AECOM

Proposed Nursing Home at Newbrook House, Taylors Lane, Rathfarnham

Traffic and Transport Assessment

Luxcare Ltd

Project number: 60662352

August 2021

Delivering a better world

Quality information

Prepared by	Checked by	Verified by	Approved by
Hilary Herlihy	Zachary Cave	[illegible]	[illegible]
Hilary Herlihy Graduate Consultant	Zachary Cave Traffic Planner / Engineer	Carolyn Rollo Associate Director	Carolyn Rollo Associate Director

Revision History

Revision	Revision date	Details	Authorized	Name	Position
A	26.07.2021	Draft Issue	CR	Carolyn Rollo	Associate Director
B	17.08.2021	Final Issue	CR	Carolyn Rollo	Associate Director

Distribution List

# Hard Copies	PDF Required	Association / Company Name

Prepared for:

Luxcare Ltd

Prepared by:

Hilary Herlihy
Graduate Consultant
E: hilary.herlihy@aecom.com

AECOM Ireland Limited
4th Floor
Adelphi Plaza
Georges Street Upper
Dun Laoghaire
Co. Dublin A96 T927
Ireland

T: +353 1 238 3100
aecom.com

Table of Contents

Figures

Tables

1. Introduction

1.1 Background

AECOM has been commissioned by Luxcare Ltd to prepare a Traffic and Transport Assessment (TTA) to accompany a planning application for a proposed 111 bed nursing home, 5 no. private residential units and associated infrastructure in Rathfarnham, Dublin 16 (proposed development).

The proposed development site is shown in Figure 1-1 and is bound by Taylor's Lane to the north, residential properties to the south and west and a petrol filling station to the east.

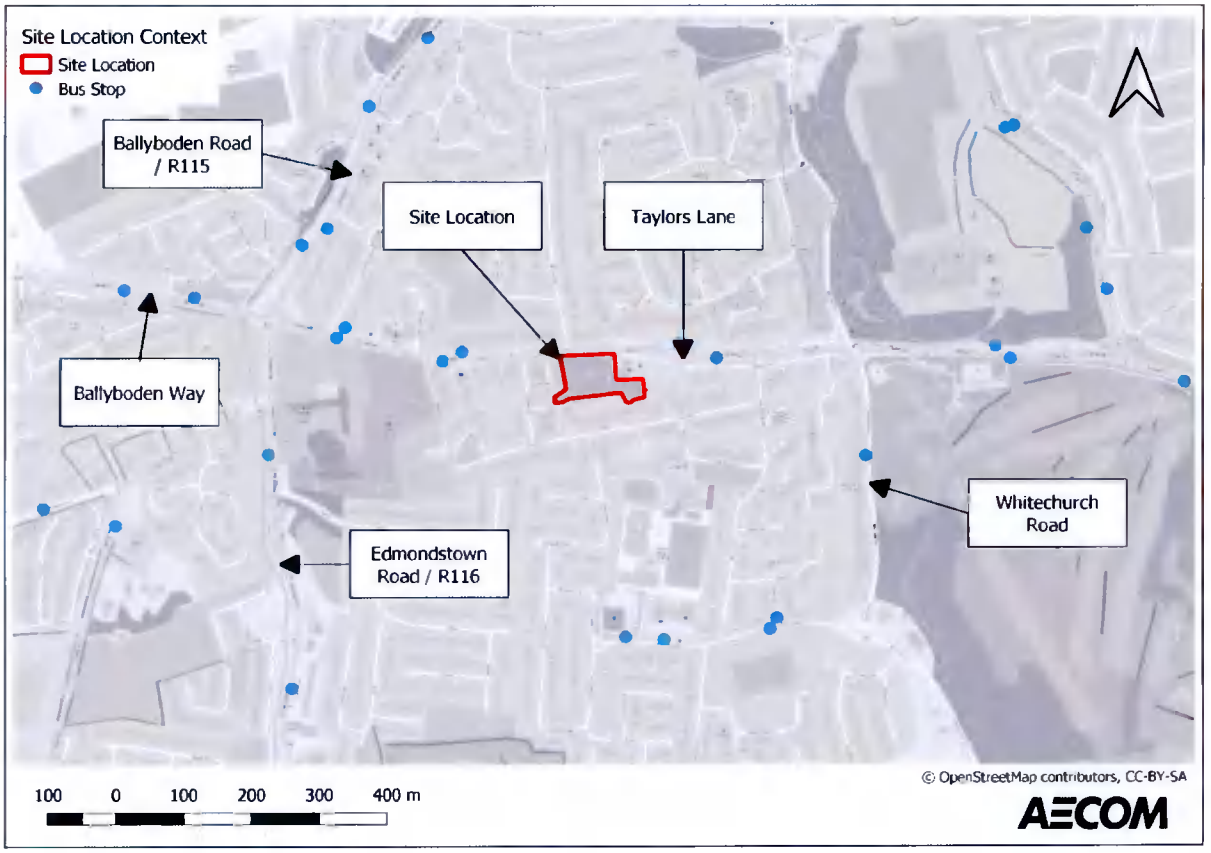


Figure 1-1 Site Location

The subject site is brownfield and is currently occupied by 1 no. derelict protected structure, Newbrook House. The proposed development will incorporate Newbrook House into the scheme. Figure 1-2 (Appendix A) illustrates the proposed development layout.

Figure 1-2 Proposed Indicative Site Layout (Courtesy: Holmes Miller)

1.2 Proposed Development

The development would consist of the construction of a 111 no. bedroom nursing home ranging in height from two to three storeys with a total Gross Floor Area (GFA) of 5,110 sq. m. The development would be constructed around the protected structure of the detached two storey Newbrook House. Additionally, 5 no. private townhouses to the south east of the nursing home are proposed.

The proposed development would include the provision of: 2 no. vehicular access points off Taylor's Lane (1 no. new access point to the west and 1 no. existing access point to the east); 25 no. car parking spaces (18 no. for the nursing home); bicycle parking (24 cycle spaces) a bin store; hard and soft landscaping and all associated site works above and below ground.

1.3 Planning History

There is no history of planning applications on the respective site noted on the South Dublin County Council (SDCC) Planning Portal.

1.4 Objectives

The main objective of this assessment is to examine the potential traffic impact of the proposed development. The change in traffic on the network due to 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 made reference to the following documents:

- SDDC Development Plan (2016 – 2022);
- Standards for Cycle Parking and associated Cycling Facilities for New Developments (January 2018);
- Greater Dublin Area Cycle Network Plan (National Transport Authority, 2013);
- Design Manual for Urban Roads and Streets, DMURS, May 2019 (Dept of Transport, Tourism and Sport/ Dept of Environment, Community & Local Govt);
- Geometric Design of Junctions (priority junctions, direct accesses, roundabouts, grade separated, and compact grade separated junctions), DN-GEO-03060, (TII, June 2017);

- PE-PDV-02045 TTA Guidelines (May 2014), Transport Infrastructure Ireland; and
- Pre-application response from SDCC via conference call on 1 December 2020.

1.5 Study Methodology

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

- **Existing Transport Infrastructure** – AECOM collated information on the public transport, walking and cycling in proximity to the site based on a desktop review.
- **Development Proposals** – Description of the operational characteristics of the proposed development has been provided by Luxcare Ltd based on the operations of other nursing homes.
- **Existing Traffic Flow Assessment** – Due to the ongoing Covid-19 pandemic traffic flow data for the weekday morning and evening peak conditions was obtained from the Taylor's Lane SHD (SDCC Ref: SHD3ABP-307222-20). The data for this project was collected on the 30th May 2019.
- **Development Trip Generation** – Based on the proposed development land use characteristics, AECOM reviewed trip rate data for similar uses and developed anticipated traffic flows, by using the industry standard Trip Rate Information Computer System (TRICS) database (Version 7.8.2 on July 22nd 2021). These flows were then assigned to the existing network having regard for observed traffic patterns on the surrounding road network.
- **Percentage Impact** – The traffic impact of the proposed development at key road network links was ascertained as a percentage change compared to existing patterns.
- **Junction Impact Analysis** – Road links shown to exceed the percentage impact threshold of 10% based on the Transport Infrastructure Ireland (TII) Traffic and Transport Guidelines (May 2014 are subject to standalone junction modelling using industry standard software Junctions 9 – in the case of the proposed development it is only the accesses to the site which have been tested.

1.6 Structure of the Report

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

- Section 2 of this report describes the existing conditions at the subject site location and the surrounding area;
- Section 3 provides a summary of the proposed development itself, including the proposed Parking Strategy;
- Section 4 provides a summary of the proposed vehicle trip generation, vehicle distribution, and network assignment, in addition to quantifying the potential level of impact as a measure of percentage change in traffic volumes.
- The operational performance of the proposed site access junctions are investigated and reported within Section 5;
- Section 6 details a Framework for a Mobility Management Plan (MMP);
- Section 7 details a Framework for a Construction Traffic Management Plan (CTMP); and
- Finally, a summary of our appraisal together with the main conclusions of the assessment are provided in Section 8.

2. Existing Conditions

2.1 Introduction

This chapter includes a review of the existing baseline conditions of the site including public transport, walking and cycling facilities and the current operation of the surrounding road network based on a desktop review.

2.2 Existing Site Context

The subject site is situated on brownfield lands located along Taylor's Lane in Rathfarnham. The subject site currently has 1 no. derelict protected two story detached dwelling within the confines of the site (Newbrook House).

2.3 Land Use Zoning

The subject lands are zoned '*RES*' within the SDCC Development Plan (2016-2022) as illustrated within Figure 2-1 below. The zoning objective of lands zoned '*RES*' is as follows "*To protect and-or improve residential amenity*".

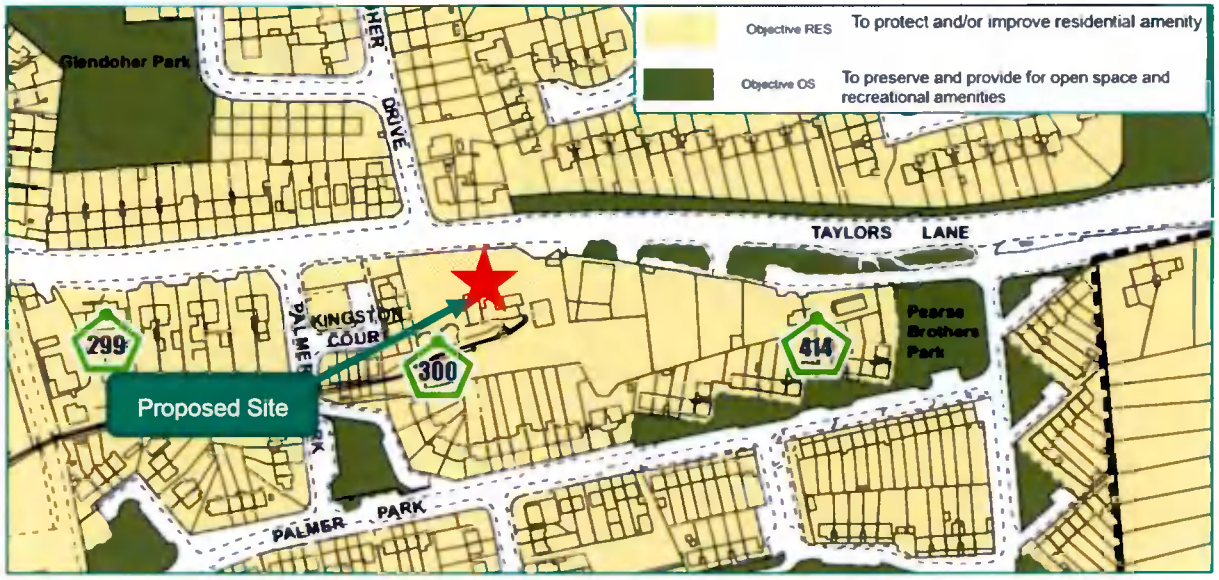


Figure 2-1 Site Zoning (Source: SDCC Development Plan 2016-2022)

2.4 Existing Site Access

At present there is currently one entry point into the site which serves both vehicles and pedestrian / cyclist access. Figure 2-2 shows the location of the existing access point into the site which is gated off.

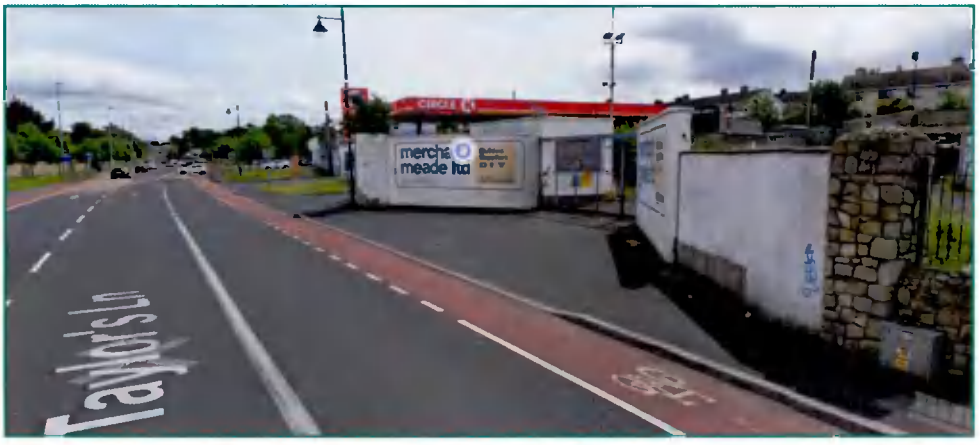


Figure 2-2 Existing Vehicular Access Point (Source Google Earth15/07/2021)

2.5 Proposed Site Access

There would be 2 no. vehicular access points serving the subject site from Taylor's Lane, both access points are located along the northern boundary of Taylor's Lane and would facilitate both vehicular and pedestrian / cycle

access. The eastern access point is existing and the western access point forms part of the proposed development. Figure 2-3 illustrates the proposed access points into the development and what function they are intended to serve, more detail is provided in Section 3.

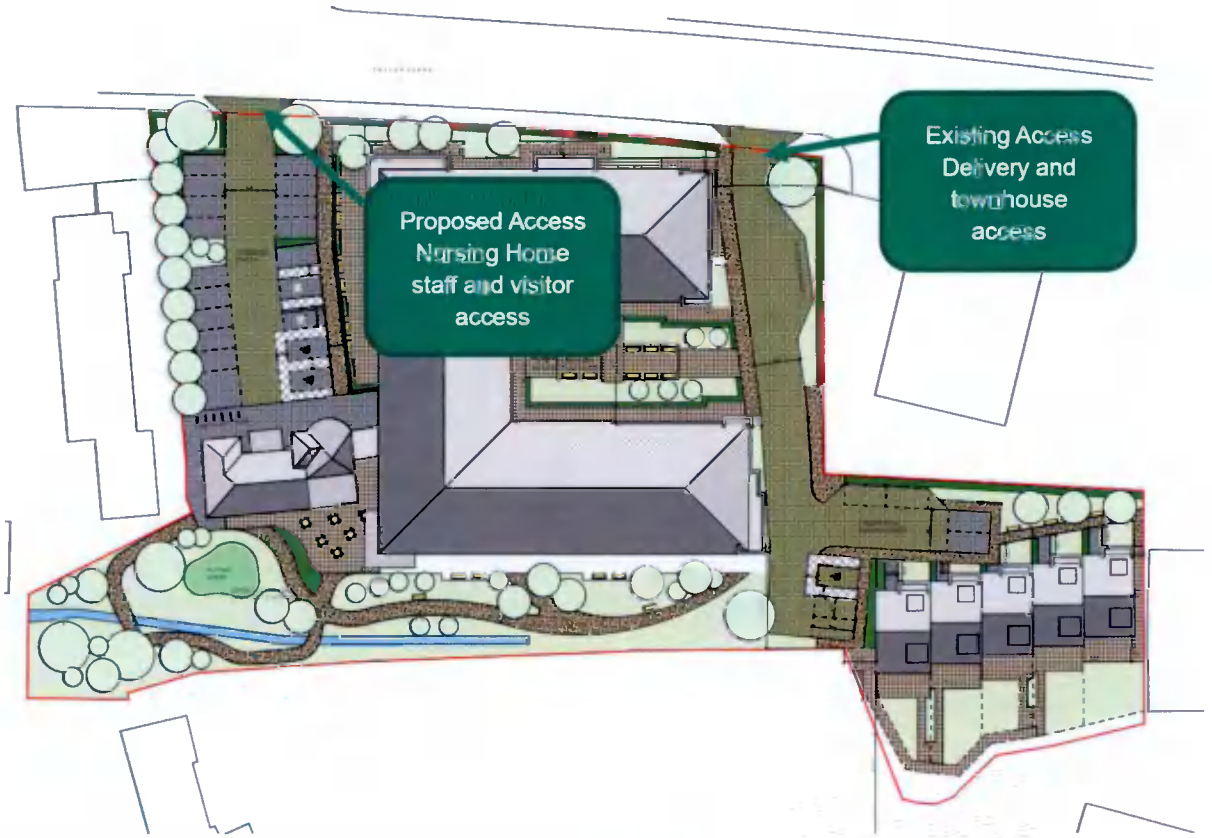


Figure 2-3 Proposed Site Access Points (Source: Holmes Miller)

2.6 Existing Transportation Infrastructure

2.6.1 Background

An important stage in the development of a TTA is the identification and appreciation of the local transport network's existing characteristics. These characteristics are set out below.

2.6.2 Existing Pedestrian / Cyclist Environment

2.6.2.1 Taylor's Lane

Pedestrian facilities are provided in the vicinity of the proposed development. There are footpaths along both sides of Taylor's Lane, allowing for pedestrian access to the local shops and businesses of Rathfarnham and Ballyboden. The pedestrian facilities provided along Taylor's Lane take the form of 1.5m wide footways, which are well lit and avail of dropped kerbs for crossings. The posted speed limit along Taylor's Lane is 50km/hr.

Controlled pedestrian crossings are provided 150 m west of the site and 350 m east of the site. There are on-road cycle lanes provided along Taylor's Lane. Sections of the northern cycle lane are separated from the road while the southern cycle lane is shared with the bus corridor along Taylor's lane. Figure 2-4 illustrates the existing cycle facilities in relation to the subject site.

The Local Primary School (Scoil Mhurie) is located 500 m from the subject site. Rathfarnham Shopping Centre is located 2.6 km to the north-west there are also a number of another amenities within a suitable walk / cycle distance of the site such as: St. Enda's Park, Marley Park, Lidl, Tesco and Ballinteer Community School.

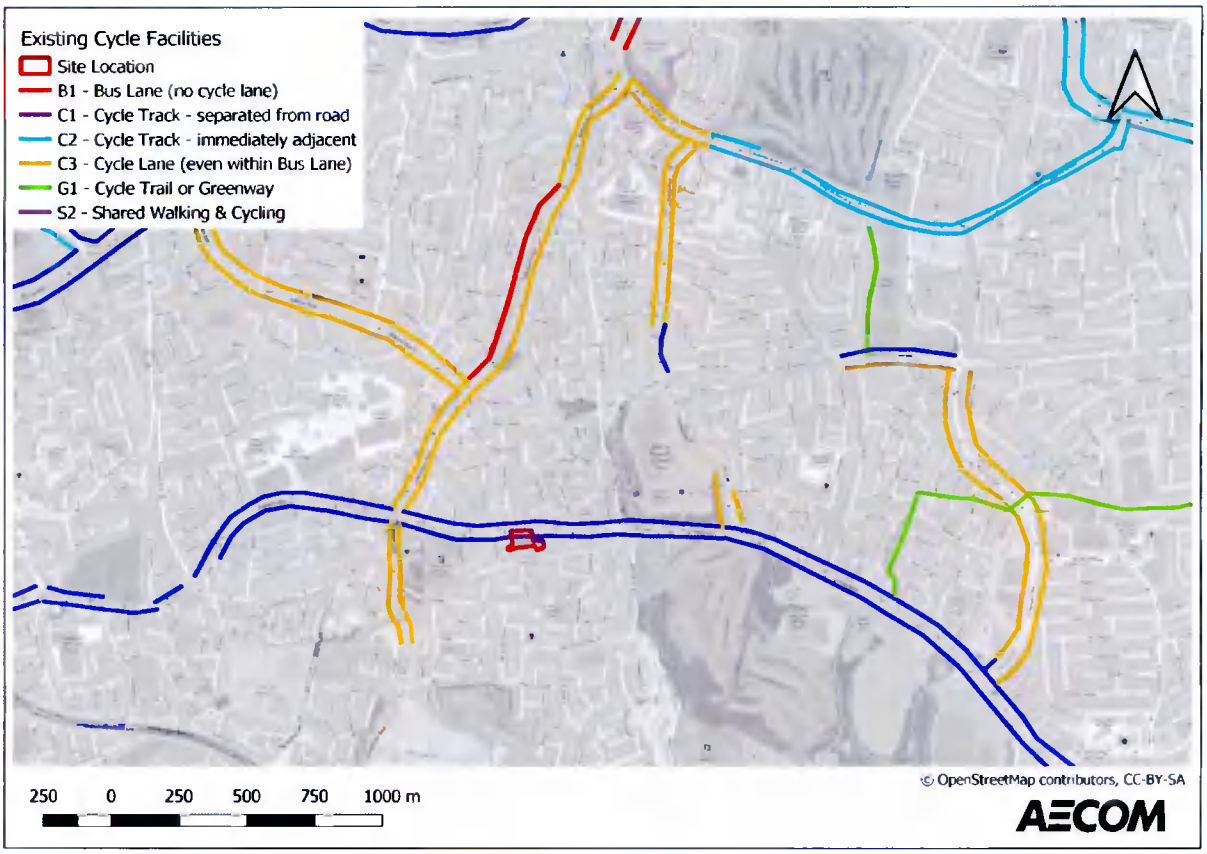


Figure 2-4 Existing Cycle Facilities (Source: GDA Cycle Network Plan, National Transport Authority)

2.6.3 Sustainable Transport – Bus

As graphically illustrated in Figure 2-5 below, the site is situated to benefit from bus transport connections allowing staff / visitors and residential unit residents to travel by this sustainable mode.

The closest bus stops to the site are located along Taylor's Lane which are within a 100 m (1 min) walk of the site. These bus stops are operated by Dublin Bus. Along Ballyboden Road there is a bus stop for the 15B, this a 3-minute walk from the subject site. This bus route offers services to Dublin city centre. Figure 2-5 illustrates the location of the bus stops in relation to the development with Table 2.1 detailing the number of services per day and the routes.

Figure 2-5 Bus Stops in Vicinity of the Site

Table 2.1 Bus Servicing (Timetables as of 15/07/2021)

Route No.	Operator	Route	No. of Services		
			Monday to Friday	Saturday	Sunday
15B	Dublin Bus	Ringsend – Dame Street – Rathmines – Ballyboden - Knocklyon –	1 service every 15 mins	1 service every 15 mins	1 service every 20 mins
61	Dublin Bus	Eden Quay – White Church	1 service every 1 hour 15 mins	1 service every 1 hour	1 service every 1 hour
161	Go Ahead	Rockbrook - Moyville – Whitechurch Way- Dundrum	1 service every 1 hour 30 mins	No Service	No Service
175	Go Ahead	UCD – Dundrum – Tallaght – Kingswood Avenue	1 service every 45 mins	1 service every hour	1 service every hour

2.6.4 Sustainable Transport – Car Sharing

There is 1 no. GoCar hire station located within a 1km walking catchment of the subject site which is located south-east of the development along Whitechurch Way. 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; and
- Car sharing allows those who cannot afford a car the opportunity to drive, encouraging social inclusivity.

The location of the nearby GoCar bases are illustrated in Figure 2-6. The nearest GoCar base is located approximately 1 km (13-minute walk) from the site which has 2 no. GoCity vehicles available at Whitechurch Way, Clarkstown.

Table 2.2 GoBase Details

Ref No.	Go Base Location	Vehicle Class	Approx. Distance from the Development (Walking Time)
1	Whitechurch Way Clarkstown	GoCity	1 km (13-minute walk)
2	Circle K Three Rock	GoTripper	1.2 km (14-minute walk)
3	Rathfarnham Shopping Centre	GoCity and GoCargo	2.3 km (27-minute walk)

Figure 2-6 GoBase Locations

2.6.5 Sustainable Transport – LUAS

Dundrum LUAS stop is served by the Luas Green Line and is located approximately 3.9km walking or cycling distance from the subject site. The Green Line Luas service offers regular services to a number of destinations.

The Luas Green Line operates on weekdays from 05:37 – 00:25, with the weekday service frequency between Dundrum and Parnell or Broombridge every 3-5 minutes during peak periods and every 12-15 minutes during off-peak periods. Therefore, the existing service is very frequent and provides significant access to the southwestern suburbs of Dublin and the city centre. The location of the Green LUAS line in relation to the site is illustrated in Figure 2-7 below.

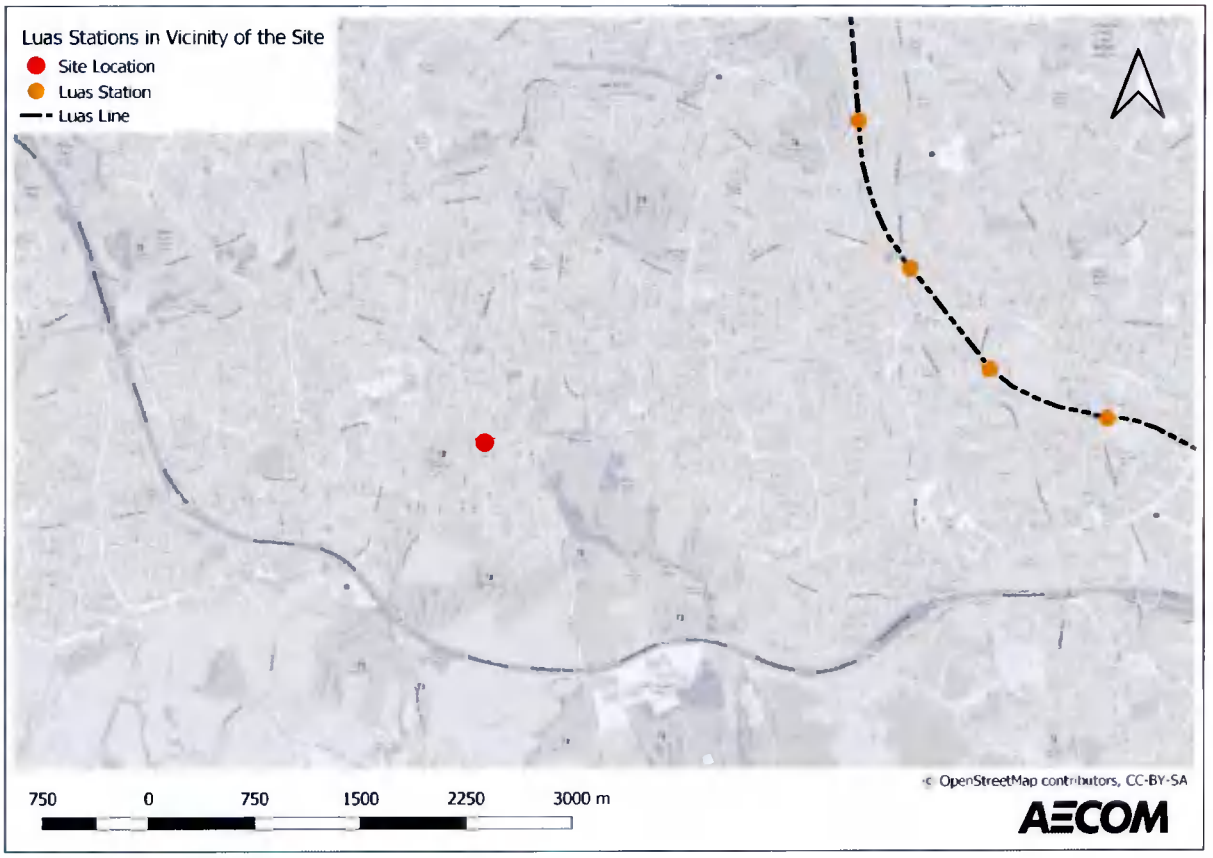


Figure 2-7 LUAS Green line in relation to the Site

2.7 Emerging Transportation Infrastructure

2.7.1 Local Road Proposals

The SDCC Development Plan 2016 – 2022, has outlined both short (6 years) and long-term road network proposals for the SDCC environs. Within the SDCC Development Plan, Section 6.4.1 Strategic Road and Street Network details the following:

"Continued investment in the County's road network is necessary to ensure the efficient movement of people and goods within the County, to provide access to developing areas to support economic activity."

As part of this roads policy SDCC have indicated that there are to be 1 no. road improvement scheme in the vicinity of Taylor's Lane which is as follows:

- 'Ballyboden Road – Upgrade of existing road. *("To enhance pedestrian and cycling facilities and exploit tourist potential of the route")*

As part of the Development Plan, the Ballyboden Road is to be delivered within the 6 years that the Plan covers (2016 – 2022). 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 2-8 illustrates the proposed road objectives.

It should be noted that the proposed development of a nursing home and residential town houses does not impact on the road's objectives.

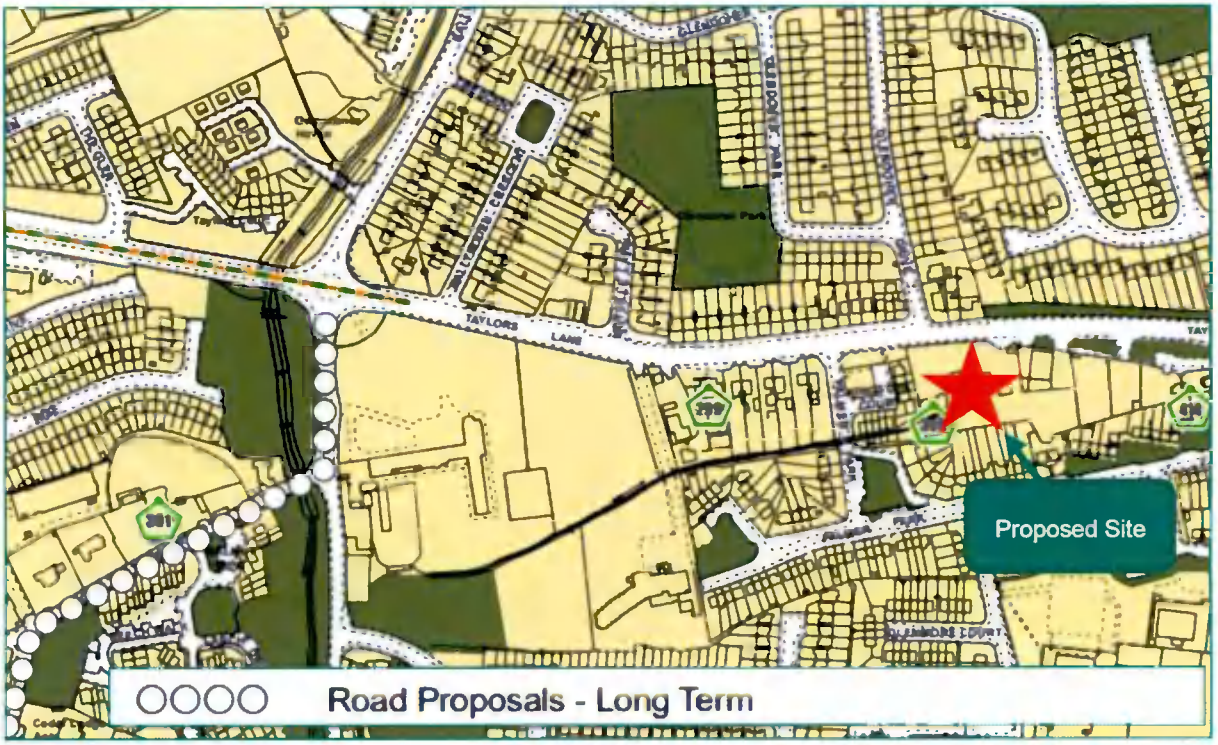


Figure 2-8 Road Proposals (Source: SDCC Development Plan Index Map)

2.7.2 Cycle Network Proposals

In the vicinity of the subject site, there are planned upgrades to the Taylor's Lane cycle network to the west of the site at the Ballyboden Way Roundabout with Figure 2-9 illustrating the proposed cycle network upgrades as part of the Cycle Network Plan for the Greater Dublin Area.

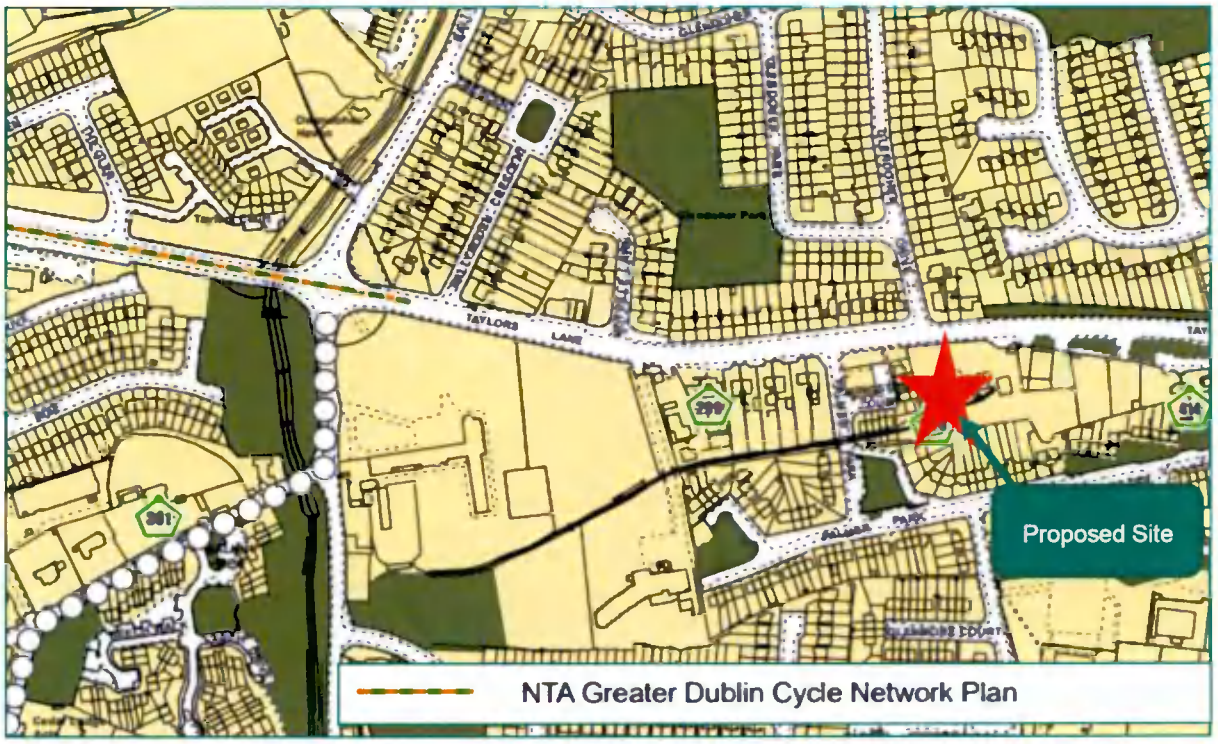


Figure 2-9 Cycle Network Proposals (Source: SDCC Development Plan Index Map)

2.7.3 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. Table 2.3 details the proposed revised routes in the vicinity of the subject site with Figure 2-10 illustrating the proposed routing.

Table 2.3 Revised Bus Network Routes

Route	Route Type	Route	Frequency
A2	Spine and Branches	Airport – City Centre – Ballinteer - Dundrum	Every 12 mins
P16	Peak Only / Express Route	Whitechurch - UCD	Every Hour in Peak Hour
P18	Peak Only / Express Route	Whitechurch – City Centre	Every 30 mins in Peak Hour
L35	Local Route	Rockbrook - Dundrum	Every 60 mins
74	Radial Route	Dundrum – Whitechurch – Crumlin – City Centre	Every 30 mins
85	Radial Route	Tallaght -Ballyboden – Harold's Cross -Parnell Square	Every 15 mins

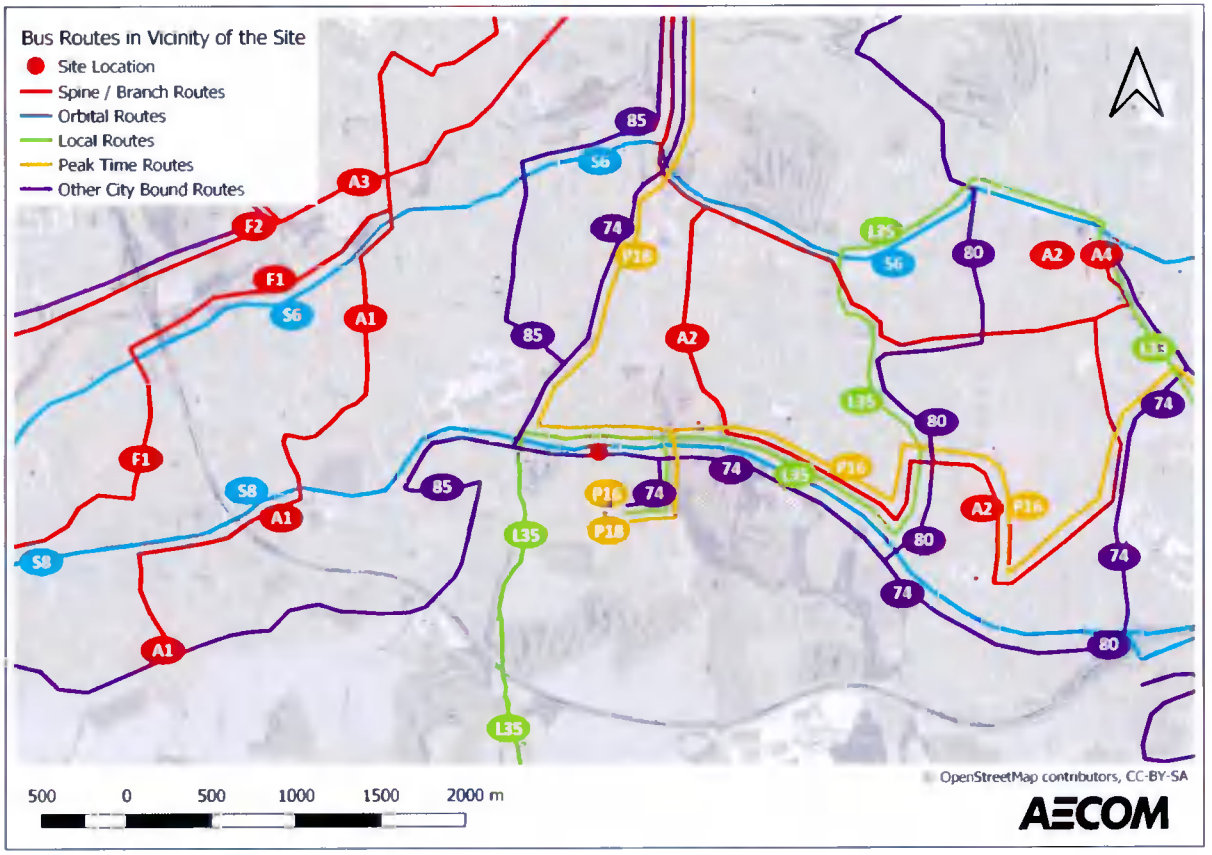


Figure 2-10 Proposed Public Transport Services (source: www.busconnects.ie)

2.8 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 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 reported 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 for 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 2-11 below.

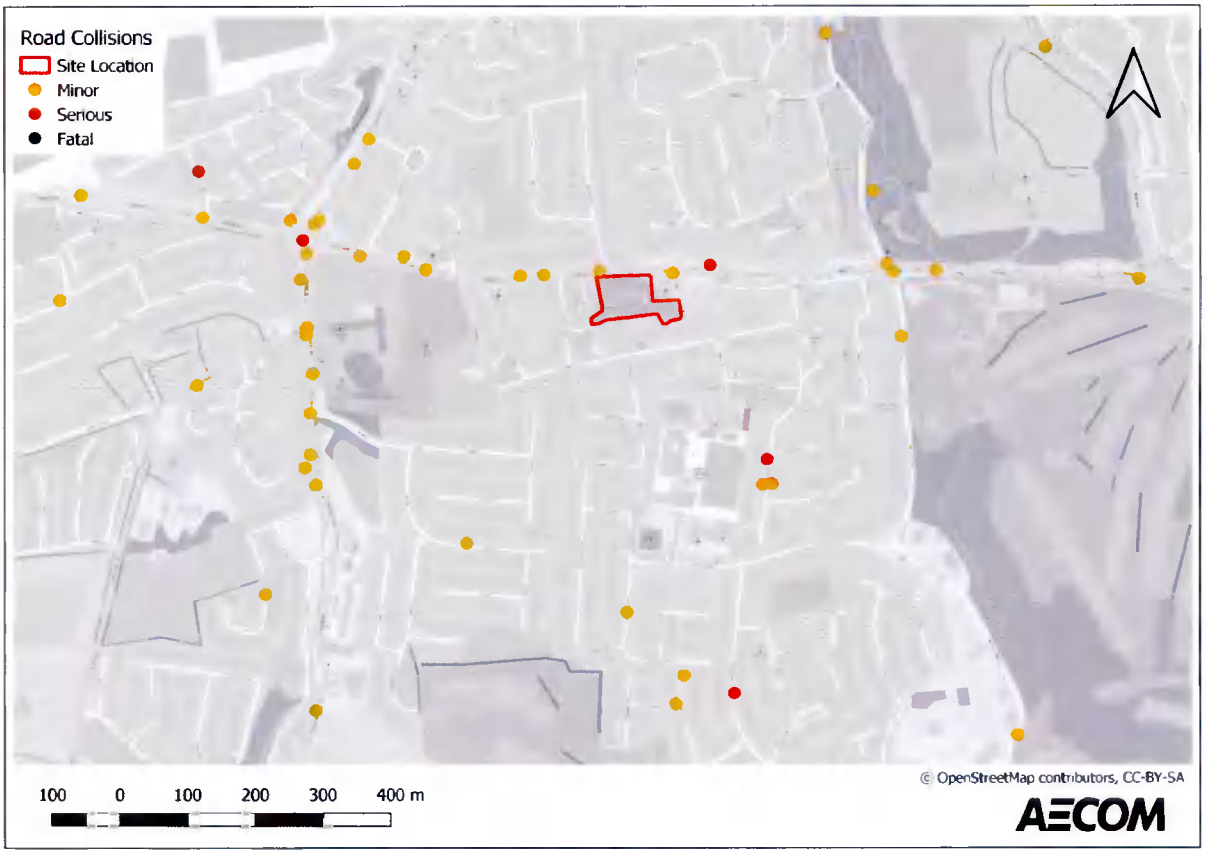


Figure 2-11 Road Collision Statistics (Source RSA.ie)

Upon inspection there has been 1 no. serious collision recorded along Taylor's Lane involving a bicycle in 2015. There have been 7 no. minor collisions between the Ballyboden Road Roundabout and the site access points. There have been 5 no. minor collisions east of the site access point to the Whitechurch Road Junction all of which included a car in the collisions. The road safety collisions map does not indicate any reoccurring collision hotspots or traffic concerns with the existing road network.

2.9 Summary

The proposed development site is ideally positioned within the urban environment to maximise access to/from the proposed development utilising existing and proposed sustainable forms of travel including walking, cycling and public transport.

3. Proposed Development

3.1 Introduction

This chapter details the proposed development with regard to operational characteristics, the internal roads layout, proposed pedestrian/cycling infrastructure and car parking provisions.

3.2 Proposed Development

The development would consist of the construction of a 111 no. bedroom nursing home ranging in height from two to three storeys with a total GFA of 5,110 sq. m. The development would be constructed around the protected structure of the detached two storey Newbrook House. Additionally, proposed is the construction of 5 no. private townhouses in the south east of the site boundary.

The development would also include the provision of a 1 no. new vehicular access points off Taylor's Lane to access the nursing home element and the existing access from Taylor's Lane would be used to access the private residential units.

The proposed development will consist of 18 no. car parking spaces for the nursing home including 2 no. mobility impaired spaces, 2 no. EV spaces and 24 no. bicycle spaces for staff and visitors. The residential development to the south east of the site includes 7 no. car parking spaces and bicycle parking within the curtilage of the residential units.

Table 3.1 illustrates a summary schedule of the proposed development.

Table 3.1 Summary Schedule

Type	Quantum	Vehicle Parking	Cycle Parking
Nursing home	111 no. Bedrooms	18 no. spaces	24 no. spaces
Townhouse	5 no. units	7 no. Spaces	Within curtilage
	Total	**25 no.**	**18 no.**

It is anticipated that the nursing home would have a maximum of 32 no. staff on site at any one time and with lower numbers of staff on site during the night shift (11 no. staff).

3.3 Internal Roads Layout

The internal roads layout consists of access to the nursing home and a separate access to the residential townhouses within the site. The western entry point is for the visitors and staff of the nursing home while the eastern entry point is for the residents of the town houses and deliveries for the nursing home.

3.4 Nursing Home Operation

With regards to the operation of the nursing home, staff would always be present on site. There would be no resident staff and the maximum number working on site at any one time would be 32 no. during the day, and 11 no. overnight. The working day would comprise of two main shifts as follows:

- Day shift 8am – 8pm
- Night shift 8pm – 8am

There are therefore only two changeovers between shifts each day, occurring at around 8am and 8pm. However, the 8pm changeover would not be as extensive as that at 8am as a number of staff leave at staggered times during the day.

Visiting hours would be fully flexible. Peak visiting hours, based on other similar facilities, tend to be between 10am and 12 noon, and between 2pm and 4pm. Peak visitor periods therefore do not occur at the same time as the staff shift changeover. Information provided by Luxcare also confirms the following typical transport characteristics:

- Ambulance access is typically required 2-3 times a week.
- Servicing / deliveries are approximately 1 no. vehicle every few days.

- At any one point of time, except for organised day trips, approximately 6 no. residents may be out of the facility e.g. with family.

Luxcare would seek to recruit staff from the local area, thus providing the mechanism for some journeys by staff to be made by sustainable modes. Moreover, based on other similar facilities, the majority of staff likely to be employed at the site will travel by sustainable modes over the private car.

3.5 Pedestrian and Cyclists Permeability

The subject site will be highly accessible to pedestrians from Taylor's Lane. Pedestrians will be given priority within the internal site layout to ensure desire lines within the site are accommodated providing a good level of service and ensures the risk of vehicle/pedestrian conflict with vehicles is at a minimum.

3.6 Parking Strategy

3.6.1 Standard Vehicle Parking

In order to determine the appropriate quantum of vehicle parking for the proposed development, reference has been made to the current SDCC Development Plan (2016-2022).

The SDCC Development Plan 2016-2022 details the maximum quantum of car parking to be provided based on the proposed land use of the subject site. With regard to the proposed development[1], the associated SDCC maximum car parking requirements are outlined in Table 3.2.

Table 3.2 SDCC Development Plan Vehicle Parking Maximum Requirement & Development Parking Provision

Description	Quantum		SDCC Maximum Parking Rate			Proposed Parking Provision	
			Parking Required		Maximum Parking to be Provided	Residential Parking	Visitor Parking
Nursing home	111	Bedrooms	1 space per 10 residents	1 space per 5 staff	18	18	
Townhouses	5	Houses	1.5 space per house		8	7	
Total					**26**	**25**	

In regard to the development proposals for the nursing home and townhouses, it is noted that the proposed car parking provisions for the nursing home and townhouse units are below the maximum standard recommended by SDCC and it is therefore considered that the proposed provision is appropriate.

Mobility Impaired Parking

The appropriate level of mobility impaired parking for the proposed development will be provided in accordance with the SDCC requirements. It is typical that 4% of car parking spaces be suitable for use by disabled persons which equates to 1 no. space being required. It is proposed to provide 2 no. mobility impaired spaces.

Electric Vehicle Parking

The appropriate level of electric vehicle parking for the proposed development will be provided in accordance with the SDCC Development Plan requirements.

The development plan requires that for residential developments '*All developments shall provide facilities for the charging of battery-operated cars at a rate of up to 10% of the total car parking spaces*'.

The proposed development will provide 2 no. electric vehicle parking spaces which is in line with the SDCC Development Plan.

[1] *Assume 1 resident per bedroom*

3.6.2 Cycle Parking

The appropriate level of cycle parking provision for the proposed development should also be provided in reference to the SDCC Development Plan requirements. There is no specific guidance provided within the SDCC Plan regarding townhouses. Therefore, it is assumed that the cycle parking will be provided within the curtilage of the townhouses. The SDCC Development Plan cycle parking standards are detailed in Table 3.3 below.

Table 3.3 SDCC and Design Standards Guidelines for Parking Provisions

Description	SDCC Parking Requirement	
	Short Stay	Long Stay
Nursing home	1 space per 10 residents	1 space per 5 staff
Townhouses	-	1 per 1 unit (within curtilage)

Table 3.4 Cycle Parking Requirements & Development Provision

Description	Quantum		SDCC Parking Requirement			Development Provision		
			Short Stay	Long Stay	Total	Short Stay	Long Stay	Total
Nursing home	111	Bedrooms	11	7	18	12	12	24
Townhouse	5	Houses	-	5	5		5	5
Totals			**11**	**12**	**23**	**7**	**16**	**29**

The level of bicycle parking proposed on-site for the nursing home and townhouses has been provided in accordance with the SDCC Development Plan.

The MMP provides the opportunity to monitor the usage of the cycle stands following the opening of the proposed development. Should demand meet the proposed level of cycle parking, Luxcare may allocate additional cycle parking for the development i.e. increasing the number of bicycle stands.

3.7 Summary

The proposed development would comprise of a 111 no. bed nursing home and 5 no. private residential townhouses accessed from Taylor's Lane via an existing priority junction and 1 no. new priority junctions. Car and cycle parking has been provided to an acceptable quantum in keeping with SDCC requirements.

4. Trip Generation and Distribution

4.1 Introduction

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

To understand the potential vehicular trip generation associated with the proposed development, a multi-modal TRICS analysis has been undertaken and a review of the committed traffic upon the adjoining road network against the proposed trip generation is also outlined in this section.

4.2 Trip Generation

4.2.1 Traffic Flows

AECOM has undertaken a review of the SDCC planning portal and have acquired relevant traffic counts from the Taylor's Lane SHD (SDCC Planning Application Ref SHD3ABP-307222-20). This application comprises of proposals for the construction of 3 no. residential apartment blocks ranging in height from 2 -7 storeys consisting of a total of 496 number residential units. This scheme was granted planning permission on July 20th 2020. Through this application AECOM were able to retrieve traffic data which was used as the baseline scenario for use in the analysis of this scheme. The location of the traffic surveys are illustrated in Figure 4-1.

As part of this analysis, the relevant committed development flows (Planning Ref: SHD3ABP-307222-20) have been included within the baseline scenario and are illustrated within Appendix B.

Figure 4-1 Traffic Count Locations

4.2.2 Proposed Development

In order to determine the potential vehicle trip generation for the proposed development, trip rates were taken from the industry standard TRICS database for the proposed land uses using the latest version of the software (version 7.8.2). 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. For the purposes of this TTA AECOM has focussed on vehicle trips only.

Table 4.1 and Table 4.2 (Appendix C) illustrate the vehicle trip generation using TRICS for the subject nursing home and townhouses, respectively.

Table 4.1 Proposed Development Vehicle Trip Generation Nursing Home

	Trip Generation			
	AM Peak (08:00- 09:00)		PM Peak (17:00-18:00)	
	Arrivals	Departures	Arrivals	Departures
One Way Traffic Movements	7	5	9	16
Two Way traffic Movements	12		25	

Table 4.2 Proposed Development Vehicle Trip Generation Townhouses

	Trip Generation			
	AM Peak (08:00- 09:00)		PM Peak (17:00-18:00)	
	Arrivals	Departures	Arrivals	Departures
One Way Traffic Movements	1	2	2	1
Two Way traffic Movements	3		3	

The review identifies that the proposed development may generate an additional 15 no. two-way vehicular trips during the weekday morning peak hour and an additional 28 no. two-way vehicle trips during the evening peak hour, respectively.

4.3 Trip Distribution & Assignment

To understand the potential distribution of the vehicle 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 adjacent to the site during the typical peak periods. Figure 4-2 illustrates the trip distribution splits across the road network. Appendix B illustrates the proposed Baseline Traffic Flow patterns during the morning and evening peak hours on the surrounding road network.

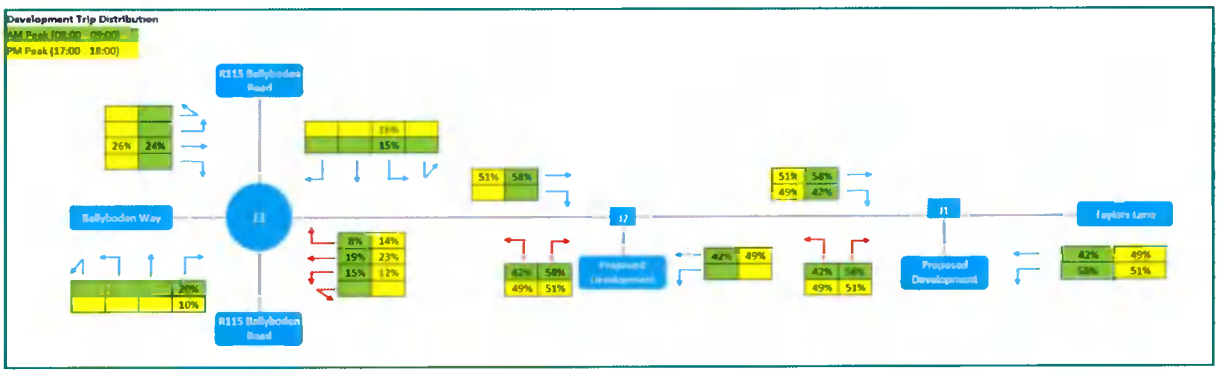


Figure 4-2 AM and PM Trip Distribution

4.4 Traffic Growth

The TTA will adopt an Opening Design Year of 2023. In accordance with TII Guidance, Future Design years (+5 and +15 years) of 2028 and 2038 will therefore be adopted.

The 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 Rathfarnham, which is in the 'Dublin Metropolitan Area', 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 will be assessed for the opening year of the development (2023) and the two horizon year assessments (2028 and 2038), as per the TII Traffic Assessment Guidelines. The assessment years are as follows:

- 2019 to 2023 – 1.0664 (or 6.64%);
- 2019 to 2028 – 1.1556 (or 15.56%); and
- 2019 to 2038 – 1.2159 (or 21.59%).

4.5 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.'*

For the purposes of this TTA the 10% threshold has been considered.

4.6 Impact of the Proposed Development

A comparison was made between the pre-development and post-development scenarios, to identify the percentage impact of the development within the Taylor's Lane road network.

The projected percentage impact of traffic associated with the proposed development on the surrounding road junctions in the year of opening (2023) is set out in in Figure 4-3 and Table 4.3.

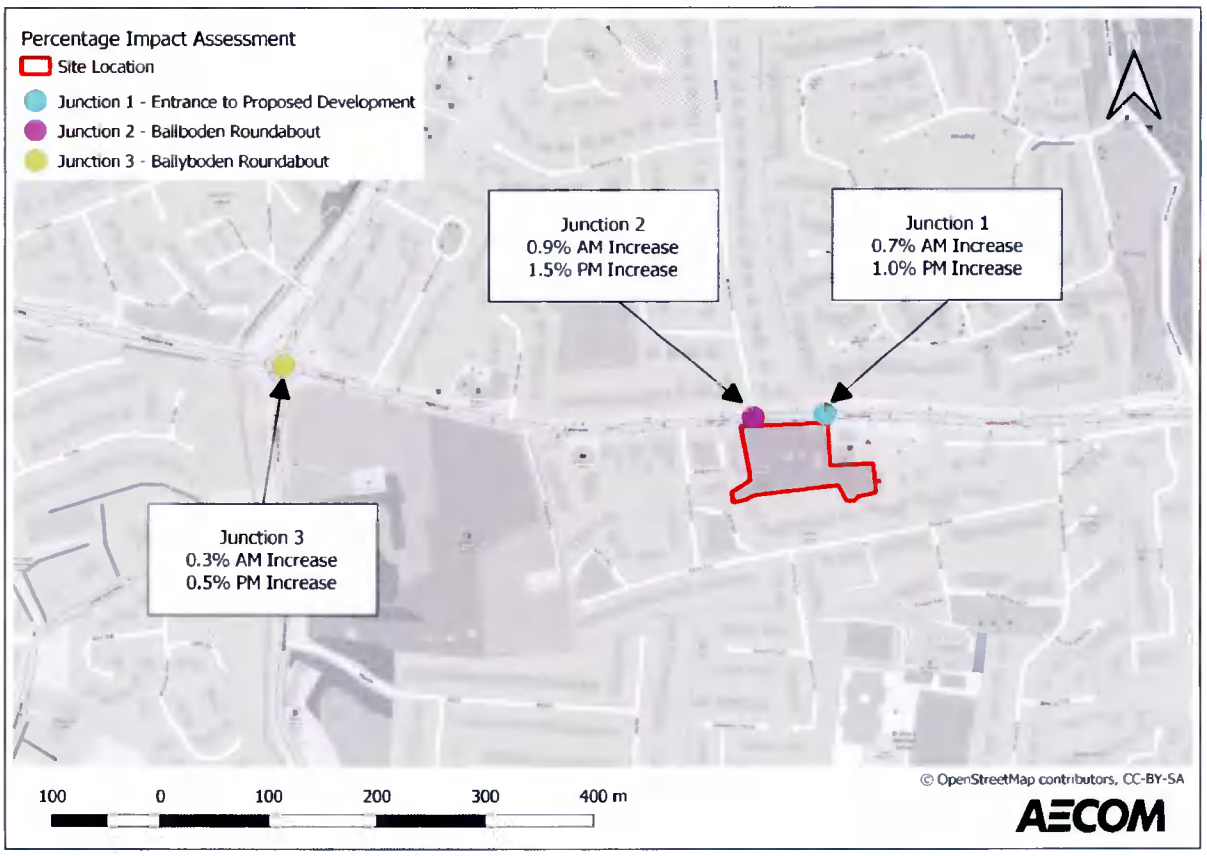


Figure 4-3 Percentage Impact Assessments

Table 4.3 Percentage Impact Assessment

Junction	Time Period	Existing Flows + Committed	Proposed Dev Flows	% Impact
Junction 1: Existing Site Access / Taylors Lane	AM	1643	12	0.7%
	PM	1874	18	1.0%
Junction 2: Proposed Site Access / Taylors Lane	AM	1648	14	0.9%
	PM	1874	28	1.5%
Junction 3: Ballyboden Roundabout	AM	2614	8	0.3%
	PM	2860	15	0.5%

The proposed development will result in an impact of:

- 0.7% and 1.0% upon the Existing Site Access / Taylors Lane junction in the respective morning and evening peaks.
- 0.9% and 1.5% upon the Proposed Site Access / Taylors Lane junction in the respective morning and evening peaks
- 0.3% and 0.5% upon the Ballyboden Roundabout in the respective morning and evening peaks.

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 not exceed 10% of the existing two-way traffic flow, modelling is not required for this junction. The traffic impacts upon this junction will be nominal. For robustness in AECOM's approach, a Junctions 9 model will be completed for the proposed site accesses.

Junction 2: Based on the TII Traffic and Transport Guidelines (May 2014), given that the impact upon this priority junction does not exceed 10% of the existing two-way traffic flow, modelling is not required for this junction. The traffic impacts upon this junction will be nominal. For robustness in AECOM's approach, a Junctions 9 model will be completed for the proposed site accesses.

Junction 3: Based on the TII Traffic and Transport Guidelines (May 2014), given that the impact upon this priority junction does not exceed 10% of the existing two-way traffic flow, modelling is not required for this junction. The traffic impacts upon this junction will be nominal.

5. Network Analysis

5.1 Introduction

This chapter presents the junction impact analysis at the proposed site accesses. As these junctions are unsignalized priority controlled junctions they will be assessed using the industry standard Junctions 9 (PICADY) software developed by Transport Research Laboratory (TRL).

5.2 Junction Analysis

Junctions 9 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.

5.2.1 Existing Site Access / Taylors Lane

A Junctions 9 model was completed using the aforementioned traffic data (Chapter 4) to assess the traffic volumes for the weekday morning and evening peak periods and future assessment years with and without the development in place. A summary of the results are shown in Table 5.1 with the full Junctions 9 outputs contained within Appendix D.

Table 5.1 Existing Site Access / Taylors Lane Outputs

Assessment Year	Arm	AM		PM	
		Queue (PCU)	RFC	Queue (PCU)	RFC
2019 Baseline	Existing Site Access	0	0	0	0
	Taylors Lane Western Arm	0	0	0	0
2023 Baseline + Committed	Existing Site Access	0	0	0	0
	Taylors Lane Western Arm	0	0	0	0
2023 Baseline + Committed + Development	Existing Site Access	0	0	0	0
	Taylors Lane Western Arm	0	0.01	0	0.01
2028 Baseline + Committed	Existing Site Access	0	0	0	0
	Taylors Lane Western Arm	0	0	0	0
2028 Baseline + Committed + Development	Existing Site Access	0	0	0	0
	Taylors Lane Western Arm	0	0.01	0	0.01
2038 Baseline + Committed	Existing Access	0	0	0	0
	Taylors Lane Western Arm	0	0	0	0
2038 Baseline + Committed + Development	Existing Site Access	0	0	0	0
	Taylors Lane Western Arm	0	0.01	0	0.02

Based on the analysis of Site Access 1 Junction, it is clear that with the inclusion of the junction along Taylors Lane, the junction will continue to operate within capacity throughout the 2023 (opening year) to the 2038 (opening year + 15) assessment with the development in place.

When comparing the 2038 assessment years with and without development, the proposed development results in a RFC of 0.01 (1%) with no queueing anticipated during the morning peak period. During the evening peak period it is anticipated that the Taylors Lane Western arm will result in a 0.02 (2%) RFC with no queuing anticipated.

5.2.2 Proposed Site Access / Taylors Lane

A summary of the results are shown in Table 5.2 with the full Junctions 9 outputs contained within Appendix D.

Table 5.2 Proposed Site Access / Taylors Lane Outputs

Assessment Year	Arm	AM		PM	
		Queue (PCU)	RFC	Queue (PCU)	RFC
2019 Baseline	Proposed Access	0	0	0	0
	Taylors Lane Western Arm	0	0	0	0
2023 Baseline + Committed	Proposed Access	0	0	0	0
	Taylors Lane Western Arm	0	0	0	0
2023 Baseline + Committed + Development	Proposed Access	0	0.02	0.1	0.07
	Taylors Lane Western Arm	0	0.02	0	0.03
2028 Baseline + Committed	Proposed Access	0	0	0	0
	Taylors Lane Western Arm	0	0	0	0
2028 Baseline + Committed + Development	Proposed Access	0	0.02	0.1	0.08
	Taylors Lane Western Arm	0	0.03	0.1	0.04
2038 Baseline + Committed	Proposed Access	0	0	0	0
	Taylors Lane Western Arm	0	0	0	0
2038 Baseline + Committed + Development	Proposed Access	0	0.02	0.1	0.09
	Taylors Lane Western Arm	0	0.03	0.1	0.04

Based on the analysis of Site Access 2 Junction, it is clear that with the inclusion of the junction along Taylors Lane, the junction will continue to operate within capacity throughout the 2023 (opening year) to the 2038 (opening year + 15) assessment with the development in place.

When comparing the 2038 assessment years with and without development, the proposed development results in a RFC of 0.03 (3%) with no corresponding queue during the morning peak period on the Taylors Lane Western Arm. During the evening peak period it is anticipated that the Site Access arm will result in a 0.09 (9%) RFC with a corresponding queue of 0.1 PCU.

From the analysis undertaken this indicates that the proposed development will not negatively impact the surrounding road network and the proposed new access can accommodate the demands of the proposed nursing home.

6. Framework Mobility Management Plan

6.1 General

The environmental and congestion impacts of road transport have led to policy changes by officials in the industry. These changes have led to increasing the priority of more sustainable modes of transport. The aim of a MMP is to encourage modes of travel other than the car. Note the MMP is focussed on the nursing home element only of the proposed development.

This section will present an overview of the proposed mobility management measures for the proposed development. A review of the key measures and policies outlined in the existing SDCC Development Plan (2016 – 2022) has been undertaken. This section is also informed by the existing and proposed provision of public transport outlined in Section 2 of this report.

Upon completion of the development, when the scheme is occupied it is recommended that an update to the MMP is undertaken in unison with travel surveys for nursing home staff and visitors which will inform travel targets for site users.

6.2 Aims

A MMP broadly seeks to reduce the number of car journeys associated with a development, which in turn reduces the environmental impact on the receiving environment. The specific aims of this MMP are:

- To discourage private car use as a means of travel to and from the development;
- To increase and facilitate the number of people choosing to walk, cycle or travel by public transport to and from the development;
- To work with SDCC, the NTA and public transport providers to support and encourage visitor and staff uptake;
- To develop an integrated and unified plan for public transport, private vehicle, business fleet management and suppliers of commercial services to the development;
- To liaise and co-operate with any adjacent developments in relation to a coordinated approach to Mobility Management between to and from the various employment areas; and
- To achieve the above aims, measures have been proposed for the specific modes of transport. These are based on existing infrastructure and public transport systems. These objectives are preliminary and will be further developed in the light of ongoing monitoring as the proposed development is occupied and information becomes available on future travel behaviour of staff and visitors.

In order to achieve these aims a two-stage approach has been adopted. These stages are summarised below:

- Stage 1: To provide a package of measures from the outset as part of the development to provide staff and visitors with safe and viable transport alternatives to the car for accessing the site.
- Stage 2: To continually monitor the travel patterns of people using the site to ensure that the most sustainable travel patterns are encouraged.

6.3 Benefits

MMPs are intended to bring the following benefits:

- A partnership approach between staff / visitors and management to influence travel behaviour;
- Widen accessibility of the site and buildings;
- Encourage safe and viable alternatives for accessing the site;
- Pragmatic initiatives based on a continual appraisal of travel patterns;
- A benchmark from which future developments can be assessed;
- Reduction in overall vehicle mileage;
- Reduction in congestion and air pollution;
- Fewer vehicular trips than would otherwise be the case;

- Improved road safety on and near the site;
- Accommodate those journeys, which need to be made by car;
- Preservation of valuable land and avoiding the costs of providing too much parking; and
- Health benefits for staff and visitors due to the use of active modes of transport (i.e. cycling and walking).

6.4 Monitoring

A critical part of any MMP is ongoing monitoring. It is proposed that an initial evaluation of the operation of the Plan will take place one year into operation.

Upon occupation of the development it would be proposed to undertake travel attitude surveys to establish baseline modal split of residents. This would assist considerably in the setting of appropriate trip rate and modal share targets for the development.

An after study should then be undertaken following the operation of the MMP for a reasonable period of time. The two datasets could then be compared to review what remedial changes are necessary after implementation of the various infrastructural measures and initiatives.

Campaigns and promotions would be run throughout the year to maintain awareness of modes of travel other than the car and the benefits accrued to both the individual and the environment.

The management of the proposed development will be encouraged to continually monitor the MMP initiatives in order to maximise their success. Monitoring results could be included in the annual report or a separate environmental report. The results can also be forwarded to SDCC at intervals to be determined by agreement.

6.5 Targets and Timescales

The targets and timescales will be set further to completion of a travel survey when the development is occupied, reflecting the existing conditions and mindful of the environmental, health and social benefits of increasing active and sustainable travel to and from the proposed development. Some indicative targets include:

- Total % change in numbers of people walking/cycling to the subject site;
- Total % of people choosing to travel to work using the car;
- Increase in occupancy of cycle stands;
- Observed levels of car parking; and
- Change in overall modal split over time (five-yearly monitoring).

6.6 Measures

6.6.1 MMP Partners

This section presents a 'Toolkit' of measures, identifying a number of 'hard' and 'soft' measures that should be promoted and delivered where possible, to ensure that the theme of sustainability is entrenched within the design of the proposed development.

This section identifies the key individuals and groups who will be responsible for managing the delivery of the MMP. These are:

- MMP Co-ordinator;
- SDCC;
- Site developer; and
- MMP advisor (engineer).

6.6.2 Mobility Management Plan Coordinator

A MMP Coordinator should be identified by the management company of the development, who would be responsible for internally monitoring the travel plan, promoting the travel plan and distributing travel plan

information. The coordinator will work in conjunction with SDCC, the local community and other interested parties for the continuing progression of the MMP.

The coordinator should be appointed prior to occupation of the proposed development, to ensure they are involved in developing a travel pack which should be sent out to all staff prior to their start date and the visitors of nursing home residents. The role of the coordinator should be as follows:

- Overseeing the development and implementation of the MMP;
- Designing and implementing effective marketing and awareness raising campaigns;
- Provide a point of contact and travel information;
- Liaison with external organisations; and
- Coordinating the monitoring programme for the MMP.

6.6.3 Mobility Management Plan 'Toolkit'

A 'Toolkit' contains a range of 'soft' and 'hard' options, to encourage sustainable travel and achieve the aims of the plans. Example of 'softer' measures include: promoting sustainable travel via marketing material on staff notice boards, whilst examples of 'harder' measures include new cycle parking stands. Table 6.1 presents a list of potential sustainable travel planning initiatives for the development.

Table 6.1 Possible Mobility Management Measures and Actions

Walking		
Initiatives	**Responsibility / Ownership**	**Timescale**
Provision of details on how to access the site on foot. Details would include safe walking routes and location of the nearest bus stops for perspective staff and visitors Promote walking events / lunchtime walks for staff Provide quarterly 'How to Travel' newsletter via email to staff and visitors Distribute travel maps, leaflets and timetables, ensuring consistent accessible formats, health information for walking routes, signposting to website / apps. Provide umbrella for staff and visitors of the development (in the nursing home) on wet days. As previously stated, the proposed design includes for a number of pedestrian facilities. Pedestrian and cycling access will be provided across the site onto Taylor's Lane	The Action Plan Co-ordinator	To be commenced prior to occupation
Cycling		
Initiatives	**Responsibility / Ownership**	**Timescale**
Establish a staff Bicycle User Group. Advertising the Bike to Work scheme for staff. Encourage establishment of a cycling club / society. Provision for cyclist equipment i.e. pump, Allen keys, lights, puncture repairs. Display maps of local cycle network on staff/ visitor notice boards. Participate in national cycle week.	The Action Plan Co-ordinator	To be commenced prior to occupation

Survey and monitor cycle parking occupancy. Install good quality cycle parking provision on site.		
Public Transport		
Initiatives	**Responsibility / Ownership**	**Timescale**
Provision of public transport maps and timetables in prominent locations on site. Information should be kept up to date. Provision of information to staff on savings that can be made by using Leap Card and details on where Leap Cards can be purchased. Re-advertise and promote the Tax saver monthly and annual commuter tickets for public transport to staff of the development. Display a local area map with public transport stops / route numbers marked. Publicise real time passenger information apps and websites where relevant. Publicise door-to-door multi modal journey planner website. Liaise with public transport operators regarding service frequencies to the development. Provide attractive, good quality walking routes to the existing public transport infrastructure.	The Action Plan Co-ordinator	To be commenced prior to occupation
Car Sharing		
Initiatives	**Responsibility / Ownership**	**Timescale**
Encouragement of staff and visitors of the development to use other modes of travel other than private car. Where it is necessary for car use to travel to and from work, visitors and staff (of the nursing home) should be made aware of other people who are either within close proximity of their homes (for staff). Hold a coffee morning / launch event for potential car sharers	The Action Plan Co-ordinator	To be commenced prior to occupation
Construction Phase		
Initiatives	**Responsibility / Ownership**	**Timescale**
Provide a preliminary CTMP to provide detailed mitigation of construction traffic associated with the proposed development.	The Contractor / SDCC Roads & Traffic Department	To be commenced prior to occupation

6.7 MMP Summary

Luxcare Ltd are committed to implementing a MMP and will monitor progress and take remedial actions as necessary.

7. Framework Construction Traffic Management Plan

7.1 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 CTMP 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 CTMP for the approval of SDCC in advance of any works.

7.2 Policy Guidance

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

- Traffic Signs Manual Chapter 8 Temporary Traffic Measures and Signs for Roadworks (2019);
- Traffic Management Guidelines, Department of Transport (2003); and
- Requirements of SDCC.

7.3 Likely Construction Programme & Phasing

The construction programme is expected to require approximately 12 to 18 months to complete.

7.4 Construction Route

To minimise construction impacts upon the surrounding road network, it is recommended that all construction traffic enters and exits from the M50 Junction 13 taking the R826 exit to Sandyford/ Dundrum. At the roundabout take the 1st exit onto Brehon Field Road (R133) and Continue onto Grange Road / R822 for 1.3km. In 600 m the site will be located on the left. This route has been selected as it minimises the interaction construction traffic will have with residential areas. Figure 7-1 illustrates the recommended construction routing from the M50 Junction 13.

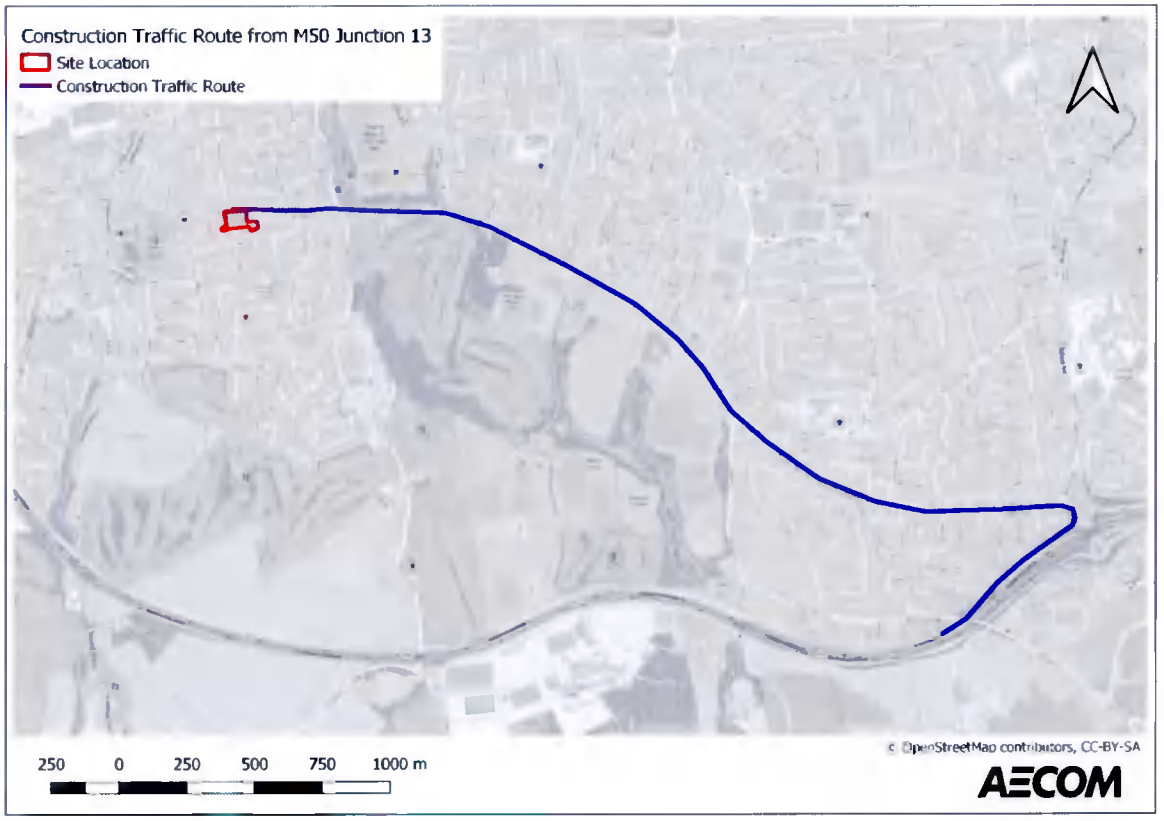


Figure 7-1 Construction Traffic Proposed Route

7.5 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.

7.6 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 SDCC.

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.

7.7 Hours of Operation

Site development and building works shall be carried out between the hours of operation recommended by SDCC 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.

7.8 Traffic Management Measures

Below is a list of proposed traffic management measures to be considered 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 roads, unless proposed within a designated area that is subject to traffic management measures and agreed with SDCC;
- 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, this is 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. 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.

8. Summary and Conclusions

AECOM has been commissioned to undertake a Traffic and Transport Assessment (TTA) to accompany a planning application by Luxcare Ltd. The proposed development would consist of the construction of a 111 no. bedroom nursing home ranging in height from two to three storeys with a total Gross Floor Area of 5,110 sq. m. The development would be constructed around the protected structure of the detached two storey Newbrook House. Additionally, proposed is the construction of 5 no. townhouses.

The proposed development site is bound by Taylor's Lane to the north, residential properties to the south and west and a petrol filling station to the east.

The site is proposed to be accessed by way of one new priority junction and one existing priority junction. There is proposed to be 18 no. car parking spaces for the nursing home and 7 no. car parking spaces for the residential development. The western access point would service the nursing home only while the eastern access point would service the residential units and any deliveries that are to be made to the nursing home. There is proposed to be 2 no. mobility impaired spaces for the nursing home and 2 no. electric vehicle spaces. Bicycle parking proposed includes 24 no. spaces for the staff and visitors of the nursing home and 5 no. spaces for the residential development which will be provided within the curtilage of the proposed residential units. A bin store, hard and soft landscaping and all associated site works above and below ground will also be included in the proposed development.

The proposed development site is ideally positioned within the urban environment to maximise access to/from the proposed development utilising existing and proposed sustainable forms of travel including walking, cycling and public transport. Car and cycle parking has been provided in line with the South Dublin County Council (SDCC) Development Plan.

It is envisaged that the proposed development may generate 15 and 28 two-way vehicular movements during the weekday morning and evening peak hours, respectively. These figures were obtained using the industry standard TRICS (Trip Rate Information Computer System) database for a multi-modal assessment. Trip distribution onto the network was established cognisant of current and future traffic patterns based on traffic data obtained via the SDCC for a consented Strategic Housing Development (SHD) to the west of the site (Planning Application Ref SHD3ABP-307222-20).

A percentage impact assessment has been completed in line with Transport Infrastructure Ireland (TII) Traffic and Transport Guidelines (May 2014) guidance. This has established that the following percentage impacts are anticipated at local junctions:

- 0.7% and 1.0% upon the Site Access 1 / Taylor's Lane junction in the respective morning and evening peaks.
- 0.9% and 1.5% upon the Site Access 2 / Taylor's Lane junction in the respective morning and evening peaks
- 0.3% and 0.5% upon the Ballyboden Roundabout in the respective morning and evening peaks.

From the junction modelling assessment (Junctions 9) undertaken at the site accesses only it was clear that the proposed development does not result in any deterioration of the junction capacity and does not result in traffic congestion along Taylor's Lane.

A Framework for a Mobility Management Plan (MMP) has been prepared outlining the key measures and policies to be undertaken by the operator of the proposed nursing home in order to reduce the reliance on private vehicular modes of transport for future staff and visitors. Luxcare Ltd are committed to the implementation of a MMP.

A Framework for a Construction Traffic Management Plan (CTMP) has been prepared indicating the potential construction traffic route and measures that could be implemented by the contractor to minimise the impact on the surrounding road network, this will be subject to agreement with SDCC and the appointed contractor subject to consent.

It is AECOM's considered opinion that there is no traffic or transportation reason why this development should not proceed.

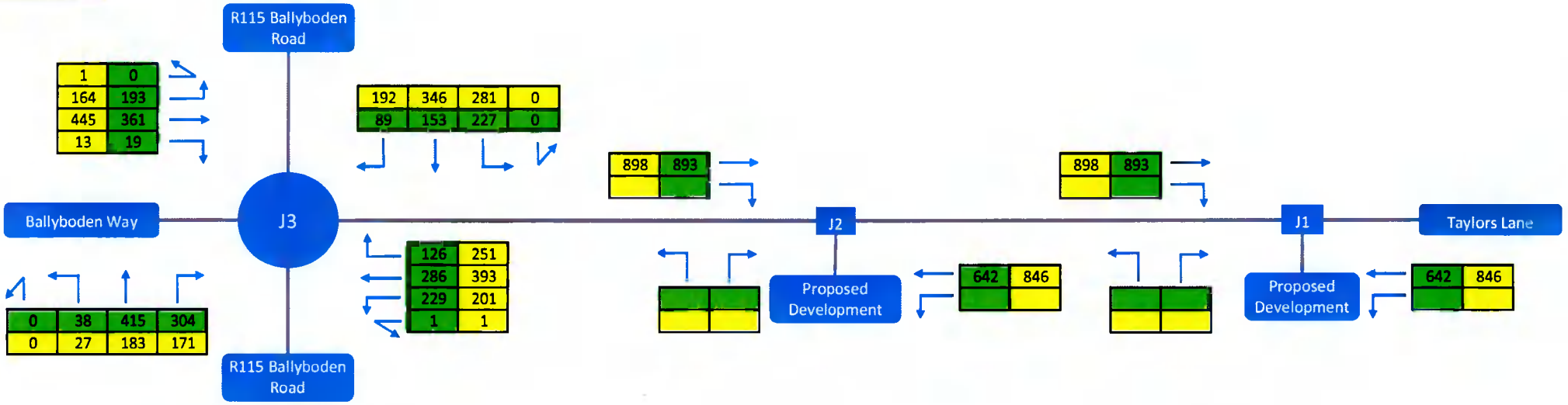
Appendix A Site Layout

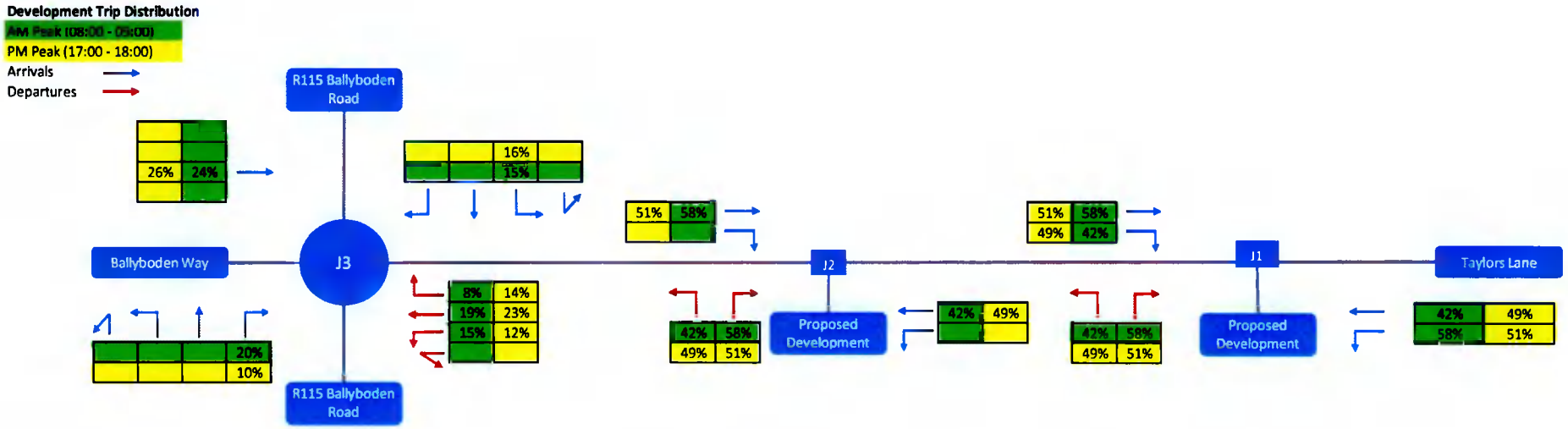
Appendix B Network Flow Diagrams

2019 Baseline Flows

AM Peak (08:00 - 09:00)

PM Peak (17:00 - 18:00)




Development Trip Distribution
AM Peak (08:00 - 09:00)
PM Peak (17:00 - 18:00)
Arrivals
Departures
R115 Ballyboden Road
26%
24%
16%
15%
51%
58%
51%
58%
49%
42%
Ballyboden Way
J3
J2
J1
Taylors Lane
8%
14%
19%
23%
15%
12%
42%
58%
49%
51%
Proposed Development
42%
49%
42%
58%
49%
51%
Proposed Development
42%
49%
58%
51%
20%
10%
R115 Ballyboden Road

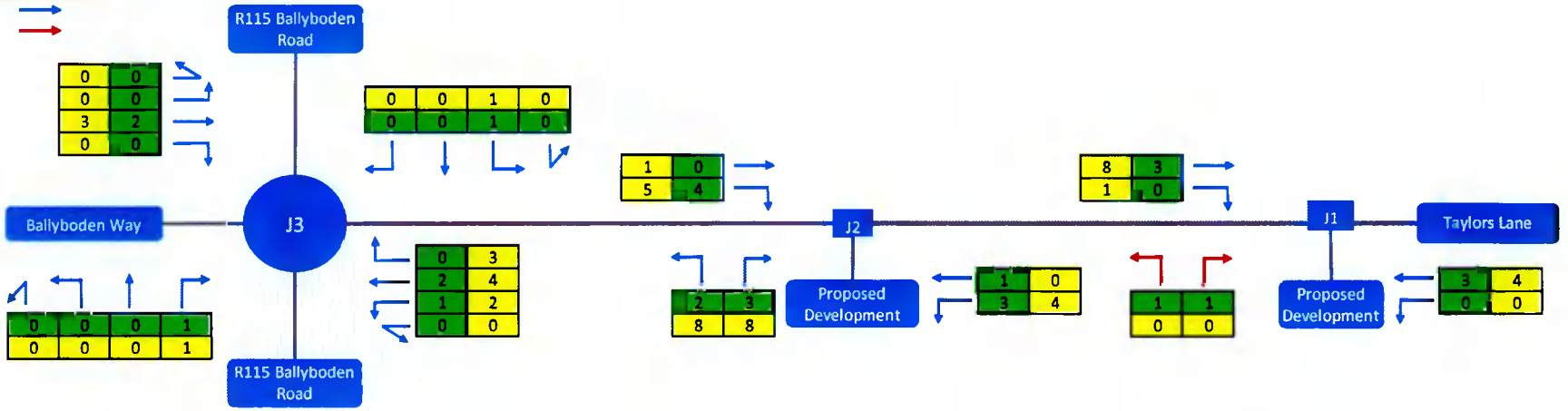
Development Trip Generation

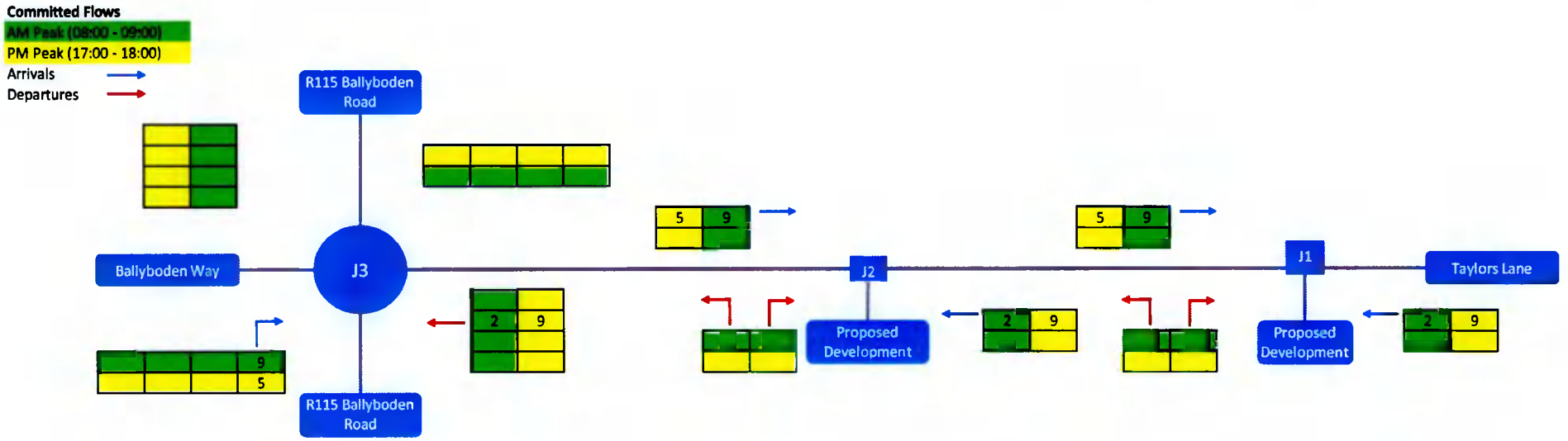
AM Peak (08:00 - 09:00)

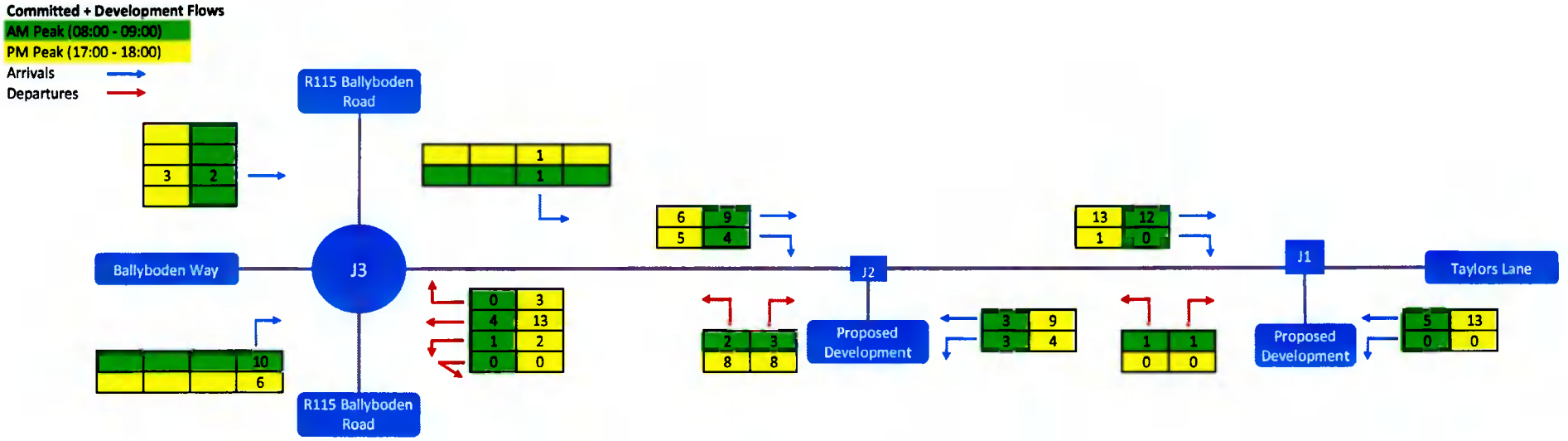
PM Peak (17:00 - 18:00)

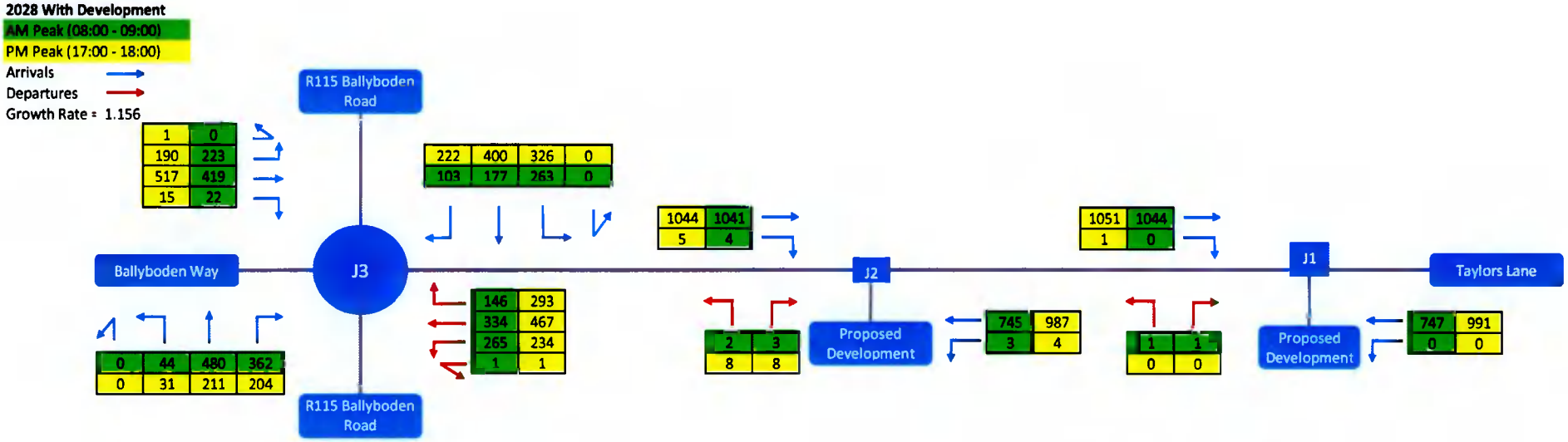
Arrivals

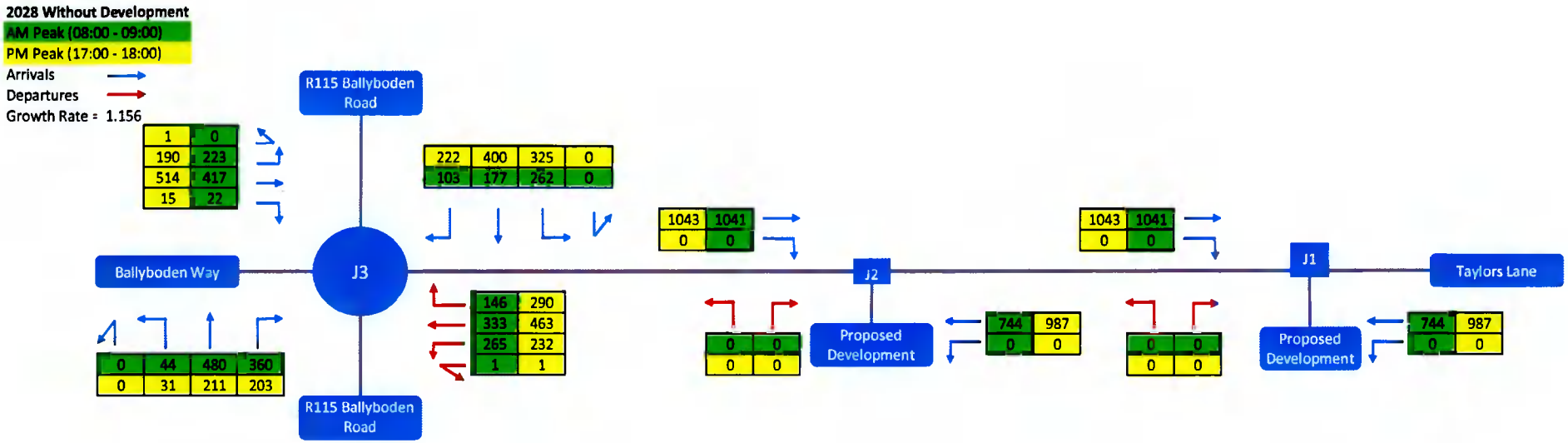
Departures

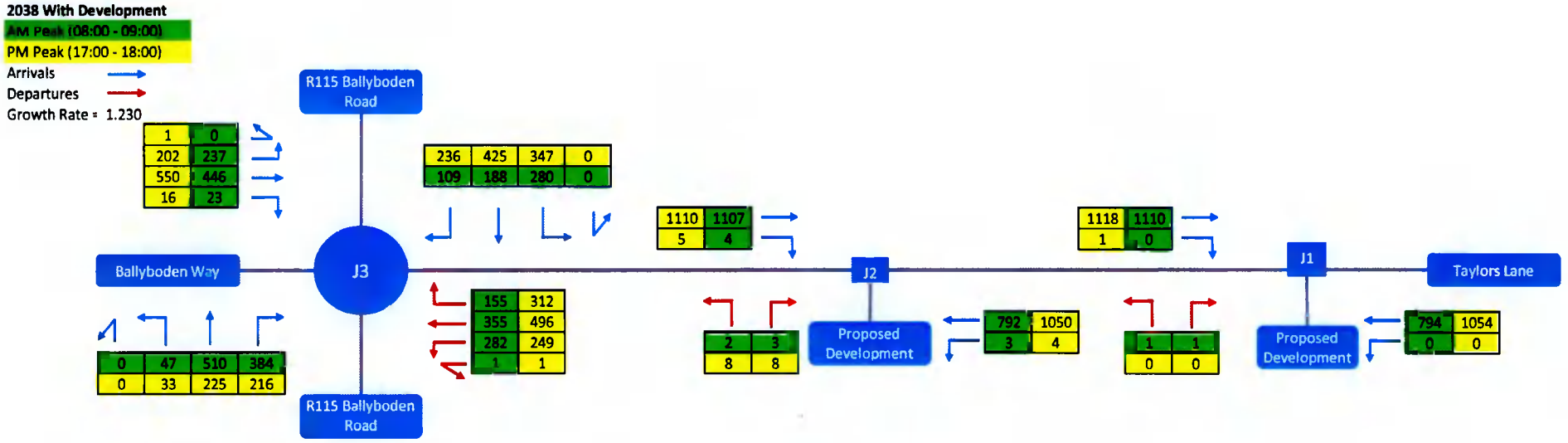


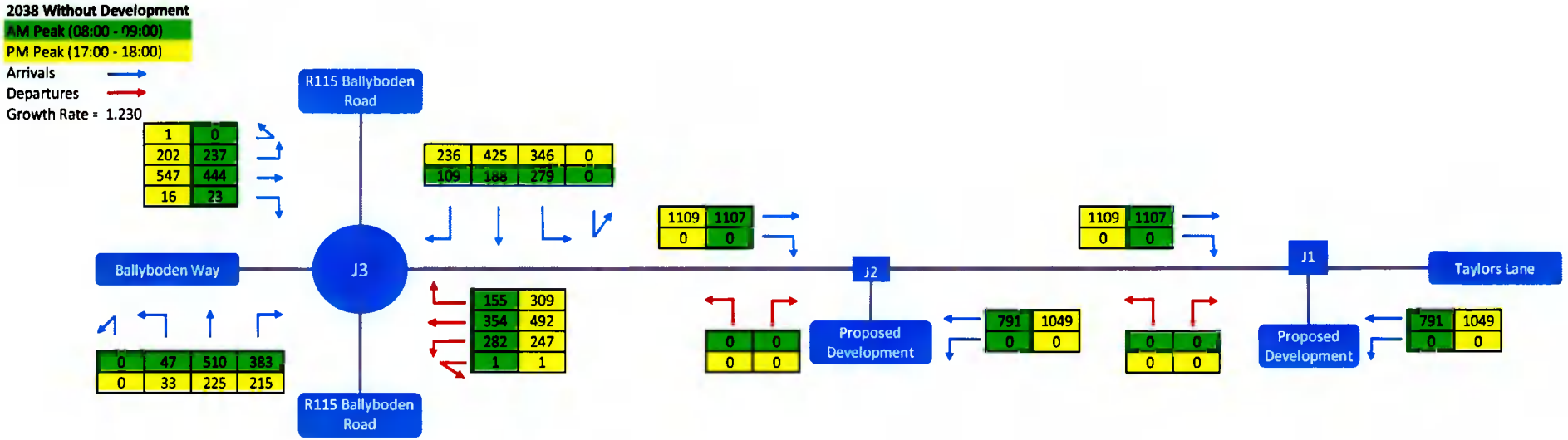

Committed Flows
AM Peak (08:00 - 09:00)
PM Peak (17:00 - 18:00)
Arrivals
Departures
R115 Ballyboden Road
Ballyboden Way
J3
R115 Ballyboden Road
J2
Proposed Development
J1
Proposed Development
Taylors Lane
5
9
2
9
9
5

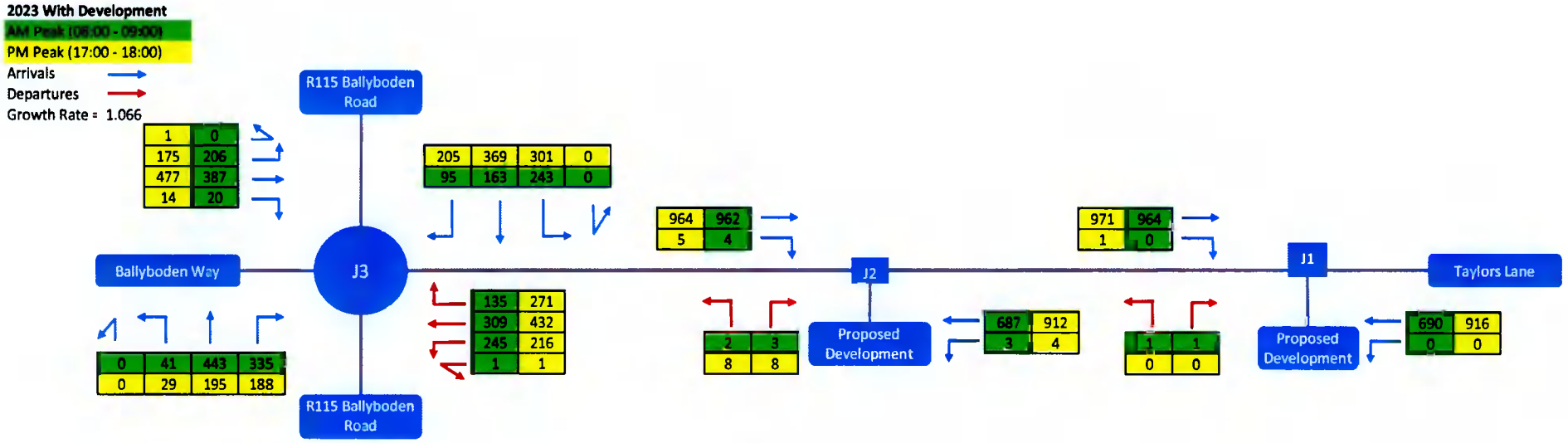

Committed + Development Flows
AM Peak (08:00 - 09:00)
PM Peak (17:00 - 18:00)
Arrivals
Departures
R115 Ballyboden Road
Ballyboden Way
J3
R115 Ballyboden Road
J2
Proposed Development
J1
Proposed Development
Taylors Lane
3 2
1 1
6 9 5 4
13 12 1 0
0 3 4 13 1 2 0 0
10 6
2 3 8 8
3 9 3 4
1 1 0 0
5 13 0 0

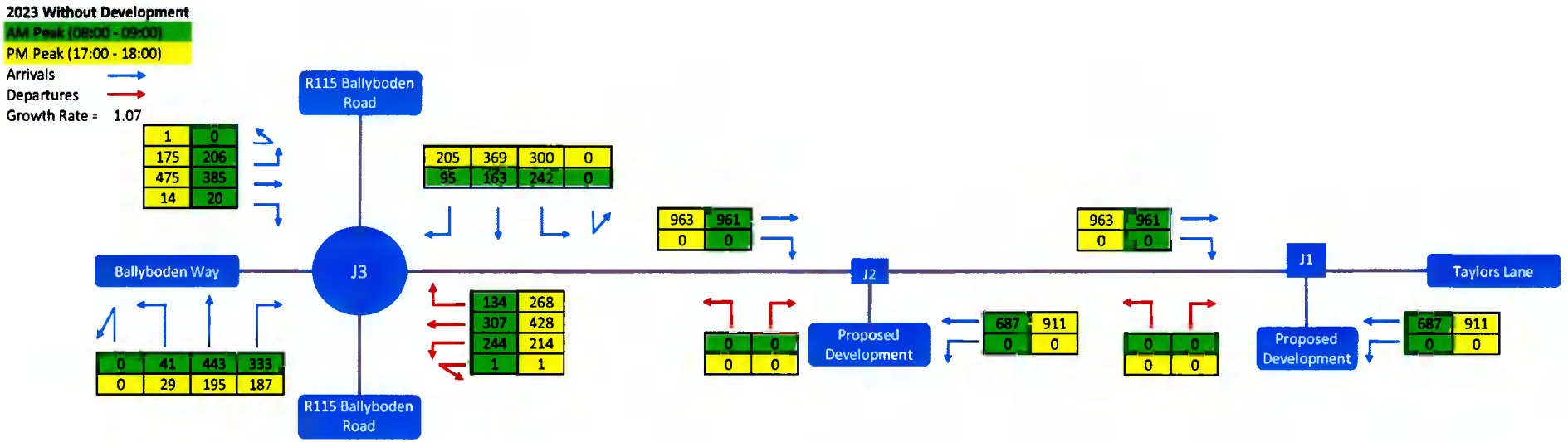

2028 With Development
AM Peak (08:00 - 09:00)
PM Peak (17:00 - 18:00)
Arrivals
Departures
Growth Rate = 1.156
R115 Ballyboden Road
1 0
190 223
517 419
15 22
222 400 326 0
103 177 263 0
1044 1041
5 4
1051 1044
1 0
Ballyboden Way
J3
J2
J1
Taylors Lane
146 293
334 467
265 234
1 1
0 44 480 362
0 31 211 204
2 3
8 8
Proposed Development
745 987
3 4
1 1
0 0
Proposed Development
747 991
0 0
R115 Ballyboden Road


2028 Without Development
AM Peak (08:00 - 09:00)
PM Peak (17:00 - 18:00)
Arrivals
Departures
Growth Rate = 1.156
R115 Ballyboden Road
1 0
190 223
514 417
15 22
222 400 325 0
103 177 262 0
1043 1041
0 0
1043 1041
0 0
Ballyboden Way
J3
J2
J1
Taylors Lane
146 290
333 463
265 232
1 1
0 0
0 0
Proposed Development
744 987
0 0
0 0
0 0
Proposed Development
744 987
0 0
0 44 480 360
0 31 211 203
R115 Ballyboden Road


2038 With Development
AM Peak (08:00 - 09:00)
PM Peak (17:00 - 18:00)
Arrivals
Departures
Growth Rate = 1.230
R115 Ballyboden Road
Ballyboden Way
J3
J2
J1
Taylors Lane
Proposed Development
Proposed Development
R115 Ballyboden Road
1 0
202 237
550 446
16 23
236 425 347 0
109 188 280 0
1110 1107
5 4
1118 1110
1 0
0 47 510 384
0 33 225 216
155 312
355 496
282 249
1 1
2 3
8 8
792 1050
3 4
1 1
0 0
794 1054
0 0


2038 Without Development
AM Peak (08:00 - 09:00)
PM Peak (17:00 - 18:00)
Arrivals
Departures
Growth Rate = 1.230
R115 Ballyboden Road
1 0
202 237
547 444
16 23
236 425 346 0
109 188 279 0
1109 1107
0 0
1109 1107
0 0
Ballyboden Way
J3
J2
J1
Taylors Lane
155 309
354 492
282 247
1 1
0 0
0 0
Proposed Development
791 1049
0 0
0 0
0 0
Proposed Development
791 1049
0 0
0 47 510 383
0 33 225 215
R115 Ballyboden Road


2023 With Development
AM Peak (08:00 - 09:00)
PM Peak (17:00 - 18:00)
Arrivals
Departures
Growth Rate = 1.066
R115 Ballyboden Road
Ballyboden Way
J3
R115 Ballyboden Road
J2
Proposed Development
J1
Proposed Development
Taylors Lane
1 0
175 206
477 387
14 20
205 369 301 0
95 163 243 0
964 962
5 4
971 964
1 0
135 271
309 432
245 216
1 1
2 3
8 8
687 912
3 4
1 1
0 0
690 916
0 0
0 41 443 335
0 29 195 188


2023 Without Development
AM Peak (08:00 - 09:00)
PM Peak (17:00 - 18:00)
Arrivals
Departures
Growth Rate = 1.07
R115 Ballyboden Road
1 0
175 206
475 385
14 20
205 369 300 0
95 163 242 0
963 961
0 0
963 961
0 0
Ballyboden Way
J3
J2
J1
Taylors Lane
0 41 443 333
0 29 195 187
134 268
307 428
244 214
1 1
0 0
0 0
Proposed Development
687 911
0 0
0 0
0 0
Proposed Development
687 911
0 0
R115 Ballyboden Road

Appendix C TRICS Outputs

Calculation Reference: AUDIT-204602-210623-0624

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 05 - HEALTH
Category : F - CARE HOME (ELDERLY RESIDENTIAL)

TOTAL VEHICLES

Selected regions and areas:

02	**SOUTH EAST**		
	ES	EAST SUSSEX	1 days
07	**YORKSHIRE & NORTH LINCOLNSHIRE**		
	NY	NORTH YORKSHIRE	1 days
11	**SCOTLAND**		
	SR	STIRLING	1 days
15	**GREATER DUBLIN**		
	DL	DUBLIN	1 days
17	**ULSTER (NORTHERN IRELAND)**		
	DO	DOWN	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:	Number of residents
Actual Range:	16 to 69 (units:)
Range Selected by User:	16 to 90 (units:)

Parking Spaces Range: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/13 to 02/05/19

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

Selected survey days:

Monday	1 days
Tuesday	1 days
Wednesday	2 days
Saturday	1 days

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

Selected survey types:

Manual count	5 days
Directional ATC Count	0 days

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

Selected Locations:

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

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

Selected Location Sub Categories:

Residential Zone	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:

Use Class:

C2	5 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:

1,001 to 5,000	1 days
5,001 to 10,000	3 days
15,001 to 20,000	1 days

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

Population within 5 miles:

5,001 to 25,000	1 days
25,001 to 50,000	3 days
50,001 to 75,000	1 days

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

Car ownership within 5 miles:

1.1 to 1.5	5 days

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

Travel Plan:

Yes	1 days
No	4 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	5 days

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

LIST OF SITES relevant to selection parameters

1 **DL-05-F-01** **NURSING HOME** **DUBLIN**
MOUNT ANVILLE PARK
DUBLIN
GOATSTOWN
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of residents: 16
Survey date: TUESDAY *05/09/17* *Survey Type: MANUAL*

2 **DO-05-F-01** **CARE HOME** **DOWN**
STRANGFORD ROAD
DOWNPATRICK

Edge of Town
Residential Zone
Total Number of residents: 65
Survey date: SATURDAY *20/06/15* *Survey Type: MANUAL*

3 **ES-05-F-02** **CARE HOME** **EAST SUSSEX**
BATTLE ROAD
HAILSHAM

Edge of Town Centre
Residential Zone
Total Number of residents: 69
Survey date: WEDNESDAY *13/07/16* *Survey Type: MANUAL*

4 **NY-05-F-05** **NURSING HOME** **NORTH YORKSHIRE**
SEAGRIM CRESCENT
RICHMOND

Edge of Town
Residential Zone
Total Number of residents: 37
Survey date: MONDAY *04/03/19* *Survey Type: MANUAL*

5 **SR-05-F-01** **NURSING HOME** **STIRLING**
PERTH ROAD
DUNBLANE

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of residents: 60
Survey date: WEDNESDAY *18/06/14* *Survey Type: MANUAL*

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

TRIP RATE for Land Use 05 - HEALTH/F - CARE HOME (ELDERLY RESIDENTIAL)

TOTAL VEHICLES

Calculation factor: 1 RESIDE

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. RESIDE	Trip Rate	No. Days	Ave. RESIDE	Trip Rate	No. Days	Ave. RESIDE	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	**5**	**49**	**0.243**	5	49	0.093	5	49	0.336
08:00 - 09:00	5	49	0.109	5	49	0.105	5	49	0.214
09:00 - 10:00	5	49	0.113	5	49	0.053	5	49	0.166
10:00 - 11:00	5	49	0.170	5	49	0.077	5	49	0.247
11:00 - 12:00	5	49	0.097	5	49	0.077	5	49	0.174
12:00 - 13:00	5	49	0.077	5	49	0.142	5	49	0.219
13:00 - 14:00	5	49	0.178	5	49	0.150	5	49	0.328
14:00 - 15:00	5	49	0.162	**5**	**49**	**0.259**	**5**	**49**	**0.421**
15:00 - 16:00	5	49	0.121	5	49	0.146	5	49	0.267
16:00 - 17:00	5	49	0.073	5	49	0.166	5	49	0.239
17:00 - 18:00	5	49	0.057	5	49	0.093	5	49	0.150
18:00 - 19:00	5	49	0.081	5	49	0.069	5	49	0.150
19:00 - 20:00	5	49	0.142	5	49	0.158	5	49	0.300
20:00 - 21:00	5	49	0.028	5	49	0.077	5	49	0.105
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.651			1.665			3.316

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

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

Parameter summary

Trip rate parameter range selected:	16 - 69 (units:)
Survey date date range:	01/01/13 - 02/05/19
Number of weekdays (Monday-Friday):	4
Number of Saturdays:	1
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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

Calculation Reference: AUDIT-204602-210714-0726

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

02	**SOUTH EAST**		
	HC	HAMPSHIRE	1 days
	KC	KENT	2 days
03	**SOUTH WEST**		
	DV	DEVON	3 days
	WL	WILTSHIRE	1 days
04	**EAST ANGLIA**		
	CA	CAMBRIDGESHIRE	1 days
	SF	SUFFOLK	1 days
05	**EAST MIDLANDS**		
	LN	LINCOLNSHIRE	1 days
07	**YORKSHIRE & NORTH LINCOLNSHIRE**		
	NE	NORTH EAST LINCOLNSHIRE	1 days
	NY	NORTH YORKSHIRE	4 days
08	**NORTH WEST**		
	CH	CHESHIRE	1 days
09	**NORTH**		
	CB	CUMBRIA	1 days
	DH	DURHAM	1 days
10	**WALES**		
	PS	POWYS	2 days
11	**SCOTLAND**		
	FA	FALKIRK	2 days
	HI	HIGHLAND	1 days
12	**CONNAUGHT**		
	LT	LEITRIM	2 days
	RO	ROSCOMMON	1 days
14	**LEINSTER**		
	WC	WICKLOW	1 days
16	**ULSTER (REPUBLIC OF IRELAND)**		
	DN	DONEGAL	3 days
17	**ULSTER (NORTHERN IRELAND)**		
	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: No of Dwellings
Actual Range: 9 to 363 (units:)
Range Selected by User: 4 to 4334 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/13 to 20/10/20

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

Selected survey days:

Monday	9 days
Tuesday	6 days
Wednesday	8 days
Thursday	5 days
Friday	3 days

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

Selected survey types:

Manual count	31 days
Directional ATC Count	0 days

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

Selected Locations:

Edge of Town Centre	8
Suburban Area (PPS6 Out of Centre)	23

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	31

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

Secondary Filtering selection:

Use Class:

C3	31 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:

1,001 to 5,000	6 days
5,001 to 10,000	7 days
10,001 to 15,000	6 days
15,001 to 20,000	4 days
20,001 to 25,000	4 days
25,001 to 50,000	4 days

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

Secondary Filtering selection (Cont.):

Population within 5 miles:

5,001 to 25,000	14 days
25,001 to 50,000	1 days
50,001 to 75,000	4 days
75,001 to 100,000	5 days
100,001 to 125,000	1 days
125,001 to 250,000	6 days

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

Car ownership within 5 miles:

0.5 or Less	1 days
0.6 to 1.0	8 days
1.1 to 1.5	20 days
1.6 to 2.0	2 days

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

Travel Plan:

Yes	3 days
No	28 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	31 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-A-08** **HOUSES & FLATS** **ANTRIM**
BALLINDERRY ROAD
LISBURN

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 204
Survey date: TUESDAY *29/10/13* *Survey Type: MANUAL*

2 **CA-03-A-05** **DETACHED HOUSES** **CAMBRIDGESHIRE**
EASTFIELD ROAD
PETERBOROUGH

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 28
Survey date: MONDAY *17/10/16* *Survey Type: MANUAL*

3 **CB-03-A-05** **DETACHED/TERRACED HOUSING** **CUMBRIA**
MACADAM WAY
PENRITH

Edge of Town Centre
Residential Zone
Total No of Dwellings: 50
Survey date: TUESDAY *21/06/16* *Survey Type: MANUAL*

4 **CH-03-A-11** **TOWN HOUSES** **CHESHIRE**
LONDON ROAD
NORTHWICH
LEFTWICH
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 24
Survey date: THURSDAY *06/06/19* *Survey Type: MANUAL*

5 **DH-03-A-01** **SEMI DETACHED** **DURHAM**
GREENFIELDS ROAD
BISHOP AUCKLAND

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 50
Survey date: TUESDAY *28/03/17* *Survey Type: MANUAL*

6 **DN-03-A-05** **DETACHED/SEMI-DETACHED** **DONEGAL**
GORTLEE ROAD
LETTERKENNY
GORTLEE
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 146
Survey date: WEDNESDAY *03/09/14* *Survey Type: MANUAL*

7 **DN-03-A-07** **DETACHED & SEMI-DETACHED** **DONEGAL**
ST ORANS ROAD
BUNCRANA

Edge of Town Centre
Residential Zone
Total No of Dwellings: 9
Survey date: WEDNESDAY *29/05/19* *Survey Type: MANUAL*

8 **DN-03-A-08** **SEMI DETACHED & DETACHED** **DONEGAL**
CHURCH ROAD
CARNDONAGH

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 36
Survey date: WEDNESDAY *30/09/20* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

9 **DV-03-A-01** **TERRACED HOUSES** **DEVON**
BRONSHILL ROAD
TORQUAY

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 37
Survey date: WEDNESDAY *30/09/15* *Survey Type: MANUAL*

10 **DV-03-A-02** **HOUSES & BUNGALOWS** **DEVON**
MILLHEAD ROAD
HONITON

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 116
Survey date: FRIDAY *25/09/15* *Survey Type: MANUAL*

11 **DV-03-A-03** **TERRACED & SEMI DETACHED** **DEVON**
LOWER BRAND LANE
HONITON

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 70
Survey date: MONDAY *28/09/15* *Survey Type: MANUAL*

12 **FA-03-A-01** **SEMI-DETACHED/TERRACED** **FALKIRK**
MANDELA AVENUE
FALKIRK

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 37
Survey date: THURSDAY *30/05/13* *Survey Type: MANUAL*

13 **FA-03-A-02** **MIXED HOUSES** **FALKIRK**
ROSEBANK AVENUE & SPRINGFIELD DRIVE
FALKIRK

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 161
Survey date: WEDNESDAY *29/05/13* *Survey Type: MANUAL*

14 **HC-03-A-23** **HOUSES & FLATS** **HAMPSHIRE**
CANADA WAY
LIPHOOK

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 62
Survey date: TUESDAY *19/11/19* *Survey Type: MANUAL*

15 **HI-03-A-14** **SEMI-DETACHED & TERRACED** **HIGHLAND**
KING BRUDE ROAD
INVERNESS
SCORGUIE
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 40
Survey date: WEDNESDAY *23/03/16* *Survey Type: MANUAL*

16 **KC-03-A-03** **MIXED HOUSES & FLATS** **KENT**
HYTHE ROAD
ASHFORD
WILLESBOROUGH
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 51
Survey date: THURSDAY *14/07/16* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

17 **KC-03-A-06** **MIXED HOUSES & FLATS** **KENT**
MARGATE ROAD
HERNE BAY

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 363
Survey date: WEDNESDAY *27/09/17* *Survey Type: MANUAL*

18 **LN-03-A-04** **DETACHED & SEMI-DETACHED** **LINCOLNSHIRE**
EGERTON ROAD
LINCOLN

Edge of Town Centre
Residential Zone
Total No of Dwellings: 30
Survey date: MONDAY *29/06/15* *Survey Type: MANUAL*

19 **LT-03-A-01** **SEMI-DETACHED & DETACHED** **LEITRIM**
ARD NA SI
CARRICK-ON-SHANNON
ATTIRORY
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 90
Survey date: FRIDAY *24/04/15* *Survey Type: MANUAL*

20 **LT-03-A-02** **BUNGALOWS** **LEITRIM**
ARD ÁLAINN
CARRICK-ON-SHANNON
GALLOW'S HILL
Edge of Town Centre
Residential Zone
Total No of Dwellings: 10
Survey date: MONDAY *22/05/17* *Survey Type: MANUAL*

21 **NE-03-A-03** **PRIVATE HOUSES** **NORTH EAST LINCOLNSHIRE**
STATION ROAD
SCUNTHORPE

Edge of Town Centre
Residential Zone
Total No of Dwellings: 180
Survey date: TUESDAY *20/05/14* *Survey Type: MANUAL*

22 **NY-03-A-08** **TERRACED HOUSES** **NORTH YORKSHIRE**
NICHOLAS STREET
YORK

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 21
Survey date: MONDAY *16/09/13* *Survey Type: MANUAL*

23 **NY-03-A-09** **MIXED HOUSING** **NORTH YORKSHIRE**
GRAMMAR SCHOOL LANE
NORTHALLERTON

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 52
Survey date: MONDAY *16/09/13* *Survey Type: MANUAL*

24 **NY-03-A-12** **TOWN HOUSES** **NORTH YORKSHIRE**
RACECOURSE LANE
NORTHALLERTON

Edge of Town Centre
Residential Zone
Total No of Dwellings: 47
Survey date: TUESDAY *27/09/16* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

25 **NY-03-A-13** **TERRACED HOUSES** **NORTH YORKSHIRE**
CATTERICK ROAD
CATTERICK GARRISON
OLD HOSPITAL COMPOUND
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 10
Survey date: WEDNESDAY *10/05/17* *Survey Type: MANUAL*

26 **PS-03-A-01** **MIXED HOUSES** **POWYS**
BRYN GLAS
WELSHPOOL

Edge of Town Centre
Residential Zone
Total No of Dwellings: 16
Survey date: MONDAY *11/05/15* *Survey Type: MANUAL*

27 **PS-03-A-02** **DETACHED/SEMI-DETACHED** **POWYS**
GUNROG ROAD
WELSHPOOL

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 28
Survey date: MONDAY *11/05/15* *Survey Type: MANUAL*

28 **RO-03-A-04** **SEMI DET. & BUNGALOWS** **ROSCOMMON**
EAGLE COURT
ROSCOMMON
ARDNANAGH
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 39
Survey date: FRIDAY *26/09/14* *Survey Type: MANUAL*

29 **SF-03-A-07** **MIXED HOUSES** **SUFFOLK**
FOXHALL ROAD
IPSWICH

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 73
Survey date: THURSDAY *09/05/19* *Survey Type: MANUAL*

30 **WC-03-A-02** **DETACHED HOUSES** **WICKLOW**
MARLTON ROAD
WICKLOW
FRIARSHILL
Edge of Town Centre
Residential Zone
Total No of Dwellings: 45
Survey date: MONDAY *28/05/18* *Survey Type: MANUAL*

31 **WL-03-A-02** **SEMI DETACHED** **WILTSHIRE**
HEADLANDS GROVE
SWINDON

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 27
Survey date: THURSDAY *22/09/16* *Survey Type: MANUAL*

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

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

TOTAL VEHICLES

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	31	69	0.052	31	69	0.228	31	69	0.280
08:00 - 09:00	31	69	0.124	**31**	**69**	**0.361**	31	69	0.485
09:00 - 10:00	31	69	0.172	31	69	0.196	31	69	0.368
10:00 - 11:00	31	69	0.128	31	69	0.169	31	69	0.297
11:00 - 12:00	31	69	0.138	31	69	0.147	31	69	0.285
12:00 - 13:00	31	69	0.179	31	69	0.167	31	69	0.346
13:00 - 14:00	31	69	0.177	31	69	0.189	31	69	0.366
14:00 - 15:00	31	69	0.178	31	69	0.197	31	69	0.375
15:00 - 16:00	31	69	0.254	31	69	0.180	31	69	0.434
16:00 - 17:00	31	69	0.276	31	69	0.168	31	69	0.444
17:00 - 18:00	**31**	**69**	**0.363**	31	69	0.210	**31**	**69**	**0.573**
18:00 - 19:00	31	69	0.265	31	69	0.201	31	69	0.466
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.306			2.413			4.719

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

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

Parameter summary

Trip rate parameter range selected:	9 - 363 (units:)
Survey date date range:	01/01/13 - 20/10/20
Number of weekdays (Monday-Friday):	31
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	4
Surveys manually removed from selection:	0

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

Appendix D Junctions 9 Outputs

Junctions 9

PICADY 9 - Priority Intersection Module

Filename: Site Access_Taylors Lane model.j9
Path:
\\iedbl2fp001.eu.aecomnet.com\Data\DCS\Projects\CI\60662352_CareHomeConsultancy\400_Technical\430_Technical_Working_
Report generation date: 23/07/2021 09:58:33

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
	2019 Baseline							
Junction 1 - Stream B-AC	0.0	0.00	0.00	A	0.0	0.00	0.00	A
Junction 1 - Stream C-AB	0.0	0.00	0.00	A	0.0	0.00	0.00	A
Junction 2 - Stream B-AC	0.0	0.00	0.00	A	0.0	0.00	0.00	A
Junction 2 - Stream C-AB	0.0	0.00	0.00	A	0.0	0.00	0.00	A
	2023 Baseline + Committed							
Junction 1 - Stream B-AC	0.0	0.00	0.00	A	0.0	0.00	0.00	A
Junction 1 - Stream C-AB	0.0	0.00	0.00	A	0.0	0.00	0.00	A
Junction 2 - Stream B-AC	0.0	0.00	0.00	A	0.0	0.00	0.00	A
Junction 2 - Stream C-AB	0.0	0.00	0.00	A	0.0	0.00	0.00	A
	2028 Baseline + Committed							
Junction 1 - Stream B-AC	0.0	0.00	0.00	A	0.0	0.00	0.00	A
Junction 1 - Stream C-AB	0.0	0.00	0.00	A	0.0	0.00	0.00	A
Junction 2 - Stream B-AC	0.0	0.00	0.00	A	0.0	0.00	0.00	A
Junction 2 - Stream C-AB	0.0	0.00	0.00	A	0.0	0.00	0.00	A
	2038 Baseline + Committed							
Junction 1 - Stream B-AC	0.0	0.00	0.00	A	0.0	0.00	0.00	A
Junction 1 - Stream C-AB	0.0	0.00	0.00	A	0.0	0.00	0.00	A
Junction 2 - Stream B-AC	0.0	0.00	0.00	A	0.0	0.00	0.00	A
Junction 2 - Stream C-AB	0.0	0.00	0.00	A	0.0	0.00	0.00	A
	2023 Baseline + Committed + Development							
Junction 1 - Stream B-AC	0.0	0.00	0.00	A	0.0	0.00	0.00	A
Junction 1 - Stream C-AB	0.0	3.66	0.01	A	0.0	3.75	0.01	A
Junction 2 - Stream B-AC	0.0	13.16	0.02	B	0.1	15.91	0.07	C
Junction 2 - Stream C-AB	0.0	3.70	0.02	A	0.0	3.79	0.03	A
	2028 Baseline + Committed + Development							
Junction 1 - Stream B-AC	0.0	0.00	0.00	A	0.0	0.00	0.00	A
Junction 1 - Stream C-AB	0.0	3.55	0.01	A	0.0	3.63	0.01	A
Junction 2 - Stream B-AC	0.0	14.44	0.02	B	0.1	18.39	0.08	C
Junction 2 - Stream C-AB	0.0	3.59	0.03	A	0.1	3.68	0.04	A
	2038 Baseline + Committed + Development							
Junction 1 - Stream B-AC	0.0	0.00	0.00	A	0.0	0.00	0.00	A
Junction 1 - Stream C-AB	0.0	3.47	0.01	A	0.0	3.54	0.02	A
Junction 2 - Stream B-AC	0.0	15.73	0.02	C	0.1	21.27	0.09	C
Junction 2 - Stream C-AB	0.0	3.50	0.03	A	0.1	3.59	0.04	A

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

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

File summary

File Description

Title	(untitled)
Location	
Site number	
Date	22/07/2021
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	EU\Zac Cave
Description	

Units

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

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D1	2019 Baseline	AM	ONE HOUR	07:45	09:15	15	✓		
D2	2019 Baseline	PM	ONE HOUR	16:45	18:15	15	✓		
D3	Committed Development	AM	ONE HOUR	07:45	09:15	15			
D4	Committed Development	PM	ONE HOUR	16:45	18:15	15			
D5	2023 Baseline + Committed	AM	ONE HOUR	07:45	09:15	15	✓	Simple	(D1*1.0664) +D3
D6	2023 Baseline + Committed	PM	ONE HOUR	16:45	18:15	15	✓	Simple	(D2*1.0664) +D4
D7	2028 Baseline + Committed	AM	ONE HOUR	07:45	09:15	15	✓	Simple	(D1*1.1556) +D3
D8	2028 Baseline + Committed	PM	ONE HOUR	16:45	18:15	15	✓	Simple	(D2*1.1556) +D4
D9	2038 Baseline + Committed	AM	ONE HOUR	07:45	09:15	15	✓	Simple	(D1*1.2296) +D3
D10	2038 Baseline + Committed	PM	ONE HOUR	16:45	18:15	15	✓	Simple	(D2*1.2296) +D4
D11	Development Flows	AM	ONE HOUR	07:45	09:15	15			
D12	Development Flows	PM	ONE HOUR	16:45	18:15	15			
D13	2023 Baseline + Committed + Development	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D5+D11
D14	2023 Baseline + Committed + Development	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D6+D12
D15	2028 Baseline + Committed + Development	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D7+D11
D16	2028 Baseline + Committed + Development	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D8+D12
D17	2038 Baseline + Committed + Development	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D9+D11
D18	2038 Baseline + Committed + Development	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D10+D12

Analysis Set Details

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

2019 Baseline, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D13 - 2023 Baseline + Committed + Development, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Existing Site Access / Taylors Lane	T-Junction	Two-way	0.00	A
2	Proposed Site Access / Taylors Lane	T-Junction	Two-way	0.00	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Junction	Arm	Name	Description	Arm type
1	A	Taylors Lane (Eastern Arm)		Major
	B	Existing Access		Minor
	C	Taylors Lane (Western Arm)		Major
2	A	Taylors Lane (Eastern Arm)		Major
	B	Proposed Access		Minor
	C	Taylors Lane (Western Arm)		Major

Major Arm Geometry

Junction	Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
1	C	9.70			150.0	✓	0.00
2	C	9.60			150.0	✓	0.00

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

Minor Arm Geometry

Junction	Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
1	B	One lane	2.25	25	14
2	B	One lane	3.00	24	14

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	456	0.070	0.176	0.111	0.251
1	B-C	585	0.075	0.190	-	-
1	C-B	661	0.215	0.215	-	-

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
2	B-A	492	0.076	0.191	0.120	0.273
2	B-C	633	0.082	0.207	-	-
2	C-B	661	0.216	0.216	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2019 Baseline	AM	ONE HOUR	07:45	09:15	15	✓

Default vehicle mix	Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1	A		ONE HOUR	✓	642	100.000
	B		ONE HOUR	✓	0	100.000
	C		ONE HOUR	✓	893	100.000
2	A		ONE HOUR	✓	642	100.000
	B		ONE HOUR	✓	0	100.000
	C		ONE HOUR	✓	893	100.000

Origin-Destination Data

Junction 1

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	0	642
	B	0	0	0
	C	893	0	0

Proportions

		To		
		A	B	C
From	A	0.00	0.00	1.00
	B	0.33	0.33	0.33
	C	1.00	0.00	0.00

Junction 2

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	0	642
	B	0	0	0
	C	893	0	0

Proportions

		To		
		A	B	C
From	A	0.00	0.00	1.00
	B	0.33	0.33	0.33
	C	1.00	0.00	0.00

Vehicle Mix

Junction 1

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	10	10	10
	B	10	10	10
	C	10	10	10

Average PCU Per Veh

		To		
		A	B	C
From	A	1.100	1.100	1.100
	B	1.100	1.100	1.100
	C	1.100	1.100	1.100

Junction 2

Heavy Vehicle Percentages

From \ To	A	B	C
A	10	10	10
B	10	10	10
C	10	10	10

Average PCU Per Veh

From \ To	A	B	C
A	1.100	1.100	1.100
B	1.100	1.100	1.100
C	1.100	1.100	1.100

Detailed Demand Data

Demand for each time segment

Time Segment	Junction	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
07:45-08:00	1	A	483	483
		B	0	0
		C	672	672
	2	A	483	483
		B	0	0
		C	672	672
08:00-08:15	1	A	577	577
		B	0	0
		C	803	803
	2	A	577	577
		B	0	0
		C	803	803
08:15-08:30	1	A	707	707
		B	0	0
		C	983	983
	2	A	707	707
		B	0	0
		C	983	983
08:30-08:45	1	A	707	707
		B	0	0
		C	983	983
	2	A	707	707
		B	0	0
		C	983	983
08:45-09:00	1	A	577	577
		B	0	0
		C	803	803
	2	A	577	577
		B	0	0
		C	803	803
09:00-09:15	1	A	483	483
		B	0	0
		C	672	672
	2	A	483	483
		B	0	0
		C	672	672

Results

Results Summary for whole modelled period

Junction	Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	B-AC	0.00	0.00	0.0	A	0	0
	C-AB	0.00	0.00	0.0	A	0	0
	C-A					819	1229
	A-B					0	0
	A-C					589	884
2	B-AC	0.00	0.00	0.0	A	0	0
	C-AB	0.00	0.00	0.0	A	0	0
	C-A					819	1229
	A-B					0	0
	A-C					589	884

Main Results for each time segment

07:45 - 08:00

Junction	Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	B-AC	0	0	370	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	557	0.000	0	0.0	0.0	0.000	A
	C-A	672	168			672				
	A-B	0	0			0				
	A-C	483	121			483				
2	B-AC	0	0	399	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	556	0.000	0	0.0	0.0	0.000	A
	C-A	672	168			672				
	A-B	0	0			0				
	A-C	483	121			483				

08:00 - 08:15

Junction	Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	B-AC	0	0	341	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	537	0.000	0	0.0	0.0	0.000	A
	C-A	803	201			803				
	A-B	0	0			0				
	A-C	577	144			577				
2	B-AC	0	0	367	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	536	0.000	0	0.0	0.0	0.000	A
	C-A	803	201			803				
	A-B	0	0			0				
	A-C	577	144			577				

08:15 - 08:30

Junction	Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	B-AC	0	0	298	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	509	0.000	0	0.0	0.0	0.000	A
	C-A	983	246			983				
	A-B	0	0			0				
	A-C	707	177			707				
2	B-AC	0	0	321	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	508	0.000	0	0.0	0.0	0.000	A
	C-A	983	246			983				
	A-B	0	0			0				
	A-C	707	177			707				

08:30 - 08:45

Junction	Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	B-AC	0	0	298	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	509	0.000	0	0.0	0.0	0.000	A
	C-A	983	246			983				
	A-B	0	0			0				
	A-C	707	177			707				
2	B-AC	0	0	321	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	508	0.000	0	0.0	0.0	0.000	A
	C-A	983	246			983				
	A-B	0	0			0				
	A-C	707	177			707				

08:45 - 09:00

Junction	Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	B-AC	0	0	341	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	537	0.000	0	0.0	0.0	0.000	A
	C-A	803	201			803				
	A-B	0	0			0				
	A-C	577	144			577				
2	B-AC	0	0	367	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	536	0.000	0	0.0	0.0	0.000	A
	C-A	803	201			803				
	A-B	0	0			0				
	A-C	577	144			577				

09:00 - 09:15

Junction	Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	B-AC	0	0	370	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	557	0.000	0	0.0	0.0	0.000	A
	C-A	672	168			672				
	A-B	0	0			0				
	A-C	483	121			483				
2	B-AC	0	0	399	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	556	0.000	0	0.0	0.0	0.000	A
	C-A	672	168			672				
	A-B	0	0			0				
	A-C	483	121			483				

2019 Baseline, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D13 - 2023 Baseline + Committed + Development, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Existing Site Access / Taylors Lane	T-Junction	Two-way	0.00	A
2	Proposed Site Access / Taylors Lane	T-Junction	Two-way	0.00	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2019 Baseline	PM	ONE HOUR	16:45	18:15	15	✓

Default vehicle mix	Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1	A		ONE HOUR	✓	846	100.000
	B		ONE HOUR	✓	0	100.000
	C		ONE HOUR	✓	898	100.000
2	A		ONE HOUR	✓	846	100.000
	B		ONE HOUR	✓	0	100.000
	C		ONE HOUR	✓	898	100.000

Origin-Destination Data

Junction 1

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	0	846
	B	0	0	0
	C	898	0	0

Proportions

		To		
		A	B	C
From	A	0.00	0.00	1.00
	B	0.33	0.33	0.33
	C	1.00	0.00	0.00

Junction 2

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	0	846
	B	0	0	0
	C	898	0	0

Proportions

		To		
		A	B	C
From	A	0.00	0.00	1.00
	B	0.33	0.33	0.33
	C	1.00	0.00	0.00

Vehicle Mix

Junction 1

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	10	10	10
	B	10	10	10
	C	10	10	10

Average PCU Per Veh

		To		
		A	B	C
From	A	1.100	1.100	1.100
	B	1.100	1.100	1.100
	C	1.100	1.100	1.100

Junction 2

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	10	10	10
	B	10	10	10
	C	10	10	10

Average PCU Per Veh

		To		
		A	B	C
From	A	1.100	1.100	1.100
	B	1.100	1.100	1.100
	C	1.100	1.100	1.100

Detailed Demand Data

Demand for each time segment

Time Segment	Junction	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
16:45-17:00	1	A	637	637
		B	0	0
		C	676	676
	2	A	637	637
		B	0	0
		C	676	676
17:00-17:15	1	A	761	761
		B	0	0
		C	807	807
	2	A	761	761
		B	0	0
		C	807	807
17:15-17:30	1	A	931	931
		B	0	0
		C	989	989
	2	A	931	931
		B	0	0
		C	989	989
17:30-17:45	1	A	931	931
		B	0	0
		C	989	989
	2	A	931	931
		B	0	0
		C	989	989
17:45-18:00	1	A	761	761
		B	0	0
		C	807	807
	2	A	761	761
		B	0	0
		C	807	807
18:00-18:15	1	A	637	637
		B	0	0
		C	676	676
	2	A	637	637
		B	0	0
		C	676	676

Results

Results Summary for whole modelled period

Junction	Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	B-AC	0.00	0.00	0.0	A	0	0
	C-AB	0.00	0.00	0.0	A	0	0
	C-A					824	1236
	A-B					0	0
	A-C					776	1164
2	B-AC	0.00	0.00	0.0	A	0	0
	C-AB	0.00	0.00	0.0	A	0	0
	C-A					824	1236
	A-B					0	0
	A-C					776	1164

Main Results for each time segment

16:45 - 17:00

Junction	Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	B-AC	0	0	340	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	524	0.000	0	0.0	0.0	0.000	A
	C-A	676	169			676				
	A-B	0	0			0				
	A-C	637	159			637				
2	B-AC	0	0	367	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	523	0.000	0	0.0	0.0	0.000	A
	C-A	676	169			676				
	A-B	0	0			0				
	A-C	637	159			637				

17:00 - 17:15

Junction	Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	B-AC	0	0	304	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	497	0.000	0	0.0	0.0	0.000	A
	C-A	807	202			807				
	A-B	0	0			0				
	A-C	761	190			761				
2	B-AC	0	0	328	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	497	0.000	0	0.0	0.0	0.000	A
	C-A	807	202			807				
	A-B	0	0			0				
	A-C	761	190			761				

17:15 - 17:30

Junction	Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	B-AC	0	0	252	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	461	0.000	0	0.0	0.0	0.000	A
	C-A	989	247			989				
	A-B	0	0			0				
	A-C	931	233			931				
2	B-AC	0	0	271	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	460	0.000	0	0.0	0.0	0.000	A
	C-A	989	247			989				
	A-B	0	0			0				
	A-C	931	233			931				

17:30 - 17:45

Junction	Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	B-AC	0	0	252	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	461	0.000	0	0.0	0.0	0.000	A
	C-A	989	247			989				
	A-B	0	0			0				
	A-C	931	233			931				
2	B-AC	0	0	271	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	460	0.000	0	0.0	0.0	0.000	A
	C-A	989	247			989				
	A-B	0	0			0				
	A-C	931	233			931				

17:45 - 18:00

Junction	Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	B-AC	0	0	304	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	497	0.000	0	0.0	0.0	0.000	A
	C-A	807	202			807				
	A-B	0	0			0				
	A-C	761	190			761				
2	B-AC	0	0	328	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	497	0.000	0	0.0	0.0	0.000	A
	C-A	807	202			807				
	A-B	0	0			0				
	A-C	761	190			761				

18:00 - 18:15

Junction	Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	B-AC	0	0	340	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	524	0.000	0	0.0	0.0	0.000	A
	C-A	676	169			676				
	A-B	0	0			0				
	A-C	637	159			637				
2	B-AC	0	0	367	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	523	0.000	0	0.0	0.0	0.000	A
	C-A	676	169			676				
	A-B	0	0			0				
	A-C	637	159			637				

2023 Baseline + Committed, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D13 - 2023 Baseline + Committed + Development, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Existing Site Access / Taylors Lane	T-Junction	Two-way	0.00	A
2	Proposed Site Access / Taylors Lane	T-Junction	Two-way	0.00	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D5	2023 Baseline + Committed	AM	ONE HOUR	07:45	09:15	15	✓	Simple	(D1*1.0664) +D3

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1	A		ONE HOUR	✓	687	100.000
	B		ONE HOUR	✓	0	100.000
	C		ONE HOUR	✓	961	100.000
2	A		ONE HOUR	✓	687	100.000
	B		ONE HOUR	✓	0	100.000
	C		ONE HOUR	✓	961	100.000

Origin-Destination Data

Junction 1

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	0	687
	B	0	0	0
	C	961	0	0

Proportions

		To		
		A	B	C
From	A	0.00	0.00	1.00
	B	0.33	0.33	0.33
	C	1.00	0.00	0.00

Junction 2

Demand (PCU/hr)

From \ To	A	B	C
A	0	0	687
B	0	0	0
C	961	0	0

Proportions

From \ To	A	B	C
A	0.00	0.00	1.00
B	0.33	0.33	0.33
C	1.00	0.00	0.00

Vehicle Mix

Junction 1

Heavy Vehicle Percentages

From \ To	A	B	C
A	0	0	10
B	0	0	0
C	10	0	0

Average PCU Per Veh

From \ To	A	B	C
A	1.000	1.000	1.100
B	1.000	1.000	1.000
C	1.099	1.000	1.000

Junction 2

Heavy Vehicle Percentages

From \ To	A	B	C
A	0	0	10
B	0	0	0
C	10	0	0

Average PCU Per Veh

From \ To	A	B	C
A	1.000	1.000	1.100
B	1.000	1.000	1.000
C	1.099	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Junction	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
07:45-08:00	1	A	517	517
		B	0	0
		C	724	724
	2	A	517	517
		B	0	0
		C	724	724
08:00-08:15	1	A	617	617
		B	0	0
		C	864	864
	2	A	617	617
		B	0	0
		C	864	864
08:15-08:30	1	A	756	756
		B	0	0
		C	1058	1058
	2	A	756	756
		B	0	0
		C	1058	1058
08:30-08:45	1	A	756	756
		B	0	0
		C	1058	1058
	2	A	756	756
		B	0	0
		C	1058	1058
08:45-09:00	1	A	617	617
		B	0	0
		C	864	864
	2	A	617	617
		B	0	0
		C	864	864
09:00-09:15	1	A	517	517
		B	0	0
		C	724	724
	2	A	517	517
		B	0	0
		C	724	724

Results

Results Summary for whole modelled period

Junction	Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	B-AC	0.00	0.00	0.0	A	0	0
	C-AB	0.00	0.00	0.0	A	0	0
	C-A					882	1323
	A-B					0	0
	A-C					630	945
2	B-AC	0.00	0.00	0.0	A	0	0
	C-AB	0.00	0.00	0.0	A	0	0
	C-A					882	1323
	A-B					0	0
	A-C					630	945

Main Results for each time segment

07:45 - 08:00

Junction	Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	B-AC	0	0	359	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	550	0.000	0	0.0	0.0	0.000	A
	C-A	724	181			724				
	A-B	0	0			0				
	A-C	517	129			517				
2	B-AC	0	0	387	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	549	0.000	0	0.0	0.0	0.000	A
	C-A	724	181			724				
	A-B	0	0			0				
	A-C	517	129			517				

08:00 - 08:15

Junction	Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	B-AC	0	0	327	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	528	0.000	0	0.0	0.0	0.000	A
	C-A	864	216			864				
	A-B	0	0			0				
	A-C	617	154			617				
2	B-AC	0	0	352	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	528	0.000	0	0.0	0.0	0.000	A
	C-A	864	216			864				
	A-B	0	0			0				
	A-C	617	154			617				

08:15 - 08:30

Junction	Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	B-AC	0	0	280	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	498	0.000	0	0.0	0.0	0.000	A
	C-A	1058	265			1058				
	A-B	0	0			0				
	A-C	756	189			756				
2	B-AC	0	0	302	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	498	0.000	0	0.0	0.0	0.000	A
	C-A	1058	265			1058				
	A-B	0	0			0				
	A-C	756	189			756				

08:30 - 08:45

Junction	Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	B-AC	0	0	280	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	498	0.000	0	0.0	0.0	0.000	A
	C-A	1058	265			1058				
	A-B	0	0			0				
	A-C	756	189			756				
2	B-AC	0	0	302	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	498	0.000	0	0.0	0.0	0.000	A
	C-A	1058	265			1058				
	A-B	0	0			0				
	A-C	756	189			756				

08:45 - 09:00

Junction	Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	B-AC	0	0	327	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	528	0.000	0	0.0	0.0	0.000	A
	C-A	864	216			864				
	A-B	0	0			0				
	A-C	617	154			617				
2	B-AC	0	0	352	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	528	0.000	0	0.0	0.0	0.000	A
	C-A	864	216			864				
	A-B	0	0			0				
	A-C	617	154			617				

09:00 - 09:15

Junction	Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	B-AC	0	0	359	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	550	0.000	0	0.0	0.0	0.000	A
	C-A	724	181			724				
	A-B	0	0			0				
	A-C	517	129			517				
2	B-AC	0	0	387	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	549	0.000	0	0.0	0.0	0.000	A
	C-A	724	181			724				
	A-B	0	0			0				
	A-C	517	129			517				

2023 Baseline + Committed, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D13 - 2023 Baseline + Committed + Development, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Existing Site Access / Taylors Lane	T-Junction	Two-way	0.00	A
2	Proposed Site Access / Taylors Lane	T-Junction	Two-way	0.00	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D6	2023 Baseline + Committed	PM	ONE HOUR	16:45	18:15	15	✓	Simple	(D2*1.0664) +D4

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1	A		ONE HOUR	✓	911	100.000
	B		ONE HOUR	✓	0	100.000
	C		ONE HOUR	✓	963	100.000
2	A		ONE HOUR	✓	911	100.000
	B		ONE HOUR	✓	0	100.000
	C		ONE HOUR	✓	963	100.000

Origin-Destination Data

Junction 1

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	0	911
	B	0	0	0
	C	963	0	0

Proportions

		To		
		A	B	C
From	A	0.00	0.00	1.00
	B	0.33	0.33	0.33
	C	1.00	0.00	0.00

Junction 2

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	0	911
	B	0	0	0
	C	963	0	0

Proportions

		To		
		A	B	C
From	A	0.00	0.00	1.00
	B	0.33	0.33	0.33
	C	1.00	0.00	0.00

Vehicle Mix

Junction 1

Heavy Vehicle Percentages

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

Average PCU Per Veh

		To		
		A	B	C
From	A	1.000	1.000	1.099
	B	1.000	1.000	1.000
	C	1.099	1.000	1.000

Junction 2

Heavy Vehicle Percentages

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

Average PCU Per Veh

		To		
		A	B	C
From	A	1.000	1.000	1.099
	B	1.000	1.000	1.000
	C	1.099	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Junction	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
16:45-17:00	1	A	686	686
		B	0	0
		C	725	725
	2	A	686	686
		B	0	0
		C	725	725
17:00-17:15	1	A	819	819
		B	0	0
		C	865	865
	2	A	819	819
		B	0	0
		C	865	865
17:15-17:30	1	A	1003	1003
		B	0	0
		C	1060	1060
	2	A	1003	1003
		B	0	0
		C	1060	1060
17:30-17:45	1	A	1003	1003
		B	0	0
		C	1060	1060
	2	A	1003	1003
		B	0	0
		C	1060	1060
17:45-18:00	1	A	819	819
		B	0	0
		C	865	865
	2	A	819	819
		B	0	0
		C	865	865
18:00-18:15	1	A	686	686
		B	0	0
		C	725	725
	2	A	686	686
		B	0	0
		C	725	725

Results

Results Summary for whole modelled period

Junction	Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	B-AC	0.00	0.00	0.0	A	0	0
	C-AB	0.00	0.00	0.0	A	0	0
	C-A					883	1325
	A-B					0	0
	A-C					836	1254
2	B-AC	0.00	0.00	0.0	A	0	0
	C-AB	0.00	0.00	0.0	A	0	0
	C-A					883	1325
	A-B					0	0
	A-C					836	1254

Main Results for each time segment

16:45 - 17:00

Junction	Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	B-AC	0	0	327	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	513	0.000	0	0.0	0.0	0.000	A
	C-A	725	181			725				
	A-B	0	0			0				
	A-C	686	171			686				
2	B-AC	0	0	352	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	513	0.000	0	0.0	0.0	0.000	A
	C-A	725	181			725				
	A-B	0	0			0				
	A-C	686	171			686				

17:00 - 17:15

Junction	Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	B-AC	0	0	287	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	485	0.000	0	0.0	0.0	0.000	A
	C-A	865	216			865				
	A-B	0	0			0				
	A-C	819	205			819				
2	B-AC	0	0	309	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	484	0.000	0	0.0	0.0	0.000	A
	C-A	865	216			865				
	A-B	0	0			0				
	A-C	819	205			819				

17:15 - 17:30

Junction	Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	B-AC	0	0	229	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	445	0.000	0	0.0	0.0	0.000	A
	C-A	1060	265			1060				
	A-B	0	0			0				
	A-C	1003	251			1003				
2	B-AC	0	0	246	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	444	0.000	0	0.0	0.0	0.000	A
	C-A	1060	265			1060				
	A-B	0	0			0				
	A-C	1003	251			1003				

17:30 - 17:45

Junction	Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	B-AC	0	0	229	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	445	0.000	0	0.0	0.0	0.000	A
	C-A	1060	265			1060				
	A-B	0	0			0				
	A-C	1003	251			1003				
2	B-AC	0	0	246	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	444	0.000	0	0.0	0.0	0.000	A
	C-A	1060	265			1060				
	A-B	0	0			0				
	A-C	1003	251			1003				

17:45 - 18:00

Junction	Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	B-AC	0	0	287	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	485	0.000	0	0.0	0.0	0.000	A
	C-A	865	216			865				
	A-B	0	0			0				
	A-C	819	205			819				
2	B-AC	0	0	309	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	484	0.000	0	0.0	0.0	0.000	A
	C-A	865	216			865				
	A-B	0	0			0				
	A-C	819	205			819				

18:00 - 18:15

Junction	Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	B-AC	0	0	327	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	513	0.000	0	0.0	0.0	0.000	A
	C-A	725	181			725				
	A-B	0	0			0				
	A-C	686	171			686				
2	B-AC	0	0	352	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	513	0.000	0	0.0	0.0	0.000	A
	C-A	725	181			725				
	A-B	0	0			0				
	A-C	686	171			686				

2028 Baseline + Committed, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D13 - 2023 Baseline + Committed + Development, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Existing Site Access / Taylors Lane	T-Junction	Two-way	0.00	A
2	Proposed Site Access / Taylors Lane	T-Junction	Two-way	0.00	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D7	2028 Baseline + Committed	AM	ONE HOUR	07:45	09:15	15	✓	Simple	(D1*1.1556) +D3

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1	A		ONE HOUR	✓	744	100.000
	B		ONE HOUR	✓	0	100.000
	C		ONE HOUR	✓	1041	100.000
2	A		ONE HOUR	✓	744	100.000
	B		ONE HOUR	✓	0	100.000
	C		ONE HOUR	✓	1041	100.000

Origin-Destination Data

Junction 1

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	0	744
	B	0	0	0
	C	1041	0	0

Proportions

		To		
		A	B	C
From	A	0.00	0.00	1.00
	B	0.33	0.33	0.33
	C	1.00	0.00	0.00

Junction 2

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	0	744
	B	0	0	0
	C	1041	0	0

Proportions

		To		
		A	B	C
From	A	0.00	0.00	1.00
	B	0.33	0.33	0.33
	C	1.00	0.00	0.00

Vehicle Mix

Junction 1

Heavy Vehicle Percentages

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

Average PCU Per Veh

		To		
		A	B	C
From	A	1.000	1.000	1.100
	B	1.000	1.000	1.000
	C	1.099	1.000	1.000

Junction 2

Heavy Vehicle Percentages

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

Average PCU Per Veh

		To		
		A	B	C
From	A	1.000	1.000	1.100
	B	1.000	1.000	1.000
	C	1.099	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Junction	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
07:45-08:00	1	A	560	560
		B	0	0
		C	784	784
	2	A	560	560
		B	0	0
		C	784	784
08:00-08:15	1	A	669	669
		B	0	0
		C	936	936
	2	A	669	669
		B	0	0
		C	936	936
08:15-08:30	1	A	819	819
		B	0	0
		C	1146	1146
	2	A	819	819
		B	0	0
		C	1146	1146
08:30-08:45	1	A	819	819
		B	0	0
		C	1146	1146
	2	A	819	819
		B	0	0
		C	1146	1146
08:45-09:00	1	A	669	669
		B	0	0
		C	936	936
	2	A	669	669
		B	0	0
		C	936	936
09:00-09:15	1	A	560	560
		B	0	0
		C	784	784
	2	A	560	560
		B	0	0
		C	784	784

Results

Results Summary for whole modelled period

Junction	Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	B-AC	0.00	0.00	0.0	A	0	0
	C-AB	0.00	0.00	0.0	A	0	0
	C-A					955	1433
	A-B					0	0
	A-C					683	1024
2	B-AC	0.00	0.00	0.0	A	0	0
	C-AB	0.00	0.00	0.0	A	0	0
	C-A					955	1433
	A-B					0	0
	A-C					683	1024

Main Results for each time segment

07:45 - 08:00

Junction	Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	B-AC	0	0	346	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	541	0.000	0	0.0	0.0	0.000	A
	C-A	784	196			784				
	A-B	0	0			0				
	A-C	560	140			560				
2	B-AC	0	0	372	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	540	0.000	0	0.0	0.0	0.000	A
	C-A	784	196			784				
	A-B	0	0			0				
	A-C	560	140			560				

08:00 - 08:15

Junction	Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	B-AC	0	0	310	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	517	0.000	0	0.0	0.0	0.000	A
	C-A	936	234			936				
	A-B	0	0			0				
	A-C	669	167			669				
2	B-AC	0	0	334	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	516	0.000	0	0.0	0.0	0.000	A
	C-A	936	234			936				
	A-B	0	0			0				
	A-C	669	167			669				

08:15 - 08:30

Junction	Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	B-AC	0	0	258	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	485	0.000	0	0.0	0.0	0.000	A
	C-A	1146	287			1146				
	A-B	0	0			0				
	A-C	819	205			819				
2	B-AC	0	0	277	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	484	0.000	0	0.0	0.0	0.000	A
	C-A	1146	287			1146				
	A-B	0	0			0				
	A-C	819	205			819				

08:30 - 08:45

Junction	Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	B-AC	0	0	258	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	485	0.000	0	0.0	0.0	0.000	A
	C-A	1146	287			1146				
	A-B	0	0			0				
	A-C	819	205			819				
2	B-AC	0	0	277	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	484	0.000	0	0.0	0.0	0.000	A
	C-A	1146	287			1146				
	A-B	0	0			0				
	A-C	819	205			819				

08:45 - 09:00

Junction	Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	B-AC	0	0	310	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	517	0.000	0	0.0	0.0	0.000	A
	C-A	936	234			936				
	A-B	0	0			0				
	A-C	669	167			669				
2	B-AC	0	0	334	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	516	0.000	0	0.0	0.0	0.000	A
	C-A	936	234			936				
	A-B	0	0			0				
	A-C	669	167			669				

09:00 - 09:15

Junction	Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	B-AC	0	0	346	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	541	0.000	0	0.0	0.0	0.000	A
	C-A	784	196			784				
	A-B	0	0			0				
	A-C	560	140			560				
2	B-AC	0	0	372	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	540	0.000	0	0.0	0.0	0.000	A
	C-A	784	196			784				
	A-B	0	0			0				
	A-C	560	140			560				

2028 Baseline + Committed, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D13 - 2023 Baseline + Committed + Development, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Existing Site Access / Taylors Lane	T-Junction	Two-way	0.00	A
2	Proposed Site Access / Taylors Lane	T-Junction	Two-way	0.00	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D8	2028 Baseline + Committed	PM	ONE HOUR	16:45	18:15	15	✓	Simple	(D2*1.1556) +D4

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1	A		ONE HOUR	✓	987	100.000
	B		ONE HOUR	✓	0	100.000
	C		ONE HOUR	✓	1043	100.000
2	A		ONE HOUR	✓	987	100.000
	B		ONE HOUR	✓	0	100.000
	C		ONE HOUR	✓	1043	100.000

Origin-Destination Data

Junction 1

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	0	987
	B	0	0	0
	C	1043	0	0

Proportions

		To		
		A	B	C
From	A	0.00	0.00	1.00
	B	0.33	0.33	0.33
	C	1.00	0.00	0.00

Junction 2

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	0	987
	B	0	0	0
	C	1043	0	0

Proportions

		To		
		A	B	C
From	A	0.00	0.00	1.00
	B	0.33	0.33	0.33
	C	1.00	0.00	0.00

Vehicle Mix

Junction 1

Heavy Vehicle Percentages

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

Average PCU Per Veh

		To		
		A	B	C
From	A	1.000	1.000	1.099
	B	1.000	1.000	1.000
	C	1.099	1.000	1.000

Junction 2

Heavy Vehicle Percentages

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

Average PCU Per Veh

		To		
		A	B	C
From	A	1.000	1.000	1.099
	B	1.000	1.000	1.000
	C	1.099	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Junction	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
16:45-17:00	1	A	743	743
		B	0	0
		C	785	785
	2	A	743	743
		B	0	0
		C	785	785
17:00-17:15	1	A	887	887
		B	0	0
		C	937	937
	2	A	887	887
		B	0	0
		C	937	937
17:15-17:30	1	A	1086	1086
		B	0	0
		C	1148	1148
	2	A	1086	1086
		B	0	0
		C	1148	1148
17:30-17:45	1	A	1086	1086
		B	0	0
		C	1148	1148
	2	A	1086	1086
		B	0	0
		C	1148	1148
17:45-18:00	1	A	887	887
		B	0	0
		C	937	937
	2	A	887	887
		B	0	0
		C	937	937
18:00-18:15	1	A	743	743
		B	0	0
		C	785	785
	2	A	743	743
		B	0	0
		C	785	785

Results

Results Summary for whole modelled period

Junction	Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	B-AC	0.00	0.00	0.0	A	0	0
	C-AB	0.00	0.00	0.0	A	0	0
	C-A					957	1435
	A-B					0	0
	A-C					905	1358
2	B-AC	0.00	0.00	0.0	A	0	0
	C-AB	0.00	0.00	0.0	A	0	0
	C-A					957	1435
	A-B					0	0
	A-C					905	1358

Main Results for each time segment

16:45 - 17:00

Junction	Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	B-AC	0	0	310	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	501	0.000	0	0.0	0.0	0.000	A
	C-A	785	196			785				
	A-B	0	0			0				
	A-C	743	186			743				
2	B-AC	0	0	334	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	500	0.000	0	0.0	0.0	0.000	A
	C-A	785	196			785				
	A-B	0	0			0				
	A-C	743	186			743				

17:00 - 17:15

Junction	Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	B-AC	0	0	266	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	470	0.000	0	0.0	0.0	0.000	A
	C-A	937	234			937				
	A-B	0	0			0				
	A-C	887	222			887				
2	B-AC	0	0	286	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	469	0.000	0	0.0	0.0	0.000	A
	C-A	937	234			937				
	A-B	0	0			0				
	A-C	887	222			887				

17:15 - 17:30

Junction	Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	B-AC	0	0	202	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	427	0.000	0	0.0	0.0	0.000	A
	C-A	1148	287			1148				
	A-B	0	0			0				
	A-C	1086	272			1086				
2	B-AC	0	0	216	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	426	0.000	0	0.0	0.0	0.000	A
	C-A	1148	287			1148				
	A-B	0	0			0				
	A-C	1086	272			1086				

17:30 - 17:45

Junction	Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	B-AC	0	0	202	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	427	0.000	0	0.0	0.0	0.000	A
	C-A	1148	287			1148				
	A-B	0	0			0				
	A-C	1086	272			1086				
2	B-AC	0	0	216	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	426	0.000	0	0.0	0.0	0.000	A
	C-A	1148	287			1148				
	A-B	0	0			0				
	A-C	1086	272			1086				

17:45 - 18:00

Junction	Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	B-AC	0	0	266	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	470	0.000	0	0.0	0.0	0.000	A
	C-A	937	234			937				
	A-B	0	0			0				
	A-C	887	222			887				
2	B-AC	0	0	286	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	469	0.000	0	0.0	0.0	0.000	A
	C-A	937	234			937				
	A-B	0	0			0				
	A-C	887	222			887				

18:00 - 18:15

Junction	Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	B-AC	0	0	310	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	501	0.000	0	0.0	0.0	0.000	A
	C-A	785	196			785				
	A-B	0	0			0				
	A-C	743	186			743				
2	B-AC	0	0	334	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	500	0.000	0	0.0	0.0	0.000	A
	C-A	785	196			785				
	A-B	0	0			0				
	A-C	743	186			743				

2038 Baseline + Committed, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D13 - 2023 Baseline + Committed + Development, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Existing Site Access / Taylors Lane	T-Junction	Two-way	0.00	A
2	Proposed Site Access / Taylors Lane	T-Junction	Two-way	0.00	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D9	2038 Baseline + Committed	AM	ONE HOUR	07:45	09:15	15	✓	Simple	(D1*1.2296) +D3

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1	A		ONE HOUR	✓	791	100.000
	B		ONE HOUR	✓	0	100.000
	C		ONE HOUR	✓	1107	100.000
2	A		ONE HOUR	✓	791	100.000
	B		ONE HOUR	✓	0	100.000
	C		ONE HOUR	✓	1107	100.000

Origin-Destination Data

Junction 1

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	0	791
	B	0	0	0
	C	1107	0	0

Proportions

		To		
		A	B	C
From	A	0.00	0.00	1.00
	B	0.33	0.33	0.33
	C	1.00	0.00	0.00

Junction 2

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	0	791
	B	0	0	0
	C	1107	0	0

Proportions

		To		
		A	B	C
From	A	0.00	0.00	1.00
	B	0.33	0.33	0.33
	C	1.00	0.00	0.00

Vehicle Mix

Junction 1

Heavy Vehicle Percentages

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

Average PCU Per Veh

		To		
		A	B	C
From	A	1.000	1.000	1.100
	B	1.000	1.000	1.000
	C	1.099	1.000	1.000

Junction 2

Heavy Vehicle Percentages

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

Average PCU Per Veh

		To		
		A	B	C
From	A	1.000	1.000	1.100
	B	1.000	1.000	1.000
	C	1.099	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Junction	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
07:45-08:00	1	A	596	596
		B	0	0
		C	833	833
	2	A	596	596
		B	0	0
		C	833	833
08:00-08:15	1	A	711	711
		B	0	0
		C	995	995
	2	A	711	711
		B	0	0
		C	995	995
08:15-08:30	1	A	871	871
		B	0	0
		C	1219	1219
	2	A	871	871
		B	0	0
		C	1219	1219
08:30-08:45	1	A	871	871
		B	0	0
		C	1219	1219
	2	A	871	871
		B	0	0
		C	1219	1219
08:45-09:00	1	A	711	711
		B	0	0
		C	995	995
	2	A	711	711
		B	0	0
		C	995	995
09:00-09:15	1	A	596	596
		B	0	0
		C	833	833
	2	A	596	596
		B	0	0
		C	833	833

Results

Results Summary for whole modelled period

Junction	Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	B-AC	0.00	0.00	0.0	A	0	0
	C-AB	0.00	0.00	0.0	A	0	0
	C-A					1016	1524
	A-B					0	0
	A-C					726	1089
2	B-AC	0.00	0.00	0.0	A	0	0
	C-AB	0.00	0.00	0.0	A	0	0
	C-A					1016	1524
	A-B					0	0
	A-C					726	1089

Main Results for each time segment

07:45 - 08:00

Junction	Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	B-AC	0	0	334	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	533	0.000	0	0.0	0.0	0.000	A
	C-A	833	208			833				
	A-B	0	0			0				
	A-C	596	149			596				
2	B-AC	0	0	360	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	532	0.000	0	0.0	0.0	0.000	A
	C-A	833	208			833				
	A-B	0	0			0				
	A-C	596	149			596				

08:00 - 08:15

Junction	Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	B-AC	0	0	296	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	508	0.000	0	0.0	0.0	0.000	A
	C-A	995	249			995				
	A-B	0	0			0				
	A-C	711	178			711				
2	B-AC	0	0	318	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	507	0.000	0	0.0	0.0	0.000	A
	C-A	995	249			995				
	A-B	0	0			0				
	A-C	711	178			711				

08:15 - 08:30

Junction	Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	B-AC	0	0	239	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	474	0.000	0	0.0	0.0	0.000	A
	C-A	1219	305			1219				
	A-B	0	0			0				
	A-C	871	218			871				
2	B-AC	0	0	257	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	473	0.000	0	0.0	0.0	0.000	A
	C-A	1219	305			1219				
	A-B	0	0			0				
	A-C	871	218			871				

08:30 - 08:45

Junction	Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	B-AC	0	0	239	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	474	0.000	0	0.0	0.0	0.000	A
	C-A	1219	305			1219				
	A-B	0	0			0				
	A-C	871	218			871				
2	B-AC	0	0	257	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	473	0.000	0	0.0	0.0	0.000	A
	C-A	1219	305			1219				
	A-B	0	0			0				
	A-C	871	218			871				

08:45 - 09:00

Junction	Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	B-AC	0	0	296	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	508	0.000	0	0.0	0.0	0.000	A
	C-A	995	249			995				
	A-B	0	0			0				
	A-C	711	178			711				
2	B-AC	0	0	318	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	507	0.000	0	0.0	0.0	0.000	A
	C-A	995	249			995				
	A-B	0	0			0				
	A-C	711	178			711				

09:00 - 09:15

Junction	Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	B-AC	0	0	334	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	533	0.000	0	0.0	0.0	0.000	A
	C-A	833	208			833				
	A-B	0	0			0				
	A-C	596	149			596				
2	B-AC	0	0	360	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	532	0.000	0	0.0	0.0	0.000	A
	C-A	833	208			833				
	A-B	0	0			0				
	A-C	596	149			596				

2038 Baseline + Committed, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D13 - 2023 Baseline + Committed + Development, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Existing Site Access / Taylors Lane	T-Junction	Two-way	0.00	A
2	Proposed Site Access / Taylors Lane	T-Junction	Two-way	0.00	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D10	2038 Baseline + Committed	PM	ONE HOUR	16:45	18:15	15	✓	Simple	(D2*1.2296) +D4

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1	A		ONE HOUR	✓	1049	100.000
	B		ONE HOUR	✓	0	100.000
	C		ONE HOUR	✓	1109	100.000
2	A		ONE HOUR	✓	1049	100.000
	B		ONE HOUR	✓	0	100.000
	C		ONE HOUR	✓	1109	100.000

Origin-Destination Data

Junction 1

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	0	1049
	B	0	0	0
	C	1109	0	0

Proportions

		To		
		A	B	C
From	A	0.00	0.00	1.00
	B	0.33	0.33	0.33
	C	1.00	0.00	0.00

Junction 2

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	0	1049
	B	0	0	0
	C	1109	0	0

Proportions

		To		
		A	B	C
From	A	0.00	0.00	1.00
	B	0.33	0.33	0.33
	C	1.00	0.00	0.00

Vehicle Mix

Junction 1

Heavy Vehicle Percentages

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

Average PCU Per Veh

		To		
		A	B	C
From	A	1.000	1.000	1.099
	B	1.000	1.000	1.000
	C	1.100	1.000	1.000

Junction 2

Heavy Vehicle Percentages

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

Average PCU Per Veh

		To		
		A	B	C
From	A	1.000	1.000	1.099
	B	1.000	1.000	1.000
	C	1.100	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Junction	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
16:45-17:00	1	A	790	790
		B	0	0
		C	835	835
	2	A	790	790
		B	0	0
		C	835	835
17:00-17:15	1	A	943	943
		B	0	0
		C	997	997
	2	A	943	943
		B	0	0
		C	997	997
17:15-17:30	1	A	1155	1155
		B	0	0
		C	1221	1221
	2	A	1155	1155
		B	0	0
		C	1221	1221
17:30-17:45	1	A	1155	1155
		B	0	0
		C	1221	1221
	2	A	1155	1155
		B	0	0
		C	1221	1221
17:45-18:00	1	A	943	943
		B	0	0
		C	997	997
	2	A	943	943
		B	0	0
		C	997	997
18:00-18:15	1	A	790	790
		B	0	0
		C	835	835
	2	A	790	790
		B	0	0
		C	835	835

Results

Results Summary for whole modelled period

Junction	Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	B-AC	0.00	0.00	0.0	A	0	0
	C-AB	0.00	0.00	0.0	A	0	0
	C-A					1018	1527
	A-B					0	0
	A-C					963	1444
2	B-AC	0.00	0.00	0.0	A	0	0
	C-AB	0.00	0.00	0.0	A	0	0
	C-A					1018	1527
	A-B					0	0
	A-C					963	1444

Main Results for each time segment

16:45 - 17:00

Junction	Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	B-AC	0	0	296	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	491	0.000	0	0.0	0.0	0.000	A
	C-A	835	209			835				
	A-B	0	0			0				
	A-C	790	197			790				
2	B-AC	0	0	318	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	490	0.000	0	0.0	0.0	0.000	A
	C-A	835	209			835				
	A-B	0	0			0				
	A-C	790	197			790				

17:00 - 17:15

Junction	Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	B-AC	0	0	249	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	458	0.000	0	0.0	0.0	0.000	A
	C-A	997	249			997				
	A-B	0	0			0				
	A-C	943	236			943				
2	B-AC	0	0	267	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	457	0.000	0	0.0	0.0	0.000	A
	C-A	997	249			997				
	A-B	0	0			0				
	A-C	943	236			943				

17:15 - 17:30

Junction	Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	B-AC	0	0	177	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	413	0.000	0	0.0	0.0	0.000	A
	C-A	1221	305			1221				
	A-B	0	0			0				
	A-C	1155	289			1155				
2	B-AC	0	0	189	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	411	0.000	0	0.0	0.0	0.000	A
	C-A	1221	305			1221				
	A-B	0	0			0				
	A-C	1155	289			1155				

17:30 - 17:45

Junction	Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	B-AC	0	0	177	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	413	0.000	0	0.0	0.0	0.000	A
	C-A	1221	305			1221				
	A-B	0	0			0				
	A-C	1155	289			1155				
2	B-AC	0	0	189	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	411	0.000	0	0.0	0.0	0.000	A
	C-A	1221	305			1221				
	A-B	0	0			0				
	A-C	1155	289			1155				

17:45 - 18:00

Junction	Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	B-AC	0	0	249	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	458	0.000	0	0.0	0.0	0.000	A
	C-A	997	249			997				
	A-B	0	0			0				
	A-C	943	236			943				
2	B-AC	0	0	267	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	457	0.000	0	0.0	0.0	0.000	A
	C-A	997	249			997				
	A-B	0	0			0				
	A-C	943	236			943				

18:00 - 18:15

Junction	Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	B-AC	0	0	296	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	491	0.000	0	0.0	0.0	0.000	A
	C-A	835	209			835				
	A-B	0	0			0				
	A-C	790	197			790				
2	B-AC	0	0	318	0.000	0	0.0	0.0	0.000	A
	C-AB	0	0	490	0.000	0	0.0	0.0	0.000	A
	C-A	835	209			835				
	A-B	0	0			0				
	A-C	790	197			790				

2023 Baseline + Committed + Development, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D13 - 2023 Baseline + Committed + Development, AM	Demand Set relationships are chained. This may slow down the file

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Existing Site Access / Taylors Lane	T-Junction	Two-way	0.01	A
2	Proposed Site Access / Taylors Lane	T-Junction	Two-way	0.08	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D13	2023 Baseline + Committed + Development	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D5+D11

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1	A		ONE HOUR	✓	691	100.000
	B		ONE HOUR	✓	3	100.000
	C		ONE HOUR	✓	965	100.000
2	A		ONE HOUR	✓	691	100.000
	B		ONE HOUR	✓	5	100.000
	C		ONE HOUR	✓	966	100.000

Origin-Destination Data

Junction 1

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	1	690
	B	2	0	1
	C	964	1	0

Proportions

		To		
		A	B	C
From	A	0.00	0.00	1.00
	B	0.67	0.00	0.33
	C	1.00	0.00	0.00

Junction 2

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	3	688
	B	3	0	2
	C	962	4	0

Proportions

		To		
		A	B	C
From	A	0.00	0.00	1.00
	B	0.60	0.00	0.40
	C	1.00	0.00	0.00

Vehicle Mix

Junction 1

Heavy Vehicle Percentages

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

Average PCU Per Veh

		To		
		A	B	C
From	A	1.000	1.000	1.099
	B	1.000	1.000	1.000
	C	1.099	1.000	1.000

Junction 2

Heavy Vehicle Percentages

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

Average PCU Per Veh

		To		
		A	B	C
From	A	1.000	1.000	1.100
	B	1.000	1.000	1.000
	C	1.099	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Junction	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
07:45-08:00	1	A	520	520
		B	0	0
		C	727	727
	2	A	520	520
		B	4	4
		C	727	727
08:00-08:15	1	A	621	621
		B	0	0
		C	868	868
	2	A	621	621
		B	4	4
		C	869	869
08:15-08:30	1	A	760	760
		B	0	0
		C	1063	1063
	2	A	760	760
		B	6	6
		C	1064	1064
08:30-08:45	1	A	760	760
		B	0	0
		C	1063	1063
	2	A	760	760
		B	6	6
		C	1064	1064
08:45-09:00	1	A	621	621
		B	0	0
		C	868	868
	2	A	621	621
		B	4	4
		C	869	869
09:00-09:15	1	A	520	520
		B	0	0
		C	727	727
	2	A	520	520
		B	4	4
		C	727	727

Results

Results Summary for whole modelled period

Junction	Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	B-AC	0.00	0.00	0.0	A	0	0
	C-AB	0.01	3.66	0.0	A	4	7
	C-A					881	1322
	A-B					0.92	1
	A-C					633	949
2	B-AC	0.02	13.16	0.0	B	5	7
	C-AB	0.02	3.70	0.0	A	17	26
	C-A					869	1304
	A-B					3	4
	A-C					631	946

Main Results for each time segment

07:45 - 08:00

Junction	Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	B-AC	0	0	358	0.000	0	0.0	0.0	0.000	A
	C-AB	2	0.61	1054	0.002	2	0.0	0.0	3.649	A
	C-A	724	181			724				
	A-B	0.75	0.19			0.75				
	A-C	519	130			519				
2	B-AC	4	0.94	367	0.010	4	0.0	0.0	9.915	A
	C-AB	10	2	1052	0.009	10	0.0	0.0	3.680	A
	C-A	718	179			718				
	A-B	2	0.56			2				
	A-C	518	129			518				

08:00 - 08:15

Junction	Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	B-AC	0	0	326	0.000	0	0.0	0.0	0.000	A
	C-AB	4	0.94	1140	0.003	4	0.0	0.0	3.389	A
	C-A	864	216			864				
	A-B	0.90	0.22			0.90				
	A-C	620	155			620				
2	B-AC	4	1	331	0.014	4	0.0	0.0	11.034	B
	C-AB	15	4	1139	0.013	15	0.0	0.0	3.428	A
	C-A	854	213			854				
	A-B	3	0.67			3				
	A-C	618	155			618				

08:15 - 08:30

Junction	Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	B-AC	0	0	279	0.000	0	0.0	0.0	0.000	A
	C-AB	7	2	1266	0.005	7	0.0	0.0	3.083	A
	C-A	1056	264			1056				
	A-B	1	0.28			1				
	A-C	759	190			759				
2	B-AC	6	1	279	0.020	5	0.0	0.0	13.160	B
	C-AB	27	7	1264	0.022	27	0.0	0.0	3.139	A
	C-A	1037	259			1037				
	A-B	3	0.83			3				
	A-C	757	189			757				

08:30 - 08:45

Junction	Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	B-AC	0	0	279	0.000	0	0.0	0.0	0.000	A
	C-AB	7	2	1266	0.005	7	0.0	0.0	3.094	A
	C-A	1056	264			1056				
	A-B	1	0.28			1				
	A-C	759	190			759				
2	B-AC	6	1	279	0.020	6	0.0	0.0	13.160	B
	C-AB	27	7	1264	0.022	27	0.0	0.0	3.150	A
	C-A	1037	259			1037				
	A-B	3	0.83			3				
	A-C	757	189			757				

08:45 - 09:00

Junction	Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	B-AC	0	0	326	0.000	0	0.0	0.0	0.000	A
	C-AB	4	0.94	1140	0.003	4	0.0	0.0	3.415	A
	C-A	864	216			864				
	A-B	0.90	0.22			0.90				
	A-C	620	155			620				
2	B-AC	4	1	331	0.014	5	0.0	0.0	11.036	B
	C-AB	15	4	1139	0.013	15	0.0	0.0	3.458	A
	C-A	854	213			854				
	A-B	3	0.67			3				
	A-C	618	155			618				

09:00 - 09:15

Junction	Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	B-AC	0	0	358	0.000	0	0.0	0.0	0.000	A
	C-AB	2	0.61	1054	0.002	2	0.0	0.0	3.665	A
	C-A	724	181			724				
	A-B	0.75	0.19			0.75				
	A-C	519	130			519				
2	B-AC	4	0.94	367	0.010	4	0.0	0.0	9.918	A
	C-AB	10	2	1052	0.009	10	0.0	0.0	3.696	A
	C-A	718	179			718				
	A-B	2	0.56			2				
	A-C	518	129			518				

2023 Baseline + Committed + Development, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D13 - 2023 Baseline + Committed + Development, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Existing Site Access / Taylors Lane	T-Junction	Two-way	0.02	A
2	Proposed Site Access / Taylors Lane	T-Junction	Two-way	0.19	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D14	2023 Baseline + Committed + Development	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D6+D12

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1	A		ONE HOUR	✓	916	100.000
	B		ONE HOUR	✓	1	100.000
	C		ONE HOUR	✓	973	100.000
2	A		ONE HOUR	✓	915	100.000
	B		ONE HOUR	✓	16	100.000
	C		ONE HOUR	✓	970	100.000

Origin-Destination Data

Junction 1

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	1	915
	B	1	0	0
	C	971	2	0

Proportions

		To		
		A	B	C
From	A	0.00	0.00	1.00
	B	1.00	0.00	0.00
	C	1.00	0.00	0.00

Junction 2

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	4	911
	B	8	0	8
	C	965	5	0

Proportions

		To		
		A	B	C
From	A	0.00	0.00	1.00
	B	0.50	0.00	0.50
	C	0.99	0.01	0.00

Vehicle Mix

Junction 1

Heavy Vehicle Percentages

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

Average PCU Per Veh

		To		
		A	B	C
From	A	1.000	1.000	1.098
	B	1.000	1.000	1.000
	C	1.099	1.000	1.000

Junction 2

Heavy Vehicle Percentages

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

Average PCU Per Veh

		To		
		A	B	C
From	A	1.000	1.000	1.099
	B	1.000	1.000	1.000
	C	1.099	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Junction	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
16:45-17:00	1	A	690	690
		B	0	0
		C	732	732
	2	A	689	689
		B	12	12
		C	730	730
17:00-17:15	1	A	824	824
		B	0	0
		C	874	874
	2	A	823	823
		B	14	14
		C	872	872
17:15-17:30	1	A	1009	1009
		B	0	0
		C	1071	1071
	2	A	1008	1008
		B	18	18
		C	1068	1068
17:30-17:45	1	A	1009	1009
		B	0	0
		C	1071	1071
	2	A	1008	1008
		B	18	18
		C	1068	1068
17:45-18:00	1	A	824	824
		B	0	0
		C	874	874
	2	A	823	823
		B	14	14
		C	872	872
18:00-18:15	1	A	690	690
		B	0	0
		C	732	732
	2	A	689	689
		B	12	12
		C	730	730

Results

Results Summary for whole modelled period

Junction	Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	B-AC	0.00	0.00	0.0	A	0	0
	C-AB	0.01	3.75	0.0	A	10	14
	C-A					883	1324
	A-B					0.92	1
	A-C					840	1260
2	B-AC	0.07	15.91	0.1	C	15	22
	C-AB	0.03	3.79	0.0	A	24	35
	C-A					866	1299
	A-B					4	6
	A-C					836	1254

Main Results for each time segment

16:45 - 17:00

Junction	Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	B-AC	0	0	325	0.000	0	0.0	0.0	0.000	A
	C-AB	5	1	1035	0.005	5	0.0	0.0	3.729	A
	C-A	727	182			727				
	A-B	0.75	0.19			0.75				
	A-C	689	172			689				
2	B-AC	12	3	350	0.034	12	0.0	0.0	10.628	B
	C-AB	13	3	1032	0.012	13	0.0	0.0	3.771	A
	C-A	717	179			717				
	A-B	3	0.75			3				
	A-C	686	171			686				

17:00 - 17:15

Junction	Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	B-AC	0	0	285	0.000	0	0.0	0.0	0.000	A
	C-AB	8	2	1122	0.007	8	0.0	0.0	3.464	A
	C-A	866	217			866				
	A-B	0.90	0.22			0.90				
	A-C	823	206			823				
2	B-AC	14	4	307	0.047	14	0.0	0.0	12.288	B
	C-AB	20	5	1118	0.018	20	0.0	0.0	3.516	A
	C-A	852	213			852				
	A-B	4	0.90			4				
	A-C	819	205			819				

17:15 - 17:30

Junction	Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	B-AC	0	0	227	0.000	0	0.0	0.0	0.000	A
	C-AB	15	4	1249	0.012	15	0.0	0.0	3.151	A
	C-A	1056	264			1056				
	A-B	1	0.28			1				
	A-C	1008	252			1008				
2	B-AC	18	4	244	0.072	18	0.0	0.1	15.897	C
	C-AB	38	9	1244	0.030	38	0.0	0.0	3.224	A
	C-A	1030	257			1030				
	A-B	4	1			4				
	A-C	1003	251			1003				

17:30 - 17:45

Junction	Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	B-AC	0	0	227	0.000	0	0.0	0.0	0.000	A
	C-AB	15	4	1249	0.012	15	0.0	0.0	3.159	A
	C-A	1056	264			1056				
	A-B	1	0.28			1				
	A-C	1008	252			1008				
2	B-AC	18	4	244	0.072	18	0.1	0.1	15.913	C
	C-AB	38	9	1244	0.030	38	0.0	0.0	3.233	A
	C-A	1030	257			1030				
	A-B	4	1			4				
	A-C	1003	251			1003				

17:45 - 18:00

Junction	Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	B-AC	0	0	285	0.000	0	0.0	0.0	0.000	A
	C-AB	8	2	1122	0.007	8	0.0	0.0	3.491	A
	C-A	866	217			866				
	A-B	0.90	0.22			0.90				
	A-C	823	206			823				
2	B-AC	14	4	307	0.047	14	0.1	0.0	12.301	B
	C-AB	20	5	1118	0.018	20	0.0	0.0	3.547	A
	C-A	852	213			852				
	A-B	4	0.90			4				
	A-C	819	205			819				

18:00 - 18:15

Junction	Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	B-AC	0	0	325	0.000	0	0.0	0.0	0.000	A
	C-AB	5	1	1035	0.005	5	0.0	0.0	3.749	A
	C-A	727	182			727				
	A-B	0.75	0.19			0.75				
	A-C	689	172			689				
2	B-AC	12	3	350	0.034	12	0.0	0.0	10.640	B
	C-AB	13	3	1032	0.012	13	0.0	0.0	3.791	A
	C-A	717	179			717				
	A-B	3	0.75			3				
	A-C	686	171			686				

2028 Baseline + Committed + Development, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D13 - 2023 Baseline + Committed + Development, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Existing Site Access / Taylors Lane	T-Junction	Two-way	0.01	A
2	Proposed Site Access / Taylors Lane	T-Junction	Two-way	0.08	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D15	2028 Baseline + Committed + Development	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D7+D11

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1	A		ONE HOUR	✓	748	100.000
	B		ONE HOUR	✓	3	100.000
	C		ONE HOUR	✓	1045	100.000
2	A		ONE HOUR	✓	748	100.000
	B		ONE HOUR	✓	5	100.000
	C		ONE HOUR	✓	1046	100.000

Origin-Destination Data

Junction 1

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	1	747
	B	2	0	1
	C	1044	1	0

Proportions

		To		
		A	B	C
From	A	0.00	0.00	1.00
	B	0.67	0.00	0.33
	C	1.00	0.00	0.00

Junction 2

Demand (PCU/hr)

From \ To	A	B	C
A	0	3	745
B	3	0	2
C	1042	4	0

Proportions

From \ To	A	B	C
A	0.00	0.00	1.00
B	0.60	0.00	0.40
C	1.00	0.00	0.00

Vehicle Mix

Junction 1

Heavy Vehicle Percentages

From \ To	A	B	C
A	0	0	10
B	0	0	0
C	10	0	0

Average PCU Per Veh

From \ To	A	B	C
A	1.000	1.000	1.099
B	1.000	1.000	1.000
C	1.099	1.000	1.000

Junction 2

Heavy Vehicle Percentages

From \ To	A	B	C
A	0	0	10
B	0	0	0
C	10	0	0

Average PCU Per Veh

From \ To	A	B	C
A	1.000	1.000	1.100
B	1.000	1.000	1.000
C	1.099	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Junction	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
07:45-08:00	1	A	563	563
		B	0	0
		C	787	787
	2	A	563	563
		B	4	4
		C	787	787
08:00-08:15	1	A	672	672
		B	0	0
		C	939	939
	2	A	672	672
		B	4	4
		C	940	940
08:15-08:30	1	A	823	823
		B	0	0
		C	1151	1151
	2	A	823	823
		B	6	6
		C	1152	1152
08:30-08:45	1	A	823	823
		B	0	0
		C	1151	1151
	2	A	823	823
		B	6	6
		C	1152	1152
08:45-09:00	1	A	672	672
		B	0	0
		C	939	939
	2	A	672	672
		B	4	4
		C	940	940
09:00-09:15	1	A	563	563
		B	0	0
		C	787	787
	2	A	563	563
		B	4	4
		C	787	787

Results

Results Summary for whole modelled period

Junction	Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	B-AC	0.00	0.00	0.0	A	0	0
	C-AB	0.01	3.55	0.0	A	5	8
	C-A					954	1431
	A-B					0.92	1
	A-C					685	1028
2	B-AC	0.02	14.44	0.0	B	5	7
	C-AB	0.03	3.59	0.0	A	20	31
	C-A					939	1409
	A-B					3	4
	A-C					684	1025

Main Results for each time segment

07:45 - 08:00

Junction	Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	B-AC	0	0	345	0.000	0	0.0	0.0	0.000	A
	C-AB	3	0.67	1090	0.002	3	0.0	0.0	3.539	A
	C-A	784	196			784				
	A-B	0.75	0.19			0.75				
	A-C	562	141			562				
2	B-AC	4	0.94	352	0.011	4	0.0	0.0	10.349	B
	C-AB	11	3	1089	0.010	11	0.0	0.0	3.570	A
	C-A	777	194			777				
	A-B	2	0.56			2				
	A-C	561	140			561				

08:00 - 08:15

Junction	Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	B-AC	0	0	309	0.000	0	0.0	0.0	0.000	A
	C-AB	4	1	1186	0.004	4	0.0	0.0	3.271	A
	C-A	935	234			935				
	A-B	0.90	0.22			0.90				
	A-C	671	168			671				
2	B-AC	4	1	312	0.014	4	0.0	0.0	11.706	B
	C-AB	17	4	1184	0.015	17	0.0	0.0	3.312	A
	C-A	923	231			923				
	A-B	3	0.67			3				
	A-C	670	167			670				

08:15 - 08:30

Junction	Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	B-AC	0	0	257	0.000	0	0.0	0.0	0.000	A
	C-AB	8	2	1324	0.006	8	0.0	0.0	2.958	A
	C-A	1142	286			1142				
	A-B	1	0.28			1				
	A-C	822	206			822				
2	B-AC	6	1	255	0.022	5	0.0	0.0	14.432	B
	C-AB	33	8	1322	0.025	33	0.0	0.0	3.020	A
	C-A	1118	280			1118				
	A-B	3	0.83			3				
	A-C	820	205			820				

08:30 - 08:45

Junction	Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	B-AC	0	0	257	0.000	0	0.0	0.0	0.000	A
	C-AB	8	2	1324	0.006	8	0.0	0.0	2.966	A
	C-A	1142	286			1142				
	A-B	1	0.28			1				
	A-C	822	206			822				
2	B-AC	6	1	255	0.022	6	0.0	0.0	14.436	B
	C-AB	33	8	1322	0.025	33	0.0	0.0	3.028	A
	C-A	1118	280			1118				
	A-B	3	0.83			3				
	A-C	820	205			820				

08:45 - 09:00

Junction	Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	B-AC	0	0	309	0.000	0	0.0	0.0	0.000	A
	C-AB	4	1	1186	0.004	4	0.0	0.0	3.296	A
	C-A	935	234			935				
	A-B	0.90	0.22			0.90				
	A-C	671	168			671				
2	B-AC	4	1	312	0.014	5	0.0	0.0	11.711	B
	C-AB	17	4	1184	0.015	17	0.0	0.0	3.340	A
	C-A	923	231			923				
	A-B	3	0.67			3				
	A-C	670	167			670				

09:00 - 09:15

Junction	Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	B-AC	0	0	345	0.000	0	0.0	0.0	0.000	A
	C-AB	3	0.68	1090	0.002	3	0.0	0.0	3.554	A
	C-A	784	196			784				
	A-B	0.75	0.19			0.75				
	A-C	562	141			562				
2	B-AC	4	0.94	352	0.011	4	0.0	0.0	10.354	B
	C-AB	11	3	1089	0.010	11	0.0	0.0	3.589	A
	C-A	777	194			777				
	A-B	2	0.56			2				
	A-C	561	140			561				

2028 Baseline + Committed + Development, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D13 - 2023 Baseline + Committed + Development, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Existing Site Access / Taylors Lane	T-Junction	Two-way	0.02	A
2	Proposed Site Access / Taylors Lane	T-Junction	Two-way	0.20	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D16	2028 Baseline + Committed + Development	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D8+D12

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1	A		ONE HOUR	✓	992	100.000
	B		ONE HOUR	✓	1	100.000
	C		ONE HOUR	✓	1053	100.000
2	A		ONE HOUR	✓	991	100.000
	B		ONE HOUR	✓	16	100.000
	C		ONE HOUR	✓	1050	100.000

Origin-Destination Data

Junction 1

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	1	991
	B	1	0	0
	C	1051	2	0

Proportions

		To		
		A	B	C
From	A	0.00	0.00	1.00
	B	1.00	0.00	0.00
	C	1.00	0.00	0.00

Junction 2

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	4	987
	B	8	0	8
	C	1045	5	0

Proportions

		To		
		A	B	C
From	A	0.00	0.00	1.00
	B	0.50	0.00	0.50
	C	1.00	0.00	0.00

Vehicle Mix

Junction 1

Heavy Vehicle Percentages

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

Average PCU Per Veh

		To		
		A	B	C
From	A	1.000	1.000	1.099
	B	1.000	1.000	1.000
	C	1.099	1.000	1.000

Junction 2

Heavy Vehicle Percentages

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

Average PCU Per Veh

		To		
		A	B	C
From	A	1.000	1.000	1.099
	B	1.000	1.000	1.000
	C	1.099	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Junction	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
16:45-17:00	1	A	747	747
		B	0	0
		C	793	793
	2	A	746	746
		B	12	12
		C	790	790
17:00-17:15	1	A	891	891
		B	0	0
		C	946	946
	2	A	891	891
		B	14	14
		C	944	944
17:15-17:30	1	A	1092	1092
		B	0	0
		C	1159	1159
	2	A	1091	1091
		B	18	18
		C	1156	1156
17:30-17:45	1	A	1092	1092
		B	0	0
		C	1159	1159
	2	A	1091	1091
		B	18	18
		C	1156	1156
17:45-18:00	1	A	891	891
		B	0	0
		C	946	946
	2	A	891	891
		B	14	14
		C	944	944
18:00-18:15	1	A	747	747
		B	0	0
		C	793	793
	2	A	746	746
		B	12	12
		C	790	790

Results

Results Summary for whole modelled period

Junction	Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	B-AC	0.00	0.00	0.0	A	0	0
	C-AB	0.01	3.63	0.0	A	11	17
	C-A					955	1432
	A-B					0.92	1
	A-C					909	1364
2	B-AC	0.08	18.39	0.1	C	15	22
	C-AB	0.04	3.68	0.1	A	28	42
	C-A					935	1403
	A-B					4	6
	A-C					905	1358

Main Results for each time segment

16:45 - 17:00

Junction	Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	B-AC	0	0	308	0.000	0	0.0	0.0	0.000	A
	C-AB	6	1	1072	0.005	6	0.0	0.0	3.616	A
	C-A	787	197			787				
	A-B	0.75	0.19			0.75				
	A-C	746	186			746				
2	B-AC	12	3	332	0.036	12	0.0	0.0	11.229	B
	C-AB	14	4	1068	0.013	14	0.0	0.0	3.659	A
	C-A	776	194			776				
	A-B	3	0.75			3				
	A-C	743	186			743				

17:00 - 17:15

Junction	Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	B-AC	0	0	264	0.000	0	0.0	0.0	0.000	A
	C-AB	9	2	1168	0.008	9	0.0	0.0	3.342	A
	C-A	937	234			937				
	A-B	0.90	0.22			0.90				
	A-C	891	223			891				
2	B-AC	14	4	285	0.051	14	0.0	0.1	13.316	B
	C-AB	23	6	1163	0.020	23	0.0	0.0	3.396	A
	C-A	920	230			920				
	A-B	4	0.90			4				
	A-C	887	222			887				

17:15 - 17:30

Junction	Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	B-AC	0	0	199	0.000	0	0.0	0.0	0.000	A
	C-AB	19	5	1309	0.015	19	0.0	0.0	3.022	A
	C-A	1140	285			1140				
	A-B	1	0.28			1				
	A-C	1091	273			1091				
2	B-AC	18	4	213	0.083	17	0.1	0.1	18.363	C
	C-AB	47	12	1304	0.036	47	0.0	0.1	3.103	A
	C-A	1109	277			1109				
	A-B	4	1			4				
	A-C	1086	272			1086				

17:30 - 17:45

Junction	Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	B-AC	0	0	199	0.000	0	0.0	0.0	0.000	A
	C-AB	19	5	1309	0.015	19	0.0	0.0	3.030	A
	C-A	1140	285			1140				
	A-B	1	0.28			1				
	A-C	1091	273			1091				
2	B-AC	18	4	213	0.083	18	0.1	0.1	18.391	B
	C-AB	47	12	1304	0.036	47	0.1	0.1	3.114	A
	C-A	1109	277			1109				
	A-B	4	1			4				
	A-C	1086	272			1086				

17:45 - 18:00

Junction	Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	B-AC	0	0	264	0.000	0	0.0	0.0	0.000	A
	C-AB	9	2	1168	0.008	9	0.0	0.0	3.367	A
	C-A	937	234			937				
	A-B	0.90	0.22			0.90				
	A-C	891	223			891				
2	B-AC	14	4	285	0.051	15	0.1	0.1	13.338	B
	C-AB	23	6	1163	0.020	24	0.1	0.0	3.423	A
	C-A	920	230			920				
	A-B	4	0.90			4				
	A-C	887	222			887				

18:00 - 18:15

Junction	Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	B-AC	0	0	308	0.000	0	0.0	0.0	0.000	A
	C-AB	6	1	1072	0.005	6	0.0	0.0	3.635	A
	C-A	787	197			787				
	A-B	0.75	0.19			0.75				
	A-C	746	186			746				
2	B-AC	12	3	332	0.036	12	0.1	0.0	11.243	B
	C-AB	14	4	1068	0.013	14	0.0	0.0	3.675	A
	C-A	776	194			776				
	A-B	3	0.75			3				
	A-C	743	186			743				

2038 Baseline + Committed + Development, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D13 - 2023 Baseline + Committed + Development, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Existing Site Access / Taylors Lane	T-Junction	Two-way	0.01	A
2	Proposed Site Access / Taylors Lane	T-Junction	Two-way	0.09	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D17	2038 Baseline + Committed + Development	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D9+D11

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1	A		ONE HOUR	✓	795	100.000
	B		ONE HOUR	✓	3	100.000
	C		ONE HOUR	✓	1111	100.000
2	A		ONE HOUR	✓	795	100.000
	B		ONE HOUR	✓	5	100.000
	C		ONE HOUR	✓	1112	100.000

Origin-Destination Data

Junction 1

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	1	794
	B	2	0	1
	C	1110	1	0

Proportions

		To		
		A	B	C
From	A	0.00	0.00	1.00
	B	0.67	0.00	0.33
	C	1.00	0.00	0.00

Junction 2

Demand (PCU/hr)

From \ To	A	B	C
A	0	3	792
B	3	0	2
C	1108	4	0

Proportions

From \ To	A	B	C
A	0.00	0.00	1.00
B	0.60	0.00	0.40
C	1.00	0.00	0.00

Vehicle Mix

Junction 1

Heavy Vehicle Percentages

From \ To	A	B	C
A	0	0	10
B	0	0	0
C	10	0	0

Average PCU Per Veh

From \ To	A	B	C
A	1.000	1.000	1.099
B	1.000	1.000	1.000
C	1.099	1.000	1.000

Junction 2

Heavy Vehicle Percentages

From \ To	A	B	C
A	0	0	10
B	0	0	0
C	10	0	0

Average PCU Per Veh

From \ To	A	B	C
A	1.000	1.000	1.100
B	1.000	1.000	1.000
C	1.099	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Junction	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
07:45-08:00	1	A	599	599
		B	0	0
		C	836	836
	2	A	599	599
		B	4	4
		C	837	837
08:00-08:15	1	A	715	715
		B	0	0
		C	999	999
	2	A	715	715
		B	4	4
		C	1000	1000
08:15-08:30	1	A	876	876
		B	0	0
		C	1223	1223
	2	A	876	876
		B	6	6
		C	1224	1224
08:30-08:45	1	A	876	876
		B	0	0
		C	1223	1223
	2	A	876	876
		B	6	6
		C	1224	1224
08:45-09:00	1	A	715	715
		B	0	0
		C	999	999
	2	A	715	715
		B	4	4
		C	1000	1000
09:00-09:15	1	A	599	599
		B	0	0
		C	836	836
	2	A	599	599
		B	4	4
		C	837	837

Results

Results Summary for whole modelled period

Junction	Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	B-AC	0.00	0.00	0.0	A	0	0
	C-AB	0.01	3.47	0.0	A	6	9
	C-A					1014	1520
	A-B					0.92	1
	A-C					729	1093
2	B-AC	0.02	15.73	0.0	C	5	7
	C-AB	0.03	3.50	0.0	A	24	36
	C-A					997	1495
	A-B					3	4
	A-C					727	1091

Main Results for each time segment

07:45 - 08:00

Junction	Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	B-AC	0	0	333	0.000	0	0.0	0.0	0.000	A
	C-AB	3	0.74	1121	0.003	3	0.0	0.0	3.451	A
	C-A	833	208			833				
	A-B	0.75	0.19			0.75				
	A-C	598	150			598				
2	B-AC	4	0.94	339	0.011	4	0.0	0.0	10.743	B
	C-AB	12	3	1119	0.011	12	0.0	0.0	3.483	A
	C-A	825	206			825				
	A-B	2	0.56			2				
	A-C	597	149			597				

08:00 - 08:15

Junction	Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	B-AC	0	0	295	0.000	0	0.0	0.0	0.000	A
	C-AB	5	1	1224	0.004	5	0.0	0.0	3.177	A
	C-A	994	248			994				
	A-B	0.90	0.22			0.90				
	A-C	714	179			714				
2	B-AC	4	1	296	0.015	4	0.0	0.0	12.339	B
	C-AB	19	5	1222	0.016	19	0.0	0.0	3.221	A
	C-A	980	245			980				
	A-B	3	0.67			3				
	A-C	712	178			712				

08:15 - 08:30

Junction	Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	B-AC	0	0	238	0.000	0	0.0	0.0	0.000	A
	C-AB	10	2	1374	0.007	10	0.0	0.0	2.861	A
	C-A	1213	303			1213				
	A-B	1	0.28			1				
	A-C	875	219			875				
2	B-AC	6	1	234	0.023	5	0.0	0.0	15.728	C
	C-AB	40	10	1372	0.029	40	0.0	0.0	2.930	A
	C-A	1185	296			1185				
	A-B	3	0.83			3				
	A-C	872	218			872				

08:30 - 08:45

Junction	Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	B-AC	0	0	238	0.000	0	0.0	0.0	0.000	A
	C-AB	10	2	1374	0.007	10	0.0	0.0	2.868	A
	C-A	1213	303			1213				
	A-B	1	0.28			1				
	A-C	875	219			875				
2	B-AC	6	1	234	0.023	6	0.0	0.0	15.733	C
	C-AB	40	10	1372	0.029	40	0.0	0.0	2.937	A
	C-A	1184	296			1184				
	A-B	3	0.83			3				
	A-C	872	218			872				

08:45 - 09:00

Junction	Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	B-AC	0	0	295	0.000	0	0.0	0.0	0.000	A
	C-AB	5	1	1224	0.004	5	0.0	0.0	3.204	A
	C-A	994	248			994				
	A-B	0.90	0.22			0.90				
	A-C	714	179			714				
2	B-AC	4	1	296	0.015	5	0.0	0.0	12.345	B
	C-AB	20	5	1222	0.016	20	0.0	0.0	3.245	A
	C-A	980	245			980				
	A-B	3	0.67			3				
	A-C	712	178			712				

09:00 - 09:15

Junction	Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	B-AC	0	0	333	0.000	0	0.0	0.0	0.000	A
	C-AB	3	0.74	1121	0.003	3	0.0	0.0	3.465	A
	C-A	833	208			833				
	A-B	0.75	0.19			0.75				
	A-C	598	150			598				
2	B-AC	4	0.94	339	0.011	4	0.0	0.0	10.749	B
	C-AB	12	3	1119	0.011	12	0.0	0.0	3.498	A
	C-A	825	206			825				
	A-B	2	0.56			2				
	A-C	597	149			597				

2038 Baseline + Committed + Development, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D13 - 2023 Baseline + Committed + Development, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Existing Site Access / Taylors Lane	T-Junction	Two-way	0.02	A
2	Proposed Site Access / Taylors Lane	T-Junction	Two-way	0.22	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D18	2038 Baseline + Committed + Development	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D10+D12

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1	A		ONE HOUR	✓	1054	100.000
	B		ONE HOUR	✓	1	100.000
	C		ONE HOUR	✓	1119	100.000
2	A		ONE HOUR	✓	1053	100.000
	B		ONE HOUR	✓	16	100.000
	C		ONE HOUR	✓	1116	100.000

Origin-Destination Data

Junction 1

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	1	1053
	B	1	0	0
	C	1117	2	0

Proportions

		To		
		A	B	C
From	A	0.00	0.00	1.00
	B	1.00	0.00	0.00
	C	1.00	0.00	0.00

Junction 2

Demand (PCU/hr)

From \ To	A	B	C
A	0	4	1049
B	8	0	8
C	1111	5	0

Proportions

From \ To	A	B	C
A	0.00	0.00	1.00
B	0.50	0.00	0.50
C	1.00	0.00	0.00

Vehicle Mix

Junction 1

Heavy Vehicle Percentages

From \ To	A	B	C
A	0	0	10
B	0	0	0
C	10	0	0

Average PCU Per Veh

From \ To	A	B	C
A	1.000	1.000	1.099
B	1.000	1.000	1.000
C	1.099	1.000	1.000

Junction 2

Heavy Vehicle Percentages

From \ To	A	B	C
A	0	0	10
B	0	0	0
C	10	0	0

Average PCU Per Veh

From \ To	A	B	C
A	1.000	1.000	1.099
B	1.000	1.000	1.000
C	1.099	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Junction	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
16:45-17:00	1	A	794	794
		B	0	0
		C	843	843
	2	A	793	793
		B	12	12
		C	840	840
17:00-17:15	1	A	948	948
		B	0	0
		C	1006	1006
	2	A	947	947
		B	14	14
		C	1003	1003
17:15-17:30	1	A	1161	1161
		B	0	0
		C	1232	1232
	2	A	1160	1160
		B	18	18
		C	1229	1229
17:30-17:45	1	A	1161	1161
		B	0	0
		C	1232	1232
	2	A	1160	1160
		B	18	18
		C	1229	1229
17:45-18:00	1	A	948	948
		B	0	0
		C	1006	1006
	2	A	947	947
		B	14	14
		C	1003	1003
18:00-18:15	1	A	794	794
		B	0	0
		C	843	843
	2	A	793	793
		B	12	12
		C	840	840

Results

Results Summary for whole modelled period

Junction	Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	B-AC	0.00	0.00	0.0	A	0	0
	C-AB	0.02	3.54	0.0	A	13	20
	C-A					1014	1520
	A-B					0.92	1
	A-C					966	1450
2	B-AC	0.09	21.27	0.1	C	15	22
	C-AB	0.04	3.59	0.1	A	33	50
	C-A					991	1487
	A-B					4	6
	A-C					963	1444

Main Results for each time segment

16:45 - 17:00

Junction	Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	B-AC	0	0	294	0.000	0	0.0	0.0	0.000	A
	C-AB	6	2	1102	0.006	6	0.0	0.0	3.525	A
	C-A	836	209			836				
	A-B	0.75	0.19			0.75				
	A-C	793	198			793				
2	B-AC	12	3	317	0.038	12	0.0	0.0	11.789	B
	C-AB	16	4	1099	0.014	16	0.0	0.0	3.569	A
	C-A	825	206			825				
	A-B	3	0.75			3				
	A-C	790	197			790				

17:00 - 17:15

Junction	Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	B-AC	0	0	247	0.000	0	0.0	0.0	0.000	A
	C-AB	11	3	1206	0.009	11	0.0	0.0	3.245	A
	C-A	995	249			995				
	A-B	0.90	0.22			0.90				
	A-C	947	237			947				
2	B-AC	14	4	265	0.054	14	0.0	0.1	14.341	B
	C-AB	27	7	1202	0.022	27	0.0	0.0	3.302	A
	C-A	977	244			977				
	A-B	4	0.90			4				
	A-C	943	236			943				

17:15 - 17:30

Junction	Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	B-AC	0	0	175	0.000	0	0.0	0.0	0.000	A
	C-AB	23	6	1360	0.017	23	0.0	0.0	2.922	A
	C-A	1209	302			1209				
	A-B	1	0.28			1				
	A-C	1160	290			1160				
2	B-AC	18	4	187	0.094	17	0.1	0.1	21.229	C
	C-AB	57	14	1355	0.042	57	0.0	0.1	3.012	A
	C-A	1172	293			1172				
	A-B	4	1			4				
	A-C	1155	289			1155				

17:30 - 17:45

Junction	Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	B-AC	0	0	175	0.000	0	0.0	0.0	0.000	A
	C-AB	23	6	1360	0.017	23	0.0	0.0	2.931	A
	C-A	1209	302			1209				
	A-B	1	0.28			1				
	A-C	1160	290			1160				
2	B-AC	18	4	187	0.094	18	0.1	0.1	21.272	C
	C-AB	57	14	1355	0.042	57	0.1	0.1	3.021	A
	C-A	1172	293			1172				
	A-B	4	1			4				
	A-C	1155	289			1155				

17:45 - 18:00

Junction	Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	B-AC	0	0	247	0.000	0	0.0	0.0	0.000	A
	C-AB	11	3	1206	0.009	11	0.0	0.0	3.271	A
	C-A	995	249			995				
	A-B	0.90	0.22			0.90				
	A-C	947	237			947				
2	B-AC	14	4	265	0.054	15	0.1	0.1	14.368	B
	C-AB	27	7	1202	0.022	27	0.1	0.0	3.327	A
	C-A	977	244			977				
	A-B	4	0.90			4				
	A-C	943	236			943				

18:00 - 18:15

Junction	Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	B-AC	0	0	294	0.000	0	0.0	0.0	0.000	A
	C-AB	6	2	1102	0.006	6	0.0	0.0	3.541	A
	C-A	836	209			836				
	A-B	0.75	0.19			0.75				
	A-C	793	198			793				
2	B-AC	12	3	317	0.038	12	0.1	0.0	11.809	B
	C-AB	16	4	1099	0.014	16	0.0	0.0	3.588	A
	C-A	824	206			824				
	A-B	3	0.75			3				
	A-C	790	197			790				

TAYLOR'S LANE

18 PARKING SPACES

EV

EV

12 BICYCLE SPACES

REFER TO LANDSCAPE ARCHITECT'S LAYOUTS

DELIVERIES PARKING

PUTTING GREEN

REFER TO LANDSCAPE ARCHITECT'S LAYOUTS

7 RESIDENTIAL PARKING SPACES

Notes

APPLICATION BOUNDARY

Rev	Notes	Drawn	Appr	Date
P01	First Issue	DH	DJ	xx/xx/xx

Holmes Miller
89 Minerva Street
Glasgow
G3 8LE
0141 204 2080
www.holmesmiller.com

Project 4801

Newbrook House Luxury Suites

Drawing Name

PROPOSED SITE PLAN

Scale @ A1	Checked	Revision
1 : 200	DJ	P01

Drawing Number

4801-HML-ZZ-ZZ-DR-A-10100