

TRAFFIC & TRANSPORT ASSESSMENT

Residential Development At Kilbarry Cork June 2022

FOR: LONGVIEW ESTATES LTD.





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1.0 INTRODUCTION

1.1 INTRODUCTION

1.1.1 MHL Consulting Engineers has been instructed by Cork County GAA Board to prepare a Traffic & Transport Assessment (TTA) in support of a planning application for the proposed residential development on lands at Kilbarry, Cork.

1.1.2 The proposed development consists of the construction of a residential development, a creche, and all ancillary site development works, on lands adjacent to Delaney's GAA Club in Kilbarry, Cork. The proposed development provides for 319 no. dwelling houses consisting of 85 no. semi-detached, 118 no. terraced, 53 no. duplex, and 63 no. apartment units.

Access to the proposed development will be via 2 no. entrances, each of which will access the development from the proposed Distribution Road (objective NE-U-08, in the current Local Area Plan). The Distribution Road will link from the Old Whitechurch Road to Upper Dublin Hill and will be partially delivered as part of this application. The Distribution Road will include the installation of grass verges, cycleways and footpaths.

As part of CMATS (Cork Metropolitan Area Transport Strategy) a Northern Distributor Road (NDR) is proposed which will run to the east of the site. The route selection process for this scheme has been advanced and the City Council have confirmed that the routes under consideration will not impact on the site. A drawing has been prepared showing the likely route for the NDR to the east of the site. On its completion the NDR will provide a high frequency orbital bus service in addition to cycle/pedestrian facilities in close proximity to the site. The adjoining IDA lands have been purchased by the Land Development Authority (LDA) as the new Draft Development Plan shows the zoning changing to residential. The development of the site, the subject of this application and the future development of the adjoining site for residential use will ensure a density of development to support this orbital route.

It is anticipated that the Distribution Road through the site will ultimately link to the NDR replacing objective NE-U-08 which will facilitate the future distribution of vehicular traffic from the site.

Ancillary site development works include public realm upgrades, amenity walks and public open spaces.

1.1.3 This TTA appraises the manner in which the proposed development will impact the surrounding roads network and considers appropriate access arrangements and the transport choices available to future users of the development site and the manner in which the existing/proposed transport infrastructure surrounding the site will influence that choice. The impact of traffic demand generated by the proposals will be considered and quantified.

1.1.4 The scope of this study has been agreed with Cork City Council's Traffic & Transportation Department. Key parameters relating to the traffic modelling carried out including, junctions to be assessed, trip generation, modal shift targets, trip distribution, assessment years and the presentation of results have been agreed with the Council.

1.1.5 The key junctions in the area surrounding the proposed development are shown in **Figure 1.1** and are as follows:

- Junction 1: Access Road junction with Old Whitechurch Road.
- Junction 2: Old Whitechurch Rd./ Old Mallow Rd.
- Junction 3: Redforge Rd./ Dublin Hill
- Junction 4: Kilbarry Enterprise Centre Rd./ Upper Dublin Hill
- Junction 5: Upper Dublin Hill/ Lower Dublin Hill

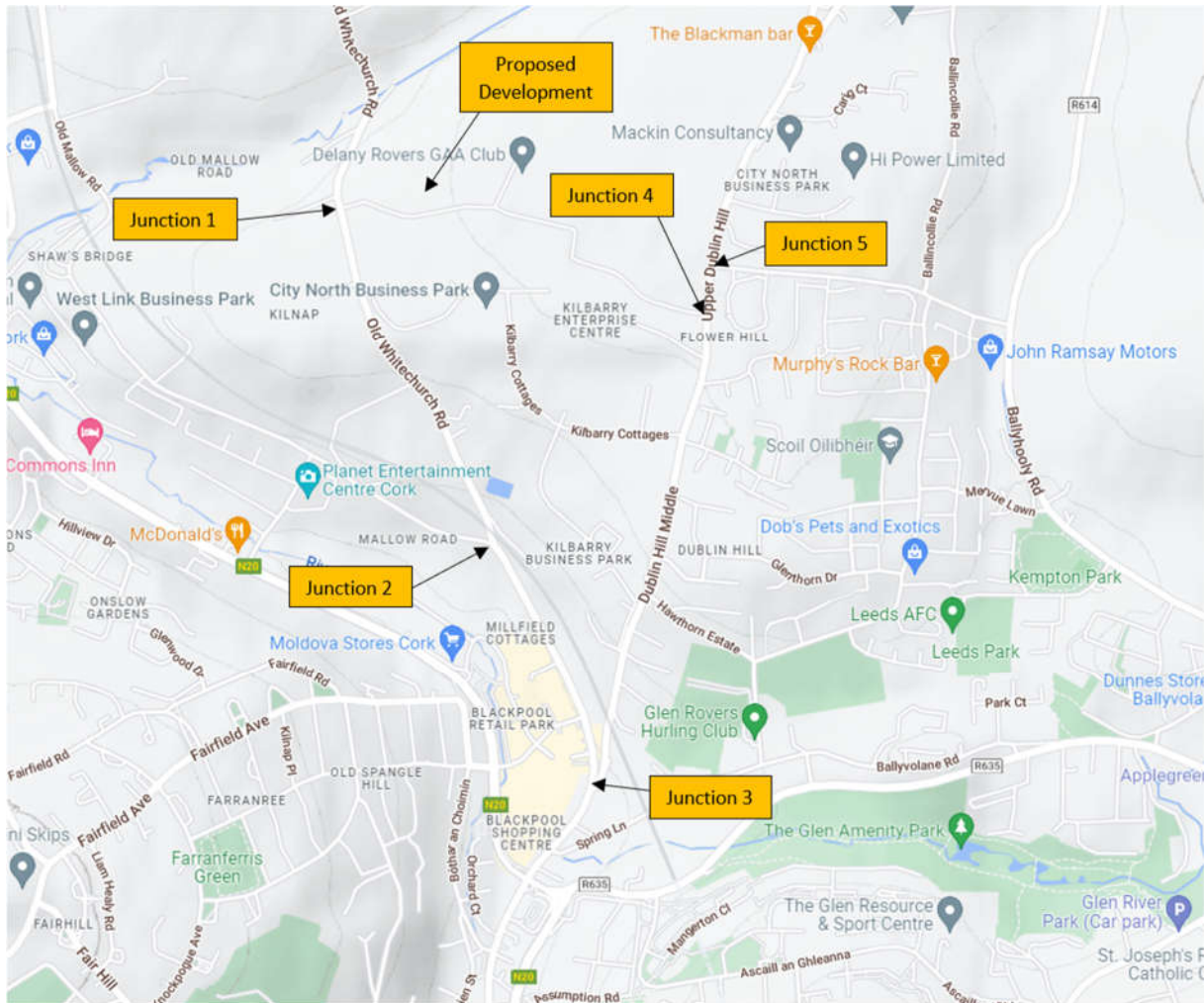


Figure 1.1: Junction Locations

1.2 CONSULTATION

- 1.2.1 The Design Team has engaged with various departments within Cork City Council with a view to consider the respective issues raised as part of the design process of the scheme.
- 1.2.2 These engagements have informed the final layout of the scheme including access arrangements for vehicular, pedestrian and cycle modes of transport.

1.3 DOCUMENT STRUCTURE

- 1.3.1 A TTA is an appropriate form of assessment for the scale of the proposed development and the scope has been agreed with the local authority. The structure of this TTA is in accordance with TII (Transport Infrastructure Ireland) Document, Traffic and Transport Assessment Guidelines, 2014.

The aim of this TTA is to identify the characteristics of the application site and surrounding area, examine the likely transport implications, ensure sustainable accessibility is maximised and appropriate infrastructure provided.

The key issues that need to be addressed within this TTA, with reference to the size and location of the development proposal, are as follows:

- Review of the site location, composition and local roads network.

- Analysis of Road Safety data for the most recent five-year period available.
- Accessibility critique reviewing pedestrian, cycle and public transport access to the site, plus any infrastructure currently available to promote travel by sustainable means.
- A review of the relevant planning and transport policy.
- Description of the development proposal.
- Description and justification for the proposed access arrangement, internal layout, parking provision, public transport provision, fire tender/service/delivery access, including all necessary swept-path assessments and visibility splays.
- Forecast multi-modal trip rates and trip generation as agreed with the Local Authority.
- Modal split assumptions used in the trip generation process.
- The use of appropriate and agreed traffic modelling software for the assessment of individual junctions.
- Provide With/Without Development assessment for each of the critical junctions.
- Assess significance of development generated traffic upon the surrounding transport infrastructure and identify any necessary mitigation.

2.0 NON-TECHNICAL SUMMARY

2.1 This TTA has been prepared in support of an application to An Bord Pleanála for permission in respect of the proposed Kilbarry SHD, comprising 319 no. residential units, and a 71-child creche.

2.2 The TTA has demonstrated the following:

- (i) The proposed Kilbarry SHD is in accordance with the traffic and transportation policies and objectives of the Local Area Plan and abides with the delivery of sustainable residential developments.
- (ii) A review of the existing roads network in the vicinity of the site indicates that there are no significant impacts on road safety. At the time of undertaking this report, the RSA Road Collision Statistics were not available in the vicinity of the development.
- (iii) Junction 1: Distributor Road junction with Old Whitechurch Road is shown to operate well within capacity up to and including the design year 2040 with and without development traffic.
- (iv) Junction 2: Old Whitechurch Rd./ Old Mallow Rd. is shown to operate well within capacity up to and including the design year 2040 with and without development traffic.
- (v) Junction 3: Redforge Rd./ Dublin Hill is shown to reach capacity in 2025 during the PM peak with no additional development traffic applied. When development traffic is included, the junction instead reaches capacity in 2024 during the PM Peak and is shown to exceed capacity during the PM Peak in 2025. The analysis results indicate that the junction will exceed capacity both with and without development traffic in the future design years 2030 and 2040.

In an effort to improve junction capacity, an additional model was created for this junction using an increased traffic signal cycle time. The results indicate that this would improve the performance of the junction.

The constructed models of this junction present a very conservative and robust analysis. Future increases in modal shift away from the private car, in line with national targets, have been applied to the development traffic in the 2040 scenario but not to the background traffic.

- (vi) Junction 4: Kilbarry Enterprise Centre Rd./ Upper Dublin Hill is shown to operate well within capacity up to and including the design year 2040 with and without development traffic.
 - (vii) Junction 5: Upper Dublin Hill/ Lower Dublin Hill is shown to operate within capacity up to and including the design year 2040 with and without development traffic.
 - (viii) The proposed site layout is permeable to the roads network and is well connected to existing pedestrian linkages, to public transport offerings, schools, retail and amenity destinations.
 - (ix) The proposed access arrangements are safe and suitable and are in accordance with the Design Manual for Roads & Bridges (DMRB) and the Design Manual for Urban Roads & Streets (DMURS).
 - (x) The site benefits from being in close proximity to regular transport provision within walking distance of the site, which enables journeys throughout Cork City. Future proposed high density orbital bus services, to be available when the Northern Distributor Road is completed and the development of a new train station in Kilbarry will aid future modal shift for residents away from the private car towards more sustainable modes of travel.
- 2.4 A modal shift of 40% (implying an anticipated increase in public transport usage or active travel in the immediate area of 21%) for future year models is deemed to be reasonable. This modal shift increase of 21% has been applied to the proposed development traffic for design year 2040 only, by which time it is anticipated that the Northern Distributor Road, and the train service via the proposed Blackpool/Kilbarry train station, will be in operation. This same modal shift increase of 21% has not been applied to the background traffic of the modelled junctions, ensuring that a conservative (worst-case) analysis has been carried out.

3.0 EXISTING CONDITIONS

3.1 INTRODUCTION

- 3.1.1 This section describes the base data used to develop the junction models, the critical links and junctions as agreed with the Local Authority, committed transport proposals to the area and other surrounding proposed development.

3.2 BASELINE TRAFFIC CONDITIONS

- 3.2.1 A variety of different data sources have been used, including:

- 12-hour classified turning counts (3 sites, refer **Figure 3.1** below);
- Background OS Mapping and aerial photography;
- On-site junction measurements including saturation flows, link speeds, queue length measurements, pedestrian movements at signalled crossings and geometric data for each of the modelled junctions;

- 3.2.2 A total of 3 no. turning count surveys were undertaken as part of the study on Tuesday 5th April 2022, as outlined in the following figure; these surveys were carried out simultaneously using video cameras at each of the junctions for a 12-hour period.

- 3.2.3 On-site measurements including lane widths, junction turning radii, lane lengths and saturation flows were undertaken by MHL and were incorporated in the constructed models.



Figure 3.2.1: Traffic Count Survey Locations

3.2.4 The following figures present the recorded 12-hour traffic profile, number of vehicles per turning movement, and percentage of classified vehicles for each of the surveyed sites carried out on Tuesday 5th of April 2022:

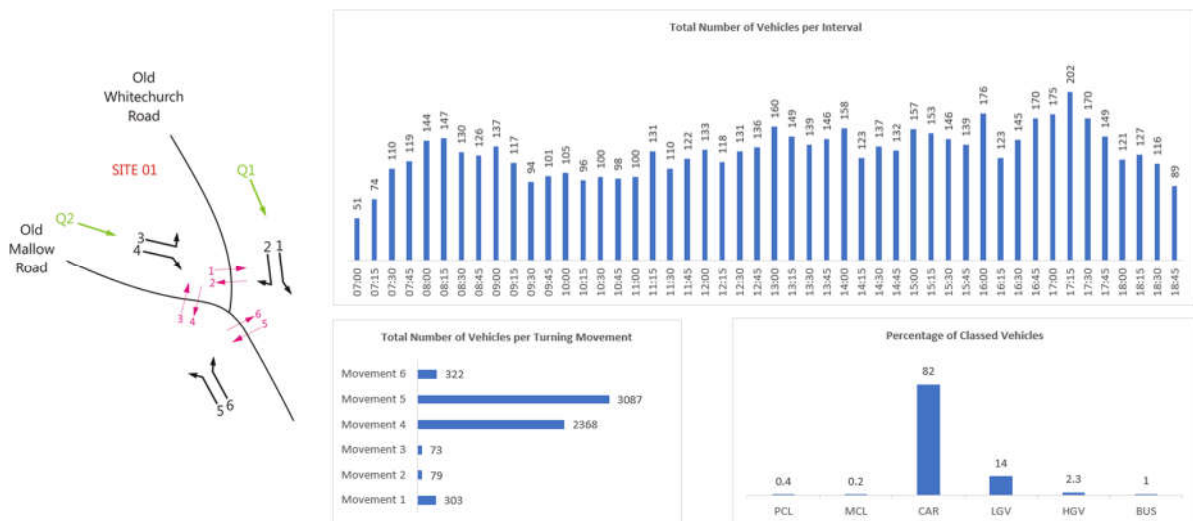


Figure 3.2.2: Site 1: Old Whitechurch Rd./Old Mallow Rd. junction

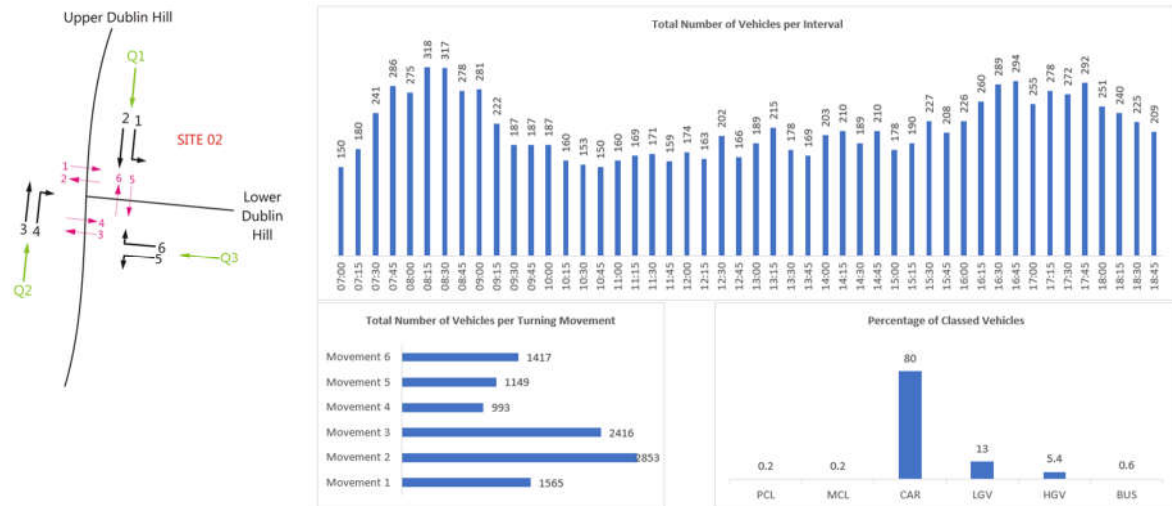


Figure 3.2.3: Site 2: Upper Dublin Hill/ Lower Dublin Hill junction

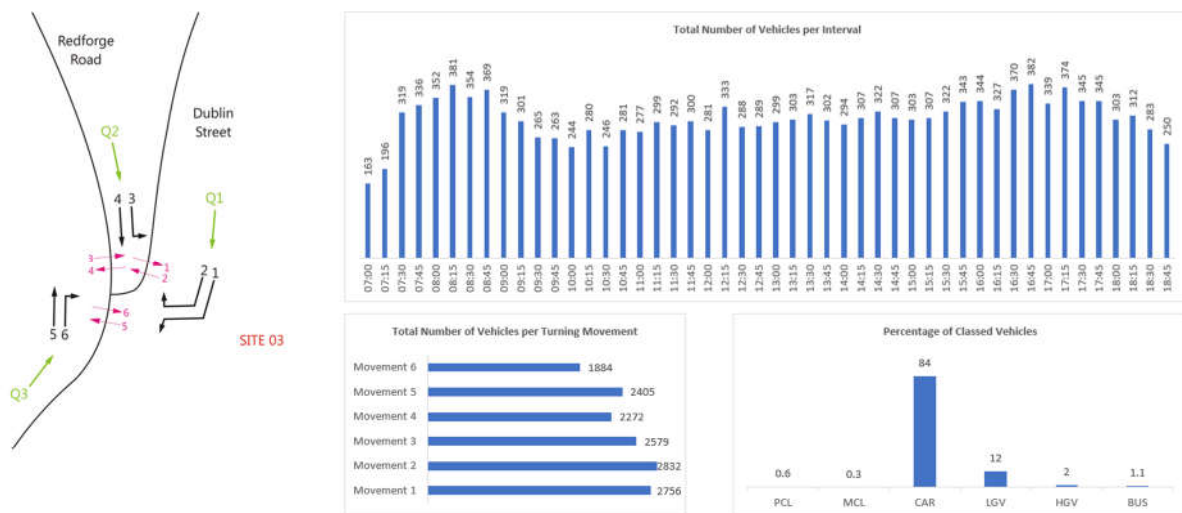


Figure 3.2.4: Site 3: Redforge Rd./ Dublin St. junction

3.2.5 The data presented in the above figures shows the peak hour traffic periods for both morning and evening respectively at each junction as follows:

- Site 1: 08:00 – 09:00 and 16:45 – 17:45
- Site 2: 07:45 – 08:45 and 16:30 – 17:30
- Site 3: 08:00 – 09:00 and 16:30 – 17:30

For the purpose of the modelling analysis, each of the above peak hour traffic periods are included in order to obtain the worst-case traffic build-up results. This ensures a robust analysis of the road network is conducted. The models have been calibrated to represent recorded flows.

3.2.6 The percentage of classified vehicles was used within the generated traffic models to accurately reflect existing conditions.

3.3 SITE LOCATION AND COMPOSITION

- 3.3.1 The application site is located on the lands to the west of Delaney's GAA Club, with access onto Old Whitechurch Road and to Upper Dublin Hill by means of a right of way over the main access road serving Delaney's GAA Club. The location of the access road is within the 50kph speed limit zone on both main roads. The site is bounded by the Delaney's GAA club to the east and Old Whitechurch Rd. to the west.



Figure 3.3.1: Existing Site Boundary

3.4 LOCAL ROADS NETWORK

The following junctions were identified as the key junctions in the area surrounding the proposed development.

3.4.1 *Junction 1: Access Road junction with Old Whitechurch Road*

This priority junction serves as a vehicular access between the Rathpeacon/ Whitechurch area of Cork and the greater Cork City urban area. The measured two-way AADT (Annual Average Daily Traffic) at the junction is 620.



Image 3.4.1: Image of existing Access Road junction with Old Whitechurch Road

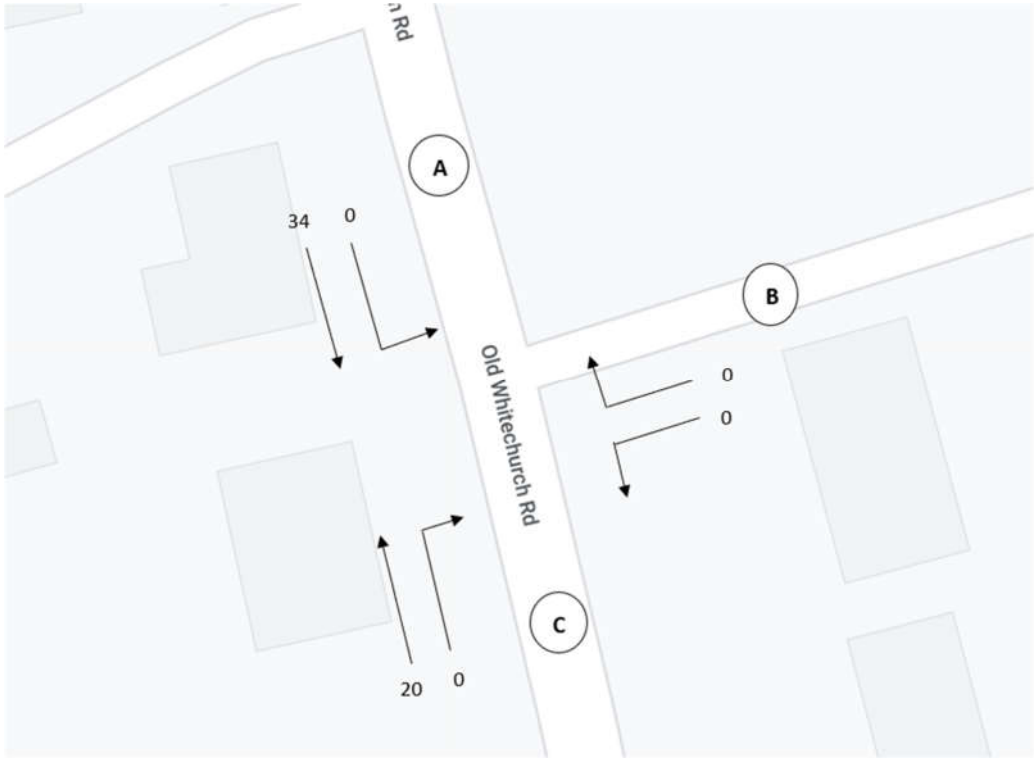


Figure 3.4.1: Access Road junction – AM Peak Hour Flows

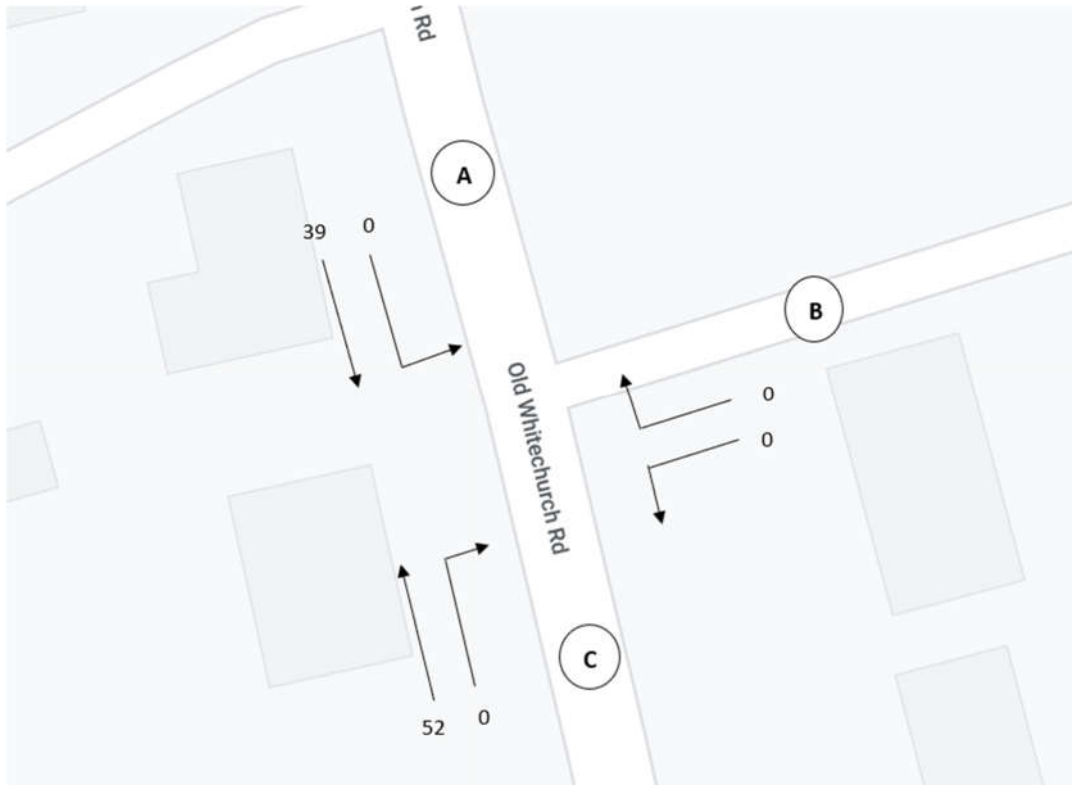


Figure 3.4.2: Access Road junction – PM Peak Hour Flows

3.4.2 Junction 2: Old Whitechurch Rd./ Old Mallow Rd.

This Signalised Junction serves as a primary access towards the Blackpool Shopping Centre and into Cork City via the N20. The measured two-way AADT (Annual Average Daily Traffic) at the junction is 6145.



Image 3.4.2: Image of Junction 2: Old Whitechurch Rd./Old Mallow Rd.

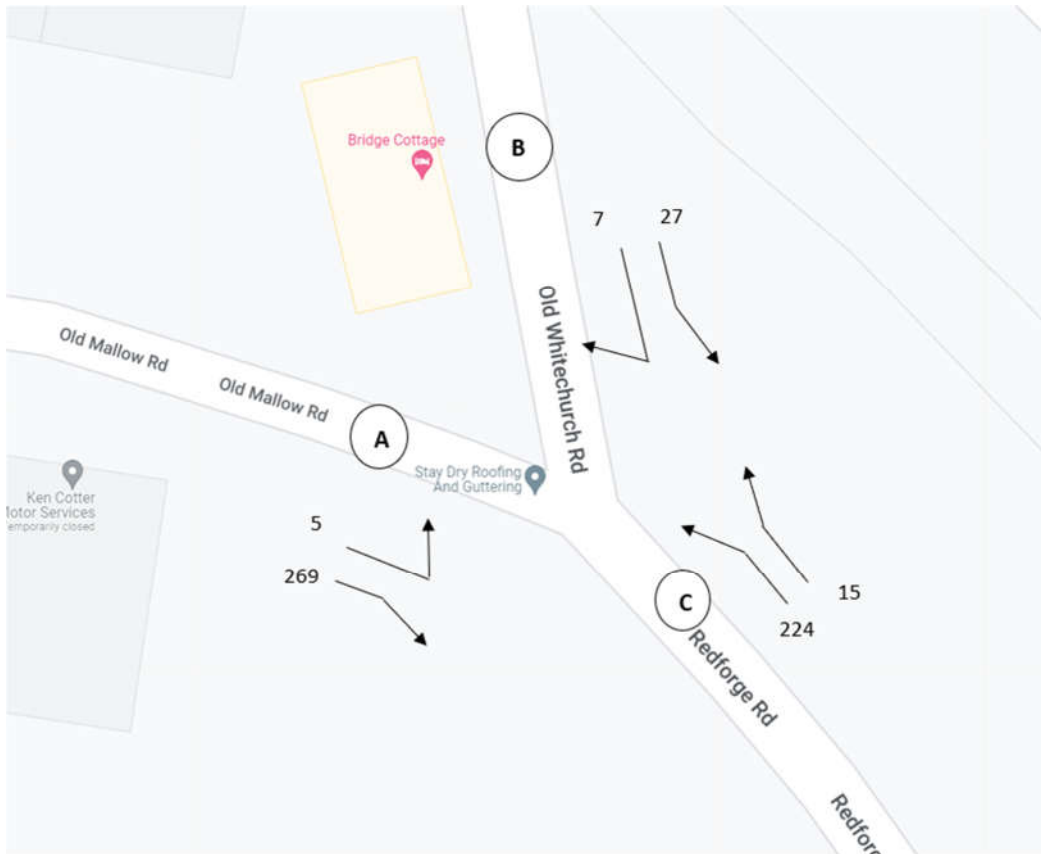


Figure 3.4.3: Old Whitechurch Rd./ Old Mallow Rd. – AM Peak Hour Flows

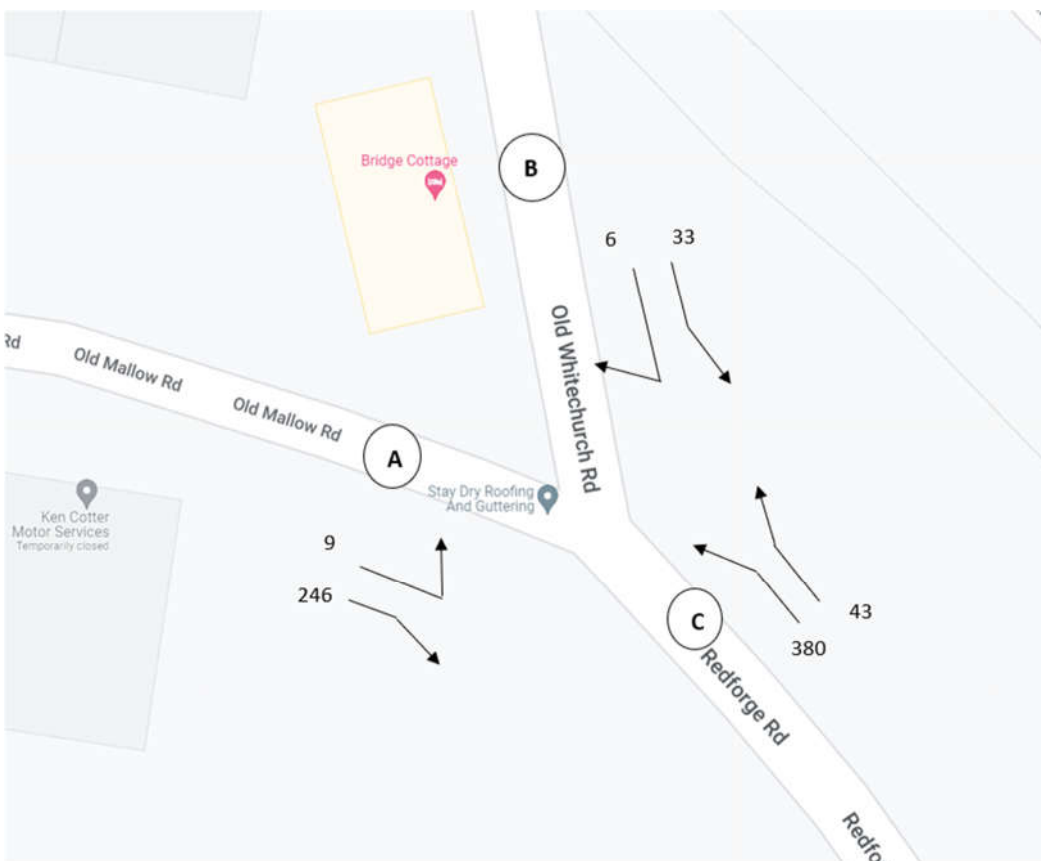


Figure 3.4.4: Old Whitechurch Rd./ Old Mallow Rd. - PM Peak Hour Flows

3.4.3 Junction 3: Redforge Rd./ Dublin Hill

This signalised junction forms a link between the Dublin Hill/ White’s Cross area to the Blackpool shopping and Cork City. Traffic heading to Cork City travels either south along Dublin St. towards Watercourse Rd. or travels north along Redforge Rd. towards the Brother Delaney Rd. junction. The measured two-way AADT (Annual Average Daily Traffic) at the junction is 16,360.



Image 3.4.3: Redforge Rd./ Dublin Hill Junction

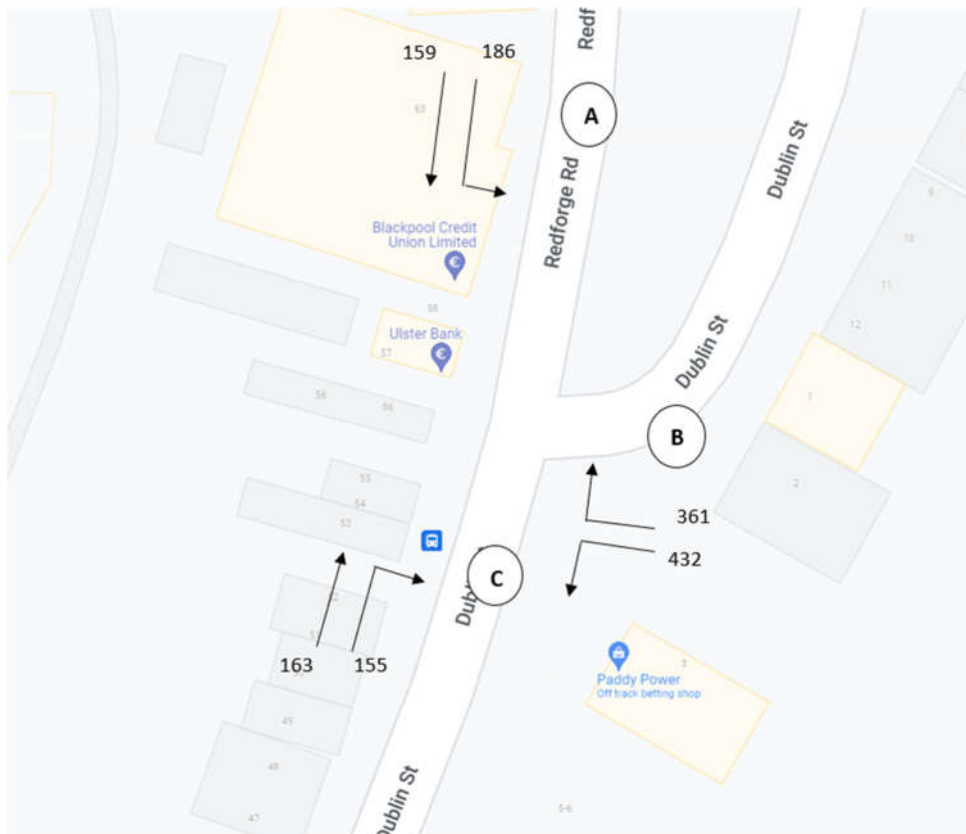


Figure 3.4.5: Redforge Rd./ Dublin Hill Junction. – AM Peak Hour Flows

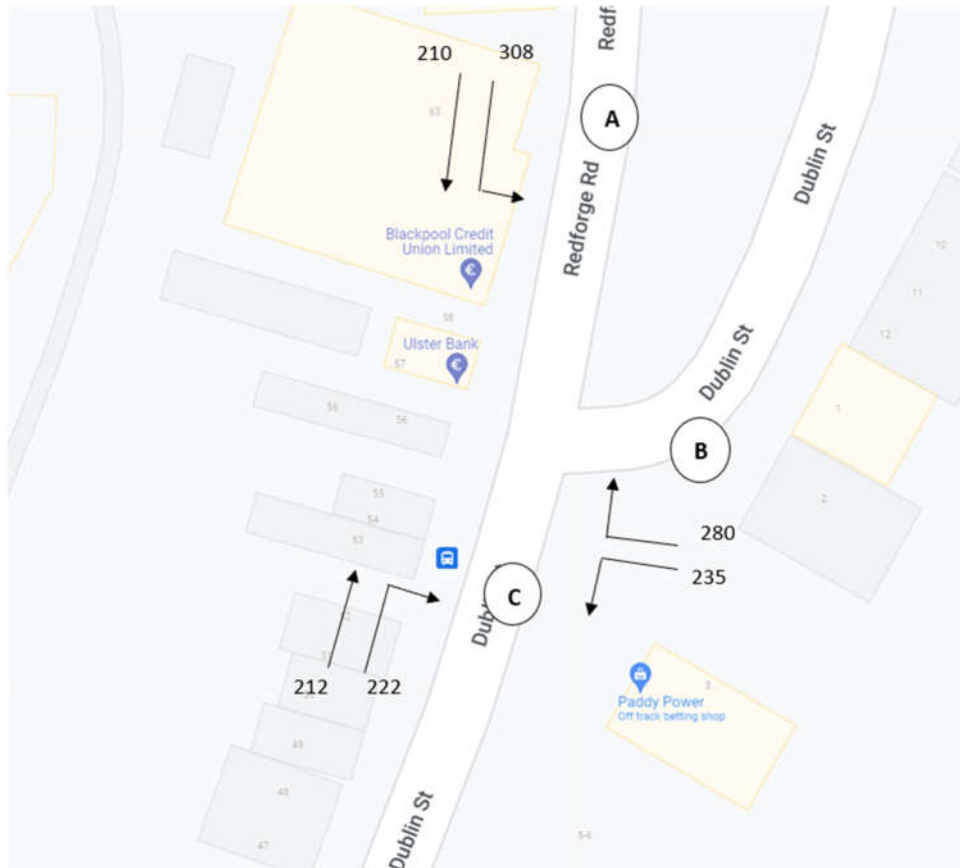


Figure 3.4.6: Redforge Rd./ Dublin Hill – PM Peak Hour Flows

3.4.4 Junction 4: Kilbarry Enterprise Centre Rd./ Upper Dublin Hill

This priority junction provides access to the Kilbarry Enterprise Centre and Delaneys GAA pitch from Upper Dublin Hill. The measured two-way AADT (Annual Average Daily Traffic) at the junction is 10,655.



Image 3.4.4: Kilbarry Enterprise Centre Rd./ Upper Dublin Hill Junction

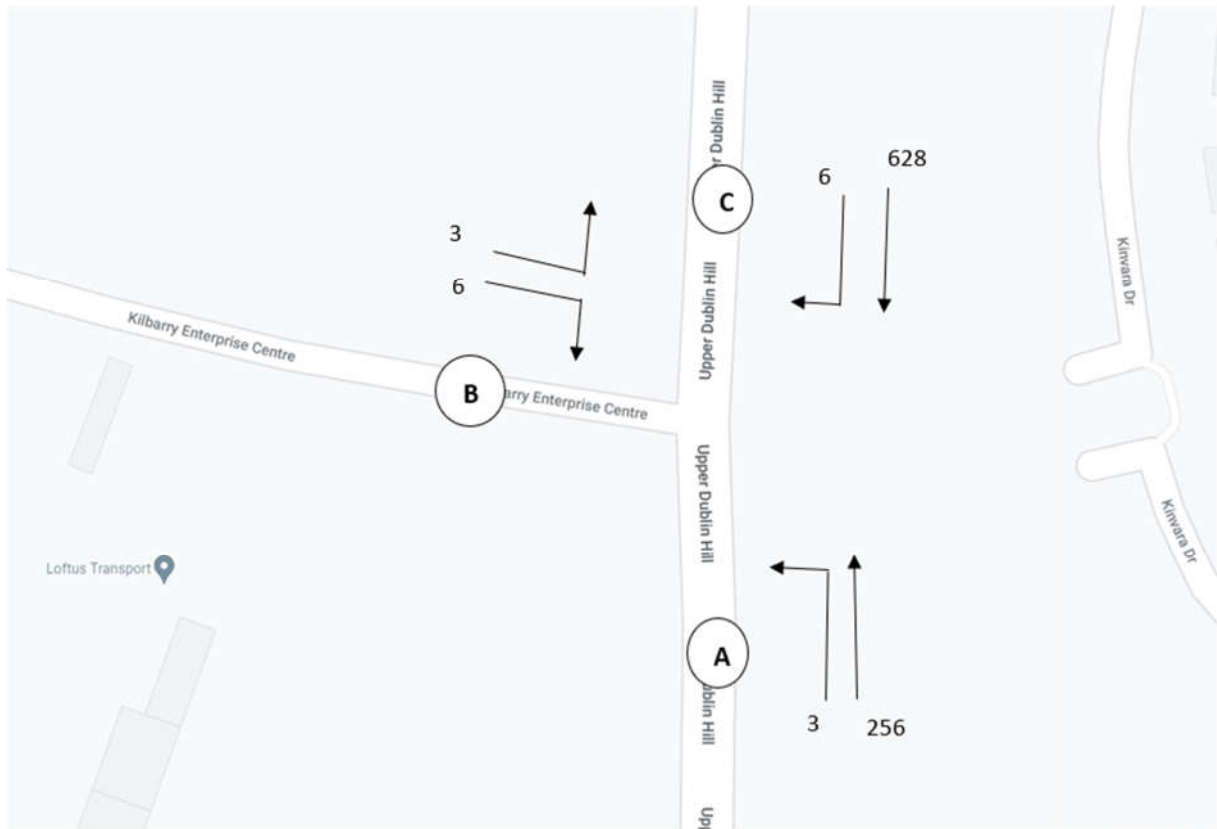


Figure 3.4.5: Kilbarry Enterprise Centre Rd./ Upper Dublin Hill Junction – AM Peak Hour Flows

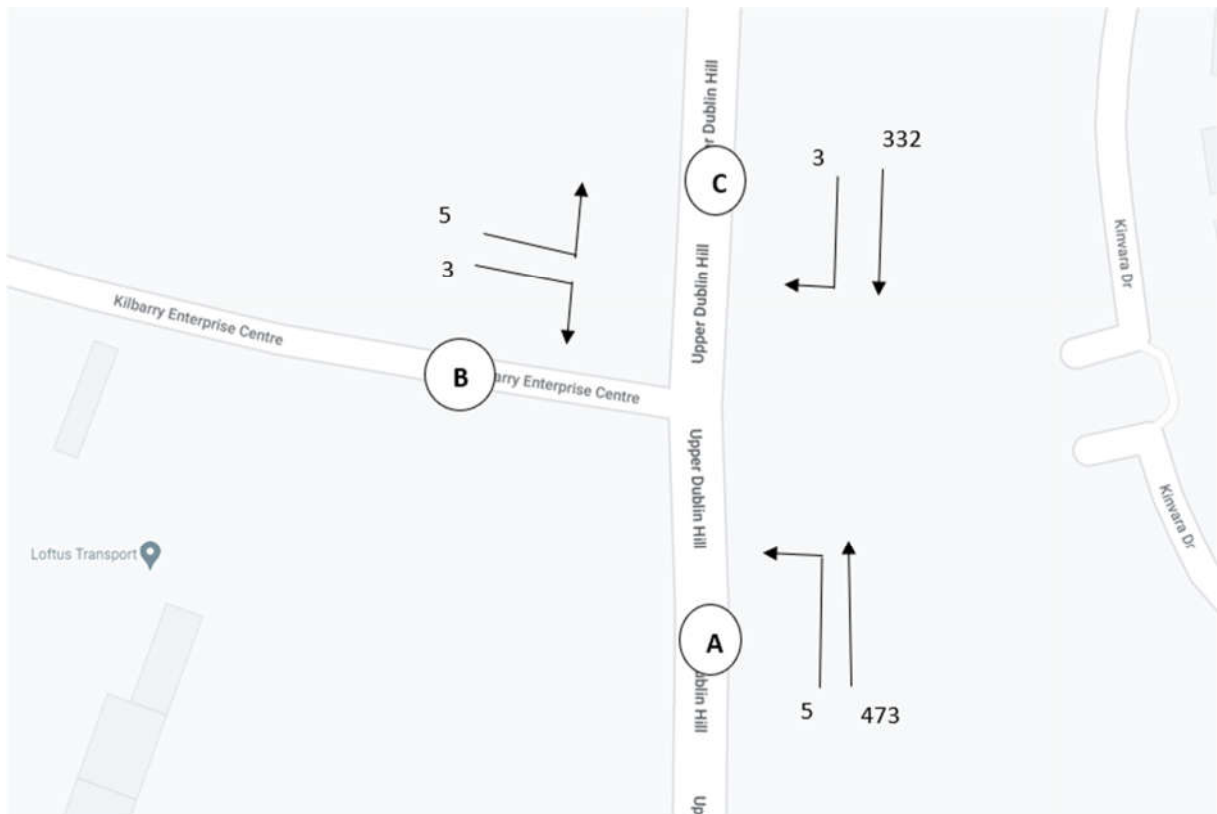


Figure 3.4.6: Kilbarry Enterprise Centre Rd./ Upper Dublin Hill Junction – PM Peak Hour Flows

3.4.5 Junction 5: Upper Dublin Hill/ Lower Dublin Hill

This priority junction forms a major link into the Blackpool shopping centre and onwards to Cork City. The measured two-way AADT (Annual Average Daily Traffic) at the junction is 14125.



Image 3.4.5: Upper Dublin Hill/ Lower Dublin Hill Junction

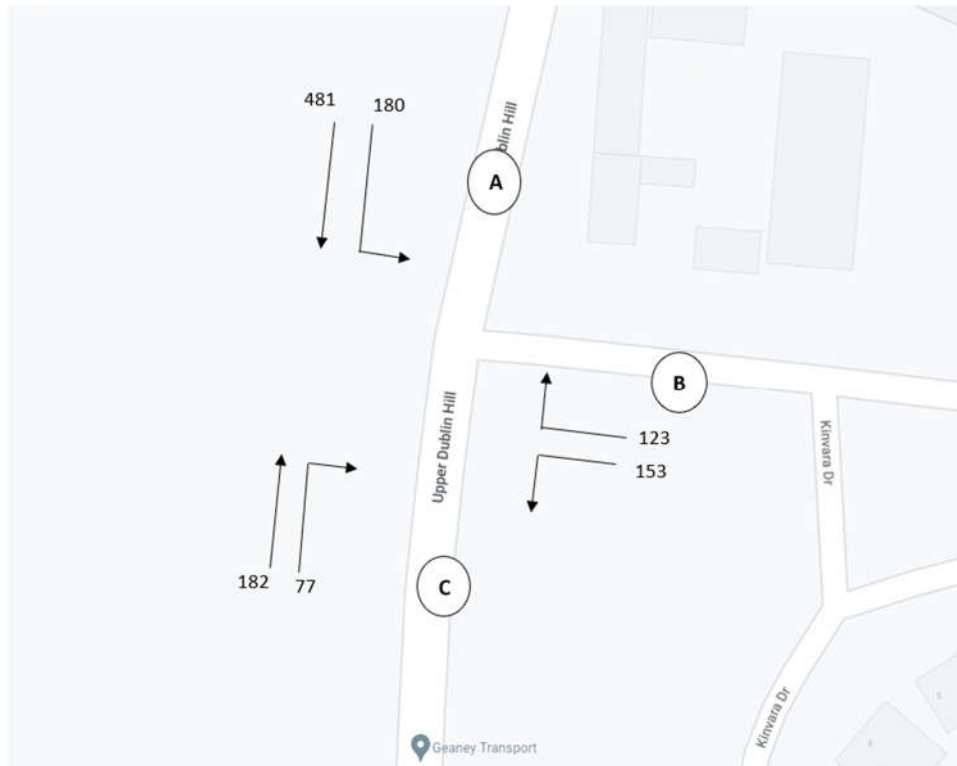


Figure 3.4.5: Upper Dublin Hill/ Lower Dublin Hill – AM Peak Hour Flows

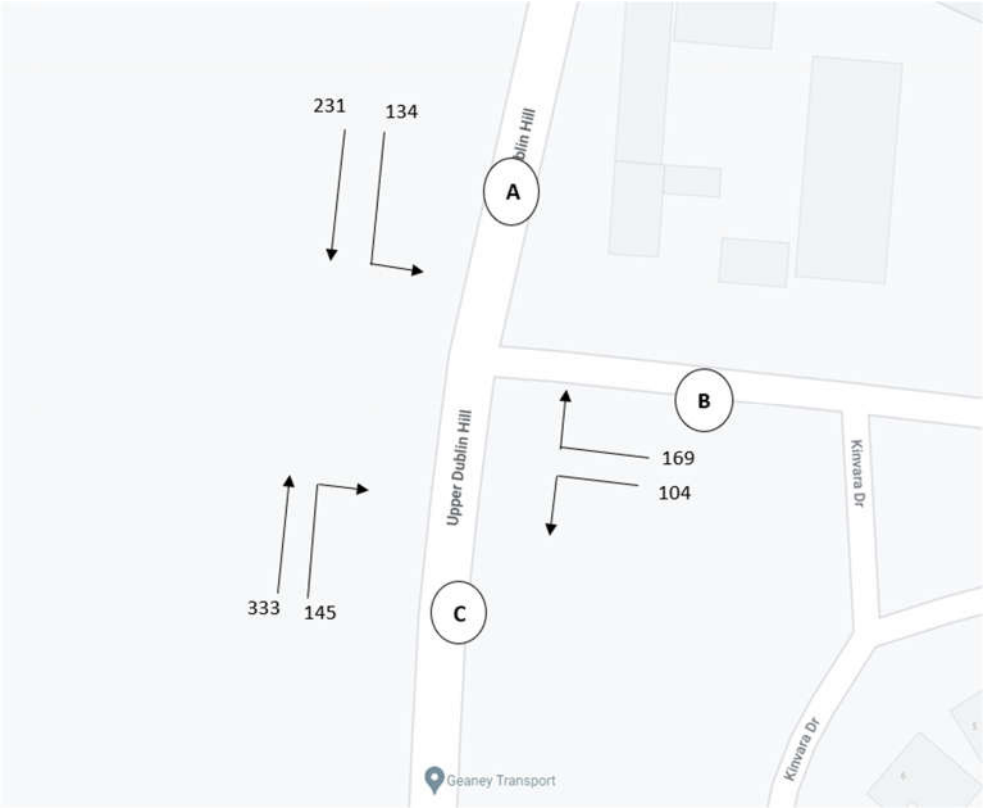


Figure 3.4.6: Upper Dublin Hill/ Lower Dublin Hill – PM Peak Hour Flows

3.5 COMMITTED TRANSPORT PROPOSALS

- 3.5.1 The publication of the CMATS (Cork Metropolitan Area Transport Study) document proposes major upgrades to public transport provision to serve the City Public Transport Network. These measures will contribute to an expected increase in modal shift towards sustainable travel resulting in a reduction in traffic generation from residential developments. Figure 3.5.1 outlines the 9 measures proposed to achieve this aim.

As part of this assessment, allowance was made for a modal shift of 40% (current sustainable travel usage in the area as per 2016 census was 19%) for development traffic only, in the Design Year 2040. This represents a 21% increase in modal shift over current levels and has been applied to 'new development traffic' only. The use of an increased modal shift for development traffic is justified based on the expected increase in public transport options available in the vicinity of the development brought on by BusConnects and the proposed infrastructure improvements per CMATS.

The resulting reduction in traffic generation from the site has not been applied to background traffic flows, refer to Chapter 6.0 of this report for further details.

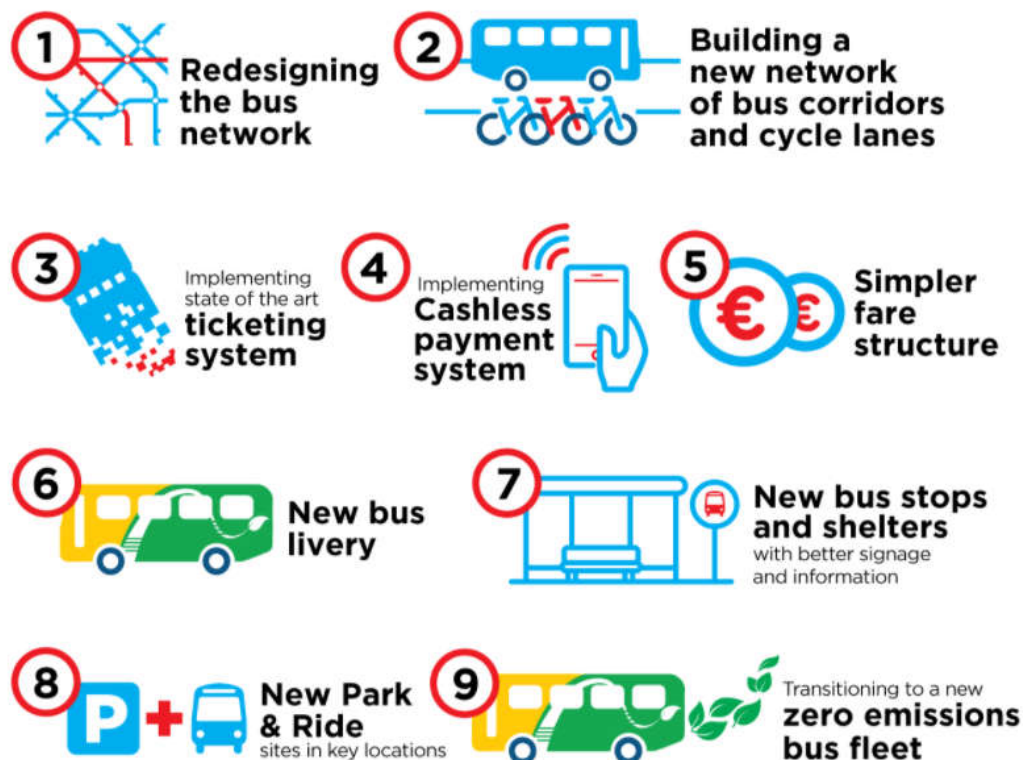


Figure 3.5.1: BusConnects Cork – Measures proposed to increase public transport usage.

- 3.5.2 The route for the proposed Northern Distributor Road is included within CMATS and extends in very close proximity to the development site. The proposed route included in CMATS is indicative only but serves as a good indicator of the route to be taken. Figure 3.5.2 highlights a potential route for the Northern Distributor Road around the development lands and Delaney's GAA grounds. This route was presented as part of the tripartite submission and it was confirmed by Cork City Council Infrastructure Department that it broadly represents the emerging preferred route soon to be published. None of the routes assessed pass through the GAA grounds or the development site.



Figure 3.5.2: Northern Distributor Road – indicative route option

The proposed Northern Distributor Road is anticipated for completion in 2031 and will provide a direct route for local traffic to avoid the major traffic centres of Blackpool and the City Centre when wishing to travel to the N22 west or the N8 east.

3.5.3 The proposed Blackpool/Kilbarr train station, included in CMATS as part of the proposed suburban rail network, will offer an attractive alternative mode of travel for residents. The proposed station, as shown in CMATS, is located approximately 20-minutes’ walk from the site.

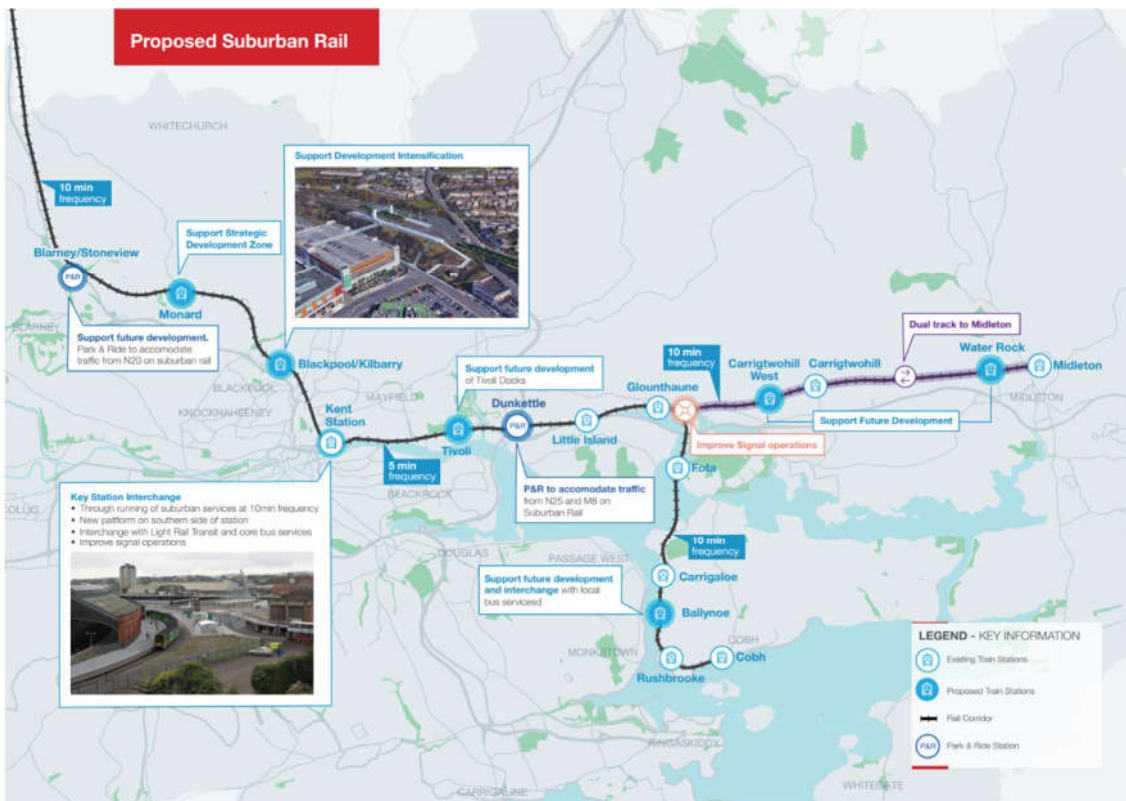


Figure 3.5.3: Taken from CMATS – Proposed Suburban Rail

The train station will have a significant impact on the commuter habits of the Blackpool/ Kilbarr area by offering a frequent, reliable, and comfortable travel option into Cork City. According to CMATS, the proposed frequency of trains between the Blackpool/Kilbarr station and Kent Station will be 5 minutes.

4.0 PROPOSED DEVELOPMENT

4.1 INTRODUCTION

- 4.1.1 The proposed Kilbarry Residential Development consisting of residential housing and a creche abides with the zoning in the local area plan of ZO1 Sustainable Residential Developments.
- 4.1.2 The proposed development will consist of a strategic housing development of 319no. residential dwellings comprising of 85no. semi-detached units (comprising of 17no. 4-bed units and 68no. 3-bed units), 118no. terraced units (comprising of 8no. 4-bed units, 60no. 3-bed units and 50no. 2-bed units), 53no. duplex units (comprising of 26no. 1-bed units, 25no. 2-bed units and 2no. 3-bed units) and 63no. apartments (in 3no. part 4 storey and part 5-storey blocks and comprising 15no. 1-bed units and 48no. 2-bed units). The development also includes the provision of a crèche facility (519sqm) and a riverside amenity park to the north and northeast of the site.



Figure 4.1.1: Proposed Site Layout

- 4.1.3 The site layout includes a proposed distributor road to encompass the existing access road from Old Whitechurch Rd. connecting to the existing Delaney's GAA access road from Upper Dublin Hill. On full completion of the scheme both access points will be used to serve vehicular traffic until the completion of the NDR.
- 4.1.4 The proposed development includes pedestrian access to the existing footpaths along Old Whitechurch Rd. and on Kilbarry Enterprise Centre Rd leading to Upper Dublin Hill granting access to the wider footpath network and bus service.
- 4.1.5 The scheme proposes residential parking at 2 spaces per unit.
- 4.1.6 For full details of the scheme please refer to the planning application documentation.

4.2 PHASING

- 4.2.1 The proposed development will be completed in three phases, with an indicative commencement date in 2023 and finishing by 2025. The proposed creche will be delivered in

phase 1. The Traffic Impact Assessment includes the design year 2023 (phase 1 complete), the design year 2024 (phase 2 complete), the proposed opening year of 2025, the opening year +5 (2030), and the opening year +15 (2040).

4.3 CONSTRUCTION STAGE TRAFFIC IMPACT

- 4.3.1 The construction stage of the proposed development will be phased as described above in section 4.2.1.

It is envisaged that working hours will be from 07:00 to 18:00, Monday to Friday (08:00 to 14:00 Saturday) for construction personnel through each phase of the development. Generally, construction workers will travel to site before the measured peak hour of 08:00 – 09:00, to be on site for an 07:00 start-time. A very limited number of construction employees are likely to travel to the site during peak hours.

It is anticipated that heavy goods vehicles, HGV's, will be restricted to movements on the local road network during the off-peak periods. It is estimated that truck movements and general deliveries would arrive/leave at a steady rate during the course of the day.

In general, the impact of construction traffic will be temporary in nature and less significant than the final development operational stage.

- 4.3.4 The construction stage elements of the Traffic Management Plan submitted with this application, including identified haulage routes, will be implemented.

The surrounding road network is suitable to accommodate the construction traffic associated with the proposed development. The Traffic Management Plan includes a range of mitigating measures to:

- ensure the safety of the workforce on the site
- ensure the safety of those accessing the site
- ensure the safety of the public on the surrounding roads
- minimise construction traffic generation
- minimise disruption on the surrounding road network

5.0 TRIP GENERATION

- 5.1.1 Trip generation from the proposed development was garnered via the TRICS database. MHL is a licence holder for the TRICS database and employ it for traffic studies. TRICS is a well-established UK and Irish national database which holds in excess of 2,100 site locations and 7,000 survey counts with over 98 separate land use sub-categories. The TRICS program was utilised for the land-use sub-category associated with the development proposal. The "Guidelines for Traffic and Transportation Assessments" state that for residential use the busiest hours are between 08:00-09:00 and 17:00-18:00. Traffic counts conducted on the 5th May 2021 by Tracsis were utilised to establish the actual AM & PM Peak traffic hours for the local road network for the purposes of this assessment.
- 5.1.2 Sites from Greater Dublin Area, Tipperary, Waterford, Carlow, Louth, Wicklow, Wexford, Cavan, Donegal, Monaghan, Antrim, and Tyrone were included from the TRICS database to determine the trip rates as shown in **Table 5.1** and **Table 5.2** below.

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	20	75	0.062	20	75	0.231	20	75	0.293
08:00 - 09:00	20	75	0.192	20	75	0.555	20	75	0.747
09:00 - 10:00	20	75	0.229	20	75	0.264	20	75	0.493
10:00 - 11:00	20	75	0.184	20	75	0.208	20	75	0.392
11:00 - 12:00	20	75	0.176	20	75	0.223	20	75	0.399
12:00 - 13:00	20	75	0.262	20	75	0.233	20	75	0.495
13:00 - 14:00	20	75	0.255	20	75	0.275	20	75	0.530
14:00 - 15:00	20	75	0.298	20	75	0.312	20	75	0.610
15:00 - 16:00	20	75	0.357	20	75	0.265	20	75	0.622
16:00 - 17:00	20	75	0.371	20	75	0.246	20	75	0.617
17:00 - 18:00	20	75	0.487	20	75	0.294	20	75	0.781
18:00 - 19:00	20	75	0.373	20	75	0.292	20	75	0.665
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			3.246			3.398			6.644

Table 5.1 Trip Generation Per House (TRICS)

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	5	31	0.032	5	31	0.197	5	31	0.229
08:00 - 09:00	5	31	0.076	5	31	0.178	5	31	0.254
09:00 - 10:00	5	31	0.134	5	31	0.102	5	31	0.236
10:00 - 11:00	5	31	0.108	5	31	0.108	5	31	0.216
11:00 - 12:00	5	31	0.076	5	31	0.127	5	31	0.203
12:00 - 13:00	5	31	0.083	5	31	0.115	5	31	0.198
13:00 - 14:00	5	31	0.108	5	31	0.096	5	31	0.204
14:00 - 15:00	5	31	0.115	5	31	0.115	5	31	0.230
15:00 - 16:00	5	31	0.140	5	31	0.134	5	31	0.274
16:00 - 17:00	5	31	0.146	5	31	0.153	5	31	0.299
17:00 - 18:00	5	31	0.274	5	31	0.127	5	31	0.401
18:00 - 19:00	5	31	0.166	5	31	0.153	5	31	0.319
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.458			1.605			3.063

Table 5.2 Trip Generation Per Apartment (TRICS)

5.1.3 In the following chapter reference is made to the current (2016) Modal Shift by means of travel to work, school or college and is based on 2016 Census Data. The site is located in the Electoral Division of 'St. Marys', ref. **Table 6.1**, with 2016-year figures implying 19% of persons in the area use sustainable means of travel.

5.1.4 Trip Generation from the proposed 71 pupil creche was derived using the TRICS database. The following table presents the peak hour trip rates for a standalone creche.

In this instance, it is assumed that the creche will serve both the proposed scheme and the wider area. It is anticipated that the creche will add to traffic entering and exiting the development during the morning/evening peak hours over and above 'pass-by' traffic (traffic already accounted for on the network).

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	57	0.000	1	57	0.000	1	57	0.000
07:00 - 08:00	3	73	0.028	3	73	0.018	3	73	0.046
08:00 - 09:00	3	73	0.390	3	73	0.206	3	73	0.596
09:00 - 10:00	3	73	0.294	3	73	0.335	3	73	0.629
10:00 - 11:00	3	73	0.018	3	73	0.032	3	73	0.050
11:00 - 12:00	3	73	0.083	3	73	0.014	3	73	0.097
12:00 - 13:00	3	73	0.183	3	73	0.261	3	73	0.444
13:00 - 14:00	3	73	0.133	3	73	0.124	3	73	0.257
14:00 - 15:00	3	73	0.174	3	73	0.096	3	73	0.270
15:00 - 16:00	3	73	0.087	3	73	0.096	3	73	0.183
16:00 - 17:00	3	73	0.110	3	73	0.142	3	73	0.252
17:00 - 18:00	3	73	0.243	3	73	0.372	3	73	0.615
18:00 - 19:00	3	73	0.000	3	73	0.041	3	73	0.041
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.743			1.737			3.480

Table 5.3 Trip Generation Per Pupil – Creche (TRICS)

6.0 MODAL SPLIT

- 6.1.1 This section describes the current level of modal shift (the use of sustainable modes of travel) based on available data and compares these to national targets.
- 6.1.2 The 2016 Census online SAP data was used to assess current modal shift patterns in the St. Marys Area which encompasses the site. 19% of people in this area said they were commuting on foot, bike or using public transport.

Population aged 5 years and over by means of travel to work, school or college			
Means of Travel	Population aged 5 years and over by means of travel to work (Number)	Population aged 5 years and over by means of travel to school or college (Number)	Population aged 5 years and over by means of travel to work, school or college (total) (Number)
On Foot	95	322	417
Bicycle	27	5	32
Bus, minibus or coach	83	162	245
Train, DART or LUAS	2	0	2
Motorcycle or scooter	11	3	14
Car Driver	1,414	96	1,510
Car passenger	151	996	1,147
Van	156	4	160
Other (incl. lorry)	16	0	16
Work mainly at or from home	65	0	65
Not stated	67	73	140
Total	2,087	1,661	3,748

Table 6.1: 2016 Modal Shift by means of travel to work, school or college. (Electoral Division of St. Marys)

6.1.3 Future national targets in the range of 40% are being pursued by all Local Authorities and the Kilbarry area is part of future public transport upgrade proposals. Given the location of the proposed development and based on the increased density of development, a limited increase in sustainable transport is expected. A change in the local demographic to a younger population (lower car ownership) will also facilitate this change.

6.1.4 A modal split of 40% (implying an anticipated increase in public transport or active travel in the immediate area of 21%) for the Opening Year +15 (2040) scenario is deemed to be reasonable.

This modal shift of 21% will not be applied to the other modelled scenarios as it is unlikely that the proposed surrounding infrastructure, as depicted in CMATS, would be completed by the respective scenario years (e.g., the proposed Northern Distributor Road). Additionally, to ensure a robust analysis of the wider road network, the modal shift will not be applied to background network traffic.

7.0 TRAFFIC GENERATION / FORECASTING

7.1.1 This section describes the traffic generation from the development as outlined in Section 5 and accounts for future modal shift targets as described in Section 6.

7.1.2 Based on the above trip generation rates the following tables present the residential development traffic for the different phases. This traffic has been added to existing background flows and distributed through the network to model each of the identified junctions. The results are presented in Section 9 of this report.

Phase 1 only		AM PEAK		PM PEAK	
		Arrivals	Departures	Arrivals	Departures
New Residential Houses Trip Generation - based on TRICs database					
109	Peak Trips Trip Rates Per Unit	0.192	0.555	0.487	0.294
	Peak Trips No. Units	21	60	53	32
	TOTAL	81		85	
New Residential Apartments Trip Generation - based on TRICs database					
0	Peak Trips Trip Rates Per Unit	0.032	0.197	0.274	0.127
	Peak Trips No. Units	0	0	0	0
	TOTAL	0		0	
New Creche Trip Generation - based on TRICs database					
71	Peak Trips Trip Rates Per pupil	0.294	0.335	0.243	0.372
	Peak Trips No. Units	21	24	17	26
	TOTAL	45		44	
New Creche Trip Generation - traffic external to new development					
	Factor of creche traffic external to dev.	0.8			
	Peak Trips No. Units	17	19	14	21
	TOTAL	36		35	

Table 7.1 Proposed Development Traffic in 2023

Phases 1 & 2		AM PEAK		PM PEAK	
		Arrivals	Departures	Arrivals	Departures
New Residential Houses Trip Generation - based on TRICs database					
172	Peak Trips Trip Rates Per Unit	0.192	0.555	0.487	0.294
	Peak Trips No. Units	33	95	84	51
	TOTAL	128		134	
New Residential Apartments Trip Generation - based on TRICs database					
42	Peak Trips Trip Rates Per Unit	0.032	0.197	0.274	0.127
	Peak Trips No. Units	1	8	12	5
	TOTAL	10		17	
New Creche Trip Generation - based on TRICs database					
71	Peak Trips Trip Rates Per pupil	0.294	0.335	0.243	0.372
	Peak Trips No. Units	21	24	17	26
	TOTAL	45		44	
New Creche Trip Generation - traffic external to new development					
	Factor of creche traffic external to dev.	0.8			
	Peak Trips No. Units	17	19	14	21
	TOTAL	36		35	

Table 7.2 Proposed Development Traffic in 2024

Phases 1, 2, & 3 (Full dev)		AM PEAK		PM PEAK	
		Arrivals	Departures	Arrivals	Departures
New Residential Houses Trip Generation - based on TRICs database					
256	Peak Trips Trip Rates Per Unit	0.192	0.555	0.487	0.294
	Peak Trips No. Units	49	142	125	75
	TOTAL	191		200	
New Residential Apartments Trip Generation - based on TRICs database					
63	Peak Trips Trip Rates Per Unit	0.032	0.197	0.274	0.127
	Peak Trips No. Units	2	12	17	8
	TOTAL	14		25	
New Residential Trip Generation - allowing for 21% modal shift increase					
	TOTAL (Existing modal split of 19%)	51	154	142	83
	Factor for increase to 40% modal split	0.74			
	Peak Trips No. Units	38	114	105	62
	TOTAL w/ modal shift	152		167	
New Creche Trip Generation - based on TRICs database					
71	Peak Trips Trip Rates Per pupil	0.294	0.335	0.243	0.372
	Peak Trips No. Units	21	24	17	26
	TOTAL	45		44	
New Creche Trip Generation - traffic external to new development					
	Factor of creche traffic external to dev.	0.8			
	Peak Trips No. Units	17	19	14	21
	TOTAL	36		35	

Table 7.3 Proposed Development Traffic in 2025

- 7.1.3 As the proposed development site currently generates no traffic, no reduction has been applied to account for pass-by trips, transfer trips or combined trips from the residential element of the scheme.
- 7.1.4 It is assumed that a portion of the Creche demand will be derived from the proposed development, however, in order to carry out a robust assessment of the roads network it is assumed that 80% of traffic that would be generated by a standalone creche will be attracted to the proposed development.
- 7.1.5 In addition to development traffic, recorded background traffic was factored using TII (Transport Infrastructure Ireland) Project Appraisal Guidelines (PE-PAG-02017) for use in future year scenarios. The following table presents the factors used on recorded vehicle counts based on Link Based Growth Rates (Central Growth) for the Cork Metropolitan Area.

	Cars/LGV	HGV	Combined
Count %	97%	3%	100%
2022 to 2023	1.017	1.029	1.017
2022 to 2024	1.034	1.060	1.035
2022 to 2025	1.052	1.091	1.053
2022 to 2030	1.143	1.261	1.147
2022 to 2040	1.237	1.420	1.243

TII Project Appraisal Guidelines for National Roads Unit 5.3
Travel Demand Projections (PE-PAG-0217-02)

Table 7.4 Background Traffic Growth Rates Per Annum

8.0 TRIP ATTRACTION AND DISTRIBUTION

- 8.1.1 This section describes the methodology used in the distribution of development specific traffic onto the modelled network. **Figure 3.1** outlines the location of each of the junctions where turning count movements were recorded over a 12-hour timeframe. This 'snapshot' of existing traffic movements provides a basis for determining desire lines which was used to assign development traffic at each of the modelled junctions.
- 8.1.2 The following figures illustrate the distribution of the proposed development traffic across the existing road network for each of the following scenarios:
- 2023 AM/PM - Phase 1 only (Old Whitechurch Rd. access in operation only)
 - 2024 AM/PM - Phases 1 & 2 (Old Whitechurch Rd. access in operation only)
 - 2025 AM/PM - Phases 1, 2, & 3 (full development traffic with Old Whitechurch Rd. access in operation only)
 - 2030 AM/PM - Dev +5 years (access onto Upper Dublin Hill via existing Delaney's GAA access in operation, no change to modal shift applied)
 - 2040 AM/PM With/Without Dev +15 years (with entrance onto Upper Dublin Hill via existing Delaney's GAA access in operation, modal shift to 40% applied)

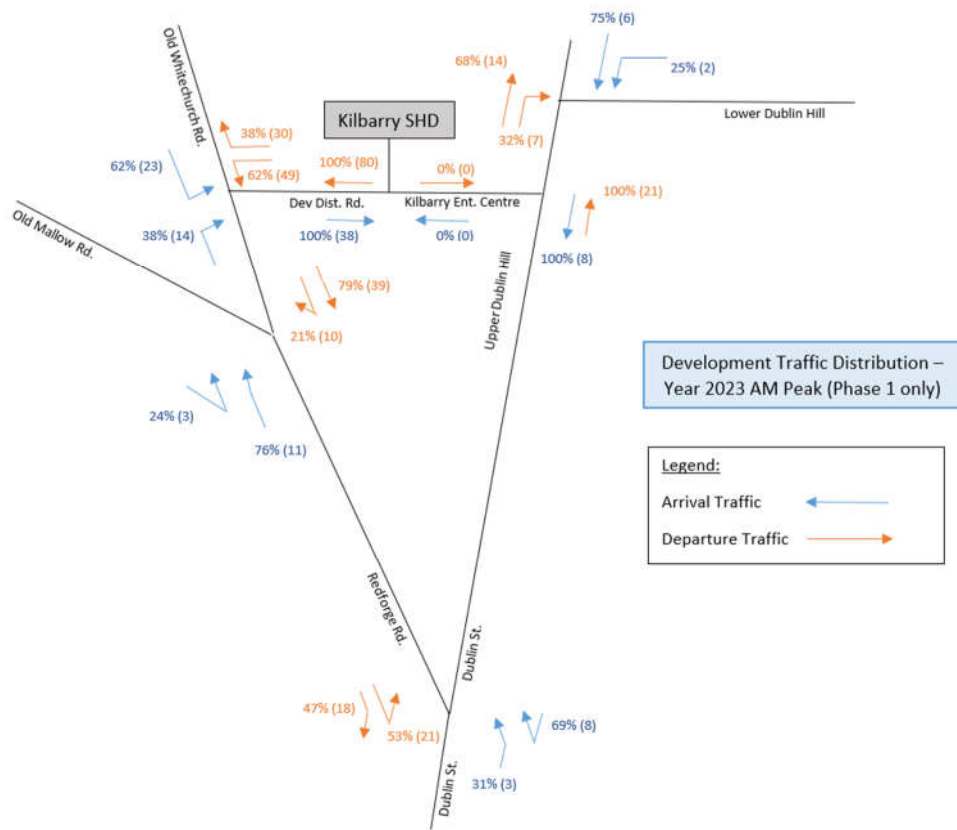


Figure 8.1: Development Traffic Distribution - Year 2023 AM Peak

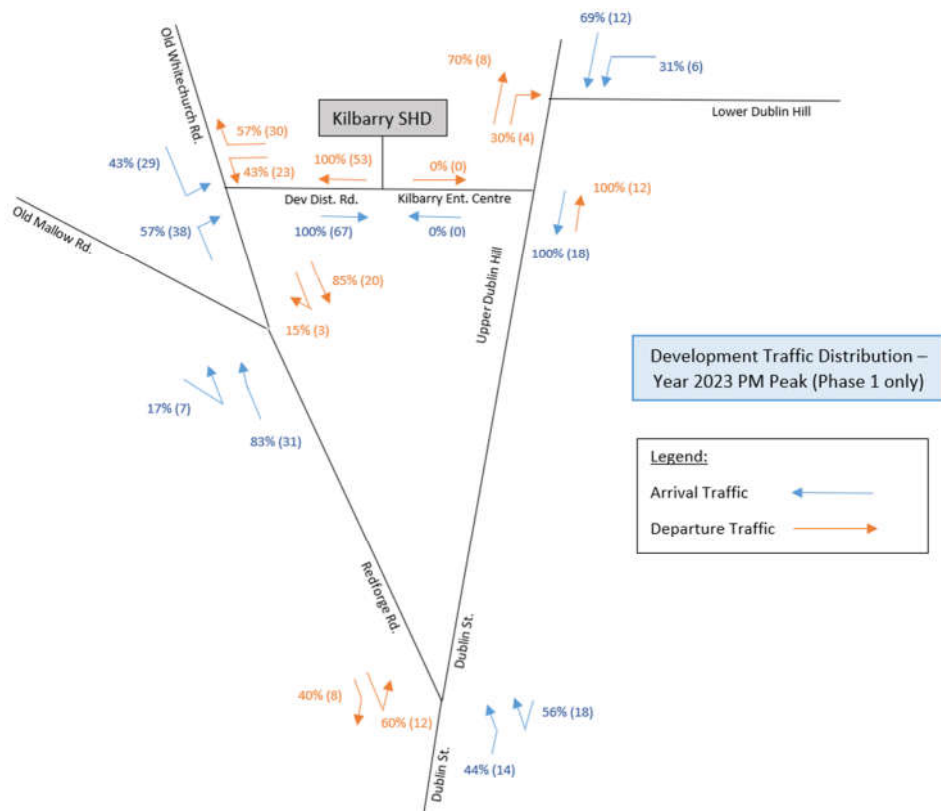


Figure 8.2: Development Traffic Distribution - Year 2023 PM Peak

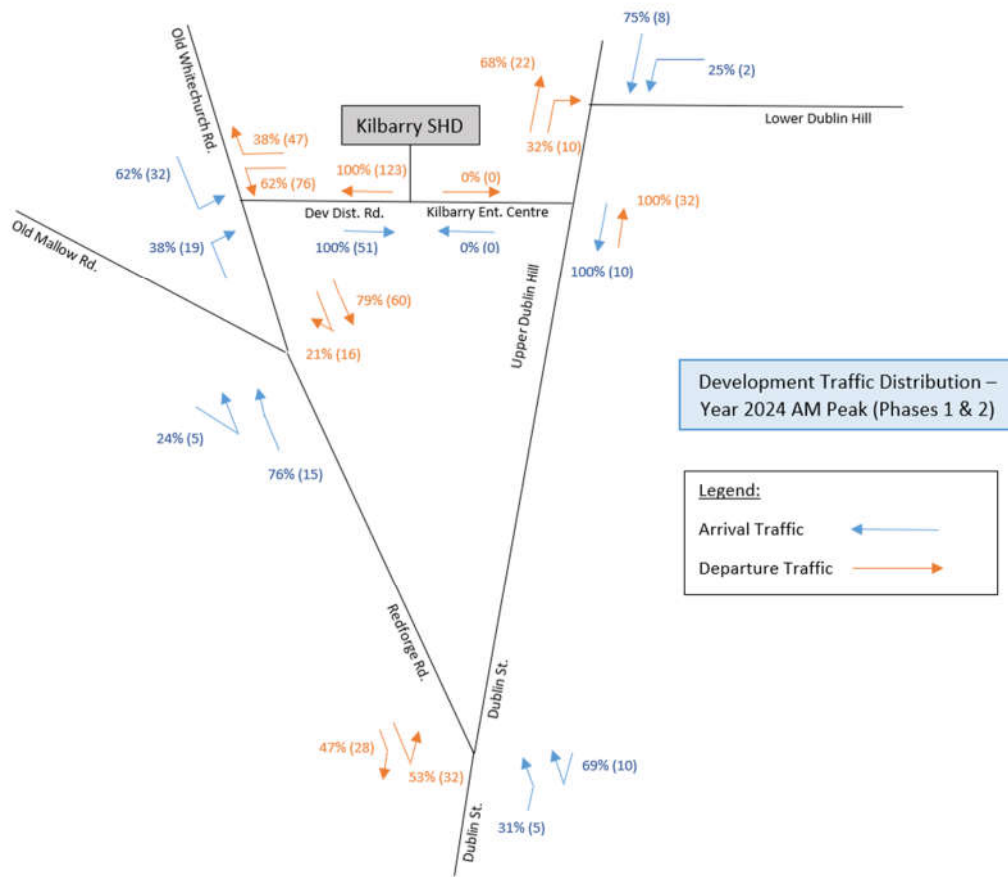


Figure 8.3: Development Traffic Distribution - Year 2024 AM Peak

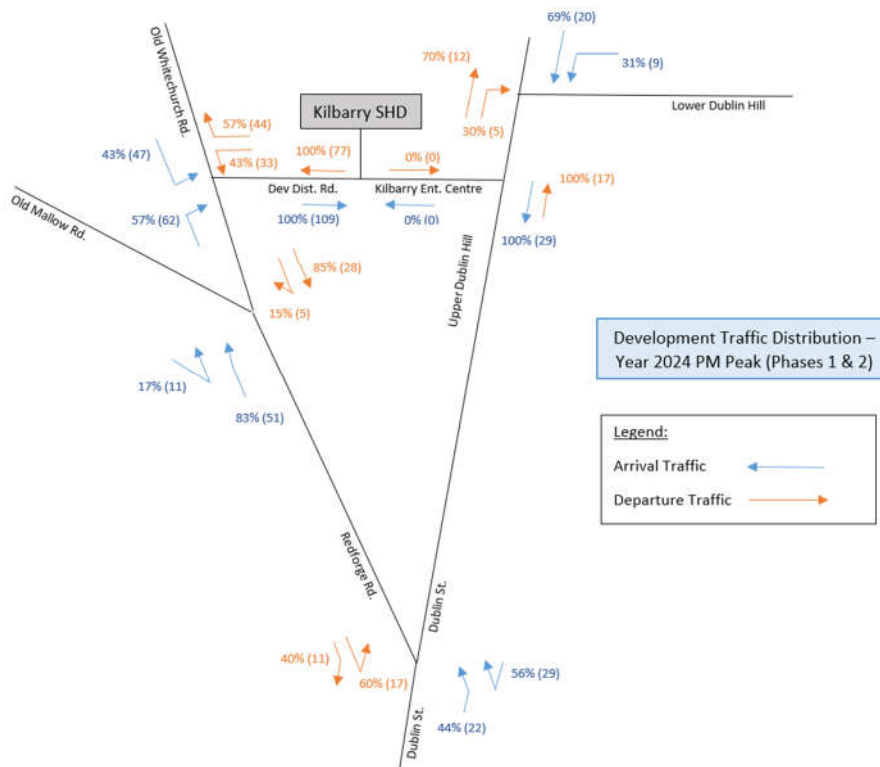


Figure 8.4: Development Traffic Distribution - Year 2024 PM Peak

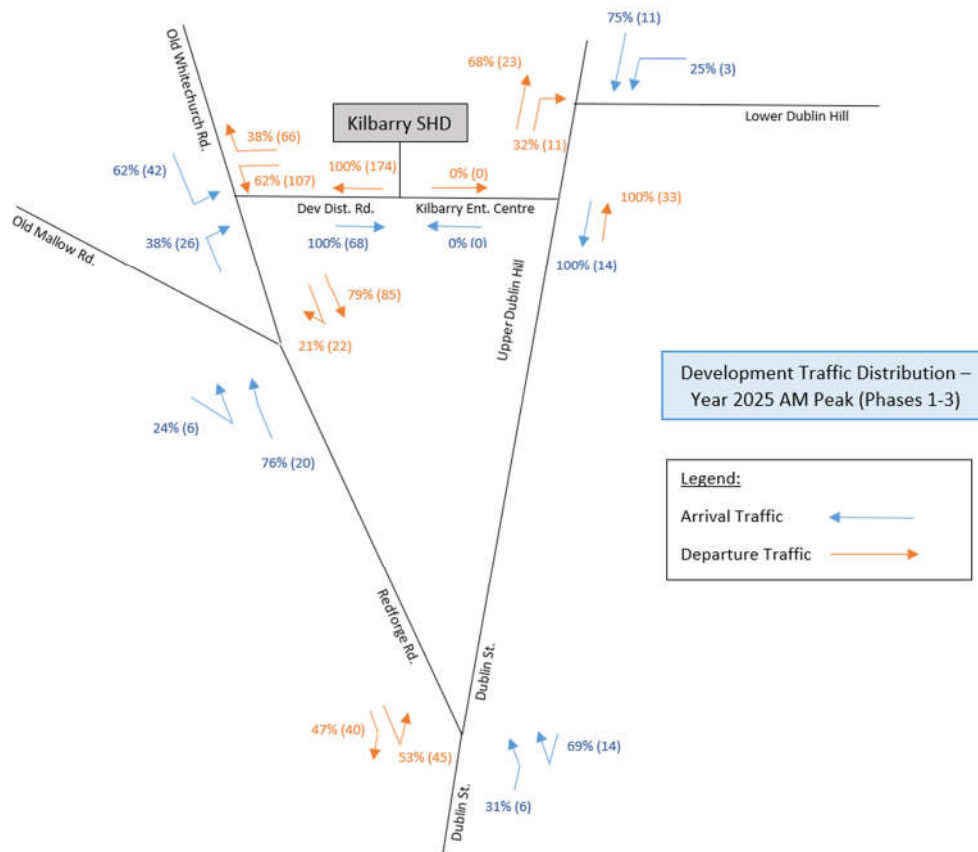


Figure 8.5: Development Traffic Distribution - Year 2025 AM Peak

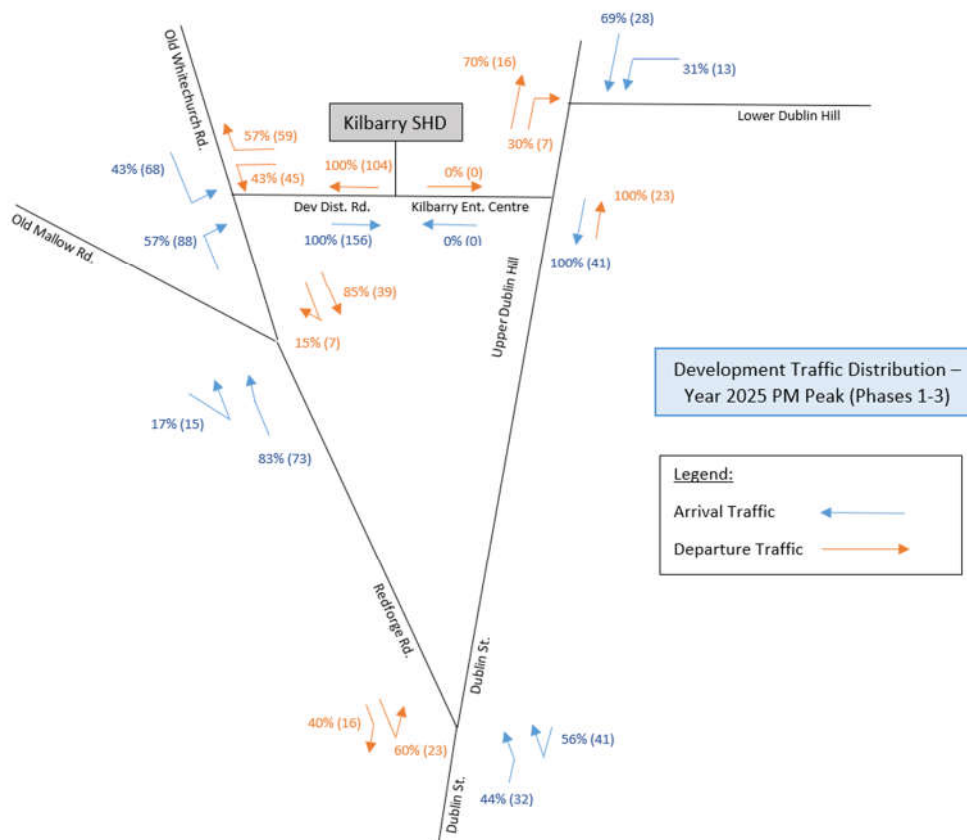


Figure 8.6: Development Traffic Distribution - Year 2025 PM Peak

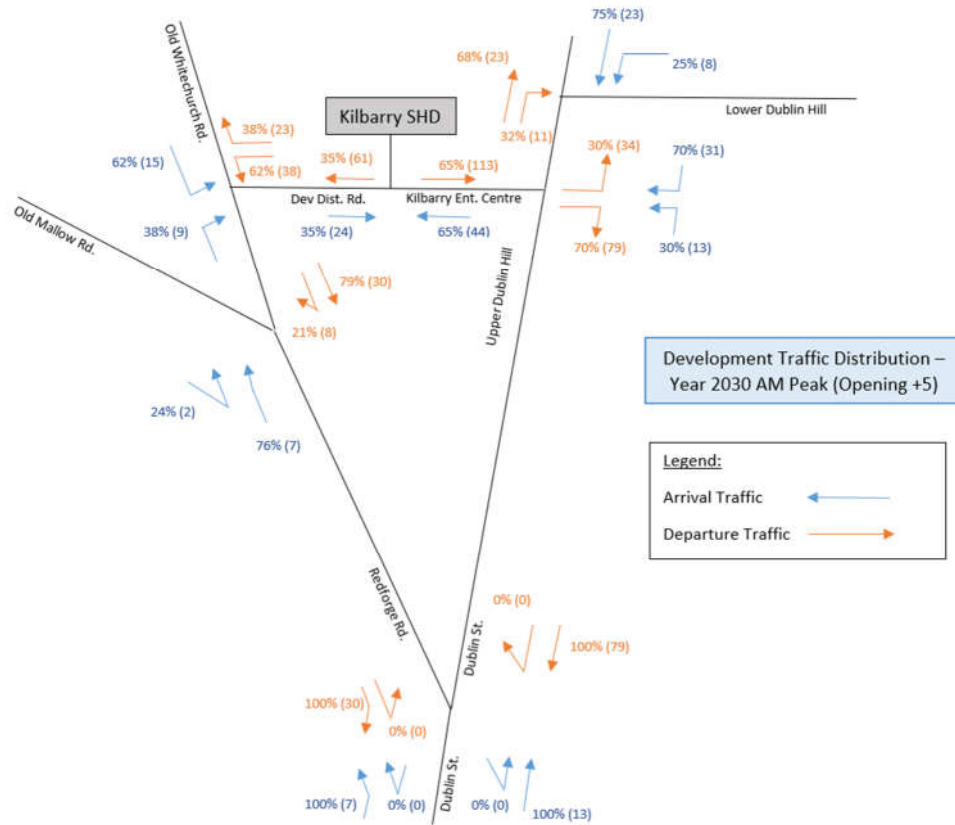


Figure 8.7: Development Traffic Distribution - Year 2030 AM Peak

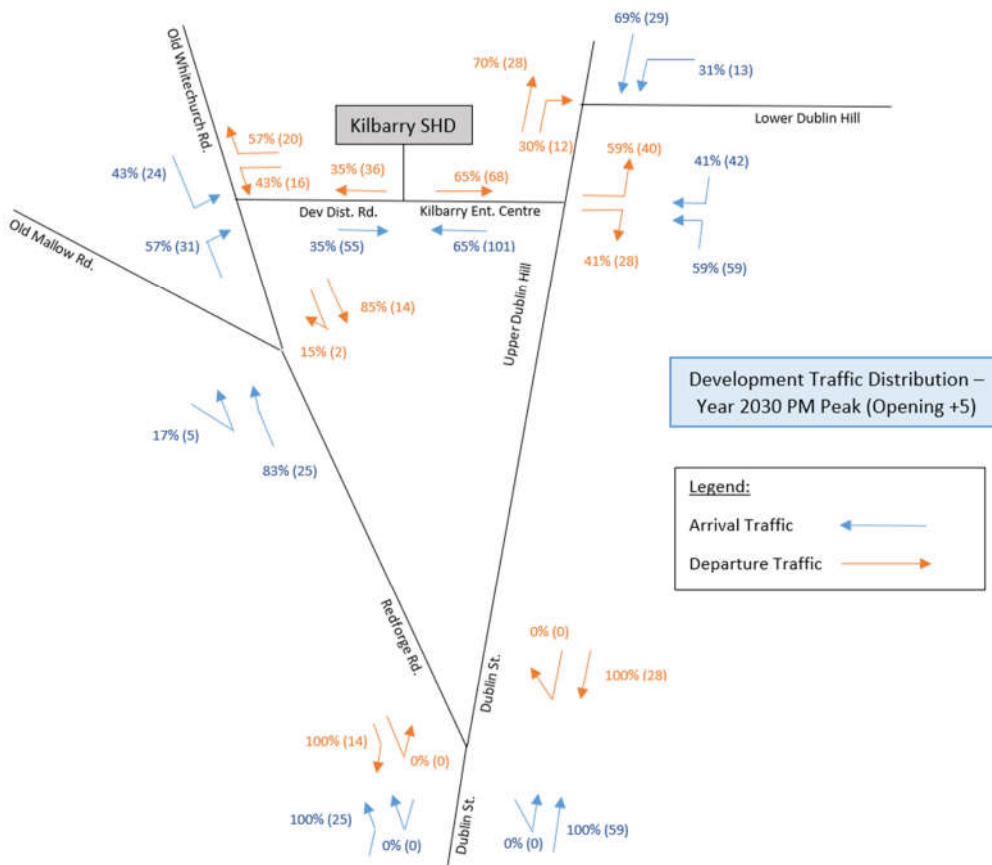


Figure 8.8: Development Traffic Distribution - Year 2030 PM Peak

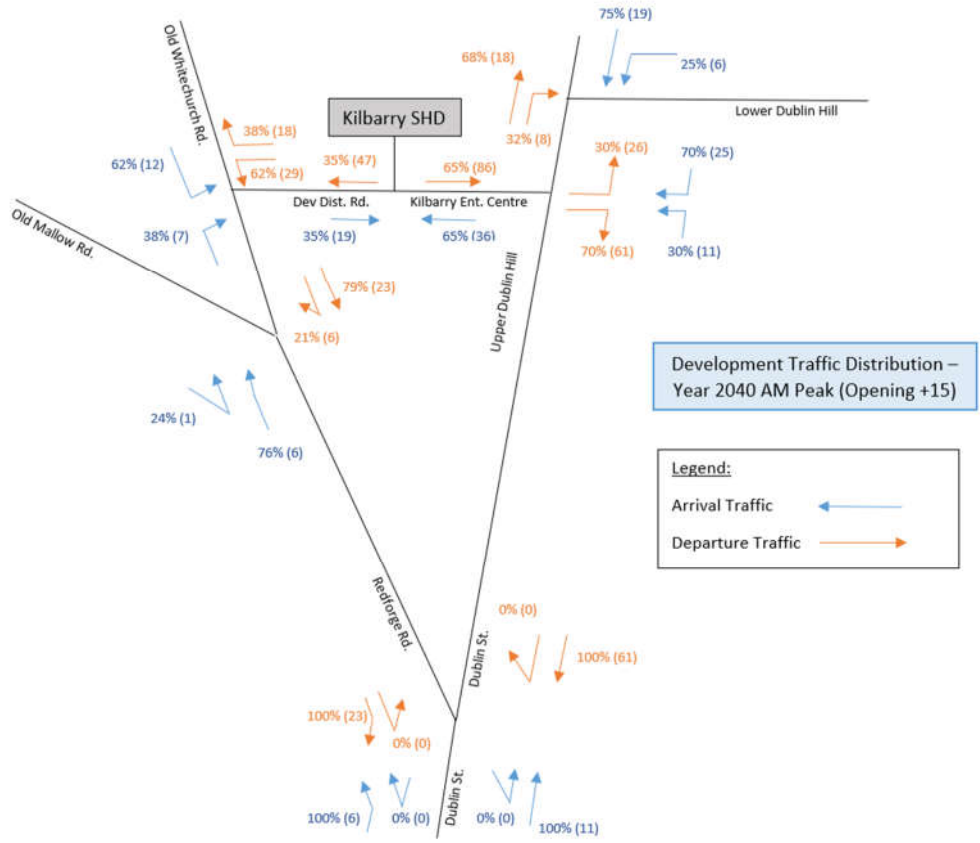


Figure 8.9: Development Traffic Distribution - Year 2040 AM Peak

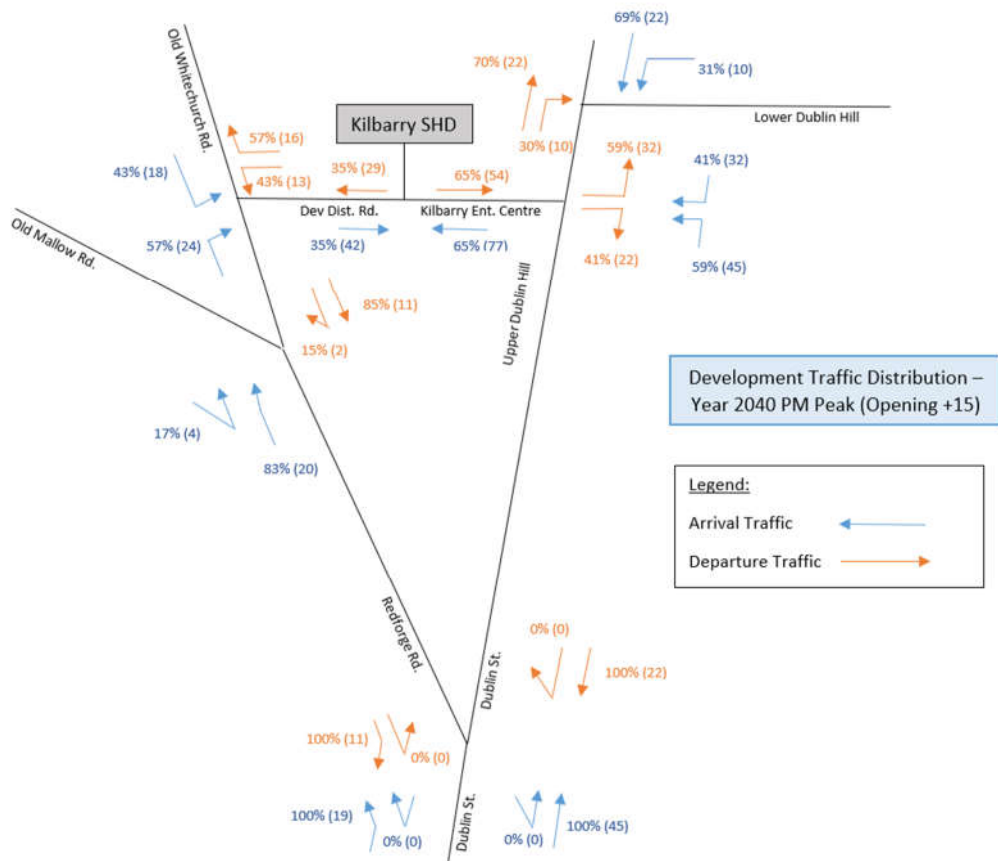


Figure 8.10: Development Traffic Distribution - Year 2040 PM Peak

8.1.3 The distribution of development traffic was used to create traffic flow matrices for each Junction when the development is in operation. Traffic flow matrices were developed for each of the following scenarios:

- 2023 AM/PM With/Without Phase 1
- 2024 Am/PM With/Without Phases 1 & 2
- 2025 Am/PM With/Without Phases 1, 2, & 3 (full development)
- 2030 AM/PM With/Without Dev +5 years
- 2040 AM/PM With/Without Dev +15 years

8.1.4 Junction 1: Access Road junction with Old Whitechurch Road

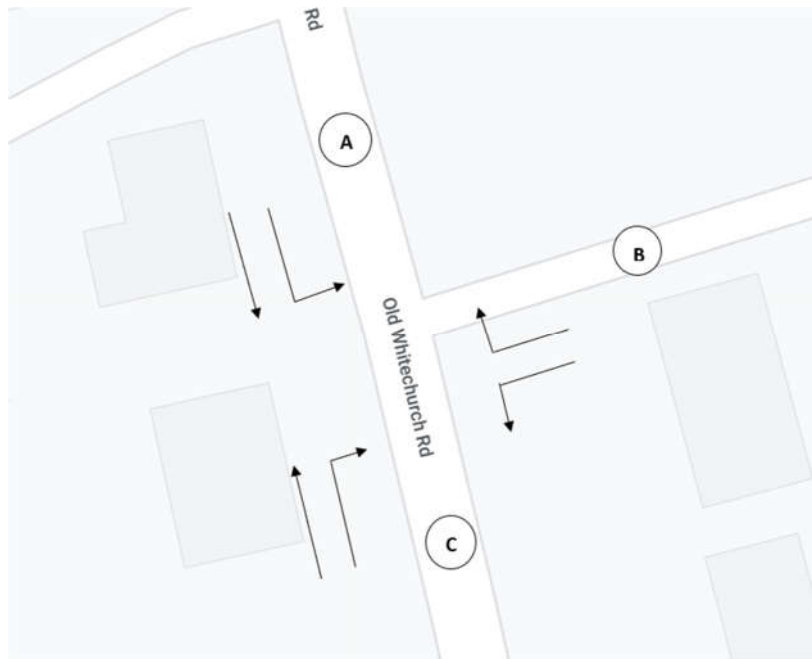


Figure 8.11: Junction 1 Arm Designation

AM

		Destination			
		A	B	C	Tot
Origin	A	0	0	34	34
	B	0	0	0	0
	C	21	0	0	21
	Total	21	0	34	55

PM

		Destination			
		A	B	C	Tot
Origin	A	0	0	40	40
	B	0	0	0	0
	C	52	0	0	52
	Total	52	0	40	92

Table 8.1 Junction 1: 2022 Existing AM/PM Peak Hour Traffic Movements

AM

		Destination			
		A	B	C	Tot
Origin	A	0	0	35	35
	B	0	0	0	0
	C	21	0	0	21
	Total	21	0	35	56

PM

		Destination			
		A	B	C	Tot
Origin	A	0	0	41	41
	B	0	0	0	0
	C	53	0	0	53
	Total	53	0	41	94

Table 8.2 Junction 1: 2023 Without Development AM/PM Peak Hour Traffic Movements

AM

		Destination			
		A	B	C	Tot
Origin	A	0	23	35	58
	B	30	0	49	80
	C	21	14	0	36
	Total	52	38	84	173

PM

		Destination			
		A	B	C	Tot
Origin	A	0	29	41	70
	B	30	0	23	53
	C	53	38	0	91
	Total	83	67	64	214

Table 8.3 Junction 1: 2023 With Development AM/PM Peak Hour Traffic Movements

AM

		Destination			
		A	B	C	Tot
Origin	A	0	0	35	35
	B	0	0	0	0
	C	22	0	0	22
	Total	22	0	35	57

PM

		Destination			
		A	B	C	Tot
Origin	A	0	0	41	41
	B	0	0	0	0
	C	54	0	0	54
	Total	54	0	41	95

Table 8.4 Junction 1: 2024 Without Development AM/PM Peak Hour Traffic Movements

AM

		Destination			
		A	B	C	Tot
Origin	A	0	32	35	67
	B	47	0	76	123
	C	22	19	0	41
	Total	69	51	111	231

PM

		Destination			
		A	B	C	Tot
Origin	A	0	47	41	89
	B	44	0	33	77
	C	54	62	0	115
	Total	97	109	75	281

Table 8.5 Junction 1: 2024 With Development AM/PM Peak Hour Traffic Movements

AM

		Destination			
		A	B	C	Tot
Origin	A	0	0	36	36
	B	0	0	0	0
	C	22	0	0	22
	Total	22	0	36	58

PM

		Destination			
		A	B	C	Tot
Origin	A	0	0	42	42
	B	0	0	0	0
	C	55	0	0	55
	Total	55	0	42	97

Table 8.6 Junction 1: 2025 Without Development AM/PM Peak Hour Traffic Movements

AM

		Destination			
		A	B	C	Tot
Origin	A	0	42	36	78
	B	66	0	107	174
	C	22	26	0	48
	Total	88	68	143	299

PM

		Destination			
		A	B	C	Tot
Origin	A	0	68	42	110
	B	59	0	45	104
	C	55	88	0	143
	Total	114	156	87	357

Table 8.7 Junction 1: 2025 With Development AM/PM Peak Hour Traffic Movements

AM

		Destination			
		A	B	C	Tot
Origin	A	0	0	39	39
	B	0	0	0	0
	C	24	0	0	24
	Total	24	0	39	63

PM

		Destination			
		A	B	C	Tot
Origin	A	0	0	46	46
	B	0	0	0	0
	C	60	0	0	60
	Total	60	0	46	106

Table 8.8 Junction 1: 2030 Without Development AM/PM Peak Hour Traffic Movements

		Destination			
		A	B	C	Tot
Origin	A	0	15	39	54
	B	23	0	38	61
	C	24	9	0	33
	Total	47	24	77	148

		Destination			
		A	B	C	Tot
Origin	A	0	24	46	70
	B	21	0	16	37
	C	60	31	0	90
	Total	80	55	62	197

Table 8.9 Junction 1: 2030 With Development AM/PM Peak Hour Traffic Movements

		Destination			
		A	B	C	Tot
Origin	A	0	0	42	42
	B	0	0	0	0
	C	26	0	0	26
	Total	26	0	42	68

		Destination			
		A	B	C	Tot
Origin	A	0	0	50	50
	B	0	0	0	0
	C	65	0	0	65
	Total	65	0	50	114

Table 8.10 Junction 1: 2040 Without Development AM/PM Peak Hour Traffic Movements

		Destination			
		A	B	C	Tot
Origin	A	0	12	42	54
	B	18	0	29	47
	C	26	7	0	33
	Total	44	19	71	134

		Destination			
		A	B	C	Tot
Origin	A	0	18	50	68
	B	16	0	13	29
	C	65	24	0	88
	Total	81	42	62	185

Table 8.11 Junction 1: 2040 With Development AM/PM Peak Hour Traffic Movements

8.1.5 Junction 2: Old Whitechurch Rd./ Old Mallow Rd.

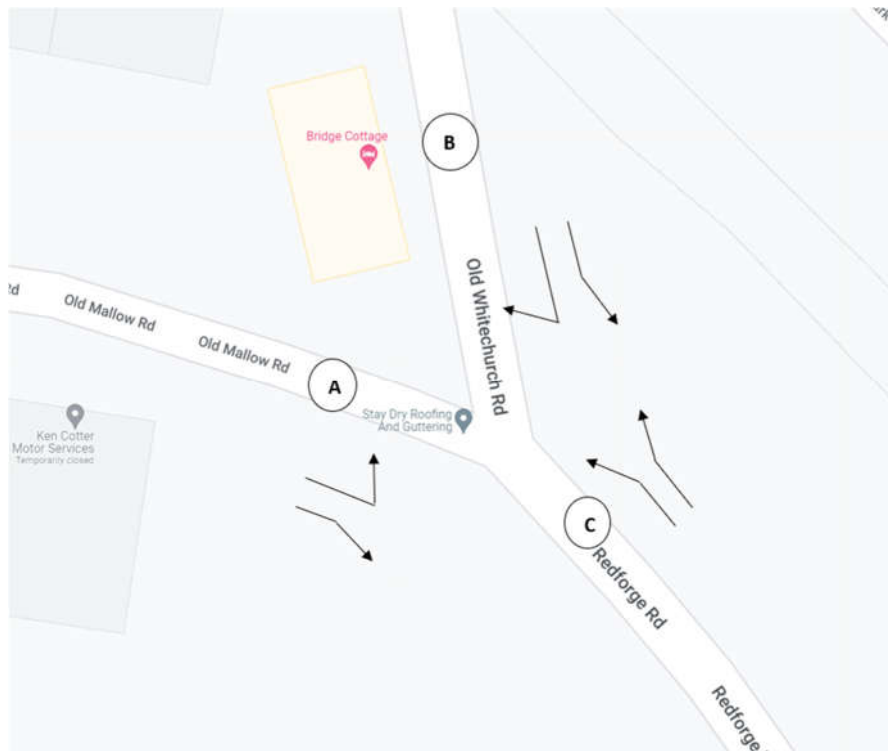


Figure 8.12: Junction 2 Arm Designation

AM

		Destination			
		A	B	C	Tot
Origin	A	0	5	280	285
	B	7	0	27	34
	C	230	16	0	246
	Total	237	21	307	565

PM

		Destination			
		A	B	C	Tot
Origin	A	0	9	248	257
	B	6	0	34	40
	C	387	43	0	430
	Total	393	52	282	727

Table 8.12 Junction 2: 2022 Existing AM/PM Peak Hour Traffic Movements

AM

		Destination			
		A	B	C	Tot
Origin	A	0	5	285	290
	B	7	0	27	35
	C	234	16	0	250
	Total	241	21	312	575

PM

		Destination			
		A	B	C	Tot
Origin	A	0	9	252	261
	B	6	0	35	41
	C	394	44	0	437
	Total	400	53	287	740

Table 8.13 Junction 2: 2023 Without Development AM/PM Peak Hour Traffic Movements

AM

		Destination			
		A	B	C	Tot
Origin	A	0	9	285	293
	B	17	0	67	84
	C	234	27	0	261
	Total	251	36	351	638

PM

		Destination			
		A	B	C	Tot
Origin	A	0	16	252	268
	B	10	0	54	64
	C	394	75	0	469
	Total	403	91	307	800

Table 8.14 Junction 2: 2023 With Development AM/PM Peak Hour Traffic Movements

AM

		Destination			
		A	B	C	Tot
Origin	A	0	5	290	295
	B	7	0	28	35
	C	238	17	0	255
	Total	245	22	318	585

PM

		Destination			
		A	B	C	Tot
Origin	A	0	9	257	266
	B	6	0	35	41
	C	400	44	0	445
	Total	407	54	292	752

Table 8.15 Junction 2: 2024 Without Development AM/PM Peak Hour Traffic Movements

AM

		Destination			
		A	B	C	Tot
Origin	A	0	10	290	300
	B	23	0	88	111
	C	238	31	0	269
	Total	261	41	378	680

PM

		Destination			
		A	B	C	Tot
Origin	A	0	20	257	277
	B	11	0	64	75
	C	400	95	0	496
	Total	412	115	320	847

Table 8.16 Junction 2: 2024 With Development AM/PM Peak Hour Traffic Movements

AM

		Destination			
		A	B	C	Tot
Origin	A	0	5	295	300
	B	7	0	28	36
	C	242	17	0	259
	Total	249	22	323	595

PM

		Destination			
		A	B	C	Tot
Origin	A	0	9	261	271
	B	6	0	36	42
	C	407	45	0	453
	Total	414	55	297	765

Table 8.17 Junction 2: 2025 Without Development AM/PM Peak Hour Traffic Movements

AM

		Destination			
		A	B	C	Tot
Origin	A	0	11	295	306
	B	29	0	114	143
	C	242	37	0	279
	Total	272	48	408	728

PM

		Destination			
		A	B	C	Tot
Origin	A	0	25	261	286
	B	13	0	74	87
	C	407	118	0	525
	Total	421	143	335	899

Table 8.18 Junction 2: 2025 With Development AM/PM Peak Hour Traffic Movements

AM

		Destination			
		A	B	C	Tot
Origin	A	0	6	321	327
	B	8	0	31	39
	C	264	18	0	282
	Total	272	24	352	648

PM

		Destination			
		A	B	C	Tot
Origin	A	0	10	284	295
	B	7	0	39	46
	C	444	49	0	493
	Total	451	60	323	834

Table 8.19 Junction 2: 2030 Without Development AM/PM Peak Hour Traffic Movements

AM

		Destination			
		A	B	C	Tot
Origin	A	0	8	321	329
	B	16	0	61	77
	C	264	25	0	289
	Total	280	33	382	695

PM

		Destination			
		A	B	C	Tot
Origin	A	0	16	284	300
	B	9	0	53	62
	C	444	75	0	519
	Total	453	90	337	881

Table 8.20 Junction 2: 2030 With Development AM/PM Peak Hour Traffic Movements

AM

		Destination			
		A	B	C	Tot
Origin	A	0	6	348	354
	B	9	0	34	42
	C	286	20	0	306
	Total	295	26	382	702

PM

		Destination			
		A	B	C	Tot
Origin	A	0	11	308	319
	B	7	0	42	50
	C	481	53	0	534
	Total	488	65	350	903

Table 8.21 Junction 2: 2040 Without Development AM/PM Peak Hour Traffic Movements

AM

		Destination			
		A	B	C	Tot
Origin	A	0	8	348	356
	B	15	0	56	71
	C	286	25	0	311
	Total	300	33	404	738

PM

		Destination			
		A	B	C	Tot
Origin	A	0	15	308	323
	B	9	0	53	62
	C	481	73	0	554
	Total	490	88	361	940

Table 8.22 Junction 1: 2040 With Development AM/PM Peak Hour Traffic Movements

8.1.6 Junction 3: Redforge Rd./ Dublin Hill

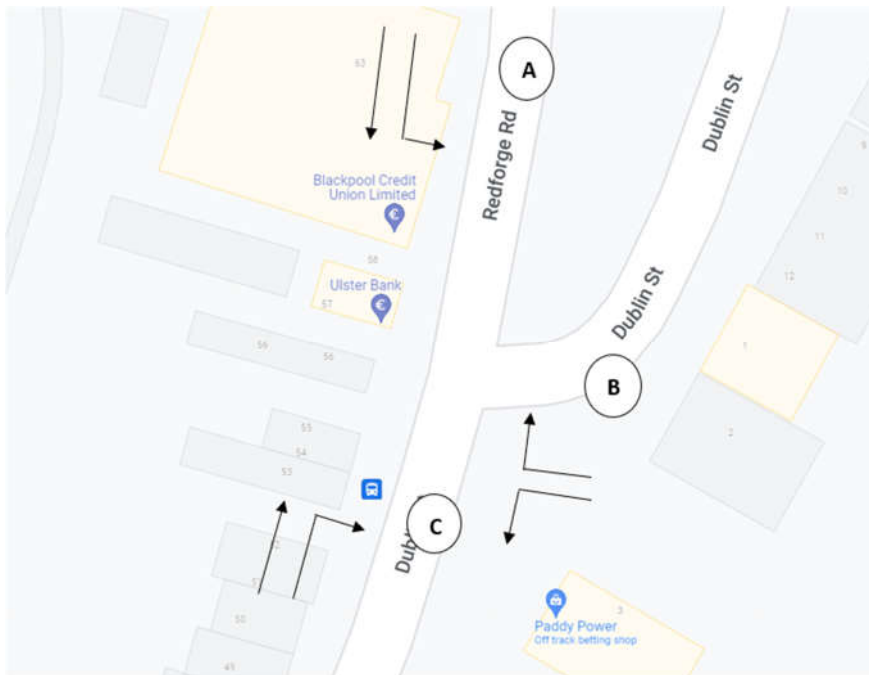


Figure 8.13: Junction 3 Arm Designation

		Destination			
		A	B	C	Tot
Origin	A	0	194	170	364
	B	367	0	438	805
	C	168	159	0	327
	Total	535	353	608	1496

		Destination			
		A	B	C	Tot
Origin	A	0	311	209	520
	B	281	0	237	518
	C	217	224	0	441
	Total	498	535	446	1479

Table 8.23 Junction 3: 2022 Existing AM/PM Peak Hour Traffic Movements

		Destination			
		A	B	C	Tot
Origin	A	0	197	173	370
	B	373	0	446	819
	C	171	162	0	333
	Total	544	359	619	1522

		Destination			
		A	B	C	Tot
Origin	A	0	316	213	529
	B	286	0	241	527
	C	221	228	0	449
	Total	507	544	454	1505

Table 8.24 Junction 3: 2023 Without Development AM/PM Peak Hour Traffic Movements

		Destination			
		A	B	C	Tot
Origin	A	0	218	191	409
	B	381	0	446	826
	C	174	162	0	336
	Total	555	380	637	1572

		Destination			
		A	B	C	Tot
Origin	A	0	328	221	549
	B	303	0	241	545
	C	234	228	0	462
	Total	538	556	462	1555

Table 8.25 Junction 3: 2023 With Development AM/PM Peak Hour Traffic Movements

AM

		Destination			
		A	B	C	Tot
Origin	A	0	201	176	377
	B	380	0	453	833
	C	174	165	0	338
	Total	554	365	629	1548

PM

		Destination			
		A	B	C	Tot
Origin	A	0	322	216	538
	B	291	0	245	536
	C	225	232	0	456
	Total	515	554	462	1531

Table 8.26 Junction 3: 2024 Without Development AM/PM Peak Hour Traffic Movements

AM

		Destination			
		A	B	C	Tot
Origin	A	0	233	204	437
	B	390	0	453	843
	C	179	165	0	343
	Total	569	397	657	1623

PM

		Destination			
		A	B	C	Tot
Origin	A	0	339	228	567
	B	320	0	245	565
	C	247	232	0	479
	Total	566	571	473	1610

Table 8.27 Junction 3: 2024 With Development AM/PM Peak Hour Traffic Movements

AM

		Destination			
		A	B	C	Tot
Origin	A	0	204	179	383
	B	386	0	461	847
	C	177	167	0	344
	Total	563	372	640	1575

PM

		Destination			
		A	B	C	Tot
Origin	A	0	327	220	547
	B	296	0	249	545
	C	228	236	0	464
	Total	524	563	470	1557

Table 8.28 Junction 3: 2025 Without Development AM/PM Peak Hour Traffic Movements

AM

		Destination			
		A	B	C	Tot
Origin	A	0	250	219	468
	B	400	0	461	861
	C	183	167	0	350
	Total	583	417	680	1680

PM

		Destination			
		A	B	C	Tot
Origin	A	0	350	236	586
	B	337	0	249	586
	C	260	236	0	496
	Total	597	586	485	1668

Table 8.29 Junction 3: 2025 With Development AM/PM Peak Hour Traffic Movements

AM

		Destination			
		A	B	C	Tot
Origin	A	0	223	195	418
	B	421	0	502	923
	C	193	182	0	375
	Total	614	405	697	1716

PM

		Destination			
		A	B	C	Tot
Origin	A	0	357	240	596
	B	322	0	272	594
	C	249	257	0	506
	Total	571	614	512	1696

Table 8.30 Junction 3: 2030 Without Development AM/PM Peak Hour Traffic Movements

AM

		Destination			
		A	B	C	Tot
Origin	A	0	223	225	447
	B	421	0	582	1003
	C	200	195	0	395
	Total	621	418	807	1845

PM

		Destination			
		A	B	C	Tot
Origin	A	0	357	253	610
	B	322	0	300	622
	C	274	316	0	591
	Total	597	673	553	1823

Table 8.31 Junction 3: 2030 With Development AM/PM Peak Hour Traffic Movements

		Destination			
		A	B	C	Tot
Origin	A	0	241	211	452
	B	456	0	544	1000
	C	209	198	0	406
	Total	665	439	756	1859

		Destination			
		A	B	C	Tot
Origin	A	0	386	260	646
	B	349	0	295	644
	C	270	278	0	548
	Total	619	665	554	1838

Table 8.32 Junction 3: 2040 Without Development AM/PM Peak Hour Traffic Movements

		Destination			
		A	B	C	Tot
Origin	A	0	241	234	475
	B	456	0	605	1061
	C	214	208	0	422
	Total	670	449	840	1959

		Destination			
		A	B	C	Tot
Origin	A	0	386	270	657
	B	349	0	317	666
	C	289	324	0	613
	Total	638	710	587	1936

Table 8.33 Junction 1: 2040 With Development AM/PM Peak Hour Traffic Movements

8.1.7 Junction 4: Kilbarry Enterprise Centre Rd./ Upper Dublin Hill

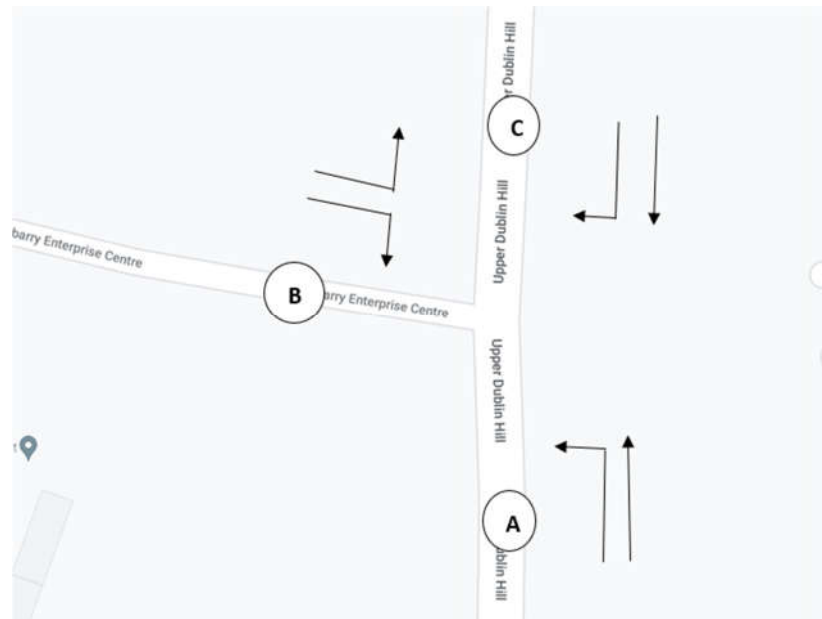


Figure 8.14: Junction 4 Arm Designation

		Destination			
		A	B	C	Tot
Origin	A	0	3	269	272
	B	6	0	3	9
	C	639	6	0	645
	Total	645	9	272	926

		Destination			
		A	B	C	Tot
Origin	A	0	5	482	487
	B	3	0	5	8
	C	340	3	0	343
	Total	343	8	487	839

Table 8.34 Junction 4: 2022 Existing AM/PM Peak Hour Traffic Movements

AM

		Destination			
		A	B	C	Tot
Origin	A	0	3	274	276
	B	7	0	3	9
	C	650	7	0	657
Total		657	9	276	942

PM

		Destination			
		A	B	C	Tot
Origin	A	0	5	490	495
	B	3	0	5	8
	C	346	3	0	349
Total		349	8	495	853

Table 8.35 Junction 4: 2023 Without Development AM/PM Peak Hour Traffic Movements

AM

		Destination			
		A	B	C	Tot
Origin	A	0	3	294	297
	B	7	0	3	9
	C	658	7	0	664
Total		664	9	297	971

PM

		Destination			
		A	B	C	Tot
Origin	A	0	5	502	507
	B	3	0	5	8
	C	364	3	0	367
Total		367	8	507	882

Table 8.36 Junction 4: 2023 With Development AM/PM Peak Hour Traffic Movements

AM

		Destination			
		A	B	C	Tot
Origin	A	0	3	278	281
	B	7	0	3	9
	C	661	7	0	668
Total		668	9	281	959

PM

		Destination			
		A	B	C	Tot
Origin	A	0	5	499	504
	B	4	0	5	9
	C	352	4	0	355
Total		355	9	504	868

Table 8.37 Junction 4: 2024 Without Development AM/PM Peak Hour Traffic Movements

AM

		Destination			
		A	B	C	Tot
Origin	A	0	3	310	313
	B	7	0	3	9
	C	671	7	0	678
Total		678	9	313	1001

PM

		Destination			
		A	B	C	Tot
Origin	A	0	5	516	521
	B	4	0	5	9
	C	381	4	0	384
Total		384	9	521	914

Table 8.38 Junction 4: 2024 With Development AM/PM Peak Hour Traffic Movements

AM

		Destination			
		A	B	C	Tot
Origin	A	0	3	283	286
	B	7	0	3	10
	C	673	7	0	679
Total		679	10	286	975

PM

		Destination			
		A	B	C	Tot
Origin	A	0	5	507	513
	B	4	0	5	9
	C	358	4	0	362
Total		362	9	513	883

Table 8.39 Junction 4: 2025 Without Development AM/PM Peak Hour Traffic Movements

AM

		Destination			
		A	B	C	Tot
Origin	A	0	3	317	320
	B	7	0	3	10
	C	686	7	0	693
Total		693	10	320	1022

PM

		Destination			
		A	B	C	Tot
Origin	A	0	5	530	536
	B	4	0	5	9
	C	399	4	0	403
Total		403	9	536	947

Table 8.40 Junction 4: 2025 With Development AM/PM Peak Hour Traffic Movements

AM

		Destination			
		A	B	C	Tot
Origin	A	0	3	309	312
	B	7	0	3	11
	C	733	7	0	740
Total		740	11	312	1063

PM

		Destination			
		A	B	C	Tot
Origin	A	0	6	553	558
	B	4	0	6	10
	C	390	4	0	394
Total		394	10	558	962

Table 8.41 Junction 4: 2030 Without Development AM/PM Peak Hour Traffic Movements

AM

		Destination			
		A	B	C	Tot
Origin	A	0	16	309	325
	B	87	0	37	123
	C	733	38	0	771
Total		820	55	345	1219

PM

		Destination			
		A	B	C	Tot
Origin	A	0	65	553	618
	B	32	0	45	77
	C	390	46	0	436
Total		422	111	598	1131

Table 8.42 Junction 4: 2030 With Development AM/PM Peak Hour Traffic Movements

AM

		Destination			
		A	B	C	Tot
Origin	A	0	3	334	338
	B	8	0	3	11
	C	794	8	0	802
Total		802	11	338	1151

PM

		Destination			
		A	B	C	Tot
Origin	A	0	6	599	605
	B	4	0	6	10
	C	423	4	0	427
Total		427	10	605	1042

Table 8.43 Junction 4: 2040 Without Development AM/PM Peak Hour Traffic Movements

AM

		Destination			
		A	B	C	Tot
Origin	A	0	14	334	348
	B	69	0	29	98
	C	794	33	0	827
Total		863	47	363	1273

PM

		Destination			
		A	B	C	Tot
Origin	A	0	51	599	650
	B	27	0	38	64
	C	423	36	0	459
Total		449	88	637	1173

Table 8.44 Junction 4: 2040 With Development AM/PM Peak Hour Traffic Movements

8.1.8 Junction 5: Upper Dublin Hill/ Lower Dublin Hill

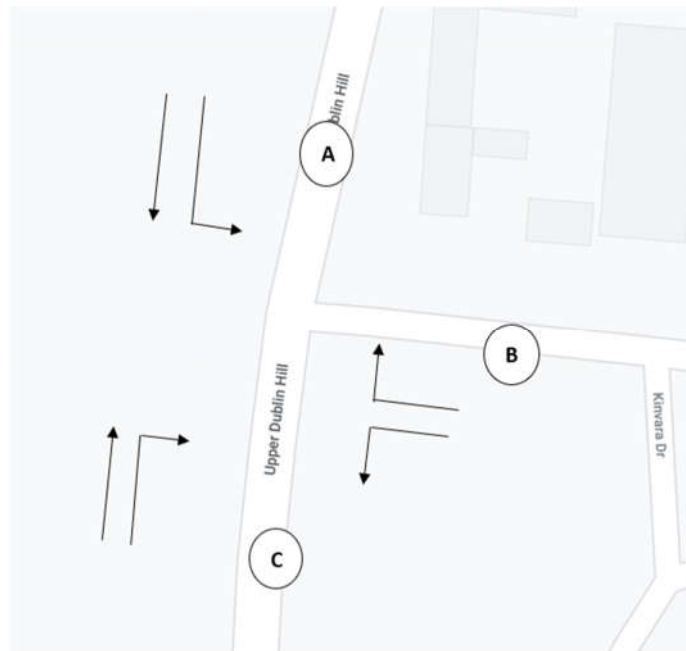


Figure 8.15: Junction 5 Arm Designation

		Destination			
		A	B	C	Tot
Origin	A	0	194	486	680
	B	135	0	159	294
	C	185	87	0	272
	Total	320	281	645	1246

		Destination			
		A	B	C	Tot
Origin	A	0	142	235	377
	B	184	0	108	292
	C	340	147	0	487
	Total	524	289	343	1156

Table 8.45 Junction 5: 2022 Existing AM/PM Peak Hour Traffic Movements

		Destination			
		A	B	C	Tot
Origin	A	0	197	494	692
	B	137	0	162	299
	C	188	89	0	277
	Total	326	286	656	1268

		Destination			
		A	B	C	Tot
Origin	A	0	144	239	384
	B	187	0	110	297
	C	346	150	0	495
	Total	533	294	349	1176

Table 8.46 Junction 5: 2023 Without Development AM/PM Peak Hour Traffic Movements

		Destination			
		A	B	C	Tot
Origin	A	0	197	500	697
	B	137	0	164	301
	C	202	95	0	298
	Total	340	293	664	1296

		Destination			
		A	B	C	Tot
Origin	A	0	144	251	396
	B	187	0	115	303
	C	354	153	0	507
	Total	541	298	367	1205

Table 8.47 Junction 5: 2023 With Development AM/PM Peak Hour Traffic Movements

AM

		Destination			
		A	B	C	Tot
Origin	A	0	201	503	704
	B	140	0	165	304
	C	191	90	0	281
	Total	331	291	667	1289

PM

		Destination			
		A	B	C	Tot
Origin	A	0	147	243	390
	B	190	0	112	302
	C	352	152	0	504
	Total	542	299	355	1196

Table 8.48 Junction 5: 2024 Without Development AM/PM Peak Hour Traffic Movements

AM

		Destination			
		A	B	C	Tot
Origin	A	0	201	511	711
	B	140	0	167	307
	C	213	100	0	314
	Total	353	301	678	1332

PM

		Destination			
		A	B	C	Tot
Origin	A	0	147	263	410
	B	190	0	121	311
	C	364	157	0	521
	Total	554	304	384	1242

Table 8.49 Junction 5: 2024 With Development AM/PM Peak Hour Traffic Movements

AM

		Destination			
		A	B	C	Tot
Origin	A	0	204	512	716
	B	142	0	167	310
	C	195	92	0	286
	Total	337	296	679	1312

PM

		Destination			
		A	B	C	Tot
Origin	A	0	149	247	397
	B	194	0	114	307
	C	358	155	0	513
	Total	552	304	361	1217

Table 8.50 Junction 5: 2025 Without Development AM/PM Peak Hour Traffic Movements

AM

		Destination			
		A	B	C	Tot
Origin	A	0	204	522	726
	B	142	0	171	313
	C	218	102	0	320
	Total	360	307	693	1359

PM

		Destination			
		A	B	C	Tot
Origin	A	0	149	276	425
	B	194	0	127	320
	C	374	162	0	536
	Total	568	311	402	1281

Table 8.51 Junction 5: 2025 With Development AM/PM Peak Hour Traffic Movements

AM

		Destination			
		A	B	C	Tot
Origin	A	0	223	557	780
	B	155	0	182	337
	C	212	100	0	312
	Total	367	322	740	1429

PM

		Destination			
		A	B	C	Tot
Origin	A	0	163	270	432
	B	211	0	124	335
	C	390	169	0	559
	Total	601	331	393	1326

Table 8.52 Junction 5: 2030 Without Development AM/PM Peak Hour Traffic Movements

AM

		Destination			
		A	B	C	Tot
Origin	A	0	223	581	803
	B	155	0	190	345
	C	235	110	0	345
	Total	390	333	771	1494

PM

		Destination			
		A	B	C	Tot
Origin	A	0	163	298	461
	B	211	0	137	348
	C	418	181	0	598
	Total	629	343	435	1408

Table 8.53 Junction 5: 2030 With Development AM/PM Peak Hour Traffic Movements

		Destination			
		A	B	C	Tot
Origin	A	0	241	604	845
	B	168	0	198	365
	C	230	108	0	338
	Total	398	349	802	1548

		Destination			
		A	B	C	Tot
Origin	A	0	176	292	468
	B	229	0	134	363
	C	423	183	0	605
	Total	651	359	426	1437

Table 8.54 Junction 5: 2040 Without Development AM/PM Peak Hour Traffic Movements

		Destination			
		A	B	C	Tot
Origin	A	0	241	623	864
	B	168	0	204	372
	C	247	116	0	364
	Total	415	357	827	1599

		Destination			
		A	B	C	Tot
Origin	A	0	176	314	490
	B	229	0	144	373
	C	445	192	0	637
	Total	673	369	458	1500

Table 8.55 Junction 5: 2040 With Development AM/PM Peak Hour Traffic Movements

9.0 NETWORK MODELLING RESULTS

9.1 INTRODUCTION

- 9.1.1 This section presents the results of the traffic modelling of the five identified junctions presented both with/without development in place for both morning and evening peaks, for each phase of the development as it becomes occupied. The current year (2022) results are based on traffic surveys completed on 5th April 2022 and are representative of how each junction currently operates during peak periods. The complete results sheets of the generated models are provided as an appendix (Appendix A).
- 9.1.2 Of the five identified junctions, the junctions identified as 1,4, and 5, are priority T-junctions with the remaining two, identified as junctions 2 and 3, being signalised. Traffic Signal controlled junctions are analysed using LinSig Version 3.3 and priority-controlled junctions are analysed using Junctions 9 Software (PICADY).
- 9.1.3 The Junctions 9: PICADY modelling software produces an RFC % (Ratio of Flow to Capacity), a Delay figure measured in seconds and a LOS (Level of Service) which are used to compare the effects the development will have on the junction being modelled. An RFC of 85% on a roundabout junction implies that the junction has reached capacity but is still operational with delay incurred. The following table describes the different LOS and the implications for the junction being assessed.

Level of Service A	Free-Flow
Level of Service B	Reasonably Free-Flow (no delay incurred)
Level of Service C	Stable Operation (busy but operational with acceptable delay incurred)
Level of Service D	Borderline Unstable (Junctions reaching capacity – but still operational-delay incurred)
Level of Service E	Extremely Unstable (Junctions at capacity or over, any incident will cause a grid-lock situation- significant delay incurred)
Level of Service F	Breakdown (Junctions over capacity, unacceptable delay traffic at a standstill)

Table 9.1 Level of Service

- 9.1.4 The LinSig modelling software produces a PRC % (Practical Reserve Capacity) and a Delay figure which are used to compare the effects the development will have on the junction being modelled. A PRC of 10% implies that the junction has reached capacity but is still operational with delay incurred. The delay figure produced (pcuHr) is a measure of the overall delay incurred on all arms of the junction and is based on the Demand Flow per arm multiplied by the Average Delay per PCU.

9.2 Junction 1: Access Road junction with Old Whitechurch Road

9.2.1 The Junctions 9: PICADY results for the junction both with/without development are presented in **Table 9.2** below.

9.2.2 The results indicate that the junction currently operates within capacity for both AM & PM peak at a Level of Service A – Free Flow. For the purposes of modelling the “Without Development” future year scenarios, it is assumed that no traffic will travel via the existing minor road which would serve as the development access road when the development is occupied.

	AM							PM						
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Junction LOS	Network Residual Capacity	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Junction LOS	Network Residual Capacity
2022														
Stream B-AC	D1	0.0	0.00	0.00	A	A	900 %	D2	0.0	0.00	0.00	A	A	900 %
Stream C-AB		0.0	0.00	0.00	A				0.0	0.00	0.00	A		
2023 Without Development														
Stream B-AC	D3	0.0	0.00	0.00	A	A	900 %	D4	0.0	0.00	0.00	A	A	900 %
Stream C-AB		0.0	0.00	0.00	A				0.0	0.00	0.00	A		
2023 With Development														
Stream B-AC	D5	0.2	8.15	0.16	A	A	335 %	D6	0.1	8.27	0.12	A	A	378 %
Stream C-AB		0.0	6.63	0.03	A				[Stream B-AC]	0.1	6.74	0.08		
2024 Without Development														
Stream B-AC	D7	0.0	0.00	0.00	A	A	900 %	D8	0.0	0.00	0.00	A	A	900 %
Stream C-AB		0.0	0.00	0.00	A				0.0	0.00	0.00	A		
2024 With Development														
Stream B-AC	D9	0.3	9.20	0.26	A	A	192 %	D10	0.2	9.00	0.17	A	A	242 %
Stream C-AB		0.0	6.72	0.04	A				[Stream B-AC]	0.2	7.19	0.13		
2025 Without Development														
Stream B-AC	D11	0.0	0.00	0.00	A	A	900 %	D12	0.0	0.00	0.00	A	A	900 %
Stream C-AB		0.0	0.00	0.00	A				0.0	0.00	0.00	A		
2025 With Development														
Stream B-AC	D13	0.6	10.79	0.36	B	A	112 %	D14	0.3	9.95	0.24	A	A	160 %
Stream C-AB		0.1	6.86	0.05	A				[Stream B-AC]	0.3	7.76	0.19		
2030 Without Development														
Stream B-AC	D15	0.0	0.00	0.00	A	A	900 %	D16	0.0	0.00	0.00	A	A	900 %
Stream C-AB		0.0	0.00	0.00	A				0.0	0.00	0.00	A		
2030 With Development														
Stream B-AC	D17	0.1	7.78	0.13	A	A	442 %	D18	0.1	7.95	0.08	A	A	494 %
Stream C-AB		0.0	6.52	0.02	A				[Stream B-AC]	0.1	6.58	0.07		
2040 Without Development														
Stream B-AC	D19	0.0	0.00	0.00	A	A	900 %	D20	0.0	0.00	0.00	A	A	900 %
Stream C-AB		0.0	0.00	0.00	A				0.0	0.00	0.00	A		
2040 With Development														
Stream B-AC	D21	0.1	7.55	0.10	A	A	562 %	D22	0.1	7.75	0.06	A	A	590 %
Stream C-AB		0.0	6.48	0.01	A				[Stream B-AC]	0.1	6.43	0.05		

Table 9.2: Junction 1 – PICADY Results

9.2.3 Future year results, with the development traffic included, show an increasing RFC% (Ratio of Flow to Capacity) as the different phases are introduced. A maximum AM and PM RFC% result, of 36% and 24% respectively, is shown in 2025 when all three phases of the development are added. The RFC% can be seen to decrease in the future year scenarios 2030 and 2040 as traffic is siphoned away from this junction and onto the Kilbarry Enterprise Centre Rd./ Upper Dublin Hill (Junction 4). The junction operates with a Level of Service A – Free Flow for all modelled scenarios.

9.3 Junction 2: Old Whitechurch Rd./ Old Mallow Rd.

9.3.1 The LinSig results for Junction 2 with and without development traffic are presented in **Table 9.3** below.

9.3.2 The results indicate that the junction will operate within capacity during both AM & PM peak for all future years both with and without development traffic.

Junction 2: Old Whitechurch Rd./ Old Mallow Rd.		No Development			With Development		
		Cycle Time (s)	PRC (%)	Delay (pcu/hr)	Cycle Time (s)	PRC (%)	Delay (pcu/hr)
2022	AM	90	162.1	3.56	90	N/A	N/A
	PM	90	103.9	4.59	90	N/A	N/A
2023	AM	90	157.9	3.63	90	153.6	4.05
	PM	90	100.7	4.39	90	89.0	5.08
2024	AM	90	152.9	3.71	90	147.2	4.34
	PM	90	97.0	4.79	90	81.9	5.40
2025	AM	90	149.0	3.78	90	138.3	4.69
	PM	90	94.0	4.89	90	72.7	5.79
2030	AM	90	128.7	4.21	90	126.6	4.51
	PM	90	78.2	5.50	90	70.8	5.84
2040	AM	90	110.7	4.66	90	109.4	4.88
	PM	90	64.2	6.15	90	60.0	6.43

Table 9.3: Junction 2 – LinSig Results

9.4 Junction 3: Redforge Rd./ Dublin Hill

9.4.1 The LinSig results for Junction 3 both with and without development traffic are presented in **Table 9.4** below.

9.4.2 The results indicate that the junction will reach capacity in 2025 during the PM peak with no additional development traffic applied. When development traffic is included, the junction instead reaches capacity in 2024 during the PM Peak and is shown to exceed capacity during the PM Peak in 2025. The junction can be seen to continue degrading and exceeds capacity both with and without development traffic for the design years 2030 and 2040.

Junction 3: Redforge Rd./ Dublin St.		No Development			With Development		
		Cycle Time (s)	PRC (%)	Delay (pcu/hr)	Cycle Time (s)	PRC (%)	Delay (pcu/hr)
2022	AM	90	43.1	12.60	90	N/A	N/A
	PM	90	19.7	15.00	90	N/A	N/A
2023	AM	90	40.5	13.10	90	32.9	14.00
	PM	90	16.5	15.93	90	10.5	17.72
2024	AM	90	36.8	13.52	90	25.0	15.01
	PM	90	13.3	16.67	90	4.2	20.75
2025	AM	90	32.6	13.96	90	17.2	16.34
	PM	90	9.9	17.81	90	-1.2	25.58
2030	AM	90	20.1	16.67	90	11.3	19.06
	PM	90	-2.1	25.92	90	-12.6	50.46
2040	AM	90	6.9	20.52	90	2.8	23.23
	PM	90	-14.8	58.31	90	-20.8	87.70

Table 9.4 Junction 3: LinSig results

9.5 Junction 4: Kilbarry Enterprise Centre Rd./ Upper Dublin Hill

9.5.1 The PICADY results for Junction 4 both with and without development traffic are presented in **Table 9.5** below.

9.5.2 The results indicate that the junction currently operates within capacity for both AM & PM peak at a Level of Service A – Free Flow.

9.5.3 Future year results, with and without the development traffic included, show a gradual increase in RFC% (Ratio of Flow to Capacity) up to design year 2040. Design years 2030 & 2040 include a portion of the development traffic accessing Upper Dublin Hill via the Kilbarry Enterprise Centre Rd. link. It is not anticipated that the connection between the Development Distributor Road and the Kilbarry Enterprise Centre Rd. will be open for the modelled scenario year 2025. In accordance, a maximum AM and PM RFC% result, of 34% and 20% respectively, is shown in 2030. The reduction in the RFC% in 2040 is the result of anticipated modal shift to more sustainable modes of travel upon the completion of the Northern Distributor Road and improved available public travel facilities prior to 2040. The junction is shown to operate with a Level of Service A – Free Flow for all modelled scenarios.

	AM							PM						
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Junction LOS	Network Residual Capacity	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Junction LOS	Network Residual Capacity
2022														
Stream B-AC	D1	0.0	8.24	0.02	A	A	136 %	D2	0.0	7.61	0.02	A	A	179 %
Stream C-AB		0.0	4.04	0.02	A		[Stream C-AB]		0.0	5.01	0.01	A		[Stream B-AC]
2023 Without Development														
Stream B-AC	D3	0.0	8.45	0.03	A	A	130 %	D4	0.0	7.66	0.02	A	A	175 %
Stream C-AB		0.0	4.02	0.02	A		[Stream C-AB]		0.0	5.00	0.01	A		[Stream B-AC]
2023 With Development														
Stream B-AC	D5	0.0	8.58	0.03	A	A	127 %	D6	0.0	7.74	0.02	A	A	167 %
Stream C-AB		0.0	4.01	0.02	A		[Stream C-AB]		0.0	4.95	0.01	A		[Stream B-AC]
2024 Without Development														
Stream B-AC	D7	0.0	8.50	0.03	A	A	127 %	D8	0.0	7.95	0.02	A	A	164 %
Stream C-AB		0.0	4.00	0.02	A		[Stream C-AB]		0.0	5.00	0.01	A		[Stream B-AC]
2024 With Development														
Stream B-AC	D9	0.0	8.71	0.03	A	A	123 %	D10	0.0	8.09	0.02	A	A	153 %
Stream C-AB		0.0	3.99	0.02	A		[Stream C-AB]		0.0	4.91	0.01	A		[Stream B-AC]
2025 Without Development														
Stream B-AC	D11	0.0	8.56	0.03	A	A	123 %	D12	0.0	8.00	0.02	A	A	160 %
Stream C-AB		0.0	3.97	0.02	A		[Stream C-AB]		0.0	4.98	0.01	A		[Stream B-AC]
2025 With Development														
Stream B-AC	D13	0.0	8.79	0.03	A	A	118 %	D14	0.0	8.20	0.02	A	A	145 %
Stream C-AB		0.0	3.97	0.02	A		[Stream C-AB]		0.0	4.86	0.01	A		[Stream B-AC]
2030 Without Development														
Stream B-AC	D15	0.0	8.90	0.03	A	A	105 %	D16	0.0	8.16	0.02	A	A	141 %
Stream C-AB		0.0	3.86	0.03	A		[Stream C-AB]		0.0	4.91	0.01	A		[Stream B-AC]
2030 With Development														
Stream B-AC	D17	0.5	13.49	0.34	B	A	47 %	D18	0.2	10.36	0.20	B	A	77 %
Stream C-AB		0.4	4.12	0.14	A		[Stream B-AC]		0.3	5.37	0.14	A		[Stream B-AC]
2040 Without Development														
Stream B-AC	D19	0.0	9.42	0.03	A	A	89 %	D20	0.0	8.47	0.03	A	A	123 %
Stream C-AB		0.0	3.76	0.03	A		[Stream C-AB]		0.0	4.84	0.01	A		[Stream B-AC]
2040 With Development														
Stream B-AC	D21	0.4	12.81	0.28	B	A	52 %	D22	0.2	10.33	0.17	B	A	76 %
Stream C-AB		0.3	3.97	0.14	A		[Stream B-AC]		0.3	5.18	0.12	A		[Stream B-AC]

Table 9.5 Junction 4: PICADY results

9.6 Junction 5: Upper Dublin Hill/ Lower Dublin Hill

9.6.1 The PICADY results for Junction 5 both with and without development traffic are presented in Table 9.6 below.

- 9.6.2 The results indicate that the junction currently operates within capacity for both AM & PM peak at a Level of Service A – Free Flow.
- 9.6.3 Future year results, with and without the development traffic included, show a gradual increase in RFC% (Ratio of Glow to Capacity) up to design year 2040. The junction is shown to operate, both with and without development traffic, with a Level of Service B – Reasonably Free Flow (no delay incurred) in design year 2030, and a Level of Service C - Stable Operation (busy but operational with acceptable delay incurred) in design year 2040.

	AM							PM						
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Junction LOS	Network Residual Capacity	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Junction LOS	Network Residual Capacity
2022														
Stream B-AC	D1	1.9	21.70	0.66	C	A	12 %	D2	1.8	20.83	0.65	C	A	14 %
Stream C-AB		0.4	7.47	0.23	A				[Stream B-AC]	0.9	7.15	0.38		
2023 Without Development														
Stream B-AC	D3	2.0	22.93	0.68	C	A	10 %	D4	1.9	21.94	0.67	C	A	12 %
Stream C-AB		0.4	7.54	0.24	A				[Stream B-AC]	0.9	7.25	0.39		
2023 With Development														
Stream B-AC	D5	2.1	23.96	0.69	C	A	9 %	D6	2.1	23.21	0.68	C	A	10 %
Stream C-AB		0.5	7.62	0.25	A				[Stream B-AC]	1.0	7.37	0.40		
2024 Without Development														
Stream B-AC	D7	2.2	24.56	0.70	C	A	8 %	D8	2.1	23.13	0.68	C	A	10 %
Stream C-AB		0.4	7.59	0.24	A				[Stream B-AC]	1.0	7.32	0.39		
2024 With Development														
Stream B-AC	D9	2.4	26.25	0.71	D	A	6 %	D10	2.4	25.64	0.71	D	A	7 %
Stream C-AB		0.5	7.73	0.27	A				[Stream B-AC]	1.1	7.54	0.41		
2025 Without Development														
Stream B-AC	D11	2.4	26.06	0.71	D	A	6 %	D12	2.2	24.72	0.70	C	A	8 %
Stream C-AB		0.5	7.66	0.25	A				[Stream B-AC]	1.0	7.43	0.40		
2025 With Development														
Stream B-AC	D13	2.6	28.48	0.73	D	A	4 %	D14	2.7	29.06	0.74	D	A	4 %
Stream C-AB		0.6	7.81	0.28	A				[Stream B-AC]	1.2	7.76	0.43		
2030 Without Development														
Stream B-AC	D15	3.9	40.27	0.81	E	B	-2 %	D16	3.5	36.33	0.79	E	B	-1 %
Stream C-AB		0.6	8.03	0.28	A				[Stream B-AC]	1.3	8.05	0.46		
2030 With Development														
Stream B-AC	D17	4.9	50.10	0.85	F	B	-5 %	D18	4.7	47.78	0.85	E	B	-5 %
Stream C-AB		0.7	8.30	0.32	A				[Stream B-AC]	1.7	8.75	0.51		
2040 Without Development														
Stream B-AC	D19	8.1	77.46	0.93	F	C	-10 %	D20	6.6	63.94	0.90	F	C	-8 %
Stream C-AB		0.7	8.47	0.32	A				[Stream B-AC]	1.7	8.91	0.52		
2040 With Development														
Stream B-AC	D21	10.5	97.10	0.96	F	C	-12 %	D22	9.2	85.44	0.94	F	C	-11 %
Stream C-AB		0.8	8.76	0.35	A				[Stream B-AC]	2.1	9.65	0.57		

Table 9.6 Junction 5: PICADY results

9.7 TRAFFIC MODELLING CONCLUSIONS

- 9.7.1 The traffic modelling results show that, with and without development traffic, the junctions 1, 2, 4, and 5 operate within capacity up to and including the design year 2040.
- 9.7.2 Analysis of Junction 3: Redforge Rd./ Dublin Hill shows that the junction will reach capacity in 2025 without the introduction of the proposed development traffic. With development traffic included, the junction reaches capacity in 2024.

A LinSig traffic model of the junction was constructed both with/without development traffic which shows what impact an extended cycle time would have on the junction capacity. Table 9.7 shows the results of this change.

Junction 3: Redforge Rd./ Dublin St.		No Development			With Development		
		Cycle Time (s)	PRC (%)	Delay (pcu/hr)	Cycle Time (s)	PRC (%)	Delay (pcu/hr)
2022	AM	110	51.7	13.75	110	N/A	N/A
	PM	110	25.6	14.83	110	N/A	N/A
2023	AM	110	48.1	14.04	110	40.9	14.98
	PM	110	23.4	15.62	110	16.4	16.91
2024	AM	110	45.3	14.45	110	33.7	15.98
	PM	110	16.0	15.57	110	10.3	18.94
2025	AM	110	43.1	14.90	110	28.6	17.46
	PM	110	14.0	16.37	110	5.2	23.07
2030	AM	110	27.5	17.47	110	20.5	19.97
	PM	110	4.8	22.58	110	-4.9	31.47
2040	AM	110	14.4	20.74	110	11.0	22.97
	PM	110	-7.1	38.30	110	-13.7	59.85

Table 9.7 Junction 3: LinSig results with Cycle Time of 110 seconds

The increase in cycle time from 90 seconds to 110 seconds is shown to improve the capacity of the junction when compared to the previous results.

The results in both tables 9.4 & 9.7 represent a very conservative and robust analysis of the junction. In reality, an increased modal shift in the area away from the private car and the completion of the Northern Distributor Road, give a strong reason to believe that a reduction in traffic volumes throughout the local road network is likely. For the purposes of producing a robust analysis, it was deemed appropriate to include the full traffic volumes in the analysis while understanding that the true future scenario would be much improved.

The combination of an increased cycle time, the continued model shift towards national targets, and regional traffic utilising the future Northern Distributor Road will result in an increase in available capacity at the Redforge Rd./Dublin Hill junction in future year scenarios.

10.0 CUMULATIVE IMPACT

10.1.1 As outlined in **Section 7.0** of this report, industry standard growth rates have been applied to background traffic for future year assessments (to account for further development within the area). These growth rates make allowance for modal shift targets as set by national policy but do not take account of site-specific measures that may be implemented to mitigate against traffic generation from a particular development. In this instance the development of strategic transport corridors in-line with CMATS and Bus Connects. An increase in modal shift from the recorded 19% level to 40% has been applied to development traffic in design year 2040. It was deemed inappropriate to apply this increase to prior year scenarios. The 40% figure falls short of the national target of 45% implying that the analysis presented is robust.

10.1.2 Per the Cork Metropolitan Area Transport Strategy (CMATS), future road infrastructural projects such as the Northern Distributor Road and the Outer Ring Road will have a fundamental effect on traffic in this area. In addition, CMATS proposes the development of the Kilbarry Train Station which will provide a direct link to the city centre and to further afield. At present there is no direct path for local traffic to bypass the Blackpool retail area if wishing to access the N20. This results in high traffic volumes in the area, especially during the PM Peak. With the delivery of these road schemes, traffic volumes in the area can be expected to fall dramatically.

11.0 ROAD SAFETY

11.1.1 Existing Road Network Safety

Old Whitechurch Road to the west of the development site operates at a 50kph speed limit and comprises a wide 6.0m carriageway with a footpath along its western edge. Traffic calming measures in the form of a speed bump are present to the south of the exiting access road to the development site. There are no cycle lane facilities along of road.



Figure 11.1: Existing Speed Bump present on Old Whitechurch Road in close proximity to site access

To the east of the development site, a future connection is proposed to the existing Kilbarry Enterprise Centre Road. This road which serves as the access road to the Delaney's GAA ground, comprises a 6.0m wide carriageway with a footpath along its northern edge for its full length. The width of the existing footpath is exceedingly narrow over long stretches. Pedestrians attempting to cross Upper Dublin Hill and join the wider footpath network do not presently have access to a formalised pedestrian crossing with appropriate dropped kerbing.

11.1.2 Road Collision Database

At the time of undertaking this Traffic and Transport Assessment, the RSA Road Collision Statistics were not available in the vicinity of the development.

11.1.3 Proposed Road Safety Mitigation Measures

The proposed development will include a number of measures that are deemed necessary to improve road safety in the area. Internally within the scheme, raised junctions, colour contrasted surfaces, and minimal junction radii will create a low-speed regime where pedestrians will have the priority.

External to the site, public realm improvement works to include new footpath and the provision of pedestrian crossings at both the Old Whitechurch Road and Upper Dublin Hill junctions are proposed. The full extent of works proposed are detailed in the submitted planning drawings.

12.0 ENVIRONMENTAL IMPACT

- 12.1 The proposed development has been designed in accordance with the principles of DMURS (Design Manual for Urban Roads and Streets) with all internal roads having a gradient of not greater than 5% and good pedestrian connectivity throughout.
- 12.2 Proposed infrastructure improvements to the wider road network will put the development site in close proximity to public transport facilities. These infrastructure improvements include the proposed Northern Distributor Road which is preliminarily planned for completion in 2031 (per CMATS). The result of these infrastructure improvements should result in the scheme moving closer to the target modal split as set out by Government (45%).
- 12.3 The construction stage of the scheme proposes to re-use / relocate excavation material within the site where possible. This will result in a significant reduction in construction traffic generated to and from the site. There is a requirement for the exportation of excavated material over and above what can be re-used on-site. The exportation of materials will be carried out in accordance with the developed Construction Environmental Management Plan (CEMP) so as to minimise the impact the construction phase of the development will have on the existing roads network.

13.0 INTERNAL LAYOUT & PARKING PROVISION

- 13.1 **Figure 4.1.2** presents the proposed layout which includes the provision of on street and own curtilage parking, shared cycle/footpaths, pedestrian/cycle permeability throughout the site on designated off-road routes, and raised shared surfaces serving as speed control measures.
- 13.2 A total of 534 no. car parking spaces and 12 no. motorbike spaces are proposed for the proposed development, which are allocated on the basis of housing type and likely demands of future residents. The proposed parking provision is in accordance with the Development Plan minimum standard of 2 spaces per house and 1 space per apartment.
- 13.3 The development includes 124 no. bicycle parking spaces, provided as internal bike storage areas in each of the 3 apartment Blocks E, F and G, covered bike storage for the 4 duplex blocks, and additional bike storage at the crèche.

14.0 PUBLIC TRANSPORT

- 14.1 The proposed scheme is in close proximity to a number of high frequency bus services. The following figures are taken from the BusConnects online network map and indicate the bus services presently available via bus stops located within 15-min walking distance of the development lands.

The 207 Donnybrook to Glenheights bus route which operates 7 days a week running a 30min service, serves Donnybrook, Douglas, Ballyvolane, and Cork City Centre.

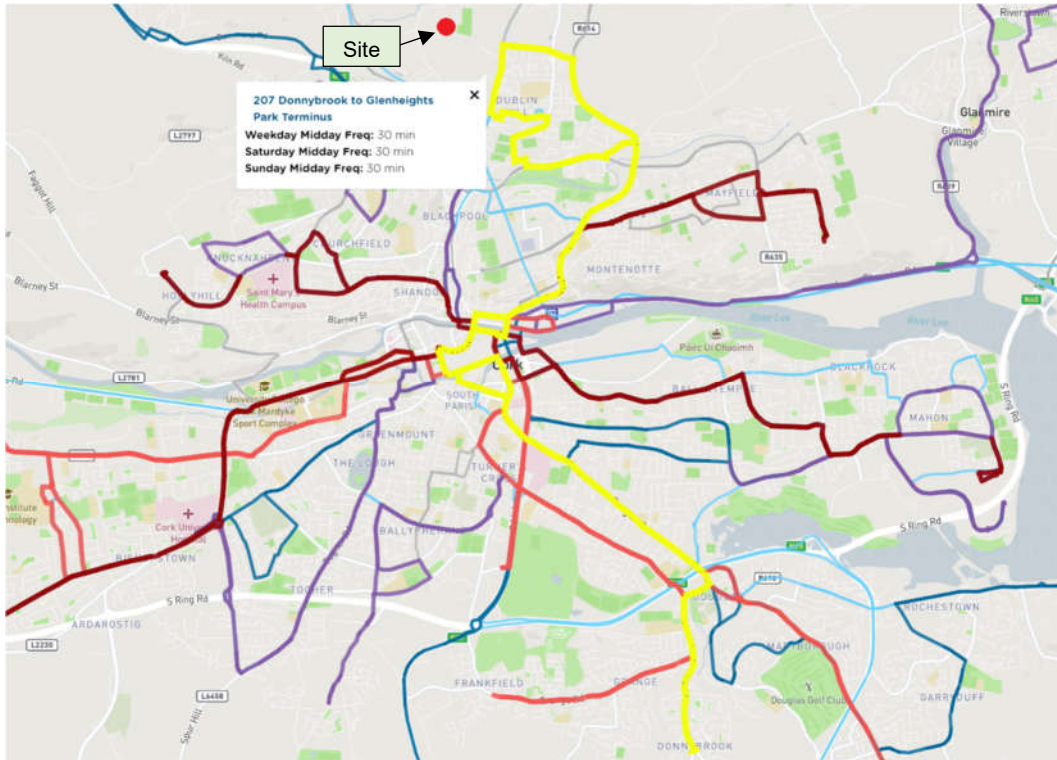


Figure 14.1: 207 Service – Donnybrook to Glenheights

The 207A Glenthorn to Merchants Quay bus route operates 7 days a week running a 60min service travelling via Blackpool and Glen Ave.'

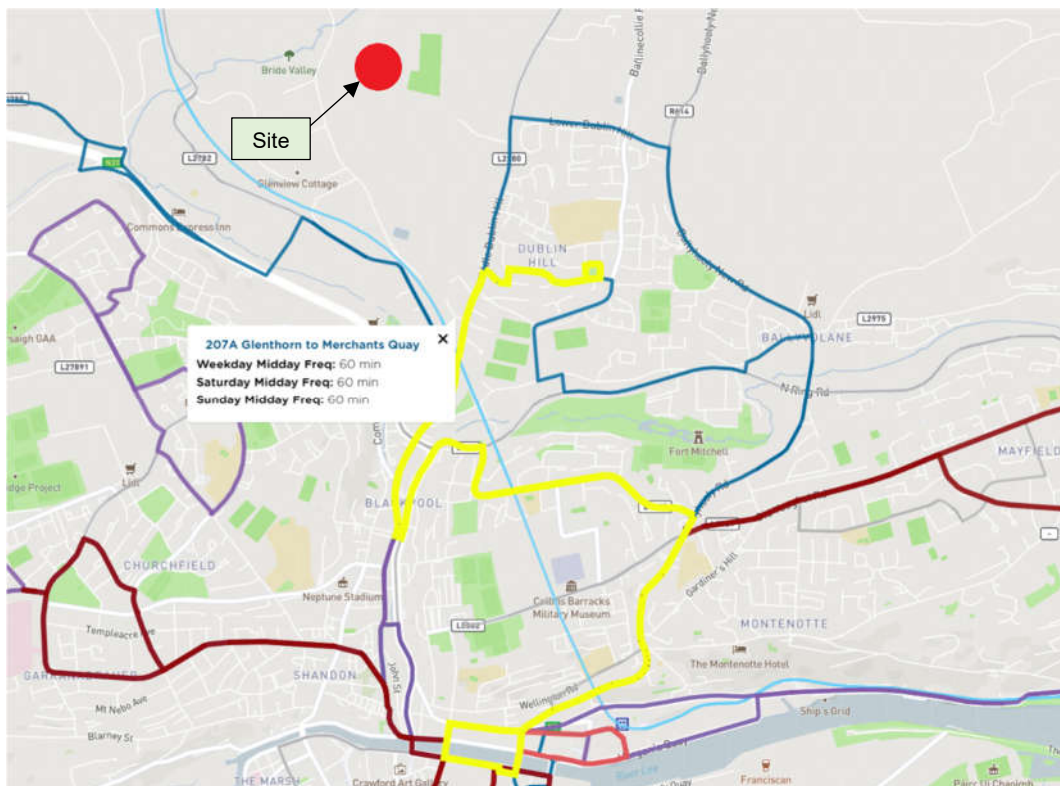


Figure 14.2: 207A Service – Glenthorn to Merchants Quay

The 215-bus service runs a 30min service and serves Blarney, Cork City Centre and Mahon Point. This service runs 7 days a week.

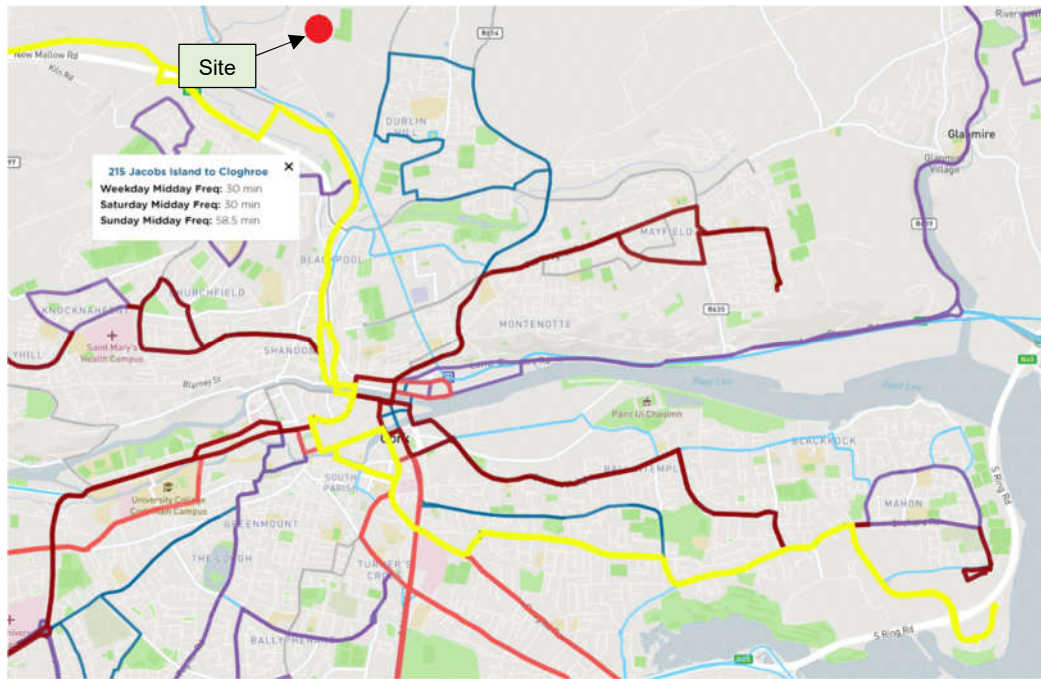


Figure 14.3: 215 Service – Jacobs Island to Cloghroe

Within 25-min walk from the development, the 203 Manor Farm to Fairhill bus route operates a 20min service Monday to Saturday and a 30min service on Sundays.

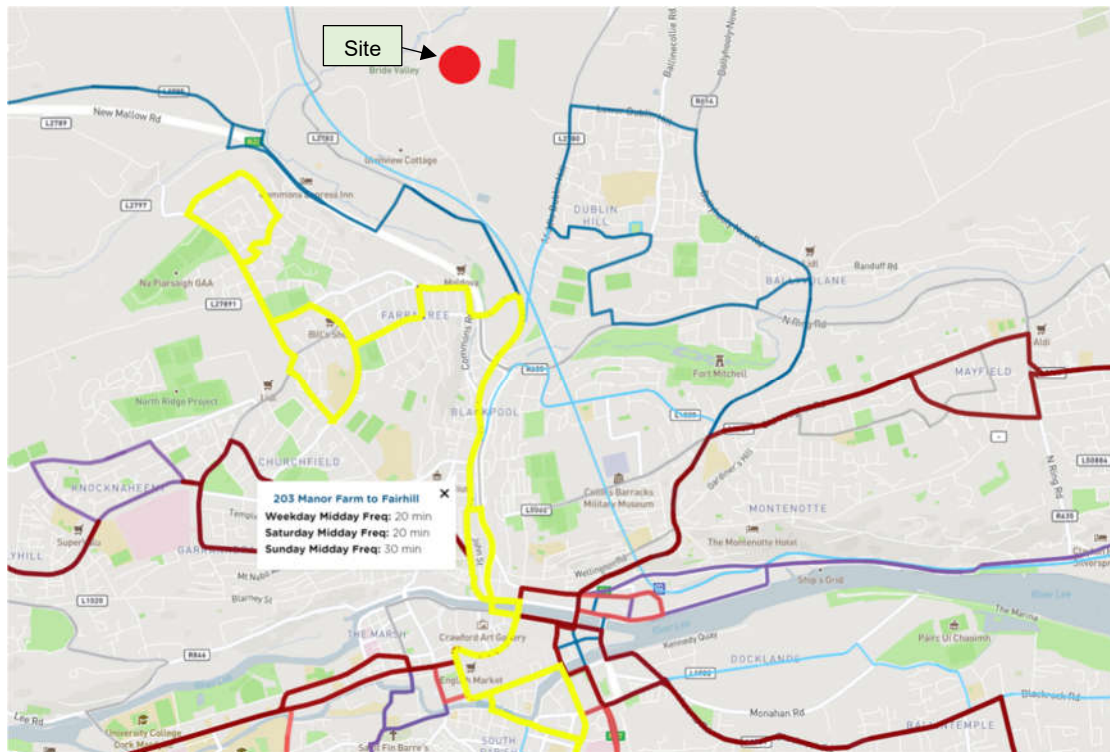


Figure 14.4: 203 Service – Manor Farm to Fairhill

14.2 The following image, taken from the BusConnects website, highlights (in grey) the 60-min travel time from the development site utilising the existing BusConnects network.

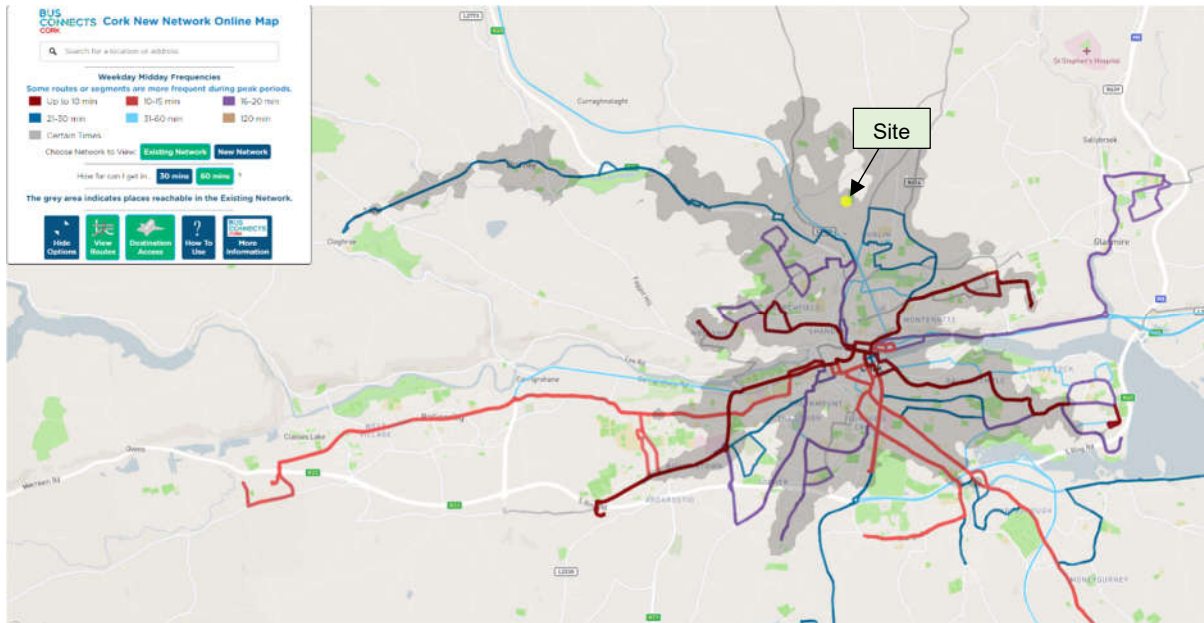


Figure 14.5: BusConnects existing network – 60 mins travel area

14.3 The following isochrone map shows the areas currently accessible by public transport based on time of travel from the site.

Note: The distances include transfers to different services so are indicative only (delay may be experienced during transfer)

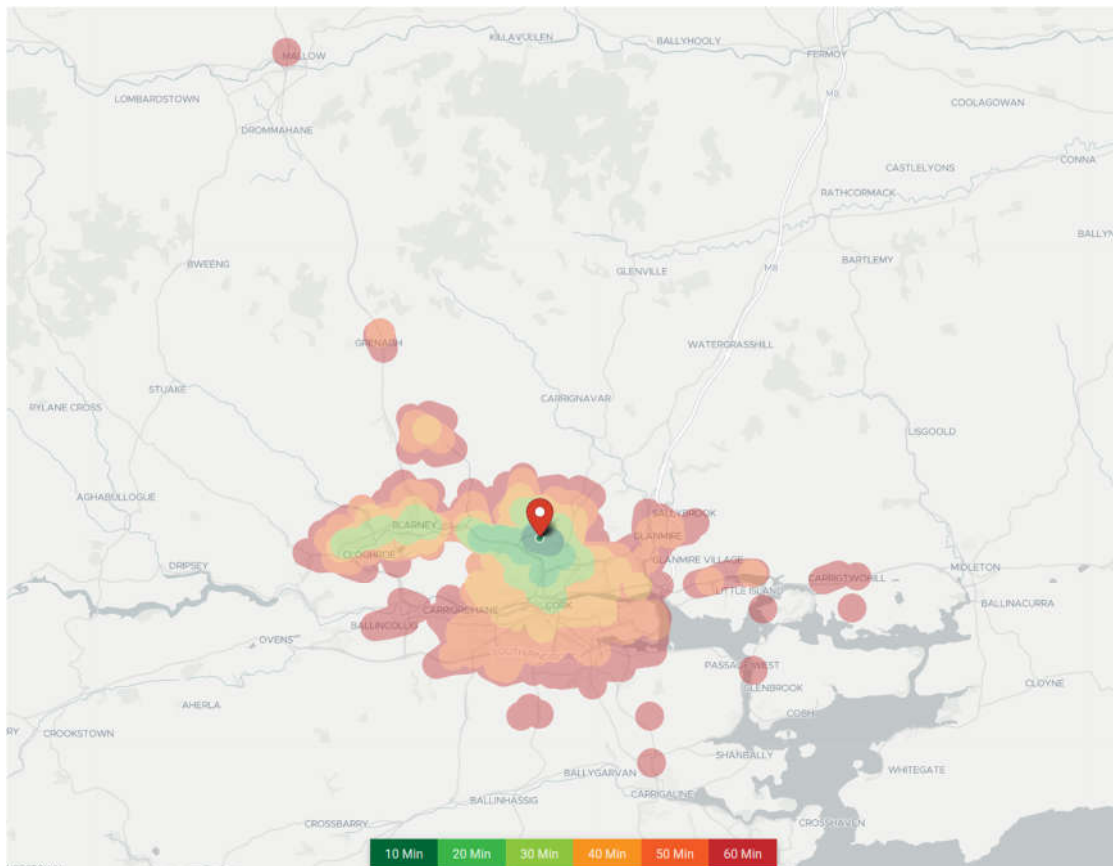


Figure 14.6: Time of travel by Public Transport Options

It is evident from **Figure 14.6** that current public transport provision in the area allows travel to a wide area within 60 mins, with many of the main employment centres being within the 30 mins range.

A commute time by public transport in excess of 45 mins results in a change in behavioural preference away from public transport. It can be concluded that the proposed development site by its location will encourage the use of public transport in-line with national policy.

14.4 The aforementioned travel times will significantly improve as a result of CMATS which will introduce high frequency orbital bus services upon completion of the Northern Distributor Road. Access to these bus services will be in close proximity to the proposed development.

14.5 As noted previously in Section 3.5, the Cork Metropolitan Area Transport Strategy 2040 (CMATS) proposes significant improvements to the public transport facilities over and above what is currently available. With the provision of these facilities and other incentives as part of national policy, it is anticipated that a greater shift to public transport will occur during the operational phase of this scheme. CMATS has provided more certainty for the delivery of these enhancements

15.0 ACCESSIBILITY AND INTEGRATION

15.1 A desktop assessment of the existing permeability for cyclists and pedestrians from the site was carried out. Presented in the following isochrone maps are the range of distances, for both pedestrians and cyclists, based on travel time. Pedestrians have the benefit of footpaths, but cyclists are required to use the existing regional roads and share with other vehicles.

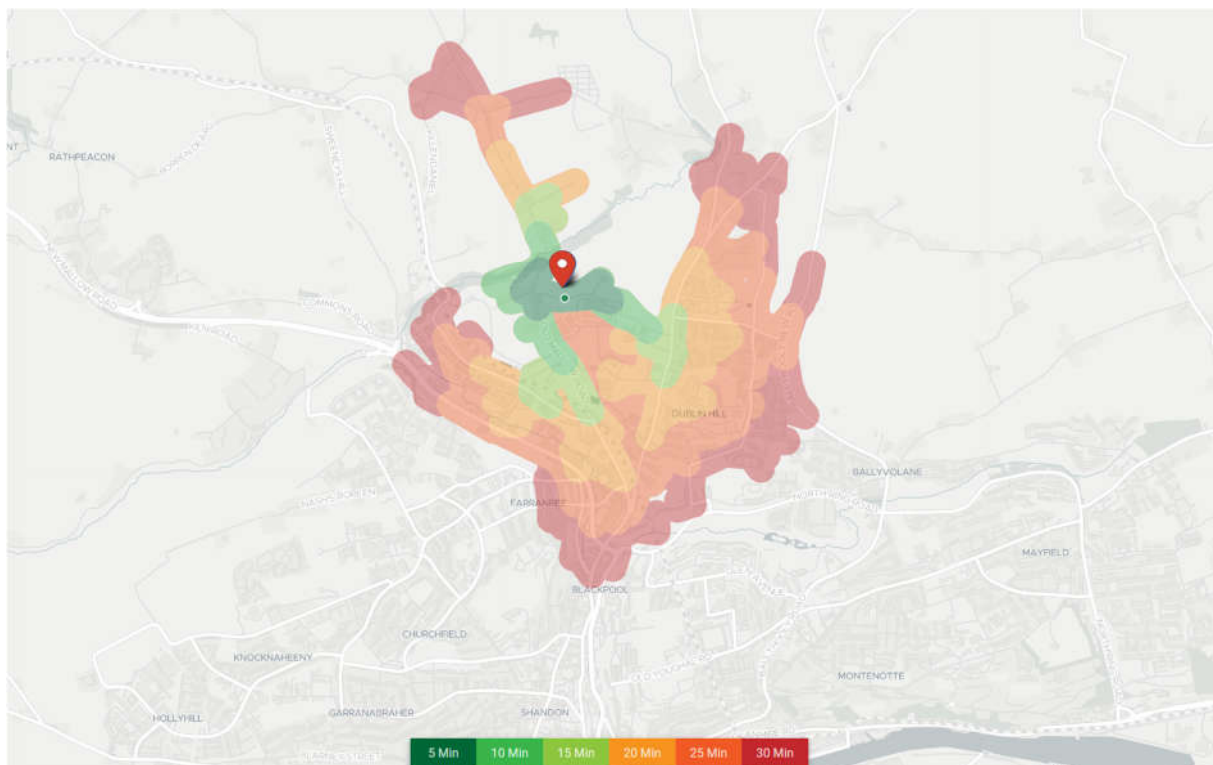


Figure 15.1: Proposed Development: Walking distance to local area

15.2 Within 5 mins walk time from the site:

- Delany's GAA

Within 20 mins walk time from the site:

- St. Aidan's Community College
- Aldi Blackpool
- Woodies Blackpool
- SouthDoc Blackpool
- Planet Entertainment Centre

18.0 REFERENCES

- National Roads Authority (May 2014) Traffic and Transport Assessment Guidelines NRA, Dublin
- Institution of Highways & Transportation (1994) Guidelines for Traffic Impact Assessment IHT, London
- National Roads Authority (2000) Road Geometry Handbook NRA, Dublin
- National Roads Authority (revised 2003) Design Manual For Roads and Bridges NRA, Dublin
- National Roads Authority (November 2004) Draft Traffic and Transport Assessment Guidelines NRA, Dublin
- RSA Ireland Road Collisions
<http://www.rsa.ie/RSA/Road-Safety/Our-Research/Ireland-Road-Collisions/>



APPENDIX A: TRAFFIC MODEL OUTPUTS – PICADY

<h1>Junctions 9</h1>
<h2>PICADY 9 - Priority Intersection Module</h2>
Version: 9.5.1.7462 © Copyright TRL Limited, 2019
For sales and distribution information, program advice and maintenance, contact TRL: +44 (0)1344 379777 software@trl.co.uk www.trlsoftware.co.uk
The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution

Filename: Junctions 1.j9

Path: N:\TIA\19034TT_Delaney's_OFlynn 1\Traffic Analysis\Junctions 9

Report generation date: 22/06/2022 11:02:22

-
- »2022, AM
 - »2022, PM
 - »2023 Without Development, AM
 - »2023 Without Development, PM
 - »2023 With Development, AM
 - »2023 With Development, PM
 - »2024 Without Development, AM
 - »2024 Without Development, PM
 - »2024 With Development, AM
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 - »2030 With Development, AM
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 - »2040 Without Development, AM
 - »2040 Without Development, PM
 - »2040 With Development, AM
 - »2040 With Development, PM

Summary of junction performance

	AM							PM						
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Junction LOS	Network Residual Capacity	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Junction LOS	Network Residual Capacity
2022														
Stream B-AC	D1	0.0	0.00	0.00	A	A	900 %	D2	0.0	0.00	0.00	A	A	900 %
Stream C-AB		0.0	0.00	0.00	A				[]	0.0	0.00	0.00		
2023 Without Development														
Stream B-AC	D3	0.0	0.00	0.00	A	A	900 %	D4	0.0	0.00	0.00	A	A	900 %
Stream C-AB		0.0	0.00	0.00	A				[]	0.0	0.00	0.00		
2023 With Development														
Stream B-AC	D5	0.2	8.15	0.16	A	A	335 %	D6	0.1	8.27	0.12	A	A	378 %
Stream C-AB		0.0	6.63	0.03	A				[Stream B-AC]	0.1	6.74	0.08		
2024 Without Development														
Stream B-AC	D7	0.0	0.00	0.00	A	A	900 %	D8	0.0	0.00	0.00	A	A	900 %
Stream C-AB		0.0	0.00	0.00	A				[]	0.0	0.00	0.00		
2024 With Development														
Stream B-AC	D9	0.3	9.20	0.26	A	A	192 %	D10	0.2	9.00	0.17	A	A	242 %
Stream C-AB		0.0	6.72	0.04	A				[Stream B-AC]	0.2	7.19	0.13		
2025 Without Development														
Stream B-AC	D11	0.0	0.00	0.00	A	A	900 %	D12	0.0	0.00	0.00	A	A	900 %
Stream C-AB		0.0	0.00	0.00	A				[]	0.0	0.00	0.00		
2025 With Development														
Stream B-AC	D13	0.6	10.79	0.36	B	A	112 %	D14	0.3	9.95	0.24	A	A	160 %
Stream C-AB		0.1	6.86	0.05	A				[Stream B-AC]	0.3	7.76	0.19		
2030 Without Development														
Stream B-AC	D15	0.0	0.00	0.00	A	A	900 %	D16	0.0	0.00	0.00	A	A	900 %
Stream C-AB		0.0	0.00	0.00	A				[]	0.0	0.00	0.00		
2030 With Development														
Stream B-AC	D17	0.1	7.78	0.13	A	A	442 %	D18	0.1	7.95	0.08	A	A	494 %
Stream C-AB		0.0	6.52	0.02	A				[Stream B-AC]	0.1	6.58	0.07		
2040 Without Development														
Stream B-AC	D19	0.0	0.00	0.00	A	A	900 %	D20	0.0	0.00	0.00	A	A	900 %
Stream C-AB		0.0	0.00	0.00	A				[]	0.0	0.00	0.00		
2040 With Development														
Stream B-AC	D21	0.1	7.55	0.10	A	A	562 %	D22	0.1	7.75	0.06	A	A	590 %
Stream C-AB		0.0	6.48	0.01	A				[Stream B-AC]	0.1	6.43	0.05		

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

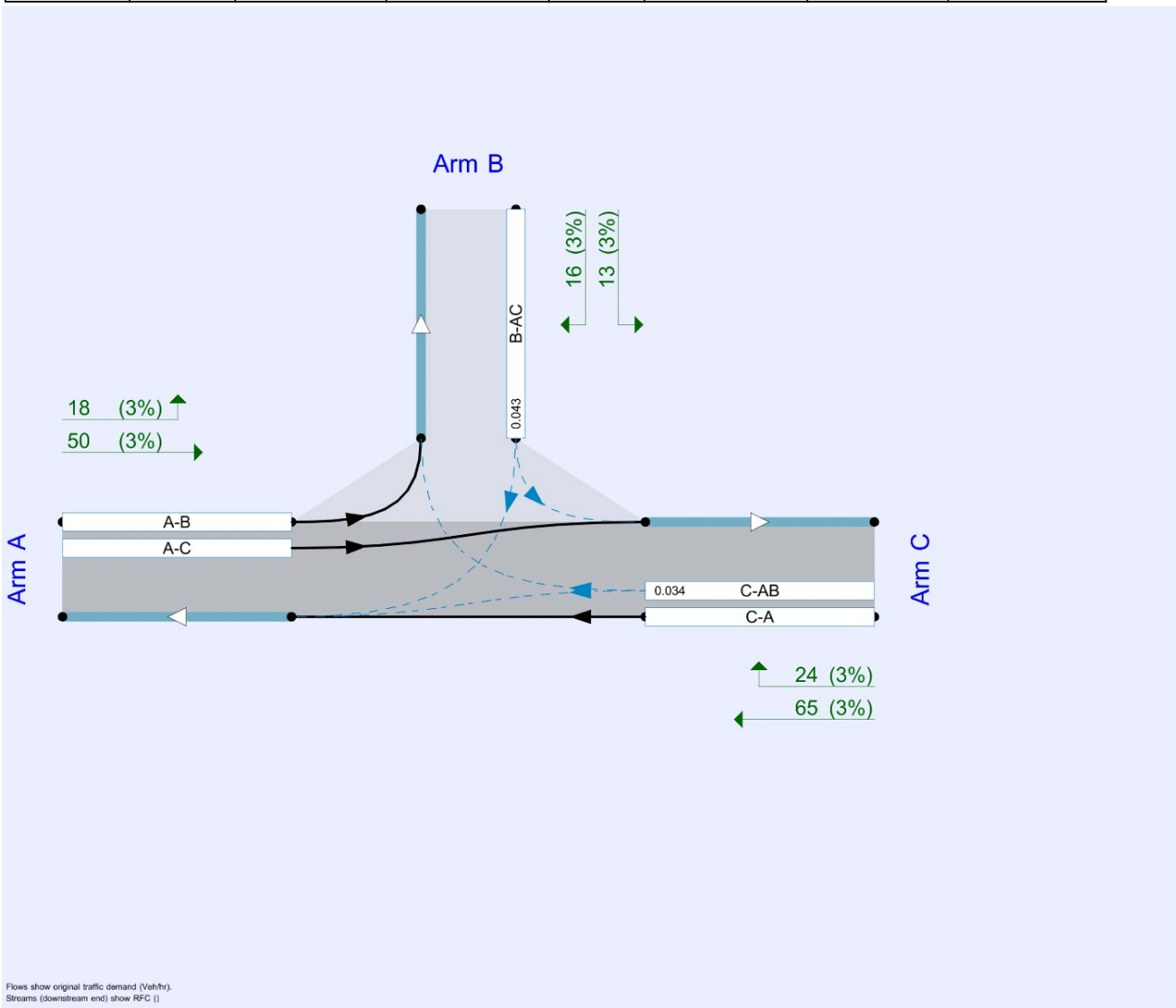
File summary

File Description

Title	
Location	
Site number	
Date	17/06/2022
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	MHL\bmurphy
Description	

Units

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



The junction diagram reflects the last run of Junctions.

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2022	AM	ONE HOUR	08:00	09:30	15
D2	2022	PM	ONE HOUR	17:00	18:30	15
D3	2023 Without Development	AM	ONE HOUR	08:00	09:30	15
D4	2023 Without Development	PM	ONE HOUR	17:00	18:30	15
D5	2023 With Development	AM	ONE HOUR	08:00	09:30	15
D6	2023 With Development	PM	ONE HOUR	17:00	18:30	15
D7	2024 Without Development	AM	ONE HOUR	08:00	09:30	15
D8	2024 Without Development	PM	ONE HOUR	17:00	18:30	15
D9	2024 With Development	AM	ONE HOUR	08:00	09:30	15
D10	2024 With Development	PM	ONE HOUR	17:00	18:30	15
D11	2025 Without Development	AM	ONE HOUR	08:00	09:30	15
D12	2025 Without Development	PM	ONE HOUR	17:00	18:30	15
D13	2025 With Development	AM	ONE HOUR	08:00	09:30	15
D14	2025 With Development	PM	ONE HOUR	17:00	18:30	15
D15	2030 Without Development	AM	ONE HOUR	08:00	09:30	15
D16	2030 Without Development	PM	ONE HOUR	17:00	18:30	15
D17	2030 With Development	AM	ONE HOUR	08:00	09:30	15
D18	2030 With Development	PM	ONE HOUR	17:00	18:30	15
D19	2040 Without Development	AM	ONE HOUR	08:00	09:30	15
D20	2040 Without Development	PM	ONE HOUR	17:00	18:30	15
D21	2040 With Development	AM	ONE HOUR	08:00	09:30	15
D22	2040 With Development	PM	ONE HOUR	17:00	18:30	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2022, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	T-Junction Existing Access Road	T-Junction	Two-way		0.00	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	900	

Arms

Arms

Arm	Name	Description	Arm type
A	Old Whitechurch Road (N)		Major
B	Existing Access Road		Minor
C	Old Whitechurch Road (S)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	6.00			0.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	2.50	70	35

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	492	0.090	0.226	0.142	0.323
B-C	614	0.094	0.238	-	-
C-B	574	0.222	0.222	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2022	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	34	100.000
B		✓	0	100.000
C		✓	21	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
	A	B	C	
From	A	0	0	34
	B	0	0	0
	C	21	0	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	A	B	C	
From	A	3	3	3
	B	3	3	3
	C	3	3	3

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.00	0.00	0.0	A
C-AB	0.00	0.00	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	523	0.000	0	0.0	0.000	A
C-AB	0	552	0.000	0	0.0	0.000	A
C-A	16			16			
A-B	0			0			
A-C	26			26			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	521	0.000	0	0.0	0.000	A
C-AB	0	550	0.000	0	0.0	0.000	A
C-A	19			19			
A-B	0			0			
A-C	31			31			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	519	0.000	0	0.0	0.000	A
C-AB	0	549	0.000	0	0.0	0.000	A
C-A	23			23			
A-B	0			0			
A-C	37			37			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	519	0.000	0	0.0	0.000	A
C-AB	0	549	0.000	0	0.0	0.000	A
C-A	23			23			
A-B	0			0			
A-C	37			37			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	521	0.000	0	0.0	0.000	A
C-AB	0	550	0.000	0	0.0	0.000	A
C-A	19			19			
A-B	0			0			
A-C	31			31			

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	523	0.000	0	0.0	0.000	A
C-AB	0	552	0.000	0	0.0	0.000	A
C-A	16			16			
A-B	0			0			
A-C	26			26			

2022, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	T-Junction Existing Access Road	T-Junction	Two-way		0.00	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	900	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2022	PM	ONE HOUR	17:00	18:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	40	100.000
B		✓	0	100.000
C		✓	52	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	0	40
	B	0	0	0
	C	52	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	3	3	3
	B	3	3	3
	C	3	3	3

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.00	0.00	0.0	A
C-AB	0.00	0.00	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	520	0.000	0	0.0	0.000	A
C-AB	0	551	0.000	0	0.0	0.000	A
C-A	39			39			
A-B	0			0			
A-C	30			30			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	517	0.000	0	0.0	0.000	A
C-AB	0	549	0.000	0	0.0	0.000	A
C-A	47			47			
A-B	0			0			
A-C	36			36			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	515	0.000	0	0.0	0.000	A
C-AB	0	547	0.000	0	0.0	0.000	A
C-A	57			57			
A-B	0			0			
A-C	44			44			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	515	0.000	0	0.0	0.000	A
C-AB	0	547	0.000	0	0.0	0.000	A
C-A	57			57			
A-B	0			0			
A-C	44			44			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	517	0.000	0	0.0	0.000	A
C-AB	0	549	0.000	0	0.0	0.000	A
C-A	47			47			
A-B	0			0			
A-C	36			36			

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	520	0.000	0	0.0	0.000	A
C-AB	0	551	0.000	0	0.0	0.000	A
C-A	39			39			
A-B	0			0			
A-C	30			30			

2023 Without Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	T-Junction Existing Access Road	T-Junction	Two-way		0.00	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	900	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2023 Without Development	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	35	100.000
B		✓	0	100.000
C		✓	21	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	0	35
	B	0	0	0
	C	21	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	3	3	3
	B	3	3	3
	C	3	3	3

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.00	0.00	0.0	A
C-AB	0.00	0.00	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	522	0.000	0	0.0	0.000	A
C-AB	0	551	0.000	0	0.0	0.000	A
C-A	16			16			
A-B	0			0			
A-C	26			26			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	521	0.000	0	0.0	0.000	A
C-AB	0	550	0.000	0	0.0	0.000	A
C-A	19			19			
A-B	0			0			
A-C	31			31			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	519	0.000	0	0.0	0.000	A
C-AB	0	549	0.000	0	0.0	0.000	A
C-A	23			23			
A-B	0			0			
A-C	39			39			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	519	0.000	0	0.0	0.000	A
C-AB	0	549	0.000	0	0.0	0.000	A
C-A	23			23			
A-B	0			0			
A-C	39			39			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	521	0.000	0	0.0	0.000	A
C-AB	0	550	0.000	0	0.0	0.000	A
C-A	19			19			
A-B	0			0			
A-C	31			31			

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	522	0.000	0	0.0	0.000	A
C-AB	0	551	0.000	0	0.0	0.000	A
C-A	16			16			
A-B	0			0			
A-C	26			26			

2023 Without Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	T-Junction Existing Access Road	T-Junction	Two-way		0.00	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	900	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2023 Without Development	PM	ONE HOUR	17:00	18:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	41	100.000
B		✓	0	100.000
C		✓	53	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	0	41
	B	0	0	0
	C	53	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	3	3	3
	B	3	3	3
	C	3	3	3

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.00	0.00	0.0	A
C-AB	0.00	0.00	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	519	0.000	0	0.0	0.000	A
C-AB	0	550	0.000	0	0.0	0.000	A
C-A	40			40			
A-B	0			0			
A-C	31			31			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	517	0.000	0	0.0	0.000	A
C-AB	0	549	0.000	0	0.0	0.000	A
C-A	48			48			
A-B	0			0			
A-C	37			37			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	514	0.000	0	0.0	0.000	A
C-AB	0	547	0.000	0	0.0	0.000	A
C-A	58			58			
A-B	0			0			
A-C	45			45			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	514	0.000	0	0.0	0.000	A
C-AB	0	547	0.000	0	0.0	0.000	A
C-A	58			58			
A-B	0			0			
A-C	45			45			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	517	0.000	0	0.0	0.000	A
C-AB	0	549	0.000	0	0.0	0.000	A
C-A	48			48			
A-B	0			0			
A-C	37			37			

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	519	0.000	0	0.0	0.000	A
C-AB	0	550	0.000	0	0.0	0.000	A
C-A	40			40			
A-B	0			0			
A-C	31			31			

2023 With Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	T-Junction Existing Access Road	T-Junction	Two-way		4.30	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	335	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	2023 With Development	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	58	100.000
B		✓	79	100.000
C		✓	35	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	23	35
	B	30	0	49
	C	21	14	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	3	3	3
	B	3	3	3
	C	3	3	3

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.16	8.15	0.2	A
C-AB	0.03	6.63	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	59	534	0.111	59	0.1	7.573	A
C-AB	11	558	0.019	11	0.0	6.574	A
C-A	16			16			
A-B	17			17			
A-C	26			26			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	71	532	0.134	71	0.2	7.810	A
C-AB	13	559	0.023	13	0.0	6.597	A
C-A	18			18			
A-B	21			21			
A-C	31			31			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	87	529	0.164	87	0.2	8.137	A
C-AB	16	559	0.029	16	0.0	6.630	A
C-A	22			22			
A-B	25			25			
A-C	39			39			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	87	529	0.164	87	0.2	8.146	A
C-AB	16	559	0.029	16	0.0	6.633	A
C-A	22			22			
A-B	25			25			
A-C	39			39			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	71	532	0.134	71	0.2	7.820	A
C-AB	13	559	0.023	13	0.0	6.600	A
C-A	18			18			
A-B	21			21			
A-C	31			31			

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	59	534	0.111	60	0.1	7.592	A
C-AB	11	558	0.019	11	0.0	6.574	A
C-A	15			15			
A-B	17			17			
A-C	26			26			

2023 With Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	T-Junction Existing Access Road	T-Junction	Two-way		3.36	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	378	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	2023 With Development	PM	ONE HOUR	17:00	18:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	70	100.000
B		✓	53	100.000
C		✓	91	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	29	41
	B	30	0	23
	C	53	38	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	3	3	3
	B	3	3	3
	C	3	3	3

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.12	8.27	0.1	A
C-AB	0.08	6.74	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	40	503	0.079	40	0.1	7.764	A
C-AB	31	573	0.054	31	0.1	6.633	A
C-A	38			38			
A-B	22			22			
A-C	31			31			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	48	499	0.095	48	0.1	7.973	A
C-AB	37	576	0.065	37	0.1	6.680	A
C-A	45			45			
A-B	26			26			
A-C	37			37			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	58	494	0.118	58	0.1	8.264	A
C-AB	47	580	0.080	46	0.1	6.742	A
C-A	54			54			
A-B	32			32			
A-C	45			45			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	58	494	0.118	58	0.1	8.268	A
C-AB	47	580	0.080	47	0.1	6.743	A
C-A	54			54			
A-B	32			32			
A-C	45			45			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	48	499	0.095	48	0.1	7.980	A
C-AB	37	576	0.065	37	0.1	6.685	A
C-A	45			45			
A-B	26			26			
A-C	37			37			

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	40	503	0.079	40	0.1	7.779	A
C-AB	31	573	0.054	31	0.1	6.640	A
C-A	38			38			
A-B	22			22			
A-C	31			31			

2024 Without Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	T-Junction Existing Access Road	T-Junction	Two-way		0.00	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	900	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D7	2024 Without Development	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	35	100.000
B		✓	0	100.000
C		✓	22	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	0	35
	B	0	0	0
	C	22	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	3	3	3
	B	3	3	3
	C	3	3	3

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.00	0.00	0.0	A
C-AB	0.00	0.00	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	522	0.000	0	0.0	0.000	A
C-AB	0	551	0.000	0	0.0	0.000	A
C-A	17			17			
A-B	0			0			
A-C	26			26			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	521	0.000	0	0.0	0.000	A
C-AB	0	550	0.000	0	0.0	0.000	A
C-A	20			20			
A-B	0			0			
A-C	31			31			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	519	0.000	0	0.0	0.000	A
C-AB	0	549	0.000	0	0.0	0.000	A
C-A	24			24			
A-B	0			0			
A-C	39			39			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	519	0.000	0	0.0	0.000	A
C-AB	0	549	0.000	0	0.0	0.000	A
C-A	24			24			
A-B	0			0			
A-C	39			39			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	521	0.000	0	0.0	0.000	A
C-AB	0	550	0.000	0	0.0	0.000	A
C-A	20			20			
A-B	0			0			
A-C	31			31			

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	522	0.000	0	0.0	0.000	A
C-AB	0	551	0.000	0	0.0	0.000	A
C-A	17			17			
A-B	0			0			
A-C	26			26			

2024 Without Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	T-Junction Existing Access Road	T-Junction	Two-way		0.00	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	900	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D8	2024 Without Development	PM	ONE HOUR	17:00	18:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	41	100.000
B		✓	0	100.000
C		✓	54	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	0	41
	B	0	0	0
	C	54	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	3	3	3
	B	3	3	3
	C	3	3	3

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.00	0.00	0.0	A
C-AB	0.00	0.00	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	519	0.000	0	0.0	0.000	A
C-AB	0	550	0.000	0	0.0	0.000	A
C-A	41			41			
A-B	0			0			
A-C	31			31			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	517	0.000	0	0.0	0.000	A
C-AB	0	549	0.000	0	0.0	0.000	A
C-A	49			49			
A-B	0			0			
A-C	37			37			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	514	0.000	0	0.0	0.000	A
C-AB	0	547	0.000	0	0.0	0.000	A
C-A	59			59			
A-B	0			0			
A-C	45			45			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	514	0.000	0	0.0	0.000	A
C-AB	0	547	0.000	0	0.0	0.000	A
C-A	59			59			
A-B	0			0			
A-C	45			45			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	517	0.000	0	0.0	0.000	A
C-AB	0	549	0.000	0	0.0	0.000	A
C-A	49			49			
A-B	0			0			
A-C	37			37			

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	519	0.000	0	0.0	0.000	A
C-AB	0	550	0.000	0	0.0	0.000	A
C-A	41			41			
A-B	0			0			
A-C	31			31			

2024 With Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	T-Junction Existing Access Road	T-Junction	Two-way		5.47	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	192	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D9	2024 With Development	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	67	100.000
B		✓	123	100.000
C		✓	41	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	32	35
	B	47	0	76
	C	22	19	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	3	3	3
	B	3	3	3
	C	3	3	3

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.26	9.20	0.3	A
C-AB	0.04	6.72	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	93	532	0.174	92	0.2	8.158	A
C-AB	15	557	0.026	15	0.0	6.630	A
C-A	16			16			
A-B	24			24			
A-C	26			26			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	111	530	0.209	110	0.3	8.576	A
C-AB	18	557	0.032	18	0.0	6.668	A
C-A	19			19			
A-B	29			29			
A-C	31			31			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	135	527	0.257	135	0.3	9.186	A
C-AB	22	558	0.039	22	0.0	6.719	A
C-A	23			23			
A-B	35			35			
A-C	39			39			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	135	527	0.257	135	0.3	9.201	A
C-AB	22	558	0.039	22	0.0	6.719	A
C-A	23			23			
A-B	35			35			
A-C	39			39			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	111	530	0.209	111	0.3	8.598	A
C-AB	18	557	0.032	18	0.0	6.672	A
C-A	19			19			
A-B	29			29			
A-C	31			31			

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	93	532	0.174	93	0.2	8.198	A
C-AB	15	557	0.026	15	0.0	6.636	A
C-A	16			16			
A-B	24			24			
A-C	26			26			

2024 With Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	T-Junction Existing Access Road	T-Junction	Two-way		4.21	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	242	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D10	2024 With Development	PM	ONE HOUR	17:00	18:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	88	100.000
B		✓	77	100.000
C		✓	116	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	47	41
	B	44	0	33
	C	54	62	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	3	3	3
	B	3	3	3
	C	3	3	3

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.17	9.00	0.2	A
C-AB	0.13	7.19	0.2	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	58	497	0.117	57	0.1	8.181	A
C-AB	50	571	0.088	50	0.1	6.910	A
C-A	37			37			
A-B	35			35			
A-C	31			31			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	69	492	0.141	69	0.2	8.513	A
C-AB	61	573	0.106	61	0.1	7.026	A
C-A	43			43			
A-B	42			42			
A-C	37			37			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	85	485	0.175	85	0.2	8.989	A
C-AB	76	577	0.132	76	0.2	7.187	A
C-A	52			52			
A-B	52			52			
A-C	45			45			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	85	485	0.175	85	0.2	8.996	A
C-AB	76	577	0.132	76	0.2	7.189	A
C-A	52			52			
A-B	52			52			
A-C	45			45			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	69	492	0.141	69	0.2	8.529	A
C-AB	61	573	0.106	61	0.1	7.031	A
C-A	43			43			
A-B	42			42			
A-C	37			37			

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	58	497	0.117	58	0.1	8.211	A
C-AB	50	571	0.088	50	0.1	6.922	A
C-A	37			37			
A-B	35			35			
A-C	31			31			

2025 Without Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	T-Junction Existing Access Road	T-Junction	Two-way		0.00	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	900	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D11	2025 Without Development	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	36	100.000
B		✓	0	100.000
C		✓	22	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	0	36
	B	0	0	0
	C	22	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	3	3	3
	B	3	3	3
	C	3	3	3

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.00	0.00	0.0	A
C-AB	0.00	0.00	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	522	0.000	0	0.0	0.000	A
C-AB	0	551	0.000	0	0.0	0.000	A
C-A	17			17			
A-B	0			0			
A-C	27			27			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	521	0.000	0	0.0	0.000	A
C-AB	0	550	0.000	0	0.0	0.000	A
C-A	20			20			
A-B	0			0			
A-C	32			32			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	519	0.000	0	0.0	0.000	A
C-AB	0	548	0.000	0	0.0	0.000	A
C-A	24			24			
A-B	0			0			
A-C	40			40			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	519	0.000	0	0.0	0.000	A
C-AB	0	548	0.000	0	0.0	0.000	A
C-A	24			24			
A-B	0			0			
A-C	40			40			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	521	0.000	0	0.0	0.000	A
C-AB	0	550	0.000	0	0.0	0.000	A
C-A	20			20			
A-B	0			0			
A-C	32			32			

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	522	0.000	0	0.0	0.000	A
C-AB	0	551	0.000	0	0.0	0.000	A
C-A	17			17			
A-B	0			0			
A-C	27			27			

2025 Without Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	T-Junction Existing Access Road	T-Junction	Two-way		0.00	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	900	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D12	2025 Without Development	PM	ONE HOUR	17:00	18:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	42	100.000
B		✓	0	100.000
C		✓	55	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	0	42
	B	0	0	0
	C	55	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	3	3	3
	B	3	3	3
	C	3	3	3

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.00	0.00	0.0	A
C-AB	0.00	0.00	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	519	0.000	0	0.0	0.000	A
C-AB	0	550	0.000	0	0.0	0.000	A
C-A	41			41			
A-B	0			0			
A-C	32			32			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	517	0.000	0	0.0	0.000	A
C-AB	0	549	0.000	0	0.0	0.000	A
C-A	49			49			
A-B	0			0			
A-C	38			38			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	514	0.000	0	0.0	0.000	A
C-AB	0	547	0.000	0	0.0	0.000	A
C-A	61			61			
A-B	0			0			
A-C	46			46			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	514	0.000	0	0.0	0.000	A
C-AB	0	547	0.000	0	0.0	0.000	A
C-A	61			61			
A-B	0			0			
A-C	46			46			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	517	0.000	0	0.0	0.000	A
C-AB	0	549	0.000	0	0.0	0.000	A
C-A	49			49			
A-B	0			0			
A-C	38			38			

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	519	0.000	0	0.0	0.000	A
C-AB	0	550	0.000	0	0.0	0.000	A
C-A	41			41			
A-B	0			0			
A-C	32			32			

2025 With Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	T-Junction Existing Access Road	T-Junction	Two-way		6.86	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	112	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D13	2025 With Development	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	78	100.000
B		✓	173	100.000
C		✓	48	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	42	36
	B	66	0	107
	C	22	26	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	3	3	3
	B	3	3	3
	C	3	3	3

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.36	10.79	0.6	B
C-AB	0.05	6.86	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	130	531	0.245	129	0.3	8.936	A
C-AB	20	556	0.036	20	0.0	6.720	A
C-A	16			16			
A-B	32			32			
A-C	27			27			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	156	528	0.295	155	0.4	9.649	A
C-AB	24	555	0.044	24	0.0	6.778	A
C-A	19			19			
A-B	38			38			
A-C	32			32			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	190	524	0.363	190	0.6	10.749	B
C-AB	30	555	0.054	30	0.1	6.856	A
C-A	23			23			
A-B	46			46			
A-C	40			40			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	190	524	0.363	190	0.6	10.786	B
C-AB	30	555	0.054	30	0.1	6.856	A
C-A	23			23			
A-B	46			46			
A-C	40			40			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	156	528	0.295	156	0.4	9.700	A
C-AB	24	555	0.044	24	0.0	6.782	A
C-A	19			19			
A-B	38			38			
A-C	32			32			

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	130	531	0.245	131	0.3	9.012	A
C-AB	20	556	0.036	20	0.0	6.724	A
C-A	16			16			
A-B	32			32			
A-C	27			27			

2025 With Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	T-Junction Existing Access Road	T-Junction	Two-way		5.00	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	160	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D14	2025 With Development	PM	ONE HOUR	17:00	18:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	110	100.000
B		✓	104	100.000
C		✓	143	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	68	42
	B	59	0	45
	C	55	88	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	3	3	3
	B	3	3	3
	C	3	3	3

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.24	9.95	0.3	A
C-AB	0.19	7.76	0.3	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	78	491	0.159	78	0.2	8.688	A
C-AB	71	567	0.126	71	0.2	7.242	A
C-A	36			36			
A-B	51			51			
A-C	32			32			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	93	485	0.193	93	0.2	9.189	A
C-AB	87	570	0.152	87	0.2	7.451	A
C-A	42			42			
A-B	61			61			
A-C	38			38			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	115	476	0.240	114	0.3	9.936	A
C-AB	108	573	0.189	108	0.3	7.752	A
C-A	49			49			
A-B	75			75			
A-C	46			46			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	115	476	0.240	114	0.3	9.953	A
C-AB	108	573	0.189	108	0.3	7.759	A
C-A	49			49			
A-B	75			75			
A-C	46			46			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	93	485	0.193	94	0.2	9.215	A
C-AB	87	570	0.152	87	0.2	7.466	A
C-A	42			42			
A-B	61			61			
A-C	38			38			

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	78	491	0.159	78	0.2	8.733	A
C-AB	72	568	0.126	72	0.2	7.266	A
C-A	36			36			
A-B	51			51			
A-C	32			32			

2030 Without Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	T-Junction Existing Access Road	T-Junction	Two-way		0.00	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	900	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D15	2030 Without Development	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	39	100.000
B		✓	0	100.000
C		✓	24	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	0	39
	B	0	0	0
	C	24	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	3	3	3
	B	3	3	3
	C	3	3	3

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.00	0.00	0.0	A
C-AB	0.00	0.00	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	522	0.000	0	0.0	0.000	A
C-AB	0	551	0.000	0	0.0	0.000	A
C-A	18			18			
A-B	0			0			
A-C	29			29			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	520	0.000	0	0.0	0.000	A
C-AB	0	549	0.000	0	0.0	0.000	A
C-A	22			22			
A-B	0			0			
A-C	35			35			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	518	0.000	0	0.0	0.000	A
C-AB	0	548	0.000	0	0.0	0.000	A
C-A	26			26			
A-B	0			0			
A-C	43			43			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	518	0.000	0	0.0	0.000	A
C-AB	0	548	0.000	0	0.0	0.000	A
C-A	26			26			
A-B	0			0			
A-C	43			43			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	520	0.000	0	0.0	0.000	A
C-AB	0	549	0.000	0	0.0	0.000	A
C-A	22			22			
A-B	0			0			
A-C	35			35			

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	522	0.000	0	0.0	0.000	A
C-AB	0	551	0.000	0	0.0	0.000	A
C-A	18			18			
A-B	0			0			
A-C	29			29			

2030 Without Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	T-Junction Existing Access Road	T-Junction	Two-way		0.00	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	900	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D16	2030 Without Development	PM	ONE HOUR	17:00	18:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	46	100.000
B		✓	0	100.000
C		✓	60	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	0	46
	B	0	0	0
	C	60	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	3	3	3
	B	3	3	3
	C	3	3	3

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.00	0.00	0.0	A
C-AB	0.00	0.00	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	518	0.000	0	0.0	0.000	A
C-AB	0	550	0.000	0	0.0	0.000	A
C-A	45			45			
A-B	0			0			
A-C	35			35			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	516	0.000	0	0.0	0.000	A
C-AB	0	548	0.000	0	0.0	0.000	A
C-A	54			54			
A-B	0			0			
A-C	41			41			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	512	0.000	0	0.0	0.000	A
C-AB	0	546	0.000	0	0.0	0.000	A
C-A	66			66			
A-B	0			0			
A-C	51			51			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	512	0.000	0	0.0	0.000	A
C-AB	0	546	0.000	0	0.0	0.000	A
C-A	66			66			
A-B	0			0			
A-C	51			51			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	516	0.000	0	0.0	0.000	A
C-AB	0	548	0.000	0	0.0	0.000	A
C-A	54			54			
A-B	0			0			
A-C	41			41			

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	518	0.000	0	0.0	0.000	A
C-AB	0	550	0.000	0	0.0	0.000	A
C-A	45			45			
A-B	0			0			
A-C	35			35			

2030 With Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	T-Junction Existing Access Road	T-Junction	Two-way		3.62	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	442	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D17	2030 With Development	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	54	100.000
B		✓	61	100.000
C		✓	33	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	15	39
	B	23	0	38
	C	24	9	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	3	3	3
	B	3	3	3
	C	3	3	3

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.13	7.78	0.1	A
C-AB	0.02	6.52	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	46	534	0.086	46	0.1	7.359	A
C-AB	7	561	0.012	7	0.0	6.502	A
C-A	18			18			
A-B	11			11			
A-C	29			29			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	55	532	0.103	55	0.1	7.536	A
C-AB	8	561	0.015	8	0.0	6.510	A
C-A	21			21			
A-B	13			13			
A-C	35			35			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	67	530	0.127	67	0.1	7.780	A
C-AB	10	562	0.019	10	0.0	6.523	A
C-A	26			26			
A-B	17			17			
A-C	43			43			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	67	530	0.127	67	0.1	7.783	A
C-AB	10	562	0.019	10	0.0	6.523	A
C-A	26			26			
A-B	17			17			
A-C	43			43			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	55	532	0.103	55	0.1	7.539	A
C-AB	8	561	0.015	8	0.0	6.511	A
C-A	21			21			
A-B	13			13			
A-C	35			35			

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	46	534	0.086	46	0.1	7.370	A
C-AB	7	561	0.012	7	0.0	6.505	A
C-A	18			18			
A-B	11			11			
A-C	29			29			

2030 With Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	T-Junction Existing Access Road	T-Junction	Two-way		2.63	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	494	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D18	2030 With Development	PM	ONE HOUR	17:00	18:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	70	100.000
B		✓	37	100.000
C		✓	91	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	24	46
	B	21	0	16
	C	60	31	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	3	3	3
	B	3	3	3
	C	3	3	3

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.08	7.95	0.1	A
C-AB	0.07	6.58	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	28	503	0.055	28	0.1	7.571	A
C-AB	25	577	0.044	25	0.1	6.527	A
C-A	43			43			
A-B	18			18			
A-C	35			35			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	33	499	0.067	33	0.1	7.727	A
C-AB	31	580	0.053	31	0.1	6.548	A
C-A	51			51			
A-B	22			22			
A-C	41			41			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	41	494	0.083	41	0.1	7.944	A
C-AB	38	586	0.066	38	0.1	6.577	A
C-A	62			62			
A-B	26			26			
A-C	51			51			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	41	494	0.083	41	0.1	7.946	A
C-AB	39	586	0.066	39	0.1	6.580	A
C-A	62			62			
A-B	26			26			
A-C	51			51			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	33	499	0.067	33	0.1	7.731	A
C-AB	31	580	0.053	31	0.1	6.553	A
C-A	51			51			
A-B	22			22			
A-C	41			41			

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	28	503	0.055	28	0.1	7.583	A
C-AB	25	577	0.044	25	0.1	6.531	A
C-A	43			43			
A-B	18			18			
A-C	35			35			

2040 Without Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	T-Junction Existing Access Road	T-Junction	Two-way		0.00	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	900	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D19	2040 Without Development	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	42	100.000
B		✓	0	100.000
C		✓	26	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	0	42
	B	0	0	0
	C	26	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	3	3	3
	B	3	3	3
	C	3	3	3

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.00	0.00	0.0	A
C-AB	0.00	0.00	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	521	0.000	0	0.0	0.000	A
C-AB	0	550	0.000	0	0.0	0.000	A
C-A	20			20			
A-B	0			0			
A-C	32			32			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	519	0.000	0	0.0	0.000	A
C-AB	0	549	0.000	0	0.0	0.000	A
C-A	23			23			
A-B	0			0			
A-C	38			38			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	517	0.000	0	0.0	0.000	A
C-AB	0	547	0.000	0	0.0	0.000	A
C-A	29			29			
A-B	0			0			
A-C	46			46			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	517	0.000	0	0.0	0.000	A
C-AB	0	547	0.000	0	0.0	0.000	A
C-A	29			29			
A-B	0			0			
A-C	46			46			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	519	0.000	0	0.0	0.000	A
C-AB	0	549	0.000	0	0.0	0.000	A
C-A	23			23			
A-B	0			0			
A-C	38			38			

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	521	0.000	0	0.0	0.000	A
C-AB	0	550	0.000	0	0.0	0.000	A
C-A	20			20			
A-B	0			0			
A-C	32			32			

2040 Without Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	T-Junction Existing Access Road	T-Junction	Two-way		0.00	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	900	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D20	2040 Without Development	PM	ONE HOUR	17:00	18:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	50	100.000
B		✓	0	100.000
C		✓	65	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	0	50
	B	0	0	0
	C	65	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	3	3	3
	B	3	3	3
	C	3	3	3

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.00	0.00	0.0	A
C-AB	0.00	0.00	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	517	0.000	0	0.0	0.000	A
C-AB	0	549	0.000	0	0.0	0.000	A
C-A	49			49			
A-B	0			0			
A-C	38			38			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	514	0.000	0	0.0	0.000	A
C-AB	0	547	0.000	0	0.0	0.000	A
C-A	58			58			
A-B	0			0			
A-C	45			45			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	511	0.000	0	0.0	0.000	A
C-AB	0	545	0.000	0	0.0	0.000	A
C-A	72			72			
A-B	0			0			
A-C	55			55			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	511	0.000	0	0.0	0.000	A
C-AB	0	545	0.000	0	0.0	0.000	A
C-A	72			72			
A-B	0			0			
A-C	55			55			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	514	0.000	0	0.0	0.000	A
C-AB	0	547	0.000	0	0.0	0.000	A
C-A	58			58			
A-B	0			0			
A-C	45			45			

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	517	0.000	0	0.0	0.000	A
C-AB	0	549	0.000	0	0.0	0.000	A
C-A	49			49			
A-B	0			0			
A-C	38			38			

2040 With Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	T-Junction Existing Access Road	T-Junction	Two-way		3.00	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	562	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D21	2040 With Development	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	54	100.000
B		✓	47	100.000
C		✓	33	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	12	42
	B	18	0	29
	C	26	7	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	3	3	3
	B	3	3	3
	C	3	3	3

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.10	7.55	0.1	A
C-AB	0.01	6.48	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	35	534	0.066	35	0.1	7.220	A
C-AB	5	562	0.010	5	0.0	6.471	A
C-A	19			19			
A-B	9			9			
A-C	32			32			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	42	531	0.080	42	0.1	7.357	A
C-AB	7	563	0.012	7	0.0	6.474	A
C-A	23			23			
A-B	11			11			
A-C	38			38			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	52	529	0.098	52	0.1	7.547	A
C-AB	8	564	0.014	8	0.0	6.478	A
C-A	28			28			
A-B	13			13			
A-C	46			46			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	52	529	0.098	52	0.1	7.547	A
C-AB	8	564	0.014	8	0.0	6.481	A
C-A	28			28			
A-B	13			13			
A-C	46			46			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	42	531	0.080	42	0.1	7.360	A
C-AB	7	563	0.012	7	0.0	6.477	A
C-A	23			23			
A-B	11			11			
A-C	38			38			

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	35	534	0.066	35	0.1	7.227	A
C-AB	5	562	0.010	5	0.0	6.474	A
C-A	19			19			
A-B	9			9			
A-C	32			32			

2040 With Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	T-Junction Existing Access Road	T-Junction	Two-way		2.14	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	590	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D22	2040 With Development	PM	ONE HOUR	17:00	18:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	68	100.000
B		✓	29	100.000
C		✓	89	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	18	50
	B	16	0	13
	C	65	24	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	3	3	3
	B	3	3	3
	C	3	3	3

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.06	7.75	0.1	A
C-AB	0.05	6.43	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	22	505	0.043	22	0.0	7.441	A
C-AB	20	580	0.034	20	0.0	6.427	A
C-A	47			47			
A-B	14			14			
A-C	38			38			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	26	502	0.052	26	0.1	7.568	A
C-AB	24	584	0.041	24	0.1	6.428	A
C-A	56			56			
A-B	16			16			
A-C	45			45			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	32	497	0.064	32	0.1	7.745	A
C-AB	30	590	0.051	30	0.1	6.428	A
C-A	68			68			
A-B	20			20			
A-C	55			55			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	32	497	0.064	32	0.1	7.746	A
C-AB	30	590	0.051	30	0.1	6.431	A
C-A	68			68			
A-B	20			20			
A-C	55			55			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	26	502	0.052	26	0.1	7.573	A
C-AB	24	584	0.041	24	0.1	6.430	A
C-A	56			56			
A-B	16			16			
A-C	45			45			

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	22	505	0.043	22	0.0	7.445	A
C-AB	20	580	0.034	20	0.0	6.434	A
C-A	47			47			
A-B	14			14			
A-C	38			38			

<h1>Junctions 9</h1>
<h2>PICADY 9 - Priority Intersection Module</h2>
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Filename: Junction 4.j9

Path: N:\TIA\19034TT_Delaney's_OFlynn 1\Traffic Analysis\Junctions 9

Report generation date: 22/06/2022 11:04:41

-
- »2022, AM
 - »2022, PM
 - »2023 Without Development, AM
 - »2023 Without Development, PM
 - »2023 With Development, AM
 - »2023 With Development, PM
 - »2024 Without Development, AM
 - »2024 Without Development, PM
 - »2024 With Development, AM
 - »2024 With Development, PM
 - »2025 Without Development, AM
 - »2025 Without Development, PM
 - »2025 With Development, AM
 - »2025 With Development, PM
 - »2030 Without Development, AM
 - »2030 Without Development, PM
 - »2030 With Development, AM
 - »2030 With Development, PM
 - »2040 Without Development, AM
 - »2040 Without Development, PM
 - »2040 With Development, AM
 - »2040 With Development, PM

Summary of junction performance

	AM							PM						
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Junction LOS	Network Residual Capacity	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Junction LOS	Network Residual Capacity
2022														
Stream B-AC	D1	0.0	8.24	0.02	A	A	136 %	D2	0.0	7.61	0.02	A	A	179 %
Stream C-AB		0.0	4.04	0.02	A		[Stream C-AB]		0.0	5.01	0.01	A		[Stream B-AC]
2023 Without Development														
Stream B-AC	D3	0.0	8.45	0.03	A	A	130 %	D4	0.0	7.66	0.02	A	A	175 %
Stream C-AB		0.0	4.02	0.02	A		[Stream C-AB]		0.0	5.00	0.01	A		[Stream B-AC]
2023 With Development														
Stream B-AC	D5	0.0	8.58	0.03	A	A	127 %	D6	0.0	7.74	0.02	A	A	167 %
Stream C-AB		0.0	4.01	0.02	A		[Stream C-AB]		0.0	4.95	0.01	A		[Stream B-AC]
2024 Without Development														
Stream B-AC	D7	0.0	8.50	0.03	A	A	127 %	D8	0.0	7.95	0.02	A	A	164 %
Stream C-AB		0.0	4.00	0.02	A		[Stream C-AB]		0.0	5.00	0.01	A		[Stream B-AC]
2024 With Development														
Stream B-AC	D9	0.0	8.71	0.03	A	A	123 %	D10	0.0	8.09	0.02	A	A	153 %
Stream C-AB		0.0	3.99	0.02	A		[Stream C-AB]		0.0	4.91	0.01	A		[Stream B-AC]
2025 Without Development														
Stream B-AC	D11	0.0	8.56	0.03	A	A	123 %	D12	0.0	8.00	0.02	A	A	160 %
Stream C-AB		0.0	3.97	0.02	A		[Stream C-AB]		0.0	4.98	0.01	A		[Stream B-AC]
2025 With Development														
Stream B-AC	D13	0.0	8.79	0.03	A	A	118 %	D14	0.0	8.20	0.02	A	A	145 %
Stream C-AB		0.0	3.97	0.02	A		[Stream C-AB]		0.0	4.86	0.01	A		[Stream B-AC]
2030 Without Development														
Stream B-AC	D15	0.0	8.90	0.03	A	A	105 %	D16	0.0	8.16	0.02	A	A	141 %
Stream C-AB		0.0	3.86	0.03	A		[Stream C-AB]		0.0	4.91	0.01	A		[Stream B-AC]
2030 With Development														
Stream B-AC	D17	0.5	13.49	0.34	B	A	47 %	D18	0.2	10.36	0.20	B	A	77 %
Stream C-AB		0.4	4.12	0.14	A		[Stream B-AC]		0.3	5.37	0.14	A		[Stream B-AC]
2040 Without Development														
Stream B-AC	D19	0.0	9.42	0.03	A	A	89 %	D20	0.0	8.47	0.03	A	A	123 %
Stream C-AB		0.0	3.76	0.03	A		[Stream C-AB]		0.0	4.84	0.01	A		[Stream B-AC]
2040 With Development														
Stream B-AC	D21	0.4	12.81	0.28	B	A	52 %	D22	0.2	10.33	0.17	B	A	76 %
Stream C-AB		0.3	3.97	0.14	A		[Stream B-AC]		0.3	5.18	0.12	A		[Stream B-AC]

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

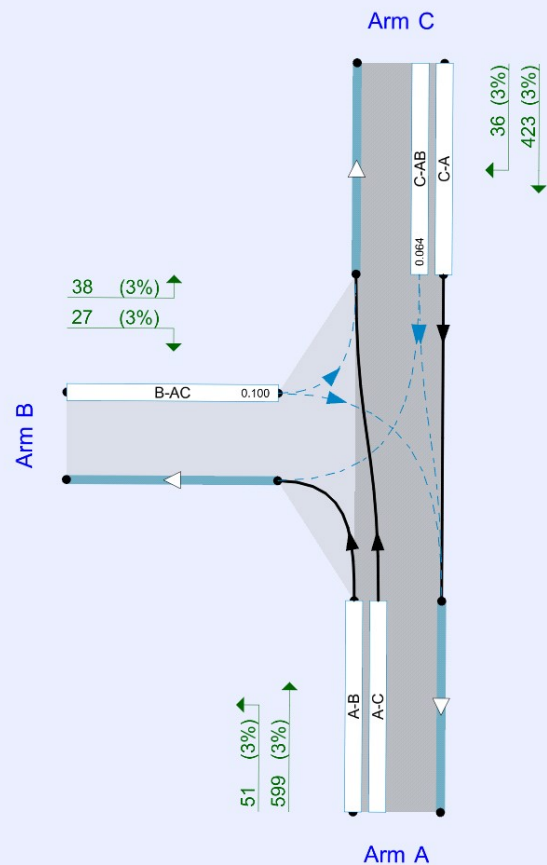
File summary

File Description

Title	
Location	
Site number	
Date	17/06/2022
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	MHL\bmurphy
Description	

Units

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



Flows show original traffic demand (Veh/hr).
Streams (downstream end) show RFC (l)

The junction diagram reflects the last run of Junctions.

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2022	AM	ONE HOUR	08:00	09:30	15
D2	2022	PM	ONE HOUR	17:00	18:30	15
D3	2023 Without Development	AM	ONE HOUR	08:00	09:30	15
D4	2023 Without Development	PM	ONE HOUR	17:00	18:30	15
D5	2023 With Development	AM	ONE HOUR	08:00	09:30	15
D6	2023 With Development	PM	ONE HOUR	17:00	18:30	15
D7	2024 Without Development	AM	ONE HOUR	08:00	09:30	15
D8	2024 Without Development	PM	ONE HOUR	17:00	18:30	15
D9	2024 With Development	AM	ONE HOUR	08:00	09:30	15
D10	2024 With Development	PM	ONE HOUR	17:00	18:30	15
D11	2025 Without Development	AM	ONE HOUR	08:00	09:30	15
D12	2025 Without Development	PM	ONE HOUR	17:00	18:30	15
D13	2025 With Development	AM	ONE HOUR	08:00	09:30	15
D14	2025 With Development	PM	ONE HOUR	17:00	18:30	15
D15	2030 Without Development	AM	ONE HOUR	08:00	09:30	15
D16	2030 Without Development	PM	ONE HOUR	17:00	18:30	15
D17	2030 With Development	AM	ONE HOUR	08:00	09:30	15
D18	2030 With Development	PM	ONE HOUR	17:00	18:30	15
D19	2040 Without Development	AM	ONE HOUR	08:00	09:30	15
D20	2040 Without Development	PM	ONE HOUR	17:00	18:30	15
D21	2040 With Development	AM	ONE HOUR	08:00	09:30	15
D22	2040 With Development	PM	ONE HOUR	17:00	18:30	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2022, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
4	Kilbarry Enterprise Centre/ Upper Dublin Hill	T-Junction	Two-way		0.15	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	136	Stream C-AB

Arms

Arms

Arm	Name	Description	Arm type
A	Upper Dublin Hill (S)		Major
B	Kilbarry Enterprise Centre		Minor
C	Upper Dublin Hill (S)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	9.00			121.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	3.50	100	90

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	583	0.092	0.234	0.147	0.334
B-C	715	0.095	0.241	-	-
C-B	644	0.217	0.217	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2022	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	272	100.000
B		✓	9	100.000
C		✓	645	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
	A	B	C	
From	A	0	3	269
	B	6	0	3
	C	639	6	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	A	B	C	
From	A	3	3	3
	B	3	3	3
	C	3	3	3

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.02	8.24	0.0	A
C-AB	0.02	4.04	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	7	498	0.014	7	0.0	7.331	A
C-AB	10	902	0.011	10	0.0	4.034	A
C-A	476			476			
A-B	2			2			
A-C	203			203			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	8	476	0.017	8	0.0	7.686	A
C-AB	13	959	0.014	13	0.0	3.808	A
C-A	566			566			
A-B	3			3			
A-C	242			242			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	10	447	0.022	10	0.0	8.243	A
C-AB	21	1038	0.020	21	0.0	3.536	A
C-A	690			690			
A-B	3			3			
A-C	296			296			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	10	447	0.022	10	0.0	8.243	A
C-AB	21	1038	0.020	21	0.0	3.539	A
C-A	690			690			
A-B	3			3			
A-C	296			296			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	8	476	0.017	8	0.0	7.686	A
C-AB	14	959	0.014	14	0.0	3.808	A
C-A	566			566			
A-B	3			3			
A-C	242			242			

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	7	498	0.014	7	0.0	7.335	A
C-AB	10	902	0.011	10	0.0	4.035	A
C-A	476			476			
A-B	2			2			
A-C	203			203			

2022, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
4	Kilbarry Enterprise Centre/ Upper Dublin Hill	T-Junction	Two-way		0.10	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	179	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2022	PM	ONE HOUR	17:00	18:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	487	100.000
B		✓	8	100.000
C		✓	343	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	5	482
	B	3	0	5
	C	340	3	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	3	3	3
	B	3	3	3
	C	3	3	3

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.02	7.61	0.0	A
C-AB	0.01	5.01	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	6	533	0.011	6	0.0	6.836	A
C-AB	3	722	0.005	3	0.0	5.011	A
C-A	255			255			
A-B	4			4			
A-C	363			363			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	7	511	0.014	7	0.0	7.140	A
C-AB	5	743	0.006	5	0.0	4.873	A
C-A	304			304			
A-B	4			4			
A-C	433			433			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	9	481	0.018	9	0.0	7.615	A
C-AB	6	774	0.008	6	0.0	4.687	A
C-A	371			371			
A-B	6			6			
A-C	531			531			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	9	481	0.018	9	0.0	7.615	A
C-AB	6	774	0.008	6	0.0	4.689	A
C-A	371			371			
A-B	6			6			
A-C	531			531			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	7	511	0.014	7	0.0	7.141	A
C-AB	5	743	0.006	5	0.0	4.875	A
C-A	304			304			
A-B	4			4			
A-C	433			433			

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	6	533	0.011	6	0.0	6.839	A
C-AB	4	722	0.005	4	0.0	5.011	A
C-A	255			255			
A-B	4			4			
A-C	363			363			

2023 Without Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
4	Kilbarry Enterprise Centre/ Upper Dublin Hill	T-Junction	Two-way		0.17	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	130	Stream C-AB

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2023 Without Development	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	277	100.000
B		✓	10	100.000
C		✓	657	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	3	274
	B	7	0	3
	C	650	7	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	3	3	3
	B	3	3	3
	C	3	3	3

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.03	8.45	0.0	A
C-AB	0.02	4.02	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	8	490	0.015	7	0.0	7.461	A
C-AB	11	907	0.013	11	0.0	4.019	A
C-A	483			483			
A-B	2			2			
A-C	206			206			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	9	468	0.019	9	0.0	7.843	A
C-AB	16	965	0.017	16	0.0	3.794	A
C-A	575			575			
A-B	3			3			
A-C	246			246			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	11	437	0.025	11	0.0	8.447	A
C-AB	24	1046	0.023	24	0.0	3.523	A
C-A	699			699			
A-B	3			3			
A-C	302			302			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	11	437	0.025	11	0.0	8.447	A
C-AB	24	1046	0.023	24	0.0	3.523	A
C-A	699			699			
A-B	3			3			
A-C	302			302			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	9	468	0.019	9	0.0	7.845	A
C-AB	16	965	0.017	16	0.0	3.797	A
C-A	575			575			
A-B	3			3			
A-C	246			246			

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	8	490	0.015	8	0.0	7.462	A
C-AB	11	907	0.013	12	0.0	4.021	A
C-A	483			483			
A-B	2			2			
A-C	206			206			

2023 Without Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
4	Kilbarry Enterprise Centre/ Upper Dublin Hill	T-Junction	Two-way		0.10	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	175	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2023 Without Development	PM	ONE HOUR	17:00	18:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	495	100.000
B		✓	8	100.000
C		✓	349	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	5	490
	B	3	0	5
	C	346	3	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	3	3	3
	B	3	3	3
	C	3	3	3

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.02	7.66	0.0	A
C-AB	0.01	5.00	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	6	531	0.011	6	0.0	6.859	A
C-AB	4	724	0.005	4	0.0	4.997	A
C-A	259			259			
A-B	4			4			
A-C	369			369			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	7	509	0.014	7	0.0	7.172	A
C-AB	5	746	0.006	5	0.0	4.857	A
C-A	309			309			
A-B	4			4			
A-C	440			440			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	9	479	0.018	9	0.0	7.659	A
C-AB	6	777	0.008	6	0.0	4.669	A
C-A	378			378			
A-B	6			6			
A-C	540			540			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	9	479	0.018	9	0.0	7.659	A
C-AB	6	777	0.008	6	0.0	4.669	A
C-A	378			378			
A-B	6			6			
A-C	540			540			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	7	509	0.014	7	0.0	7.175	A
C-AB	5	746	0.006	5	0.0	4.859	A
C-A	309			309			
A-B	4			4			
A-C	440			440			

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	6	531	0.011	6	0.0	6.862	A
C-AB	4	724	0.005	4	0.0	4.999	A
C-A	259			259			
A-B	4			4			
A-C	369			369			

2023 With Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
4	Kilbarry Enterprise Centre/ Upper Dublin Hill	T-Junction	Two-way		0.17	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	127	Stream C-AB

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	2023 With Development	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	297	100.000
B		✓	10	100.000
C		✓	665	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	3	294
	B	7	0	3
	C	658	7	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	3	3	3
	B	3	3	3
	C	3	3	3

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.03	8.58	0.0	A
C-AB	0.02	4.01	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	8	486	0.016	7	0.0	7.529	A
C-AB	12	909	0.013	12	0.0	4.012	A
C-A	489			489			
A-B	2			2			
A-C	221			221			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	9	463	0.019	9	0.0	7.934	A
C-AB	16	967	0.017	16	0.0	3.786	A
C-A	582			582			
A-B	3			3			
A-C	264			264			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	11	431	0.026	11	0.0	8.578	A
C-AB	25	1049	0.024	25	0.0	3.514	A
C-A	707			707			
A-B	3			3			
A-C	324			324			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	11	431	0.026	11	0.0	8.578	A
C-AB	25	1049	0.024	25	0.0	3.514	A
C-A	707			707			
A-B	3			3			
A-C	324			324			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	9	463	0.019	9	0.0	7.935	A
C-AB	16	967	0.017	16	0.0	3.786	A
C-A	582			582			
A-B	3			3			
A-C	264			264			

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	8	486	0.016	8	0.0	7.533	A
C-AB	12	909	0.013	12	0.0	4.014	A
C-A	489			489			
A-B	2			2			
A-C	221			221			

2023 With Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
4	Kilbarry Enterprise Centre/ Upper Dublin Hill	T-Junction	Two-way		0.10	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	167	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	2023 With Development	PM	ONE HOUR	17:00	18:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	507	100.000
B		✓	8	100.000
C		✓	367	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	5	502
	B	3	0	5
	C	364	3	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	3	3	3
	B	3	3	3
	C	3	3	3

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.02	7.74	0.0	A
C-AB	0.01	4.95	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	6	527	0.011	6	0.0	6.903	A
C-AB	4	731	0.005	4	0.0	4.945	A
C-A	273			273			
A-B	4			4			
A-C	378			378			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	7	505	0.014	7	0.0	7.229	A
C-AB	5	755	0.006	5	0.0	4.797	A
C-A	325			325			
A-B	4			4			
A-C	451			451			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	9	474	0.019	9	0.0	7.742	A
C-AB	7	789	0.009	7	0.0	4.599	A
C-A	397			397			
A-B	6			6			
A-C	553			553			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	9	474	0.019	9	0.0	7.742	A
C-AB	7	789	0.009	7	0.0	4.599	A
C-A	397			397			
A-B	6			6			
A-C	553			553			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	7	505	0.014	7	0.0	7.232	A
C-AB	5	755	0.006	5	0.0	4.799	A
C-A	325			325			
A-B	4			4			
A-C	451			451			

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	6	527	0.011	6	0.0	6.903	A
C-AB	4	731	0.005	4	0.0	4.945	A
C-A	273			273			
A-B	4			4			
A-C	378			378			

2024 Without Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
4	Kilbarry Enterprise Centre/ Upper Dublin Hill	T-Junction	Two-way		0.17	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	127	Stream C-AB

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D7	2024 Without Development	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	281	100.000
B		✓	10	100.000
C		✓	668	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	3	278
	B	7	0	3
	C	661	7	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	3	3	3
	B	3	3	3
	C	3	3	3

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.03	8.50	0.0	A
C-AB	0.02	4.00	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	8	488	0.015	7	0.0	7.488	A
C-AB	12	912	0.013	12	0.0	3.997	A
C-A	491			491			
A-B	2			2			
A-C	209			209			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	9	466	0.019	9	0.0	7.879	A
C-AB	16	971	0.017	16	0.0	3.770	A
C-A	584			584			
A-B	3			3			
A-C	250			250			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	11	434	0.025	11	0.0	8.500	A
C-AB	25	1054	0.024	25	0.0	3.499	A
C-A	710			710			
A-B	3			3			
A-C	306			306			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	11	434	0.025	11	0.0	8.500	A
C-AB	25	1054	0.024	25	0.0	3.502	A
C-A	710			710			
A-B	3			3			
A-C	306			306			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	9	466	0.019	9	0.0	7.882	A
C-AB	16	971	0.017	16	0.0	3.774	A
C-A	584			584			
A-B	3			3			
A-C	250			250			

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	8	488	0.015	8	0.0	7.492	A
C-AB	12	912	0.013	12	0.0	3.998	A
C-A	491			491			
A-B	2			2			
A-C	209			209			

2024 Without Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
4	Kilbarry Enterprise Centre/ Upper Dublin Hill	T-Junction	Two-way		0.12	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	164	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D8	2024 Without Development	PM	ONE HOUR	17:00	18:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	504	100.000
B		✓	9	100.000
C		✓	356	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	5	499
	B	4	0	5
	C	352	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	3	3	3
	B	3	3	3
	C	3	3	3

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.02	7.95	0.0	A
C-AB	0.01	5.00	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	7	517	0.013	7	0.0	7.057	A
C-AB	5	726	0.007	5	0.0	4.993	A
C-A	263			263			
A-B	4			4			
A-C	376			376			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	8	494	0.016	8	0.0	7.405	A
C-AB	6	748	0.008	6	0.0	4.852	A
C-A	314			314			
A-B	4			4			
A-C	449			449			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	10	462	0.021	10	0.0	7.954	A
C-AB	9	780	0.011	9	0.0	4.664	A
C-A	383			383			
A-B	6			6			
A-C	549			549			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	10	462	0.021	10	0.0	7.954	A
C-AB	9	780	0.011	9	0.0	4.664	A
C-A	383			383			
A-B	6			6			
A-C	549			549			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	8	494	0.016	8	0.0	7.406	A
C-AB	6	748	0.008	6	0.0	4.854	A
C-A	314			314			
A-B	4			4			
A-C	449			449			

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	7	517	0.013	7	0.0	7.060	A
C-AB	5	726	0.007	5	0.0	4.995	A
C-A	263			263			
A-B	4			4			
A-C	376			376			

2024 With Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
4	Kilbarry Enterprise Centre/ Upper Dublin Hill	T-Junction	Two-way		0.17	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	123	Stream C-AB

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D9	2024 With Development	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	313	100.000
B		✓	10	100.000
C		✓	678	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	3	310
	B	7	0	3
	C	671	7	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	3	3	3
	B	3	3	3
	C	3	3	3

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.03	8.71	0.0	A
C-AB	0.02	3.99	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	8	481	0.016	7	0.0	7.595	A
C-AB	12	913	0.013	12	0.0	3.992	A
C-A	499			499			
A-B	2			2			
A-C	233			233			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	9	458	0.020	9	0.0	8.022	A
C-AB	17	973	0.017	17	0.0	3.764	A
C-A	593			593			
A-B	3			3			
A-C	279			279			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	11	424	0.026	11	0.0	8.706	A
C-AB	26	1057	0.024	26	0.0	3.491	A
C-A	721			721			
A-B	3			3			
A-C	341			341			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	11	424	0.026	11	0.0	8.707	A
C-AB	26	1057	0.024	26	0.0	3.491	A
C-A	721			721			
A-B	3			3			
A-C	341			341			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	9	458	0.020	9	0.0	8.023	A
C-AB	17	973	0.017	17	0.0	3.767	A
C-A	593			593			
A-B	3			3			
A-C	279			279			

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	8	481	0.016	8	0.0	7.599	A
C-AB	12	913	0.013	12	0.0	3.994	A
C-A	499			499			
A-B	2			2			
A-C	233			233			

2024 With Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
4	Kilbarry Enterprise Centre/ Upper Dublin Hill	T-Junction	Two-way		0.12	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	153	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D10	2024 With Development	PM	ONE HOUR	17:00	18:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	521	100.000
B		✓	9	100.000
C		✓	385	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	5	516
	B	4	0	5
	C	381	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	3	3	3
	B	3	3	3
	C	3	3	3

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.02	8.09	0.0	A
C-AB	0.01	4.91	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	7	512	0.013	7	0.0	7.128	A
C-AB	5	738	0.007	5	0.0	4.908	A
C-A	285			285			
A-B	4			4			
A-C	388			388			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	8	488	0.017	8	0.0	7.500	A
C-AB	7	764	0.009	7	0.0	4.755	A
C-A	340			340			
A-B	4			4			
A-C	464			464			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	10	455	0.022	10	0.0	8.092	A
C-AB	9	800	0.012	9	0.0	4.551	A
C-A	415			415			
A-B	6			6			
A-C	568			568			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	10	455	0.022	10	0.0	8.092	A
C-AB	9	800	0.012	9	0.0	4.553	A
C-A	415			415			
A-B	6			6			
A-C	568			568			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	8	488	0.017	8	0.0	7.501	A
C-AB	7	764	0.009	7	0.0	4.755	A
C-A	340			340			
A-B	4			4			
A-C	464			464			

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	7	512	0.013	7	0.0	7.129	A
C-AB	5	738	0.007	5	0.0	4.910	A
C-A	285			285			
A-B	4			4			
A-C	388			388			

2025 Without Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
4	Kilbarry Enterprise Centre/ Upper Dublin Hill	T-Junction	Two-way		0.17	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	123	Stream C-AB

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D11	2025 Without Development	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	286	100.000
B		✓	10	100.000
C		✓	680	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	3	283
	B	7	0	3
	C	673	7	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	3	3	3
	B	3	3	3
	C	3	3	3

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.03	8.56	0.0	A
C-AB	0.02	3.97	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	8	486	0.015	7	0.0	7.520	A
C-AB	12	917	0.013	12	0.0	3.974	A
C-A	500			500			
A-B	2			2			
A-C	213			213			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	9	463	0.019	9	0.0	7.922	A
C-AB	17	977	0.017	17	0.0	3.745	A
C-A	595			595			
A-B	3			3			
A-C	254			254			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	11	431	0.026	11	0.0	8.562	A
C-AB	26	1062	0.024	26	0.0	3.473	A
C-A	723			723			
A-B	3			3			
A-C	312			312			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	11	431	0.026	11	0.0	8.562	A
C-AB	26	1062	0.024	26	0.0	3.476	A
C-A	723			723			
A-B	3			3			
A-C	312			312			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	9	463	0.019	9	0.0	7.923	A
C-AB	17	977	0.017	17	0.0	3.749	A
C-A	595			595			
A-B	3			3			
A-C	254			254			

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	8	486	0.015	8	0.0	7.521	A
C-AB	12	918	0.013	12	0.0	3.974	A
C-A	500			500			
A-B	2			2			
A-C	213			213			

2025 Without Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
4	Kilbarry Enterprise Centre/ Upper Dublin Hill	T-Junction	Two-way		0.12	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	160	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D12	2025 Without Development	PM	ONE HOUR	17:00	18:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	512	100.000
B		✓	9	100.000
C		✓	362	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	5	507
	B	4	0	5
	C	358	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	3	3	3
	B	3	3	3
	C	3	3	3

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.02	8.00	0.0	A
C-AB	0.01	4.98	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	7	515	0.013	7	0.0	7.083	A
C-AB	5	728	0.007	5	0.0	4.979	A
C-A	268			268			
A-B	4			4			
A-C	382			382			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	8	492	0.016	8	0.0	7.440	A
C-AB	6	750	0.008	6	0.0	4.837	A
C-A	319			319			
A-B	4			4			
A-C	456			456			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	10	460	0.022	10	0.0	8.003	A
C-AB	9	784	0.011	9	0.0	4.645	A
C-A	390			390			
A-B	6			6			
A-C	558			558			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	10	460	0.022	10	0.0	8.003	A
C-AB	9	784	0.011	9	0.0	4.647	A
C-A	390			390			
A-B	6			6			
A-C	558			558			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	8	492	0.016	8	0.0	7.440	A
C-AB	6	751	0.008	6	0.0	4.837	A
C-A	319			319			
A-B	4			4			
A-C	456			456			

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	7	515	0.013	7	0.0	7.084	A
C-AB	5	728	0.007	5	0.0	4.981	A
C-A	268			268			
A-B	4			4			
A-C	382			382			

2025 With Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
4	Kilbarry Enterprise Centre/ Upper Dublin Hill	T-Junction	Two-way		0.16	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	118	Stream C-AB

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D13	2025 With Development	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	320	100.000
B		✓	10	100.000
C		✓	693	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	3	317
	B	7	0	3
	C	686	7	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	3	3	3
	B	3	3	3
	C	3	3	3

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.03	8.79	0.0	A
C-AB	0.02	3.97	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	8	479	0.016	7	0.0	7.638	A
C-AB	12	920	0.013	12	0.0	3.963	A
C-A	510			510			
A-B	2			2			
A-C	239			239			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	9	454	0.020	9	0.0	8.080	A
C-AB	17	981	0.017	17	0.0	3.733	A
C-A	606			606			
A-B	3			3			
A-C	285			285			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	11	420	0.026	11	0.0	8.793	A
C-AB	26	1067	0.025	26	0.0	3.459	A
C-A	737			737			
A-B	3			3			
A-C	349			349			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	11	420	0.026	11	0.0	8.793	A
C-AB	26	1067	0.025	26	0.0	3.461	A
C-A	737			737			
A-B	3			3			
A-C	349			349			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	9	454	0.020	9	0.0	8.081	A
C-AB	17	981	0.017	17	0.0	3.736	A
C-A	606			606			
A-B	3			3			
A-C	285			285			

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	8	479	0.016	8	0.0	7.639	A
C-AB	12	920	0.013	12	0.0	3.965	A
C-A	510			510			
A-B	2			2			
A-C	239			239			

2025 With Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
4	Kilbarry Enterprise Centre/ Upper Dublin Hill	T-Junction	Two-way		0.12	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	145	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D14	2025 With Development	PM	ONE HOUR	17:00	18:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	535	100.000
B		✓	9	100.000
C		✓	403	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	5	530
	B	4	0	5
	C	399	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	3	3	3
	B	3	3	3
	C	3	3	3

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.02	8.20	0.0	A
C-AB	0.01	4.86	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	7	508	0.013	7	0.0	7.183	A
C-AB	5	746	0.007	5	0.0	4.859	A
C-A	298			298			
A-B	4			4			
A-C	399			399			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	8	483	0.017	8	0.0	7.573	A
C-AB	7	773	0.009	7	0.0	4.699	A
C-A	356			356			
A-B	4			4			
A-C	476			476			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	10	449	0.022	10	0.0	8.198	A
C-AB	10	812	0.012	10	0.0	4.487	A
C-A	434			434			
A-B	6			6			
A-C	584			584			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	10	449	0.022	10	0.0	8.198	A
C-AB	10	812	0.012	10	0.0	4.489	A
C-A	434			434			
A-B	6			6			
A-C	584			584			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	8	483	0.017	8	0.0	7.577	A
C-AB	7	773	0.009	7	0.0	4.701	A
C-A	356			356			
A-B	4			4			
A-C	476			476			

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	7	508	0.013	7	0.0	7.183	A
C-AB	5	746	0.007	5	0.0	4.859	A
C-A	298			298			
A-B	4			4			
A-C	399			399			

2030 Without Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
4	Kilbarry Enterprise Centre/ Upper Dublin Hill	T-Junction	Two-way		0.16	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	105	Stream C-AB

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D15	2030 Without Development	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	312	100.000
B		✓	10	100.000
C		✓	740	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	3	309
	B	7	0	3
	C	733	7	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	3	3	3
	B	3	3	3
	C	3	3	3

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.03	8.90	0.0	A
C-AB	0.03	3.86	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	8	476	0.016	7	0.0	7.687	A
C-AB	13	945	0.013	13	0.0	3.861	A
C-A	544			544			
A-B	2			2			
A-C	233			233			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	9	451	0.020	9	0.0	8.148	A
C-AB	18	1011	0.018	18	0.0	3.626	A
C-A	647			647			
A-B	3			3			
A-C	278			278			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	11	416	0.026	11	0.0	8.895	A
C-AB	29	1103	0.026	29	0.0	3.348	A
C-A	786			786			
A-B	3			3			
A-C	340			340			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	11	416	0.026	11	0.0	8.895	A
C-AB	29	1104	0.026	29	0.0	3.349	A
C-A	786			786			
A-B	3			3			
A-C	340			340			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	9	451	0.020	9	0.0	8.150	A
C-AB	18	1011	0.018	18	0.0	3.629	A
C-A	647			647			
A-B	3			3			
A-C	278			278			

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	8	476	0.016	8	0.0	7.690	A
C-AB	13	945	0.013	13	0.0	3.862	A
C-A	544			544			
A-B	2			2			
A-C	233			233			

2030 Without Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
4	Kilbarry Enterprise Centre/ Upper Dublin Hill	T-Junction	Two-way		0.12	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	141	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D16	2030 Without Development	PM	ONE HOUR	17:00	18:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	559	100.000
B		✓	10	100.000
C		✓	394	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	6	553
	B	4	0	6
	C	390	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	3	3	3
	B	3	3	3
	C	3	3	3

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.02	8.16	0.0	A
C-AB	0.01	4.91	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	8	512	0.015	7	0.0	7.136	A
C-AB	5	738	0.007	5	0.0	4.911	A
C-A	292			292			
A-B	5			5			
A-C	416			416			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	9	487	0.018	9	0.0	7.529	A
C-AB	7	763	0.009	7	0.0	4.757	A
C-A	348			348			
A-B	5			5			
A-C	497			497			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	11	452	0.024	11	0.0	8.160	A
C-AB	10	800	0.012	10	0.0	4.551	A
C-A	424			424			
A-B	7			7			
A-C	609			609			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	11	452	0.024	11	0.0	8.160	A
C-AB	10	800	0.012	10	0.0	4.553	A
C-A	424			424			
A-B	7			7			
A-C	609			609			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	9	487	0.018	9	0.0	7.530	A
C-AB	7	763	0.009	7	0.0	4.759	A
C-A	348			348			
A-B	5			5			
A-C	497			497			

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	8	512	0.015	8	0.0	7.139	A
C-AB	5	738	0.007	5	0.0	4.913	A
C-A	292			292			
A-B	5			5			
A-C	416			416			

2030 With Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
4	Kilbarry Enterprise Centre/ Upper Dublin Hill	T-Junction	Two-way		1.77	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	47	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D17	2030 With Development	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	325	100.000
B		✓	124	100.000
C		✓	771	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	16	309
	B	87	0	37
	C	733	38	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	3	3	3
	B	3	3	3
	C	3	3	3

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.34	13.49	0.5	B
C-AB	0.14	4.12	0.4	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	93	468	0.200	92	0.2	9.565	A
C-AB	69	943	0.073	68	0.1	4.115	A
C-A	512			512			
A-B	12			12			
A-C	233			233			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	111	441	0.253	111	0.3	10.898	B
C-AB	99	1009	0.098	99	0.2	3.955	A
C-A	594			594			
A-B	14			14			
A-C	278			278			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	137	403	0.338	136	0.5	13.416	B
C-AB	157	1102	0.143	157	0.4	3.812	A
C-A	692			692			
A-B	18			18			
A-C	340			340			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	137	403	0.338	137	0.5	13.488	B
C-AB	158	1103	0.143	158	0.4	3.815	A
C-A	691			691			
A-B	18			18			
A-C	340			340			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	111	441	0.253	112	0.3	10.972	B
C-AB	99	1010	0.098	100	0.2	3.964	A
C-A	594			594			
A-B	14			14			
A-C	278			278			

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	93	468	0.200	94	0.3	9.636	A
C-AB	69	944	0.073	70	0.1	4.123	A
C-A	511			511			
A-B	12			12			
A-C	233			233			

2030 With Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
4	Kilbarry Enterprise Centre/ Upper Dublin Hill	T-Junction	Two-way		1.13	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	77	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D18	2030 With Development	PM	ONE HOUR	17:00	18:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	618	100.000
B		✓	77	100.000
C		✓	436	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	65	553
	B	32	0	45
	C	390	46	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	3	3	3
	B	3	3	3
	C	3	3	3

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.20	10.36	0.2	B
C-AB	0.14	5.37	0.3	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	58	499	0.116	57	0.1	8.156	A
C-AB	58	730	0.079	57	0.1	5.353	A
C-A	270			270			
A-B	49			49			
A-C	416			416			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	69	471	0.147	69	0.2	8.951	A
C-AB	78	754	0.103	77	0.2	5.321	A
C-A	314			314			
A-B	58			58			
A-C	497			497			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	85	432	0.196	84	0.2	10.341	B
C-AB	112	790	0.141	111	0.3	5.311	A
C-A	368			368			
A-B	72			72			
A-C	609			609			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	85	432	0.196	85	0.2	10.359	B
C-AB	112	790	0.141	112	0.3	5.318	A
C-A	368			368			
A-B	72			72			
A-C	609			609			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	69	471	0.147	69	0.2	8.973	A
C-AB	78	755	0.103	78	0.2	5.334	A
C-A	314			314			
A-B	58			58			
A-C	497			497			

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	58	498	0.116	58	0.1	8.180	A
C-AB	58	730	0.080	59	0.2	5.368	A
C-A	270			270			
A-B	49			49			
A-C	416			416			

2040 Without Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
4	Kilbarry Enterprise Centre/ Upper Dublin Hill	T-Junction	Two-way		0.18	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	89	Stream C-AB

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D19	2040 Without Development	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	337	100.000
B		✓	11	100.000
C		✓	802	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	3	334
	B	8	0	3
	C	794	8	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	3	3	3
	B	3	3	3
	C	3	3	3

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.03	9.42	0.0	A
C-AB	0.03	3.76	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	8	460	0.018	8	0.0	7.960	A
C-AB	16	973	0.016	16	0.0	3.759	A
C-A	588			588			
A-B	2			2			
A-C	251			251			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	10	433	0.023	10	0.0	8.508	A
C-AB	23	1045	0.022	23	0.0	3.521	A
C-A	698			698			
A-B	3			3			
A-C	300			300			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	12	394	0.031	12	0.0	9.416	A
C-AB	37	1147	0.032	37	0.0	3.244	A
C-A	846			846			
A-B	3			3			
A-C	368			368			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	12	394	0.031	12	0.0	9.417	A
C-AB	37	1147	0.032	37	0.0	3.247	A
C-A	846			846			
A-B	3			3			
A-C	368			368			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	10	433	0.023	10	0.0	8.510	A
C-AB	23	1045	0.022	23	0.0	3.521	A
C-A	698			698			
A-B	3			3			
A-C	300			300			

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	8	460	0.018	8	0.0	7.963	A
C-AB	16	973	0.016	16	0.0	3.759	A
C-A	588			588			
A-B	2			2			
A-C	251			251			

2040 Without Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
4	Kilbarry Enterprise Centre/ Upper Dublin Hill	T-Junction	Two-way		0.12	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	123	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D20	2040 Without Development	PM	ONE HOUR	17:00	18:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	605	100.000
B		✓	10	100.000
C		✓	427	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	6	599
	B	4	0	6
	C	423	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	3	3	3
	B	3	3	3
	C	3	3	3

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.03	8.47	0.0	A
C-AB	0.01	4.84	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	8	501	0.015	7	0.0	7.289	A
C-AB	5	749	0.007	5	0.0	4.839	A
C-A	316			316			
A-B	5			5			
A-C	451			451			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	9	474	0.019	9	0.0	7.737	A
C-AB	7	777	0.009	7	0.0	4.674	A
C-A	377			377			
A-B	5			5			
A-C	538			538			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	11	436	0.025	11	0.0	8.466	A
C-AB	10	818	0.013	10	0.0	4.454	A
C-A	460			460			
A-B	7			7			
A-C	660			660			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	11	436	0.025	11	0.0	8.466	A
C-AB	10	818	0.013	10	0.0	4.454	A
C-A	460			460			
A-B	7			7			
A-C	660			660			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	9	474	0.019	9	0.0	7.739	A
C-AB	7	777	0.009	7	0.0	4.676	A
C-A	377			377			
A-B	5			5			
A-C	538			538			

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	8	501	0.015	8	0.0	7.289	A
C-AB	5	749	0.007	5	0.0	4.842	A
C-A	316			316			
A-B	5			5			
A-C	451			451			

2040 With Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
4	Kilbarry Enterprise Centre/ Upper Dublin Hill	T-Junction	Two-way		1.34	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	52	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D21	2040 With Development	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	348	100.000
B		✓	98	100.000
C		✓	827	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	14	334
	B	69	0	29
	C	794	33	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	3	3	3
	B	3	3	3
	C	3	3	3

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.28	12.81	0.4	B
C-AB	0.14	3.97	0.3	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	74	458	0.161	73	0.2	9.330	A
C-AB	65	972	0.066	64	0.1	3.966	A
C-A	558			558			
A-B	11			11			
A-C	251			251			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	88	429	0.205	88	0.3	10.538	B
C-AB	94	1044	0.090	94	0.2	3.794	A
C-A	649			649			
A-B	13			13			
A-C	300			300			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	108	389	0.277	107	0.4	12.760	B
C-AB	154	1145	0.135	154	0.3	3.631	A
C-A	756			756			
A-B	15			15			
A-C	368			368			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	108	389	0.277	108	0.4	12.807	B
C-AB	155	1146	0.135	155	0.3	3.639	A
C-A	756			756			
A-B	15			15			
A-C	368			368			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	88	429	0.205	89	0.3	10.581	B
C-AB	95	1044	0.091	95	0.2	3.797	A
C-A	649			649			
A-B	13			13			
A-C	300			300			

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	74	458	0.161	74	0.2	9.381	A
C-AB	65	972	0.067	65	0.1	3.973	A
C-A	558			558			
A-B	11			11			
A-C	251			251			

2040 With Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
4	Kilbarry Enterprise Centre/ Upper Dublin Hill	T-Junction	Two-way		0.90	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	76	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D22	2040 With Development	PM	ONE HOUR	17:00	18:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	650	100.000
B		✓	65	100.000
C		✓	459	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	51	599
	B	27	0	38
	C	423	36	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	3	3	3
	B	3	3	3
	C	3	3	3

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.17	10.33	0.2	B
C-AB	0.12	5.18	0.3	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	49	490	0.100	48	0.1	8.137	A
C-AB	47	743	0.064	47	0.1	5.174	A
C-A	298			298			
A-B	38			38			
A-C	451			451			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	58	461	0.127	58	0.1	8.931	A
C-AB	64	770	0.083	64	0.2	5.097	A
C-A	348			348			
A-B	46			46			
A-C	538			538			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	72	420	0.170	71	0.2	10.312	B
C-AB	94	811	0.115	93	0.3	5.021	A
C-A	412			412			
A-B	56			56			
A-C	660			660			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	72	420	0.170	72	0.2	10.328	B
C-AB	94	811	0.116	94	0.3	5.028	A
C-A	412			412			
A-B	56			56			
A-C	660			660			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	58	461	0.127	59	0.1	8.950	A
C-AB	64	771	0.084	65	0.2	5.107	A
C-A	348			348			
A-B	46			46			
A-C	538			538			

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	49	490	0.100	49	0.1	8.162	A
C-AB	48	743	0.064	48	0.1	5.181	A
C-A	298			298			
A-B	38			38			
A-C	451			451			

<h1>Junctions 9</h1>
<h2>PICADY 9 - Priority Intersection Module</h2>
Version: 9.5.1.7462 © Copyright TRL Limited, 2019
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Filename: Junction 5.j9

Path: N:\TIA\19034TT_Delaney's_OFlynn 1\Traffic Analysis\Junctions 9

Report generation date: 22/06/2022 11:07:51

-
- »2022, AM
 - »2022, PM
 - »2023 Without Development, AM
 - »2023 Without Development, PM
 - »2023 With Development, AM
 - »2023 With Development, PM
 - »2024 Without Development, AM
 - »2024 Without Development, PM
 - »2024 With Development, AM
 - »2024 With Development, PM
 - »2025 Without Development, AM
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 - »2025 With Development, AM
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 - »2030 Without Development, AM
 - »2030 Without Development, PM
 - »2030 With Development, AM
 - »2030 With Development, PM
 - »2040 Without Development, AM
 - »2040 Without Development, PM
 - »2040 With Development, AM
 - »2040 With Development, PM

Summary of junction performance

	AM							PM						
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Junction LOS	Network Residual Capacity	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Junction LOS	Network Residual Capacity
2022														
Stream B-AC	D1	1.9	21.70	0.66	C	A	12 %	D2	1.8	20.83	0.65	C	A	14 %
Stream C-AB		0.4	7.47	0.23	A		[Stream B-AC]		0.9	7.15	0.38	A		[Stream B-AC]
2023 Without Development														
Stream B-AC	D3	2.0	22.93	0.68	C	A	10 %	D4	1.9	21.94	0.67	C	A	12 %
Stream C-AB		0.4	7.54	0.24	A		[Stream B-AC]		0.9	7.25	0.39	A		[Stream B-AC]
2023 With Development														
Stream B-AC	D5	2.1	23.96	0.69	C	A	9 %	D6	2.1	23.21	0.68	C	A	10 %
Stream C-AB		0.5	7.62	0.25	A		[Stream B-AC]		1.0	7.37	0.40	A		[Stream B-AC]
2024 Without Development														
Stream B-AC	D7	2.2	24.56	0.70	C	A	8 %	D8	2.1	23.13	0.68	C	A	10 %
Stream C-AB		0.4	7.59	0.24	A		[Stream B-AC]		1.0	7.32	0.39	A		[Stream B-AC]
2024 With Development														
Stream B-AC	D9	2.4	26.25	0.71	D	A	6 %	D10	2.4	25.64	0.71	D	A	7 %
Stream C-AB		0.5	7.73	0.27	A		[Stream B-AC]		1.1	7.54	0.41	A		[Stream B-AC]
2025 Without Development														
Stream B-AC	D11	2.4	26.06	0.71	D	A	6 %	D12	2.2	24.72	0.70	C	A	8 %
Stream C-AB		0.5	7.66	0.25	A		[Stream B-AC]		1.0	7.43	0.40	A		[Stream B-AC]
2025 With Development														
Stream B-AC	D13	2.6	28.48	0.73	D	A	4 %	D14	2.7	29.06	0.74	D	A	4 %
Stream C-AB		0.6	7.81	0.28	A		[Stream B-AC]		1.2	7.76	0.43	A		[Stream B-AC]
2030 Without Development														
Stream B-AC	D15	3.9	40.27	0.81	E	B	-2 %	D16	3.5	36.33	0.79	E	B	-1 %
Stream C-AB		0.6	8.03	0.28	A		[Stream B-AC]		1.3	8.05	0.46	A		[Stream B-AC]
2030 With Development														
Stream B-AC	D17	4.9	50.10	0.85	F	B	-5 %	D18	4.7	47.78	0.85	E	B	-5 %
Stream C-AB		0.7	8.30	0.32	A		[Stream B-AC]		1.7	8.75	0.51	A		[Stream B-AC]
2040 Without Development														
Stream B-AC	D19	8.1	77.46	0.93	F	C	-10 %	D20	6.6	63.94	0.90	F	C	-8 %
Stream C-AB		0.7	8.47	0.32	A		[Stream B-AC]		1.7	8.91	0.52	A		[Stream B-AC]
2040 With Development														
Stream B-AC	D21	10.5	97.10	0.96	F	C	-12 %	D22	9.2	85.44	0.94	F	C	-11 %
Stream C-AB		0.8	8.76	0.35	A		[Stream B-AC]		2.1	9.65	0.57	A		[Stream B-AC]

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

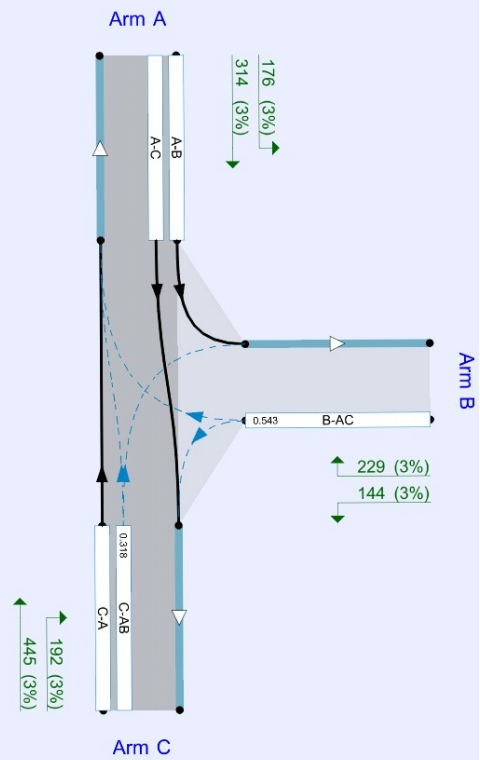
File summary

File Description

Title	
Location	
Site number	
Date	17/06/2022
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	MHL\bmurphy
Description	

Units

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



Flows show original traffic demand (Veh/hr).
Streams (downstream end) show RFC (l)

The junction diagram reflects the last run of Junctions.

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2022	AM	ONE HOUR	08:00	09:30	15
D2	2022	PM	ONE HOUR	17:00	18:30	15
D3	2023 Without Development	AM	ONE HOUR	08:00	09:30	15
D4	2023 Without Development	PM	ONE HOUR	17:00	18:30	15
D5	2023 With Development	AM	ONE HOUR	08:00	09:30	15
D6	2023 With Development	PM	ONE HOUR	17:00	18:30	15
D7	2024 Without Development	AM	ONE HOUR	08:00	09:30	15
D8	2024 Without Development	PM	ONE HOUR	17:00	18:30	15
D9	2024 With Development	AM	ONE HOUR	08:00	09:30	15
D10	2024 With Development	PM	ONE HOUR	17:00	18:30	15
D11	2025 Without Development	AM	ONE HOUR	08:00	09:30	15
D12	2025 Without Development	PM	ONE HOUR	17:00	18:30	15
D13	2025 With Development	AM	ONE HOUR	08:00	09:30	15
D14	2025 With Development	PM	ONE HOUR	17:00	18:30	15
D15	2030 Without Development	AM	ONE HOUR	08:00	09:30	15
D16	2030 Without Development	PM	ONE HOUR	17:00	18:30	15
D17	2030 With Development	AM	ONE HOUR	08:00	09:30	15
D18	2030 With Development	PM	ONE HOUR	17:00	18:30	15
D19	2040 Without Development	AM	ONE HOUR	08:00	09:30	15
D20	2040 Without Development	PM	ONE HOUR	17:00	18:30	15
D21	2040 With Development	AM	ONE HOUR	08:00	09:30	15
D22	2040 With Development	PM	ONE HOUR	17:00	18:30	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2022, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
5	Upper Dublin Hill/ Lower Dublin Hill	T-Junction	Two-way		5.85	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	12	Stream B-AC

Arms

Arms

Arm	Name	Description	Arm type
A	Upper Dublin Hill (N)		Major
B	Lower Dublin Hill		Minor
C	Upper Dublin Hill (S)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	9.00			155.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	4.00	110	150

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	649	0.103	0.260	0.163	0.371
B-C	790	0.105	0.266	-	-
C-B	664	0.224	0.224	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2022	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	680	100.000
B		✓	294	100.000
C		✓	272	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	194	486
	B	135	0	159
	C	185	87	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	3	3	3
	B	3	3	3
	C	3	3	3

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.66	21.70	1.9	C
C-AB	0.23	7.47	0.4	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	221	556	0.398	219	0.6	10.581	B
C-AB	84	627	0.134	83	0.2	6.618	A
C-A	121			121			
A-B	146			146			
A-C	366			366			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	264	528	0.500	263	1.0	13.502	B
C-AB	107	626	0.171	106	0.3	6.934	A
C-A	138			138			
A-B	174			174			
A-C	437			437			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	324	489	0.662	320	1.8	20.921	C
C-AB	142	625	0.228	142	0.4	7.452	A
C-A	157			157			
A-B	214			214			
A-C	535			535			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	324	489	0.662	323	1.9	21.703	C
C-AB	143	625	0.228	143	0.4	7.468	A
C-A	157			157			
A-B	214			214			
A-C	535			535			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	264	528	0.500	268	1.0	14.006	B
C-AB	107	626	0.171	107	0.3	6.957	A
C-A	138			138			
A-B	174			174			
A-C	437			437			

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	221	556	0.398	223	0.7	10.842	B
C-AB	84	627	0.135	85	0.2	6.646	A
C-A	120			120			
A-B	146			146			
A-C	366			366			

2022, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
5	Upper Dublin Hill/ Lower Dublin Hill	T-Junction	Two-way		6.81	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	14	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2022	PM	ONE HOUR	17:00	18:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	377	100.000
B		✓	292	100.000
C		✓	487	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	142	235
	B	184	0	108
	C	340	147	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	3	3	3
	B	3	3	3
	C	3	3	3

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.65	20.83	1.8	C
C-AB	0.38	7.15	0.9	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	220	553	0.397	217	0.6	10.629	B
C-AB	168	752	0.223	166	0.4	6.141	A
C-A	199			199			
A-B	107			107			
A-C	177			177			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	263	529	0.497	261	1.0	13.401	B
C-AB	219	775	0.282	218	0.6	6.471	A
C-A	219			219			
A-B	128			128			
A-C	211			211			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	321	494	0.651	318	1.8	20.124	C
C-AB	303	808	0.375	302	0.9	7.118	A
C-A	233			233			
A-B	156			156			
A-C	259			259			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	321	494	0.651	321	1.8	20.830	C
C-AB	303	809	0.375	303	0.9	7.153	A
C-A	233			233			
A-B	156			156			
A-C	259			259			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	263	528	0.497	266	1.0	13.876	B
C-AB	220	776	0.283	221	0.6	6.519	A
C-A	218			218			
A-B	128			128			
A-C	211			211			

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	220	553	0.398	221	0.7	10.899	B
C-AB	169	752	0.224	169	0.4	6.192	A
C-A	198			198			
A-B	107			107			
A-C	177			177			

2023 Without Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
5	Upper Dublin Hill/ Lower Dublin Hill	T-Junction	Two-way		6.15	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	10	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2023 Without Development	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	691	100.000
B		✓	299	100.000
C		✓	277	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	197	494
	B	137	0	162
	C	188	89	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	3	3	3
	B	3	3	3
	C	3	3	3

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.68	22.93	2.0	C
C-AB	0.24	7.54	0.4	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	225	554	0.406	222	0.7	10.766	B
C-AB	87	627	0.138	86	0.2	6.650	A
C-A	122			122			
A-B	148			148			
A-C	372			372			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	269	525	0.512	267	1.0	13.884	B
C-AB	110	626	0.176	110	0.3	6.977	A
C-A	139			139			
A-B	177			177			
A-C	444			444			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	329	485	0.678	325	2.0	21.991	C
C-AB	147	625	0.235	146	0.4	7.521	A
C-A	158			158			
A-B	217			217			
A-C	544			544			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	329	485	0.678	329	2.0	22.930	C
C-AB	147	626	0.235	147	0.4	7.537	A
C-A	158			158			
A-B	217			217			
A-C	544			544			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	269	525	0.512	273	1.1	14.450	B
C-AB	110	626	0.176	111	0.3	6.999	A
C-A	139			139			
A-B	177			177			
A-C	444			444			

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	225	554	0.406	227	0.7	11.047	B
C-AB	87	627	0.138	87	0.2	6.675	A
C-A	122			122			
A-B	148			148			
A-C	372			372			

2023 Without Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
5	Upper Dublin Hill/ Lower Dublin Hill	T-Junction	Two-way		7.13	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	12	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2023 Without Development	PM	ONE HOUR	17:00	18:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	383	100.000
B		✓	297	100.000
C		✓	496	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	144	239
	B	187	0	110
	C	346	150	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	3	3	3
	B	3	3	3
	C	3	3	3

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.67	21.94	1.9	C
C-AB	0.39	7.25	0.9	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	224	551	0.406	221	0.7	10.812	B
C-AB	173	754	0.229	171	0.4	6.166	A
C-A	201			201			
A-B	108			108			
A-C	180			180			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	267	526	0.508	266	1.0	13.759	B
C-AB	226	778	0.290	225	0.6	6.517	A
C-A	220			220			
A-B	129			129			
A-C	215			215			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	327	491	0.667	324	1.9	21.113	C
C-AB	313	812	0.385	311	0.9	7.210	A
C-A	233			233			
A-B	159			159			
A-C	263			263			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	327	490	0.667	327	1.9	21.936	C
C-AB	313	812	0.386	313	0.9	7.251	A
C-A	233			233			
A-B	159			159			
A-C	263			263			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	267	525	0.508	270	1.1	14.301	B
C-AB	226	779	0.291	228	0.6	6.568	A
C-A	220			220			
A-B	129			129			
A-C	215			215			

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	224	551	0.406	225	0.7	11.102	B
C-AB	173	755	0.230	174	0.4	6.221	A
C-A	200			200			
A-B	108			108			
A-C	180			180			

2023 With Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
5	Upper Dublin Hill/ Lower Dublin Hill	T-Junction	Two-way		6.37	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	9	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	2023 With Development	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	697	100.000
B		✓	301	100.000
C		✓	297	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	197	500
	B	137	0	164
	C	202	95	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	3	3	3
	B	3	3	3
	C	3	3	3

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.69	23.96	2.1	C
C-AB	0.25	7.62	0.5	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	227	551	0.411	224	0.7	10.903	B
C-AB	94	633	0.149	93	0.2	6.660	A
C-A	129			129			
A-B	148			148			
A-C	376			376			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	271	522	0.518	269	1.0	14.159	B
C-AB	120	634	0.189	120	0.3	7.008	A
C-A	147			147			
A-B	177			177			
A-C	449			449			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	331	481	0.689	327	2.1	22.877	C
C-AB	161	635	0.254	161	0.5	7.593	A
C-A	166			166			
A-B	217			217			
A-C	551			551			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	331	481	0.690	331	2.1	23.960	C
C-AB	162	636	0.254	162	0.5	7.616	A
C-A	165			165			
A-B	217			217			
A-C	551			551			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	271	522	0.519	275	1.1	14.801	B
C-AB	120	634	0.190	121	0.3	7.033	A
C-A	147			147			
A-B	177			177			
A-C	449			449			

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	227	551	0.411	228	0.7	11.201	B
C-AB	94	634	0.149	95	0.2	6.691	A
C-A	129			129			
A-B	148			148			
A-C	376			376			

2023 With Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
5	Upper Dublin Hill/ Lower Dublin Hill	T-Junction	Two-way		7.46	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	10	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	2023 With Development	PM	ONE HOUR	17:00	18:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	395	100.000
B		✓	302	100.000
C		✓	507	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	144	251
	B	187	0	115
	C	354	153	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	3	3	3
	B	3	3	3
	C	3	3	3

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.68	23.21	2.1	C
C-AB	0.40	7.37	1.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	227	549	0.414	225	0.7	10.992	B
C-AB	178	756	0.235	176	0.4	6.198	A
C-A	204			204			
A-B	108			108			
A-C	189			189			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	271	523	0.519	270	1.0	14.131	B
C-AB	233	781	0.299	232	0.6	6.575	A
C-A	223			223			
A-B	129			129			
A-C	226			226			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	333	487	0.683	329	2.0	22.216	C
C-AB	324	816	0.398	323	1.0	7.324	A
C-A	234			234			
A-B	159			159			
A-C	276			276			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	333	487	0.683	332	2.1	23.209	C
C-AB	325	816	0.398	325	1.0	7.366	A
C-A	233			233			
A-B	159			159			
A-C	276			276			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	271	523	0.519	275	1.1	14.761	B
C-AB	234	782	0.299	235	0.6	6.625	A
C-A	222			222			
A-B	129			129			
A-C	226			226			

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	227	549	0.414	229	0.7	11.305	B
C-AB	179	757	0.236	180	0.4	6.252	A
C-A	203			203			
A-B	108			108			
A-C	189			189			

2024 Without Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
5	Upper Dublin Hill/ Lower Dublin Hill	T-Junction	Two-way		6.55	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	8	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D7	2024 Without Development	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	704	100.000
B		✓	305	100.000
C		✓	281	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	201	503
	B	140	0	165
	C	191	90	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	3	3	3
	B	3	3	3
	C	3	3	3

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.70	24.56	2.2	C
C-AB	0.24	7.59	0.4	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	230	552	0.416	227	0.7	10.997	B
C-AB	88	626	0.140	87	0.2	6.669	A
C-A	124			124			
A-B	151			151			
A-C	379			379			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	274	522	0.525	273	1.1	14.338	B
C-AB	112	625	0.179	111	0.3	7.009	A
C-A	141			141			
A-B	181			181			
A-C	452			452			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	336	481	0.698	332	2.1	23.386	C
C-AB	150	625	0.240	149	0.4	7.573	A
C-A	160			160			
A-B	221			221			
A-C	554			554			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	336	481	0.698	335	2.2	24.560	C
C-AB	150	625	0.240	150	0.4	7.590	A
C-A	159			159			
A-B	221			221			
A-C	554			554			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	274	522	0.525	278	1.1	15.025	C
C-AB	112	626	0.179	113	0.3	7.035	A
C-A	141			141			
A-B	181			181			
A-C	452			452			

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	230	551	0.417	231	0.7	11.307	B
C-AB	88	627	0.141	89	0.2	6.698	A
C-A	123			123			
A-B	151			151			
A-C	379			379			

2024 Without Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
5	Upper Dublin Hill/ Lower Dublin Hill	T-Junction	Two-way		7.46	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	10	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D8	2024 Without Development	PM	ONE HOUR	17:00	18:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	390	100.000
B		✓	302	100.000
C		✓	504	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	147	243
	B	190	0	112
	C	352	152	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	3	3	3
	B	3	3	3
	C	3	3	3

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.68	23.13	2.1	C
C-AB	0.39	7.32	1.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	227	549	0.414	225	0.7	10.997	B
C-AB	176	756	0.233	174	0.4	6.184	A
C-A	203			203			
A-B	111			111			
A-C	183			183			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	271	523	0.519	270	1.0	14.124	B
C-AB	231	780	0.296	230	0.6	6.549	A
C-A	222			222			
A-B	132			132			
A-C	218			218			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	333	487	0.682	329	2.0	22.149	C
C-AB	321	815	0.394	319	1.0	7.279	A
C-A	234			234			
A-B	162			162			
A-C	268			268			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	333	487	0.683	332	2.1	23.130	C
C-AB	321	816	0.394	321	1.0	7.323	A
C-A	234			234			
A-B	162			162			
A-C	268			268			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	271	523	0.519	275	1.1	14.747	B
C-AB	231	781	0.296	233	0.6	6.600	A
C-A	222			222			
A-B	132			132			
A-C	218			218			

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	227	549	0.414	229	0.7	11.310	B
C-AB	177	757	0.234	178	0.4	6.237	A
C-A	202			202			
A-B	111			111			
A-C	183			183			

2024 With Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
5	Upper Dublin Hill/ Lower Dublin Hill	T-Junction	Two-way		6.90	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	6	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D9	2024 With Development	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	712	100.000
B		✓	307	100.000
C		✓	313	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	201	511
	B	140	0	167
	C	213	100	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	3	3	3
	B	3	3	3
	C	3	3	3

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.71	26.25	2.4	D
C-AB	0.27	7.73	0.5	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	231	547	0.423	228	0.7	11.201	B
C-AB	101	637	0.158	100	0.2	6.695	A
C-A	135			135			
A-B	151			151			
A-C	385			385			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	276	516	0.534	274	1.1	14.773	B
C-AB	129	638	0.202	128	0.3	7.068	A
C-A	153			153			
A-B	181			181			
A-C	459			459			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	338	474	0.713	333	2.3	24.812	C
C-AB	174	641	0.272	174	0.5	7.709	A
C-A	170			170			
A-B	221			221			
A-C	563			563			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	338	474	0.714	338	2.4	26.255	D
C-AB	174	641	0.272	174	0.5	7.733	A
C-A	170			170			
A-B	221			221			
A-C	563			563			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	276	516	0.535	281	1.2	15.576	C
C-AB	129	638	0.202	130	0.4	7.097	A
C-A	152			152			
A-B	181			181			
A-C	459			459			

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	231	547	0.423	233	0.7	11.536	B
C-AB	101	637	0.158	101	0.3	6.733	A
C-A	135			135			
A-B	151			151			
A-C	385			385			

2024 With Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
5	Upper Dublin Hill/ Lower Dublin Hill	T-Junction	Two-way		8.12	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	7	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D10	2024 With Development	PM	ONE HOUR	17:00	18:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	410	100.000
B		✓	311	100.000
C		✓	521	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	147	263
	B	190	0	121
	C	364	157	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	3	3	3
	B	3	3	3
	C	3	3	3

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.71	25.64	2.4	D
C-AB	0.41	7.54	1.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	234	547	0.428	231	0.7	11.315	B
C-AB	185	759	0.244	183	0.5	6.241	A
C-A	207			207			
A-B	111			111			
A-C	198			198			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	280	520	0.538	278	1.1	14.805	B
C-AB	243	784	0.310	242	0.7	6.652	A
C-A	225			225			
A-B	132			132			
A-C	236			236			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	342	482	0.711	338	2.3	24.268	C
C-AB	340	820	0.414	338	1.1	7.485	A
C-A	234			234			
A-B	162			162			
A-C	290			290			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	342	481	0.711	342	2.4	25.641	D
C-AB	341	821	0.415	341	1.1	7.536	A
C-A	233			233			
A-B	162			162			
A-C	290			290			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	280	519	0.539	284	1.2	15.610	C
C-AB	244	785	0.311	246	0.7	6.709	A
C-A	224			224			
A-B	132			132			
A-C	236			236			

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	234	546	0.429	236	0.8	11.678	B
C-AB	186	760	0.245	187	0.5	6.300	A
C-A	206			206			
A-B	111			111			
A-C	198			198			

2025 Without Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
5	Upper Dublin Hill/ Lower Dublin Hill	T-Junction	Two-way		6.90	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	6	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D11	2025 Without Development	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	716	100.000
B		✓	309	100.000
C		✓	287	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	204	512
	B	142	0	167
	C	195	92	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	3	3	3
	B	3	3	3
	C	3	3	3

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.71	26.06	2.4	D
C-AB	0.25	7.66	0.5	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	233	549	0.424	230	0.7	11.192	B
C-AB	90	627	0.144	90	0.2	6.697	A
C-A	126			126			
A-B	154			154			
A-C	385			385			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	278	519	0.535	276	1.1	14.740	B
C-AB	115	626	0.184	115	0.3	7.050	A
C-A	143			143			
A-B	183			183			
A-C	460			460			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	340	477	0.713	336	2.3	24.650	C
C-AB	155	626	0.247	154	0.5	7.641	A
C-A	161			161			
A-B	225			225			
A-C	564			564			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	340	477	0.713	340	2.4	26.065	D
C-AB	155	626	0.248	155	0.5	7.663	A
C-A	161			161			
A-B	225			225			
A-C	564			564			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	278	519	0.536	283	1.2	15.535	C
C-AB	115	626	0.184	116	0.3	7.074	A
C-A	143			143			
A-B	183			183			
A-C	460			460			

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	233	548	0.424	234	0.8	11.528	B
C-AB	91	627	0.145	91	0.2	6.729	A
C-A	125			125			
A-B	154			154			
A-C	385			385			

2025 Without Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
5	Upper Dublin Hill/ Lower Dublin Hill	T-Junction	Two-way		7.92	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	8	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D12	2025 Without Development	PM	ONE HOUR	17:00	18:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	396	100.000
B		✓	308	100.000
C		✓	513	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	149	247
	B	194	0	114
	C	358	155	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	3	3	3
	B	3	3	3
	C	3	3	3

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.70	24.72	2.2	C
C-AB	0.40	7.43	1.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	232	547	0.424	229	0.7	11.224	B
C-AB	181	758	0.239	179	0.4	6.213	A
C-A	205			205			
A-B	112			112			
A-C	186			186			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	277	521	0.532	275	1.1	14.586	B
C-AB	238	783	0.303	237	0.6	6.601	A
C-A	224			224			
A-B	134			134			
A-C	222			222			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	339	484	0.701	335	2.2	23.502	C
C-AB	331	818	0.404	329	1.0	7.377	A
C-A	234			234			
A-B	164			164			
A-C	272			272			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	339	483	0.701	339	2.2	24.720	C
C-AB	332	819	0.405	332	1.0	7.425	A
C-A	233			233			
A-B	164			164			
A-C	272			272			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	277	520	0.532	281	1.2	15.326	C
C-AB	238	784	0.304	240	0.7	6.653	A
C-A	223			223			
A-B	134			134			
A-C	222			222			

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	232	546	0.424	234	0.8	11.571	B
C-AB	182	759	0.240	183	0.5	6.268	A
C-A	204			204			
A-B	112			112			
A-C	186			186			

2025 With Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
5	Upper Dublin Hill/ Lower Dublin Hill	T-Junction	Two-way		7.43	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	4	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D13	2025 With Development	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	726	100.000
B		✓	313	100.000
C		✓	320	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	204	522
	B	142	0	171
	C	218	102	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	3	3	3
	B	3	3	3
	C	3	3	3

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.73	28.48	2.6	D
C-AB	0.28	7.81	0.6	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	236	544	0.433	233	0.7	11.452	B
C-AB	103	637	0.162	102	0.3	6.724	A
C-A	137			137			
A-B	154			154			
A-C	393			393			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	281	513	0.548	280	1.2	15.312	C
C-AB	133	639	0.208	132	0.4	7.112	A
C-A	155			155			
A-B	183			183			
A-C	469			469			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	345	469	0.734	339	2.5	26.622	D
C-AB	180	642	0.280	179	0.6	7.788	A
C-A	172			172			
A-B	225			225			
A-C	575			575			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	345	469	0.734	344	2.6	28.478	D
C-AB	180	642	0.281	180	0.6	7.813	A
C-A	172			172			
A-B	225			225			
A-C	575			575			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	281	513	0.549	287	1.3	16.285	C
C-AB	133	639	0.208	134	0.4	7.143	A
C-A	155			155			
A-B	183			183			
A-C	469			469			

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	236	544	0.433	238	0.8	11.825	B
C-AB	104	638	0.163	104	0.3	6.760	A
C-A	137			137			
A-B	154			154			
A-C	393			393			

2025 With Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
5	Upper Dublin Hill/ Lower Dublin Hill	T-Junction	Two-way		9.05	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	4	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D14	2025 With Development	PM	ONE HOUR	17:00	18:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	425	100.000
B		✓	321	100.000
C		✓	536	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	149	276
	B	194	0	127
	C	374	162	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	3	3	3
	B	3	3	3
	C	3	3	3

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.74	29.06	2.7	D
C-AB	0.43	7.76	1.2	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	242	543	0.445	239	0.8	11.708	B
C-AB	193	762	0.254	191	0.5	6.306	A
C-A	210			210			
A-B	112			112			
A-C	208			208			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	289	515	0.560	287	1.2	15.649	C
C-AB	255	788	0.324	254	0.7	6.755	A
C-A	227			227			
A-B	134			134			
A-C	248			248			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	353	476	0.743	348	2.6	27.043	D
C-AB	358	825	0.434	356	1.2	7.700	A
C-A	232			232			
A-B	164			164			
A-C	304			304			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	353	475	0.743	353	2.7	29.061	D
C-AB	359	826	0.435	359	1.2	7.761	A
C-A	231			231			
A-B	164			164			
A-C	304			304			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	289	514	0.561	294	1.3	16.736	C
C-AB	256	789	0.324	258	0.7	6.823	A
C-A	226			226			
A-B	134			134			
A-C	248			248			

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	242	542	0.446	244	0.8	12.133	B
C-AB	194	763	0.255	195	0.5	6.367	A
C-A	209			209			
A-B	112			112			
A-C	208			208			

2030 Without Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
5	Upper Dublin Hill/ Lower Dublin Hill	T-Junction	Two-way		10.33	B

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-2	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D15	2030 Without Development	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	780	100.000
B		✓	337	100.000
C		✓	312	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	223	557
	B	155	0	182
	C	212	100	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	3	3	3
	B	3	3	3
	C	3	3	3

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.81	40.27	3.9	E
C-AB	0.28	8.03	0.6	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	254	535	0.474	250	0.9	12.489	B
C-AB	101	626	0.161	100	0.3	6.840	A
C-A	134			134			
A-B	168			168			
A-C	419			419			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	303	502	0.603	301	1.5	17.636	C
C-AB	130	625	0.207	129	0.4	7.264	A
C-A	151			151			
A-B	200			200			
A-C	501			501			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	371	457	0.813	362	3.6	35.360	E
C-AB	176	626	0.282	175	0.6	8.005	A
C-A	167			167			
A-B	246			246			
A-C	613			613			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	371	456	0.813	370	3.9	40.268	E
C-AB	177	626	0.282	177	0.6	8.032	A
C-A	167			167			
A-B	246			246			
A-C	613			613			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	303	502	0.603	312	1.6	19.776	C
C-AB	130	626	0.208	131	0.4	7.296	A
C-A	151			151			
A-B	200			200			
A-C	501			501			

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	254	535	0.474	256	0.9	13.048	B
C-AB	101	626	0.162	102	0.3	6.877	A
C-A	133			133			
A-B	168			168			
A-C	419			419			

2030 Without Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
5	Upper Dublin Hill/ Lower Dublin Hill	T-Junction	Two-way		11.08	B

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-1	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D16	2030 Without Development	PM	ONE HOUR	17:00	18:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	433	100.000
B		✓	335	100.000
C		✓	559	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	163	270
	B	211	0	124
	C	390	169	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	3	3	3
	B	3	3	3
	C	3	3	3

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.79	36.33	3.5	E
C-AB	0.46	8.05	1.3	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	252	535	0.472	249	0.9	12.431	B
C-AB	206	769	0.268	204	0.5	6.360	A
C-A	215			215			
A-B	123			123			
A-C	203			203			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	301	506	0.595	299	1.4	17.227	C
C-AB	273	797	0.342	272	0.8	6.867	A
C-A	230			230			
A-B	147			147			
A-C	243			243			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	369	465	0.793	361	3.3	32.536	D
C-AB	385	836	0.461	383	1.3	7.972	A
C-A	230			230			
A-B	179			179			
A-C	297			297			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	369	465	0.794	368	3.5	36.328	E
C-AB	386	837	0.461	386	1.3	8.047	A
C-A	229			229			
A-B	179			179			
A-C	297			297			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	301	505	0.596	309	1.5	19.036	C
C-AB	274	798	0.343	276	0.8	6.948	A
C-A	229			229			
A-B	147			147			
A-C	243			243			

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	252	534	0.472	255	0.9	12.999	B
C-AB	207	770	0.269	208	0.5	6.433	A
C-A	214			214			
A-B	123			123			
A-C	203			203			

2030 With Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
5	Upper Dublin Hill/ Lower Dublin Hill	T-Junction	Two-way		12.52	B

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-5	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D17	2030 With Development	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	804	100.000
B		✓	345	100.000
C		✓	345	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	223	581
	B	155	0	190
	C	235	110	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	3	3	3
	B	3	3	3
	C	3	3	3

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.85	50.10	4.9	F
C-AB	0.32	8.30	0.7	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	260	529	0.491	256	0.9	13.034	B
C-AB	115	634	0.181	114	0.3	6.905	A
C-A	145			145			
A-B	168			168			
A-C	437			437			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	310	494	0.628	308	1.6	19.015	C
C-AB	149	636	0.234	148	0.4	7.385	A
C-A	162			162			
A-B	200			200			
A-C	522			522			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	380	446	0.852	369	4.4	41.733	E
C-AB	204	640	0.319	203	0.7	8.264	A
C-A	176			176			
A-B	246			246			
A-C	640			640			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	380	445	0.853	378	4.9	50.103	F
C-AB	205	640	0.320	205	0.7	8.303	A
C-A	175			175			
A-B	246			246			
A-C	640			640			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	310	494	0.628	323	1.8	22.387	C
C-AB	149	636	0.234	150	0.4	7.428	A
C-A	161			161			
A-B	200			200			
A-C	522			522			

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	260	528	0.492	263	1.0	13.722	B
C-AB	115	635	0.182	116	0.3	6.950	A
C-A	144			144			
A-B	168			168			
A-C	437			437			

2030 With Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
5	Upper Dublin Hill/ Lower Dublin Hill	T-Junction	Two-way		14.00	B

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-5	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D18	2030 With Development	PM	ONE HOUR	17:00	18:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	461	100.000
B		✓	348	100.000
C		✓	599	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	163	298
	B	211	0	137
	C	418	181	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	3	3	3
	B	3	3	3
	C	3	3	3

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.85	47.78	4.7	E
C-AB	0.51	8.75	1.7	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	262	528	0.496	258	1.0	13.146	B
C-AB	229	779	0.293	226	0.6	6.495	A
C-A	222			222			
A-B	123			123			
A-C	224			224			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	313	497	0.629	310	1.6	18.989	C
C-AB	305	810	0.377	304	0.9	7.137	A
C-A	233			233			
A-B	147			147			
A-C	268			268			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	383	453	0.846	373	4.3	40.183	E
C-AB	436	852	0.512	434	1.6	8.629	A
C-A	223			223			
A-B	179			179			
A-C	328			328			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	383	453	0.847	381	4.7	47.779	E
C-AB	438	854	0.513	438	1.7	8.748	A
C-A	222			222			
A-B	179			179			
A-C	328			328			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	313	496	0.630	325	1.8	22.231	C
C-AB	307	811	0.378	310	0.9	7.255	A
C-A	232			232			
A-B	147			147			
A-C	268			268			

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	262	528	0.497	265	1.0	13.880	B
C-AB	230	781	0.295	231	0.6	6.587	A
C-A	221			221			
A-B	123			123			
A-C	224			224			

2040 Without Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
5	Upper Dublin Hill/ Lower Dublin Hill	T-Junction	Two-way		19.21	C

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-10	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D19	2040 Without Development	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	845	100.000
B		✓	366	100.000
C		✓	338	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	241	604
	B	168	0	198
	C	230	108	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	3	3	3
	B	3	3	3
	C	3	3	3

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.93	77.46	8.1	F
C-AB	0.32	8.47	0.7	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	276	521	0.529	271	1.1	14.160	B
C-AB	112	626	0.180	111	0.3	6.993	A
C-A	142			142			
A-B	181			181			
A-C	455			455			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	329	486	0.677	326	2.0	21.990	C
C-AB	145	625	0.233	145	0.4	7.500	A
C-A	158			158			
A-B	217			217			
A-C	543			543			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	403	436	0.925	384	6.6	56.571	F
C-AB	200	627	0.320	199	0.7	8.436	A
C-A	172			172			
A-B	265			265			
A-C	665			665			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	403	435	0.926	397	8.1	77.459	F
C-AB	201	627	0.320	201	0.7	8.474	A
C-A	171			171			
A-B	265			265			
A-C	665			665			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	329	485	0.678	352	2.3	30.765	D
C-AB	146	626	0.233	147	0.4	7.548	A
C-A	158			158			
A-B	217			217			
A-C	543			543			

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	276	521	0.529	280	1.2	15.199	C
C-AB	113	626	0.180	113	0.3	7.041	A
C-A	142			142			
A-B	181			181			
A-C	455			455			

2040 Without Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
5	Upper Dublin Hill/ Lower Dublin Hill	T-Junction	Two-way		18.39	C

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-8	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D20	2040 Without Development	PM	ONE HOUR	17:00	18:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	468	100.000
B		✓	363	100.000
C		✓	606	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	176	292
	B	229	0	134
	C	423	183	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	3	3	3
	B	3	3	3
	C	3	3	3

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.90	63.94	6.6	F
C-AB	0.52	8.91	1.7	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	273	523	0.523	269	1.1	13.984	B
C-AB	233	781	0.298	230	0.6	6.525	A
C-A	224			224			
A-B	133			133			
A-C	220			220			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	326	491	0.665	323	1.9	21.067	C
C-AB	311	812	0.383	310	0.9	7.194	A
C-A	234			234			
A-B	158			158			
A-C	263			263			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	400	446	0.896	385	5.6	49.513	E
C-AB	446	855	0.522	443	1.7	8.772	A
C-A	221			221			
A-B	194			194			
A-C	321			321			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	400	446	0.897	396	6.6	63.938	F
C-AB	448	856	0.523	447	1.7	8.905	A
C-A	220			220			
A-B	194			194			
A-C	321			321			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	326	490	0.666	344	2.1	27.183	D
C-AB	313	813	0.385	316	1.0	7.319	A
C-A	232			232			
A-B	158			158			
A-C	263			263			

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	273	522	0.524	277	1.1	14.966	B
C-AB	234	782	0.299	236	0.6	6.619	A
C-A	222			222			
A-B	133			133			
A-C	220			220			

2040 With Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
5	Upper Dublin Hill/ Lower Dublin Hill	T-Junction	Two-way		23.60	C

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-12	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D21	2040 With Development	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	864	100.000
B		✓	372	100.000
C		✓	363	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	241	623
	B	168	0	204
	C	247	116	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	3	3	3
	B	3	3	3
	C	3	3	3

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.96	97.10	10.5	F
C-AB	0.35	8.76	0.8	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	280	516	0.543	275	1.1	14.701	B
C-AB	124	632	0.196	122	0.3	7.059	A
C-A	150			150			
A-B	181			181			
A-C	469			469			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	334	479	0.698	330	2.1	23.610	C
C-AB	161	633	0.254	161	0.5	7.624	A
C-A	165			165			
A-B	217			217			
A-C	560			560			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	410	427	0.960	386	8.1	66.039	F
C-AB	224	637	0.352	223	0.8	8.706	A
C-A	176			176			
A-B	265			265			
A-C	686			686			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	410	426	0.961	400	10.5	97.098	F
C-AB	224	637	0.352	224	0.8	8.757	A
C-A	175			175			
A-B	265			265			
A-C	686			686			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	334	479	0.699	366	2.6	38.597	E
C-AB	162	634	0.255	163	0.5	7.681	A
C-A	165			165			
A-B	217			217			
A-C	560			560			

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	280	516	0.543	285	1.2	15.963	C
C-AB	124	632	0.197	125	0.3	7.113	A
C-A	149			149			
A-B	181			181			
A-C	469			469			

2040 With Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
5	Upper Dublin Hill/ Lower Dublin Hill	T-Junction	Two-way		23.78	C

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-11	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D22	2040 With Development	PM	ONE HOUR	17:00	18:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	490	100.000
B		✓	373	100.000
C		✓	637	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	176	314
	B	229	0	144
	C	445	192	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	3	3	3
	B	3	3	3
	C	3	3	3

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.94	85.44	9.2	F
C-AB	0.57	9.65	2.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	281	517	0.543	276	1.1	14.676	B
C-AB	251	789	0.318	248	0.7	6.645	A
C-A	228			228			
A-B	133			133			
A-C	236			236			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	335	484	0.693	332	2.1	23.079	C
C-AB	338	822	0.412	337	1.1	7.444	A
C-A	234			234			
A-B	158			158			
A-C	282			282			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	411	436	0.941	390	7.3	60.411	F
C-AB	489	868	0.564	486	2.0	9.456	A
C-A	212			212			
A-B	194			194			
A-C	346			346			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	411	436	0.943	403	9.2	85.445	F
C-AB	492	870	0.565	492	2.1	9.653	A
C-A	210			210			
A-B	194			194			
A-C	346			346			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	335	483	0.695	362	2.5	34.847	D
C-AB	341	824	0.413	344	1.1	7.611	A
C-A	232			232			
A-B	158			158			
A-C	282			282			

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	281	516	0.544	286	1.2	15.943	C
C-AB	253	791	0.320	255	0.7	6.760	A
C-A	227			227			
A-B	133			133			
A-C	236			236			

APPENDIX B: TRAFFIC MODEL OUTPUTS – LINSIG

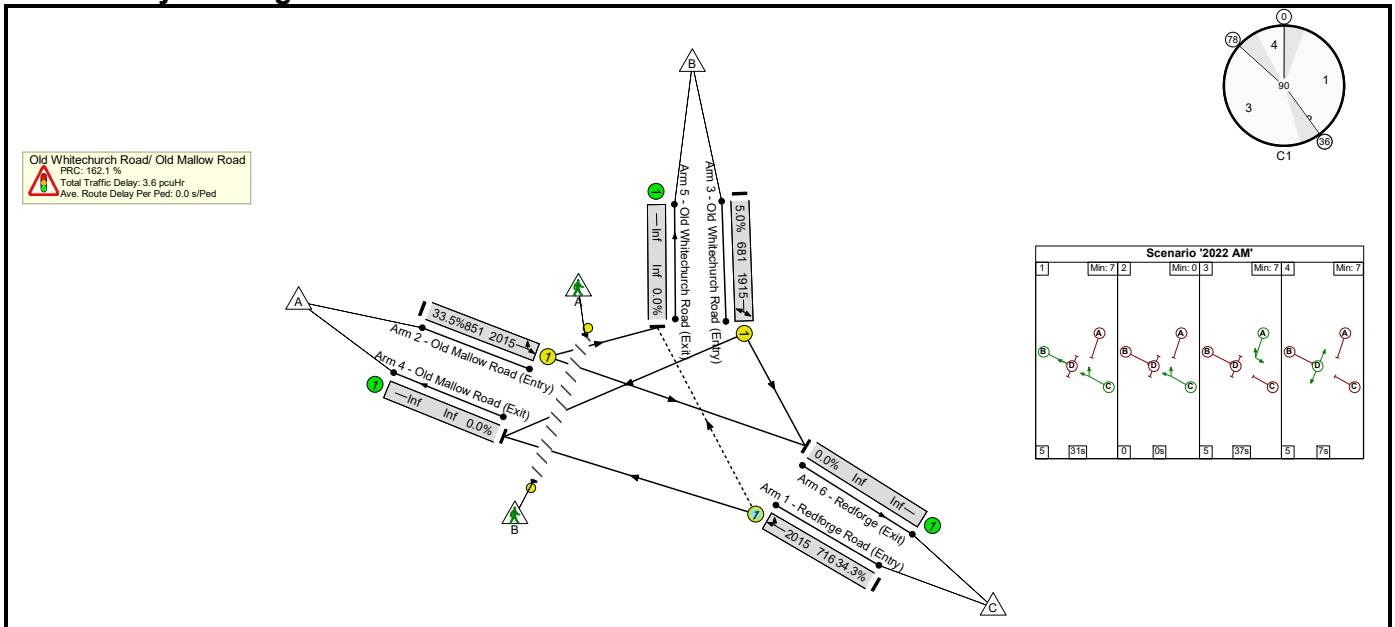
Basic Results Summary
Basic Results Summary

User and Project Details

Project:	
Title:	Junction 2 – Basic Results Summary – 90 Seconds Cycle Time
Location:	
Additional detail:	
File name:	Junction 2.lsg3x
Author:	
Company:	
Address:	

Scenario 1: '2022 AM' (FG1: '2022 AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

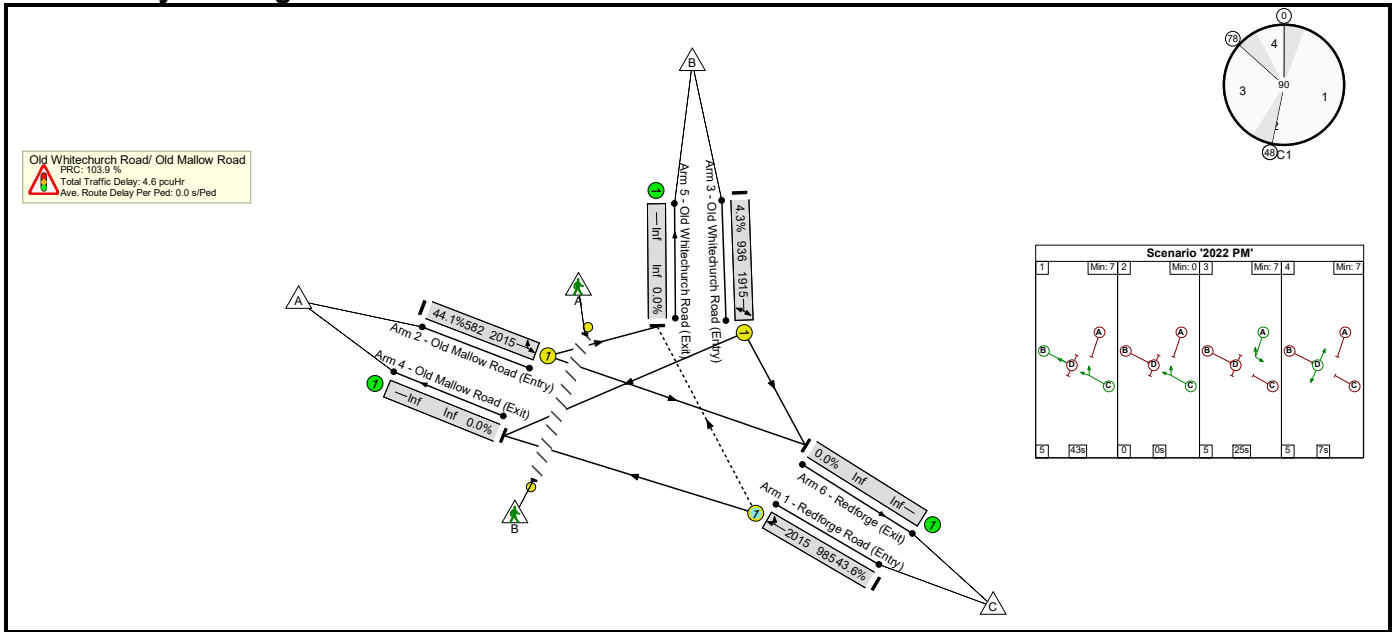
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	34.3%	0	16	0	3.6	-	-
Old Whitechurch Road/ Old Mallow Road	-	-	-		-	-	-	-	-	-	34.3%	0	16	0	3.6	-	-
1/1	Redforge Road (Entry) Ahead Right	O	C		1	31	-	246	2015	716	34.3%	0	16	0	1.7	25.1	4.8
2/1	Old Mallow Road (Entry) Left Ahead	U	A		1	37	-	285	2015	851	33.5%	-	-	-	1.6	20.7	5.0
3/1	Old Whitechurch Road (Entry) Right Left	U	B		1	31	-	34	1915	681	5.0%	-	-	-	0.2	21.8	0.6
Ped Link: P1	Old Whitechurch Road	-	D		1	7	-	0	-	5600	0.0%	-	-	-	0.0	0.0	0.0
		C1			PRC for Signalled Lanes (%):		162.1			Total Delay for Signalled Lanes (pcuHr):		3.56			Cycle Time (s):		90
				PRC Over All Lanes (%):		162.1			Total Delay Over All Lanes(pcuHr):		3.56						

Basic Results Summary

Scenario 2: '2022 PM' (FG2: '2022 PM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

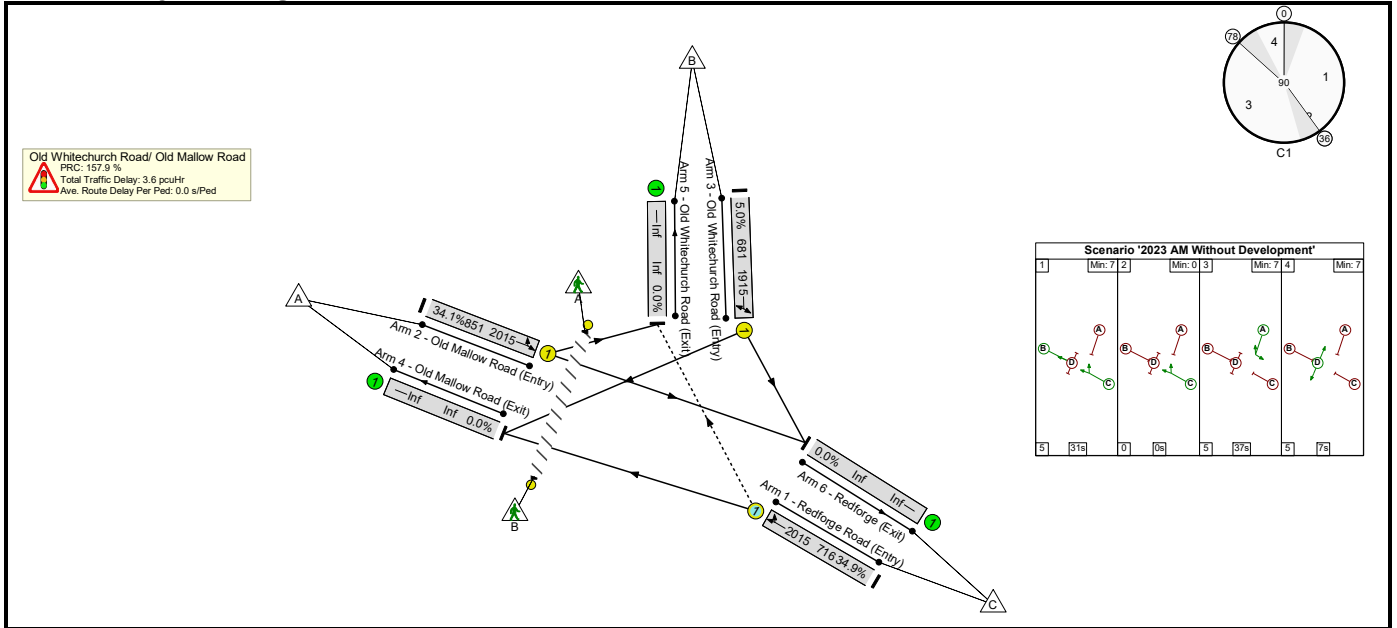
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	44.1%	0	43	0	4.6	-	-
Old Whitechurch Road/ Old Mallow Road	-	-	-		-	-	-	-	-	-	44.1%	0	43	0	4.6	-	-
1/1	Redforge Road (Entry) Ahead Right	O	C		1	43	-	430	2015	985	43.6%	0	43	0	2.2	18.2	7.3
2/1	Old Mallow Road (Entry) Left Ahead	U	A		1	25	-	257	2015	582	44.1%	-	-	-	2.3	31.6	5.6
3/1	Old Whitechurch Road (Entry) Right Left	U	B		1	43	-	40	1915	936	4.3%	-	-	-	0.2	14.0	0.5
Ped Link: P1	Old Whitechurch Road	-	D		1	7	-	0	-	5600	0.0%	-	-	-	0.0	0.0	0.0
		C1			PRC for Signalled Lanes (%):		103.9			Total Delay for Signalled Lanes (pcuHr):		4.59			Cycle Time (s):		90
				PRC Over All Lanes (%):		103.9			Total Delay Over All Lanes(pcuHr):		4.59						

Basic Results Summary

Scenario 3: '2023 AM Without Development' (FG3: '2023 AM Without Development', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

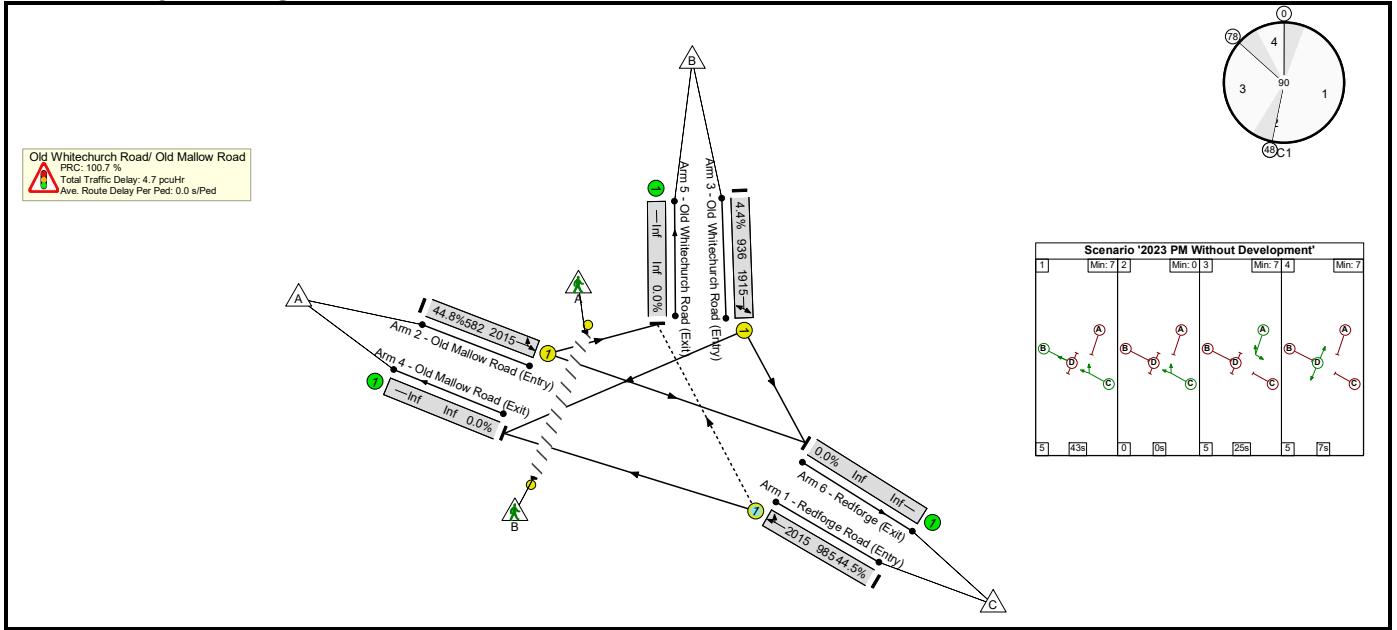
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)		
Network	-	-	-		-	-	-	-	-	-	34.9%	0	16	0	3.6	-	-		
Old Whitechurch Road/ Old Mallow Road	-	-	-		-	-	-	-	-	-	34.9%	0	16	0	3.6	-	-		
1/1	Redforge Road (Entry) Ahead Right	O	C		1	31	-	250	2015	716	34.9%	0	16	0	1.7	25.2	4.9		
2/1	Old Mallow Road (Entry) Left Ahead	U	A		1	37	-	290	2015	851	34.1%	-	-	-	1.7	20.8	5.1		
3/1	Old Whitechurch Road (Entry) Right Left	U	B		1	31	-	34	1915	681	5.0%	-	-	-	0.2	21.8	0.6		
Ped Link: P1	Old Whitechurch Road	-	D		1	7	-	0	-	5600	0.0%	-	-	-	0.0	0.0	0.0		
C1		PRC for Signalled Lanes (%):		157.9		PRC Over All Lanes (%):		157.9		Total Delay for Signalled Lanes (pcuHr):		3.63		Total Delay Over All Lanes(pcuHr):		3.63		Cycle Time (s): 90	

Basic Results Summary

Scenario 4: '2023 PM Without Development' (FG4: '2023 PM Without Development', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

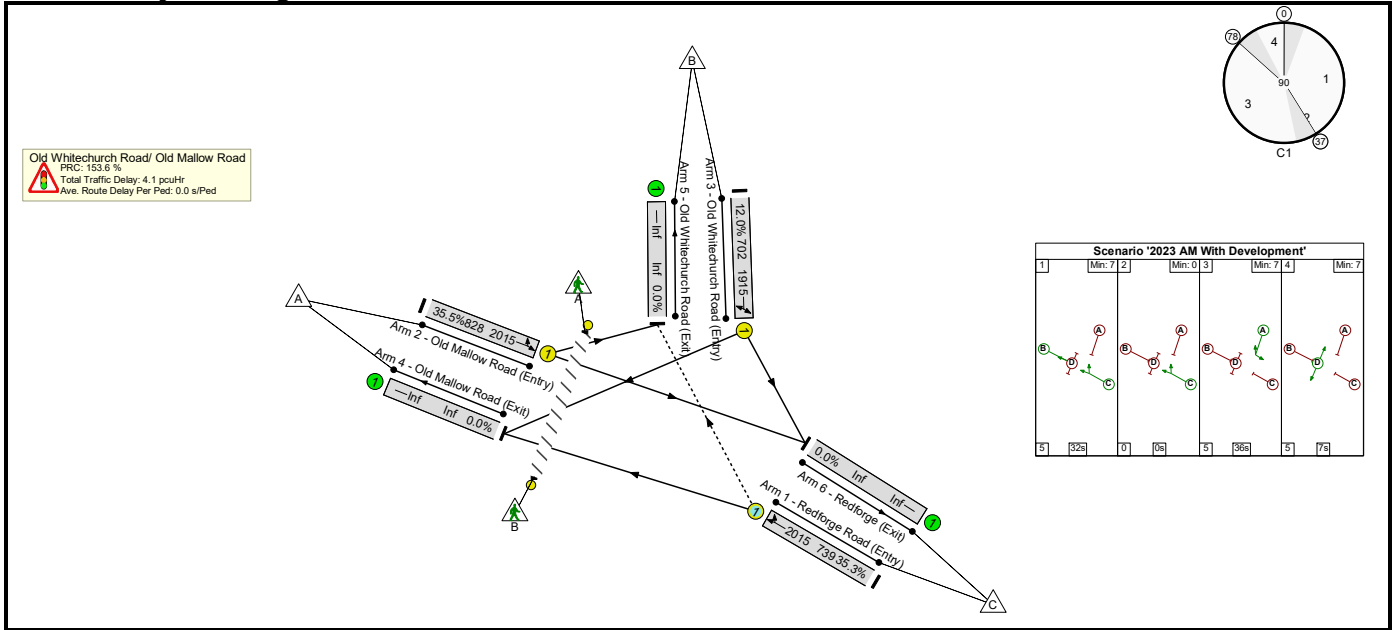
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)		
Network	-	-	-		-	-	-	-	-	-	44.8%	0	44	0	4.7	-	-		
Old Whitechurch Road/ Old Mallow Road	-	-	-		-	-	-	-	-	-	44.8%	0	44	0	4.7	-	-		
1/1	Redforge Road (Entry) Ahead Right	O	C		1	43	-	438	2015	985	44.5%	0	44	0	2.2	18.3	7.5		
2/1	Old Mallow Road (Entry) Left Ahead	U	A		1	25	-	261	2015	582	44.8%	-	-	-	2.3	31.7	5.7		
3/1	Old Whitechurch Road (Entry) Right Left	U	B		1	43	-	41	1915	936	4.4%	-	-	-	0.2	14.0	0.6		
Ped Link: P1	Old Whitechurch Road	-	D		1	7	-	0	-	5600	0.0%	-	-	-	0.0	0.0	0.0		
C1		PRC for Signalled Lanes (%):		100.7		PRC Over All Lanes (%):		100.7		Total Delay for Signalled Lanes (pcuHr):		4.69		Total Delay Over All Lanes(pcuHr):		4.69		Cycle Time (s): 90	

Basic Results Summary

Scenario 5: '2023 AM With Development' (FG5: '2023 AM With Development', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

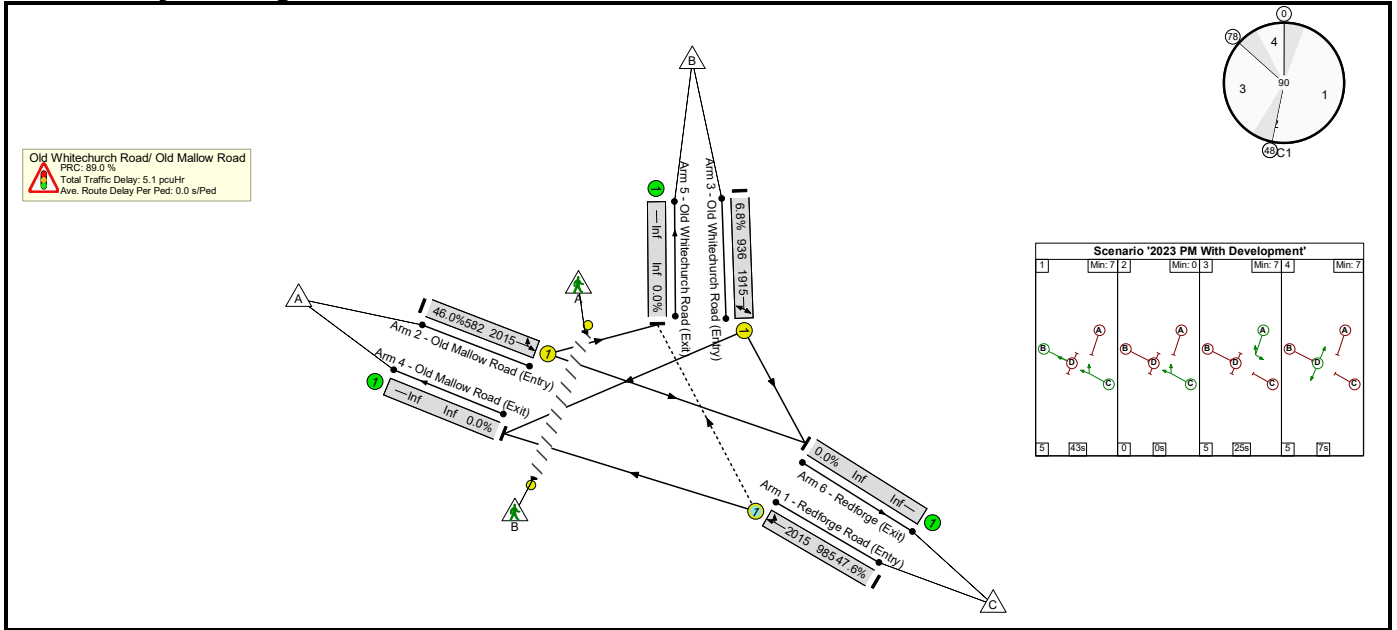
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)		
Network	-	-	-		-	-	-	-	-	-	35.5%	0	27	0	4.1	-	-		
Old Whitechurch Road/ Old Mallow Road	-	-	-		-	-	-	-	-	-	35.5%	0	27	0	4.1	-	-		
1/1	Redforge Road (Entry) Ahead Right	O	C		1	32	-	261	2015	739	35.3%	0	27	0	1.8	24.5	5.0		
2/1	Old Mallow Road (Entry) Left Ahead	U	A		1	36	-	294	2015	828	35.5%	-	-	-	1.8	21.6	5.3		
3/1	Old Whitechurch Road (Entry) Right Left	U	B		1	32	-	84	1915	702	12.0%	-	-	-	0.5	21.8	1.4		
Ped Link: P1	Old Whitechurch Road	-	D		1	7	-	0	-	5600	0.0%	-	-	-	0.0	0.0	0.0		
C1		PRC for Signalled Lanes (%):		153.6		PRC Over All Lanes (%):		153.6		Total Delay for Signalled Lanes (pcuHr):		4.05		Total Delay Over All Lanes(pcuHr):		4.05		Cycle Time (s): 90	

Basic Results Summary

Scenario 6: '2023 PM With Development' (FG6: '2023 PM With Development', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

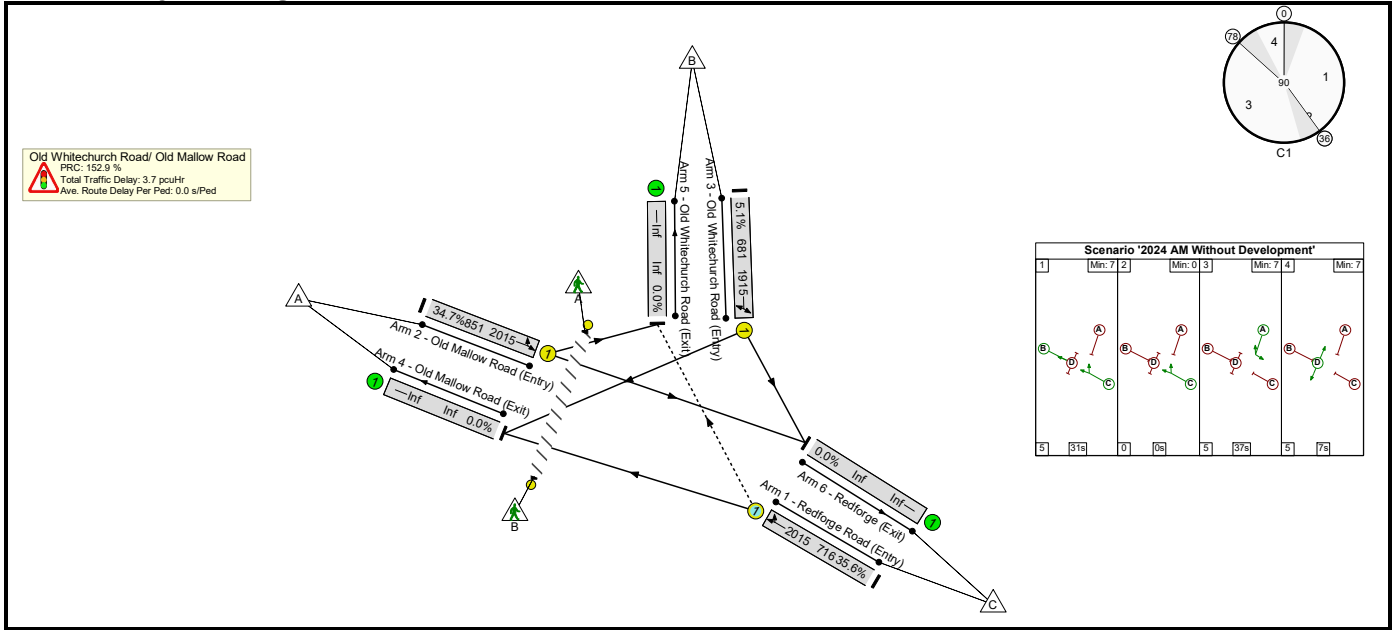
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	47.6%	0	75	0	5.1	-	-
Old Whitechurch Road/ Old Mallow Road	-	-	-		-	-	-	-	-	-	47.6%	0	75	0	5.1	-	-
1/1	Redforge Road (Entry) Ahead Right	O	C		1	43	-	469	2015	985	47.6%	0	75	0	2.4	18.8	8.1
2/1	Old Mallow Road (Entry) Left Ahead	U	A		1	25	-	268	2015	582	46.0%	-	-	-	2.4	32.0	5.9
3/1	Old Whitechurch Road (Entry) Right Left	U	B		1	43	-	64	1915	936	6.8%	-	-	-	0.3	14.3	0.9
Ped Link: P1	Old Whitechurch Road	-	D		1	7	-	0	-	5600	0.0%	-	-	-	0.0	0.0	0.0
		C1			PRC for Signalled Lanes (%):		89.0			Total Delay for Signalled Lanes (pcuHr):		5.08			Cycle Time (s):		90
				PRC Over All Lanes (%):		89.0			Total Delay Over All Lanes(pcuHr):		5.08						

Basic Results Summary

Scenario 7: '2024 AM Without Development' (FG7: '2024 AM Without Development', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

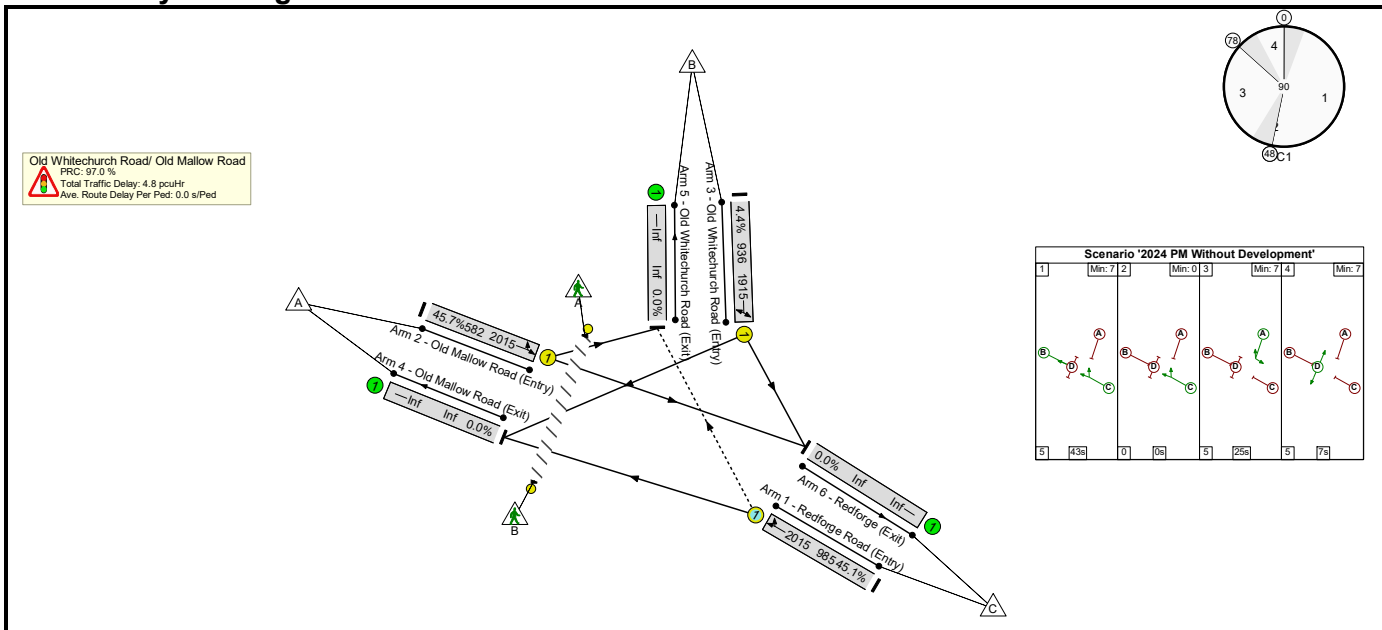
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)		
Network	-	-	-		-	-	-	-	-	-	35.6%	0	17	0	3.7	-	-		
Old Whitechurch Road/ Old Mallow Road	-	-	-		-	-	-	-	-	-	35.6%	0	17	0	3.7	-	-		
1/1	Redforge Road (Entry) Ahead Right	O	C		1	31	-	255	2015	716	35.6%	0	17	0	1.8	25.3	5.0		
2/1	Old Mallow Road (Entry) Left Ahead	U	A		1	37	-	295	2015	851	34.7%	-	-	-	1.7	20.8	5.2		
3/1	Old Whitechurch Road (Entry) Right Left	U	B		1	31	-	35	1915	681	5.1%	-	-	-	0.2	21.8	0.6		
Ped Link: P1	Old Whitechurch Road	-	D		1	7	-	0	-	5600	0.0%	-	-	-	0.0	0.0	0.0		
C1		PRC for Signalled Lanes (%):		152.9		PRC Over All Lanes (%):		152.9		Total Delay for Signalled Lanes (pcuHr):		3.71		Total Delay Over All Lanes(pcuHr):		3.71		Cycle Time (s): 90	

Basic Results Summary

Scenario 8: '2024 PM Without Development' (FG8: '2024 PM Without Development', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

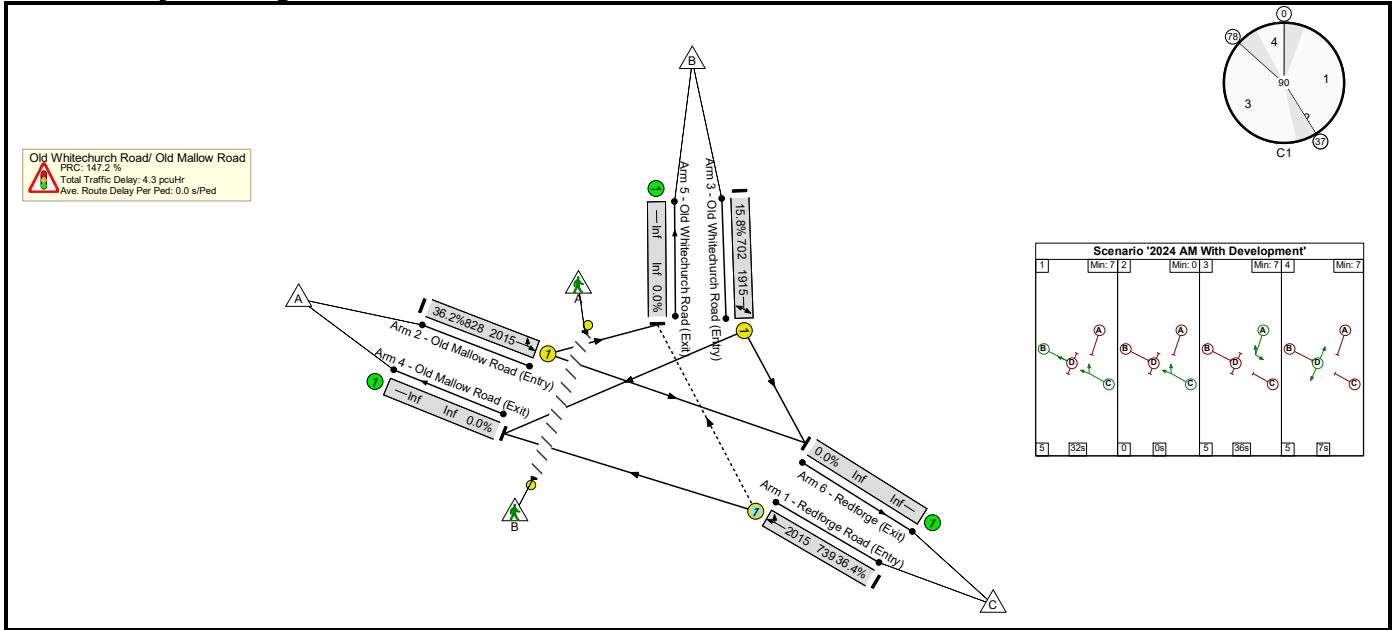
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	45.7%	0	44	0	4.8	-	-
Old Whitechurch Road/ Old Mallow Road	-	-	-		-	-	-	-	-	-	45.7%	0	44	0	4.8	-	-
1/1	Redforge Road (Entry) Ahead Right	O	C		1	43	-	444	2015	985	45.1%	0	44	0	2.3	18.4	7.7
2/1	Old Mallow Road (Entry) Left Ahead	U	A		1	25	-	266	2015	582	45.7%	-	-	-	2.4	31.9	5.8
3/1	Old Whitechurch Road (Entry) Right Left	U	B		1	43	-	41	1915	936	4.4%	-	-	-	0.2	14.0	0.6
Ped Link: P1	Old Whitechurch Road	-	D		1	7	-	0	-	5600	0.0%	-	-	-	0.0	0.0	0.0
		C1			PRC for Signalled Lanes (%):		97.0			Total Delay for Signalled Lanes (pcuHr):		4.79			Cycle Time (s):		90
				PRC Over All Lanes (%):		97.0			Total Delay Over All Lanes(pcuHr):		4.79						

Basic Results Summary

Scenario 9: '2024 AM With Development' (FG9: '2024 AM With Development', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

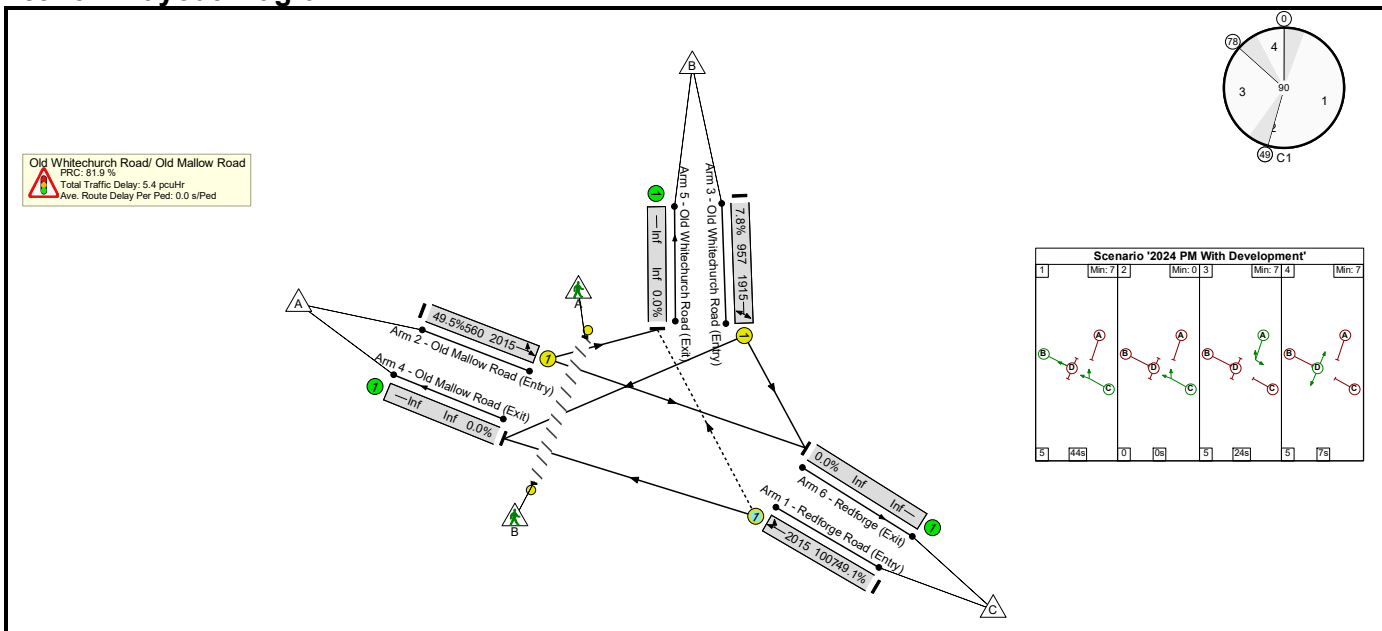
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	36.4%	0	31	0	4.3	-	-
Old Whitechurch Road/ Old Mallow Road	-	-	-		-	-	-	-	-	-	36.4%	0	31	0	4.3	-	-
1/1	Redforge Road (Entry) Ahead Right	O	C		1	32	-	269	2015	739	36.4%	0	31	0	1.8	24.7	5.1
2/1	Old Mallow Road (Entry) Left Ahead	U	A		1	36	-	300	2015	828	36.2%	-	-	-	1.8	21.7	5.5
3/1	Old Whitechurch Road (Entry) Right Left	U	B		1	32	-	111	1915	702	15.8%	-	-	-	0.7	22.2	1.9
Ped Link: P1	Old Whitechurch Road	-	D		1	7	-	0	-	5600	0.0%	-	-	-	0.0	0.0	0.0
		C1			PRC for Signalled Lanes (%): 147.2		PRC Over All Lanes (%): 147.2		Total Delay for Signalled Lanes (pcuHr): 4.34			Total Delay Over All Lanes(pcuHr): 4.34		Cycle Time (s): 90			

Basic Results Summary

Scenario 10: '2024 PM With Development' (FG10: '2024 PM With Development', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

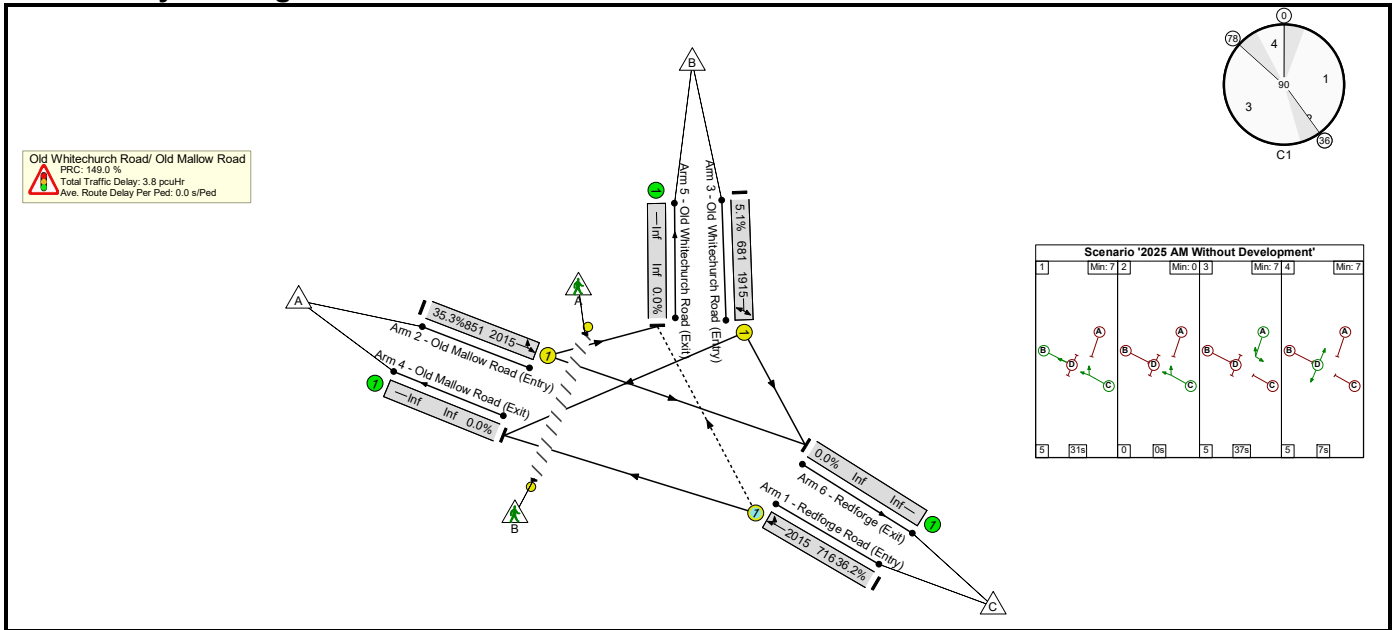
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	49.5%	0	95	0	5.4	-	-
Old Whitechurch Road/ Old Mallow Road	-	-	-		-	-	-	-	-	-	49.5%	0	95	0	5.4	-	-
1/1	Redforge Road (Entry) Ahead Right	O	C		1	44	-	495	2015	1007	49.1%	0	95	0	2.5	18.4	8.6
2/1	Old Mallow Road (Entry) Left Ahead	U	A		1	24	-	277	2015	560	49.5%	-	-	-	2.6	33.6	6.3
3/1	Old Whitechurch Road (Entry) Right Left	U	B		1	44	-	75	1915	957	7.8%	-	-	-	0.3	13.8	1.0
Ped Link: P1	Old Whitechurch Road	-	D		1	7	-	0	-	5600	0.0%	-	-	-	0.0	0.0	0.0
		C1			PRC for Signalled Lanes (%):		81.9			Total Delay for Signalled Lanes (pcuHr):		5.40			Cycle Time (s):		90
				PRC Over All Lanes (%):		81.9			Total Delay Over All Lanes(pcuHr):		5.40						

Basic Results Summary

Scenario 11: '2025 AM Without Development' (FG11: '2025 AM Without Development', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

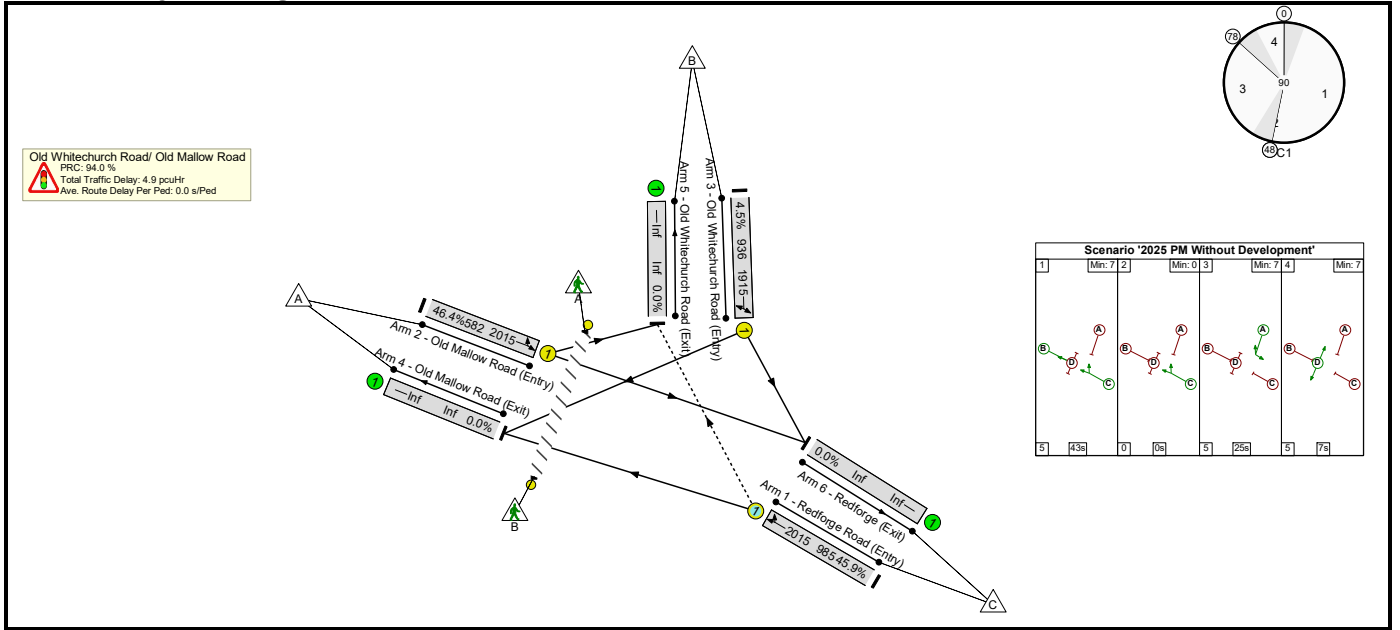
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)		
Network	-	-	-		-	-	-	-	-	-	36.2%	0	17	0	3.8	-	-		
Old Whitechurch Road/ Old Mallow Road	-	-	-		-	-	-	-	-	-	36.2%	0	17	0	3.8	-	-		
1/1	Redforge Road (Entry) Ahead Right	O	C		1	31	-	259	2015	716	36.2%	0	17	0	1.8	25.4	5.0		
2/1	Old Mallow Road (Entry) Left Ahead	U	A		1	37	-	300	2015	851	35.3%	-	-	-	1.7	20.9	5.4		
3/1	Old Whitechurch Road (Entry) Right Left	U	B		1	31	-	35	1915	681	5.1%	-	-	-	0.2	21.8	0.6		
Ped Link: P1	Old Whitechurch Road	-	D		1	7	-	0	-	5600	0.0%	-	-	-	0.0	0.0	0.0		
C1		PRC for Signalled Lanes (%):		149.0		PRC Over All Lanes (%):		149.0		Total Delay for Signalled Lanes (pcuHr):		3.78		Total Delay Over All Lanes(pcuHr):		3.78		Cycle Time (s): 90	

Basic Results Summary

Scenario 12: '2025 PM Without Development' (FG12: '2025 PM Without Development', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

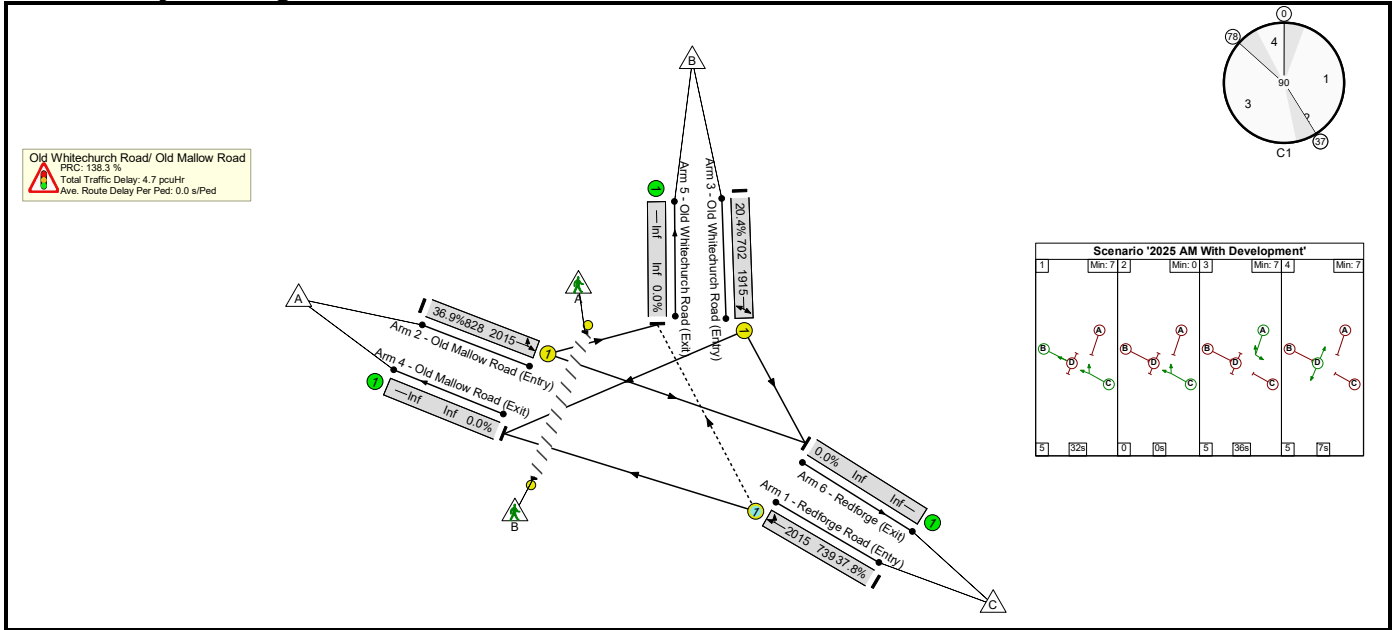
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	46.4%	0	45	0	4.9	-	-
Old Whitechurch Road/ Old Mallow Road	-	-	-		-	-	-	-	-	-	46.4%	0	45	0	4.9	-	-
1/1	Redforge Road (Entry) Ahead Right	O	C		1	43	-	452	2015	985	45.9%	0	45	0	2.3	18.5	7.8
2/1	Old Mallow Road (Entry) Left Ahead	U	A		1	25	-	270	2015	582	46.4%	-	-	-	2.4	32.0	5.9
3/1	Old Whitechurch Road (Entry) Right Left	U	B		1	43	-	42	1915	936	4.5%	-	-	-	0.2	14.0	0.6
Ped Link: P1	Old Whitechurch Road	-	D		1	7	-	0	-	5600	0.0%	-	-	-	0.0	0.0	0.0
		C1			PRC for Signalled Lanes (%):		94.0			Total Delay for Signalled Lanes (pcuHr):		4.89			Cycle Time (s):		90
				PRC Over All Lanes (%):		94.0			Total Delay Over All Lanes(pcuHr):		4.89						

Basic Results Summary

Scenario 13: '2025 AM With Development' (FG13: '2025 AM With Development', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

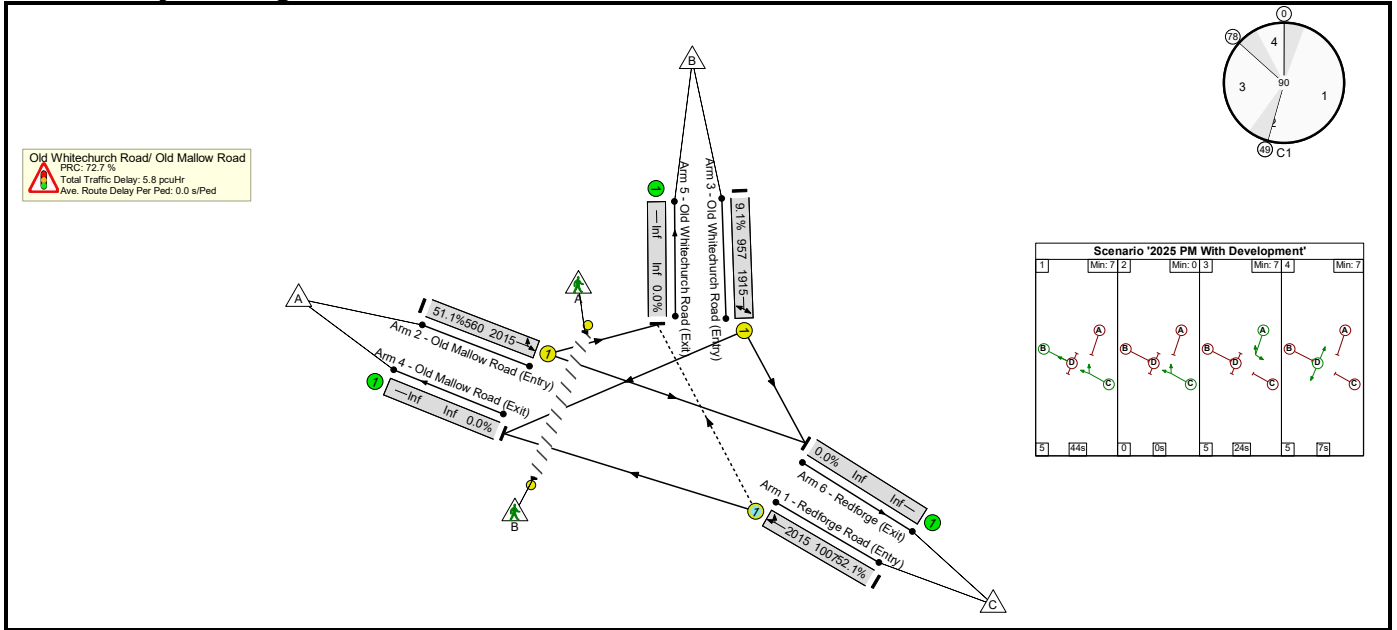
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	37.8%	0	37	0	4.7	-	-
Old Whitechurch Road/ Old Mallow Road	-	-	-		-	-	-	-	-	-	37.8%	0	37	0	4.7	-	-
1/1	Redforge Road (Entry) Ahead Right	O	C		1	32	-	279	2015	739	37.8%	0	37	0	1.9	24.9	5.4
2/1	Old Mallow Road (Entry) Left Ahead	U	A		1	36	-	306	2015	828	36.9%	-	-	-	1.9	21.8	5.6
3/1	Old Whitechurch Road (Entry) Right Left	U	B		1	32	-	143	1915	702	20.4%	-	-	-	0.9	22.7	2.6
Ped Link: P1	Old Whitechurch Road	-	D		1	7	-	0	-	5600	0.0%	-	-	-	0.0	0.0	0.0
		C1			PRC for Signalled Lanes (%):		138.3			Total Delay for Signalled Lanes (pcuHr):		4.69			Cycle Time (s):		90
				PRC Over All Lanes (%):		138.3			Total Delay Over All Lanes(pcuHr):		4.69						

Basic Results Summary

Scenario 14: '2025 PM With Development' (FG14: '2025 PM With Development', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

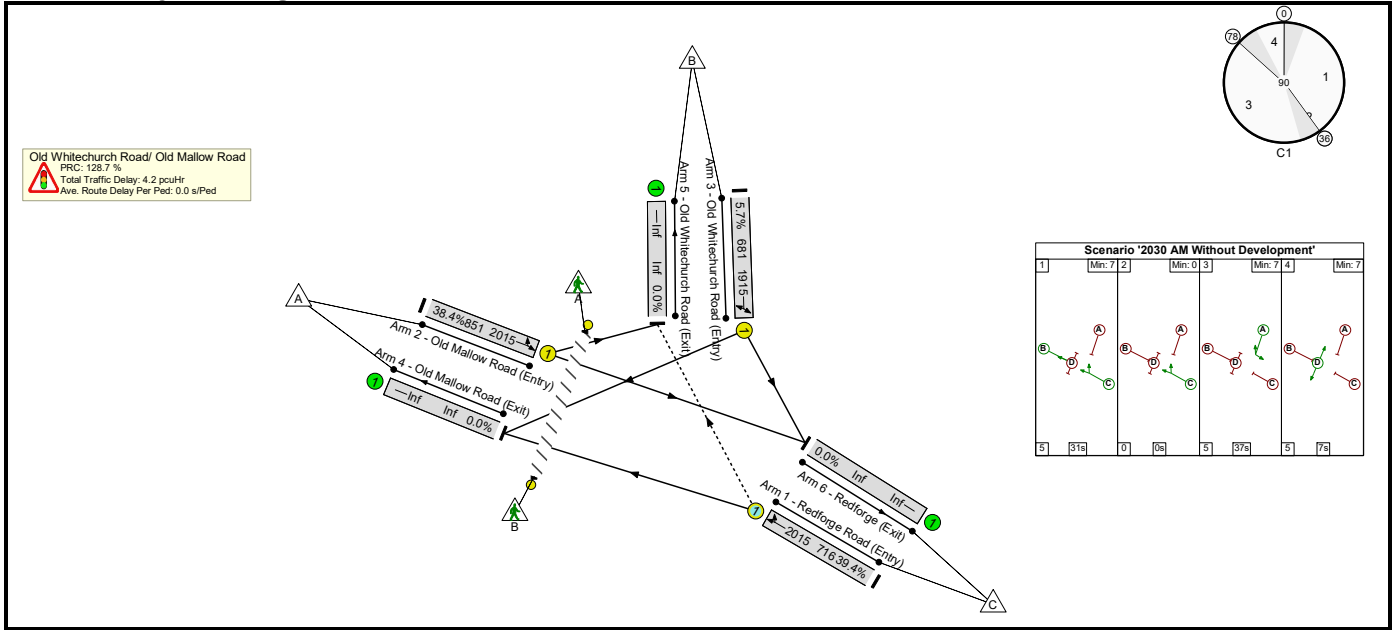
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	52.1%	0	118	0	5.8	-	-
Old Whitechurch Road/ Old Mallow Road	-	-	-		-	-	-	-	-	-	52.1%	0	118	0	5.8	-	-
1/1	Redforge Road (Entry) Ahead Right	O	C		1	44	-	525	2015	1007	52.1%	0	118	0	2.8	18.9	9.3
2/1	Old Mallow Road (Entry) Left Ahead	U	A		1	24	-	286	2015	560	51.1%	-	-	-	2.7	33.9	6.5
3/1	Old Whitechurch Road (Entry) Right Left	U	B		1	44	-	87	1915	957	9.1%	-	-	-	0.3	13.9	1.2
Ped Link: P1	Old Whitechurch Road	-	D		1	7	-	0	-	5600	0.0%	-	-	-	0.0	0.0	0.0
		C1			PRC for Signalled Lanes (%):		72.7			Total Delay for Signalled Lanes (pcuHr):		5.79			Cycle Time (s):		90
				PRC Over All Lanes (%):		72.7			Total Delay Over All Lanes(pcuHr):		5.79						

Basic Results Summary

Scenario 15: '2030 AM Without Development' (FG15: '2030 AM Without Development', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

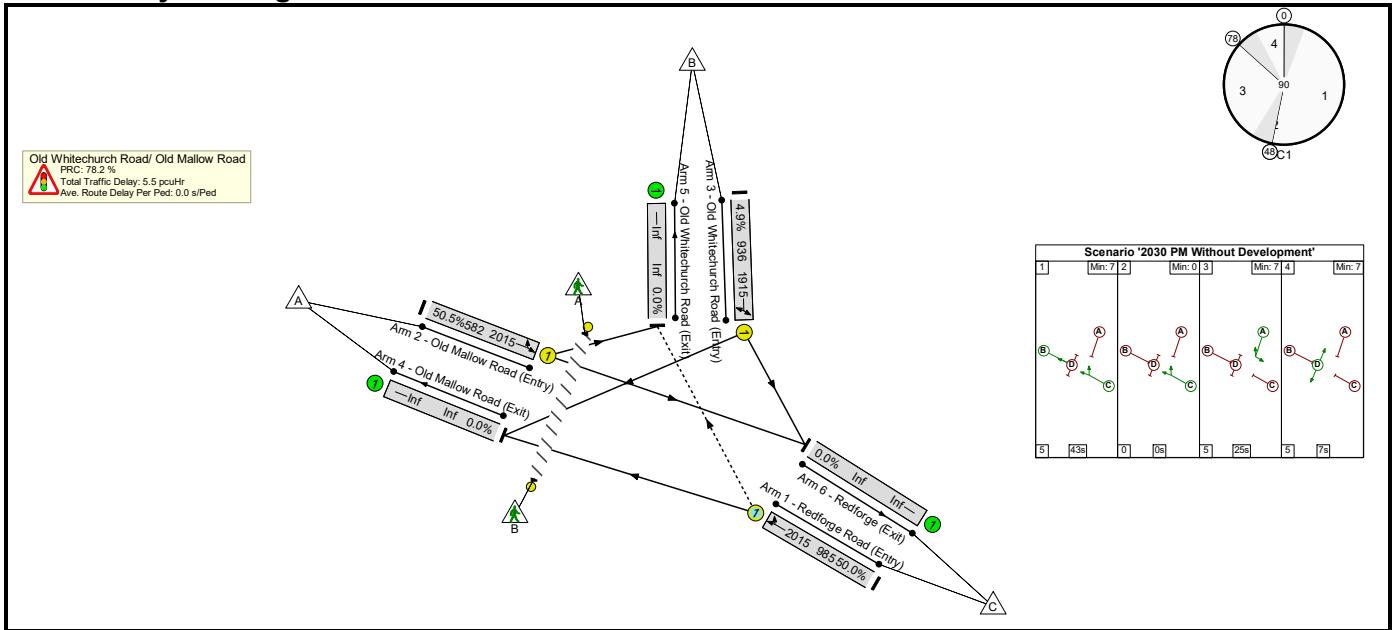
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)	
Network	-	-	-		-	-	-	-	-	-	39.4%	0	18	0	4.2	-	-	
Old Whitechurch Road/ Old Mallow Road	-	-	-		-	-	-	-	-	-	39.4%	0	18	0	4.2	-	-	
1/1	Redforge Road (Entry) Ahead Right	O	C		1	31	-	282	2015	716	39.4%	0	18	0	2.0	25.9	5.6	
2/1	Old Mallow Road (Entry) Left Ahead	U	A		1	37	-	327	2015	851	38.4%	-	-	-	1.9	21.4	5.9	
3/1	Old Whitechurch Road (Entry) Right Left	U	B		1	31	-	39	1915	681	5.7%	-	-	-	0.2	21.9	0.7	
Ped Link: P1	Old Whitechurch Road	-	D		1	7	-	0	-	5600	0.0%	-	-	-	0.0	0.0	0.0	
		C1			PRC for Signalled Lanes (%):		128.7			Total Delay for Signalled Lanes (pcuHr):		4.21			Cycle Time (s):		90	
				PRC Over All Lanes (%):		128.7			Total Delay Over All Lanes(pcuHr):		4.21							

Basic Results Summary

Scenario 16: '2030 PM Without Development' (FG16: '2030 PM Without Development', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

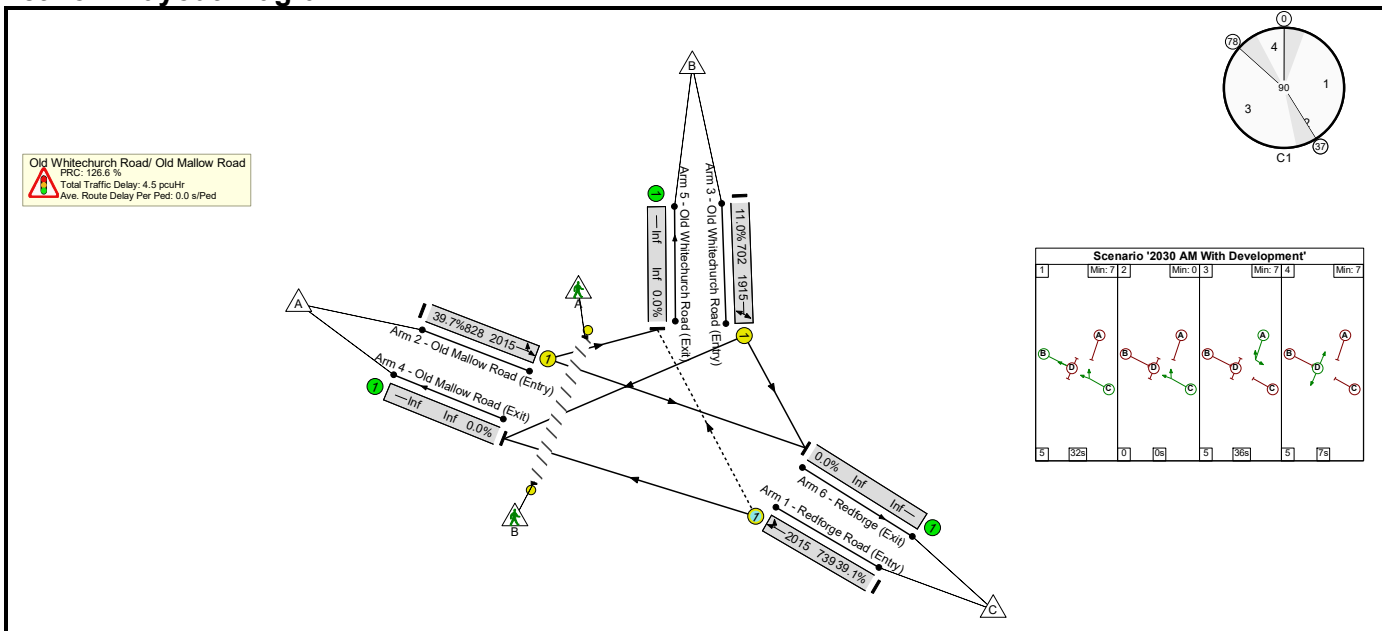
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	50.5%	0	49	0	5.5	-	-
Old Whitechurch Road/ Old Mallow Road	-	-	-		-	-	-	-	-	-	50.5%	0	49	0	5.5	-	-
1/1	Redforge Road (Entry) Ahead Right	O	C		1	43	-	493	2015	985	50.0%	0	49	0	2.6	19.2	8.7
2/1	Old Mallow Road (Entry) Left Ahead	U	A		1	25	-	294	2015	582	50.5%	-	-	-	2.7	32.9	6.6
3/1	Old Whitechurch Road (Entry) Right Left	U	B		1	43	-	46	1915	936	4.9%	-	-	-	0.2	14.1	0.6
Ped Link: P1	Old Whitechurch Road	-	D		1	7	-	0	-	5600	0.0%	-	-	-	0.0	0.0	0.0
		C1			PRC for Signalled Lanes (%):		78.2			Total Delay for Signalled Lanes (pcuHr):		5.50			Cycle Time (s):		90
				PRC Over All Lanes (%):		78.2			Total Delay Over All Lanes(pcuHr):		5.50						

Basic Results Summary

Scenario 17: '2030 AM With Development' (FG17: '2030 AM With Development', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

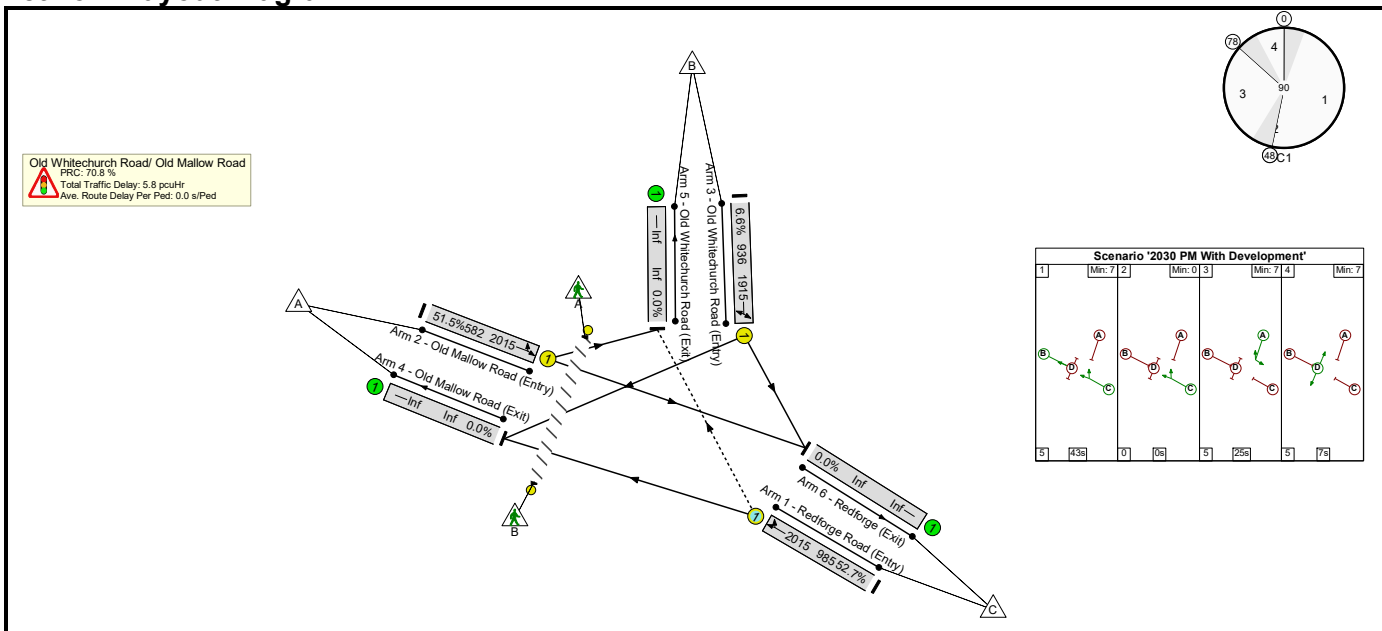
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)		
Network	-	-	-		-	-	-	-	-	-	39.7%	0	25	0	4.5	-	-		
Old Whitechurch Road/ Old Mallow Road	-	-	-		-	-	-	-	-	-	39.7%	0	25	0	4.5	-	-		
1/1	Redforge Road (Entry) Ahead Right	O	C		1	32	-	289	2015	739	39.1%	0	25	0	2.0	25.1	5.6		
2/1	Old Mallow Road (Entry) Left Ahead	U	A		1	36	-	329	2015	828	39.7%	-	-	-	2.0	22.3	6.1		
3/1	Old Whitechurch Road (Entry) Right Left	U	B		1	32	-	77	1915	702	11.0%	-	-	-	0.5	21.7	1.3		
Ped Link: P1	Old Whitechurch Road	-	D		1	7	-	0	-	5600	0.0%	-	-	-	0.0	0.0	0.0		
C1		PRC for Signalled Lanes (%):		126.6		PRC Over All Lanes (%):		126.6		Total Delay for Signalled Lanes (pcuHr):		4.51		Total Delay Over All Lanes(pcuHr):		4.51		Cycle Time (s): 90	

Basic Results Summary

Scenario 18: '2030 PM With Development' (FG18: '2030 PM With Development', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

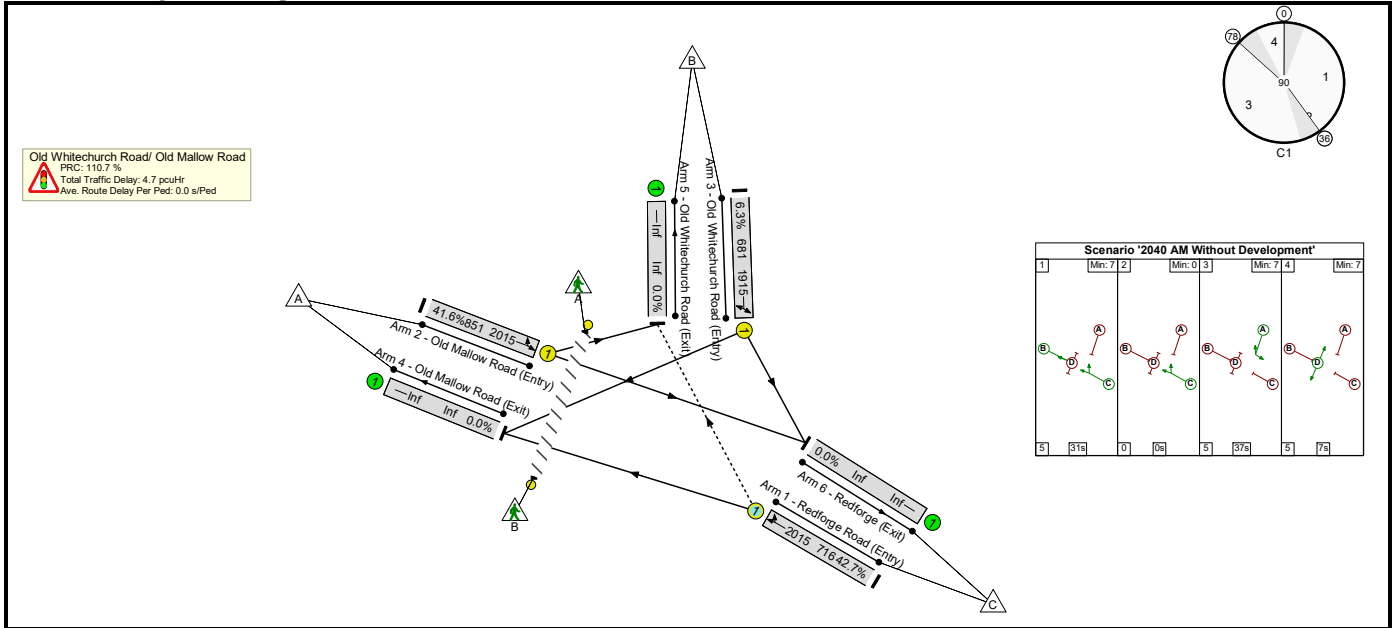
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	52.7%	0	75	0	5.8	-	-
Old Whitechurch Road/ Old Mallow Road	-	-	-		-	-	-	-	-	-	52.7%	0	75	0	5.8	-	-
1/1	Redforge Road (Entry) Ahead Right	O	C		1	43	-	519	2015	985	52.7%	0	75	0	2.8	19.7	9.3
2/1	Old Mallow Road (Entry) Left Ahead	U	A		1	25	-	300	2015	582	51.5%	-	-	-	2.8	33.1	6.8
3/1	Old Whitechurch Road (Entry) Right Left	U	B		1	43	-	62	1915	936	6.6%	-	-	-	0.2	14.2	0.8
Ped Link: P1	Old Whitechurch Road	-	D		1	7	-	0	-	5600	0.0%	-	-	-	0.0	0.0	0.0
		C1			PRC for Signalled Lanes (%): 70.8		70.8	Total Delay for Signalled Lanes (pcuHr):		5.84		Cycle Time (s): 90					
				PRC Over All Lanes (%):		70.8		Total Delay Over All Lanes(pcuHr):		5.84							

Basic Results Summary

Scenario 19: '2040 AM Without Development' (FG19: '2040 AM Without Development', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

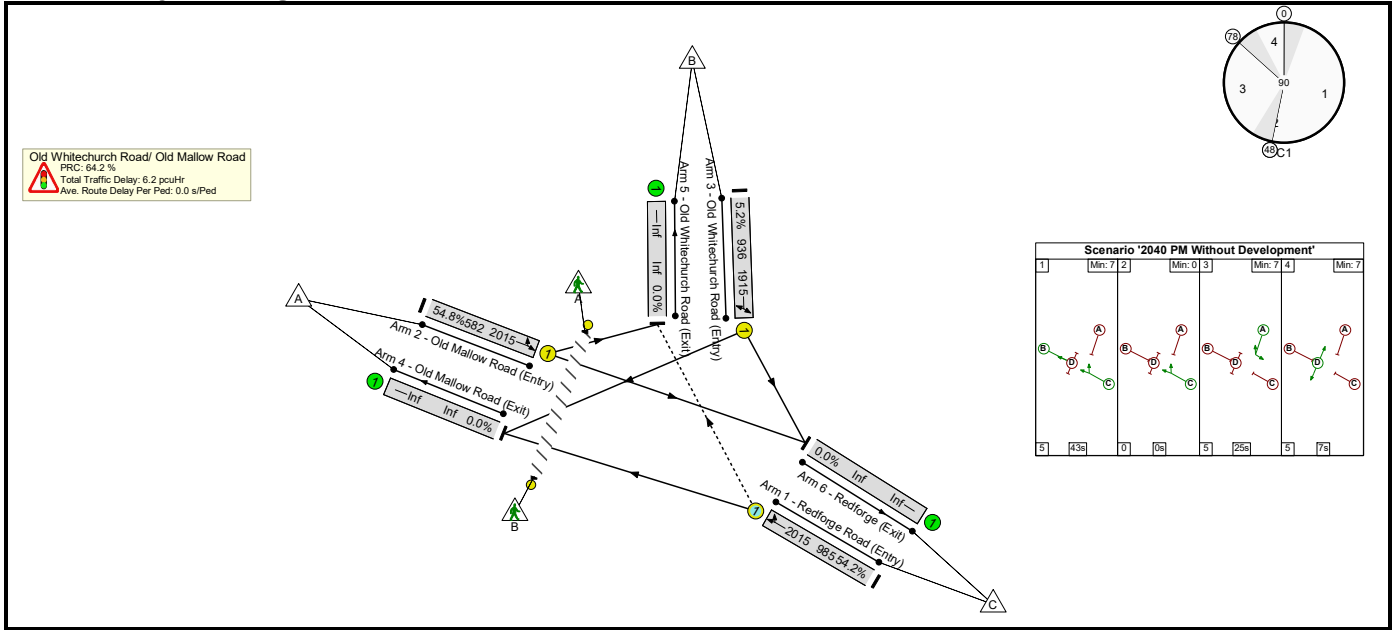
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	42.7%	0	20	0	4.7	-	-
Old Whitechurch Road/ Old Mallow Road	-	-	-		-	-	-	-	-	-	42.7%	0	20	0	4.7	-	-
1/1	Redforge Road (Entry) Ahead Right	O	C		1	31	-	306	2015	716	42.7%	0	20	0	2.2	26.4	6.2
2/1	Old Mallow Road (Entry) Left Ahead	U	A		1	37	-	354	2015	851	41.6%	-	-	-	2.1	21.8	6.6
3/1	Old Whitechurch Road (Entry) Right Left	U	B		1	31	-	43	1915	681	6.3%	-	-	-	0.3	22.0	0.7
Ped Link: P1	Old Whitechurch Road	-	D		1	7	-	0	-	5600	0.0%	-	-	-	0.0	0.0	0.0
		C1			PRC for Signalled Lanes (%): 110.7		PRC Over All Lanes (%): 110.7		Total Delay for Signalled Lanes (pcuHr): 4.66			Total Delay Over All Lanes(pcuHr): 4.66		Cycle Time (s): 90			

Basic Results Summary

Scenario 20: '2040 PM Without Development' (FG20: '2040 PM Without Development', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

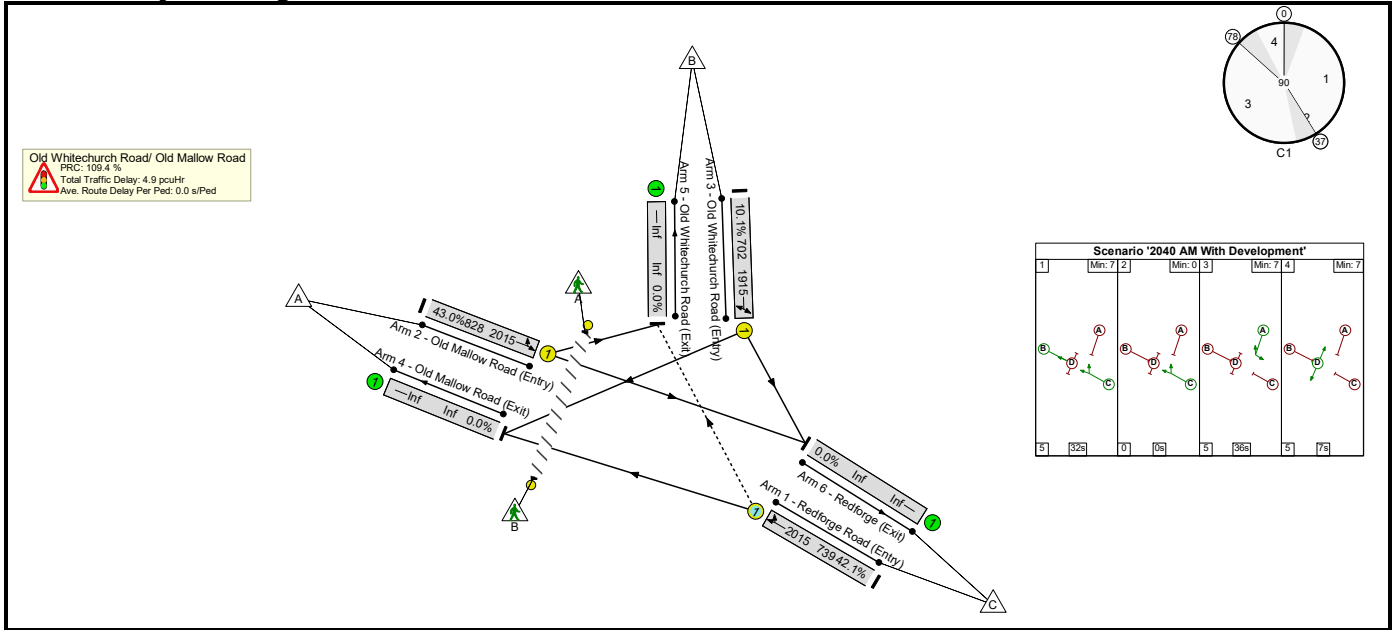
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	54.8%	0	53	0	6.2	-	-
Old Whitechurch Road/ Old Mallow Road	-	-	-		-	-	-	-	-	-	54.8%	0	53	0	6.2	-	-
1/1	Redforge Road (Entry) Ahead Right	O	C		1	43	-	534	2015	985	54.2%	0	53	0	3.0	20.0	9.8
2/1	Old Mallow Road (Entry) Left Ahead	U	A		1	25	-	319	2015	582	54.8%	-	-	-	3.0	33.8	7.3
3/1	Old Whitechurch Road (Entry) Right Left	U	B		1	43	-	49	1915	936	5.2%	-	-	-	0.2	14.1	0.7
Ped Link: P1	Old Whitechurch Road	-	D		1	7	-	0	-	5600	0.0%	-	-	-	0.0	0.0	0.0
		C1			PRC for Signalled Lanes (%): 64.2		64.2	Total Delay for Signalled Lanes (pcuHr):		6.15		Cycle Time (s):		90			
				PRC Over All Lanes (%):		64.2		Total Delay Over All Lanes(pcuHr):		6.15							

Basic Results Summary

Scenario 21: '2040 AM With Development' (FG21: '2040 AM With Development', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

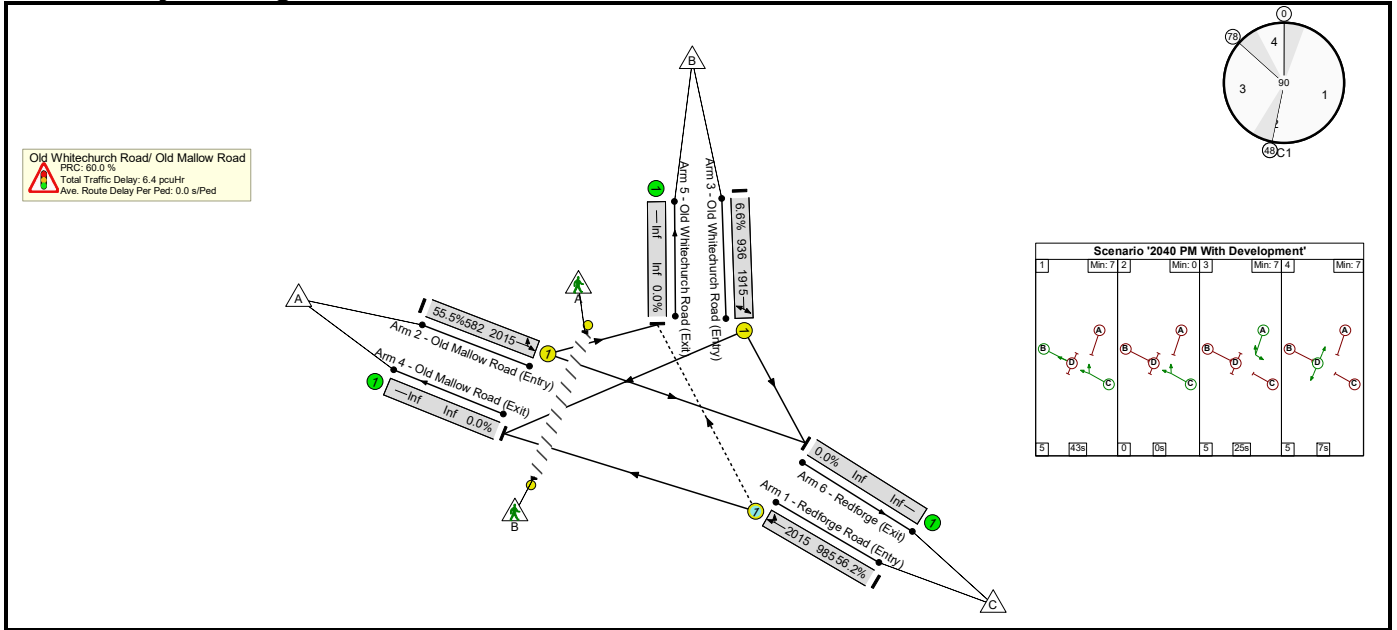
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)		
Network	-	-	-		-	-	-	-	-	-	43.0%	0	25	0	4.9	-	-		
Old Whitechurch Road/ Old Mallow Road	-	-	-		-	-	-	-	-	-	43.0%	0	25	0	4.9	-	-		
1/1	Redforge Road (Entry) Ahead Right	O	C		1	32	-	311	2015	739	42.1%	0	25	0	2.2	25.6	6.2		
2/1	Old Mallow Road (Entry) Left Ahead	U	A		1	36	-	356	2015	828	43.0%	-	-	-	2.3	22.8	6.7		
3/1	Old Whitechurch Road (Entry) Right Left	U	B		1	32	-	71	1915	702	10.1%	-	-	-	0.4	21.6	1.2		
Ped Link: P1	Old Whitechurch Road	-	D		1	7	-	0	-	5600	0.0%	-	-	-	0.0	0.0	0.0		
C1		PRC for Signalled Lanes (%):		109.4		PRC Over All Lanes (%):		109.4		Total Delay for Signalled Lanes (pcuHr):		4.88		Total Delay Over All Lanes(pcuHr):		4.88		Cycle Time (s): 90	

Basic Results Summary

Scenario 22: '2040 PM With Development' (FG22: '2040 PM With Development', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	56.2%	0	73	0	6.4	-	-
Old Whitechurch Road/ Old Mallow Road	-	-	-		-	-	-	-	-	-	56.2%	0	73	0	6.4	-	-
1/1	Redforge Road (Entry) Ahead Right	O	C		1	43	-	554	2015	985	56.2%	0	73	0	3.1	20.4	10.3
2/1	Old Mallow Road (Entry) Left Ahead	U	A		1	25	-	323	2015	582	55.5%	-	-	-	3.1	34.0	7.4
3/1	Old Whitechurch Road (Entry) Right Left	U	B		1	43	-	62	1915	936	6.6%	-	-	-	0.2	14.2	0.8
Ped Link: P1	Old Whitechurch Road	-	D		1	7	-	0	-	5600	0.0%	-	-	-	0.0	0.0	0.0
		C1			PRC for Signalled Lanes (%):		60.0			Total Delay for Signalled Lanes (pcuHr):		6.43			Cycle Time (s):		90
				PRC Over All Lanes (%):		60.0			Total Delay Over All Lanes(pcuHr):		6.43						

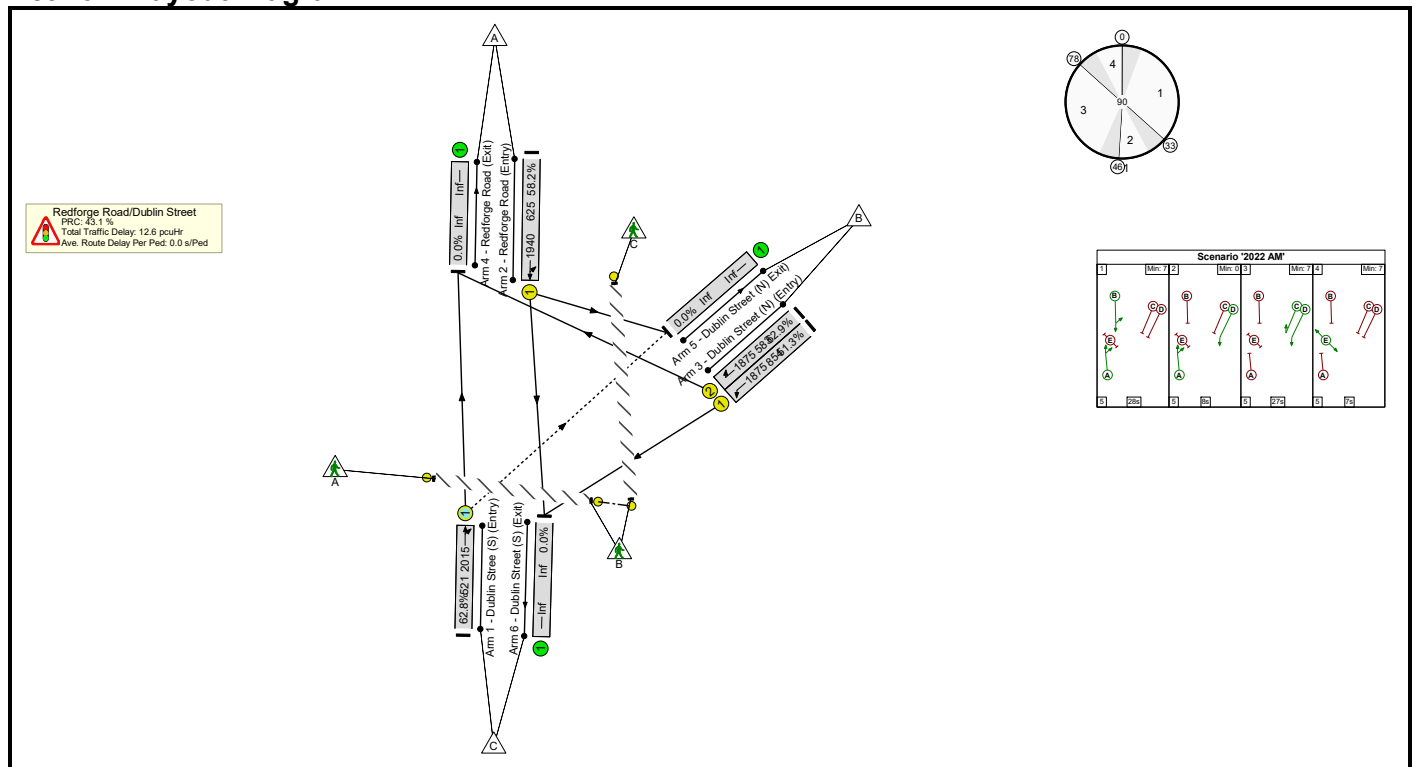
Basic Results Summary
Basic Results Summary

User and Project Details

Project:	
Title:	Junction 3 – Basic Results Summary – 90 Seconds Cycle Time
Location:	
Additional detail:	
File name:	Junction 3.lsg3x
Author:	
Company:	
Address:	

Scenario 1: '2022 AM' (FG1: '2022 AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

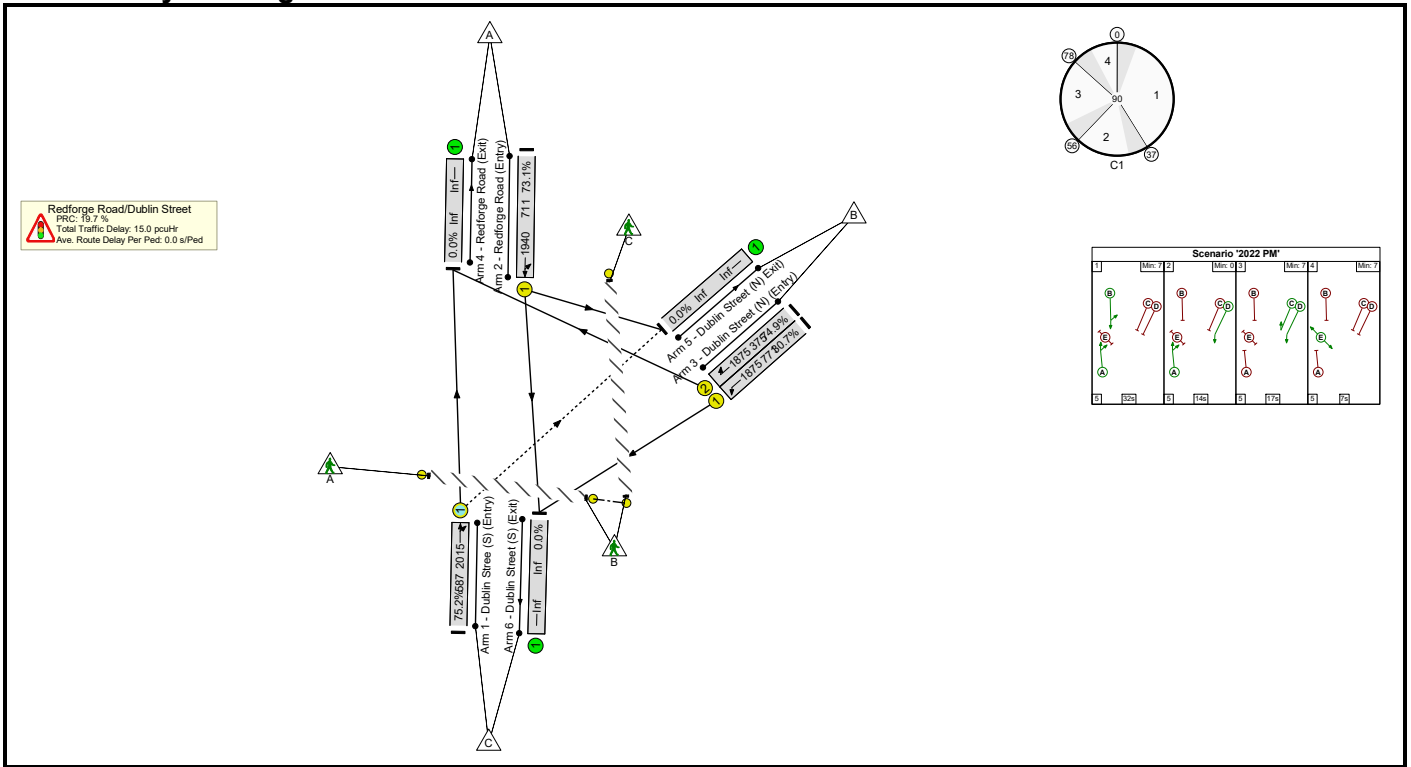
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	62.9%	112	47	0	12.6	-	-
Redforge Road/Dublin Street	-	-	-		-	-	-	-	-	-	62.9%	112	47	0	12.6	-	-
1/1	Dublin Street (S) (Entry) Ahead Right	O	A		1	41	-	327	2015	521	62.8%	112	47	0	3.1	34.6	8.0
2/1	Redforge Road (Entry) Left Ahead	U	B		1	28	-	364	1940	625	58.2%	-	-	-	3.3	32.3	8.3
3/1	Dublin Street (N) (Entry) Left	U	D		1	40	-	438	1875	854	51.3%	-	-	-	2.6	21.7	8.2
3/2	Dublin Street (N) (Entry) Right	U	C		1	27	-	367	1875	583	62.9%	-	-	-	3.5	34.8	8.7
Ped Link: P1	Unnamed Ped Link	-	E		1	7	-	0	-	5600	0.0%	-	-	-	0.0	0.0	0.0
Ped Link: P2	Unnamed Ped Link	-	E		1	7	-	0	-	5600	0.0%	-	-	-	0.0	0.0	0.0
C1		PRC for Signalled Lanes (%):		43.1		Total Delay for Signalled Lanes (pcuHr):		12.60		Cycle Time (s):		90					
		PRC Over All Lanes (%):		43.1		Total Delay Over All Lanes(pcuHr):		12.60									

Basic Results Summary

Scenario 2: '2022 PM' (FG2: '2022 PM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

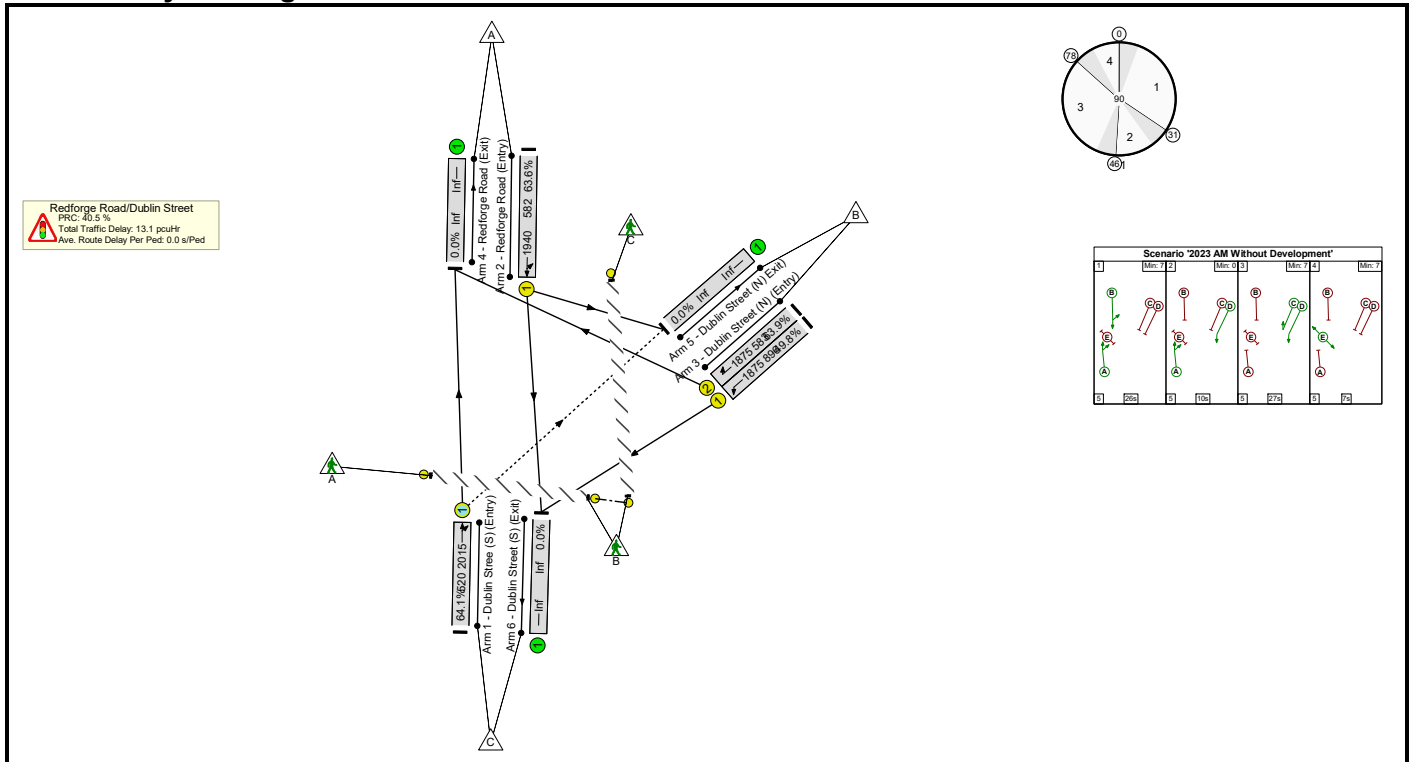
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)		
Network	-	-	-		-	-	-	-	-	-	75.2%	82	142	0	15.0	-	-		
Redforge Road/Dublin Street	-	-	-		-	-	-	-	-	-	75.2%	82	142	0	15.0	-	-		
1/1	Dublin Street (S) (Entry) Ahead Right	O	A		1	51	-	441	2015	587	75.2%	82	142	0	4.6	37.6	11.4		
2/1	Redforge Road (Entry) Left Ahead	U	B		1	32	-	520	1940	711	73.1%	-	-	-	4.9	33.9	12.5		
3/1	Dublin Street (N) (Entry) Left	U	D		1	36	-	237	1875	771	30.7%	-	-	-	1.4	21.2	4.2		
3/2	Dublin Street (N) (Entry) Right	U	C		1	17	-	281	1875	375	74.9%	-	-	-	4.1	52.5	8.0		
Ped Link: P1	Unnamed Ped Link	-	E		1	7	-	0	-	5600	0.0%	-	-	-	0.0	0.0	0.0		
Ped Link: P2	Unnamed Ped Link	-	E		1	7	-	0	-	5600	0.0%	-	-	-	0.0	0.0	0.0		
C1		PRC for Signalled Lanes (%):		19.7		PRC Over All Lanes (%):		19.7		Total Delay for Signalled Lanes (pcuHr):		15.00		Total Delay Over All Lanes(pcuHr):		15.00		Cycle Time (s): 90	

Basic Results Summary

Scenario 3: '2023 AM Without Development' (FG3: '2023 AM Without Development', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

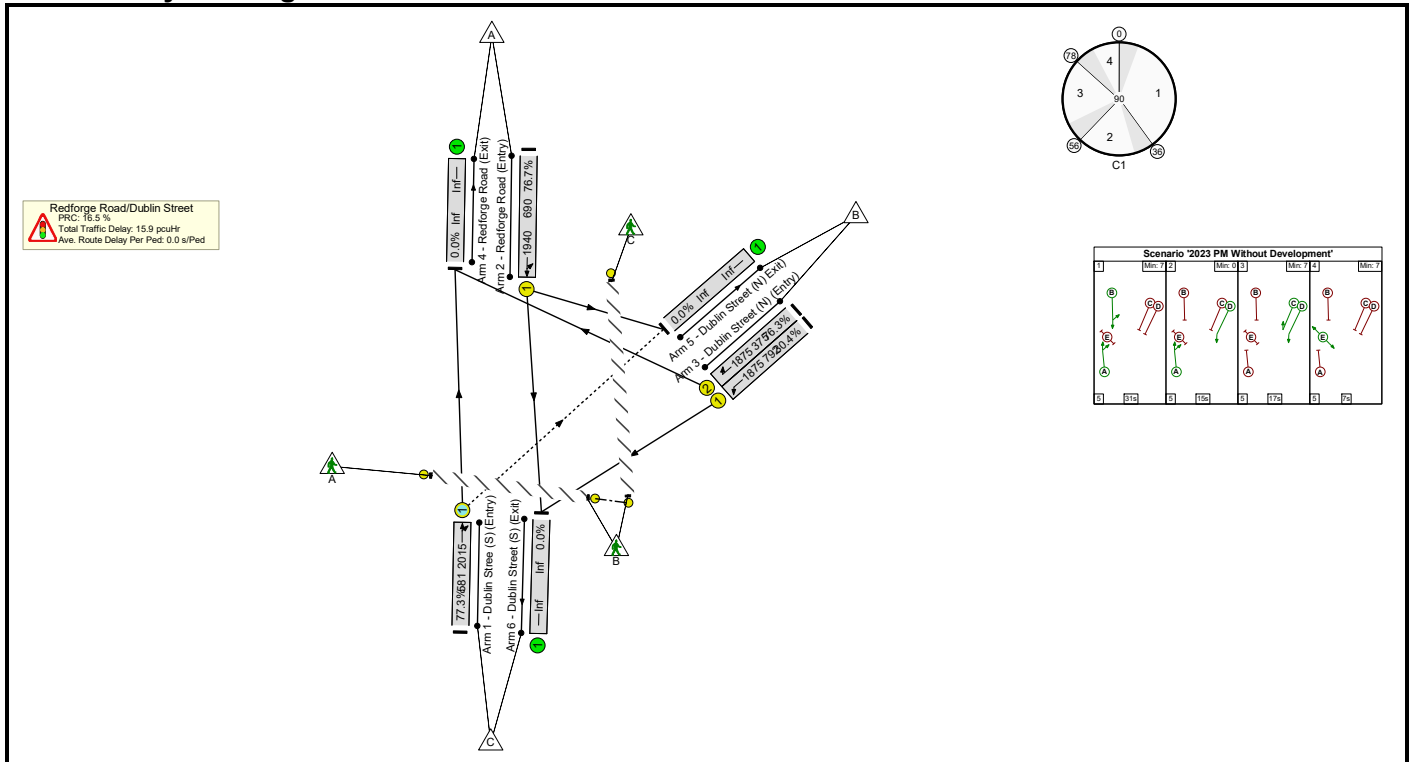
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)				
Network	-	-	-		-	-	-	-	-	-	64.1%	90	72	0	13.1	-	-				
Redforge Road/Dublin Street	-	-	-		-	-	-	-	-	-	64.1%	90	72	0	13.1	-	-				
1/1	Dublin Street (S) (Entry) Ahead Right	O	A		1	41	-	333	2015	520	64.1%	90	72	0	3.3	35.7	8.3				
2/1	Redforge Road (Entry) Left Ahead	U	B		1	26	-	370	1940	582	63.6%	-	-	-	3.7	35.7	8.8				
3/1	Dublin Street (N) (Entry) Left	U	D		1	42	-	446	1875	896	49.8%	-	-	-	2.5	20.1	8.1				
3/2	Dublin Street (N) (Entry) Right	U	C		1	27	-	373	1875	583	63.9%	-	-	-	3.6	35.2	8.9				
Ped Link: P1	Unnamed Ped Link	-	E		1	7	-	0	-	5600	0.0%	-	-	-	0.0	0.0	0.0				
Ped Link: P2	Unnamed Ped Link	-	E		1	7	-	0	-	5600	0.0%	-	-	-	0.0	0.0	0.0				
C1		PRC for Signalled Lanes (%):		40.5		Total Delay for Signalled Lanes (pcuHr):		13.10		Cycle Time (s):		90		PRC Over All Lanes (%):		40.5		Total Delay Over All Lanes(pcuHr):		13.10	

Basic Results Summary

Scenario 4: '2023 PM Without Development' (FG4: '2023 PM Without Development', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

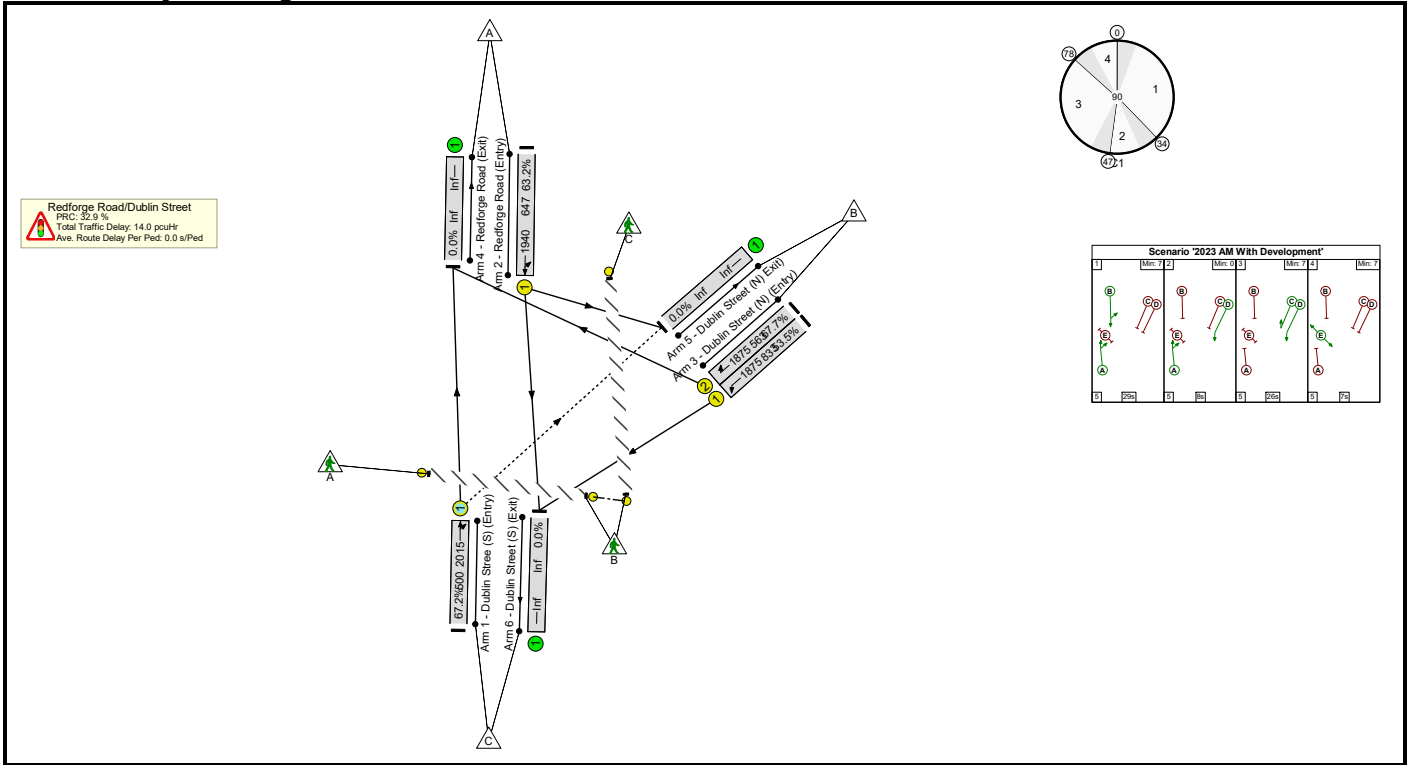
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	77.3%	68	160	0	15.9	-	-
Redforge Road/Dublin Street	-	-	-		-	-	-	-	-	-	77.3%	68	160	0	15.9	-	-
1/1	Dublin Street (S) (Entry) Ahead Right	O	A		1	51	-	449	2015	581	77.3%	68	160	0	4.9	39.4	11.9
2/1	Redforge Road (Entry) Left Ahead	U	B		1	31	-	529	1940	690	76.7%	-	-	-	5.4	36.7	13.2
3/1	Dublin Street (N) (Entry) Left	U	D		1	37	-	241	1875	792	30.4%	-	-	-	1.4	20.5	4.2
3/2	Dublin Street (N) (Entry) Right	U	C		1	17	-	286	1875	375	76.3%	-	-	-	4.3	53.5	8.2
Ped Link: P1	Unnamed Ped Link	-	E		1	7	-	0	-	5600	0.0%	-	-	-	0.0	0.0	0.0
Ped Link: P2	Unnamed Ped Link	-	E		1	7	-	0	-	5600	0.0%	-	-	-	0.0	0.0	0.0
C1		PRC for Signalled Lanes (%):		16.5		Total Delay for Signalled Lanes (pcuHr):		15.93		Cycle Time (s):		90					
		PRC Over All Lanes (%):		16.5		Total Delay Over All Lanes(pcuHr):		15.93									

Basic Results Summary

Scenario 5: '2023 AM With Development' (FG5: '2023 AM With Development', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

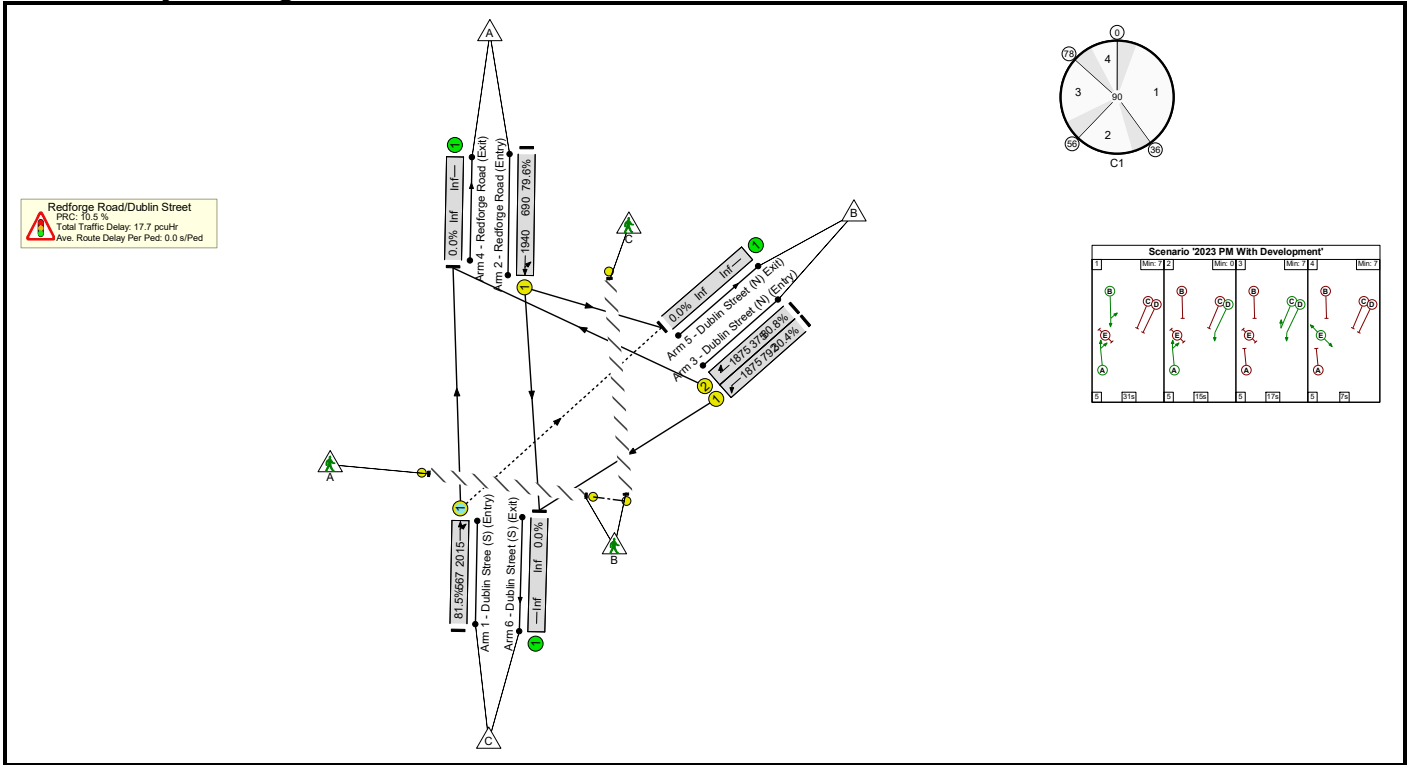
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	67.7%	101	61	0	14.0	-	-
Redforge Road/Dublin Street	-	-	-		-	-	-	-	-	-	67.7%	101	61	0	14.0	-	-
1/1	Dublin Street (S) (Entry) Ahead Right	O	A		1	42	-	336	2015	500	67.2%	101	61	0	3.5	37.2	8.6
2/1	Redforge Road (Entry) Left Ahead	U	B		1	29	-	409	1940	647	63.2%	-	-	-	3.7	32.9	9.5
3/1	Dublin Street (N) (Entry) Left	U	D		1	39	-	446	1875	833	53.5%	-	-	-	2.8	22.9	8.6
3/2	Dublin Street (N) (Entry) Right	U	C		1	26	-	381	1875	563	67.7%	-	-	-	4.0	37.5	9.4
Ped Link: P1	Unnamed Ped Link	-	E		1	7	-	0	-	5600	0.0%	-	-	-	0.0	0.0	0.0
Ped Link: P2	Unnamed Ped Link	-	E		1	7	-	0	-	5600	0.0%	-	-	-	0.0	0.0	0.0
C1		PRC for Signalled Lanes (%):		32.9		Total Delay for Signalled Lanes (pcuHr):		14.00		Cycle Time (s):		90					
		PRC Over All Lanes (%):		32.9		Total Delay Over All Lanes(pcuHr):		14.00									

Basic Results Summary

Scenario 6: '2023 PM With Development' (FG6: '2023 PM With Development', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

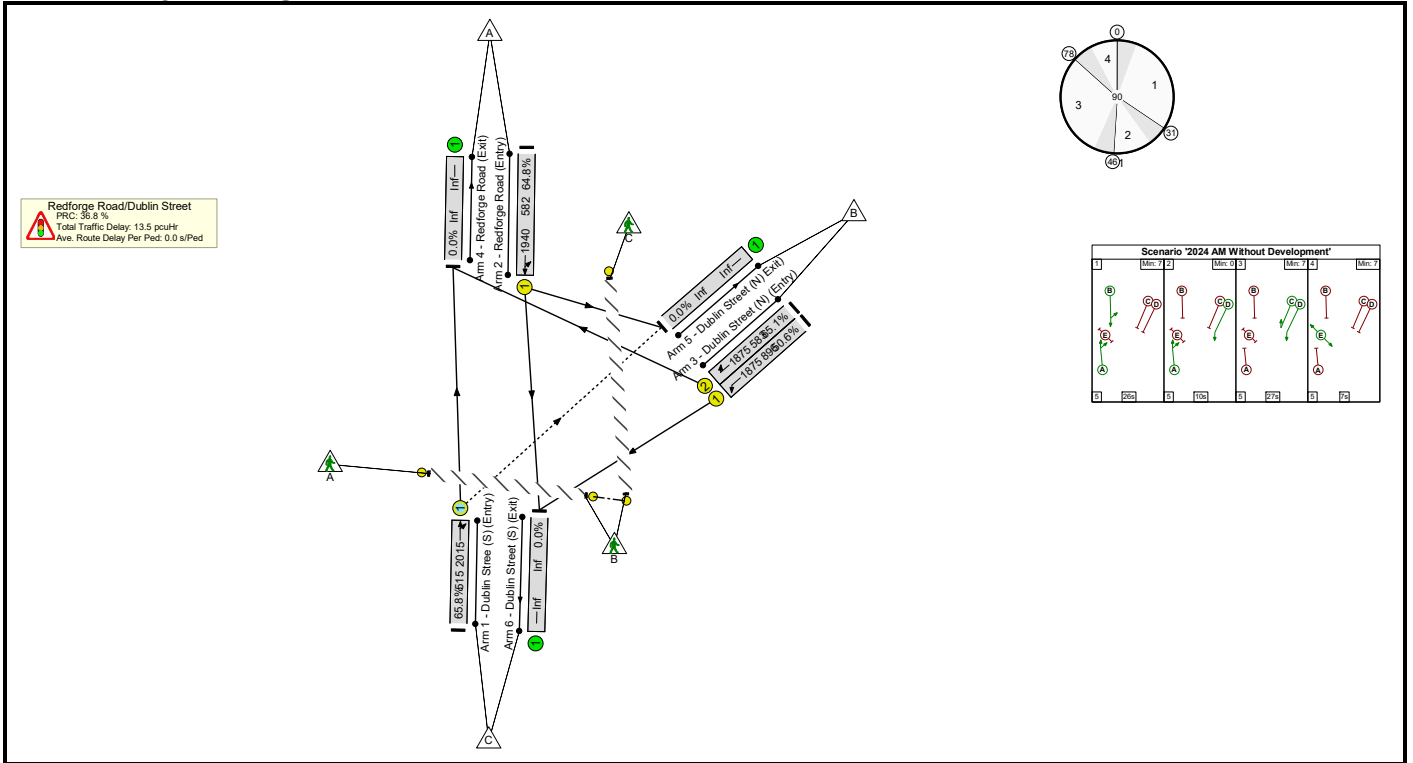
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	81.5%	59	169	0	17.7	-	-
Redforge Road/Dublin Street	-	-	-		-	-	-	-	-	-	81.5%	59	169	0	17.7	-	-
1/1	Dublin Street (S) (Entry) Ahead Right	O	A		1	51	-	462	2015	567	81.5%	59	169	0	5.6	43.6	12.8
2/1	Redforge Road (Entry) Left Ahead	U	B		1	31	-	549	1940	690	79.6%	-	-	-	5.9	38.5	14.1
3/1	Dublin Street (N) (Entry) Left	U	D		1	37	-	241	1875	792	30.4%	-	-	-	1.4	20.5	4.2
3/2	Dublin Street (N) (Entry) Right	U	C		1	17	-	303	1875	375	80.8%	-	-	-	4.9	58.0	9.1
Ped Link: P1	Unnamed Ped Link	-	E		1	7	-	0	-	5600	0.0%	-	-	-	0.0	0.0	0.0
Ped Link: P2	Unnamed Ped Link	-	E		1	7	-	0	-	5600	0.0%	-	-	-	0.0	0.0	0.0
		C1	PRC for Signalled Lanes (%):		10.5		Total Delay for Signalled Lanes (pcuHr):		17.72		Cycle Time (s):		90				
			PRC Over All Lanes (%):		10.5		Total Delay Over All Lanes(pcuHr):		17.72								

Basic Results Summary

Scenario 7: '2024 AM Without Development' (FG7: '2024 AM Without Development', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)				
Network	-	-	-		-	-	-	-	-	-	65.8%	87	78	0	13.5	-	-				
Redforge Road/Dublin Street	-	-	-		-	-	-	-	-	-	65.8%	87	78	0	13.5	-	-				
1/1	Dublin Street (S) (Entry) Ahead Right	O	A		1	41	-	339	2015	515	65.8%	87	78	0	3.4	36.6	8.5				
2/1	Redforge Road (Entry) Left Ahead	U	B		1	26	-	377	1940	582	64.8%	-	-	-	3.8	36.1	9.1				
3/1	Dublin Street (N) (Entry) Left	U	D		1	42	-	453	1875	896	50.6%	-	-	-	2.5	20.2	8.2				
3/2	Dublin Street (N) (Entry) Right	U	C		1	27	-	380	1875	583	65.1%	-	-	-	3.8	35.6	9.1				
Ped Link: P1	Unnamed Ped Link	-	E		1	7	-	0	-	5600	0.0%	-	-	-	0.0	0.0	0.0				
Ped Link: P2	Unnamed Ped Link	-	E		1	7	-	0	-	5600	0.0%	-	-	-	0.0	0.0	0.0				
C1		PRC for Signalled Lanes (%):		36.8		Total Delay for Signalled Lanes (pcuHr):		13.52		Cycle Time (s):		90		PRC Over All Lanes (%):		36.8		Total Delay Over All Lanes(pcuHr):		13.52	

Basic Results Summary

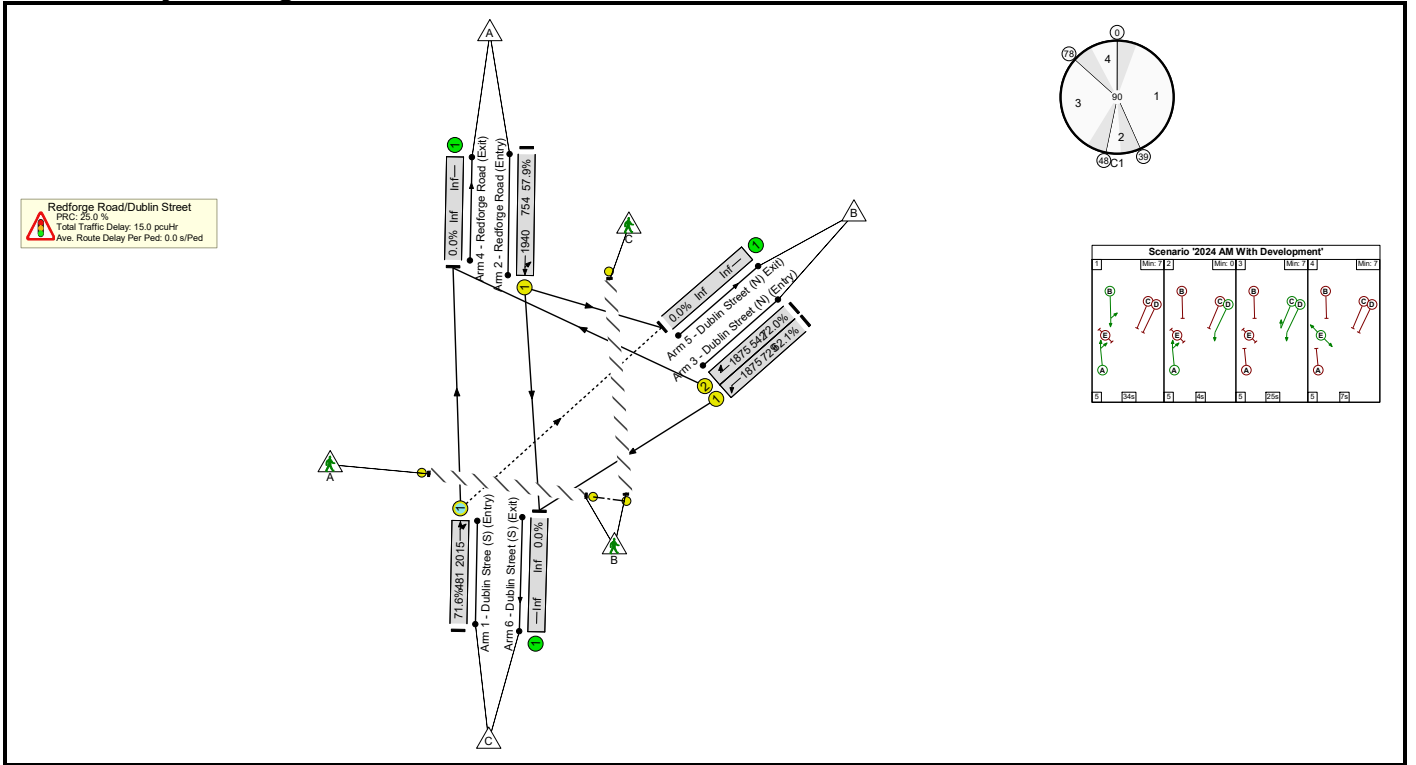
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)		
Network	-	-	-		-	-	-	-	-	-	79.5%	65	167	0	16.7	-	-		
Redforge Road/Dublin Street	-	-	-		-	-	-	-	-	-	79.5%	65	167	0	16.7	-	-		
1/1	Dublin Street (S) (Entry) Ahead Right	O	A		1	51	-	457	2015	575	79.5%	65	167	0	5.3	41.4	12.4		
2/1	Redforge Road (Entry) Left Ahead	U	B		1	31	-	538	1940	690	78.0%	-	-	-	5.6	37.5	13.7		
3/1	Dublin Street (N) (Entry) Left	U	D		1	37	-	245	1875	792	30.9%	-	-	-	1.4	20.6	4.2		
3/2	Dublin Street (N) (Entry) Right	U	C		1	17	-	291	1875	375	77.6%	-	-	-	4.4	54.7	8.5		
Ped Link: P1	Unnamed Ped Link	-	E		1	7	-	0	-	5600	0.0%	-	-	-	0.0	0.0	0.0		
Ped Link: P2	Unnamed Ped Link	-	E		1	7	-	0	-	5600	0.0%	-	-	-	0.0	0.0	0.0		
C1		PRC for Signalled Lanes (%):		13.3		PRC Over All Lanes (%):		13.3		Total Delay for Signalled Lanes (pcuHr):		16.67		Total Delay Over All Lanes(pcuHr):		16.67		Cycle Time (s): 90	

Basic Results Summary

Scenario 9: '2024 AM With Development' (FG9: '2024 AM With Development', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

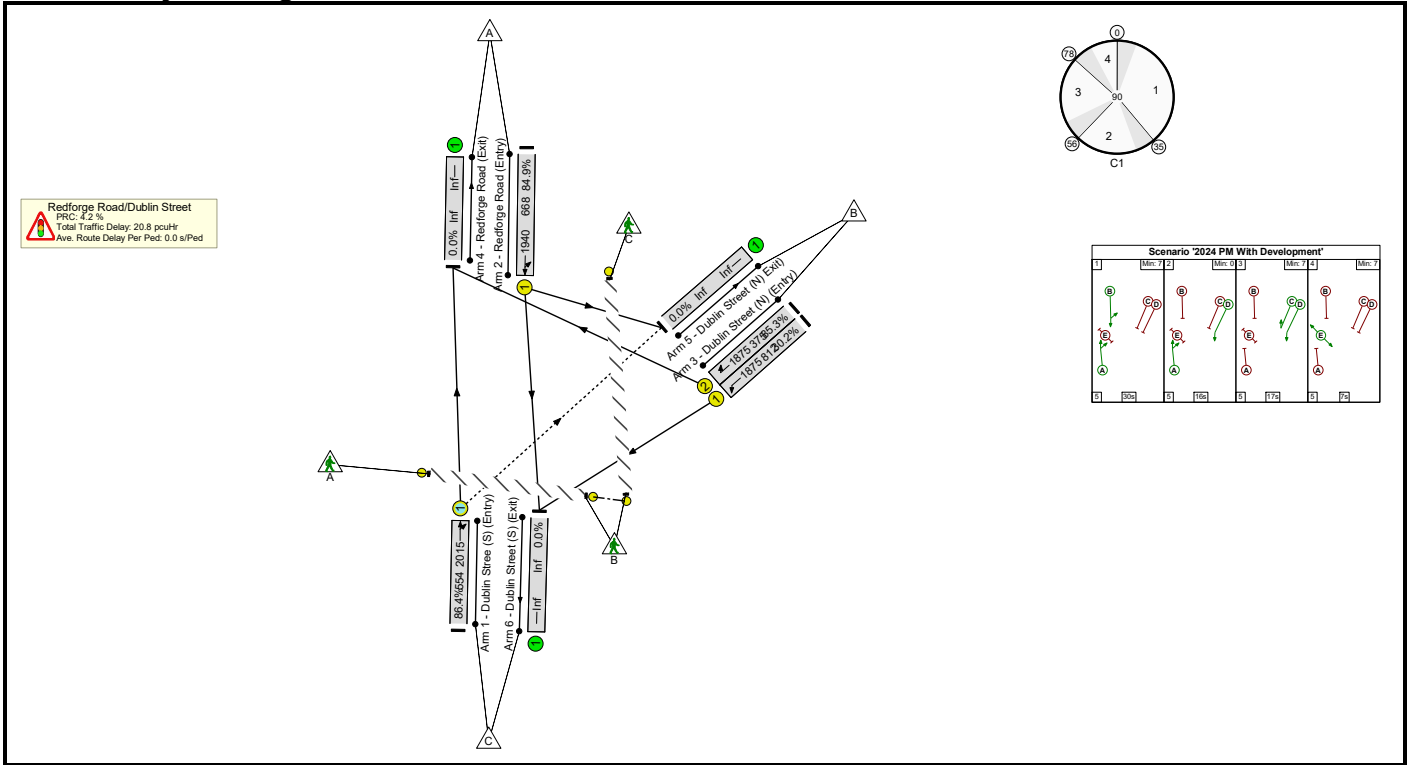
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	72.0%	131	34	0	15.0	-	-
Redforge Road/Dublin Street	-	-	-		-	-	-	-	-	-	72.0%	131	34	0	15.0	-	-
1/1	Dublin Street (S) (Entry) Ahead Right	O	A		1	43	-	344	2015	481	71.6%	131	34	0	3.7	38.8	9.1
2/1	Redforge Road (Entry) Left Ahead	U	B		1	34	-	437	1940	754	57.9%	-	-	-	3.3	27.3	9.2
3/1	Dublin Street (N) (Entry) Left	U	D		1	34	-	453	1875	729	62.1%	-	-	-	3.6	28.6	9.9
3/2	Dublin Street (N) (Entry) Right	U	C		1	25	-	390	1875	542	72.0%	-	-	-	4.4	40.4	9.9
Ped Link: P1	Unnamed Ped Link	-	E		1	7	-	0	-	5600	0.0%	-	-	-	0.0	0.0	0.0
Ped Link: P2	Unnamed Ped Link	-	E		1	7	-	0	-	5600	0.0%	-	-	-	0.0	0.0	0.0
		C1	PRC for Signalled Lanes (%):		25.0		25.0		Total Delay for Signalled Lanes (pcuHr):			15.01		Cycle Time (s):		90	
			PRC Over All Lanes (%):		25.0				Total Delay Over All Lanes(pcuHr):			15.01					

Basic Results Summary

Scenario 10: '2024 PM With Development' (FG10: '2024 PM With Development', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

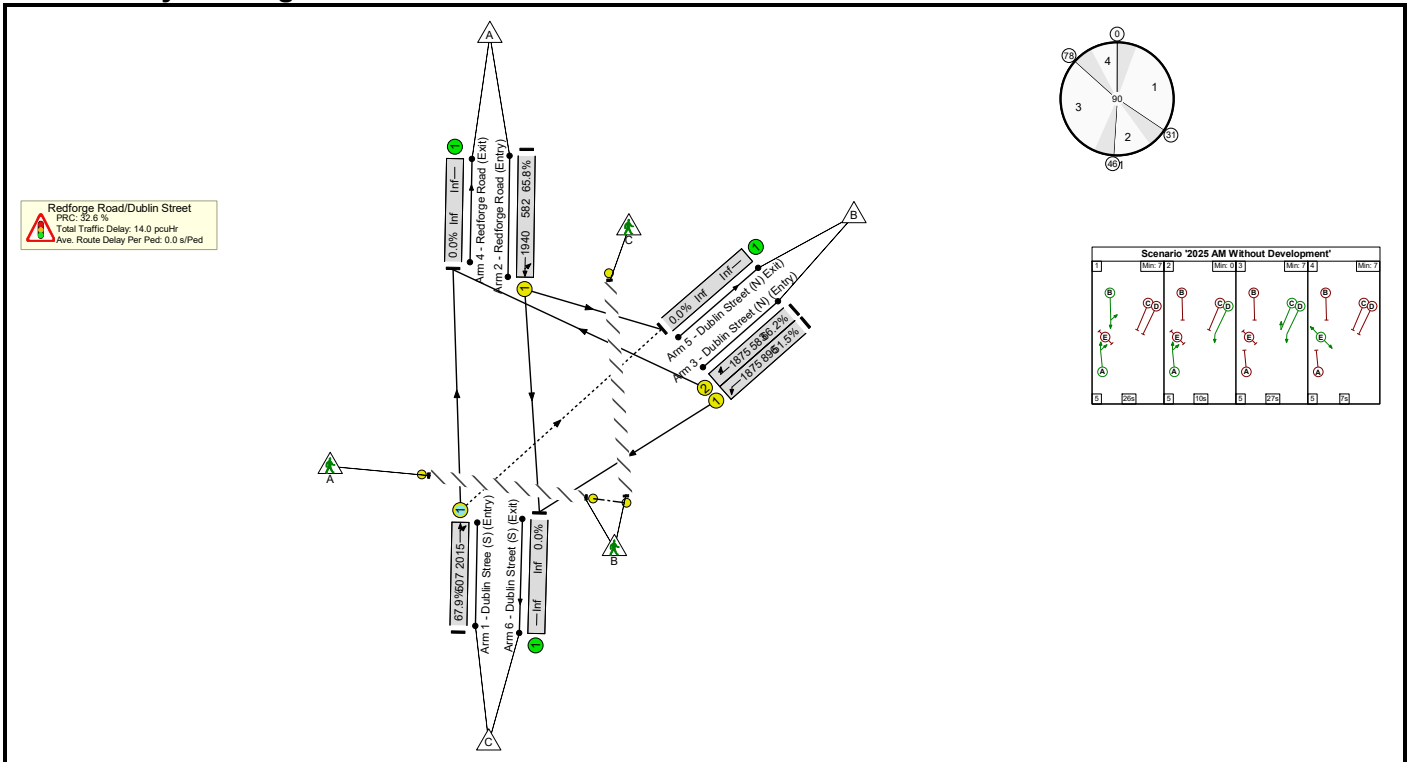
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	86.4%	41	191	0	20.8	-	-
Redforge Road/Dublin Street	-	-	-		-	-	-	-	-	-	86.4%	41	191	0	20.8	-	-
1/1	Dublin Street (S) (Entry) Ahead Right	O	A		1	51	-	479	2015	554	86.4%	41	191	0	6.7	50.4	14.3
2/1	Redforge Road (Entry) Left Ahead	U	B		1	30	-	567	1940	668	84.9%	-	-	-	7.0	44.2	15.7
3/1	Dublin Street (N) (Entry) Left	U	D		1	38	-	245	1875	812	30.2%	-	-	-	1.3	19.8	4.2
3/2	Dublin Street (N) (Entry) Right	U	C		1	17	-	320	1875	375	85.3%	-	-	-	5.7	64.6	10.3
Ped Link: P1	Unnamed Ped Link	-	E		1	7	-	0	-	5600	0.0%	-	-	-	0.0	0.0	0.0
Ped Link: P2	Unnamed Ped Link	-	E		1	7	-	0	-	5600	0.0%	-	-	-	0.0	0.0	0.0
		C1	PRC for Signalled Lanes (%):		4.2		Total Delay for Signalled Lanes (pcuHr):		20.75		Cycle Time (s):		90				
			PRC Over All Lanes (%):		4.2		Total Delay Over All Lanes(pcuHr):		20.75								

Basic Results Summary

Scenario 11: '2025 AM Without Development' (FG11: '2025 AM Without Development', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

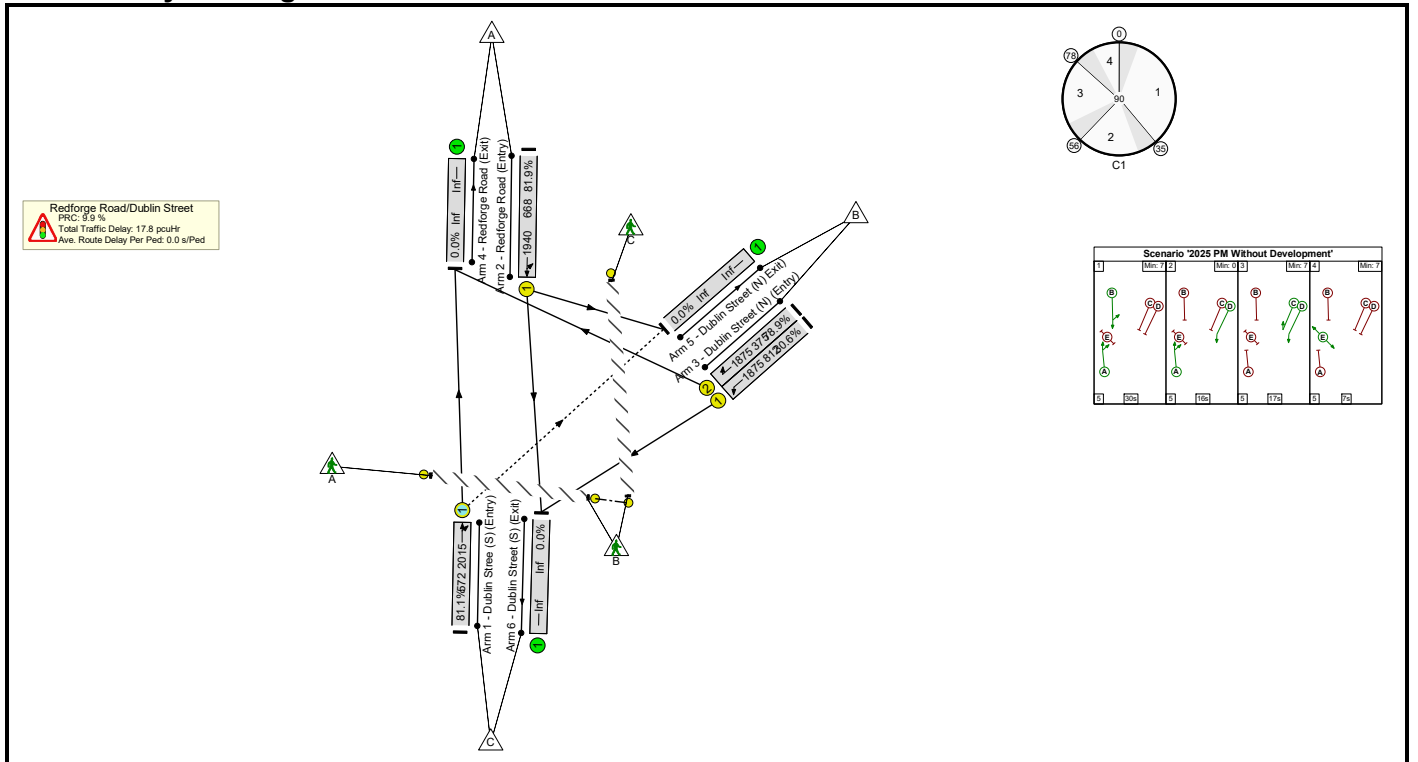
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	67.9%	83	84	0	14.0	-	-
Redforge Road/Dublin Street	-	-	-		-	-	-	-	-	-	67.9%	83	84	0	14.0	-	-
1/1	Dublin Street (S) (Entry) Ahead Right	O	A		1	41	-	344	2015	507	67.9%	83	84	0	3.6	37.9	8.8
2/1	Redforge Road (Entry) Left Ahead	U	B		1	26	-	383	1940	582	65.8%	-	-	-	3.9	36.4	9.3
3/1	Dublin Street (N) (Entry) Left	U	D		1	42	-	461	1875	896	51.5%	-	-	-	2.6	20.4	8.5
3/2	Dublin Street (N) (Entry) Right	U	C		1	27	-	386	1875	583	66.2%	-	-	-	3.9	35.9	9.3
Ped Link: P1	Unnamed Ped Link	-	E		1	7	-	0	-	5600	0.0%	-	-	-	0.0	0.0	0.0
Ped Link: P2	Unnamed Ped Link	-	E		1	7	-	0	-	5600	0.0%	-	-	-	0.0	0.0	0.0
		C1	PRC for Signalled Lanes (%):		32.6		Total Delay for Signalled Lanes (pcuHr):		13.96		Cycle Time (s):		90				
			PRC Over All Lanes (%):		32.6		Total Delay Over All Lanes(pcuHr):		13.96								

Basic Results Summary

Scenario 12: '2025 PM Without Development' (FG12: '2025 PM Without Development', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

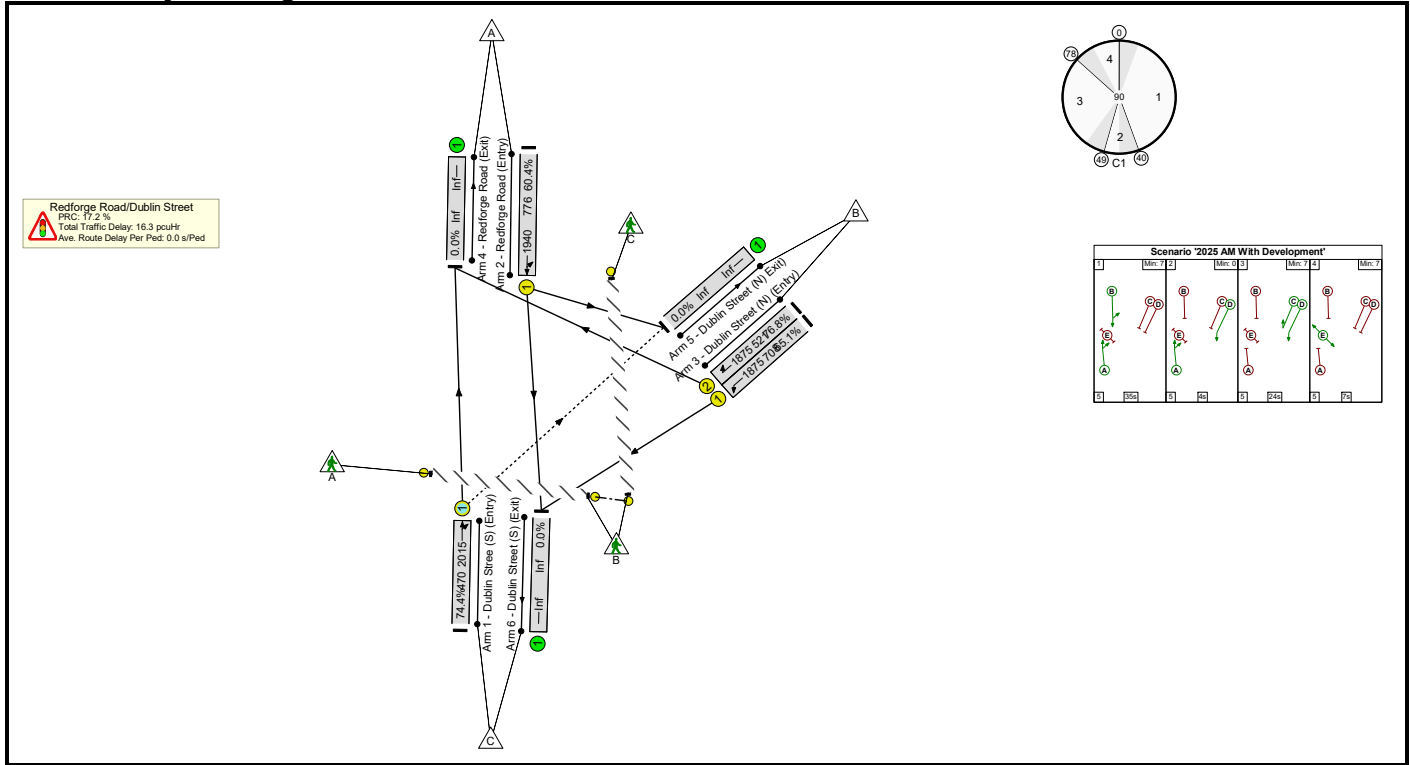
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)		
Network	-	-	-		-	-	-	-	-	-	81.9%	52	184	0	17.8	-	-		
Redforge Road/Dublin Street	-	-	-		-	-	-	-	-	-	81.9%	52	184	0	17.8	-	-		
1/1	Dublin Street (S) (Entry) Ahead Right	O	A		1	51	-	464	2015	572	81.1%	52	184	0	5.6	43.1	12.8		
2/1	Redforge Road (Entry) Left Ahead	U	B		1	30	-	547	1940	668	81.9%	-	-	-	6.3	41.3	14.6		
3/1	Dublin Street (N) (Entry) Left	U	D		1	38	-	249	1875	812	30.6%	-	-	-	1.4	19.9	4.2		
3/2	Dublin Street (N) (Entry) Right	U	C		1	17	-	296	1875	375	78.9%	-	-	-	4.6	56.0	8.8		
Ped Link: P1	Unnamed Ped Link	-	E		1	7	-	0	-	5600	0.0%	-	-	-	0.0	0.0	0.0		
Ped Link: P2	Unnamed Ped Link	-	E		1	7	-	0	-	5600	0.0%	-	-	-	0.0	0.0	0.0		
C1		PRC for Signalled Lanes (%):		9.9		PRC Over All Lanes (%):		9.9		Total Delay for Signalled Lanes (pcuHr):		17.81		Total Delay Over All Lanes(pcuHr):		17.81		Cycle Time (s): 90	

Basic Results Summary

Scenario 13: '2025 AM With Development' (FG13: '2025 AM With Development', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

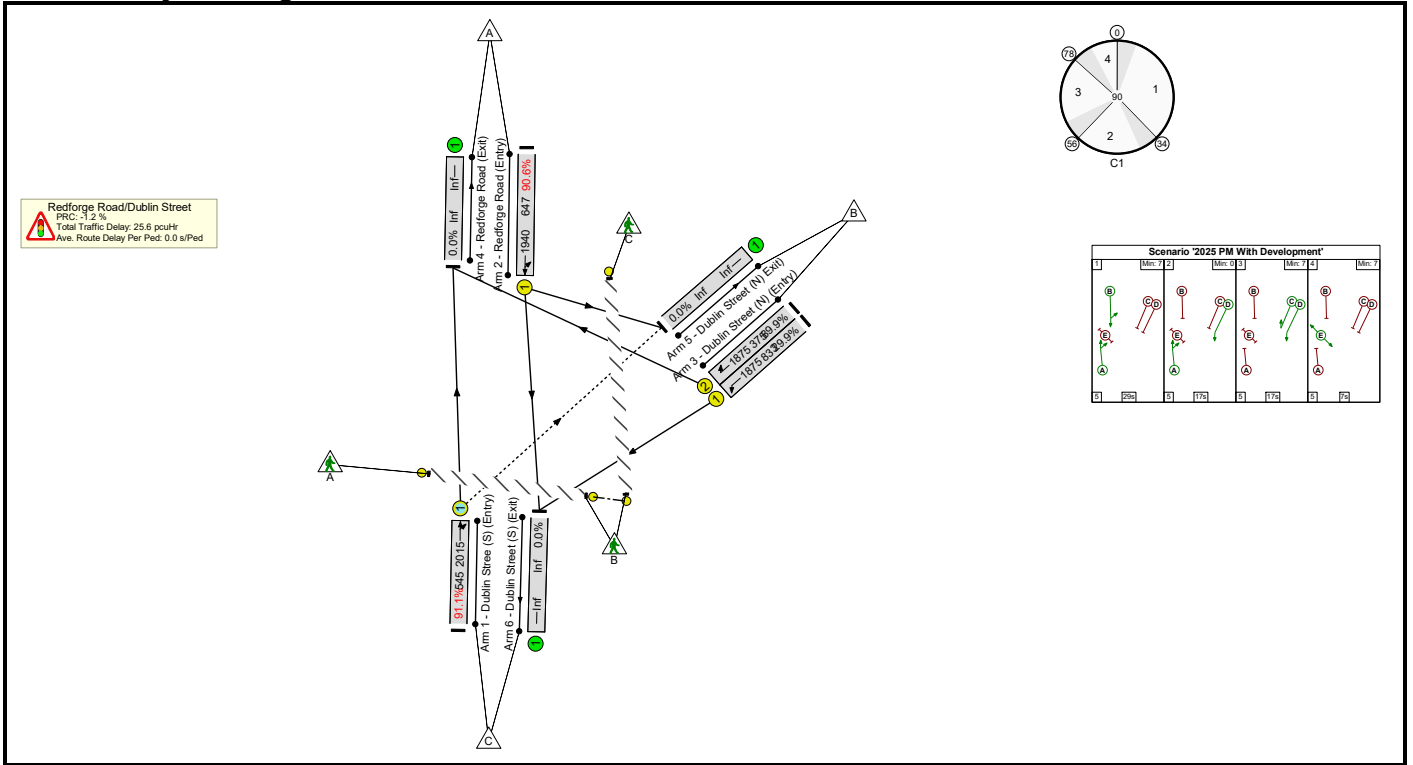
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	76.8%	128	39	0	16.3	-	-
Redforge Road/Dublin Street	-	-	-		-	-	-	-	-	-	76.8%	128	39	0	16.3	-	-
1/1	Dublin Street (S) (Entry) Ahead Right	O	A		1	44	-	350	2015	470	74.4%	128	39	0	4.0	41.0	9.5
2/1	Redforge Road (Entry) Left Ahead	U	B		1	35	-	469	1940	776	60.4%	-	-	-	3.5	27.2	10.0
3/1	Dublin Street (N) (Entry) Left	U	D		1	33	-	461	1875	708	65.1%	-	-	-	3.9	30.3	10.4
3/2	Dublin Street (N) (Entry) Right	U	C		1	24	-	400	1875	521	76.8%	-	-	-	4.9	44.4	10.7
Ped Link: P1	Unnamed Ped Link	-	E		1	7	-	0	-	5600	0.0%	-	-	-	0.0	0.0	0.0
Ped Link: P2	Unnamed Ped Link	-	E		1	7	-	0	-	5600	0.0%	-	-	-	0.0	0.0	0.0
		C1	PRC for Signalled Lanes (%):		17.2		17.2		Total Delay for Signalled Lanes (pcuHr):			16.34		Cycle Time (s):		90	
			PRC Over All Lanes (%):		17.2				Total Delay Over All Lanes(pcuHr):			16.34					

Basic Results Summary

Scenario 14: '2025 PM With Development' (FG14: '2025 PM With Development', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

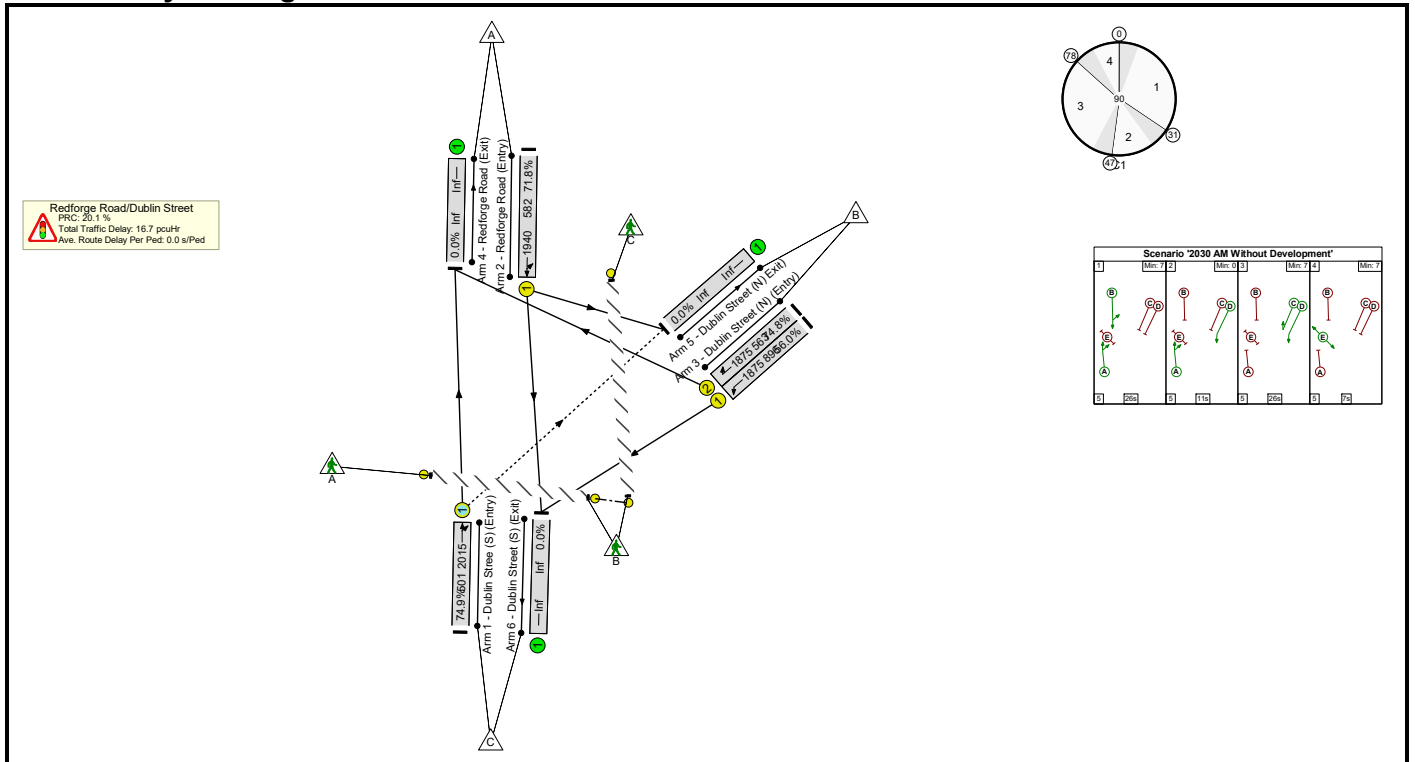
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	91.1%	25	211	0	25.6	-	-
Redforge Road/Dublin Street	-	-	-		-	-	-	-	-	-	91.1%	25	211	0	25.6	-	-
1/1	Dublin Street (S) (Entry) Ahead Right	O	A		1	51	-	496	2015	545	91.1%	25	211	0	8.4	60.7	16.3
2/1	Redforge Road (Entry) Left Ahead	U	B		1	29	-	586	1940	647	90.6%	-	-	-	8.9	54.7	18.1
3/1	Dublin Street (N) (Entry) Left	U	D		1	39	-	249	1875	833	29.9%	-	-	-	1.3	19.1	4.2
3/2	Dublin Street (N) (Entry) Right	U	C		1	17	-	337	1875	375	89.9%	-	-	-	7.0	74.7	11.9
Ped Link: P1	Unnamed Ped Link	-	E		1	7	-	0	-	5600	0.0%	-	-	-	0.0	0.0	0.0
Ped Link: P2	Unnamed Ped Link	-	E		1	7	-	0	-	5600	0.0%	-	-	-	0.0	0.0	0.0
C1		PRC for Signalled Lanes (%):		-1.2		Total Delay for Signalled Lanes (pcuHr):		25.58		Cycle Time (s):		90					
		PRC Over All Lanes (%):		-1.2		Total Delay Over All Lanes(pcuHr):		25.58									

Basic Results Summary

Scenario 15: '2030 AM Without Development' (FG15: '2030 AM Without Development', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

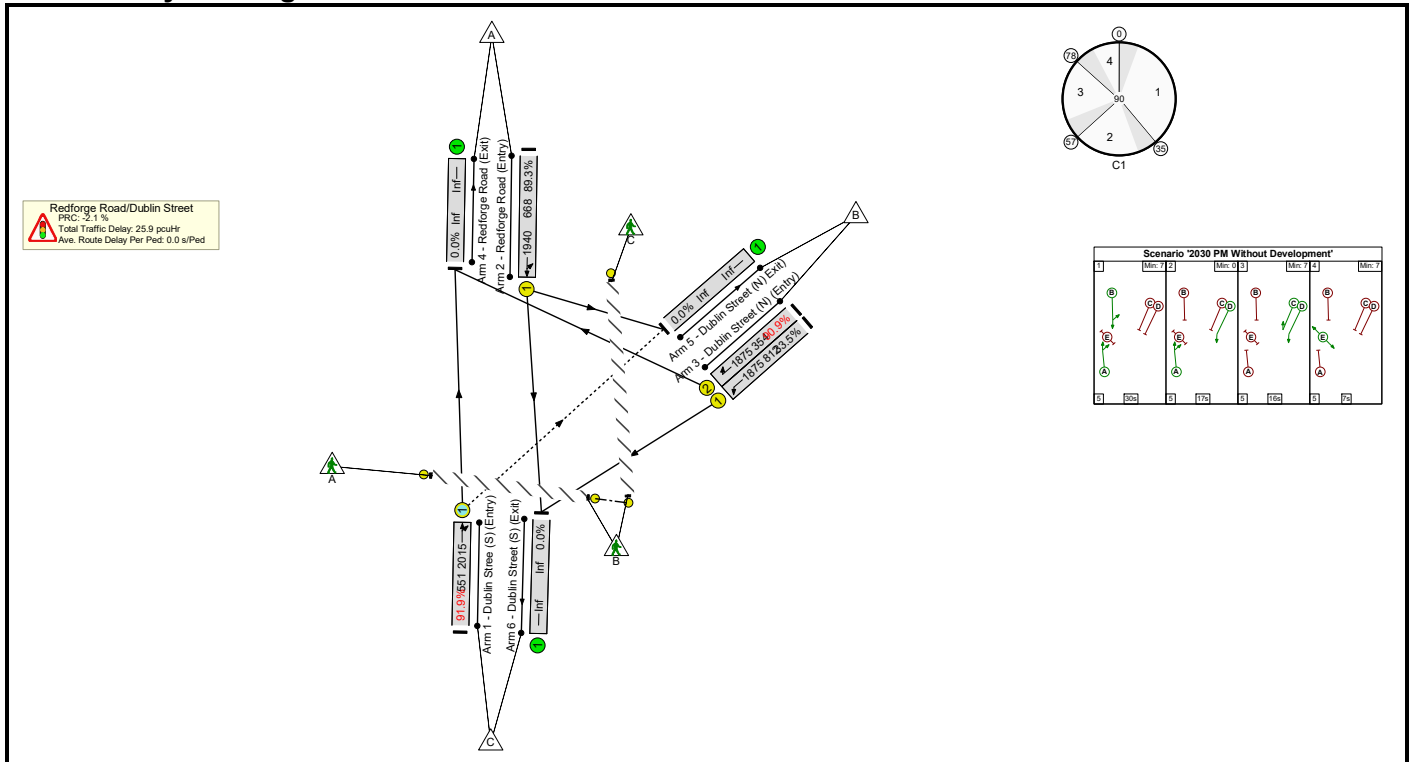
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)		
Network	-	-	-		-	-	-	-	-	-	74.9%	69	113	0	16.7	-	-		
Redforge Road/Dublin Street	-	-	-		-	-	-	-	-	-	74.9%	69	113	0	16.7	-	-		
1/1	Dublin Street (S) (Entry) Ahead Right	O	A		1	42	-	375	2015	501	74.9%	69	113	0	4.4	42.2	10.1		
2/1	Redforge Road (Entry) Left Ahead	U	B		1	26	-	418	1940	582	71.8%	-	-	-	4.5	38.9	10.5		
3/1	Dublin Street (N) (Entry) Left	U	D		1	42	-	502	1875	896	56.0%	-	-	-	3.0	21.3	9.6		
3/2	Dublin Street (N) (Entry) Right	U	C		1	26	-	421	1875	563	74.8%	-	-	-	4.8	40.9	10.9		
Ped Link: P1	Unnamed Ped Link	-	E		1	7	-	0	-	5600	0.0%	-	-	-	0.0	0.0	0.0		
Ped Link: P2	Unnamed Ped Link	-	E		1	7	-	0	-	5600	0.0%	-	-	-	0.0	0.0	0.0		
C1		PRC for Signalled Lanes (%):		20.1		PRC Over All Lanes (%):		20.1		Total Delay for Signalled Lanes (pcuHr):		16.67		Total Delay Over All Lanes(pcuHr):		16.67		Cycle Time (s): 90	

Basic Results Summary

Scenario 16: '2030 PM Without Development' (FG16: '2030 PM Without Development', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

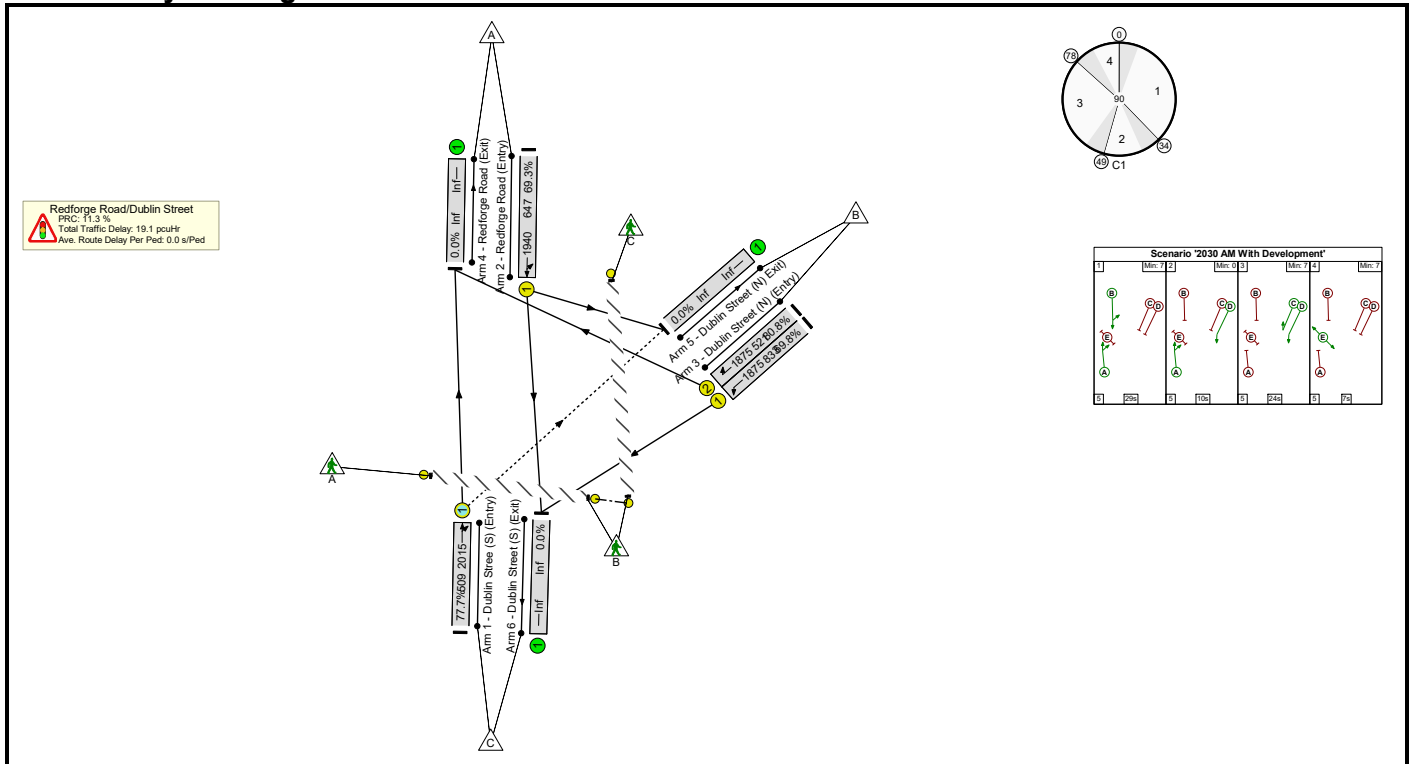
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	91.9%	30	227	0	25.9	-	-
Redforge Road/Dublin Street	-	-	-		-	-	-	-	-	-	91.9%	30	227	0	25.9	-	-
1/1	Dublin Street (S) (Entry) Ahead Right	O	A		1	52	-	506	2015	551	91.9%	30	227	0	8.8	62.4	16.9
2/1	Redforge Road (Entry) Left Ahead	U	B		1	30	-	597	1940	668	89.3%	-	-	-	8.4	50.8	17.9
3/1	Dublin Street (N) (Entry) Left	U	D		1	38	-	272	1875	812	33.5%	-	-	-	1.5	20.2	4.7
3/2	Dublin Street (N) (Entry) Right	U	C		1	16	-	322	1875	354	90.9%	-	-	-	7.2	80.5	11.9
Ped Link: P1	Unnamed Ped Link	-	E		1	7	-	0	-	5600	0.0%	-	-	-	0.0	0.0	0.0
Ped Link: P2	Unnamed Ped Link	-	E		1	7	-	0	-	5600	0.0%	-	-	-	0.0	0.0	0.0
		C1	PRC for Signalled Lanes (%):		-2.1		Total Delay for Signalled Lanes (pcuHr):		25.92		Cycle Time (s):		90				
			PRC Over All Lanes (%):		-2.1		Total Delay Over All Lanes(pcuHr):		25.92								

Basic Results Summary

Scenario 17: '2030 AM With Development' (FG17: '2030 AM With Development', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

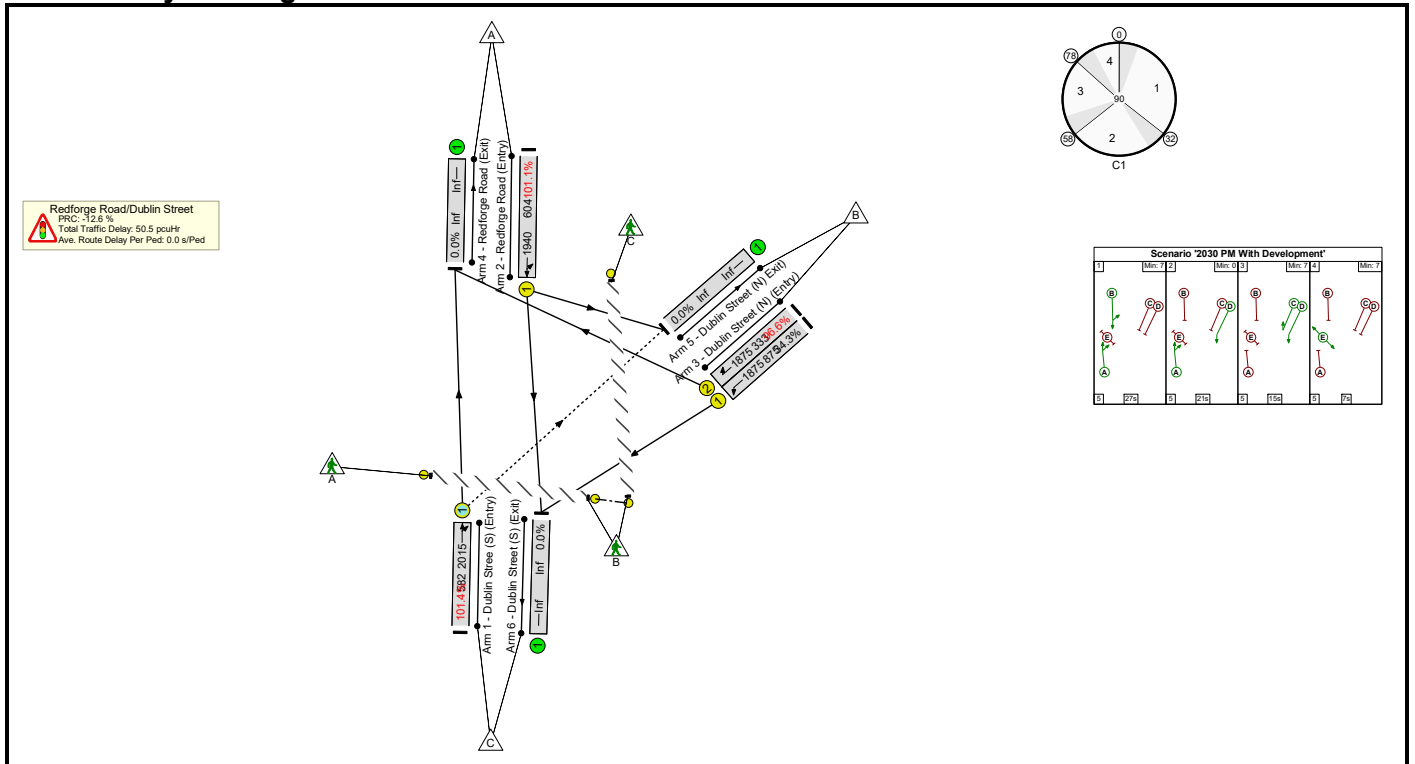
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	80.8%	85	110	0	19.1	-	-
Redforge Road/Dublin Street	-	-	-		-	-	-	-	-	-	80.8%	85	110	0	19.1	-	-
1/1	Dublin Street (S) (Entry) Ahead Right	O	A		1	44	-	395	2015	509	77.7%	85	110	0	4.7	43.2	10.8
2/1	Redforge Road (Entry) Left Ahead	U	B		1	29	-	448	1940	647	69.3%	-	-	-	4.4	35.0	10.8
3/1	Dublin Street (N) (Entry) Left	U	D		1	39	-	582	1875	833	69.8%	-	-	-	4.4	27.2	12.8
3/2	Dublin Street (N) (Entry) Right	U	C		1	24	-	421	1875	521	80.8%	-	-	-	5.6	47.6	11.7
Ped Link: P1	Unnamed Ped Link	-	E		1	7	-	0	-	5600	0.0%	-	-	-	0.0	0.0	0.0
Ped Link: P2	Unnamed Ped Link	-	E		1	7	-	0	-	5600	0.0%	-	-	-	0.0	0.0	0.0
C1				PRC for Signalled Lanes (%):		11.3		Total Delay for Signalled Lanes (pcuHr):		19.06		Cycle Time (s):		90			
				PRC Over All Lanes (%):		11.3		Total Delay Over All Lanes(pcuHr):		19.06							

Basic Results Summary

Scenario 18: '2030 PM With Development' (FG18: '2030 PM With Development', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

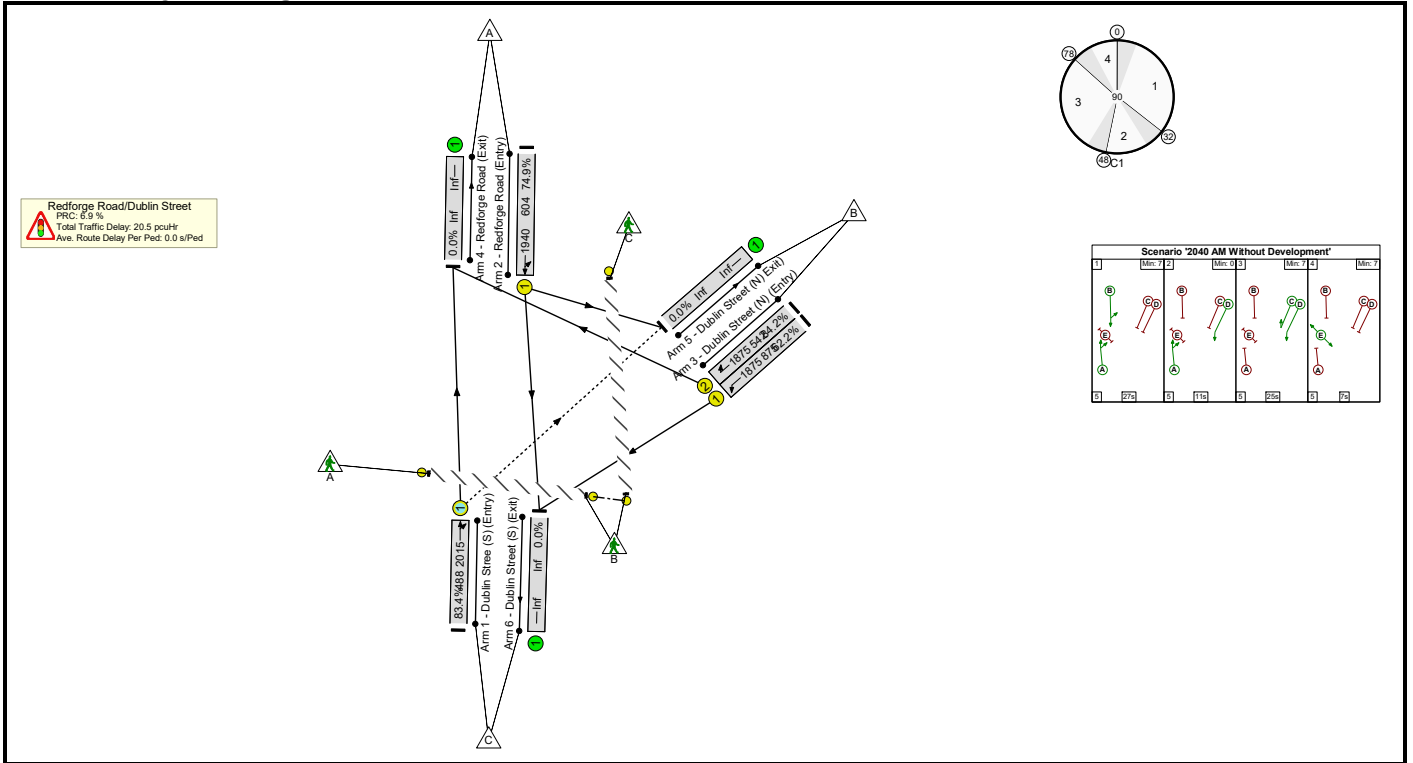
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	101.4%	0	312	0	50.5	-	-
Redforge Road/Dublin Street	-	-	-		-	-	-	-	-	-	101.4%	0	312	0	50.5	-	-
1/1	Dublin Stree (S) (Entry) Ahead Right	O	A		1	53	-	590	2015	582	101.4%	0	312	0	19.5	118.8	29.2
2/1	Redforge Road (Entry) Left Ahead	U	B		1	27	-	610	1940	604	101.1%	-	-	-	19.6	115.7	29.5
3/1	Dublin Street (N) (Entry) Left	U	D		1	41	-	300	1875	875	34.3%	-	-	-	1.5	18.4	5.0
3/2	Dublin Street (N) (Entry) Right	U	C		1	15	-	322	1875	333	96.6%	-	-	-	9.9	110.3	14.5
Ped Link: P1	Unnamed Ped Link	-	E		1	7	-	0	-	5600	0.0%	-	-	-	0.0	0.0	0.0
Ped Link: P2	Unnamed Ped Link	-	E		1	7	-	0	-	5600	0.0%	-	-	-	0.0	0.0	0.0
		C1	PRC for Signalled Lanes (%):		-12.6		Total Delay for Signalled Lanes (pcuHr):		50.46		Cycle Time (s):		90				
			PRC Over All Lanes (%):		-12.6		Total Delay Over All Lanes(pcuHr):		50.46								

Basic Results Summary

Scenario 19: '2040 AM Without Development' (FG19: '2040 AM Without Development', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

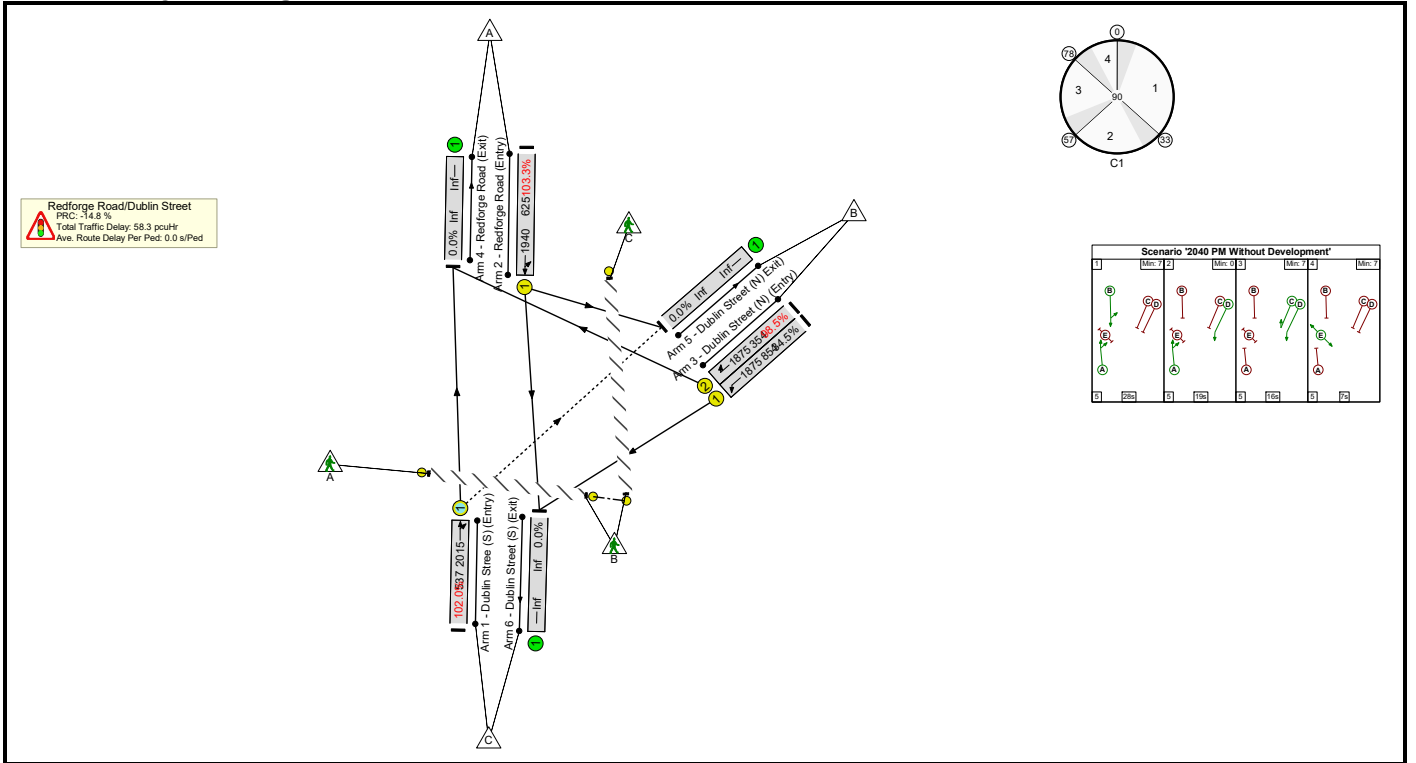
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	84.2%	63	135	0	20.5	-	-
Redforge Road/Dublin Street	-	-	-		-	-	-	-	-	-	84.2%	63	135	0	20.5	-	-
1/1	Dublin Street (S) (Entry) Ahead Right	O	A		1	43	-	407	2015	488	83.4%	63	135	0	5.7	50.4	12.0
2/1	Redforge Road (Entry) Left Ahead	U	B		1	27	-	452	1940	604	74.9%	-	-	-	5.0	39.5	11.5
3/1	Dublin Street (N) (Entry) Left	U	D		1	41	-	544	1875	875	62.2%	-	-	-	3.5	23.4	10.9
3/2	Dublin Street (N) (Entry) Right	U	C		1	25	-	456	1875	542	84.2%	-	-	-	6.3	49.9	13.2
Ped Link: P1	Unnamed Ped Link	-	E		1	7	-	0	-	5600	0.0%	-	-	-	0.0	0.0	0.0
Ped Link: P2	Unnamed Ped Link	-	E		1	7	-	0	-	5600	0.0%	-	-	-	0.0	0.0	0.0
C1		PRC for Signalled Lanes (%):		6.9		Total Delay for Signalled Lanes (pcuHr):		20.52		Cycle Time (s):		90					
		PRC Over All Lanes (%):		6.9		Total Delay Over All Lanes(pcuHr):		20.52									

Basic Results Summary

Scenario 20: '2040 PM Without Development' (FG20: '2040 PM Without Development', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

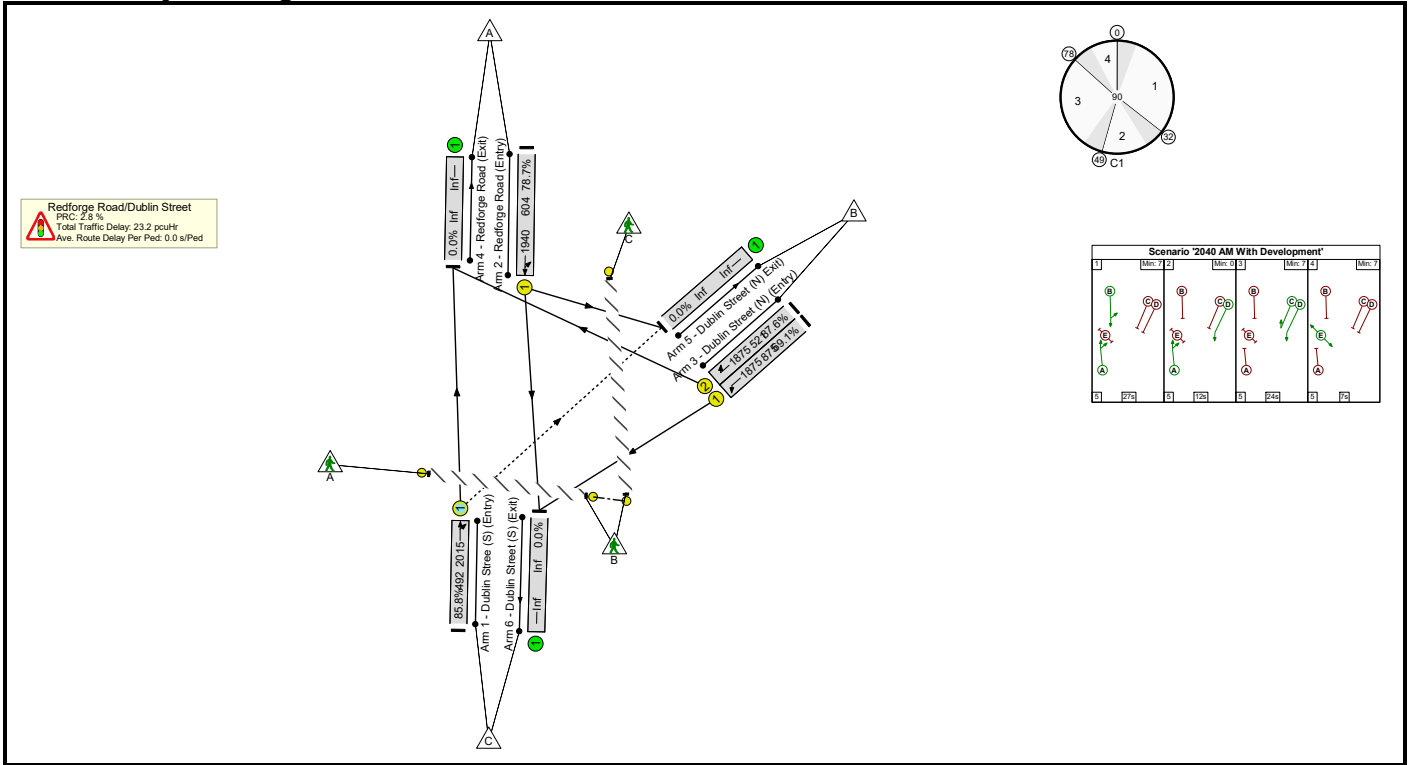
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	103.3%	0	273	0	58.3	-	-
Redforge Road/Dublin Street	-	-	-		-	-	-	-	-	-	103.3%	0	273	0	58.3	-	-
1/1	Dublin Stree (S) (Entry) Ahead Right	O	A		1	52	-	548	2015	537	102.0%	0	273	0	19.7	129.6	28.6
2/1	Redforge Road (Entry) Left Ahead	U	B		1	28	-	646	1940	625	103.3%	-	-	-	25.4	141.3	35.6
3/1	Dublin Street (N) (Entry) Left	U	D		1	40	-	295	1875	854	34.5%	-	-	-	1.6	19.0	5.0
3/2	Dublin Street (N) (Entry) Right	U	C		1	16	-	349	1875	354	98.5%	-	-	-	11.7	120.3	16.8
Ped Link: P1	Unnamed Ped Link	-	E		1	7	-	0	-	5600	0.0%	-	-	-	0.0	0.0	0.0
Ped Link: P2	Unnamed Ped Link	-	E		1	7	-	0	-	5600	0.0%	-	-	-	0.0	0.0	0.0
		C1	PRC for Signalled Lanes (%):		-14.8		Total Delay for Signalled Lanes (pcuHr):		58.31		Cycle Time (s):		90				
			PRC Over All Lanes (%):		-14.8		Total Delay Over All Lanes(pcuHr):		58.31								

Basic Results Summary

Scenario 21: '2040 AM With Development' (FG21: '2040 AM With Development', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

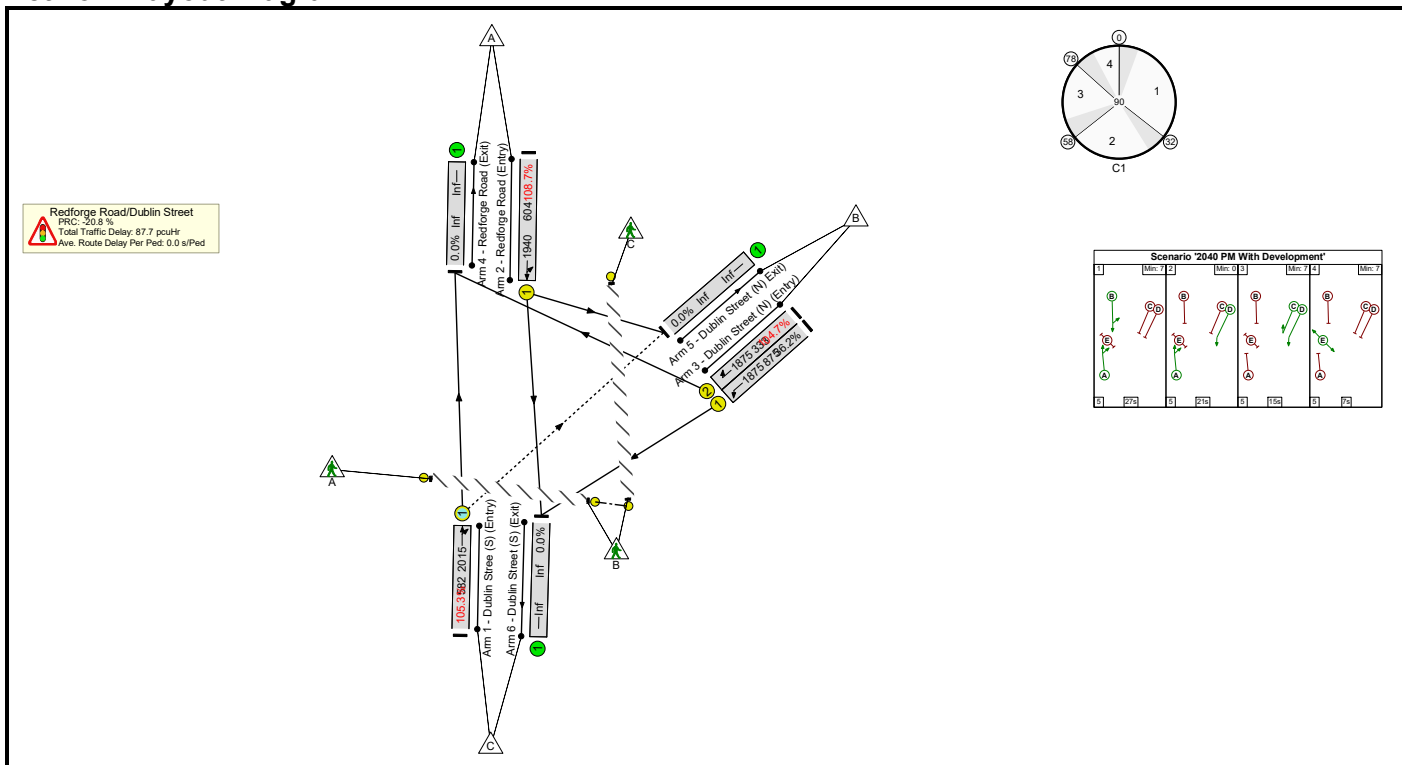
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	87.6%	55	153	0	23.2	-	-
Redforge Road/Dublin Street	-	-	-		-	-	-	-	-	-	87.6%	55	153	0	23.2	-	-
1/1	Dublin Street (S) (Entry) Ahead Right	O	A		1	44	-	422	2015	492	85.8%	55	153	0	6.3	53.6	12.9
2/1	Redforge Road (Entry) Left Ahead	U	B		1	27	-	475	1940	604	78.7%	-	-	-	5.5	41.9	12.6
3/1	Dublin Street (N) (Entry) Left	U	D		1	41	-	605	1875	875	69.1%	-	-	-	4.3	25.5	12.9
3/2	Dublin Street (N) (Entry) Right	U	C		1	24	-	456	1875	521	87.6%	-	-	-	7.1	56.3	14.0
Ped Link: P1	Unnamed Ped Link	-	E		1	7	-	0	-	5600	0.0%	-	-	-	0.0	0.0	0.0
Ped Link: P2	Unnamed Ped Link	-	E		1	7	-	0	-	5600	0.0%	-	-	-	0.0	0.0	0.0
		C1	PRC for Signalled Lanes (%):		2.8		Total Delay for Signalled Lanes (pcuHr):		23.23		Cycle Time (s):		90				
			PRC Over All Lanes (%):		2.8		Total Delay Over All Lanes(pcuHr):		23.23								

Basic Results Summary

Scenario 22: '2040 PM With Development' (FG22: '2040 PM With Development', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)				
Network	-	-	-		-	-	-	-	-	-	108.7%	0	308	0	87.7	-	-				
Redforge Road/Dublin Street	-	-	-		-	-	-	-	-	-	108.7%	0	308	0	87.7	-	-				
1/1	Dublin Stree (S) (Entry) Ahead Right	O	A		1	53	-	613	2015	582	105.3%	0	308	0	28.6	167.7	38.4				
2/1	Redforge Road (Entry) Left Ahead	U	B		1	27	-	656	1940	604	108.7%	-	-	-	39.4	216.3	49.1				
3/1	Dublin Street (N) (Entry) Left	U	D		1	41	-	317	1875	875	36.2%	-	-	-	1.6	18.6	5.3				
3/2	Dublin Street (N) (Entry) Right	U	C		1	15	-	349	1875	333	104.7%	-	-	-	18.1	186.7	23.2				
Ped Link: P1	Unnamed Ped Link	-	E		1	7	-	0	-	5600	0.0%	-	-	-	0.0	0.0	0.0				
Ped Link: P2	Unnamed Ped Link	-	E		1	7	-	0	-	5600	0.0%	-	-	-	0.0	0.0	0.0				
C1		PRC for Signalled Lanes (%):		-20.8		Total Delay for Signalled Lanes (pcuHr):		87.70		Cycle Time (s):		90		PRC Over All Lanes (%):		-20.8		Total Delay Over All Lanes(pcuHr):		87.70	

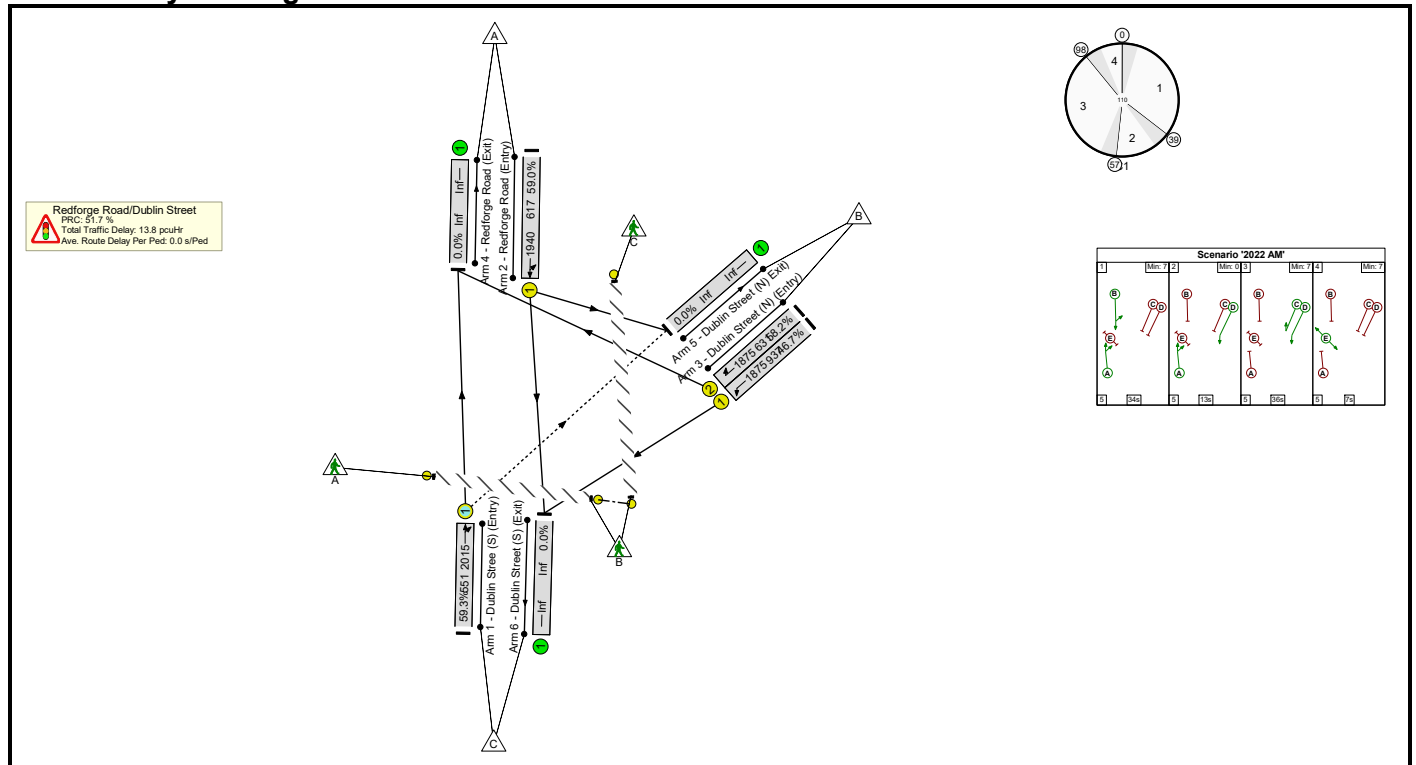
Basic Results Summary
Basic Results Summary

User and Project Details

Project:	
Title:	Junction 3 – Basic Results Summary – 110 Seconds Cycle Time
Location:	
Additional detail:	
File name:	Junction 3.lsg3x
Author:	
Company:	
Address:	

Scenario 1: '2022 AM' (FG1: '2022 AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

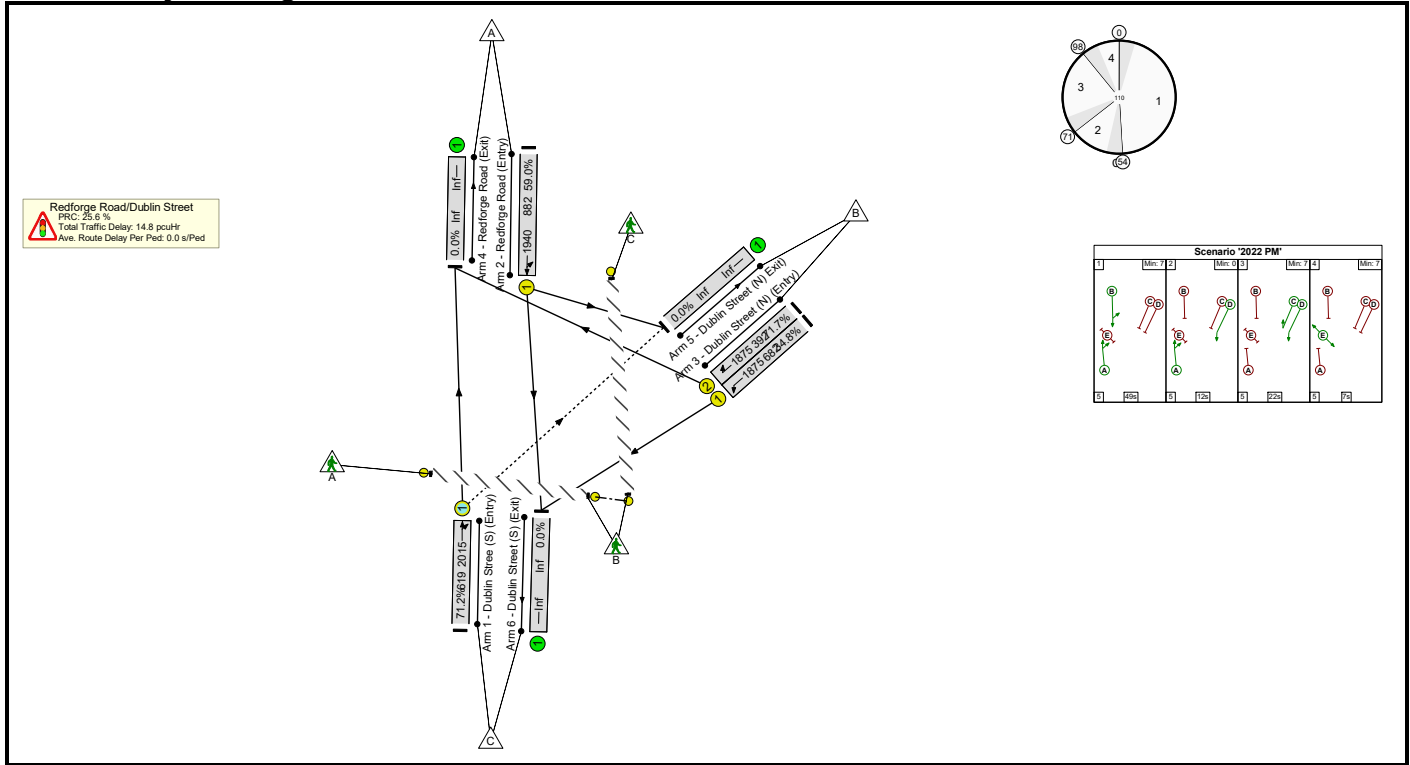
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)				
Network	-	-	-		-	-	-	-	-	-	59.3%	108	51	0	13.8	-	-				
Redforge Road/Dublin Street	-	-	-		-	-	-	-	-	-	59.3%	108	51	0	13.8	-	-				
1/1	Dublin Street (S) (Entry) Ahead Right	O	A		1	52	-	327	2015	551	59.3%	108	51	0	3.5	38.2	9.4				
2/1	Redforge Road (Entry) Left Ahead	U	B		1	34	-	364	1940	617	59.0%	-	-	-	3.9	38.5	10.0				
3/1	Dublin Street (N) (Entry) Left	U	D		1	54	-	438	1875	937	46.7%	-	-	-	2.6	21.5	9.1				
3/2	Dublin Street (N) (Entry) Right	U	C		1	36	-	367	1875	631	58.2%	-	-	-	3.8	36.9	9.9				
Ped Link: P1	Unnamed Ped Link	-	E		1	7	-	0	-	4582	0.0%	-	-	-	0.0	0.0	0.0				
Ped Link: P2	Unnamed Ped Link	-	E		1	7	-	0	-	4582	0.0%	-	-	-	0.0	0.0	0.0				
C1		PRC for Signalled Lanes (%):		51.7		Total Delay for Signalled Lanes (pcuHr):		13.75		Cycle Time (s):		110		PRC Over All Lanes (%):		51.7		Total Delay Over All Lanes(pcuHr):		13.75	

Basic Results Summary

Scenario 2: '2022 PM' (FG2: '2022 PM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

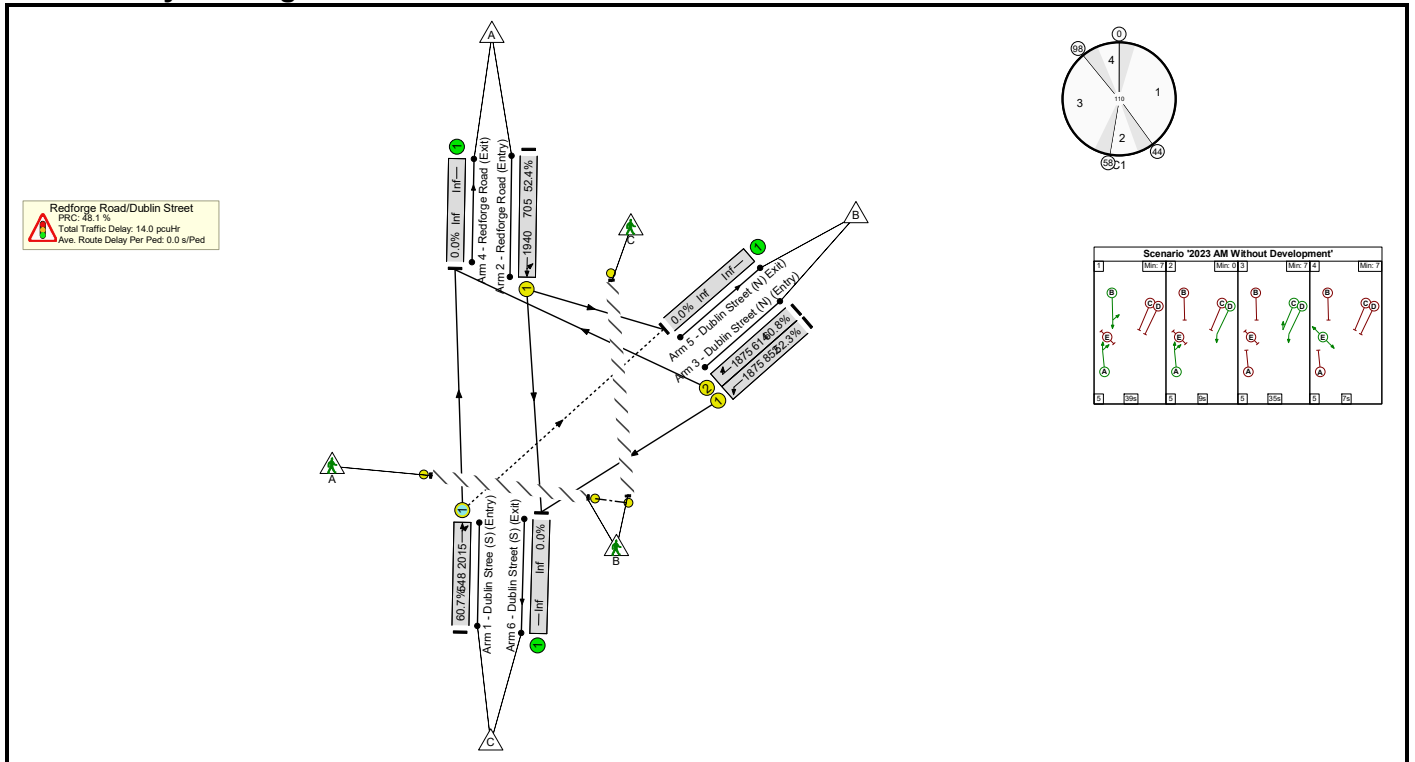
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)		
Network	-	-	-		-	-	-	-	-	-	71.7%	156	68	0	14.8	-	-		
Redforge Road/Dublin Street	-	-	-		-	-	-	-	-	-	71.7%	156	68	0	14.8	-	-		
1/1	Dublin Street (S) (Entry) Ahead Right	O	A		1	66	-	441	2015	619	71.2%	156	68	0	4.5	37.1	13.1		
2/1	Redforge Road (Entry) Left Ahead	U	B		1	49	-	520	1940	882	59.0%	-	-	-	3.9	27.3	12.4		
3/1	Dublin Street (N) (Entry) Left	U	D		1	39	-	237	1875	682	34.8%	-	-	-	1.9	29.5	5.5		
3/2	Dublin Street (N) (Entry) Right	U	C		1	22	-	281	1875	392	71.7%	-	-	-	4.4	56.3	9.2		
Ped Link: P1	Unnamed Ped Link	-	E		1	7	-	0	-	4582	0.0%	-	-	-	0.0	0.0	0.0		
Ped Link: P2	Unnamed Ped Link	-	E		1	7	-	0	-	4582	0.0%	-	-	-	0.0	0.0	0.0		
C1		PRC for Signalled Lanes (%):		25.6		PRC Over All Lanes (%):		25.6		Total Delay for Signalled Lanes (pcuHr):		14.83		Total Delay Over All Lanes(pcuHr):		14.83		Cycle Time (s): 110	

Basic Results Summary

Scenario 3: '2023 AM Without Development' (FG3: '2023 AM Without Development', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

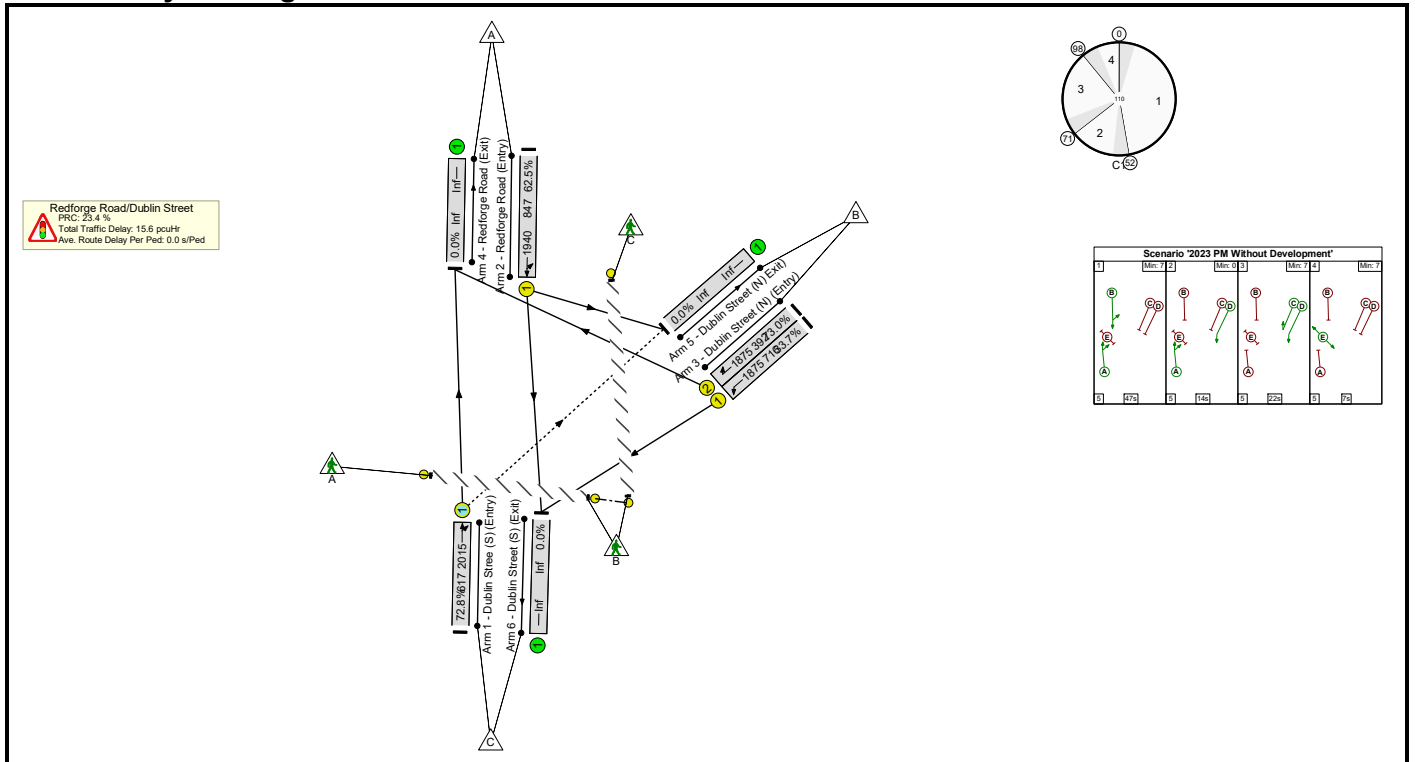
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)				
Network	-	-	-		-	-	-	-	-	-	60.8%	127	35	0	14.0	-	-				
Redforge Road/Dublin Street	-	-	-		-	-	-	-	-	-	60.8%	127	35	0	14.0	-	-				
1/1	Dublin Street (S) (Entry) Ahead Right	O	A		1	53	-	333	2015	548	60.7%	127	35	0	3.5	37.4	9.5				
2/1	Redforge Road (Entry) Left Ahead	U	B		1	39	-	370	1940	705	52.4%	-	-	-	3.4	32.9	9.4				
3/1	Dublin Street (N) (Entry) Left	U	D		1	49	-	446	1875	852	52.3%	-	-	-	3.2	25.9	10.2				
3/2	Dublin Street (N) (Entry) Right	U	C		1	35	-	373	1875	614	60.8%	-	-	-	4.0	38.5	10.3				
Ped Link: P1	Unnamed Ped Link	-	E		1	7	-	0	-	4582	0.0%	-	-	-	0.0	0.0	0.0				
Ped Link: P2	Unnamed Ped Link	-	E		1	7	-	0	-	4582	0.0%	-	-	-	0.0	0.0	0.0				
C1		PRC for Signalled Lanes (%):		48.1		Total Delay for Signalled Lanes (pcuHr):		14.04		Cycle Time (s):		110		PRC Over All Lanes (%):		48.1		Total Delay Over All Lanes(pcuHr):		14.04	

Basic Results Summary

Scenario 4: '2023 PM Without Development' (FG4: '2023 PM Without Development', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

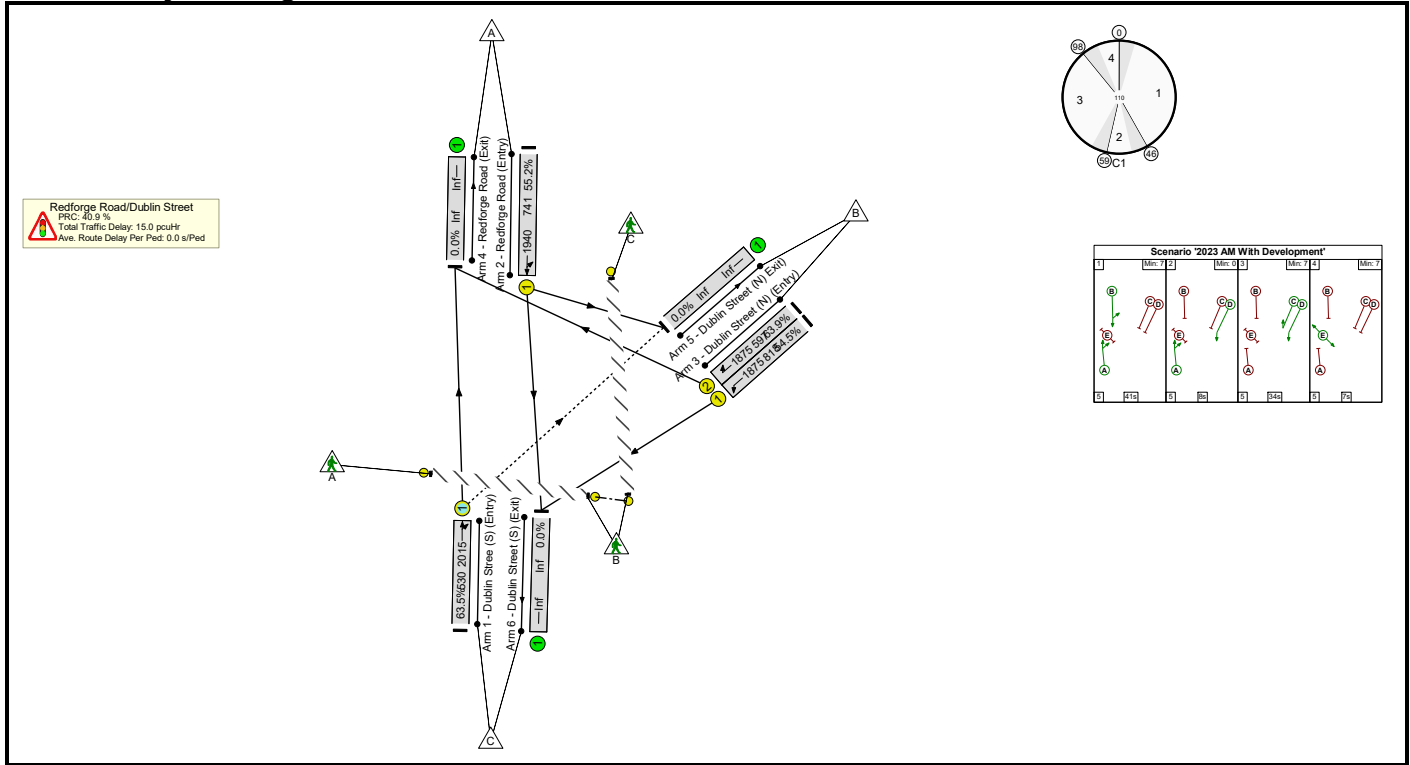
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)		
Network	-	-	-		-	-	-	-	-	-	73.0%	137	91	0	15.6	-	-		
Redforge Road/Dublin Street	-	-	-		-	-	-	-	-	-	73.0%	137	91	0	15.6	-	-		
1/1	Dublin Street (S) (Entry) Ahead Right	O	A		1	66	-	449	2015	617	72.8%	137	91	0	4.9	38.9	13.5		
2/1	Redforge Road (Entry) Left Ahead	U	B		1	47	-	529	1940	847	62.5%	-	-	-	4.4	29.7	13.3		
3/1	Dublin Street (N) (Entry) Left	U	D		1	41	-	241	1875	716	33.7%	-	-	-	1.9	27.9	5.5		
3/2	Dublin Street (N) (Entry) Right	U	C		1	22	-	286	1875	392	73.0%	-	-	-	4.5	57.2	9.4		
Ped Link: P1	Unnamed Ped Link	-	E		1	7	-	0	-	4582	0.0%	-	-	-	0.0	0.0	0.0		
Ped Link: P2	Unnamed Ped Link	-	E		1	7	-	0	-	4582	0.0%	-	-	-	0.0	0.0	0.0		
C1		PRC for Signalled Lanes (%):		23.4		PRC Over All Lanes (%):		23.4		Total Delay for Signalled Lanes (pcuHr):		15.62		Total Delay Over All Lanes(pcuHr):		15.62		Cycle Time (s): 110	

Basic Results Summary

Scenario 5: '2023 AM With Development' (FG5: '2023 AM With Development', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

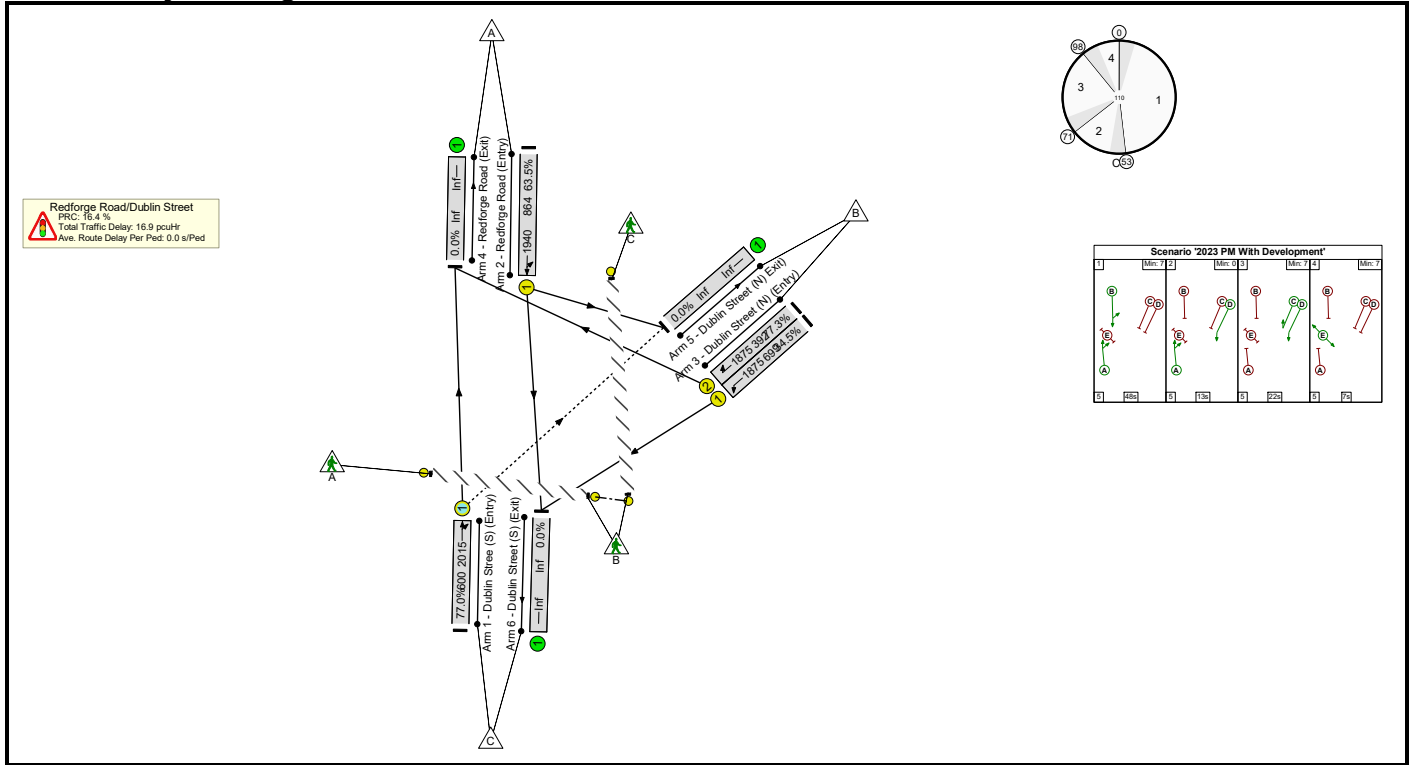
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)				
Network	-	-	-		-	-	-	-	-	-	63.9%	128	34	0	15.0	-	-				
Redforge Road/Dublin Street	-	-	-		-	-	-	-	-	-	63.9%	128	34	0	15.0	-	-				
1/1	Dublin Street (S) (Entry) Ahead Right	O	A		1	54	-	336	2015	530	63.5%	128	34	0	3.6	38.9	9.8				
2/1	Redforge Road (Entry) Left Ahead	U	B		1	41	-	409	1940	741	55.2%	-	-	-	3.6	32.0	10.4				
3/1	Dublin Street (N) (Entry) Left	U	D		1	47	-	446	1875	818	54.5%	-	-	-	3.4	27.8	10.6				
3/2	Dublin Street (N) (Entry) Right	U	C		1	34	-	381	1875	597	63.9%	-	-	-	4.3	40.4	10.8				
Ped Link: P1	Unnamed Ped Link	-	E		1	7	-	0	-	4582	0.0%	-	-	-	0.0	0.0	0.0				
Ped Link: P2	Unnamed Ped Link	-	E		1	7	-	0	-	4582	0.0%	-	-	-	0.0	0.0	0.0				
C1		PRC for Signalled Lanes (%):		40.9		Total Delay for Signalled Lanes (pcuHr):		14.98		Cycle Time (s):		110		PRC Over All Lanes (%):		40.9		Total Delay Over All Lanes(pcuHr):		14.98	

Basic Results Summary

Scenario 6: '2023 PM With Development' (FG6: '2023 PM With Development', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

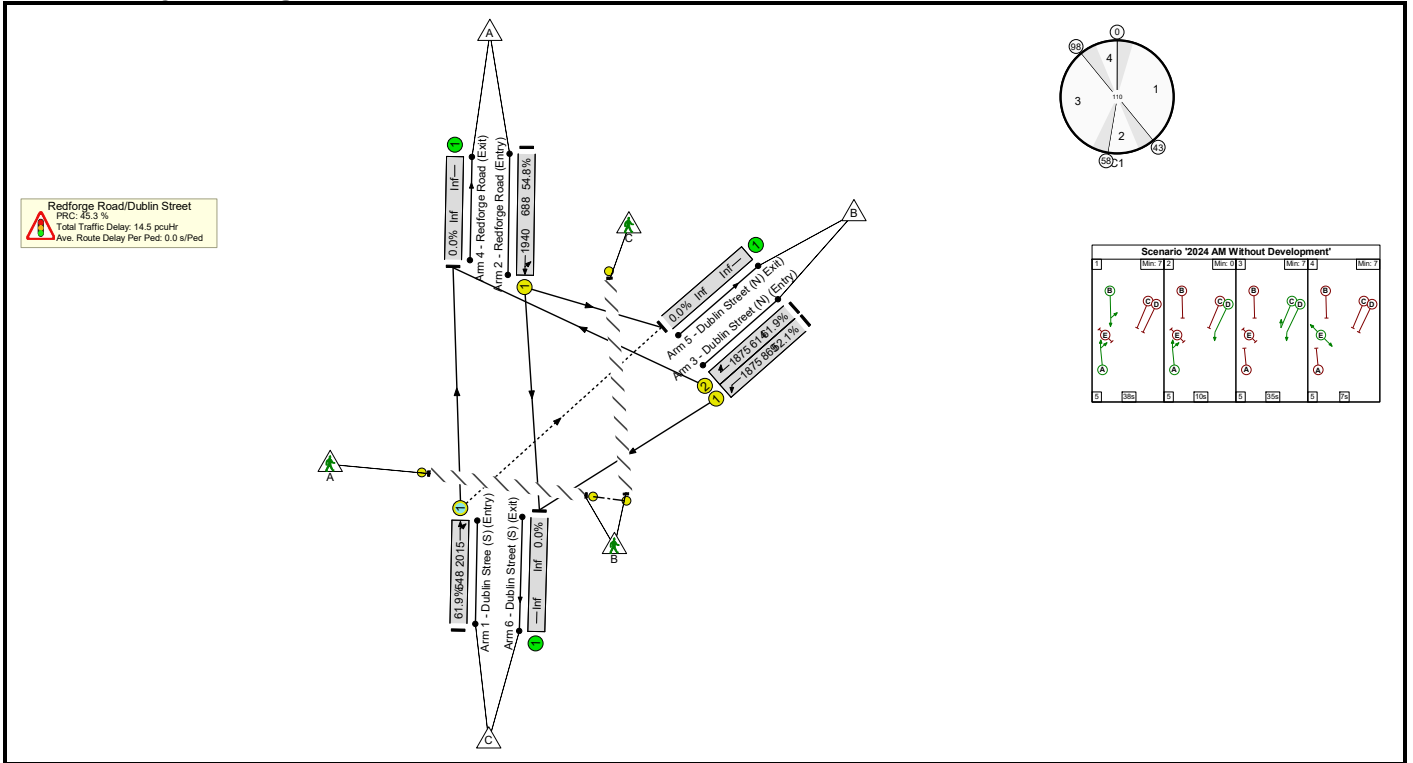
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)				
Network	-	-	-		-	-	-	-	-	-	77.3%	133	95	0	16.9	-	-				
Redforge Road/Dublin Street	-	-	-		-	-	-	-	-	-	77.3%	133	95	0	16.9	-	-				
1/1	Dublin Street (S) (Entry) Ahead Right	O	A		1	66	-	462	2015	600	77.0%	133	95	0	5.4	42.3	14.5				
2/1	Redforge Road (Entry) Left Ahead	U	B		1	48	-	549	1940	864	63.5%	-	-	-	4.5	29.3	13.8				
3/1	Dublin Street (N) (Entry) Left	U	D		1	40	-	241	1875	699	34.5%	-	-	-	1.9	28.8	5.6				
3/2	Dublin Street (N) (Entry) Right	U	C		1	22	-	303	1875	392	77.3%	-	-	-	5.1	60.5	10.3				
Ped Link: P1	Unnamed Ped Link	-	E		1	7	-	0	-	4582	0.0%	-	-	-	0.0	0.0	0.0				
Ped Link: P2	Unnamed Ped Link	-	E		1	7	-	0	-	4582	0.0%	-	-	-	0.0	0.0	0.0				
C1		PRC for Signalled Lanes (%):		16.4		Total Delay for Signalled Lanes (pcuHr):		16.91		Cycle Time (s):		110		PRC Over All Lanes (%):		16.4		Total Delay Over All Lanes(pcuHr):		16.91	

Basic Results Summary

Scenario 7: '2024 AM Without Development' (FG7: '2024 AM Without Development', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

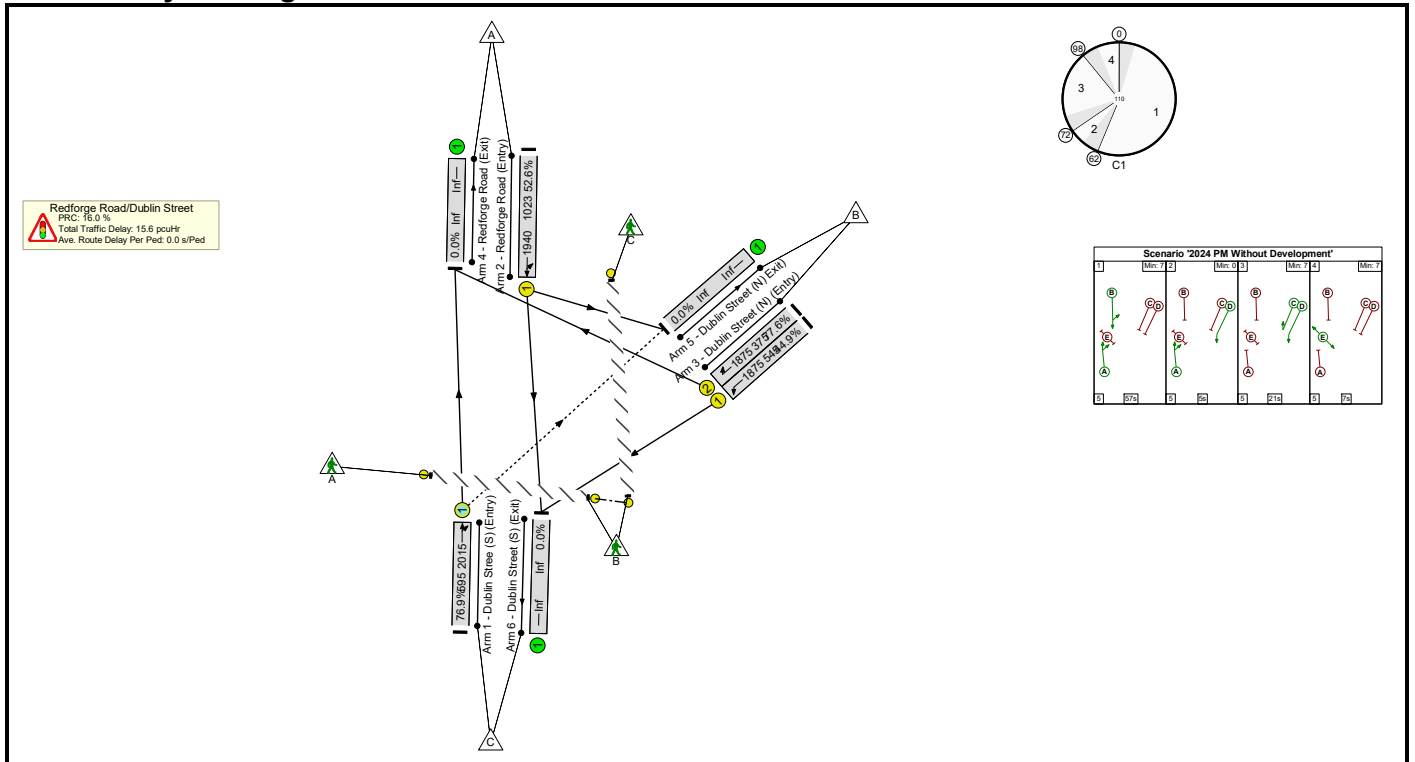
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)		
Network	-	-	-		-	-	-	-	-	-	61.9%	128	37	0	14.5	-	-		
Redforge Road/Dublin Street	-	-	-		-	-	-	-	-	-	61.9%	128	37	0	14.5	-	-		
1/1	Dublin Street (S) (Entry) Ahead Right	O	A		1	53	-	339	2015	548	61.9%	128	37	0	3.6	38.2	9.8		
2/1	Redforge Road (Entry) Left Ahead	U	B		1	38	-	377	1940	688	54.8%	-	-	-	3.6	34.2	9.8		
3/1	Dublin Street (N) (Entry) Left	U	D		1	50	-	453	1875	869	52.1%	-	-	-	3.2	25.2	10.2		
3/2	Dublin Street (N) (Entry) Right	U	C		1	35	-	380	1875	614	61.9%	-	-	-	4.1	38.9	10.5		
Ped Link: P1	Unnamed Ped Link	-	E		1	7	-	0	-	4582	0.0%	-	-	-	0.0	0.0	0.0		
Ped Link: P2	Unnamed Ped Link	-	E		1	7	-	0	-	4582	0.0%	-	-	-	0.0	0.0	0.0		
C1		PRC for Signalled Lanes (%):		45.3		PRC Over All Lanes (%):		45.3		Total Delay for Signalled Lanes (pcuHr):		14.45		Total Delay Over All Lanes(pcuHr):		14.45		Cycle Time (s): 110	

Basic Results Summary

Scenario 8: '2024 PM Without Development' (FG8: '2024 PM Without Development', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

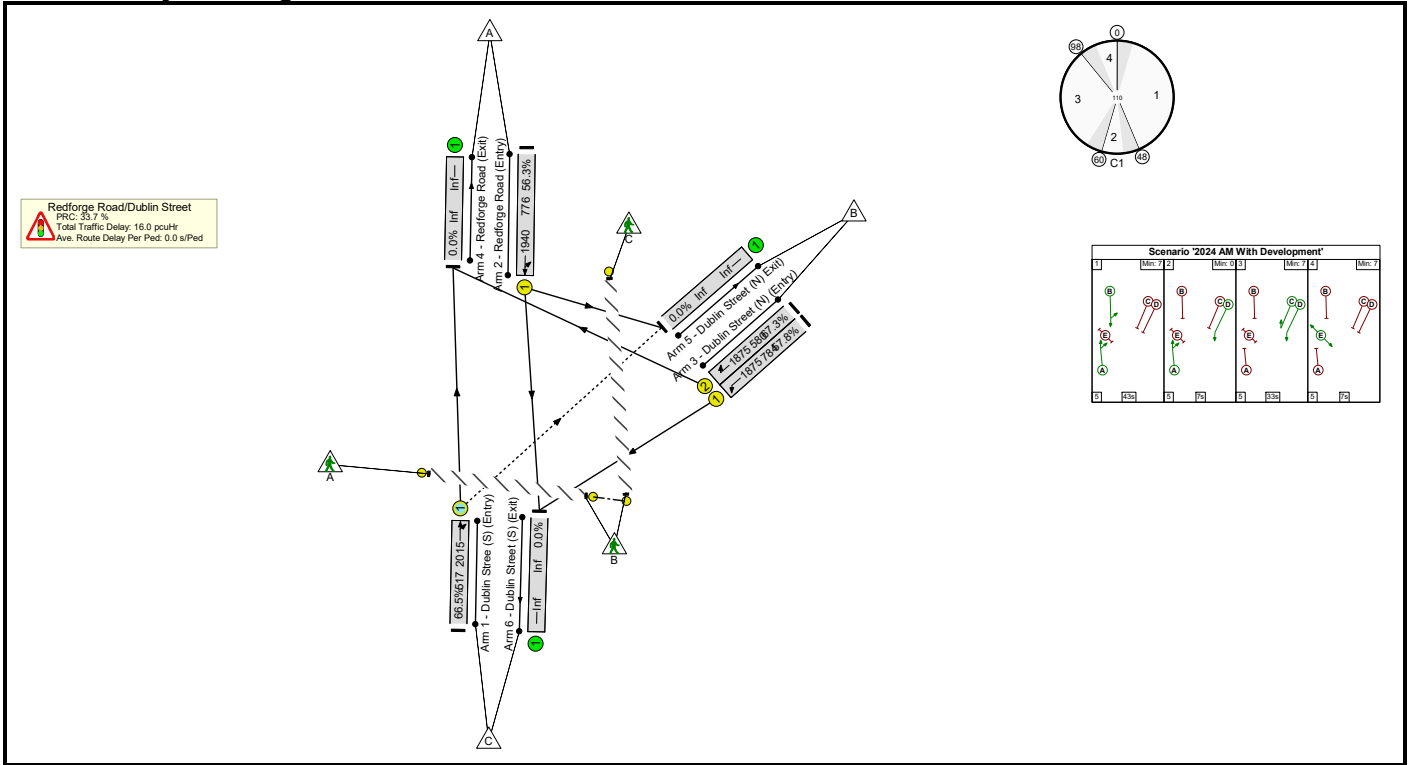
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	77.6%	197	35	0	15.6	-	-
Redforge Road/Dublin Street	-	-	-		-	-	-	-	-	-	77.6%	197	35	0	15.6	-	-
1/1	Dublin Street (S) (Entry) Ahead Right	O	A		1	67	-	457	2015	595	76.9%	197	35	0	4.9	38.3	14.1
2/1	Redforge Road (Entry) Left Ahead	U	B		1	57	-	538	1940	1023	52.6%	-	-	-	3.1	20.7	11.2
3/1	Dublin Street (N) (Entry) Left	U	D		1	31	-	245	1875	545	44.9%	-	-	-	2.6	37.8	6.5
3/2	Dublin Street (N) (Entry) Right	U	C		1	21	-	291	1875	375	77.6%	-	-	-	5.0	62.3	10.1
Ped Link: P1	Unnamed Ped Link	-	E		1	7	-	0	-	4582	0.0%	-	-	-	0.0	0.0	0.0
Ped Link: P2	Unnamed Ped Link	-	E		1	7	-	0	-	4582	0.0%	-	-	-	0.0	0.0	0.0
C1		PRC for Signalled Lanes (%):		16.0		Total Delay for Signalled Lanes (pcuHr):		15.57		Cycle Time (s):		110					
		PRC Over All Lanes (%):		16.0		Total Delay Over All Lanes(pcuHr):		15.57									

Basic Results Summary

Scenario 9: '2024 AM With Development' (FG9: '2024 AM With Development', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

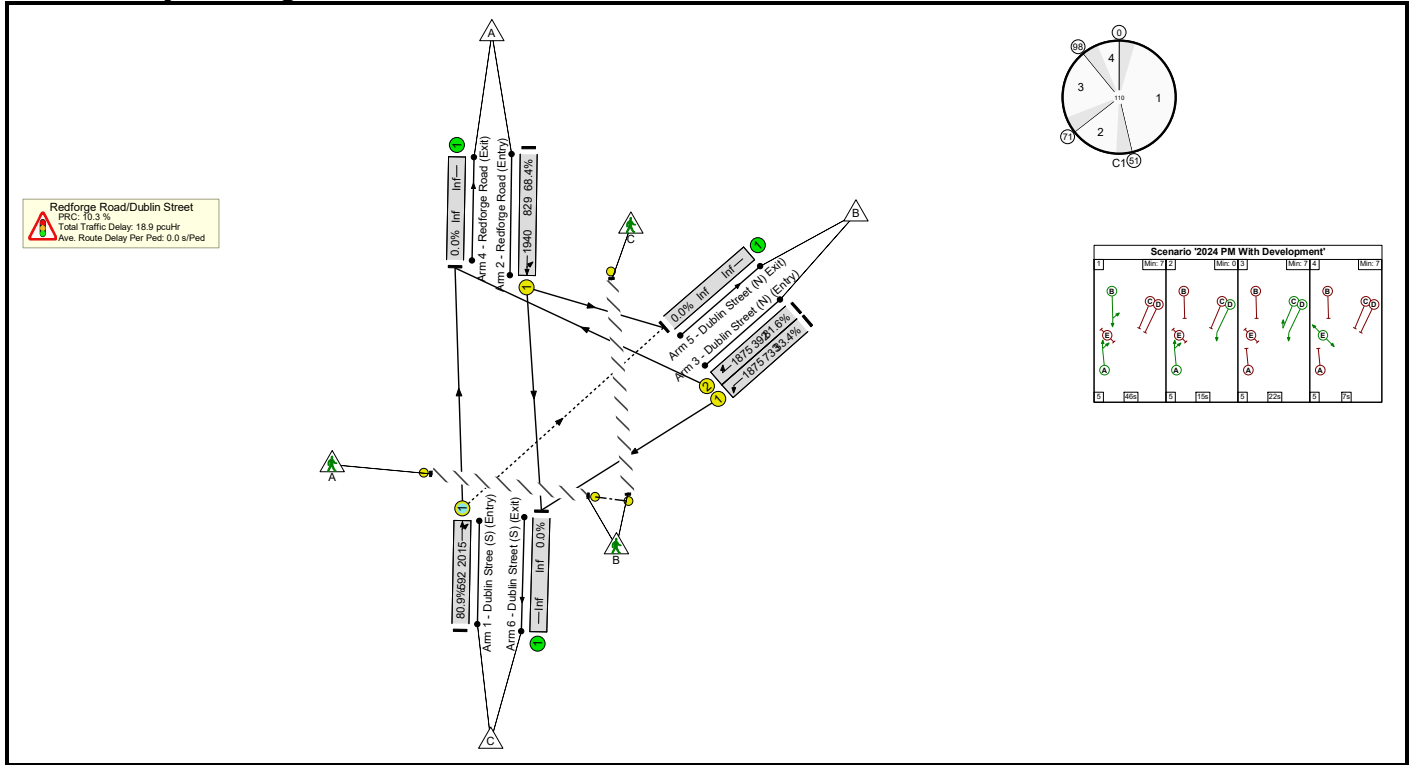
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)		
Network	-	-	-		-	-	-	-	-	-	67.3%	132	33	0	16.0	-	-		
Redforge Road/Dublin Street	-	-	-		-	-	-	-	-	-	67.3%	132	33	0	16.0	-	-		
1/1	Dublin Street (S) (Entry) Ahead Right	O	A		1	55	-	344	2015	517	66.5%	132	33	0	3.9	40.3	10.2		
2/1	Redforge Road (Entry) Left Ahead	U	B		1	43	-	437	1940	776	56.3%	-	-	-	3.7	30.8	11.0		
3/1	Dublin Street (N) (Entry) Left	U	D		1	45	-	453	1875	784	57.8%	-	-	-	3.8	30.0	11.3		
3/2	Dublin Street (N) (Entry) Right	U	C		1	33	-	390	1875	580	67.3%	-	-	-	4.6	42.5	11.3		
Ped Link: P1	Unnamed Ped Link	-	E		1	7	-	0	-	4582	0.0%	-	-	-	0.0	0.0	0.0		
Ped Link: P2	Unnamed Ped Link	-	E		1	7	-	0	-	4582	0.0%	-	-	-	0.0	0.0	0.0		
C1		PRC for Signalled Lanes (%):		33.7		PRC Over All Lanes (%):		33.7		Total Delay for Signalled Lanes (pcuHr):		15.98		Total Delay Over All Lanes(pcuHr):		15.98		Cycle Time (s): 110	

Basic Results Summary

Scenario 10: '2024 PM With Development' (FG10: '2024 PM With Development', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

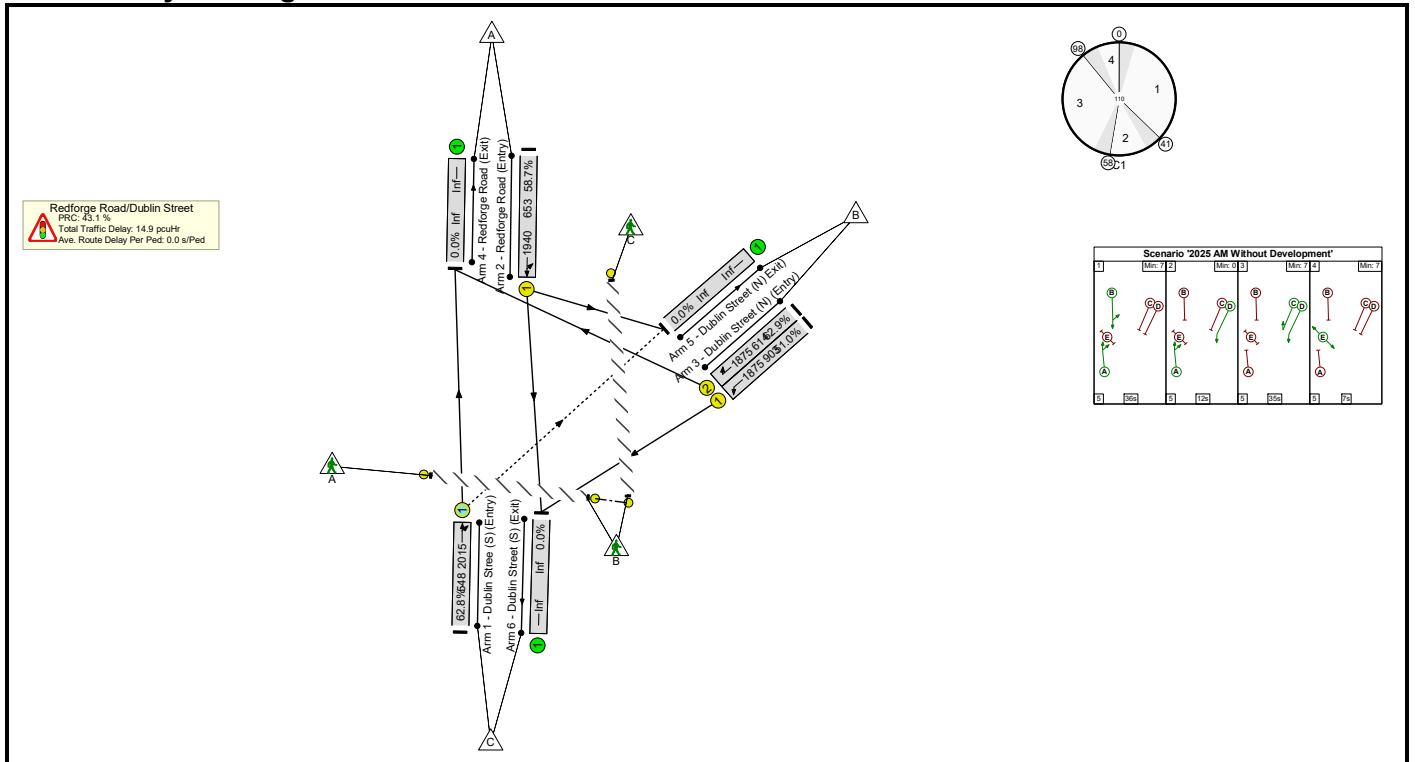
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)		
Network	-	-	-		-	-	-	-	-	-	81.6%	109	123	0	18.9	-	-		
Redforge Road/Dublin Street	-	-	-		-	-	-	-	-	-	81.6%	109	123	0	18.9	-	-		
1/1	Dublin Street (S) (Entry) Ahead Right	O	A		1	66	-	479	2015	592	80.9%	109	123	0	6.2	46.7	15.5		
2/1	Redforge Road (Entry) Left Ahead	U	B		1	46	-	567	1940	829	68.4%	-	-	-	5.1	32.3	15.1		
3/1	Dublin Street (N) (Entry) Left	U	D		1	42	-	245	1875	733	33.4%	-	-	-	1.8	27.2	5.5		
3/2	Dublin Street (N) (Entry) Right	U	C		1	22	-	320	1875	392	81.6%	-	-	-	5.8	65.1	11.3		
Ped Link: P1	Unnamed Ped Link	-	E		1	7	-	0	-	4582	0.0%	-	-	-	0.0	0.0	0.0		
Ped Link: P2	Unnamed Ped Link	-	E		1	7	-	0	-	4582	0.0%	-	-	-	0.0	0.0	0.0		
C1		PRC for Signalled Lanes (%):		10.3		PRC Over All Lanes (%):		10.3		Total Delay for Signalled Lanes (pcuHr):		18.94		Total Delay Over All Lanes(pcuHr):		18.94		Cycle Time (s): 110	

Basic Results Summary

Scenario 11: '2025 AM Without Development' (FG11: '2025 AM Without Development', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

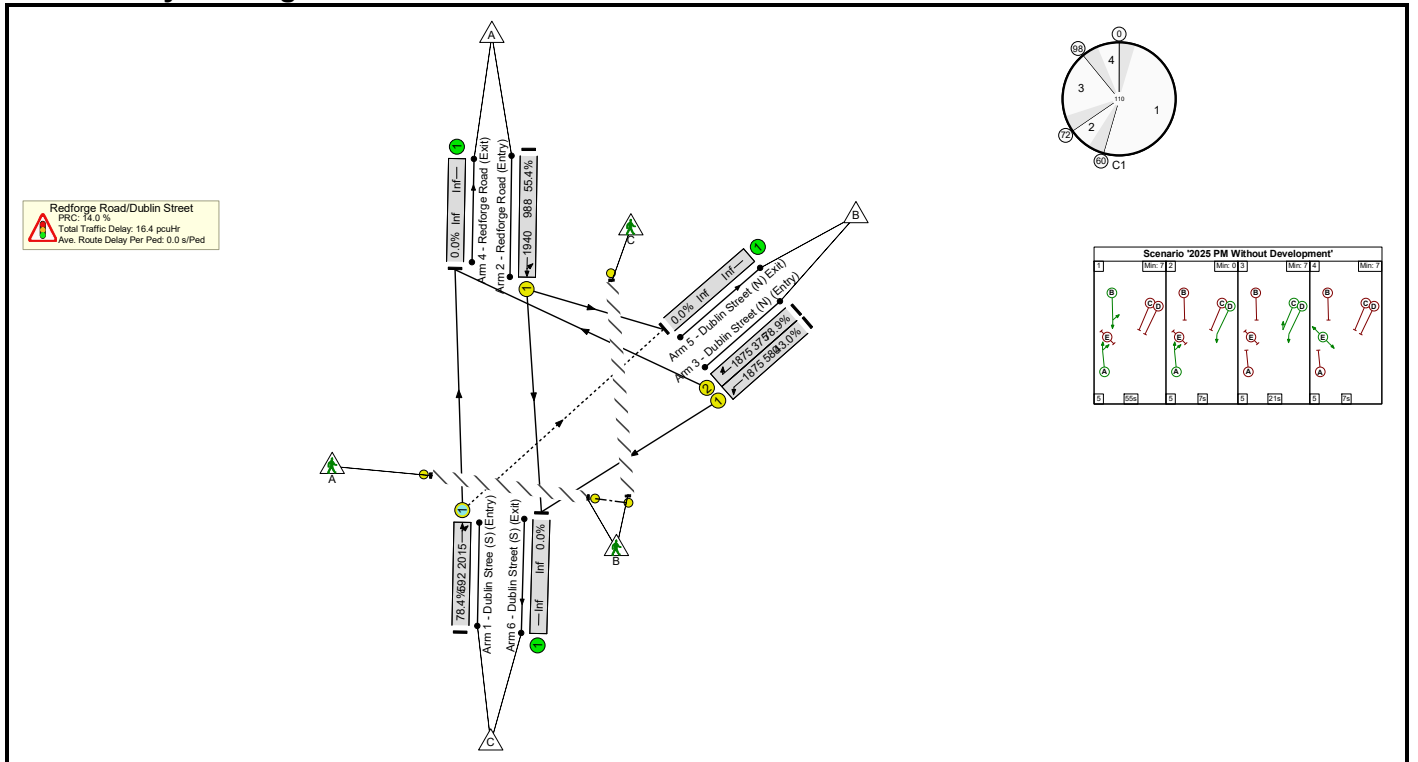
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)				
Network	-	-	-		-	-	-	-	-	-	62.9%	115	52	0	14.9	-	-				
Redforge Road/Dublin Street	-	-	-		-	-	-	-	-	-	62.9%	115	52	0	14.9	-	-				
1/1	Dublin Street (S) (Entry) Ahead Right	O	A		1	53	-	344	2015	548	62.8%	115	52	0	3.8	39.3	10.0				
2/1	Redforge Road (Entry) Left Ahead	U	B		1	36	-	383	1940	653	58.7%	-	-	-	3.9	36.8	10.3				
3/1	Dublin Street (N) (Entry) Left	U	D		1	52	-	461	1875	903	51.0%	-	-	-	3.0	23.6	10.1				
3/2	Dublin Street (N) (Entry) Right	U	C		1	35	-	386	1875	614	62.9%	-	-	-	4.2	39.2	10.8				
Ped Link: P1	Unnamed Ped Link	-	E		1	7	-	0	-	4582	0.0%	-	-	-	0.0	0.0	0.0				
Ped Link: P2	Unnamed Ped Link	-	E		1	7	-	0	-	4582	0.0%	-	-	-	0.0	0.0	0.0				
C1		PRC for Signalled Lanes (%):		43.1		Total Delay for Signalled Lanes (pcuHr):		14.90		Cycle Time (s):		110		PRC Over All Lanes (%):		43.1		Total Delay Over All Lanes(pcuHr):		14.90	

Basic Results Summary

Scenario 12: '2025 PM Without Development' (FG12: '2025 PM Without Development', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

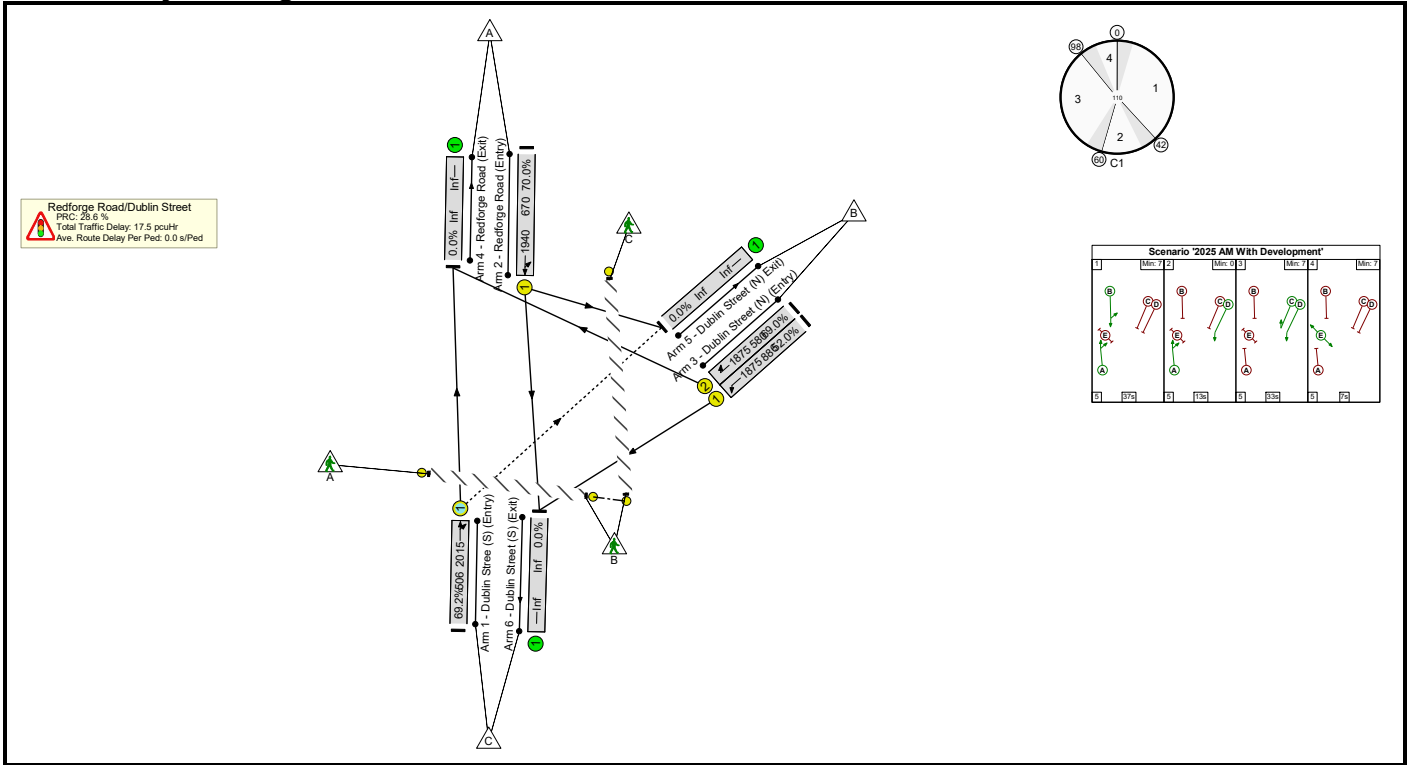
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	78.9%	189	47	0	16.4	-	-
Redforge Road/Dublin Street	-	-	-		-	-	-	-	-	-	78.9%	189	47	0	16.4	-	-
1/1	Dublin Street (S) (Entry) Ahead Right	O	A		1	67	-	464	2015	592	78.4%	189	47	0	5.2	40.7	14.7
2/1	Redforge Road (Entry) Left Ahead	U	B		1	55	-	547	1940	988	55.4%	-	-	-	3.4	22.5	12.0
3/1	Dublin Street (N) (Entry) Left	U	D		1	33	-	249	1875	580	43.0%	-	-	-	2.5	35.7	6.4
3/2	Dublin Street (N) (Entry) Right	U	C		1	21	-	296	1875	375	78.9%	-	-	-	5.2	63.6	10.3
Ped Link: P1	Unnamed Ped Link	-	E		1	7	-	0	-	4582	0.0%	-	-	-	0.0	0.0	0.0
Ped Link: P2	Unnamed Ped Link	-	E		1	7	-	0	-	4582	0.0%	-	-	-	0.0	0.0	0.0
C1		PRC for Signalled Lanes (%):		14.0		Total Delay for Signalled Lanes (pcuHr):		16.37		Cycle Time (s):		110					
		PRC Over All Lanes (%):		14.0		Total Delay Over All Lanes(pcuHr):		16.37									

Basic Results Summary

Scenario 13: '2025 AM With Development' (FG13: '2025 AM With Development', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

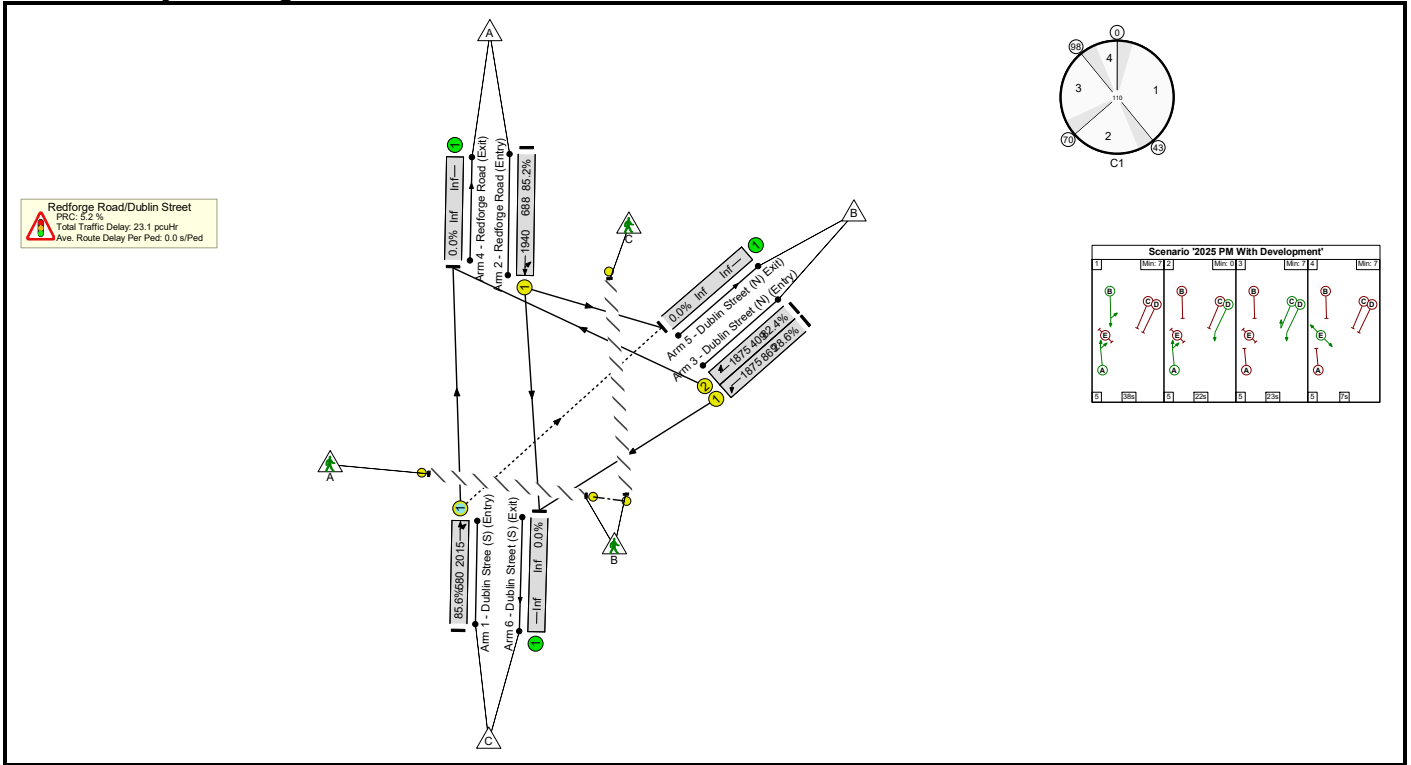
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)		
Network	-	-	-		-	-	-	-	-	-	70.0%	84	83	0	17.5	-	-		
Redforge Road/Dublin Street	-	-	-		-	-	-	-	-	-	70.0%	84	83	0	17.5	-	-		
1/1	Dublin Street (S) (Entry) Ahead Right	O	A		1	55	-	350	2015	506	69.2%	84	83	0	4.3	44.4	10.7		
2/1	Redforge Road (Entry) Left Ahead	U	B		1	37	-	469	1940	670	70.0%	-	-	-	5.2	39.9	13.4		
3/1	Dublin Street (N) (Entry) Left	U	D		1	51	-	461	1875	886	52.0%	-	-	-	3.1	24.5	10.3		
3/2	Dublin Street (N) (Entry) Right	U	C		1	33	-	400	1875	580	69.0%	-	-	-	4.8	43.3	11.8		
Ped Link: P1	Unnamed Ped Link	-	E		1	7	-	0	-	4582	0.0%	-	-	-	0.0	0.0	0.0		
Ped Link: P2	Unnamed Ped Link	-	E		1	7	-	0	-	4582	0.0%	-	-	-	0.0	0.0	0.0		
C1		PRC for Signalled Lanes (%):		28.6		PRC Over All Lanes (%):		28.6		Total Delay for Signalled Lanes (pcuHr):		17.46		Total Delay Over All Lanes(pcuHr):		17.46		Cycle Time (s): 110	

Basic Results Summary

Scenario 14: '2025 PM With Development' (FG14: '2025 PM With Development', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

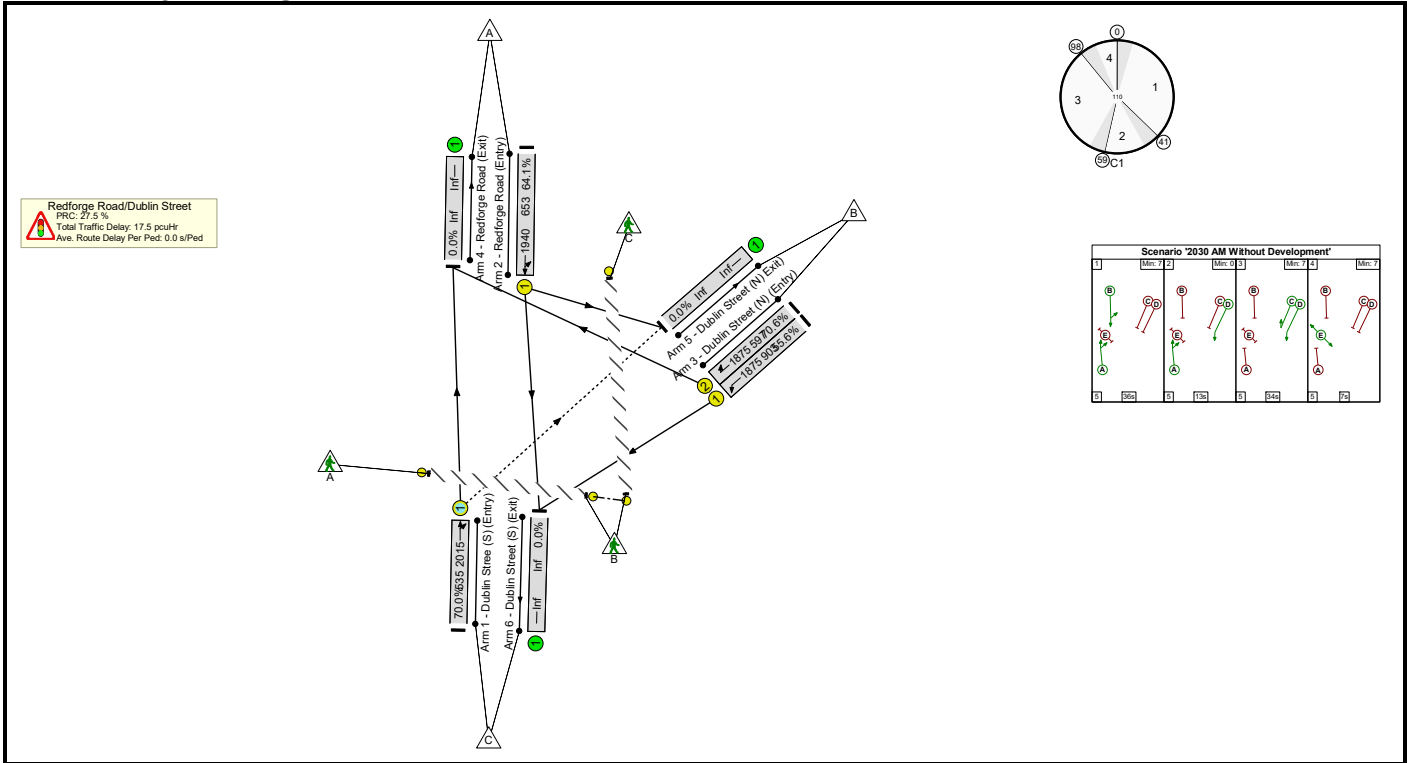
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)				
Network	-	-	-		-	-	-	-	-	-	85.6%	40	196	0	23.1	-	-				
Redforge Road/Dublin Street	-	-	-		-	-	-	-	-	-	85.6%	40	196	0	23.1	-	-				
1/1	Dublin Street (S) (Entry) Ahead Right	O	A		1	65	-	496	2015	580	85.6%	40	196	0	7.5	54.4	17.0				
2/1	Redforge Road (Entry) Left Ahead	U	B		1	38	-	586	1940	688	85.2%	-	-	-	8.1	49.6	19.2				
3/1	Dublin Street (N) (Entry) Left	U	D		1	50	-	249	1875	869	28.6%	-	-	-	1.5	21.1	4.9				
3/2	Dublin Street (N) (Entry) Right	U	C		1	23	-	337	1875	409	82.4%	-	-	-	6.0	64.5	11.9				
Ped Link: P1	Unnamed Ped Link	-	E		1	7	-	0	-	4582	0.0%	-	-	-	0.0	0.0	0.0				
Ped Link: P2	Unnamed Ped Link	-	E		1	7	-	0	-	4582	0.0%	-	-	-	0.0	0.0	0.0				
C1		PRC for Signalled Lanes (%):		5.2		Total Delay for Signalled Lanes (pcuHr):		23.07		Cycle Time (s):		110		PRC Over All Lanes (%):		5.2		Total Delay Over All Lanes(pcuHr):		23.07	

Basic Results Summary

Scenario 15: '2030 AM Without Development' (FG15: '2030 AM Without Development', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

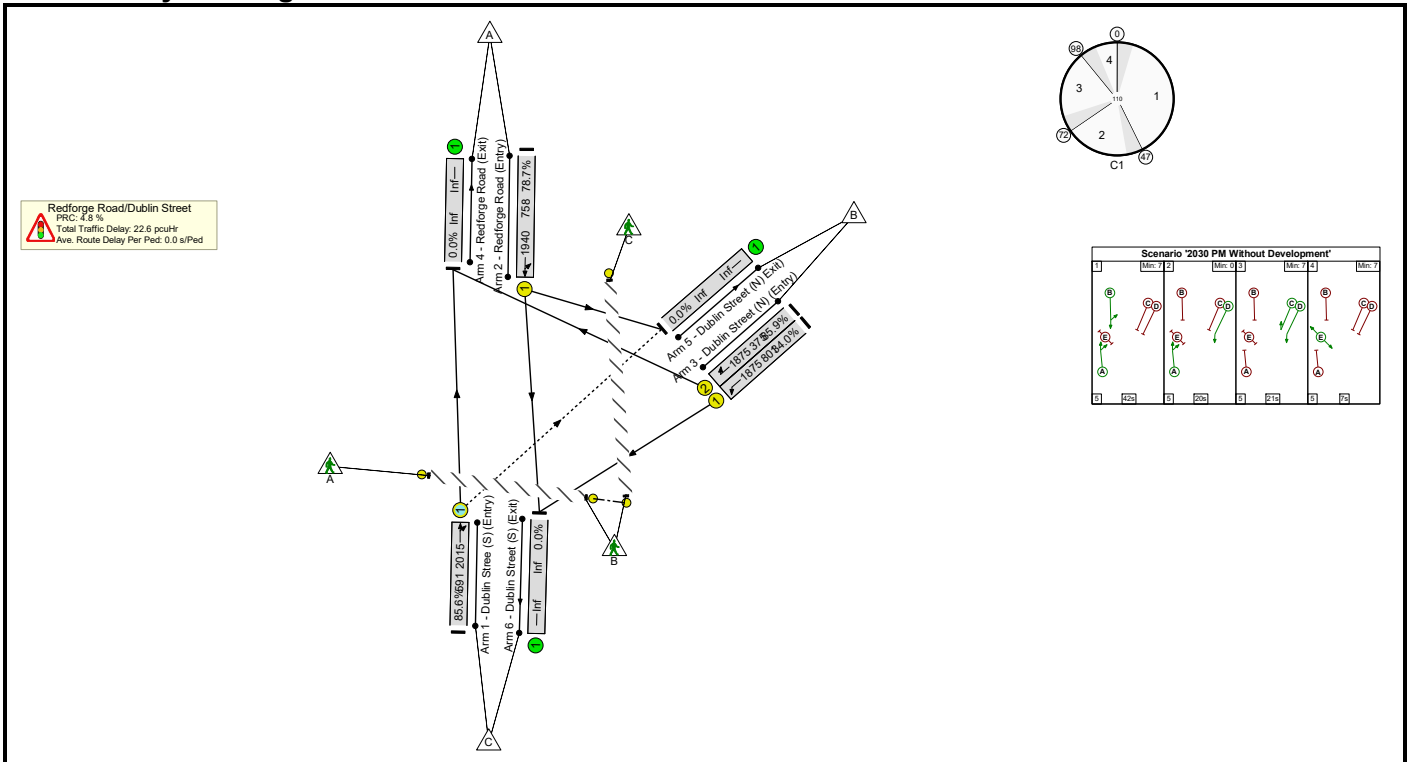
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)		
Network	-	-	-		-	-	-	-	-	-	70.6%	100	82	0	17.5	-	-		
Redforge Road/Dublin Street	-	-	-		-	-	-	-	-	-	70.6%	100	82	0	17.5	-	-		
1/1	Dublin Street (S) (Entry) Ahead Right	O	A		1	54	-	375	2015	535	70.0%	100	82	0	4.5	43.4	11.5		
2/1	Redforge Road (Entry) Left Ahead	U	B		1	36	-	418	1940	653	64.1%	-	-	-	4.5	38.5	11.7		
3/1	Dublin Street (N) (Entry) Left	U	D		1	52	-	502	1875	903	55.6%	-	-	-	3.4	24.6	11.4		
3/2	Dublin Street (N) (Entry) Right	U	C		1	34	-	421	1875	597	70.6%	-	-	-	5.0	43.1	12.4		
Ped Link: P1	Unnamed Ped Link	-	E		1	7	-	0	-	4582	0.0%	-	-	-	0.0	0.0	0.0		
Ped Link: P2	Unnamed Ped Link	-	E		1	7	-	0	-	4582	0.0%	-	-	-	0.0	0.0	0.0		
C1		PRC for Signalled Lanes (%):		27.5		PRC Over All Lanes (%):		27.5		Total Delay for Signalled Lanes (pcuHr):		17.47		Total Delay Over All Lanes(pcuHr):		17.47		Cycle Time (s): 110	

Basic Results Summary

Scenario 16: '2030 PM Without Development' (FG16: '2030 PM Without Development', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

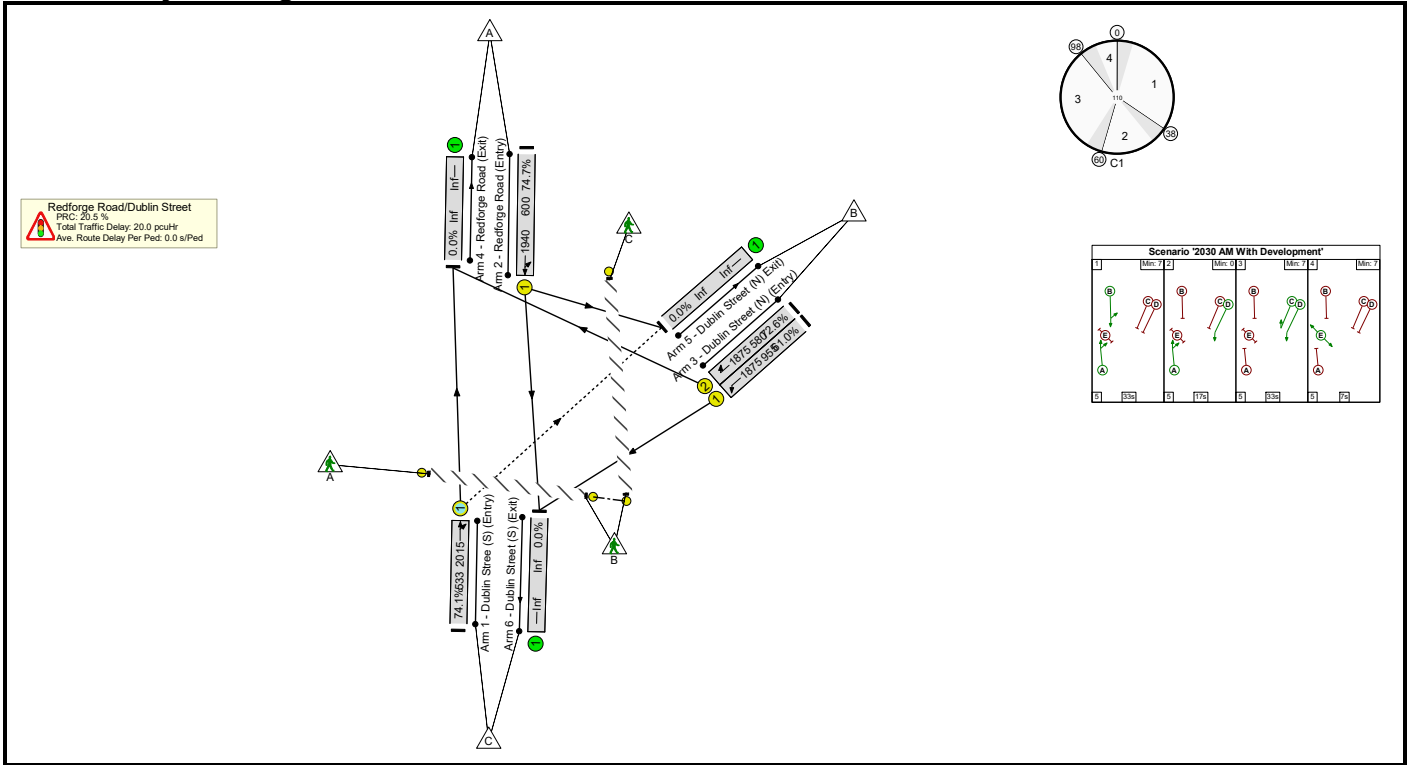
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)		
Network	-	-	-		-	-	-	-	-	-	85.9%	68	189	0	22.6	-	-		
Redforge Road/Dublin Street	-	-	-		-	-	-	-	-	-	85.9%	68	189	0	22.6	-	-		
1/1	Dublin Street (S) (Entry) Ahead Right	O	A		1	67	-	506	2015	591	85.6%	68	189	0	7.5	53.2	17.3		
2/1	Redforge Road (Entry) Left Ahead	U	B		1	42	-	597	1940	758	78.7%	-	-	-	6.7	40.4	17.7		
3/1	Dublin Street (N) (Entry) Left	U	D		1	46	-	272	1875	801	34.0%	-	-	-	1.9	24.5	5.8		
3/2	Dublin Street (N) (Entry) Right	U	C		1	21	-	322	1875	375	85.9%	-	-	-	6.6	73.3	12.2		
Ped Link: P1	Unnamed Ped Link	-	E		1	7	-	0	-	4582	0.0%	-	-	-	0.0	0.0	0.0		
Ped Link: P2	Unnamed Ped Link	-	E		1	7	-	0	-	4582	0.0%	-	-	-	0.0	0.0	0.0		
C1		PRC for Signalled Lanes (%):		4.8		PRC Over All Lanes (%):		4.8		Total Delay for Signalled Lanes (pcuHr):		22.58		Total Delay Over All Lanes(pcuHr):		22.58		Cycle Time (s): 110	

Basic Results Summary

Scenario 17: '2030 AM With Development' (FG17: '2030 AM With Development', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

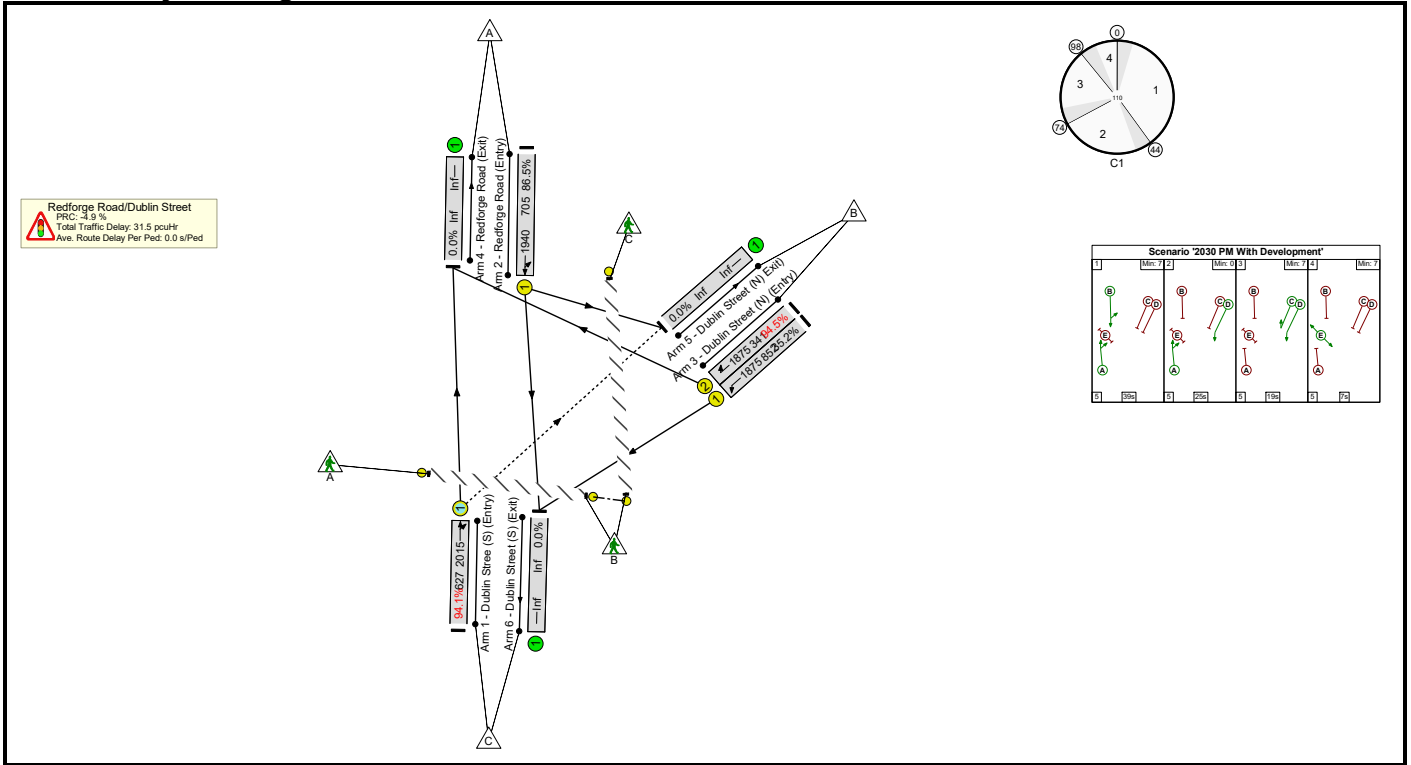
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)		
Network	-	-	-		-	-	-	-	-	-	74.7%	64	131	0	20.0	-	-		
Redforge Road/Dublin Street	-	-	-		-	-	-	-	-	-	74.7%	64	131	0	20.0	-	-		
1/1	Dublin Street (S) (Entry) Ahead Right	O	A		1	55	-	395	2015	533	74.1%	64	131	0	5.1	46.7	12.4		
2/1	Redforge Road (Entry) Left Ahead	U	B		1	33	-	448	1940	600	74.7%	-	-	-	5.7	45.8	13.6		
3/1	Dublin Street (N) (Entry) Left	U	D		1	55	-	582	1875	955	61.0%	-	-	-	3.9	24.0	13.4		
3/2	Dublin Street (N) (Entry) Right	U	C		1	33	-	421	1875	580	72.6%	-	-	-	5.3	45.0	12.8		
Ped Link: P1	Unnamed Ped Link	-	E		1	7	-	0	-	4582	0.0%	-	-	-	0.0	0.0	0.0		
Ped Link: P2	Unnamed Ped Link	-	E		1	7	-	0	-	4582	0.0%	-	-	-	0.0	0.0	0.0		
C1		PRC for Signalled Lanes (%):		20.5		PRC Over All Lanes (%):		20.5		Total Delay for Signalled Lanes (pcuHr):		19.97		Total Delay Over All Lanes(pcuHr):		19.97		Cycle Time (s): 110	

Basic Results Summary

Scenario 18: '2030 PM With Development' (FG18: '2030 PM With Development', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

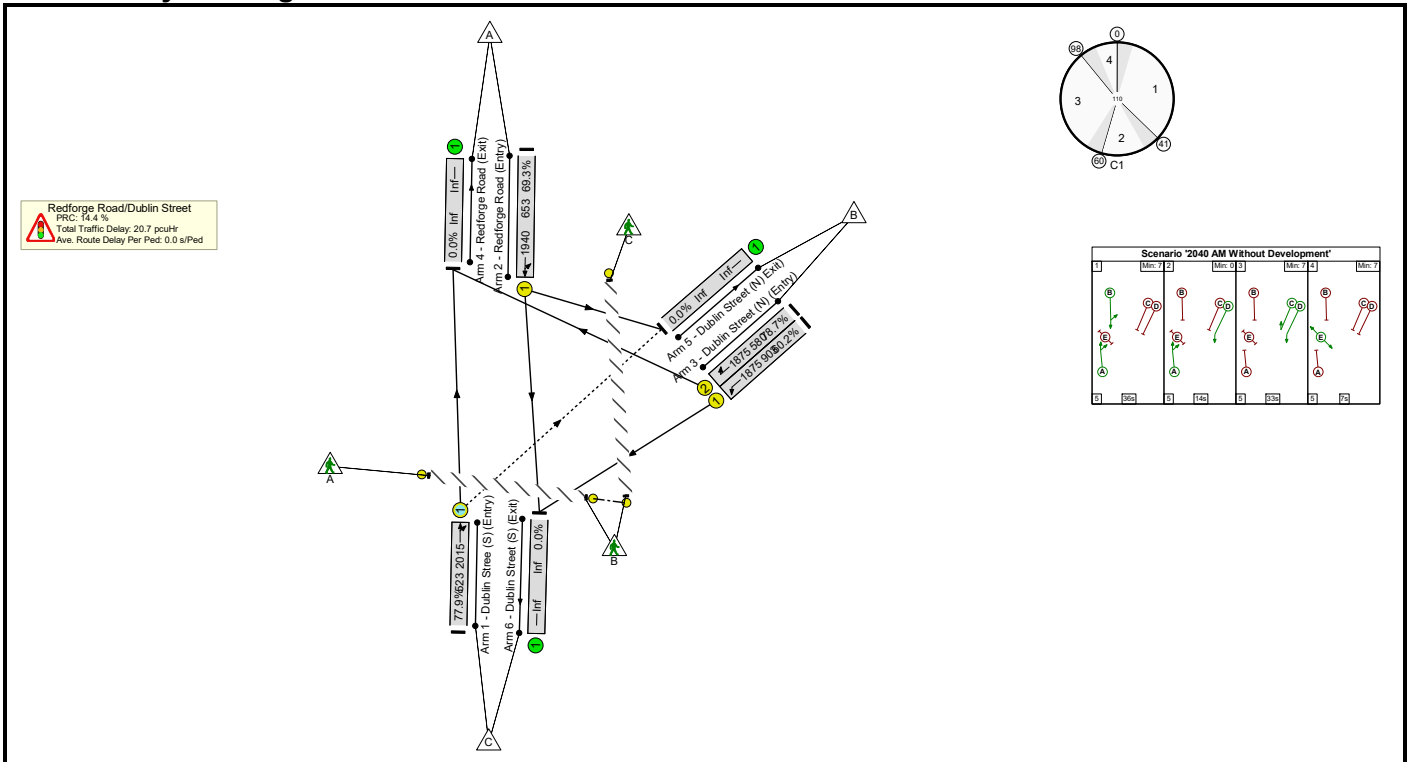
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	94.5%	41	275	0	31.5	-	-
Redforge Road/Dublin Street	-	-	-		-	-	-	-	-	-	94.5%	41	275	0	31.5	-	-
1/1	Dublin Street (S) (Entry) Ahead Right	O	A		1	69	-	590	2015	627	94.1%	41	275	0	11.7	71.2	23.6
2/1	Redforge Road (Entry) Left Ahead	U	B		1	39	-	610	1940	705	86.5%	-	-	-	8.5	50.2	20.3
3/1	Dublin Street (N) (Entry) Left	U	D		1	49	-	300	1875	852	35.2%	-	-	-	1.9	22.7	6.2
3/2	Dublin Street (N) (Entry) Right	U	C		1	19	-	322	1875	341	94.5%	-	-	-	9.4	105.0	15.1
Ped Link: P1	Unnamed Ped Link	-	E		1	7	-	0	-	4582	0.0%	-	-	-	0.0	0.0	0.0
Ped Link: P2	Unnamed Ped Link	-	E		1	7	-	0	-	4582	0.0%	-	-	-	0.0	0.0	0.0
C1		PRC for Signalled Lanes (%):		-4.9		Total Delay for Signalled Lanes (pcuHr):		31.47		Cycle Time (s):		110					
		PRC Over All Lanes (%):		-4.9		Total Delay Over All Lanes(pcuHr):		31.47									

Basic Results Summary

Scenario 19: '2040 AM Without Development' (FG19: '2040 AM Without Development', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

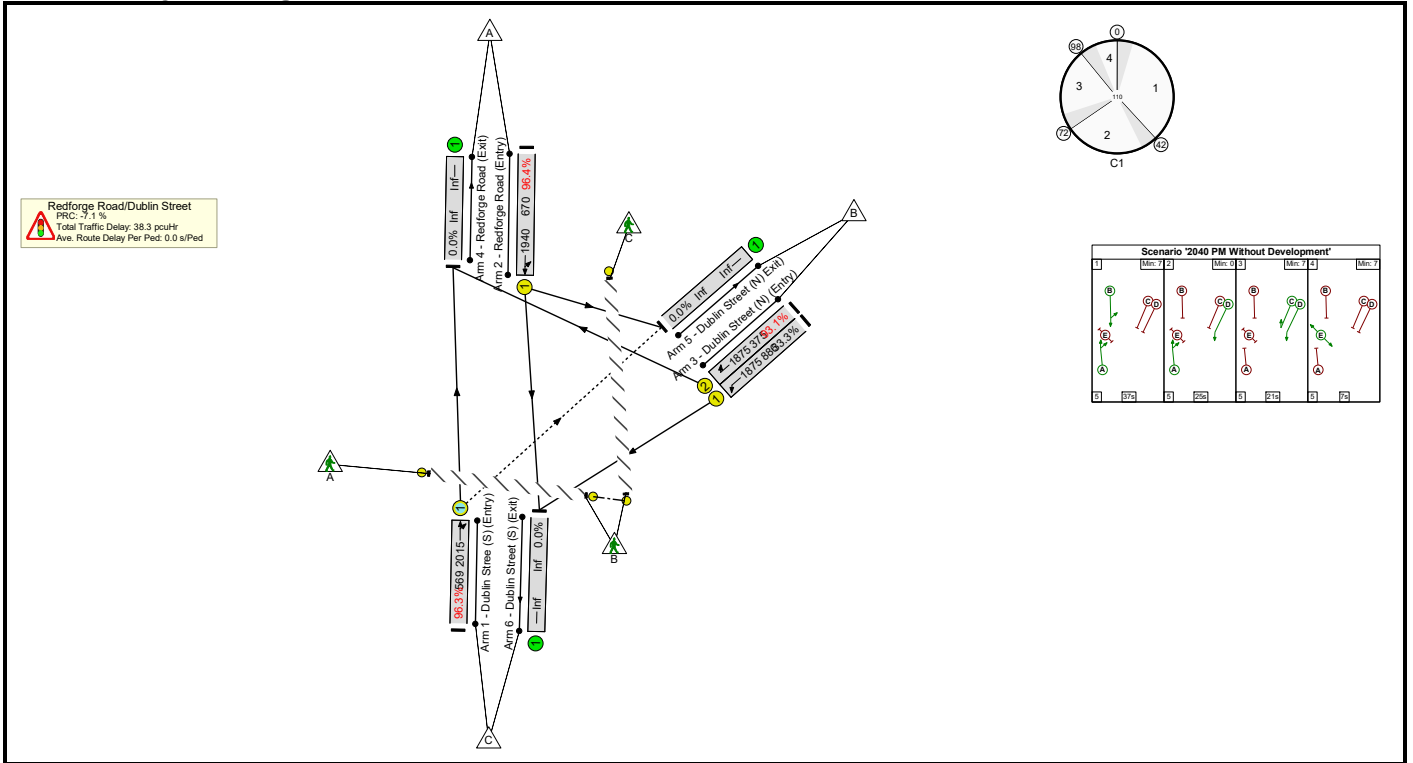
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)		
Network	-	-	-		-	-	-	-	-	-	78.7%	85	113	0	20.7	-	-		
Redforge Road/Dublin Street	-	-	-		-	-	-	-	-	-	78.7%	85	113	0	20.7	-	-		
1/1	Dublin Street (S) (Entry) Ahead Right	O	A		1	55	-	407	2015	523	77.9%	85	113	0	5.6	49.3	13.2		
2/1	Redforge Road (Entry) Left Ahead	U	B		1	36	-	452	1940	653	69.3%	-	-	-	5.1	40.5	13.0		
3/1	Dublin Street (N) (Entry) Left	U	D		1	52	-	544	1875	903	60.2%	-	-	-	3.9	25.8	12.8		
3/2	Dublin Street (N) (Entry) Right	U	C		1	33	-	456	1875	580	78.7%	-	-	-	6.2	48.9	14.5		
Ped Link: P1	Unnamed Ped Link	-	E		1	7	-	0	-	4582	0.0%	-	-	-	0.0	0.0	0.0		
Ped Link: P2	Unnamed Ped Link	-	E		1	7	-	0	-	4582	0.0%	-	-	-	0.0	0.0	0.0		
C1		PRC for Signalled Lanes (%):		14.4		PRC Over All Lanes (%):		14.4		Total Delay for Signalled Lanes (pcuHr):		20.74		Total Delay Over All Lanes(pcuHr):		20.74		Cycle Time (s): 110	

Basic Results Summary

Scenario 20: '2040 PM Without Development' (FG20: '2040 PM Without Development', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

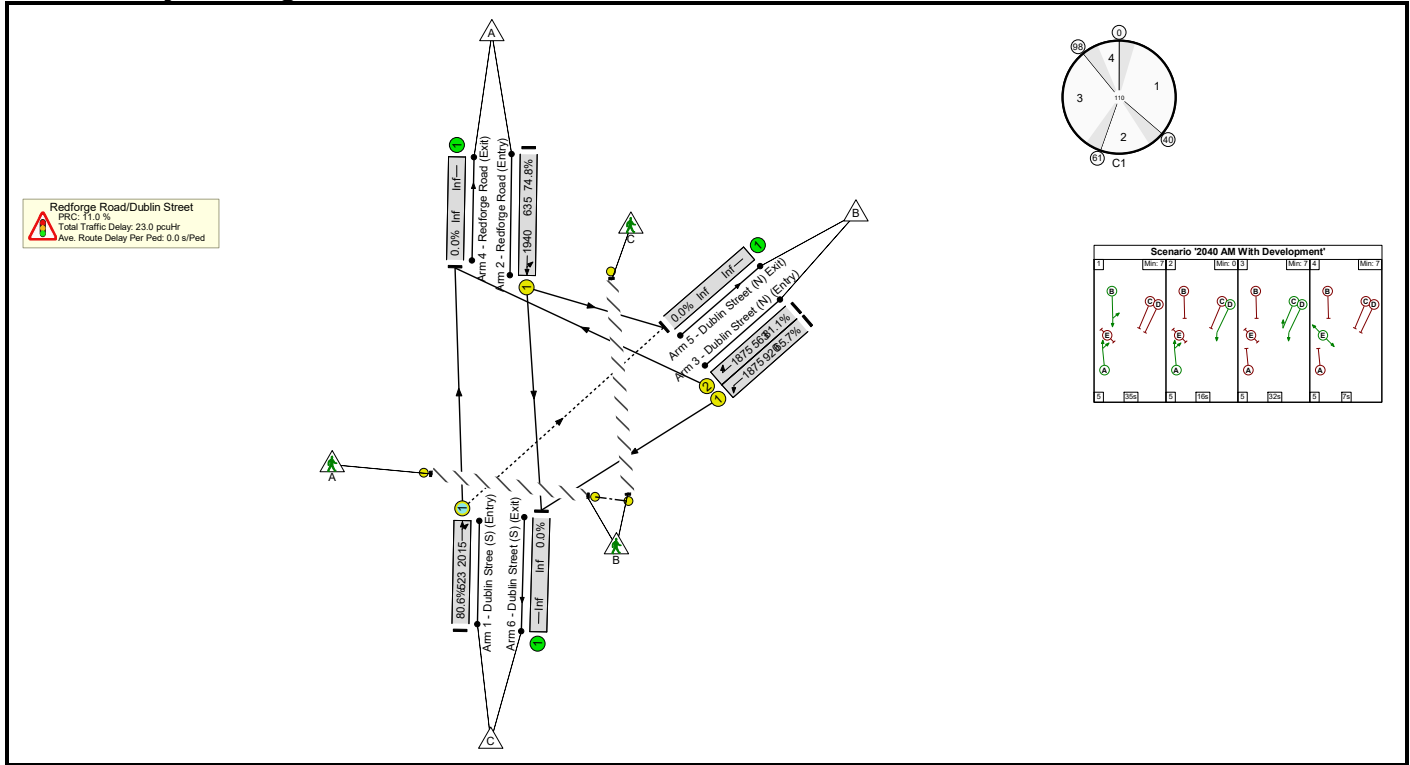
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)				
Network	-	-	-		-	-	-	-	-	-	96.4%	10	268	0	38.3	-	-				
Redforge Road/Dublin Street	-	-	-		-	-	-	-	-	-	96.4%	10	268	0	38.3	-	-				
1/1	Dublin Street (S) (Entry) Ahead Right	O	A		1	67	-	548	2015	569	96.3%	10	268	0	13.1	86.2	24.0				
2/1	Redforge Road (Entry) Left Ahead	U	B		1	37	-	646	1940	670	96.4%	-	-	-	14.4	80.1	27.2				
3/1	Dublin Street (N) (Entry) Left	U	D		1	51	-	295	1875	886	33.3%	-	-	-	1.7	21.2	5.8				
3/2	Dublin Street (N) (Entry) Right	U	C		1	21	-	349	1875	375	93.1%	-	-	-	9.1	93.6	15.3				
Ped Link: P1	Unnamed Ped Link	-	E		1	7	-	0	-	4582	0.0%	-	-	-	0.0	0.0	0.0				
Ped Link: P2	Unnamed Ped Link	-	E		1	7	-	0	-	4582	0.0%	-	-	-	0.0	0.0	0.0				
C1		PRC for Signalled Lanes (%):		-7.1		Total Delay for Signalled Lanes (pcuHr):		38.30		Cycle Time (s):		110		PRC Over All Lanes (%):		-7.1		Total Delay Over All Lanes(pcuHr):		38.30	

Basic Results Summary

Scenario 21: '2040 AM With Development' (FG21: '2040 AM With Development', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

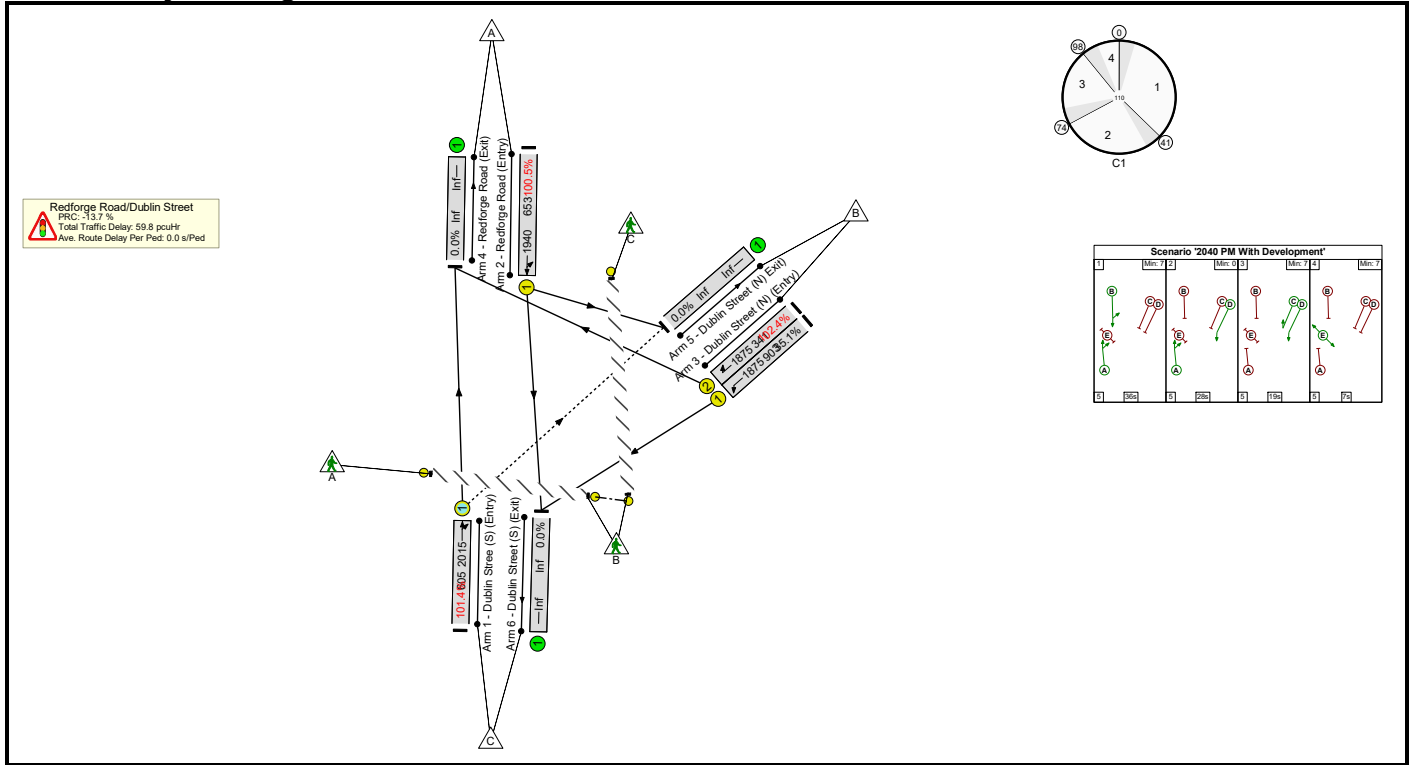
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)		
Network	-	-	-		-	-	-	-	-	-	81.1%	68	140	0	23.0	-	-		
Redforge Road/Dublin Street	-	-	-		-	-	-	-	-	-	81.1%	68	140	0	23.0	-	-		
1/1	Dublin Street (S) (Entry) Ahead Right	O	A		1	56	-	422	2015	523	80.6%	68	140	0	6.1	52.0	14.1		
2/1	Redforge Road (Entry) Left Ahead	U	B		1	35	-	475	1940	635	74.8%	-	-	-	5.8	44.0	14.3		
3/1	Dublin Street (N) (Entry) Left	U	D		1	53	-	605	1875	920	65.7%	-	-	-	4.5	26.7	14.7		
3/2	Dublin Street (N) (Entry) Right	U	C		1	32	-	456	1875	563	81.1%	-	-	-	6.6	51.9	14.9		
Ped Link: P1	Unnamed Ped Link	-	E		1	7	-	0	-	4582	0.0%	-	-	-	0.0	0.0	0.0		
Ped Link: P2	Unnamed Ped Link	-	E		1	7	-	0	-	4582	0.0%	-	-	-	0.0	0.0	0.0		
C1		PRC for Signalled Lanes (%):		11.0		PRC Over All Lanes (%):		11.0		Total Delay for Signalled Lanes (pcuHr):		22.97		Total Delay Over All Lanes(pcuHr):		22.97		Cycle Time (s): 110	

Basic Results Summary

Scenario 22: '2040 PM With Development' (FG22: '2040 PM With Development', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)				
Network	-	-	-		-	-	-	-	-	-	102.4%	0	320	0	59.8	-	-				
Redforge Road/Dublin Street	-	-	-		-	-	-	-	-	-	102.4%	0	320	0	59.8	-	-				
1/1	Dublin Stree (S) (Entry) Ahead Right	O	A		1	69	-	613	2015	605	101.4%	0	320	0	21.2	124.8	33.7				
2/1	Redforge Road (Entry) Left Ahead	U	B		1	36	-	656	1940	653	100.5%	-	-	-	20.5	112.7	33.8				
3/1	Dublin Street (N) (Entry) Left	U	D		1	52	-	317	1875	903	35.1%	-	-	-	1.8	20.8	6.3				
3/2	Dublin Street (N) (Entry) Right	U	C		1	19	-	349	1875	341	102.4%	-	-	-	16.2	167.5	22.5				
Ped Link: P1	Unnamed Ped Link	-	E		1	7	-	0	-	4582	0.0%	-	-	-	0.0	0.0	0.0				
Ped Link: P2	Unnamed Ped Link	-	E		1	7	-	0	-	4582	0.0%	-	-	-	0.0	0.0	0.0				
C1		PRC for Signalled Lanes (%):		-13.7		Total Delay for Signalled Lanes (pcuHr):		59.85		Cycle Time (s):		110		PRC Over All Lanes (%):		-13.7		Total Delay Over All Lanes(pcuHr):		59.85	



APPENDIX C: TRICS

Calculation Reference: AUDIT-761701-220613-0612

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

TOTAL VEHICLES

Selected regions and areas:

13	MUNSTER	
	TI TIPPERARY	1 days
	WA WATERFORD	1 days
14	LEINSTER	
	CC CARLOW	1 days
	LU LOUTH	1 days
	WC WICKLOW	2 days
	WX WEXFORD	1 days
15	GREATER DUBLIN	
	DL DUBLIN	1 days
16	ULSTER (REPUBLIC OF IRELAND)	
	CV CAVAN	2 days
	DN DONEGAL	6 days
	MG MONAGHAN	2 days
17	ULSTER (NORTHERN IRELAND)	
	AN ANTRIM	1 days
	TY TYRONE	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: 6 to 280 (units:)
 Range Selected by User: 4 to 437 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/14 to 12/10/21

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	5 days
Tuesday	4 days
Wednesday	7 days
Thursday	3 days
Friday	1 days

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

Selected survey types:

Manual count	20 days
Directional ATC Count	0 days

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

Selected Locations:

Edge of Town Centre	3
Suburban Area (PPS6 Out of Centre)	4
Edge of Town	12
Neighbourhood Centre (PPS6 Local Centre)	1

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

Selected Location Sub Categories:

Industrial Zone	1
Residential Zone	13
Out of Town	1
No Sub Category	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:

C3 20 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:

1,000 or Less	1 days
1,001 to 5,000	5 days
5,001 to 10,000	8 days
10,001 to 15,000	5 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:

5,000 or Less	1 days
5,001 to 25,000	11 days
25,001 to 50,000	4 days
50,001 to 75,000	4 days

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

Car ownership within 5 miles:

0.6 to 1.0	5 days
1.1 to 1.5	10 days
1.6 to 2.0	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:

No 20 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 20 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
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LIST OF SITES relevant to selection parameters

1	AN-03-A-09	DETACHED & SEMI-DETACHED	ANTRIM
	SLOEFIELD DRIVE CARRICKFERGUS		
	Edge of Town No Sub Category		
	Total No of Dwellings:	151	
	Survey date: WEDNESDAY	12/10/16	Survey Type: MANUAL
2	CC-03-A-01	DETACHED HOUSES	CARLOW
	R417 ANTHY ROAD CARLOW		
	Edge of Town Residential Zone		
	Total No of Dwellings:	23	
	Survey date: WEDNESDAY	25/05/16	Survey Type: MANUAL
3	CV-03-A-02	DETACHED & SEMI DETACHED	CAVAN
	R212 DUBLIN ROAD CAVAN		
	KILLYNEBBER Edge of Town No Sub Category		
	Total No of Dwellings:	80	
	Survey date: MONDAY	22/05/17	Survey Type: MANUAL
4	CV-03-A-03	DETACHED HOUSES	CAVAN
	R212 DUBLIN ROAD CAVAN		
	PULLAMORE NEAR Edge of Town No Sub Category		
	Total No of Dwellings:	37	
	Survey date: MONDAY	22/05/17	Survey Type: MANUAL
5	DL-03-A-10	SEMI DETACHED & DETACHED	DUBLIN
	R124 MALAHIDE SAINT HELENS		
	Edge of Town Residential Zone		
	Total No of Dwellings:	65	
	Survey date: WEDNESDAY	20/06/18	Survey Type: MANUAL
6	DN-03-A-03	DETACHED/SEMI-DETACHED	DONEGAL
	THE GRANGE LETTERKENNY GLENCAR IRISH		
	Edge of Town Residential Zone		
	Total No of Dwellings:	50	
	Survey date: MONDAY	01/09/14	Survey Type: MANUAL
7	DN-03-A-04	SEMI-DETACHED	DONEGAL
	GORTLEE ROAD LETTERKENNY GORTLEE		
	Edge of Town Residential Zone		
	Total No of Dwellings:	83	
	Survey date: FRIDAY	26/09/14	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

8	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
9	DN-03-A-06	DETACHED HOUSING	DONEGAL
	GLENFIN ROAD BALLYBOFEY Edge of Town Residential Zone Total No of Dwellings: 6 Survey date: WEDNESDAY 10/10/18		
			Survey Type: MANUAL
10	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
11	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
12	LU-03-A-01	TERRACED & SEMI-DETACHED	LOUTH
	RATHMULLAN ROAD DROGHEDA Neighbourhood Centre (PPS6 Local Centre) Residential Zone Total No of Dwellings: 111 Survey date: TUESDAY 21/09/21		
			Survey Type: MANUAL
13	MG-03-A-01	SEMI-DETACHED HOUSES	MONAGHAN
	ORIEL WAY MONAGHAN Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 49 Survey date: TUESDAY 12/10/21		
			Survey Type: MANUAL
14	MG-03-A-02	MIXED HOUSES	MONAGHAN
	GLEN ROAD MONAGHAN Edge of Town Centre Residential Zone Total No of Dwellings: 76 Survey date: TUESDAY 12/10/21		
			Survey Type: MANUAL
15	TI-03-A-01	MIXED HOUSES	TIPPERARY
	BRITTAS ROAD THURLES Edge of Town Out of Town Total No of Dwellings: 76 Survey date: THURSDAY 17/06/21		
			Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

16	TY-03-A-02	SEMI DETACHED & BUNGALOWS	TYRONE
	SANDHOLES ROAD COOKSTOWN DERRYLORAN Edge of Town Industrial Zone		
	Total No of Dwellings:	101	
	Survey date: THURSDAY	14/03/19	Survey Type: MANUAL
17	WA-03-A-04	DETACHED	WATERFORD
	MAYPARK LANE WATERFORD		
	Edge of Town Residential Zone		
	Total No of Dwellings:	280	
	Survey date: TUESDAY	24/06/14	Survey Type: MANUAL
18	WC-03-A-01	DETACHED HOUSES	WICKLOW
	STATION ROAD WICKLOW CORPORATION MURRAGH Edge of Town No Sub Category		
	Total No of Dwellings:	50	
	Survey date: MONDAY	28/05/18	Survey Type: MANUAL
19	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
20	WX-03-A-01	SEMI-DETACHED	WEXFORD
	CLONARD ROAD WEXFORD		
	Suburban Area (PPS6 Out of Centre) No Sub Category		
	Total No of Dwellings:	34	
	Survey date: THURSDAY	25/09/14	Survey Type: MANUAL

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

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

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	20	75	0.062	20	75	0.231	20	75	0.293
08:00 - 09:00	20	75	0.192	20	75	0.555	20	75	0.747
09:00 - 10:00	20	75	0.229	20	75	0.264	20	75	0.493
10:00 - 11:00	20	75	0.184	20	75	0.208	20	75	0.392
11:00 - 12:00	20	75	0.176	20	75	0.223	20	75	0.399
12:00 - 13:00	20	75	0.262	20	75	0.233	20	75	0.495
13:00 - 14:00	20	75	0.255	20	75	0.275	20	75	0.530
14:00 - 15:00	20	75	0.298	20	75	0.312	20	75	0.610
15:00 - 16:00	20	75	0.357	20	75	0.265	20	75	0.622
16:00 - 17:00	20	75	0.371	20	75	0.246	20	75	0.617
17:00 - 18:00	20	75	0.487	20	75	0.294	20	75	0.781
18:00 - 19:00	20	75	0.373	20	75	0.292	20	75	0.665
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			3.246			3.398			6.644

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

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

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Parameter summary

Trip rate parameter range selected: 6 - 280 (units:)
 Survey date range: 01/01/14 - 12/10/21
 Number of weekdays (Monday-Friday): 20
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys automatically removed from selection: 0
 Surveys manually removed from selection: 0

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

Calculation Reference: AUDIT-761701-220613-0637

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

TOTAL VEHICLES

Selected regions and areas:

12 CONNAUGHT	
MA MAYO	1 days
13 MUNSTER	
WA WATERFORD	1 days
14 LEINSTER	
LU LOUTH	1 days
15 GREATER DUBLIN	
DL DUBLIN	1 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: 20 to 51 (units:)
 Range Selected by User: 18 to 372 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/14 to 22/09/21

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:

Tuesday	2 days
Wednesday	2 days
Friday	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 undertaken using machines.

Selected Locations:

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

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

Selected Location Sub Categories:

Residential Zone	4
No Sub Category	1

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

Secondary Filtering selection:

Use Class:

C3 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	2 days
20,001 to 25,000	1 days
25,001 to 50,000	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
50,001 to 75,000	2 days
125,001 to 250,000	1 days
250,001 to 500,000	1 days

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

Car ownership within 5 miles:

0.6 to 1.0	1 days
1.1 to 1.5	4 days

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

Travel Plan:

No 5 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.

Covid-19 Restrictions	Yes	At least one survey within the selected data set was undertaken at a time of Covid-19 restrictions
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LIST OF SITES relevant to selection parameters

1	AN-03-C-02	BLOCK OF FLATS		ANTRIM
	SUMMERHILL AVENUE			
	BELFAST			
	KNOCK			
	Edge of Town			
	Residential Zone			
	Total No of Dwellings:		22	
	Survey date: FRIDAY		28/11/14	Survey Type: MANUAL
2	DL-03-C-15	BLOCKS OF FLATS		DUBLIN
	MONKSTOWN ROAD			
	DUBLIN			
	MONKSTOWN			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total No of Dwellings:		20	
	Survey date: WEDNESDAY		01/10/14	Survey Type: MANUAL
3	LU-03-C-04	BLOCKS OF FLATS		LOUTH
	RIVER COURT			
	DROGHEDA			
	Neighbourhood Centre (PPS6 Local Centre)			
	Residential Zone			
	Total No of Dwellings:		42	
	Survey date: WEDNESDAY		22/09/21	Survey Type: MANUAL
4	MA-03-C-01	BLOCKS OF FLATS		MAYO
	KNOCK ROAD			
	CLAREMORRIS			
	Edge of Town Centre			
	No Sub Category			
	Total No of Dwellings:		22	
	Survey date: TUESDAY		14/09/21	Survey Type: MANUAL
5	WA-03-C-01	BLOCKS OF FLATS		WATERFORD
	UPPER YELLOW ROAD			
	WATERFORD			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total No of Dwellings:		51	
	Survey date: TUESDAY		12/05/15	Survey Type: MANUAL

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

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

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	5	31	0.032	5	31	0.197	5	31	0.229
08:00 - 09:00	5	31	0.076	5	31	0.178	5	31	0.254
09:00 - 10:00	5	31	0.134	5	31	0.102	5	31	0.236
10:00 - 11:00	5	31	0.108	5	31	0.108	5	31	0.216
11:00 - 12:00	5	31	0.076	5	31	0.127	5	31	0.203
12:00 - 13:00	5	31	0.083	5	31	0.115	5	31	0.198
13:00 - 14:00	5	31	0.108	5	31	0.096	5	31	0.204
14:00 - 15:00	5	31	0.115	5	31	0.115	5	31	0.230
15:00 - 16:00	5	31	0.140	5	31	0.134	5	31	0.274
16:00 - 17:00	5	31	0.146	5	31	0.153	5	31	0.299
17:00 - 18:00	5	31	0.274	5	31	0.127	5	31	0.401
18:00 - 19:00	5	31	0.166	5	31	0.153	5	31	0.319
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.458			1.605			3.063

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

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

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Parameter summary

Trip rate parameter range selected: 20 - 51 (units:)
 Survey date range: 01/01/14 - 22/09/21
 Number of weekdays (Monday-Friday): 5
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys automatically removed from selection: 0
 Surveys manually removed from selection: 0

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

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 04 - EDUCATION
Category : D - NURSERY

TOTAL VEHICLES

Selected regions and areas:

12 CONNAUGHT	
RO ROSCOMMON	2 days
16 ULSTER (REPUBLIC OF IRELAND)	
MG MONAGHAN	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 pupils
Actual Range: 55 to 106 (units:)
Range Selected by User: 18 to 106 (units:)

Parking Spaces Range: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/14 to 12/10/21

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:

Tuesday	2 days
Friday	1 days

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

Selected survey types:

Manual count	3 days
Directional ATC Count	0 days

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

Selected Locations:

Edge of Town Centre	2
Edge of Town	1

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

Selected Location Sub Categories:

Residential Zone	3
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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:

E(f)	3 days
------	--------

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

Population within 500m Range:

All Surveys Included

Secondary Filtering selection (Cont.):

Population within 1 mile:

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

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

Population within 5 miles:

5,001 to 25,000	2 days
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	3 days
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This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

No	3 days
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This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:

No PTAL Present	3 days
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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
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LIST OF SITES relevant to selection parameters

1	MG-04-D-01 THE GRANGE MONAGHAN	NURSERY		MONAGHAN
	Edge of Town Centre Residential Zone			
	Total Number of pupils:		55	
	Survey date: TUESDAY		12/10/21	Survey Type: MANUAL
2	RO-04-D-01 PARK VIEW ROSCOMMON CRUBY HILL	NURSERY		ROSCOMMON
	Edge of Town Residential Zone			
	Total Number of pupils:		106	
	Survey date: FRIDAY		26/09/14	Survey Type: MANUAL
3	RO-04-D-03 CIRCULAR ROAD ROSCOMMON	NURSERY		ROSCOMMON
	Edge of Town Centre Residential Zone			
	Total Number of pupils:		57	
	Survey date: TUESDAY		14/09/21	Survey Type: MANUAL

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

TRIP RATE for Land Use 04 - EDUCATION/D - NURSERY

TOTAL VEHICLES

Calculation factor: 1

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	57	0.000	1	57	0.000	1	57	0.000
07:00 - 08:00	3	73	0.028	3	73	0.018	3	73	0.046
08:00 - 09:00	3	73	0.390	3	73	0.206	3	73	0.596
09:00 - 10:00	3	73	0.294	3	73	0.335	3	73	0.629
10:00 - 11:00	3	73	0.018	3	73	0.032	3	73	0.050
11:00 - 12:00	3	73	0.083	3	73	0.014	3	73	0.097
12:00 - 13:00	3	73	0.183	3	73	0.261	3	73	0.444
13:00 - 14:00	3	73	0.133	3	73	0.124	3	73	0.257
14:00 - 15:00	3	73	0.174	3	73	0.096	3	73	0.270
15:00 - 16:00	3	73	0.087	3	73	0.096	3	73	0.183
16:00 - 17:00	3	73	0.110	3	73	0.142	3	73	0.252
17:00 - 18:00	3	73	0.243	3	73	0.372	3	73	0.615
18:00 - 19:00	3	73	0.000	3	73	0.041	3	73	0.041
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.743			1.737			3.480

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

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

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Parameter summary

Trip rate parameter range selected: 55 - 106 (units:)
 Survey date range: 01/01/14 - 12/10/21
 Number of weekdays (Monday-Friday): 3
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys automatically removed from selection: 1
 Surveys manually removed from selection: 0

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