100	100		0.00				
	2	Flare	100	100	100		2.00				
Ax	1	NetworkDefault	100	100	100		0.00				
B	1	PDM	100	100	100		0.00	✓	0.00	0.00	
	2	Flare	100	100	100		4.00				
Bx	1	NetworkDefault	100	100	100		0.00				
C	1	PDM	100	100	100		0.00				
Cx	1	NetworkDefault	100	100	100		0.00				
D	1	PDM	100	100	100		0.00				
Dx	1	NetworkDefault	100	100	100		0.00				
9	1	NetworkDefault	100	100	100		0.00				
10	1	NetworkDefault	100	100	100		0.00				

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
A	1	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	120
	2	2.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	120
Ax	1	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	120
B	1	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	120
	2	4.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	120
Bx	1	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	120
C	1	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	120
Cx	1	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	120
D	1	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	120
Dx	1	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	120
9	1	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	120
10	1	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	120

Normal traffic - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	(ALL)	100	100

Normal traffic - Advanced

Arm	Traffic Stream	Dispersion type for Normal Traffic
(ALL)	(ALL)	NetworkDefault

Flows

Arm	Traffic Stream	Total Flow (Veh/hr)	Normal Flow (Veh/hr)
A	1	230	230
	2	186	186
Ax	1	321	321
B	1	258	258
	2	149	149
Bx	1	499	499
C	1	85	85
Cx	1	41	41
D	1	392	392
Dx	1	439	439
9	1	407	407
10	1	416	416

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
A	1	1	C	
	2	1	C	
B	1	1	A	
	2	1	F	
C	1	1	D	
D	1	1	B	

Entry Sources

Arm	Traffic Stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)
C	1	12.00	30.00
D	1	12.00	30.00
9	1	5.19	30.00
10	1	7.56	30.00

Sources

Arm	Traffic Stream	Source	Source traffic stream	Destination traffic stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)	Auto turning radius	Traffic turn style	Turning radius (m)
A	1	1	10/1	A/1	12.00	30.00	✓	Straight	Straight Movement
	2	1	10/1	A/2	1.68	30.00	✓	Straight	Straight Movement
Ax	1	1	C/1	Ax/1	16.26	30.00	✓	Straight	Straight Movement
B	1	1	9/1	B/1	12.00	30.00	✓	Straight	Straight Movement
	2	1	9/1	B/2	2.16	30.00	✓	Straight	Straight Movement
Bx	1	1	A/1	Bx/1	16.72	30.00	✓	Nearside	38.14
Cx	1	1	A/1	Cx/1	16.76	30.00	✓	Straight	Straight Movement
Dx	1	1	C/1	Dx/1	16.18	30.00	✓	Nearside	40.00
Ax	1	2	D/1	Ax/1	16.26	30.00	✓	Nearside	40.00
Bx	1	2	D/1	Bx/1	16.72	30.00	✓	Straight	Straight Movement
Cx	1	2	B/1	Cx/1	16.76	30.00	✓	Nearside	45.31
Dx	1	2	B/1	Dx/1	16.18	30.00	✓	Straight	Straight Movement
Ax	1	3	B/2	Ax/1	16.26	30.00	✓	Offside	46.69
Bx	1	3	C/1	Bx/1	16.72	30.00	✓	Offside	60.00
Cx	1	3	D/1	Cx/1	16.76	30.00	✓	Offside	55.00
Dx	1	3	A/2	Dx/1	16.18	30.00	✓	Offside	47.67

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Visibility restricted
B	2	AllTraffic		

Give Way Data - All Movements - Conflicts

Traffic Stream	Description	Controlling type	Controlling traffic stream	Percentage opposing (%)	Slope coefficient	Upstream signals visible
2		TrafficStream	A/2	100	0.00	

Pedestrian Crossings

Pedestrian Crossings

Crossing	Name	Description	Traffic node	Allow walk on red	Crossing type	Length (m)	Cruise time (seconds)	Cruise speed (kph)
2	(untitled)		1		Farside	8.00	5.33	5.40
3	(untitled)		1		Farside	8.00	5.33	5.40
4	(untitled)		1		Farside	7.00	4.67	5.40

Pedestrian Crossings - Signals

Crossing	Controller stream	Phase	Second phase enabled
(ALL)	1	E	

Pedestrian Crossings - Sides

Crossing	Side	Saturation flow (Ped/hr)
(ALL)	(ALL)	11000

Pedestrian Crossings - Modelling

Crossing	Side	Delay weighting (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (Ped)	Has queue limit	Has degree of saturation limit
(ALL)	(ALL)	100	100		0.00		

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit	Limit paths by flow	Low path flow threshold
1	(untitled)	✓	✓	Path Equalisation	✓		✓			✓	1.25				

Normal Input Flows (Veh/hr)

From \ To	1	2	3	4	5	6	7	8
1	0	18	18	49	0	0	0	0
2	9	0	154	229	0	0	0	0
3	9	186	0	221	0	0	0	0
4	23	235	149	0	0	0	0	0
5	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows (Veh/hr)

From \ To	1	2	3	4	5	6	7	8
1	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	100	0
6	0	0	0	0	0	0	0	100
7	0	0	0	0	100	0	0	100
8	0	0	0	0	0	100	100	0

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1	(untitled)	C/1	Cx/1	#0000FF
	2	(untitled)	D/1	Dx/1	#FF0000
	3	(untitled)	10/1	Ax/1	#00FF00
	4	(untitled)	9/1	Bx/1	#FFFF00
	5	(untitled)	3:2E	3:2X	#FF00FF
	6	(untitled)	2:1E	2:1X	#008000
	7	(untitled)	4:2E, 3:1E	4:2X, 3:1X	#FFA500
	8	(untitled)	4:1E, 2:2E	4:1X, 2:2X	#00FFFF

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (Veh/hr)
1	1		1	2	C/1, Dx/1	Normal	18
	2		1	3	C/1, Ax/1	Normal	18
	3		1	4	C/1, Bx/1	Normal	49
	5		2	3	D/1, Ax/1	Normal	154
	6		2	4	D/1, Bx/1	Normal	229
	7		2	1	D/1, Cx/1	Normal	9
	16		4	2	9/1, B/1, Dx/1	Normal	235
	49		4	1	9/1, B/1, Cx/1	Normal	23
	50		4	3	9/1, B/2, Ax/1	Normal	149
	51		3	2	10/1, A/2, Dx/1	Normal	186
	52		3	4	10/1, A/1, Bx/1	Normal	221
	53		3	1	10/1, A/1, Cx/1	Normal	9

Pedestrian Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Pedestrian calculated flow (Ped/hr)
1	17		8	7	4:1E, 4:2X	Normal	100
	18		8	6	2:2E, 2:1X	Normal	100
	22		5	7	3:2E, 3:1X	Normal	100
	34		6	8	2:1E, 2:2X	Normal	100
	41		7	8	4:2E, 4:1X	Normal	100
	42		7	5	3:1E, 3:2X	Normal	100

Traffic Stream Results

Traffic Stream Results: Vehicle summary

Time Segment	Arm	Traffic Stream	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (Veh/hr)	Calculated sat flow (Veh/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Mean max queue (Veh)	Utilised storage (%)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	A	1	48	109	230	1800	31	30.73	3.37	19.35	27.88	1.27	29.15
		2	39	158	186	1800	31	25.31	2.12	106.15	18.57	0.83	19.40
	Ax	1	0	Unrestricted	321	Unrestricted	120	0.00	0.00	0.00	0.00	0.00	0.00
	B	1	86	16	258	1800	19	80.69	10.61	61.01	82.12	3.90	86.02
		2	15	564	149	1800	65	13.80	2.25	56.21	8.11	0.89	9.00
	Bx	1	0	Unrestricted	499	Unrestricted	120	0.00	0.00	0.00	0.00	0.00	0.00
	C	1	81	24	85	1800	5	115.55	4.20	24.12	38.74	1.51	40.25
	Cx	1	0	Unrestricted	41	Unrestricted	120	0.00	0.00	0.00	0.00	0.00	0.00
	D	1	71	42	392	1800	36	44.35	12.38	71.16	68.58	4.56	73.14
	Dx	1	0	Unrestricted	439	Unrestricted	120	0.00	0.00	0.00	0.00	0.00	0.00
	9	1	23	342	407	1800	120	0.29	0.03	0.44	0.47	0.00	0.47
	10	1	41	142	416	1800	120	16.35	8.00	73.00	26.82	2.94	29.76

Traffic Stream Results: Flows and signals

Time Segment	Arm	Traffic Stream	Calculated flow entering (Veh/hr)	Calculated flow out (Veh/hr)	Flow discrepancy (Veh/hr)	Adjusted flow warning	Calculated sat flow (Veh/hr)	Calculated capacity (Veh/hr)	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Mean modulus of error	Actual green (s (per cycle))
08:00-09:00	A	1	230	230	0		1800	480	48		109	0.88	31
		2	186	186	0		1800	480	39		158	0.87	31
	Ax	1	321	321	0		Unrestricted	Unrestricted	0		Unrestricted	0.82	120
	B	1	258	258	0		1800	300	86		16	0.00	19
		2	149	149	0		1800	990	15		564	0.00	65
	Bx	1	499	499	0		Unrestricted	Unrestricted	0		Unrestricted	0.64	120
	C	1	85	85	0		1800	105	81		24	0.00	5
	Cx	1	41	41	0		Unrestricted	Unrestricted	0		Unrestricted	0.66	120
	D	1	392	392	0		1800	555	71		42	0.00	36
	Dx	1	439	439	0		Unrestricted	Unrestricted	0		Unrestricted	0.93	120
	9	1	407	407	0		1800	1800	23		342	0.00	120
	10	1	416	416	0		1800	1006	41		142	0.00	120

Traffic Stream Results: Stops and delays

Time Segment	Arm	Traffic Stream	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Uniform delay (Veh-hr/hr)	Random plus oversat delay (Veh-hr/hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Uniform stops (Stops per hr)	Random stops (Stops per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	A	1	12.00	30.73	1.74	0.22	27.88	43.88	94.40	6.53	1.27
		2	1.68	25.31	1.18	0.13	18.57	35.57	62.50	3.67	0.83
	Ax	1	16.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	B	1	12.00	80.69	3.49	2.30	82.12	120.60	246.64	64.51	3.90
		2	2.16	13.80	0.55	0.02	8.11	47.62	70.55	0.40	0.89
	Bx	1	16.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	C	1	12.00	115.55	1.32	1.41	38.74	141.39	82.75	37.43	1.51
	Cx	1	16.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	D	1	12.00	44.35	4.00	0.83	68.58	92.86	339.40	24.61	4.56
	Dx	1	16.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	9	1	5.19	0.29	0.00	0.03	0.47	0.00	0.00	0.00	0.00
	10	1	7.56	16.35	1.74	0.15	26.82	56.33	229.98	4.36	2.94

Traffic Stream Results: Queues and blocking

Time Segment	Arm	Traffic Stream	Initial queue (Veh)	Mean max queue (Veh)	Max queue storage (Veh)	Utilised storage (%)	Average storage excess queue (Veh)	Average limit excess queue (Veh)	Excess queue penalty (£ per hr)	Wasted time starvation (s (per cycle))	Wasted time blocking back (s (per cycle))	Wasted time total (s (per cycle))	Estimated blocking
08:00-09:00	A	1	0.00	3.37	17.39	19.35	0.00	0.00	0.00	7.00	0.00	7.00	
		2	2.00	2.12	2.00	106.15	0.05	0.00	0.00	0.00	0.00	0.00	
	Ax	1	0.00	0.00	23.56	0.00	0.00	0.00	0.00	33.00	0.00	33.00	
	B	1	0.00	10.61	17.39	61.01	0.00	6.35	0.00	0.00	0.00	0.00	
		2	4.00	2.25	4.00	56.21	0.00	0.00	0.00	0.00	0.00	0.00	
	Bx	1	0.00	0.00	24.23	0.00	0.00	0.00	0.00	24.00	0.00	24.00	
	C	1	0.00	4.20	17.39	24.12	0.00	0.00	0.00	0.00	0.00	0.00	
	Cx	1	0.00	0.00	24.29	0.00	0.00	0.00	0.00	100.00	0.00	100.00	
	D	1	0.00	12.38	17.39	71.16	0.00	0.00	0.00	0.00	0.00	0.00	
	Dx	1	0.00	0.00	23.45	0.00	0.00	0.00	0.00	38.00	0.00	38.00	
	9	1	0.00	0.03	7.52	0.44	0.00	0.00	0.00	0.00	0.00	0.00	
	10	1	0.00	8.00	10.96	73.00	0.00	0.00	0.00	0.00	54.00	54.00	

Traffic Stream Results: Journey times

Time Segment	Arm	Traffic Stream	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	JourneyTime (s)
08:00-09:00	A	1	23.00	2.73	8.42	42.73
		2	2.60	1.39	1.88	26.87
	Ax	1	43.49	1.45	30.00	16.26
	B	1	25.80	6.64	3.88	92.69
		2	2.68	0.65	4.12	15.73
	Bx	1	69.52	2.32	30.00	16.72
	C	1	8.50	3.01	2.82	127.55
	Cx	1	5.73	0.19	30.00	16.76
	D	1	39.20	6.14	6.39	56.35
	Dx	1	59.20	1.97	30.00	16.18
	9	1	17.60	0.62	28.40	5.48
	10	1	26.22	2.76	9.49	23.91

Traffic Stream Results: Advanced

Time Segment	Arm	Traffic Stream	Degree of saturation penalty (£ per hr)	Ped gap accepting penalty (£ per hr)	Warmed up	Mean Max Queue EoTS (Veh)	Mean End of Green Queue EoTS (Veh)	Mean End of Red Queue EoTS (Veh)	PCU Factor	Cost of traffic penalties (£ per hr)	Performance Index (£ per hr)
08:00-09:00	A	1	0.00	0.00	✓	3.37	0.22	3.37	1.00	0.00	29.15
		2	0.00	0.00	✓	2.12	0.12	2.12	1.00	0.00	19.40
	Ax	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	B	1	0.00	0.00	✓	10.76	2.45	9.62	1.00	0.00	86.02
		2	0.00	0.00	✓	2.25	0.01	2.25	1.00	0.00	9.00
	Bx	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	C	1	0.00	0.00	✓	4.33	1.54	4.21	1.00	0.00	40.25
	Cx	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	D	1	0.00	0.00	✓	12.38	0.84	9.88	1.00	0.00	73.14
	Dx	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	9	1	0.00	0.00	✓	0.03			1.00	0.00	0.47
	10	1	0.00	0.00	✓	8.00			1.00	0.00	29.76

Pedestrian Crossing Results

Pedestrian Crossings: Pedestrian summary

Time Segment	Crossing	Side	Degree of saturation (%)	Calculated Flow Entering (Ped/hr)	Calculated sat flow (Ped/hr)	Actual green (s (per cycle))	Mean Delay Per Ped (s)	Mean max queue (Ped)	Weighted cost of delay (£ per hr)	Performance Index (£ per hr)
08:00-09:00	(ALL)	(ALL)	27	100	11000	4	56.61	3.22	22.33	22.33

Pedestrian Crossings: Flows and signals

Time Segment	Crossing	Side	Calculated flow entering (Ped/hr)	Calculated flow out (Ped/hr)	Flow discrepancy (Ped/hr)	Adjusted flow warning	Calculated sat flow (Ped/hr)	Calculated capacity (Ped/hr)	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Mean modulus of error	Actual green (s (per cycle))
08:00-09:00	(ALL)	(ALL)	100	100	0		11000	367	27		267	0.00	4

Pedestrian Crossings: Stops and delays

Time Segment	Crossing	Side	Mean Cruise Time per Ped (s)	Mean Delay per Ped (s)	Uniform delay (Ped-hr/hr)	Random plus oversat delay (Ped-hr/hr)	Weighted cost of delay (£ per hr)
08:00-09:00	2	1	6.33	56.61	1.57	0.00	22.33
		2	6.33	56.61	1.57	0.00	22.33
	3	1	6.33	56.61	1.57	0.00	22.33
		2	6.33	56.61	1.57	0.00	22.33
	4	1	5.67	56.61	1.57	0.00	22.33
		2	5.67	56.61	1.57	0.00	22.33

Pedestrian Crossings: Queues and blocking

Time Segment	Crossing	Side	Mean max queue (Ped)	Max queue storage (Ped)	Utilised storage (%)	Average storage excess queue (Ped)	Average limit excess queue (Ped)	Excess queue penalty (£ per hr)
08:00-09:00	(ALL)	(ALL)	3.22	10.00	32.22	0.00	0.00	0.00

Pedestrian Crossings: Journey times

Time Segment	Crossing	Side	Distance travelled (Ped-km/hr)	Time spent (Ped-hr/hr)	Mean journey speed (kph)	JourneyTime (s)
08:00-09:00	2	1	0.90	1.75	0.51	62.94
		2	0.90	1.75	0.51	62.94
	3	1	0.90	1.75	0.51	62.94
		2	0.90	1.75	0.51	62.94
	4	1	0.80	1.73	0.46	62.28
		2	0.80	1.73	0.46	62.28

Pedestrian Crossings: Advanced

Time Segment	Crossing	Side	Degree of saturation penalty (£ per hr)	Ped gap accepting penalty (£ per hr)	Mean Max Queue EoTS (Ped)	Ped Factor	Cost of traffic penalties (£ per hr)	Performance Index (£ per hr)
08:00-09:00	(ALL)	(ALL)	0.00	0.00	3.22	1.00	0.00	22.33

Network Results

Run Summary

Analysis set used	Run start time	Run finish time	Run duration (s)	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (Veh-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item wi wors unsignal PRC
1	09/03/2021 12:37:35	09/03/2021 12:37:36	1.20	08:00	120	421.16	28.54	86.00	B/1	0	0	B/1	10/1

Network Results: Vehicle summary

Time Segment	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (Veh/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	86	16	3423	907	20.09	271.29	15.90	287.19

Network Results: Pedestrian summary

Time Segment	Degree of saturation (%)	Calculated Flow Entering (Ped/hr)	Actual green (s (per cycle))	Mean Delay Per Ped (s)	Weighted cost of delay (£ per hr)	Performance Index (£ per hr)
08:00-09:00	27	600	24	56.61	133.97	133.97

Network Results: Flows and signals

Time Segment	Calculated flow entering (Veh/hr)	Calculated flow out (Veh/hr)	Flow discrepancy (Veh/hr)	Adjusted flow warning	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Actual green (s (per cycle))
08:00-09:00	4023	4023	0		86		16	931

Network Results: Stops and delays

Time Segment	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Uniform delay (Veh-hr/hr)	Random plus oversat delay (Veh-hr/hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Uniform stops (Stops per hr)	Random stops (Stops per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	10.56	25.54	23.45	5.09	405.27	31.51	1126.22	141.51	15.90

Network Results: Queues and blocking

Time Segment	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time starvation (s (per cycle))	Wasted time blocking back (s (per cycle))	Wasted time total (s (per cycle))
08:00-09:00	106.15	0.00	202.00	54.00	256.00

Network Results: Journey times

Time Segment	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)
08:00-09:00	328.75	40.33	8.15

Network Results: Advanced

Time Segment	Degree of saturation penalty (£ per hr)	Ped gap accepting penalty (£ per hr)	Warmed up	PCU Factor	Cost of traffic penalties (£ per hr)	Controller stream penalties (£ per hr)	Performance Index (£ per hr)
08:00-09:00	0.00	0.00	✓	1.00	0.00	0.00	421.16

Point to Point Journey Time

Average Journey Time (s) for Local Matrix: 1

		To							
		1	2	3	4	5	6	7	8
From	1	0.0	143.7	143.8	144.3	0.0	0.0	0.0	0.0
	2	73.1	0.0	72.6	73.1	0.0	0.0	0.0	0.0
	3	83.4	67.0	0.0	83.4	0.0	0.0	0.0	0.0
	4	114.9	114.4	37.5	0.0	0.0	0.0	0.0	0.0
	5	0.0	0.0	0.0	0.0	0.0	0.0	62.9	0.0
	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	62.9
	7	0.0	0.0	0.0	0.0	62.9	0.0	0.0	62.3
	8	0.0	0.0	0.0	0.0	0.0	62.9	62.3	0.0

Path Journey Time

Path	From Location	To Location	Normal Calculated Flow (Veh/hr)	Pedestrian calculated flow (Ped/hr)	Normal journey time (s)	Pedestrian journey time (s)	Normal journey dist (m)	Bus journeydist (m)	Tram journey dist (m)	Pedestrian journey dist (m)	Calculated Total Flow (Veh/hr)	Avg journey time (s)	Avg journey dist (m)
1	1	2	18		143.74		234.86	0.00	0.00	0.00	18	143.74	234.86
2	1	3	18		143.81		235.48	0.00	0.00	0.00	18	143.81	235.48
3	1	4	49		144.27		239.32	0.00	0.00	0.00	49	144.27	239.32
5	2	3	154		72.61		235.48	0.00	0.00	0.00	154	72.61	235.48
6	2	4	229		73.07		239.32	0.00	0.00	0.00	229	73.07	239.32
7	2	1	9		73.11		239.64	0.00	0.00	0.00	9	73.11	239.64
16	4	2	235		114.36		278.10	0.00	0.00	0.00	235	114.36	278.10
17	8	7		100		62.28	8.00	8.00	8.00	8.00	100	62.28	8.00
18	8	6		100		62.94	9.00	9.00	9.00	9.00	100	62.94	9.00
22	5	7		100		62.94	9.00	9.00	9.00	9.00	100	62.94	9.00
34	6	8		100		62.94	9.00	9.00	9.00	9.00	100	62.94	9.00
41	7	8		100		62.28	8.00	8.00	8.00	8.00	100	62.28	8.00
42	7	5		100		62.94	9.00	9.00	9.00	9.00	100	62.94	9.00
49	4	1	23		114.93		282.88	0.00	0.00	0.00	23	114.93	282.88
50	4	3	149		37.47		196.72	0.00	0.00	0.00	149	37.47	196.72
51	3	2	186		66.97		211.90	0.00	0.00	0.00	186	66.97	211.90
52	3	4	221		83.37		302.36	0.00	0.00	0.00	221	83.37	302.36
53	3	1	9		83.40		302.68	0.00	0.00	0.00	9	83.40	302.68

Final Prediction Table

Traffic Stream Results

				SIGNALS		FLOWS		PERFORMANCE					PER PCU		QUEUES
Arm	Traffic Stream	Name	Traffic node	Controller stream	Phase	Calculated flow entering (Veh/hr)	Calculated sat flow (Veh/hr)	Actual green (s (per cycle))	Wasted time total (s (per cycle))	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (Veh)
A	1	(untitled)	1	1	C	230	1800	31	7.00	48	109	42.73	30.73	43.88	3.37
	2		1	1	C	186 <	1800	31	0.00	39	158	26.87	25.31	35.57	2.12 +
Ax	1	(untitled)				321	Unrestricted	120	33.00	0	Unrestricted	16.26	0.00	0.00	0.00
B	1	(untitled)	1	1	A	258	1800	19	0.00	86	16	92.89	80.69	120.60	10.61
	2		1	1	F	149	1800	65	0.00	15	564	15.73	13.80	47.62	2.25
Bx	1	(untitled)				499	Unrestricted	120	24.00	0	Unrestricted	16.72	0.00	0.00	0.00
C	1	(untitled)	1	1	D	85	1800	5	0.00	81	24	127.55	115.55	141.39	4.20
Cx	1	(untitled)				41	Unrestricted	120	100.00	0	Unrestricted	16.76	0.00	0.00	0.00
D	1	(untitled)	1	1	B	392	1800	36	0.00	71	42	56.35	44.35	92.86	12.38
Dx	1	(untitled)				439	Unrestricted	120	38.00	0	Unrestricted	16.18	0.00	0.00	0.00
9	1		1			407	1800	120	0.00	23	342	5.48	0.29	0.00	0.03
10	1		1			416	1800	120	54.00	41	142	23.91	16.35	56.33	8.00

Pedestrian Crossing Results

				SIGNALS		FLOWS		PERFORMANCE			PER PED		QUEUES	WEIGHTS	PEN
Pedestrian	Side	Name	Traffic node	Controller stream	Phase	Calculated Flow Entering (Ped/hr)	Calculated sat flow (Ped/hr)	Actual green (s (per cycle))	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Ped (s)	Mean max queue (Ped)	Delay weighting (%)	Co tra pen (£ p
2	1	(untitled)	1	1	E	100	11000	4	27	267	62.94	56.61	3.22	100	0
	2	(untitled)	1	1	E	100	11000	4	27	267	62.94	56.61	3.22	100	0
3	1	(untitled)	1	1	E	100	11000	4	27	267	62.94	56.61	3.22	100	0
	2	(untitled)	1	1	E	100	11000	4	27	267	62.94	56.61	3.22	100	0
4	1	(untitled)	1	1	E	100	11000	4	27	267	62.28	56.61	3.22	100	0
	2	(untitled)	1	1	E	100	11000	4	27	267	62.28	56.61	3.22	100	0

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Uniform delay (Veh-hr/hr)	Random plus oversat delay (Veh-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	323.55	29.87	10.83	14.02	5.09	271.29	15.90	0.00	287.19
Bus									
Tram									
Pedestrians	5.20	10.45	0.50	9.43	0.00	133.97	0.00	0.00	133.97
TOTAL	328.75	40.33	8.15	23.45	5.09	405.27	15.90	0.00	421.16

- *< = adjusted flow warning (upstream links/traffic streams are over-saturated)*
- ** = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%*
- *^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%*
- *+ = average link/traffic stream excess queue is greater than 0*
- ***P.I. = PERFORMANCE INDEX***

A2 - DO SOMETHING - 2028 (OPENING YEAR + 5 YEARS)
D2 - DO SOMETHING - 2028 (OPENING YEAR + 5 YEARS),

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Run duration (s)	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (Veh-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item wi wors unsignal PRC
2	09/03/2021 12:37:36	09/03/2021 12:37:37	1.42	08:00	120	583.75	39.52	92.67	B/1	0	0	B/1	10/1

Analysis Set Details

Name	Use Simulation	Description	Use specific Demand Set(s)	Specific Demand Set(s)	Optimise specific Demand Set(s)	Include in report	Locked
DO SOMETHING - 2028 (OPENING YEAR + 5 YEARS)			✓	D2		✓	

Demand Set Details

Scenario name	Time Period name	Description	Composite	Demand sets	Start time (HH:mm)	Locked	Run automatically
DO SOMETHING - 2028 (OPENING YEAR + 5 YEARS)					08:00		✓

Network Options

Network timings

Network cycle time (s)	Minimum possible cycle time (s)	Absolute minimum possible cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
120	117	117		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)	Missing stage transition options
10000.00	10000.00	10000.00	2	Assume banned

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from traffic model	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	100	100	✓	✓			Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Offsets And Green Splits	

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy (%)	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Standard accuracy Hill Climb	15, 40, -1, 15, 40, 1, -1, 1	50, 50, 5, 5, 0.5, 0.5, 0.05, 0.05		✓	1			Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Traffic Nodes

Traffic Nodes

Traffic node	Name	Description
1	(untitled)	

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
A	(untitled)		1
Ax	(untitled)		
B	(untitled)		1
Bx	(untitled)		
C	(untitled)		1
Cx	(untitled)		
D	(untitled)		1
Dx	(untitled)		
9			1
10			1

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Auto-calculate cell saturation flow	Cell saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
A	1	(untitled)			100.00	✓	Sum of lanes	1800	✓	1800	✓		Normal	
	2				14.00	✓	Sum of lanes	1800			✓		Normal	
Ax	1	(untitled)		✓	135.48								Normal	
B	1	(untitled)			100.00	✓	Sum of lanes	1800			✓		Normal	
	2				18.00	✓	Sum of lanes	1800			✓	✓	Normal	
Bx	1	(untitled)		✓	139.32								Normal	
C	1	(untitled)			100.00	✓	Sum of lanes	1800			✓		Normal	
Cx	1	(untitled)		✓	139.64								Normal	
D	1	(untitled)			100.00	✓	Sum of lanes	1800			✓		Normal	
Dx	1	(untitled)		✓	134.86								Normal	
9	1			✓	43.24	✓	Sum of lanes	1800					Normal	
10	1			✓	63.04	✓	Sum of lanes	1800					Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Saturation flow (PCU/hr)
A	1	1	(untitled)			1800
	2	1	(untitled)			1800
Ax	1	1	(untitled)			
B	1	1	(untitled)			1800
	2	1	(untitled)			1800
Bx	1	1	(untitled)			
C	1	1	(untitled)			1800
Cx	1	1	(untitled)			
D	1	1	(untitled)			1800
Dx	1	1	(untitled)			
9	1	1	(untitled)			1800
10	1	1	(untitled)			1800

Modelling

Arm	Traffic Stream	Traffic model	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Queue limit (PCU)	Excess queue penalty (£)	Has degree of saturation limit
A	1	CTM	100	100	100		0.00				
	2	Flare	100	100	100		2.00				
Ax	1	NetworkDefault	100	100	100		0.00				
B	1	PDM	100	100	100		0.00	✓	0.00	0.00	
	2	Flare	100	100	100		4.00				
Bx	1	NetworkDefault	100	100	100		0.00				
C	1	PDM	100	100	100		0.00				
Cx	1	NetworkDefault	100	100	100		0.00				
D	1	PDM	100	100	100		0.00				
Dx	1	NetworkDefault	100	100	100		0.00				
9	1	NetworkDefault	100	100	100		0.00				
10	1	NetworkDefault	100	100	100		0.00				

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
A	1	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	120
	2	2.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	120
Ax	1	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	120
B	1	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	120
	2	4.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	120
Bx	1	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	120
C	1	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	120
Cx	1	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	120
D	1	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	120
Dx	1	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	120
9	1	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	120
10	1	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	120

Normal traffic - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	(ALL)	100	100

Normal traffic - Advanced

Arm	Traffic Stream	Dispersion type for Normal Traffic
(ALL)	(ALL)	NetworkDefault

Flows

Arm	Traffic Stream	Total Flow (Veh/hr)	Normal Flow (Veh/hr)
A	1	290	290
	2	231	231
Ax	1	388	388
B	1	278	278
	2	189	189
Bx	1	654	654
C	1	85	85
Cx	1	41	41
D	1	514	514
Dx	1	504	504
9	1	467	467
10	1	521	521

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
A	1	1	C	
	2	1	C	
B	1	1	A	
	2	1	F	
C	1	1	D	
D	1	1	B	

Entry Sources

Arm	Traffic Stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)
C	1	12.00	30.00
D	1	12.00	30.00
9	1	5.19	30.00
10	1	7.56	30.00

Sources

Arm	Traffic Stream	Source	Source traffic stream	Destination traffic stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)	Auto turning radius	Traffic turn style	Turning radius (m)
A	1	1	10/1	A/1	12.00	30.00	✓	Straight	Straight Movement
	2	1	10/1	A/2	1.68	30.00	✓	Straight	Straight Movement
Ax	1	1	C/1	Ax/1	16.26	30.00	✓	Straight	Straight Movement
B	1	1	9/1	B/1	12.00	30.00	✓	Straight	Straight Movement
	2	1	9/1	B/2	2.16	30.00	✓	Straight	Straight Movement
Bx	1	1	A/1	Bx/1	16.72	30.00	✓	Nearside	38.14
Cx	1	1	A/1	Cx/1	16.76	30.00	✓	Straight	Straight Movement
Dx	1	1	C/1	Dx/1	16.18	30.00	✓	Nearside	40.00
Ax	1	2	D/1	Ax/1	16.26	30.00	✓	Nearside	40.00
Bx	1	2	D/1	Bx/1	16.72	30.00	✓	Straight	Straight Movement
Cx	1	2	B/1	Cx/1	16.76	30.00	✓	Nearside	45.31
Dx	1	2	B/1	Dx/1	16.18	30.00	✓	Straight	Straight Movement
Ax	1	3	B/2	Ax/1	16.26	30.00	✓	Offside	46.69
Bx	1	3	C/1	Bx/1	16.72	30.00	✓	Offside	60.00
Cx	1	3	D/1	Cx/1	16.76	30.00	✓	Offside	55.00
Dx	1	3	A/2	Dx/1	16.18	30.00	✓	Offside	47.67

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Visibility restricted
B	2	AllTraffic		

Give Way Data - All Movements - Conflicts

Traffic Stream	Description	Controlling type	Controlling traffic stream	Percentage opposing (%)	Slope coefficient	Upstream signals visible
2		TrafficStream	A/2	100	0.00	

Pedestrian Crossings

Pedestrian Crossings

Crossing	Name	Description	Traffic node	Allow walk on red	Crossing type	Length (m)	Cruise time (seconds)	Cruise speed (kph)
2	(untitled)		1		Farside	8.00	5.33	5.40
3	(untitled)		1		Farside	8.00	5.33	5.40
4	(untitled)		1		Farside	7.00	4.67	5.40

Pedestrian Crossings - Signals

Crossing	Controller stream	Phase	Second phase enabled
(ALL)	1	E	

Pedestrian Crossings - Sides

Crossing	Side	Saturation flow (Ped/hr)
(ALL)	(ALL)	11000

Pedestrian Crossings - Modelling

Crossing	Side	Delay weighting (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (Ped)	Has queue limit	Has degree of saturation limit
(ALL)	(ALL)	100	100		0.00		

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit	Limit paths by flow	Low path flow threshold
1	(untitled)	✓	✓	Path Equalisation	✓		✓			✓	1.25				

Normal Input Flows (Veh/hr)

		To							
		1	2	3	4	5	6	7	8
From	1	0	18	18	49	0	0	0	0
	2	9	0	181	324	0	0	0	0
	3	9	231	0	281	0	0	0	0
	4	23	255	189	0	0	0	0	0
	5	0	0	0	0	0	0	0	0
	6	0	0	0	0	0	0	0	0
	7	0	0	0	0	0	0	0	0
	8	0	0	0	0	0	0	0	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows (Veh/hr)

		To							
		1	2	3	4	5	6	7	8
From	1	0	0	0	0	0	0	0	0
	2	0	0	0	0	0	0	0	0
	3	0	0	0	0	0	0	0	0
	4	0	0	0	0	0	0	0	0
	5	0	0	0	0	0	0	100	0
	6	0	0	0	0	0	0	0	100
	7	0	0	0	0	100	0	0	100
	8	0	0	0	0	0	100	100	0

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1	(untitled)	C/1	Cx/1	#0000FF
	2	(untitled)	D/1	Dx/1	#FF0000
	3	(untitled)	10/1	Ax/1	#00FF00
	4	(untitled)	9/1	Bx/1	#FFFF00
	5	(untitled)	3:2E	3:2X	#FF00FF
	6	(untitled)	2:1E	2:1X	#008000
	7	(untitled)	4:2E, 3:1E	4:2X, 3:1X	#FFA500
	8	(untitled)	4:1E, 2:2E	4:1X, 2:2X	#00FFFF

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (Veh/hr)
1	1		1	2	C/1, Dx/1	Normal	18
	2		1	3	C/1, Ax/1	Normal	18
	3		1	4	C/1, Bx/1	Normal	49
	5		2	3	D/1, Ax/1	Normal	181
	6		2	4	D/1, Bx/1	Normal	324
	7		2	1	D/1, Cx/1	Normal	9
	16		4	2	9/1, B/1, Dx/1	Normal	255
	49		4	1	9/1, B/1, Cx/1	Normal	23
	50		4	3	9/1, B/2, Ax/1	Normal	189
	51		3	2	10/1, A/2, Dx/1	Normal	231
	52		3	4	10/1, A/1, Bx/1	Normal	281
	53		3	1	10/1, A/1, Cx/1	Normal	9

Pedestrian Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Pedestrian calculated flow (Ped/hr)
1	17		8	7	4:1E, 4:2X	Normal	100
	18		8	6	2:2E, 2:1X	Normal	100
	22		5	7	3:2E, 3:1X	Normal	100
	34		6	8	2:1E, 2:2X	Normal	100
	41		7	8	4:2E, 4:1X	Normal	100
	42		7	5	3:1E, 3:2X	Normal	100

Traffic Stream Results

Traffic Stream Results: Vehicle summary

Time Segment	Arm	Traffic Stream	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (Veh/hr)	Calculated sat flow (Veh/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Mean max queue (Veh)	Utilised storage (%)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	A	1	60	66	290	1800	31	42.62	5.11	29.41	48.75	1.92	50.67
		2	48	108	231	1800	31	22.94	2.22	111.23	20.90	0.87	21.77
	Ax	1	0	Unrestricted	388	Unrestricted	120	0.00	0.00	0.00	0.00	0.00	0.00
	B	1	93	8	278	1800	19	101.57	13.15	75.61	111.37	4.75	116.12
		2	19	424	189	1800	65	14.20	2.86	71.44	10.59	1.17	11.75
	Bx	1	0	Unrestricted	654	Unrestricted	120	0.00	0.00	0.00	0.00	0.00	0.00
	C	1	81	24	85	1800	5	115.55	4.20	24.12	38.74	1.51	40.25
	Cx	1	0	Unrestricted	41	Unrestricted	120	0.00	0.00	0.00	0.00	0.00	0.00
	D	1	93	8	514	1800	36	72.24	21.14	121.56	146.47	7.72	154.19
	Dx	1	0	Unrestricted	504	Unrestricted	120	0.00	0.00	0.00	0.00	0.00	0.00
	9	1	26	285	467	1800	120	0.35	0.05	0.60	0.65	0.00	0.65
	10	1	59	70	521	1800	120	24.19	12.72	115.98	49.72	4.65	54.37

Traffic Stream Results: Flows and signals

Time Segment	Arm	Traffic Stream	Calculated flow entering (Veh/hr)	Calculated flow out (Veh/hr)	Flow discrepancy (Veh/hr)	Adjusted flow warning	Calculated sat flow (Veh/hr)	Calculated capacity (Veh/hr)	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Mean modulus of error	Actual green (s (per cycle))
08:00-09:00	A	1	290	290	0		1800	480	60		66	1.01	31
		2	231	231	0		1800	480	48		108	1.00	31
	Ax	1	388	388	0		Unrestricted	Unrestricted	0		Unrestricted	0.79	120
	B	1	278	278	0		1800	300	93		8	0.00	19
		2	189	189	0		1800	990	19		424	0.00	65
	Bx	1	654	654	0		Unrestricted	Unrestricted	0		Unrestricted	0.58	120
	C	1	85	85	0		1800	105	81		24	0.00	5
	Cx	1	41	41	0		Unrestricted	Unrestricted	0		Unrestricted	0.64	120
	D	1	514	514	0		1800	555	93		8	0.00	36
	Dx	1	504	504	0		Unrestricted	Unrestricted	0		Unrestricted	0.85	120
	9	1	467	467	0		1800	1800	26		285	0.00	120
	10	1	521	521	0		1800	888	59		70	0.00	120

Traffic Stream Results: Stops and delays

Time Segment	Arm	Traffic Stream	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Uniform delay (Veh-hr/hr)	Random plus oversat delay (Veh-hr/hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Uniform stops (Stops per hr)	Random stops (Stops per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	A	1	12.00	42.62	2.98	0.46	48.75	52.86	139.76	13.52	1.92
		2	1.68	22.94	1.24	0.23	20.90	29.94	62.48	6.69	0.87
	Ax	1	16.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	B	1	12.00	101.57	3.81	4.04	111.37	136.17	269.71	108.84	4.75
		2	2.16	14.20	0.71	0.03	10.59	49.20	92.32	0.68	1.17
	Bx	1	16.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	C	1	12.00	115.55	1.32	1.41	38.74	141.39	82.75	37.43	1.51
	Cx	1	16.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	D	1	12.00	72.24	5.74	4.58	146.47	119.84	487.44	128.56	7.72
	Dx	1	16.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	9	1	5.19	0.35	0.00	0.05	0.65	0.00	0.00	0.00	0.00
	10	1	7.56	24.19	3.09	0.41	49.72	71.18	358.51	12.35	4.65

Traffic Stream Results: Queues and blocking

Time Segment	Arm	Traffic Stream	Initial queue (Veh)	Mean max queue (Veh)	Max queue storage (Veh)	Utilised storage (%)	Average storage excess queue (Veh)	Average limit excess queue (Veh)	Excess queue penalty (£ per hr)	Wasted time starvation (s (per cycle))	Wasted time blocking back (s (per cycle))	Wasted time total (s (per cycle))	Estimated blocking
08:00-09:00	A	1	0.00	5.11	17.39	29.41	0.00	0.00	0.00	4.00	0.00	4.00	
		2	2.00	2.22	2.00	111.23	0.11	0.00	0.00	0.00	0.00	0.00	
	Ax	1	0.00	0.00	23.56	0.00	0.00	0.00	0.00	30.00	0.00	30.00	
	B	1	0.00	13.15	17.39	75.61	0.00	8.56	0.00	0.00	0.00	0.00	
		2	4.00	2.86	4.00	71.44	0.00	0.00	0.00	0.00	0.00	0.00	
	Bx	1	0.00	0.00	24.23	0.00	0.00	0.00	0.00	24.00	0.00	24.00	
	C	1	0.00	4.20	17.39	24.12	0.00	0.00	0.00	0.00	0.00	0.00	
	Cx	1	0.00	0.00	24.29	0.00	0.00	0.00	0.00	99.00	0.00	99.00	
	D	1	0.00	21.14	17.39	121.56	0.43	0.00	0.00	0.00	0.00	0.00	
	Dx	1	0.00	0.00	23.45	0.00	0.00	0.00	0.00	35.00	0.00	35.00	
	9	1	0.00	0.05	7.52	0.60	0.00	0.00	0.00	0.00	0.00	0.00	
	10	1	0.00	12.72	10.96	115.98	0.10	0.00	0.00	0.00	63.00	63.00	

Traffic Stream Results: Journey times

Time Segment	Arm	Traffic Stream	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	JourneyTime (s)
08:00-09:00	A	1	29.00	4.40	6.59	54.62
		2	3.23	1.57	2.06	24.53
	Ax	1	52.57	1.75	30.00	16.26
	B	1	27.80	8.77	3.17	113.57
		2	3.40	0.85	4.01	16.17
	Bx	1	91.12	3.04	30.00	16.72
	C	1	8.50	3.01	2.82	127.55
	Cx	1	5.73	0.19	30.00	16.76
	D	1	51.40	12.03	4.27	84.24
	Dx	1	67.97	2.27	30.00	16.18
	9	1	20.19	0.72	28.10	5.54
	10	1	32.84	4.60	7.15	31.76

Traffic Stream Results: Advanced

Time Segment	Arm	Traffic Stream	Degree of saturation penalty (£ per hr)	Ped gap accepting penalty (£ per hr)	Warmed up	Mean Max Queue EoTS (Veh)	Mean End of Green Queue EoTS (Veh)	Mean End of Red Queue EoTS (Veh)	PCU Factor	Cost of traffic penalties (£ per hr)	Performance Index (£ per hr)
08:00-09:00	A	1	0.00	0.00	✓	5.12	0.46	5.12	1.00	0.00	50.67
		2	0.00	0.00	✓	2.22	0.22	2.22	1.00	0.00	21.77
	Ax	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	B	1	0.00	0.00	✓	13.78	4.67	12.39	1.00	0.00	116.12
		2	0.00	0.00	✓	2.86	0.02	2.86	1.00	0.00	11.75
	Bx	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	C	1	0.00	0.00	✓	4.33	1.54	4.21	1.00	0.00	40.25
	Cx	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	D	1	0.00	0.00	✓	21.63	5.07	16.92	1.00	0.00	154.19
	Dx	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	9	1	0.00	0.00	✓	0.05			1.00	0.00	0.65
	10	1	0.00	0.00	✓	12.72			1.00	0.00	54.37

Pedestrian Crossing Results

Pedestrian Crossings: Pedestrian summary

Time Segment	Crossing	Side	Degree of saturation (%)	Calculated Flow Entering (Ped/hr)	Calculated sat flow (Ped/hr)	Actual green (s (per cycle))	Mean Delay Per Ped (s)	Mean max queue (Ped)	Weighted cost of delay (£ per hr)	Performance Index (£ per hr)
08:00-09:00	(ALL)	(ALL)	27	100	11000	4	56.61	3.22	22.33	22.33

Pedestrian Crossings: Flows and signals

Time Segment	Crossing	Side	Calculated flow entering (Ped/hr)	Calculated flow out (Ped/hr)	Flow discrepancy (Ped/hr)	Adjusted flow warning	Calculated sat flow (Ped/hr)	Calculated capacity (Ped/hr)	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Mean modulus of error	Actual green (s (per cycle))
08:00-09:00	(ALL)	(ALL)	100	100	0		11000	367	27		267	0.00	4

Pedestrian Crossings: Stops and delays

Time Segment	Crossing	Side	Mean Cruise Time per Ped (s)	Mean Delay per Ped (s)	Uniform delay (Ped-hr/hr)	Random plus oversat delay (Ped-hr/hr)	Weighted cost of delay (£ per hr)
08:00-09:00	2	1	6.33	56.61	1.57	0.00	22.33
		2	6.33	56.61	1.57	0.00	22.33
	3	1	6.33	56.61	1.57	0.00	22.33
		2	6.33	56.61	1.57	0.00	22.33
	4	1	5.67	56.61	1.57	0.00	22.33
		2	5.67	56.61	1.57	0.00	22.33

Pedestrian Crossings: Queues and blocking

Time Segment	Crossing	Side	Mean max queue (Ped)	Max queue storage (Ped)	Utilised storage (%)	Average storage excess queue (Ped)	Average limit excess queue (Ped)	Excess queue penalty (£ per hr)
08:00-09:00	(ALL)	(ALL)	3.22	10.00	32.22	0.00	0.00	0.00

Pedestrian Crossings: Journey times

Time Segment	Crossing	Side	Distance travelled (Ped-km/hr)	Time spent (Ped-hr/hr)	Mean journey speed (kph)	JourneyTime (s)
08:00-09:00	2	1	0.90	1.75	0.51	62.94
		2	0.90	1.75	0.51	62.94
	3	1	0.90	1.75	0.51	62.94
		2	0.90	1.75	0.51	62.94
	4	1	0.80	1.73	0.46	62.28
		2	0.80	1.73	0.46	62.28

Pedestrian Crossings: Advanced

Time Segment	Crossing	Side	Degree of saturation penalty (£ per hr)	Ped gap accepting penalty (£ per hr)	Mean Max Queue EoTS (Ped)	Ped Factor	Cost of traffic penalties (£ per hr)	Performance Index (£ per hr)
08:00-09:00	(ALL)	(ALL)	0.00	0.00	3.22	1.00	0.00	22.33

Network Results

Run Summary

Analysis set used	Run start time	Run finish time	Run duration (s)	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (Veh-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item wi wors unsignal PRC
2	09/03/2021 12:37:36	09/03/2021 12:37:37	1.42	08:00	120	583.75	39.52	92.67	B/1	0	0	B/1	10/1

Network Results: Vehicle summary

Time Segment	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (Veh/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	93	8	4162	907	26.02	427.19	22.58	449.77

Network Results: Pedestrian summary

Time Segment	Degree of saturation (%)	Calculated Flow Entering (Ped/hr)	Actual green (s (per cycle))	Mean Delay Per Ped (s)	Weighted cost of delay (£ per hr)	Performance Index (£ per hr)
08:00-09:00	27	600	24	56.61	133.97	133.97

Network Results: Flows and signals

Time Segment	Calculated flow entering (Veh/hr)	Calculated flow out (Veh/hr)	Flow discrepancy (Veh/hr)	Adjusted flow warning	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Actual green (s (per cycle))
08:00-09:00	4762	4762	0		93		8	931

Network Results: Stops and delays

Time Segment	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Uniform delay (Veh-hr/hr)	Random plus oversat delay (Veh-hr/hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Uniform stops (Stops per hr)	Random stops (Stops per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	10.69	29.88	28.31	11.20	561.16	37.82	1492.96	308.07	22.58

Network Results: Queues and blocking

Time Segment	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time starvation (s (per cycle))	Wasted time blocking back (s (per cycle))	Wasted time total (s (per cycle))
08:00-09:00	121.56	0.00	192.00	63.00	255.00

Network Results: Journey times

Time Segment	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)
08:00-09:00	398.95	53.65	7.44

Network Results: Advanced

Time Segment	Degree of saturation penalty (£ per hr)	Ped gap accepting penalty (£ per hr)	Warmed up	PCU Factor	Cost of traffic penalties (£ per hr)	Controller stream penalties (£ per hr)	Performance Index (£ per hr)
08:00-09:00	0.00	0.00	✓	1.00	0.00	0.00	583.75

Point to Point Journey Time

Average Journey Time (s) for Local Matrix: 1

		To							
		1	2	3	4	5	6	7	8
From	1	0.0	143.7	143.8	144.3	0.0	0.0	0.0	0.0
	2	101.0	0.0	100.5	101.0	0.0	0.0	0.0	0.0
	3	103.1	72.5	0.0	103.1	0.0	0.0	0.0	0.0
	4	135.9	135.3	38.0	0.0	0.0	0.0	0.0	0.0
	5	0.0	0.0	0.0	0.0	0.0	0.0	62.9	0.0
	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	62.9
	7	0.0	0.0	0.0	0.0	62.9	0.0	0.0	62.3
	8	0.0	0.0	0.0	0.0	0.0	62.9	62.3	0.0

Path Journey Time

Path	From Location	To Location	Normal Calculated Flow (Veh/hr)	Pedestrian calculated flow (Ped/hr)	Normal journey time (s)	Pedestrian journey time (s)	Normal journey dist (m)	Bus journeydist (m)	Tram journey dist (m)	Pedestrian journey dist (m)	Calculated Total Flow (Veh/hr)	Avg journey time (s)	Avg journey dist (m)
1	1	2	18		143.74		234.86	0.00	0.00	0.00	18	143.74	234.86
2	1	3	18		143.81		235.48	0.00	0.00	0.00	18	143.81	235.48
3	1	4	49		144.27		239.32	0.00	0.00	0.00	49	144.27	239.32
5	2	3	181		100.50		235.48	0.00	0.00	0.00	181	100.50	235.48
6	2	4	324		100.96		239.32	0.00	0.00	0.00	324	100.96	239.32
7	2	1	9		101.00		239.64	0.00	0.00	0.00	9	101.00	239.64
16	4	2	255		135.29		278.10	0.00	0.00	0.00	255	135.29	278.10
17	8	7		100		62.28	8.00	8.00	8.00	8.00	100	62.28	8.00
18	8	6		100		62.94	9.00	9.00	9.00	9.00	100	62.94	9.00
22	5	7		100		62.94	9.00	9.00	9.00	9.00	100	62.94	9.00
34	6	8		100		62.94	9.00	9.00	9.00	9.00	100	62.94	9.00
41	7	8		100		62.28	8.00	8.00	8.00	8.00	100	62.28	8.00
42	7	5		100		62.94	9.00	9.00	9.00	9.00	100	62.94	9.00
49	4	1	23		135.86		282.88	0.00	0.00	0.00	23	135.86	282.88
50	4	3	189		37.97		196.72	0.00	0.00	0.00	189	37.97	196.72
51	3	2	231		72.47		211.90	0.00	0.00	0.00	231	72.47	211.90
52	3	4	281		103.10		302.36	0.00	0.00	0.00	281	103.10	302.36
53	3	1	9		103.13		302.68	0.00	0.00	0.00	9	103.13	302.68

Final Prediction Table

Traffic Stream Results

		SIGNALS				FLOWS		PERFORMANCE				PER PCU		QUEUES
Arm	Traffic Stream	Name	Traffic node	Controller stream	Phase	Calculated flow entering (Veh/hr)	Calculated sat flow (Veh/hr)	Actual green (s (per cycle))	Wasted time total (s (per cycle))	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (Veh)
A	1	(untitled)	1	1	C	290	1800	31	4.00	60	66	54.62	42.62	52.86	5.11
	2		1	1	C	231 <	1800	31	0.00	48	108	24.53	22.94	29.94	2.22 +
Ax	1	(untitled)				388	Unrestricted	120	30.00	0	Unrestricted	16.26	0.00	0.00	0.00
B	1	(untitled)	1	1	A	278	1800	19	0.00	93	8	113.57	101.57	136.17	13.15
	2		1	1	F	189	1800	65	0.00	19	424	16.17	14.20	49.20	2.86
Bx	1	(untitled)				654	Unrestricted	120	24.00	0	Unrestricted	16.72	0.00	0.00	0.00
C	1	(untitled)	1	1	D	85	1800	5	0.00	81	24	127.55	115.55	141.39	4.20
Cx	1	(untitled)				41	Unrestricted	120	99.00	0	Unrestricted	16.76	0.00	0.00	0.00
D	1	(untitled)	1	1	B	514 <	1800	36	0.00	93	8	84.24	72.24	119.84	21.14 +
Dx	1	(untitled)				504	Unrestricted	120	35.00	0	Unrestricted	16.18	0.00	0.00	0.00
9	1		1			467	1800	120	0.00	26	285	5.54	0.35	0.00	0.05
10	1		1			521 <	1800	120	63.00	59	70	31.76	24.19	71.18	12.72 +

Pedestrian Crossing Results

		SIGNALS				FLOWS		PERFORMANCE			PER PED		QUEUES	WEIGHTS	PEN
Pedestrian	Side	Name	Traffic node	Controller stream	Phase	Calculated Flow Entering (Ped/hr)	Calculated sat flow (Ped/hr)	Actual green (s (per cycle))	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Ped (s)	Mean max queue (Ped)	Delay weighting (%)	Co tra pen (£ p
2	1	(untitled)	1	1	E	100	11000	4	27	267	62.94	56.61	3.22	100	0
	2	(untitled)	1	1	E	100	11000	4	27	267	62.94	56.61	3.22	100	0
3	1	(untitled)	1	1	E	100	11000	4	27	267	62.94	56.61	3.22	100	0
	2	(untitled)	1	1	E	100	11000	4	27	267	62.94	56.61	3.22	100	0
4	1	(untitled)	1	1	E	100	11000	4	27	267	62.28	56.61	3.22	100	0
	2	(untitled)	1	1	E	100	11000	4	27	267	62.28	56.61	3.22	100	0

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Uniform delay (Veh-hr/hr)	Random plus oversat delay (Veh-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	393.75	43.19	9.12	18.88	11.20	427.19	22.58	0.00	449.77
Bus									
Tram									
Pedestrians	5.20	10.45	0.50	9.43	0.00	133.97	0.00	0.00	133.97
TOTAL	398.95	53.65	7.44	28.31	11.20	561.16	22.58	0.00	583.75

- *< = adjusted flow warning (upstream links/traffic streams are over-saturated)*
- ** = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%*
- *^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%*
- *+ = average link/traffic stream excess queue is greater than 0*
- ***P.I. = PERFORMANCE INDEX***

A3 - DO SOMETHING - 2038 (OPENING YEAR + 15 YEARS)
D3 - DO SOMETHING - 2038 (OPENING YEAR + 15 YEARS),

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Run duration (s)	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (Veh-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item wi wors unsignal PRC
3	09/03/2021 12:37:37	09/03/2021 12:37:38	1.57	08:00	120	744.04	50.48	98.74	D/1	0	0	D/1	10/1

Analysis Set Details

Name	Use Simulation	Description	Use specific Demand Set(s)	Specific Demand Set(s)	Optimise specific Demand Set(s)	Include in report	Locked
DO SOMETHING - 2038 (OPENING YEAR + 15 YEARS)			✓	D3		✓	

Demand Set Details

Scenario name	Time Period name	Description	Composite	Demand sets	Start time (HH:mm)	Locked	Run automatically
DO SOMETHING - 2038 (OPENING YEAR + 15 YEARS)					08:00		✓

Network Options

Network timings

Network cycle time (s)	Minimum possible cycle time (s)	Absolute minimum possible cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
120	117	117		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)	Missing stage transition options
10000.00	10000.00	10000.00	2	Assume banned

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from traffic model	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	100	100	✓	✓			Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Offsets And Green Splits	

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy (%)	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Standard accuracy Hill Climb	15, 40, -1, 15, 40, 1, -1, 1	50, 50, 5, 5, 0.5, 0.5, 0.05, 0.05		✓	1			Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Traffic Nodes

Traffic Nodes

Traffic node	Name	Description
1	(untitled)	

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
A	(untitled)		1
Ax	(untitled)		
B	(untitled)		1
Bx	(untitled)		
C	(untitled)		1
Cx	(untitled)		
D	(untitled)		1
Dx	(untitled)		
9			1
10			1

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Auto-calculate cell saturation flow	Cell saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
A	1	(untitled)			100.00	✓	Sum of lanes	1800	✓	1800	✓		Normal	
	2				14.00	✓	Sum of lanes	1800			✓		Normal	
Ax	1	(untitled)		✓	135.48								Normal	
B	1	(untitled)			100.00	✓	Sum of lanes	1800			✓		Normal	
	2				18.00	✓	Sum of lanes	1800			✓	✓	Normal	
Bx	1	(untitled)		✓	139.32								Normal	
C	1	(untitled)			100.00	✓	Sum of lanes	1800			✓		Normal	
Cx	1	(untitled)		✓	139.64								Normal	
D	1	(untitled)			100.00	✓	Sum of lanes	1800			✓		Normal	
Dx	1	(untitled)		✓	134.86								Normal	
9	1			✓	43.24	✓	Sum of lanes	1800					Normal	
10	1			✓	63.04	✓	Sum of lanes	1800					Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Saturation flow (PCU/hr)
A	1	1	(untitled)			1800
	2	1	(untitled)			1800
Ax	1	1	(untitled)			
B	1	1	(untitled)			1800
	2	1	(untitled)			1800
Bx	1	1	(untitled)			
C	1	1	(untitled)			1800
Cx	1	1	(untitled)			
D	1	1	(untitled)			1800
Dx	1	1	(untitled)			
9	1	1	(untitled)			1800
10	1	1	(untitled)			1800

Modelling

Arm	Traffic Stream	Traffic model	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Queue limit (PCU)	Excess queue penalty (£)	Has degree of saturation limit
A	1	CTM	100	100	100		0.00				
	2	Flare	100	100	100		2.00				
Ax	1	NetworkDefault	100	100	100		0.00				
B	1	PDM	100	100	100		0.00	✓	0.00	0.00	
	2	Flare	100	100	100		4.00				
Bx	1	NetworkDefault	100	100	100		0.00				
C	1	PDM	100	100	100		0.00				
Cx	1	NetworkDefault	100	100	100		0.00				
D	1	PDM	100	100	100		0.00				
Dx	1	NetworkDefault	100	100	100		0.00				
9	1	NetworkDefault	100	100	100		0.00				
10	1	NetworkDefault	100	100	100		0.00				

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
A	1	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	120
	2	2.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	120
Ax	1	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	120
B	1	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	120
	2	4.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	120
Bx	1	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	120
C	1	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	120
Cx	1	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	120
D	1	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	120
Dx	1	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	120
9	1	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	120
10	1	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	120

Normal traffic - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	(ALL)	100	100

Normal traffic - Advanced

Arm	Traffic Stream	Dispersion type for Normal Traffic
(ALL)	(ALL)	NetworkDefault

Flows

Arm	Traffic Stream	Total Flow (Veh/hr)	Normal Flow (Veh/hr)
A	1	321	321
	2	244	244
Ax	1	409	409
B	1	296	296
	2	199	199
Bx	1	708	708
C	1	85	85
Cx	1	41	41
D	1	548	548
Dx	1	535	535
9	1	495	495
10	1	565	565

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
A	1	1	C	
	2	1	C	
B	1	1	A	
	2	1	F	
C	1	1	D	
D	1	1	B	

Entry Sources

Arm	Traffic Stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)
C	1	12.00	30.00
D	1	12.00	30.00
9	1	5.19	30.00
10	1	7.56	30.00

Sources

Arm	Traffic Stream	Source	Source traffic stream	Destination traffic stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)	Auto turning radius	Traffic turn style	Turning radius (m)
A	1	1	10/1	A/1	12.00	30.00	✓	Straight	Straight Movement
	2	1	10/1	A/2	1.68	30.00	✓	Straight	Straight Movement
Ax	1	1	C/1	Ax/1	16.26	30.00	✓	Straight	Straight Movement
B	1	1	9/1	B/1	12.00	30.00	✓	Straight	Straight Movement
	2	1	9/1	B/2	2.16	30.00	✓	Straight	Straight Movement
Bx	1	1	A/1	Bx/1	16.72	30.00	✓	Nearside	38.14
Cx	1	1	A/1	Cx/1	16.76	30.00	✓	Straight	Straight Movement
Dx	1	1	C/1	Dx/1	16.18	30.00	✓	Nearside	40.00
Ax	1	2	D/1	Ax/1	16.26	30.00	✓	Nearside	40.00
Bx	1	2	D/1	Bx/1	16.72	30.00	✓	Straight	Straight Movement
Cx	1	2	B/1	Cx/1	16.76	30.00	✓	Nearside	45.31
Dx	1	2	B/1	Dx/1	16.18	30.00	✓	Straight	Straight Movement
Ax	1	3	B/2	Ax/1	16.26	30.00	✓	Offside	46.69
Bx	1	3	C/1	Bx/1	16.72	30.00	✓	Offside	60.00
Cx	1	3	D/1	Cx/1	16.76	30.00	✓	Offside	55.00
Dx	1	3	A/2	Dx/1	16.18	30.00	✓	Offside	47.67

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Visibility restricted
B	2	AllTraffic		

Give Way Data - All Movements - Conflicts

Traffic Stream	Description	Controlling type	Controlling traffic stream	Percentage opposing (%)	Slope coefficient	Upstream signals visible
2		TrafficStream	A/2	100	0.00	

Pedestrian Crossings

Pedestrian Crossings

Crossing	Name	Description	Traffic node	Allow walk on red	Crossing type	Length (m)	Cruise time (seconds)	Cruise speed (kph)
2	(untitled)		1		Farside	8.00	5.33	5.40
3	(untitled)		1		Farside	8.00	5.33	5.40
4	(untitled)		1		Farside	7.00	4.67	5.40

Pedestrian Crossings - Signals

Crossing	Controller stream	Phase	Second phase enabled
(ALL)	1	E	

Pedestrian Crossings - Sides

Crossing	Side	Saturation flow (Ped/hr)
(ALL)	(ALL)	11000

Pedestrian Crossings - Modelling

Crossing	Side	Delay weighting (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (Ped)	Has queue limit	Has degree of saturation limit
(ALL)	(ALL)	100	100		0.00		

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit	Limit paths by flow	Low path flow threshold
1	(untitled)	✓	✓	Path Equalisation	✓		✓			✓	1.25				

Normal Input Flows (Veh/hr)

From \ To	1	2	3	4	5	6	7	8
1	0	18	18	49	0	0	0	0
2	9	0	192	347	0	0	0	0
3	9	244	0	312	0	0	0	0
4	23	273	199	0	0	0	0	0
5	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows (Veh/hr)

From \ To	1	2	3	4	5	6	7	8
1	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	100	0
6	0	0	0	0	0	0	0	100
7	0	0	0	0	100	0	0	100
8	0	0	0	0	0	100	100	0

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1	(untitled)	C/1	Cx/1	#0000FF
	2	(untitled)	D/1	Dx/1	#FF0000
	3	(untitled)	10/1	Ax/1	#00FF00
	4	(untitled)	9/1	Bx/1	#FFFF00
	5	(untitled)	3:2E	3:2X	#FF00FF
	6	(untitled)	2:1E	2:1X	#008000
	7	(untitled)	4:2E, 3:1E	4:2X, 3:1X	#FFA500
	8	(untitled)	4:1E, 2:2E	4:1X, 2:2X	#00FFFF

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (Veh/hr)
1	1		1	2	C/1, Dx/1	Normal	18
	2		1	3	C/1, Ax/1	Normal	18
	3		1	4	C/1, Bx/1	Normal	49
	5		2	3	D/1, Ax/1	Normal	192
	6		2	4	D/1, Bx/1	Normal	347
	7		2	1	D/1, Cx/1	Normal	9
	16		4	2	9/1, B/1, Dx/1	Normal	273
	49		4	1	9/1, B/1, Cx/1	Normal	23
	50		4	3	9/1, B/2, Ax/1	Normal	199
	51		3	2	10/1, A/2, Dx/1	Normal	244
	52		3	4	10/1, A/1, Bx/1	Normal	312
	53		3	1	10/1, A/1, Cx/1	Normal	9

Pedestrian Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Pedestrian calculated flow (Ped/hr)
1	17		8	7	4:1E, 4:2X	Normal	100
	18		8	6	2:2E, 2:1X	Normal	100
	22		5	7	3:2E, 3:1X	Normal	100
	34		6	8	2:1E, 2:2X	Normal	100
	41		7	8	4:2E, 4:1X	Normal	100
	42		7	5	3:1E, 3:2X	Normal	100

Traffic Stream Results

Traffic Stream Results: Vehicle summary

Time Segment	Arm	Traffic Stream	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (Veh/hr)	Calculated sat flow (Veh/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Mean max queue (Veh)	Utilised storage (%)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	A	1	67	50	321	1800	31	48.86	6.25	35.94	61.86	2.35	64.21
		2	51	97	244	1800	31	22.71	2.26	113.23	21.86	0.88	22.74
	Ax	1	0	Unrestricted	409	Unrestricted	120	0.00	0.00	0.00	0.00	0.00	0.00
	B	1	99	1	296	1800	19	137.33	16.98	97.61	160.34	5.91	166.24
		2	20	397	199	1800	65	14.31	3.01	75.26	11.23	1.23	12.46
	Bx	1	0	Unrestricted	708	Unrestricted	120	0.00	0.00	0.00	0.00	0.00	0.00
	C	1	81	24	85	1800	5	115.55	4.20	24.12	38.74	1.51	40.25
	Cx	1	0	Unrestricted	41	Unrestricted	120	0.00	0.00	0.00	0.00	0.00	0.00
	D	1	99	1	548	1800	36	104.39	27.72	159.41	225.65	9.88	235.52
	Dx	1	0	Unrestricted	535	Unrestricted	120	0.00	0.00	0.00	0.00	0.00	0.00
	9	1	28	264	495	1800	120	0.38	0.05	0.69	0.74	0.00	0.74
	10	1	66	51	565	1800	120	28.00	14.92	136.06	62.41	5.50	67.90

Traffic Stream Results: Flows and signals

Time Segment	Arm	Traffic Stream	Calculated flow entering (Veh/hr)	Calculated flow out (Veh/hr)	Flow discrepancy (Veh/hr)	Adjusted flow warning	Calculated sat flow (Veh/hr)	Calculated capacity (Veh/hr)	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Mean modulus of error	Actual green (s (per cycle))
08:00-09:00	A	1	321	321	0		1800	480	67		50	1.05	31
		2	244	244	0		1800	480	51		97	1.04	31
	Ax	1	409	409	0		Unrestricted	Unrestricted	0		Unrestricted	0.78	120
	B	1	296	296	0		1800	300	99		1	0.00	19
		2	199	199	0		1800	990	20		397	0.00	65
	Bx	1	708	708	0		Unrestricted	Unrestricted	0		Unrestricted	0.58	120
	C	1	85	85	0		1800	105	81		24	0.00	5
	Cx	1	41	41	0		Unrestricted	Unrestricted	0		Unrestricted	0.63	120
	D	1	548	548	0		1800	555	99		1	0.00	36
	Dx	1	535	535	0		Unrestricted	Unrestricted	0		Unrestricted	0.81	120
	9	1	495	495	0		1800	1800	28		264	0.00	120
	10	1	565	565	0		1800	856	66		51	0.00	120

Traffic Stream Results: Stops and delays

Time Segment	Arm	Traffic Stream	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Uniform delay (Veh-hr/hr)	Random plus oversat delay (Veh-hr/hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Uniform stops (Stops per hr)	Random stops (Stops per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	A	1	12.00	48.86	3.69	0.66	61.86	58.32	167.60	19.61	2.35
		2	1.68	22.71	1.27	0.27	21.86	28.81	62.43	7.87	0.88
	Ax	1	16.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	B	1	12.00	137.33	4.10	7.19	160.34	159.13	290.22	180.79	5.91
		2	2.16	14.31	0.76	0.04	11.23	49.36	97.46	0.76	1.23
	Bx	1	16.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	C	1	12.00	115.55	1.32	1.41	38.74	141.39	82.75	37.43	1.51
	Cx	1	16.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	D	1	12.00	104.39	6.28	9.61	225.65	143.73	534.17	253.46	9.88
	Dx	1	16.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	9	1	5.19	0.38	0.00	0.05	0.74	0.00	0.00	0.00	0.00
	10	1	7.56	28.00	3.76	0.64	62.41	77.58	419.45	18.90	5.50

Traffic Stream Results: Queues and blocking

Time Segment	Arm	Traffic Stream	Initial queue (Veh)	Mean max queue (Veh)	Max queue storage (Veh)	Utilised storage (%)	Average storage excess queue (Veh)	Average limit excess queue (Veh)	Excess queue penalty (£ per hr)	Wasted time starvation (s (per cycle))	Wasted time blocking back (s (per cycle))	Wasted time total (s (per cycle))	Estimated blocking
08:00-09:00	A	1	0.00	6.25	17.39	35.94	0.00	0.00	0.00	2.00	0.00	2.00	
		2	2.00	2.26	2.00	113.23	0.14	0.00	0.00	0.00	0.00	0.00	
	Ax	1	0.00	0.00	23.56	0.00	0.00	0.00	0.00	29.00	0.00	29.00	
	B	1	0.00	16.98	17.39	97.61	0.00	12.08	0.00	0.00	0.00	0.00	
		2	4.00	3.01	4.00	75.26	0.00	0.00	0.00	0.00	0.00	0.00	
	Bx	1	0.00	0.00	24.23	0.00	0.00	0.00	0.00	24.00	0.00	24.00	
	C	1	0.00	4.20	17.39	24.12	0.00	0.00	0.00	0.00	0.00	0.00	
	Cx	1	0.00	0.00	24.29	0.00	0.00	0.00	0.00	98.00	0.00	98.00	
	D	1	0.00	27.72	17.39	159.41	2.96	0.00	0.00	0.00	0.00	0.00	
	Dx	1	0.00	0.00	23.45	0.00	0.00	0.00	0.00	34.00	0.00	34.00	
	9	1	0.00	0.05	7.52	0.69	0.00	0.00	0.00	0.00	0.00	0.00	
	10	1	0.00	14.92	10.96	136.06	0.43	0.00	0.00	0.00	66.00	66.00	

Traffic Stream Results: Journey times

Time Segment	Arm	Traffic Stream	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	JourneyTime (s)
08:00-09:00	A	1	32.10	5.43	5.92	60.86
		2	3.42	1.65	2.07	24.30
	Ax	1	55.41	1.85	30.00	16.26
	B	1	29.60	12.28	2.41	149.33
		2	3.58	0.90	3.98	16.28
	Bx	1	98.64	3.29	30.00	16.72
	C	1	8.50	3.01	2.82	127.55
	Cx	1	5.73	0.19	30.00	16.76
	D	1	54.80	17.72	3.09	116.39
	Dx	1	72.15	2.41	30.00	16.18
	9	1	21.40	0.77	27.96	5.57
	10	1	35.62	5.58	6.38	35.57

Traffic Stream Results: Advanced

Time Segment	Arm	Traffic Stream	Degree of saturation penalty (£ per hr)	Ped gap accepting penalty (£ per hr)	Warmed up	Mean Max Queue EoTS (Veh)	Mean End of Green Queue EoTS (Veh)	Mean End of Red Queue EoTS (Veh)	PCU Factor	Cost of traffic penalties (£ per hr)	Performance Index (£ per hr)
08:00-09:00	A	1	0.00	0.00	✓	6.26	0.67	6.26	1.00	0.00	64.21
		2	0.00	0.00	✓	2.26	0.26	2.26	1.00	0.00	22.74
	Ax	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	B	1	0.00	0.00	✓	19.64	9.85	18.07	1.00	0.00	166.24
		2	0.00	0.00	✓	3.01	0.03	3.01	1.00	0.00	12.46
	Bx	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	C	1	0.00	0.00	✓	4.33	1.54	4.21	1.00	0.00	40.25
	Cx	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	D	1	0.00	0.00	✓	31.05	12.94	25.57	1.00	0.00	235.52
	Dx	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	9	1	0.00	0.00	✓	0.05			1.00	0.00	0.74
	10	1	0.00	0.00	✓	14.92			1.00	0.00	67.90

Pedestrian Crossing Results

Pedestrian Crossings: Pedestrian summary

Time Segment	Crossing	Side	Degree of saturation (%)	Calculated Flow Entering (Ped/hr)	Calculated sat flow (Ped/hr)	Actual green (s (per cycle))	Mean Delay Per Ped (s)	Mean max queue (Ped)	Weighted cost of delay (£ per hr)	Performance Index (£ per hr)
08:00-09:00	(ALL)	(ALL)	27	100	11000	4	56.61	3.22	22.33	22.33

Pedestrian Crossings: Flows and signals

Time Segment	Crossing	Side	Calculated flow entering (Ped/hr)	Calculated flow out (Ped/hr)	Flow discrepancy (Ped/hr)	Adjusted flow warning	Calculated sat flow (Ped/hr)	Calculated capacity (Ped/hr)	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Mean modulus of error	Actual green (s (per cycle))
08:00-09:00	(ALL)	(ALL)	100	100	0		11000	367	27		267	0.00	4

Pedestrian Crossings: Stops and delays

Time Segment	Crossing	Side	Mean Cruise Time per Ped (s)	Mean Delay per Ped (s)	Uniform delay (Ped-hr/hr)	Random plus oversat delay (Ped-hr/hr)	Weighted cost of delay (£ per hr)
	2	1	6.33	56.61	1.57	0.00	22.33
		2	6.33	56.61	1.57	0.00	22.33
	[illegible]	1	6.33	56.61	1.57	0.00	22.33
	[illegible]	2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	4	1	5.67	56.61	1.57	0.00	22.33
		2	5.67	56.61	1.57	0.00	22.33

Pedestrian Crossings: Queues and blocking

Time Segment	Crossing	Side	Mean max queue (Ped)	Max queue storage (Ped)	Utilised storage (%)	Average storage excess queue (Ped)	Average limit excess queue (Ped)	Excess queue penalty (£ per hr)
08:00-09:00	(ALL)	(ALL)	3.22	10.00	32.22	0.00	0.00	0.00

Pedestrian Crossings: Journey times

Time Segment	Crossing	Side	Distance travelled (Ped-km/hr)	Time spent (Ped-hr/hr)	Mean journey speed (kph)	JourneyTime (s)
08:00-09:00	2	1	0.90	1.75	0.51	62.94
		2	0.90	1.75	0.51	62.94
	3	1	0.90	1.75	0.51	62.94
		2	0.90	1.75	0.51	62.94
	4	1	0.80	1.73	0.46	62.28
		2	0.80	1.73	0.46	62.28

Pedestrian Crossings: Advanced

Time Segment	Crossing	Side	Degree of saturation penalty (£ per hr)	Ped gap accepting penalty (£ per hr)	Mean Max Queue EoTS (Ped)	Ped Factor	Cost of traffic penalties (£ per hr)	Performance Index (£ per hr)
08:00-09:00	(ALL)	(ALL)	0.00	0.00	3.22	1.00	0.00	22.33

Network Results

Run Summary

Analysis set used	Run start time	Run finish time	Run duration (s)	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (Veh-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item wi wors unsignal PRC
3	09/03/2021 12:37:37	09/03/2021 12:37:38	1.57	08:00	120	744.04	50.48	98.74	D/1	0	0	D/1	10/1

Network Results: Vehicle summary

Time Segment	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (Veh/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	99	1	4446	907	33.23	582.82	27.25	610.07

Network Results: Pedestrian summary

Time Segment	Degree of saturation (%)	Calculated Flow Entering (Ped/hr)	Actual green (s (per cycle))	Mean Delay Per Ped (s)	Weighted cost of delay (£ per hr)	Performance Index (£ per hr)
08:00-09:00	27	600	24	56.61	133.97	133.97

Network Results: Flows and signals

Time Segment	Calculated flow entering (Veh/hr)	Calculated flow out (Veh/hr)	Flow discrepancy (Veh/hr)	Adjusted flow warning	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Actual green (s (per cycle))
08:00-09:00	5046	5046	0		99		1	931

Network Results: Stops and delays

Time Segment	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Uniform delay (Veh-hr/hr)	Random plus oversat delay (Veh-hr/hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Uniform stops (Stops per hr)	Random stops (Stops per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	10.74	36.01	30.61	19.87	716.80	43.06	1654.08	518.83	27.25

Network Results: Queues and blocking

Time Segment	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time starvation (s (per cycle))	Wasted time blocking back (s (per cycle))	Wasted time total (s (per cycle))
08:00-09:00	159.41	0.00	187.00	66.00	253.00

Network Results: Journey times

Time Segment	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)
08:00-09:00	426.15	65.51	6.50

Network Results: Advanced

Time Segment	Degree of saturation penalty (£ per hr)	Ped gap accepting penalty (£ per hr)	Warmed up	PCU Factor	Cost of traffic penalties (£ per hr)	Controller stream penalties (£ per hr)	Performance Index (£ per hr)
08:00-09:00	0.00	0.00	✓	1.00	0.00	0.00	744.04

Point to Point Journey Time

Average Journey Time (s) for Local Matrix: 1

From \ To	1	2	3	4	5	6	7	8
1	0.0	143.7	143.8	144.3	0.0	0.0	0.0	0.0
2	133.1	0.0	132.6	133.1	0.0	0.0	0.0	0.0
3	113.2	76.0	0.0	113.1	0.0	0.0	0.0	0.0
4	171.7	171.1	38.1	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	62.9	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	62.9
7	0.0	0.0	0.0	0.0	62.9	0.0	0.0	62.3
8	0.0	0.0	0.0	0.0	0.0	62.9	62.3	0.0

Path Journey Time

Path	From Location	To Location	Normal Calculated Flow (Veh/hr)	Pedestrian calculated flow (Ped/hr)	Normal journey time (s)	Pedestrian journey time (s)	Normal journey dist (m)	Bus journeydist (m)	Tram journey dist (m)	Pedestrian journey dist (m)	Calculated Total Flow (Veh/hr)	Avg journey time (s)	Avg journey dist (m)
1	1	2	18		143.74		234.86	0.00	0.00	0.00	18	143.74	234.86
2	1	3	18		143.81		235.48	0.00	0.00	0.00	18	143.81	235.48
3	1	4	49		144.27		239.32	0.00	0.00	0.00	49	144.27	239.32
5	2	3	192		132.65		235.48	0.00	0.00	0.00	192	132.65	235.48
6	2	4	347		133.11		239.32	0.00	0.00	0.00	347	133.11	239.32
7	2	1	9		133.15		239.64	0.00	0.00	0.00	9	133.15	239.64
16	4	2	273		171.08		278.10	0.00	0.00	0.00	273	171.08	278.10
17	8	7		100		62.28	8.00	8.00	8.00	8.00	100	62.28	8.00
18	8	6		100		62.94	9.00	9.00	9.00	9.00	100	62.94	9.00
22	5	7		100		62.94	9.00	9.00	9.00	9.00	100	62.94	9.00
34	6	8		100		62.94	9.00	9.00	9.00	9.00	100	62.94	9.00
41	7	8		100		62.28	8.00	8.00	8.00	8.00	100	62.28	8.00
42	7	5		100		62.94	9.00	9.00	9.00	9.00	100	62.94	9.00
49	4	1	23		171.65		282.88	0.00	0.00	0.00	23	171.65	282.88
50	4	3	199		38.11		196.72	0.00	0.00	0.00	199	38.11	196.72
51	3	2	244		76.05		211.90	0.00	0.00	0.00	244	76.05	211.90
52	3	4	312		113.15		302.36	0.00	0.00	0.00	312	113.15	302.36
53	3	1	9		113.18		302.68	0.00	0.00	0.00	9	113.18	302.68

Final Prediction Table

Traffic Stream Results

				SIGNALS		FLOWS		PERFORMANCE					PER PCU		QUEUES
Arm	Traffic Stream	Name	Traffic node	Controller stream	Phase	Calculated flow entering (Veh/hr)	Calculated sat flow (Veh/hr)	Actual green (s (per cycle))	Wasted time total (s (per cycle))	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (Veh)
A	1	(untitled)	1	1	C	321	1800	31	2.00	67	50	60.86	48.86	58.32	6.25
	2		1	1	C	244 <	1800	31	0.00	51	97	24.30	22.71	28.81	2.26 +
Ax	1	(untitled)				409	Unrestricted	120	29.00	0	Unrestricted	16.26	0.00	0.00	0.00
B	1	(untitled)	1	1	A	296	1800	19	0.00	99	1	149.33	137.33	159.13	16.98
	2		1	1	F	199	1800	65	0.00	20	397	16.28	14.31	49.36	3.01
Bx	1	(untitled)				708	Unrestricted	120	24.00	0	Unrestricted	16.72	0.00	0.00	0.00
C	1	(untitled)	1	1	D	85	1800	5	0.00	81	24	127.55	115.55	141.39	4.20
Cx	1	(untitled)				41	Unrestricted	120	98.00	0	Unrestricted	16.76	0.00	0.00	0.00
D	1	(untitled)	1	1	B	548 <	1800	36	0.00	99	1	116.39	104.39	143.73	27.72 +
Dx	1	(untitled)				535	Unrestricted	120	34.00	0	Unrestricted	16.18	0.00	0.00	0.00
9	1		1			495	1800	120	0.00	28	264	5.57	0.38	0.00	0.05
10	1		1			565 <	1800	120	66.00	66	51	35.57	28.00	77.58	14.92 +

Pedestrian Crossing Results

				SIGNALS		FLOWS		PERFORMANCE			PER PED		QUEUES	WEIGHTS	PEN
Pedestrian	Side	Name	Traffic node	Controller stream	Phase	Calculated Flow Entering (Ped/hr)	Calculated sat flow (Ped/hr)	Actual green (s (per cycle))	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Ped (s)	Mean max queue (Ped)	Delay weighting (%)	Co tra pen (£ p
2	1	(untitled)	1	1	E	100	11000	4	27	267	62.94	56.61	3.22	100	0
	2	(untitled)	1	1	E	100	11000	4	27	267	62.94	56.61	3.22	100	0
3	1	(untitled)	1	1	E	100	11000	4	27	267	62.94	56.61	3.22	100	0
	2	(untitled)	1	1	E	100	11000	4	27	267	62.94	56.61	3.22	100	0
4	1	(untitled)	1	1	E	100	11000	4	27	267	62.28	56.61	3.22	100	0
	2	(untitled)	1	1	E	100	11000	4	27	267	62.28	56.61	3.22	100	0

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Uniform delay (Veh-hr/hr)	Random plus oversat delay (Veh-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	420.95	55.06	7.65	21.18	19.87	582.82	27.25	0.00	610.07
Bus									
Tram									
Pedestrians	5.20	10.45	0.50	9.43	0.00	133.97	0.00	0.00	133.97
TOTAL	426.15	65.51	6.50	30.61	19.87	716.80	27.25	0.00	744.04

- *< = adjusted flow warning (upstream links/traffic streams are over-saturated)*
- ** = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%*
- *^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%*
- *+ = average link/traffic stream excess queue is greater than 0*
- ***P.I. = PERFORMANCE INDEX***

TRANSYT 16

Filename: Junction 1 - DO SOMETHING - PM.t16
Path: M:\Projects\19\19-020 - Malahide Road\Design\Traffic\Junction Modelling\MODELLING MARCH 2021\Junction 1\Junction 1 - DO SOMETHING - PM
Report generation date: 09/03/2021 12:41:01

»A1 - DO SOMETHING - 2023 (OPENING YEAR) : D1 - DO SOMETHING - 2023 (OPENING YEAR), :
»A2 - DO SOMETHING - 2028 (OPENING YEAR + 5 YEARS) : D2 - DO SOMETHING - 2028 (OPENING YEAR + 5 YEARS), :
»A3 - DO SOMETHING - 2038 (OPENING YEAR + 15 YEARS) : D3 - DO SOMETHING - 2038 (OPENING YEAR + 15 YEARS), :

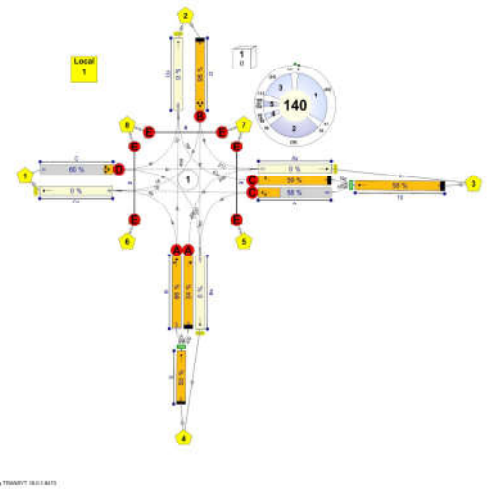
Summary of network performance

	Set ID	PI (£ per hr)	Total delay (Veh-hr/hr)	Highest DOS	Number oversaturated
	DO SOMETHING - 2023 (OPENING YEAR) - DO SOMETHING - 2023 (OPENING YEAR)				
Network	A1 D1	30467.41	31.80	78% (TS B/1)	0 (0%)

	Set ID	PI (£ per hr)	Total delay (Veh-hr/hr)	Highest DOS	Number oversaturated
	DO SOMETHING - 2028 (OPENING YEAR + 5 YEARS) - DO SOMETHING - 2028 (OPENING YEAR + 5 YEARS)				
Network	A2 D2	20577.46	39.21	87% (TS D/1)	0 (0%)

	Set ID	PI (£ per hr)	Total delay (Veh-hr/hr)	Highest DOS	Number oversaturated
	DO SOMETHING - 2038 (OPENING YEAR + 15 YEARS) - DO SOMETHING - 2038 (OPENING YEAR + 15 YEARS)				
Network	A3 D3	10661.75	44.95	95% (TS D/1)	0 (0%)

Network Diagrams



A1 - DO SOMETHING - 2023 (OPENING YEAR)
D1 - DO SOMETHING - 2023 (OPENING YEAR),

Network Options

Network timings

Network cycle time (s)	Minimum possible cycle time (s)	Absolute minimum possible cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
140	130	130		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)	Missing stage transition options
10000.00	10000.00	10000.00	2	Assume banned

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from traffic model	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	100	100	✓	✓			Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Offsets And Green Splits	

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy (%)	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Standard accuracy Hill Climb	15, 40, -1, 15, 40, 1, -1, 1	50, 50, 5, 5, 0.5, 0.5, 0.05, 0.05		✓	1			Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Traffic Nodes

Traffic Nodes

Traffic node	Name	Description
1	(untitled)	

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
A	(untitled)		1
Ax	(untitled)		
B	(untitled)		1
Bx	(untitled)		
C	(untitled)		1
Cx	(untitled)		
D	(untitled)		1
Dx	(untitled)		
9			1
10			1

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Auto-calculate cell saturation flow	Cell saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
A	1	(untitled)			100.00	✓	Sum of lanes	1800			✓		Normal	
	2				14.00	✓	Sum of lanes	1800			✓		Normal	
Ax	1	(untitled)		✓	135.07								Normal	
B	1	(untitled)			100.00	✓	Sum of lanes	1800	✓	1800	✓		Normal	
	2				18.00	✓	Sum of lanes	1800			✓		Normal	
Bx	1	(untitled)		✓	139.57								Normal	
C	1	(untitled)			100.00	✓	Sum of lanes	1800			✓		Normal	
Cx	1	(untitled)		✓	139.63								Normal	
D	1	(untitled)			100.00	✓	Sum of lanes	1800			✓		Normal	
Dx	1	(untitled)		✓	134.93								Normal	
9	1			✓	36.93	✓	Sum of lanes	1800					Normal	
10	1			✓	61.37	✓	Sum of lanes	1800					Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Saturation flow (PCU/hr)
A	1	1	(untitled)			1800
	2	1	(untitled)			1800
Ax	1	1	(untitled)			
B	1	1	(untitled)			1800
	2	1	(untitled)			1800
Bx	1	1	(untitled)			
C	1	1	(untitled)			1800
Cx	1	1	(untitled)			
D	1	1	(untitled)			1800
Dx	1	1	(untitled)			
9	1	1	(untitled)			1800
10	1	1	(untitled)			1800

Modelling

Arm	Traffic Stream	Traffic model	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
A	1	NetworkDefault	100	100	100		0.00		
	2	Flare	100	100	100		2.00		
Ax	1	NetworkDefault	100	100	100		0.00		
B	1	CTM	100	100	100		0.00		
	2	Flare	100	100	100		4.00		
Bx	1	NetworkDefault	100	100	100		0.00		
C	1	NetworkDefault	100	100	100		0.00		
Cx	1	NetworkDefault	100	100	100		0.00		
D	1	NetworkDefault	100	100	100		0.00		
Dx	1	NetworkDefault	100	100	100		0.00		
9	1	NetworkDefault	100	100	100		0.00		
10	1	NetworkDefault	100	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
A	1	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	140
	2	2.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	140
Ax	1	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	140
B	1	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	140
	2	4.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	140
Bx	1	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	140
C	1	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	140
Cx	1	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	140
D	1	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	140
Dx	1	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	140
9	1	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	140
10	1	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	140

Normal traffic - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	(ALL)	100	100

Normal traffic - Advanced

Arm	Traffic Stream	Dispersion type for Normal Traffic
(ALL)	(ALL)	NetworkDefault

Flows

Arm	Traffic Stream	Total Flow (Veh/hr)	Normal Flow (Veh/hr)
A	1	137	137
	2	151	151
Ax	1	293	293
B	1	444	444
	2	125	125
Bx	1	358	358
C	1	46	46
Cx	1	85	85
D	1	389	389
Dx	1	556	556
9	1	569	569
10	1	288	288

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
A	1	1	C	
	2	1	C	
B	1	1	A	
	2	1	A	
C	1	1	D	
D	1	1	B	

Entry Sources

Arm	Traffic Stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)
C	1	12.00	30.00
D	1	12.00	30.00
9	1	4.43	30.00
10	1	7.36	30.00

Sources

Arm	Traffic Stream	Source	Source traffic stream	Destination traffic stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)	Auto turning radius	Traffic turn style	Turning radius (m)
A	1	1	10/1	A/1	12.00	30.00	✓	Straight	Straight Movement
	2	1	10/1	A/2	1.68	30.00	✓	Straight	Straight Movement
Ax	1	1	C/1	Ax/1	16.21	30.00	✓	Straight	Straight Movement
B	1	1	9/1	B/1	12.00	30.00	✓	Straight	Straight Movement
	2	1	9/1	B/2	2.16	30.00	✓	Straight	Straight Movement
Bx	1	1	A/1	Bx/1	16.75	30.00	✓	Nearside	39.81
Cx	1	1	A/1	Cx/1	16.76	30.00	✓	Straight	Straight Movement
Dx	1	1	C/1	Dx/1	16.19	30.00	✓	Nearside	40.37
Ax	1	2	D/1	Ax/1	16.21	30.00	✓	Nearside	40.00
Bx	1	2	D/1	Bx/1	16.75	30.00	✓	Straight	Straight Movement
Cx	1	2	B/1	Cx/1	16.76	30.00	✓	Nearside	43.92
Dx	1	2	B/1	Dx/1	16.19	30.00	✓	Straight	Straight Movement
Ax	1	3	B/2	Ax/1	16.21	30.00	✓	Offside	48.08
Bx	1	3	C/1	Bx/1	16.75	30.00	✓	Offside	59.63
Cx	1	3	D/1	Cx/1	16.76	30.00	✓	Offside	55.00
Dx	1	3	A/2	Dx/1	16.19	30.00	✓	Offside	48.08

Pedestrian Crossings

Pedestrian Crossings

Crossing	Name	Description	Traffic node	Allow walk on red	Crossing type	Length (m)	Cruise time (seconds)	Cruise speed (kph)
2	(untitled)		1		Farside	8.00	5.33	5.40
3	(untitled)		1		Farside	8.00	5.33	5.40
4	(untitled)		1		Farside	7.00	4.67	5.40

Pedestrian Crossings - Signals

Crossing	Controller stream	Phase	Second phase enabled
(ALL)	1	E	

Pedestrian Crossings - Sides

Crossing	Side	Saturation flow (Ped/hr)
(ALL)	(ALL)	11000

Pedestrian Crossings - Modelling

Crossing	Side	Delay weighting (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (Ped)	Has queue limit	Has degree of saturation limit
(ALL)	(ALL)	100	100		0.00		

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit	Limit paths by flow	Low path flow threshold
1	(untitled)	✓	✓	Path Equalisation	✓		✓			✓	1.25				

Normal Input Flows (Veh/hr)

		To							
		1	2	3	4	5	6	7	8
From	1	0	10	10	26	0	0	0	0
	2	18	0	158	213	0	0	0	0
	3	18	151	0	119	0	0	0	0
	4	49	395	125	0	0	0	0	0
	5	0	0	0	0	0	0	0	0
	6	0	0	0	0	0	0	0	0
	7	0	0	0	0	0	0	0	0
	8	0	0	0	0	0	0	0	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows (Veh/hr)

		To							
		1	2	3	4	5	6	7	8
From	1	0	0	0	0	0	0	0	0
	2	0	0	0	0	0	0	0	0
	3	0	0	0	0	0	0	0	0
	4	0	0	0	0	0	0	0	0
	5	0	0	0	0	0	0	100	0
	6	0	0	0	0	0	0	0	100
	7	0	0	0	0	100	0	0	100
	8	0	0	0	0	0	100	100	0

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1	(untitled)	C/1	Cx/1	#0000FF
	2	(untitled)	D/1	Dx/1	#FF0000
	3	(untitled)	10/1	Ax/1	#00FF00
	4	(untitled)	9/1	Bx/1	#FFFF00
	5	(untitled)	3:2E	3:2X	#FF00FF
	6	(untitled)	2:1E	2:1X	#008000
	7	(untitled)	4:2E, 3:1E	4:2X, 3:1X	#FFA500
	8	(untitled)	4:1E, 2:2E	4:1X, 2:2X	#00FFFF

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (Veh/hr)
1	1		1	2	C/1, Dx/1	Normal	10
	2		1	3	C/1, Ax/1	Normal	10
	3		1	4	C/1, Bx/1	Normal	26
	5		2	3	D/1, Ax/1	Normal	158
	6		2	4	D/1, Bx/1	Normal	213
	7		2	1	D/1, Cx/1	Normal	18
	16		4	2	9/1, B/1, Dx/1	Normal	395
	43		4	1	9/1, B/1, Cx/1	Normal	49
	44		4	3	9/1, B/2, Ax/1	Normal	125
	45		3	4	10/1, A/1, Bx/1	Normal	119
	46		3	1	10/1, A/1, Cx/1	Normal	18
	47		3	2	10/1, A/2, Dx/1	Normal	151

Pedestrian Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Pedestrian calculated flow (Ped/hr)
1	17		8	7	4:1E, 4:2X	Normal	100
	18		8	6	2:2E, 2:1X	Normal	100
	22		5	7	3:2E, 3:1X	Normal	100
	34		6	8	2:1E, 2:2X	Normal	100
	41		7	8	4:2E, 4:1X	Normal	100
	42		7	5	3:1E, 3:2X	Normal	100

Signal Timings

Network Default: 140s cycle time; 140 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)	Minimum possible cycle time (s)
1	(untitled)		1	NetworkDefault	140	130

Controller Stream 1 - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
1	Unspecified						Relative

Controller Stream 1 - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
1	✓	✓	Offsets And Green Splits	✓	

Phases

Controller Stream	Phase	Name	Street minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type	Blackout Time (s)
1	A	(untitled)	36	300	0	0	Traffic	
	B	(untitled)	37	37	0	0	Traffic	
	C	(untitled)	24	24	0	0	Traffic	
	D	(untitled)	4	4	0	1	Traffic	
	E	(untitled)	4	4	0	0	Pedestrian	0

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)	Run every N cycles	Probability of running (%)
1	1	A	1	0	0
	2	B	1	0	0
	3	C	1	0	0
	4	D	1	0	0
	5	E	1	0	0

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends	Minimum possible cycle time (s)	Exclude from analysis
1	1	(untitled)	Single	1, 2, 3, 4, 5	46, 90, 120, 129, 138	130	

Intergreen Matrix for Controller Stream 1

From \ To	A	B	C	D	E
A		5	5	5	5
B	5		5	5	5
C	5	5		5	5
D	5	5	5		5
E	5	5	5	5	

Banned Stage transitions for Controller Stream 1

From \ To	1	2	3	4	5
1					
2					
3					
4					
5					

Interstage Matrix for Controller Stream 1

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

Resultant Stages

Controller Stream	Resultant Stage	Is base 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	3	46	43	1	36
	2	✓	2	B	51	90	39	1	37
	3	✓	3	C	95	120	25	1	24
	4	✓	4	D	125	129	4	1	4
	5	✓	5	E	134	138	4	1	4

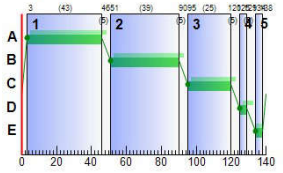
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
1	A	1	✓	3	46	43
	B	1	✓	51	90	39
	C	1	✓	95	120	25
	D	1	✓	125	129	4
	E	1	✓	134	138	4

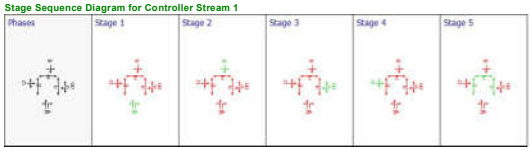
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
A	1	1	1	C	95	120	25
A	2	1	1	C	95	120	25
B	1	1	1	A	3	46	43
B	2	1	1	A	3	46	43
C	1	1	1	D	125	129	4
D	1	1	1	B	51	90	39

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



Resultant penalties

Time Segment	Controller stream	Phase min max penalty (£ per hr)	Intergreen broken penalty (£ per hr)	Stage constraint broken penalty (£ per hr)	Cost of controller stream penalties (£ per hr)
18:00-19:00	1	30000.00	0.00	0.00	30000.00

Final Prediction Table

Traffic Stream Results

Arm	Traffic Stream	Name	SIGNALS: Traffic node	SIGNALS: Controller stream	SIGNALS: Phase	FLOWS: Calculated flow entering (Veh/hr)	FLOWS: Calculated sat flow (Veh/hr)	PERFORMANCE: Actual green (s (per cycle))	PERFORMANCE: Wasted time total (s (per cycle))	PERFORMANCE: Degree of saturation (%)	PERFORMANCE: Practical reserve capacity (%)	PERFORMANCE: JourneyTime (s)	PER PCU: Mean Delay per Veh (s)	PER PCU: Mean stops per Veh (%)	QUEUES: Mean max queue (Veh)
A	1	(untitled)	1	1	C	137	1800	25	6.00	41	144	64.19	52.19	55.36	2.95
	2		1	1	C	151 <	1800	25	0.00	45	121	37.56	36.09	38.89	2.19 +
Ax	1	(untitled)				293	Unrestricted	140	38.00	0	Unrestricted	16.21	0.00	0.00	0.00
B	1	(untitled)	1	1	A	444	1800	43	0.00	78	27	66.77	54.77	93.08	16.21
	2		1	1	A	125	1800	43	0.00	22	353	38.37	36.72	70.90	3.36
Bx	1	(untitled)				358	Unrestricted	140	51.00	0	Unrestricted	16.75	0.00	0.00	0.00
C	1	(untitled)	1	1	D	46	1800	4	2.00	60	68	110.22	98.22	118.85	2.16
Cx	1	(untitled)				85	Unrestricted	140	52.00	0	Unrestricted	16.76	0.00	0.00	0.00
D	1	(untitled)	1	1	B	389	1800	39	0.00	76	32	68.11	56.11	97.03	14.86
Dx	1	(untitled)				556	Unrestricted	140	45.00	0	Unrestricted	16.19	0.00	0.00	0.00
9	1		1			569	1800	140	5.00	33	205	5.07	0.64	3.96	1.19
10	1		1			288	1800	140	73.00	32	213	29.02	21.65	58.68	6.72

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Uniform delay (Veh-hr/hr)	Random plus oversat delay (Veh-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	321.08	31.36	10.24	17.20	3.48	293.67	15.80	0.00	309.47
Bus									
Tram									
Pedestrians	5.20	12.14	0.43	11.12	0.00	157.94	0.00	0.00	157.94
Controller streams									30000
TOTAL	326.28	43.50	7.50	28.33	3.48	451.61	15.80	0.00	30467.41

- *< = adjusted flow warning (upstream links/traffic streams are over-saturated)*
- ** = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%*
- *^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%*
- *+ = average link/traffic stream excess queue is greater than 0*
- ***P.I. = PERFORMANCE INDEX***

A2 - DO SOMETHING - 2028 (OPENING YEAR + 5 YEARS)
D2 - DO SOMETHING - 2028 (OPENING YEAR + 5 YEARS),

Network Options

Network timings

Network cycle time (s)	Minimum possible cycle time (s)	Absolute minimum possible cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
140	130	130		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)	Missing stage transition options
10000.00	10000.00	10000.00	2	Assume banned

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from traffic model	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	100	100	✓	✓			Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Offsets And Green Splits	

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy (%)	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Standard accuracy Hill Climb	15, 40, -1, 15, 40, 1, -1, 1	50, 50, 5, 5, 0.5, 0.5, 0.05, 0.05		✓	1			Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Traffic Nodes

Traffic Nodes

Traffic node	Name	Description
1	(untitled)	

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
A	(untitled)		1
Ax	(untitled)		
B	(untitled)		1
Bx	(untitled)		
C	(untitled)		1
Cx	(untitled)		
D	(untitled)		1
Dx	(untitled)		
9			1
10			1

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Auto-calculate call saturation flow	Call saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
A	1	(untitled)			100.00	✓	Sum of lanes	1800			✓		Normal	
	2				14.00	✓	Sum of lanes	1800			✓		Normal	
Ax	1	(untitled)		✓	135.07								Normal	
B	1	(untitled)			100.00	✓	Sum of lanes	1800	✓	1800	✓		Normal	
	2				18.00	✓	Sum of lanes	1800			✓		Normal	
Bx	1	(untitled)		✓	139.57								Normal	
C	1	(untitled)			100.00	✓	Sum of lanes	1800			✓		Normal	
Cx	1	(untitled)		✓	139.63								Normal	
D	1	(untitled)			100.00	✓	Sum of lanes	1800			✓		Normal	
Dx	1	(untitled)		✓	134.93								Normal	
9	1			✓	36.93	✓	Sum of lanes	1800					Normal	
10	1			✓	61.37	✓	Sum of lanes	1800					Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Saturation flow (PCU/hr)
A	1	1	(untitled)			1800
	2	1	(untitled)			1800
Ax	1	1	(untitled)			
B	1	1	(untitled)			1800
	2	1	(untitled)			1800
Bx	1	1	(untitled)			
C	1	1	(untitled)			1800
Cx	1	1	(untitled)			
D	1	1	(untitled)			1800
Dx	1	1	(untitled)			
9	1	1	(untitled)			1800
10	1	1	(untitled)			1800

Modelling

Arm	Traffic Stream	Traffic model	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
A	1	NetworkDefault	100	100	100		0.00		
	2	Flare	100	100	100		2.00		
Ax	1	NetworkDefault	100	100	100		0.00		
B	1	CTM	100	100	100		0.00		
	2	Flare	100	100	100		4.00		
Bx	1	NetworkDefault	100	100	100		0.00		
C	1	NetworkDefault	100	100	100		0.00		
Cx	1	NetworkDefault	100	100	100		0.00		
D	1	NetworkDefault	100	100	100		0.00		
Dx	1	NetworkDefault	100	100	100		0.00		
9	1	NetworkDefault	100	100	100		0.00		
10	1	NetworkDefault	100	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
A	1	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	140
	2	2.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	140
Ax	1	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	140
B	1	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	140
	2	4.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	140
Bx	1	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	140
C	1	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	140
Cx	1	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	140
D	1	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	140
Dx	1	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	140
9	1	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	140
10	1	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	140

Normal traffic - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	(ALL)	100	100

Normal traffic - Advanced

Arm	Traffic Stream	Dispersion type for Normal Traffic
(ALL)	(ALL)	NetworkDefault

Flows

Arm	Traffic Stream	Total Flow (Veh/hr)	Normal Flow (Veh/hr)
A	1	177	177
	2	179	179
Ax	1	402	402
B	1	477	477
	2	192	192
Bx	1	416	416
C	1	46	46
Cx	1	85	85
D	1	449	449
Dx	1	617	617
9	1	669	669
10	1	356	356

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
A	1	1	C	
	2	1	C	
B	1	1	A	
	2	1	A	
C	1	1	D	
D	1	1	B	

Entry Sources

Arm	Traffic Stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)
C	1	12.00	30.00
D	1	12.00	30.00
9	1	4.43	30.00
10	1	7.36	30.00

Sources

Arm	Traffic Stream	Source	Source traffic stream	Destination traffic stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)	Auto turning radius	Traffic turn style	Turning radius (m)
A	1	1	10/1	A/1	12.00	30.00	✓	Straight	Straight Movement
	2	1	10/1	A/2	1.68	30.00	✓	Straight	Straight Movement
Ax	1	1	C/1	Ax/1	16.21	30.00	✓	Straight	Straight Movement
B	1	1	9/1	B/1	12.00	30.00	✓	Straight	Straight Movement
	2	1	9/1	B/2	2.16	30.00	✓	Straight	Straight Movement
Bx	1	1	A/1	Bx/1	16.75	30.00	✓	Nearside	39.81
Cx	1	1	A/1	Cx/1	16.76	30.00	✓	Straight	Straight Movement
Dx	1	1	C/1	Dx/1	16.19	30.00	✓	Nearside	40.37
Ax	1	2	D/1	Ax/1	16.21	30.00	✓	Nearside	40.00
Bx	1	2	D/1	Bx/1	16.75	30.00	✓	Straight	Straight Movement
Cx	1	2	B/1	Cx/1	16.76	30.00	✓	Nearside	43.92
Dx	1	2	B/1	Dx/1	16.19	30.00	✓	Straight	Straight Movement
Ax	1	3	B/2	Ax/1	16.21	30.00	✓	Offside	48.08
Bx	1	3	C/1	Bx/1	16.75	30.00	✓	Offside	59.63
Cx	1	3	D/1	Cx/1	16.76	30.00	✓	Offside	55.00
Dx	1	3	A/2	Dx/1	16.19	30.00	✓	Offside	48.08

Pedestrian Crossings

Pedestrian Crossings

Crossing	Name	Description	Traffic node	Allow walk on red	Crossing type	Length (m)	Cruise time (seconds)	Cruise speed (kph)
2	(untitled)		1		Farside	8.00	5.33	5.40
3	(untitled)		1		Farside	8.00	5.33	5.40
4	(untitled)		1		Farside	7.00	4.67	5.40

Pedestrian Crossings - Signals

Crossing	Controller stream	Phase	Second phase enabled
(ALL)	1	E	

Pedestrian Crossings - Sides

Crossing	Side	Saturation flow (Ped/hr)
(ALL)	(ALL)	11000

Pedestrian Crossings - Modelling

Crossing	Side	Delay weighting (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (Ped)	Has queue limit	Has degree of saturation limit
(ALL)	(ALL)	100	100		0.00		

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit	Limit paths by flow	Low path flow threshold
1	(untitled)	✓	✓	Path Equalisation	✓		✓			✓	1.25				

Normal Input Flows (Veh/hr)

From \ To	1	2	3	4	5	6	7	8
1	0	10	10	26	0	0	0	0
2	18	0	200	231	0	0	0	0
3	18	179	0	159	0	0	0	0
4	49	428	192	0	0	0	0	0
5	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows (Veh/hr)

From \ To	1	2	3	4	5	6	7	8
1	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	100	0
6	0	0	0	0	0	0	0	100
7	0	0	0	0	100	0	0	100
8	0	0	0	0	0	100	100	0

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1	(untitled)	C/1	Cx/1	#0000FF
	2	(untitled)	D/1	Dx/1	#FF0000
	3	(untitled)	10/1	Ax/1	#00FF00
	4	(untitled)	9/1	Bx/1	#FFFF00
	5	(untitled)	3:2E	3:2X	#FF00FF
	6	(untitled)	2:1E	2:1X	#008000
	7	(untitled)	4:2E, 3:1E	4:2X, 3:1X	#FFA500
	8	(untitled)	4:1E, 2:2E	4:1X, 2:2X	#00FFFF

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (Veh/hr)
1	1		1	2	C/1, Dx/1	Normal	10
	2		1	3	C/1, Ax/1	Normal	10
	3		1	4	C/1, Bx/1	Normal	26
	5		2	3	D/1, Ax/1	Normal	200
	6		2	4	D/1, Bx/1	Normal	231
	7		2	1	D/1, Cx/1	Normal	18
	16		4	2	9/1, B/1, Dx/1	Normal	428
	43		4	1	9/1, B/1, Cx/1	Normal	49
	44		4	3	9/1, B/2, Ax/1	Normal	192
	45		3	4	10/1, A/1, Bx/1	Normal	159
	46		3	1	10/1, A/1, Cx/1	Normal	18
	47		3	2	10/1, A/2, Dx/1	Normal	179

Pedestrian Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Pedestrian calculated flow (Ped/hr)
1	17		8	7	4:1E, 4:2X	Normal	100
	18		8	6	2:2E, 2:1X	Normal	100
	22		5	7	3:2E, 3:1X	Normal	100
	34		6	8	2:1E, 2:2X	Normal	100
	41		7	8	4:2E, 4:1X	Normal	100
	42		7	5	3:1E, 3:2X	Normal	100

Signal Timings

Network Default: 140s cycle time; 140 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)	Minimum possible cycle time (s)
1	(untitled)		1	NetworkDefault	140	130

Controller Stream 1 - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
1	Unspecified						Relative

Controller Stream 1 - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
1	✓	✓	Offsets And Green Splits	✓	

Phases

Controller Stream	Phase	Name	Street minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type	Blackout Time (s)
1	A	(untitled)	36	300	0	0	Traffic	
	B	(untitled)	37	37	0	0	Traffic	
	C	(untitled)	24	24	0	0	Traffic	
	D	(untitled)	4	4	0	1	Traffic	
	E	(untitled)	4	4	0	0	Pedestrian	0

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)	Run every N cycles	Probability of running (%)
1	1	A	1	0	0
	2	B	1	0	0
	3	C	1	0	0
	4	D	1	0	0
	5	E	1	0	0

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends	Minimum possible cycle time (s)	Exclude from analysis
1	1	(untitled)	Single	1, 2, 3, 4, 5	47, 91, 120, 129, 138	130	
	2	(untitled)	Single	1, 2, 3, 5, 4	38, 82, 113, 124, 135	130	
	3	(untitled)	Single	1, 2, 4, 3, 5	38, 82, 93, 124, 135	130	
	4	(untitled)	Single	1, 2, 4, 5, 3	38, 82, 93, 104, 135	130	
	5	(untitled)	Single	1, 2, 5, 3, 4	38, 82, 93, 124, 135	130	
	6	(untitled)	Single	1, 2, 5, 4, 3	38, 82, 93, 104, 135	130	
	7	(untitled)	Single	1, 3, 2, 4, 5	38, 69, 113, 124, 135	130	
	8	(untitled)	Single	1, 3, 2, 5, 4	38, 69, 113, 124, 135	130	
	9	(untitled)	Single	1, 3, 4, 2, 5	38, 69, 80, 124, 135	130	
	10	(untitled)	Single	1, 3, 4, 5, 2	38, 69, 80, 91, 135	130	

Intergreen Matrix for Controller Stream 1

From \ To	A	B	C	D	E
A		5	5	5	5
B	5		5	5	5
C	5	5		5	5
D	5	5	5		5
E	5	5	5	5	

Banned Stage transitions for Controller Stream 1

From \ To	1	2	3	4	5
1					
2					
3					
4					
5					

Interstage Matrix for Controller Stream 1

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

Resultant Stages

Controller Stream	Resultant Stage	Is base 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	3	47	44	1	36
	2	✓	2	B	52	91	39	1	37
	3	✓	3	C	96	120	24	1	24
	4	✓	4	D	125	129	4	1	4
	5	✓	5	E	134	138	4	1	4

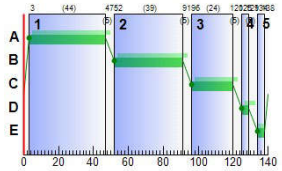
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
1	A	1	✓	3	47	44
	B	1	✓	52	91	39
	C	1	✓	96	120	24
	D	1	✓	125	129	4
	E	1	✓	134	138	4

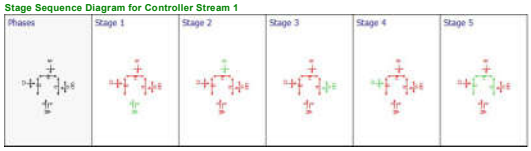
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
A	1	1	1	C	96	120	24
A	2	1	1	C	96	120	24
B	1	1	1	A	3	47	44
B	2	1	1	A	3	47	44
C	1	1	1	D	125	129	4
D	1	1	1	B	52	91	39

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



Resultant penalties

Time Segment	Controller stream	Phase min max penalty (£ per hr)	Intergreen broken penalty (£ per hr)	Stage constraint broken penalty (£ per hr)	Cost of controller stream penalties (£ per hr)
18:00-19:00	1	20000.00	0.00	0.00	20000.00

Final Prediction Table

Traffic Stream Results

Arm	Traffic Stream	Name	SIGNALS: Traffic node	SIGNALS: Controller stream	SIGNALS: Phase	FLOWS: Calculated flow entering (Veh/hr)	FLOWS: Calculated sat flow (Veh/hr)	PERFORMANCE: Actual green (s (per cycle))	PERFORMANCE: Wasted time total (s (per cycle))	PERFORMANCE: Degree of saturation (%)	PERFORMANCE: Practical reserve capacity (%)	PERFORMANCE: JourneyTime (s)	PER PCU: Mean Delay per Veh (s)	PER PCU: Mean stops per Veh (%)	QUEUES: Mean max queue (Veh)
A	1	(untitled)	1	1	C	177	1800	24	3.00	55	82	84.89	72.89	69.56	4.79
	2		1	1	C	179 <	1800	24	0.00	56	80	36.70	35.20	35.10	2.35 +
Ax	1	(untitled)				402	Unrestricted	140	34.00	0	Unrestricted	16.21	0.00	0.00	0.00
B	1	(untitled)	1	1	A	477	1800	44	0.00	82	21	65.09	53.09	75.99	15.22
	2		1	1	A	192 <	1800	44	0.00	33	201	36.65	34.86	54.67	4.08 +
Bx	1	(untitled)				416	Unrestricted	140	51.00	0	Unrestricted	16.75	0.00	0.00	0.00
C	1	(untitled)	1	1	D	46	1800	4	2.00	60	68	110.22	98.22	118.85	2.16
Cx	1	(untitled)				85	Unrestricted	140	43.00	0	Unrestricted	16.76	0.00	0.00	0.00
D	1	(untitled)	1	1	B	449 <	1800	39	0.00	87	15	81.28	69.28	108.51	19.29 +
Dx	1	(untitled)				617	Unrestricted	140	43.00	0	Unrestricted	16.19	0.00	0.00	0.00
9	1		1			669 <	1800	140	28.85	47	114	10.19	5.76	31.35	8.57 +
10	1		1			356	1800	140	85.00	45	121	36.59	29.22	69.70	9.88

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Uniform delay (Veh-hr/hr)	Random plus oversat delay (Veh-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	374.90	40.55	9.24	21.93	6.15	398.80	20.73	0.00	419.52
Bus									
Tram									
Pedestrians	5.20	12.14	0.43	11.12	0.00	157.94	0.00	0.00	157.94
Controller streams									20000
TOTAL	380.10	52.69	7.21	33.06	6.15	556.74	20.73	0.00	20577.46

- *< = adjusted flow warning (upstream links/traffic streams are over-saturated)*
- ** = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%*
- *^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%*
- *+ = average link/traffic stream excess queue is greater than 0*
- ***P.I. = PERFORMANCE INDEX***

A3 - DO SOMETHING - 2038 (OPENING YEAR + 15 YEARS)
D3 - DO SOMETHING - 2038 (OPENING YEAR + 15 YEARS),

Network Options

Network timings

Network cycle time (s)	Minimum possible cycle time (s)	Absolute minimum possible cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
140	130	130		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)	Missing stage transition options
10000.00	10000.00	10000.00	2	Assume banned

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from traffic model	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	100	100	✓	✓			Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Offsets And Green Splits	

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy (%)	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Standard accuracy Hill Climb	15, 40, -1, 15, 40, 1, -1, 1	50, 50, 5, 5, 0.5, 0.5, 0.05, 0.05		✓	1			Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Traffic Nodes

Traffic Nodes

Traffic node	Name	Description
1	(untitled)	

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
A	(untitled)		1
Ax	(untitled)		
B	(untitled)		1
Bx	(untitled)		
C	(untitled)		1
Cx	(untitled)		
D	(untitled)		1
Dx	(untitled)		
9			1
10			1

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Auto-calculate cell saturation flow	Cell saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
A	1	(untitled)			100.00	✓	Sum of lanes	1800			✓		Normal	
	2				14.00	✓	Sum of lanes	1800			✓		Normal	
Ax	1	(untitled)		✓	135.07								Normal	
B	1	(untitled)			100.00	✓	Sum of lanes	1800	✓	1800	✓		Normal	
	2				18.00	✓	Sum of lanes	1800			✓		Normal	
Bx	1	(untitled)		✓	139.57								Normal	
C	1	(untitled)			100.00	✓	Sum of lanes	1800			✓		Normal	
Cx	1	(untitled)		✓	139.63								Normal	
D	1	(untitled)			100.00	✓	Sum of lanes	1800			✓		Normal	
Dx	1	(untitled)		✓	134.93								Normal	
9	1			✓	36.93	✓	Sum of lanes	1800					Normal	
10	1			✓	61.37	✓	Sum of lanes	1800					Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Saturation flow (PCU/hr)
A	1	1	(untitled)			1800
	2	1	(untitled)			1800
Ax	1	1	(untitled)			
B	1	1	(untitled)			1800
	2	1	(untitled)			1800
Bx	1	1	(untitled)			
C	1	1	(untitled)			1800
Cx	1	1	(untitled)			
D	1	1	(untitled)			1800
Dx	1	1	(untitled)			
9	1	1	(untitled)			1800
10	1	1	(untitled)			1800

Modelling

Arm	Traffic Stream	Traffic model	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
A	1	NetworkDefault	100	100	100		0.00		
	2	Flare	100	100	100		2.00		
Ax	1	NetworkDefault	100	100	100		0.00		
B	1	CTM	100	100	100		0.00		
	2	Flare	100	100	100		4.00		
Bx	1	NetworkDefault	100	100	100		0.00		
C	1	NetworkDefault	100	100	100		0.00		
Cx	1	NetworkDefault	100	100	100		0.00		
D	1	NetworkDefault	100	100	100		0.00		
Dx	1	NetworkDefault	100	100	100		0.00		
9	1	NetworkDefault	100	100	100		0.00		
10	1	NetworkDefault	100	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
A	1	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	140
	2	2.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	140
Ax	1	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	140
B	1	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	140
	2	4.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	140
Bx	1	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	140
C	1	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	140
Cx	1	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	140
D	1	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	140
Dx	1	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	140
9	1	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	140
10	1	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	140

Normal traffic - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	(ALL)	100	100

Normal traffic - Advanced

Arm	Traffic Stream	Dispersion type for Normal Traffic
(ALL)	(ALL)	NetworkDefault

Flows

Arm	Traffic Stream	Total Flow (Veh/hr)	Normal Flow (Veh/hr)
A	1	185	185
	2	190	190
Ax	1	421	421
B	1	507	507
	2	200	200
Bx	1	440	440
C	1	46	46
Cx	1	85	85
D	1	476	476
Dx	1	658	658
9	1	707	707
10	1	375	375

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
A	1	1	C	
	2	1	C	
B	1	1	A	
	2	1	A	
C	1	1	D	
D	1	1	B	

Entry Sources

Arm	Traffic Stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)
C	1	12.00	30.00
D	1	12.00	30.00
9	1	4.43	30.00
10	1	7.36	30.00

Sources

Arm	Traffic Stream	Source	Source traffic stream	Destination traffic stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)	Auto turning radius	Traffic turn style	Turning radius (m)
A	1	1	10/1	A/1	12.00	30.00	✓	Straight	Straight Movement
	2	1	10/1	A/2	1.68	30.00	✓	Straight	Straight Movement
Ax	1	1	C/1	Ax/1	16.21	30.00	✓	Straight	Straight Movement
B	1	1	9/1	B/1	12.00	30.00	✓	Straight	Straight Movement
	2	1	9/1	B/2	2.16	30.00	✓	Straight	Straight Movement
Bx	1	1	A/1	Bx/1	16.75	30.00	✓	Nearside	39.81
Cx	1	1	A/1	Cx/1	16.76	30.00	✓	Straight	Straight Movement
Dx	1	1	C/1	Dx/1	16.19	30.00	✓	Nearside	40.37
Ax	1	2	D/1	Ax/1	16.21	30.00	✓	Nearside	40.00
Bx	1	2	D/1	Bx/1	16.75	30.00	✓	Straight	Straight Movement
Cx	1	2	B/1	Cx/1	16.76	30.00	✓	Nearside	43.92
Dx	1	2	B/1	Dx/1	16.19	30.00	✓	Straight	Straight Movement
Ax	1	3	B/2	Ax/1	16.21	30.00	✓	Offside	48.08
Bx	1	3	C/1	Bx/1	16.75	30.00	✓	Offside	59.63
Cx	1	3	D/1	Cx/1	16.76	30.00	✓	Offside	55.00
Dx	1	3	A/2	Dx/1	16.19	30.00	✓	Offside	48.08

Pedestrian Crossings

Pedestrian Crossings

Crossing	Name	Description	Traffic node	Allow walk on red	Crossing type	Length (m)	Cruise time (seconds)	Cruise speed (kph)
2	(untitled)		1		Farside	8.00	5.33	5.40
3	(untitled)		1		Farside	8.00	5.33	5.40
4	(untitled)		1		Farside	7.00	4.67	5.40

Pedestrian Crossings - Signals

Crossing	Controller stream	Phase	Second phase enabled
(ALL)	1	E	

Pedestrian Crossings - Sides

Crossing	Side	Saturation flow (Ped/hr)
(ALL)	(ALL)	11000

Pedestrian Crossings - Modelling

Crossing	Side	Delay weighting (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (Ped)	Has queue limit	Has degree of saturation limit
(ALL)	(ALL)	100	100		0.00		

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit	Limit paths by flow	Low path flow threshold
1	(untitled)	✓	✓	Path Equalisation	✓		✓			✓	1.25				

Normal Input Flows (Veh/hr)

		To							
		1	2	3	4	5	6	7	8
From	1	0	10	10	26	0	0	0	0
	2	18	0	211	247	0	0	0	0
	3	18	190	0	167	0	0	0	0
	4	49	458	200	0	0	0	0	0
	5	0	0	0	0	0	0	0	0
	6	0	0	0	0	0	0	0	0
	7	0	0	0	0	0	0	0	0
	8	0	0	0	0	0	0	0	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows (Veh/hr)

		To							
		1	2	3	4	5	6	7	8
From	1	0	0	0	0	0	0	0	0
	2	0	0	0	0	0	0	0	0
	3	0	0	0	0	0	0	0	0
	4	0	0	0	0	0	0	0	0
	5	0	0	0	0	0	0	100	0
	6	0	0	0	0	0	0	0	100
	7	0	0	0	0	100	0	0	100
	8	0	0	0	0	0	100	100	0

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1	(untitled)	C/1	Cx/1	#0000FF
	2	(untitled)	D/1	Dx/1	#FF0000
	3	(untitled)	10/1	Ax/1	#00FF00
	4	(untitled)	9/1	Bx/1	#FFFF00
	5	(untitled)	3:2E	3:2X	#FF00FF
	6	(untitled)	2:1E	2:1X	#008000
	7	(untitled)	4:2E, 3:1E	4:2X, 3:1X	#FFA500
	8	(untitled)	4:1E, 2:2E	4:1X, 2:2X	#00FFFF

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (Veh/hr)
1	1		1	2	C/1, Dx/1	Normal	10
	2		1	3	C/1, Ax/1	Normal	10
	3		1	4	C/1, Bx/1	Normal	26
	5		2	3	D/1, Ax/1	Normal	211
	6		2	4	D/1, Bx/1	Normal	247
	7		2	1	D/1, Cx/1	Normal	18
	16		4	2	9/1, B/1, Dx/1	Normal	458
	43		4	1	9/1, B/1, Cx/1	Normal	49
	44		4	3	9/1, B/2, Ax/1	Normal	200
	45		3	4	10/1, A/1, Bx/1	Normal	167
	46		3	1	10/1, A/1, Cx/1	Normal	18
	47		3	2	10/1, A/2, Dx/1	Normal	190

Pedestrian Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Pedestrian calculated flow (Ped/hr)
1	17		8	7	4:1E, 4:2X	Normal	100
	18		8	6	2:2E, 2:1X	Normal	100
	22		5	7	3:2E, 3:1X	Normal	100
	34		6	8	2:1E, 2:2X	Normal	100
	41		7	8	4:2E, 4:1X	Normal	100
	42		7	5	3:1E, 3:2X	Normal	100

Signal Timings

Network Default: 140s cycle time; 140 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)	Minimum possible cycle time (s)
1	(untitled)		4	NetworkDefault	140	130

Controller Stream 1 - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
1	Unspecified						Relative

Controller Stream 1 - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
1	✓	✓	Offsets And Green Splits	✓	

Phases

Controller Stream	Phase	Name	Street minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type	Blackout Time (s)
1	A	(untitled)	36	300	0	0	Traffic	
	B	(untitled)	37	37	0	0	Traffic	
	C	(untitled)	24	24	0	0	Traffic	
	D	(untitled)	4	4	0	1	Traffic	
	E	(untitled)	4	4	0	0	Pedestrian	0

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)	Run every N cycles	Probability of running (%)
1	1	A	1	1	100
	2	B	1	1	100
	3	C	1	1	100
	4	D	1	1	100
	5	E	1	1	100

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends	Minimum possible cycle time (s)	Exclude from analysis
1	1	(untitled)	Single	1, 2, 3, 4, 5	44, 62, 80, 98, 115	130	
	2	(untitled)	Single	1, 2, 3, 5, 4	30, 72, 89, 99, 109	130	
	3	(untitled)	Single	1, 2, 4, 3, 5	32, 72, 82, 98, 108	130	
	4	(untitled)	Single	1, 2, 4, 5, 3	47, 90, 99, 108, 137	130	
	5	(untitled)	Single	1, 2, 5, 3, 4	44, 62, 80, 98, 115	130	
	6	(untitled)	Single	1, 2, 5, 4, 3	44, 62, 80, 98, 115	130	
	7	(untitled)	Single	1, 3, 2, 4, 5	44, 62, 80, 98, 115	130	
	8	(untitled)	Single	1, 3, 2, 5, 4	44, 62, 80, 98, 115	130	
	9	(untitled)	Single	1, 3, 4, 2, 5	44, 62, 80, 98, 115	130	
	10	(untitled)	Single	1, 3, 4, 5, 2	44, 62, 80, 98, 115	130	

Intergreen Matrix for Controller Stream 1

From \ To	A	B	C	D	E
A		5	5	5	5
B	5		5	5	5
C	5	5		5	5
D	5	5	5		5
E	5	5	5	5	

Banned Stage transitions for Controller Stream 1

From \ To	1	2	3	4	5
1					
2					
3					
4					
5					

Interstage Matrix for Controller Stream 1

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

Resultant Stages

Controller Stream	Resultant Stage	Is base 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	2	47	45	1	36
	2	✓	2	B	52	90	38	1	37
	3	✓	4	D	95	99	4	1	4
	4	✓	5	E	104	108	4	1	4
	5	✓	3	C	113	137	24	1	24

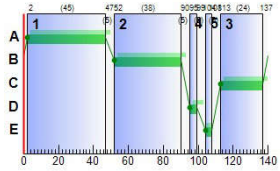
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
1	A	1	✓	2	47	45
	B	1	✓	52	90	38
	C	1	✓	113	137	24
	D	1	✓	95	99	4
	E	1	✓	104	108	4

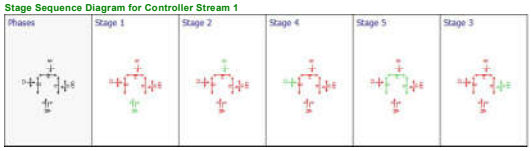
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
A	1	1	1	C	113	137	24
A	2	1	1	C	113	137	24
B	1	1	1	A	2	47	45
B	2	1	1	A	2	47	45
C	1	1	1	D	95	99	4
D	1	1	1	B	52	90	38

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



Resultant penalties

Time Segment	Controller stream	Phase min max penalty (£ per hr)	Intergreen broken penalty (£ per hr)	Stage constraint broken penalty (£ per hr)	Cost of controller stream penalties (£ per hr)
18:00-19:00	1	10000.00	0.00	0.00	10000.00

Final Prediction Table

Traffic Stream Results

Arm	Traffic Stream	Name	SIGNALS: Traffic node	SIGNALS: Controller stream	SIGNALS: Phase	FLOWS: Calculated flow entering (Veh/hr)	FLOWS: Calculated sat flow (Veh/hr)	PERFORMANCE: Actual green (s (per cycle))	PERFORMANCE: Wasted time total (s (per cycle))	PERFORMANCE: Degree of saturation (%)	PERFORMANCE: Practical reserve capacity (%)	PERFORMANCE: JourneyTime (s)	PER PCU: Mean Delay per Veh (s)	PER PCU: Mean stops per Veh (%)	QUEUES: Mean max queue (Veh)
A	1	(untitled)	1	1	C	185	1800	24	2.00	58	74	88.64	76.64	71.84	5.17
	2		1	1	C	190 <	1800	24	0.00	59	69	36.78	35.26	34.13	2.43 +
Ax	1	(untitled)				421	Unrestricted	140	35.00	0	Unrestricted	16.21	0.00	0.00	0.00
B	1	(untitled)	1	1	A	507	1800	45	0.00	86	17	67.41	55.41	78.08	17.08
	2		1	1	A	200 <	1800	45	0.00	34	196	35.60	33.79	52.54	4.09 +
Bx	1	(untitled)				440	Unrestricted	140	44.00	0	Unrestricted	16.75	0.00	0.00	0.00
C	1	(untitled)	1	1	D	46	1800	4	2.00	60	68	110.22	98.22	118.85	2.16
Cx	1	(untitled)				85	Unrestricted	140	41.00	0	Unrestricted	16.76	0.00	0.00	0.00
D	1	(untitled)	1	1	B	476 <	1800	38	0.00	95	5	105.44	93.44	125.54	23.92 +
Dx	1	(untitled)				658	Unrestricted	140	45.00	0	Unrestricted	16.19	0.00	0.00	0.00
9	1		1			707 <	1800	140	30.84	50	99	11.24	6.81	34.95	10.07 +
10	1		1			375 <	1800	140	89.00	50	99	39.97	32.60	74.05	10.98 +

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Uniform delay (Veh-hr/hr)	Random plus oversat delay (Veh-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	395.71	46.99	8.42	23.77	10.05	480.29	23.52	0.00	503.81
Bus									
Tram									
Pedestrians	5.20	12.14	0.43	11.12	0.00	157.94	0.00	0.00	157.94
Controller streams									10000
TOTAL	400.91	59.13	6.78	34.89	10.05	638.23	23.52	0.00	10661.75

- *< = adjusted flow warning (upstream links/traffic streams are over-saturated)*
- ** = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%*
- *^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%*
- *+ = average link/traffic stream excess queue is greater than 0*
- *P.I. = PERFORMANCE INDEX*

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.5.1.7462

Filename: Junction 2 - DO NOTHING - AM-PM.j9
Path: M:\Projects\19\19-020 - Malahide Road\Design\Traffic\Junction Modelling\MODELLING MARCH 2021\Junction 2\Junction 2 - DO NOTHING
Report generation date: 09/03/2021 12:42:14

Summary of junction performance

	AM			PM		
	Set ID	Queue (Veh)	RFC	Set ID	Queue (Veh)	RFC
JUNCTION 2 - DO NOTHING - 2020						
Stream B-AC	D1	0.1	0.06	D2	0.0	0.03
Stream C-AB		0.0	0.02		0.0	0.03
JUNCTION 2 - DO NOTHING - 2023						
Stream B-AC	D3	0.1	0.07	D4	0.0	0.03
Stream C-AB		0.0	0.03		0.0	0.03
JUNCTION 2 - DO NOTHING - 2028						
Stream B-AC	D5	0.1	0.07	D6	0.0	0.03
Stream C-AB		0.0	0.03		0.0	0.03
JUNCTION 2 - DO NOTHING - 2038						
Stream B-AC	D7	0.1	0.08	D8	0.0	0.03
Stream C-AB		0.0	0.03		0.0	0.03

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

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

File summary

File Description

Title	
Location	
Site number	
Date	27/02/2020
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DOMAIN\f.silva
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	Veh	Veh	perHour	s	-Min	perMin

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2020	AM	ONE HOUR	08:00	09:30	15
D2	2020	PM	ONE HOUR	18:00	19:30	15
D3	2023	AM	ONE HOUR	08:00	09:30	15
D4	2023	PM	ONE HOUR	18:00	19:30	15
D5	2028	AM	ONE HOUR	08:00	09:30	15
D6	2028	PM	ONE HOUR	18:00	19:30	15
D7	2038	AM	ONE HOUR	08:00	09:30	15
D8	2038	PM	ONE HOUR	18:00	19:30	15

Analysis Set Details

ID	Name	Network flow scaling factor (%)
A1	JUNCTION 2 - DO NOTHING	100.000

JUNCTION 2 - DO NOTHING - 2020, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.52	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Streamstown Lane (S)		Major
B	Carrey's Lane (N)		Minor
C	Streamstown Lane (E)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	5.50			20.0	✓	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	2.50	90	55

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	508	0.094	0.239	0.150	0.341
B-C	626	0.098	0.248	-	-
C-B	586	0.232	0.232	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2020	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	94	100.000
B		✓	33	100.000
C		✓	64	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	5	89
	B	5	0	28
	C	52	12	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	5
	B	0	0	0
	C	5	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.06	6.68	0.1	A
C-AB	0.02	6.16	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	25	584	0.043	25	0.0	6.429	A
C-AB	10	595	0.016	10	0.0	6.154	A
C-A	39			39			
A-B	4			4			
A-C	67			67			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	30	581	0.051	30	0.1	6.533	A
C-AB	12	596	0.020	12	0.0	6.155	A
C-A	46			46			
A-B	4			4			
A-C	80			80			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	36	575	0.063	36	0.1	6.678	A
C-AB	15	599	0.024	15	0.0	6.157	A
C-A	56			56			
A-B	6			6			
A-C	98			98			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	36	575	0.063	36	0.1	6.678	A
C-AB	15	599	0.024	15	0.0	6.163	A
C-A	56			56			
A-B	6			6			
A-C	98			98			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	30	581	0.051	30	0.1	6.534	A
C-AB	12	596	0.020	12	0.0	6.160	A
C-A	46			46			
A-B	4			4			
A-C	80			80			

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	25	584	0.043	25	0.0	6.432	A
C-AB	10	595	0.016	10	0.0	6.159	A
C-A	39			39			
A-B	4			4			
A-C	67			67			

JUNCTION 2 - DO NOTHING - 2020, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.79	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2020	PM	ONE HOUR	18:00	19:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	49	100.000
B		✓	14	100.000
C		✓	33	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	7	42
	B	5	0	9
	C	20	13	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	5
	B	0	0	0
	C	5	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.03	6.60	0.0	A
C-AB	0.03	6.29	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	11	586	0.019	10	0.0	6.477	A
C-AB	10	587	0.017	10	0.0	6.243	A
C-A	15			15			
A-B	5			5			
A-C	32			32			

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	13	564	0.022	13	0.0	6.527	A
C-AB	12	587	0.021	12	0.0	6.261	A
C-A	18			18			
A-B	6			6			
A-C	38			38			

18:30 - 18:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	15	561	0.027	15	0.0	6.597	A
C-AB	15	587	0.025	15	0.0	6.288	A
C-A	21			21			
A-B	8			8			
A-C	46			46			

18:45 - 19:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	15	561	0.027	15	0.0	6.597	A
C-AB	15	587	0.025	15	0.0	6.289	A
C-A	21			21			
A-B	8			8			
A-C	46			46			

19:00 - 19:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	13	564	0.022	13	0.0	6.528	A
C-AB	12	587	0.021	12	0.0	6.266	A
C-A	18			18			
A-B	6			6			
A-C	38			38			

19:15 - 19:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	11	566	0.019	11	0.0	6.477	A
C-AB	10	587	0.017	10	0.0	6.246	A
C-A	15			15			
A-B	5			5			
A-C	32			32			

JUNCTION 2 - DO NOTHING - 2023, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.52	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2023	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	98	100.000
B		✓	34	100.000
C		✓	68	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	5	93
	B	5	0	29
	C	55	13	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	5
	B	0	0	0
	C	5	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.07	6.70	0.1	A
C-AB	0.03	6.16	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	26	584	0.044	25	0.0	6.441	A
C-AB	11	595	0.018	10	0.0	6.155	A
C-A	41			41			
A-B	4			4			
A-C	70			70			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	31	580	0.053	31	0.1	6.549	A
C-AB	13	597	0.021	13	0.0	6.155	A
C-A	48			48			
A-B	4			4			
A-C	84			84			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	37	575	0.065	37	0.1	6.700	A
C-AB	16	600	0.027	16	0.0	6.158	A
C-A	59			59			
A-B	6			6			
A-C	102			102			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	37	575	0.065	37	0.1	6.700	A
C-AB	16	600	0.027	16	0.0	6.162	A
C-A	59			59			
A-B	6			6			
A-C	102			102			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	31	580	0.053	31	0.1	6.550	A
C-AB	13	597	0.021	13	0.0	6.164	A
C-A	48			48			
A-B	4			4			
A-C	84			84			

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	26	584	0.044	26	0.0	6.444	A
C-AB	11	595	0.018	11	0.0	6.160	A
C-A	41			41			
A-B	4			4			
A-C	70			70			

JUNCTION 2 - DO NOTHING - 2023, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.78	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2023	PM	ONE HOUR	18:00	19:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	51	100.000
B		✓	14	100.000
C		✓	35	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	7	44
	B	5	0	9
	C	21	14	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	5
	B	0	0	0
	C	5	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.03	6.61	0.0	A
C-AB	0.03	6.30	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	11	586	0.019	10	0.0	6.483	A
C-AB	11	587	0.018	11	0.0	6.250	A
C-A	16			16			
A-B	5			5			
A-C	33			33			

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	13	563	0.022	13	0.0	6.535	A
C-AB	13	587	0.022	13	0.0	6.270	A
C-A	18			18			
A-B	6			6			
A-C	40			40			

18:30 - 18:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	15	560	0.028	15	0.0	6.607	A
C-AB	16	587	0.027	16	0.0	6.299	A
C-A	22			22			
A-B	8			8			
A-C	48			48			

18:45 - 19:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	15	560	0.028	15	0.0	6.608	A
C-AB	16	587	0.027	16	0.0	6.303	A
C-A	22			22			
A-B	8			8			
A-C	48			48			

19:00 - 19:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	13	563	0.022	13	0.0	6.536	A
C-AB	13	587	0.022	13	0.0	6.272	A
C-A	18			18			
A-B	6			6			
A-C	40			40			

19:15 - 19:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	11	566	0.019	11	0.0	6.486	A
C-AB	11	587	0.018	11	0.0	6.254	A
C-A	16			16			
A-B	5			5			
A-C	33			33			

JUNCTION 2 - DO NOTHING - 2028, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.57	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	2028	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	107	100.000
B		✓	38	100.000
C		✓	73	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	6	101
	B	6	0	32
	C	59	14	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	5
	B	0	0	0
	C	5	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.07	6.81	0.1	A
C-AB	0.03	6.17	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	29	581	0.049	28	0.1	6.516	A
C-AB	11	596	0.019	11	0.0	6.159	A
C-A	44			44			
A-B	5			5			
A-C	76			76			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	34	576	0.059	34	0.1	6.638	A
C-AB	14	598	0.023	14	0.0	6.161	A
C-A	52			52			
A-B	5			5			
A-C	91			91			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	42	570	0.073	42	0.1	6.811	A
C-AB	17	601	0.029	17	0.0	6.166	A
C-A	63			63			
A-B	7			7			
A-C	111			111			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	42	570	0.073	42	0.1	6.811	A
C-AB	17	601	0.029	17	0.0	6.172	A
C-A	63			63			
A-B	7			7			
A-C	111			111			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	34	576	0.059	34	0.1	6.642	A
C-AB	14	598	0.023	14	0.0	6.170	A
C-A	52			52			
A-B	5			5			
A-C	91			91			

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	29	581	0.049	29	0.1	6.522	A
C-AB	11	596	0.019	11	0.0	6.163	A
C-A	44			44			
A-B	5			5			
A-C	76			76			

JUNCTION 2 - DO NOTHING - 2028, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.81	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	2028	PM	ONE HOUR	18:00	19:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	56	100.000
B		✓	16	100.000
C		✓	38	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	8	48
	B	6	0	10
	C	23	15	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	5
	B	0	0	0
	C	5	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.03	6.68	0.0	A
C-AB	0.03	6.31	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	12	582	0.021	12	0.0	6.541	A
C-AB	12	587	0.020	12	0.0	6.257	A
C-A	17			17			
A-B	6			6			
A-C	36			36			

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	14	580	0.026	14	0.0	6.600	A
C-AB	14	587	0.024	14	0.0	6.279	A
C-A	20			20			
A-B	7			7			
A-C	43			43			

18:30 - 18:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	18	556	0.032	18	0.0	6.683	A
C-AB	17	588	0.029	17	0.0	6.310	A
C-A	25			25			
A-B	9			9			
A-C	53			53			

18:45 - 19:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	18	556	0.032	18	0.0	6.683	A
C-AB	17	588	0.029	17	0.0	6.314	A
C-A	25			25			
A-B	9			9			
A-C	53			53			

19:00 - 19:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	14	560	0.026	14	0.0	6.601	A
C-AB	14	587	0.024	14	0.0	6.284	A
C-A	20			20			
A-B	7			7			
A-C	43			43			

19:15 - 19:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	12	562	0.021	12	0.0	6.545	A
C-AB	12	587	0.020	12	0.0	6.259	A
C-A	17			17			
A-B	6			6			
A-C	36			36			

JUNCTION 2 - DO NOTHING - 2038, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.57	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D7	2038	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	114	100.000
B		✓	40	100.000
C		✓	78	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	6	108
	B	6	0	34
	C	63	15	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	5
	B	0	0	0
	C	5	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.08	6.85	0.1	A
C-AB	0.03	6.17	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	30	580	0.052	30	0.1	6.534	A
C-AB	12	597	0.021	12	0.0	6.161	A
C-A	46			46			
A-B	5			5			
A-C	81			81			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	36	576	0.062	36	0.1	6.668	A
C-AB	15	599	0.025	15	0.0	6.162	A
C-A	55			55			
A-B	5			5			
A-C	97			97			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	44	569	0.077	44	0.1	6.853	A
C-AB	19	602	0.031	19	0.0	6.168	A
C-A	67			67			
A-B	7			7			
A-C	119			119			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	44	569	0.077	44	0.1	6.853	A
C-AB	19	602	0.031	19	0.0	6.171	A
C-A	67			67			
A-B	7			7			
A-C	119			119			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	36	576	0.062	36	0.1	6.672	A
C-AB	15	599	0.025	15	0.0	6.170	A
C-A	55			55			
A-B	5			5			
A-C	97			97			

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	30	580	0.052	30	0.1	6.544	A
C-AB	12	596	0.021	12	0.0	6.164	A
C-A	46			46			
A-B	5			5			
A-C	81			81			

JUNCTION 2 - DO NOTHING - 2038, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.81	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D8	2038	PM	ONE HOUR	18:00	19:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	60	100.000
B		✓	17	100.000
C		✓	40	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	9	51
	B	6	0	11
	C	24	16	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	5
	B	0	0	0
	C	5	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.03	6.68	0.0	A
C-AB	0.03	6.33	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	13	564	0.023	13	0.0	6.526	A
C-AB	12	587	0.021	12	0.0	6.268	A
C-A	18			18			
A-B	7			7			
A-C	38			38			

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	15	562	0.027	15	0.0	6.588	A
C-AB	15	587	0.025	15	0.0	6.292	A
C-A	21			21			
A-B	8			8			
A-C	46			46			

18:30 - 18:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	19	558	0.034	19	0.0	6.676	A
C-AB	18	587	0.031	18	0.0	6.327	A
C-A	26			26			
A-B	10			10			
A-C	56			56			

18:45 - 19:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	19	558	0.034	19	0.0	6.676	A
C-AB	18	587	0.031	18	0.0	6.328	A
C-A	26			26			
A-B	10			10			
A-C	56			56			

19:00 - 19:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	15	562	0.027	15	0.0	6.591	A
C-AB	15	587	0.025	15	0.0	6.295	A
C-A	21			21			
A-B	8			8			
A-C	46			46			

19:15 - 19:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	13	564	0.023	13	0.0	6.529	A
C-AB	12	587	0.021	12	0.0	6.270	A
C-A	18			18			
A-B	7			7			
A-C	38			38			

Junctions 9

PICADY 9 - Priority Intersection Module

Filename: Junction 2 - DO SOMETHING - AM-PM.j9
Path: M:\Projects\19\19-020 - Malahide Road\Design\Traffic\Junction Modelling\MODELLING MARCH 2021\Junction 2\Junction 2 - DO SOMETHING
Report generation date: 09/03/2021 12:43:02

Summary of junction performance

	AM			PM		
	Set ID	Queue (Veh)	RFC	Set ID	Queue (Veh)	RFC
JUNCTION 2 - DO SOMETHING - 2023						
Stream B-AC	D1	0.2	0.15	D2	0.1	0.07
Stream C-AB		0.0	0.04		0.1	0.05
JUNCTION 2 - DO SOMETHING - 2028						
Stream B-AC	D3	0.2	0.16	D4	0.1	0.08
Stream C-AB		0.1	0.04		0.1	0.05
JUNCTION 2 - DO SOMETHING - 2038						
Stream B-AC	D5	0.2	0.16	D6	0.1	0.08
Stream C-AB		0.1	0.04		0.1	0.06

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

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

File summary

File Description

Title	
Location	
Site number	
Date	27/02/2020
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DOMAIN\f.silva
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	Veh	Veh	perHour	s	-Min	perMin

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2023	AM	ONE HOUR	08:00	09:30	15
D2	2023	PM	ONE HOUR	18:00	19:30	15
D3	2028	AM	ONE HOUR	08:00	09:30	15
D4	2028	PM	ONE HOUR	18:00	19:30	15
D5	2038	AM	ONE HOUR	08:00	09:30	15
D6	2038	PM	ONE HOUR	18:00	19:30	15

Analysis Set Details

ID	Name	Network flow scaling factor (%)
A1	JUNCTION 2 - DO SOMETHING	100.000

JUNCTION 2 - DO SOMETHING - 2023, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		2.47	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Streamstown Lane (S)		Major
B	Carrey's Lane (N)		Minor
C	Streamstown Lane (E)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	5.50			20.0	✓	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	2.50	90	55

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	508	0.094	0.239	0.150	0.341
B-C	626	0.098	0.248	-	-
C-B	586	0.232	0.232	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2023	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	117	100.000
B		✓	72	100.000
C		✓	86	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	17	100
	B	30	0	42
	C	68	18	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	5
	B	0	0	0
	C	5	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.15	7.99	0.2	A
C-AB	0.04	6.18	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	54	543	0.100	54	0.1	7.355	A
C-AB	15	599	0.025	15	0.0	6.166	A
C-A	50			50			
A-B	13			13			
A-C	75			75			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	65	537	0.120	65	0.1	7.611	A
C-AB	18	601	0.030	18	0.0	6.169	A
C-A	59			59			
A-B	15			15			
A-C	90			90			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	79	530	0.150	79	0.2	7.982	A
C-AB	23	605	0.037	23	0.0	6.177	A
C-A	72			72			
A-B	19			19			
A-C	110			110			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	79	530	0.150	79	0.2	7.987	A
C-AB	23	605	0.037	23	0.0	6.181	A
C-A	72			72			
A-B	19			19			
A-C	110			110			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	65	537	0.120	65	0.1	7.619	A
C-AB	18	601	0.030	18	0.0	6.179	A
C-A	59			59			
A-B	15			15			
A-C	90			90			

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	54	543	0.100	54	0.1	7.373	A
C-AB	15	599	0.025	15	0.0	6.170	A
C-A	50			50			
A-B	13			13			
A-C	75			75			

JUNCTION 2 - DO SOMETHING - 2023, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		2.38	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2023	PM	ONE HOUR	18:00	19:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	89	100.000
B		✓	35	100.000
C		✓	52	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	32	57
	B	19	0	16
	C	27	25	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	5
	B	0	0	0
	C	5	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.07	7.37	0.1	A
C-AB	0.05	6.51	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	26	536	0.049	26	0.1	7.058	A
C-AB	20	583	0.033	19	0.0	6.384	A
C-A	20			20			
A-B	24			24			
A-C	43			43			

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	31	532	0.059	31	0.1	7.192	A
C-AB	23	583	0.040	23	0.0	6.435	A
C-A	23			23			
A-B	29			29			
A-C	51			51			

18:30 - 18:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	39	527	0.073	38	0.1	7.375	A
C-AB	29	582	0.050	29	0.1	6.506	A
C-A	28			28			
A-B	35			35			
A-C	63			63			

18:45 - 19:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	39	527	0.073	39	0.1	7.375	A
C-AB	29	582	0.050	29	0.1	6.508	A
C-A	28			28			
A-B	35			35			
A-C	63			63			

19:00 - 19:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	31	532	0.059	32	0.1	7.197	A
C-AB	23	583	0.040	24	0.0	6.440	A
C-A	23			23			
A-B	29			29			
A-C	51			51			

19:15 - 19:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	26	536	0.049	26	0.1	7.070	A
C-AB	20	583	0.033	20	0.0	6.391	A
C-A	20			20			
A-B	24			24			
A-C	43			43			

JUNCTION 2 - DO SOMETHING - 2028, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		2.30	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2028	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	132	100.000
B		✓	74	100.000
C		✓	107	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	17	115
	B	30	0	44
	C	87	20	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	5
	B	0	0	0
	C	5	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.16	8.11	0.2	A
C-AB	0.04	6.12	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	56	540	0.103	55	0.1	7.421	A
C-AB	17	606	0.028	17	0.0	6.114	A
C-A	64			64			
A-B	13			13			
A-C	87			87			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	67	534	0.125	66	0.1	7.702	A
C-AB	21	610	0.034	21	0.0	6.108	A
C-A	76			76			
A-B	15			15			
A-C	103			103			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	81	525	0.155	81	0.2	8.110	A
C-AB	26	615	0.042	26	0.1	6.104	A
C-A	92			92			
A-B	19			19			
A-C	127			127			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	81	525	0.155	81	0.2	8.115	A
C-AB	26	615	0.042	26	0.1	6.111	A
C-A	92			92			
A-B	19			19			
A-C	127			127			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	67	534	0.125	67	0.1	7.711	A
C-AB	21	610	0.034	21	0.0	6.118	A
C-A	76			76			
A-B	15			15			
A-C	103			103			

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	56	540	0.103	56	0.1	7.440	A
C-AB	17	606	0.028	17	0.0	6.120	A
C-A	64			64			
A-B	13			13			
A-C	87			87			

JUNCTION 2 - DO SOMETHING - 2028, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		2.13	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2028	PM	ONE HOUR	18:00	19:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	108	100.000
B		✓	36	100.000
C		✓	65	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	33	75
	B	19	0	17
	C	38	27	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	5
	B	0	0	0
	C	5	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.08	7.47	0.1	A
C-AB	0.05	6.51	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	27	533	0.051	27	0.1	7.110	A
C-AB	21	585	0.037	21	0.0	6.381	A
C-A	28			28			
A-B	25			25			
A-C	56			56			

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	32	528	0.061	32	0.1	7.260	A
C-AB	26	585	0.044	26	0.1	6.432	A
C-A	33			33			
A-B	30			30			
A-C	67			67			

18:30 - 18:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	40	522	0.076	40	0.1	7.469	A
C-AB	32	585	0.055	32	0.1	6.504	A
C-A	40			40			
A-B	36			36			
A-C	83			83			

18:45 - 19:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	40	522	0.076	40	0.1	7.469	A
C-AB	32	585	0.055	32	0.1	6.507	A
C-A	40			40			
A-B	36			36			
A-C	83			83			

19:00 - 19:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	32	528	0.061	32	0.1	7.262	A
C-AB	26	585	0.044	26	0.1	6.441	A
C-A	33			33			
A-B	30			30			
A-C	67			67			

19:15 - 19:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	27	533	0.051	27	0.1	7.118	A
C-AB	21	585	0.037	21	0.0	6.389	A
C-A	28			28			
A-B	25			25			
A-C	56			56			

JUNCTION 2 - DO SOMETHING - 2038, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		2.31	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	2038	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	140	100.000
B		✓	77	100.000
C		✓	112	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	18	122
	B	31	0	46
	C	91	21	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	5
	B	0	0	0
	C	5	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.16	8.22	0.2	A
C-AB	0.04	6.12	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	58	538	0.108	57	0.1	7.476	A
C-AB	18	606	0.029	18	0.0	6.115	A
C-A	66			66			
A-B	14			14			
A-C	92			92			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	69	532	0.130	69	0.1	7.777	A
C-AB	22	610	0.036	22	0.0	6.115	A
C-A	79			79			
A-B	16			16			
A-C	110			110			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	85	523	0.162	85	0.2	8.212	A
C-AB	28	616	0.045	28	0.1	6.109	A
C-A	96			96			
A-B	20			20			
A-C	134			134			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	85	523	0.162	85	0.2	8.219	A
C-AB	28	616	0.045	28	0.1	6.117	A
C-A	96			96			
A-B	20			20			
A-C	134			134			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	69	532	0.130	69	0.2	7.788	A
C-AB	22	610	0.036	22	0.0	6.122	A
C-A	79			79			
A-B	16			16			
A-C	110			110			

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	58	538	0.108	58	0.1	7.495	A
C-AB	18	606	0.029	18	0.0	6.123	A
C-A	66			66			
A-B	14			14			
A-C	92			92			

JUNCTION 2 - DO SOMETHING - 2038, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		2.14	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	2038	PM	ONE HOUR	18:00	19:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	111	100.000
B		✓	37	100.000
C		✓	67	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	33	78
	B	19	0	18
	C	39	28	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	5
	B	0	0	0
	C	5	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.08	7.48	0.1	A
C-AB	0.06	6.52	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	28	534	0.052	28	0.1	7.107	A
C-AB	22	585	0.038	22	0.0	6.391	A
C-A	28			28			
A-B	25			25			
A-C	59			59			

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	33	529	0.063	33	0.1	7.261	A
C-AB	27	585	0.046	27	0.1	6.444	A
C-A	33			33			
A-B	30			30			
A-C	70			70			

18:30 - 18:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	41	522	0.078	41	0.1	7.476	A
C-AB	33	585	0.057	33	0.1	6.519	A
C-A	40			40			
A-B	36			36			
A-C	86			86			

18:45 - 19:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	41	522	0.078	41	0.1	7.476	A
C-AB	33	585	0.057	33	0.1	6.522	A
C-A	40			40			
A-B	36			36			
A-C	86			86			

19:00 - 19:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	33	529	0.063	33	0.1	7.266	A
C-AB	27	585	0.046	27	0.1	6.453	A
C-A	33			33			
A-B	30			30			
A-C	70			70			

19:15 - 19:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	28	534	0.052	28	0.1	7.115	A
C-AB	22	585	0.038	22	0.0	6.399	A
C-A	28			28			
A-B	25			25			
A-C	59			59			

Junctions 9

PICADY 9 - Priority Intersection Module

Filename: Junction 3_DO NOTHING.j9
Path: M:\Projects\19\19-020 - Malahide Road\Design\Traffic\Junction Modelling\MODELLING MARCH 2021\Junction 3\Junction 3 - DO NOTHING
Report generation date: 09/03/2021 12:43:49

»DO NOTHING - AM & PM - 2020, AM
»DO NOTHING - AM & PM - 2020, PM
»DO NOTHING - AM & PM - 2023, AM
»DO NOTHING - AM & PM - 2023, PM
»DO NOTHING - AM & PM - 2028, AM
»DO NOTHING - AM & PM - 2028, PM
»DO NOTHING - AM & PM - 2038, AM
»DO NOTHING - AM & PM - 2038, PM

Summary of junction performance

	AM			PM		
	Set ID	Queue (PCU)	RFC	Set ID	Queue (PCU)	RFC
DO NOTHING - AM & PM - 2020						
Stream B-AC	D1	0.4	0.27	D2	0.1	0.11
Stream C-AB		0.3	0.13		0.2	0.09
DO NOTHING - AM & PM - 2023						
Stream B-AC	D3	0.4	0.28	D4	0.1	0.12
Stream C-AB		0.4	0.14		0.2	0.10
DO NOTHING - AM & PM - 2028						
Stream B-AC	D5	0.5	0.31	D6	0.2	0.13
Stream C-AB		0.5	0.16		0.3	0.12
DO NOTHING - AM & PM - 2038						
Stream B-AC	D7	0.5	0.34	D8	0.2	0.14
Stream C-AB		0.5	0.18		0.3	0.13

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

File summary

File Description

Title	
Location	
Site number	
Date	01/12/2020
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DOMAIN\l.byrne
Description	

Units

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

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2020	AM	ONE HOUR	08:00	09:30	15
D2	2020	PM	ONE HOUR	16:00	17:30	15
D3	2023	AM	ONE HOUR	08:00	09:30	15
D4	2023	PM	ONE HOUR	16:00	17:30	15
D5	2028	AM	ONE HOUR	08:00	09:30	15
D6	2028	PM	ONE HOUR	16:00	17:30	15
D7	2038	AM	ONE HOUR	08:00	09:30	15
D8	2038	PM	ONE HOUR	16:00	17:30	15

Analysis Set Details

ID	Name	Network flow scaling factor (%)
A1	DO NOTHING - AM & PM	100.000

DO NOTHING - AM & PM - 2020, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.55	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	untitled		Major
B	untitled		Minor
C	untitled		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	8.76			247.0	✓	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	5.00	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	574	0.092	0.232	0.146	0.332
B-C	749	0.101	0.255	-	-
C-B	717	0.244	0.244	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2020	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	421	100.000
B		✓	148	100.000
C		✓	553	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	6	415
	B	8	0	140
	C	504	49	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	5	10
	B	5	0	5
	C	10	5	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.27	8.49	0.4	A
C-AB	0.13	4.72	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	111	650	0.172	111	0.2	7.001	A
C-AB	65	884	0.073	64	0.1	4.700	A
C-A	352			352			
A-B	5			5			
A-C	312			312			

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	133	632	0.210	133	0.3	7.566	A
C-AB	87	921	0.095	87	0.2	4.635	A
C-A	410			410			
A-B	5			5			
A-C	373			373			

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	163	608	0.268	163	0.4	8.479	A
C-AB	126	973	0.130	126	0.3	4.579	A
C-A	483			483			
A-B	7			7			
A-C	457			457			

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	163	608	0.268	163	0.4	8.494	A
C-AB	126	973	0.130	126	0.3	4.591	A
C-A	482			482			
A-B	7			7			
A-C	457			457			

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	133	632	0.210	133	0.3	7.587	A
C-AB	87	921	0.095	88	0.2	4.661	A
C-A	410			410			
A-B	5			5			
A-C	373			373			

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	111	649	0.172	112	0.2	7.033	A
C-AB	65	884	0.073	65	0.1	4.719	A
C-A	351			351			
A-B	5			5			
A-C	312			312			

DO NOTHING - AM & PM - 2020, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.76	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2020	PM	ONE HOUR	16:00	17:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	467	100.000
B		✓	54	100.000
C		✓	487	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	2	465
	B	13	0	41
	C	451	36	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	5	10
	B	5	0	5
	C	10	5	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.11	8.01	0.1	A
C-AB	0.09	4.79	0.2	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:00 - 16:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	41	586	0.069	40	0.1	6.927	A
C-AB	45	852	0.053	45	0.1	4.771	A
C-A	322			322			
A-B	2			2			
A-C	350			350			

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	49	563	0.086	48	0.1	7.343	A
C-AB	60	882	0.068	60	0.1	4.694	A
C-A	378			378			
A-B	2			2			
A-C	418			418			

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	59	531	0.112	59	0.1	8.006	A
C-AB	86	925	0.093	86	0.2	4.613	A
C-A	450			450			
A-B	2			2			
A-C	512			512			

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	59	531	0.112	59	0.1	8.010	A
C-AB	86	925	0.093	86	0.2	4.622	A
C-A	450			450			
A-B	2			2			
A-C	512			512			

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	49	563	0.086	49	0.1	7.347	A
C-AB	60	882	0.068	61	0.1	4.716	A
C-A	378			378			
A-B	2			2			
A-C	418			418			

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	41	586	0.069	41	0.1	6.935	A
C-AB	45	852	0.053	45	0.1	4.787	A
C-A	321			321			
A-B	2			2			
A-C	350			350			

DO NOTHING - AM & PM - 2023, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.59	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2023	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	441	100.000
B		✓	155	100.000
C		✓	580	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	6	435
	B	8	0	147
	C	529	51	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	5	10
	B	5	0	5
	C	10	5	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.28	8.75	0.4	A
C-AB	0.14	4.70	0.4	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	646	0.181	116	0.2	7.116	A
C-AB	69	893	0.078	69	0.2	4.677	A
C-A	367			367			
A-B	5			5			
A-C	327			327			

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	628	0.222	139	0.3	7.727	A
C-AB	94	932	0.101	94	0.2	4.612	A
C-A	427			427			
A-B	5			5			
A-C	391			391			

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	603	0.283	170	0.4	8.733	A
C-AB	138	987	0.139	137	0.4	4.566	A
C-A	501			501			
A-B	7			7			
A-C	479			479			

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	603	0.283	171	0.4	8.751	A
C-AB	138	988	0.140	138	0.4	4.578	A
C-A	501			501			
A-B	7			7			
A-C	479			479			

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	628	0.222	140	0.3	7.749	A
C-AB	94	932	0.101	95	0.2	4.641	A
C-A	427			427			
A-B	5			5			
A-C	391			391			

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	646	0.181	117	0.2	7.146	A
C-AB	70	894	0.078	70	0.2	4.697	A
C-A	367			367			
A-B	5			5			
A-C	327			327			

DO NOTHING - AM & PM - 2023, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.77	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2023	PM	ONE HOUR	16:00	17:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	490	100.000
B		✓	56	100.000
C		✓	512	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	2	488
	B	13	0	43
	C	474	38	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	5	10
	B	5	0	5
	C	10	5	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.12	8.15	0.1	A
C-AB	0.10	4.77	0.2	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:00 - 16:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	42	582	0.072	42	0.1	6.987	A
C-AB	49	859	0.057	49	0.1	4.751	A
C-A	337			337			
A-B	2			2			
A-C	367			367			

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	50	559	0.090	50	0.1	7.434	A
C-AB	66	891	0.074	65	0.1	4.674	A
C-A	395			395			
A-B	2			2			
A-C	439			439			

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	62	525	0.117	62	0.1	8.148	A
C-AB	95	938	0.101	94	0.2	4.594	A
C-A	469			469			
A-B	2			2			
A-C	537			537			

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	62	525	0.117	62	0.1	8.154	A
C-AB	95	938	0.101	95	0.2	4.606	A
C-A	469			469			
A-B	2			2			
A-C	537			537			

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	50	559	0.090	50	0.1	7.438	A
C-AB	66	892	0.074	66	0.1	4.699	A
C-A	394			394			
A-B	2			2			
A-C	439			439			

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	42	582	0.072	42	0.1	7.001	A
C-AB	49	860	0.057	49	0.1	4.766	A
C-A	336			336			
A-B	2			2			
A-C	367			367			

DO NOTHING - AM & PM - 2028, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.70	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	2028	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	478	100.000
B		✓	168	100.000
C		✓	629	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	6	472
	B	9	0	159
	C	573	56	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	5	10
	B	5	0	5
	C	10	5	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.31	9.34	0.5	A
C-AB	0.16	4.68	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	126	638	0.198	125	0.3	7.366	A
C-AB	80	910	0.088	79	0.2	4.653	A
C-A	393			393			
A-B	5			5			
A-C	355			355			

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	151	618	0.245	151	0.3	8.088	A
C-AB	110	952	0.116	110	0.3	4.599	A
C-A	455			455			
A-B	5			5			
A-C	424			424			

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	185	590	0.314	184	0.5	9.311	A
C-AB	164	1013	0.162	164	0.4	4.578	A
C-A	528			528			
A-B	7			7			
A-C	520			520			

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	185	590	0.314	185	0.5	9.337	A
C-AB	165	1014	0.162	165	0.5	4.593	A
C-A	528			528			
A-B	7			7			
A-C	520			520			

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	151	618	0.245	152	0.3	8.120	A
C-AB	111	953	0.116	111	0.3	4.627	A
C-A	455			455			
A-B	5			5			
A-C	424			424			

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	126	637	0.198	127	0.3	7.408	A
C-AB	81	910	0.089	81	0.2	4.677	A
C-A	393			393			
A-B	5			5			
A-C	355			355			

DO NOTHING - AM & PM - 2028, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.82	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	2028	PM	ONE HOUR	16:00	17:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	532	100.000
B		✓	61	100.000
C		✓	554	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	3	529
	B	14	0	47
	C	513	41	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	5	10
	B	5	0	5
	C	10	5	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.13	8.53	0.2	A
C-AB	0.12	4.73	0.3	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:00 - 16:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	46	573	0.080	46	0.1	7.162	A
C-AB	55	872	0.063	55	0.1	4.718	A
C-A	362			362			
A-B	2			2			
A-C	398			398			

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	55	547	0.100	55	0.1	7.674	A
C-AB	75	908	0.083	75	0.2	4.643	A
C-A	423			423			
A-B	3			3			
A-C	476			476			

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	67	510	0.132	67	0.2	8.524	A
C-AB	110	959	0.115	110	0.3	4.571	A
C-A	500			500			
A-B	3			3			
A-C	582			582			

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	67	510	0.132	67	0.2	8.528	A
C-AB	111	959	0.115	111	0.3	4.583	A
C-A	499			499			
A-B	3			3			
A-C	582			582			

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	55	547	0.100	55	0.1	7.683	A
C-AB	75	908	0.083	76	0.2	4.667	A
C-A	423			423			
A-B	3			3			
A-C	476			476			

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	46	573	0.080	46	0.1	7.174	A
C-AB	56	873	0.064	56	0.1	4.735	A
C-A	361			361			
A-B	2			2			
A-C	398			398			

DO NOTHING - AM & PM - 2038, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.83	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D7	2038	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	512	100.000
B		✓	181	100.000
C		✓	673	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	7	505
	B	10	0	171
	C	613	60	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	5	10
	B	5	0	5
	C	10	5	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.34	9.98	0.5	A
C-AB	0.18	4.66	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	136	630	0.216	135	0.3	7.626	A
C-AB	90	925	0.098	89	0.2	4.631	A
C-A	416			416			
A-B	5			5			
A-C	380			380			

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	163	608	0.267	162	0.4	8.469	A
C-AB	125	971	0.129	125	0.3	4.586	A
C-A	480			480			
A-B	6			6			
A-C	454			454			

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	199	578	0.345	199	0.5	9.943	A
C-AB	190	1037	0.183	190	0.5	4.593	A
C-A	551			551			
A-B	8			8			
A-C	556			556			

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	199	578	0.345	199	0.5	9.978	A
C-AB	191	1038	0.184	191	0.5	4.612	A
C-A	550			550			
A-B	8			8			
A-C	556			556			

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	163	608	0.268	163	0.4	8.507	A
C-AB	126	971	0.130	127	0.3	4.617	A
C-A	479			479			
A-B	6			6			
A-C	454			454			

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	136	630	0.216	137	0.3	7.674	A
C-AB	91	925	0.098	91	0.2	4.655	A
C-A	416			416			
A-B	5			5			
A-C	380			380			

DO NOTHING - AM & PM - 2038, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.86	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D8	2038	PM	ONE HOUR	16:00	17:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	569	100.000
B		✓	65	100.000
C		✓	593	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	3	566
	B	15	0	50
	C	549	44	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	5	10
	B	5	0	5
	C	10	5	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.14	8.91	0.2	A
C-AB	0.13	4.71	0.3	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:00 - 16:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	49	563	0.087	49	0.1	7.337	A
C-AB	62	885	0.070	62	0.1	4.692	A
C-A	384			384			
A-B	2			2			
A-C	426			426			

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	58	535	0.109	58	0.1	7.920	A
C-AB	85	923	0.092	85	0.2	4.616	A
C-A	448			448			
A-B	3			3			
A-C	509			509			

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	72	496	0.144	71	0.2	8.906	A
C-AB	127	979	0.130	127	0.3	4.558	A
C-A	526			526			
A-B	3			3			
A-C	623			623			

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	72	496	0.144	72	0.2	8.914	A
C-AB	128	980	0.130	128	0.3	4.572	A
C-A	525			525			
A-B	3			3			
A-C	623			623			

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	58	535	0.109	59	0.1	7.933	A
C-AB	86	924	0.093	86	0.2	4.646	A
C-A	447			447			
A-B	3			3			
A-C	509			509			

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	49	563	0.087	49	0.1	7.354	A
C-AB	62	885	0.071	63	0.1	4.710	A
C-A	384			384			
A-B	2			2			
A-C	426			426			

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.5.1.7462

Filename: Junction 3_DO SOMETHING.j9
Path: M:\Projects\19\19-020 - Malahide Road\Design\Traffic\Junction Modelling\MODELLING MARCH 2021\Junction 3\Junction 3 - DO SOMETHING
Report generation date: 09/03/2021 12:44:33

»DO SOMETHING - AM & PM - 2023, AM
»DO SOMETHING - AM & PM - 2023, PM
»DO SOMETHING - AM & PM - 2028, AM
»DO SOMETHING - AM & PM - 2028, PM
»DO SOMETHING - AM & PM - 2038, AM
»DO SOMETHING - AM & PM - 2038, PM

Summary of junction performance

	AM			PM		
	Set ID	Queue (PCU)	RFC	Set ID	Queue (PCU)	RFC
DO SOMETHING - AM & PM - 2023						
Stream B-AC	D1	0.5	0.34	D2	0.2	0.17
Stream C-AB		0.5	0.19		0.3	0.13
DO SOMETHING - AM & PM - 2028						
Stream B-AC	D3	0.7	0.39	D4	0.3	0.22
Stream C-AB		0.8	0.25		0.5	0.18
DO SOMETHING - AM & PM - 2038						
Stream B-AC	D5	0.8	0.43	D6	0.3	0.24
Stream C-AB		1.0	0.31		0.6	0.20

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

File summary

File Description

Title	
Location	
Site number	
Date	01/12/2020
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DOMAIN\i.byrne
Description	

Units

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

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2023	AM	ONE HOUR	08:00	09:30	15
D2	2023	PM	ONE HOUR	16:00	17:30	15
D3	2028	AM	ONE HOUR	08:00	09:30	15
D4	2028	PM	ONE HOUR	16:00	17:30	15
D5	2038	AM	ONE HOUR	08:00	09:30	15
D6	2038	PM	ONE HOUR	16:00	17:30	15

Analysis Set Details

ID	Name	Network flow scaling factor (%)
A1	DO SOMETHING - AM & PM	100.000

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Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.90	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	untitled		Major
B	untitled		Minor
C	untitled		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	8.76			247.0	✓	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	5.00	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	574	0.092	0.232	0.148	0.332
B-C	749	0.101	0.255	-	-
C-B	717	0.244	0.244	-	-

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2023	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	474	100.000
B		✓	173	100.000
C		✓	654	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	12	462
	B	21	0	152
	C	590	64	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	5	10
	B	5	0	5
	C	10	5	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.34	10.22	0.5	B
C-AB	0.19	4.70	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	130	614	0.212	129	0.3	7.776	A
C-AB	93	919	0.102	92	0.2	4.679	A
C-A	399			399			
A-B	9			9			
A-C	348			348			

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	156	592	0.263	155	0.4	8.646	A
C-AB	129	963	0.134	128	0.3	4.644	A
C-A	459			459			
A-B	11			11			
A-C	415			415			

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	190	560	0.340	190	0.5	10.180	B
C-AB	193	1027	0.188	192	0.5	4.662	A
C-A	527			527			
A-B	13			13			
A-C	509			509			

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	190	560	0.340	190	0.5	10.217	B
C-AB	193	1027	0.188	193	0.5	4.682	A
C-A	527			527			
A-B	13			13			
A-C	509			509			

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	156	592	0.263	156	0.4	8.688	A
C-AB	129	964	0.134	130	0.3	4.677	A
C-A	459			459			
A-B	11			11			
A-C	415			415			

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	130	614	0.212	131	0.3	7.824	A
C-AB	94	919	0.102	94	0.2	4.703	A
C-A	398			398			
A-B	9			9			
A-C	348			348			

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Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.97	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2023	PM	ONE HOUR	16:00	17:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	563	100.000
B		✓	75	100.000
C		✓	552	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	15	548
	B	20	0	55
	C	507	45	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	5	10
	B	5	0	5
	C	10	5	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.17	9.25	0.2	A
C-AB	0.13	4.81	0.3	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:00 - 16:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	56	558	0.101	56	0.1	7.526	A
C-AB	61	865	0.070	60	0.1	4.790	A
C-A	355			355			
A-B	11			11			
A-C	413			413			

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	67	530	0.127	67	0.2	8.160	A
C-AB	82	899	0.092	82	0.2	4.733	A
C-A	414			414			
A-B	13			13			
A-C	493			493			

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	83	491	0.168	82	0.2	9.241	A
C-AB	121	949	0.128	120	0.3	4.686	A
C-A	487			487			
A-B	17			17			
A-C	603			603			

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	83	491	0.168	83	0.2	9.250	A
C-AB	121	949	0.128	121	0.3	4.702	A
C-A	486			486			
A-B	17			17			
A-C	603			603			

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	67	530	0.127	68	0.2	8.175	A
C-AB	83	899	0.092	83	0.2	4.761	A
C-A	414			414			
A-B	13			13			
A-C	493			493			

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	56	558	0.101	57	0.1	7.543	A
C-AB	61	865	0.070	61	0.1	4.812	A
C-A	355			355			
A-B	11			11			
A-C	413			413			

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Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		2.20	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2028	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	531	100.000
B		✓	192	100.000
C		✓	713	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	12	519
	B	21	0	171
	C	635	78	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	5	10
	B	5	0	5
	C	10	5	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.39	11.33	0.7	B
C-AB	0.25	4.94	0.8	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	145	605	0.239	143	0.3	8.162	A
C-AB	120	933	0.129	119	0.3	4.760	A
C-A	416			416			
A-B	9			9			
A-C	391			391			

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	173	580	0.297	172	0.4	9.249	A
C-AB	169	981	0.172	168	0.4	4.774	A
C-A	472			472			
A-B	11			11			
A-C	467			467			

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	211	545	0.388	211	0.7	11.273	B
C-AB	259	1051	0.246	257	0.7	4.915	A
C-A	527			527			
A-B	13			13			
A-C	571			571			

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	211	545	0.388	211	0.7	11.330	B
C-AB	259	1052	0.246	259	0.8	4.938	A
C-A	526			526			
A-B	13			13			
A-C	571			571			

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	173	580	0.297	173	0.5	9.311	A
C-AB	169	982	0.172	170	0.5	4.817	A
C-A	472			472			
A-B	11			11			
A-C	467			467			

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	145	605	0.239	145	0.3	8.227	A
C-AB	121	934	0.130	122	0.3	4.789	A
C-A	415			415			
A-B	9			9			
A-C	391			391			

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Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.18	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2028	PM	ONE HOUR	16:00	17:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	648	100.000
B		✓	94	100.000
C		✓	627	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	15	633
	B	21	0	73
	C	571	56	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	5	10
	B	5	0	5
	C	10	5	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.22	10.24	0.3	B
C-AB	0.18	4.83	0.5	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:00 - 16:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	71	549	0.129	70	0.2	7.880	A
C-AB	82	885	0.093	81	0.2	4.810	A
C-A	390			390			
A-B	11			11			
A-C	477			477			

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	85	518	0.163	84	0.2	8.716	A
C-AB	114	924	0.123	113	0.3	4.779	A
C-A	450			450			
A-B	13			13			
A-C	569			569			

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	103	473	0.219	103	0.3	10.218	B
C-AB	172	982	0.176	172	0.5	4.804	A
C-A	518			518			
A-B	17			17			
A-C	697			697			

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	103	473	0.219	103	0.3	10.238	B
C-AB	173	983	0.176	173	0.5	4.820	A
C-A	517			517			
A-B	17			17			
A-C	697			697			

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	85	518	0.163	85	0.2	8.739	A
C-AB	114	925	0.124	115	0.3	4.815	A
C-A	449			449			
A-B	13			13			
A-C	569			569			

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	71	549	0.129	71	0.2	7.910	A
C-AB	83	885	0.093	83	0.2	4.835	A
C-A	389			389			
A-B	11			11			
A-C	477			477			

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Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		2.44	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	2038	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	565	100.000
B		✓	205	100.000
C		✓	806	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	13	552
	B	22	0	183
	C	719	87	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	5	10
	B	5	0	5
	C	10	5	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.43	12.42	0.8	B
C-AB	0.31	5.10	1.0	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	154	596	0.259	153	0.4	8.498	A
C-AB	148	970	0.153	147	0.4	4.711	A
C-A	459			459			
A-B	10			10			
A-C	416			416			

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	184	569	0.324	184	0.5	9.790	A
C-AB	213	1027	0.207	212	0.6	4.774	A
C-A	512			512			
A-B	12			12			
A-C	496			496			

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	226	530	0.426	225	0.8	12.330	B
C-AB	338	1109	0.305	336	1.0	5.060	A
C-A	550			550			
A-B	14			14			
A-C	608			608			

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	226	530	0.426	226	0.8	12.417	B
C-AB	339	1110	0.305	339	1.0	5.097	A
C-A	548			548			
A-B	14			14			
A-C	608			608			

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	184	569	0.324	185	0.5	9.874	A
C-AB	214	1028	0.208	215	0.6	4.828	A
C-A	511			511			
A-B	12			12			
A-C	496			496			

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	154	596	0.259	155	0.4	8.578	A
C-AB	149	971	0.154	150	0.4	4.752	A
C-A	457			457			
A-B	10			10			
A-C	416			416			

DO SOMETHING - AM & PM - 2038, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.23	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	2038	PM	ONE HOUR	16:00	17:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	685	100.000
B		✓	98	100.000
C		✓	666	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	15	670
	B	22	0	76
	C	607	59	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	5	10
	B	5	0	5
	C	10	5	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.24	10.82	0.3	B
C-AB	0.20	4.84	0.6	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:00 - 16:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	74	540	0.137	73	0.2	8.093	A
C-AB	90	898	0.101	90	0.2	4.786	A
C-A	411			411			
A-B	11			11			
A-C	504			504			

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	88	506	0.174	88	0.2	9.038	A
C-AB	127	941	0.135	126	0.4	4.765	A
C-A	472			472			
A-B	13			13			
A-C	602			602			

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	108	457	0.236	107	0.3	10.795	B
C-AB	196	1004	0.195	195	0.6	4.819	A
C-A	537			537			
A-B	17			17			
A-C	738			738			

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	108	457	0.236	108	0.3	10.818	B
C-AB	196	1004	0.196	196	0.6	4.842	A
C-A	537			537			
A-B	17			17			
A-C	738			738			

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	88	506	0.174	88	0.2	9.067	A
C-AB	128	942	0.135	128	0.4	4.803	A
C-A	471			471			
A-B	13			13			
A-C	602			602			

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	74	539	0.137	74	0.2	8.126	A
C-AB	91	898	0.101	92	0.2	4.817	A
C-A	410			410			
A-B	11			11			
A-C	504			504			

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.5.1.7462

Filename: Junction 4_DO NOTHING.j9
Path: M:\Projects\19\19-020 - Malahide Road\Design\Traffic\Junction Modelling\MODELLING MARCH 2021\Junction 4\Junction 4 - DO NOTHING
Report generation date: 09/03/2021 12:45:18

Summary of junction performance

	AM			PM		
	Set ID	Queue (PCU)	RFC	Set ID	Queue (PCU)	RFC
DO NOTHING - 2020						
Stream B-C	D1	0.0	0.02	D2	0.0	0.01
Stream B-A		0.2	0.17		0.2	0.15
Stream C-AB		0.0	0.02		0.0	0.01
DO NOTHING - 2023						
Stream B-C	D3	0.0	0.02	D4	0.0	0.01
Stream B-A		0.2	0.18		0.2	0.16
Stream C-AB		0.0	0.02		0.0	0.01
DO NOTHING - 2028						
Stream B-C	D5	0.0	0.02	D6	0.0	0.01
Stream B-A		0.3	0.21		0.2	0.18
Stream C-AB		0.0	0.03		0.0	0.01
DO NOTHING - 2038						
Stream B-C	D7	0.0	0.02	D8	0.0	0.02
Stream B-A		0.4	0.24		0.3	0.20
Stream C-AB		0.1	0.03		0.0	0.01

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

File summary

File Description

Title	
Location	
Site number	
Date	01/12/2020
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DOMAIN\l.byrne
Description	

Units

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

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2020	AM	ONE HOUR	08:00	09:30	15
D2	2020	PM	ONE HOUR	16:00	17:30	15
D3	2023	AM	ONE HOUR	08:00	09:30	15
D4	2023	PM	ONE HOUR	16:00	17:30	15
D5	2028	AM	ONE HOUR	08:00	09:30	15
D6	2028	PM	ONE HOUR	16:00	17:30	15
D7	2038	AM	ONE HOUR	08:00	09:30	15
D8	2038	PM	ONE HOUR	16:00	17:30	15

Analysis Set Details

ID	Name	Network flow scaling factor (%)
A1	DO NOTHING	100.000

DO NOTHING - 2020, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.85	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	untitled		Major
B	untitled		Minor
C	untitled		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	6.30			148.2	✓	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	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B	One lane plus flare	10.00	6.48	6.48	6.48	6.48		1.00	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	574	0.103	0.261	0.164	0.372
B-C	573	0.087	0.219	-	-
C-B	660	0.252	0.252	-	-

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2020	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	558	100.000
B		✓	61	100.000
C		✓	434	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	97	461
	B	55	0	6
	C	426	8	0

Vehicle Mix

Heavy Vehicle Percentages

		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-C	0.02	9.35	0.0	A
B-A	0.17	13.68	0.2	B
C-AB	0.02	5.17	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-C	5	478	0.009	4	0.0	8.363	A
B-A	41	421	0.098	41	0.1	10.414	B
C-AB	10	776	0.013	10	0.0	5.172	A
C-A	316			316			
A-B	73			73			
A-C	347			347			

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	5	458	0.012	5	0.0	8.741	A
B-A	49	391	0.126	49	0.2	11.582	B
C-AB	14	803	0.017	14	0.0	5.018	A
C-A	376			376			
A-B	87			87			
A-C	414			414			

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	7	430	0.015	7	0.0	9.348	A
B-A	61	350	0.173	60	0.2	13.656	B
C-AB	20	842	0.024	20	0.0	4.814	A
C-A	458			458			
A-B	107			107			
A-C	508			508			

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	7	430	0.015	7	0.0	9.351	A
B-A	61	350	0.173	61	0.2	13.679	B
C-AB	20	842	0.024	20	0.0	4.816	A
C-A	458			458			
A-B	107			107			
A-C	508			508			

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	5	458	0.012	5	0.0	8.747	A
B-A	49	391	0.126	50	0.2	11.612	B
C-AB	14	803	0.017	14	0.0	5.019	A
C-A	376			376			
A-B	87			87			
A-C	414			414			

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	5	478	0.009	5	0.0	8.369	A
B-A	41	421	0.098	42	0.1	10.448	B
C-AB	10	776	0.013	10	0.0	5.174	A
C-A	316			316			
A-B	73			73			
A-C	347			347			

DO NOTHING - 2020, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

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

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2020	PM	ONE HOUR	16:00	17:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	392	100.000
B		✓	58	100.000
C		✓	410	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	48	344
	B	52	0	6
	C	407	3	0

Vehicle Mix

Heavy Vehicle Percentages

		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-C	0.01	8.62	0.0	A
B-A	0.15	11.74	0.2	B
C-AB	0.01	5.02	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:00 - 16:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	5	502	0.009	4	0.0	7.966	A
B-A	39	451	0.087	39	0.1	9.590	A
C-AB	4	792	0.005	4	0.0	5.022	A
C-A	305			305			
A-B	36			36			
A-C	259			259			

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	5	487	0.011	5	0.0	8.224	A
B-A	47	427	0.109	47	0.1	10.393	B
C-AB	5	821	0.006	5	0.0	4.853	A
C-A	364			364			
A-B	43			43			
A-C	309			309			

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	7	466	0.014	7	0.0	8.619	A
B-A	57	395	0.145	57	0.2	11.721	B
C-AB	7	862	0.008	7	0.0	4.631	A
C-A	445			445			
A-B	53			53			
A-C	379			379			

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	7	466	0.014	7	0.0	8.621	A
B-A	57	395	0.145	57	0.2	11.735	B
C-AB	7	862	0.008	7	0.0	4.633	A
C-A	445			445			
A-B	53			53			
A-C	379			379			

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	5	487	0.011	5	0.0	8.227	A
B-A	47	427	0.109	47	0.1	10.412	B
C-AB	5	821	0.006	5	0.0	4.853	A
C-A	364			364			
A-B	43			43			
A-C	309			309			

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	5	501	0.009	5	0.0	7.969	A
B-A	39	451	0.087	39	0.1	9.616	A
C-AB	4	792	0.005	4	0.0	5.022	A
C-A	305			305			
A-B	36			36			
A-C	259			259			

DO NOTHING - 2023, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.87	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2023	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	585	100.000
B		✓	63	100.000
C		✓	455	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	102	483
	B	57	0	6
	C	447	8	0

Vehicle Mix

Heavy Vehicle Percentages

		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-C	0.02	9.52	0.0	A
B-A	0.18	14.32	0.2	B
C-AB	0.02	5.13	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-C	5	473	0.010	4	0.0	8.445	A
B-A	43	413	0.104	42	0.1	10.659	B
C-AB	11	783	0.014	10	0.0	5.128	A
C-A	332			332			
A-B	77			77			
A-C	364			364			

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	5	453	0.012	5	0.0	8.852	A
B-A	51	382	0.134	51	0.2	11.947	B
C-AB	14	811	0.018	14	0.0	4.968	A
C-A	395			395			
A-B	92			92			
A-C	434			434			

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	7	423	0.016	7	0.0	9.514	A
B-A	63	339	0.185	62	0.2	14.284	B
C-AB	21	854	0.024	21	0.0	4.755	A
C-A	480			480			
A-B	112			112			
A-C	532			532			

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	7	423	0.016	7	0.0	9.517	A
B-A	63	339	0.185	63	0.2	14.315	B
C-AB	21	854	0.024	21	0.0	4.757	A
C-A	480			480			
A-B	112			112			
A-C	532			532			

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	5	453	0.012	5	0.0	8.856	A
B-A	51	382	0.134	52	0.2	11.983	B
C-AB	14	811	0.018	14	0.0	4.970	A
C-A	395			395			
A-B	92			92			
A-C	434			434			

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	5	473	0.010	5	0.0	8.449	A
B-A	43	413	0.104	43	0.1	10.699	B
C-AB	11	783	0.014	11	0.0	5.131	A
C-A	332			332			
A-B	77			77			
A-C	364			364			

DO NOTHING - 2023, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.84	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2023	PM	ONE HOUR	16:00	17:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	411	100.000
B		✓	61	100.000
C		✓	431	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	50	361
	B	55	0	6
	C	427	4	0

Vehicle Mix

Heavy Vehicle Percentages

		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-C	0.01	8.74	0.0	A
B-A	0.16	12.18	0.2	B
C-AB	0.01	4.98	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:00 - 16:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	5	498	0.009	4	0.0	8.027	A
B-A	41	445	0.093	41	0.1	9.790	A
C-AB	5	799	0.006	5	0.0	4.985	A
C-A	319			319			
A-B	38			38			
A-C	272			272			

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	5	482	0.011	5	0.0	8.303	A
B-A	49	420	0.118	49	0.1	10.678	B
C-AB	7	830	0.008	7	0.0	4.811	A
C-A	381			381			
A-B	45			45			
A-C	325			325			

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	7	460	0.014	7	0.0	8.733	A
B-A	61	386	0.157	60	0.2	12.167	B
C-AB	10	873	0.011	10	0.0	4.584	A
C-A	465			465			
A-B	55			55			
A-C	397			397			

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	7	460	0.014	7	0.0	8.735	A
B-A	61	386	0.157	61	0.2	12.184	B
C-AB	10	873	0.011	10	0.0	4.584	A
C-A	465			465			
A-B	55			55			
A-C	397			397			

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	5	482	0.011	5	0.0	8.308	A
B-A	49	420	0.118	50	0.1	10.697	B
C-AB	7	830	0.008	7	0.0	4.813	A
C-A	381			381			
A-B	45			45			
A-C	325			325			

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	5	498	0.009	5	0.0	8.030	A
B-A	41	445	0.093	42	0.1	9.818	A
C-AB	5	799	0.006	5	0.0	4.985	A
C-A	319			319			
A-B	38			38			
A-C	272			272			

DO NOTHING - 2028, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.95	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	2028	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	634	100.000
B		✓	68	100.000
C		✓	494	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	110	524
	B	62	0	6
	C	485	9	0

Vehicle Mix

Heavy Vehicle Percentages

		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-C	0.02	9.87	0.0	A
B-A	0.21	15.77	0.3	C
C-AB	0.03	5.06	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-C	5	465	0.010	4	0.0	8.608	A
B-A	47	400	0.117	46	0.1	11.178	B
C-AB	13	795	0.016	12	0.0	5.059	A
C-A	359			359			
A-B	83			83			
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-C	5	442	0.012	5	0.0	9.076	A
B-A	56	366	0.152	56	0.2	12.745	B
C-AB	17	827	0.021	17	0.0	4.889	A
C-A	427			427			
A-B	99			99			
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-C	7	408	0.016	7	0.0	9.865	A
B-A	68	319	0.214	68	0.3	15.717	C
C-AB	26	874	0.029	25	0.0	4.665	A
C-A	518			518			
A-B	121			121			
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-C	7	408	0.016	7	0.0	9.870	A
B-A	68	319	0.214	68	0.3	15.766	C
C-AB	26	874	0.029	26	0.0	4.665	A
C-A	518			518			
A-B	121			121			
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-C	5	441	0.012	5	0.0	9.084	A
B-A	56	366	0.152	56	0.2	12.794	B
C-AB	17	827	0.021	17	0.0	4.889	A
C-A	427			427			
A-B	99			99			
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-C	5	484	0.010	5	0.0	8.615	A
B-A	47	400	0.117	47	0.1	11.230	B
C-AB	13	795	0.016	13	0.0	5.060	A
C-A	359			359			
A-B	83			83			
A-C	394			394			

DO NOTHING - 2028, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.90	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	2028	PM	ONE HOUR	16:00	17:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	446	100.000
B		✓	66	100.000
C		✓	467	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	54	392
	B	60	0	6
	C	463	4	0

Vehicle Mix

Heavy Vehicle Percentages

		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-C	0.01	8.95	0.0	A
B-A	0.18	13.04	0.2	B
C-AB	0.01	4.91	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:00 - 16:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	5	491	0.009	4	0.0	8.139	A
B-A	45	434	0.104	45	0.1	10.153	B
C-AB	5	812	0.006	5	0.0	4.906	A
C-A	346			346			
A-B	41			41			
A-C	295			295			

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	5	474	0.011	5	0.0	8.453	A
B-A	54	407	0.132	54	0.2	11.203	B
C-AB	7	846	0.008	7	0.0	4.721	A
C-A	413			413			
A-B	49			49			
A-C	352			352			

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	7	449	0.015	7	0.0	8.951	A
B-A	66	370	0.179	66	0.2	13.018	B
C-AB	10	894	0.011	10	0.0	4.481	A
C-A	504			504			
A-B	59			59			
A-C	432			432			

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	7	449	0.015	7	0.0	8.953	A
B-A	66	370	0.179	66	0.2	13.041	B
C-AB	10	894	0.012	10	0.0	4.481	A
C-A	504			504			
A-B	59			59			
A-C	432			432			

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	5	474	0.011	5	0.0	8.456	A
B-A	54	407	0.133	54	0.2	11.231	B
C-AB	7	846	0.008	7	0.0	4.721	A
C-A	413			413			
A-B	49			49			
A-C	352			352			

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	5	491	0.009	5	0.0	8.143	A
B-A	45	434	0.104	45	0.1	10.190	B
C-AB	5	812	0.007	5	0.0	4.906	A
C-A	346			346			
A-B	41			41			
A-C	295			295			

DO NOTHING - 2038, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.06	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D7	2038	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	678	100.000
B		✓	74	100.000
C		✓	529	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	118	560
	B	67	0	7
	C	519	10	0

Vehicle Mix

Heavy Vehicle Percentages

		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-C	0.02	10.27	0.0	B
B-A	0.24	17.38	0.4	C
C-AB	0.03	5.00	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-C	5	456	0.012	5	0.0	8.776	A
B-A	50	388	0.130	50	0.2	11.699	B
C-AB	15	806	0.018	15	0.0	5.000	A
C-A	384			384			
A-B	89			89			
A-C	422			422			

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	6	431	0.015	6	0.0	9.315	A
B-A	60	352	0.171	60	0.2	13.572	B
C-AB	20	841	0.024	20	0.0	4.821	A
C-A	455			455			
A-B	106			106			
A-C	503			503			

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	8	394	0.020	8	0.0	10.258	B
B-A	74	302	0.245	73	0.3	17.303	C
C-AB	31	893	0.034	31	0.1	4.590	A
C-A	552			552			
A-B	130			130			
A-C	617			617			

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	8	393	0.020	8	0.0	10.266	B
B-A	74	302	0.245	74	0.4	17.377	C
C-AB	31	893	0.034	31	0.1	4.592	A
C-A	552			552			
A-B	130			130			
A-C	617			617			

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	6	431	0.015	6	0.0	9.326	A
B-A	60	352	0.171	61	0.2	13.642	B
C-AB	20	842	0.024	20	0.0	4.822	A
C-A	455			455			
A-B	106			106			
A-C	503			503			

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	5	456	0.012	5	0.0	8.785	A
B-A	50	388	0.130	51	0.2	11.762	B
C-AB	15	807	0.018	15	0.0	5.000	A
C-A	384			384			
A-B	89			89			
A-C	422			422			

DO NOTHING - 2038, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.95	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D8	2038	PM	ONE HOUR	16:00	17:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	477	100.000
B		✓	71	100.000
C		✓	499	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	58	419
	B	64	0	7
	C	495	4	0

Vehicle Mix

Heavy Vehicle Percentages

		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-C	0.02	9.18	0.0	A
B-A	0.20	13.88	0.3	B
C-AB	0.01	4.84	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:00 - 16:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	5	485	0.011	5	0.0	8.251	A
B-A	48	425	0.113	48	0.1	10.490	B
C-AB	5	824	0.007	5	0.0	4.837	A
C-A	370			370			
A-B	44			44			
A-C	315			315			

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	6	466	0.013	6	0.0	8.605	A
B-A	58	396	0.145	57	0.2	11.698	B
C-AB	7	860	0.009	7	0.0	4.643	A
C-A	441			441			
A-B	52			52			
A-C	377			377			

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	8	439	0.018	8	0.0	9.177	A
B-A	70	356	0.198	70	0.3	13.845	B
C-AB	11	913	0.012	11	0.0	4.391	A
C-A	538			538			
A-B	64			64			
A-C	461			461			

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	8	439	0.018	8	0.0	9.181	A
B-A	70	356	0.198	70	0.3	13.882	B
C-AB	11	913	0.012	11	0.0	4.391	A
C-A	538			538			
A-B	64			64			
A-C	461			461			

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	6	466	0.014	6	0.0	8.610	A
B-A	58	396	0.145	58	0.2	11.732	B
C-AB	7	860	0.009	7	0.0	4.645	A
C-A	441			441			
A-B	52			52			
A-C	377			377			

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	5	485	0.011	5	0.0	8.259	A
B-A	48	425	0.113	48	0.1	10.530	B
C-AB	6	824	0.007	6	0.0	4.839	A
C-A	370			370			
A-B	44			44			
A-C	315			315			

Junctions 9

PICADY 9 - Priority Intersection Module

Filename: Junction 4_DO SOMETHING.j9
Path: M:\Projects\19\19-020 - Malahide Road\Design\Traffic\Junction Modelling\MODELLING MARCH 2021\Junction 4\Junction 4 - DO SOMETHING
Report generation date: 09/03/2021 12:46:02

»DO SOMETHING - 2023, AM
»DO SOMETHING - 2023, PM
»DO SOMETHING - 2028, AM
»DO SOMETHING - 2028, PM
»DO SOMETHING - 2038, AM
»DO SOMETHING - 2038, PM

Summary of junction performance

	AM			PM		
	Set ID	Queue (PCU)	RFC	Set ID	Queue (PCU)	RFC
DO SOMETHING - 2023						
Stream B-C	D1	0.0	0.03	D2	0.0	0.02
Stream B-A		0.4	0.29		0.3	0.21
Stream C-AB		0.1	0.03		0.0	0.03
DO SOMETHING - 2028						
Stream B-C	D3	0.0	0.04	D4	0.0	0.03
Stream B-A		0.7	0.38		0.4	0.26
Stream C-AB		0.1	0.04		0.0	0.03
DO SOMETHING - 2038						
Stream B-C	D5	0.0	0.04	D6	0.0	0.03
Stream B-A		0.8	0.41		0.4	0.28
Stream C-AB		0.1	0.05		0.0	0.03

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

File summary

File Description

Title	
Location	
Site number	
Date	01/12/2020
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DOMAIN\l.byrne
Description	

Units

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

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2023	AM	ONE HOUR	08:00	09:30	15
D2	2023	PM	ONE HOUR	16:00	17:30	15
D3	2028	AM	ONE HOUR	08:00	09:30	15
D4	2028	PM	ONE HOUR	16:00	17:30	15
D5	2038	AM	ONE HOUR	08:00	09:30	15
D6	2038	PM	ONE HOUR	16:00	17:30	15

Analysis Set Details

ID	Name	Network flow scaling factor (%)
A1	DO SOMETHING	100.000

DO SOMETHING - 2023, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.47	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	untitled		Major
B	untitled		Minor
C	untitled		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	6.30			148.2	✓	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	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B	One lane plus flare	10.00	6.48	6.48	6.48	6.48		1.00	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	574	0.103	0.261	0.164	0.372
B-C	573	0.087	0.219	-	-
C-B	660	0.252	0.252	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2023	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	598	100.000
B		✓	100	100.000
C		✓	458	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	115	483
	B	88	0	12
	C	447	11	0

Vehicle Mix

Heavy Vehicle Percentages

		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-C	0.03	10.18	0.0	B
B-A	0.29	16.52	0.4	C
C-AB	0.03	5.17	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-C	9	464	0.019	9	0.0	8.700	A
B-A	66	412	0.161	65	0.2	11.413	B
C-AB	15	781	0.019	14	0.0	5.168	A
C-A	330			330			
A-B	87			87			
A-C	364			364			

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	11	440	0.025	11	0.0	9.229	A
B-A	79	380	0.208	79	0.3	13.131	B
C-AB	20	809	0.024	20	0.0	5.016	A
C-A	392			392			
A-B	103			103			
A-C	434			434			

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	13	402	0.033	13	0.0	10.170	B
B-A	97	337	0.288	96	0.4	16.443	C
C-AB	29	851	0.034	29	0.0	4.816	A
C-A	475			475			
A-B	127			127			
A-C	532			532			

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	13	402	0.033	13	0.0	10.182	B
B-A	97	337	0.288	97	0.4	16.520	C
C-AB	29	851	0.034	29	0.1	4.817	A
C-A	475			475			
A-B	127			127			
A-C	532			532			

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	11	439	0.025	11	0.0	9.240	A
B-A	79	380	0.208	80	0.3	13.208	B
C-AB	20	809	0.024	20	0.0	5.017	A
C-A	392			392			
A-B	103			103			
A-C	434			434			

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	9	464	0.019	9	0.0	8.710	A
B-A	66	412	0.161	67	0.2	11.492	B
C-AB	15	781	0.019	15	0.0	5.171	A
C-A	330			330			
A-B	87			87			
A-C	364			364			

DO SOMETHING - 2023, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.18	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2023	PM	ONE HOUR	16:00	17:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	442	100.000
B		✓	81	100.000
C		✓	437	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	81	361
	B	72	0	9
	C	427	10	0

Vehicle Mix

Heavy Vehicle Percentages

		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-C	0.02	9.03	0.0	A
B-A	0.21	13.19	0.3	B
C-AB	0.03	5.07	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:00 - 16:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	7	491	0.014	7	0.0	8.167	A
B-A	54	441	0.123	54	0.2	10.210	B
C-AB	13	794	0.016	13	0.0	5.064	A
C-A	316			316			
A-B	61			61			
A-C	272			272			

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	8	474	0.017	8	0.0	8.498	A
B-A	65	415	0.156	65	0.2	11.289	B
C-AB	17	824	0.020	17	0.0	4.905	A
C-A	376			376			
A-B	73			73			
A-C	325			325			

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	10	448	0.022	10	0.0	9.031	A
B-A	79	380	0.209	79	0.3	13.160	B
C-AB	24	867	0.028	24	0.0	4.698	A
C-A	457			457			
A-B	89			89			
A-C	397			397			

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	10	448	0.022	10	0.0	9.034	A
B-A	79	379	0.209	79	0.3	13.189	B
C-AB	24	867	0.028	24	0.0	4.700	A
C-A	457			457			
A-B	89			89			
A-C	397			397			

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	8	474	0.017	8	0.0	8.505	A
B-A	65	415	0.156	65	0.2	11.324	B
C-AB	17	824	0.021	17	0.0	4.907	A
C-A	376			376			
A-B	73			73			
A-C	325			325			

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	7	491	0.014	7	0.0	8.174	A
B-A	54	441	0.123	54	0.2	10.253	B
C-AB	13	795	0.016	13	0.0	5.067	A
C-A	316			316			
A-B	61			61			
A-C	272			272			

DO SOMETHING - 2028, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.93	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2028	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	655	100.000
B		✓	121	100.000
C		✓	497	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	131	524
	B	108	0	13
	C	485	12	0

Vehicle Mix

Heavy Vehicle Percentages

		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-C	0.04	11.15	0.0	B
B-A	0.38	20.12	0.7	C
C-AB	0.04	5.11	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-C	10	449	0.022	10	0.0	9.004	A
B-A	81	397	0.205	80	0.3	12.445	B
C-AB	17	792	0.021	17	0.0	5.108	A
C-A	357			357			
A-B	99			99			
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-C	12	420	0.028	12	0.0	9.707	A
B-A	97	363	0.267	97	0.4	14.838	B
C-AB	23	823	0.028	23	0.0	4.946	A
C-A	424			424			
A-B	118			118			
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-C	14	370	0.039	14	0.0	11.116	B
B-A	119	316	0.377	118	0.6	19.927	C
C-AB	34	870	0.039	34	0.1	4.737	A
C-A	513			513			
A-B	144			144			
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-C	14	370	0.039	14	0.0	11.145	B
B-A	119	316	0.377	119	0.7	20.118	C
C-AB	34	870	0.039	34	0.1	4.739	A
C-A	513			513			
A-B	144			144			
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-C	12	419	0.028	12	0.0	9.732	A
B-A	97	363	0.267	98	0.4	15.003	C
C-AB	23	824	0.028	23	0.0	4.949	A
C-A	424			424			
A-B	118			118			
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-C	10	449	0.022	10	0.0	9.026	A
B-A	81	397	0.205	82	0.3	12.572	B
C-AB	17	792	0.021	17	0.0	5.111	A
C-A	357			357			
A-B	99			99			
A-C	394			394			

DO SOMETHING - 2028, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.35	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2028	PM	ONE HOUR	16:00	17:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	491	100.000
B		✓	94	100.000
C		✓	473	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	99	392
	B	84	0	10
	C	463	10	0

Vehicle Mix

Heavy Vehicle Percentages

		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-C	0.03	9.44	0.0	A
B-A	0.26	14.69	0.4	B
C-AB	0.03	5.00	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:00 - 16:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	8	482	0.016	7	0.0	8.350	A
B-A	63	429	0.147	62	0.2	10.784	B
C-AB	13	805	0.016	13	0.0	4.998	A
C-A	343			343			
A-B	75			75			
A-C	295			295			

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	9	461	0.019	9	0.0	8.753	A
B-A	76	401	0.188	75	0.3	12.151	B
C-AB	18	838	0.021	18	0.0	4.829	A
C-A	407			407			
A-B	89			89			
A-C	352			352			

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	11	431	0.026	11	0.0	9.434	A
B-A	92	362	0.255	92	0.4	14.638	B
C-AB	26	885	0.029	26	0.0	4.609	A
C-A	495			495			
A-B	109			109			
A-C	432			432			

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	11	430	0.026	11	0.0	9.440	A
B-A	92	362	0.255	92	0.4	14.687	B
C-AB	26	885	0.029	26	0.0	4.610	A
C-A	495			495			
A-B	109			109			
A-C	432			432			

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	9	461	0.020	9	0.0	8.760	A
B-A	76	401	0.188	76	0.3	12.205	B
C-AB	18	838	0.021	18	0.0	4.831	A
C-A	407			407			
A-B	89			89			
A-C	352			352			

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	8	481	0.016	8	0.0	8.359	A
B-A	63	429	0.147	64	0.2	10.843	B
C-AB	13	805	0.017	13	0.0	4.999	A
C-A	343			343			
A-B	75			75			
A-C	295			295			

DO SOMETHING - 2038, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		2.10	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	2038	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	698	100.000
B		✓	125	100.000
C		✓	532	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	138	560
	B	112	0	13
	C	519	13	0

Vehicle Mix

Heavy Vehicle Percentages

		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-C	0.04	11.78	0.0	B
B-A	0.41	22.65	0.8	C
C-AB	0.05	5.05	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-C	10	441	0.022	10	0.0	9.183	A
B-A	84	385	0.219	83	0.3	13.057	B
C-AB	19	804	0.024	19	0.0	5.047	A
C-A	381			381			
A-B	104			104			
A-C	422			422			

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	12	408	0.029	12	0.0	9.991	A
B-A	101	349	0.289	100	0.4	15.904	C
C-AB	26	838	0.032	26	0.0	4.878	A
C-A	452			452			
A-B	124			124			
A-C	503			503			

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	14	352	0.041	14	0.0	11.732	B
B-A	123	298	0.414	122	0.7	22.358	C
C-AB	40	890	0.045	40	0.1	4.662	A
C-A	546			546			
A-B	152			152			
A-C	617			617			

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	14	351	0.041	14	0.0	11.778	B
B-A	123	298	0.414	123	0.8	22.654	C
C-AB	40	890	0.045	40	0.1	4.662	A
C-A	546			546			
A-B	152			152			
A-C	617			617			

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	12	407	0.029	12	0.0	10.024	B
B-A	101	349	0.289	102	0.5	16.132	C
C-AB	26	838	0.032	27	0.0	4.879	A
C-A	452			452			
A-B	124			124			
A-C	503			503			

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	10	440	0.022	10	0.0	9.207	A
B-A	84	385	0.219	85	0.3	13.213	B
C-AB	19	804	0.024	19	0.0	5.048	A
C-A	381			381			
A-B	104			104			
A-C	422			422			

DO SOMETHING - 2038, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.42	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	2038	PM	ONE HOUR	16:00	17:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	522	100.000
B		✓	98	100.000
C		✓	505	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	103	419
	B	88	0	10
	C	495	10	0

Vehicle Mix

Heavy Vehicle Percentages

		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-C	0.03	9.70	0.0	A
B-A	0.28	15.76	0.4	C
C-AB	0.03	4.93	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:00 - 16:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	8	475	0.016	7	0.0	8.461	A
B-A	66	419	0.158	65	0.2	11.161	B
C-AB	14	817	0.017	14	0.0	4.928	A
C-A	366			366			
A-B	78			78			
A-C	315			315			

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	9	453	0.020	9	0.0	8.910	A
B-A	79	389	0.203	79	0.3	12.736	B
C-AB	19	853	0.022	19	0.0	4.749	A
C-A	435			435			
A-B	93			93			
A-C	377			377			

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	11	419	0.026	11	0.0	9.693	A
B-A	97	348	0.278	96	0.4	15.694	C
C-AB	28	904	0.031	28	0.0	4.519	A
C-A	528			528			
A-B	113			113			
A-C	461			461			

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	11	419	0.026	11	0.0	9.702	A
B-A	97	348	0.278	97	0.4	15.762	C
C-AB	28	904	0.031	28	0.0	4.521	A
C-A	528			528			
A-B	113			113			
A-C	461			461			

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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	9	453	0.020	9	0.0	8.921	A
B-A	79	389	0.203	80	0.3	12.803	B
C-AB	19	853	0.022	19	0.0	4.751	A
C-A	435			435			
A-B	93			93			
A-C	377			377			

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	8	475	0.016	8	0.0	8.471	A
B-A	66	419	0.158	67	0.2	11.234	B
C-AB	14	817	0.017	14	0.0	4.931	A
C-A	366			366			
A-B	78			78			
A-C	315			315			

UK and Ireland Office Locations