

# **Glenageary Gate**

Traffic and Transport Assessment

Red Rock Glenageary

Project number: 60690914

September2023

Delivering a better world

## Quality information



## **Revision History**

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## 1. Introduction

## 1.1 Background

AECOM has been commissioned by Red Rock Glenageary to undertake a Traffic and Transport Assessment for a planning submission to Dun Laoghaire Rathdown County Council (DLRCC)for a proposed Large Scale Residential Development (LRD) on a site located at the junction of Sallynoggin Road Lower and Glenageary Avenue, Glenageary, Co. Dublin.

The lands on which the proposed development will be constructed are both greenfield and brownfield with an existing car park located at the south-western boundary of the site. Figure 3-1 shows the surrounding site location.



Figure 1-1 – Development Location in Relation to Dublin City

## 1.2 Proposed Development

The proposed development will consist of a 138 new residential and mixed-use scheme to include apartments, restaurant and retail units, public plaza, childcare facility and associated residential amenities.

## **1.3** Planning History

#### Mixed Use SHD Development, (ABP Ref: 312321, 2021 application Lodged – Refused Planning 2022)

- (i) Construction of a Build-To-Rent residential development of 147 no. apartments (9 no. studio, 51 no. one bedroom, 67 no. two bedroom and 20 no. three bedroom) in 4 no. blocks (ranging in height from five to nine storeys) over basement level as follows:
  - Block A1 containing a total of 30 no. apartments (1 no. studio, 20 no. one bedroom and 9 no. two bedroom) and measuring five storeys in height;
  - Block A2 containing a total of 17 no. apartments (6 no. one bedroom, 7 no. two bedroom and 4 no. three bedroom) and measuring four storeys in height;
  - Block B1 containing a total of 31 no. apartments (19 no. two bedroom and 12 no. three bedroom) and measuring part-six part-seven storeys in height; and,

• Block B2 containing a total of 69 no. apartments (8 no. studios, 25. no one bedroom, 32 no. two bedroom and 4 no. three bedroom) and measuring part-seven part-eight part-nine storeys in height.

(ii) all apartments will have direct access to an area of private amenity space, in the form of a balcony, and will have shared access to 807. 9sq.m of internal resident's amenities, 2,569sq.m of external communal amenity space (ground level courtyard & 3 no. roof gardens) and 1,409sq.m of public open space;

(iii) provision of 113 no. vehicular parking spaces (including 5 no. mobility parking spaces and 15 no. electric charging spaces) 5 no. motorcycle parking spaces and 428 no. bicycle parking spaces at basement floor level accessible via new vehicular access from Glenageary Avenue.

(iv) provision of 6 no. commercial units (493. 8sq.m total) located at ground floor level in Blocks A1, A2 and B2; and 1 no. childcare facility (201. 1sq.m) located within the ground floor level of Block B2; and,

(v) all ancillary works including public realm/footpath improvements, landscaping, boundary treatments, provision of internal footpaths, provision of surface level cycle parking (60 no. spaces), bin storage, foul and surface water drainage, green roofs, ESB substation and all site services, site infrastructure and associated site development works necessary to facilitate the development.

#### Permitted Mixed Use Development, (DLRCC Ref: D14A/0865, ABP Ref: PL 06D.244904)

In 2014, an application (DLRCC Reg Ref: D14A/0865) was submitted on the subject site for the construction of a mixed-use development (totalling 10,616 Sq. m) consisting of three blocks (A, B and C) which are detailed as follows:

#### Block A

Part 4/ part 5 storey building totalling 7,329 sqm, accommodating a retirement home complex (7,154 sqm) comprising 141 bedrooms and all associated resident and staff facilities and ancillary accommodation.

The building also accommodates 2 no. commercial units for use as a pharmacy (83 sqm) and a café/restaurant (92 sqm) fronting Sallynoggin Road Lower. The building encloses a private landscaped courtyard and has private roof garden for residents.

#### Block B

Medical centre and associated ancillary accommodation within a 3 storey building of 551 sqm gross floor area.

#### Block C

Supermarket with ancillary off licence sales area comprising 2,714 sqm gross floor area (of which 1,225 sqm is net retail sales area) with ground floor entrance area and circulation area providing access to first floor supermarket and with covered under-croft parking area at ground level beneath supermarket. The building presents as a 3 storey equivalent building with maximum height of 10.65m fronting Sallynoggin Road Lower. A total of 139 parking spaces are proposed for the overall site (including 63 parking spaces beneath supermarket and 76 surface parking spaces). Access will be provided from Sallynoggin Road Lower (which is to be widened and re-configured) with a secondary access from Glenageary Avenue serving the surface parking area adjacent to Blocks A and B only. Permission is also sought for associated ESB substation (22 sqm), hard and soft landscaping, boundary treatment, signage and all associated site and development works.

This application was refused planning permission by DLRCC but an appeal was lodged to ABP by the applicant, ABP reversed the decision and granted planning permission with the final grant being issued on 6<sup>th</sup> of October 2015. The proposed site layout as part of this permitted scheme has been illustrated in Figure 1-2.



Figure 1-2 – Permitted Site Layout (Source: D14A/0865 DLRCC Planning)

#### 1.3.1 Amendments to Permitted Mixed Use Development, (DLRCC Ref: D17A/0148)

In 2017, an application (DLRCC Reg Ref: D17A/0148) was submitted on the subject site for amendments to Block C of the permitted mixed use development (D14A/0865). There was a reduction of 5 no. spaces for the supermarket from 105 to 100 no. spaces.

This application was granted planning permission by DLRCC subject to a Request for Further Information (RFI) on the 8<sup>th</sup> of August 2017. The proposed site layout as part of this amendment application has been illustrated in Figure 1-3.



Figure 1-3 Permitted Site Layout (Source: D17A/0149 DLRCC Planning)

## 1.4 Objectives

The main objective of this assessment is to examine the potential traffic impact of the proposed development and its access arrangements on the adjacent local road network. The net change in traffic on the network due to the additional traffic has been calculated and its influence on the adjacent local road network has been investigated.

In order to complete this report, AECOM has referred to the following documents:

- Dun Laoghaire Rathdown County Development Plan (2022 2028);
- Standards for Cycle Parking and Associated Cycling Facilities for New Developments (DLRCC, January 2018)
- Greater Dublin Area Cycle Network Plan (NTA<sup>1</sup>, 2013);
- Sustainable Urban Housing Design Standards for New Apartments Guidelines for planning Authorities (Department of Housing, Local Government and Heritage, December 2020);
- Design Manual for Urban Roads and Streets, DMURS (Department of Transport, Tourism and Sport, May 2019);
- Geometric Design of Junctions (priority junctions, direct accesses, roundabouts, grade separated and compact grade separated junctions), DN-GEO-03060 (TII<sup>2</sup>, June 2017); and
- Traffic and Transport Assessment Guidelines, PE-PDV-02045 (TII, May 2014).

## 1.5 Study Methodology

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

- **Existing Transport Infrastructure** AECOM have collated information on the public transport, walking and cycling facilities in the surrounding area of the site.
- **Development Proposals** Description of the proposed development which includes proposed improvements to the road.
- Traffic Flow Assessment Following on from discussions with DLRCC, DLRCC recommended that a traffic survey be undertaken at the Sallynoggin Road/ Glenageary Avenue Junction and the Sallynoggin Roundabout. A traffic surveying specialist, ITS, conducted a 12hr (07:00 – 19:00) on Thursday the 27<sup>th</sup> of May 2021. These surveys have formed the baseline scenario for this analysis.
- **Development Trip Generation** Based on the quantum of the proposed development, AECOM have reviewed trip rate data for similar uses and developed anticipated traffic flows, by using the industry standard Trip Rate Information Computer System (TRICS) database. These flows were then assigned to the existing network having regard for the observed traffic patterns on the surrounding road network.
- **Percentage Impact Assessment** The developments traffic impact on the key junctions, with and without the proposed development was undertaken to determine the future operation and any key requirements for further analysis or required mitigation measures.
- **Impact Analysis –** Traffic modelling was completed where the need for this was identified using the industry standard Junctions 10 software.

## **1.6** Report Structure

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

- Section 2 details the response of the LRD opinion received from DLRCC
- Section 3 details the existing site characteristics including the surrounding transport infrastructure and any future infrastructure proposals;
- Section 4 discusses the proposed development as part of this application and gives a brief outline of the proposed internal road network and site layout;
- Section 5 sets out the Design Manual for Urban Roads and Streets Statement of Compliance;
- Section 6 considers a high level traffic impact of the proposed development;

<sup>&</sup>lt;sup>1</sup> NTA – National Transport Authority

<sup>&</sup>lt;sup>2</sup> TII - Transport Infrastructure Ireland

- **Section 7** details the operational performance of the identified junctions for a range of different traffic scenarios following the commission of the development;
- Section 8 outlines the framework for a Construction Traffic Management Plan; and
- Section 9 provides a summary of AECOM's appraisal together with the main conclusions of the assessment

## 2. DLRCC LRD Opinion Response Transport

## 2.1 Introduction

AECOM has prepared a response to the DLRCC Opinion in relation to the proposed Large Scale Residential Development (LRD) application at the junction of Sallynoggin Road Lower and Glenageary Avenue, Sallynoggin/Glenageary Co. Dublin (DL Reference -PAC LRD1/021/23). This response should be read in conjunction with the remainder of AECOM's Traffic and Transport Assessment which has been updated to include the feedback from Dun Laoghaire Rathdown County Council (DLRCC).

## 2.2 AECOM Responses to DLRCC Opinion

The subsequent sections set out the response to the traffic and transport items raised within the opinion issued by DLRCC.

#### 12. Transportation: Evidence to address potential issues and concerns regarding.

**DLRCC Opinion 1.** Cycle parking: Compliance with Standards for Cycle Parking and associated Cycling Facilities for New Developments – January 2018'.

#### **Applicant Response 1**

The relevant development plan objectives and DLRCC "Standards for Cycle Parking and associated Cycling Facilities for new Developments" document has been reviewed and the proposed cycle parking provisions have been designed cognisant of the standards and recommendations. A cycle audit has also been prepared by AECOM, which further outlines the main design criteria that have been assessed in the preparation of the proposed cycle parking strategy.

As suggested by DLRCC, the minimum requirement for cycle parking numbers (for both short stay and long stay cycle parking) has been met using quality parking in the form of Sheffield stands set out to the dimensions recommended. This includes provisions for 56. short stay cycle parking spaces at ground floor level of the development and 254 long stay cycle parking spaces at basement level.

Of the spaces mentioned above, 10. of these have been designed for long stay cargo bikes and 16. of these have been designed for short stay cargo bikes. In addition, which exceeds the DLRCC requirements for cycle parking numbers, the remainder of the long stay cycle parking outside of the required long stay standards is stacked at basement level. The proposed basement access ramp, is now proposed with a gradient of 7% (1:14)

In accordance with the DLRCC standards, a minimum of 50% of the short term/visitor cycle parking. 50% of short terms cycle spaces at ground level are proposed to be covered/sheltered. A minimum of 2.4m headroom will be provided within the proposed basement, please refer to Architectural drawings for basement cross-sections. While available, lifts are not proposed for use by cyclists.

Due to constraints on the available space a 1.1m wide bicycle ramp is proposed alongside the vehicular ramp which is to be designated by line markings.

**DLRCC Opinion 2:** Proposed parking provision (appearing to be a significant departure from Development Plan). Also required, drawings and details which demonstrate arrangements for non-residential deliveries, set-down, creche drop off etc. including any arrangements proposed which employ dual use of on-site/off-site parking should be clearly outlined, and for 3 No. loading bays that are required in accordance with Section 12.4.5.7, and details of any car sharing schemes.

#### Applicant Response 2:

The proposed development includes 80 No. car parking spaces at basement level. In addition to this there are 4 No. mobility impaired spaces proposed, 3 No. of these at basement level and 1 No. at ground floor level. The car parking proposed at basement level is for residential use only and this results in a proposed car parking ratio of 0.56.

It is noted that, in relation to the current DLRCC Development Plan, Chapter 12 Development Management, while the proposed site is classified as Parking Zone 3, the site is only marginally outside the requirements set for Parking

Zone 2 development sites. This is by virtue of the proposed site being located within a 14 minute walking distance to the nearest dart station (Glenageary dart Station) and also within a 10 minute walking distance of Kill Avenue.

In addition to the justifications set out in the main body of this TTA report, the justifications for the proposed car parking ratio under the DLRCC Development Plan Chapter 12, Section 12.4.5.2 Application of Standards (i) Assessment Criteria for Deviation from Car Parking Standards, are as follows:

DLRCC Deviation from Parking Standard Reason	AECOM Response
Proximity to Public transport services and level of service and interchange available and The range of services available within the area	Within this TTA AECOM has provided the planning authority with evidence of the existing transport network via both bus and rail and its close proximities and frequencies of service to the subject site. As part of the TTA a review of the census data has been undertaken to understand the existing level of uptake on public transport and active modes of travel. 46% of those who participated in the census 2016 noted the public transport or active modes of travel as their main mode of transport. Therefore, demonstrating that a high car dependency is present in the area but it is equally balanced with active modes.
	Chapter 3 of this TTA provides details of the existing conditions of the transport network in the area of the proposed development site. This includes the site's urban context and good transport networks.
Walking and cycling accessibility and any improvement to same. Urban design, regeneration and civic benefits including street vibrancy.	It is proposed that 10 long stay residential bike parking spaces will be designated for Cargo bikes. It is proposed to provide 16 no. cargo bike parking spaces at the surface for visitor / creche cycle parking. Total of 56 short term cycle parking spaces are to be provided on the surface for visitors in addition to 254 long stay cycle parking spaces in the basement for residential use.
	The proposed public plaza within the site through specific landscaping and design has numerous points of pedestrian connectivity with the existing environment as
	Further information in relation to this DLRCC comment is detailed in chapter 3.7
The need to safeguard investment in sustainable transport and encourage a modal shift	It is proposed to provide 310 total cycle parking spaces within the proposed development site. As per the DLRCC cycle parking standards the resident cycle parking meets the requirements.
	Further information in relation to this DLRCC comment is detailed in Chapter 4 of this TTA.
Availability of car sharing and bike/ e bike sharing facilities	AECOM have noted within this TTA the local existing car sharing facilities by car sharing firm GoCar. In addition to the existing car sharing facilities within the locality of the Proposed Development Site, it is proposed to provide an additional 2 car sharing spaces assumed exclusive for residents of the proposed development site as part of this scheme. Further information in relation to this DLRCC comment is detailed in Chapter 4 of this TTA.
	Cycle sharing schemes will be permitted within the visitor cycle parking areas at surface level of the proposed development. The bike schemes that have the potential to be used within the area and subsequently to be parked on the proposed development temporarily are known as Bleeper bike (manual) and Moby (electric) bike renting schemes.
Existing availability of parking and its potential use	It is the intention of the design team that the proposed development be considered self sufficient from other neighbouring developments.

Particular nature, scale and characteristics of the proposed development	
Impact on traffic safety and the amenities of the area	A Road safety audit has been undertaken by an independent road safety auditor to determine that the design created will have no negative impact on traffic safety and the existing layout of the surrounding area.

**DLRCC Opinion 3:.** Also, with regard to the Cherrywood to Dun Laoghaire Strategic Route (R118, Wyatville Road to Glenageary Roundabout) Applicant should liaise with DLRCC in order to agree necessary requirements in order to ensure that the proposed development will not hinder, or conflict, with any future proposals for the public realm improvement works associated with this 6 year objective.

#### Applicant Response 3:

AECOM have liaised with the DLRCC Transport Planning department in relation to the referenced Cherrywood to Dun Laoghaire 6 year roads objective, as included in the current DLRCC Development Plan. DLRCC Transport Planning have provided a proposed signalised junction layout, for the existing Glenageary Roundabout, in both PDF and digital AutoCAD format.

It has been demonstrated to the Transportation Department (in a meeting on 22/03/2023) that the proposed development building structure footprint does not encroach on the signalised junction footprint.

Notwithstanding the above, it has been highlighted that the footprint of the proposed signalised junction layout that has been provided by DLRCC Transport Planning far exceeds the extents of the referenced 6 year roads objective, as indicated within the current development plan zoning maps. Furthermore, the proposed signalised junction layout provided is dated May 2008 and is therefore likely outdated and would require significant amendments to meet current standards.

**DLRCC Opinion 4:** Bus Stop: Applicant is requested to explore and arrange for the replacement and upgrading of the existing bus stop (Stop 3205) to a bus shelter on Sallynoggin Road (liaise with DLRCC and NTA), and to liaise with DLRCC in order to agree proposed areas to be Taken-in-Charge (TIC).

#### Applicant Response 4:

AECOM have made contact with both DLRCC Transportation and the NTA in relation to the requested bus shelter. It is not currently proposed to provide a bus shelter at this location, but this can be facilitated if needed. AECOM include the below text received from the NTA on the 22<sup>nd</sup> of March. "The bus shelter programme is managed by the NTA. It is not uncommon (or is sometimes included by way of condition) as part of a planning application for a residential development at the request of the local authority." AECOM invite DLRCC to include a condition relating to the potential upgrade of bus stop to bus shelter on Sallynoggin Road.

Please refer to the proposed Architectural drawing pack for the proposed Taking in Charge (TIC) drawing.

**DLRCC Opinion 5:.** Detailed Quality Audit should be submitted. It should be demonstrated that gradients and headroom associated with the refuse access point are acceptable in order to ensure ease of access for large refuse vehicles.

#### Applicant Response 5:

Please refer to Quality Audit report that has been submitted as part of the planning application documentation, which has been undertaken by Bruton Consulting Engineers.

**DLRCC Opinion 6:** Applicant should liaise with the Planning Authority to agree all proposed and required works to the public realm in the vicinity of the site - including works to improve pedestrian and cyclists connectivity (and details to include drawings which demonstrate the agreed changes shall be included as part of any final application), and (notwithstanding submitted MMP) that the submitted Mobility Management Plan (MMP) should be updated to demonstrate measures, targets and recommendations for the proposed childcare facility/creche, and for revised details for a Standalone Construction Management Plan to deal with traffic conflicts etc, (and the submitted TIA also noted).

#### Applicant Response 6:

AECOM have liaised with the DLRCC Transport Planning department, and the following has been agreed in principle:

1. A new raised table, complete with a 4m wide uncontrolled shared pedestrian/cyclist crossing, has been proposed on Glenageary Avenue, matching the desire line as requested.

2. The existing pedestrian crossing on Glenageary Avenue, at the junction between Glenageary Avenue and Sallynoggin Road, is proposed to be increased in width from 1.2m wide to 2.0m wide. Please refer to AECOM Drg. 60690914-ACM-00-00-DR-CE-10-0001 current proposals as indicated above.

**DLRCC Opinion 7:.** The submitted Mobility Management Plan by AECOM, dated January 2023 is noted. Transportation Planning consider that this document should be updated to demonstrate measures, targets and recommendations for the proposed childcare facility/creche.

#### Applicant Response 7:

Please refer to revised Mobility Management Plan submitted with this application.

It is proposed to provide a Creche drop-off/pick up parking bay capable of accommodating at least 2 cars on Glenageary Avenue.

#### DLRCC Opinion 8: Car Sharing/Cycle Sharing: Details of car sharing/cycle sharing.

#### Applicant Response 8:

Cycle sharing schemes will be permitted within the visitor cycle parking areas at surface level of the proposed development. The bike schemes that have the potential to be used within the area and subsequently to be parked on the proposed development temporarily.

Contact has been made with GoCar in relation to the current proposals and a Letter of Support has been received from GoCar for 2 No. car sharing vehicles within the proposed basement for use by the residents. Refer to the Appendix D of this report for GoCar letter of Support.

**DLRCC Opinion 9:.** Transportation- Access- The Applicant is requested to investigate the potential for vehicular access arrangement which utilises the existing Lidl access Road off Sallynoggin Road. Noting that this arrangement would require access agreement across lands in third party ownership, the Applicant will be requested to demonstrate the extent and outcome of relevant discussions in the event that an agreement cannot be reached.

#### Applicant Response 9:

The existing Lidl car park access is located outside the ownership boundary of the proposed scheme and there is no current right of way for access to the proposed site through these third-party lands. There is an existing access to the site from Glenageary Avenue and the current proposals have been prepared on the basis of a new entrance to the site from Glenageary Avenue. Appendix F details the correspondence between the client and LIDL.

# 3. Existing Conditions

## 3.1 Introduction

This chapter includes a review of the existing baseline conditions of the site including public transport provision, walking and cycling facilities and the current operation of the surrounding public network. AECOM undertook a number of site audits to identify the existing conditions in the vicinity of the site. The findings from AECOM's analysis are presented within this chapter.

## 3.2 Location

The site is bounded by Glenageary Avenue and Sallynoggin Road Lower to the east and north, respectively. To the west of the site is a Lidl supermarket while there is a Post Office to the south of the site.

The site is situated to benefit from both sustainable and active forms of transport due to its proximity to Dun Laoghaire Village Centre, (approx. 1.8km walk to Dun Laoghaire Shopping Centre). AECOM has undertaken a desktop review via Google Maps of the surrounding road network. The following sub-headings will outline the existing facilities available to the prospective residents with respect to active travel (walking, cycling) and sustainable transport (bus, rail, car share) along with a review of the existing commuting habits for the surrounding DLRCC council area based on the 2016 Census data via the DLRCC 2022-2028 development plan.

The proposed development is located within a network of roads that provide both pedestrian and vehicular access, the existing road network and pedestrian infrastructure is considered to be good quality and functioning well. The local road network is illustrated in Figure 3-1.



Figure 3-1 – Proposed Site Location

## 3.3 Land Use Zoning

The subject lands are zoned 'NC' within the Dun Laoghaire Rathdown County Development Plan 2022– 2028 and are illustrated in Figure 3-2. The zoning objective of lands zoned 'NC' are as follows '*To protect, provide and-or improve mixed-use neighbourhood centre facilities*. The R118 has also been designated as both a '*Proposed Quality Bus/ Bus Priority Route*' and a '6 Year Roads Objective'.

In vicinity of the subject scheme there is a 6 year Road Objective detailed '*Cherrywood to Dún Laoghaire Strategic Route (R118, Wyattville Road to Glenageary Roundabout*' The majority of DLR's 6 Year road proposals primarily consist of safety and facilities improvements for pedestrians and cyclists. All road projects listed and unlisted in this Plan will consider all modes (walking, cycling and, if appropriate, bus) in accordance with DMURS and the National Cycle Manual.

In vicinity of the subject scheme there is one 'Specific Local Objectives' (SLO) which is **SLO-65**, this aims '*To prepare a Local Area Plan for Sallynoggin*'.



Figure 3-2 – Site Zoning (Source: Dun Laoghaire Rathdown County Development Plan 2022 – 2028, Map 7)

## 3.4 Existing Transportation infrastructure

An important stage in the development of a Traffic and Transport Assessment is the identification and appreciation of the local network's existing transport conditions and vehicle movement characteristics.

An audit of the local road network has therefore been undertaken to establish the existing transport conditions and vehicle movement patterns across the existing network.

#### 3.4.1.1 Glenageary Avenue

Glenageary Avenue is a 6.0m wide single carriageway local street which is located along the eastern boundary of the site. Footpaths are provided along the western side of Glenageary Avenue. Public street lighting is provided in the vicinity of the site along the eastern and western side of the carriageway. Glenageary avenue is adjacent to the Glenageary roundabout. Glenageary Avenue is a cul-de-sac which exits on to Sallynoggin road lower. The posted speed limit along the Glenageary avenue is 30 km/hr.

#### 3.4.1.2 Sallynoggin Road Lower

Sallynoggin Road Lower is a 9.0m wide carriageway local Road which is located along the northern boundary of the site. Footpaths are provided along both sides of the Sallynoggin Road Lower with two push button operated pedestrians' crossings. Public Street lighting is provided in the vicinity of the site along both sides of the carriageway. There is on-street car parking provided along the northern side of the carriageway with right turn pockets provided for vehicles accessing the surrounding neighbourhoods and retail units. Two bus stops are provided along the Sallynoggin Road in close proximity to the scheme within a 200m walking catchment. The posted speed limit along the Sallynoggin Road Lower is 50 km/hr.

#### 3.4.1.3 R118

The R118 is a 7.0 wide carriageway which is located to the east of Glenageary Avenue. Footpaths are provided along both sides of the R118 but are separated by a grass verge and a wall. A staggered push button operated signalised crossing is provided on approach to the Sallynoggin Roundabout. Public Street lighting is provided along both sides of the carriageway. Two bus stops are provided along the R118 in close proximity to the scheme within

a 200m walking catchment. The posted speed limit along the R118 is 60 km/hr which reduces to 50km/hr on approach to the Sallynoggin Roundabout.



Figure 3-3 – Existing Site Layout

## 3.5 Sustainable Transport – Bus

Figure 2.4 Illustrates the location of bus stops in relation to the site. It demonstrates the site benefits from good bus transport connections.

The closest bus stops are located north and east of the site on the Sallynoggin Road Lower and the R118 Bypass. These bus stops are operated by Dublin Bus. The stops along Sallynoggin Road Lower are also serviced by the no. 111 which is operated by Go Ahead Ireland. Figure 3-4 and Table 3-1 details the number of services per day and the routes.



#### Figure 3-4 – Bus Stops in Vicinity of the Site (Source: www.journeyplanner.transportforireland.ie)

Route	Onereter	Douto	Services			
No.	Operator	Route	Monday to Friday	Saturday	Sunday	
7a	Dublin Bus	Mountjoy sq. west. – Blackrock – Sallynoggin. – Loughlinstown	1 service every 30 mins	1 service every 30 mins	1 service every 40 mins	
7D	Dublin Bus	Ulverton Road - Glenageary – Stillorgan – Lesson Street – Mountjoy Square	1 service per day	1 service per day	No Service	
7	Dublin Bus	Mount Joy Sq. west – Ballsbridge – Monkstown–Sallynoggin– Rathmichael	1 service every 30 mins	1 service every 30 mins	1 service every 40 mins	
111	Go-Ahead	Brides Glen Luas (Green Line) – Sallynoggin – Dun Laoghaire – Dalkey	1 service every 1 hour	1 service every 1 hour	1 service every 1 hour	
45A	Go-Ahead	kilmacanoge– Shankhill – Sallynoggin – Dun Laoghaire	1 service every 20 mins	1 service every 20 mins	1 service every 30 mins	
45B	Go-Ahead	Kilmacanoge – Bray -Shankhill - Sallynoggin – Dun Laoghaire	1 service per day	1 service per day	No service	

Table	3-1	– Bus	Services	and	Routing
IUNIC	0-1	Dus	001 11003	unu	Routing

## 3.6 Sustainable Transport – Rail

The closest DART stations to the site are the Glenageary station, located 1.3 km (16-minute walk) to the east of the site and the Glasthule station, located 1.4 km (18-minute walk) to the northeast of the site as shown in Figure 2.5.



Figure 3-5 – DART Stations in Vicinity of the Site (Source: www.journeyplanner.transportforireland.ie)

These stations are situated along both the South Eastern Commuter Train Line and DART lines. DART services travel north to Dublin City Centre and south to Bray/Greystones. It should be noted that heavy rail does not stop at either of these stations, the nearest station where heavy rail stops is Dun Laoghaire and Greystones Railway Station, these stations are serviced by the South Eastern Commuter and Intercity.

## 3.7 Sustainable Transport – Car Sharing

There are 5 GoCar hire stations located within a 1.5km walking catchment of the subject site. GoCar members can book cars online or via the app for durations of as little as an hour. They then unlock the car with their phone or a GoCard; the keys are in the car, with fuel, insurance and city parking all included. The benefits of such car sharing services include:

- The reduction of cars on the road and therefore traffic congestion, noise, and air pollution.
- Frees up land traditionally used for private parking spaces.
- Encourages and potentially increases use of public transport, walking and cycling as the need for car ownership is reduced.
- Car sharing allows those who cannot afford a car the opportunity to drive, encouraging social inclusivity; and
- Each GoCar which is placed in a community has the potential to replace the journeys of up to 15 private vehicles.

The locations of the GoCar bases are illustrated in Figure 3-6 with Table 3-2 providing additional details in relation to walking distance from the site and the type of GoCar vehicle available.



Figure 3-6 – GoBase Locations (Source: www.gocar.ie)

Table 3-2 – GoBase Deta	ils
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Ref No.	Go Base Location	Vehicle Class	Approx. Distance from the Development (Walking Time)
1	O'Rourke Park (Igo Café)	GoCity	0.40 km (5 minute walk)
2	Leona Building (HoneyPark)	GoCity and GoTripper	1.00 km (13 minute walk)
3	HoneyPark Shopping Centre	GoCity	0.80 km (10 minute walk)
4	Fairways Building, Cualanor, Glenageary	GoExplore	0.75 km (9 minute walk)
5	Silchester Road, Glenageary	GoTripper	0.65 km (8 minute walk)

The proposed development will provide 2 dedicated GoCar spaces in the basement dedicated to residents use only. Appendix D contains the letter of consent obtained by GoCar.

## 3.8 Emerging Transportation Infrastructure

### 3.8.1 Local Road Proposals

The DLRCC Development Plan 2022 – 2028, has outlined both short (6 years) and long (6+ years)-term road network proposals for the DLRCC environs. Within the DLRCC Development Plan, **Policy T23: Roads and Streets** details the following:

'It is a Policy Objective, in conjunction and co-operation with other transport bodies and authorities such as the TII and the NTA, to secure improvements to the County road network – including improved pedestrian and cycle facilities, subject to the outcome of environmental assessment, flood risk assessment and the planning process'

'Walking and cycling infrastructure is a key component of the design and implementation of the 6 Year road proposals/projects. The design of individual roads and the level of segregation of cycle lanes/paths is done on a case-by-case basis in accordance with Design Manual for Urban Roads and Streets (2019) and the 'National Cycle Manual' (2011).'

As part of this roads policy DLRCC have indicated that the R118 bypass is to be upgraded.

As part of the development plan this scheme is to be delivered within the 6 years that the development plan covers (2022 – 2028). The extent of the works that will need to be undertaken for the implementation of the scheme is unknown at this stage or what stage of the design process it currently sits at. Figure 3-7 illustrates the proposed roads objectives.



# Figure 3-7 Road Proposals (Source: Dun Laoghaire Rathdown County Development Plan 2022 – 2028, Road Proposals)

AECOM attended a meeting with DLRCC Transport Planning Department on the 22<sup>nd</sup> of March 2023 in relation to the proposed County Development Plan 2022-2028 Cherrywood to Dun Laoghaire 6 year road objective. This objective extends from Cherrywood, northwards along the R118 Wyatville Road to a termination point at the existing Sallynoggin Roundabout, located adjacent to the proposed site boundary.

As indicated in Figure 3-8 which includes an extract from the DLRCC County Development Plan 2022-2028 zoning mapping for the area around the proposed site, the proposed 6 year road objective footprint is limited to the footprint of the existing Sallynoggin roundabout and does not encroach within the extents of the proposed site.



# Figure 3-8. Extract from DLRCC Development Plan Zoning. (Source: <u>DLRCC County Development Plan</u> <u>2022-2028</u>)

DLRCC provided a signalised junction layout for the existing Sallynoggin roundabout (dated May 15<sup>th</sup> 2008) on September 27<sup>th</sup> 2022. The signalised junction layout that has been provided, in contrast to the development plan 6 year road objective footprint, does encroach into the proposed site, at the northern boundary.

During the meeting between AECOM and DLRCC Transport Planning (on March 22<sup>nd</sup> 2023), AECOM presented an overlay of the signalised junction on the proposed development layout.. This overlay illustrates that there are the 4 no. minor overlaps between the proposed building and the signalised junction at the back of footpath. These overlaps are localised, as illustrated in Figure 3-9 and due to this, the proposed building in principle is not considered to make the signalised junction layout unfeasible.



Figure 3-9. Extract from Proposed Signalised Junction Overlay. (Source: AECOM Drg. 60690914-ACM-00-00-SK-CE-10-0010)

AECOM also presented an overlay with possible minor amendments that could be made to the signalised junction layout, and which would facilitate a loading bay being provided on Glenageary Avenue for the use of the proposed development as shown in Figure 3-10. This illustrates the possible amendments that could be made, and which includes moving the realigned Glenageary Avenue circa. 2m north. This possible amendment would allow a larger clearance between the proposed building structure and the signalised junction as well as allowing for the provision of a 18m long loading bay on Glenageary Avenue for the use of the proposed development.



# Figure 3-10. Extract from Proposed Signalised Junction Possible Amendments. (Source: 60690914-ACM-00-00-SK-CE-10-0011)

DLRCC suggested that a 2m set-back would typically be provided around the perimeter of the proposed signalised junction footprint. Based on the current proposals, there are some locations where this 2m set-back cannot be provided and this was discussed during the meeting. AECOM suggest that this 2m set-back is not required, on the basis that the proposed 2m wide footway to be provided on the nearside of the signalised junction layout, at the interface with the proposed building structure, will not require deep excavations in order to be built and will in itself provide a 2m wide buffer between the proposed building structure and the signalised junction kerb/carriageway construction.

As requested, AECOM have prepared an overlay sketch of the proposed building structure and the provided signalised junction layout, refer to Appendix G. AECOM have also prepared and enclosed a sketch illustrating that possible minor amendments could be made to the signalised junction layout, as discussed above, refer to Appendix G.

## 3.8.2 Cycle Network Proposals

In the vicinity of the subject site, it is planned to upgrade the cycle facilities along the R118 and create a cycle track separated from the road linking the R118 up with the R829. The R829 will have a cycle lane within the bus lane. Figure 3-11 illustrates the existing cycle facilitates in the vicinity of the subject site with Figure 3-12illustrating the proposed cycle network upgrades as part of the 'Cycle Network Plan for the Greater Dublin Area' – 2013.







Figure 3-12 – Proposed Cycling Facilities

It is proposed to install continuous, high-quality, and segregated walking and cycling facilities, improved public realm areas including incidental play features, improved bus priority along Kill Avenue up to the Bakers Corner Junction.

### 3.8.3 Bus Network Proposals

The National Transport Authority (NTA) has put forward proposals to upgrade a number of core bus corridors from the Dublin environs to the City Centre under the title 'BusConnects'. The aim of the project is to:

- 'Make bus journeys faster, predictable and reliable;
- New bus stops and better facilities;
- More efficient network, connecting more places and carrying more passengers;
- Updated ticketing systems and implementing a cashless payment system with a simpler fare structure; and
- Improving the cycling network and making it safer.'

As part of the BusConnects scheme the current bus network is to be revised and more frequent and efficient services are to be provided across the Dublin environs. The site is located along both the Local Route L11 and L22 which travel from Dalkey and Brides Glen to Dun Laoghaire, respectively. Dun Laoghaire is to become a Terminus providing access to the wider bus network. Figure 3.10 illustrates all route and Table 3-3 details the proposed routes in the vicinity of the subject site.



Figure 3.10 – Proposed Public Transport Services (Source: <u>www.busconnects.ie</u>)

	Route Type	Route	Frequency		
Route			Mon to Fri	Saturday	Sunday
В3	Spine / Branch Route	Tyrrelstown – City Centre – Dun Laoghaire	1 service every 15 mins	1 service every 15 mins	1 service every 20 mins
B4	Spine / Branch Route	Blanchardstown SC – City Centre - Sallynoggin	1 Service every 15 mins	1 service every 15 mins	1 service every 20 mins
E2	Spine / Branch Route	Charlestown – City Centre – Dun Laoghaire	1 service every 8-10 mins	1 service every 10- 15 mins	1 service every 15 mins
S8	Orbital Routes	Tallaght – Sandyford – Dun Laoghaire	1 service every 15 - 20 mins	1 service every 30 mins	1 service every 30 mins
L11	Local Route	Kilmacanogue – Bray – Dun Laoghaire	1 service every 20 mins	1 service every 30 mins	1 service every 30 mins
L21	Local Route	Dalkey – Dun Laoghaire	1 service per hour		
L22	Local Route	Brides Glen – Sally Glen Road – Dun Laoghaire	1 service every 15 mins	1 service every 15- 20 mins	1 service every 20 mins
L25	Local Route	Dundrum – Dun Laoghaire	1 service every 15 mins	1 service every 15- 20 mins	1 service every 20 mins
L27	Local Route	Ballyogan – Cabinteely – NRH – Dun Laoghaire	1 service every 30 mins		
P11	Peak Time Route	Shankhill – Ballybrack – City Centre	1 service during AM Peak (7-8) and PM Peak (5-6)	Weekday Only	
P12	Peak Time Route	Dalkey – City Centre	2 services during AM Peak (7-8) and PM Peak (5-6)	Weekday Only	

#### Table 3-3 – Revised Bus Network Routes

## 3.9 Existing Site Access

At present there is currently one access point into the site which serves the existing greenfield space on the site Figure 3-13 shows the location of the existing access point into the site and Figure 3-14 illustrates the existing desire line through the proposed site which is taken into account with the proposed design with the focal point of the proposed central plaza.



Figure 3-13 Existing Site Access (Source: Google Street view)



Figure 3-14 Ariel Image of Proposed site Indicating the Existing Desire Line (Google Earth)

## 3.10 Road Collision Statistics

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

Traffic collision data was obtained for the period 2005 – 2016, which is the most recent data available from the RSA website. It should be noted that information relating to report incidents for the years 2017, 2018, 2019 and 2020 is not yet available on the Road Safety Authority (RSA) website. The RSA records detail only those occasions where the incident was officially recorded such as the Garda being present to formally record details of the incident.

The incidents are categorised into class of severity, which includes minor, serious and fatal collisions. The collision locations are shown in Figure 3-15.

Upon reviewing the RSA website, it was found that in the vicinity of the site there have been two no. minor collisions. One involved a single vehicle collision with a motorbike along Glenageary Avenue and the second occurred along Sallynoggin Road Lower which involved a car in a rear end straight collision.



Figure 3-15 – Road Collisions (Source: www.rsa.ie)

## 3.11 Existing Conditions Summary

The subject site is positioned within the urban environment to benefit from access to / from the site utilising sustainable forms of travel including walking, cycling and public transport.

The sites proximity to the nearby bus stops, a number of which are within a 1.5km walking catchment, giving perspective residents access to the wider bus network.

Most notably are the bus services offered within Sallynoggin which travel towards Dun Laoghaire and further to the city centre on a frequent basis.

The site is situated within a 1.5 km walking catchment of both the Glenageary and Sandycove/Glasthule DART stations which is served by a DART every 10 minutes which further enhances the sustainability characteristics of the site. These services travel towards Dublin City and will allow residents / staff to avail of the wider bus network or train services.

The site is also close to a number of car sharing facilities, as outlined previously, with 5 GoCar GoBase locations within a 1.5km walking catchment of the site. These services will allow residents to take day trips without the requirement for owning a private vehicle. This will aid in reducing the car parking demand by perspective residents. The proposed development will provide 2 dedicated GoCar spaces in the basement dedicated to residents use only. Appendix D contains the letter of consent obtained by GoCar.

## 4. Proposed Development

## 4.1 Introduction

This chapter details the proposed development with regard to the transportation elements which include the internal roads layout, proposed pedestrian/ cycling infrastructure and parking provisions within the development area.

## 4.2 Proposed Development

The proposed development includes:

- a) Construction of 138 no. residential apartment units (37 no. 1-bedroom units, 68 no. 2-bedroom (4 person units), 6 no. 2-bedroom (3 person units) and 27 no. 3-bedroom units) in 2 no. interlinked blocks at third to fifth floor level (ranging in height from four to seven storeys over basement level) consisting of:
  - i. Block A (5-6 storeys) comprising 41 no. apartments (8 no. 1-bedroom units, 17 no. 2-bedroom (4 person) units, 2 no. 2-bedroom (3 person) units and 14 no. 3-bedroom units).
  - ii. Block B (4-7 storeys) containing 97 no. apartments (29 no. 1-bedroom units, 51 no. 2-bedroom (4 person) units, 4 no. 2-bedroom (3 person) units and 13 no. 3-bedroom units).

Each residential unit has associated private open space in the form of a balcony/terrace.

- b) Residential amenity areas of approx. 342 sqm are proposed in the form of resident support services, concierge services, co-working space, social/activity spaces and gym at the ground floor level of Blocks A and B.
- c) Open Space (approx. 2,806.6 sqm) is proposed in the form of (a) public open space (c. 1,848.4 sqm) in the form of a public plaza accommodating outdoor seating, planting, pedestrian footpaths and cyclist links and (b) residential/communal open space (approx. 958.2 sqm) including c. 750.6 sqm at surface level (incl. playground), roof terrace at fifth floor level of link between Blocks A and Block B (c. 151 sqm) and roof terrace (c. 56.6 sqm) at fifth floor level of Block B. 1.8 m opaque screens are proposed around both roof gardens.
- d) Commercial and retail uses at ground floor level of Blocks A and B (c. 996 sqm) to include (a) 2 no. restaurants (c. 267 sqm and 295 sqm) in Block A, (b) a retail clothing unit (c. 142 sqm), (c) retail florist unit (c. 66 sqm), (d) retail pharmacy unit (c. 126 sqm) and (e) hairdresser unit (c. 100 sqm) all in Block B.
- e) Childcare facility (c. 263 sqm) with dedicated open space and children's play area (c. 39.5 sqm) at ground floor level of Block B.
- f) Basement areas (total approx. 3,411 sqm) are proposed on one level and include car and bicycle parking areas, waste management and plant areas. An ESB substation (approx. 31.7 sqm) is proposed at surface level at the top of the basement ramp accessed off Glenageary Avenue. Commercial bin stores (c. 47.9 sqm) are proposed to be located at ground floor level of both Blocks A and B.
- g) A total of 80 no. car parking spaces at basement level are proposed to include 3 no. accessible parking spaces, 2 no. GoCar spaces and 17 no. EV charging spaces. 5 no. motorcycle parking spaces are also proposed at basement level.
- h) A set down area/loading bay is proposed at surface level at Sallynoggin Road and 2 no. set down areas/loading bays including 1 no. accessible car parking space are proposed at surface level at Glenageary Avenue.
- A total of 310 no. bicycle parking spaces to include 254 no. bicycle parking spaces at basement level including 10 no. cargo bicycle spaces and 56 no. bicycle parking spaces including 16 no. cargo bicycle spaces at surface level.
- j) The development shall be served via a new vehicular access point to the basement level from Glenageary Avenue. New pedestrian and cyclist access points will be provided onto Sallynoggin Road and Glenageary Avenue from the site.

- k) Removal of existing cycle path and footpath and dropped kerb pedestrian crossing at Glenageary Avenue to be reinstated by soft landscaping and replaced by a new shared cyclist and pedestrian raised table crossing point located on Glenageary Avenue linking to the existing signalised crossing on the R118. Existing 1.2 m pedestrian crossing on Glenageary Avenue to be widened to 2 m.
- I) Emergency services/servicing access is proposed from Sallynoggin Road and Glenageary Avenue.
- M) All associated site and infrastructural works include provision for water services; foul and surface water drainage and connections; attenuation proposal; permeable paving; all landscaping works; green roofs; roof plant room and general plant areas; photovoltaic panels; landscaped boundary treatment; footpaths; public lighting; and electrical services.

Land Use	Туре	Quantum	
	Studio	0	units
Aportmont	1 Bed	37	units
Apartment	2 Bed	68	units
	3 Bed	33	units
	Block B	100	Sq. m
Patail	Block B	142	Sq. m
Retail	Block B	66	Sq. m
	Block B	126	Sq. m
Restaurant	Block A	562	Sq. m
Creche	Block B	263	Sq. m

#### Table 4-1 Schedule of Accommodation

## 4.3 Site Access

There will be 1 no. vehicular access serving the subject site, the vehicular access point will be located at the southeastern boundary of the site and will serve the needs of residents. The proposed site access has been illustrated in Figure 4-1.



#### Figure 4-1 – Proposed General Arrangement Indicating Basement Access (AECOM Drawing: 60690914-ACM-00-00-DR-CE-10-0001

The existing Lidl car park is located outside the ownership boundary of the proposed scheme and there is no current right of way for access to the proposed site through these third-party lands. The current proposals are using an access to the proposed basement via Glenageary Avenue and this is also where the existing site is accessed from.

The option to provide an entrance to the proposed basement via the existing Lidl car park has been discussed between Red Rock Glenageary Ltd. and Lidl Ireland GmbH. Please see evidence of this correspondence in Appendix F which illustrates that the suggested option is not feasible.

The existing Lidl car park access is located outside the ownership boundary of the proposed scheme and there is no current right of way for access to the proposed site through these third-party lands. There is an existing access to the site from Glenageary Avenue and the current proposals have been prepared on the basis of a new entrance to the site from Glenageary Avenue.

## 4.4 Internal Roads Layout

The proposed internal access road is to be 6.2m wide in accordance with DMURS (Design Manual Urban Roads and Streets) which will cater for the demand of the proposed development whilst also ensuring that vehicle speeds remain low.

According to the 'Design Recommendations for multi-storey and underground car parks, March 2011', the internal roads through the basement car parking area are to be 6.0m wide to ensure that there is enough aisle width to

facilitate a 90-degree parking and two way traffic movements through the site. The proposed basement layout can be seen in AECOM Drawing: 60690914-ACM-01-00-DR-CE-10-0002. Figure 4-2 illustrates the proposed basement layout.



Figure 4-2 Proposed Basement Layout (AECOM Drawing: 60690914-ACM-01-00-DR-CE-10-0002)

## 4.5 Pedestrian and Cyclist Permeability

The proposed development will be highly accessible to pedestrians from Glenageary Avenue and Sallynoggin Road Lower. Pedestrians will be given priority within the internal site layout to ensure desire lines within the site are accommodated for and ensures the risk of vehicle/ pedestrian conflict with vehicles is minimised. Permeability through the site has been illustrated in Figure 4-3.



#### Figure 4-3 Proposed General Arrangement indicating Pedestrian Permeability (AECOM Drawing 60690914aACM-00-00-DR-CE-10-0001)

Cyclist and pedestrian permeability in the context of the existing environment has been illustrated in Figure 4-4 highlights the proposed developments connectivity with the existing environment.



Figure 4-4 Cyclist and Pedestrian Access Points from Existing facilities to the Site AECOM Drawing: 60690914-ACM-00-00-DR-CE-10-0001
### 4.6 Servicing.

A swept path analysis has been undertaken to illustrate and demonstrate the development and boundary pedestrian footway can cater for a ESB service truck of 6m in length to access the Electrical servicing unit. This is illustrated in Figure 4-5



Figure 4-5 Proposed ESB and Bin Servicing Arrangements (AECOM Drawing: 60690914-ACM-01-00-DR-CE-10-0102)

A swept path analysis has been undertaken to demonstrate the capability of the development to cater for a 10.2m bin lorry. The results of the analysis show that the proposed set-down area can accommodate a 10.2m long bin lorry accessing and egressing the set down area. This is illustrated in Figure 4-5.

The drawings submitted by AECOM as part of this TTA planning application, in Appendix A have included swept paths prepared using Autodesk Vehicle Tracking which demonstrate that the required refuse vehicles can park offroad for the purposes of refuse collection and will not block or impede vehicle movements on Glenageary Avenue.

An Operational Waste Management Plan (ref. CB/227501.0701WMR02) has been prepared for the proposals by AWN Consulting and submitted as part of this planning application lodgement. This document sets out the requirements for waste management for the proposed development, which includes under Section 5.3 the requirement for bins to be brought to and from the collection staging areas by an approved contractor/facilities management company and that the collection staging areas are to be managed and collection times staggered, so that they do not impede pedestrian and traffic movements in the area.



#### Figure 4-6. Proposed Refuse Swept Path Layout. (Source: AECOM Drawing 60690914-ACM-01-00-DR-CE-10-0102)

#### 5.3 Waste Collection

There are numerous private contractors that provide waste collection services in the DLRCC area. All waste contractors servicing the proposed development must hold a valid waste collection permit for the specific waste types collected. All waste collected must be transported to registered/permitted/licensed facilities only.

Bins from the proposed development will be brought to a collection/staging areas by the waste contractor or facilities management immediately prior to collection. The waste collection area for the residential waste is located at the top of the carpark ramp, in close proximity to the loading bay on the south-eastern side of the development on Glenageary Avenue. Commercial bins will be stage and collected at the loading bay on the northern side off the development on Glenageary Avenue. Bins will be returned to the WSAs immediately following collection.

The collection/staging areas are such that they will not obstruct traffic or pedestrians (allowing a footway path of at least 1.8m, the space needed for two wheelchairs to pass each other) as is recommended in the Design Manual for Urban Roads and Streets (2022) <sup>22</sup>. These staging areas and road sweep analysis can be found in the appendices of this report.

It is recommended that bin collection times/days are staggered to reduce the number of bins required to be emptied at once and the time the waste vehicle is onsite. This will be determined during the process of appointment of a waste contractor.



## 4.7 Visibility Splay

In accordance with DMURS, sightlines of 23m are required having regards to the speed limit along Glenageary Avenue (30 km/hr). The visibility splay requirement is achieved at the subject site access from a 2.4m setback to the edge of the road. Figure 4-8 illustrates the visibility splay requirement.



Figure 4-8 Visibility Splay from Proposed Site Access (AECOM Drawing 60690914-ACM-00-00-DR-CE-10-0101)

## 4.8 Existing Commuting Habits

To further understand the proposed development within the context of the local area, AECOM has undertaken a review of the DLRCC Development Plan 2022-2028 Means of Travel data from the 2016 census. This analysis has been used to identify initial baseline travel characteristics for the proposed development and is presented in Table 4-2. This demonstrates the majority of residents using sustainable travel modes for travel to work or places of study.

Means of Travel	2016	Mode Share (%)
On foot	18387	14%
Bicycle	8864	7%
Bus, minibus or coach	15180	11%
Train, DART or LUAS	19040	14%
Motorcycle or scooter	861	1%
Car driver	50021	37%
Car passenger	20614	15%
Van/lorry/ other	2466	2%
Total	135433	100%

Table 4-2 Means of Travel to Work, School or College for Residents in Dun Laoghaire Rathdown (SourceDRRCC Development Plan 2022-2028)

Table 4-3 details the proposed trips generated by different modes of transport based form the Total people trips from TRICS combined with the data from Table 4-2 This gives a more localised idea of how the residents, staff and patrons of the proposed development are likely to travel to and from the site.

Table 4-3	Analysis of the trip generation determined from the DLRCC means of Travel to work, So	chool and
College D	Data.	

DI RCC Mada Data	Morning	(09:30 - 10:30)	Evening (15:45 - 16:45)	
DLRCC Mode Data	Arrivals	Departures	Arrivals	Departures
Total People	74	63	109	88
On foot	10	9	15	12
Bicycle	5	4	7	6
Bus, minibus or coach	8	7	12	10
Train, DART or LUAS	10	9	15	12
Motorcycle or scooter	0	0	1	1
Car driver	27	24	40	32
Car passenger	11	10	17	13
Van/lorry/ other	1	1	2	2
Total	74	63	109	88

### 4.9 Standard Vehicle Parking

In order to determine the appropriate quantum of vehicle parking for the proposed residential development, reference has been made to the following guidance:

- Chapter 4 of the Sustainable Urban Housing: Design Standards for New Apartments Guidelines For Planning Authorities, (Department of Housing Planning and Local Government, December 2022); and
- Table 12.5 of the Dun Laoghaire Rathdown County Development Plan (2022 2028).

#### 4.9.1 Design Standards for New Apartments Guidelines

The Sustainable Urban Housing: Design Standards for New Apartments Guidelines identifies 3 different location categories that are used to assess how accessible a scheme is to the surrounding sustainable forms of transport which are as follows:

- 'Central and / or Accessible Urban Locations;
- Intermediate Urban Locations; and
- Peripheral and / or Less Accessible Urban Locations.'

Based upon the review of the existing transport facilities and taking cognisance of the proposed future works as detailed in Chapter 2, the applicable location standard as per the Design Standards for New Apartment Guidelines for this development would be '**Intermediate Urban Locations**'. The Design Standards for New Apartment Guidelines defines 'Intermediate Urban Locations' as follows:

'Such locations are generally suitable for smaller-scale (will vary subject to location), higher density development that may wholly comprise apartments, or alternatively, medium-high density residential development of any scale that includes apartments to some extent (will also vary, but broadly >45 dwellings per hectare net) including:

- Sites within or close to i.e. within reasonable walking distance (i.e. up to 10 minutes or 800-1,000m), of principal town or suburban centres or employment locations, that may include hospitals and third level institutions;
- Sites within walking distance (i.e. between 10-15 minutes or 1,000-1,500m) of high capacity urban public transport stops (such as DART, commuter rail or Luas) or within reasonable walking distance (i.e. between 5-10 minutes or up to 1,000m) of high frequency (i.e. min 10 minute peak hour frequency) urban bus services or where such services can be provided;
- Sites within easy walking distance (i.e. up to 5 minutes or 400-500m) of reasonably frequent (min 15 minute peak hour frequency) urban bus services.'

In relation to car parking, within 'Intermediate Urban Locations' the document states '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.'

Accordingly, the site can be classified as an 'Intermediate Urban Location' as it is located within a reasonable walking distance of a suburban centre (Sallynoggin). Furthermore, the site is also ideally located to benefit from the emerging Bus Connects network redesign and is situated within a 1.5 km walking catchment of 5 no. GoCar GoBase locations.

AECOM believe the parking provision for the proposed residential units of the development should be provided in accordance with the Department of Housing, Planning and Local Government Sustainable Urban Housing Design Standards for New Apartment Guidelines as referred to above, and as such the quantum of vehicle parking provided on site should be a '**reduced overall car parking standard and apply an appropriate maximum car parking standard**.'

#### 4.9.2 Dun Laoghaire Rathdown County Development Plan 2022 – 2028

The Dun Laoghaire Rathdown County Development Plan 2022-2028 states the following in relation to car parking:

The proposed development site is located in zone 3 of the T2 DLRCC development plan 2022-2028 map.

Within parking zone 3 maximum standards shall apply to uses other than residential where the parking standard shall apply. In zone 3 additional parking shall be provided for visitors in residential schemes at a rate of 1 per 10. In some instances, in zone 3 reduced provision may be acceptable dependent on the criteria of land use. With particular regard to infill/brownfield developments in neighbourhood or district centres

'In all instances, where a deviation from the maximum or standard specified is being proposed, the level of parking permitted and the acceptability of proposals, will be decided at the discretion of the Planning Authority, having regard to criteria as set out below'

'Assessment Criteria for deviation from Car Parking Standards'

- The location of the proposed development and specifically its proximity to Town Centres and District
- Centres and high density commercial / business areas;
- The proximity of the proposed development to public transport;
- The precise nature and characteristics of the proposed development;
- Appropriate mix of land uses within and surrounding the proposed development;
- The availability of on-street parking controls in the immediate area;
- The implementation of a Travel Plan for the proposed development where a significant modal shift towards sustainable travel modes can be achieved; and

• Other circumstances where it can be justified on sustainability grounds.

The proposed site has been reviewed in relation to the accessibility of the above factors and shown in Table 4-4.

#### Table 4-4 Parking Standard Criteria

Criteria	AECOM Response	Criteria Met
Proximity public transport services and level of service and interchange available	5-minute cycle to high frequency Glasthule DART Station or a 15 minute walk to Glenageary DART Station, where services connect the site to Dublin City Centre. 5 min walk to bus services within Sallynoggin where services connect the site to Dun Laoghaire and surrounding environs. There are 5 no. GoCar GoBase stations located within a 1.5km walking catchment of the site.	Yes
Walking and cycling accessibility/permeability and any improvement to same.	The proposed development has incorporated the existing cycling and pedestrian facilities and incorporated them to link in with the designed access points to the site. Illustrations of these links and the proposed permeability for the site are detailed in the adjoining Mobility management plan. The 2 new pedestrian and cyclist crossing pint on the eastern site boundary will additionally improve permeability.	Yes
Availability of car sharing and bike / e-bike sharing facilities.	<ul> <li>The site is located within the vicinity of the GoCar car share scheme, with 5 GoBase stations being located within a 1.5km walking catchment. The existing facilities will further assist to promote sustainable modes and reduce the need for private vehicle ownership.</li> <li>In addition to the existing car sharing facilities within the locality of the Proposed Development Site, it is proposed to provide an additional 2 car sharing spaces assumed exclusive for residents of the proposed development site as part of this scheme.</li> <li>Cycle sharing schemes will be permitted within the visitor cycle parking areas at surface level of the proposed development. The bike schemes that have the potential to be used within the area and subsequently to be parked on the proposed development temporarily are known as Bleeper bike (manual) and Moby (electric) bike renting schemes.</li> </ul>	Yes
Existing availability of parking and its potential for dual use and The availability of on street parking controls in the immediate vicinity.	As the development is adopting basement car parking for the residents only and few parking spaces are proposed on street. Parking controls for on street parking is in the form of local authority or development management signage to ensure correct usage of the dual functioning parking spaces.	Yes
Particular nature, scale and characteristics of the proposed development (as noted above deviations may be more appropriate for smaller infill proposals).	The development comprises of a 'Build to Sell' complex where opportunity for promoting sustainable travel and modal shift for future occupants will be high. There will be mixed community use in the form of proposed retail units, creche and restaurant. This neighbourhood centre proposal will provide additional retail/ commercial facilities to those already established in the vicinity.	Yes
Urban design, regeneration and civic benefits including street vibrancy	The site is situated within the suburban area of Sallynoggin with the predominate land use comprising of residential and the neighbourhood centre of Glenageary Village. The proposed site will therefore benefit from being situated within walking and cycling distance to an array of different land uses and transport connections which will reduce the requirement for private car use. The site is located within a 1.5km walking catchment to a number of primary and secondary schools such as, St joseph of Cluny Secondary School (1.3km), Rathdown School (650m), Carmona Special needs National School(240m), Holy Child Community School (600m) Dalkey School Project (700m) St. Kevin's National School (600m). the proposed public plaza has been designed with the intention of encouraging site vibrancy though beneficial landscaping.	Yes
Robustness of Mobility Management Plan to support the development	A Residential and visitor Mobility Management Plan will be prepared to accompany the planning application and will be adopted prior to operation of the residential development. The Travel Plan will set out a framework of measures to promote sustainable travel amongst future residents and visitors, whilst reducing the reliance on private car modes.	Yes
Other Circumstances	Due to the site's central proximity to Sallynoggin, Glenageary and Dun Laoghaire, there is an array of existing walking and cycling facilities within the vicinity of the site that will allow for safe travel of pedestrians / cyclists. Of note, pedestrian footpaths connect the site to the	Yes

aforementioned towns and also to nearby Dublin Bus and DART stations.	
· ·	

With regard to the proposed development schedule, the associated DLRCC standard car parking requirements are outlined in Table 4-5

		DLRCC Parking Standard Rate		Proposed Parking Provision	
Description	Quantum	Parking Required	Parking to be Provided as per DLRCC standards	Residential Parking	Visitor Parking
1 Bed Apartment (Including Studio)	37 Units	1 space per 1 bed unit* Standard	37 (+ 4 Visitor Space)		
2 bed Apartment	68 Units	1 space per 2 bed unit* Standard	68 (+6 Visitor Space)	80	4 +18m long Loading bay
3 Bed Apartment	33 Units	2 space per 3 bed unit* Standard	33 (+3 Visitor Space)		
Retail Units (Convenience >100 sqm)	434 Sq. m	1 space per 30 Sq. m Maximum	14 Maximum	N/A	4 +18m long Loading bay
Restaurant	562 Sq. m	1 space per 30 Sq. m Maximum	19 Maximum	N/A	4 +18m long Loading bay
Creche	263 Sq. m	1 space per 40 Sq. m Maximum	7 Maximum	N/A	4 +18m long Loading bay
Total			191 Maximum	84 + 18 m long L	oading bay

# Table 4-5 DLRCC Development Plan 2022-2028 Vehicle Parking Requirements & Development Parking Provision

\*plus 1 in 10 visitor parking for apartments in zone 3

In regard to the development proposals for the 138 residential apartment units, it is noted that the car parking ratio for the residential scheme is 0.58. In regard to the development proposals for the 2 residential blocks, it is noted that the car parking proposals for this development are less than the DLRCC car parking requirements.

AECOM believe this level of car parking is acceptable given the sites public transport accessibility, the proximity of car club spaces and bicycle spaces. A Mobility Management Plan will also be prepared by AECOM outlining the existing travel patterns for residents in this area along with the targets for using various modes of transport with detailed measures which can be utilised by the Mobility Management Plan Coordinator to achieve these target goals.

Contact has been made with GoCar in relation to the current proposals and a Letter of Support has been received from GoCar for 2 No. car sharing vehicles within the proposed basement for use by the residents. Refer to the Appendix D of this report for GoCar letter of Support.

Considering the Department of Housing, Planning and Local Government (DHPLG) guidelines' opportunity of reducing the quantum of on-site car parking for developments such as the subject proposals. AECOM believe that the proposed provision car parking ratio of 0.58 of the DLRCC Development Plan standards complies fully with the principles and recommendations of the DHPLG guidelines. Table 3.4 highlights the reasoning that this development meets the requirements for deviation from the DLRCC parking requirements.

In addition, the census information provided in Table 4-2 details the reality of the local travel modes used by residents of the particular area identifying that 45% of those assessed in the census for the DLRCC area use sustainable and public modes of transport.

With the addition of the 2 car club sharing spaces in the basement this provides a hypothetical or effective parking ratio of 0.80 as each car club space is considered to replace 15 private car spaces as per GoCar letter of consent located in Appendix D.

It is proposed to provide a Creche drop-off/pick up parking bay capable of accommodating at least 2 cars on Glenageary Avenue.

The proposed development includes 80 car parking spaces at basement level. In addition to this there are 4 mobility impaired spaces proposed, 3 of these at basement level and 1 at ground floor level. The car parking proposed at basement level is for residential use only and this results in a final proposed car parking ratio of 0.58.

It is noted that, in relation to the current DLRCC Development Plan, Chapter 12 Development Management, while the proposed site is classified as Parking Zone 3, the site is only marginally outside the requirements set for Parking

Zone 2 development sites. This is by virtue of the proposed site being located within a 14-minute walking distance to the nearest dart station (Glenageary dart Station) and also within a 10 minute walking distance of Kill Avenue.

#### Mobility Impaired Parking

The Dun Laoghaire Rathdown County Development Plan requires that '4% of car parking spaces shall be suitable for use by mobility impaired persons', which equates to 4 no. space being required.

The proposed development provides 4 no. mobility impaired parking, 3 of which are located in the basement and 1 mobility impaired space is located on the Ground level at Glenageary Avenue. This complies with the DLRCC Development Plan.

<u>Motorcycle Parking</u> The Dun Laoghaire Rathdown County Development Plan requires that 'A minimum of four or more spaces per 100 no. car spaces', which equates to 4 no. spaces being required. The proposed development will provide 5 number spaces at basement level which is in line with the Dun Laoghaire Rathdown County Development Plan requirement.

#### Electric Vehicle Parking

Electric Vehicle (EV) parking for the development will be provided at a minimum of one electric vehicle car parking space per five parking spaces, in accordance with the DLRCC Development Plan. This equates to 16 no. electric vehicle car parking spaces being required, it is proposed to provide 17 no. electric vehicle spaces within the basement. These spaces are planned with health and safety at the forefront in order to minimise or eliminate the risk of trips and falls on the electric cabling when charging the vehicles.

#### 4.10 Car Parking Management

A management company will be appointed to enforce the car parking arrangements on the site which perspective residents will be made aware of prior to moving in. The management company will be responsible for the following:

- Regular checks of the car park at basement and surface to ensure appropriate parking.
- On site warning signs to be erected to warn visitors of parking restriction.
- Letters to be sent to all residents informing them of the agreed parking strategy.
- Ensuring the dual use set down areas and visitor parking bays are used in accordance to the management guidelines.

Due to the accessibility of local public transport to this development and access to ample bicycle parking it is the opinion of the development team that 80 no car parking basement spaces will be adequate for such a scheme. In order to reduce car ownership levels, the implementation of car and bicycle share schemes will be introduced within the remit of the development.

### 4.11 Cycle Parking

The quantity of cycle parking spaces provided as part of the proposed development and their relevant footprint is considered compliant and in line with the DLRCC Standards for Cycle Parking and Associated Cycling Facilities for New Developments 2018.

Table 4-6 details the DLRCC Cycle Parking Standards requirements for residential land use.

DLRCC Cycle Parking Standards					
Residential Development type	1 short stay (visitor) parking space per: (Minimum of 2 spaces)	1 long stay parking space per: (Minimum of 2 spaces)			
Apartments, Flats, Sheltered housing	5 units	1 unit			
Total Required by Development	28	138			

# Table 4-6 DLRCC Standards for Cycle Parking and Associate Cycling Facilities for New Developments 2018Residential

Table 4.1 illustrates the development needs to provide a total of 28 short stay spaces and 138 long stay spaces in order to comply with the standards. The development is providing 56 short stay and 254 Long stay and therefore is providing in excess of the required DLRCC standards.

#### Table 4-7 Design Standards for New Apartments 2022 Cycle Guidelines

Design Standards for New Apartments, Guidelines Cycle Parking Standards					
	Short Stay	Long Stay			
Apartments	1 Cycle storage Space per 2 Units	1 Cycle storage space per bedroom			
Total Required by Development	69	272			

Table 4.2 illustrates the development needs to provide a total of 69 short stay spaces and 272 long stay spaces in order to comply with the standards. The development is providing 56 short stay and 254 Long stay and therefore is providing an amount very close to what is the overall desired cycle parking spaces for the Design standards for new apartment guidelines. By being in this close position to the DLRCC standards this is considered suitable for this particular proposed development. Therefore, it is considered the proposed development is near to compliant to DLRCC cycle parking standards.

For clarity Table 4.3 outlines the proposed cycle parking spaces which will be provided within the development.

#### Table 4-8 Cycle Parking Development Provision

Short Stay	Long Stay	Total	
56	254	310	

AECOM has also reviewed the cycle parking standards for the employment land uses on the proposed development site. Table 4.4 illustrates the proposed employment land uses, the parking standards and the proposed provision provided.

# Table 4-9 DLRCC Standards for Cycle Parking and Associate Cycling Facilities for New Developments 2018 Commercial

		DLRCC Cycle Parking Standard Rate		Proposed Cycle Parking Provision	
Description	Quantum	1 short stay (visitor) parking space per: (Minimum of 2 spaces)	1 long stay parking space per: (Minimum of 2 spaces)	Short Stay (Surface)	Long Stay (Basement)
Retail Units (Convenience >100 sqm)	434 Sq. m	1 space per 100 Sq. m GFA Maximum	1 space per 5 staff	4	5
Restaurant	562 Sq. m	1 space per 100 Sq. m GFA Maximum	1 space per 5 staff	6	5
Creche	263 Sq. m	1 space per 10 Children	1 space per 5 staff	4 (20 children Approx.)	5
Total			29	)	

As the development is proposing 56 short stay and 254 Long stay spaces, this is well in excess of the design standards for the above land uses.

Please refer to the submitted landscape architecture masterplan drawing ref. 7655-L-1300 prepared by Park Hood Landscape Architects, which includes illustrations with sizes and materials proposed for the bicycle covers at ground floor level.

As indicated in the proposed drawings and in accordance with the DLRCC Standards for Cycle Parking and associated Cycling facilities for New Developments January 2018, Section 4.4.2, a minimum of 50% of the proposed ground floor level (short-term) cycle parking will be covered.

Cycle sharing schemes will be permitted within the visitor cycle parking areas at surface level of the proposed development. The bike schemes that have the potential to be used within the area and subsequently to be parked on the proposed development temporarily.

#### 4.12 Proposed Cycle Infrastructure Location

The proposals include the provision of

- 310 bicycle parking spaces (short and long stay).
- 254 cycle parking spaces in the basement; (10 of which are cargo bike spaces); and
- 56 cycle parking spaces at ground level; (16 of which are designated cargo bike parking spaces).

The basement cycle parking for the residents and staff of the proposed development is accessed through a security gate via a secure fob system. All access to cycle parking is provided by way of dished kerbs for surface cycle parking or by way of a ramp for the basement cycle parking. At the basement access it is proposed for the 1:14 ramp to have a dedicated cycle route marking to the basement cycle parking facilities to ensure cyclist priority throughout the internal basement road network.

Cycle sharing schemes will be permitted within the visitor cycle parking areas at surface level of the proposed development. The bike schemes that have the potential to be used within the area and subsequently to be parked on the proposed development temporarily are known as Bleeper bike (manual) and Moby (electric) bike renting schemes. The mentioned bike schemes use smartphone and GPS technology to enable people to hire a bike from anywhere in Dublin. Signage will be located at the entry points to the proposed plaza indicated that cyclists are to dismount when connecting through to either sides of the plaza.

Table 4-8 illustrates the basement cycle facilities and the cycle permeability from existing facilities to the proposed development respectively.



Figure 4-9 Basement Layout Indicating Bike Storage (AECOM Drawing 60690914-ACM-01-00-DR-CE-10-0003)

There is an existing dedicated cycle track along Glenageary avenue, this promotes a safe cycle route for residents or visitors of the development to access the cycle parking either located in the basement by way of ramp and clearly marked shared cycle lane or on the surface. Staff of the commercial units of the development will have access to the basement secure cycle parking. A newly proposed shared cyclist and pedestrian raised table crossing point will be located on Glenageary Avenue. This will link the site up to the existing signalised crossing on the R118, hence improving connectivity.

Figure 4-10 details the new shared pedestrian and cyclist priority crossing point.



# Figure 4-10 General Arrangement detailing proposed new shared pedestrian and cyclist priority crossing point (Source: AECOM Drawing 60690914-ACM-00-00-DR-CE-10-0001)

There will be 56 cycle spaces including 16 cargo bike spaces on ground level which will be dedicated to visitors of the development site including those of the non-residential land uses e.g., the retail, restaurant and creche facilities 50% of which will be covered.

Residents and guests of residents will be able to access changing and drying facilities within the residential building apartment units.

The relevant development plan objectives and DLRCC "Standards for Cycle Parking and associated Cycling Facilities for new Developments" document has been reviewed and the proposed cycle parking provisions have been designed cognisant of the standards and recommendations. A cycle audit has also been prepared by AECOM, which further outlines the main design criteria that have been assessed in the preparation of the proposed cycle parking strategy.

As suggested by DLRCC, the minimum requirement for cycle parking numbers (for both short stay and long stay cycle parking) has been met using quality parking in the form of Sheffield stands set out to the dimensions recommended. This includes provisions for 56. short stay cycle parking spaces at ground floor level of the development and 254 long stay cycle parking spaces at basement level.

Of the spaces mentioned above, 10. of these have been designed for long stay cargo bikes and 16. of these have been designed for short stay cargo bikes. In addition, which exceeds the DLRCC requirements for cycle parking numbers, the remainder of the long stay cycle parking outside of the required long stay standards is stacked at basement level. The proposed basement access ramp, is proposed with a gradient of 7% (1:14)

In accordance with the DLRCC standards, a minimum of 50% of the short term/visitor cycle parking. 50% of short terms cycle spaces at ground level are proposed to be covered/sheltered. A minimum of 2.4m headroom will be provided within the proposed basement, please refer to Architectural drawings for basement cross-sections. While available, lifts are not proposed for use by cyclists. Due to constraints on the available space a 1.1m wide bicycle ramp is proposed alongside the vehicular ramp which is to be designated by line markings.

### 4.13 Proposed Bus Infrastructure

AECOM have made contact with both DLRCC Transportation and the NTA in relation to an upgrade to the existing bus stop on Glenageary Avenue to a bus shelter. It is not currently proposed to provide a bus shelter at this location, but this can be facilitated if needed. AECOM include the below text received from the NTA on the 22<sup>nd</sup> of March. "The bus shelter programme is managed by the NTA. It is not uncommon (or is sometimes included by way of condition) as part of a planning application for a residential development at the request of the local authority." Therefore, AECOM invite DLRCC to include a condition relating to the potential upgrade of bus stop to bus shelter on Sallynoggin Road.

A detailed Quality Audit report that has been submitted separately as part of the planning application documentation, which has been undertaken by Bruton Consulting Engineers.

## 5. DMURS Statement of Compliance

### 5.1 General

This chapter comprises of a Statement of Compliance, prepared for the proposed development. It includes the following sections with appropriate commentary relevant to the proposed development and its compliance with the Design Manual for urban Roads and Streets (DMURS).

### 5.2 Compliance with DMURS

AECOM has set out in the following sections how the proposed development is compliant with the DMURS guidelines.

It is AECOM's opinion that the proposed development is consistent with both the principles and guidance outlined within DMURS. The scheme proposals are the outcome of an integrated approach that seeks to implement a sustainable community connected by well-designed streets which deliver safe, convenient and attractive networks in addition to promoting a real and viable alternative to car-based journeys.

The adopted design approach successfully achieves the appropriate balance between the functional requirements of different network users whilst enhancing the sense of place.

The main objective of this report is to examine the design principles of the proposed development with reference to the two core principles presented within DMURS, as outlined below:

- Street Networks: To support the creation of integrated street networks which promote either level of
  permeability and legibility for all users and in particular more sustainable forms of transport.
- Street Design: The promotion of multi-functional, place-based streets that balance the needs of all users within a self-regulating environment.

#### 5.3 Street Networks

Specific attributes of the street network which contribute to achieving the DMURS objective include:

- Well designed and frequently provided pedestrian crossing facilities are provided along key desire lines throughout the site. All courtesy crossings are provided with dropped kerbs thereby allowing pedestrians to informally assert a degree of priority.
- A variety of materials and finishes will be specified in the shared areas to indicate that the carriageway is an extension of the pedestrian domain.

### 5.4 Street Design

The internal layout design has been informed by Chapter 4 of the DMURS guidelines and is in accordance with these guidelines. The following measures are examples of where compliance with the recommended street design guidelines has been demonstrated:

#### 5.4.1 Streetscape

- Pedestrian crossings are proposed which comprise of tactile paving and dropped kerbs to facilitate pedestrian movements throughout the site.
- Car parking provision is proposed both on and off street (via basement).
- DMURS also gives guidance on the types of materials and finishes to be used in order to provide a sense of calm for traffic and improve legibility for vulnerable road users. All carriageways, footpaths and tactile paving are proposed to be of visually contrasting colour.

#### 5.4.2 Pedestrian and Cyclist Environment

The following measures are examples of where compliance with the DMURS pedestrian focus has been demonstrated:

• There are pedestrian crossings proposed at the eastern border of the site, which comprise of tactile paving and flushed kerbs to facilitate pedestrian movements crossing the carriageway of Glenageary Avenue.

• The proposed corner radii at the junctions comply with DMURS (Section 4.3.3) of 4.0 – 6.0m in order to reduce vehicular speeds and reduce pedestrian crossing distances.

#### 5.4.3 Carriageway Conditions

- The proposed residential development's internal basement road network access incorporates a minimum of 6m wide carriageway.
- Car parking is greater than the required minimum dimensions i.e., 2.4m x 4.8m for a standard parking space.
- Internally within the development carriageway kerb heights will be specified as 75-80mm in accordance with the objectives of DMURS.
- SPA has been undertaken, see Civils' drawings, to demonstrate that the proposed development can cater for servicing vehicles.

#### 5.4.4 Conclusion

As detailed above the proposed development has been examined and complies with the design principles and objectives set out in DMURS (2019) for Street Networks and Street Design.

## 6. Trip Generation and Distribution

#### 6.1 Introduction

The purpose of this section is to determine the overall number of trips that will be generated by the proposed development in terms of vehicular traffic.

To understand the potential vehicular trip generation associated with the site, AECOM has undertaken a review of the committed traffic upon the adjoining road network against the proposed trip generation, outlined in the subsequent sections.

#### 6.2 Traffic Surveys

In order to establish the existing local road networks traffic characteristics and subsequently enable the identification of the potential impact of the proposed development, traffic surveys were conducted by Irish Traffic Surveys (ITS) on Wednesday the  $16^{th}$  of November 2022. These traffic surveys consisted of a 12-hour (07:00 – 19:00) Junction Turning Count (JTC) at the junction of the Sallynoggin Road / Glenageary Avenue and Glenageary Roundabout. The traffic surveys established that the local morning and evening peak hour occurs between 09:30 – 10:30 and 15:45 - 16:45, respectively.

#### Figure 6-1 Baseline Flows Entire Network

Figure 6-1 shows the 2022 baseline traffic surveys for the morning and evening peak hours. The recorded 2022 peak hour traffic flows are presented within Appendix B.



Figure 6-1 Baseline Flows Entire Network

#### 6.3 Trip Generation

#### 6.3.1 Proposed Development

In order to determine the potential vehicle trip generation for the subject site, trip rates were taken from the industry standard TRICS (Trip Rate Information Computer System) for the proposed land uses using the latest version of the software (version 7.9.3 on the 23rd of November 2022). A multi-modal assessment was undertaken to determine the potential trip generation associated with various modes of travel such as pedestrian, cyclists, public transport and vehicles with the full outputs from this analysis included in Appendix C.

The AADT (Annual Average Daily Traffic) data used in this application has taken only the one-day traffic counts. The HGV's have not been set out separately, therefore, caution is advised when relating to specific HGV Traffic.

Table 6-1details the total proposed trip rates from TRICS using the Land Uses of Private apartment, restaurant, childcare and local shops.

#### Evening (15:45 - 16:45) Morning (09:30 - 10:30) Mode of Travel Arrivals Departures Arrivals Departures Vehicle 5 4 6 6 6 4 8 7 Vehicle Passenger Cyclist 0 0 0 0 Pedestrian 2 1 3 3 **Public Transport** 1 0 0 0 **Total People** 9 6 12 11

#### Table 6-1 Proposed Total Trip Rates TRICS (Version 7.9.3)

Table 6-2 to Table 6-5Table 6-4 indicates the proposed trip generation for the apartments, restaurant, creche and retail units respectively.

#### Table 6-2 Anticipated Apartment Modal Trip Generation

Mode of Travel	Morning (09:30 - 10:30)		Evening (15:45 - 16:45)	
Vehicle	11	13	17	10
Vehicle Passenger	15	17	26	13
Cyclist	1	1	1	0
Pedestrian	7	9	10	7
Public Transport	1	5	7	2
Total People	23	31	43	21

#### Table 6-3 – Anticipated Restaurant Modal Trip Generation

Mode of Travel	Morning (09:30 - 10:30)		Evening (15:45 - 16:45)	
Vehicle	6	2	3	3
Vehicle Passenger	7	2	8	5
Cyclist	0	0	0	0
Pedestrian	3	0	7	6
Public Transport	3	0	1	1
Total People	14	3	16	12

#### Table 6-4 – Anticipated Creche Modal Trip Generation

Mode of Travel	Morning (09	Morning (09:30 - 10:30)		5:45 - 16:45)
Vehicle	1	1	1	0
Vehicle Passenger	1	1	1	3
Cyclist	0	0	0	0
Pedestrian	0	0	1	2
Public Transport	0	0	0	0
Total People	2	1	2	5

#### Table 6-5 Anticipated Retail Units (Local Shops) Modal Trip Generation

Mode of Travel	Morning (09:30 - 10:30)		Evening (15	5:45 - 16:45)
Vehicle	21	18	28	28
Vehicle Passenger	26	22	35	36

Cyclist	0	0	0	0
Pedestrian	7	6	11	11
Public Transport	1	1	1	1
Total People	35	29	47	49

Table 6-6 details the total combined proposed trips generated for the site.

 Table 6-6 – Total Anticipated Modal Trip Generation

Mode of Travel	Morning	(09:30 - 10:30)	Evening (15:45 - 16:45)		
	Arrivals	Departures	Arrivals	Departures	
Vehicle	39	33	49	41	
Vehicle Passenger	50	41	70	56	
Cyclist	1	1	1	1	
Pedestrian	17	16	29	26	
Public Transport	6	5	9	4	
Total People	74	63	109	88	
Total One Way Flows	39 33		49	41	
Total Two Way Flows	72			90	

### 6.4 Existing Commuting Habits Trip Generation

Taking Cognisance of the Trips generated using the TRICS software, AECOM have also analysed the DLRCC modal share data. From this analysis a more localised trip generation and modal split illustration This highlights the existing modal split and how the proposed development trip generation can be translated into the localised modal split observed through the 2016 census data.

This analysis has been used to identify initial baseline travel characteristics for the proposed development and is presented in Table 6-7.

Table 6-7 Means of Travel to Work, School or College for Residents in Dun Laoghaire Rathdown (Source DRRCC Development Plan 2022-2028)

Means of Travel	2016	Mode Share (%)
On foot	18387	14%
Bicycle	8864	7%
Bus, minibus or coach	15180	11%
Train, DART or LUAS	19040	14%
Motorcycle or scooter	861	1%
Car driver	50021	37%
Car passenger	20614	15%
Van/lorry/ other	2466	2%
Total	135433	100%

Through looking at the existing mode share in the area, we can consider the potential mode share of the development site.

Table 6-8 Table 6-8 details the proposed Sustainable trip generation taking cognisance of the census data derived from the DLRCC development plan 2022-2028 for the council area.

Sustainable Made of Troval	Morning	(09:30 - 10:30)	Evening (15:45 - 16:45)		
Sustainable mode of Travel	Arrivals	Departures	Arrivals	Departures	
On foot	10	9	15	12	
Bicycle	5	4	7	6	
Bus, minibus or coach	8	7	12	10	
Train, DART or LUAS	10	9	15	12	
Total	33	29	49	40	

#### Table 6-8 Sustainable Trips Generated from the Proposed Development

Table 6-9 further details the total additional cars that would be associated with the new development based from the most recent 2016 data.

Table 6-9 Total	<b>Additional</b>	Cars	for the Pro	posed De	evelopment

Privata Vahiala Mada	Morning	(09:30 - 10:30)	Evening (15:45 - 16:45)		
	Arrivals	Departures	Arrivals	Departures	
Car driver	27	23	40	32	
Total One Way Flows	27	23	40	32	
Total Two Way Flows	51			72	

#### 6.5 Trip Distribution & Assignment

To understand the potential distribution of the trips arriving and departing the site, the base traffic survey results have been interrogated. The base traffic surveys indicate the direction that motorists currently travel to / from when arriving onto the immediate road network immediately adjacent the site during the typical peak periods.

Figure 6.2 illustrates the proposed trip distribution patterns during the morning and evening peak hours along the Sallynoggin Road. For traffic travelling to / from the subject development, it has been assumed that they will do so by means of the existing passing traffic along the Sallynoggin Road.





### 6.6 Traffic Growth

The TTA adopts an Opening Design Year of 2025. In accordance with TII Guidance, Future Design years (+5 and +15 years) of 2030 and 2040 will therefore be adopted.

The Transport Infrastructure Ireland (TII) 'Project Appraisal Guidelines for National Roads Unit 5.3 - Travel Demand Projections (May 2019)' sets out growth rates for forecasting future year traffic for use in scheme modelling and appraisal. It is noted that in respect of Glenageary, which is in 'Dublin', the growth during the period 2016 – 2030 is set at 1.62% per annum for central growth, reducing to 0.51% per annum from 2030 – 2040 (LV rates used).

The development has assessed the opening year of the development (2024) and the two horizon year assessments (2029 and 2039), as per the TII Traffic Assessment Guidelines. The assessment years used for this assessment are as follows for the traffic surveys:

- 2022 to 2025 1.0494 (or 4.94%);
- 2021 to 2029 1.1372 (or 13.72%); and
- 2021 to 2039 1.1840 (or 18.40%).

### 6.7 Threshold Analysis

The TII Guidelines for Transport Assessments state that the thresholds for junction analysis in Transport Assessments are as follows:

- 'Traffic to and from the development exceeds 10% of the existing two-way traffic flow on the adjoining highway.'
- 'Traffic to and from the development exceeds 5% of the existing two-way flow on the adjoining highway, where traffic congestion exists or will exist within the assessment period or in other sensitive locations.'

### 6.8 Impact of the Proposed Development

#### 6.8.1 Local Road Network

A comparison was made between the pre-development and post-development scenarios, to identify the percentage impact of the development.

The projected percentage impact of the operational traffic based from TRICS on the surrounding road junctions in the year of opening (2025) is set out in Table 6-10 and shown indicatively in Figure 6-3



Figure 6-3 Percentage Impact Increase at Junctions (Source Google Earth)

It should be noted that the opening year of the development has been assessed only. Any future year base flows would be greater than the flows presented in Table 6-10 hence a smaller percentage impact in comparison to the development flows would be recorded.

#### Table 6-10 Percentage Impact Analysis (Opening Year 2025)

Junction	Time Period	Existing Flows	Proposed Development Flows	% Impact
J1: Sallynoggin Road /	AM	959	73	8%
Glenageary Avenue	PM	1054	90	9%
12: Clanageon, Doundahout	AM	2856	37	1%
Jz. Glenageary Roundabout	PM	2591	46	2%
J3: Glenageary Avenue /	AM	44	73	164%
Proposed Site Access	PM	69	90	130%

The percentage impact of the operational phase will result in an impact of:

- 8% and 9% upon the Sallynoggin Road / Glenageary Avenue junction in the respective morning and evening peak hour periods.
- 1% and 2% upon the Glenageary Roundabout in the respective morning and evening peak hour periods.
- 164% and 130% upon the Glenageary Avenue / Proposed Site Access junction in the respective morning and evening peak hour periods.

Each junction is discussed in more detail in the paragraphs below

**Junction 1**: Based on the TII Traffic and Transport Guidelines (May 2014), given that the impact upon this priority junction does exceed 5% of the existing two-way traffic flow, modelling is required for this junction as it is considered a junction entering on to a major arm with congestion. AECOM has completed Junctions 10 analysis of Junction 1.

**Junction 2**: Based on the TII Traffic and Transport Guidelines (May 2014), given that the impact upon this roundabout does not exceed 5% of the existing two-way traffic flow, modelling is not required for this junction. The traffic impacts upon this junction will be nominal.

**Junction 3**: Based on the TII Traffic and Transport Guidelines (May 2014), given that the impact upon the site access does exceed 10% of the existing two-way traffic flow for a non-congested area and it is a new site access, modelling is required for this junction. It should be noted that the significant percentage increase along this road is due to the existing low levels of traffic along this road.

It should also be acknowledged that the trip generation does not include for any potential pass by or diverted trip rate reduction. It can therefore be argued that the impacts are a worst-case scenario.

### 6.9 Summary

It is anticipated that the proposed development would generate 72 and 90 vehicle trips during the respective morning and evening peak hour periods using the worst-case scenario with TRICS software. However, using the DLRCC census data the proposed development will generate 51 and 72 vehicle trips during the respective morning and evening peak periods.

Based on the percentage impact analysis it has been determined that Junction 1 and Junction 3 will be subject to detailed traffic modelling using the industry standard Junctions 10 software.

## 7. Network Analysis

#### 7.1 Introduction

This chapter presents the impact analysis to identify the potential effects of the proposed development upon the surrounding road network at the junctions as identified in Chapter 5 of this report. As the junctions are unsignalized priority-controlled junctions they will be assessed using the industry standard Junctions 10 (PICADY) software developed by Transport Research Laboratory (TRL).

### 7.2 Junction Analysis

The operational assessment of the local road network has been undertaken using TRL Junctions 9 for nonsignalised junctions. When considering priority-controlled junctions, a Ratio to Flow Capacity (RFC) of greater than 85% (0.85) would indicate a junction to be approaching capacity, as operation above this RFC value is poor and deteriorates quickly resulting in traffic congestion in the form of longer queues.

Junctions 10 is an industry standard software to model the capacity and queuing of non-signalised junctions (Priority controlled, intersections, roundabouts). The meaning of the acronyms used within the capacity assessment results are discussed below.

- RFC Ratio to Flow Capacity (for non-signalised junctions)
- Q Queue length (PCU's) i.e. 1 PCU equates to a 5.75m long car

It is generally accepted that RFC values of 0.85 (85%) and less are indicators that a junction is operating within capacity. Junctions are only identified as operating over capacity if these values are exceeded.

### 7.3 Glenageary Avenue / Proposed Site Access

A model was completed using the aforementioned traffic surveys to assess the traffic volumes for the morning and evening peak period and future assessment years with and without the development in place at the proposed site access along Glenageary Avenue. A summary of the results are shown in Table 7-1 with the full Junctions 10 outputs contained within Appendix E.

		AM Peak		PM Peak	
Assessment Year Arm		Queue (PCU)	RFC	Queue (PCU)	RFC
2022 Baseline	Proposed Site Access	00.	0.00	00.	0.00
	Glenageary Avenue (Northern Arm)	0.0	0.00	0.0	0.00
2025 Without	Proposed Site Access	0.0	0.00	0.0	0.00
Year)	Glenageary Avenue (Northern Arm)	0.0	0.00	0.0	0.00
2025 With Development	Proposed Site Access	0.1	0.06	0.1	0.07
(Opening Year)	Glenageary Avenue (Northern Arm)	0.1	0.07	0.1	0.09
2030 Without	Proposed Site Access	0.0	0.00	0.0	0.00
Development (Opening Year + 5)	Glenageary Avenue (Northern Arm)	0.0	0.00	0.0	0.00
2030 With Development	Proposed Site Access	0.1	0.06	0.1	0.07
(Opening Year + 5)	Glenageary Avenue (Northern Arm)	0.1	0.07	0.1	0.09
2040 Without	Proposed Site Access	0.0	0.00	0.0	0.00
Year + 15)	Glenageary Avenue (Northern Arm)	0.0	0.00	0.0	0.00
2040 With Development	Proposed Site Access	0.1	0.06	0.1	0.07
(Opening Year + 15)	Glenageary Avenue (Northern Arm)	0.1	0.07	0.1	0.09

#### Table 7-1 Glenageary Avenue / Proposed Site Access Junctions 10 Outputs

Based on the analysis of this new priority-controlled junction, it is clear that with the inclusion of the proposed site access along Glenageary Avenue, this junction would operate within capacity throughout the 2025 (opening year) to the 2040 (opening year + 15) assessment with the development in place.

As demonstrated in the 2025 assessment year, the proposed site access would result in an RFC value of 0.06 (6%) with a corresponding queue of 0.1 PCU during the morning peak period whilst during the evening peak period it is anticipated that the RFC would be 0.07 (7%) with a PCU factor of 0.1.

When comparing the 2040 assessment years with and without development, the proposed development results in an RFC of 0.06 (6%) with a queue of 0.1 PCU during the morning peak period. During the evening peak period it is anticipated that the site access arm would result in a 0.07 (7%) RFC with a PCU factor of 0.1.

### 7.4 Sallynoggin Road / Glenageary Avenue

A model was completed using the aforementioned traffic surveys to assess the traffic volumes for the morning and evening peak period and future assessment years with and without the development in place at the Sallynoggin Road / Glenageary Avenue priority junction. A summary of the results are shown in Table 7-2 with the full Junctions 9 outputs contained within Appendix E.

		AM Peak		PM Peak	
Assessment Year	Arm	Queue (PCU)	RFC	Queue (PCU)	RFC
2022 Baseline	Glenageary Avenue (Southern Arm)	0.1	0.07	0.1	0.10
	Sallynoggin Road (Western Arm)	0.0	0.00	0.0	0.02
2025 Without Development	Glenageary Avenue (Southern Arm)	0.1	0.07	0.1	0.10
(Opening Year)	Sallynoggin Road (Western Arm)	0.0	0.00	0.0	0.02
2025 With Development	Glenageary Avenue (Southern Arm)	0.2	0.17	0.3	0.22
(Opening Year)	Sallynoggin Road (Western Arm)	0.1	0.05	0.1	0.08
2030 Without Development	Glenageary Avenue (Southern Arm)	0.1	0.09	0.1	0.11
(Opening Year + 5)	Sallynoggin Road (Western Arm)	0.0	0.00	0.0	0.02
2030 With Development	Glenageary Avenue (Southern Arm)	0.2	0.18	0.3	0.25
(Opening Year + 5)	Sallynoggin Road (Western Arm)	0.1	0.05	0.1	0.08
2040 Without Development	Glenageary Avenue (Southern Arm)	0.1	0.09	0.1	0.12
(Opening Year + 15)	Sallynoggin Road (Western Arm)	0.0	0.01	0.0	0.02
2040 With Development	Glenageary Avenue (Southern Arm)	0.2	0.19	0.3	0.26
(Opening Year + 15)	Sallynoggin Road (Western Arm)	0.1	0.05	0.1	0.08

Table 7-2 Sallynoggin Road / Glenageary Avenue Junction 10 Outputs

Based on the analysis of this priority-controlled junction, it is clear that the with the inclusion of the proposed development along Glenageary Avenue, this junction would continue to operate within capacity throughout the 2024 (opening year) to the 2039 (opening year + 15) assessment with the development in place.

As demonstrated in the 2025 assessment year, the proposed development would result in an increase of 0.17 (17%) RFC with a corresponding increase to queuing of 0.2 PCU during the morning peak period on the Glenageary Avenue arm of the junction. During the evening peak period it is anticipated that the RFC would increase to 0.22 (22%) with an anticipated increase to 0.3 PCU on the Glenageary Avenue arm of the junction.

When comparing the 2040 assessment years with and without development, the proposed development would result in an increase of 0.19 (19%) RFC with a corresponding increase to queuing of 0.2 PCU during the morning peak period on the Glenageary Avenue arm of the junction. During the evening peak period it is anticipated that the RFC would increase to 0.26 (26%) with an anticipated increase of 0.3 PCU on the Glenageary Avenue arm of the junction.

From the analysis undertaken at both junctions, this indicates that the proposed development would not negatively impact on the surrounding road network.

## 8. Outline Construction Traffic Management Plan

#### 8.1 Introduction

This chapter of the report deals directly with the impacts of construction of the subject development. As with any construction project, the contractor will be required to prepare a comprehensive traffic management plan for the construction phase. The purpose of such a plan is to outline measures to manage the expected construction traffic activity during the construction period.

This chapter will provide an overview of the likely routing of construction vehicles, based on a most likely scenario of construction. It should be noted that the impacts of the construction will be temporary, and it will be the contractor's responsibility to prepare a Traffic Management Plan for the approval of Dun Laoghaire Rathdown County Council in advance of any works.

Subject to receipt of grant of the application for the scheme, a detailed Construction Management Plan will be prepared by an appointed contractor. The appointed contractor will be responsible for preparing and seeking agreement with DLRCC ensuring that DLRCC's requirements are met, prior to undertaking the works on site.

### 8.2 Policy Guidance

Guidance for the temporary control of traffic at road works to facilitate the safety of the public during the works is provided below:

- Traffic Signs Manual Chapter 8 Temporary Traffic Measures and Sign for Roadworks (2019);
- Traffic Management Guidelines, Department of Transport (2003); and
- Requirements of Dun Laoghaire Rathdown County Council.

### 8.3 Likely Construction Programme & Phasing

The construction programme is expected to require 18 – 24 months to complete from occupation of the site.

### 8.4 Construction Route

To minimise construction impacts upon the surrounding road network, it is recommended that all construction traffic access and exits from the M50 Junction 16 travelling along R118 to the Graduate Roundabout, taking the second exit continuing along the R118 until the Sallynoggin roundabout. Construction traffic will take the first exit at the Sallynoggin Roundabout and then turn left onto Glenageary Avenue and then into the site. This route is approximately 5.2km in length. This routing has been illustrated in Figure 8-1 illustrates the proposed construction routing.



Figure 8-1 Proposed Construction Routing

### 8.5 Parking

All contractors' vehicles will park within the development site area, it is recommended that as part of the construction management plan the contactor designates an area within the confines of the site dedicated to operative car parking. There will be no parking permitted on the surrounding road network or estate roads by the contractor or site operatives.

#### 8.6 Mitigation Measures

A construction management plan will be developed by the contractor prior to the commencement of work on site and will be prepared in consultation with Dun Laoghaire Rathdown County Council.

Construction debris particularly site clearance, spoil removal and dirty water run off can have a significant impact on footpaths and roads adjoining a construction site, if not adequately dealt with.

### 8.7 Hours of Operation

Site development and building works shall be carried out between the hours of operation recommended by DLRCC to safeguard the residential amenities of properties in the vicinity. The typical hours of operation are as follows:

Monday to Friday, 8am – 7pm, Saturdays 8am – 2pm and no works on Sundays or Public holidays.

#### 8.8 Traffic Management Measures

Below is a list of the proposed traffic management measures to be adopted during the construction works. Please note that this is not an exhaustive list, and that it will be the appointed contractor's responsibility to prepare a detailed construction management plan.

- Warning signs / Advanced warning signs will be installed at appropriate locations in advance of the construction access locations;
- Construction and delivery vehicles will be instructed to use only the approved and agreed means of access; and movement of construction vehicles will be restricted to these designated routes;
- Appropriate vehicles will be used to minimise environmental impacts from transporting construction material, for example the use of dust covers on trucks carrying dust producing material;
- Speed limits of construction vehicles to be managed by appropriate signage, to promote low vehicular speeds within the site;

- Parking of site vehicles will be managed and will not be permitted on public road, unless proposed within a designated area that is subject to traffic management measures and agreed with DLRCC;
- A road sweeper will be employed to clean the public roads adjacent to the site of any residual debris that may be deposited on the public roads leading away from the construction works;
- On site wheel washing will be undertaken for construction trucks and vehicles to remove any debris prior to leaving the site, to remove any potential debris on the local roads;
- All vehicles will be suitably serviced and maintained to avoid any leaks or spillage of oil, petrol or diesel. Spill kits will be available on site. All scheduled maintenance carried out off-site will not be carried out on the public highway; and
- Safe and secure pedestrian facilities are to be provided where construction works obscure any existing pedestrian footways. Alternative pedestrian facilities will be provided in these instances, supported by physical barriers to segregate traffic and pedestrian movements, and to be identified by appropriate signage. Pedestrian facilities will cater for vulnerable users including mobility impaired persons.

The mitigation measures will therefore ensure that the presence of construction traffic will not lead to any significant environmental degradation or safety concerns in the vicinity of the proposed works. Furthermore, it is in the interests of the construction programme that deliveries, particularly concrete deliveries are not unduly hampered by traffic congestion, and as a result continuous review of haulage routes, delivery timings and access arrangements will be undertaken as construction progresses to ensure smooth operation.

## 9. Conclusions

#### 9.1 Overview

AECOM has been commissioned to prepare a Traffic and Transport Assessment in support of a planning application for a proposed Large Scale Residential Housing Development at a greenfield and brownfield site located at the junction of Sallynoggin Road Lower and Glenageary Avenue, Glenageary, Co. Dublin.

The proposed development will consist of a new residential and mixed-use scheme to include apartments, restaurant and retail units, public plaza, childcare facility and associated residential amenities.

The proposed development includes the construction of 138 residential units (37 no. 1-bedroom units, 68 no. 2bedroom (4 person units) 6 no. 2-bedroom (3-person units) and 27 no. 3-bedroom units) in 2 no. interlinked blocks at third to fifth floor level (ranging in height from four to seven storeys over basement level). The development will also consist of Resident amenity, a childcare facility, four retail units and 2 restaurant units.

A total of 80 no. car parking spaces at basement level are proposed to include 3 no. accessible parking spaces, 17 no. EV charging spaces and 2 car club spaces. A set down area/loading bay is proposed on surface level at Sallynoggin Road and a set down area/loading bay on Glenageary Avenue of 18m long. In addition, there is a mobility impaired parking space adjacent to a set down bay capable of fitting 2 cars. These parking bays will be managed to allow for dual use of refuse collection, creche set down, general deliveries and visitor parking respectively with managed times for each use.

A total of 254 no. bicycle parking spaces in the basement to include 10 no. cargo bicycle spaces at basement and 56 no. bicycle parking spaces including 16 no. cargo bicycle spaces at surface level. 50% of the surface level (short term) bike parking will be sheltered.

The development shall be served via a new vehicular access point to the basement level from Glenageary Avenue.

The purpose of this TTA is to quantify the existing transport environment and to detail the results of the assessment to identify the potential level of traffic impact generated by the proposed development.

Based upon the information and analysis presented within this TTA the following subsections demonstrates how the scheme has been designed from a traffic and transport perspective to integrate within the existing network and to minimise potential impacts.

#### 9.1.1 Vehicular Access

AECOM drawing 60690914-ACM-00-00-DR-CE-10-0001 illustrates the proposed access arrangement. One vehicular access point is proposed to service the site which is akin to the permitted application (D14A/0865). This access will feature dished kerbs and tactile paving to facilitate pedestrians travelling along Glenageary Avenue.

#### 9.1.2 Accessibility

The site benefits from being accessible for walking, cycling and public transport. Good quality pedestrian infrastructure facilities and street lighting connect the site to an array of existing services and amenities in Sallynoggin including schools, shops, restaurants and medical facilities.

The Glenageary and Sandycove / Glasthule DART stations are situated within a 1.5km walking catchment from the site, which provides frequent services to and from Dublin City Centre, which will assist to promote sustainable travel to and from the site.

#### 9.1.3 Car Parking

It is proposed to provide 80 no. underground car parking spaces to serve the development of which all basement parking will be designated to residential use. The 80. Number parking spaces is inclusive of 3 mobility impaired parking spaces, 2 car club spaces and 17 no. electric vehicle parking spaces. On ground level there will be a total of 4 car parking spaces/ set down area inclusive of 1 mobility impaired space with the addition of an 18m long loading bay.

#### 9.1.4 Cycle Parking

It is proposed to provide a total of 310 no. cycle parking spaces (254 at basement level inclusive of 10 cargo bike spaces) to serve the respective development of 138 no. apartments. At ground level it is proposed to provide 56

cycle parking spaces inclusive of 16 cargo bike spaces for visitors to the, creche, restaurant and retail units, 50% of which will be sheltered. The cycle parking within the basement will be secured and available to staff of the commercial units also. The residents cycle parking will comprise mostly of Sheffield stand and the remainder outside the Development plan standards will be stacked cycle parking.

#### 9.1.5 DMURS Statement of Compliance

AECOM have prepared a DMURS statement of compliance which details how the proposed development is to comply with the requirements set out in DMURS.

#### 9.1.6 Servicing

Refuse vehicles will be required to access the proposed development. A swept path assessment demonstrates that a 10.2m refuse lorry will be able to safely access the bin store at the access point to the basement by way of the loading bays and has been illustrated in AECOM drawing 60690914-ACM-01-00-DR-CE-10-0102.

#### 9.1.7 Trip Generation

It is envisaged that the proposed development would generate 72 and 90 two-way vehicle movements during the respective morning and evening peak hour periods using the worst-case scenario with TRICS software. However, using the DLRCC census data the proposed development will generate 51 and 73 vehicle movements during the respective morning and evening peak periods.

#### 9.1.8 Operational Assessment

A percentage image assessment was completed to determine the anticipated uplift in vehicle trips on the road network due to the proposed development. From this analysis it was found that the percentage increases would be as follows:

- 8% and 9% upon the Sallynoggin Road / Glenageary Avenue junction in the respective morning and evening peak hour periods.
- 1% and 2% upon the Glenageary Roundabout in the respective morning and evening peak hour periods.
- 164% and 130% upon the Glenageary Avenue / Proposed Site Access junction in the respective morning and evening peak hour periods.

Following the results of the percentage impact analysis the proposed site access and the Sallynoggin Road / Glenageary Avenue were subject to further detailed traffic modelling using the industry standard Junctions 10 software package.

As detailed in Chapter 7 of this report, it was found that the proposed development would result in an increase of 0.17 (17%) RFC with a corresponding increase to queuing of 0.2 PCU during the morning peak period and the RFC would increase to 0.21 (22%) with an anticipated increase to 0.3 PCU during the evening peak period on the Glenageary Avenue arm of the Sallynoggin Road / Glenageary Avenue junction during the 2025 assessment scenario.

Similarly for the Glenageary Avenue / Proposed Site Access, the proposed site access would result in a RFC value of 0.06 (6%) with a corresponding queue of 0.1 PCU during the morning peak period whilst during the evening peak period it is anticipated that the RFC would be 0.07 (7%) with no queuing anticipated during the 2025 assessment scenario.

From the analysis undertaken at both junctions, this indicates that the proposed development would not negatively impact on the surrounding road network.

#### 9.1.9 Outline Construction Traffic Management Plan

An Outline Construction Traffic Management Plan has been submitted within this TTA in order to provide a range of key measures to be undertaken by the contractor in order to manage the expected construction traffic activity during the construction period. This Plan addresses such items as construction vehicle parking, mitigation measures and hours of operation in order to mitigate degradation to the surrounding environment and disruption to the surrounding road network, local residents of the existing developments in the local area.

It should be noted that the impacts of the construction will be the contractor's responsibility to prepare a Traffic Management Plan for the approval of Dun Laoghaire-Rathdown County Council in advance of any works.

## 10. Overall Conclusions

The TTA has considered the transport implications of the proposed development. It demonstrates that the location of the development benefits from existing public transport infrastructure, and any future public transport infrastructure works that will be undertaken, within the vicinity of the site.

The proposed roads layout and access arrangements are to be designed to comply with DMURS, TII and DLRCC requirements.

The proposed parking provision has been reviewed and has taken cognisance of the Sustainable Urban Housing Design of New Apartment Guidelines (December 2022).

Based upon the information and analysis presented within this TTA, the assessment demonstrates how the scheme has been designed from a traffic and transport perspective, to integrate within the existing network and to minimise any potential impacts by the proposed development.

# Appendix A Drawings



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## PROJECT

GLENAGEARY GATE LRD, AT JUNCTION OF SALLYNOGGIN ROAD LOWER AND GLENAGEARY AVENUE, GLENAGEARY, CO.DUBLIN

## CLIENT

## RED ROCK GLENAGEARY LTD

## CONSULTANT

AECOM 4th Floor Adelphi Plaza, George's Street Upper, Dun Laoghaire, Co Dublin Tel:+353 (0)1 2383100 Fax:+353(0)1 2383199 www.aecom.com

## NOTES

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# LEGEND:

PROPOSED LANDSCAPE	
PROPOSED ROAD SURFACE	
PROPOSED CONCRETE FOOTWAY SURFACE	
EXISTING PAVEMENTS TO BE REPLACED WITH SOFT LANDSCAPING	
PROPOSED DISABLED PERSONS PARKING BAY	
PROPOSED RED LINE BOUNDARY	
PROPOSED TACTILE AND CORDUROY PAVING	
PROPOSED SHEFFIELD BICYCLE STANDS	<b>촪</b> 봖쏺봖챊



### **ISSUE/REVISION**

3	29/09/2023	ISSUED FOR REVISED PLANNING
2	18/04/2023	PLANNING APPLICATION
1	03/04/2023	ISSUE FOR QUALITY AUDIT
0	10.01.2023	ISSUED FOR LRD MEETING
I/R	DATE	DESCRIPTION

### **PROJECT NUMBER**

60690914

## SHEET TITLE

PROPOSED GENERAL ARRANGEMENT

### SHEET NUMBER

60690914-ACM-00-00-DR-CE-10-0001





## PROJECT

GLENAGEARY GATE LRD, AT JUNCTION OF SALLYNOGGIN ROAD LOWER AND GLENAGEARY AVENUE, GLENAGEARY, CO.DUBLIN

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		-

### PROJECT NUMBER

60690914

SHEET TITLE

PROPOSED BASEMENT LAYOUT

## SHEET NUMBER

60690914-ACM-01-00-DR-CE-10-0002





## PROJECT

GLENAGEARY GATE LRD, AT JUNCTION OF SALLYNOGGIN ROAD LOWER AND GLENAGEARY AVENUE, GLENAGEARY, CO.DUBLIN

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## LEGEND:

PROPOSED RED LINE BOUNDARY ...



Overall Length		5.079m
Overall Width		1.872m
Overall Body Heigh	nt	1.525m
Min Body Ground	Clearance	0.310m
Max Track Width		1.831m
Lock to Lock Time		4.00 sec
Kerb to Kerb Turni	ng Radius	5.900m



## **ISSUE/REVISION**

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I/R	DATE	DESCRIPTION
		-

### PROJECT NUMBER

60690914

## SHEET TITLE

PROPOSED BASEMENT LAYOUT AND AUTOTRACK ANALYSIS

### SHEET NUMBER

60690914-ACM-01-00-DR-CE-10-0003



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## PROJECT

GLENAGEARY GATE LRD, AT JUNCTION OF SALLYNOGGIN ROAD LOWER AND GLENAGEARY AVENUE, GLENAGEARY, CO.DUBLIN

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Forward Visibility Table (Extract of Table 4.2 of the Design		
Manual for Urban Roads and Streets, DMURS)		
Design Speed (km/b)	Stopping Sight Distances (SDD)	
Design Speed (km/m)	Standard (m)	
10	7	
20	14	
30	23	
40	33	
50	45	
60	59	
Forward Visibility Table (Extract of Table 4.2 of the Design		
Forward visibility rable (Extra	act of Table 4.2 of the Design	
Manual for Urban Roads and S	treets, DMURS) - For Bus Road	
Manual for Urban Roads and S	treets, DMURS) - For Bus Road Stopping Sight Distances (SDD)	
Manual for Urban Roads and S Design Speed (km/h)	act of Table 4.2 of the Design treets, DMURS) - For Bus Road Stopping Sight Distances (SDD) Standard (m)	
Manual for Urban Roads and S Design Speed (km/h) 10	act of Table 4.2 of the Design treets, DMURS) - For Bus Road Stopping Sight Distances (SDD) Standard (m) 8	
Manual for Urban Roads and S Design Speed (km/h) 10 20	act of Table 4.2 of the Design treets, DMURS) - For Bus Road Stopping Sight Distances (SDD) Standard (m) 8 15	
Manual for Urban Roads and S Design Speed (km/h) 10 20 30	act of Table 4.2 of the Design treets, DMURS) - For Bus Road Stopping Sight Distances (SDD) Standard (m) 8 15 24	
Manual for Urban Roads and S Design Speed (km/h) 10 20 30 40	act of Table 4.2 of the Design treets, DMURS) - For Bus Road Stopping Sight Distances (SDD) Standard (m) 8 15 24 24 36	
Manual for Urban Roads and S Design Speed (km/h) 10 20 30 40 50	act of Table 4.2 of the Design treets, DMURS) - For Bus Road Stopping Sight Distances (SDD) Standard (m) 8 15 24 36 49	
Manual for Urban Roads and S Design Speed (km/h) 10 20 30 40 50 60	act of Table 4.2 of the Design treets, DMURS) - For Bus Road Stopping Sight Distances (SDD) Standard (m) 8 15 24 36 49 65	

### LEGEND:

PROPOSED RED LINE BOUNDARY ..



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### **PROJECT NUMBER**

60690914

SHEET TITLE

PROPOSED VISIBILITY SPLAY

### SHEET NUMBER

60690914-ACM-00-00-DR-CE-10-0101






## PROJECT

GLENAGEARY GATE LRD, AT JUNCTION OF SALLYNOGGIN ROAD LOWER AND GLENAGEARY AVENUE, GLENAGEARY, CO.DUBLIN

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## LEGEND:

SWEPT PATH FORWARDS MOVEMENT

SWEPT PATH REVERSE MOVEMENT

### LEGEND:

PROPOSED RED LINE BOUNDARY ..



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10.01.2023	ISSUED FOR LRD MEETING
DATE	DESCRIPTION
	29/09/2023 18/04/2023 03/04/2023 10.01.2023 DATE

### PROJECT NUMBER

60690914

SHEET TITLE

PROPOSED AUTOTRACK ANALYSIS SHEET 1 OF 2

### SHEET NUMBER

60690914-ACM-01-00-DR-CE-10-0102



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## PROJECT

GLENAGEARY GATE LRD, AT JUNCTION OF SALLYNOGGIN ROAD LOWER AND GLENAGEARY AVENUE, GLENAGEARY, CO.DUBLIN

## CLIENT

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## LEGEND:

SWEPT PATH FORWARDS MOVEMENT

SWEPT PATH REVERSE MOVEMENT

## LEGEND:

PROPOSED RED LINE BOUNDARY..



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### **PROJECT NUMBER**

60690914

### SHEET TITLE

PROPOSED AUTOTRACK ANALYSIS SHEET 2 OF 2

### SHEET NUMBER

60690914-ACM-01-00-DR-CE-10-0103

# Appendix B Network Flow Diagrams







	R	118	
R829	6	8	
Date:		A	pril 2023
Design:			НН
Checked:			PMcG
Approved:			













# Appendix C TRICS Outputs

Calculation Reference: AUDIT-204602-221121-1143

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

#### Selected regions and areas:

02	SOUTH EAST		
	CT CENTRAL BEDFOR	RDSHIRE	2 days
	HF HERTFORDSHIRE		4 davs
	PO PORTSMOUTH		1 days
03	SOUTH WEST		5
	DC DORSET		1 days
04	EAST ANGLIA		5
	NF NORFOLK		2 days
	SF SUFFOLK		3 days
05	EAST MIDLANDS		5
	DY DERBY		1 days
07	YORKSHIRE & NORTH	LINCOLNSHIRE	
	RI EAST RIDING OF	YORKSHIRE	1 days
80	NORTH WEST		
	MS MERSEYSIDE		3 days
09	NORTH		
	CB CUMBRIA		1 days
	TW TYNE & WEAR		1 days
10	WALES		
	CO CONWY		1 days
11	SCOTLAND		
	EB CITY OF EDINBUR	RGH	1 days
	SA SOUTH AYRSHIRE	-	1 days
	SR STIRLING		1 days
14	LEINSTER		
	LU LOUTH		1 days
15	GREATER DUBLIN		
	DL DUBLIN		2 days
17	ULSTER (NORTHERN I	RELAND)	
	AN ANTRIM		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: Actual Range: Range Selected by User:	No of Dwellings 9 to 184 (units: ) 6 to 372 (units: )
Parking Spaces Range:	All Surveys Included
Parking Spaces per Dwellin	g Range: All Surveys Included
Bedrooms per Dwelling Ran	nge: All Surveys Included
Percentage of dwellings pri	vately owned: All Surveys Included
Public Transport Provision: Selection by:	Include all surveys
Date Range: 01/01	/14 to 15/10/21
This data displays the rang included in the trip rate ca	ne of survey dates selected. Only surveys that were conducted within this date range are lculation.
<u>Selected survey days:</u> Monday Tuesday Wednesday Thursday Friday	5 days 8 days 8 days 4 days 3 days

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

<u>Selected survey types:</u>	
Manual count	28 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.

<u>Selected Locations:</u>	
Edge of Town Centre	11
Suburban Area (PPS6 Out of Centre)	10
Edge of Town	5
Neighbourhood Centre (PPS6 Local Centre)	2

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

Selected Location Sub Categories:	
Development Zone	3
Residential Zone	20
Built-Up Zone	5

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:

<u>Use Class:</u>

C3

28 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 Secondary Filtering selection (Cont.):

Clarence Street West

AECOM

Population within 1 mile:	
5,001 to 10,000	1 days
10,001 to 15,000	6 days
15,001 to 20,000	2 days
20,001 to 25,000	10 days
25,001 to 50,000	9 days

Belfast

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

Population within 5 miles:	
25,001 to 50,000	1 days
50,001 to 75,000	10 days
75,001 to 100,000	1 days
125,001 to 250,000	8 days
250,001 to 500,000	5 days
500,001 or More	3 days

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

Car ownership within 5 miles:

0.6 to 1.0	14 days
1.1 to 1.5	13 days
1.6 to 2.0	1 days

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

<u>Travel Plan:</u>	
Yes	5 days
No	23 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

28 days

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

**Covid-19 Restrictions** 

Yes

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

LIST OF SITES relevant to selection parameters

1	AN-03-C-02 BLOCK OF FLATS SUMMERHILL AVENUE BELFAST KNOCK Edge of Town		ANTRIM
2	Residential Zone Total No of Dwellings: Survey date: FRIDAY CB-03-C-03 FLATS & BUNGALOWS LOUND STREET KENDAL	22 <i>28/11/14</i>	<i>Survey Type: MANUAL</i> CUMBRIA
3	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: <i>Survey date: MONDAY</i> CO-03-C-01 BLOCKS OF FLATS MOSTYN BROADWAY LLANDUDNO	33 <i>09/06/14</i>	<i>Survey Type: MANUAL</i> CONWY
4	Edge of Town Centre Built-Up Zone Total No of Dwellings: <i>Survey date: MONDAY</i> CT-03-C-01 BLOCKS OF FLATS WING ROAD LEIGHTON BUZZARD LINSLADE	37 <i>26/03/18</i>	<i>Survey Type: MANUAL</i> CENTRAL BEDFORDSHIRE
5	Edge of Town Centre Residential Zone Total No of Dwellings: <i>Survey date: TUESDAY</i> CT-03-C-02 BLOCKS OF FLATS STANBRIDGE ROAD LEIGHTON BUZZARD	175 <i>15/05/18</i>	<i>Survey Type: MANUAL</i> CENTRAL BEDFORDSHI RE
6	Edge of Town Centre Residential Zone Total No of Dwellings: <i>Survey date: TUESDAY</i> DC-03-C-02 PALM COURT WEYMOUTH SPA ROAD	62 <i>15/05/18</i>	<i>Survey Type: MANUAL</i> DORSET
7	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: Survey date: FRIDAY DL-03-C-15 BLOCKS OF FLATS MONKSTOWN ROAD DUBLIN MONKSTOWN	14 <i>28/03/14</i>	<i>Survey Type: MANUAL</i> DUBLIN
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: Survey date: WEDNESDAY	20 <i>01/10/14</i>	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

8	DL-03-C-18 BLOCKS OF FLATS HAROLD'S CROSS ROAD DUBLIN		DUBLIN
9	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: <i>Survey date: WEDNESDAY</i> DY-03-C-03 CAESAR STREET DERBY	102 <i>19/05/21</i>	<i>Survey Type: MANUAL</i> DERBY
10	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: <i>Survey date: WEDNESDAY</i> EB-03-C-01 BLOCKS OF FLATS MYRESIDE ROAD EDINBURGH CRAIGLOCKHART	30 <i>25/09/19</i>	<i>Survey Type: MANUAL</i> CITY OF EDINBURGH
11	Residential Zone Total No of Dwellings: Survey date: TUESDAY HF-03-C-01 HAYLING ROAD WATFORD	32 <i>26/05/15</i>	<i>Survey Type: MANUAL</i> HERTFORDSHI RE
12	SOUTH OXHEY Edge of Town Residential Zone Total No of Dwellings: <i>Survey date: WEDNESDAY</i> HF-03-C-03 BLOCK OF FLATS SHENLEY ROAD BOREHAMWOOD	22 <i>09/06/21</i>	<i>Survey Type: MANUAL</i> HERTFORDSHIRE
13	Edge of Town Centre Built-Up Zone Total No of Dwellings: <i>Survey date: THURSDAY</i> HF-03-C-04 BLOCKS OF FLATS OXHEY DRIVE WATFORD SOUTH OXHEY	91 <i>14/11/19</i>	<i>Survey Type: MANUAL</i> HERTFORDSHIRE
14	Neighbourhood Centre (PPS6 Local Centre) Residential Zone Total No of Dwellings: <i>Survey date: THURSDAY</i> HF-03-C-05 BLOCKS OF FLATS FERNDOWN ROAD WATFORD	84 <i>10/06/21</i>	<i>Survey Type: MANUAL</i> HERTFORDSHIRE
15	SOUTH OXHEY Edge of Town Residential Zone Total No of Dwellings: Survey date: MONDAY LU-03-C-04 BLOCKS OF FLATS RIVER COURT DROGHEDA	26 <i>07/06/21</i>	<i>Survey Type: MANUAL</i> LOUTH
	Neighbourhood Centre (PPS6 Local Centre) Residential Zone Total No of Dwellings: Survey date: WEDNESDAY	42 <i>22/09/21</i>	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

16	MS-03-C-02 SOUTH FERRY QUAY LIVERPOOL	BLOCKS OF FLATS		MERSEYSIDE
	BRUNSWICK DOCK Suburban Area (PPS& Development Zone Total No of Dwellings Survey date:	o Out of Centre) : <i>TUESDAY</i>	184 <i>13/11/18</i>	Survey Type: MANIJAI
17	MS-03-C-03 MARINERS WHARF LIVERPOOL QUEENS DOCK Suburban Area (PPS6	BLOCK OF FLATS		MERSEYSIDE
	Development Zone		0	
	Survey date	: THESDAY	9 13/11/18	SURVEY TYPE MANUAL
18	MS-03-C-04 HOY DRIVE NEWTON-LE-WILLOW EARLESTOWN	BLOCK OF FLATS		MERSEYSIDE
	Edge of Town Centre Residential Zone Total No of Dwellings <i>Survey date:</i>	: MONDAY	24 1 <i>2/04/21</i>	Survey Type: MANUAL
19	NF-03-C-01 PAGE STAIR LANE KING'S LYNN	BLOCKS OF FLATS		NORFOLK
	Edge of Town Centre			
	Total No of Dwellings	:	51	
20	<i>Survey date:</i> NF-03-C-02 HALL ROAD NORWICH	THURSDAY MI XED FLATS & HOUSI	<i>11/12/14</i> ES	<i>Survey Type: MANUAL</i> NORFOLK
	LAKENHAM Suburban Area (PPS6 Residential Zone	o Out of Centre)		
	Total No of Dwellings Survey date:	: MONDAY	82 <i>18/11/19</i>	Survey Type: MANUAL
21	PO-03-C-01 CROSS STREET PORTSMOUTH	BLOCKS OF FLATS		PORTSMOUTH
	Edge of Town Centre Built-Up Zone Total No of Dwellings	:	90	
22	Survey date: RI -03-C-01 465 PRIORY ROAD HULL	<i>TUESDAY</i> FLATS	05/06/18	Survey Type: MANUAL EAST RIDING OF YORKSHIRE
	Edge of Town Residential Zone			
	Total No of Dwellings Survey date:	: TUESDAY	20 1 <i>3/05/14</i>	Survey Type: MANUAL

TRICS	7.9.3	071022 B20.58 Da	tabase right of TRI	CS Consortiu	m Limited, 20	022. All rights reserved	Monday	21/11/22 Page 7
AECOM	Cla	arence Street West	Belfast				Licence	No: 204602
	LIST	OF SITES relevant to :	selection paramete	ers (Cont.)				
	23	SA-03-C-01 RACECOURSE ROAD AYR	BLOCK OF FLATS	5		SOUTH AYRSHI RI	E	
	24	Edge of Town Centre Residential Zone Total No of Dwellings <i>Survey date:</i> SF-03-C-01 STATION HILL BURY ST EDMUNDS	: <i>TUESDAY</i> BLOCKS OF FLAT	51 <i>16/09</i> rs	0/14	<i>Survey Type: N</i> SUFFOLK	MANUAL	
	25	Edge of Town Centre Built-Up Zone Total No of Dwellings <i>Survey date:</i> SF-03-C-03 TOLLGATE LANE BURY ST EDMUNDS	: <i>THURSDAY</i> BLOCKS OF FLAT	85 <i>18/12</i> TS	2/14	<i>Survey Type: N</i> SUFFOLK	MANUAL	
	26	Suburban Area (PPS6 Residential Zone Total No of Dwellings <i>Survey date:</i> SF-03-C-05 FORE STREET IPSWICH IPSWICH WATERFRO Edge of Town Centre	Out of Centre) : <i>WEDNESDAY</i> BLOCKS OF FLAT	30 <i>03/12</i> "S	2/14	<i>Survey Type: N</i> SUFFOLK	MANUAL	
	27	Development Zone Total No of Dwellings <i>Survey date:</i> SR-03-C-02 ROSEBERRY TERRACI STIRLING	: <i>WEDNESDAY</i> FLATS E	69 <i>23/06</i>	5/21	<i>Survey Type: N</i> STIRLING	MANUAL	
		Edge of Town Centre Residential Zone Total No of Dwellings		48				

Dwe Survey date: WEDNESDAY 18/06/14 Survey Type: MANUAL 28 TW-03-C-01 BLOCKS OF FLATS TYNE & WEAR CAULDWELL AVENUE WHITLEY BAY MONKESEATON Edge of Town Residential Zone Total No of Dwellings: 45 Survey date: FRIDAY 15/10/21 Survey Type: MANUAL

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

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED MULTI-MODAL TOTAL VEHICLES Calculation factor: 1 DWELLS BOLD print indicates peak (busiest) period Total People to Total Vehicles ratio (all time periods and directions): 2.33

		ARRIVALS		[	DEPARTURES	;	TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	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	28	56	0.040	28	56	0.156	28	56	0.196
08:00 - 09:00	28	56	0.059	28	56	0.187	28	56	0.246
09:00 - 10:00	28	56	0.080	28	56	0.091	28	56	0.171
10:00 - 11:00	28	56	0.079	28	56	0.099	28	56	0.178
11:00 - 12:00	28	56	0.078	28	56	0.090	28	56	0.168
12:00 - 13:00	28	56	0.095	28	56	0.093	28	56	0.188
13:00 - 14:00	28	56	0.066	28	56	0.082	28	56	0.148
14:00 - 15:00	28	56	0.070	28	56	0.084	28	56	0.154
15:00 - 16:00	28	56	0.098	28	56	0.066	28	56	0.164
16:00 - 17:00	28	56	0.132	28	56	0.075	28	56	0.207
17:00 - 18:00	28	56	0.175	28	56	0.083	28	56	0.258
18:00 - 19:00	28	56	0.157	28	56	0.099	28	56	0.256
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.129			1.205			2.334

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

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

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#### Parameter summary

Trip rate parameter range selected:	9 - 184 (units: )
Survey date date range:	01/01/14 - 15/10/21
Number of weekdays (Monday-Friday):	28
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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

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

		ARRIVALS		DEPARTURES			TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	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	28	56	0.003	28	56	0.003	28	56	0.006
08:00 - 09:00	28	56	0.004	28	56	0.004	28	56	0.008
09:00 - 10:00	28	56	0.005	28	56	0.004	28	56	0.009
10:00 - 11:00	28	56	0.003	28	56	0.003	28	56	0.006
11:00 - 12:00	28	56	0.005	28	56	0.004	28	56	0.009
12:00 - 13:00	28	56	0.009	28	56	0.008	28	56	0.017
13:00 - 14:00	28	56	0.004	28	56	0.005	28	56	0.009
14:00 - 15:00	28	56	0.000	28	56	0.000	28	56	0.000
15:00 - 16:00	28	56	0.003	28	56	0.003	28	56	0.006
16:00 - 17:00	28	56	0.006	28	56	0.006	28	56	0.012
17:00 - 18:00	28	56	0.001	28	56	0.001	28	56	0.002
18:00 - 19:00	28	56	0.008	28	56	0.008	28	56	0.016
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.051			0.049			0.100

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.

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

		ARRIVALS		[	DEPARTURES		TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	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	28	56	0.003	28	56	0.003	28	56	0.006
08:00 - 09:00	28	56	0.001	28	56	0.001	28	56	0.002
09:00 - 10:00	28	56	0.004	28	56	0.003	28	56	0.007
10:00 - 11:00	28	56	0.003	28	56	0.003	28	56	0.006
11:00 - 12:00	28	56	0.002	28	56	0.003	28	56	0.005
12:00 - 13:00	28	56	0.003	28	56	0.003	28	56	0.006
13:00 - 14:00	28	56	0.001	28	56	0.001	28	56	0.002
14:00 - 15:00	28	56	0.001	28	56	0.001	28	56	0.002
15:00 - 16:00	28	56	0.000	28	56	0.000	28	56	0.000
16:00 - 17:00	28	56	0.001	28	56	0.001	28	56	0.002
17:00 - 18:00	28	56	0.000	28	56	0.001	28	56	0.001
18:00 - 19:00	28	56	0.000	28	56	0.000	28	56	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.019			0.020			0.039

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.

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

		ARRIVALS			DEPARTURES			TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip	
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	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	28	56	0.000	28	56	0.000	28	56	0.000	
08:00 - 09:00	28	56	0.000	28	56	0.000	28	56	0.000	
09:00 - 10:00	28	56	0.000	28	56	0.000	28	56	0.000	
10:00 - 11:00	28	56	0.001	28	56	0.001	28	56	0.002	
11:00 - 12:00	28	56	0.000	28	56	0.000	28	56	0.000	
12:00 - 13:00	28	56	0.000	28	56	0.000	28	56	0.000	
13:00 - 14:00	28	56	0.000	28	56	0.000	28	56	0.000	
14:00 - 15:00	28	56	0.001	28	56	0.001	28	56	0.002	
15:00 - 16:00	28	56	0.001	28	56	0.000	28	56	0.001	
16:00 - 17:00	28	56	0.001	28	56	0.001	28	56	0.002	
17:00 - 18:00	28	56	0.001	28	56	0.001	28	56	0.002	
18:00 - 19:00	28	56	0.000	28	56	0.000	28	56	0.000	
19:00 - 20:00										
20:00 - 21:00										
21:00 - 22:00										
22:00 - 23:00										
23:00 - 24:00										
Total Rates:			0.005			0.004			0.009	

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.

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

		ARRIVALS		DEPARTURES			TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	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	28	56	0.003	28	56	0.012	28	56	0.015
08:00 - 09:00	28	56	0.003	28	56	0.023	28	56	0.026
09:00 - 10:00	28	56	0.005	28	56	0.006	28	56	0.011
10:00 - 11:00	28	56	0.003	28	56	0.004	28	56	0.007
11:00 - 12:00	28	56	0.004	28	56	0.003	28	56	0.007
12:00 - 13:00	28	56	0.002	28	56	0.001	28	56	0.003
13:00 - 14:00	28	56	0.005	28	56	0.003	28	56	0.008
14:00 - 15:00	28	56	0.007	28	56	0.003	28	56	0.010
15:00 - 16:00	28	56	0.006	28	56	0.003	28	56	0.009
16:00 - 17:00	28	56	0.005	28	56	0.001	28	56	0.006
17:00 - 18:00	28	56	0.010	28	56	0.004	28	56	0.014
18:00 - 19:00	28	56	0.005	28	56	0.004	28	56	0.009
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.058			0.067			0.125

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.

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

		ARRIVALS		[	DEPARTURES	5	TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	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	28	56	0.047	28	56	0.212	28	56	0.259
08:00 - 09:00	28	56	0.068	28	56	0.298	28	56	0.366
09:00 - 10:00	28	56	0.109	28	56	0.116	28	56	0.225
10:00 - 11:00	28	56	0.104	28	56	0.126	28	56	0.230
11:00 - 12:00	28	56	0.100	28	56	0.125	28	56	0.225
12:00 - 13:00	28	56	0.127	28	56	0.128	28	56	0.255
13:00 - 14:00	28	56	0.090	28	56	0.100	28	56	0.190
14:00 - 15:00	28	56	0.087	28	56	0.117	28	56	0.204
15:00 - 16:00	28	56	0.146	28	56	0.089	28	56	0.235
16:00 - 17:00	28	56	0.198	28	56	0.092	28	56	0.290
17:00 - 18:00	28	56	0.244	28	56	0.105	28	56	0.349
18:00 - 19:00	28	56	0.239	28	56	0.143	28	56	0.382
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.559			1.651			3.210

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

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

		ARRIVALS		[	DEPARTURES	;	TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	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	28	56	0.016	28	56	0.064	28	56	0.080
08:00 - 09:00	28	56	0.027	28	56	0.106	28	56	0.133
09:00 - 10:00	28	56	0.047	28	56	0.080	28	56	0.127
10:00 - 11:00	28	56	0.049	28	56	0.053	28	56	0.102
11:00 - 12:00	28	56	0.041	28	56	0.056	28	56	0.097
12:00 - 13:00	28	56	0.060	28	56	0.058	28	56	0.118
13:00 - 14:00	28	56	0.061	28	56	0.051	28	56	0.112
14:00 - 15:00	28	56	0.057	28	56	0.053	28	56	0.110
15:00 - 16:00	28	56	0.070	28	56	0.049	28	56	0.119
16:00 - 17:00	28	56	0.071	28	56	0.051	28	56	0.122
17:00 - 18:00	28	56	0.092	28	56	0.065	28	56	0.157
18:00 - 19:00	28	56	0.075	28	56	0.059	28	56	0.134
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.666			0.745			1.411

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.

#### TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED MULTI-MODAL BUS/TRAM PASSENGERS Calculation factor: 1 DWELLS BOLD print indicates peak (busiest) period

	ARRIVALS		DEPARTURES			TOTALS			
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	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	28	56	0.002	28	56	0.032	28	56	0.034
08:00 - 09:00	28	56	0.007	28	56	0.059	28	56	0.066
09:00 - 10:00	28	56	0.007	28	56	0.032	28	56	0.039
10:00 - 11:00	28	56	0.009	28	56	0.012	28	56	0.021
11:00 - 12:00	28	56	0.008	28	56	0.011	28	56	0.019
12:00 - 13:00	28	56	0.013	28	56	0.016	28	56	0.029
13:00 - 14:00	28	56	0.009	28	56	0.020	28	56	0.029
14:00 - 15:00	28	56	0.016	28	56	0.011	28	56	0.027
15:00 - 16:00	28	56	0.034	28	56	0.011	28	56	0.045
16:00 - 17:00	28	56	0.035	28	56	0.008	28	56	0.043
17:00 - 18:00	28	56	0.046	28	56	0.008	28	56	0.054
18:00 - 19:00	28	56	0.035	28	56	0.008	28	56	0.043
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.221			0.228			0.449

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.

#### TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED MULTI-MODAL TOTAL RAIL PASSENGERS Calculation factor: 1 DWELLS BOLD print indicates peak (busiest) period

		ARRIVALS		DEPARTURES			TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	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	28	56	0.001	28	56	0.037	28	56	0.038
08:00 - 09:00	28	56	0.002	28	56	0.047	28	56	0.049
09:00 - 10:00	28	56	0.000	28	56	0.013	28	56	0.013
10:00 - 11:00	28	56	0.006	28	56	0.009	28	56	0.015
11:00 - 12:00	28	56	0.003	28	56	0.006	28	56	0.009
12:00 - 13:00	28	56	0.009	28	56	0.004	28	56	0.013
13:00 - 14:00	28	56	0.004	28	56	0.004	28	56	0.008
14:00 - 15:00	28	56	0.007	28	56	0.001	28	56	0.008
15:00 - 16:00	28	56	0.011	28	56	0.003	28	56	0.014
16:00 - 17:00	28	56	0.018	28	56	0.003	28	56	0.021
17:00 - 18:00	28	56	0.036	28	56	0.000	28	56	0.036
18:00 - 19:00	28	56	0.018	28	56	0.003	28	56	0.021
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.115			0.130			0.245

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.

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

	ARRIVALS		DEPARTURES			TOTALS			
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	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	28	56	0.000	28	56	0.000	28	56	0.000
08:00 - 09:00	28	56	0.000	28	56	0.001	28	56	0.001
09:00 - 10:00	28	56	0.000	28	56	0.000	28	56	0.000
10:00 - 11:00	28	56	0.000	28	56	0.001	28	56	0.001
11:00 - 12:00	28	56	0.000	28	56	0.000	28	56	0.000
12:00 - 13:00	28	56	0.000	28	56	0.000	28	56	0.000
13:00 - 14:00	28	56	0.000	28	56	0.000	28	56	0.000
14:00 - 15:00	28	56	0.000	28	56	0.001	28	56	0.001
15:00 - 16:00	28	56	0.001	28	56	0.000	28	56	0.001
16:00 - 17:00	28	56	0.001	28	56	0.000	28	56	0.001
17:00 - 18:00	28	56	0.002	28	56	0.001	28	56	0.003
18:00 - 19:00	28	56	0.000	28	56	0.000	28	56	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.004			0.004			0.008

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

#### TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED MULTI-MODAL PUBLIC TRANSPORT USERS Calculation factor: 1 DWELLS BOLD print indicates peak (busiest) period

		ARRIVALS		DEPARTURES			TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	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	28	56	0.003	28	56	0.068	28	56	0.071
08:00 - 09:00	28	56	0.009	28	56	0.108	28	56	0.117
09:00 - 10:00	28	56	0.007	28	56	0.045	28	56	0.052
10:00 - 11:00	28	56	0.014	28	56	0.022	28	56	0.036
11:00 - 12:00	28	56	0.009	28	56	0.017	28	56	0.026
12:00 - 13:00	28	56	0.022	28	56	0.021	28	56	0.043
13:00 - 14:00	28	56	0.014	28	56	0.023	28	56	0.037
14:00 - 15:00	28	56	0.023	28	56	0.013	28	56	0.036
15:00 - 16:00	28	56	0.047	28	56	0.015	28	56	0.062
16:00 - 17:00	28	56	0.053	28	56	0.010	28	56	0.063
17:00 - 18:00	28	56	0.084	28	56	0.008	28	56	0.092
18:00 - 19:00	28	56	0.054	28	56	0.011	28	56	0.065
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.339			0.361			0.700

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.

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED MULTI-MODAL TOTAL PEOPLE Calculation factor: 1 DWELLS BOLD print indicates peak (busiest) period Total People to Total Vehicles ratio (all time periods and directions): 2.33

	ARRIVALS		DEPARTURES			TOTALS			
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	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	28	56	0.068	28	56	0.356	28	56	0.424
08:00 - 09:00	28	56	0.106	28	56	0.535	28	56	0.641
09:00 - 10:00	28	56	0.168	28	56	0.247	28	56	0.415
10:00 - 11:00	28	56	0.169	28	56	0.204	28	56	0.373
11:00 - 12:00	28	56	0.154	28	56	0.202	28	56	0.356
12:00 - 13:00	28	56	0.211	28	56	0.208	28	56	0.419
13:00 - 14:00	28	56	0.170	28	56	0.177	28	56	0.347
14:00 - 15:00	28	56	0.173	28	56	0.186	28	56	0.359
15:00 - 16:00	28	56	0.268	28	56	0.156	28	56	0.424
16:00 - 17:00	28	56	0.327	28	56	0.154	28	56	0.481
17:00 - 18:00	28	56	0.431	28	56	0.183	28	56	0.614
18:00 - 19:00	28	56	0.373	28	56	0.217	28	56	0.590
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.618			2.825			5.443

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

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

	ARRIVALS		DEPARTURES			TOTALS			
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	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	28	56	0.031	28	56	0.143	28	56	0.174
08:00 - 09:00	28	56	0.046	28	56	0.170	28	56	0.216
09:00 - 10:00	28	56	0.057	28	56	0.073	28	56	0.130
10:00 - 11:00	28	56	0.058	28	56	0.072	28	56	0.130
11:00 - 12:00	28	56	0.057	28	56	0.068	28	56	0.125
12:00 - 13:00	28	56	0.071	28	56	0.069	28	56	0.140
13:00 - 14:00	28	56	0.051	28	56	0.065	28	56	0.116
14:00 - 15:00	28	56	0.059	28	56	0.072	28	56	0.131
15:00 - 16:00	28	56	0.083	28	56	0.053	28	56	0.136
16:00 - 17:00	28	56	0.114	28	56	0.057	28	56	0.171
17:00 - 18:00	28	56	0.163	28	56	0.073	28	56	0.236
18:00 - 19:00	28	56	0.142	28	56	0.085	28	56	0.227
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.932			1.000			1.932

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.

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

	ARRIVALS		DEPARTURES			TOTALS			
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	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	28	56	0.003	28	56	0.007	28	56	0.010
08:00 - 09:00	28	56	0.009	28	56	0.012	28	56	0.021
09:00 - 10:00	28	56	0.015	28	56	0.009	28	56	0.024
10:00 - 11:00	28	56	0.015	28	56	0.019	28	56	0.034
11:00 - 12:00	28	56	0.015	28	56	0.015	28	56	0.030
12:00 - 13:00	28	56	0.013	28	56	0.013	28	56	0.026
13:00 - 14:00	28	56	0.008	28	56	0.011	28	56	0.019
14:00 - 15:00	28	56	0.009	28	56	0.009	28	56	0.018
15:00 - 16:00	28	56	0.011	28	56	0.010	28	56	0.021
16:00 - 17:00	28	56	0.010	28	56	0.011	28	56	0.021
17:00 - 18:00	28	56	0.008	28	56	0.006	28	56	0.014
18:00 - 19:00	28	56	0.006	28	56	0.004	28	56	0.010
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.122			0.126			0.248

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.

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

		ARRIVALS		[	DEPARTURES			TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip	
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	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	28	56	0.001	28	56	0.001	28	56	0.002	
08:00 - 09:00	28	56	0.000	28	56	0.001	28	56	0.001	
09:00 - 10:00	28	56	0.000	28	56	0.001	28	56	0.001	
10:00 - 11:00	28	56	0.001	28	56	0.001	28	56	0.002	
11:00 - 12:00	28	56	0.000	28	56	0.000	28	56	0.000	
12:00 - 13:00	28	56	0.000	28	56	0.001	28	56	0.001	
13:00 - 14:00	28	56	0.002	28	56	0.001	28	56	0.003	
14:00 - 15:00	28	56	0.000	28	56	0.000	28	56	0.000	
15:00 - 16:00	28	56	0.001	28	56	0.001	28	56	0.002	
16:00 - 17:00	28	56	0.001	28	56	0.000	28	56	0.001	
17:00 - 18:00	28	56	0.002	28	56	0.001	28	56	0.003	
18:00 - 19:00	28	56	0.001	28	56	0.002	28	56	0.003	
19:00 - 20:00										
20:00 - 21:00										
21:00 - 22:00										
22:00 - 23:00										
23:00 - 24:00										
Total Rates:			0.009			0.010			0.019	

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.

Calculation Reference: AUDIT-204602-221123-1114

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 04 - EDUCATION Category : D - NURSERY MULTI-MODAL TOTAL VEHICLES

Sele	cted re	egions and areas:	
02	SOU	THEAST	
	BH	BRIGHTON & HOVE	1 days
04	EAS	T ANGLI A	
	PB	PETERBOROUGH	1 days
	SF	SUFFOLK	1 days
05	EAS	T MI DLANDS	
	LN	LINCOLNSHIRE	1 days
07	YOR	KSHIRE & NORTH LINCOLNSHIRE	
	SY	SOUTH YORKSHIRE	1 days
09	NOR	2TH	
	ΤW	TYNE & WEAR	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:	Gross floor area
Actual Range:	185 to 1250 (units: sqm)
Range Selected by User:	176 to 2350 (units: sqm)

Parking Spaces Range: All Surveys Included

#### Public Transport Provision:

Selection by:	Include all surveys
---------------	---------------------

Date Range: 01/01/14 to 13/05/22

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.

<u>Selected survey days:</u>	
Tuesday	3 days
Wednesday	1 days
Friday	2 days

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

Selected survey types:	
Manual count	6 days
Directional ATC Count	0 days

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

<u>Selected Locations:</u>	
Edge of Town Centre	1
Suburban Area (PPS6 Out of Centre)	4
Neighbourhood Centre (PPS6 Local Centre)	1

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

<u>Selected Location Sub Categories:</u> Residential Zone

6

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:

<u>Use Class:</u> E(f)

6 days

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

Population within 500m Range:	
All Surveys Included	
Population within 1 mile:	
10,001 to 15,000	1 days
15,001 to 20,000	3 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:	
25,001 to 50,000	1 days
75,001 to 100,000	1 days
125,001 to 250,000	2 days
250,001 to 500,000	2 days

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

1 days
2 days
2 days
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.

<u>Travel Plan:</u>

No

6 days

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

<u>PTAL Rating:</u> No PTAL Present

6 days

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

Clarence Street West

AECOM

LIST OF SITES	relevant to selection	parameters

Belfast

1	BH-04-D-01 N CONNAUGHT ROAD BRIGHTON HOVE	NURSERY		BRIGHTON & HOVE
	Neighbourhood Centre Residential Zone Total Gross floor area:	e (PPS6 Local Centre)	185 sqm	
2	Survey date: Fr LN-04-D-01 N NEWARK ROAD LINCOLN SWALLOW BECK	<i>RIDAY</i> NURSERY	22/09/17	<i>Survey Type: MANUAL</i> LINCOLNSHIRE
	Suburban Area (PPS6 ( Residential Zone Total Gross floor area:	Out of Centre)	600 sqm	
3	Survey date: To PB-04-D-01 N EASTFIELD ROAD PETERBOROUGH	<i>UESDAY</i> NURSERY	31/10/17	<i>Survey Type: MANUAL</i> PETERBOROUGH
4	Suburban Area (PPS6 C Residential Zone Total Gross floor area: <i>Survey date: To</i> SF-04-D-03 N CAMP ROAD LOWESTOFT	Out of Centre) <i>TUESDAY</i> NURSERY	400 sqm <i>18/10/16</i>	<i>Survey Type: MANUAL</i> SUFFOLK
5	Edge of Town Centre Residential Zone Total Gross floor area: <i>Survey date: V</i> SY-04-D-01 N BAWTRY ROAD DONCASTER	<i>VEDNESDAY</i> NURSERY	750 sqm <i>10/12/14</i>	<i>Survey Type: MANUAL</i> SOUTH YORKSHI RE
	Suburban Area (PPS6 ( Residential Zone Total Gross floor area: <i>Survey date: Fi</i>	Out of Centre)	1250 sqm <i>13/05/22</i>	Survey Type: MANUAL
6	I W-04-D-03 N JUBILEE ROAD NEWCASTLE UPON TYN GOSFORTH Suburban Area (PPS6 ( Residential Zone	NURSERY NE Out of Centre)		IYNE & WEAR
	Total Gross floor area: Survey date: To	UESDAY	725 sqm <i>21/05/19</i>	Survey Type: MANUAL

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

TRIP RATE for Land Use 04 - EDUCATION/D - NURSERY MULTI-MODAL TOTAL VEHICLES Calculation factor: 100 sqm BOLD print indicates peak (busiest) period Total People to Total Vehicles ratio (all time periods and directions): 2.49

		ARRIVALS		[	DEPARTURES	5		TOTALS	
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	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	1	400	0.000	1	400	0.000	1	400	0.000
07:00 - 08:00	6	652	0.870	6	652	0.281	6	652	1.151
08:00 - 09:00	6	652	1.841	6	652	1.407	6	652	3.248
09:00 - 10:00	6	652	0.563	6	652	0.435	6	652	0.998
10:00 - 11:00	6	652	0.077	6	652	0.051	6	652	0.128
11:00 - 12:00	6	652	0.077	6	652	0.077	6	652	0.154
12:00 - 13:00	6	652	0.793	6	652	0.946	6	652	1.739
13:00 - 14:00	6	652	0.742	6	652	0.921	6	652	1.663
14:00 - 15:00	6	652	0.077	6	652	0.179	6	652	0.256
15:00 - 16:00	6	652	0.409	6	652	0.358	6	652	0.767
16:00 - 17:00	6	652	0.588	6	652	0.588	6	652	1.176
17:00 - 18:00	6	652	1.253	6	652	1.509	6	652	2.762
18:00 - 19:00	6	652	0.128	6	652	0.665	6	652	0.793
19:00 - 20:00	1	400	0.000	1	400	0.000	1	400	0.000
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			7.418			7.417			14.835

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

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

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#### Parameter summary

Trip rate parameter range selected:	185 - 1250 (units: sqm)
Survey date date range:	01/01/14 - 13/05/22
Number of weekdays (Monday-Friday):	6
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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

TRIP RATE for Land Use 04 - EDUCATION/D - NURSERY MULTI-MODAL TAXIS Calculation factor: 100 sqm BOLD print indicates peak (busiest) period

		ARRIVALS		l	DEPARTURES	5		TOTALS	
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	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	1	400	0.000	1	400	0.000	1	400	0.000
07:00 - 08:00	6	652	0.026	6	652	0.026	6	652	0.052
08:00 - 09:00	6	652	0.026	6	652	0.026	6	652	0.052
09:00 - 10:00	6	652	0.000	6	652	0.000	6	652	0.000
10:00 - 11:00	6	652	0.000	6	652	0.000	6	652	0.000
11:00 - 12:00	6	652	0.000	6	652	0.000	6	652	0.000
12:00 - 13:00	6	652	0.077	6	652	0.077	6	652	0.154
13:00 - 14:00	6	652	0.000	6	652	0.000	6	652	0.000
14:00 - 15:00	6	652	0.000	6	652	0.000	6	652	0.000
15:00 - 16:00	6	652	0.000	6	652	0.000	6	652	0.000
16:00 - 17:00	6	652	0.000	6	652	0.000	6	652	0.000
17:00 - 18:00	6	652	0.000	6	652	0.000	6	652	0.000
18:00 - 19:00	6	652	0.000	6	652	0.000	6	652	0.000
19:00 - 20:00	1	400	0.000	1	400	0.000	1	400	0.000
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.129			0.129			0.258

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.

TRIP RATE for Land Use 04 - EDUCATION/D - NURSERY MULTI-MODAL OGVS Calculation factor: 100 sqm BOLD print indicates peak (busiest) period

		ARRIVALS		l	DEPARTURES	5		TOTALS	
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	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	1	400	0.000	1	400	0.000	1	400	0.000
07:00 - 08:00	6	652	0.000	6	652	0.000	6	652	0.000
08:00 - 09:00	6	652	0.000	6	652	0.000	6	652	0.000
09:00 - 10:00	6	652	0.026	6	652	0.026	6	652	0.052
10:00 - 11:00	6	652	0.000	6	652	0.000	6	652	0.000
11:00 - 12:00	6	652	0.000	6	652	0.000	6	652	0.000
12:00 - 13:00	6	652	0.000	6	652	0.000	6	652	0.000
13:00 - 14:00	6	652	0.000	6	652	0.000	6	652	0.000
14:00 - 15:00	6	652	0.000	6	652	0.000	6	652	0.000
15:00 - 16:00	6	652	0.000	6	652	0.000	6	652	0.000
16:00 - 17:00	6	652	0.000	6	652	0.000	6	652	0.000
17:00 - 18:00	6	652	0.000	6	652	0.000	6	652	0.000
18:00 - 19:00	6	652	0.000	6	652	0.000	6	652	0.000
19:00 - 20:00	1	400	0.000	1	400	0.000	1	400	0.000
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.026			0.026			0.052

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.

TRIP RATE for Land Use 04 - EDUCATION/D - NURSERY MULTI-MODAL CYCLISTS Calculation factor: 100 sqm BOLD print indicates peak (busiest) period

		ARRIVALS		[	DEPARTURES	5		TOTALS	
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	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	1	400	0.000	1	400	0.000	1	400	0.000
07:00 - 08:00	6	652	0.051	6	652	0.000	6	652	0.051
08:00 - 09:00	6	652	0.051	6	652	0.026	6	652	0.077
09:00 - 10:00	6	652	0.000	6	652	0.000	6	652	0.000
10:00 - 11:00	6	652	0.000	6	652	0.000	6	652	0.000
11:00 - 12:00	6	652	0.000	6	652	0.000	6	652	0.000
12:00 - 13:00	6	652	0.077	6	652	0.026	6	652	0.103
13:00 - 14:00	6	652	0.026	6	652	0.051	6	652	0.077
14:00 - 15:00	6	652	0.000	6	652	0.000	6	652	0.000
15:00 - 16:00	6	652	0.000	6	652	0.051	6	652	0.051
16:00 - 17:00	6	652	0.000	6	652	0.000	6	652	0.000
17:00 - 18:00	6	652	0.000	6	652	0.026	6	652	0.026
18:00 - 19:00	6	652	0.000	6	652	0.000	6	652	0.000
19:00 - 20:00	1	400	0.000	1	400	0.000	1	400	0.000
20:00 - 21:00	1	400	0.000	1	400	0.000	1	400	0.000
21:00 - 22:00	1	400	0.000	1	400	0.000	1	400	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.205			0.180			0.385

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.

### TRIP RATE for Land Use 04 - EDUCATION/D - NURSERY MULTI-MODAL VEHICLE OCCUPANTS Calculation factor: 100 sqm BOLD print indicates peak (busiest) period

		ARRIVALS		[	DEPARTURES	5	TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	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	1	400	0.000	1	400	0.000	1	400	0.000
07:00 - 08:00	6	652	1.279	6	652	0.281	6	652	1.560
08:00 - 09:00	6	652	3.146	6	652	1.304	6	652	4.450
09:00 - 10:00	6	652	0.921	6	652	0.460	6	652	1.381
10:00 - 11:00	6	652	0.077	6	652	0.051	6	652	0.128
11:00 - 12:00	6	652	0.077	6	652	0.077	6	652	0.154
12:00 - 13:00	6	652	1.049	6	652	1.023	6	652	2.072
13:00 - 14:00	6	652	1.049	6	652	1.151	6	652	2.200
14:00 - 15:00	6	652	0.102	6	652	0.307	6	652	0.409
15:00 - 16:00	6	652	0.460	6	652	0.742	6	652	1.202
16:00 - 17:00	6	652	0.563	6	652	1.074	6	652	1.637
17:00 - 18:00	6	652	1.253	6	652	2.455	6	652	3.708
18:00 - 19:00	6	652	0.102	6	652	1.074	6	652	1.176
19:00 - 20:00	1	400	0.000	1	400	0.000	1	400	0.000
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			10.078			9.999			20.077

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.

TRIP RATE for Land Use 04 - EDUCATION/D - NURSERY MULTI-MODAL PEDESTRIANS Calculation factor: 100 sqm BOLD print indicates peak (busiest) period

		ARRIVALS		[	DEPARTURES	5		TOTALS	
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	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	1	400	0.000	1	400	0.000	1	400	0.000
07:00 - 08:00	6	652	0.972	6	652	0.256	6	652	1.228
08:00 - 09:00	6	652	1.662	6	652	0.639	6	652	2.301
09:00 - 10:00	6	652	0.281	6	652	0.077	6	652	0.358
10:00 - 11:00	6	652	0.077	6	652	0.051	6	652	0.128
11:00 - 12:00	6	652	0.230	6	652	0.512	6	652	0.742
12:00 - 13:00	6	652	1.432	6	652	1.304	6	652	2.736
13:00 - 14:00	6	652	0.588	6	652	0.946	6	652	1.534
14:00 - 15:00	6	652	0.102	6	652	0.051	6	652	0.153
15:00 - 16:00	6	652	0.537	6	652	0.537	6	652	1.074
16:00 - 17:00	6	652	0.281	6	652	0.895	6	652	1.176
17:00 - 18:00	6	652	0.486	6	652	0.972	6	652	1.458
18:00 - 19:00	6	652	0.026	6	652	0.512	6	652	0.538
19:00 - 20:00	1	400	0.000	1	400	0.000	1	400	0.000
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			6.674			6.752			13.426

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.

### TRIP RATE for Land Use 04 - EDUCATION/D - NURSERY MULTI-MODAL BUS/TRAM PASSENGERS Calculation factor: 100 sqm BOLD print indicates peak (busiest) period

		ARRIVALS			DEPARTURES			TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip	
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	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	1	400	0.000	1	400	0.000	1	400	0.000	
07:00 - 08:00	6	652	0.332	6	652	0.026	6	652	0.358	
08:00 - 09:00	6	652	0.384	6	652	0.077	6	652	0.461	
09:00 - 10:00	6	652	0.128	6	652	0.026	6	652	0.154	
10:00 - 11:00	6	652	0.026	6	652	0.000	6	652	0.026	
11:00 - 12:00	6	652	0.000	6	652	0.179	6	652	0.179	
12:00 - 13:00	6	652	0.332	6	652	0.384	6	652	0.716	
13:00 - 14:00	6	652	0.051	6	652	0.128	6	652	0.179	
14:00 - 15:00	6	652	0.051	6	652	0.026	6	652	0.077	
15:00 - 16:00	6	652	0.051	6	652	0.153	6	652	0.204	
16:00 - 17:00	6	652	0.026	6	652	0.128	6	652	0.154	
17:00 - 18:00	6	652	0.077	6	652	0.179	6	652	0.256	
18:00 - 19:00	6	652	0.000	6	652	0.205	6	652	0.205	
19:00 - 20:00	1	400	0.000	1	400	0.000	1	400	0.000	
20:00 - 21:00										
21:00 - 22:00										
22:00 - 23:00										
23:00 - 24:00										
Total Rates:			1.458			1.511			2.969	

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.

### TRIP RATE for Land Use 04 - EDUCATION/D - NURSERY MULTI-MODAL TOTAL RAIL PASSENGERS Calculation factor: 100 sqm BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	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	1	400	0.000	1	400	0.000	1	400	0.000
07:00 - 08:00	6	652	0.077	6	652	0.000	6	652	0.077
08:00 - 09:00	6	652	0.000	6	652	0.000	6	652	0.000
09:00 - 10:00	6	652	0.000	6	652	0.000	6	652	0.000
10:00 - 11:00	6	652	0.000	6	652	0.000	6	652	0.000
11:00 - 12:00	6	652	0.000	6	652	0.000	6	652	0.000
12:00 - 13:00	6	652	0.000	6	652	0.000	6	652	0.000
13:00 - 14:00	6	652	0.000	6	652	0.000	6	652	0.000
14:00 - 15:00	6	652	0.000	6	652	0.000	6	652	0.000
15:00 - 16:00	6	652	0.000	6	652	0.000	6	652	0.000
16:00 - 17:00	6	652	0.000	6	652	0.000	6	652	0.000
17:00 - 18:00	6	652	0.000	6	652	0.000	6	652	0.000
18:00 - 19:00	6	652	0.000	6	652	0.051	6	652	0.051
19:00 - 20:00	1	400	0.000	1	400	0.000	1	400	0.000
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:	Total Rates: 0.077 0.051 0.12								0.128

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.

### TRIP RATE for Land Use 04 - EDUCATION/D - NURSERY MULTI-MODAL PUBLIC TRANSPORT USERS Calculation factor: 100 sqm BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	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	1	400	0.000	1	400	0.000	1	400	0.000
07:00 - 08:00	6	652	0.409	6	652	0.026	6	652	0.435
08:00 - 09:00	6	652	0.384	6	652	0.077	6	652	0.461
09:00 - 10:00	6	652	0.128	6	652	0.026	6	652	0.154
10:00 - 11:00	6	652	0.026	6	652	0.000	6	652	0.026
11:00 - 12:00	6	652	0.000	6	652	0.179	6	652	0.179
12:00 - 13:00	6	652	0.332	6	652	0.384	6	652	0.716
13:00 - 14:00	6	652	0.051	6	652	0.128	6	652	0.179
14:00 - 15:00	6	652	0.051	6	652	0.026	6	652	0.077
15:00 - 16:00	6	652	0.051	6	652	0.153	6	652	0.204
16:00 - 17:00	6	652	0.026	6	652	0.128	6	652	0.154
17:00 - 18:00	6	652	0.077	6	652	0.179	6	652	0.256
18:00 - 19:00	6	652	0.000	6	652	0.256	6	652	0.256
19:00 - 20:00	1	400	0.000	1	400	0.000	1	400	0.000
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:	Total Rates: 1.535 1.562 3.097								3.097

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.

TRIP RATE for Land Use 04 - EDUCATION/D - NURSERY MULTI-MODAL TOTAL PEOPLE Calculation factor: 100 sqm BOLD print indicates peak (busiest) period Total People to Total Vehicles ratio (all time periods and directions): 2.49

	ARRIVALS			DEPARTURES			TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	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	1	400	0.000	1	400	0.000	1	400	0.000
07:00 - 08:00	6	652	2.711	6	652	0.563	6	652	3.274
08:00 - 09:00	6	652	5.243	6	652	2.046	6	652	7.289
09:00 - 10:00	6	652	1.330	6	652	0.563	6	652	1.893
10:00 - 11:00	6	652	0.179	6	652	0.102	6	652	0.281
11:00 - 12:00	6	652	0.307	6	652	0.767	6	652	1.074
12:00 - 13:00	6	652	2.890	6	652	2.737	6	652	5.627
13:00 - 14:00	6	652	1.714	6	652	2.276	6	652	3.990
14:00 - 15:00	6	652	0.256	6	652	0.384	6	652	0.640
15:00 - 16:00	6	652	1.049	6	652	1.483	6	652	2.532
16:00 - 17:00	6	652	0.870	6	652	2.097	6	652	2.967
17:00 - 18:00	6	652	1.816	6	652	3.632	6	652	5.448
18:00 - 19:00	6	652	0.128	6	652	1.841	6	652	1.969
19:00 - 20:00	1	400	0.000	1	400	0.000	1	400	0.000
20:00 - 21:00	1	400	0.000	1	400	0.000	1	400	0.000
21:00 - 22:00	1	400	0.000	1	400	0.000	1	400	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			18.493			18,491			36.984

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.

TRIP RATE for Land Use 04 - EDUCATION/D - NURSERY MULTI-MODAL CARS Calculation factor: 100 sqm BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	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	1	400	0.000	1	400	0.000	1	400	0.000
07:00 - 08:00	6	652	0.844	6	652	0.256	6	652	1.100
08:00 - 09:00	6	652	1.765	6	652	1.330	6	652	3.095
09:00 - 10:00	6	652	0.537	6	652	0.409	6	652	0.946
10:00 - 11:00	6	652	0.051	6	652	0.051	6	652	0.102
11:00 - 12:00	6	652	0.026	6	652	0.051	6	652	0.077
12:00 - 13:00	6	652	0.716	6	652	0.844	6	652	1.560
13:00 - 14:00	6	652	0.716	6	652	0.921	6	652	1.637
14:00 - 15:00	6	652	0.077	6	652	0.179	6	652	0.256
15:00 - 16:00	6	652	0.409	6	652	0.332	6	652	0.741
16:00 - 17:00	6	652	0.563	6	652	0.563	6	652	1.126
17:00 - 18:00	6	652	1.253	6	652	1.483	6	652	2.736
18:00 - 19:00	6	652	0.128	6	652	0.665	6	652	0.793
19:00 - 20:00	1	400	0.000	1	400	0.000	1	400	0.000
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:	Total Rates: 7.085 7.084 14.16								14.169

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.

TRIP RATE for Land Use 04 - EDUCATION/D - NURSERY MULTI-MODAL LGVS Calculation factor: 100 sqm BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS					
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip			
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	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	1	400	0.000	1	400	0.000	1	400	0.000			
07:00 - 08:00	6	652	0.000	6	652	0.000	6	652	0.000			
08:00 - 09:00	6	652	0.051	6	652	0.051	6	652	0.102			
09:00 - 10:00	6	652	0.000	6	652	0.000	6	652	0.000			
10:00 - 11:00	6	652	0.026	6	652	0.000	6	652	0.026			
11:00 - 12:00	6	652	0.051	6	652	0.026	6	652	0.077			
12:00 - 13:00	6	652	0.000	6	652	0.026	6	652	0.026			
13:00 - 14:00	6	652	0.026	6	652	0.000	6	652	0.026			
14:00 - 15:00	6	652	0.000	6	652	0.000	6	652	0.000			
15:00 - 16:00	6	652	0.000	6	652	0.026	6	652	0.026			
16:00 - 17:00	6	652	0.026	6	652	0.026	6	652	0.052			
17:00 - 18:00	6	652	0.000	6	652	0.026	6	652	0.026			
18:00 - 19:00	6	652	0.000	6	652	0.000	6	652	0.000			
19:00 - 20:00	1	400	0.000	1	400	0.000	1	400	0.000			
20:00 - 21:00												
21:00 - 22:00												
22:00 - 23:00												
23:00 - 24:00												
Total Rates:			0.180		Total Rates: 0.180 0.181 0.361							

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.

TRIP RATE for Land Use 04 - EDUCATION/D - NURSERY MULTI-MODAL Scooters Calculation factor: 100 sqm BOLD print indicates peak (busiest) period

	ARRIVALS				DEPARTURES			TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip	
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	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	1	400	0.000	1	400	0.000	1	400	0.000	
07:00 - 08:00	6	652	0.026	6	652	0.000	6	652	0.026	
08:00 - 09:00	6	652	0.000	6	652	0.000	6	652	0.000	
09:00 - 10:00	6	652	0.000	6	652	0.000	6	652	0.000	
10:00 - 11:00	6	652	0.000	6	652	0.000	6	652	0.000	
11:00 - 12:00	6	652	0.000	6	652	0.000	6	652	0.000	
12:00 - 13:00	6	652	0.000	6	652	0.026	6	652	0.026	
13:00 - 14:00	6	652	0.026	6	652	0.000	6	652	0.026	
14:00 - 15:00	6	652	0.000	6	652	0.000	6	652	0.000	
15:00 - 16:00	6	652	0.000	6	652	0.000	6	652	0.000	
16:00 - 17:00	6	652	0.000	6	652	0.000	6	652	0.000	
17:00 - 18:00	6	652	0.000	6	652	0.026	6	652	0.026	
18:00 - 19:00	6	652	0.000	6	652	0.000	6	652	0.000	
19:00 - 20:00	1	400	0.000	1	400	0.000	1	400	0.000	
20:00 - 21:00										
21:00 - 22:00										
22:00 - 23:00										
23:00 - 24:00										
Total Rates:	Total Rates: 0.052 0.052 0.10									

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.

Calculation Reference: AUDIT-204602-221214-1259

# TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use	: 01 - RETAIL
Category	: I - SHOPPING CENTRE - LOCAL SHOPS
MULTI-	MODAL TOTAL VEHICLES

Selec	ted red	gions and areas:	
05	EAST	MIDLANDS	
	LR	LEICESTER	1 days
07	YORK	SHIRE & NORTH LINCOLNSHIRE	
	SY	SOUTH YORKSHIRE	1 days
13	MUNS	STER	-
	CR	CORK	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: Actual Range: Range Selected by User:	Gross floor area 550 to 1645 (units: sqm) 240 to 3394 (units: sqm)
Parking Spaces Range:	All Surveys Included
Public Transport Provision: Selection by:	Include all surveys
Date Range: 01/01/	'14 to 17/09/21
This data displays the rang included in the trip rate cal	re of survey dates selected. Only surveys that were conducted within this date range are Iculation.
Selected survey days:	1 days
Friday	2 days
This data displays the num	ber of selected surveys by day of the week.
Selected survey types:	
Manual count	3 days
Directional ATC Count	0 davs

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.

> 1 2

2 1

<u>Selected Locations:</u>	
Edge of Town	
Neighbourhood Centre (PPS6 Local Centre)	

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

Selected Location Sub Categories:	
Residential Zone	
Retail Zone	

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.

TRICS	7.9.3 071022 B20.58	Database right	of TRICS C	Consortium L	imited, 202	2. All rights	reserved	Wednesday	14/12/22 Page 2
AECOM	Clarence Street West	Belfast						Licence	No: 204602
	Secondary Filtering s	election:							
	Use Class:								
	n/a			3 days					
	This data displays the i has been used for this ,	number of surve ourpose, which	ys per Use can be fouri	Class classifi nd within the	ication with Library mo	oin the select Indule of TRIC	ted set. The CS®.	Use Classes Ordel	r 2005
	Population within 500n	n Range:							
	All Surveys Included								
	Population within 1 mil	<u>e:</u>							
	10,001 to 15,000			1 days					
	20,001 10 25,000			z uays					
	This data displays the i	number of select	ed surveys	within state	d 1-mile rad	dii of popula	ation.		
	Population within 5 mil	<u>es:</u>							
	125,001 to 250,000			2 days					
	250,001 to 500,000			1 days					
	This data displays the i	number of select	ed surveys	within state	d 5-mile rad	dii of popula	ation.		
	Car ownership within 5	miles:							
	0.6 to 1.0			1 days					
	1.1 to 1.5			2 days					
	This data displays the i within a radius of 5-mi	number of select les of selected st	ted surveys urvey sites.	within state	od ranges of	<sup>f</sup> average ca	prs owned pe	er residential dwell.	ling,
	Petrol filling station:	count		0 days					
	Excluded from count or	no filling station	ı	3 days					
			•	s aays					

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

 No
 3 days

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

<u>PTAL Rating:</u> No PTAL Present

Travel Plan:

3 days

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

TRICS 7	.9.3	071022 B20.58	Database r	right of TRICS	Consortium Limit	ed, 2022.	All rights reserved	Wednesday	14/12/22 Page 3
AECOM	Cla	rence Street West	Belfast					Licence	No: 204602
	1157	OF SITES relevant	ta coloctia	n naramatara					
4	131	OF SITES TELEVALL	U SEIECTION	T parameters					
	1	CR-01-I-01	LOCAL	SHOPS			CORK		
		BISHOPSTOWN RC	DAD						
		CORK							
		WILTON Neighbourbood Cei	ntra (PPSA	Local Centre	)				
		Retail Zone							
		Total Gross floor a	rea:		1575 sqm				
		Survey date	e: FRIDAY		23/03/18		Survey Type: MANUA	12	
	2	LR-01-I-02	LOCAL	SHOPS			LEICESTER		
		LEICESTER							
		LEIGESTER							
		Edge of Town							
		Residential Zone							
		Total Gross floor a	rea:	41/	550 sqm		Curvey Type, MANUL	<i>1 /</i>	
	З	SY-01-L-01		SHOPS	28/10/14		SOUTH YORKSHIRE	12	
	0	EVERINGHAM ROA	D	51101 5			SOUTH FORRESTINE		
		DONCASTER							
		CANTLEY							
		Neighbourhood Cei	ntre (PPS6	Local Centre	)				
		Total Gross floor a	roa.		1645 sam				
		Survev date	e: FRIDAY	,	17/09/21		Survev Type: MANUA	12	
							5 57		

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 01 - RETAIL/I - SHOPPING CENTRE - LOCAL SHOPS MULTI-MODAL TOTAL VEHICLES Calculation factor: 100 sqm BOLD print indicates peak (busiest) period Total People to Total Vehicles ratio (all time periods and directions): 1.79

		ARRIVALS		[	DEPARTURES	5		TOTALS	
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	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	1	1645	1.277	1	1645	0.912	1	1645	2.189
07:00 - 08:00	3	1257	1.963	3	1257	1.618	3	1257	3.581
08:00 - 09:00	3	1257	3.316	3	1257	2.812	3	1257	6.128
09:00 - 10:00	3	1257	3.183	3	1257	2.626	3	1257	5.809
10:00 - 11:00	3	1257	4.324	3	1257	3.660	3	1257	7.984
11:00 - 12:00	3	1257	3.448	3	1257	3.714	3	1257	7.162
12:00 - 13:00	3	1257	5.995	3	1257	5.836	3	1257	11.831
13:00 - 14:00	3	1257	5.942	3	1257	6.101	3	1257	12.043
14:00 - 15:00	3	1257	4.483	3	1257	4.324	3	1257	8.807
15:00 - 16:00	3	1257	4.695	3	1257	4.801	3	1257	9.496
16:00 - 17:00	3	1257	4.960	3	1257	5.013	3	1257	9.973
17:00 - 18:00	3	1257	4.801	3	1257	5.411	3	1257	10.212
18:00 - 19:00	3	1257	3.899	3	1257	4.032	3	1257	7.931
19:00 - 20:00	3	1257	3.395	3	1257	3.846	3	1257	7.241
20:00 - 21:00	3	1257	2.095	3	1257	2.308	3	1257	4.403
21:00 - 22:00	3	1257	1.485	3	1257	1.936	3	1257	3.421
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			59.261			58.950			118.211

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

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

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#### Parameter summary

Trip rate parameter range selected:	550 - 1645 (units: sqm)
Survey date date range:	01/01/14 - 17/09/21
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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

TRIP RATE for Land Use 01 - RETAIL/I - SHOPPING CENTRE - LOCAL SHOPS MULTI-MODAL TAXIS Calculation factor: 100 sqm BOLD print indicates peak (busiest) period

		ARRIVALS			DEPARTURES			TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip	
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	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	1	1645	0.000	1	1645	0.000	1	1645	0.000	
07:00 - 08:00	3	1257	0.000	3	1257	0.000	3	1257	0.000	
08:00 - 09:00	3	1257	0.027	3	1257	0.027	3	1257	0.054	
09:00 - 10:00	3	1257	0.000	3	1257	0.000	3	1257	0.000	
10:00 - 11:00	3	1257	0.000	3	1257	0.000	3	1257	0.000	
11:00 - 12:00	3	1257	0.053	3	1257	0.053	3	1257	0.106	
12:00 - 13:00	3	1257	0.027	3	1257	0.027	3	1257	0.054	
13:00 - 14:00	3	1257	0.053	3	1257	0.053	3	1257	0.106	
14:00 - 15:00	3	1257	0.000	3	1257	0.000	3	1257	0.000	
15:00 - 16:00	3	1257	0.027	3	1257	0.027	3	1257	0.054	
16:00 - 17:00	3	1257	0.027	3	1257	0.027	3	1257	0.054	
17:00 - 18:00	3	1257	0.053	3	1257	0.053	3	1257	0.106	
18:00 - 19:00	3	1257	0.000	3	1257	0.000	3	1257	0.000	
19:00 - 20:00	3	1257	0.000	3	1257	0.000	3	1257	0.000	
20:00 - 21:00	3	1257	0.027	3	1257	0.027	3	1257	0.054	
21:00 - 22:00	3	1257	0.000	3	1257	0.000	3	1257	0.000	
22:00 - 23:00										
23:00 - 24:00										
Total Rates:			0.294			0.294			0.588	

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

TRIP RATE for Land Use 01 - RETAIL/I - SHOPPING CENTRE - LOCAL SHOPS MULTI-MODAL OGVS Calculation factor: 100 sqm BOLD print indicates peak (busiest) period

		ARRIVALS			DEPARTURES	;	TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	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	1	1645	0.000	1	1645	0.000	1	1645	0.000
07:00 - 08:00	3	1257	0.053	3	1257	0.053	3	1257	0.106
08:00 - 09:00	3	1257	0.053	3	1257	0.053	3	1257	0.106
09:00 - 10:00	3	1257	0.080	3	1257	0.080	3	1257	0.160
10:00 - 11:00	3	1257	0.027	3	1257	0.027	3	1257	0.054
11:00 - 12:00	3	1257	0.053	3	1257	0.053	3	1257	0.106
12:00 - 13:00	3	1257	0.053	3	1257	0.053	3	1257	0.106
13:00 - 14:00	3	1257	0.000	3	1257	0.000	3	1257	0.000
14:00 - 15:00	3	1257	0.080	3	1257	0.080	3	1257	0.160
15:00 - 16:00	3	1257	0.027	3	1257	0.027	3	1257	0.054
16:00 - 17:00	3	1257	0.053	3	1257	0.053	3	1257	0.106
17:00 - 18:00	3	1257	0.027	3	1257	0.000	3	1257	0.027
18:00 - 19:00	3	1257	0.000	3	1257	0.027	3	1257	0.027
19:00 - 20:00	3	1257	0.000	3	1257	0.000	3	1257	0.000
20:00 - 21:00	3	1257	0.000	3	1257	0.000	3	1257	0.000
21:00 - 22:00	3	1257	0.000	3	1257	0.000	3	1257	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.506			1.012			

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.

TRIP RATE for Land Use 01 - RETAIL/I - SHOPPING CENTRE - LOCAL SHOPS MULTI-MODAL CYCLISTS Calculation factor: 100 sqm BOLD print indicates peak (busiest) period

		ARRIVALS			DEPARTURES			TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip	
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	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	1	1645	0.000	1	1645	0.000	1	1645	0.000	
07:00 - 08:00	3	1257	0.000	3	1257	0.000	3	1257	0.000	
08:00 - 09:00	3	1257	0.027	3	1257	0.027	3	1257	0.054	
09:00 - 10:00	3	1257	0.053	3	1257	0.027	3	1257	0.080	
10:00 - 11:00	3	1257	0.053	3	1257	0.027	3	1257	0.080	
11:00 - 12:00	3	1257	0.027	3	1257	0.080	3	1257	0.107	
12:00 - 13:00	3	1257	0.027	3	1257	0.027	3	1257	0.054	
13:00 - 14:00	3	1257	0.080	3	1257	0.053	3	1257	0.133	
14:00 - 15:00	3	1257	0.000	3	1257	0.000	3	1257	0.000	
15:00 - 16:00	3	1257	0.053	3	1257	0.027	3	1257	0.080	
16:00 - 17:00	3	1257	0.053	3	1257	0.080	3	1257	0.133	
17:00 - 18:00	3	1257	0.053	3	1257	0.027	3	1257	0.080	
18:00 - 19:00	3	1257	0.053	3	1257	0.053	3	1257	0.106	
19:00 - 20:00	3	1257	0.080	3	1257	0.080	3	1257	0.160	
20:00 - 21:00	3	1257	0.000	3	1257	0.000	3	1257	0.000	
21:00 - 22:00	3	1257	0.000	3	1257	0.000	3	1257	0.000	
22:00 - 23:00										
23:00 - 24:00										
Total Rates:			0.559			0.508			1.067	

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.

### TRIP RATE for Land Use 01 - RETAIL/I - SHOPPING CENTRE - LOCAL SHOPS MULTI-MODAL VEHICLE OCCUPANTS Calculation factor: 100 sqm BOLD print indicates peak (busiest) period

		ARRIVALS			DEPARTURES	5	TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	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	1	1645	1.459	1	1645	0.973	1	1645	2.432
07:00 - 08:00	3	1257	2.308	3	1257	1.883	3	1257	4.191
08:00 - 09:00	3	1257	4.297	3	1257	3.554	3	1257	7.851
09:00 - 10:00	3	1257	3.926	3	1257	3.210	3	1257	7.136
10:00 - 11:00	3	1257	5.411	3	1257	4.536	3	1257	9.947
11:00 - 12:00	3	1257	4.377	3	1257	4.615	3	1257	8.992
12:00 - 13:00	3	1257	7.507	3	1257	7.109	3	1257	14.616
13:00 - 14:00	3	1257	7.719	3	1257	7.772	3	1257	15.491
14:00 - 15:00	3	1257	5.570	3	1257	5.676	3	1257	11.246
15:00 - 16:00	3	1257	5.809	3	1257	5.995	3	1257	11.804
16:00 - 17:00	3	1257	6.366	3	1257	6.499	3	1257	12.865
17:00 - 18:00	3	1257	6.419	3	1257	7.056	3	1257	13.475
18:00 - 19:00	3	1257	6.154	3	1257	5.729	3	1257	11.883
19:00 - 20:00	3	1257	5.119	3	1257	5.809	3	1257	10.928
20:00 - 21:00	3	1257	2.918	3	1257	3.687	3	1257	6.605
21:00 - 22:00	3	1257	1.777	3	1257	2.308	3	1257	4.085
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			77.136			76.411			153.547

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.

TRIP RATE for Land Use 01 - RETAIL/I - SHOPPING CENTRE - LOCAL SHOPS MULTI - MODAL PEDESTRIANS Calculation factor: 100 sqm BOLD print indicates peak (busiest) period

		ARRIVALS			DEPARTURES	;	TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	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	1	1645	0.061	1	1645	0.061	1	1645	0.122
07:00 - 08:00	3	1257	0.531	3	1257	0.610	3	1257	1.141
08:00 - 09:00	3	1257	0.610	3	1257	0.743	3	1257	1.353
09:00 - 10:00	3	1257	1.300	3	1257	1.141	3	1257	2.441
10:00 - 11:00	3	1257	1.220	3	1257	1.114	3	1257	2.334
11:00 - 12:00	3	1257	1.592	3	1257	1.273	3	1257	2.865
12:00 - 13:00	3	1257	3.660	3	1257	2.891	3	1257	6.551
13:00 - 14:00	3	1257	3.687	3	1257	3.660	3	1257	7.347
14:00 - 15:00	3	1257	2.414	3	1257	3.050	3	1257	5.464
15:00 - 16:00	3	1257	2.202	3	1257	2.706	3	1257	4.908
16:00 - 17:00	3	1257	1.910	3	1257	1.724	3	1257	3.634
17:00 - 18:00	3	1257	1.512	3	1257	1.698	3	1257	3.210
18:00 - 19:00	3	1257	1.406	3	1257	1.432	3	1257	2.838
19:00 - 20:00	3	1257	1.883	3	1257	2.016	3	1257	3.899
20:00 - 21:00	3	1257	0.928	3	1257	1.273	3	1257	2.201
21:00 - 22:00	3	1257	0.743	3	1257	1.034	3	1257	1.777
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			25.659			26.426			52.085

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.

# TRIP RATE for Land Use 01 - RETAIL/I - SHOPPING CENTRE - LOCAL SHOPS MULTI-MODAL BUS/TRAM PASSENGERS Calculation factor: 100 sqm BOLD print indicates peak (busiest) period

		ARRIVALS			DEPARTURES		TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	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	1	1645	0.000	1	1645	0.000	1	1645	0.000
07:00 - 08:00	3	1257	0.186	3	1257	0.106	3	1257	0.292
08:00 - 09:00	3	1257	0.239	3	1257	0.027	3	1257	0.266
09:00 - 10:00	3	1257	0.080	3	1257	0.027	3	1257	0.107
10:00 - 11:00	3	1257	0.265	3	1257	0.186	3	1257	0.451
11:00 - 12:00	3	1257	0.027	3	1257	0.106	3	1257	0.133
12:00 - 13:00	3	1257	0.239	3	1257	0.159	3	1257	0.398
13:00 - 14:00	3	1257	0.398	3	1257	0.159	3	1257	0.557
14:00 - 15:00	3	1257	0.265	3	1257	0.106	3	1257	0.371
15:00 - 16:00	3	1257	0.186	3	1257	0.239	3	1257	0.425
16:00 - 17:00	3	1257	0.133	3	1257	0.265	3	1257	0.398
17:00 - 18:00	3	1257	0.027	3	1257	0.159	3	1257	0.186
18:00 - 19:00	3	1257	0.000	3	1257	0.000	3	1257	0.000
19:00 - 20:00	3	1257	0.053	3	1257	0.106	3	1257	0.159
20:00 - 21:00	3	1257	0.053	3	1257	0.027	3	1257	0.080
21:00 - 22:00	3	1257	0.106	3	1257	0.000	3	1257	0.106
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.257			1.672			3.929

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.

### TRIP RATE for Land Use 01 - RETAIL/I - SHOPPING CENTRE - LOCAL SHOPS MULTI-MODAL PUBLIC TRANSPORT USERS Calculation factor: 100 sqm BOLD print indicates peak (busiest) period

		ARRIVALS			DEPARTURES	;	TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	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	1	1645	0.000	1	1645	0.000	1	1645	0.000
07:00 - 08:00	3	1257	0.186	3	1257	0.106	3	1257	0.292
08:00 - 09:00	3	1257	0.239	3	1257	0.027	3	1257	0.266
09:00 - 10:00	3	1257	0.080	3	1257	0.027	3	1257	0.107
10:00 - 11:00	3	1257	0.265	3	1257	0.186	3	1257	0.451
11:00 - 12:00	3	1257	0.027	3	1257	0.106	3	1257	0.133
12:00 - 13:00	3	1257	0.239	3	1257	0.159	3	1257	0.398
13:00 - 14:00	3	1257	0.398	3	1257	0.159	3	1257	0.557
14:00 - 15:00	3	1257	0.265	3	1257	0.106	3	1257	0.371
15:00 - 16:00	3	1257	0.186	3	1257	0.239	3	1257	0.425
16:00 - 17:00	3	1257	0.133	3	1257	0.265	3	1257	0.398
17:00 - 18:00	3	1257	0.027	3	1257	0.159	3	1257	0.186
18:00 - 19:00	3	1257	0.000	3	1257	0.000	3	1257	0.000
19:00 - 20:00	3	1257	0.053	3	1257	0.106	3	1257	0.159
20:00 - 21:00	3	1257	0.053	3	1257	0.027	3	1257	0.080
21:00 - 22:00	3	1257	0.106	3	1257	0.000	3	1257	0.106
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.257			1.672			3.929

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.

### TRIP RATE for Land Use 01 - RETAIL/I - SHOPPING CENTRE - LOCAL SHOPS MULTI - MODAL TOTAL PEOPLE Calculation factor: 100 sqm BOLD print indicates peak (busiest) period Total People to Total Vehicles ratio (all time periods and directions): 1.79

		ARRIVALS			DEPARTURES	;	TOTALS			
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip	
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	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	1	1645	1.520	1	1645	1.033	1	1645	2.553	
07:00 - 08:00	3	1257	3.024	3	1257	2.599	3	1257	5.623	
08:00 - 09:00	3	1257	5.172	3	1257	4.350	3	1257	9.522	
09:00 - 10:00	3	1257	5.358	3	1257	4.403	3	1257	9.761	
10:00 - 11:00	3	1257	6.950	3	1257	5.862	3	1257	12.812	
11:00 - 12:00	3	1257	6.021	3	1257	6.074	3	1257	12.095	
12:00 - 13:00	3	1257	11.432	3	1257	10.186	3	1257	21.618	
13:00 - 14:00	3	1257	11.883	3	1257	11.645	3	1257	23.528	
14:00 - 15:00	3	1257	8.249	3	1257	8.833	3	1257	17.082	
15:00 - 16:00	3	1257	8.249	3	1257	8.966	3	1257	17.215	
16:00 - 17:00	3	1257	8.462	3	1257	8.568	3	1257	17.030	
17:00 - 18:00	3	1257	8.011	3	1257	8.939	3	1257	16.950	
18:00 - 19:00	3	1257	7.613	3	1257	7.215	3	1257	14.828	
19:00 - 20:00	3	1257	7.135	3	1257	8.011	3	1257	15.146	
20:00 - 21:00	3	1257	3.899	3	1257	4.987	3	1257	8.886	
21:00 - 22:00	3	1257	2.626	3	1257	3.342	3	1257	5.968	
22:00 - 23:00										
23:00 - 24:00										
Total Rates:			105.604			105.013			210.617	

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.

TRIP RATE for Land Use 01 - RETAIL/I - SHOPPING CENTRE - LOCAL SHOPS MULTI-MODAL CARS Calculation factor: 100 sqm BOLD print indicates peak (busiest) period

	ARRIVALS		DEPARTURES			TOTALS			
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	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	1	1645	1.277	1	1645	0.912	1	1645	2.189
07:00 - 08:00	3	1257	1.592	3	1257	1.273	3	1257	2.865
08:00 - 09:00	3	1257	2.865	3	1257	2.414	3	1257	5.279
09:00 - 10:00	3	1257	2.891	3	1257	2.387	3	1257	5.278
10:00 - 11:00	3	1257	3.740	3	1257	3.050	3	1257	6.790
11:00 - 12:00	3	1257	2.918	3	1257	3.156	3	1257	6.074
12:00 - 13:00	3	1257	5.305	3	1257	5.225	3	1257	10.530
13:00 - 14:00	3	1257	5.438	3	1257	5.676	3	1257	11.114
14:00 - 15:00	3	1257	3.899	3	1257	3.767	3	1257	7.666
15:00 - 16:00	3	1257	4.218	3	1257	4.297	3	1257	8.515
16:00 - 17:00	3	1257	4.589	3	1257	4.483	3	1257	9.072
17:00 - 18:00	3	1257	4.483	3	1257	5.093	3	1257	9.576
18:00 - 19:00	3	1257	3.767	3	1257	3.873	3	1257	7.640
19:00 - 20:00	3	1257	3.210	3	1257	3.687	3	1257	6.897
20:00 - 21:00	3	1257	1.963	3	1257	2.175	3	1257	4.138
21:00 - 22:00	3	1257	1.406	3	1257	1.804	3	1257	3.210
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			53.561			53.272			106.833

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.

TRIP RATE for Land Use 01 - RETAIL/I - SHOPPING CENTRE - LOCAL SHOPS MULTI - MODAL LGVS Calculation factor: 100 sqm BOLD print indicates peak (busiest) period

	ARRIVALS		DEPARTURES			TOTALS			
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	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	1	1645	0.000	1	1645	0.000	1	1645	0.000
07:00 - 08:00	3	1257	0.292	3	1257	0.265	3	1257	0.557
08:00 - 09:00	3	1257	0.371	3	1257	0.318	3	1257	0.689
09:00 - 10:00	3	1257	0.212	3	1257	0.159	3	1257	0.371
10:00 - 11:00	3	1257	0.531	3	1257	0.557	3	1257	1.088
11:00 - 12:00	3	1257	0.424	3	1257	0.451	3	1257	0.875
12:00 - 13:00	3	1257	0.584	3	1257	0.504	3	1257	1.088
13:00 - 14:00	3	1257	0.398	3	1257	0.318	3	1257	0.716
14:00 - 15:00	3	1257	0.477	3	1257	0.451	3	1257	0.928
15:00 - 16:00	3	1257	0.424	3	1257	0.451	3	1257	0.875
16:00 - 17:00	3	1257	0.265	3	1257	0.424	3	1257	0.689
17:00 - 18:00	3	1257	0.239	3	1257	0.265	3	1257	0.504
18:00 - 19:00	3	1257	0.292	3	1257	0.133	3	1257	0.425
19:00 - 20:00	3	1257	0.186	3	1257	0.159	3	1257	0.345
20:00 - 21:00	3	1257	0.106	3	1257	0.106	3	1257	0.212
21:00 - 22:00	3	1257	0.053	3	1257	0.106	3	1257	0.159
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			4.854			4.667			9.521

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.

# TRIP RATE for Land Use 01 - RETAIL/I - SHOPPING CENTRE - LOCAL SHOPS MULTI - MODAL MOTOR CYCLES Calculation factor: 100 sqm BOLD print indicates peak (busiest) period

	ARRIVALS		DEPARTURES			TOTALS			
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	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	1	1645	0.000	1	1645	0.000	1	1645	0.000
07:00 - 08:00	3	1257	0.027	3	1257	0.027	3	1257	0.054
08:00 - 09:00	3	1257	0.000	3	1257	0.000	3	1257	0.000
09:00 - 10:00	3	1257	0.000	3	1257	0.000	3	1257	0.000
10:00 - 11:00	3	1257	0.027	3	1257	0.027	3	1257	0.054
11:00 - 12:00	3	1257	0.000	3	1257	0.000	3	1257	0.000
12:00 - 13:00	3	1257	0.027	3	1257	0.027	3	1257	0.054
13:00 - 14:00	3	1257	0.053	3	1257	0.053	3	1257	0.106
14:00 - 15:00	3	1257	0.027	3	1257	0.027	3	1257	0.054
15:00 - 16:00	3	1257	0.000	3	1257	0.000	3	1257	0.000
16:00 - 17:00	3	1257	0.027	3	1257	0.027	3	1257	0.054
17:00 - 18:00	3	1257	0.000	3	1257	0.000	3	1257	0.000
18:00 - 19:00	3	1257	0.000	3	1257	0.000	3	1257	0.000
19:00 - 20:00	3	1257	0.000	3	1257	0.000	3	1257	0.000
20:00 - 21:00	3	1257	0.000	3	1257	0.000	3	1257	0.000
21:00 - 22:00	3	1257	0.027	3	1257	0.027	3	1257	0.054
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.215			0.215			0.430

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.

#### TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 06 - HOTEL, FOOD & DRINK Category : B - RESTAURANTS MULTI-MODAL TOTAL VEHICLES

Sele	cted re	gions and areas:	
03	SOUT	TH WEST	
	DC	DORSET	1 days
05	EAST	MIDLANDS	
	DY	DERBY	1 days
	LN	LINCOLNSHIRE	1 days
06	WES	T MIDLANDS	
	WM	WEST MIDLANDS	3 days
80	NOR	TH WEST	
	EC	CHESHIRE EAST	2 days
09	NOR	TH	
	СВ	CUMBRIA	1 days
12	CON	NAUGHT	
	GA	GALWAY	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:	Gross floor area	
Actual Range:	75 to 1300 (units: sqm)	
Range Selected by User:	75 to 2400 (units: sqm)	
Parking Spaces Range:	All Surveys Included	
Dublic Transport Dravision.		
Public Transport Provision:		
Selection by:		Include all surveys

Date Range: 01/01/14 to 25/09/19

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.

<u>Selected survey days:</u>	
Monday	1 days
Tuesday	2 days
Wednesday	1 days
Thursday	2 days
Friday	1 days
Saturday	3 days

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

<u>Selected survey types:</u>	
Manual count	10 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.

<u>Selected Locations:</u>	
Town Centre	6
Edge of Town Centre	2
Neighbourhood Centre (PPS6 Local Centre)	2

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

Selected Location Sub Categories:	
Development Zone	
Built-Up Zone	
High Street	

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,

1 5 4 Secondary Filtering selection:

Clarence Street West

<u>Use Class:</u> E(b)

AECOM

10 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:

 15,001 to 20,000
 2 days

 20,001 to 25,000
 2 days

 25,001 to 50,000
 6 days

Belfast

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

Population within 5 miles:	
25,001 to 50,000	1 days
75,001 to 100,000	4 days
125,001 to 250,000	1 days
250,001 to 500,000	4 days

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

<u>Car ownership within 5 miles:</u>	
0.5 or Less	1 days
0.6 to 1.0	5 days
1.1 to 1.5	4 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.

<u>Travel Plan:</u> No

10 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

10 days

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

2.0

1	CB-06-B-01 MARKET STREET CARLISLE	ITALIAN RESTAURAN	Т	CUMBRIA
2	Town Centre Built-Up Zone Total Gross floor area <i>Survey date:</i> DC-06-B-02 HIGH WEST STREET DORCHESTER	a: <i>SATURDAY</i> PREZZO	150 sqm <i>25/06/16</i>	<i>Survey Type: MANUAL</i> DORSET
3	Town Centre High Street Total Gross floor area <i>Survey date:</i> DY-06-B-04 FRIAR GATE DERBY	a: <i>FRIDAY</i> FRENCH RESTAURANT	525 sqm <i>16/09/16</i>	<i>Survey Type: MANUAL</i> DERBY
4	Town Centre High Street Total Gross floor area <i>Survey date:</i> EC-06-B-01 MILL STREET MACCLESFIELD	a: <i>WEDNESDAY</i> ITALIAN RESTAURAN <sup>-</sup>	180 sqm <i>25/09/19</i> T	<i>Survey Type: MANUAL</i> CHESHIRE EAST
5	Town Centre Built-Up Zone Total Gross floor area <i>Survey date:</i> EC-06-B-02 MARKET PLACE MACCLESFIELD	a: <i>SATURDAY</i> PIZZA EXPRESS	75 sqm <i>17/09/16</i>	<i>Survey Type: MANUAL</i> CHESHIRE EAST
6	Town Centre Built-Up Zone Total Gross floor area <i>Survey date:</i> GA-06-B-01 MIDDLE STREET GALWAY	a: <i>SATURDAY</i> PIZZA RESTAURANT	321 sqm <i>11/11/17</i>	<i>Survey Type: MANUAL</i> GALWAY
7	Town Centre Built-Up Zone Total Gross floor area Survey date: LN-06-B-01 BRAYFORD WHARF N LINCOLN	a: <i>MONDAY</i> PREZZO IORTH	1300 sqm <i>27/05/19</i>	<i>Survey Type: MANUAL</i> LI NCOLNSHI RE
8	BRAYFORD WHARF Edge of Town Centre Development Zone Total Gross floor area <i>Survey date:</i> WM-06-B-05 THE BUTTS COVENTRY	a: <i>TUESDAY</i> AKBARS	1136 sqm <i>10/10/17</i>	<i>Survey Type: MANUAL</i> WEST MIDLANDS
	Edge of Town Centre Built-Up Zone Total Gross floor area <i>Survey date:</i>	a: THURSDAY	600 sqm <i>17/11/16</i>	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

9	WM-06-B-06 ITALIAN RESTAURAN EARLSDON STREET COVENTRY	ITALIAN RESTAURANT			
	Neighbourhood Centre (PPS6 Local Centre) High Street Total Gross floor area:	175 sqm	SURVEY TYPE: MANUAL		
10	WM-06-B-07 INDIAN RESTAURANT AUDNAM STOURBRIDGE AUDNAM Neighbourhood Centre (PPS6 Local Centre) High Street	<i>24711710</i>	WEST MIDLANDS		
	Total Gross floor area: Survey date: TUESDAY	370 sqm <i>28/11/17</i>	Survey Type: MANUAL		

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

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/B - RESTAURANTS MULTI-MODAL TOTAL VEHICLES Calculation factor: 100 sqm BOLD print indicates peak (busiest) period Total People to Total Vehicles ratio (all time periods and directions): 3.36

	ARRIVALS			DEPARTURES			TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	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									
08:00 - 09:00									
09:00 - 10:00	1	175	0.571	1	175	0.571	1	175	1.142
10:00 - 11:00	5	249	1.525	5	249	0.161	5	249	1.686
11:00 - 12:00	8	483	0.673	8	483	0.414	8	483	1.087
12:00 - 13:00	8	483	1.735	8	483	0.621	8	483	2.356
13:00 - 14:00	8	483	1.709	8	483	1.450	8	483	3.159
14:00 - 15:00	8	483	0.777	8	483	1.165	8	483	1.942
15:00 - 16:00	9	470	0.473	9	470	0.662	9	470	1.135
16:00 - 17:00	10	483	0.621	10	483	0.414	10	483	1.035
17:00 - 18:00	10	483	1.511	10	483	0.683	10	483	2.194
18:00 - 19:00	10	483	2.608	10	483	1.821	10	483	4.429
19:00 - 20:00	10	483	2.690	10	483	2.194	10	483	4.884
20:00 - 21:00	10	483	1.118	10	483	1.925	10	483	3.043
21:00 - 22:00	10	483	0.517	10	483	1.676	10	483	2.193
22:00 - 23:00	10	483	0.166	10	483	1.221	10	483	1.387
23:00 - 24:00	7	457	0.031	7	457	0.437	7	457	0.468
Total Rates:			16.725			15.415			32.140

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

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

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#### Parameter summary

Trip rate parameter range selected:	75 - 1300 (units: sqm)
Survey date date range:	01/01/14 - 25/09/19
Number of weekdays (Monday-Friday):	7
Number of Saturdays:	3
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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

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

	ARRIVALS			DEPARTURES			TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	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									
08:00 - 09:00									
09:00 - 10:00	1	175	0.000	1	175	0.000	1	175	0.000
10:00 - 11:00	5	249	0.000	5	249	0.000	5	249	0.000
11:00 - 12:00	8	483	0.000	8	483	0.000	8	483	0.000
12:00 - 13:00	8	483	0.104	8	483	0.104	8	483	0.208
13:00 - 14:00	8	483	0.129	8	483	0.129	8	483	0.258
14:00 - 15:00	8	483	0.078	8	483	0.078	8	483	0.156
15:00 - 16:00	9	470	0.024	9	470	0.024	9	470	0.048
16:00 - 17:00	10	483	0.062	10	483	0.021	10	483	0.083
17:00 - 18:00	10	483	0.124	10	483	0.124	10	483	0.248
18:00 - 19:00	10	483	0.352	10	483	0.331	10	483	0.683
19:00 - 20:00	10	483	0.393	10	483	0.414	10	483	0.807
20:00 - 21:00	10	483	0.083	10	483	0.124	10	483	0.207
21:00 - 22:00	10	483	0.062	10	483	0.062	10	483	0.124
22:00 - 23:00	10	483	0.062	10	483	0.062	10	483	0.124
23:00 - 24:00	7	457	0.000	7	457	0.000	7	457	0.000
Total Rates:			1.473			1.473			2.946

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.
TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/B - RESTAURANTS MULTI-MODAL PSVS Calculation factor: 100 sqm BOLD print indicates peak (busiest) period

		ARRIVALS		l	DEPARTURES	5	TOTALS			
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip	
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	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										
08:00 - 09:00										
09:00 - 10:00	1	175	0.000	1	175	0.000	1	175	0.000	
10:00 - 11:00	5	249	0.000	5	249	0.000	5	249	0.000	
11:00 - 12:00	8	483	0.000	8	483	0.000	8	483	0.000	
12:00 - 13:00	8	483	0.000	8	483	0.000	8	483	0.000	
13:00 - 14:00	8	483	0.000	8	483	0.000	8	483	0.000	
14:00 - 15:00	8	483	0.000	8	483	0.000	8	483	0.000	
15:00 - 16:00	9	470	0.000	9	470	0.000	9	470	0.000	
16:00 - 17:00	10	483	0.000	10	483	0.000	10	483	0.000	
17:00 - 18:00	10	483	0.000	10	483	0.000	10	483	0.000	
18:00 - 19:00	10	483	0.021	10	483	0.021	10	483	0.042	
19:00 - 20:00	10	483	0.000	10	483	0.000	10	483	0.000	
20:00 - 21:00	10	483	0.000	10	483	0.000	10	483	0.000	
21:00 - 22:00	10	483	0.000	10	483	0.000	10	483	0.000	
22:00 - 23:00	10	483	0.000	10	483	0.000	10	483	0.000	
23:00 - 24:00	7	457	0.000	7	457	0.000	7	457	0.000	
Total Rates:			0.021			0.021			0.042	

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.

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

		ARRIVALS		l	DEPARTURES		TOTALS			
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip	
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	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										
08:00 - 09:00										
09:00 - 10:00	1	175	0.000	1	175	0.000	1	175	0.000	
10:00 - 11:00	5	249	0.000	5	249	0.000	5	249	0.000	
11:00 - 12:00	8	483	0.026	8	483	0.000	8	483	0.026	
12:00 - 13:00	8	483	0.000	8	483	0.000	8	483	0.000	
13:00 - 14:00	8	483	0.052	8	483	0.000	8	483	0.052	
14:00 - 15:00	8	483	0.026	8	483	0.052	8	483	0.078	
15:00 - 16:00	9	470	0.000	9	470	0.000	9	470	0.000	
16:00 - 17:00	10	483	0.000	10	483	0.021	10	483	0.021	
17:00 - 18:00	10	483	0.000	10	483	0.000	10	483	0.000	
18:00 - 19:00	10	483	0.000	10	483	0.021	10	483	0.021	
19:00 - 20:00	10	483	0.000	10	483	0.000	10	483	0.000	
20:00 - 21:00	10	483	0.000	10	483	0.000	10	483	0.000	
21:00 - 22:00	10	483	0.000	10	483	0.000	10	483	0.000	
22:00 - 23:00	10	483	0.000	10	483	0.000	10	483	0.000	
23:00 - 24:00	7	457	0.000	7	457	0.000	7	457	0.000	
Total Rates:			0.104			0.094			0.198	

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.

#### TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/B - RESTAURANTS MULTI-MODAL VEHICLE OCCUPANTS Calculation factor: 100 sqm BOLD print indicates peak (busiest) period

		ARRIVALS		[	DEPARTURES	5	TOTALS			
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip	
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	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										
08:00 - 09:00										
09:00 - 10:00	1	175	0.571	1	175	0.571	1	175	1.142	
10:00 - 11:00	5	249	2.087	5	249	0.161	5	249	2.248	
11:00 - 12:00	8	483	1.010	8	483	0.596	8	483	1.606	
12:00 - 13:00	8	483	3.366	8	483	0.854	8	483	4.220	
13:00 - 14:00	8	483	3.211	8	483	2.952	8	483	6.163	
14:00 - 15:00	8	483	1.657	8	483	2.512	8	483	4.169	
15:00 - 16:00	9	470	0.898	9	470	1.347	9	470	2.245	
16:00 - 17:00	10	483	1.635	10	483	0.807	10	483	2.442	
17:00 - 18:00	10	483	3.187	10	483	1.552	10	483	4.739	
18:00 - 19:00	10	483	4.988	10	483	3.622	10	483	8.610	
19:00 - 20:00	10	483	5.050	10	483	4.553	10	483	9.603	
20:00 - 21:00	10	483	2.194	10	483	3.704	10	483	5.898	
21:00 - 22:00	10	483	0.911	10	483	3.146	10	483	4.057	
22:00 - 23:00	10	483	0.103	10	483	2.111	10	483	2.214	
23:00 - 24:00	7	457	0.062	7	457	0.812	7	457	0.874	
Total Rates:			30.930			29.300			60.230	

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.

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/B - RESTAURANTS MULTI-MODAL PEDESTRIANS Calculation factor: 100 sqm BOLD print indicates peak (busiest) period

		ARRIVALS		[	DEPARTURES	5	TOTALS			
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip	
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	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										
08:00 - 09:00										
09:00 - 10:00	1	175	0.571	1	175	0.000	1	175	0.571	
10:00 - 11:00	5	249	0.482	5	249	0.161	5	249	0.643	
11:00 - 12:00	8	483	0.932	8	483	0.414	8	483	1.346	
12:00 - 13:00	8	483	1.605	8	483	0.647	8	483	2.252	
13:00 - 14:00	8	483	1.424	8	483	1.813	8	483	3.237	
14:00 - 15:00	8	483	1.346	8	483	2.512	8	483	3.858	
15:00 - 16:00	9	470	1.181	9	470	1.772	9	470	2.953	
16:00 - 17:00	10	483	1.221	10	483	0.911	10	483	2.132	
17:00 - 18:00	10	483	1.573	10	483	0.745	10	483	2.318	
18:00 - 19:00	10	483	2.070	10	483	0.766	10	483	2.836	
19:00 - 20:00	10	483	2.608	10	483	1.614	10	483	4.222	
20:00 - 21:00	10	483	1.511	10	483	1.325	10	483	2.836	
21:00 - 22:00	10	483	0.642	10	483	1.800	10	483	2.442	
22:00 - 23:00	10	483	0.166	10	483	1.925	10	483	2.091	
23:00 - 24:00	7	457	0.031	7	457	0.187	7	457	0.218	
Total Rates:			17.363			16.592			33.955	

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.

#### TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/B - RESTAURANTS MULTI - MODAL BUS/TRAM PASSENGERS Calculation factor: 100 sqm BOLD print indicates peak (busiest) period

		ARRIVALS			DEPARTURES		TOTALS			
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip	
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	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										
08:00 - 09:00										
09:00 - 10:00	1	175	1.143	1	175	0.000	1	175	1.143	
10:00 - 11:00	5	249	0.080	5	249	0.000	5	249	0.080	
11:00 - 12:00	8	483	0.104	8	483	0.026	8	483	0.130	
12:00 - 13:00	8	483	0.466	8	483	0.078	8	483	0.544	
13:00 - 14:00	8	483	0.155	8	483	0.259	8	483	0.414	
14:00 - 15:00	8	483	0.337	8	483	0.285	8	483	0.622	
15:00 - 16:00	9	470	0.284	9	470	0.118	9	470	0.402	
16:00 - 17:00	10	483	0.062	10	483	0.083	10	483	0.145	
17:00 - 18:00	10	483	0.373	10	483	0.186	10	483	0.559	
18:00 - 19:00	10	483	0.786	10	483	0.393	10	483	1.179	
19:00 - 20:00	10	483	0.766	10	483	0.662	10	483	1.428	
20:00 - 21:00	10	483	0.517	10	483	0.559	10	483	1.076	
21:00 - 22:00	10	483	0.248	10	483	0.890	10	483	1.138	
22:00 - 23:00	10	483	0.021	10	483	0.517	10	483	0.538	
23:00 - 24:00	7	457	0.000	7	457	0.125	7	457	0.125	
Total Rates:			5.342			4.181			9.523	

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.

#### TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/B - RESTAURANTS MULTI - MODAL TOTAL RAIL PASSENGERS Calculation factor: 100 sqm BOLD print indicates peak (busiest) period

		ARRIVALS		[	DEPARTURES		TOTALS			
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip	
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	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										
08:00 - 09:00										
09:00 - 10:00	1	175	0.000	1	175	0.000	1	175	0.000	
10:00 - 11:00	5	249	0.000	5	249	0.000	5	249	0.000	
11:00 - 12:00	8	483	0.026	8	483	0.000	8	483	0.026	
12:00 - 13:00	8	483	0.104	8	483	0.000	8	483	0.104	
13:00 - 14:00	8	483	0.104	8	483	0.000	8	483	0.104	
14:00 - 15:00	8	483	0.026	8	483	0.181	8	483	0.207	
15:00 - 16:00	9	470	0.071	9	470	0.000	9	470	0.071	
16:00 - 17:00	10	483	0.041	10	483	0.062	10	483	0.103	
17:00 - 18:00	10	483	0.000	10	483	0.083	10	483	0.083	
18:00 - 19:00	10	483	0.103	10	483	0.000	10	483	0.103	
19:00 - 20:00	10	483	0.145	10	483	0.083	10	483	0.228	
20:00 - 21:00	10	483	0.083	10	483	0.000	10	483	0.083	
21:00 - 22:00	10	483	0.000	10	483	0.103	10	483	0.103	
22:00 - 23:00	10	483	0.000	10	483	0.062	10	483	0.062	
23:00 - 24:00	7	457	0.000	7	457	0.062	7	457	0.062	
Total Rates:			0.703			0.636			1.339	

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.

#### TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/B - RESTAURANTS MULTI - MODAL PUBLIC TRANSPORT USERS Calculation factor: 100 sqm BOLD print indicates peak (busiest) period

		ARRIVALS			DEPARTURES		TOTALS			
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip	
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	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										
08:00 - 09:00										
09:00 - 10:00	1	175	1.143	1	175	0.000	1	175	1.143	
10:00 - 11:00	5	249	0.080	5	249	0.000	5	249	0.080	
11:00 - 12:00	8	483	0.129	8	483	0.026	8	483	0.155	
12:00 - 13:00	8	483	0.570	8	483	0.078	8	483	0.648	
13:00 - 14:00	8	483	0.259	8	483	0.259	8	483	0.518	
14:00 - 15:00	8	483	0.363	8	483	0.466	8	483	0.829	
15:00 - 16:00	9	470	0.354	9	470	0.118	9	470	0.472	
16:00 - 17:00	10	483	0.103	10	483	0.145	10	483	0.248	
17:00 - 18:00	10	483	0.373	10	483	0.269	10	483	0.642	
18:00 - 19:00	10	483	0.890	10	483	0.393	10	483	1.283	
19:00 - 20:00	10	483	0.911	10	483	0.745	10	483	1.656	
20:00 - 21:00	10	483	0.600	10	483	0.559	10	483	1.159	
21:00 - 22:00	10	483	0.248	10	483	0.993	10	483	1.241	
22:00 - 23:00	10	483	0.021	10	483	0.579	10	483	0.600	
23:00 - 24:00	7	457	0.000	7	457	0.187	7	457	0.187	
Total Rates:			6.044			4.817			10.861	

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.

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/B - RESTAURANTS MULTI-MODAL TOTAL PEOPLE Calculation factor: 100 sqm BOLD print indicates peak (busiest) period Total People to Total Vehicles ratio (all time periods and directions): 3.36

		ARRIVALS		[	DEPARTURES	5	TOTALS			
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip	
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	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										
08:00 - 09:00										
09:00 - 10:00	1	175	2.286	1	175	0.571	1	175	2.857	
10:00 - 11:00	5	249	2.648	5	249	0.321	5	249	2.969	
11:00 - 12:00	8	483	2.097	8	483	1.036	8	483	3.133	
12:00 - 13:00	8	483	5.541	8	483	1.579	8	483	7.120	
13:00 - 14:00	8	483	4.946	8	483	5.023	8	483	9.969	
14:00 - 15:00	8	483	3.392	8	483	5.541	8	483	8.933	
15:00 - 16:00	9	470	2.434	9	470	3.237	9	470	5.671	
16:00 - 17:00	10	483	2.959	10	483	1.883	10	483	4.842	
17:00 - 18:00	10	483	5.132	10	483	2.566	10	483	7.698	
18:00 - 19:00	10	483	7.947	10	483	4.801	10	483	12.748	
19:00 - 20:00	10	483	8.568	10	483	6.912	10	483	15.480	
20:00 - 21:00	10	483	4.305	10	483	5.588	10	483	9.893	
21:00 - 22:00	10	483	1.800	10	483	5.940	10	483	7.740	
22:00 - 23:00	10	483	0.290	10	483	4.615	10	483	4.905	
23:00 - 24:00	7	457	0.094	7	457	1.187	7	457	1.281	
Total Rates:			54.439			50.800			105.239	

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.

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

		ARRIVALS		l	DEPARTURES	5	TOTALS			
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip	
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	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										
08:00 - 09:00										
09:00 - 10:00	1	175	0.571	1	175	0.571	1	175	1.142	
10:00 - 11:00	5	249	1.364	5	249	0.080	5	249	1.444	
11:00 - 12:00	8	483	0.673	8	483	0.388	8	483	1.061	
12:00 - 13:00	8	483	1.554	8	483	0.518	8	483	2.072	
13:00 - 14:00	8	483	1.528	8	483	1.295	8	483	2.823	
14:00 - 15:00	8	483	0.647	8	483	1.010	8	483	1.657	
15:00 - 16:00	9	470	0.425	9	470	0.614	9	470	1.039	
16:00 - 17:00	10	483	0.559	10	483	0.393	10	483	0.952	
17:00 - 18:00	10	483	1.366	10	483	0.579	10	483	1.945	
18:00 - 19:00	10	483	2.132	10	483	1.490	10	483	3.622	
19:00 - 20:00	10	483	2.318	10	483	1.780	10	483	4.098	
20:00 - 21:00	10	483	1.035	10	483	1.738	10	483	2.773	
21:00 - 22:00	10	483	0.435	10	483	1.594	10	483	2.029	
22:00 - 23:00	10	483	0.103	10	483	1.097	10	483	1.200	
23:00 - 24:00	7	457	0.031	7	457	0.406	7	457	0.437	
Total Rates:			14.741			13.553			28.294	

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.

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

		ARRIVALS		l	DEPARTURES	5	TOTALS			
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip	
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	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										
08:00 - 09:00										
09:00 - 10:00	1	175	0.000	1	175	0.000	1	175	0.000	
10:00 - 11:00	5	249	0.161	5	249	0.080	5	249	0.241	
11:00 - 12:00	8	483	0.000	8	483	0.026	8	483	0.026	
12:00 - 13:00	8	483	0.078	8	483	0.026	8	483	0.104	
13:00 - 14:00	8	483	0.026	8	483	0.026	8	483	0.052	
14:00 - 15:00	8	483	0.052	8	483	0.052	8	483	0.104	
15:00 - 16:00	9	470	0.024	9	470	0.024	9	470	0.048	
16:00 - 17:00	10	483	0.000	10	483	0.000	10	483	0.000	
17:00 - 18:00	10	483	0.041	10	483	0.000	10	483	0.041	
18:00 - 19:00	10	483	0.021	10	483	0.000	10	483	0.021	
19:00 - 20:00	10	483	0.000	10	483	0.021	10	483	0.021	
20:00 - 21:00	10	483	0.000	10	483	0.021	10	483	0.021	
21:00 - 22:00	10	483	0.021	10	483	0.021	10	483	0.042	
22:00 - 23:00	10	483	0.000	10	483	0.041	10	483	0.041	
23:00 - 24:00	7	457	0.000	7	457	0.031	7	457	0.031	
Total Rates:			0.424			0.369			0.793	

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.

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

		ARRIVALS		l	DEPARTURES	5	TOTALS			
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip	
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	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										
08:00 - 09:00										
09:00 - 10:00	1	175	0.000	1	175	0.000	1	175	0.000	
10:00 - 11:00	5	249	0.000	5	249	0.000	5	249	0.000	
11:00 - 12:00	8	483	0.000	8	483	0.000	8	483	0.000	
12:00 - 13:00	8	483	0.026	8	483	0.000	8	483	0.026	
13:00 - 14:00	8	483	0.026	8	483	0.000	8	483	0.026	
14:00 - 15:00	8	483	0.000	8	483	0.026	8	483	0.026	
15:00 - 16:00	9	470	0.000	9	470	0.000	9	470	0.000	
16:00 - 17:00	10	483	0.000	10	483	0.000	10	483	0.000	
17:00 - 18:00	10	483	0.000	10	483	0.000	10	483	0.000	
18:00 - 19:00	10	483	0.041	10	483	0.000	10	483	0.041	
19:00 - 20:00	10	483	0.000	10	483	0.000	10	483	0.000	
20:00 - 21:00	10	483	0.000	10	483	0.041	10	483	0.041	
21:00 - 22:00	10	483	0.000	10	483	0.000	10	483	0.000	
22:00 - 23:00	10	483	0.000	10	483	0.021	10	483	0.021	
23:00 - 24:00	7	457	0.000	7	457	0.000	7	457	0.000	
Total Rates:			0.093			0.088			0.181	

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.

# Appendix D GoCar Letter of Consent



Red Rock Glenageary Limited Millington 3 Crosthwaite Grove Crosthwaite Park South Dun Laoghaire, Co Dublin

29/3/2023

To Whom It May Concern,

This is a letter to confirm that GoCar will look to provide a car sharing service at the proposed address, Glenageary Gate development at Glenageary of 135 residential units. GoCar representatives have discussed the project with representatives of Red Rock Developments and are excited to provide a car sharing service at the proposed location. GoCar will aim to provide 2 car sharing vehicles at the development, the 2 cars to be located at basement level. It is the intention for these vehicles to be used solely by the residents of the development.

GoCar is Ireland's leading car sharing service with over 80,000 members and over 880 cars and vans on fleet. Car sharing is a sustainable community service. Each GoCar which is placed in a community has the potential to replace the journeys of up to 15 private vehicles. With the addition of Electric Vehicles and Vans to the GoCar fleet it gives members the ability to choose from different vehicles depending on their journey needs.

The Department of Housing's Design Standards for New Apartments - Guidelines for Planning Authorities 2020 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."

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 sharing vehicles in a development such as this, the residents therein will have access to pay-as-you-go driving, near their homes, which will increase usership of the service and in-turn decrease the requirement for car ownership.

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

Morne Swart GoCar Customer Experience Carsharing Ltd Mobile: 086 162 1758 E: Morne.Swart@GoCar.ie

# Appendix E Junction 10 Outputs



# **Junctions 10**

# **PICADY 10 - Priority Intersection Module**

Version: 10.0.4.1693

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

Filename: Sallynoggin Road\_ Glenageary Avenue Junction Model\_RightTurnPocket - 11.04.23 .j10 Path: \\na.aecomnet.com\lfs\EMEA\Dublin-IEDBL2 \DCS\Projects\CI\60690914\_GlenagearyGate\400\_Technical\404\_CE\01\_Traffic\05\_Reports\01\_TTA\Junction Models Report generation date: 11/04/2023 11:26:27

»2022 Base, AM
»2022 Base, PM
»2025 Without Dev, AM
»2025 Without Dev, PM
»2025 With Dev, AM
»2025 With Dev, PM
»2030 Without Dev, AM
»2030 Without Dev, PM
»2030 With Dev, PM
»2030 With Dev, PM
»2040 Without Dev, AM
»2040 Without Dev, AM
»2040 Without Dev, AM
»2040 With Dev, AM



# Summary of junction performance

		A	M				Р	М		
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
					2022	Base				
Stream B-AC	D1	0.1	11.05	0.07	В	<b>D</b> 2	0.1	10.39	0.10	В
Stream C-B	וט	0.0	7.48	0.00	А	DZ	0.0	7.96	0.02	А
				202	5 Wit	hout D	ev			
Stream B-AC	<b>D</b> 2	0.1	11.26	0.07	В	D4	0.1	10.73	0.10	В
Stream C-B	03	0.0	7.54	0.00	А	D4	0.0	8.04	0.02	А
				20	025 W	ith Dev	/			
Stream B-AC	DE	0.2	11.52	0.17	В	De	0.3	12.49	0.22	В
Stream C-B	05	0.1	7.99	0.05	А	00	0.1	8.67	0.08	Α
				203	0 Wit	hout D	ev			
Stream B-AC	DZ	0.1	11.82	0.09	В	<b>D</b> 0	0.1	11.45	0.11	В
Stream C-B	יט	0.0	7.70	0.00	А	00	0.0	8.27	0.02	А
				20	30 W	ith Dev	/			
Stream B-AC	DO	0.2	12.32	0.18	В	D10	0.3	13.63	0.25	В
Stream C-B	09	0.1	8.17	0.05	Α	DIU	0.1	8.94	0.08	А
				204	0 Wit	hout D	ev			
Stream B-AC	D11	0.1	12.24	0.09	В	D10	0.1	11.90	0.12	В
Stream C-B	D11	0.0	7.80	0.01	А	D12	0.0	8.39	0.02	А
				20	940 W	ith Dev	/			
Stream B-AC	D12	0.2	12.78	0.19	В	D14	0.3	14.31	0.26	В
Stream C-B	013	0.1	8.27	0.05	А	D14	0.1	9.09	0.08	А

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	14/12/2022
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	EU\hilary.herlihy
Description	

# Units

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





Flows show original traffic demand (PCU/hr) Streams (downstream end) show RFC ()

The junction diagram reflects the last run of Junctions.

# **Analysis Options**

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

# **Demand Set Summary**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2022 Base	AM	ONE HOUR	09:30	11:00	15
D2	2022 Base	PM	ONE HOUR	15:45	17:15	15
D3	2025 Without Dev	AM	ONE HOUR	09:30	11:00	15
D4	2025 Without Dev	PM	ONE HOUR	15:45	17:15	15
D5	2025 With Dev	AM	ONE HOUR	09:30	11:00	15
D6	2025 With Dev	PM	ONE HOUR	15:45	17:15	15
D7	2030 Without Dev	AM	ONE HOUR	09:30	11:00	15
D8	2030 Without Dev	PM	ONE HOUR	15:45	17:15	15
D9	2030 With Dev	AM	ONE HOUR	09:30	11:00	15
D10	2030 With Dev	PM	ONE HOUR	15:45	17:15	15
D11	2040 Without Dev	AM	ONE HOUR	09:30	11:00	15
D12	2040 Without Dev	PM	ONE HOUR	15:45	17:15	15
D13	2040 With Dev	AM	ONE HOUR	09:30	11:00	15
D14	2040 With Dev	PM	ONE HOUR	15:45	17:15	15



# **Analysis Set Details**

ID	Network flow scaling factor (%)
A1	100.000



# 2022 Base, AM

### **Data Errors and Warnings**

No errors or warnings

# **Junction Network**

#### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		0.32	A

### **Junction Network**

Driving side	Lighting	Network delay (s)	Network LOS	
Left	Normal/unknown	0.32	A	

# Arms

#### Arms

Arm	Name	Description	Arm type
Α	Sallynoggin Road East		Major
в	Glenageary Avenue		Minor
С	Sallynoggin Road West		Major

## **Major Arm Geometry**

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Width for right-turn storage (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Sallynoggin Road West	6.00		✓	2.30	25.0		-

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 - Glenageary Avenue	One lane	3.80	30	23

# 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	539	0.098	0.248	0.156	0.354
B-C	690	0.106	0.267	-	-
C-B	595	0.230	0.230	-	-

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

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

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

# **Traffic Demand**

# **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2022 Base	AM	ONE HOUR	09:30	11:00	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 - Sallynoggin Road East		~	440	100.000
B - Glenageary Avenue		✓	24	100.000
C - Sallynoggin Road West		~	419	100.000

# **Origin-Destination Data**

# Demand (PCU/hr)

		То									
		A - Sallynoggin Road East	B - Glenageary Avenue	C - Sallynoggin Road West							
<b>F</b>	A - Sallynoggin Road East	0	18	422							
From	B - Glenageary Avenue	21	0	3							
	C - Sallynoggin Road West	417	2	0							

# **Vehicle Mix**

### **Heavy Vehicle Percentages**

	То									
		A - Sallynoggin Road East	B - Glenageary Avenue	C - Sallynoggin Road West						
<b>F</b>	A - Sallynoggin Road East	0	0	0						
From	B - Glenageary Avenue	5	0	0						
	C - Sallynoggin Road West	1	0	0						

# **Detailed Demand Data**

# Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
	09:30-09:45	331	331
A - Sallynoggin Road Fast	09:45-10:00	396	396
	10:00-10:15	484	484
A- Saliyiloyyili Koau East	10:15-10:30	484	484
	10:30-10:45	396	396
	10:45-11:00	331	331
	09:30-09:45	18	18
	09:45-10:00	22	22
	10:00-10:15	26	26
B - Glenageary Avenue	10:15-10:30	26	26
	10:30-10:45	22	22
	10:45-11:00	18	18
	09:30-09:45	315	315
	09:45-10:00	377	377
C Sallynaggin Boad West	10:00-10:15	461	461
C - Sallynoggin Road West	10:15-10:30	461	461
	10:30-10:45	377	377
	10:45-11:00	315	315



# Results

# Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	<b>C</b> 0.07 11.05		0.1	В
C-A				
С-В	0.00	7.48	0.0	A
A-B				
A-C				

# Main Results for each time segment

## 09:30 - 09:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	18	426	0.042	18	0.0	9.198	А
C-A	314			314			
С-В	2	518	0.003	1	0.0	6.962	A
ΑB	14			14			
A-C	318			318			

### 09:45 - 10:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	22	401	0.054	22	0.1	9.895	А
C-A	375			375			
С-В	2	504	0.004	2	0.0	7.172	А
A-B	16			16			
A-C	379			379			

### 10:00 - 10:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	26	366	0.072	26	0.1	11.043	В
C-A	459			459			
С-В	2	483	0.005	2	0.0	7.483	А
A-B	20			20			
A-C	465			465			

## 10:15 - 10:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	26	366	0.072	26	0.1	11.047	В
C-A	459			459			
С-В	2	483	0.005	2	0.0	7.483	А
A-B	20			20			
A-C	465			465			



# 10:30 - 10:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	22	401	0.054	22	0.1	9.901	А
C-A	375			375			
С-В	2	504	0.004	2	0.0	7.172	А
ΑB	16			16			
A-C	379			379			

# 10:45 - 11:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	18	426	0.042	18	0.0	9.208	А
C-A	314			314			
С-В	2	518	0.003	2	0.0	6.962	A
A-B	14			14			
A-C	318			318			



# 2022 Base, PM

### **Data Errors and Warnings**

No errors or warnings

# **Junction Network**

## Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		0.40	A

## **Junction Network**

Driving side	Lighting	Network delay (s)	Network LOS	
Left	Normal/unknown	0.40	А	

# **Traffic Demand**

# **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	2022 Base	PM	ONE HOUR	15:45	17:15	15

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

# **Demand overview (Traffic)**

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Sallynoggin Road East		~	527	100.000
B - Glenageary Avenue		✓	34	100.000
C - Sallynoggin Road West		~	493	100.000

# **Origin-Destination Data**

# Demand (PCU/hr)

	То								
From		A - Sallynoggin Road East	B - Glenageary Avenue	C - Sallynoggin Road West					
	A - Sallynoggin Road East	0	28	499					
	B - Glenageary Avenue	19	0	15					
	C - Sallynoggin Road West	485	8	0					

# **Vehicle Mix**

# **Heavy Vehicle Percentages**

	То								
From		A - Sallynoggin Road East	B - Glenageary Avenue	C - Sallynoggin Road West					
	A - Sallynoggin Road East	0	0	2					
	B - Glenageary Avenue	0	0	0					
	C - Sallynoggin Road West	2	0	0					

# **Detailed Demand Data**

# Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
	15:45-16:00	397	397
	16:00-16:15	474	474
A Collyneggin Deed Feet	16:15-16:30	580	580
A- Sanyhoggin Road East	16:30-16:45	580	580
	16:45-17:00	474	474
	17:00-17:15	397	397
	15:45-16:00	26	26
	16:00-16:15	31	31
B. Clanaraany Avanua	16:15-16:30	37	37
B - Glenageary Avenue	16:30-16:45	37	37
	16:45-17:00	31	31
	17:00-17:15	26	26
	15:45-16:00	371	371
	16:00-16:15	443	443
C Sallynoggin Bood West	16:15-16:30	543	543
C - Sallynoggin Road west	16:30-16:45	543	543
	16:45-17:00	443	443
	17:00-17:15	371	371

# Results

# **Results Summary for whole modelled period**

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.10	10.39	0.1	В
C-A				
С-В	0.02	7.96	0.0	A
A-B				
A-C				

# Main Results for each time segment

### 15:45 - 16:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	26	453	0.056	25	0.1	8.408	А
C-A	365			365			
С-В	6	503	0.012	6	0.0	7.237	А
A-B	21			21			
A-C	376			376			

## 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	31	425	0.072	30	0.1	9.134	А
C-A	436			436			
С-В	7	486	0.015	7	0.0	7.523	А
A-B	25			25			
A-C	449			449			



### 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	37	384	0.097	37	0.1	10.379	В
C-A	534			534			
С-В	9	461	0.019	9	0.0	7.958	A
A-B	31			31			
A-C	549			549			

# 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	37	384	0.097	37	0.1	10.385	В
C-A	534			534			
С-В	9	461	0.019	9	0.0	7.958	A
A-B	31			31			
A-C	549			549			

### 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	31	425	0.072	31	0.1	9.142	А
C-A	436			436			
С-В	7	486	0.015	7	0.0	7.523	A
ΑB	25			25			
A-C	449			449			

### 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	26	453	0.056	26	0.1	8.421	А
C-A	365			365			
С-В	6	503	0.012	6	0.0	7.240	А
ΑB	21			21			
A-C	376			376			



# 2025 Without Dev, AM

### **Data Errors and Warnings**

No errors or warnings

# **Junction Network**

## Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		0.31	А

## **Junction Network**

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.31	А

# **Traffic Demand**

# **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2025 Without Dev	AM	ONE HOUR	09:30	11:00	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 - Sallynoggin Road East		✓	455	100.000
B - Glenageary Avenue		✓	24	100.000
C - Sallynoggin Road West		~	433	100.000

# **Origin-Destination Data**

# Demand (PCU/hr)

	То					
		A - Sallynoggin Road East	B - Glenageary Avenue	C - Sallynoggin Road West		
<b>F</b>	A - Sallynoggin Road East	0	19	436		
From	B - Glenageary Avenue	21	0	3		
	C - Sallynoggin Road West	431	2	0		

# **Vehicle Mix**

# **Heavy Vehicle Percentages**

	То					
		A - Sallynoggin Road East	B - Glenageary Avenue	C - Sallynoggin Road West		
From	A - Sallynoggin Road East	0	0	0		
From	B - Glenageary Avenue	5	0	0		
	C - Sallynoggin Road West	1	0	0		

# **Detailed Demand Data**

# Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
	09:30-09:45	343	343
	09:45-10:00	409	409
A Colline and Dood Foot	10:00-10:15	501	501
A - Sallynoggin Road East	10:15-10:30	501	501
	10:30-10:45	409	409
	10:45-11:00	343	343
	09:30-09:45	18	18
	09:45-10:00	22	22
D. Olamana Autom	10:00-10:15	26	26
B - Glenageary Avenue	10:15-10:30	26	26
	10:30-10:45	22	22
	10:45-11:00	18	18
	09:30-09:45	326	326
	09:45-10:00	389	389
C. Sallynaggin Bood Woot	10:00-10:15	477	477
C - Sanynogyin Road West	10:15-10:30	477	477
	10:30-10:45	389	389
	10:45-11:00	326	326

# Results

# **Results Summary for whole modelled period**

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.07	11.26	0.1	В
C-A				
С-В	0.00	7.54	0.0	A
A-B				
A-C				

# Main Results for each time segment

# 09:30 - 09:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	18	422	0.043	18	0.0	9.296	А
C-A	324			324			
С-В	2	516	0.003	1	0.0	6.997	A
A-B	14			14			
A-C	328			328			

## 09:45 - 10:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	22	396	0.054	22	0.1	10.031	В
C-A	387			387			
С-В	2	501	0.004	2	0.0	7.216	A
A-B	17			17			
A-C	392			392			



### 10:00 - 10:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	26	360	0.073	26	0.1	11.253	В
C-A	475			475			
С-В	2	479	0.005	2	0.0	7.543	A
A-B	21			21			
A-C	480			480			

# 10:15 - 10:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	26	360	0.073	26	0.1	11.257	В
C-A	475			475			
С-В	2	479	0.005	2	0.0	7.543	А
ΑB	21			21			
A-C	480			480			

### 10:30 - 10:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	22	396	0.054	22	0.1	10.039	В
C-A	387			387			
С-В	2	501	0.004	2	0.0	7.216	A
A-B	17			17			
A-C	392			392			

### 10:45 - 11:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	18	422	0.043	18	0.0	9.306	А
C-A	324			324			
С-В	2	516	0.003	2	0.0	7.000	А
ΑB	14			14			
A-C	328			328			



# 2025 Without Dev, PM

### **Data Errors and Warnings**

No errors or warnings

# **Junction Network**

## Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		0.40	A

## **Junction Network**

Driving side Lighting		Network delay (s)	Network LOS
Left	Normal/unknown	0.40	А

# **Traffic Demand**

# **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2025 Without Dev	PM	ONE HOUR	15:45	17:15	15

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

# **Demand overview (Traffic)**

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Sallynoggin Road East		~	545	100.000
B - Glenageary Avenue		✓	35	100.000
C - Sallynoggin Road West		✓	509	100.000

# **Origin-Destination Data**

# Demand (PCU/hr)

	То						
		A - Sallynoggin Road East	B - Glenageary Avenue	C - Sallynoggin Road West			
From	A - Sallynoggin Road East	0	29	516			
	B - Glenageary Avenue	20	0	15			
	C - Sallynoggin Road West	501	8	0			

# **Vehicle Mix**

# **Heavy Vehicle Percentages**

	То							
		A - Sallynoggin Road East	B - Glenageary Avenue	C - Sallynoggin Road West				
From	A - Sallynoggin Road East	0	0	2				
From	B - Glenageary Avenue	0	0	0				
	C - Sallynoggin Road West	2	0	0				

# **Detailed Demand Data**

# Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
	15:45-16:00	410	410
	16:00-16:15	490	490
A College and Decid Free	16:15-16:30	600	600
A- Sanyhoggin Road East	16:30-16:45	600	600
	16:45-17:00	490	490
	17:00-17:15	410	410
	15:45-16:00	26	26
	16:00-16:15	31	31
	16:15-16:30	39	39
B - Glenageary Avenue	16:30-16:45	39	39
	16:45-17:00	31	31
	17:00-17:15	26	26
	15:45-16:00	383	383
	16:00-16:15	458	458
C. Sallynaggin Bood Woot	16:15-16:30	560	560
C - Sallynoggin Road West	16:30-16:45	560	560
	16:45-17:00	458	458
	17:00-17:15	383	383

# Results

# **Results Summary for whole modelled period**

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	
B-AC	0.10	10.73	0.1	В	
C-A					
С-В	0.02	8.04	0.0	A	
A-B					
A-C					

# Main Results for each time segment

### 15:45 - 16:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	26	446	0.059	26	0.1	8.569	А
C-A	377			377			
С-В	6	500	0.012	6	0.0	7.282	A
A-B	22			22			
A-C	388			388			

## 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	31	416	0.076	31	0.1	9.351	А
C-A	450			450			
С-В	7	482	0.015	7	0.0	7.582	А
A-B	26			26			
A-C	464			464			



### 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	39	374	0.103	38	0.1	10.716	В
C-A	552			552			
С-В	9	457	0.019	9	0.0	8.040	A
ΑB	32			32			
A-C	568			568			

# 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	39	374	0.103	39	0.1	10.728	В
C-A	552			552			
С-В	9	457	0.019	9	0.0	8.040	A
ΑB	32			32			
A-C	568			568			

### 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	31	416	0.076	32	0.1	9.362	А
C-A	450			450			
С-В	7	482	0.015	7	0.0	7.582	A
ΑB	26			26			
A-C	464			464			

### 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	26	446	0.059	26	0.1	8.581	А
C-A	377			377			
С-В	6	500	0.012	6	0.0	7.283	А
ΑB	22			22			
A-C	388			388			



# 2025 With Dev , AM

### **Data Errors and Warnings**

No errors or warnings

# **Junction Network**

## Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		0.86	А

## **Junction Network**

Driving side	Driving side Lighting		Network LOS
Left	Normal/unknown	0.86	А

# **Traffic Demand**

# **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	2025 With Dev	AM	ONE HOUR	09:30	11:00	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 - Sallynoggin Road East		~	474	100.000
B - Glenageary Avenue		✓	58	100.000
C - Sallynoggin Road West		✓	453	100.000

# **Origin-Destination Data**

# Demand (PCU/hr)

		То									
		A - Sallynoggin Road East	B - Glenageary Avenue	C - Sallynoggin Road West							
<b>F</b>	A - Sallynoggin Road East	0	38	436							
From	B - Glenageary Avenue	38	0	20							
	C - Sallynoggin Road West	431	22	0							

# **Vehicle Mix**

# **Heavy Vehicle Percentages**

		То									
		A - Sallynoggin Road East	B - Glenageary Avenue	C - Sallynoggin Road West							
From	A - Sallynoggin Road East	0	0	0							
	B - Glenageary Avenue	5	0	0							
	C - Sallynoggin Road West	1	0	0							

# **Detailed Demand Data**

# Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
	09:30-09:45	357	357
A - Sallynoggin Road East	09:45-10:00	426	426
	10:00-10:15	522	522
	10:15-10:30	522	522
	10:30-10:45	426	426
	10:45-11:00	357	357
	09:30-09:45	44	44
	09:45-10:00	52	52
B. Clanageory Avenue	10:00-10:15	64	64
B - Glenageary Avenue	10:15-10:30	64	64
	10:30-10:45	52	52
	10:45-11:00	44	44
	09:30-09:45	341	341
	09:45-10:00	407	407
C - Sallynoggin Road West	10:00-10:15	499	499
	10:15-10:30	499	499
	10:30-10:45	407	407
	10:45-11:00	341	341

# Results

# **Results Summary for whole modelled period**

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.17	11.52	0.2	В
C-A				
С-В	0.05	7.99	0.1	A
A-B				
A-C				

# Main Results for each time segment

#### 09:30 - 09:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	44	450	0.097	43	0.1	9.127	A
C-A	324			324			
С-В	17	513	0.032	16	0.0	7.253	A
A-B	29			29			
A-C	328			328			

## 09:45 - 10:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	52	423	0.123	52	0.1	10.000	В
C-A	387			387			
С-В	20	497	0.040	20	0.0	7.548	A
ΑB	34			34			
A-C	392			392			



### 10:00 - 10:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	64	386	0.165	64	0.2	11.504	В
C-A	475			475			
С-В	24	475	0.051	24	0.1	7.992	A
ΑB	42			42			
A-C	480			480			

# 10:15 - 10:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	64	386	0.165	64	0.2	11.521	В
C-A	475			475			
С-В	24	475	0.051	24	0.1	7.993	A
ΑB	42			42			
A-C	480			480			

### 10:30 - 10:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	52	423	0.123	52	0.1	10.021	В
C-A	387			387			
С-В	20	497	0.040	20	0.0	7.549	A
ΑB	34			34			
A-C	392			392			

### 10:45 - 11:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	44	450	0.097	44	0.1	9.155	А
C-A	324			324			
С-В	17	513	0.032	17	0.0	7.260	А
ΑB	29			29			
A-C	328			328			



# 2025 With Dev, PM

### **Data Errors and Warnings**

No errors or warnings

# **Junction Network**

## Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		1.03	А

## **Junction Network**

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.03	А

# **Traffic Demand**

# **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	2025 With Dev	PM	ONE HOUR	15:45	17:15	15

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

# **Demand overview (Traffic)**

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Sallynoggin Road East		~	570	100.000
B - Glenageary Avenue		✓	75	100.000
C - Sallynoggin Road West		~	533	100.000

# **Origin-Destination Data**

# Demand (PCU/hr)

	То						
_		A - Sallynoggin Road East	B - Glenageary Avenue	C - Sallynoggin Road West			
	A - Sallynoggin Road East	0	54	516			
From	B - Glenageary Avenue	40	0	35			
	C - Sallynoggin Road West	501	32	0			

# **Vehicle Mix**

# **Heavy Vehicle Percentages**

	То							
From		A - Sallynoggin Road East	B - Glenageary Avenue	C - Sallynoggin Road West				
	A - Sallynoggin Road East	0	0	2				
	B - Glenageary Avenue	0	0	0				
	C - Sallynoggin Road West	2	0	0				

# **Detailed Demand Data**

# Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
	15:45-16:00	429	429
	16:00-16:15	512	512
A Collyneggin Dead Fact	16:15-16:30	628	628
A- Sanyhoggin Road East	16:30-16:45	628	628
	16:45-17:00	512	512
	17:00-17:15	16:30         628         628           16:45         628         628           17:00         512         512           17:15         429         429           16:00         56         56           16:15         67         67           16:30         83         83           16:45         83         83           17:00         67         67           17:15         56         56           16:00         401         401	429
	15:45-16:00	56	56
B - Glenageary Avenue	16:00-16:15	67	67
	16:15-16:30	83	83
	16:30-16:45	83	83
	16:45-17:00	67	67
	17:00-17:15	56	56
	15:45-16:00	401	401
	16:00-16:15	479	479
C - Sallynoggin Road West	16:15-16:30	587	587
	16:30-16:45	587	587
	16:45-17:00	479	479
B - Glenageary Avenue C - Sallynoggin Road West	17:00-17:15	401	401

# Results

# **Results Summary for whole modelled period**

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.22	12.49	0.3	В
C-A				
С-В	0.08	8.67	0.1	A
A-B				
A-C				

# Main Results for each time segment

### 15:45 - 16:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	56	446	0.127	56	0.1	9.208	А
C-A	377			377			
С-В	24	496	0.049	24	0.1	7.622	A
A-B	41			41			
A-C	388			388			

## 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	67	415	0.162	67	0.2	10.344	В
C-A	450			450			
С-В	29	477	0.060	29	0.1	8.034	A
ΑB	49			49			
A-C	464			464			


#### 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	83	371	0.223	82	0.3	12.457	В
C-A	552			552			
С-В	35	450	0.078	35	0.1	8.670	A
ΑB	59			59			
A-C	568			568			

#### 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	371	0.223	83	0.3	12.489	В
C-A	552			552			
С-В	35	450	0.078	35	0.1	8.674	A
ΑB	59			59			
A-C	568			568			

#### 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	415	0.162	68	0.2	10.379	В
C-A	450			450			
С-В	29	477	0.060	29	0.1	8.038	A
ΑB	49			49			
A-C	464			464			

#### 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	56	446	0.127	57	0.1	9.245	A
C-A	377			377			
С-В	24	496	0.049	24	0.1	7.633	A
ΑB	41			41			
A-C	388			388			



# 2030 Without Dev, AM

#### **Data Errors and Warnings**

No errors or warnings

## **Junction Network**

#### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		0.34	А

#### **Junction Network**

Driving side Lighting		Network delay (s)	Network LOS
Left	Normal/unknown	0.34	A

## **Traffic Demand**

#### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D7	2030 Without Dev	AM	ONE HOUR	09:30	11:00	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 - Sallynoggin Road East		~	493	100.000
B - Glenageary Avenue		✓	27	100.000
C - Sallynoggin Road West		✓	469	100.000

## **Origin-Destination Data**

#### Demand (PCU/hr)

	То							
		A - Sallynoggin Road East	B - Glenageary Avenue	C - Sallynoggin Road West				
<b>F</b>	A - Sallynoggin Road East	0	20	473				
From	B - Glenageary Avenue	23	0	4				
	C - Sallynoggin Road West	467	2	0				

## **Vehicle Mix**

	То						
		A - Sallynoggin Road East	B - Glenageary Avenue	C - Sallynoggin Road West			
From	A - Sallynoggin Road East	0	0	0			
From	B - Glenageary Avenue	5	0	0			
	C - Sallynoggin Road West	1	0	0			

#### Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
	09:30-09:45	371	371
	09:45-10:00	443	443
A College and Deed Foot	10:00-10:15	543	543
A - Sallynoggin Road East	10:15-10:30	543	543
	10:30-10:45	443	443
	Time Segment         Demand (PCU/hr)           09:30-09:45         371           09:45-10:00         443           10:00-10:15         543           10:30-10:45         443           10:30-10:45         443           10:45-11:00         371           09:30-09:45         20           09:45-10:00         24           10:00-10:15         30           10:15-10:30         30           10:15-10:30         30           10:15-10:30         30           10:45-11:00         20           09:30-09:45         353           09:45-10:00         422           10:00-10:15         516           10:15-10:30         516           10:15-10:30         516           10:30-10:45         422           10:45-11:00         353	371	
	09:30-09:45	20	20
	09:45-10:00	24	24
	10:00-10:15	30	30
B - Glenageary Avenue	10:15-10:30	30	30
	10:30-10:45	24	24
	10:45-11:00	20	20
	09:30-09:45	353	353
	09:45-10:00	422	422
C. Callynaggin Bood Woot	10:00-10:15	516	516
c - Sanynoggin Koad west	10:15-10:30	516	516
	10:30-10:45	422	422
	10:45-11:00	353	353

## Results

#### **Results Summary for whole modelled period**

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	AC 0.09 11.82		0.1	В
C-A				
С-В	0.00	7.70	0.0	A
A-B				
A-C				

#### Main Results for each time segment

#### 09:30 - 09:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	20	414	0.049	20	0.1	9.520	А
C-A	352			352			
С-В	2	509	0.003	1	0.0	7.088	A
A-B	15			15			
A-C	356			356			

#### 09:45 - 10:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	24	386	0.063	24	0.1	10.369	В
C-A	420			420			
С-В	2	493	0.004	2	0.0	7.332	А
A-B	18			18			
A-C	425			425			



#### 10:00 - 10:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	30	347	0.086	30	0.1	11.815	В
C-A	514			514			
С-В	2	470	0.005	2	0.0	7.699	A
A-B	22			22			
A-C	521			521			

#### 10:15 - 10:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	30	347	0.086	30	0.1	11.822	В
C-A	514			514			
С-В	2	470	0.005	2	0.0	7.699	А
ΑB	22			22			
A-C	521			521			

#### 10:30 - 10:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	24	386	0.063	24	0.1	10.377	В
C-A	420			420			
С-В	2	493	0.004	2	0.0	7.332	А
ΑB	18			18			
A-C	425			425			

#### 10:45 - 11:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	20	414	0.049	20	0.1	9.533	А
C-A	352			352			
С-В	2	509	0.003	2	0.0	7.088	A
ΑB	15			15			
A-C	356			356			



# 2030 Without Dev, PM

#### **Data Errors and Warnings**

No errors or warnings

## **Junction Network**

#### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		0.42	A

#### **Junction Network**

Driving side Lighting		Network delay (s)	Network LOS
Left	Normal/unknown	0.42	А

## **Traffic Demand**

#### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D8	2030 Without Dev	PM	ONE HOUR	15:45	17:15	15

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

#### **Demand overview (Traffic)**

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Sallynoggin Road East		~	590	100.000
B - Glenageary Avenue		✓	37	100.000
C - Sallynoggin Road West		✓	552	100.000

## **Origin-Destination Data**

#### Demand (PCU/hr)

	То							
From		A - Sallynoggin Road East	B - Glenageary Avenue	C - Sallynoggin Road West				
	A - Sallynoggin Road East	0	31	559				
	B - Glenageary Avenue	21	0	16				
	C - Sallynoggin Road West	543	9	0				

## **Vehicle Mix**

	То							
From		A - Sallynoggin Road East	B - Glenageary Avenue	C - Sallynoggin Road West				
	A - Sallynoggin Road East	0	0	2				
	B - Glenageary Avenue	0	0	0				
	C - Sallynoggin Road West	2	0	0				

#### Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
	15:45-16:00	444	444
	16:00-16:15	530	530
A College and Deed Foot	16:15-16:30	650	650
A - Sallynoggin Road East	16:30-16:45	650	650
	16:45-17:00	530	530
	17:00-17:15	444	444
	15:45-16:00	28	28
	16:00-16:15	33	33
D. Olamana A	16:15-16:30	41	41
B - Glenageary Avenue	16:30-16:45	41	41
	16:45-17:00	33	33
	17:00-17:15	28	28
	15:45-16:00	416	416
	16:00-16:15	496	496
C. Sallynaggin Bood Woot	16:15-16:30	608	608
C - Sallynoggin Road west	16:30-16:45	608	608
	16:45-17:00	496	496
	17:00-17:15	416	416

## Results

#### **Results Summary for whole modelled period**

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.11	11.45	0.1	В
C-A				
С-В	0.02	8.27	0.0	A
A-B				
A-C				

#### Main Results for each time segment

#### 15:45 - 16:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	28	434	0.064	28	0.1	8.853	А
C-A	409			409			
С-В	7	492	0.014	7	0.0	7.411	A
A-B	23			23			
A-C	421			421			

#### 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	33	401	0.083	33	0.1	9.775	А
C-A	488			488			
С-В	8	473	0.017	8	0.0	7.749	А
A-B	28			28			
A-C	503			503			



#### 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	41	355	0.115	41	0.1	11.434	В
C-A	598			598			
С-В	10	445	0.022	10	0.0	8.271	A
A-B	34			34			
A-C	615			615			

#### 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	41	355	0.115	41	0.1	11.446	В
C-A	598			598			
С-В	10	445	0.022	10	0.0	8.271	A
ΑB	34			34			
A-C	615			615			

#### 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	33	401	0.083	33	0.1	9.789	А
C-A	488			488			
С-В	8	473	0.017	8	0.0	7.752	A
ΑB	28			28			
A-C	503			503			

#### 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	28	434	0.064	28	0.1	8.870	А
C-A	409			409			
С-В	7	492	0.014	7	0.0	7.414	А
ΑB	23			23			
A-C	421			421			



# 2030 With Dev, AM

#### **Data Errors and Warnings**

No errors or warnings

## **Junction Network**

#### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		0.87	A

#### **Junction Network**

Driving side Lighting		Network delay (s)	Network LOS
Left	Normal/unknown	0.87	А

## **Traffic Demand**

#### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D9	2030 With Dev	AM	ONE HOUR	09:30	11:00	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 - Sallynoggin Road East		~	513	100.000
B - Glenageary Avenue		✓	60	100.000
C - Sallynoggin Road West		✓	489	100.000

## **Origin-Destination Data**

#### Demand (PCU/hr)

	То							
		A - Sallynoggin Road East	B - Glenageary Avenue	C - Sallynoggin Road West				
_	A - Sallynoggin Road East	0	40	473				
From	B - Glenageary Avenue	40	0	20				
	C - Sallynoggin Road West	467	22	0				

## **Vehicle Mix**

	То								
		A - Sallynoggin Road East	B - Glenageary Avenue	C - Sallynoggin Road West					
<b>F</b>	A - Sallynoggin Road East	0	0	0					
From	B - Glenageary Avenue	5	0	0					
	C - Sallynoggin Road West	1	0	0					

#### Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
	09:30-09:45	386	386
	Time Segment         Demand (PCU/hr)         Demand in           09:30-09:45         386	461	
A Collyneggin Dead Fast		565	
A- Sanyhoggin Road East	10:15-10:30	Demand (PCU/hr)         Demand i           0-09:45         386           0-09:45         386           0-10:10         461           0-10:15         565           0-10:45         461           0-10:45         461           0-10:45         461           0-10:45         461           0-10:45         461           0-10:45         461           0-10:45         54           0-10:15         66           0-10:45         54           0-10:45         54           0-10:45         54           0-10:45         54           0-10:45         54           0-10:45         54           0-10:45         54           0-10:45         548           0-10:45         538           0-10:15         538           0-10:45         440           0-10:45         440	565
	10:30-10:45		461
	10:45-11:00	386	386
	09:30-09:45	45	45
	ynoggin Road East ynoggin Road East 909:45-10:00 10:00-10:15 10:15-10:30 10:30-10:45 10:45-11:00 909:30-09:45 09:45-10:00 10:00-10:15 10:15-10:30 10:30-10:45 10:45-11:00 909:30-09:45 009:45-10:00 10:00-10:15 10:00-10:15 10:15-10:30	54	54
B - Glenageary Avenue	10:00-10:15	66	66
B - Glenageary Avenue	10:15-10:30	66	66
	10:30-10:45	Intersegnment         Demand (PCOM)         Demand (PCOM)           09:30-09:45         386         386           09:45-10:00         461         461           10:00-10:15         565         5655           10:15-10:30         565         5655           10:30-10:45         461         461           10:45-11:00         386         386           09:30-09:45         45         45           09:30-09:45         66         66           10:00-10:15         66         66           10:30-10:45         54         54           10:45-11:00         45         45           09:30-09:45         368         368           09:30-09:45         54         54           10:45-11:00         45         45           09:45-10:00         440         440           10:00-10:15         538         538           10:15-10:30         538         538           10:30-10:45         440         440           10:45-11:00         368         368	54
	10:45-11:00	45	45
	09:30-09:45	368	368
	09:45-10:00	Demand (PCU/hr)         Demand in PCU (Proprint of the structure)           145         386         386           100         461         461           115         565         565           130         565         565           145         461         461           150         565         565           145         461         461           150         386         386           145         451         451           150         54         54           151         666         66           145         54         54           150         54         54           151         568         368           152         54         54           153         568         368           154         368         368           155         538         538           153         538         538           153         440         440           150         368         368	440
C. Sallynaggin Bood Woot	10:00-10:15	538	538
c - Sanynoggin Koad west	10:15-10:30	Demand (PCU/hr)         Demand in PCU (           9:30-09:45         386         386           9:45-10:00         461         461           0:00-10:15         565         565           0:15-10:30         565         565           0:30-09:45         461         461           0:00-10:15         565         565           0:30-10:45         461         461           0:45-11:00         386         386           9:30-09:45         45         45           9:45-11:00         54         54           0:00-10:15         66         66           0:00-10:15         54         54           0:30-10:45         54         54           0:45-11:00         45         45           0:45-11:00         45         53           0:45-11:00         538         538           0:45-11:00         538         538           0:45-11:03         538         538           0:400         440         440           0:401         440         440           0:45-11:00         368         368	538
	10:30-10:45		440
	10:45-11:00	368	368

## Results

#### **Results Summary for whole modelled period**

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.18	12.32	0.2	В
C-A				
С-В	0.05	8.17	0.1	A
ΑB				
A-C				

#### Main Results for each time segment

#### 09:30 - 09:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	45	437	0.103	45	0.1	9.465	А
C-A	352			352			
С-В	17	506	0.033	16	0.0	7.354	A
A-B	30			30			
A-C	356			356			

#### 09:45 - 10:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	54	408	0.132	54	0.2	10.486	В
C-A	420			420			
С-В	20	489	0.040	20	0.0	7.678	А
ΑB	36			36			
A-C	425			425			



#### 10:00 - 10:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	66	368	0.180	66	0.2	12.298	В
C-A	514			514			
С-В	24	465	0.052	24	0.1	8.171	A
A-B	44			44			
A-C	521			521			

#### 10:15 - 10:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	66	368	0.180	66	0.2	12.320	В
C-A	514			514			
С-В	24	465	0.052	24	0.1	8.173	А
A-B	44			44			
A-C	521			521			

#### 10:30 - 10:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	54	408	0.132	54	0.2	10.510	В
C-A	420			420			
С-В	20	489	0.040	20	0.0	7.680	A
ΑB	36			36			
A-C	425			425			

#### 10:45 - 11:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	45	437	0.103	45	0.1	9.498	А
C-A	352			352			
С-В	17	506	0.033	17	0.0	7.357	А
ΑB	30			30			
A-C	356			356			



# 2030 With Dev, PM

#### **Data Errors and Warnings**

No errors or warnings

## **Junction Network**

#### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		1.07	А

#### **Junction Network**

Driving side Lighting		Network delay (s)	Network LOS
Left	Normal/unknown	1.07	А

## **Traffic Demand**

#### **Demand Set Details**

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

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

#### **Demand overview (Traffic)**

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Sallynoggin Road East		~	615	100.000
B - Glenageary Avenue		✓	78	100.000
C - Sallynoggin Road West		✓	576	100.000

## **Origin-Destination Data**

#### Demand (PCU/hr)

	То							
		A - Sallynoggin Road East	B - Glenageary Avenue	C - Sallynoggin Road West				
Farm	A - Sallynoggin Road East	0	56	559				
From	B - Glenageary Avenue	42	0	36				
	C - Sallynoggin Road West	543	33	0				

## **Vehicle Mix**

	То							
From		A - Sallynoggin Road East	B - Glenageary Avenue	C - Sallynoggin Road West				
	A - Sallynoggin Road East	0	0	2				
	B - Glenageary Avenue	0	0	0				
	C - Sallynoggin Road West	2	0	0				

#### Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
	15:45-16:00	463	463
	16:00-16:15	553	553
A Collyneggin Dead Fact	16:15-16:30	677	677
A- Sanyhoggin Road East	16:30-16:45	677	677
	16:45-17:00	553	553
	17:00-17:15	463	463
	15:45-16:00	59	59
	16:00-16:15	70	70
	16:15-16:30	86	86
B - Glenageary Avenue	16:30-16:45	86	86
	16:45-17:00	70	70
	17:00-17:15	59	59
	15:45-16:00	434	434
	16:00-16:15	518	518
C. Sallynaggin Bood Woot	16:15-16:30	634	634
C - Sallynoggin Road west	16:30-16:45	634	634
	16:45-17:00	518	518
	17:00-17:15	434	434

## Results

#### **Results Summary for whole modelled period**

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.25	13.63	0.3	В
C-A				
С-В	0.08	8.94	0.1	A
A-B				
A-C				

#### Main Results for each time segment

#### 15:45 - 16:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	59	433	0.136	58	0.2	9.600	А
C-A	409			409			
С-В	25	488	0.051	25	0.1	7.764	А
A-B	42			42			
A-C	421			421			

#### 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	70	398	0.176	70	0.2	10.950	В
C-A	488			488			
С-В	30	467	0.063	30	0.1	8.221	А
A-B	50			50			
A-C	503			503			



#### 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	86	350	0.245	85	0.3	13.585	В
C-A	598			598			
С-В	36	439	0.083	36	0.1	8.941	A
ΑB	62			62			
A-C	615			615			

#### 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	86	350	0.245	86	0.3	13.632	В
C-A	598			598			
С-В	36	439	0.083	36	0.1	8.944	А
A-B	62			62			
A-C	615			615			

#### 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	70	398	0.176	71	0.2	10.996	В
C-A	488			488			
С-В	30	467	0.063	30	0.1	8.228	A
ΑB	50			50			
A-C	503			503			

#### 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	59	432	0.136	59	0.2	9.644	А
C-A	409			409			
С-В	25	488	0.051	25	0.1	7.772	А
ΑB	42			42			
A-C	421			421			



# 2040 Without Dev, AM

#### **Data Errors and Warnings**

No errors or warnings

## **Junction Network**

#### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		0.36	A

#### **Junction Network**

Driving side Lighting		Network delay (s)	Network LOS
Left	Normal/unknown	0.36	А

## **Traffic Demand**

#### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D11	2040 Without Dev	AM	ONE HOUR	09:30	11:00	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 - Sallynoggin Road East		~	513	100.000
B - Glenageary Avenue		✓	28	100.000
C - Sallynoggin Road West		✓	489	100.000

## **Origin-Destination Data**

#### Demand (PCU/hr)

	То							
		A - Sallynoggin Road East	B - Glenageary Avenue	C - Sallynoggin Road West				
<b>F</b>	A - Sallynoggin Road East	0	21	492				
From	B - Glenageary Avenue	24	0	4				
	C - Sallynoggin Road West	486	3	0				

## **Vehicle Mix**

	То							
		A - Sallynoggin Road East	B - Glenageary Avenue	C - Sallynoggin Road West				
From	A - Sallynoggin Road East	0	0	0				
From	B - Glenageary Avenue	5	0	0				
	C - Sallynoggin Road West	1	0	0				

#### Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
	09:30-09:45	386	386
	09:45-10:00	461	461
A Collyneggin Dead Fact	10:00-10:15	565	565
A - Sallynoggin Road East	10:15-10:30	565	565
	10:30-10:45	461	461
	10:45-11:00	386	386
	09:30-09:45	21	21
	09:45-10:00	25	25
	10:00-10:15	31	31
B - Glenageary Avenue	10:15-10:30	31	31
	10:30-10:45	25	25
	09:30-09:43         388           09:45-10:00         461           10:00-10:15         565           10:15-10:30         565           10:30-10:45         461           10:45-11:00         386           09:30-09:45         21           09:45-10:00         25           10:00-10:15         31           10:15-10:30         31           10:15-10:30         31           10:15-10:30         31           10:30-10:45         25           10:45-11:00         21           09:30-09:45         368           09:45-10:00         440           10:00-10:15         538           10:15-10:30         538           10:30-10:45         440           10:45-11:00         368	21	21
	09:30-09:45	368	368
	09:45-10:00	440	440
C. Sallynaggin Bood Woot	10:00-10:15	538	538
c - Sanynoggin Koad west	10:15-10:30	538	538
	10:30-10:45	440	440
	10:45-11:00	368	368

## Results

#### **Results Summary for whole modelled period**

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.09	12.24	0.1	В
C-A				
С-В	0.01	7.80	0.0	A
A-B				
A-C				

#### Main Results for each time segment

#### 09:30 - 09:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	21	407	0.052	21	0.1	9.711	А
C-A	366			366			
С-В	2	506	0.004	2	0.0	7.148	А
A-B	16			16			
A-C	370			370			

#### 09:45 - 10:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	25	378	0.067	25	0.1	10.632	В
C-A	437			437			
С-В	3	489	0.006	3	0.0	7.408	А
A-B	19			19			
A-C	442			442			



#### 10:00 - 10:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	31	337	0.091	31	0.1	12.231	В
C-A	535			535			
С-В	3	465	0.007	3	0.0	7.802	A
ΑB	23			23			
A-C	542			542			

#### 10:15 - 10:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	31	337	0.091	31	0.1	12.244	В
C-A	535			535			
С-В	3	465	0.007	3	0.0	7.802	A
A-B	23			23			
A-C	542			542			

#### 10:30 - 10:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	25	378	0.067	25	0.1	10.646	В
C-A	437			437			
С-В	3	489	0.006	3	0.0	7.408	A
ΑB	19			19			
A-C	442			442			

#### 10:45 - 11:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	21	407	0.052	21	0.1	9.725	А
C-A	366			366			
С-В	2	506	0.004	2	0.0	7.150	А
ΑB	16			16			
A-C	370			370			



# 2040 Without Dev, PM

#### **Data Errors and Warnings**

No errors or warnings

## **Junction Network**

#### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		0.44	A

#### **Junction Network**

Driving side Lighting		Network delay (s)	Network LOS
Left	Normal/unknown	0.44	А

## **Traffic Demand**

#### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D12	2040 Without Dev	PM	ONE HOUR	15:45	17:15	15

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

#### **Demand overview (Traffic)**

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Sallynoggin Road East		✓	615	100.000
B - Glenageary Avenue		✓	39	100.000
C - Sallynoggin Road West		✓	574	100.000

## **Origin-Destination Data**

#### Demand (PCU/hr)

	То							
		A - Sallynoggin Road East	B - Glenageary Avenue	C - Sallynoggin Road West				
From	A - Sallynoggin Road East	0	33	582				
	B - Glenageary Avenue	22	0	17				
	C - Sallynoggin Road West	565	9	0				

## **Vehicle Mix**

	То							
From		A - Sallynoggin Road East	B - Glenageary Avenue	C - Sallynoggin Road West				
	A - Sallynoggin Road East	0	0	2				
	B - Glenageary Avenue	0	0	0				
	C - Sallynoggin Road West	2	0	0				

#### Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
	15:45-16:00	463	463
	16:00-16:15	553	553
A Collyneggin Dead Fast	16:15-16:30	677	677
A- Sanyhoggin Road East	16:30-16:45	677	677
	16:45-17:00	553	553
	17:00-17:15	463	463
	15:45-16:00	29	29
	16:00-16:15	35	35
	16:15-16:30	43	43
B - Glellageary Avenue	16:30-16:45	43	43
	16:45-17:00	35	35
	17:00-17:15	29	29
	15:45-16:00	432	432
	16:00-16:15	516	516
C Sallynaggin Boad West	16:15-16:30	632	632
C - Sallynoggin Road west	16:30-16:45	632	632
	16:45-17:00	516	516
	17:00-17:15	432	432

## Results

#### **Results Summary for whole modelled period**

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.12	11.90	0.1	В
C-A				
С-В	0.02	8.39	0.0	A
A-B				
A-C				

#### Main Results for each time segment

#### 15:45 - 16:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	29	428	0.069	29	0.1	9.022	А
C-A	425			425			
С-В	7	488	0.014	7	0.0	7.477	А
A-B	25			25			
A-C	438			438			

#### 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	35	394	0.089	35	0.1	10.031	В
C-A	508			508			
С-В	8	467	0.017	8	0.0	7.837	А
ΑB	30			30			
A-C	523			523			



#### 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	43	345	0.124	43	0.1	11.887	В
C-A	622			622			
С-В	10	439	0.023	10	0.0	8.393	A
ΑB	36			36			
A-C	641			641			

#### 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	43	345	0.124	43	0.1	11.898	В
C-A	622			622			
С-В	10	439	0.023	10	0.0	8.393	A
ΑB	36			36			
A-C	641			641			

#### 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	35	394	0.089	35	0.1	10.045	В
C-A	508			508			
С-В	8	467	0.017	8	0.0	7.837	A
A-B	30			30			
A-C	523			523			

#### 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	29	428	0.069	29	0.1	9.039	А
C-A	425			425			
С-В	7	488	0.014	7	0.0	7.481	А
ΑB	25			25			
A-C	438			438			



# 2040 With Dev, AM

#### **Data Errors and Warnings**

No errors or warnings

## **Junction Network**

#### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		0.87	A

#### **Junction Network**

Driving side Lighting		Network delay (s)	Network LOS
Left	Normal/unknown	0.87	А

## **Traffic Demand**

#### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D13	2040 With Dev	AM	ONE HOUR	09:30	11:00	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 - Sallynoggin Road East		✓	533	100.000
B - Glenageary Avenue		✓	61	100.000
C - Sallynoggin Road West		✓	508	100.000

## **Origin-Destination Data**

#### Demand (PCU/hr)

	То						
		A - Sallynoggin Road East	B - Glenageary Avenue	C - Sallynoggin Road West			
_	A - Sallynoggin Road East	0	41	492			
From	B - Glenageary Avenue	41	0	20			
	C - Sallynoggin Road West	486	22	0			

## **Vehicle Mix**

	То								
		A - Sallynoggin Road East	B - Glenageary Avenue	C - Sallynoggin Road West					
From	A - Sallynoggin Road East	0	0	0					
From	B - Glenageary Avenue	5	0	0					
	C - Sallynoggin Road West	1	0	0					

#### Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
	09:30-09:45	401	401
	09:45-10:00	Demand (PCU/hr)         Demand in PCU (PCU           09:30-09:45         401         401           09:45-10:00         479         479           10:00-10:15         587         587           10:15-10:30         587         587           10:30-10:45         479         479           10:45-11:00         401         401           09:30-09:45         46         46           09:30-09:45         46         46           09:45-10:00         55         55           10:00-10:15         67         67           10:30-10:45         55         55           10:00-10:15         67         67           10:30-10:45         382         382           09:30-09:45         382         382           10:45-11:00         457         457           10:00-10:15         559         559           10:15-10:30         559         559           10:30-10:45         457         457           10:30-10:45         457         457           10:30-10:45         457         457	479
A College and Decid Free	10:00-10:15		587
A - Sallynoggin Road East	10:15-10:30	587	587
	10:30-10:45	479	479
	10:45-11:00	401	401
	09:30-09:45	46	46
	09:45-10:00	55	55
	10:00-10:15	67	67
B - Glenageary Avenue	10:15-10:30	67	67
	10:30-10:45	Benand (P Com)         Demand (P Com)           1:30-09:45         401         4           1:45-10:00         479         4           1:00-10:15         587         5           1:15-10:30         587         5           1:45-11:00         401         4           1:45-11:00         401         4           1:45-11:00         401         4           1:30-09:45         46         4           1:45-11:00         55         5           1:00-10:15         67         6           1:15-10:30         67         6           1:30-09:45         382         3           1:45-11:00         46         4           1:30-09:45         382         3           1:45-11:00         457         4           1:30-09:45         559         5           1:45-11:00         457         4           1:00-10:15         559         5           1:51-01:30         559         5           1:30-10:45         457         4           1:45-11:00         382         3	55
	10:45-11:00	46	46
	09:30-09:45	382	382
	09:45-10:00	457	457
C. Sallynaggin Bood Woot	10:00-10:15	559	559
C - Sanynogyin Road West	10:15-10:30	09:30-09:45         401         401           09:45-10:00         479         479           10:00-10:15         587         587           10:15-10:30         587         587           10:30-10:45         479         479           10:45-11:00         401         401           09:30-09:45         46         46           09:30-09:45         46         46           09:45-10:00         55         55           10:00-10:15         67         67           10:30-10:45         55         55           10:45-11:00         46         46           09:30-09:45         382         382           09:45-11:00         457         457           10:00-10:15         559         559           10:15-10:30         559         559           10:05-10:00         457         457           10:05-10:15         559         559           10:30-10:45         457         457           10:30-10:45         457         457           10:45-11:00         382         382	559
	10:30-10:45		457
	10:45-11:00	382	382

## Results

#### **Results Summary for whole modelled period**

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.19	12.78	0.2	В
C-A				
С-В	0.05	8.27	0.1	A
A-B				
A-C				

#### Main Results for each time segment

#### 09:30 - 09:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	46	430	0.107	45	0.1	9.650	А
C-A	366			366			
С-В	17	502	0.033	16	0.0	7.406	A
A-B	31			31			
A-C	370			370			

#### 09:45 - 10:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	55	400	0.137	55	0.2	10.754	В
C-A	437			437			
С-В	20	484	0.041	20	0.0	7.747	А
A-B	37			37			
A-C	442			442			



#### 10:00 - 10:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	67	358	0.187	67	0.2	12.750	В
C-A	535			535			
С-В	24	460	0.053	24	0.1	8.266	A
A-B	45			45			
A-C	542			542			

#### 10:15 - 10:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	67	358	0.187	67	0.2	12.776	В
C-A	535			535			
С-В	24	460	0.053	24	0.1	8.268	A
ΑB	45			45			
A-C	542			542			

#### 10:30 - 10:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	55	400	0.137	55	0.2	10.783	В
C-A	437			437			
С-В	20	484	0.041	20	0.0	7.750	A
A-B	37			37			
A-C	442			442			

#### 10:45 - 11:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	46	430	0.107	46	0.1	9.684	А
C-A	366			366			
С-В	17	502	0.033	17	0.0	7.413	A
ΑB	31			31			
A-C	370			370			



# 2040 With Dev, PM

#### **Data Errors and Warnings**

No errors or warnings

## **Junction Network**

#### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		1.10	A

#### **Junction Network**

Driving side Lighting		Network delay (s)	Network LOS
Left	Normal/unknown	1.10	А

## **Traffic Demand**

#### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D14	2040 With Dev	PM	ONE HOUR	15:45	17:15	15

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

#### **Demand overview (Traffic)**

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Sallynoggin Road East		✓	640	100.000
B - Glenageary Avenue		✓	80	100.000
C - Sallynoggin Road West		✓	598	100.000

## **Origin-Destination Data**

#### Demand (PCU/hr)

	То							
		A - Sallynoggin Road East	B - Glenageary Avenue	C - Sallynoggin Road West				
Farm	A - Sallynoggin Road East	0	58	582				
From	B - Glenageary Avenue	43	0	37				
	C - Sallynoggin Road West	565	33	0				

## **Vehicle Mix**

	То							
From		A - Sallynoggin Road East	B - Glenageary Avenue	C - Sallynoggin Road West				
	A - Sallynoggin Road East	0	0	2				
	B - Glenageary Avenue	0	0	0				
	C - Sallynoggin Road West	2	0	0				

#### Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
	15:45-16:00	482	482
	16:00-16:15	575	575
A Collyneggin Dead Fast	16:15-16:30	705	705
A- Sanyhoggin Road East	16:30-16:45	705	705
	16:45-17:00	575	575
	17:00-17:15	482	482
	15:45-16:00	60	60
	16:00-16:15	72	72
	16:15-16:30	88	88
B - Glenageary Avenue	16:30-16:45	88	88
	16:45-17:00	72	72
	17:00-17:15	60	60
	15:45-16:00	450	450
	16:00-16:15	538	538
C. Sallynaggin Bood Woot	16:15-16:30	658	658
C - Sanynogyin Road West	16:30-16:45	658	658
	16:45-17:00	538	538
	17:00-17:15	450	450

## Results

#### **Results Summary for whole modelled period**

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.26	14.31	0.3	В
C-A				
С-В	0.08	9.09	0.1	A
A-B				
A-C				

#### Main Results for each time segment

#### 15:45 - 16:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	60	426	0.141	60	0.2	9.813	А
C-A	425			425			
С-В	25	484	0.051	25	0.1	7.837	А
A-B	44			44			
A-C	438			438			

#### 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	72	390	0.184	72	0.2	11.290	В
C-A	508			508			
С-В	30	462	0.064	30	0.1	8.320	А
ΑB	52			52			
A-C	523			523			



#### 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	340	0.259	88	0.3	14.258	В
C-A	622			622			
С-В	36	432	0.084	36	0.1	9.084	A
A-B	64			64			
A-C	641			641			

#### 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	88	340	0.259	88	0.3	14.310	В
C-A	622			622			
С-В	36	432	0.084	36	0.1	9.088	A
A-B	64			64			
A-C	641			641			

#### 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	390	0.184	72	0.2	11.343	В
C-A	508			508			
С-В	30	462	0.064	30	0.1	8.325	A
ΑB	52			52			
A-C	523			523			

#### 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	60	426	0.141	60	0.2	9.862	А
C-A	425			425			
С-В	25	484	0.051	25	0.1	7.845	А
ΑB	44			44			
A-C	438			438			



# Junctions 10 PICADY 10 - Priority Intersection Module Version: 10.0.4.1693 © Copyright TRL Software Limited, 2021 For sales and distribution information, program advice and maintenance, contact TRL Software: +44 (0)1344 37977 software@trl.co.uk trlsoftware.com The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the

solution

Filename: Site Access Model - 26.09.23.j10

Path: \\na.aecomnet.com\lfs\EMEA\Dublin-IEDBL2

\DCS\Projects\CI\60690914\_GlenagearyGate\400\_Technical\404\_CE\01\_Traffic\05\_Reports\Planner Submission 29th Sept 2023 Report generation date: 26/09/2023 10:27:32

»2022 Base, AM
»2022 Base, PM
»2025 Without Dev, AM
»2025 With Dev, AM
»2025 With Dev, AM
»2025 With Dev, PM
»2030 Without Dev, AM
»2030 Without Dev, AM
»2030 With Dev, AM
»2030 With Dev, PM
»2040 Without Dev, AM
»2040 Without Dev, AM
»2040 With Dev, AM
»2040 With Dev, AM
»2040 With Dev, AM



#### Summary of junction performance

		A	M				Р	М		
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
					2022	Base				
Stream B-AC	D1	0.0	0.00	0.00	Α	<b>D</b> 2	0.0	0.00	0.00	А
Stream C-AB	וט	0.0	0.00	0.00	А	DZ	0.0	0.00	0.00	А
	2025 Without Dev									
Stream B-AC	<b>D</b> 2	0.0	0.00	0.00	Α	D4	0.0	0.00	0.00	А
Stream C-AB	03	0.0	0.00	0.00	A	D4	0.0	0.00	0.00	А
	2025 With Dev									
Stream B-AC	DE	0.1	6.72	0.06	А	De	0.1	6.85	0.07	А
Stream C-AB	03	0.1	6.65	0.07	А	00	0.1	6.70	0.09	А
				203	0 Wit	hout D	ev			
Stream B-AC	DZ	0.0	0.00	0.00	Α	D.º	0.0	0.00	0.00	А
Stream C-AB	07	0.0	0.00	0.00	А	00	0.0	0.00	0.00	А
				20	30 W	ith Dev	V			
Stream B-AC	DO	0.1	6.72	0.06	A	D10	0.1	6.86	0.07	А
Stream C-AB	03	0.1	6.64	0.07	А	DIU	0.1	6.69	0.09	А
				204	0 Wit	hout D	ev			
Stream B-AC	D11	0.0	0.00	0.00	Α	D12	0.0	0.00	0.00	А
Stream C-AB	DII	0.0	0.00	0.00	А	DIZ	0.0	0.00	0.00	А
				20	940 W	ith Dev	V			
Stream B-AC	D13	0.1	6.72	0.06	А	D14	0.1	6.86	0.07	А
Stream C-AB	510	0.1	6.64	0.07	A	014	0.1	6.67	0.09	А

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	14/12/2022
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	EU\hilary.herlihy
Description	

#### Units

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





Flows show original traffic demand (PCU/hr) Streams (downstream end) show RFC ()

The junction diagram reflects the last run of Junctions.

#### **Analysis Options**

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

#### **Demand Set Summary**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2022 Base	AM	ONE HOUR	09:30	11:00	15
D2	2022 Base	PM	ONE HOUR	15:45	17:15	15
D3	2025 Without Dev	AM	ONE HOUR	09:30	11:00	15
D4	2025 Without Dev	PM	ONE HOUR	15:45	17:15	15
D5	2025 With Dev	AM	ONE HOUR	09:30	11:00	15
D6	2025 With Dev	PM	ONE HOUR	15:45	17:15	15
D7	2030 Without Dev	AM	ONE HOUR	09:30	11:00	15
D8	2030 Without Dev	PM	ONE HOUR	15:45	17:15	15
D9	2030 With Dev	AM	ONE HOUR	09:30	11:00	15
D10	2030 With Dev	PM	ONE HOUR	15:45	17:15	15
D11	2040 Without Dev	AM	ONE HOUR	09:30	11:00	15
D12	2040 Without Dev	PM	ONE HOUR	15:45	17:15	15
D13	2040 With Dev	AM	ONE HOUR	09:30	11:00	15
D14	2040 With Dev	PM	ONE HOUR	15:45	17:15	15



#### **Analysis Set Details**

ID	Network flow scaling factor (%)
A1	100.000



# 2022 Base, AM

#### Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - Glenageary Avenue North - 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	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		0.00	A

#### **Junction Network**

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.00	A

#### Arms

#### Arms

Arm	Name	Description	Arm type
Α	Glenageary Avenue South		Major
в	Site Access		Minor
С	Glenageary Avenue North		Major

#### **Major Arm Geometry**

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right <del>-t</del> urn storage	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Glenageary Avenue North	5.80			100.0	✓	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 - Site Access	One lane	3.00	14	14

#### 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	489	0.090	0.227	0.143	0.325
B-C	633	0.098	0.247	-	-
C-B	632	0.247	0.247	-	-

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

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

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



## **Traffic Demand**

#### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2022 Base	AM	ONE HOUR	09:30	11:00	15

Default vehicle mix	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 - Glenageary Avenue South		~	24	100.000
B - Site Access		~	0	100.000
C - Glenageary Avenue North		✓	20	100.000

## **Origin-Destination Data**

#### Demand (PCU/hr)

	То				
		A - Glenageary Avenue South	B - Site Access	C - Glenageary Avenue North	
<b>F</b>	A - Glenageary Avenue South	0	0	24	
From	B - Site Access	0	0	0	
	C - Glenageary Avenue North	20	0	0	

## **Vehicle Mix**

	То				
		A - Glenageary Avenue South	B - Site Access	C - Glenageary Avenue North	
-	A - Glenageary Avenue South	10	10	10	
From	B - Site Access	10	10	10	
	C - Glenageary Avenue North	10	10	10	

#### Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
	09:30-09:45	18	18
	09:45-10:00	22	22
A - Glenageary Avenue South	10:00-10:15	26	26
	10:15-10:30	26	26
	10:30-10:45	22	22
	10:45-11:00	18	18
	09:30-09:45	0	0
	09:45-10:00	0	0
B. Site Assess	10:00-10:15	0	0
B - Site Access	10:15-10:30	0	0
	10:30-10:45	0	0
	10:45-11:00	0	0
	09:30-09:45	15	15
	09:45-10:00	18	18
C. Glanagoary Avanua North	10:00-10:15	22	22
C - Gienageary Avenue North	10:15-10:30	22	22
	10:30-10:45	18	18
	10:45-11:00	15	15

## Results

#### **Results Summary for whole modelled period**

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.00	0.00	0.0	A
C-AB	0.00	0.00	0.0	A
C-A				
A-B				
A-C				

#### Main Results for each time segment

#### 09:30 - 09:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	546	0.000	0	0.0	0.000	А
C-AB	0	627	0.000	0	0.0	0.000	А
C-A	15			15			
A-B	0			0			
A-C	18			18			

#### 09:45 - 10:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	545	0.000	0	0.0	0.000	А
C-AB	0	627	0.000	0	0.0	0.000	А
C-A	18			18			
A-B	0			0			
A-C	22			22			



#### 10:00 - 10:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	543	0.000	0	0.0	0.000	А
C-AB	0	625	0.000	0	0.0	0.000	А
C-A	22			22			
A-B	0			0			
A-C	26			26			

#### 10:15 - 10:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	543	0.000	0	0.0	0.000	А
C-AB	0	625	0.000	0	0.0	0.000	A
C-A	22			22			
A-B	0			0			
A-C	26			26			

#### 10:30 - 10:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	545	0.000	0	0.0	0.000	А
C-AB	0	627	0.000	0	0.0	0.000	А
C-A	18			18			
A-B	0			0			
A-C	22			22			

#### 10:45 - 11:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	546	0.000	0	0.0	0.000	A
C-AB	0	627	0.000	0	0.0	0.000	A
C-A	15			15			
ΑB	0			0			
A-C	18			18			



# 2022 Base, PM

#### Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - Glenageary Avenue North - 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	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		0.00	A

#### **Junction Network**

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.00	A

## **Traffic Demand**

#### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2022 Base	PM	ONE HOUR	15:45	17:15	15

Default vehicle mix	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 - Glenageary Avenue South		✓	34	100.000
B - Site Access		✓	0	100.000
C - Glenageary Avenue North		✓	36	100.000

## **Origin-Destination Data**

#### Demand (PCU/hr)

	То								
From		A - Glenageary Avenue South	B - Site Access	C - Glenageary Avenue North					
	A - Glenageary Avenue South	0	0	34					
	B - Site Access	0	0	0					
	C - Glenageary Avenue North	36	0	0					

## **Vehicle Mix**

	То							
From		A - Glenageary Avenue South	B - Site Access	C - Glenageary Avenue North				
	A - Glenageary Avenue South	10	10	10				
	B - Site Access	10	10	10				
	C - Glenageary Avenue North	10	10	10				



#### Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
	15:45-16:00	26	26
	16:00-16:15	31	31
A Clanageory Avenue South	16:15-16:30	37	37
A- Glenageary Avenue South	16:30-16:45	37	37
	16:45-17:00	31	31
	17:00-17:15	26	26
	15:45-16:00	0	0
	16:00-16:15	0	0
P. Site Assocs	16:15-16:30	0	0
D - She Access	16:30-16:45	0	0
	16:45-17:00	0	0
	17:00-17:15	0	0
	15:45-16:00	27	27
	16:00-16:15	32	32
C. Glanagoary Avanua North	16:15-16:30	40	40
C - Gienageary Avenue North	16:30-16:45	40	40
	16:45-17:00	32	32
	17:00-17:15	27	27

## Results

#### **Results Summary for whole modelled period**

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.00	0.00	0.0	А
C-AB	0.00	0.00	0.0	А
C-A				
A-B				
A-C				

#### Main Results for each time segment

#### 15:45 - 16:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	543	0.000	0	0.0	0.000	А
C-AB	0	626	0.000	0	0.0	0.000	А
C-A	27			27			
A-B	0			0			
A-C	26			26			

#### 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	0	542	0.000	0	0.0	0.000	А
C-AB	0	624	0.000	0	0.0	0.000	А
C-A	32			32			
A-B	0			0			
A-C	31			31			



#### 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	0	539	0.000	0	0.0	0.000	А
C-AB	0	623	0.000	0	0.0	0.000	A
C-A	40			40			
ΑB	0			0			
A-C	37			37			

#### 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	0	539	0.000	0	0.0	0.000	А
C-AB	0	623	0.000	0	0.0	0.000	А
C-A	40			40			
A-B	0			0			
A-C	37			37			

#### 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	0	542	0.000	0	0.0	0.000	А
C-AB	0	624	0.000	0	0.0	0.000	А
C-A	32			32			
ΑB	0			0			
A-C	31			31			

#### 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	0	543	0.000	0	0.0	0.000	A
C-AB	0	626	0.000	0	0.0	0.000	A
C-A	27			27			
ΑB	0			0			
A-C	26			26			


# 2025 Without Dev, AM

#### **Data Errors and Warnings**

Severity	Area	Item	Description
Warning	Major arm width	C - Glenageary Avenue North - 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	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		0.00	А

#### **Junction Network**

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.00	A

# **Traffic Demand**

#### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2025 Without Dev	AM	ONE HOUR	09:30	11:00	15

Default vehicle mix	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 - Glenageary Avenue South		✓	25	100.000
B - Site Access		✓	0	100.000
C - Glenageary Avenue North		✓	21	100.000

## **Origin-Destination Data**

#### Demand (PCU/hr)

		То		
From		A - Glenageary Avenue South	B - Site Access	C - Glenageary Avenue North
	A - Glenageary Avenue South	0	0	25
	B - Site Access	0	0	0
	C - Glenageary Avenue North	21	0	0

### **Vehicle Mix**

	То							
		A - Glenageary Avenue South	B - Site Access	C - Glenageary Avenue North				
<b>F</b>	A - Glenageary Avenue South	10	10	10				
From	B - Site Access	10	10	10				
	C - Glenageary Avenue North	10	10	10				



#### Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
	09:30-09:45	19	19
	09:45-10:00	22	22
A Clanageory Avenue South	10:00-10:15	28	28
A- Glenageary Avenue South	10:15-10:30	28	28
	10:30-10:45	22	22
	10:45-11:00	19	19
	09:30-09:45	0	0
	09:45-10:00	0	0
P. Site Assocs	10:00-10:15	0	0
D - She Access	10:15-10:30	0	0
	10:30-10:45	0	0
	10:45-11:00	0	0
	09:30-09:45	16	16
	09:45-10:00	19	19
C. Glanagoary Avanua North	10:00-10:15	23	23
C - Gienageary Avenue North	10:15-10:30	23	23
	10:30-10:45	19	19
	10:45-11:00	16	16

# Results

#### **Results Summary for whole modelled period**

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.00	0.00	0.0	А
C-AB	0.00	0.00	0.0	А
C-A				
A-B				
A-C				

#### Main Results for each time segment

#### 09:30 - 09:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	546	0.000	0	0.0	0.000	А
C-AB	0	627	0.000	0	0.0	0.000	A
C-A	16			16			
A-B	0			0			
A-C	19			19			

#### 09:45 - 10:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	545	0.000	0	0.0	0.000	А
C-AB	0	626	0.000	0	0.0	0.000	А
C-A	19			19			
A-B	0			0			
A-C	22			22			



#### 10:00 - 10:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	543	0.000	0	0.0	0.000	A
C-AB	0	625	0.000	0	0.0	0.000	A
C-A	23			23			
ΑB	0			0			
A-C	28			28			

#### 10:15 - 10:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	543	0.000	0	0.0	0.000	А
C-AB	0	625	0.000	0	0.0	0.000	А
C-A	23			23			
A-B	0			0			
A-C	28			28			

#### 10:30 - 10:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	545	0.000	0	0.0	0.000	А
C-AB	0	626	0.000	0	0.0	0.000	А
C-A	19			19			
A-B	0			0			
A-C	22			22			

#### 10:45 - 11:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	546	0.000	0	0.0	0.000	A
C-AB	0	627	0.000	0	0.0	0.000	A
C-A	16			16			
ΑB	0			0			
A-C	19			19			



# 2025 Without Dev, PM

#### **Data Errors and Warnings**

Severity	Area	Item	Description
Warning	Major arm width	C - Glenageary Avenue North - 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	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		0.00	A

#### **Junction Network**

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.00	A

# **Traffic Demand**

#### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2025 Without Dev	PM	ONE HOUR	15:45	17:15	15

Default vehicle mix 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 - Glenageary Avenue South		✓	35	100.000
B - Site Access		✓	0	100.000
C - Glenageary Avenue North		✓	37	100.000

## **Origin-Destination Data**

#### Demand (PCU/hr)

	То							
From		A - Glenageary Avenue South	B - Site Access	C - Glenageary Avenue North				
	A - Glenageary Avenue South	0	0	35				
	B - Site Access	0	0	0				
	C - Glenageary Avenue North	37	0	0				

### **Vehicle Mix**

	То						
		A - Glenageary Avenue South	B - Site Access	C - Glenageary Avenue North			
<b>F</b>	A - Glenageary Avenue South	10	10	10			
From	B - Site Access	10	10	10			
	C - Glenageary Avenue North	10	10	10			



#### Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)	
	15:45-16:00	26	26	
	16:00-16:15	31	31	
A Oleman August Cauth	16:15-16:30	39	39	
A - Glenageary Avenue South	16:30-16:45	39	39	
	16:45-17:00	31	31	
	17:00-17:15	26	26	
	15:45-16:00	0	0	
	16:00-16:15	0	0	
B. Site Assess	16:15-16:30	0	0	
B - Site Access	16:30-16:45	0	0	
	16:45-17:00	0	0	
	17:00-17:15	0	0	
	15:45-16:00	28	28	
	16:00-16:15	33	33	
	16:15-16:30	41	41	
C - Gienageary Avenue North	16:30-16:45	41	41	
	16:45-17:00	33	33	
	17:00-17:15	28	28	

# Results

#### **Results Summary for whole modelled period**

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	
B-AC	0.00	0.00	0.0	А	
C-AB	0.00	0.00	0.0	A	
C-A					
A-B					
A-C					

#### Main Results for each time segment

#### 15:45 - 16:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	543	0.000	0	0.0	0.000	А
C-AB	0	625	0.000	0	0.0	0.000	А
C-A	28			28			
A-B	0			0			
A-C	26			26			

#### 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	0	541	0.000	0	0.0	0.000	А
C-AB	0	624	0.000	0	0.0	0.000	А
C-A	33			33			
A-B	0			0			
A-C	31			31			



#### 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	0	539	0.000	0	0.0	0.000	A
C-AB	0	622	0.000	0	0.0	0.000	A
C-A	41			41			
ΑB	0			0			
A-C	39			39			

#### 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	0	539	0.000	0	0.0	0.000	А
C-AB	0	622	0.000	0	0.0	0.000	А
C-A	41			41			
A-B	0			0			
A-C	39			39			

#### 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	0	541	0.000	0	0.0	0.000	А
C-AB	0	624	0.000	0	0.0	0.000	А
C-A	33			33			
A-B	0			0			
A-C	31			31			

#### 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	0	543	0.000	0	0.0	0.000	A
C-AB	0	625	0.000	0	0.0	0.000	A
C-A	28			28			
ΑB	0			0			
A-C	26			26			



# 2025 With Dev, AM

#### **Data Errors and Warnings**

Severity	Area	Item	Description
Warning	Major arm width	C - Glenageary Avenue North - 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	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		4.15	А

#### **Junction Network**

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.15	A

# **Traffic Demand**

#### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	2025 With Dev	AM	ONE HOUR	09:30	11:00	15

Default vehicle mix	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 - Glenageary Avenue South		✓	25	100.000
B - Site Access		~	33	100.000
C - Glenageary Avenue North		✓	60	100.000

## **Origin-Destination Data**

#### Demand (PCU/hr)

		То		
From		A - Glenageary Avenue South	B - Site Access	C - Glenageary Avenue North
	A - Glenageary Avenue South	0	0	25
	B - Site Access	0	0	33
	C - Glenageary Avenue North	21	39	0

### **Vehicle Mix**

		То									
From		A - Glenageary Avenue South	B - Site Access	C - Glenageary Avenue North							
	A - Glenageary Avenue South	10	10	10							
	B - Site Access	10	10	10							
	C - Glenageary Avenue North	10	10	10							



#### Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
	09:30-09:45	19	19
	09:45-10:00	22	22
A - Glenageary Avenue South	10:00-10:15	28	28
	10:15-10:30	28	28
	10:30-10:45	22	22
	10:45-11:00	19	19
	09:30-09:45	25	25
	09:45-10:00	30	30
B. Site Assess	10:00-10:15	36	36
B - Site Access	10:15-10:30	36	36
	10:30-10:45	30	30
	10:45-11:00	25	25
	09:30-09:45	45	45
	09:45-10:00	54	54
C. Glanagoary Avanua North	10:00-10:15	66	66
C - Gienageary Avenue North	10:15-10:30	66	66
	10:30-10:45	54	54
	10:45-11:00	45	45

# Results

#### **Results Summary for whole modelled period**

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.06	6.72	0.1	A
C-AB	0.07	6.65	0.1	A
C-A				
ΑB				
A-C				

#### Main Results for each time segment

#### 09:30 - 09:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	25	628	0.040	25	0.0	6.561	А
C-AB	30	638	0.047	30	0.1	6.516	A
C-A	15			15			
A-B	0			0			
A-C	19			19			

#### 09:45 - 10:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	30	627	0.047	30	0.1	6.626	А
C-AB	36	639	0.057	36	0.1	6.571	А
C-A	18			18			
A-B	0			0			
A-C	22			22			



#### 10:00 - 10:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	36	626	0.058	36	0.1	6.715	А
C-AB	45	640	0.070	44	0.1	6.647	A
C-A	22			22			
ΑB	0			0			
A-C	28			28			

#### 10:15 - 10:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	36	626	0.058	36	0.1	6.715	А
C-AB	45	640	0.070	45	0.1	6.648	А
C-A	22			22			
A-B	0			0			
A-C	28			28			

#### 10:30 - 10:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	30	627	0.047	30	0.1	6.630	А
C-AB	36	639	0.057	36	0.1	6.576	А
C-A	18			18			
A-B	0			0			
A-C	22			22			

#### 10:45 - 11:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	25	628	0.040	25	0.0	6.564	А
C-AB	30	638	0.047	30	0.1	6.519	A
C-A	15			15			
ΑB	0			0			
A-C	19			19			



# 2025 With Dev, PM

#### **Data Errors and Warnings**

Severity	Area	Item	Description
Warning	Major arm width	C - Glenageary Avenue North - 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	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		3.88	A

#### **Junction Network**

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.88	A

# **Traffic Demand**

#### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	2025 With Dev	PM	ONE HOUR	15:45	17:15	15

Default vehicle mix	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 - Glenageary Avenue South		✓	35	100.000
B - Site Access		✓	41	100.000
C - Glenageary Avenue North		✓	86	100.000

## **Origin-Destination Data**

#### Demand (PCU/hr)

		То		
From		A - Glenageary Avenue South	B - Site Access	C - Glenageary Avenue North
	A - Glenageary Avenue South	0	0	35
	B - Site Access	0	0	41
	C - Glenageary Avenue North	37	49	0

### **Vehicle Mix**

	То							
		A - Glenageary Avenue South	B - Site Access	C - Glenageary Avenue North				
Farm	A - Glenageary Avenue South	10	10	10				
From	B - Site Access	10	10	10				
	C - Glenageary Avenue North	10	10	10				



#### Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
	15:45-16:00	26	26
	16:00-16:15	31	31
A Clanageory Avenue South	16:15-16:30	39	39
A- Glenageary Avenue South	16:30-16:45	39	39
	16:45-17:00	31	31
	17:00-17:15	26	26
	15:45-16:00	31	31
	16:00-16:15	37	37
P. Site Assocs	16:15-16:30	45	45
D - She Access	16:30-16:45	45	45
	16:45-17:00	37	37
	17:00-17:15	31	31
	15:45-16:00	65	65
	16:00-16:15	77	77
C. Glanagoary Avanua North	16:15-16:30	95	95
C - Gienageary Avenue North	16:30-16:45	95	95
	16:45-17:00	77	77
	17:00-17:15	65	65

# Results

#### **Results Summary for whole modelled period**

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.07	6.85	0.1	A
C-AB	0.09	6.70	0.1	A
C-A				
ΑB				
A-C				

#### Main Results for each time segment

#### 15:45 - 16:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	31	626	0.049	31	0.1	6.647	А
C-AB	39	644	0.060	38	0.1	6.539	А
C-A	26			26			
A-B	0			0			
A-C	26			26			

#### 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	37	625	0.059	37	0.1	6.732	А
C-AB	46	646	0.072	46	0.1	6.605	А
C-A	31			31			
A-B	0			0			
A-C	31			31			



#### 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	45	623	0.072	45	0.1	6.849	А
C-AB	58	649	0.089	57	0.1	6.694	A
C-A	37			37			
ΑB	0			0			
A-C	39			39			

#### 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	45	623	0.072	45	0.1	6.849	A
C-AB	58	649	0.089	58	0.1	6.698	A
C-A	37			37			
A-B	0			0			
A-C	39			39			

#### 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	37	625	0.059	37	0.1	6.734	А
C-AB	46	646	0.072	47	0.1	6.611	А
C-A	31			31			
ΑB	0			0			
A-C	31			31			

#### 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	31	626	0.049	31	0.1	6.654	А
C-AB	39	644	0.060	39	0.1	6.546	A
C-A	26			26			
ΑB	0			0			
A-C	26			26			



# 2030 Without Dev, AM

#### **Data Errors and Warnings**

Severity	Area	Item	Description
Warning	Major arm width	C - Glenageary Avenue North - 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	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		0.00	A

#### **Junction Network**

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.00	A

# **Traffic Demand**

#### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D7	2030 Without Dev	AM	ONE HOUR	09:30	11:00	15

Default vehicle mix	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 - Glenageary Avenue South		✓	27	100.000
B - Site Access		✓	0	100.000
C - Glenageary Avenue North		✓	23	100.000

## **Origin-Destination Data**

#### Demand (PCU/hr)

	То						
		A - Glenageary Avenue South	B - Site Access	C - Glenageary Avenue North			
_	A - Glenageary Avenue South	0	0	27			
From	B - Site Access	0	0	0			
	C - Glenageary Avenue North	23	0	0			

## **Vehicle Mix**

	То					
		A - Glenageary Avenue South	B - Site Access	C - Glenageary Avenue North		
Farm	A - Glenageary Avenue South	10	10	10		
From	B - Site Access	10	10	10		
	C - Glenageary Avenue North	10	10	10		



#### Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
	09:30-09:45	20	20
	09:45-10:00	24	24
A - Glanagaary Avanua South	10:00-10:15	30	30
A- Glenageary Avenue South	10:15-10:30	30	30
	10:30-10:45	24	24
	10:45-11:00	20	20
	09:30-09:45	0	0
	09:45-10:00	0	0
P. Site Assocs	10:00-10:15	0	0
D - She Access	10:15-10:30	0	0
	10:30-10:45	0	0
	10:45-11:00	0	0
	09:30-09:45	17	17
	09:45-10:00	21	21
C. Glanagoary Avanua North	10:00-10:15	25	25
C - Gienageary Avenue North	10:15-10:30	25	25
	10:30-10:45	21	21
	10:45-11:00	17	17

# Results

#### **Results Summary for whole modelled period**

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.00	0.00	0.0	А
C-AB	0.00	0.00	0.0	А
C-A				
A-B				
A-C				

#### Main Results for each time segment

#### 09:30 - 09:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	545	0.000	0	0.0	0.000	А
C-AB	0	627	0.000	0	0.0	0.000	A
C-A	17			17			
A-B	0			0			
A-C	20			20			

#### 09:45 - 10:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	544	0.000	0	0.0	0.000	А
C-AB	0	626	0.000	0	0.0	0.000	А
C-A	21			21			
A-B	0			0			
A-C	24			24			



#### 10:00 - 10:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	542	0.000	0	0.0	0.000	А
C-AB	0	625	0.000	0	0.0	0.000	A
C-A	25			25			
ΑB	0			0			
A-C	30			30			

#### 10:15 - 10:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	542	0.000	0	0.0	0.000	А
C-AB	0	625	0.000	0	0.0	0.000	А
C-A	25			25			
A-B	0			0			
A-C	30			30			

#### 10:30 - 10:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	544	0.000	0	0.0	0.000	А
C-AB	0	626	0.000	0	0.0	0.000	А
C-A	21			21			
ΑB	0			0			
A-C	24			24			

#### 10:45 - 11:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	545	0.000	0	0.0	0.000	A
C-AB	0	627	0.000	0	0.0	0.000	A
C-A	17			17			
ΑB	0			0			
A-C	20			20			



# 2030 Without Dev, PM

#### **Data Errors and Warnings**

Severity	Area	Item	Description
Warning	Major arm width	C - Glenageary Avenue North - 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	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		0.00	А

#### **Junction Network**

Driving side	Lighting	Network delay (s)	Network LOS	
Left	Normal/unknown	0.00	A	

# **Traffic Demand**

#### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D8	2030 Without Dev	PM	ONE HOUR	15:45	17:15	15

Default vehicle mix	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 - Glenageary Avenue South		✓	38	100.000
B - Site Access		~	0	100.000
C - Glenageary Avenue North		✓	40	100.000

## **Origin-Destination Data**

#### Demand (PCU/hr)

		То									
		A - Glenageary Avenue South	B - Site Access	C - Glenageary Avenue North							
	A - Glenageary Avenue South	0	0	38							
From	B - Site Access	0	0	0							
	C - Glenageary Avenue North	40	0	0							

## **Vehicle Mix**

		То									
		A - Glenageary Avenue South	B - Site Access	C - Glenageary Avenue North							
Farm	A - Glenageary Avenue South	10	10	10							
From	B - Site Access	10	10	10							
	C - Glenageary Avenue North	10	10	10							



#### Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
	15:45-16:00	29	29
	16:00-16:15	34	34
A - Glenageary Avenue South	16:15-16:30	42	42
A- Glenageary Avenue South	16:30-16:45	42	42
	16:45-17:00	34	34
	17:00-17:15	29	29
	15:45-16:00	0	0
	16:00-16:15	0	0
P. Site Assocs	16:15-16:30	0	0
D - She Access	16:30-16:45	0	0
	16:45-17:00	0	0
	17:00-17:15	0	0
	15:45-16:00	30	30
	16:00-16:15	36	36
C. Glanagoary Avanua North	16:15-16:30	44	44
C - Glenageary Avenue North	16:30-16:45	44	44
	16:45-17:00	36	36
	17:00-17:15	30	30

# Results

#### **Results Summary for whole modelled period**

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.00	0.00	0.0	А
C-AB	0.00	0.00	0.0	А
C-A				
A-B				
A-C				

#### Main Results for each time segment

#### 15:45 - 16:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	542	0.000	0	0.0	0.000	А
C-AB	0	625	0.000	0	0.0	0.000	А
C-A	30			30			
A-B	0			0			
A-C	29			29			

#### 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	0	540	0.000	0	0.0	0.000	А
C-AB	0	623	0.000	0	0.0	0.000	А
C-A	36			36			
A-B	0			0			
A-C	34			34			



#### 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	0	538	0.000	0	0.0	0.000	А
C-AB	0	622	0.000	0	0.0	0.000	A
C-A	44			44			
ΑB	0			0			
A-C	42			42			

#### 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	0	538	0.000	0	0.0	0.000	А
C-AB	0	622	0.000	0	0.0	0.000	А
C-A	44			44			
A-B	0			0			
A-C	42			42			

#### 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	0	540	0.000	0	0.0	0.000	А
C-AB	0	623	0.000	0	0.0	0.000	А
C-A	36			36			
A-B	0			0			
A-C	34			34			

#### 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	0	542	0.000	0	0.0	0.000	A
C-AB	0	625	0.000	0	0.0	0.000	A
C-A	30			30			
ΑB	0			0			
A-C	29			29			



# 2030 With Dev, AM

#### Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - Glenageary Avenue North - 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	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		4.02	A

#### **Junction Network**

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.02	A

# **Traffic Demand**

#### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D9	2030 With Dev	AM	ONE HOUR	09:30	11:00	15

Default vehicle mix	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 - Glenageary Avenue South		✓	27	100.000
B - Site Access		~	33	100.000
C - Glenageary Avenue North		✓	62	100.000

## **Origin-Destination Data**

#### Demand (PCU/hr)

		То		
From		A - Glenageary Avenue South	B - Site Access	C - Glenageary Avenue North
	A - Glenageary Avenue South	0	0	27
	B - Site Access	0	0	33
	C - Glenageary Avenue North	23	39	0

## **Vehicle Mix**

	То							
		A - Glenageary Avenue South	B - Site Access	C - Glenageary Avenue North				
Farm	A - Glenageary Avenue South	10	10	10				
From	B - Site Access	10	10	10				
	C - Glenageary Avenue North	10	10	10				



#### Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
	09:30-09:45	20	20
	09:45-10:00	24	24
A Clanageory Avenue South	Time Segment   Demand (PCU/hr)   Demand in PCU (PCU/hr)     09:30-09:45   20   20     09:45-10:00   24   24     10:00-10:15   30   30     10:10-10:15   30   30     10:15-10:30   30   30     10:15-11:00   20   20     09:30-09:45   24   24     10:05-10:15   24   24     10:05-10:15   24   24     10:05-10:15   25   25     09:30-09:45   25   25     10:00-10:15   36   36     10:01:10:15   36   36     10:10:10:15   30   30     10:45-11:00   25   25     09:30-09:45   47   47     09:45-10:00   56   56     10:00-10:15   68   68     10:01:15:10:30   68   68		
A - Glenageary Avenue South	10:15-10:30	30	30
	10:30-10:45	24	24
	10:45-11:00	20	20   21   22   24   30   24   20   24   20   24   20   24   20   25   30   36   37   38   39   30   30   30   31   32   33   34   35   36   36   36   36
	09:30-09:45	25	25
	09:45-10:00	30	30
B - Site Access	10:00-10:15	36	36
	10:15-10:30	36	36
	10:30-10:45	30	30
	10:45-11:00	25	25
	09:30-09:45	47	47
	09:45-10:00	56	56
C. Glanagoary Avanua North	10:00-10:15	68	68
C - Gienageary Avenue North	10:15-10:30	68	68
	10:30-10:45	56	56
	10:45-11:00	47	47

# Results

#### **Results Summary for whole modelled period**

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.06	6.72	0.1	A
C-AB	0.07	6.64	0.1	A
C-A				
ΑB				
A-C				

#### Main Results for each time segment

#### 09:30 - 09:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	25	628	0.040	25	0.0	6.565	А
C-AB	30	638	0.047	30	0.1	6.510	А
C-A	16			16			
A-B	0			0			
A-C	20			20			

#### 09:45 - 10:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	30	627	0.047	30	0.1	6.631	А
C-AB	36	639	0.057	36	0.1	6.564	А
C-A	19			19			
A-B	0			0			
A-C	24			24			



#### 10:00 - 10:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	36	625	0.058	36	0.1	6.721	А
C-AB	45	641	0.070	45	0.1	6.639	A
C-A	24			24			
ΑB	0			0			
A-C	30			30			

#### 10:15 - 10:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	36	625	0.058	36	0.1	6.721	А
C-AB	45	641	0.070	45	0.1	6.642	А
C-A	24			24			
A-B	0			0			
A-C	30			30			

#### 10:30 - 10:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	30	627	0.047	30	0.1	6.632	А
C-AB	36	639	0.057	36	0.1	6.569	А
C-A	19			19			
ΑB	0			0			
A-C	24			24			

#### 10:45 - 11:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	25	628	0.040	25	0.0	6.568	А
C-AB	30	638	0.047	30	0.1	6.516	A
C-A	16			16			
ΑB	0			0			
A-C	20			20			



# 2030 With Dev, PM

#### **Data Errors and Warnings**

Severity	Area	Item	Description
Warning	Major arm width	C - Glenageary Avenue North - 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	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		3.74	A

#### **Junction Network**

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.74	А

# **Traffic Demand**

#### **Demand Set Details**

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

Default vehicle mix	Default vehicle mix Vehicle mix source		
✓	HV Percentages	2.00	

#### **Demand overview (Traffic)**

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Glenageary Avenue South		✓	38	100.000
B - Site Access		✓	41	100.000
C - Glenageary Avenue North		✓	89	100.000

## **Origin-Destination Data**

#### Demand (PCU/hr)

	То						
		A - Glenageary Avenue South	B - Site Access	C - Glenageary Avenue North			
	A - Glenageary Avenue South	0	0	38			
From	B - Site Access	0	0	41			
	C - Glenageary Avenue North	40	49	0			

### **Vehicle Mix**

	То						
		A - Glenageary Avenue South	B - Site Access	C - Glenageary Avenue North			
<b>F</b>	A - Glenageary Avenue South	10	10	10			
From	B - Site Access	10	10	10			
	C - Glenageary Avenue North	10	10	10			



#### Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)	
	15:45-16:00	29	29	
	16:00-16:15	34	34	
A Oleman August Cauth	16:15-16:30	42	42	
A - Glenageary Avenue South	16:30-16:45	42	42	
	16:45-17:00	34	34	
	17:00-17:15	29	29	
	15:45-16:00	31	31	
	16:00-16:15	37	37	
B. Site Assess	16:15-16:30	45	45	
B - Site Access	16:30-16:45	45	45	
	16:45-17:00	37	37	
	17:00-17:15	31	31	
	15:45-16:00	67	67	
	16:00-16:15	80	80	
	16:15-16:30	98	98	
C - Gienageary Avenue North	16:30-16:45	98	98	
	16:45-17:00	80	80	
	17:00-17:15	67	67	

# Results

#### **Results Summary for whole modelled period**

Stream	eam Max RFC Max Delay		Max Queue (PCU)	Max LOS	
B-AC	0.07	6.86	0.1	A	
C-AB	0.09	6.69	0.1	A	
C-A					
ΑB					
A-C					

#### Main Results for each time segment

#### 15:45 - 16:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	31	626	0.049	31	0.1	6.654	A
C-AB	39	644	0.060	38	0.1	6.531	A
C-A	28			28			
A-B	0			0			
A-C	29			29			

#### 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	37	624	0.059	37	0.1	6.740	А
C-AB	47	647	0.072	47	0.1	6.596	А
C-A	33			33			
A-B	0			0			
A-C	34			34			



#### 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	45	622	0.073	45	0.1	6.859	A
C-AB	58	650	0.089	58	0.1	6.682	A
C-A	40			40			
ΑB	0			0			
A-C	42			42			

#### 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	45	622	0.073	45	0.1	6.859	A
C-AB	58	650	0.089	58	0.1	6.686	A
C-A	40			40			
A-B	0			0			
A-C	42			42			

#### 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	37	624	0.059	37	0.1	6.744	А
C-AB	47	647	0.072	47	0.1	6.598	А
C-A	33			33			
ΑB	0			0			
A-C	34			34			

#### 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	31	626	0.049	31	0.1	6.660	A
C-AB	39	644	0.060	39	0.1	6.538	A
C-A	28			28			
ΑB	0			0			
A-C	29			29			



# 2040 Without Dev, AM

#### **Data Errors and Warnings**

Severity	Area	Item	Description
Warning	Major arm width	C - Glenageary Avenue North - 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	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		0.00	A

#### **Junction Network**

Driving side	Lighting	Network delay (s)	Network LOS	
Left	Normal/unknown	0.00	A	

# **Traffic Demand**

#### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D11	2040 Without Dev	AM	ONE HOUR	09:30	11:00	15

Default vehicle mix	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 - Glenageary Avenue South		✓	28	100.000
B - Site Access		~	0	100.000
C - Glenageary Avenue North		✓	24	100.000

## **Origin-Destination Data**

#### Demand (PCU/hr)

		То		
		A - Glenageary Avenue South	B - Site Access	C - Glenageary Avenue North
	A - Glenageary Avenue South	0	0	28
From	B - Site Access	0	0	0
	C - Glenageary Avenue North	24	0	0

### **Vehicle Mix**

		То								
		A - Glenageary Avenue South	B - Site Access	C - Glenageary Avenue North						
<b>F</b>	A - Glenageary Avenue South	10	10	10						
From	B - Site Access	10	10	10						
	C - Glenageary Avenue North	10	10	10						



#### Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
	09:30-09:45	21	21
	09:45-10:00	25	25
A Clanageory Avenue South	10:00-10:15	31	31
A - Glenageary Avenue South	10:15-10:30	31	31
	10:30-10:45	25	25
	10:45-11:00	21	21
	09:30-09:45	0	0
	09:45-10:00	0	0
P. Site Assocs	10:00-10:15	0	0
D - She Access	10:15-10:30	0	0
	10:30-10:45	0	0
	10:45-11:00	0	0
	09:30-09:45	18	18
	09:45-10:00	22	22
C. Glanagoary Avanua North	10:00-10:15	26	26
C - Gienageary Avenue North	10:15-10:30	26	26
	10:30-10:45	22	22
	10:45-11:00	18	18

# Results

#### **Results Summary for whole modelled period**

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.00	0.00	0.0	А
C-AB	0.00	0.00	0.0	А
C-A				
A-B				
A-C				

#### Main Results for each time segment

#### 09:30 - 09:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	545	0.000	0	0.0	0.000	А
C-AB	0	627	0.000	0	0.0	0.000	A
C-A	18			18			
A-B	0			0			
A-C	21			21			

#### 09:45 - 10:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	544	0.000	0	0.0	0.000	А
C-AB	0	626	0.000	0	0.0	0.000	А
C-A	22			22			
A-B	0			0			
A-C	25			25			



#### 10:00 - 10:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	542	0.000	0	0.0	0.000	A
C-AB	0	624	0.000	0	0.0	0.000	A
C-A	26			26			
ΑB	0			0			
A-C	31			31			

#### 10:15 - 10:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	542	0.000	0	0.0	0.000	A
C-AB	0	624	0.000	0	0.0	0.000	A
C-A	26			26			
A-B	0			0			
A-C	31			31			

#### 10:30 - 10:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	544	0.000	0	0.0	0.000	А
C-AB	0	626	0.000	0	0.0	0.000	А
C-A	22			22			
A-B	0			0			
A-C	25			25			

#### 10:45 - 11:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	545	0.000	0	0.0	0.000	A
C-AB	0	627	0.000	0	0.0	0.000	A
C-A	18			18			
ΑB	0			0			
A-C	21			21			



# 2040 Without Dev, PM

#### **Data Errors and Warnings**

Severity	Area	Item	Description
Warning	Major arm width	C - Glenageary Avenue North - 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	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		0.00	A

#### **Junction Network**

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.00	A

# **Traffic Demand**

#### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D12	2040 Without Dev	PM	ONE HOUR	15:45	17:15	15

Default vehicle mix	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 - Glenageary Avenue South		✓	39	100.000
B - Site Access		✓	0	100.000
C - Glenageary Avenue North		✓	42	100.000

## **Origin-Destination Data**

#### Demand (PCU/hr)

		То		
From		A - Glenageary Avenue South	B - Site Access	C - Glenageary Avenue North
	A - Glenageary Avenue South	0	0	39
	B - Site Access	0	0	0
	C - Glenageary Avenue North	42	0	0

### **Vehicle Mix**

	То						
		A - Glenageary Avenue South	B - Site Access	C - Glenageary Avenue North			
Francis	A - Glenageary Avenue South	10	10	10			
From	B - Site Access	10	10	10			
	C - Glenageary Avenue North	10	10	10			



#### Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
	15:45-16:00	29	29
	16:00-16:15	35	35
A Clanageory Avenue South	16:15-16:30	43	43
A- Glenageary Avenue South	16:30-16:45	43	43
	16:45-17:00	35	35
	17:00-17:15	29	29
	15:45-16:00	0	0
	16:00-16:15	0	0
B. Site Assess	16:15-16:30	0	0
B - Site Access	16:30-16:45	0	0
	16:45-17:00	0	0
	17:00-17:15	0	0
	15:45-16:00	32	32
	16:00-16:15	38	38
	16:15-16:30	46	46
C - Glenageary Avenue North	16:30-16:45	46	46
	16:45-17:00	38	38
	17:00-17:15	32	32

# Results

#### **Results Summary for whole modelled period**

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.00	0.00	0.0	A
C-AB	0.00	0.00	0.0	A
C-A				
A-B				
A-C				

#### Main Results for each time segment

#### 15:45 - 16:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	542	0.000	0	0.0	0.000	А
C-AB	0	625	0.000	0	0.0	0.000	А
C-A	32			32			
A-B	0			0			
A-C	29			29			

#### 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	0	540	0.000	0	0.0	0.000	А
C-AB	0	623	0.000	0	0.0	0.000	А
C-A	38			38			
A-B	0			0			
A-C	35			35			



#### 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	0	537	0.000	0	0.0	0.000	A
C-AB	0	621	0.000	0	0.0	0.000	A
C-A	46			46			
ΑB	0			0			
A-C	43			43			

#### 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	0	537	0.000	0	0.0	0.000	А
C-AB	0	621	0.000	0	0.0	0.000	А
C-A	46			46			
ΑB	0			0			
A-C	43			43			

#### 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	0	540	0.000	0	0.0	0.000	А
C-AB	0	623	0.000	0	0.0	0.000	А
C-A	38			38			
ΑB	0			0			
A-C	35			35			

#### 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	0	542	0.000	0	0.0	0.000	А
C-AB	0	625	0.000	0	0.0	0.000	А
C-A	32			32			
ΑB	0			0			
A-C	29			29			



# 2040 With Dev, AM

#### Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - Glenageary Avenue North - 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	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		3.95	А

#### **Junction Network**

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.95	A

# **Traffic Demand**

#### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D13	2040 With Dev	AM	ONE HOUR	09:30	11:00	15

Default vehicle mix	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 - Glenageary Avenue South		✓	28	100.000
B - Site Access		✓	33	100.000
C - Glenageary Avenue North		✓	63	100.000

## **Origin-Destination Data**

#### Demand (PCU/hr)

		То							
From		A - Glenageary Avenue South	B - Site Access	C - Glenageary Avenue North					
	A - Glenageary Avenue South	0	0	28					
	B - Site Access	0	0	33					
	C - Glenageary Avenue North	24	39	0					

### **Vehicle Mix**

	То						
		A - Glenageary Avenue South	B - Site Access	C - Glenageary Avenue North			
<b>F</b>	A - Glenageary Avenue South	10	10	10			
From	B - Site Access	10	10	10			
	C - Glenageary Avenue North	10	10	10			



#### Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
	09:30-09:45	21	21
	09:45-10:00	25	25
A Clanageory Avenue South	10:00-10:15	31	31
A- Glenageary Avenue South	10:15-10:30	31	31
	10:30-10:45	25	25
	10:45-11:00	21	21
	09:30-09:45	25	25
	09:45-10:00	30	30
P. Site Access	10:00-10:15	36	36
D - Sile Access	10:15-10:30	36	36
	10:30-10:45	30	30
	10:45-11:00	25	25
	09:30-09:45	47	47
	09:45-10:00	57	57
C. Glanagoary Avanua North	10:00-10:15	69	69
C - Gienageary Avenue North	10:15-10:30	69	69
	10:30-10:45	57	57
	10:45-11:00	47	47

# Results

#### **Results Summary for whole modelled period**

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.06	6.72	0.1	A
C-AB	0.07	6.64	0.1	A
C-A				
A-B				
A-C				

#### Main Results for each time segment

#### 09:30 - 09:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	25	628	0.040	25	0.0	6.567	А
C-AB	30	638	0.047	30	0.1	6.507	А
C-A	17			17			
A-B	0			0			
A-C	21			21			

#### 09:45 - 10:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	30	627	0.047	30	0.1	6.633	А
C-AB	36	640	0.057	36	0.1	6.561	А
C-A	20			20			
A-B	0			0			
A-C	25			25			



#### 10:00 - 10:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	36	625	0.058	36	0.1	6.724	A
C-AB	45	642	0.070	45	0.1	6.635	A
C-A	25			25			
ΑB	0			0			
A-C	31			31			

#### 10:15 - 10:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	36	625	0.058	36	0.1	6.724	А
C-AB	45	642	0.070	45	0.1	6.638	А
C-A	25			25			
A-B	0			0			
A-C	31			31			

#### 10:30 - 10:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	30	627	0.047	30	0.1	6.637	А
C-AB	36	640	0.057	36	0.1	6.565	А
C-A	20			20			
ΑB	0			0			
A-C	25			25			

#### 10:45 - 11:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	25	628	0.040	25	0.0	6.570	A
C-AB	30	638	0.047	30	0.1	6.511	A
C-A	17			17			
ΑB	0			0			
A-C	21			21			



# 2040 With Dev, PM

#### **Data Errors and Warnings**

Severity	Area	Item	Description
Warning	Major arm width	C - Glenageary Avenue North - 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	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		3.68	A

#### **Junction Network**

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.68	A

# **Traffic Demand**

#### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D14	2040 With Dev	PM	ONE HOUR	15:45	17:15	15

Default vehicle mix	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 - Glenageary Avenue South		✓	39	100.000
B - Site Access		✓	41	100.000
C - Glenageary Avenue North		✓	91	100.000

## **Origin-Destination Data**

#### Demand (PCU/hr)

		То								
From		A - Glenageary Avenue South	B - Site Access	C - Glenageary Avenue North						
	A - Glenageary Avenue South	0	0	39						
	B - Site Access	0	0	41						
	C - Glenageary Avenue North	42	49	0						

### **Vehicle Mix**

		То								
From		A - Glenageary Avenue South	B - Site Access	C - Glenageary Avenue North						
	A - Glenageary Avenue South	10	10	10						
	B - Site Access	10	10	10						
	C - Glenageary Avenue North	10	10	10						



#### Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
	15:45-16:00	29	29
	16:00-16:15	35	35
A - Glenageary Avenue South	16:15-16:30	43	43
	16:30-16:45	43	43
	16:45-17:00	35	35
	17:00-17:15	29	29
	15:45-16:00	31	31
	16:00-16:15	37	37
P. Site Access	16:15-16:30	45	45
D - Sile Access	16:30-16:45	45	45
	16:45-17:00	37	37
	17:00-17:15	31	31
	15:45-16:00	69	69
	16:00-16:15	82	82
C. Glanagoary Avanua North	16:15-16:30	100	100
C - Gienageary Avenue North	16:30-16:45	100	100
	16:45-17:00	82	82
	17:00-17:15	69	69

# Results

#### **Results Summary for whole modelled period**

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.07	6.86	0.1	A
C-AB	0.09	6.67	0.1	A
C-A				
ΑB				
A-C				

#### Main Results for each time segment

#### 15:45 - 16:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	31	625	0.049	31	0.1	6.656	А
C-AB	39	645	0.060	38	0.1	6.523	А
C-A	30			30			
A-B	0			0			
A-C	29			29			

#### 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	37	624	0.059	37	0.1	6.742	А
C-AB	47	648	0.072	47	0.1	6.586	А
C-A	35			35			
A-B	0			0			
A-C	35			35			



#### 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	45	622	0.073	45	0.1	6.862	А
C-AB	58	652	0.089	58	0.1	6.671	A
C-A	42			42			
ΑB	0			0			
A-C	43			43			

#### 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	45	622	0.073	45	0.1	6.862	А
C-AB	58	652	0.089	58	0.1	6.675	А
C-A	42			42			
A-B	0			0			
A-C	43			43			

#### 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	37	624	0.059	37	0.1	6.744	А
C-AB	47	648	0.072	47	0.1	6.592	А
C-A	35			35			
ΑB	0			0			
A-C	35			35			

#### 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	31	625	0.049	31	0.1	6.659	A
C-AB	39	645	0.060	39	0.1	6.530	A
C-A	30			30			
ΑB	0			0			
A-C	29			29			
## Appendix F LIDL Correspondence



Mr. Neil O'Sullivan, Red Rock Developments 83-87 Main Street Ranelagh Dublin 6 D06 EOH1

21 August 2023

# RE: GLENAGEARY GATE PLANNING APPLICATION: REQUEST FOR RIGHT OF ACCESS OVER LIDL LANDS TO FACILITATE BASEMENT ACCESS

Dear Neil,

I refer to our recent discussions regarding a request for right of way passage over our lands to facilitate access to the basement car park which forms part of your current design for the adjacent Glenageary Gate site, subject to planning with Dun Laoghaire Rathdown CC.

We wish to advise that, while we have no objection to your planning application in general, we are not agreeable to a vehicular right of way across the Lidl site as we feel that the subject site is more appropriately accessed from a separate access from Glenageary Avenue as per Ref D14A/0865

I trust you understand our position in this regard.

Your Sincerely,

anylate Milable.

MaryKate McLoughlin Leasing and Disposal Senior Project Manager On behalf of Lidl Ireland Gmbh

Lidl Ireland GmbH Head Office, Main Road, Tallaght, Dublin 24, Rep. Ireland. – VAT Reg. No.: IE9513674T – Company Reg No.: 904141 Tel.: + 353 (0) 1 421 2000 – www.lidl.ie Bank Details: AIB p.l.c., Dublin. BIC: AIBKIE2D, IBAN: IE64 AIBK 9323 5308 2000 54 (EUR) AIB p.l.c., Dublin BIC: AIBKIE2D, IBAN: GB50 AIBK 2385 9005 9590 12 (GBP) Dresdner Bank AG, Heilbronn, BIC: DRESEDEFF620, IBAN: DE44 6208 0012 0701 0722 00 (EUR)

# Appendix G Signalised Junction Overlay Sketch



### PROJECT

GLENAGEARY GATE LRD, AT JUNCTION OF SALLYNOGGIN ROAD LOWER AND GLENAGEARY AVENUE, GLENAGEARY, CO.DUBLIN

### CLIENT

RED ROCK GLENAGEARY LTD

### CONSULTANT

AECOM 4th Floor Adelphi Plaza, George's Street Upper, Dun Laoghaire, Co Dublin Tel:+353 (0)1 2383100 Fax:+353(0)1 2383199 www.aecom.com

### NOTES

- 1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT ARCHITECTURAL AND ENGINEERING DRAWINGS, ANY DISCREPANCIES, ERRORS OR OMISSIONS TO BE BROUGHT TO THE ATTENTION OF THE DESIGNER.
- 2. ALL DIMENSIONS TO BE CHECKED BY THE CONTRACTOR ON SITE PRIOR TO COMMENCEMENT OF WORKS.
- AECOM LIMITED TO BE INFORMED BY THE CONTRACTOR OF ANY DISCREPANCIES PRIOR TO THE COMMENCEMENT OF WORKS ON SITE.
- 4. DIMENSIONS OF ALL BOUNDARIES AND ADJOINING ROADS TO BE CHECKED ON SITE PRIOR TO COMMENCEMENT OF WORKS.

### LEGEND:

PROPOSED DLRCC SIGNALISED JUNCTION EXTENTS	
OUTLINE OF PROPOSED BASEMENT WALL	

OUTLINE OF PROPOSED BUILDING ABOVE GROUND



### **ISSUE/REVISION**

0	29/09/2023	ISSUED FOR REVISED PLANNING
I/R	DATE	DESCRIPTION
	DATE	

#### PROJECT NUMBER

60690914

### SHEET TITLE

PROPOSED SIGNALISED JUNCTION OVERLAY

#### SHEET NUMBER

60690914-ACM-00-00-SK-CE-10-0010



### PROJECT

GLENAGEARY GATE LRD, AT JUNCTION OF SALLYNOGGIN ROAD LOWER AND GLENAGEARY AVENUE, GLENAGEARY, CO.DUBLIN

### CLIENT

RED ROCK GLENAGEARY LTD

### CONSULTANT

AECOM 4th Floor Adelphi Plaza, George's Street Upper, Dun Laoghaire, Co Dublin Tel:+353 (0)1 2383100 Fax:+353(0)1 2383199 www.aecom.com

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- 1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT ARCHITECTURAL AND ENGINEERING DRAWINGS, ANY DISCREPANCIES, ERRORS OR OMISSIONS TO BE BROUGHT TO THE ATTENTION OF THE DESIGNER.
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### LEGEND:

PROPOSED DLRCC SIGNALISED JUNCTION EXTENTS

POSSIBLE AMENDMENTS TO DLRCC REALIGNED GLENAGEARY AVENUE EXTENTS

OUTLINE OF PROPOSED BASEMENT WALL

OUTLINE OF PROPOSED BUILDING ABOVE GROUND





#### **ISSUE/REVISION**

0	29/09/2023	ISSUED FOR REVISED PLANNING
I/R	DATE	DESCRIPTION

#### **PROJECT NUMBER**

60690914

### SHEET TITLE

PROPOSED SIGNALISED JUNCTION POSSIBLE AMENDMENTS

#### SHEET NUMBER

60690914-ACM-00-00-SK-CE-10-0011



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