Traffic & Transport Assessment

Residential Development
Cork Rd.
Fermoy
Co. Cork

January 2022

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1.0 INTRODUCTION

1.1 INTRODUCTION

1.1.1 MHL Consulting Engineers has been instructed by Cumnor Construction Ltd. to prepare a Traffic & Transport Assessment (TTA) in support of a planning application for the development of their lands along Cork Rd. in Fermoy, County Cork.

1.1.2 This TTA will assess how the proposed development, consisting of 336 total units, will impact the surrounding roads network. It will consider appropriate access arrangements and the transport choices available to future users of the application site and how 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.

1.1.3 The scope of this study has been agreed with Cork County Council's Traffic & Transportation Department. Technical Notes have been produced to agree the 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.

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

- Junction 1: T- junction serving the R639 Cork Rd. & the L-1542 local road.
- Junction 2: Roundabout on the junction of the R639 and the M8 Motorway.
- Junction 3: Proposed entrance junction to the development.

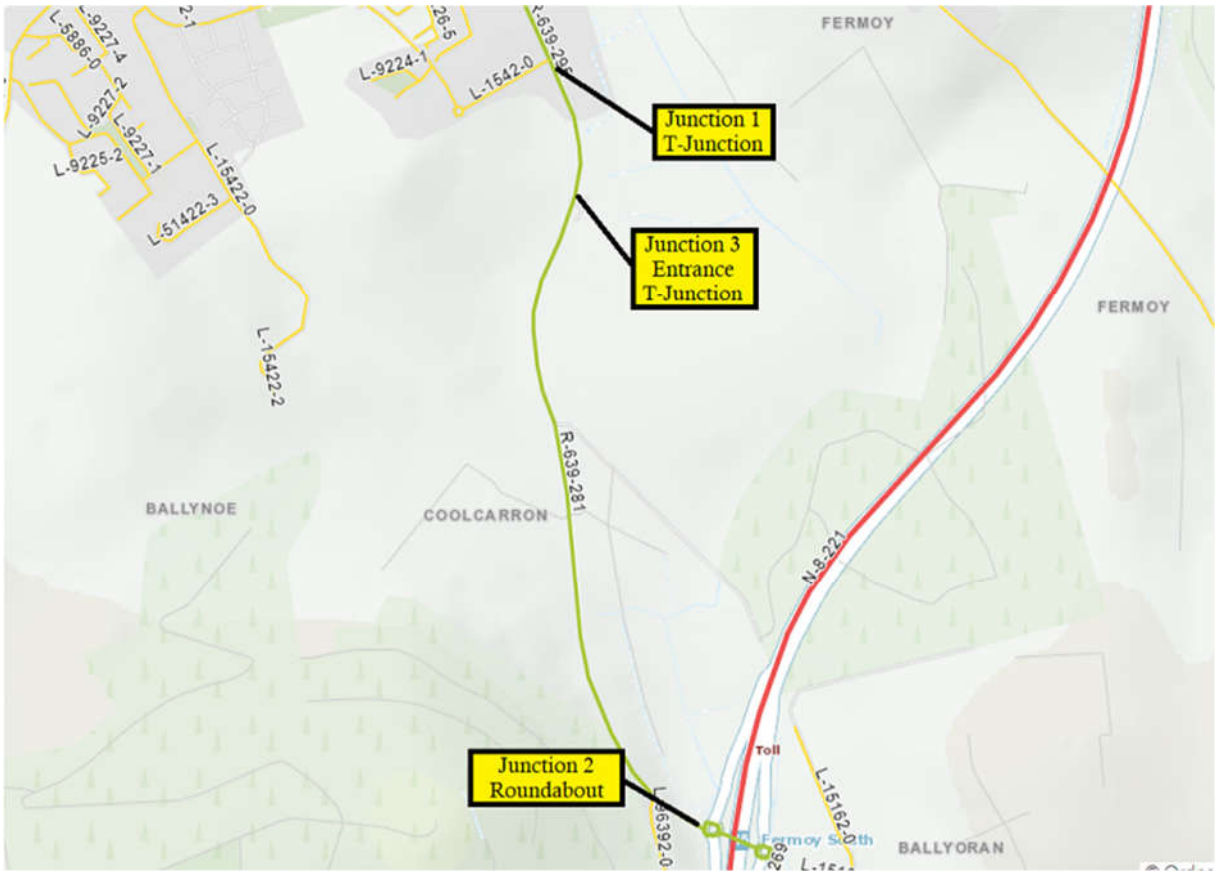

Figure 1.1: Junction Locations

1.2 PLANNING BACKGROUND

1.2.1 The lands are zoned for residential development in the current Fermoy Local Area Plan 2017 under objective number FY-R-08 for medium density housing.

1.2.2 The proposed development of these lands for residential use is in accordance with the County Development Plan which seeks to increase population and households within the county via development of the main towns, villages, and rural areas.

1.3 STATUTORY CONSULTEE CONSULTATION

1.3.1 Notwithstanding ongoing consultation with the Traffic & Transportation Department of Cork County Council, the Design Team, have engaged with various departments within Cork County Council with a view to consider the respective issues raised as part of the design process of the scheme.

1.3.2 These engagements have informed the final layout of the scheme including access arrangements for vehicular, pedestrian and cycle modes of transport.

1.4 DOCUMENT STRUCTURE

1.4.1 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.

1.4.2 The TTA concludes that the proposed development, in traffic and transportation terms is acceptable, and there are no traffic and transportation reasons that should prevent the Planning Authority from recommending approval of this application.

2.0 NON-TECHNICAL SUMMARY

2.1 A TTA has been prepared in support of an application to Cork County Council for the development of 336 no. residential units and a creche in the Fermoy Housing Development.

2.2 The TTA methodology including the scope and means of assessment of the identified key junctions has been agreed with the Local Authority as part of the pre-application process.

2.3 The TTA has demonstrated the following:

(i) A review of the existing roads network and collision data in the vicinity of the site indicates that there are no significant problems in relation to the current safety of the Roads Network.

(ii) Junction 1: R639 Cork Rd. & L-1542 local road is shown to currently operate within capacity and will continue to do so during morning & evening peaks with the development in place up to design year 2042. The modelling results show the junction approaching capacity in the design year 2042 both with and without development traffic.

(iii) Junction 2: R639 Cork Rd./M8 Motorway currently operates within capacity during both morning & evening peaks and will continue to do so with the development in place up to design year 2042. The junction maintains a 'free-flow' level of service throughout the modelled analysis.

(iv) Junction 3: Proposed development entrance will access the development from the R639 Cork Rd. The modelling results indicate that the junction will operate well within capacity up to design year 2042.

(v) 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.

(vi) The proposed new 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).

(vii) The site benefits from being in close proximity to regular transport provision, within walking distance of the site, which enables journeys to Cork City.

(viii) Car parking provision within the site is in accordance with the County Development Plan. A total of 602 no. car parking spaces are proposed for the proposed residential development which are allocated on the bases of housing type and likely demands of future residents. The proposed parking provision allows for 2 spaces per house and 1.25 spaces per apartment. Additional creche parking has been provided as 1 space per 3 staff and 1 space per 10 children giving a total of 15 spaces.

2.4 A modal split of 40% (implying an anticipated increase in public transport or active travel in the immediate area of 22%) for future year models is deemed to be reasonable. This modal shift increase of 22% has been applied to proposed development traffic from the opening year (when the development is fully completed) 2027, up to the design year 2042. This same modal shift increase of 22% has not been applied to the background traffic of the modelled junctions, ensuring that a conservative (worst-case) analysis has been carried out. If the anticipated increase in modal split occurs, then future year scenarios for the modeled junctions will more resemble the Base Year (2027) scenario as background growth rates will in effect be negated by the modal shift increase.

Figure 2.1: Proposed Development

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 As part of the pre-application process the extent of data collection and the critical links and junctions was agreed with the Local Authority.

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

- 12-hour classified turning counts (2 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 2 turning count surveys were undertaken as part of the study on Thursday 16th December 2021, 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 3.1: Traffic Count Survey Locations

3.2.4 The following figures present the recorded 12-hour traffic profile, percentage of classified vehicles and turning movements for each of the modelled junctions carried out on Thursday 16th of December 2021:

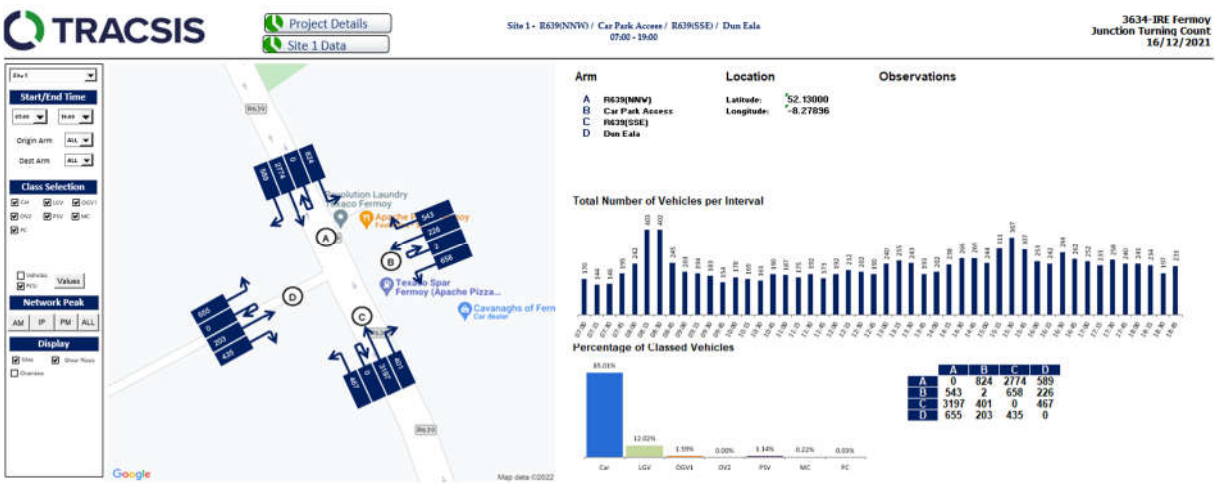

Figure 3.2: Junction 1: R639 Cork Rd./L-1542 local road

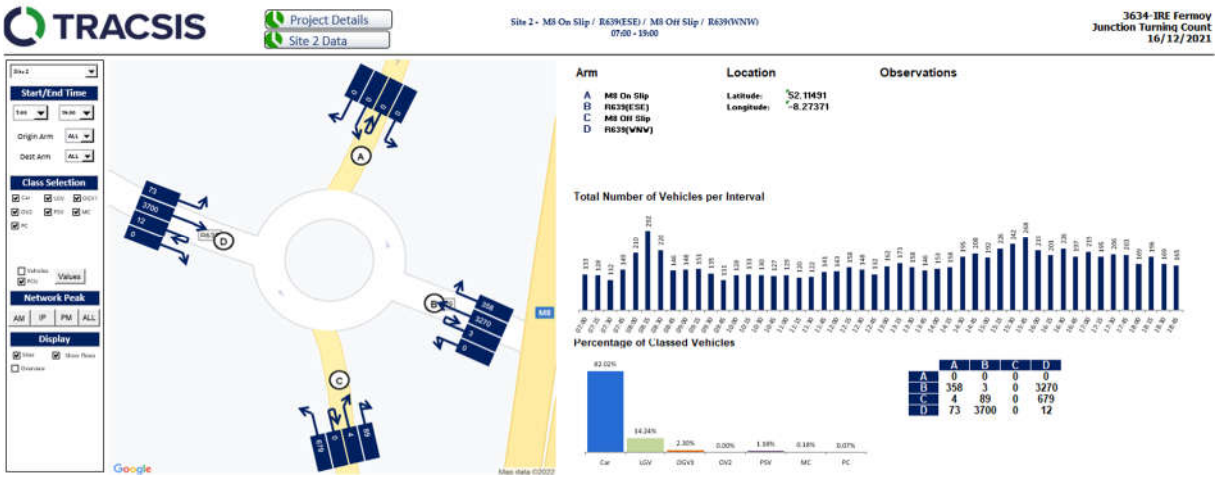

Figure 3.3: Junction 2: R639 Cork Rd./M8 motorway

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:

- Junction 1: 08:00 – 09:00 and 16:00 – 17:00
- Junction 2: 07:45 – 08:45 and 16:00 – 17:00

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.

3.2.6 The percentage of classified vehicles was used within the generated traffic models to reflect existing conditions more accurately (HGV% averaged across both junctions calculated at 3%).

3.2.7 To account for the reduced traffic volumes experienced at the time of the traffic surveys due to Covid-19 travel restrictions, a growth factor was applied to the traffic counts to better represent "normal" traffic volumes. This growth factor was determined by comparing TII Traffic Data volumes from 2019 (pre-covid) to volumes in 2021. The site selected for the comparison study is the TII Traffic Data Site located on the R639 between Exit 15 of the M8 and Rathcormac. The week during which the new traffic counts were taken (12th December to 18th December 2021) was compared the week of 15th December to 21st December 2019. It was found that traffic volumes in 2021 were 95.14% of the volumes measured in 2019.

3.3 SITE LOCATION AND COMPOSITION

3.3.1 The application site is located in Fermoy, County Cork with access to the site via a new proposed access road off R639 Cork Road.

3.4 LOCAL ROADS NETWORK

3.4.1 *Junction 1: T- junction serving R639 Cork Rd. & L-1542 local road*

This T- junction serves as an important vehicular access between Fermoy and the M8 Motorway. It also provides a link for the surrounding residential areas to the wider roads network.
The measured two-way AADT (Annual Average Daily Traffic) at the cross-roads junction is 14,910.

Image 3.4.1: Image of R639 Cork Rd./L-1542 local roads

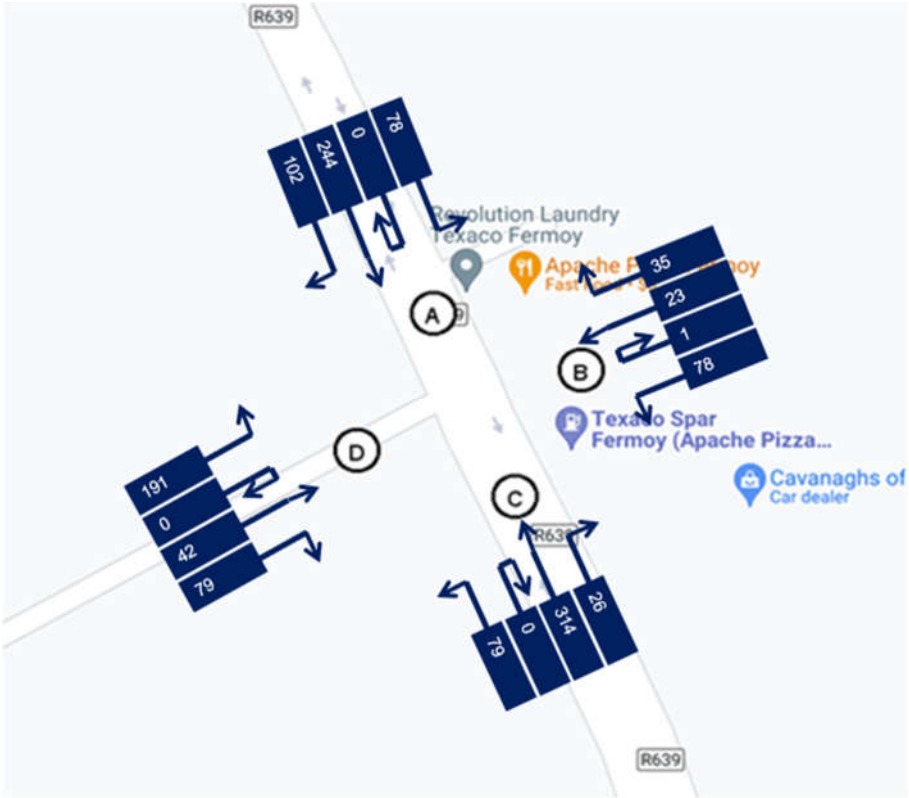

Fig 3.4.1: R639 Cork Rd./L-1542 local road – AM Peak Hour Flows

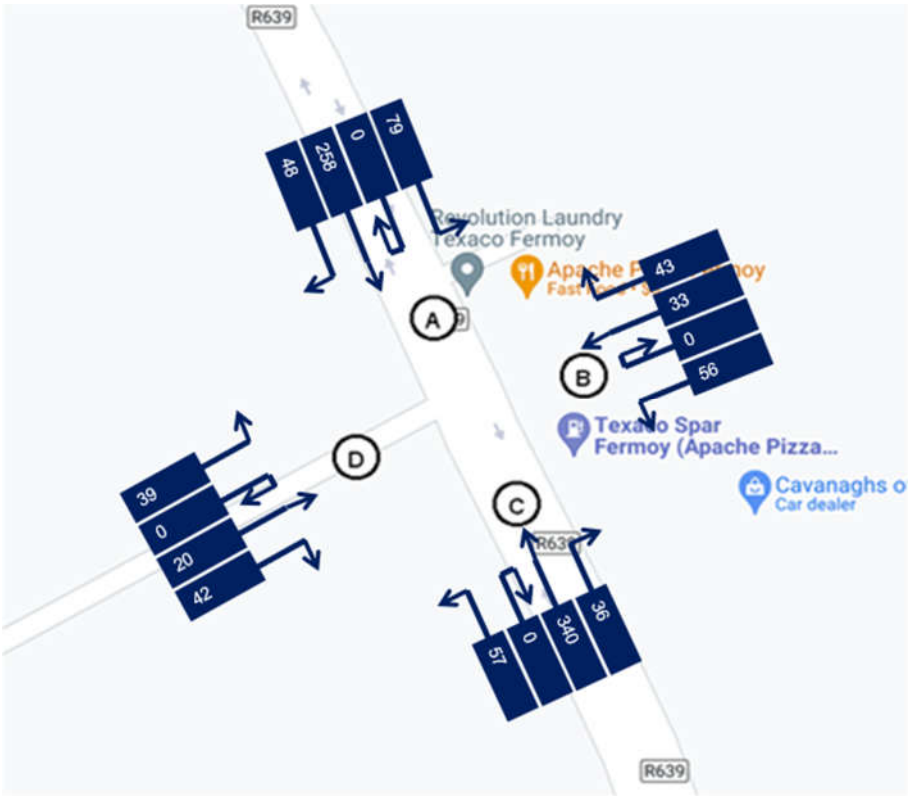

Fig 3.4.2: R639 Cork Rd./L-1542 local road – PM Peak Hour Flows

3.4.2 *Junction 2: Roundabout on the junction of R639 Cork Rd. and M8 Motorway*

This roundabout forms a part of the access to the M8 Motorway from the R639. The roundabout also facilitates northbound M8 traffic exiting the motorway and traffic heading towards Rathcormac further south on the R639.
The measured AADT (Annual Average Daily Traffic) at the roundabout is 10,570.

Image 3.4.2: Image of Junction 2: R639 Cork Rd./M8 Motorway

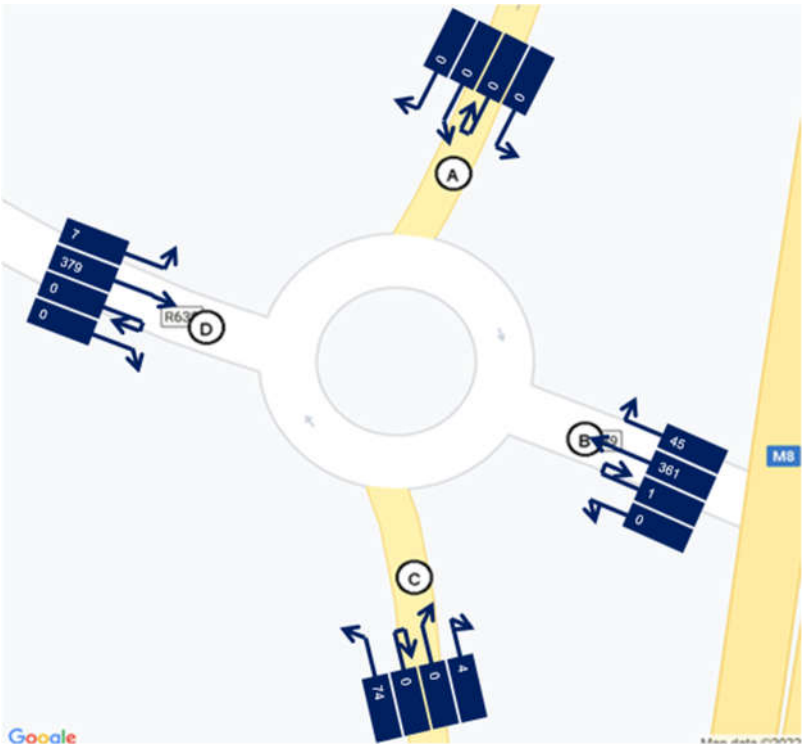

Fig 3.4.3: R639 Cork Rd./M8 Motorway– AM Peak Hour Flows

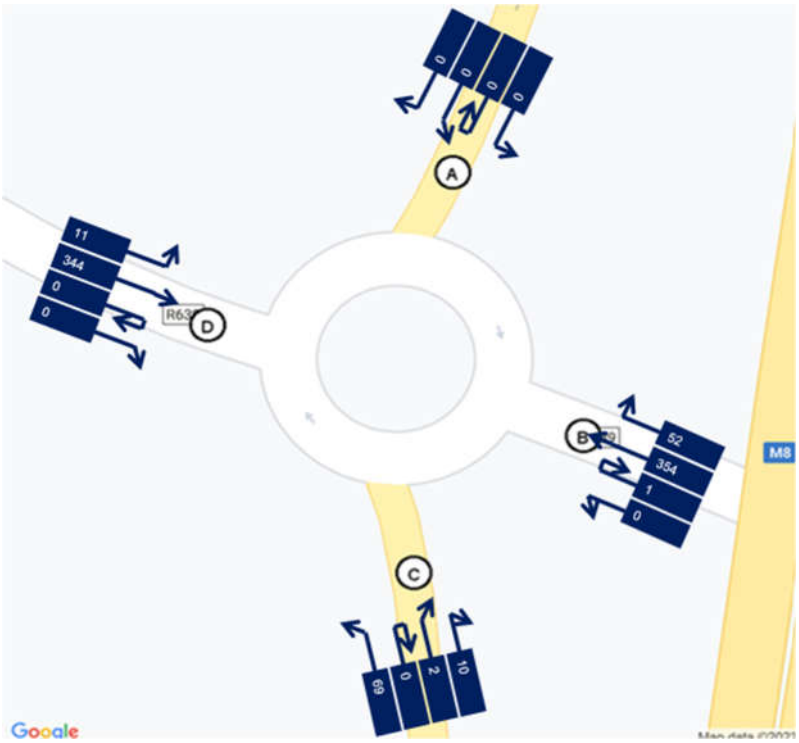

Fig 3.4.4: R639 Cork Rd./M8 Motorway– PM Peak Hour Flows

4.0 PROPOSED DEVELOPMENT

4.1 INTRODUCTION

4.1.1 The proposed development consists of 336 no. residential units comprising 242 no. houses, and 94 no. duplexes. The proposed houses consist of detached, semi-detached, and terraced units. A creche will be provided as part of an overall developed masterplan for the site.

4.1.2 The proposed primary access to the site is from the R639 Cork Rd. via a new entrance junction to be constructed as a part of the development works.

4.1.3 The scheme proposes residential parking at 2 spaces per house and 1.25 spaces per apartment for a total of 602 no. car parking spaces. Additional creche parking is proposed at 1 space per 3 staff and 1 space per 10 children giving a total of 15 spaces.

Fig 4.1.1: Proposed Site Layout

4.2 PHASING

4.2.1 The scheme of three hundred and thirty-six (336) residential units, and a creche, would be completed in a number of phases starting in 2022 and finishing by 2027. To demonstrate the impact of the development on the local road network, the Traffic Impact Assessment includes the base year (2021), the design year 2027 (full scheme complete), the design year +5 (2032), and the design year +15 (2042).

4.2.2 The proposed development will be phased as follows:

- 2023 – Phase 1 (40 residential units)
- 2024 – Phase 2 (adding 70 residential units)
- 2025 – Phase 3 (adding 77 residential units and creche)
- 2026 – Phase 4 (adding 66 residential units)
- 2027 – Full scheme complete

4.3 CONSTRUCTION STAGE TRAFFIC IMPACT

4.3.1 The construction stage of the proposed development will be phased as described above in section 4.2.2.

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 successful Contractor will develop a Construction Stage Traffic Management Plan including identified haulage routes in compliance with the Preliminary Temporary Traffic Management Plan developed in consultation with Cork County Council Roads & Transportation Department.

The surrounding road network is suitable to accommodate the construction traffic associated with the proposed development and the Construction Traffic Management Plan will include a range of mitigating measures to ensure the safety of the workforce on the site and accessing the site, and the public on the surrounding roads and to minimise construction traffic generation and disruption on the surrounding road network.

5.0 TRAFFIC GENERATION

5.1.1 Trip generation from the proposed 336 residential units was garnered via the TRICS database. MHL are 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. MHL & Associates Ltd. are one of over 300 worldwide licensed TRICS member organisations. 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 16th December 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, Cavan, Monaghan, and the UK were included from the TRICS database to determine the trip rates as shown in Table 5.1 below.

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	15	85	0.031	15	85	0.187	15	85	0.218
08:00 - 09:00	15	85	0.137	**15**	**85**	**0.482**	15	85	0.619
09:00 - 10:00	15	85	0.208	15	85	0.264	15	85	0.472
10:00 - 11:00	15	85	0.151	15	85	0.176	15	85	0.327
11:00 - 12:00	15	85	0.160	15	85	0.201	15	85	0.361
12:00 - 13:00	15	85	0.242	15	85	0.243	15	85	0.485
13:00 - 14:00	15	85	0.234	15	85	0.240	15	85	0.474
14:00 - 15:00	15	85	0.279	15	85	0.276	15	85	0.555
15:00 - 16:00	15	85	0.332	15	85	0.239	15	85	0.571
16:00 - 17:00	15	85	0.319	15	85	0.217	15	85	0.536
17:00 - 18:00	**15**	**85**	**0.480**	15	85	0.274	**15**	**85**	**0.754**
18:00 - 19:00	15	85	0.363	15	85	0.262	15	85	0.625
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.936			3.061			5.997

Table 5.1 Trip Generation Per Residential Unit (TRICS)

5.1.4 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 '*Fermoy Rural*', ref. **Table 6.1**, which 2016 Census figures imply 18% of persons in the area use sustainable means of travel.

5.1.5 Trip Generation from the proposed 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. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	2	505	0.496	2	505	0.297	2	505	0.793
08:00 - 09:00	**2**	**505**	**5.946**	2	505	3.271	2	505	9.217
09:00 - 10:00	2	505	5.649	**2**	**505**	**6.244**	**2**	**505**	**11.893**
10:00 - 11:00	2	505	0.396	2	505	0.793	2	505	1.189
11:00 - 12:00	2	505	1.586	2	505	0.396	2	505	1.982
12:00 - 13:00	2	505	3.271	2	505	4.460	2	505	7.731
13:00 - 14:00	2	505	1.982	2	505	1.982	2	505	3.964
14:00 - 15:00	2	505	2.279	2	505	1.288	2	505	3.567
15:00 - 16:00	2	505	0.892	2	505	1.982	2	505	2.874
16:00 - 17:00	2	505	1.982	2	505	2.081	2	505	4.063
17:00 - 18:00	2	505	3.766	2	505	5.055	2	505	8.821
18:00 - 19:00	2	505	0.000	2	505	0.793	2	505	0.793
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			28.245			28.642			56.887

Table 5.2 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 Fermoy area, specifically the electoral division of Fermoy Rural which encompasses the site. 18% of people in this area said they were commuting on foot, bike or using public transport.

PDF Excel Print

Population aged 5 years and over by means of travel to work, school or college

Means of Travel	Work	School or College	Total
On foot	173	245	418
Bicycle	13	3	16
Bus, minibus or coach	21	70	91
Train, DART or LUAS	4	1	5
Motorcycle or scooter	4	0	4
Car driver	1,267	51	1,318
Car passenger	183	744	927
Van	100	1	101
Other (incl. lorry)	7	1	8
Work mainly at or from home	44	2	46
Not stated	67	53	120
Total	1,883	1,171	3,054

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

6.1.3 A modal shift of 40% (implying an anticipated increase in public transport or active travel in the immediate area of 22%) for future year models is deemed to be reasonable. This modal shift increase of 22% will be applied to proposed development traffic from the opening year (when the development is fully completed) 2027, up to the design year 2042.

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 table presents residential development traffic for future years. 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.

Full Development (all phases)		AM PEAK		PM PEAK	
		Arrivals	Departures	Arrivals	Departures
New Residential Units Trip Generation - based on TRICs database					
336	*Peak Trics Trip Rate Per Unit*	*0.137*	*0.482*	*0.480*	*0.274*
	Peak Trips No. Units	*46*	*162*	*161*	*92*
	TOTAL	*208*		*253*	
	Calculating modal shift increase from 18% to 40%				
	Factor for increase to 40% modal split	0.73			
	Peak Trips No. Units	*34*	*119*	*118*	*67*
	TOTAL w/ modal shi	*152*		*185*	
New Creche Trip Generation - based on TRICs database					
4	*Peak Trics Trip Rate Per 100 sqm.*	*5.649*	*6.244*	*3.766*	*5.055*
	Peak Trips No. Units	*23*	*26*	*15*	*21*
	TOTAL	*49*		*36*	
	New Creche Trip Generation - traffic external to development				
	Factor of creche traffic external to dev.	0.8			
	Peak Trips No. Units	*18*	*20*	*12*	*17*
	TOTAL	*39*		29	
New Residential & Creche Trip Generation Combined TOTALS					
	Peak Trips No. Units	*52*	*139*	*130*	*84*
	TOTAL	*191*		*214*	

Table 7.1 Proposed Development Traffic in 2027 (full scheme)

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 will be used for 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. **Table 7.1** presents the expected 'new' trips to be generated by the proposed creche.

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 County Area.

	Cars/LGV	HGV	Combined
Count %	97%	3%	**100%**
2021 to 2027	1.119	1.249	**1.123**
2021 to 2032	1.201	1.427	**1.208**
2021 to 2042	1.290	1.608	**1.299**

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

Table 7.2 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 can be used to assign development traffic at each of the modelled junctions.

8.1.2 Traffic flow matrices have been developed for each Junction for the following scenarios:

- 2021 Current Year Flows AM/PM
- 2027 AM/PM With/Without Dev (Opening Year)
- 2032 AM/PM With/Without Dev (Design year +5)
- 2042 AM/PM With/Without Dev (Design year +15)

As previously mentioned in Section 3.2.7, a growth factor was applied to the traffic surveys undertaken to account for reduced traffic volumes experienced during the survey due to Covid-19 related travel restrictions. This growth factor was determined by comparing TII Traffic Data volumes from 2019 (pre-covid) to volumes in 2021. The site selected for the comparison study is the TII Traffic Data Site located on the R639 between Exit 15 of the M8 and Rathcormac. The week during which the new traffic counts were taken (12th December to 18th December 2021) was compared the week of 15th December to 21st December 2019. It was found that traffic volumes in 2021 were 95.14% of the volumes measured in 2019. To account for this in the survey undertaken, a growth factor of 1.05 was applied to the survey results and is included in the matrices presented below. The factored volumes should better represent "normal" traffic volumes as would be typically experienced resulting in a more robust analysis of the traffic network.

8.1.3 *Junction 1: T- junction serving R639 Cork Rd. & L-1542 local road*

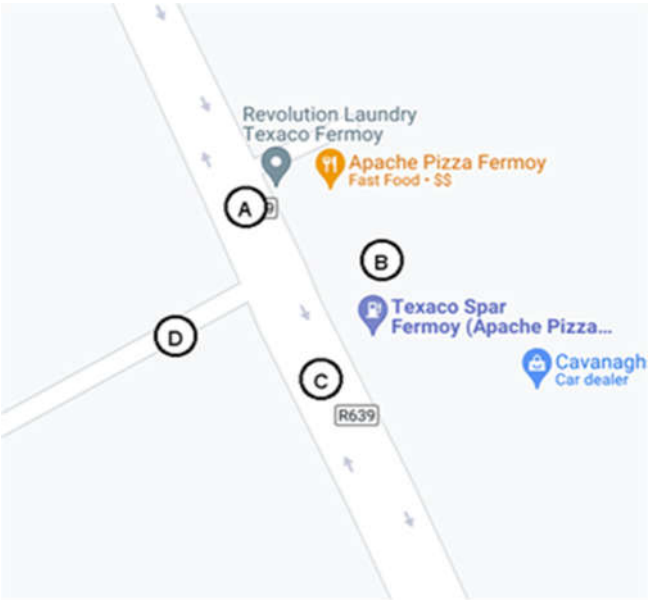

Figure 8.1.3: Junction 1 Arm Designation

2021 *AM*

Origin \ Destination	A	B	C	D	Tot
A	0	82	256	107	445
B	37	1	82	24	144
C	330	27	0	83	440
D	201	44	83	0	328
Total	567	154	421	214	1357

PM

Origin \ Destination	A	B	C	D	Tot
A	0	83	271	50	404
B	45	0	59	35	139
C	357	38	0	60	455
D	41	21	44	0	106
Total	443	142	374	145	1104

Table 8.1 Junction 1: Existing 2021 AM/PM Peak Hour Traffic Movements

2027 *AM*

Origin \ Destination	A	B	C	D	Tot
A	0	92	288	120	500
B	41	1	92	27	162
C	370	31	0	93	494
D	225	50	93	0	368
Total	637	173	473	241	1523

PM

Origin \ Destination	A	B	C	D	Tot
A	0	93	304	57	454
B	51	0	66	39	156
C	401	42	0	67	510
D	46	24	50	0	119
Total	498	159	420	163	1239

Table 8.2 Junction 1: 2027 Without Development AM/PM Peak Hour Traffic Movements

2027 *AM*

Origin \ Destination	A	B	C	D	Tot
A	0	92	303	120	515
B	41	1	97	27	167
C	423	35	0	107	565
D	225	50	98	0	373
Total	690	177	498	255	1619

PM

Origin \ Destination	A	B	C	D	Tot
A	0	93	347	57	497
B	51	0	75	39	165
C	437	46	0	73	556
D	46	24	57	0	126
Total	534	163	479	169	1344

Table 8.3 Junction 1: 2027 With Development AM/PM Peak Hour Traffic Movements

2032 *AM*

Origin \ Destination	A	B	C	D	Tot
A	0	99	309	129	538
B	44	1	99	29	174
C	398	33	0	100	531
D	242	53	100	0	396
Total	685	186	509	259	1639

PM

Origin \ Destination	A	B	C	D	Tot
A	0	100	327	61	488
B	55	0	71	42	167
C	431	46	0	72	549
D	49	25	53	0	128
Total	535	171	451	175	1333

Table 8.4 Junction 1: 2032 Without Development AM/PM Peak Hour Traffic Movements

2032 *AM*

Origin \ Destination	A	B	C	D	Tot
A	0	99	324	129	553
B	44	1	104	29	179
C	451	37	0	114	602
D	242	53	105	0	401
Total	738	190	534	273	1735

PM

Origin \ Destination	A	B	C	D	Tot
A	0	100	370	61	531
B	55	0	80	42	176
C	467	50	0	78	595
D	49	25	60	0	135
Total	571	175	510	181	1438

Table 8.5 Junction 1: 2032 With Development AM/PM Peak Hour Traffic Movements

2042 *AM*

Origin \ Destination	A	B	C	D	Tot
A	0	106	333	139	578
B	48	1	106	31	187
C	428	35	0	108	572
D	261	57	108	0	426
Total	737	201	547	278	1763

PM

Origin \ Destination	A	B	C	D	Tot
A	0	108	352	65	525
B	59	0	76	45	180
C	464	49	0	78	591
D	53	27	57	0	138
Total	576	184	486	188	1434

Table 8.6 Junction 1: 2042 Without Development AM/PM Peak Hour Traffic Movements

2042 *AM*

Origin \ Destination	A	B	C	D	Tot
A	0	106	348	139	593
B	48	1	111	31	192
C	481	39	0	122	643
D	261	57	113	0	431
Total	790	205	572	292	1859

PM

Origin \ Destination	A	B	C	D	Tot
A	0	108	395	65	568
B	59	0	85	45	189
C	500	53	0	84	637
D	53	27	64	0	145
Total	612	188	545	194	1539

Table 8.7 Junction 1: 2042 With Development AM/PM Peak Hour Traffic Movements

8.1.4 *Junction 2: Roundabout on the junction of R639 Cork Rd. and M8 Motorway*

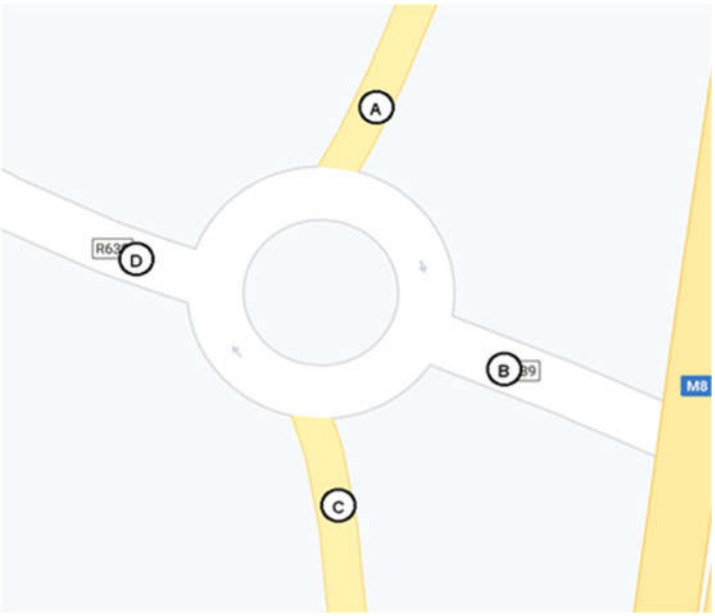

Figure 8.1.4: Junction 2 Arm Designation

2021 *AM*

Origin \ Destination	A	B	C	D	Tot
A	0	0	0	0	0
B	47	1	0	379	427
C	0	4	0	78	82
D	7	398	0	0	405
Total	55	403	0	457	915

PM

Origin \ Destination	A	B	C	D	Tot
A	0	0	0	0	0
B	55	1	0	372	427
C	2	11	0	72	85
D	12	361	0	0	373
Total	68	373	0	444	885

Table 8.8 Junction 2: 2021 AM/PM Peak Hour Traffic Movements

2027 *AM*

Origin \ Destination	A	B	C	D	Tot
A	0	0	0	0	0
B	53	1	0	426	480
C	0	5	0	87	92
D	8	447	0	0	455
Total	61	453	0	513	1027

PM

Origin \ Destination	A	B	C	D	Tot
A	0	0	0	0	0
B	61	1	0	417	480
C	2	12	0	81	95
D	13	406	0	0	419
Total	77	419	0	499	994

Table 8.9 Junction 2: 2027 Without Development AM/PM Peak Hour Traffic Movements

2027 *AM*

Origin \ Destination	A	B	C	D	Tot
A	0	0	0	0	0
B	53	1	0	448	502
C	0	5	0	92	97
D	9	514	0	0	523
Total	62	520	0	540	1122

PM

Origin \ Destination	A	B	C	D	Tot
A	0	0	0	0	0
B	61	1	0	477	540
C	2	12	0	92	106
D	14	443	0	0	457
Total	78	456	0	570	1103

Table 8.10 Junction 2: 2027 With Development AM/PM Peak Hour Traffic Movements

2032 *AM*

Origin \ Destination	A	B	C	D	Tot
A	0	0	0	0	0
B	57	1	0	458	516
C	0	5	0	94	99
D	9	481	0	0	490
Total	66	487	0	552	1105

PM

Origin \ Destination	A	B	C	D	Tot
A	0	0	0	0	0
B	66	1	0	449	516
C	3	13	0	88	103
D	14	436	0	0	450
Total	82	450	0	536	1069

Table 8.11 Junction 2: 2032 Without Development AM/PM Peak Hour Traffic Movements

2032 *AM*

Origin \ Destination	A	B	C	D	Tot
A	0	0	0	0	0
B	57	1	0	480	538
C	0	5	0	99	104
D	10	548	0	0	558
Total	67	554	0	579	1200

PM

Origin \ Destination	A	B	C	D	Tot
A	0	0	0	0	0
B	66	1	0	509	576
C	3	13	0	99	114
D	15	473	0	0	488
Total	83	487	0	607	1178

Table 8.12 Junction 2: 2032 With Development AM/PM Peak Hour Traffic Movements

2042 *AM*

Origin \ Destination	A	B	C	D	Tot
A	0	0	0	0	0
B	61	1	0	492	555
C	0	5	0	101	106
D	10	517	0	0	527
Total	71	524	0	593	1188

PM

Origin \ Destination	A	B	C	D	Tot
A	0	0	0	0	0
B	71	1	0	483	555
C	3	14	0	94	110
D	15	469	0	0	484
Total	89	484	0	577	1150

Table 8.13 Junction 2: 2042 Without Development AM/PM Peak Hour Traffic Movements

2042 *AM*

Origin \ Destination	A	B	C	D	Tot
A	0	0	0	0	0
B	61	1	0	514	577
C	0	5	0	106	111
D	11	584	0	0	595
Total	72	591	0	620	1283

PM

Origin \ Destination	A	B	C	D	Tot
A	0	0	0	0	0
B	71	1	0	543	615
C	3	14	0	105	121
D	16	506	0	0	522
Total	90	521	0	648	1259

Table 8.14 Junction 2: 2042 With Development AM/PM Peak Hour Traffic Movements

8.1.5 *Junction 3: Proposed development entrance junction*

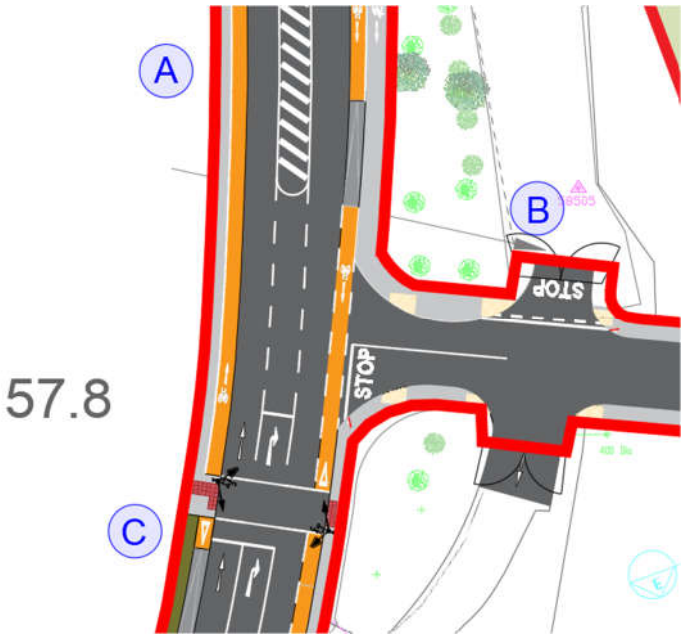

Figure 8.1.5: Junction 3 Arm Designation

2021 *AM*

Origin \ Destination	A	B	C	Tot
A	0	0	421	421
B	0	0	0	0
C	440	0	0	440
Total	440	0	421	861

PM

Origin \ Destination	A	B	C	Tot
A	0	0	374	374
B	0	0	0	0
C	455	0	0	455
Total	455	0	374	828

Table 8.15 Junction 3: 2021 AM/PM Peak Hour Traffic Movements

2027 *AM*

Origin \ Destination	A	B	C	Tot
A	0	0	473	473
B	0	0	0	0
C	494	0	0	494
Total	494	0	473	967

PM

Origin \ Destination	A	B	C	Tot
A	0	0	420	420
B	0	0	0	0
C	510	0	0	510
Total	510	0	420	930

Table 8.16 Junction 3: 2027 Without Development AM/PM Peak Hour Traffic Movements

2027 *AM*

Origin \ Destination	A	B	C	Tot
A	0	25	473	498
B	71	0	68	139
C	494	27	0	521
Total	565	52	541	1158

PM

Origin \ Destination	A	B	C	Tot
A	0	59	420	479
B	46	0	38	84
C	510	71	0	581
Total	556	130	458	1144

Table 8.17 Junction 3: 2027 With Development AM/PM Peak Hour Traffic Movements

2032 *AM*

Origin \ Destination	A	B	C	Tot
A	0	0	509	509
B	0	0	0	0
C	531	0	0	531
Total	531	0	509	1040

PM

Origin \ Destination	A	B	C	Tot
A	0	0	451	451
B	0	0	0	0
C	549	0	0	549
Total	549	0	451	1001

Table 8.18 Junction 3: 2032 Without Development AM/PM Peak Hour Traffic Movements

2032 *AM*

Origin \ Destination	A	B	C	Tot
A	0	25	509	534
B	71	0	68	139
C	531	27	0	558
Total	602	52	577	1231

PM

Origin \ Destination	A	B	C	Tot
A	0	59	451	510
B	46	0	38	84
C	549	71	0	620
Total	595	130	489	1215

Table 8.19 Junction 3: 2032 With Development AM/PM Peak Hour Traffic Movements

2042 *AM*

Origin \ Destination	A	B	C	Tot
A	0	0	547	547
B	0	0	0	0
C	572	0	0	572
Total	572	0	547	1119

PM

Origin \ Destination	A	B	C	Tot
A	0	0	486	486
B	0	0	0	0
C	591	0	0	591
Total	591	0	486	1076

Table 8.20 Junction 3: 2042 Without Development AM/PM Peak Hour Traffic Movements

2042 *AM*

Origin \ Destination	A	B	C	Tot
A	0	25	547	572
B	71	0	68	139
C	572	27	0	599
Total	643	52	615	1310

PM

Origin \ Destination	A	B	C	Tot
A	0	59	486	545
B	46	0	38	84
C	591	71	0	662
Total	637	130	524	1290

Table 8.29 Junction 3: 2042 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 three identified junctions presented both with/without development in place for the year 2021 (traffic counts undertaken in December 2021), the Opening Year 2027, the Opening Year + 5 (2032), and the Opening Year +15 (2042). The Junctions 9 Picady software was used to analyse Junctions 1 & 3, whilst the Junction 9 Arcady Software Package was used to analyse the roundabout at Junction 2. The complete results sheets for all of the generated models are provided as an appendix (appendices A & B).

9.1.2 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 junction implies that the junction has reached capacity but is still operational with delay incurred. The following **Table 9.1** describes the different LOS and the implications for the junctions being assessed.

9.1.3 The Junctions 9: ARCADY 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 junctions 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

9.2 Junction 1: T- junction serving R639 Cork Rd. & L-1542 local road

9.2.1 The Picady results for the junction both with/without development for the modelled years are presented in **Table 9.2** below.

9.2.2 The current year (2021) results are representative of how the junction currently operates during peak periods. This is borne out in terms of measured queue and observed delay recorded as part of the data collection process. **Figure 8.1.3** is referred to for arm designation when interpreting the results. The constructed model is deemed to be fit for purpose.

9.2.3 The results indicate that the junction operates within capacity currently and will continue to do so up to and including the design year 2042 with the development in place. The maximum future year RFC (Ratio of Flow to Capacity) is 75% in 2042 AM peak. The Level of Service for this maximum RFC is D – Borderline Unstable. This Level of Service signals that the junction is reaching capacity but remains operational while incurring delays. The modelling results demonstrate that this Level of Service will be experienced both with and without development traffic in the year 2042. The full results are included in the Appendix section of this report.

9.2.4 Future year results, both with and without development traffic, show a steady degradation in capacity at the junction with some queuing occurring.

	AM						PM					
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Network Residual Capacity	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Network Residual Capacity
	2021 - Without Development											
Stream B-ACD	D1	0.5	10.72	0.34	B	24 % [Stream D-AB]	D2	0.4	10.01	0.30	B	70 % [Stream B-ACD]
Stream A-D		0.2	7.63	0.20	A			0.1	6.60	0.09	A	
Stream D-AB		1.2	14.92	0.54	B			0.1	7.39	0.11	A	
Stream D-BC		0.6	17.05	0.36	C			0.2	11.80	0.16	B	
Stream C-B		0.1	5.97	0.05	A			0.1	5.84	0.06	A	
	2027 - Without Development											
Stream B-ACD	D3	0.6	11.66	0.36	B	23 % [Stream D-AB]	D4	0.5	11.41	0.35	B	52 % [Stream B-ACD]
Stream A-D		0.3	7.87	0.22	A			0.1	6.91	0.11	A	
Stream D-AB		1.2	15.30	0.55	C			0.1	7.95	0.13	A	
Stream D-BC		0.6	18.02	0.38	C			0.2	13.30	0.20	B	
Stream C-B		0.1	6.17	0.06	A			0.1	6.05	0.07	A	
	2027 - With Development											
Stream B-ACD	D5	0.6	12.39	0.38	B	17 % [Stream D-AB]	D6	0.6	12.41	0.39	B	42 % [Stream B-ACD]
Stream A-D		0.3	8.27	0.23	A			0.1	7.11	0.11	A	
Stream D-AB		1.3	17.22	0.58	C			0.2	8.37	0.13	A	
Stream D-BC		0.7	20.73	0.42	C			0.3	14.92	0.23	B	
Stream C-B		0.1	6.27	0.06	A			0.1	6.24	0.08	A	
	2032 - Without Development											
Stream B-ACD	D7	0.7	13.13	0.41	B	14 % [Stream D-AB]	D8	0.6	12.65	0.39	B	41 % [Stream B-ACD]
Stream A-D		0.3	8.25	0.25	A			0.1	7.14	0.12	A	
Stream D-AB		1.5	18.59	0.61	C			0.2	8.33	0.14	A	
Stream D-BC		0.7	20.83	0.43	C			0.3	14.48	0.22	B	
Stream C-B		0.1	6.34	0.06	A			0.1	6.22	0.08	A	
	2032 - With Development											
Stream B-ACD	D9	0.8	14.11	0.43	B	9 % [Stream D-AB]	D10	0.7	13.92	0.43	B	32 % [Stream B-ACD]
Stream A-D		0.3	8.69	0.26	A			0.1	7.36	0.12	A	
Stream D-AB		1.8	21.66	0.65	C			0.2	8.81	0.15	A	
Stream D-BC		0.9	24.50	0.47	C			0.3	16.42	0.26	C	
Stream C-B		0.1	6.45	0.07	A			0.1	6.42	0.09	A	
	2042 - Without Development											
Stream B-ACD	D11	0.9	15.43	0.47	C	6 % [Stream D-AB]	D12	0.8	14.28	0.44	B	31 % [Stream B-ACD]
Stream A-D		0.4	8.72	0.27	A			0.1	7.40	0.13	A	
Stream D-AB		2.2	24.81	0.70	C			0.2	8.86	0.16	A	
Stream D-BC		0.9	25.14	0.49	D			0.3	16.06	0.25	C	
Stream C-B		0.1	6.54	0.07	A			0.1	6.39	0.09	A	
	2042 - With Development											
Stream B-ACD	D13	1.0	16.91	0.50	C	2 % [Stream D-AB]	D14	0.9	15.97	0.48	C	24 % [Stream B-ACD]
Stream A-D		0.4	9.21	0.28	A			0.2	7.63	0.13	A	
Stream D-AB		2.7	30.90	0.75	D			0.2	9.44	0.17	A	
Stream D-BC		1.2	30.57	0.54	D			0.4	18.48	0.29	C	
Stream C-B		0.1	6.65	0.07	A			0.1	6.61	0.10	A	

Table 9.2: Junction 1: Picady software modelling results

9.2.5 The modal shift increase of 22% applied to the development traffic (see **Section 6.1.3**) has not been applied to the background traffic of the model. This ensures a conservative analysis of the junction.

9.3 Junction 2: Roundabout on the junction of R639 Cork Rd. and M8 Motorway

9.3.1 The Arcady results for Junction 2 both with/without development are presented in **Table 9.3** below.

9.3.2 The current year (2021) results are representative of how the junction currently operates during peak periods. This is borne out in terms of measured queue and observed delay recorded as part of the data collection process. **Figure 8.1.4** is referred to for arm designation when interpreting the results. The constructed model is deemed to be fit for purpose.

9.3.3 The results indicate that the junction currently operates well within capacity and will continue to do so up to and including the design year 2042 with the development in place. The maximum future year RFC (Ratio of Flow to Capacity) is 33% in 2042 PM peak. The Level of Service for this maximum RFC is A – Free Flow. The full results are included in the Appendix section of this report.

9.3.4 The modal shift increase of 22% applied to the development traffic (see **Section 6.1.3**) has not been applied to the background traffic of the model. This ensures a conservative analysis of the junction.

	AM						PM					
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Network Residual Capacity	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Network Residual Capacity
	2021 - Without Development											
Arm 2	D1	0.3	2.31	0.23	A	317 %	D2	0.3	2.31	0.23	A	316 %
Arm 3		0.1	2.17	0.05	A			0.1	2.18	0.05	A	
Arm 4		0.3	2.18	0.21	A	[Arm 2]		0.2	2.15	0.20	A	[Arm 2]
	2027 - Without Development											
Arm 2	D3	0.4	2.40	0.26	A	271 %	D4	0.4	2.40	0.26	A	271 %
Arm 3		0.1	2.25	0.06	A			0.1	2.25	0.06	A	
Arm 4		0.3	2.26	0.24	A	[Arm 2]		0.3	2.23	0.22	A	[Arm 2]
	2027 - With Development											
Arm 2	D5	0.4	2.44	0.27	A	232 %	D6	0.4	2.51	0.29	A	230 %
Arm 3		0.1	2.28	0.06	A			0.1	2.33	0.07	A	
Arm 4		0.4	2.37	0.28	A	[Arm 4]		0.3	2.28	0.24	A	[Arm 2]
	2032 - Without Development											
Arm 2	D7	0.4	2.47	0.28	A	245 %	D8	0.4	2.47	0.28	A	245 %
Arm 3		0.1	2.30	0.07	A			0.1	2.30	0.07	A	
Arm 4		0.3	2.32	0.26	A	[Arm 2]		0.3	2.28	0.24	A	[Arm 2]
	2032 - With Development											
Arm 2	D9	0.4	2.51	0.29	A	211 %	D10	0.5	2.58	0.31	A	209 %
Arm 3		0.1	2.33	0.07	A			0.1	2.39	0.08	A	
Arm 4		0.4	2.44	0.29	A	[Arm 4]		0.3	2.34	0.26	A	[Arm 2]
	2042 - Without Development											
Arm 2	D11	0.4	2.54	0.30	A	221 %	D12	0.4	2.54	0.30	A	220 %
Arm 3		0.1	2.35	0.07	A			0.1	2.36	0.07	A	
Arm 4		0.4	2.39	0.28	A	[Arm 2]		0.3	2.34	0.26	A	[Arm 2]
	2042 - With Development											
Arm 2	D13	0.5	2.58	0.31	A	192 %	D14	0.5	2.66	0.33	A	189 %
Arm 3		0.1	2.39	0.07	A			0.1	2.46	0.08	A	
Arm 4		0.5	2.52	0.31	A	[Arm 4]		0.4	2.41	0.28	A	[Arm 2]

Table 9.3: Junction 2: Arcady software modelling results

9.4 Junction 3: Proposed development entrance junction

9.4.1 The Picady results for Junction 3 both with/without development are presented in **Table 9.4** below.

9.4.2 The current year (2021) results are representative of how the junction currently operates during peak periods (i.e. no junction present). This is borne out in terms of measured queue and observed delay recorded as part of the data collection process. **Figure 8.1.5** is referred to for arm designation when interpreting the results. The constructed model is deemed to be fit for purpose.

9.4.3 The results indicate that the proposed junction will operate within capacity up to and including the design year 2042 with the development in place. The maximum future year RFC (Ratio of Flow to Capacity) is 35% in 2042 AM peak. The Level of Service for this maximum RFC is B – Reasonably Free-Flow. This Level of Service signals that the junction is operating within capacity with no delay incurred. The full results are included in the Appendix section of this report.

9.4.4 The modal shift increase of 22% applied to the development traffic (see **Section 6.1.3**) has not been applied to the background traffic of the model. This ensures a conservative analysis of the junction.

	AM						PM					
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Network Residual Capacity	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Network Residual Capacity
2021 - Without Development												
Stream B-AC	D1	0.0	0.00	0.00	A	900 %	D2	0.0	0.00	0.00	A	900 %
Stream C-B		0.0	0.00	0.00	A	[]		0.0	0.00	0.00	A	[]
2027 - Without Development												
Stream B-AC	D3	0.0	0.00	0.00	A	900 %	D4	0.0	0.00	0.00	A	900 %
Stream C-B		0.0	0.00	0.00	A	[]		0.0	0.00	0.00	A	[]
2027 - With Development												
Stream B-AC	D5	0.5	11.35	0.33	B	58 %	D6	0.3	9.83	0.20	A	80 %
Stream C-B		0.1	6.66	0.05	A	[Stream B-AC]		0.2	7.24	0.14	A	[Stream B-AC]
2032 - Without Development												
Stream B-AC	D7	0.0	0.00	0.00	A	900 %	D8	0.0	0.00	0.00	A	900 %
Stream C-B		0.0	0.00	0.00	A	[]		0.0	0.00	0.00	A	[]
2032 - With Development												
Stream B-AC	D9	0.5	11.91	0.34	B	52 %	D10	0.3	10.23	0.21	B	72 %
Stream C-B		0.1	6.78	0.05	A	[Stream B-AC]		0.2	7.36	0.14	A	[Stream B-AC]
2042 - Without Development												
Stream B-AC	D11	0.0	0.00	0.00	A	900 %	D12	0.0	0.00	0.00	A	900 %
Stream C-B		0.0	0.00	0.00	A	[]		0.0	0.00	0.00	A	[]
2042 - With Development												
Stream B-AC	D13	0.5	12.59	0.35	B	45 %	D14	0.3	10.72	0.22	B	64 %
Stream C-B		0.1	6.90	0.05	A	[Stream B-AC]		0.2	7.50	0.14	A	[Stream B-AC]

Table 9.4 Junction 3: Picady software modelling results

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.

10.1.2 The upgrade works proposed on the R639 adjacent to the site will include the construction of the new proposed entrance junction and improvements upon the existing pedestrian and cycling facilities presently available. These works will increase connectivity around the local area and enable residents of the new development to access Fermoy town by utilising sustainable means of transport.

11.0 ROAD SAFETY

11.1.1 Existing Road Network Safety

The R639 operates at a 60kph speed limit at the location of the proposed development entrance and currently serves as the main route linking Fermoy to the M8 Motorway/ Rathcormac. An existing footpath starts approximately 80m north of the proposed development entrance and extends on the eastern side of the R639 providing pedestrian connectivity into Fermoy.

11.1.2 Road Collision Database

A review of the RSA Road Collision Statistics was undertaken for the area in the vicinity of the applicants' site.

One minor collision occurred in 2009 at a location on the R639 approximately 350m south of the proposed development entrance. The circumstances of the collision involved a car being rear ended resulting in one minor casualty.

A number of other collisions occurred in the wider area over the available 11-year period as shown in **Figure 11.1**.

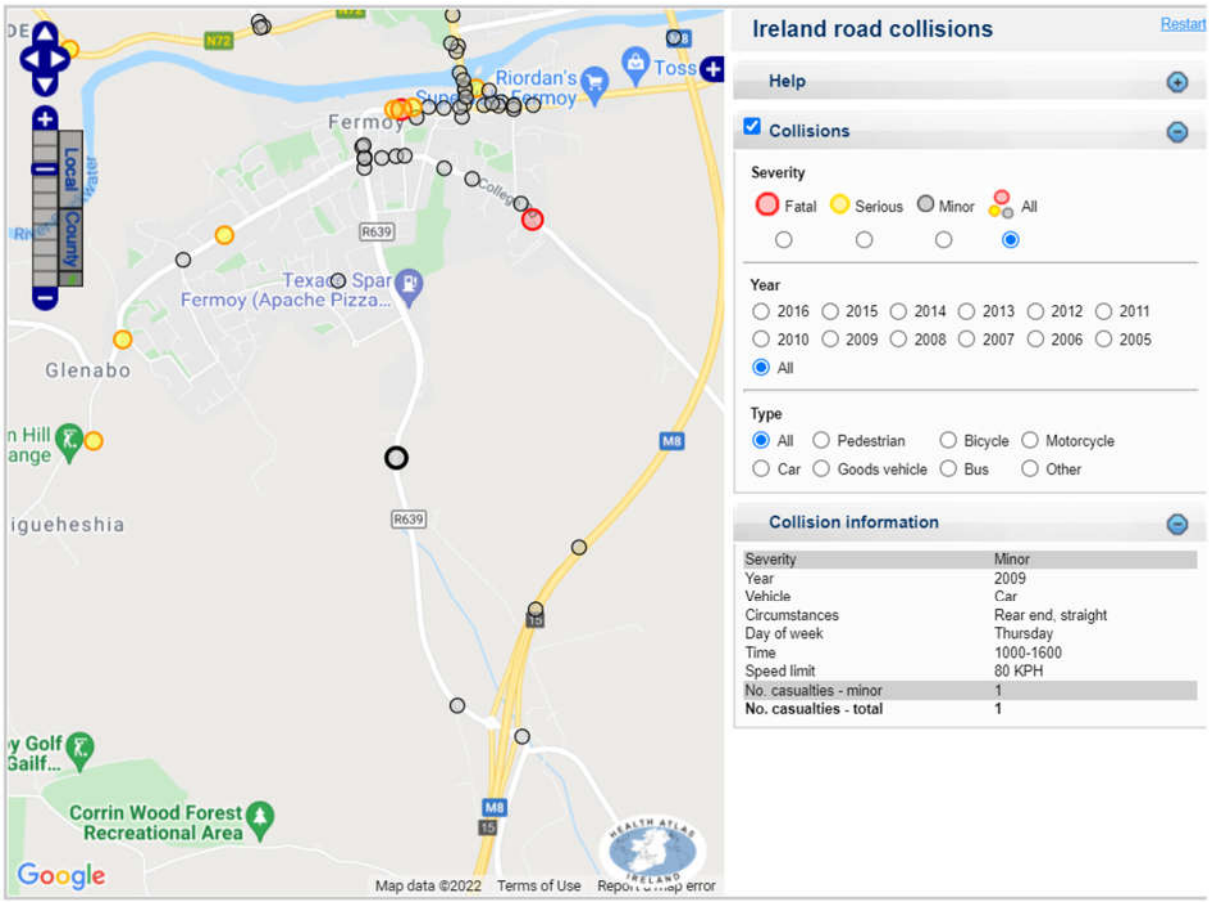

Figure 11.1: Collision statistics for Roads in the vicinity of the site

11.1.3 Proposed Road Safety Mitigation Measures

The proposed development will include a number of measures that are deemed necessary to ensure road safety in the area. The proposed entrance is designed with appropriate sight distances for vehicles entering and exiting the development. Additionally, a right turn lane is proposed for northbound traffic accessing the development. The introduction of the northbound turning lane will reduce the risk of vehicle collisions caused by stopped vehicles attempting to access the new development.

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 The close proximity to current public transport facilities present on the R639, via connection to existing footpath network, in addition to proposed improvements to the cycling network should result in the scheme verging upon the target modal split as set out by Government (45%).

12.3 The construction stage of the scheme proposes to re-use / relocate the bulk of the excavation within the site implying that there will be a significant reduction in construction traffic generated. This will minimise the impact the development will have on the existing roads network during this period. The importation of structural fill may be required should suitable stone not be recovered during site excavations. The Construction and Demolition Waste Management Plan completed by Walsh Design Group and included with this submittal should be referred to for further detail on the importation and exportation of material from the site grounds.

13.0 INTERNAL LAYOUT & PARKING PROVISION

13.1 **Figure 4.1.1** presents the proposed layout which includes the provision of on-street parking, footpaths, pedestrian/cycle permeability throughout the site on designated off-road routes, and raised junction surfaces serving as a speed control measure.

13.2 Parking is provided in accordance with the LAP and is suitably located on site in private driveways and shared on-street parking.

14.0 PUBLIC TRANSPORT

14.1 The 245-bus route available at a stop within 10 mins walk of the site provides an hourly service from Cork City to Clonmel. The route includes stops in Glanmire, Sallybrook, Watergrasshill, Rathcormac, Mitchelstown, and Cahir, amongst others.

The 768-route to Busaras Dublin stops four times daily within 20 mins walk of the site.

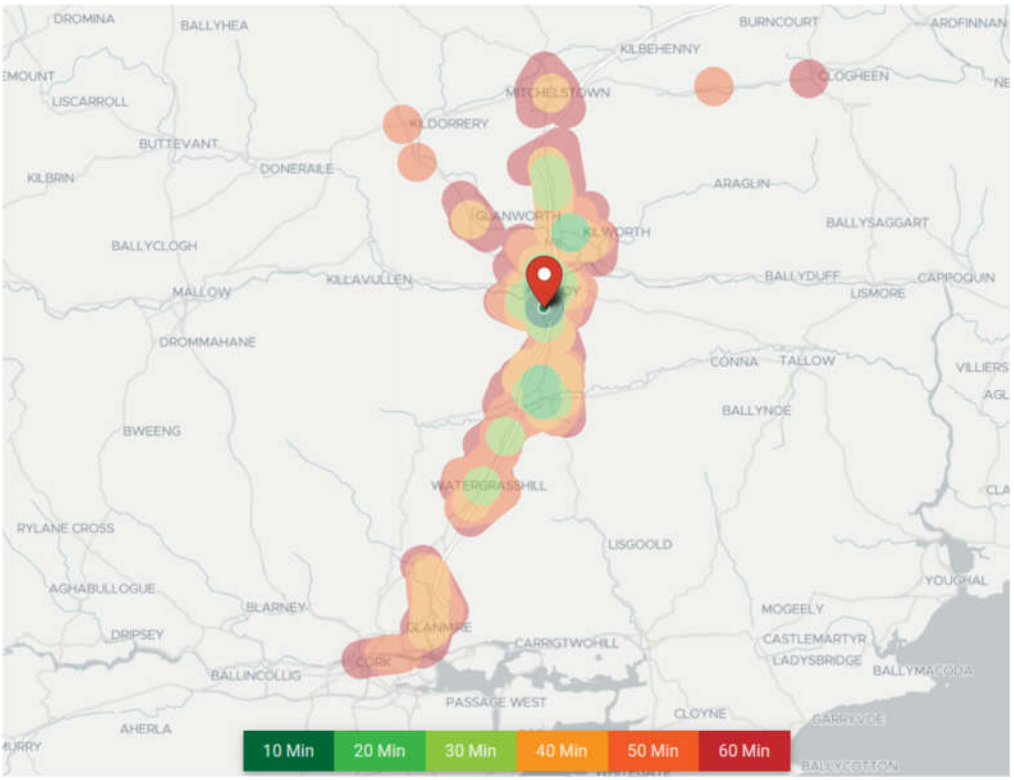

Figure 14.1: Time of travel by Public Transport Options

14.2 The above isochrone map shows the areas currently accessible by public transport based on time of travel from the site (limited to 60 mins).
Note: The distances include transfers to different services so are indicative only (delay may be experienced during transfer).

14.3 The isochrone map indicates current bus provision in the area allows travel to a wide area within 60 mins, including to the main employment centre of Cork City.

15.0 ACCESSIBILITY AND INTEGRATION

15.1 A desktop assessment of 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.

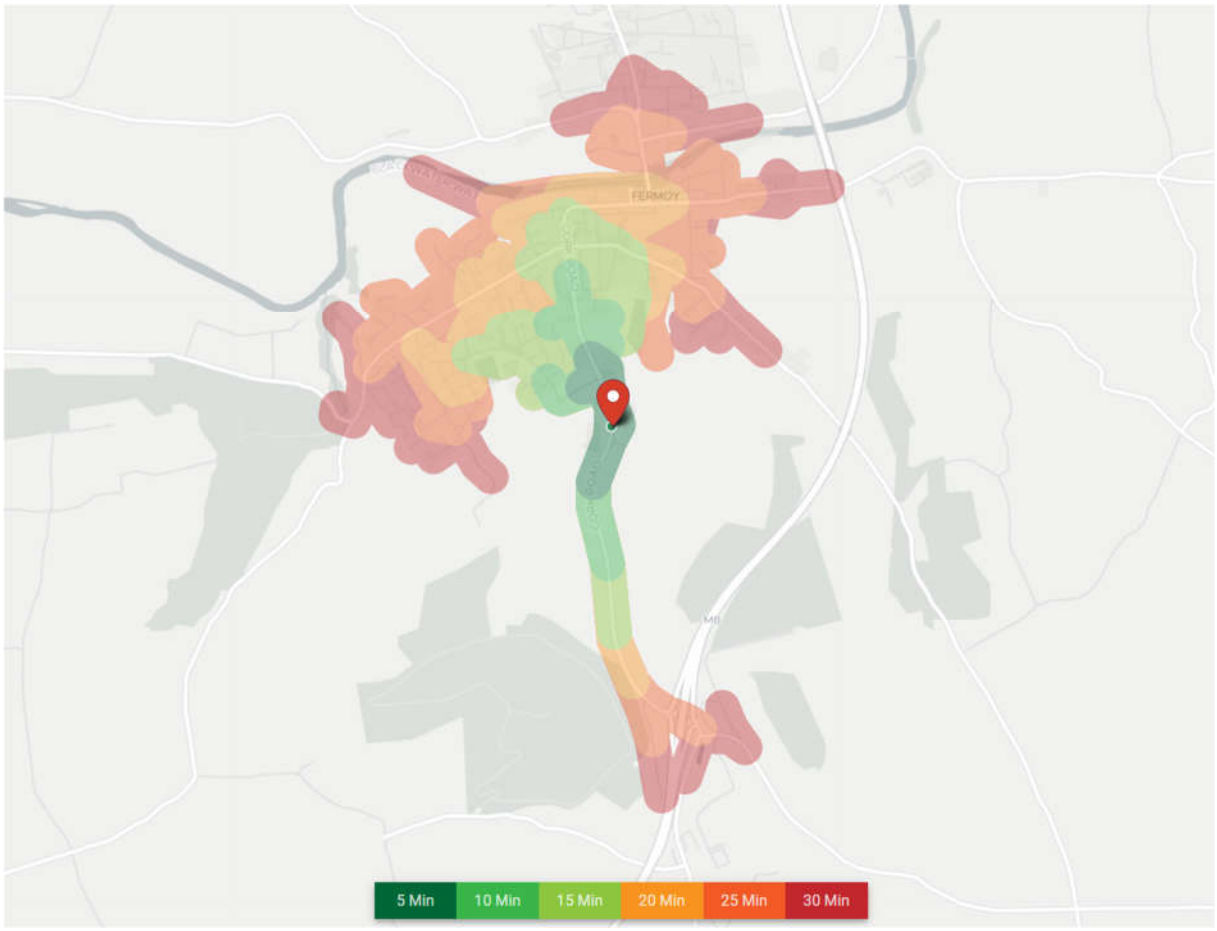

Figure 15.1: Proposed Development: Walking distance to local area

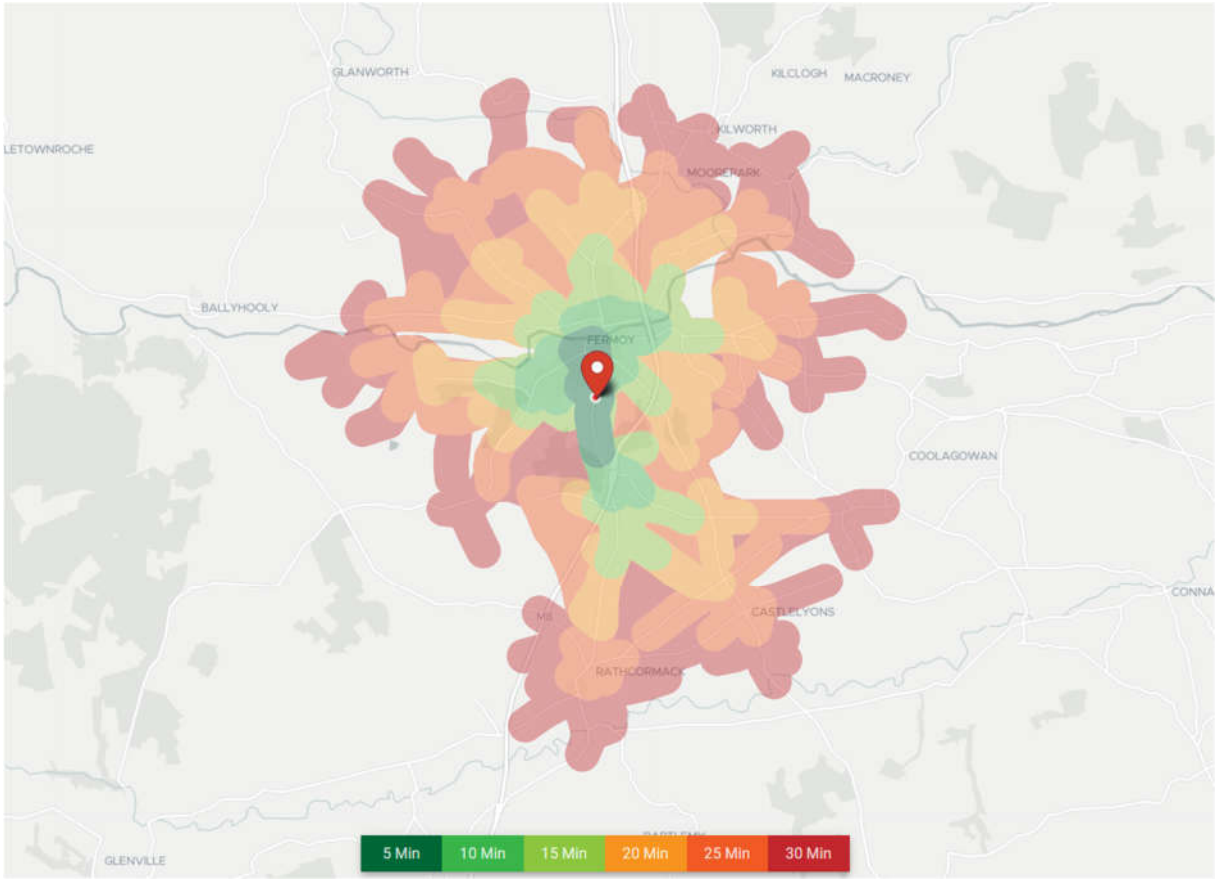

Figure 15.2: Proposed Development: Cycle distance to local area

15.2 Within 10 mins walk time from the site:

- Texaco Spar
- Bus Stop Cork Rd (Service 245)

Within 15 mins walk time from the site:

- Fermoy Town Playground
- Bishop Murphy Memorial Primary School
- St. Patricks Catholic Church
- St. Colmans College
- Loretto Catholic Secondary School
- Loretto Fermoy Sports Complex
- Bus Stop St. Patricks Ave. (Service 245)

Within 20 mins walk time from the site:

- Fermoy Post Office
- Fermoy Library
- Fermoy Educate Together National School
- Fermoy Rowing Club
- AIB Bank
- Synergy Credit Union
- Bank of Ireland
- McCauley Pharmacy
- Bus Stop Fermoy (Service 245 & 768)

Within 30 mins walk time from the site:

- Fermoy Health Centre
- Fermoy Town Park
- Fermoy Leisure Centre
- Riordan's SuperValu
- Lidl
- Fermoy GAA (Fitzgerald Park)
- Christ Church
- Fermoy Playground

15.3 The cycle range is presented in similar terms and relates to the average distance travelled in a specific time (15-18 kmh).

Note: The travel speed used is on the low side, an experienced cyclist would have a 26-30kph average speed.

16.0 ACCESS FOR PEOPLE WITH DISABILITIES

16.1 The internal layout of the development is designed to accommodate all road users and will adhere to national guidelines regarding people with disabilities.

17.0 MOBILITY MANAGEMENT PLAN

A separate Mobility Management Plan for this development has been completed and is included with this planning application.

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
- Department of Transport (May 2019) Design Manual for Urban Roads and Streets
- RSA Ireland Road Collisions

  https://www.rsa.ie/road-safety/statistics/collisions

APPENDIX A: TRAFFIC MODEL OUTPUTS – JUNCTIONS 9: PICADY

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.5.1.7462
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The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution

Filename: Junction 1.j9
Path: N:\TIA\19099_Fermoy Dev Cumnor\Traffic Generation\Junctions 9
Report generation date: 20/01/2022 16:50:09

»2021 - Without Development, AM
»2021 - Without Development, PM
»2027 - Without Development, AM
»2027 - Without Development, PM
»2027 - With Development , AM
»2027 - With Development, PM
»2032 - Without Development, AM
»2032 - Without Development, PM
»2032 - With Development, AM
»2032 - With Development, PM
»2042 - Without Development, AM
»2042 - Without Development, PM
»2042 - With Development, AM
»2042 - With Development, PM

Summary of junction performance

	AM						PM					
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Network Residual Capacity	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Network Residual Capacity
2021 - Without Development												
Stream B-ACD	D1	0.5	10.72	0.34	B	24 % [Stream D-AB]	D2	0.4	10.01	0.30	B	70 % [Stream B-ACD]
Stream A-D		0.2	7.63	0.20	A			0.1	6.60	0.09	A	
Stream D-AB		1.2	14.92	0.54	B			0.1	7.39	0.11	A	
Stream D-BC		0.6	17.05	0.36	C			0.2	11.80	0.16	B	
Stream C-B		0.1	5.97	0.05	A			0.1	5.84	0.06	A	
2027 - Without Development												
Stream B-ACD	D3	0.6	11.66	0.36	B	23 % [Stream D-AB]	D4	0.5	11.41	0.35	B	52 % [Stream B-ACD]
Stream A-D		0.3	7.87	0.22	A			0.1	6.91	0.11	A	
Stream D-AB		1.2	15.30	0.55	C			0.1	7.95	0.13	A	
Stream D-BC		0.6	18.02	0.38	C			0.2	13.30	0.20	B	
Stream C-B		0.1	6.17	0.06	A			0.1	6.05	0.07	A	
2027 - With Development												
Stream B-ACD	D5	0.6	12.39	0.38	B	17 % [Stream D-AB]	D6	0.6	12.41	0.39	B	42 % [Stream B-ACD]
Stream A-D		0.3	8.27	0.23	A			0.1	7.11	0.11	A	
Stream D-AB		1.3	17.22	0.58	C			0.2	8.37	0.13	A	
Stream D-BC		0.7	20.73	0.42	C			0.3	14.92	0.23	B	
Stream C-B		0.1	6.27	0.06	A			0.1	6.24	0.08	A	
2032 - Without Development												
Stream B-ACD	D7	0.7	13.13	0.41	B	14 % [Stream D-AB]	D8	0.6	12.65	0.39	B	41 % [Stream B-ACD]
Stream A-D		0.3	8.25	0.25	A			0.1	7.14	0.12	A	
Stream D-AB		1.5	18.59	0.61	C			0.2	8.33	0.14	A	
Stream D-BC		0.7	20.83	0.43	C			0.3	14.48	0.22	B	
Stream C-B		0.1	6.34	0.06	A			0.1	6.22	0.08	A	
2032 - With Development												
Stream B-ACD	D9	0.8	14.11	0.43	B	9 % [Stream D-AB]	D10	0.7	13.92	0.43	B	32 % [Stream B-ACD]
Stream A-D		0.3	8.69	0.26	A			0.1	7.36	0.12	A	
Stream D-AB		1.8	21.66	0.65	C			0.2	8.81	0.15	A	
Stream D-BC		0.9	24.50	0.47	C			0.3	16.42	0.26	C	
Stream C-B		0.1	6.45	0.07	A			0.1	6.42	0.09	A	
2042 - Without Development												
Stream B-ACD	D11	0.9	15.43	0.47	C	6 % [Stream D-AB]	D12	0.8	14.28	0.44	B	31 % [Stream B-ACD]
Stream A-D		0.4	8.72	0.27	A			0.1	7.40	0.13	A	
Stream D-AB		2.2	24.81	0.70	C			0.2	8.86	0.16	A	
Stream D-BC		0.9	25.14	0.49	D			0.3	16.06	0.25	C	
Stream C-B		0.1	6.54	0.07	A			0.1	6.39	0.09	A	
2042 - With Development												
Stream B-ACD	D13	1.0	16.91	0.50	C	2 % [Stream D-AB]	D14	0.9	15.97	0.48	C	24 % [Stream B-ACD]
Stream A-D		0.4	9.21	0.28	A			0.2	7.63	0.13	A	
Stream D-AB		2.7	30.90	0.75	D			0.2	9.44	0.17	A	
Stream D-BC		1.2	30.57	0.54	D			0.4	18.48	0.29	C	
Stream C-B		0.1	6.65	0.07	A			0.1	6.61	0.10	A	

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

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. 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	20/01/2022
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

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	2021 - Without Development	AM	ONE HOUR	08:00	09:30	15
D2	2021 - Without Development	PM	ONE HOUR	17:00	18:30	15
D3	2027 - Without Development	AM	ONE HOUR	08:00	09:30	15
D4	2027 - Without Development	PM	ONE HOUR	17:00	18:30	15
D5	2027 - With Development	AM	ONE HOUR	08:00	09:30	15
D6	2027 - With Development	PM	ONE HOUR	17:00	18:30	15
D7	2032 - Without Development	AM	ONE HOUR	08:00	09:30	15
D8	2032 - Without Development	PM	ONE HOUR	17:00	18:30	15
D9	2032 - With Development	AM	ONE HOUR	08:00	09:30	15
D10	2032 - With Development	PM	ONE HOUR	17:00	18:30	15
D11	2042 - Without Development	AM	ONE HOUR	08:00	09:30	15
D12	2042 - Without Development	PM	ONE HOUR	17:00	18:30	15
D13	2042 - With Development	AM	ONE HOUR	08:00	09:30	15
D14	2042 - With Development	PM	ONE HOUR	17:00	18:30	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2021 - Without Development, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	R639/L1542/Texaco	Crossroads	Two-way		5.74	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	24	Stream D-AB

Arms

Arms

Arm	Name	Description	Arm type
A	R639 - North Arm		Major
B	Texaco		Minor
C	R639 - South Arm		Major
D	L1542		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Width for right turn (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A	7.00		✓	3.50	134.0		-
C	7.00		✓	3.20	250.0		-

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	3.00			140	250
D	Two lanes		3.50	2.20	250	130

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
A-D	744	-	-	-	-	-	-	0.276	0.394	0.276	-	-	-
B-A	654	0.114	0.288	0.288	-	-	-	0.181	0.411	-	0.288	0.288	0.144
B-C	781	0.115	0.290	-	-	-	-	-	-	-	-	-	-
B-D, nearside lane	654	0.114	0.288	0.288	-	-	-	0.181	0.411	0.181	-	-	-
B-D, offside lane	654	0.114	0.288	0.288	-	-	-	0.181	0.411	0.181	-	-	-
C-B	797	0.295	0.295	0.422	-	-	-	-	-	-	-	-	-
D-A	741	-	-	-	-	-	-	0.275	-	0.109	-	-	-
D-B, nearside lane	661	0.183	0.183	0.416	-	-	-	0.291	0.291	0.115	-	-	-
D-B, offside lane	579	0.160	0.160	0.364	-	-	-	0.255	0.255	0.101	-	-	-
D-C	579	-	0.160	0.364	0.128	0.255	0.255	0.255	0.255	0.101	-	-	-

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	2021 - 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		✓	445	100.000
B		✓	156	100.000
C		✓	494	100.000
D		✓	368	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	82	256	107
	B	37	0	92	27
	C	370	31	0	93
	D	225	50	93	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-ACD	0.34	10.72	0.5	B
A-B				
A-C				
A-D	0.20	7.63	0.2	A
D-AB	0.54	14.92	1.2	B
D-BC	0.36	17.05	0.6	C
C-D				
C-A				
C-B	0.05	5.97	0.1	A

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-ACD	117	584	0.201	116	0.2	7.679	A
A-B	62			62			
A-C	193			193			
A-D	81	638	0.126	80	0.1	6.439	A
D-AB	191	598	0.320	190	0.5	8.768	A
D-BC	86	411	0.208	85	0.3	10.983	B
C-D	70			70			
C-A	279			279			
C-B	23	688	0.034	23	0.0	5.415	A

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-ACD	140	553	0.253	140	0.3	8.702	A
A-B	74			74			
A-C	230			230			
A-D	96	618	0.156	96	0.2	6.895	A
D-AB	230	569	0.404	229	0.7	10.572	B
D-BC	101	378	0.267	101	0.4	12.954	B
C-D	84			84			
C-A	333			333			
C-B	28	666	0.042	28	0.0	5.637	A

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-ACD	172	508	0.338	171	0.5	10.668	B
A-B	90			90			
A-C	282			282			
A-D	118	590	0.200	118	0.2	7.621	A
D-AB	284	525	0.540	282	1.1	14.676	B
D-BC	121	332	0.365	120	0.6	16.913	C
C-D	102			102			
C-A	407			407			
C-B	34	637	0.054	34	0.1	5.970	A

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-ACD	172	507	0.338	172	0.5	10.722	B
A-B	90			90			
A-C	282			282			
A-D	118	590	0.200	118	0.2	7.627	A
D-AB	284	525	0.541	284	1.2	14.921	B
D-BC	121	332	0.365	121	0.6	17.050	C
C-D	102			102			
C-A	407			407			
C-B	34	637	0.054	34	0.1	5.971	A

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-ACD	140	553	0.254	141	0.3	8.757	A
A-B	74			74			
A-C	230			230			
A-D	96	618	0.156	96	0.2	6.905	A
D-AB	230	568	0.405	232	0.7	10.761	B
D-BC	101	378	0.267	102	0.4	13.077	B
C-D	84			84			
C-A	333			333			
C-B	28	666	0.042	28	0.0	5.642	A

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-ACD	117	584	0.201	118	0.3	7.734	A
A-B	62			62			
A-C	193			193			
A-D	81	638	0.126	81	0.1	6.458	A
D-AB	192	598	0.320	192	0.5	8.900	A
D-BC	86	411	0.208	86	0.3	11.099	B
C-D	70			70			
C-A	279			279			
C-B	23	688	0.034	23	0.0	5.420	A

2021 - Without Development, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	R639/L1542/Texaco	Crossroads	Two-way		2.68	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	70	Stream B-ACD

Traffic Demand

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	2021 - 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		✓	404	100.000
B		✓	139	100.000
C		✓	455	100.000
D		✓	106	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	83	271	50
	B	45	0	59	35
	C	357	38	0	60
	D	41	21	44	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-ACD	0.30	10.01	0.4	B
A-B				
A-C				
A-D	0.09	6.60	0.1	A
D-AB	0.11	7.39	0.1	A
D-BC	0.16	11.80	0.2	B
C-D				
C-A				
C-B	0.06	5.84	0.1	A

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-ACD	105	575	0.182	104	0.2	7.622	A
A-B	62			62			
A-C	204			204			
A-D	38	646	0.058	37	0.1	5.912	A
D-AB	39	606	0.065	39	0.1	6.347	A
D-BC	40	432	0.094	40	0.1	9.171	A
C-D	45			45			
C-A	269			269			
C-B	29	702	0.041	28	0.0	5.340	A

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-ACD	125	549	0.228	125	0.3	8.474	A
A-B	75			75			
A-C	244			244			
A-D	45	627	0.072	45	0.1	6.185	A
D-AB	47	581	0.081	47	0.1	6.741	A
D-BC	48	403	0.119	48	0.1	10.128	B
C-D	54			54			
C-A	321			321			
C-B	34	684	0.050	34	0.1	5.540	A

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-ACD	153	513	0.299	153	0.4	9.984	A
A-B	91			91			
A-C	298			298			
A-D	55	601	0.092	55	0.1	6.597	A
D-AB	58	546	0.107	58	0.1	7.383	A
D-BC	58	364	0.161	58	0.2	11.781	B
C-D	66			66			
C-A	393			393			
C-B	42	658	0.064	42	0.1	5.837	A

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-ACD	153	513	0.299	153	0.4	10.014	B
A-B	91			91			
A-C	298			298			
A-D	55	601	0.092	55	0.1	6.597	A
D-AB	58	545	0.107	58	0.1	7.388	A
D-BC	58	363	0.161	58	0.2	11.803	B
C-D	66			66			
C-A	393			393			
C-B	42	658	0.064	42	0.1	5.837	A

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-ACD	125	549	0.228	125	0.3	8.508	A
A-B	75			75			
A-C	244			244			
A-D	45	627	0.072	45	0.1	6.187	A
D-AB	47	581	0.081	47	0.1	6.747	A
D-BC	48	403	0.119	48	0.1	10.153	B
C-D	54			54			
C-A	321			321			
C-B	34	684	0.050	34	0.1	5.541	A

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-ACD	105	575	0.182	105	0.2	7.666	A
A-B	62			62			
A-C	204			204			
A-D	38	646	0.058	38	0.1	5.919	A
D-AB	39	606	0.065	39	0.1	6.357	A
D-BC	40	432	0.094	41	0.1	9.206	A
C-D	45			45			
C-A	269			269			
C-B	29	702	0.041	29	0.0	5.344	A

2027 - Without Development, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	R639/L1542/Texaco	Crossroads	Two-way		5.87	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	23	Stream D-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	2027 - 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		✓	500	100.000
B		✓	160	100.000
C		✓	494	100.000
D		✓	368	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	92	288	120
	B	41	0	92	27
	C	370	31	0	93
	D	225	50	93	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-ACD	0.36	11.66	0.6	B
A-B				
A-C				
A-D	0.22	7.87	0.3	A
D-AB	0.55	15.30	1.2	C
D-BC	0.38	18.02	0.6	C
C-D				
C-A				
C-B	0.06	6.17	0.1	A

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-ACD	120	569	0.212	119	0.3	7.984	A
A-B	69			69			
A-C	217			217			
A-D	90	638	0.142	90	0.2	6.550	A
D-AB	192	596	0.321	190	0.5	8.822	A
D-BC	86	403	0.212	84	0.3	11.252	B
C-D	70			70			
C-A	279			279			
C-B	23	674	0.035	23	0.0	5.527	A

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-ACD	144	535	0.269	143	0.4	9.178	A
A-B	83			83			
A-C	259			259			
A-D	108	618	0.175	108	0.2	7.053	A
D-AB	230	565	0.407	229	0.7	10.688	B
D-BC	101	369	0.274	100	0.4	13.404	B
C-D	84			84			
C-A	333			333			
C-B	28	650	0.043	28	0.0	5.783	A

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-ACD	176	485	0.363	175	0.6	11.580	B
A-B	101			101			
A-C	317			317			
A-D	132	590	0.224	132	0.3	7.857	A
D-AB	284	520	0.547	282	1.2	15.032	C
D-BC	121	321	0.377	120	0.6	17.856	C
C-D	102			102			
C-A	407			407			
C-B	34	617	0.055	34	0.1	6.172	A

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-ACD	176	485	0.363	176	0.6	11.656	B
A-B	101			101			
A-C	317			317			
A-D	132	590	0.224	132	0.3	7.867	A
D-AB	284	519	0.548	284	1.2	15.301	C
D-BC	121	320	0.377	121	0.6	18.022	C
C-D	102			102			
C-A	407			407			
C-B	34	617	0.055	34	0.1	6.173	A

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-ACD	144	535	0.269	145	0.4	9.250	A
A-B	83			83			
A-C	259			259			
A-D	108	618	0.175	108	0.2	7.065	A
D-AB	230	564	0.408	232	0.7	10.891	B
D-BC	101	368	0.274	102	0.4	13.550	B
C-D	84			84			
C-A	333			333			
C-B	28	650	0.043	28	0.0	5.788	A

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-ACD	120	569	0.212	121	0.3	8.049	A
A-B	69			69			
A-C	217			217			
A-D	90	638	0.142	91	0.2	6.572	A
D-AB	192	595	0.322	192	0.5	8.962	A
D-BC	85	403	0.212	86	0.3	11.377	B
C-D	70			70			
C-A	279			279			
C-B	23	674	0.035	23	0.0	5.532	A

2027 - Without Development, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	R639/L1542/Texaco	Crossroads	Two-way		2.99	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	52	Stream B-ACD

Traffic Demand

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	2027 - 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		✓	454	100.000
B		✓	156	100.000
C		✓	510	100.000
D		✓	120	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	93	304	57
	B	51	0	66	39
	C	401	42	0	67
	D	46	24	50	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-ACD	0.35	11.41	0.5	B
A-B				
A-C				
A-D	0.11	6.91	0.1	A
D-AB	0.13	7.95	0.1	A
D-BC	0.20	13.30	0.2	B
C-D				
C-A				
C-B	0.07	6.05	0.1	A

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-ACD	117	559	0.210	116	0.3	8.116	A
A-B	70			70			
A-C	229			229			
A-D	43	634	0.068	43	0.1	6.083	A
D-AB	44	590	0.075	44	0.1	6.594	A
D-BC	46	414	0.111	45	0.1	9.752	A
C-D	50			50			
C-A	302			302			
C-B	32	691	0.046	31	0.0	5.460	A

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-ACD	140	529	0.265	140	0.4	9.244	A
A-B	84			84			
A-C	273			273			
A-D	51	613	0.084	51	0.1	6.409	A
D-AB	53	561	0.095	53	0.1	7.092	A
D-BC	54	382	0.143	54	0.2	10.994	B
C-D	60			60			
C-A	360			360			
C-B	38	670	0.056	38	0.1	5.695	A

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-ACD	172	487	0.353	171	0.5	11.360	B
A-B	102			102			
A-C	335			335			
A-D	63	583	0.108	63	0.1	6.910	A
D-AB	66	519	0.127	66	0.1	7.937	A
D-BC	66	337	0.196	66	0.2	13.262	B
C-D	74			74			
C-A	442			442			
C-B	46	641	0.072	46	0.1	6.049	A

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-ACD	172	487	0.353	172	0.5	11.413	B
A-B	102			102			
A-C	335			335			
A-D	63	583	0.108	63	0.1	6.913	A
D-AB	66	519	0.127	66	0.1	7.945	A
D-BC	66	337	0.196	66	0.2	13.300	B
C-D	74			74			
C-A	442			442			
C-B	46	641	0.072	46	0.1	6.050	A

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-ACD	140	529	0.265	141	0.4	9.298	A
A-B	84			84			
A-C	273			273			
A-D	51	613	0.084	51	0.1	6.415	A
D-AB	53	561	0.095	54	0.1	7.101	A
D-BC	54	381	0.143	55	0.2	11.034	B
C-D	60			60			
C-A	360			360			
C-B	38	670	0.056	38	0.1	5.699	A

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-ACD	117	558	0.210	118	0.3	8.181	A
A-B	70			70			
A-C	229			229			
A-D	43	634	0.068	43	0.1	6.092	A
D-AB	45	589	0.076	45	0.1	6.612	A
D-BC	46	414	0.111	46	0.1	9.800	A
C-D	50			50			
C-A	302			302			
C-B	32	690	0.046	32	0.0	5.464	A

2027 - With Development , AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	R639/L1542/Texaco	Crossroads	Two-way		6.23	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	17	Stream D-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	2027 - 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		✓	515	100.000
B		✓	165	100.000
C		✓	565	100.000
D		✓	373	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	92	303	120
	B	41	0	97	27
	C	423	35	0	107
	D	225	50	98	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-ACD	0.38	12.39	0.6	B
A-B				
A-C				
A-D	0.23	8.27	0.3	A
D-AB	0.58	17.22	1.3	C
D-BC	0.42	20.73	0.7	C
C-D				
C-A				
C-B	0.06	6.27	0.1	A

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-ACD	124	563	0.221	123	0.3	8.167	A
A-B	69			69			
A-C	228			228			
A-D	90	623	0.145	90	0.2	6.736	A
D-AB	192	581	0.330	190	0.5	9.172	A
D-BC	89	389	0.229	88	0.3	11.925	B
C-D	81			81			
C-A	318			318			
C-B	26	671	0.039	26	0.0	5.581	A

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-ACD	148	527	0.282	148	0.4	9.498	A
A-B	83			83			
A-C	272			272			
A-D	108	600	0.180	108	0.2	7.309	A
D-AB	231	546	0.422	230	0.7	11.339	B
D-BC	105	351	0.299	104	0.4	14.570	B
C-D	96			96			
C-A	380			380			
C-B	31	646	0.049	31	0.1	5.854	A

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-ACD	182	473	0.384	181	0.6	12.290	B
A-B	101			101			
A-C	334			334			
A-D	132	568	0.233	132	0.3	8.254	A
D-AB	285	495	0.577	283	1.3	16.815	C
D-BC	125	299	0.419	124	0.7	20.461	C
C-D	118			118			
C-A	466			466			
C-B	39	612	0.063	38	0.1	6.272	A

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-ACD	182	472	0.385	182	0.6	12.390	B
A-B	101			101			
A-C	334			334			
A-D	132	568	0.233	132	0.3	8.265	A
D-AB	286	494	0.578	285	1.3	17.224	C
D-BC	125	299	0.419	125	0.7	20.732	C
C-D	118			118			
C-A	466			466			
C-B	39	612	0.063	39	0.1	6.274	A

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-ACD	148	526	0.282	149	0.4	9.583	A
A-B	83			83			
A-C	272			272			
A-D	108	600	0.180	108	0.2	7.327	A
D-AB	231	545	0.423	233	0.7	11.618	B
D-BC	105	350	0.299	106	0.4	14.786	B
C-D	96			96			
C-A	380			380			
C-B	31	646	0.049	32	0.1	5.860	A

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-ACD	124	562	0.221	125	0.3	8.238	A
A-B	69			69			
A-C	228			228			
A-D	90	623	0.145	91	0.2	6.758	A
D-AB	192	580	0.331	193	0.5	9.332	A
D-BC	89	388	0.229	89	0.3	12.082	B
C-D	81			81			
C-A	318			318			
C-B	26	671	0.039	26	0.0	5.589	A

2027 - With Development, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	R639/L1542/Texaco	Crossroads	Two-way		3.15	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	42	Stream B-ACD

Traffic Demand

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	2027 - 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		✓	497	100.000
B		✓	165	100.000
C		✓	556	100.000
D		✓	127	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	93	347	57
	B	51	0	75	39
	C	437	46	0	73
	D	46	24	57	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-ACD	0.39	12.41	0.6	B
A-B				
A-C				
A-D	0.11	7.11	0.1	A
D-AB	0.13	8.37	0.2	A
D-BC	0.23	14.92	0.3	B
C-D				
C-A				
C-B	0.08	6.24	0.1	A

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-ACD	124	550	0.226	123	0.3	8.405	A
A-B	70			70			
A-C	261			261			
A-D	43	624	0.069	43	0.1	6.186	A
D-AB	45	576	0.077	44	0.1	6.762	A
D-BC	51	399	0.128	50	0.1	10.312	B
C-D	55			55			
C-A	329			329			
C-B	35	681	0.051	34	0.1	5.566	A

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-ACD	148	518	0.286	148	0.4	9.720	A
A-B	84			84			
A-C	312			312			
A-D	51	601	0.085	51	0.1	6.547	A
D-AB	54	544	0.099	54	0.1	7.336	A
D-BC	60	363	0.166	60	0.2	11.864	B
C-D	66			66			
C-A	393			393			
C-B	41	658	0.063	41	0.1	5.833	A

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-ACD	182	472	0.385	181	0.6	12.336	B
A-B	102			102			
A-C	382			382			
A-D	63	569	0.110	63	0.1	7.108	A
D-AB	67	497	0.134	66	0.2	8.355	A
D-BC	73	315	0.233	73	0.3	14.861	B
C-D	80			80			
C-A	481			481			
C-B	51	627	0.081	51	0.1	6.242	A

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-ACD	182	472	0.385	182	0.6	12.411	B
A-B	102			102			
A-C	382			382			
A-D	63	569	0.110	63	0.1	7.111	A
D-AB	67	497	0.134	67	0.2	8.367	A
D-BC	73	314	0.233	73	0.3	14.921	B
C-D	80			80			
C-A	481			481			
C-B	51	627	0.081	51	0.1	6.243	A

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-ACD	148	518	0.287	149	0.4	9.792	A
A-B	84			84			
A-C	312			312			
A-D	51	601	0.085	51	0.1	6.553	A
D-AB	54	544	0.099	54	0.1	7.353	A
D-BC	60	363	0.167	61	0.2	11.927	B
C-D	66			66			
C-A	393			393			
C-B	41	658	0.063	41	0.1	5.838	A

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-ACD	124	550	0.226	125	0.3	8.474	A
A-B	70			70			
A-C	261			261			
A-D	43	624	0.069	43	0.1	6.196	A
D-AB	45	576	0.078	45	0.1	6.779	A
D-BC	51	398	0.128	51	0.1	10.374	B
C-D	55			55			
C-A	329			329			
C-B	35	681	0.051	35	0.1	5.573	A

2032 - Without Development, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	R639/L1542/Texaco	Crossroads	Two-way		6.81	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	14	Stream D-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	2032 - 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		✓	537	100.000
B		✓	172	100.000
C		✓	531	100.000
D		✓	395	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	99	309	129
	B	44	0	99	29
	C	398	33	0	100
	D	242	53	100	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-ACD	0.41	13.13	0.7	B
A-B				
A-C				
A-D	0.25	8.25	0.3	A
D-AB	0.61	18.59	1.5	C
D-BC	0.43	20.83	0.7	C
C-D				
C-A				
C-B	0.06	6.34	0.1	A

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-ACD	129	557	0.233	128	0.3	8.375	A
A-B	75			75			
A-C	233			233			
A-D	97	631	0.154	96	0.2	6.731	A
D-AB	206	585	0.352	204	0.5	9.399	A
D-BC	91	390	0.234	90	0.3	11.951	B
C-D	75			75			
C-A	300			300			
C-B	25	665	0.037	25	0.0	5.618	A

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-ACD	155	520	0.298	154	0.4	9.838	A
A-B	89			89			
A-C	278			278			
A-D	116	609	0.191	116	0.2	7.300	A
D-AB	248	551	0.449	247	0.8	11.788	B
D-BC	108	353	0.305	107	0.4	14.623	B
C-D	90			90			
C-A	358			358			
C-B	30	639	0.046	30	0.0	5.903	A

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-ACD	189	464	0.408	188	0.7	12.998	B
A-B	109			109			
A-C	340			340			
A-D	142	578	0.246	142	0.3	8.239	A
D-AB	307	500	0.613	304	1.5	18.042	C
D-BC	128	301	0.426	127	0.7	20.563	C
C-D	110			110			
C-A	438			438			
C-B	36	604	0.060	36	0.1	6.341	A

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-ACD	189	464	0.409	189	0.7	13.126	B
A-B	109			109			
A-C	340			340			
A-D	142	578	0.246	142	0.3	8.253	A
D-AB	307	500	0.614	307	1.5	18.594	C
D-BC	128	301	0.426	128	0.7	20.834	C
C-D	110			110			
C-A	438			438			
C-B	36	604	0.060	36	0.1	6.343	A

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-ACD	155	519	0.298	156	0.4	9.944	A
A-B	89			89			
A-C	278			278			
A-D	116	609	0.191	116	0.2	7.317	A
D-AB	248	550	0.450	251	0.8	12.134	B
D-BC	107	352	0.305	109	0.4	14.842	B
C-D	90			90			
C-A	358			358			
C-B	30	639	0.046	30	0.0	5.909	A

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-ACD	129	556	0.233	130	0.3	8.459	A
A-B	75			75			
A-C	233			233			
A-D	97	631	0.154	97	0.2	6.753	A
D-AB	206	584	0.353	207	0.6	9.587	A
D-BC	91	389	0.234	92	0.3	12.119	B
C-D	75			75			
C-A	300			300			
C-B	25	665	0.037	25	0.0	5.624	A

2032 - Without Development, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	R639/L1542/Texaco	Crossroads	Two-way		3.23	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	41	Stream B-ACD

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D8	2032 - 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		✓	488	100.000
B		✓	168	100.000
C		✓	549	100.000
D		✓	127	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	100	327	61
	B	55	0	71	42
	C	431	46	0	72
	D	49	25	53	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-ACD	0.39	12.65	0.6	B
A-B				
A-C				
A-D	0.12	7.14	0.1	A
D-AB	0.14	8.33	0.2	A
D-BC	0.22	14.48	0.3	B
C-D				
C-A				
C-B	0.08	6.22	0.1	A

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-ACD	126	547	0.231	125	0.3	8.510	A
A-B	75			75			
A-C	246			246			
A-D	46	626	0.073	46	0.1	6.203	A
D-AB	47	580	0.081	47	0.1	6.749	A
D-BC	48	401	0.120	48	0.1	10.165	B
C-D	54			54			
C-A	324			324			
C-B	35	683	0.051	34	0.1	5.552	A

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-ACD	151	515	0.293	151	0.4	9.866	A
A-B	90			90			
A-C	294			294			
A-D	55	603	0.091	55	0.1	6.569	A
D-AB	57	549	0.103	57	0.1	7.315	A
D-BC	57	366	0.157	57	0.2	11.633	B
C-D	65			65			
C-A	387			387			
C-B	41	660	0.063	41	0.1	5.815	A

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-ACD	185	470	0.394	184	0.6	12.570	B
A-B	110			110			
A-C	360			360			
A-D	67	571	0.118	67	0.1	7.140	A
D-AB	70	503	0.140	70	0.2	8.314	A
D-BC	70	318	0.218	69	0.3	14.424	B
C-D	79			79			
C-A	475			475			
C-B	51	630	0.080	51	0.1	6.217	A

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-ACD	185	469	0.394	185	0.6	12.654	B
A-B	110			110			
A-C	360			360			
A-D	67	571	0.118	67	0.1	7.143	A
D-AB	70	503	0.140	70	0.2	8.326	A
D-BC	70	318	0.219	70	0.3	14.480	B
C-D	79			79			
C-A	475			475			
C-B	51	630	0.080	51	0.1	6.217	A

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-ACD	151	515	0.293	152	0.4	9.944	A
A-B	90			90			
A-C	294			294			
A-D	55	603	0.091	55	0.1	6.573	A
D-AB	57	548	0.104	57	0.1	7.332	A
D-BC	57	366	0.157	58	0.2	11.687	B
C-D	65			65			
C-A	387			387			
C-B	41	660	0.063	41	0.1	5.817	A

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-ACD	126	547	0.231	127	0.3	8.582	A
A-B	75			75			
A-C	246			246			
A-D	46	626	0.073	46	0.1	6.213	A
D-AB	47	579	0.082	47	0.1	6.766	A
D-BC	48	401	0.121	49	0.1	10.221	B
C-D	54			54			
C-A	324			324			
C-B	35	682	0.051	35	0.1	5.559	A

2032 - With Development, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	R639/L1542/Texaco	Crossroads	Two-way		7.44	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	9	Stream D-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	2032 - 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		✓	552	100.000
B		✓	177	100.000
C		✓	602	100.000
D		✓	400	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	99	324	129
	B	44	0	104	29
	C	451	37	0	114
	D	242	53	105	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-ACD	0.43	14.11	0.8	B
A-B				
A-C				
A-D	0.26	8.69	0.3	A
D-AB	0.65	21.66	1.8	C
D-BC	0.47	24.50	0.9	C
C-D				
C-A				
C-B	0.07	6.45	0.1	A

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-ACD	133	550	0.242	132	0.3	8.583	A
A-B	75			75			
A-C	244			244			
A-D	97	616	0.158	96	0.2	6.924	A
D-AB	206	569	0.362	204	0.6	9.799	A
D-BC	95	375	0.252	93	0.3	12.710	B
C-D	86			86			
C-A	340			340			
C-B	28	662	0.042	28	0.0	5.674	A

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-ACD	159	510	0.312	159	0.4	10.218	B
A-B	89			89			
A-C	291			291			
A-D	116	591	0.196	116	0.2	7.578	A
D-AB	248	532	0.467	247	0.9	12.599	B
D-BC	111	335	0.332	111	0.5	16.010	C
C-D	102			102			
C-A	405			405			
C-B	33	635	0.052	33	0.1	5.977	A

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-ACD	195	451	0.432	194	0.7	13.939	B
A-B	109			109			
A-C	357			357			
A-D	142	556	0.255	142	0.3	8.677	A
D-AB	308	475	0.649	304	1.7	20.744	C
D-BC	132	279	0.474	131	0.9	24.015	C
C-D	126			126			
C-A	497			497			
C-B	41	599	0.068	41	0.1	6.446	A

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-ACD	195	450	0.433	195	0.8	14.112	B
A-B	109			109			
A-C	357			357			
A-D	142	556	0.255	142	0.3	8.693	A
D-AB	308	474	0.651	308	1.8	21.657	C
D-BC	132	279	0.474	132	0.9	24.502	C
C-D	126			126			
C-A	497			497			
C-B	41	599	0.068	41	0.1	6.448	A

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-ACD	159	509	0.312	160	0.5	10.350	B
A-B	89			89			
A-C	291			291			
A-D	116	591	0.196	116	0.2	7.596	A
D-AB	248	530	0.468	252	0.9	13.097	B
D-BC	111	334	0.333	113	0.5	16.348	C
C-D	102			102			
C-A	405			405			
C-B	33	635	0.052	33	0.1	5.981	A

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-ACD	133	549	0.243	134	0.3	8.678	A
A-B	75			75			
A-C	244			244			
A-D	97	615	0.158	97	0.2	6.953	A
D-AB	206	568	0.363	208	0.6	10.022	B
D-BC	95	375	0.253	95	0.3	12.920	B
C-D	86			86			
C-A	340			340			
C-B	28	662	0.042	28	0.0	5.683	A

2032 - With Development, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	R639/L1542/Texaco	Crossroads	Two-way		3.44	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	32	Stream B-ACD

Traffic Demand

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	2032 - 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		✓	531	100.000
B		✓	177	100.000
C		✓	595	100.000
D		✓	134	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	100	370	61
	B	55	0	80	42
	C	467	50	0	78
	D	49	25	60	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-ACD	0.43	13.92	0.7	B
A-B				
A-C				
A-D	0.12	7.36	0.1	A
D-AB	0.15	8.81	0.2	A
D-BC	0.26	16.42	0.3	C
C-D				
C-A				
C-B	0.09	6.42	0.1	A

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-ACD	133	538	0.248	132	0.3	8.830	A
A-B	75			75			
A-C	279			279			
A-D	46	616	0.075	46	0.1	6.311	A
D-AB	47	566	0.084	47	0.1	6.928	A
D-BC	53	386	0.138	53	0.2	10.773	B
C-D	59			59			
C-A	352			352			
C-B	38	673	0.056	37	0.1	5.662	A

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-ACD	159	503	0.316	159	0.5	10.426	B
A-B	90			90			
A-C	333			333			
A-D	55	591	0.093	55	0.1	6.714	A
D-AB	57	531	0.107	57	0.1	7.584	A
D-BC	63	348	0.182	63	0.2	12.612	B
C-D	70			70			
C-A	420			420			
C-B	45	649	0.069	45	0.1	5.960	A

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-ACD	195	453	0.430	194	0.7	13.802	B
A-B	110			110			
A-C	407			407			
A-D	67	557	0.121	67	0.1	7.352	A
D-AB	71	480	0.148	71	0.2	8.791	A
D-BC	77	296	0.259	76	0.3	16.332	C
C-D	86			86			
C-A	514			514			
C-B	55	616	0.089	55	0.1	6.421	A

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-ACD	195	453	0.430	195	0.7	13.924	B
A-B	110			110			
A-C	407			407			
A-D	67	557	0.121	67	0.1	7.355	A
D-AB	71	480	0.148	71	0.2	8.808	A
D-BC	77	296	0.259	77	0.3	16.422	C
C-D	86			86			
C-A	514			514			
C-B	55	616	0.089	55	0.1	6.422	A

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-ACD	159	503	0.316	160	0.5	10.532	B
A-B	90			90			
A-C	333			333			
A-D	55	591	0.093	55	0.1	6.718	A
D-AB	57	531	0.108	57	0.1	7.604	A
D-BC	63	348	0.182	64	0.2	12.696	B
C-D	70			70			
C-A	420			420			
C-B	45	649	0.069	45	0.1	5.962	A

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-ACD	133	538	0.248	134	0.3	8.918	A
A-B	75			75			
A-C	279			279			
A-D	46	616	0.075	46	0.1	6.321	A
D-AB	47	566	0.084	48	0.1	6.949	A
D-BC	53	386	0.139	54	0.2	10.850	B
C-D	59			59			
C-A	352			352			
C-B	38	673	0.056	38	0.1	5.669	A

2042 - Without Development, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	R639/L1542/Texaco	Crossroads	Two-way		8.47	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	6	Stream D-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	2042 - 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		✓	578	100.000
B		✓	185	100.000
C		✓	571	100.000
D		✓	426	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	106	333	139
	B	48	0	106	31
	C	428	35	0	108
	D	261	57	108	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-ACD	0.47	15.43	0.9	C
A-B				
A-C				
A-D	0.27	8.72	0.4	A
D-AB	0.70	24.81	2.2	C
D-BC	0.49	25.14	0.9	D
C-D				
C-A				
C-B	0.07	6.54	0.1	A

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-ACD	139	542	0.257	138	0.3	8.882	A
A-B	80			80			
A-C	251			251			
A-D	105	622	0.168	104	0.2	6.936	A
D-AB	223	572	0.389	220	0.6	10.159	B
D-BC	98	376	0.261	97	0.3	12.837	B
C-D	81			81			
C-A	322			322			
C-B	26	655	0.040	26	0.0	5.721	A

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-ACD	166	500	0.332	166	0.5	10.740	B
A-B	95			95			
A-C	299			299			
A-D	125	598	0.209	125	0.3	7.595	A
D-AB	268	534	0.501	266	1.0	13.359	B
D-BC	115	335	0.343	114	0.5	16.246	C
C-D	97			97			
C-A	385			385			
C-B	31	627	0.050	31	0.1	6.040	A

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-ACD	204	438	0.465	202	0.8	15.178	C
A-B	117			117			
A-C	367			367			
A-D	153	566	0.270	153	0.4	8.703	A
D-AB	332	477	0.696	328	2.1	23.376	C
D-BC	137	280	0.488	135	0.9	24.599	C
C-D	119			119			
C-A	471			471			
C-B	39	589	0.065	38	0.1	6.536	A

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-ACD	204	437	0.466	204	0.9	15.429	C
A-B	117			117			
A-C	367			367			
A-D	153	566	0.270	153	0.4	8.721	A
D-AB	333	476	0.698	332	2.2	24.810	C
D-BC	136	279	0.488	136	0.9	25.143	D
C-D	119			119			
C-A	471			471			
C-B	39	589	0.065	39	0.1	6.538	A

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-ACD	166	499	0.333	168	0.5	10.917	B
A-B	95			95			
A-C	299			299			
A-D	125	598	0.209	125	0.3	7.618	A
D-AB	268	533	0.503	273	1.0	14.064	B
D-BC	115	335	0.343	117	0.5	16.619	C
C-D	97			97			
C-A	385			385			
C-B	31	627	0.050	32	0.1	6.047	A

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-ACD	139	541	0.258	140	0.4	8.996	A
A-B	80			80			
A-C	251			251			
A-D	105	622	0.168	105	0.2	6.963	A
D-AB	223	571	0.390	224	0.7	10.435	B
D-BC	98	375	0.261	99	0.4	13.065	B
C-D	81			81			
C-A	322			322			
C-B	26	655	0.040	26	0.0	5.729	A

2042 - Without Development, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	R639/L1542/Texaco	Crossroads	Two-way		3.54	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	31	Stream B-ACD

Traffic Demand

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	2042 - 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		✓	525	100.000
B		✓	180	100.000
C		✓	591	100.000
D		✓	137	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	108	352	65
	B	59	0	76	45
	C	464	49	0	78
	D	53	27	57	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-ACD	0.44	14.28	0.8	B
A-B				
A-C				
A-D	0.13	7.40	0.1	A
D-AB	0.16	8.86	0.2	A
D-BC	0.25	16.06	0.3	C
C-D				
C-A				
C-B	0.09	6.39	0.1	A

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-ACD	136	535	0.253	134	0.3	8.958	A
A-B	81			81			
A-C	265			265			
A-D	49	617	0.079	49	0.1	6.331	A
D-AB	51	568	0.090	51	0.1	6.956	A
D-BC	52	388	0.134	51	0.2	10.668	B
C-D	59			59			
C-A	349			349			
C-B	37	674	0.055	37	0.1	5.647	A

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-ACD	162	500	0.324	161	0.5	10.616	B
A-B	97			97			
A-C	316			316			
A-D	58	592	0.099	58	0.1	6.746	A
D-AB	62	534	0.115	61	0.1	7.622	A
D-BC	62	351	0.176	61	0.2	12.437	B
C-D	70			70			
C-A	417			417			
C-B	44	650	0.068	44	0.1	5.940	A

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-ACD	198	450	0.440	197	0.8	14.149	B
A-B	119			119			
A-C	388			388			
A-D	72	558	0.128	71	0.1	7.398	A
D-AB	76	483	0.158	76	0.2	8.846	A
D-BC	74	299	0.249	74	0.3	15.979	C
C-D	86			86			
C-A	511			511			
C-B	54	617	0.087	54	0.1	6.393	A

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-ACD	198	450	0.440	198	0.8	14.283	B
A-B	119			119			
A-C	388			388			
A-D	72	558	0.128	72	0.1	7.401	A
D-AB	76	483	0.158	76	0.2	8.863	A
D-BC	74	298	0.249	74	0.3	16.062	C
C-D	86			86			
C-A	511			511			
C-B	54	617	0.087	54	0.1	6.393	A

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-ACD	162	500	0.324	163	0.5	10.731	B
A-B	97			97			
A-C	316			316			
A-D	58	592	0.099	59	0.1	6.750	A
D-AB	62	533	0.116	62	0.1	7.643	A
D-BC	62	350	0.176	62	0.2	12.516	B
C-D	70			70			
C-A	417			417			
C-B	44	650	0.068	44	0.1	5.942	A

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-ACD	136	534	0.254	136	0.3	9.052	A
A-B	81			81			
A-C	265			265			
A-D	49	617	0.079	49	0.1	6.345	A
D-AB	51	567	0.090	51	0.1	6.975	A
D-BC	52	388	0.134	52	0.2	10.741	B
C-D	59			59			
C-A	349			349			
C-B	37	674	0.055	37	0.1	5.654	A

2042 - With Development, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	R639/L1542/Texaco	Crossroads	Two-way		9.71	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	2	Stream D-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	2042 - 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		✓	593	100.000
B		✓	190	100.000
C		✓	642	100.000
D		✓	431	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	106	348	139
	B	48	0	111	31
	C	481	39	0	122
	D	261	57	113	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-ACD	0.50	16.91	1.0	C
A-B				
A-C				
A-D	0.28	9.21	0.4	A
D-AB	0.75	30.90	2.7	D
D-BC	0.54	30.57	1.2	D
C-D				
C-A				
C-B	0.07	6.65	0.1	A

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-ACD	143	535	0.268	142	0.4	9.127	A
A-B	80			80			
A-C	262			262			
A-D	105	607	0.172	104	0.2	7.142	A
D-AB	223	556	0.401	220	0.7	10.638	B
D-BC	101	361	0.281	100	0.4	13.711	B
C-D	92			92			
C-A	362			362			
C-B	29	652	0.045	29	0.0	5.780	A

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-ACD	171	491	0.348	170	0.5	11.213	B
A-B	95			95			
A-C	313			313			
A-D	125	580	0.215	125	0.3	7.896	A
D-AB	269	515	0.522	267	1.1	14.445	B
D-BC	119	318	0.374	118	0.6	17.964	C
C-D	110			110			
C-A	432			432			
C-B	35	623	0.056	35	0.1	6.118	A

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-ACD	209	423	0.494	208	0.9	16.546	C
A-B	117			117			
A-C	383			383			
A-D	153	544	0.281	153	0.4	9.191	A
D-AB	334	450	0.742	328	2.6	28.179	D
D-BC	140	258	0.544	138	1.1	29.550	D
C-D	134			134			
C-A	530			530			
C-B	43	584	0.073	43	0.1	6.649	A

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-ACD	209	422	0.496	209	1.0	16.913	C
A-B	117			117			
A-C	383			383			
A-D	153	544	0.281	153	0.4	9.214	A
D-AB	335	449	0.745	334	2.7	30.895	D
D-BC	140	257	0.544	140	1.2	30.569	D
C-D	134			134			
C-A	530			530			
C-B	43	584	0.074	43	0.1	6.651	A

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-ACD	171	489	0.350	172	0.5	11.446	B
A-B	95			95			
A-C	313			313			
A-D	125	580	0.215	125	0.3	7.919	A
D-AB	269	513	0.524	275	1.1	15.545	C
D-BC	119	317	0.374	121	0.6	18.554	C
C-D	110			110			
C-A	432			432			
C-B	35	623	0.056	35	0.1	6.125	A

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-ACD	143	534	0.268	144	0.4	9.254	A
A-B	80			80			
A-C	262			262			
A-D	105	607	0.172	105	0.2	7.176	A
D-AB	223	555	0.402	225	0.7	10.970	B
D-BC	101	360	0.281	102	0.4	14.006	B
C-D	92			92			
C-A	362			362			
C-B	29	651	0.045	29	0.0	5.787	A

2042 - With Development, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	R639/L1542/Texaco	Crossroads	Two-way		3.84	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	24	Stream B-ACD

Traffic Demand

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	2042 - 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		✓	568	100.000
B		✓	189	100.000
C		✓	637	100.000
D		✓	144	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	108	395	65
	B	59	0	85	45
	C	500	53	0	84
	D	53	27	64	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-ACD	0.48	15.97	0.9	C
A-B				
A-C				
A-D	0.13	7.63	0.2	A
D-AB	0.17	9.44	0.2	A
D-BC	0.29	18.48	0.4	C
C-D				
C-A				
C-B	0.10	6.61	0.1	A

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-ACD	142	526	0.271	141	0.4	9.321	A
A-B	81			81			
A-C	297			297			
A-D	49	607	0.081	49	0.1	6.444	A
D-AB	51	554	0.093	51	0.1	7.147	A
D-BC	57	373	0.153	56	0.2	11.340	B
C-D	63			63			
C-A	376			376			
C-B	40	664	0.060	40	0.1	5.758	A

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-ACD	170	488	0.348	169	0.5	11.283	B
A-B	97			97			
A-C	355			355			
A-D	58	580	0.101	58	0.1	6.899	A
D-AB	62	516	0.120	62	0.1	7.922	A
D-BC	68	332	0.203	67	0.3	13.559	B
C-D	76			76			
C-A	449			449			
C-B	48	639	0.075	48	0.1	6.091	A

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-ACD	208	433	0.480	207	0.9	15.768	C
A-B	119			119			
A-C	435			435			
A-D	72	543	0.132	71	0.2	7.625	A
D-AB	77	459	0.168	77	0.2	9.416	A
D-BC	81	276	0.295	81	0.4	18.340	C
C-D	92			92			
C-A	551			551			
C-B	58	603	0.097	58	0.1	6.606	A

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-ACD	208	433	0.480	208	0.9	15.971	C
A-B	119			119			
A-C	435			435			
A-D	72	543	0.132	72	0.2	7.629	A
D-AB	77	458	0.168	77	0.2	9.440	A
D-BC	81	276	0.295	81	0.4	18.481	C
C-D	92			92			
C-A	551			551			
C-B	58	603	0.097	58	0.1	6.609	A

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-ACD	170	487	0.349	171	0.5	11.440	B
A-B	97			97			
A-C	355			355			
A-D	58	580	0.101	59	0.1	6.903	A
D-AB	62	515	0.120	62	0.1	7.947	A
D-BC	67	332	0.203	68	0.3	13.678	B
C-D	76			76			
C-A	449			449			
C-B	48	639	0.075	48	0.1	6.096	A

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-ACD	142	525	0.271	143	0.4	9.433	A
A-B	81			81			
A-C	297			297			
A-D	49	607	0.081	49	0.1	6.455	A
D-AB	51	554	0.093	52	0.1	7.172	A
D-BC	57	372	0.153	57	0.2	11.434	B
C-D	63			63			
C-A	376			376			
C-B	40	664	0.060	40	0.1	5.768	A

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.5.1.7462
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Filename: Dev Entrance.j9
Path: N:\TIA\19099_Fermoy Dev Cumnor\Traffic Generation\Junctions 9
Report generation date: 20/01/2022 17:15:15

»2021 - Without Development, AM
»2021 - Without Development, PM
»2027 - Without Development, AM
»2027 - Without Development, PM
»2027 - With Development, AM
»2027 - With Development, PM
»2032 - Without Development, AM
»2032 - Without Development, PM
»2032 - With Development, AM
»2032 - With Development, PM
»2042 - Without Development, AM
»2042 - Without Development, PM
»2042 - With Development, AM
»2042 - With Development, PM

Summary of junction performance

	AM						PM					
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Network Residual Capacity	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Network Residual Capacity
	2021 - Without Development											
Stream B-AC	D1	0.0	0.00	0.00	A	900 %	D2	0.0	0.00	0.00	A	900 %
Stream C-B		0.0	0.00	0.00	A	[]		0.0	0.00	0.00	A	[]
	2027 - Without Development											
Stream B-AC	D3	0.0	0.00	0.00	A	900 %	D4	0.0	0.00	0.00	A	900 %
Stream C-B		0.0	0.00	0.00	A	[]		0.0	0.00	0.00	A	[]
	2027 - With Development											
Stream B-AC	D5	0.5	11.35	0.33	B	58 %	D6	0.3	9.83	0.20	A	80 %
Stream C-B		0.1	6.66	0.05	A	[Stream B-AC]		0.2	7.24	0.14	A	[Stream B-AC]
	2032 - Without Development											
Stream B-AC	D7	0.0	0.00	0.00	A	900 %	D8	0.0	0.00	0.00	A	900 %
Stream C-B		0.0	0.00	0.00	A	[]		0.0	0.00	0.00	A	[]
	2032 - With Development											
Stream B-AC	D9	0.5	11.91	0.34	B	52 %	D10	0.3	10.23	0.21	B	72 %
Stream C-B		0.1	6.78	0.05	A	[Stream B-AC]		0.2	7.36	0.14	A	[Stream B-AC]
	2042 - Without Development											
Stream B-AC	D11	0.0	0.00	0.00	A	900 %	D12	0.0	0.00	0.00	A	900 %
Stream C-B		0.0	0.00	0.00	A	[]		0.0	0.00	0.00	A	[]
	2042 - With Development											
Stream B-AC	D13	0.5	12.59	0.35	B	45 %	D14	0.3	10.72	0.22	B	64 %
Stream C-B		0.1	6.90	0.05	A	[Stream B-AC]		0.2	7.50	0.14	A	[Stream B-AC]

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

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. 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	20/01/2022
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

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	2021 - Without Development	AM	ONE HOUR	08:00	09:30	15
D2	2021 - Without Development	PM	ONE HOUR	17:00	18:30	15
D3	2027 - Without Development	AM	ONE HOUR	08:00	09:30	15
D4	2027 - Without Development	PM	ONE HOUR	17:00	18:30	15
D5	2027 - With Development	AM	ONE HOUR	08:00	09:30	15
D6	2027 - With Development	PM	ONE HOUR	17:00	18:30	15
D7	2032 - Without Development	AM	ONE HOUR	08:00	09:30	15
D8	2032 - Without Development	PM	ONE HOUR	17:00	18:30	15
D9	2032 - With Development	AM	ONE HOUR	08:00	09:30	15
D10	2032 - With Development	PM	ONE HOUR	17:00	18:30	15
D11	2042 - Without Development	AM	ONE HOUR	08:00	09:30	15
D12	2042 - Without Development	PM	ONE HOUR	17:00	18:30	15
D13	2042 - With Development	AM	ONE HOUR	08:00	09:30	15
D14	2042 - With Development	PM	ONE HOUR	17:00	18:30	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2021 - Without Development, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Development Entrance	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	R639		Major
B	Development		Minor
C	R639		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Width for right turn (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	9.00		✓	3.00	120.0		-

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	3.00	150	170

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	615	0.097	0.246	0.155	0.352
B-C	731	0.097	0.246	-	-
C-B	699	0.236	0.236	-	-

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	2021 - 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		✓	421	100.000
B		✓	0	100.000
C		✓	440	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	0	421
	B	0	0	0
	C	440	0	0

Vehicle Mix

Heavy Vehicle Percentages

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

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-A				
C-B	0.00	0.00	0.0	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	557	0.000	0	0.0	0.000	A
C-A	331			331			
C-B	0	625	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	317			317			

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	535	0.000	0	0.0	0.000	A
C-A	396			396			
C-B	0	610	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	378			378			

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	504	0.000	0	0.0	0.000	A
C-A	484			484			
C-B	0	590	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	464			464			

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	504	0.000	0	0.0	0.000	A
C-A	484			484			
C-B	0	590	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	464			464			

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	535	0.000	0	0.0	0.000	A
C-A	396			396			
C-B	0	610	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	378			378			

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	557	0.000	0	0.0	0.000	A
C-A	331			331			
C-B	0	625	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	317			317			

2021 - Without Development, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Development Entrance	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	2021 - 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		✓	374	100.000
B		✓	0	100.000
C		✓	455	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	0	374
	B	0	0	0
	C	455	0	0

Vehicle Mix

Heavy Vehicle Percentages

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

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-A				
C-B	0.00	0.00	0.0	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	565	0.000	0	0.0	0.000	A
C-A	343			343			
C-B	0	633	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	282			282			

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	544	0.000	0	0.0	0.000	A
C-A	409			409			
C-B	0	620	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	336			336			

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-A	501			501			
C-B	0	602	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	412			412			

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-A	501			501			
C-B	0	602	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	412			412			

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	544	0.000	0	0.0	0.000	A
C-A	409			409			
C-B	0	620	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	336			336			

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	565	0.000	0	0.0	0.000	A
C-A	343			343			
C-B	0	633	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	282			282			

2027 - Without Development, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Development Entrance	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	2027 - 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		✓	473	100.000
B		✓	0	100.000
C		✓	494	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	0	473
	B	0	0	0
	C	494	0	0

Vehicle Mix

Heavy Vehicle Percentages

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

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-A				
C-B	0.00	0.00	0.0	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	543	0.000	0	0.0	0.000	A
C-A	372			372			
C-B	0	616	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	356			356			

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	518	0.000	0	0.0	0.000	A
C-A	444			444			
C-B	0	599	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	425			425			

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	483	0.000	0	0.0	0.000	A
C-A	544			544			
C-B	0	577	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	521			521			

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	483	0.000	0	0.0	0.000	A
C-A	544			544			
C-B	0	577	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	521			521			

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	518	0.000	0	0.0	0.000	A
C-A	444			444			
C-B	0	599	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	425			425			

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	543	0.000	0	0.0	0.000	A
C-A	372			372			
C-B	0	616	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	356			356			

2027 - Without Development, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Development Entrance	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	2027 - 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		✓	420	100.000
B		✓	0	100.000
C		✓	510	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	0	420
	B	0	0	0
	C	510	0	0

Vehicle Mix

Heavy Vehicle Percentages

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

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-A				
C-B	0.00	0.00	0.0	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	552	0.000	0	0.0	0.000	A
C-A	384			384			
C-B	0	625	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	316			316			

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	529	0.000	0	0.0	0.000	A
C-A	458			458			
C-B	0	611	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	378			378			

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	496	0.000	0	0.0	0.000	A
C-A	562			562			
C-B	0	591	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	462			462			

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	496	0.000	0	0.0	0.000	A
C-A	562			562			
C-B	0	591	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	462			462			

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	529	0.000	0	0.0	0.000	A
C-A	458			458			
C-B	0	611	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	378			378			

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	552	0.000	0	0.0	0.000	A
C-A	384			384			
C-B	0	625	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	316			316			

2027 - With Development, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Development Entrance	T-Junction	Two-way		1.52	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	58	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	2027 - 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		✓	498	100.000
B		✓	139	100.000
C		✓	521	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	25	473
	B	71	0	68
	C	494	27	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.33	11.35	0.5	B
C-A				
C-B	0.05	6.66	0.1	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	105	534	0.196	104	0.2	8.338	A
C-A	372			372			
C-B	20	611	0.033	20	0.0	6.090	A
A-B	19			19			
A-C	356			356			

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	125	508	0.246	125	0.3	9.388	A
C-A	444			444			
C-B	24	594	0.041	24	0.0	6.318	A
A-B	22			22			
A-C	425			425			

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	153	470	0.325	152	0.5	11.308	B
C-A	544			544			
C-B	30	570	0.052	30	0.1	6.659	A
A-B	28			28			
A-C	521			521			

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	153	470	0.325	153	0.5	11.348	B
C-A	544			544			
C-B	30	570	0.052	30	0.1	6.659	A
A-B	28			28			
A-C	521			521			

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	125	508	0.246	126	0.3	9.434	A
C-A	444			444			
C-B	24	594	0.041	24	0.0	6.319	A
A-B	22			22			
A-C	425			425			

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	105	534	0.196	105	0.2	8.388	A
C-A	372			372			
C-B	20	611	0.033	20	0.0	6.093	A
A-B	19			19			
A-C	356			356			

2027 - With Development, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Development Entrance	T-Junction	Two-way		1.17	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	80	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	2027 - 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		✓	479	100.000
B		✓	84	100.000
C		✓	581	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	59	420
	B	46	0	38
	C	510	71	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.20	9.83	0.3	A
C-A				
C-B	0.14	7.24	0.2	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	63	526	0.120	63	0.1	7.764	A
C-A	384			384			
C-B	53	615	0.087	53	0.1	6.408	A
A-B	44			44			
A-C	316			316			

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	76	498	0.152	75	0.2	8.514	A
C-A	458			458			
C-B	64	598	0.107	64	0.1	6.738	A
A-B	53			53			
A-C	378			378			

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	92	459	0.202	92	0.2	9.817	A
C-A	562			562			
C-B	78	575	0.136	78	0.2	7.239	A
A-B	65			65			
A-C	462			462			

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	92	459	0.202	92	0.3	9.833	A
C-A	562			562			
C-B	78	575	0.136	78	0.2	7.242	A
A-B	65			65			
A-C	462			462			

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	76	498	0.152	76	0.2	8.535	A
C-A	458			458			
C-B	64	598	0.107	64	0.1	6.742	A
A-B	53			53			
A-C	378			378			

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	63	526	0.120	63	0.1	7.790	A
C-A	384			384			
C-B	53	615	0.087	54	0.1	6.420	A
A-B	44			44			
A-C	316			316			

2032 - Without Development, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Development Entrance	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	2032 - 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		✓	509	100.000
B		✓	0	100.000
C		✓	531	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	0	509
	B	0	0	0
	C	531	0	0

Vehicle Mix

Heavy Vehicle Percentages

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

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-A				
C-B	0.00	0.00	0.0	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	533	0.000	0	0.0	0.000	A
C-A	400			400			
C-B	0	609	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	383			383			

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	506	0.000	0	0.0	0.000	A
C-A	477			477			
C-B	0	592	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	458			458			

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	468	0.000	0	0.0	0.000	A
C-A	585			585			
C-B	0	567	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	560			560			

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	468	0.000	0	0.0	0.000	A
C-A	585			585			
C-B	0	567	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	560			560			

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	506	0.000	0	0.0	0.000	A
C-A	477			477			
C-B	0	592	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	458			458			

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	533	0.000	0	0.0	0.000	A
C-A	400			400			
C-B	0	609	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	383			383			

2032 - Without Development, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Development Entrance	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	2032 - 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		✓	451	100.000
B		✓	0	100.000
C		✓	549	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	0	451
	B	0	0	0
	C	549	0	0

Vehicle Mix

Heavy Vehicle Percentages

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

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-A				
C-B	0.00	0.00	0.0	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	543	0.000	0	0.0	0.000	A
C-A	413			413			
C-B	0	619	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	340			340			

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	518	0.000	0	0.0	0.000	A
C-A	494			494			
C-B	0	604	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	405			405			

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	482	0.000	0	0.0	0.000	A
C-A	604			604			
C-B	0	582	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	497			497			

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	482	0.000	0	0.0	0.000	A
C-A	604			604			
C-B	0	582	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	497			497			

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	518	0.000	0	0.0	0.000	A
C-A	494			494			
C-B	0	604	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	405			405			

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	543	0.000	0	0.0	0.000	A
C-A	413			413			
C-B	0	619	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	340			340			

2032 - With Development, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Development Entrance	T-Junction	Two-way		1.49	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)
D9	2032 - 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		✓	534	100.000
B		✓	139	100.000
C		✓	558	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	25	509
	B	71	0	68
	C	531	27	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.34	11.91	0.5	B
C-A				
C-B	0.05	6.78	0.1	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	105	525	0.199	104	0.2	8.532	A
C-A	400			400			
C-B	20	605	0.034	20	0.0	6.156	A
A-B	19			19			
A-C	383			383			

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	125	496	0.252	125	0.3	9.688	A
C-A	477			477			
C-B	24	586	0.041	24	0.0	6.403	A
A-B	22			22			
A-C	458			458			

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	153	455	0.336	152	0.5	11.861	B
C-A	585			585			
C-B	30	561	0.053	30	0.1	6.776	A
A-B	28			28			
A-C	560			560			

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	153	455	0.336	153	0.5	11.910	B
C-A	585			585			
C-B	30	561	0.053	30	0.1	6.776	A
A-B	28			28			
A-C	560			560			

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	125	496	0.252	126	0.3	9.741	A
C-A	477			477			
C-B	24	586	0.041	24	0.0	6.407	A
A-B	22			22			
A-C	458			458			

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	105	525	0.199	105	0.3	8.588	A
C-A	400			400			
C-B	20	605	0.034	20	0.0	6.162	A
A-B	19			19			
A-C	383			383			

2032 - With Development, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Development Entrance	T-Junction	Two-way		1.14	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	72	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	2032 - 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		✓	510	100.000
B		✓	84	100.000
C		✓	620	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	59	451
	B	46	0	38
	C	549	71	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.21	10.23	0.3	B
C-A				
C-B	0.14	7.36	0.2	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	63	517	0.122	63	0.1	7.921	A
C-A	413			413			
C-B	53	609	0.088	53	0.1	6.471	A
A-B	44			44			
A-C	340			340			

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	76	487	0.155	75	0.2	8.748	A
C-A	494			494			
C-B	64	591	0.108	64	0.1	6.822	A
A-B	53			53			
A-C	405			405			

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	92	444	0.208	92	0.3	10.211	B
C-A	604			604			
C-B	78	567	0.138	78	0.2	7.358	A
A-B	65			65			
A-C	497			497			

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	92	444	0.208	92	0.3	10.230	B
C-A	604			604			
C-B	78	567	0.138	78	0.2	7.361	A
A-B	65			65			
A-C	497			497			

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	76	487	0.155	76	0.2	8.769	A
C-A	494			494			
C-B	64	591	0.108	64	0.1	6.826	A
A-B	53			53			
A-C	405			405			

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	63	516	0.122	63	0.1	7.949	A
C-A	413			413			
C-B	53	609	0.088	54	0.1	6.481	A
A-B	44			44			
A-C	340			340			

2042 - Without Development, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Development Entrance	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	2042 - 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		✓	547	100.000
B		✓	0	100.000
C		✓	572	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	0	547
	B	0	0	0
	C	572	0	0

Vehicle Mix

Heavy Vehicle Percentages

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

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-A				
C-B	0.00	0.00	0.0	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-A	431			431			
C-B	0	602	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	412			412			

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	494	0.000	0	0.0	0.000	A
C-A	514			514			
C-B	0	584	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	492			492			

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	452	0.000	0	0.0	0.000	A
C-A	630			630			
C-B	0	558	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	602			602			

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	452	0.000	0	0.0	0.000	A
C-A	630			630			
C-B	0	558	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	602			602			

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	494	0.000	0	0.0	0.000	A
C-A	514			514			
C-B	0	584	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	492			492			

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-A	431			431			
C-B	0	602	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	412			412			

2042 - Without Development, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Development Entrance	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	2042 - 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		✓	486	100.000
B		✓	0	100.000
C		✓	591	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	0	486
	B	0	0	0
	C	591	0	0

Vehicle Mix

Heavy Vehicle Percentages

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

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-A				
C-B	0.00	0.00	0.0	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	533	0.000	0	0.0	0.000	A
C-A	445			445			
C-B	0	613	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	366			366			

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	506	0.000	0	0.0	0.000	A
C-A	531			531			
C-B	0	597	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	437			437			

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	467	0.000	0	0.0	0.000	A
C-A	651			651			
C-B	0	573	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	535			535			

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	467	0.000	0	0.0	0.000	A
C-A	651			651			
C-B	0	573	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	535			535			

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	506	0.000	0	0.0	0.000	A
C-A	531			531			
C-B	0	597	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	437			437			

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	533	0.000	0	0.0	0.000	A
C-A	445			445			
C-B	0	613	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	366			366			

2042 - With Development, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Development Entrance	T-Junction	Two-way		1.48	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	45	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	2042 - 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		✓	572	100.000
B		✓	139	100.000
C		✓	599	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	25	547
	B	71	0	68
	C	572	27	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.35	12.59	0.5	B
C-A				
C-B	0.05	6.90	0.1	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	105	514	0.204	104	0.3	8.751	A
C-A	431			431			
C-B	20	598	0.034	20	0.0	6.228	A
A-B	19			19			
A-C	412			412			

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	125	483	0.259	125	0.3	10.035	B
C-A	514			514			
C-B	24	578	0.042	24	0.0	6.497	A
A-B	22			22			
A-C	492			492			

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	153	439	0.349	152	0.5	12.524	B
C-A	630			630			
C-B	30	551	0.054	30	0.1	6.904	A
A-B	28			28			
A-C	602			602			

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	153	439	0.349	153	0.5	12.586	B
C-A	630			630			
C-B	30	551	0.054	30	0.1	6.904	A
A-B	28			28			
A-C	602			602			

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	125	483	0.259	126	0.4	10.096	B
C-A	514			514			
C-B	24	578	0.042	24	0.0	6.500	A
A-B	22			22			
A-C	492			492			

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	105	514	0.204	105	0.3	8.812	A
C-A	431			431			
C-B	20	598	0.034	20	0.0	6.234	A
A-B	19			19			
A-C	412			412			

2042 - With Development, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Development Entrance	T-Junction	Two-way		1.11	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	64	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	2042 - 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		✓	545	100.000
B		✓	84	100.000
C		✓	662	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	59	486
	B	46	0	38
	C	591	71	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.22	10.72	0.3	B
C-A				
C-B	0.14	7.50	0.2	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	63	506	0.125	63	0.1	8.107	A
C-A	445			445			
C-B	53	603	0.089	53	0.1	6.544	A
A-B	44			44			
A-C	366			366			

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	76	474	0.159	75	0.2	9.024	A
C-A	531			531			
C-B	64	584	0.109	64	0.1	6.916	A
A-B	53			53			
A-C	437			437			

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	92	428	0.216	92	0.3	10.693	B
C-A	651			651			
C-B	78	558	0.140	78	0.2	7.497	A
A-B	65			65			
A-C	535			535			

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	92	428	0.216	92	0.3	10.715	B
C-A	651			651			
C-B	78	558	0.140	78	0.2	7.500	A
A-B	65			65			
A-C	535			535			

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	76	474	0.159	76	0.2	9.048	A
C-A	531			531			
C-B	64	584	0.109	64	0.1	6.926	A
A-B	53			53			
A-C	437			437			

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	63	506	0.125	63	0.1	8.135	A
C-A	445			445			
C-B	53	603	0.089	54	0.1	6.554	A
A-B	44			44			
A-C	366			366			

APPENDIX B: TRAFFIC MODEL OUTPUTS – JUNCTIONS 9: ARCADY

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.5.1.7462
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The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution

Filename: Junction 2.j9
Path: N:\TIA\19099_Fermoy Dev Cumnor\Traffic Generation\Junctions 9
Report generation date: 25/01/2022 11:27:33

»2021 - Without Development, AM
»2021 - Without Development, PM
»2027 - Without Development, AM
»2027 - Without Development , PM
»2027 - With Development, AM
»2027 - With Development, PM
»2032 - Without Development, AM
»2032 - Without Development, PM
»2032 - With Development, AM
»2032 - With Development, PM
»2042 - Without Development, AM
»2042 - Without Development, PM
»2042 - With Development, AM
»2042 - With Development, PM

Summary of junction performance

	AM						PM					
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Network Residual Capacity	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Network Residual Capacity
2021 - Without Development												
Arm 2	D1	0.3	2.31	0.23	A	317 %	D2	0.3	2.31	0.23	A	316 %
Arm 3		0.1	2.17	0.05	A	[Arm 2]		0.1	2.18	0.05	A	[Arm 2]
Arm 4		0.3	2.18	0.21	A			0.2	2.15	0.20	A	
2027 - Without Development												
Arm 2	D3	0.4	2.40	0.26	A	271 %	D4	0.4	2.40	0.26	A	271 %
Arm 3		0.1	2.25	0.06	A	[Arm 2]		0.1	2.25	0.06	A	[Arm 2]
Arm 4		0.3	2.26	0.24	A			0.3	2.23	0.22	A	
2027 - With Development												
Arm 2	D5	0.4	2.44	0.27	A	232 %	D6	0.4	2.51	0.29	A	230 %
Arm 3		0.1	2.28	0.06	A	[Arm 4]		0.1	2.33	0.07	A	[Arm 2]
Arm 4		0.4	2.37	0.28	A			0.3	2.28	0.24	A	
2032 - Without Development												
Arm 2	D7	0.4	2.47	0.28	A	245 %	D8	0.4	2.47	0.28	A	245 %
Arm 3		0.1	2.30	0.07	A	[Arm 2]		0.1	2.30	0.07	A	[Arm 2]
Arm 4		0.3	2.32	0.26	A			0.3	2.28	0.24	A	
2032 - With Development												
Arm 2	D9	0.4	2.51	0.29	A	211 %	D10	0.5	2.58	0.31	A	209 %
Arm 3		0.1	2.33	0.07	A	[Arm 4]		0.1	2.39	0.08	A	[Arm 2]
Arm 4		0.4	2.44	0.29	A			0.3	2.34	0.26	A	
2042 - Without Development												
Arm 2	D11	0.4	2.54	0.30	A	221 %	D12	0.4	2.54	0.30	A	220 %
Arm 3		0.1	2.35	0.07	A	[Arm 2]		0.1	2.36	0.07	A	[Arm 2]
Arm 4		0.4	2.39	0.28	A			0.3	2.34	0.26	A	
2042 - With Development												
Arm 2	D13	0.5	2.58	0.31	A	192 %	D14	0.5	2.66	0.33	A	189 %
Arm 3		0.1	2.39	0.07	A	[Arm 4]		0.1	2.46	0.08	A	[Arm 2]
Arm 4		0.5	2.52	0.31	A			0.4	2.41	0.28	A	

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

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. 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	25/01/2022
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

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	2021 - Without Development	AM	ONE HOUR	08:00	09:30	15
D2	2021 - Without Development	PM	ONE HOUR	17:00	18:30	15
D3	2027 - Without Development	AM	ONE HOUR	08:00	09:30	15
D4	2027 - Without Development	PM	ONE HOUR	17:00	18:30	15
D5	2027 - With Development	AM	ONE HOUR	08:00	09:30	15
D6	2027 - With Development	PM	ONE HOUR	17:00	18:30	15
D7	2032 - Without Development	AM	ONE HOUR	08:00	09:30	15
D8	2032 - Without Development	PM	ONE HOUR	17:00	18:30	15
D9	2032 - With Development	AM	ONE HOUR	08:00	09:30	15
D10	2032 - With Development	PM	ONE HOUR	17:00	18:30	15
D11	2042 - Without Development	AM	ONE HOUR	08:00	09:30	15
D12	2042 - Without Development	PM	ONE HOUR	17:00	18:30	15
D13	2042 - With Development	AM	ONE HOUR	08:00	09:30	15
D14	2042 - With Development	PM	ONE HOUR	17:00	18:30	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2021 - Without Development, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	2.24	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	317	Arm 2

Arms

Arms

Arm	Name	Description
1	M8 Entry	
2	R639	
3	M8 exit	
4	R639 - Fermoy	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1							✓
2	4.00	9.00	27.0	46.0	36.0	56.0	
3	4.00	11.50	20.0	36.0	36.0	58.0	
4	4.00	9.00	35.0	33.0	36.0	50.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1		
2	0.697	2028
3	0.703	2076
4	0.723	2139

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2021 - 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 (%)
1				
2		✓	427	100.000
3		✓	82	100.000
4		✓	405	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	Exit-only	Exit-only	Exit-only	Exit-only
	2	47	1	0	379
	3	0	4	0	78
	4	7	398	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	Exit-only	Exit-only	Exit-only	Exit-only
	2	0	0	0	0
	3	0	0	0	0
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1				
2	0.23	2.31	0.3	A
3	0.05	2.17	0.1	A
4	0.21	2.18	0.3	A

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1		303						
2	321	0	2028	0.159	321	0.2	2.107	A
3	62	321	1850	0.033	62	0.0	2.012	A
4	305	39	2111	0.144	304	0.2	1.993	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1		362						
2	384	0	2028	0.189	384	0.2	2.189	A
3	74	384	1806	0.041	74	0.0	2.077	A
4	364	47	2105	0.173	364	0.2	2.067	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1		443						
2	470	0	2028	0.232	470	0.3	2.310	A
3	90	470	1745	0.052	90	0.1	2.174	A
4	446	57	2097	0.213	446	0.3	2.179	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1		444						
2	470	0	2028	0.232	470	0.3	2.310	A
3	90	470	1745	0.052	90	0.1	2.174	A
4	446	57	2097	0.213	446	0.3	2.179	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1		363						
2	384	0	2028	0.189	384	0.2	2.191	A
3	74	384	1806	0.041	74	0.0	2.080	A
4	364	47	2105	0.173	364	0.2	2.069	A

09:15 - 09:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1		304						
2	321	0	2028	0.159	322	0.2	2.111	A
3	62	322	1850	0.033	62	0.0	2.013	A
4	305	39	2110	0.144	305	0.2	1.995	A

2021 - Without Development, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	2.23	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	316	Arm 2

Traffic Demand

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	2021 - 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 (%)
1				
2		✓	428	100.000
3		✓	85	100.000
4		✓	373	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	Exit-only	Exit-only	Exit-only	Exit-only
	2	55	1	0	372
	3	2	11	0	72
	4	12	361	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	Exit-only	Exit-only	Exit-only	Exit-only
	2	0	0	0	0
	3	0	0	0	0
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1				
2	0.23	2.31	0.3	A
3	0.05	2.18	0.1	A
4	0.20	2.15	0.2	A

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1		280						
2	322	0	2028	0.159	321	0.2	2.108	A
3	64	321	1850	0.035	64	0.0	2.015	A
4	281	52	2101	0.134	280	0.2	1.977	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1		335						
2	385	0	2028	0.190	385	0.2	2.190	A
3	76	385	1805	0.042	76	0.0	2.081	A
4	335	62	2094	0.160	335	0.2	2.046	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1		410						
2	471	0	2028	0.232	471	0.3	2.312	A
3	94	471	1745	0.054	94	0.1	2.180	A
4	411	76	2084	0.197	410	0.2	2.151	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1		411						
2	471	0	2028	0.232	471	0.3	2.312	A
3	94	471	1744	0.054	94	0.1	2.180	A
4	411	76	2084	0.197	411	0.2	2.151	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1		336						
2	385	0	2028	0.190	385	0.2	2.193	A
3	76	385	1805	0.042	76	0.0	2.084	A
4	335	62	2094	0.160	336	0.2	2.047	A

18:15 - 18:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1		281						
2	322	0	2028	0.159	322	0.2	2.112	A
3	64	322	1849	0.035	64	0.0	2.016	A
4	281	52	2101	0.134	281	0.2	1.979	A

2027 - Without Development, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	2.33	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	271	Arm 2

Traffic Demand

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	2027 - 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 (%)
1				
2		✓	480	100.000
3		✓	92	100.000
4		✓	455	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	Exit-only	Exit-only	Exit-only	Exit-only
	2	53	1	0	426
	3	0	5	0	87
	4	8	447	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	Exit-only	Exit-only	Exit-only	Exit-only
	2	0	0	0	0
	3	0	0	0	0
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1				
2	0.26	2.40	0.4	A
3	0.06	2.25	0.1	A
4	0.24	2.26	0.3	A

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1		340						
2	361	0	2028	0.178	361	0.2	2.158	A
3	69	361	1822	0.038	69	0.0	2.053	A
4	343	44	2107	0.163	342	0.2	2.038	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1		407						
2	432	0	2028	0.213	431	0.3	2.254	A
3	83	431	1773	0.047	83	0.0	2.130	A
4	409	53	2100	0.195	409	0.2	2.128	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1		498						
2	528	0	2028	0.261	528	0.4	2.400	A
3	101	528	1704	0.059	101	0.1	2.245	A
4	501	65	2092	0.239	501	0.3	2.262	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1		499						
2	528	0	2028	0.261	528	0.4	2.400	A
3	101	528	1704	0.059	101	0.1	2.245	A
4	501	65	2092	0.239	501	0.3	2.262	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1		408						
2	432	0	2028	0.213	432	0.3	2.255	A
3	83	432	1772	0.047	83	0.0	2.130	A
4	409	53	2100	0.195	409	0.2	2.130	A

09:15 - 09:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1		341						
2	361	0	2028	0.178	362	0.2	2.162	A
3	69	362	1822	0.038	69	0.0	2.054	A
4	343	44	2107	0.163	343	0.2	2.040	A

2027 - Without Development , PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	2.31	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	271	Arm 2

Traffic Demand

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	2027 - 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 (%)
1				
2		✓	479	100.000
3		✓	95	100.000
4		✓	419	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	Exit-only	Exit-only	Exit-only	Exit-only
	2	61	1	0	417
	3	2	12	0	81
	4	13	406	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	Exit-only	Exit-only	Exit-only	Exit-only
	2	0	0	0	0
	3	0	0	0	0
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1				
2	0.26	2.40	0.4	A
3	0.06	2.25	0.1	A
4	0.22	2.23	0.3	A

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1		315						
2	361	0	2028	0.178	360	0.2	2.157	A
3	72	360	1823	0.039	71	0.0	2.055	A
4	315	57	2098	0.150	315	0.2	2.018	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1		377						
2	431	0	2028	0.212	430	0.3	2.253	A
3	85	430	1773	0.048	85	0.1	2.132	A
4	377	68	2089	0.180	377	0.2	2.101	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1		461						
2	527	0	2028	0.260	527	0.4	2.398	A
3	105	527	1705	0.061	105	0.1	2.248	A
4	461	84	2078	0.222	461	0.3	2.225	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1		461						
2	527	0	2028	0.260	527	0.4	2.398	A
3	105	527	1705	0.061	105	0.1	2.249	A
4	461	84	2078	0.222	461	0.3	2.226	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1		377						
2	431	0	2028	0.212	431	0.3	2.256	A
3	85	431	1773	0.048	85	0.1	2.134	A
4	377	68	2089	0.180	377	0.2	2.103	A

18:15 - 18:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1		316						
2	361	0	2028	0.178	361	0.2	2.161	A
3	72	361	1822	0.039	72	0.0	2.056	A
4	315	57	2097	0.150	316	0.2	2.021	A

2027 - With Development, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	2.39	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	232	Arm 4

Traffic Demand

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	2027 - 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 (%)
1				
2		✓	502	100.000
3		✓	97	100.000
4		✓	523	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	Exit-only	Exit-only	Exit-only	Exit-only
	2	53	1	0	448
	3	0	5	0	92
	4	9	514	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	Exit-only	Exit-only	Exit-only	Exit-only
	2	0	0	0	0
	3	0	0	0	0
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1				
2	0.27	2.44	0.4	A
3	0.06	2.28	0.1	A
4	0.28	2.37	0.4	A

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1		391						
2	378	0	2028	0.186	377	0.2	2.179	A
3	73	377	1811	0.040	73	0.0	2.071	A
4	394	44	2107	0.187	393	0.2	2.099	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1		467						
2	451	0	2028	0.223	451	0.3	2.282	A
3	87	451	1759	0.050	87	0.1	2.153	A
4	470	53	2100	0.224	470	0.3	2.207	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1		572						
2	553	0	2028	0.273	552	0.4	2.439	A
3	107	552	1687	0.063	107	0.1	2.277	A
4	576	65	2092	0.275	575	0.4	2.374	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1		573						
2	553	0	2028	0.273	553	0.4	2.439	A
3	107	553	1687	0.063	107	0.1	2.277	A
4	576	65	2092	0.275	576	0.4	2.374	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1		468						
2	451	0	2028	0.223	452	0.3	2.285	A
3	87	452	1758	0.050	87	0.1	2.155	A
4	470	53	2100	0.224	471	0.3	2.210	A

09:15 - 09:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1		392						
2	378	0	2028	0.186	378	0.2	2.183	A
3	73	378	1810	0.040	73	0.0	2.072	A
4	394	44	2107	0.187	394	0.2	2.103	A

2027 - With Development, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	2.40	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	230	Arm 2

Traffic Demand

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	2027 - 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 (%)
1				
2		✓	539	100.000
3		✓	106	100.000
4		✓	457	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	Exit-only	Exit-only	Exit-only	Exit-only
	2	61	1	0	477
	3	2	12	0	92
	4	14	443	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	Exit-only	Exit-only	Exit-only	Exit-only
	2	0	0	0	0
	3	0	0	0	0
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1				
2	0.29	2.51	0.4	A
3	0.07	2.33	0.1	A
4	0.24	2.28	0.3	A

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1		343						
2	406	0	2028	0.200	405	0.2	2.217	A
3	80	405	1791	0.045	80	0.0	2.103	A
4	344	57	2098	0.164	343	0.2	2.051	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1		410						
2	485	0	2028	0.239	484	0.3	2.332	A
3	95	484	1735	0.055	95	0.1	2.194	A
4	411	68	2089	0.197	411	0.2	2.144	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1		502						
2	593	0	2028	0.293	593	0.4	2.509	A
3	117	593	1659	0.070	117	0.1	2.334	A
4	503	84	2078	0.242	503	0.3	2.285	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1		502						
2	593	0	2028	0.293	593	0.4	2.509	A
3	117	593	1659	0.070	117	0.1	2.334	A
4	503	84	2078	0.242	503	0.3	2.285	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1		410						
2	485	0	2028	0.239	485	0.3	2.335	A
3	95	485	1735	0.055	95	0.1	2.197	A
4	411	68	2089	0.197	411	0.2	2.146	A

18:15 - 18:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1		343						
2	406	0	2028	0.200	406	0.3	2.221	A
3	80	406	1790	0.045	80	0.0	2.106	A
4	344	57	2097	0.164	344	0.2	2.054	A

2032 - Without Development, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	2.39	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	245	Arm 2

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D7	2032 - 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 (%)
1				
2		✓	516	100.000
3		✓	99	100.000
4		✓	490	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	Exit-only	Exit-only	Exit-only	Exit-only
	2	57	1	0	458
	3	0	5	0	94
	4	9	481	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	Exit-only	Exit-only	Exit-only	Exit-only
	2	0	0	0	0
	3	0	0	0	0
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1				
2	0.28	2.47	0.4	A
3	0.07	2.30	0.1	A
4	0.26	2.32	0.3	A

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1		366						
2	388	0	2028	0.192	388	0.2	2.193	A
3	75	388	1803	0.041	74	0.0	2.082	A
4	369	47	2105	0.175	368	0.2	2.072	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1		438						
2	464	0	2028	0.229	464	0.3	2.301	A
3	89	464	1750	0.051	89	0.1	2.167	A
4	440	57	2098	0.210	440	0.3	2.171	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1		536						
2	568	0	2028	0.280	568	0.4	2.465	A
3	109	568	1677	0.065	109	0.1	2.296	A
4	540	69	2089	0.258	539	0.3	2.323	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1		536						
2	568	0	2028	0.280	568	0.4	2.465	A
3	109	568	1676	0.065	109	0.1	2.296	A
4	540	69	2089	0.258	539	0.3	2.323	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1		438						
2	464	0	2028	0.229	464	0.3	2.304	A
3	89	464	1749	0.051	89	0.1	2.169	A
4	440	57	2098	0.210	441	0.3	2.174	A

09:15 - 09:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1		367						
2	388	0	2028	0.192	389	0.2	2.197	A
3	75	389	1802	0.041	75	0.0	2.084	A
4	369	47	2104	0.175	369	0.2	2.074	A

2032 - Without Development, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	2.37	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	245	Arm 2

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D8	2032 - 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 (%)
1				
2		✓	516	100.000
3		✓	104	100.000
4		✓	450	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	Exit-only	Exit-only	Exit-only	Exit-only
	2	66	1	0	449
	3	3	13	0	88
	4	14	436	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	Exit-only	Exit-only	Exit-only	Exit-only
	2	0	0	0	0
	3	0	0	0	0
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1				
2	0.28	2.47	0.4	A
3	0.07	2.30	0.1	A
4	0.24	2.28	0.3	A

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1		338						
2	388	0	2028	0.192	388	0.2	2.193	A
3	78	388	1803	0.043	78	0.0	2.086	A
4	339	62	2094	0.162	338	0.2	2.049	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1		404						
2	464	0	2028	0.229	464	0.3	2.301	A
3	93	464	1750	0.053	93	0.1	2.173	A
4	405	75	2085	0.194	404	0.2	2.142	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1		495						
2	568	0	2028	0.280	568	0.4	2.465	A
3	115	568	1677	0.068	114	0.1	2.304	A
4	495	91	2073	0.239	495	0.3	2.281	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1		495						
2	568	0	2028	0.280	568	0.4	2.465	A
3	115	568	1676	0.068	115	0.1	2.304	A
4	495	91	2073	0.239	495	0.3	2.282	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1		405						
2	464	0	2028	0.229	464	0.3	2.304	A
3	93	464	1749	0.053	94	0.1	2.173	A
4	405	75	2085	0.194	405	0.2	2.142	A

18:15 - 18:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1		339						
2	388	0	2028	0.192	389	0.2	2.196	A
3	78	389	1802	0.043	78	0.0	2.087	A
4	339	63	2094	0.162	339	0.2	2.053	A

2032 - With Development, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	2.46	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	211	Arm 4

Traffic Demand

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	2032 - 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 (%)
1				
2		✓	538	100.000
3		✓	104	100.000
4		✓	558	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	Exit-only	Exit-only	Exit-only	Exit-only
	2	57	1	0	480
	3	0	5	0	99
	4	10	548	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	Exit-only	Exit-only	Exit-only	Exit-only
	2	0	0	0	0
	3	0	0	0	0
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1				
2	0.29	2.51	0.4	A
3	0.07	2.33	0.1	A
4	0.29	2.44	0.4	A

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1		416						
2	405	0	2028	0.200	404	0.2	2.216	A
3	78	404	1792	0.044	78	0.0	2.100	A
4	420	47	2105	0.200	419	0.2	2.135	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1		498						
2	484	0	2028	0.239	483	0.3	2.330	A
3	93	483	1736	0.054	93	0.1	2.191	A
4	502	57	2098	0.239	501	0.3	2.254	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1		610						
2	592	0	2028	0.292	592	0.4	2.507	A
3	115	592	1660	0.069	114	0.1	2.329	A
4	614	69	2089	0.294	614	0.4	2.441	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1		610						
2	592	0	2028	0.292	592	0.4	2.507	A
3	115	592	1659	0.069	115	0.1	2.329	A
4	614	69	2089	0.294	614	0.4	2.441	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1		498						
2	484	0	2028	0.239	484	0.3	2.333	A
3	93	484	1735	0.054	94	0.1	2.194	A
4	502	57	2098	0.239	502	0.3	2.257	A

09:15 - 09:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1		417						
2	405	0	2028	0.200	405	0.3	2.220	A
3	78	405	1791	0.044	78	0.0	2.101	A
4	420	47	2104	0.200	420	0.3	2.139	A

2032 - With Development, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	2.47	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	209	Arm 2

Traffic Demand

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	2032 - 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 (%)
1				
2		✓	576	100.000
3		✓	115	100.000
4		✓	488	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	Exit-only	Exit-only	Exit-only	Exit-only
	2	66	1	0	509
	3	3	13	0	99
	4	15	473	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	Exit-only	Exit-only	Exit-only	Exit-only
	2	0	0	0	0
	3	0	0	0	0
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1				
2	0.31	2.58	0.5	A
3	0.08	2.39	0.1	A
4	0.26	2.34	0.3	A

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1		366						
2	434	0	2028	0.214	433	0.3	2.255	A
3	87	433	1772	0.049	86	0.1	2.136	A
4	367	62	2094	0.175	367	0.2	2.083	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1		438						
2	518	0	2028	0.255	518	0.3	2.383	A
3	103	518	1712	0.060	103	0.1	2.237	A
4	439	75	2085	0.210	438	0.3	2.186	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1		536						
2	634	0	2028	0.313	634	0.5	2.582	A
3	127	634	1630	0.078	127	0.1	2.393	A
4	537	91	2073	0.259	537	0.3	2.344	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1		536						
2	634	0	2028	0.313	634	0.5	2.582	A
3	127	634	1630	0.078	127	0.1	2.394	A
4	537	91	2073	0.259	537	0.3	2.344	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1		438						
2	518	0	2028	0.255	518	0.3	2.384	A
3	103	518	1711	0.060	103	0.1	2.238	A
4	439	75	2085	0.210	439	0.3	2.187	A

18:15 - 18:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1		367						
2	434	0	2028	0.214	434	0.3	2.260	A
3	87	434	1771	0.049	87	0.1	2.139	A
4	367	63	2094	0.175	368	0.2	2.087	A

2042 - Without Development, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	2.46	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	221	Arm 2

Traffic Demand

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	2042 - 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 (%)
1				
2		✓	554	100.000
3		✓	106	100.000
4		✓	527	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	Exit-only	Exit-only	Exit-only	Exit-only
	2	61	1	0	492
	3	0	5	0	101
	4	10	517	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	Exit-only	Exit-only	Exit-only	Exit-only
	2	0	0	0	0
	3	0	0	0	0
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1				
2	0.30	2.54	0.4	A
3	0.07	2.35	0.1	A
4	0.28	2.39	0.4	A

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1		393						
2	417	0	2028	0.206	416	0.3	2.232	A
3	80	416	1783	0.045	80	0.0	2.113	A
4	397	50	2102	0.189	396	0.2	2.108	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1		470						
2	498	0	2028	0.246	498	0.3	2.352	A
3	95	498	1726	0.055	95	0.1	2.207	A
4	474	60	2095	0.226	474	0.3	2.219	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1		575						
2	610	0	2028	0.301	610	0.4	2.538	A
3	117	610	1647	0.071	117	0.1	2.351	A
4	580	74	2085	0.278	580	0.4	2.391	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1		576						
2	610	0	2028	0.301	610	0.4	2.538	A
3	117	610	1647	0.071	117	0.1	2.352	A
4	580	74	2085	0.278	580	0.4	2.391	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1		471						
2	498	0	2028	0.246	498	0.3	2.354	A
3	95	498	1725	0.055	95	0.1	2.208	A
4	474	60	2095	0.226	474	0.3	2.222	A

09:15 - 09:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1		394						
2	417	0	2028	0.206	417	0.3	2.237	A
3	80	417	1782	0.045	80	0.0	2.114	A
4	397	50	2102	0.189	397	0.2	2.112	A

2042 - Without Development, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	2.44	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	220	Arm 2

Traffic Demand

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	2042 - 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 (%)
1				
2		✓	555	100.000
3		✓	111	100.000
4		✓	484	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	Exit-only	Exit-only	Exit-only	Exit-only
	2	71	1	0	483
	3	3	14	0	94
	4	15	469	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	Exit-only	Exit-only	Exit-only	Exit-only
	2	0	0	0	0
	3	0	0	0	0
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1				
2	0.30	2.54	0.4	A
3	0.07	2.36	0.1	A
4	0.26	2.34	0.3	A

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1		364						
2	418	0	2028	0.206	417	0.3	2.233	A
3	84	417	1783	0.047	83	0.0	2.118	A
4	364	67	2090	0.174	364	0.2	2.083	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1		435						
2	499	0	2028	0.246	499	0.3	2.354	A
3	100	499	1725	0.058	100	0.1	2.214	A
4	435	80	2081	0.209	435	0.3	2.186	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1		533						
2	611	0	2028	0.301	611	0.4	2.540	A
3	122	611	1646	0.074	122	0.1	2.361	A
4	533	98	2068	0.258	533	0.3	2.344	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1		533						
2	611	0	2028	0.301	611	0.4	2.540	A
3	122	611	1646	0.074	122	0.1	2.361	A
4	533	98	2068	0.258	533	0.3	2.344	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1		435						
2	499	0	2028	0.246	499	0.3	2.357	A
3	100	499	1725	0.058	100	0.1	2.217	A
4	435	80	2081	0.209	435	0.3	2.189	A

18:15 - 18:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1		365						
2	418	0	2028	0.206	418	0.3	2.236	A
3	84	418	1782	0.047	84	0.0	2.121	A
4	364	67	2090	0.174	365	0.2	2.087	A

2042 - With Development, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	2.53	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	192	Arm 4

Traffic Demand

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	2042 - 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 (%)
1				
2		✓	576	100.000
3		✓	111	100.000
4		✓	595	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	Exit-only	Exit-only	Exit-only	Exit-only
	2	61	1	0	514
	3	0	5	0	106
	4	11	584	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	Exit-only	Exit-only	Exit-only	Exit-only
	2	0	0	0	0
	3	0	0	0	0
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1				
2	0.31	2.58	0.5	A
3	0.07	2.39	0.1	A
4	0.31	2.52	0.5	A

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1		443						
2	434	0	2028	0.214	433	0.3	2.255	A
3	84	433	1772	0.047	83	0.0	2.132	A
4	448	50	2102	0.213	447	0.3	2.173	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1		530						
2	518	0	2028	0.255	518	0.3	2.383	A
3	100	518	1712	0.058	100	0.1	2.232	A
4	535	60	2095	0.255	535	0.3	2.306	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1		649						
2	634	0	2028	0.313	634	0.5	2.582	A
3	122	634	1630	0.075	122	0.1	2.386	A
4	655	74	2085	0.314	655	0.5	2.516	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1		650						
2	634	0	2028	0.313	634	0.5	2.582	A
3	122	634	1630	0.075	122	0.1	2.387	A
4	655	74	2085	0.314	655	0.5	2.516	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1		531						
2	518	0	2028	0.255	518	0.3	2.384	A
3	100	518	1711	0.058	100	0.1	2.233	A
4	535	60	2095	0.255	535	0.3	2.308	A

09:15 - 09:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1		444						
2	434	0	2028	0.214	434	0.3	2.260	A
3	84	434	1771	0.047	84	0.0	2.135	A
4	448	50	2102	0.213	448	0.3	2.178	A

2042 - With Development, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	2.54	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	189	Arm 2

Traffic Demand

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	2042 - 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 (%)
1				
2		✓	615	100.000
3		✓	122	100.000
4		✓	522	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	Exit-only	Exit-only	Exit-only	Exit-only
	2	71	1	0	543
	3	3	14	0	105
	4	16	506	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	Exit-only	Exit-only	Exit-only	Exit-only
	2	0	0	0	0
	3	0	0	0	0
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1				
2	0.33	2.66	0.5	A
3	0.08	2.46	0.1	A
4	0.28	2.41	0.4	A

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1		391						
2	463	0	2028	0.228	462	0.3	2.298	A
3	92	462	1751	0.052	92	0.1	2.169	A
4	393	67	2090	0.188	392	0.2	2.118	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1		468						
2	553	0	2028	0.273	553	0.4	2.440	A
3	110	553	1687	0.065	110	0.1	2.281	A
4	469	80	2081	0.226	469	0.3	2.233	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1		573						
2	677	0	2028	0.334	677	0.5	2.664	A
3	134	677	1600	0.084	134	0.1	2.455	A
4	575	98	2068	0.278	574	0.4	2.410	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1		574						
2	677	0	2028	0.334	677	0.5	2.664	A
3	134	677	1600	0.084	134	0.1	2.456	A
4	575	98	2068	0.278	575	0.4	2.410	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1		469						
2	553	0	2028	0.273	553	0.4	2.443	A
3	110	553	1687	0.065	110	0.1	2.282	A
4	469	80	2081	0.226	470	0.3	2.236	A

18:15 - 18:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1		392						
2	463	0	2028	0.228	463	0.3	2.302	A
3	92	463	1750	0.052	92	0.1	2.170	A
4	393	67	2090	0.188	393	0.2	2.121	A

APPENDIX C: TRICS

Calculation Reference: AUDIT-761701-220118-0108

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

12	**CONNAUGHT**		
	CS	SLIGO	2 days
	LT	LEITRIM	1 days
	RO	ROSCOMMON	1 days
13	**MUNSTER**		
	TI	TIPPERARY	1 days
	WA	WATERFORD	1 days
14	**LEINSTER**		
	CC	CARLOW	1 days
15	**GREATER DUBLIN**		
	DL	DUBLIN	1 days
16	**ULSTER (REPUBLIC OF IRELAND)**		
	DN	DONEGAL	5 days
17	**ULSTER (NORTHERN IRELAND)**		
	AN	ANTRIM	1 days
	DO	DOWN	1 days

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

Primary Filtering selection:

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

Parameter: No of Dwellings
Actual Range: 6 to 280 (units:)
Range Selected by User: 200 to 600 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/13 to 17/06/21

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	1 days
Tuesday	2 days
Wednesday	6 days
Thursday	3 days
Friday	3 days

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

Selected survey types:

Manual count	15 days
Directional ATC Count	0 days

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

Selected Locations:

Suburban Area (PPS6 Out of Centre)	5
Edge of Town	8
Neighbourhood Centre (PPS6 Local Centre)	2

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and

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	15 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	2 days
1,001 to 5,000	5 days
5,001 to 10,000	2 days
10,001 to 15,000	5 days
20,001 to 25,000	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	3 days
5,001 to 25,000	7 days
25,001 to 50,000	2 days
50,001 to 75,000	1 days
75,001 to 100,000	2 days

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

Car ownership within 5 miles:

0.6 to 1.0	1 days
1.1 to 1.5	10 days
1.6 to 2.0	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	15 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	15 days

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

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

LIST OF SITES relevant to selection parameters

1 **AN-03-A-08** **HOUSES & FLATS** **ANTRIM**
BALLINDERRY ROAD
LISBURN

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

2 **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 **CS-03-A-03** **MIXED HOUSES** **SLIGO**
TOP ROAD
STRANDHILL
STRANDHILL
Neighbourhood Centre (PPS6 Local Centre)
Village
Total No of Dwellings: 30
Survey date: THURSDAY *27/10/16* *Survey Type: MANUAL*

4 **CS-03-A-04** **DETACHED & SEMI-DETACHED** **SLIGO**
R292
STRANDHILL

Neighbourhood Centre (PPS6 Local Centre)
Village
Total No of Dwellings: 63
Survey date: THURSDAY *27/10/16* *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-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*

11 **DO-03-A-03** **DETACHED/SEMI DETACHED** **DOWN**
OLD MILL HEIGHTS
BELFAST
DUNDONALD
Edge of Town
Residential Zone
Total No of Dwellings: 79
Survey date: WEDNESDAY *23/10/13* *Survey Type: MANUAL*

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

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

14 **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.)

15 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*

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	15	85	0.031	15	85	0.187	15	85	0.218
08:00 - 09:00	15	85	0.137	**15**	**85**	**0.482**	15	85	0.619
09:00 - 10:00	15	85	0.208	15	85	0.264	15	85	0.472
10:00 - 11:00	15	85	0.151	15	85	0.176	15	85	0.327
11:00 - 12:00	15	85	0.160	15	85	0.201	15	85	0.361
12:00 - 13:00	15	85	0.242	15	85	0.243	15	85	0.485
13:00 - 14:00	15	85	0.234	15	85	0.240	15	85	0.474
14:00 - 15:00	15	85	0.279	15	85	0.276	15	85	0.555
15:00 - 16:00	15	85	0.332	15	85	0.239	15	85	0.571
16:00 - 17:00	15	85	0.319	15	85	0.217	15	85	0.536
17:00 - 18:00	**15**	**85**	**0.480**	15	85	0.274	**15**	**85**	**0.754**
18:00 - 19:00	15	85	0.363	15	85	0.262	15	85	0.625
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.936			3.061			5.997

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 date range:	01/01/13 - 17/06/21
Number of weekdays (Monday-Friday):	15
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 show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

Calculation Reference: AUDIT-761701-220105-0128

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:
12 CONNAUGHT
RO ROSCOMMON 2 days

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

Primary Filtering selection:

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

Parameter: Gross floor area
Actual Range: 500 to 509 (units: sqm)
Range Selected by User: 500 to 1300 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/13 to 27/04/18

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

Selected survey days:
Friday 2 days

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

Selected survey types:
Manual count 2 days
Directional ATC Count 0 days

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

Selected Locations:
Edge of Town Centre 1
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 2

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

Secondary Filtering selection:

Use Class:
E(f) 2 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	1 days

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

Population within 5 miles:

5,001 to 25,000	2 days

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	2 days

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

Travel Plan:

No	2 days

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

PTAL Rating:

No PTAL Present	2 days

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

LIST OF SITES relevant to selection parameters

1	**RO-04-D-01**	**NURSERY**		**ROSCOMMON**
	PARK VIEW			
	ROSCOMMON			
	CRUBY HILL			
	Edge of Town			
	Residential Zone			
	Total Gross floor area:		500 sqm	
	Survey date: FRIDAY		*26/09/14*	*Survey Type: MANUAL*
2	**RO-04-D-02**	**NURSERY**		**ROSCOMMON**
	CIRCULAR ROAD			
	ROSCOMMON			
	BALLYPHEASAN			
	Edge of Town Centre			
	Residential Zone			
	Total Gross floor area:		509 sqm	
	Survey date: FRIDAY		*27/04/18*	*Survey Type: MANUAL*

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

TRIP RATE for Land Use 04 - EDUCATION/D - NURSERY

TOTAL VEHICLES

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	2	505	0.496	2	505	0.297	2	505	0.793
08:00 - 09:00	**2**	**505**	**5.946**	2	505	3.271	2	505	9.217
09:00 - 10:00	2	505	5.649	**2**	**505**	**6.244**	**2**	**505**	**11.893**
10:00 - 11:00	2	505	0.396	2	505	0.793	2	505	1.189
11:00 - 12:00	2	505	1.586	2	505	0.396	2	505	1.982
12:00 - 13:00	2	505	3.271	2	505	4.460	2	505	7.731
13:00 - 14:00	2	505	1.982	2	505	1.982	2	505	3.964
14:00 - 15:00	2	505	2.279	2	505	1.288	2	505	3.567
15:00 - 16:00	2	505	0.892	2	505	1.982	2	505	2.874
16:00 - 17:00	2	505	1.982	2	505	2.081	2	505	4.063
17:00 - 18:00	2	505	3.766	2	505	5.055	2	505	8.821
18:00 - 19:00	2	505	0.000	2	505	0.793	2	505	0.793
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			28.245			28.642			56.887

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:	500 - 509 (units: sqm)
Survey date date range:	01/01/13 - 27/04/18
Number of weekdays (Monday-Friday):	2
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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

APPENDIX D: TRAFFIC SURVEYS

3634-IRE Fermoy
Junction Turning Count
16/12/2021

Site 1 - R639(NNW) / Car Park Access / R639(SSE) / Dun Eala

Origin : Arm A R639(NNW)

	Destination : Arm A R639(NNW)							Total	**Destination :** Arm B Car Park Access							Total	**Destination :** Arm C R639(SSE)							Total	**Destination :** Arm D Dun Eala							Total	Arm Totals
	Car	LGV	OGV1	OGV2	PSV	MC	PC		Car	LGV	OGV1	OGV2	PSV	MC	PC		Car	LGV	OGV1	OGV2	PSV	MC	PC		Car	LGV	OGV1	OGV2	PSV	MC	PC		
07:00	0	0	0	0	0	0	0	0	15	6	1	0	0	0	0	22	57	10	2	1	2	0	0	72	3	0	0	0	0	0	0	3	97
07:15	0	0	0	0	0	0	0	0	5	5	0	0	0	0	0	10	37	5	4	4	1	0	0	51	0	0	0	0	0	0	0	0	61
07:30	0	0	0	0	0	0	0	0	10	7	1	0	0	0	0	18	39	5	1	2	3	0	0	50	2	0	0	0	0	0	0	2	70
07:45	0	0	0	0	0	0	0	0	10	2	0	0	0	0	0	12	49	12	1	1	1	1	0	65	8	0	0	0	0	0	0	8	85
1 Hr	0	0	0	0	0	0	0	0	40	20	2	0	0	0	0	62	182	32	8	8	7	1	0	238	13	0	0	0	0	0	0	13	313
08:00	0	0	0	0	0	0	0	0	9	6	0	0	0	0	0	15	36	10	0	1	2	0	0	49	11	0	0	0	1	0	0	12	76
08:15	0	0	0	0	0	0	0	0	16	3	0	0	1	0	0	20	62	9	0	2	5	0	0	78	33	0	0	0	5	0	0	38	136
08:30	0	0	0	0	0	0	0	0	19	6	0	0	2	0	0	27	53	10	1	1	1	1	0	67	40	0	0	0	0	0	0	40	134
08:45	0	0	0	0	0	0	0	0	14	2	0	0	0	0	0	16	44	7	2	2	1	0	0	56	12	0	0	0	0	0	0	12	84
1 Hr	0	0	0	0	0	0	0	0	58	17	0	0	3	0	0	78	195	36	3	6	9	1	0	250	96	0	0	0	6	0	0	102	430
09:00	0	0	0	0	0	0	0	0	16	4	1	0	0	0	0	21	32	14	3	4	0	0	0	53	11	0	0	0	0	0	0	11	85
09:15	0	0	0	0	0	0	0	0	15	3	0	0	0	0	0	18	35	11	1	2	0	0	0	49	5	0	0	0	0	0	0	5	72
09:30	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	9	29	4	1	2	1	0	0	37	6	0	0	0	0	0	0	6	52
09:45	0	0	0	0	0	0	0	0	14	1	0	0	0	0	0	15	29	10	1	2	2	0	0	44	3	0	0	0	0	0	0	3	62
1 Hr	0	0	0	0	0	0	0	0	54	8	1	0	0	0	0	63	125	39	6	10	3	0	0	183	25	0	0	0	0	0	0	25	271
10:00	0	0	0	0	0	0	0	0	14	2	0	0	0	0	0	16	41	6	0	4	1	0	0	52	7	0	0	0	0	0	0	7	75
10:15	0	0	0	0	0	0	0	0	17	1	0	0	0	0	0	18	37	9	0	1	0	0	0	47	1	0	0	0	0	0	0	1	66
10:30	0	0	0	0	0	0	0	0	10	2	1	0	0	0	0	13	37	7	0	2	1	0	0	47	8	1	0	0	0	0	0	9	69
10:45	0	0	0	0	0	0	0	0	18	4	0	0	0	0	0	22	41	11	3	4	0	0	0	59	3	1	0	0	1	0	0	5	86
1 Hr	0	0	0	0	0	0	0	0	59	9	1	0	0	0	0	69	156	33	3	11	2	0	0	205	19	2	0	0	1	0	0	22	296
11:00	0	0	0	0	0	0	0	0	23	4	0	0	1	0	0	28	36	9	4	1	0	0	0	50	9	0	0	0	0	0	0	9	87
11:15	0	0	0	0	0	0	0	0	18	1	0	0	0	0	0	19	33	10	2	2	2	0	0	49	6	0	0	0	0	0	0	6	74
11:30	0	0	0	0	0	0	0	0	17	2	1	0	0	0	0	20	41	4	2	1	0	0	0	48	9	1	0	0	0	0	0	10	78
11:45	0	0	0	0	0	0	0	0	15	2	0	0	0	0	0	17	43	5	1	2	1	0	0	52	4	0	0	0	0	0	0	4	73
1 Hr	0	0	0	0	0	0	0	0	73	9	1	0	1	0	0	84	153	28	9	6	3	0	0	199	28	1	0	0	0	0	0	29	312
12:00	0	0	0	0	0	0	0	0	10	2	0	0	0	0	0	12	37	5	0	2	0	0	0	44	8	2	0	0	0	0	0	10	66
12:15	0	0	0	0	0	0	0	0	13	3	0	0	0	0	0	16	52	3	1	3	0	0	0	59	11	1	0	0	0	0	0	12	87
12:30	0	0	0	0	0	0	0	0	10	4	0	0	0	0	0	14	54	4	1	2	1	0	0	62	4	0	0	0	0	1	0	5	81
12:45	0	0	0	0	0	0	0	0	27	2	0	1	0	0	0	30	38	8	0	2	0	0	1	49	7	0	0	0	0	0	0	7	86
1 Hr	0	0	0	0	0	0	0	0	60	11	0	1	0	0	0	72	181	20	2	9	1	0	1	214	30	3	0	0	0	1	0	34	320
13:00	0	0	0	0	0	0	0	0	25	2	0	0	0	0	0	27	56	11	0	0	1	0	0	68	13	1	1	0	0	0	0	15	110
13:15	0	0	0	0	0	0	0	0	15	2	0	0	0	0	0	17	46	8	1	1	0	0	0	56	22	2	0	0	0	0	0	24	97
13:30	0	0	0	0	0	0	0	0	19	4	0	0	0	0	0	23	42	11	2	2	1	1	0	59	13	0	0	0	0	0	0	13	95
13:45	0	0	0	0	0	0	0	0	12	1	0	0	0	0	0	13	30	12	0	1	0	0	0	43	8	0	1	0	0	0	0	9	65
1 Hr	0	0	0	0	0	0	0	0	71	9	0	0	0	0	0	80	174	42	3	4	2	1	0	226	56	3	2	0	0	0	0	61	367
14:00	0	0	0	0	0	0	0	0	14	0	0	0	0	0	0	14	46	10	0	3	0	0	0	59	11	1	0	0	1	0	0	13	86
14:15	0	0	0	0	0	0	0	0	17	3	2	0	0	0	0	22	40	12	3	2	1	0	0	58	14	0	0	0	0	0	0	14	94
14:30	0	0	0	0	0	0	0	0	14	2	0	0	0	0	0	16	63	11	2	5	1	0	0	82	9	0	0	0	0	0	0	9	107
14:45	0	0	0	0	0	0	0	0	15	1	0	0	0	0	0	16	70	8	4	1	0	1	0	84	17	1	0	0	2	0	0	20	120
1 Hr	0	0	0	0	0	0	0	0	60	6	2	0	0	0	0	68	219	41	9	11	2	1	0	283	51	2	0	0	3	0	0	56	407
15:00	0	0	0	0	0	0	0	0	14	1	0	0	0	0	0	15	44	12	4	1	0	0	0	61	18	1	0	0	1	0	0	20	96
15:15	0	0	0	0	0	0	0	0	13	3	0	0	0	0	0	16	51	7	2	1	1	0	0	62	24	1	0	0	2	0	0	27	105
15:30	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	8	82	14	0	0	0	0	0	96	24	1	0	0	2	0	0	27	131
15:45	0	0	0	0	0	0	0	0	15	0	0	0	0	0	0	15	86	11	1	2	12	0	0	112	16	0	0	0	1	0	0	17	144
1 Hr	0	0	0	0	0	0	0	0	50	4	0	0	0	0	0	54	263	44	7	4	13	0	0	331	82	3	0	0	6	0	0	91	476
16:00	0	0	0	0	0	0	0	0	24	0	0	0	0	0	0	24	49	14	1	3	1	0	0	68	7	1	0	0	0	0	0	8	100
16:15	0	0	0	0	0	0	0	0	21	1	0	0	0	0	0	22	46	11	2	3	0	0	0	62	8	0	0	0	0	0	0	8	92
16:30	0	0	0	0	0	0	0	0	19	0	0	0	0	0	0	19	63	13	2	3	0	1	0	82	20	0	0	0	0	0	0	20	121
16:45	0	0	0	0	0	0	0	0	12	2	0	0	0	0	0	14	52	2	0	1	1	0	0	56	11	1	0	0	0	0	0	12	82
1 Hr	0	0	0	0	0	0	0	0	76	3	0	0	0	0	0	79	210	40	5	10	2	1	0	268	46	2	0	0	0	0	0	48	395
17:00	0	0	0	0	0	0	0	0	11	2	0	0	0	0	0	13	53	3	1	0	0	0	0	57	17	0	0	0	0	0	0	17	87
17:15	0	0	0	0	0	0	0	0	16	1	0	0	0	0	0	17	56	5	1	2	1	0	0	65	9	1	0	0	0	0	0	10	92
17:30	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	10	61	4	0	2	0	0	0	67	12	1	0	0	0	0	0	13	90
17:45	0	0	0	0	0	0	0	0	14	1	0	0	0	0	0	15	43	7	1	0	1	0	0	52	15	1	0	0	0	0	0	16	83
1 Hr	0	0	0	0	0	0	0	0	51	4	0	0	0	0	0	55	213	19	3	4	2	0	0	241	53	3	0	0	0	0	0	56	352
18:00	0	0	0	0	0	0	0	0	15	1	0	0	0	0	0	16	44	4	1	2	0	0	0	51	15	0	0	0	0	0	0	15	82
18:15	0	0	0	0	0	0	0	0	14	2	0	0	0	0	0	16	51	5	2	2	0	1	0	61	14	1	0	0	0	0	0	15	92
18:30	0	0	0	0	0	0	0	0	10	0	1	0	0	0	0	11	50	6	1	3	1	0	0	61	9	1	0	0	0	0	0	10	82
18:45	0	0	0	0	0	0	0	0	16	2	0	0	0	0	0	18	47	5	1	0	0	0	0	53	11	1	0	0	0	0	0	12	83
1 Hr	0	0	0	0	0	0	0	0	55	5	1	0	0	0	0	61	192	20	5	7	1	1	0	226	49	3	0	0	0	0	0	52	339

3634-IRE Fermoy
Junction Turning Count
16/12/2021

Site 1 - R639(NNW) / Car Park Access / R639(SSE) / Dun Eala

Origin : Arm B Car Park Access

	Destination : Arm A R639(NNW)								Destination : Arm B Car Park Access								Destination : Arm C R639(SSE)								Destination : Arm D Dun Eala								
	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	Arm Totals
Total	0	0	0	0	0	0	0	0	707	105	8	1	4	0	0	825	2263	394	63	90	47	6	1	2864	548	22	2	0	16	1	0	589	4278
07:00	5	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	13	0	0	0	0	0	0	13	1	1	0	0	0	0	0	2	20
07:15	3	2	0	0	0	0	0	5	0	0	0	0	0	0	0	0	10	9	0	0	0	0	0	19	4	0	0	0	0	0	0	4	28
07:30	4	2	0	1	0	0	0	7	0	0	0	0	0	0	0	0	7	6	0	0	0	0	0	13	2	2	0	0	0	0	0	4	24
07:45	12	1	2	0	0	0	0	15	0	0	0	0	0	0	0	0	7	3	0	0	0	0	0	10	1	0	0	0	0	0	0	1	26
1 Hr	24	5	2	1	0	0	0	32	0	0	0	0	0	0	0	0	37	18	0	0	0	0	0	55	8	3	0	0	0	0	0	11	98
08:00	4	3	0	0	0	0	0	7	0	0	0	0	0	0	0	0	17	4	0	0	0	0	0	21	2	0	0	0	0	0	0	2	30
08:15	7	1	0	0	0	0	0	8	0	0	0	0	0	0	0	0	12	4	0	0	0	0	0	16	6	0	0	0	0	0	0	6	30
08:30	8	2	0	0	0	0	0	10	0	1	0	0	0	0	0	1	17	5	0	0	0	0	0	22	8	1	0	0	0	0	0	9	42
08:45	6	3	1	0	0	0	0	10	0	0	0	0	0	0	0	0	16	2	0	0	1	0	0	19	5	1	0	0	0	0	0	6	35
1 Hr	25	9	1	0	0	0	0	35	0	1	0	0	0	0	0	1	62	15	0	0	1	0	0	78	21	2	0	0	0	0	0	23	137
09:00	11	1	0	0	0	0	0	12	0	0	0	0	0	0	0	0	15	4	0	0	1	0	0	20	4	0	0	0	1	0	0	5	37
09:15	13	2	0	0	0	0	0	15	0	0	0	0	0	0	0	0	8	2	0	0	0	0	0	10	4	0	0	0	0	0	0	4	29
09:30	11	4	0	0	0	0	0	15	1	0	0	0	0	0	0	1	11	3	0	0	0	0	0	14	1	0	0	0	0	0	0	1	31
09:45	9	1	0	0	0	1	0	11	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	6	1	0	0	0	0	0	0	1	18
1 Hr	44	8	0	0	0	1	0	53	1	0	0	0	0	0	0	1	40	9	0	0	1	0	0	50	10	0	0	0	1	0	0	11	115
10:00	13	1	0	0	0	0	0	14	0	0	0	0	0	0	0	0	9	2	0	0	0	0	0	11	3	1	0	0	0	0	0	4	29
10:15	9	1	0	0	0	0	0	10	0	0	0	0	0	0	0	0	11	3	0	0	0	0	0	14	1	0	0	0	0	0	0	1	25
10:30	5	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	9	5	0	0	0	0	0	14	3	1	0	0	0	0	0	4	23
10:45	6	1	0	0	0	0	0	7	0	0	0	0	0	0	0	0	11	2	1	0	0	0	0	14	3	0	0	0	0	0	0	3	24
1 Hr	33	3	0	0	0	0	0	36	0	0	0	0	0	0	0	0	40	12	1	0	0	0	0	53	10	2	0	0	0	0	0	12	101
11:00	11	2	0	0	1	0	0	14	0	0	0	0	0	0	0	0	14	5	0	0	0	0	0	19	3	1	0	0	0	0	0	4	37
11:15	8	3	0	0	0	0	0	11	0	0	0	0	0	0	0	0	10	2	0	0	0	0	0	12	5	0	0	0	0	0	0	5	28
11:30	12	2	0	0	0	0	0	14	0	0	0	0	0	0	0	0	6	2	0	0	0	0	0	8	6	1	1	0	0	0	0	8	30
11:45	9	1	0	0	0	0	0	10	0	0	0	0	0	0	0	0	12	1	1	0	0	0	0	14	5	0	0	0	0	0	0	5	29
1 Hr	40	8	0	0	1	0	0	49	0	0	0	0	0	0	0	0	42	10	1	0	0	0	0	53	19	2	1	0	0	0	0	22	124
12:00	13	0	0	0	0	0	0	13	0	0	0	0	0	0	0	0	12	0	0	0	0	0	0	12	2	0	0	0	0	0	0	2	27
12:15	9	3	0	0	0	3	0	15	0	0	0	0	0	0	0	0	9	1	0	0	0	0	0	10	4	1	0	0	0	0	0	5	30
12:30	10	3	0	0	0	0	0	13	0	0	0	0	0	0	0	0	5	4	0	0	0	0	0	9	3	0	1	0	0	0	0	4	26
12:45	11	2	0	0	0	0	0	13	0	0	0	0	0	0	0	0	14	1	0	0	0	0	0	15	2	1	0	0	0	0	0	3	31
1 Hr	43	8	0	0	0	3	0	54	0	0	0	0	0	0	0	0	40	6	0	0	0	0	0	46	11	2	1	0	0	0	0	14	114
13:00	8	3	1	0	0	0	0	12	0	0	0	0	0	0	0	0	16	3	0	1	0	0	0	20	6	0	0	0	0	0	0	6	38
13:15	12	0	0	0	0	0	0	12	0	0	0	0	0	0	0	0	14	1	0	0	0	0	0	15	7	1	0	0	0	0	0	8	35
13:30	13	3	1	0	0	0	0	17	0	0	0	0	0	0	0	0	11	3	1	0	0	0	0	15	4	1	0	0	0	0	0	5	37
13:45	17	1	0	0	0	0	0	18	0	0	0	0	0	0	0	0	9	5	0	1	0	0	0	15	6	0	0	0	0	0	0	6	39
1 Hr	50	7	2	0	0	0	0	59	0	0	0	0	0	0	0	0	50	12	1	2	0	0	0	65	23	2	0	0	0	0	0	25	149
14:00	10	1	0	0	0	0	0	11	0	0	0	0	0	0	0	0	9	1	0	0	0	0	0	10	3	0	0	0	0	0	0	3	24
14:15	19	1	1	0	0	0	0	21	0	0	0	0	0	0	0	0	8	0	2	0	0	0	0	10	4	0	0	0	0	0	0	4	35
14:30	10	1	0	0	0	0	0	11	0	0	0	0	0	0	0	0	13	2	0	0	0	0	0	15	4	0	0	0	0	0	0	4	30
14:45	14	1	1	0	0	0	0	16	0	0	0	0	0	0	0	0	14	1	0	0	0	0	0	15	2	0	0	0	1	0	0	3	34
1 Hr	53	4	2	0	0	0	0	59	0	0	0	0	0	0	0	0	44	4	2	0	0	0	0	50	13	0	0	0	1	0	0	14	123
15:00	9	2	0	0	0	0	0	11	0	0	0	0	0	0	0	0	5	1	0	0	0	0	0	6	9	1	0	0	0	0	0	10	27
15:15	13	0	0	0	0	0	0	13	0	0	0	0	0	0	0	0	12	0	0	0	0	0	0	12	6	0	0	0	0	0	0	6	31
15:30	9	1	0	0	0	0	0	10	0	0	0	0	0	0	0	0	9	3	0	0	0	0	0	12	5	0	0	0	0	0	0	5	27
15:45	7	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	19	1	0	0	0	0	0	20	6	0	0	0	0	0	0	6	33
1 Hr	38	3	0	0	0	0	0	41	0	0	0	0	0	0	0	0	45	5	0	0	0	0	0	50	26	1	0	0	0	0	0	27	118
16:00	10	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	14	1	0	0	0	0	0	15	6	0	0	0	0	0	0	6	31
16:15	6	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	13	1	0	0	0	0	0	14	8	0	0	0	0	0	0	8	28
16:30	11	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	13	2	0	0	0	0	0	15	10	0	0	0	0	0	0	10	36
16:45	15	1	0	0	0	0	0	16	0	0	0	0	0	0	0	0	10	2	0	0	0	0	0	12	9	0	0	0	0	0	0	9	37
1 Hr	42	1	0	0	0	0	0	43	0	0	0	0	0	0	0	0	50	6	0	0	0	0	0	56	33	0	0	0	0	0	0	33	132
17:00	5	2	0	0	0	0	0	7	0	0	0	0	0	0	0	0	14	2	0	0	0	0	0	16	5	0	0	0	0	0	0	5	28
17:15	6	1	0	0	0	0	0	7	0	0	0	0	0	0	0	0	11	1	0	1	0	0	0	13	6	0	0	0	0	0	0	6	26
17:30	15	3	0	0	0	0	0	18	0	0	0	0	0	0	0	0	12	2	0	0	0	0	0	14	3	0	0	0	0	0	0	3	35
17:45	8	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	14	1	0	0	0	0	0	15	5	0	0	0	0	0	0	5	28
1 Hr	34	6	0	0	0	0	0	40	0	0	0	0	0	0	0	0	51	6	0	1	0	0	0	58	19	0	0	0	0	0	0	19	117
18:00	15	0	0	0	0	0	0	15	0	0	0	0	0	0	0	0	19	1	0	0	0	0	0	20	3	0	0	0	0	0	0	3	38
18:15	8	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	10	1	0	0	0	0	0	11	2	0	0	0	0	0	0	2	21
18:30	8	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	5	2	1	0	0	0	0	8	4	0	0	0	0	0	0	4	20
18:45	9	3	0	0	0	0	0	12	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	8	6	0	0	0	0	0	0	6	26

![TRACSIS]

Site 1 - R639(NNW) / Car Park Access / R639(SSE) / Dun Eala

Origin Arm C R639(SSE)

Destination : Arm A R639(NNW)

	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total
1 Hr	40	3	0	0	0	0	0	43
Total	466	65	7	1	1	4	0	544
07:00	15	4	0	2	1	0	0	22
07:15	27	4	1	5	0	0	0	37
07:30	17	7	0	0	1	0	0	25
07:45	28	9	2	3	1	1	0	44
1 Hr	87	24	3	10	3	1	0	128
08:00	65	11	2	2	1	0	0	81
08:15	98	12	1	0	3	0	0	114
08:30	69	6	2	2	2	0	0	81
08:45	36	6	0	2	0	0	0	44
1 Hr	268	35	5	6	6	0	0	320
09:00	43	4	1	2	0	0	0	50
09:15	56	8	0	1	1	0	0	66
09:30	47	20	1	3	1	0	0	72
09:45	40	9	0	4	0	0	0	53
1 Hr	186	41	2	10	2	0	0	241
10:00	30	14	2	2	0	0	0	48
10:15	56	7	1	4	1	0	0	69
10:30	41	10	1	1	0	0	0	53
10:45	47	6	2	5	0	0	0	60
1 Hr	174	37	6	12	1	0	0	230
11:00	39	5	1	3	0	0	0	48
11:15	39	8	1	3	1	0	0	52
11:30	37	9	5	0	1	0	0	52
11:45	40	6	0	7	0	0	0	53
1 Hr	155	28	7	13	2	0	0	205
12:00	51	13	1	2	0	0	0	67
12:15	48	12	3	5	1	0	0	69
12:30	55	10	0	1	1	0	0	67
12:45	38	9	2	2	0	0	0	51
1 Hr	192	44	6	10	2	0	0	254
13:00	58	6	2	2	0	0	0	68
13:15	59	13	5	4	1	1	0	83
13:30	43	8	2	0	0	0	0	53
13:45	49	9	1	1	0	0	0	60
1 Hr	209	36	10	7	1	1	0	264
14:00	50	14	3	5	0	0	0	72
14:15	55	9	2	1	1	0	0	68
14:30	62	8	3	2	2	0	0	77
14:45	69	7	1	2	0	1	0	80
1 Hr	236	38	9	10	3	1	0	297
15:00	66	10	1	1	0	0	0	78
15:15	91	9	3	3	1	0	0	107
15:30	68	8	2	1	2	0	0	81
15:45	56	9	3	3	1	0	0	72
1 Hr	281	36	9	8	4	0	0	338
16:00	66	11	2	1	2	1	0	83
16:15	69	7	0	1	2	1	0	80
16:30	79	10	2	3	3	1	0	98
16:45	77	7	0	1	0	0	0	85
1 Hr	291	35	4	6	7	3	0	346
17:00	78	16	0	1	0	0	0	95
17:15	68	11	0	2	0	0	0	81
17:30	67	15	3	2	1	0	0	88
17:45	75	8	0	1	0	1	0	85
1 Hr	288	50	3	6	1	1	0	349
18:00	63	16	1	2	0	1	0	83
18:15	76	10	0	2	1	0	0	89

Destination : Arm B Car Park Access

	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total
1 Hr	0	0	0	0	0	0	0	0
Total	1	1	0	0	0	0	0	2
07:00	7	1	0	0	0	0	0	8
07:15	6	1	0	1	0	0	0	8
07:30	4	0	0	0	0	0	0	4
07:45	8	3	1	0	0	0	0	12
1 Hr	25	5	1	1	0	0	0	32
08:00	7	1	0	0	0	0	0	8
08:15	5	4	0	0	0	0	0	9
08:30	4	0	1	0	0	0	0	5
08:45	3	1	0	0	0	0	0	4
1 Hr	19	6	1	0	0	0	0	26
09:00	7	1	0	0	0	0	0	8
09:15	9	0	0	0	0	0	0	9
09:30	5	2	0	0	0	0	0	7
09:45	8	1	0	0	0	0	0	9
1 Hr	29	4	0	0	0	0	0	33
10:00	4	1	0	0	0	0	0	5
10:15	2	4	0	0	0	0	0	6
10:30	4	2	0	0	0	0	0	6
10:45	4	2	0	0	0	0	0	6
1 Hr	14	9	0	0	0	0	0	23
11:00	4	1	0	0	0	0	0	5
11:15	6	0	0	0	0	0	0	6
11:30	8	0	1	0	0	0	0	9
11:45	4	0	0	0	0	0	0	4
1 Hr	22	1	1	0	0	0	0	24
12:00	10	1	0	0	0	3	0	14
12:15	4	6	1	0	0	0	0	11
12:30	7	1	2	0	0	0	0	10
12:45	7	3	0	0	0	0	0	10
1 Hr	28	11	3	0	0	3	0	45
13:00	5	3	0	0	0	0	0	8
13:15	8	0	1	0	0	0	0	9
13:30	10	3	0	0	0	0	0	13
13:45	8	0	1	0	0	0	0	9
1 Hr	31	6	2	0	0	0	0	39
14:00	6	1	0	0	0	0	0	7
14:15	10	0	0	0	0	0	0	10
14:30	4	2	0	0	1	0	0	7
14:45	9	1	0	0	0	0	0	10
1 Hr	29	4	0	0	1	0	0	34
15:00	9	1	0	0	0	0	0	10
15:15	11	1	0	0	0	0	0	12
15:30	13	0	0	0	0	0	0	13
15:45	9	0	0	0	0	0	0	9
1 Hr	42	2	0	0	0	0	0	44
16:00	6	0	0	0	0	0	0	6
16:15	9	0	0	0	0	0	0	9
16:30	5	0	0	0	0	0	0	5
16:45	14	2	0	0	0	0	0	16
1 Hr	34	2	0	0	0	0	0	36
17:00	4	2	0	1	0	0	0	7
17:15	5	1	0	0	0	0	0	6
17:30	11	0	0	0	0	0	0	11
17:45	9	0	0	0	0	0	0	9
1 Hr	29	3	0	1	0	0	0	33
18:00	9	0	0	0	0	0	0	9
18:15	13	1	0	0	0	0	0	14

Destination : Arm C R639(SSE)

	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total
1 Hr	42	4	1	0	0	0	0	47
Total	543	107	6	3	2	0	0	661
07:00	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0
1 Hr	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0
1 Hr	0	0	0	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0
09:30	0	0	0	0	0	0	0	0
09:45	0	0	0	0	0	0	0	0
1 Hr	0	0	0	0	0	0	0	0
10:00	0	0	0	0	0	0	0	0
10:15	0	0	0	0	0	0	0	0
10:30	0	0	0	0	0	0	0	0
10:45	0	0	0	0	0	0	0	0
1 Hr	0	0	0	0	0	0	0	0
11:00	0	0	0	0	0	0	0	0
11:15	0	0	0	0	0	0	0	0
11:30	0	0	0	0	0	0	0	0
11:45	0	0	0	0	0	0	0	0
1 Hr	0	0	0	0	0	0	0	0
12:00	0	0	0	0	0	0	0	0
12:15	0	0	0	0	0	0	0	0
12:30	0	0	0	0	0	0	0	0
12:45	0	0	0	0	0	0	0	0
1 Hr	0	0	0	0	0	0	0	0
13:00	0	0	0	0	0	0	0	0
13:15	0	0	0	0	0	0	0	0
13:30	0	0	0	0	0	0	0	0
13:45	0	0	0	0	0	0	0	0
1 Hr	0	0	0	0	0	0	0	0
14:00	0	0	0	0	0	0	0	0
14:15	0	0	0	0	0	0	0	0
14:30	0	0	0	0	0	0	0	0
14:45	0	0	0	0	0	0	0	0
1 Hr	0	0	0	0	0	0	0	0
15:00	0	0	0	0	0	0	0	0
15:15	0	0	0	0	0	0	0	0
15:30	0	0	0	0	0	0	0	0
15:45	0	0	0	0	0	0	0	0
1 Hr	0	0	0	0	0	0	0	0
16:00	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0
1 Hr	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0
1 Hr	0	0	0	0	0	0	0	0
18:00	0	0	0	0	0	0	0	0
18:15	0	0	0	0	0	0	0	0

Destination : Arm D Dun Eala

	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	Arm Totals
1 Hr	15	0	0	0	0	0	0	15	105
Total	208	14	2	0	2	0	0	226	1433
07:00	1	0	0	0	0	0	0	1	31
07:15	0	0	0	0	0	0	0	0	45
07:30	2	0	0	0	0	0	0	2	31
07:45	4	0	0	0	0	0	0	4	60
1 Hr	7	0	0	0	0	0	0	7	167
08:00	13	1	1	0	3	0	0	18	107
08:15	24	0	0	0	7	0	0	31	154
08:30	23	0	0	0	0	0	0	23	109
08:45	6	1	0	0	0	0	0	7	55
1 Hr	66	2	1	0	10	0	0	79	425
09:00	7	0	0	0	0	0	0	7	65
09:15	6	0	0	0	0	0	0	6	81
09:30	2	0	0	0	0	0	0	2	81
09:45	5	0	0	0	0	0	0	5	67
1 Hr	20	0	0	0	0	0	0	20	294
10:00	6	1	1	0	0	0	0	8	61
10:15	1	1	0	0	0	0	0	2	77
10:30	2	1	0	0	0	0	0	3	62
10:45	2	0	0	0	0	0	0	2	68
1 Hr	11	3	1	0	0	0	0	15	268
11:00	0	1	0	0	0	0	0	1	54
11:15	3	3	0	0	0	0	0	6	64
11:30	8	0	0	0	0	0	0	8	69
11:45	2	0	2	0	0	0	0	4	61
1 Hr	13	4	2	0	0	0	0	19	248
12:00	3	1	0	0	0	0	0	4	85
12:15	3	0	0	0	0	0	0	3	83
12:30	4	1	1	0	0	0	0	6	83
12:45	6	0	0	0	0	0	0	6	67
1 Hr	16	2	1	0	0	0	0	19	318
13:00	6	0	0	1	0	0	0	7	83
13:15	12	0	0	0	0	0	0	12	104
13:30	2	1	0	0	0	0	0	3	69
13:45	5	0	0	0	0	0	0	5	74
1 Hr	25	1	0	1	0	0	0	27	330
14:00	8	0	0	0	1	0	0	9	88
14:15	6	0	0	0	0	0	0	6	84
14:30	8	2	1	0	0	0	1	12	96
14:45	5	1	0	0	1	0	0	7	97
1 Hr	27	3	1	0	2	0	1	34	365
15:00	13	1	0	0	3	0	0	17	105
15:15	27	0	0	0	0	0	0	27	146
15:30	18	1	0	0	1	0	0	20	114
15:45	13	0	1	0	0	0	0	14	95
1 Hr	71	2	1	0	4	0	0	78	460
16:00	13	0	0	0	0	0	0	13	102
16:15	13	2	0	0	0	0	0	15	104
16:30	12	4	0	0	0	0	0	16	119
16:45	12	1	0	0	0	0	0	13	114
1 Hr	50	7	0	0	0	0	0	57	439
17:00	20	1	0	0	0	0	0	21	123
17:15	8	5	0	0	0	0	0	13	100
17:30	23	2	0	0	0	0	0	25	124
17:45	13	2	0	0	0	0	0	15	109
1 Hr	64	10	0	0	0	0	0	74	456
18:00	12	1	0	0	0	0	0	13	105
18:15	9	1	0	0	0	0	0	10	113

Time	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	Arm Totals
18:30	59	5	1	3	1	0	0	69	4	1	0	0	0	0	0	5	0	0	0	0	0	0	0	0	9	2	0	0	0	0	0	11	85
18:45	83	6	0	0	0	0	0	89	5	1	0	0	0	0	0	6	0	0	0	0	0	0	0	0	4	0	1	0	0	0	0	5	100
1 Hr	281	37	2	7	2	1	0	330	31	3	0	0	0	0	0	34	0	0	0	0	0	0	0	0	34	4	1	0	0	0	0	39	403
Total	2648	441	66	105	34	8	0	3302	333	56	8	2	1	3	0	403	0	0	0	0	0	0	0	0	404	38	8	1	16	0	1	468	4173

Origin Arm D Dun Eala

Destination : Arm A R639(NNW)

Time	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total
07:00	2	2	0	0	0	0	0	4
07:15	3	1	0	0	0	0	0	4
07:30	6	0	0	0	0	1	0	7
07:45	6	1	0	0	0	0	0	7
1 Hr	17	4	0	0	0	1	0	22
08:00	8	0	0	0	0	0	0	8
08:15	52	2	0	0	0	0	0	54
08:30	76	1	0	0	0	0	0	77
08:45	51	1	0	0	0	0	0	52
1 Hr	187	4	0	0	0	0	0	191
09:00	6	0	0	0	0	0	0	6
09:15	7	0	0	0	1	0	0	8
09:30	9	0	0	0	0	0	0	9
09:45	4	1	0	0	0	0	0	5
1 Hr	26	1	0	0	1	0	0	28
10:00	7	0	0	0	0	0	0	7
10:15	3	0	0	0	0	0	0	3
10:30	4	0	0	0	0	0	0	4
10:45	8	1	0	0	0	0	0	9
1 Hr	22	1	0	0	0	0	0	23
11:00	3	0	0	0	1	0	0	4
11:15	9	0	0	0	0	0	0	9
11:30	8	1	0	0	0	0	0	9
11:45	8	0	0	0	0	0	0	8
1 Hr	28	1	0	0	1	0	0	30
12:00	9	2	0	0	0	0	0	11
12:15	10	1	0	0	0	0	0	11
12:30	4	0	0	0	0	0	0	4
12:45	7	0	0	0	0	0	0	7
1 Hr	30	3	0	0	0	0	0	33
13:00	5	0	0	0	0	0	0	5
13:15	12	1	0	0	0	0	0	13
13:30	25	0	0	0	0	0	0	25
13:45	8	1	0	0	0	0	0	9
1 Hr	50	2	0	0	0	0	0	52
14:00	5	0	0	0	0	0	0	5
14:15	21	0	0	0	0	0	0	21
14:30	26	1	0	0	0	0	0	27
14:45	8	0	0	0	0	0	0	8
1 Hr	60	1	0	0	0	0	0	61
15:00	10	0	0	0	0	0	0	10
15:15	20	0	0	0	0	0	0	20
15:30	61	1	0	0	0	0	0	62
15:45	17	0	0	0	0	0	0	17
1 Hr	108	1	0	0	0	0	0	109
16:00	6	0	0	0	0	0	0	6
16:15	7	1	0	0	0	0	0	8
16:30	8	2	0	0	0	0	0	10
16:45	15	0	0	0	0	0	0	15
1 Hr	36	3	0	0	0	0	0	39
17:00	8	0	0	0	0	0	0	8
17:15	7	1	0	0	0	0	0	8
17:30	3	1	0	0	0	0	0	4
17:45	11	0	0	0	0	0	0	11
1 Hr	29	2	0	0	0	0	0	31

Destination : Arm B Car Park Access

Time	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total
07:00	5	0	0	0	0	0	0	5
07:15	1	2	0	0	0	0	0	3
07:30	5	1	0	0	0	0	0	6
07:45	4	0	0	0	0	0	0	4
1 Hr	15	3	0	0	0	0	0	18
08:00	6	0	0	0	0	0	0	6
08:15	8	1	0	0	0	0	0	9
08:30	15	3	0	0	0	0	0	18
08:45	9	0	0	0	0	0	0	9
1 Hr	38	4	0	0	0	0	0	42
09:00	2	0	0	0	0	0	0	2
09:15	1	1	0	0	0	0	0	2
09:30	4	1	0	0	0	0	0	5
09:45	1	1	0	0	0	1	0	3
1 Hr	8	3	0	0	0	1	0	12
10:00	4	1	0	0	0	0	0	5
10:15	0	0	0	0	0	0	0	0
10:30	2	1	0	0	0	0	0	3
10:45	4	0	0	0	0	0	0	4
1 Hr	10	2	0	0	0	0	0	12
11:00	3	0	0	0	0	0	0	3
11:15	2	0	0	0	0	0	0	2
11:30	3	0	0	0	0	0	0	3
11:45	4	1	0	0	0	0	0	5
1 Hr	12	1	0	0	0	0	0	13
12:00	4	0	0	0	0	0	0	4
12:15	3	0	0	0	0	0	0	3
12:30	3	0	0	0	0	0	0	3
12:45	1	0	0	0	0	0	0	1
1 Hr	11	0	0	0	0	0	0	11
13:00	3	0	0	0	0	0	0	3
13:15	6	1	0	0	0	0	0	7
13:30	5	0	0	0	0	0	0	5
13:45	1	0	0	0	0	0	0	1
1 Hr	15	1	0	0	0	0	0	16
14:00	3	0	0	0	0	0	0	3
14:15	3	0	0	0	0	0	0	3
14:30	5	0	0	0	0	0	0	5
14:45	4	0	1	0	0	0	0	5
1 Hr	15	0	1	0	0	0	0	16
15:00	2	0	0	0	0	0	0	2
15:15	3	0	0	0	0	0	0	3
15:30	5	1	0	0	0	0	0	6
15:45	4	0	0	0	0	0	0	4
1 Hr	14	1	0	0	0	0	0	15
16:00	4	0	0	0	0	0	0	4
16:15	4	0	0	0	0	0	0	4
16:30	5	0	0	0	0	0	0	5
16:45	7	0	0	0	0	0	0	7
1 Hr	20	0	0	0	0	0	0	20
17:00	0	0	0	0	0	0	0	0
17:15	6	1	0	0	0	0	0	7
17:30	3	0	0	0	0	0	0	3
17:45	6	0	0	0	0	0	0	6
1 Hr	15	1	0	0	0	0	0	16

Destination : Arm C R639(SSE)

Time	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total
07:00	14	2	0	0	0	0	0	16
07:15	11	2	0	0	0	0	0	13
07:30	9	2	0	0	0	0	0	11
07:45	15	2	0	0	0	0	0	17
1 Hr	49	8	0	0	0	0	0	57
08:00	16	2	0	0	0	0	0	18
08:15	21	0	1	0	0	0	0	22
08:30	23	2	0	0	0	0	0	25
08:45	13	1	0	0	0	0	0	14
1 Hr	73	5	1	0	0	0	0	79
09:00	13	1	0	0	0	0	0	14
09:15	5	0	0	0	0	0	0	5
09:30	10	0	0	0	0	0	0	10
09:45	3	1	1	0	0	0	0	5
1 Hr	31	2	1	0	0	0	0	34
10:00	6	1	0	0	0	0	0	7
10:15	3	0	0	0	0	0	0	3
10:30	3	0	0	0	0	0	0	3
10:45	7	1	0	0	0	0	0	8
1 Hr	19	2	0	0	0	0	0	21
11:00	6	0	0	0	0	0	0	6
11:15	3	0	0	0	0	0	0	3
11:30	3	1	0	0	0	0	0	4
11:45	4	2	0	0	0	0	0	6
1 Hr	16	3	0	0	0	0	0	19
12:00	2	1	0	0	0	0	0	3
12:15	6	0	0	0	0	0	0	6
12:30	7	1	0	0	0	0	0	8
12:45	2	1	0	0	0	0	0	3
1 Hr	17	3	0	0	0	0	0	20
13:00	4	0	0	0	0	0	1	5
13:15	4	0	0	0	0	0	0	4
13:30	12	2	0	0	0	0	0	14
13:45	6	2	0	0	0	0	0	8
1 Hr	26	4	0	0	0	0	1	31
14:00	4	0	0	0	0	0	0	4
14:15	4	0	0	0	0	0	0	4
14:30	8	0	0	0	0	0	0	8
14:45	7	1	0	0	0	0	0	8
1 Hr	23	1	0	0	0	0	0	24
15:00	6	0	0	0	0	0	0	6
15:15	9	1	0	0	0	0	0	10
15:30	28	0	0	0	0	0	0	28
15:45	18	1	0	0	0	0	0	19
1 Hr	61	2	0	0	0	0	0	63
16:00	13	1	0	0	0	0	0	14
16:15	9	0	1	0	0	0	0	10
16:30	8	1	0	0	0	0	0	9
16:45	9	0	0	0	0	0	0	9
1 Hr	39	2	1	0	0	0	0	42
17:00	8	0	0	0	0	0	0	8
17:15	5	0	0	0	0	0	0	5
17:30	6	0	0	0	0	0	0	6
17:45	4	0	0	0	0	0	0	4
1 Hr	23	0	0	0	0	0	0	23

Destination : Arm D Dun Eala

Time	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	Arm Totals
07:00	0	0	0	0	0	0	0	0	25
07:15	0	0	0	0	0	0	0	0	20
07:30	0	0	0	0	0	0	0	0	24
07:45	0	0	0	0	0	0	0	0	28
1 Hr	0	0	0	0	0	0	0	0	97
08:00	0	0	0	0	0	0	0	0	32
08:15	0	0	0	0	0	0	0	0	85
08:30	0	0	0	0	0	0	0	0	120
08:45	0	0	0	0	0	0	0	0	75
1 Hr	0	0	0	0	0	0	0	0	312
09:00	0	0	0	0	0	0	0	0	22
09:15	0	0	0	0	0	0	0	0	15
09:30	0	0	0	0	0	0	0	0	24
09:45	0	0	0	0	0	0	0	0	13
1 Hr	0	0	0	0	0	0	0	0	74
10:00	0	0	0	0	0	0	0	0	19
10:15	0	0	0	0	0	0	0	0	6
10:30	0	0	0	0	0	0	0	0	10
10:45	0	0	0	0	0	0	0	0	21
1 Hr	0	0	0	0	0	0	0	0	56
11:00	0	0	0	0	0	0	0	0	13
11:15	0	0	0	0	0	0	0	0	14
11:30	0	0	0	0	0	0	0	0	16
11:45	0	0	0	0	0	0	0	0	19
1 Hr	0	0	0	0	0	0	0	0	62
12:00	0	0	0	0	0	0	0	0	18
12:15	0	0	0	0	0	0	0	0	20
12:30	0	0	0	0	0	0	0	0	15
12:45	0	0	0	0	0	0	0	0	11
1 Hr	0	0	0	0	0	0	0	0	64
13:00	0	0	0	0	0	0	0	0	13
13:15	0	0	0	0	0	0	0	0	24
13:30	0	0	0	0	0	0	0	0	44
13:45	0	0	0	0	0	0	0	0	18
1 Hr	0	0	0	0	0	0	0	0	99
14:00	0	0	0	0	0	0	0	0	12
14:15	0	0	0	0	0	0	0	0	28
14:30	0	0	0	0	0	0	0	0	40
14:45	0	0	0	0	0	0	0	0	21
1 Hr	0	0	0	0	0	0	0	0	101
15:00	0	0	0	0	0	0	0	0	18
15:15	0	0	0	0	0	0	0	0	33
15:30	0	0	0	0	0	0	0	0	96
15:45	0	0	0	0	0	0	0	0	40
1 Hr	0	0	0	0	0	0	0	0	187
16:00	0	0	0	0	0	0	0	0	24
16:15	0	0	0	0	0	0	0	0	22
16:30	0	0	0	0	0	0	0	0	24
16:45	0	0	0	0	0	0	0	0	31
1 Hr	0	0	0	0	0	0	0	0	101
17:00	0	0	0	0	0	0	0	0	16
17:15	0	0	0	0	0	0	0	0	20
17:30	0	0	0	0	0	0	0	0	13
17:45	0	0	0	0	0	0	0	0	21
1 Hr	0	0	0	0	0	0	0	0	70

	A Car	A LGV	A OGV1	A OGV2	A PSV	A MC	A PC	A Total	B Car	B LGV	B OGV1	B OGV2	B PSV	B MC	B PC	B Total	C Car	C LGV	C OGV1	C OGV2	C PSV	C MC	C PC	C Total	D Car	D LGV	D OGV1	D OGV2	D PSV	D MC	D PC	D Total	Origin Totals
18:00	10	0	0	0	0	0	0	10	4	0	0	0	0	0	0	4	6	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	20
18:15	3	1	0	0	0	0	0	4	4	0	0	0	0	0	0	4	3	1	0	0	0	0	0	4	0	0	0	0	0	0	0	0	12
18:30	9	2	0	0	0	0	0	11	1	0	0	0	0	0	0	1	4	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	16
18:45	11	0	0	0	0	0	0	11	3	0	0	0	0	0	0	3	7	1	0	0	0	0	0	8	0	0	0	0	0	0	0	0	22
1 Hr	33	3	0	0	0	0	0	36	12	0	0	0	0	0	0	12	20	2	0	0	0	0	0	22	0	0	0	0	0	0	0	0	70
Total	626	26	0	0	2	1	0	655	185	16	1	0	0	1	0	203	397	34	3	0	0	0	1	435	0	0	0	0	0	0	0	0	1293

ORIGIN SUMMARY

Origin : Arm A R639(NNW)

	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total
07:00	75	16	3	1	2	0	0	97
07:15	42	10	4	4	1	0	0	61
07:30	51	12	2	2	3	0	0	70
07:45	67	14	1	1	1	1	0	85
1 Hr	235	52	10	8	7	1	0	313
08:00	56	16	0	1	3	0	0	76
08:15	111	12	0	2	11	0	0	136
08:30	112	16	1	1	3	1	0	134
08:45	70	9	2	2	1	0	0	84
1 Hr	349	53	3	6	18	1	0	430
09:00	59	18	4	4	0	0	0	85
09:15	55	14	1	2	0	0	0	72
09:30	44	4	1	2	1	0	0	52
09:45	46	11	1	2	2	0	0	62
1 Hr	204	47	7	10	3	0	0	271
10:00	62	8	0	4	1	0	0	75
10:15	55	10	0	1	0	0	0	66
10:30	55	10	1	2	1	0	0	69
10:45	62	16	3	4	1	0	0	86
1 Hr	234	44	4	11	3	0	0	296
11:00	68	13	4	1	1	0	0	87
11:15	57	11	2	2	2	0	0	74
11:30	67	7	3	1	0	0	0	78
11:45	62	7	1	2	1	0	0	73
1 Hr	254	38	10	6	4	0	0	312
12:00	55	9	0	2	0	0	0	66
12:15	76	7	1	3	0	0	0	87
12:30	68	8	1	2	1	1	0	81
12:45	72	10	0	3	0	0	1	86
1 Hr	271	34	2	10	1	1	1	320
13:00	94	14	1	0	1	0	0	110
13:15	83	12	1	1	0	0	0	97
13:30	74	15	2	2	1	1	0	95
13:45	50	13	1	1	0	0	0	65
1 Hr	301	54	5	4	2	1	0	367
14:00	71	11	0	3	1	0	0	86
14:15	71	15	5	2	1	0	0	94
14:30	86	13	2	5	1	0	0	107
14:45	102	10	4	1	2	1	0	120
1 Hr	330	49	11	11	5	1	0	407
15:00	76	14	4	1	1	0	0	96
15:15	88	11	2	1	3	0	0	105
15:30	114	15	0	0	2	0	0	131
15:45	117	11	1	2	13	0	0	144
1 Hr	395	51	7	4	19	0	0	476
16:00	80	15	1	3	1	0	0	100
16:15	75	12	2	3	0	0	0	92
16:30	102	13	2	3	0	1	0	121
16:45	75	5	0	1	1	0	0	82
1 Hr	332	45	5	10	2	1	0	395
17:00	81	5	1	0	0	0	0	87
17:15	81	7	1	2	1	0	0	92
17:30	83	5	0	2	0	0	0	90

Origin : Arm B Car Park Access

	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total
07:00	19	1	0	0	0	0	0	20
07:15	17	11	0	0	0	0	0	28
07:30	13	10	0	1	0	0	0	24
07:45	20	4	2	0	0	0	0	26
1 Hr	69	26	2	1	0	0	0	98
08:00	23	7	0	0	0	0	0	30
08:15	25	5	0	0	0	0	0	30
08:30	33	9	0	0	0	0	0	42
08:45	27	6	1	0	1	0	0	35
1 Hr	108	27	1	0	1	0	0	137
09:00	30	5	0	0	2	0	0	37
09:15	25	4	0	0	0	0	0	29
09:30	24	7	0	0	0	0	0	31
09:45	16	1	0	0	0	1	0	18
1 Hr	95	17	0	0	2	1	0	115
10:00	25	4	0	0	0	0	0	29
10:15	21	4	0	0	0	0	0	25
10:30	17	6	0	0	0	0	0	23
10:45	20	3	1	0	0	0	0	24
1 Hr	83	17	1	0	0	0	0	101
11:00	28	8	0	0	1	0	0	37
11:15	23	5	0	0	0	0	0	28
11:30	24	5	1	0	0	0	0	30
11:45	26	2	1	0	0	0	0	29
1 Hr	101	20	2	0	1	0	0	124
12:00	27	0	0	0	0	0	0	27
12:15	22	5	0	0	0	3	0	30
12:30	18	7	1	0	0	0	0	26
12:45	27	4	0	0	0	0	0	31
1 Hr	94	16	1	0	0	3	0	114
13:00	30	6	1	1	0	0	0	38
13:15	33	2	0	0	0	0	0	35
13:30	28	7	2	0	0	0	0	37
13:45	32	6	0	1	0	0	0	39
1 Hr	123	21	3	2	0	0	0	149
14:00	22	2	0	0	0	0	0	24
14:15	31	1	3	0	0	0	0	35
14:30	27	3	0	0	0	0	0	30
14:45	30	2	1	0	1	0	0	34
1 Hr	110	8	4	0	1	0	0	123
15:00	23	4	0	0	0	0	0	27
15:15	31	0	0	0	0	0	0	31
15:30	23	4	0	0	0	0	0	27
15:45	32	1	0	0	0	0	0	33
1 Hr	109	9	0	0	0	0	0	118
16:00	30	1	0	0	0	0	0	31
16:15	27	1	0	0	0	0	0	28
16:30	34	2	0	0	0	0	0	36
16:45	34	3	0	0	0	0	0	37
1 Hr	125	7	0	0	0	0	0	132
17:00	24	4	0	0	0	0	0	28
17:15	23	2	0	1	0	0	0	26
17:30	30	5	0	0	0	0	0	35

Origin : Arm C R639(SSE)

	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total
07:00	23	5	0	2	1	0	0	31
07:15	33	5	1	6	0	0	0	45
07:30	23	7	0	0	1	0	0	31
07:45	40	12	3	3	1	1	0	60
1 Hr	119	29	4	11	3	1	0	167
08:00	85	13	3	2	4	0	0	107
08:15	127	16	1	0	10	0	0	154
08:30	96	6	3	2	2	0	0	109
08:45	45	8	0	2	0	0	0	55
1 Hr	353	43	7	6	16	0	0	425
09:00	57	5	1	2	0	0	0	65
09:15	71	8	0	1	1	0	0	81
09:30	54	22	1	3	1	0	0	81
09:45	53	10	0	4	0	0	0	67
1 Hr	235	45	2	10	2	0	0	294
10:00	40	16	3	2	0	0	0	61
10:15	59	12	1	4	1	0	0	77
10:30	47	13	1	1	0	0	0	62
10:45	53	8	2	5	0	0	0	68
1 Hr	199	49	7	12	1	0	0	268
11:00	43	7	1	3	0	0	0	54
11:15	48	11	1	3	1	0	0	64
11:30	53	9	6	0	1	0	0	69
11:45	46	6	2	7	0	0	0	61
1 Hr	190	33	10	13	2	0	0	248
12:00	64	15	1	2	0	3	0	85
12:15	55	18	4	5	1	0	0	83
12:30	66	12	3	1	1	0	0	83
12:45	51	12	2	2	0	0	0	67
1 Hr	236	57	10	10	2	3	0	318
13:00	69	9	2	3	0	0	0	83
13:15	79	13	6	4	1	1	0	104
13:30	55	12	2	0	0	0	0	69
13:45	62	9	2	1	0	0	0	74
1 Hr	265	43	12	8	1	1	0	330
14:00	64	15	3	5	1	0	0	88
14:15	71	9	2	1	1	0	0	84
14:30	74	12	4	2	3	0	1	96
14:45	83	9	1	2	1	1	0	97
1 Hr	292	45	10	10	6	1	1	365
15:00	88	12	1	1	3	0	0	105
15:15	129	10	3	3	1	0	0	146
15:30	99	9	2	1	3	0	0	114
15:45	78	9	4	3	1	0	0	95
1 Hr	394	40	10	8	8	0	0	460
16:00	85	11	2	1	2	1	0	102
16:15	91	9	0	1	2	1	0	104
16:30	96	14	2	3	3	1	0	119
16:45	103	10	0	1	0	0	0	114
1 Hr	375	44	4	6	7	3	0	439
17:00	102	19	0	2	0	0	0	123
17:15	81	17	0	2	0	0	0	100
17:30	101	17	3	2	1	0	0	124

Origin : Arm D Dun Eala

	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total
07:00	21	4	0	0	0	0	0	25
07:15	15	5	0	0	0	0	0	20
07:30	20	3	0	0	0	1	0	24
07:45	25	3	0	0	0	0	0	28
1 Hr	81	15	0	0	0	1	0	97
08:00	30	2	0	0	0	0	0	32
08:15	81	3	1	0	0	0	0	85
08:30	114	6	0	0	0	0	0	120
08:45	73	2	0	0	0	0	0	75
1 Hr	298	13	1	0	0	0	0	312
09:00	21	1	0	0	0	0	0	22
09:15	13	1	0	0	1	0	0	15
09:30	23	1	0	0	0	0	0	24
09:45	8	3	1	0	0	1	0	13
1 Hr	65	6	1	0	1	1	0	74
10:00	17	2	0	0	0	0	0	19
10:15	6	0	0	0	0	0	0	6
10:30	9	1	0	0	0	0	0	10
10:45	19	2	0	0	0	0	0	21
1 Hr	51	5	0	0	0	0	0	56
11:00	12	0	0	0	1	0	0	13
11:15	14	0	0	0	0	0	0	14
11:30	14	2	0	0	0	0	0	16
11:45	16	3	0	0	0	0	0	19
1 Hr	56	5	0	0	1	0	0	62
12:00	15	3	0	0	0	0	0	18
12:15	19	1	0	0	0	0	0	20
12:30	14	1	0	0	0	0	0	15
12:45	10	1	0	0	0	0	0	11
1 Hr	58	6	0	0	0	0	0	64
13:00	12	0	0	0	0	0	1	13
13:15	22	2	0	0	0	0	0	24
13:30	42	2	0	0	0	0	0	44
13:45	15	3	0	0	0	0	0	18
1 Hr	91	7	0	0	0	0	1	99
14:00	12	0	0	0	0	0	0	12
14:15	28	0	0	0	0	0	0	28
14:30	39	1	0	0	0	0	0	40
14:45	19	1	1	0	0	0	0	21
1 Hr	98	2	1	0	0	0	0	101
15:00	18	0	0	0	0	0	0	18
15:15	32	1	0	0	0	0	0	33
15:30	94	2	0	0	0	0	0	96
15:45	39	1	0	0	0	0	0	40
1 Hr	183	4	0	0	0	0	0	187
16:00	23	1	0	0	0	0	0	24
16:15	20	1	1	0	0	0	0	22
16:30	21	3	0	0	0	0	0	24
16:45	31	0	0	0	0	0	0	31
1 Hr	95	5	1	0	0	0	0	101
17:00	16	0	0	0	0	0	0	16
17:15	18	2	0	0	0	0	0	20
17:30	12	1	0	0	0	0	0	13

	Origin Totals
07:00	173
07:15	154
07:30	149
07:45	199
1 Hr	675
08:00	245
08:15	405
08:30	405
08:45	249
1 Hr	1304
09:00	209
09:15	197
09:30	188
09:45	160
1 Hr	754
10:00	184
10:15	174
10:30	164
10:45	199
1 Hr	721
11:00	191
11:15	180
11:30	193
11:45	182
1 Hr	746
12:00	196
12:15	220
12:30	205
12:45	195
1 Hr	816
13:00	244
13:15	260
13:30	245
13:45	196
1 Hr	945
14:00	210
14:15	241
14:30	273
14:45	272
1 Hr	996
15:00	246
15:15	315
15:30	368
15:45	312
1 Hr	1241
16:00	257
16:15	246
16:30	300
16:45	264
1 Hr	1067
17:00	254
17:15	238
17:30	262

	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	
17:45	72	9	1	0	1	0	0	83	27	1	0	0	0	0	0	28	97	10	0	1	0	1	0	109	21	0	0	0	0	0	0	21	241
1 Hr	317	26	3	4	2	0	0	352	104	12	0	1	0	0	0	117	381	63	3	7	1	1	0	456	67	3	0	0	0	0	0	70	995
18:00	74	5	1	2	0	0	0	82	37	1	0	0	0	0	0	38	84	17	1	2	0	1	0	105	20	0	0	0	0	0	0	20	245
18:15	79	8	2	2	0	1	0	92	20	1	0	0	0	0	0	21	98	12	0	2	1	0	0	113	10	2	0	0	0	0	0	12	238
18:30	69	7	2	3	1	0	0	82	17	2	1	0	0	0	0	20	72	8	1	3	1	0	0	85	14	2	0	0	0	0	0	16	203
18:45	74	8	1	0	0	0	0	83	23	3	0	0	0	0	0	26	92	7	1	0	0	0	0	100	21	1	0	0	0	0	0	22	231
1 Hr	296	28	6	7	1	1	0	339	97	7	1	0	0	0	0	105	346	44	3	7	2	1	0	403	65	5	0	0	0	0	0	70	917
Total	3518	521	73	91	67	7	1	4278	1218	187	15	4	5	4	0	1433	3385	535	82	108	51	11	1	4173	1208	76	4	0	2	2	1	1293	11177

DESTINATION SUMMARY

	Destination : Arm A R639(NNW)							Total	Destination : Arm B Car Park Access							Total	Destination : Arm C R639(SSE)							Total	Destination : Arm D Dun Eala							Total	Dest Totals
	Car	LGV	OGV1	OGV2	PSV	MC	PC		Car	LGV	OGV1	OGV2	PSV	MC	PC		Car	LGV	OGV1	OGV2	PSV	MC	PC		Car	LGV	OGV1	OGV2	PSV	MC	PC		
07:00	22	6	0	2	1	0	0	31	27	7	1	0	0	0	0	35	84	12	2	1	2	0	0	101	5	1	0	0	0	0	0	6	173
07:15	33	7	1	5	0	0	0	46	12	8	0	1	0	0	0	21	58	16	4	4	1	0	0	83	4	0	0	0	0	0	0	4	154
07:30	27	9	0	1	1	1	0	39	19	8	1	0	0	0	0	28	55	13	1	2	3	0	0	74	6	2	0	0	0	0	0	8	149
07:45	46	11	4	3	1	1	0	66	22	5	1	0	0	0	0	28	71	17	1	1	1	1	0	92	13	0	0	0	0	0	0	13	199
1 Hr	128	33	5	11	3	2	0	182	80	28	3	1	0	0	0	112	268	58	8	8	7	1	0	350	28	3	0	0	0	0	0	31	675
08:00	77	14	2	2	1	0	0	96	22	7	0	0	0	0	0	29	69	16	0	1	2	0	0	88	26	1	1	0	4	0	0	32	245
08:15	157	15	1	0	3	0	0	176	29	8	0	0	1	0	0	38	95	13	1	2	5	0	0	116	63	0	0	0	12	0	0	75	405
08:30	153	9	2	2	2	0	0	168	38	10	1	0	2	0	0	51	93	17	1	1	1	1	0	114	71	1	0	0	0	0	0	72	405
08:45	93	10	1	2	0	0	0	106	26	3	0	0	0	0	0	29	73	10	2	2	2	0	0	89	23	2	0	0	0	0	0	25	249
1 Hr	480	48	6	6	6	0	0	546	115	28	1	0	3	0	0	147	330	56	4	6	10	1	0	407	183	4	1	0	16	0	0	204	1304
09:00	60	5	1	2	0	0	0	68	25	5	1	0	0	0	0	31	60	19	3	4	1	0	0	87	22	0	0	0	1	0	0	23	209
09:15	76	10	0	1	2	0	0	89	25	4	0	0	0	0	0	29	48	13	1	2	0	0	0	64	15	0	0	0	0	0	0	15	197
09:30	67	24	1	3	1	0	0	96	19	3	0	0	0	0	0	22	50	7	1	2	1	0	0	61	9	0	0	0	0	0	0	9	188
09:45	53	11	0	4	0	1	0	69	23	3	0	0	0	1	0	27	38	11	2	2	2	0	0	55	9	0	0	0	0	0	0	9	160
1 Hr	256	50	2	10	3	1	0	322	92	15	1	0	0	1	0	109	196	50	7	10	4	0	0	267	55	0	0	0	1	0	0	56	754
10:00	50	15	2	2	0	0	0	69	22	4	0	0	0	0	0	26	56	9	0	4	1	0	0	70	16	2	1	0	0	0	0	19	184
10:15	68	8	1	4	1	0	0	82	19	5	0	0	0	0	0	24	51	12	0	1	0	0	0	64	3	1	0	0	0	0	0	4	174
10:30	50	10	1	1	0	0	0	62	16	5	1	0	0	0	0	22	49	12	0	2	1	0	0	64	13	3	0	0	0	0	0	16	164
10:45	61	8	2	5	0	0	0	76	26	6	0	0	0	0	0	32	59	14	4	4	0	0	0	81	8	1	0	0	1	0	0	10	199
1 Hr	229	41	6	12	1	0	0	289	83	20	1	0	0	0	0	104	215	47	4	11	2	0	0	279	40	7	1	0	1	0	0	49	721
11:00	53	7	1	3	2	0	0	66	30	5	0	0	1	0	0	36	56	14	4	1	0	0	0	75	12	2	0	0	0	0	0	14	191
11:15	56	11	1	3	1	0	0	72	26	1	0	0	0	0	0	27	46	12	2	2	2	0	0	64	14	3	0	0	0	0	0	17	180
11:30	57	12	5	0	1	0	0	75	28	2	2	0	0	0	0	32	50	7	2	1	0	0	0	60	23	2	1	0	0	0	0	26	193
11:45	57	7	0	7	0	0	0	71	23	3	0	0	0	0	0	26	59	8	2	2	1	0	0	72	11	0	2	0	0	0	0	13	182
1 Hr	223	37	7	13	4	0	0	284	107	11	2	0	1	0	0	121	211	41	10	6	3	0	0	271	60	7	3	0	0	0	0	70	746
12:00	73	15	1	2	0	0	0	91	24	3	0	0	0	3	0	30	51	6	0	2	0	0	0	59	13	3	0	0	0	0	0	16	196
12:15	67	16	3	5	1	3	0	95	20	9	1	0	0	0	0	30	67	4	1	3	0	0	0	75	18	2	0	0	0	0	0	20	220
12:30	69	13	0	1	1	0	0	84	20	5	2	0	0	0	0	27	66	9	1	2	1	0	0	79	11	1	2	0	0	1	0	15	205
12:45	56	11	2	2	0	0	0	71	35	5	0	1	0	0	0	41	54	10	0	2	0	0	1	67	15	1	0	0	0	0	0	16	195
1 Hr	265	55	6	10	2	3	0	341	99	22	3	1	0	3	0	128	238	29	2	9	1	0	1	280	57	7	2	0	0	1	0	67	816
13:00	71	9	3	2	0	0	0	85	33	5	0	0	0	0	0	38	76	14	0	1	1	0	1	93	25	1	1	1	0	0	0	28	244
13:15	83	14	5	4	1	1	0	108	29	3	1	0	0	0	0	33	64	9	1	1	0	0	0	75	41	3	0	0	0	0	0	44	260
13:30	81	11	3	0	0	0	0	95	34	7	0	0	0	0	0	41	65	16	3	2	1	1	0	88	19	2	0	0	0	0	0	21	245
13:45	74	11	1	1	0	0	0	87	21	1	1	0	0	0	0	23	45	19	0	2	0	0	0	66	19	0	1	0	0	0	0	20	196
1 Hr	309	45	12	7	1	1	0	375	117	16	2	0	0	0	0	135	250	58	4	6	2	1	1	322	104	6	2	1	0	0	0	113	945
14:00	65	15	3	5	0	0	0	88	23	1	0	0	0	0	0	24	59	11	0	3	0	0	0	73	22	1	0	0	2	0	0	25	210
14:15	95	10	3	1	1	0	0	110	30	3	2	0	0	0	0	35	52	12	5	2	1	0	0	72	24	0	0	0	0	0	0	24	241
14:30	98	10	3	2	2	0	0	115	23	4	0	0	1	0	0	28	84	13	2	5	1	0	0	105	21	2	1	0	0	0	1	25	273
14:45	91	8	2	2	0	1	0	104	28	2	1	0	0	0	0	31	91	10	4	1	0	1	0	107	24	2	0	0	4	0	0	30	272
1 Hr	349	43	11	10	3	1	0	417	104	10	3	0	1	0	0	118	286	46	11	11	2	1	0	357	91	5	1	0	6	0	1	104	996
15:00	85	12	1	1	0	0	0	99	25	2	0	0	0	0	0	27	55	13	4	1	0	0	0	73	40	3	0	0	4	0	0	47	246
15:15	124	9	3	3	1	0	0	140	27	4	0	0	0	0	0	31	72	8	2	1	1	0	0	84	57	1	0	0	2	0	0	60	315
15:30	138	10	2	1	2	0	0	153	26	1	0	0	0	0	0	27	119	17	0	0	0	0	0	136	47	2	0	0	3	0	0	52	368
15:45	80	9	3	3	1	0	0	96	28	0	0	0	0	0	0	28	123	13	1	2	12	0	0	151	35	0	1	0	1	0	0	37	312
1 Hr	427	40	9	8	4	0	0	488	106	7	0	0	0	0	0	113	369	51	7	4	13	0	0	444	179	6	1	0	10	0	0	196	1241
16:00	82	11	2	1	2	1	0	99	34	0	0	0	0	0	0	34	76	16	1	3	1	0	0	97	26	1	0	0	0	0	0	27	257
16:15	82	8	0	1	2	1	0	94	34	1	0	0	0	0	0	35	68	12	3	3	0	0	0	86	29	2	0	0	0	0	0	31	246
16:30	98	12	2	3	3	1	0	119	29	0	0	0	0	0	0	29	84	16	2	3	0	1	0	106	42	4	0	0	0	0	0	46	300
16:45	107	8	0	1	0	0	0	116	33	4	0	0	0	0	0	37	71	4	0	1	1	0	0	77	32	2	0	0	0	0	0	34	264
1 Hr	369	39	4	6	7	3	0	428	130	5	0	0	0	0	0	135	299	48	6	10	2	1	0	366	129	9	0	0	0	0	0	138	1067
17:00	91	18	0	1	0	0	0	110	15	4	0	1	0	0	0	20	75	5	1	0	0	0	0	81	42	1	0	0	0	0	0	43	254

3634-IRE Fermoy
Junction Turning Count
16/12/2021

Site 1 - R639(NNW) / Car Park Access / R639(SSE) / Dun Eala

17:15	81	13	0	2	0	0	0	96	27	3	0	0	0	0	0	30	72	6	1	3	1	0	0	83	23	6	0	0	0	0	0	29	238
17:30	85	19	3	2	1	0	0	110	24	0	0	0	0	0	0	24	79	6	0	2	0	0	0	87	38	3	0	0	0	0	0	41	262
17:45	94	8	0	1	0	1	0	104	29	1	0	0	0	0	0	30	61	8	1	0	1	0	0	71	33	3	0	0	0	0	0	36	241
1 Hr	351	58	3	6	1	1	0	420	95	8	0	1	0	0	0	104	287	25	3	5	2	0	0	322	136	13	0	0	0	0	0	149	995
18:00	88	16	1	2	0	1	0	108	28	1	0	0	0	0	0	29	69	5	1	2	0	0	0	77	30	1	0	0	0	0	0	31	245
18:15	87	11	0	2	1	0	0	101	31	3	0	0	0	0	0	34	64	7	2	2	0	1	0	76	25	2	0	0	0	0	0	27	238
18:30	76	7	1	3	1	0	0	88	15	1	1	0	0	0	0	17	59	8	2	3	1	0	0	73	22	3	0	0	0	0	0	25	203
18:45	103	9	0	0	0	0	0	112	24	3	0	0	0	0	0	27	62	6	1	0	0	0	0	69	21	1	1	0	0	0	0	23	231
1 Hr	354	43	2	7	2	1	0	409	98	8	1	0	0	0	0	107	254	26	6	7	1	1	0	295	98	7	1	0	0	0	0	106	917
Total	3740	532	73	106	37	13	0	4501	1226	178	17	3	5	4	0	1433	3203	535	72	93	49	6	2	3960	1160	74	12	1	34	1	1	1283	11177

3634-IRE Fermoy
Junction Turning Count
16/12/2021

Site 2 - M8 On Slip / R639(ESE) / M8 Off Slip / R639(WNW)

Origin : Arm A M8 On Slip

	Destination : Arm A M8 On Slip							Total	**Destination :** Arm B R639(ESE)							Total	**Destination :** Arm C M8 Off Slip							Total	**Destination :** Arm D R639(WNW)							Total	Arm Totals
	Car	LGV	OGV1	OGV2	PSV	MC	PC		Car	LGV	OGV1	OGV2	PSV	MC	PC		Car	LGV	OGV1	OGV2	PSV	MC	PC		Car	LGV	OGV1	OGV2	PSV	MC	PC		
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1 Hr	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1 Hr	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1 Hr	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1 Hr	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1 Hr	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1 Hr	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1 Hr	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1 Hr	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1 Hr	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1 Hr	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1 Hr	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1 Hr	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

3634-IRE Fermoy
Junction Turning Count
16/12/2021

Site 2 - M8 On Slip / R639(ESE) / M8 Off Slip / R639(WNW)

Origin : Arm B R639(ESE)

	Destination : Arm A M8 On Slip								Destination : Arm B R639(ESE)								Destination : Arm C M8 Off Slip								Destination : Arm D R639(WNW)								
	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	Arm Totals
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00	5	0	1	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22	3	0	2	1	0	0	28	34
07:15	2	1	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28	5	1	5	0	0	1	40	43
07:30	3	3	0	1	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21	5	0	1	1	0	0	28	35
07:45	7	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	38	8	1	2	1	1	0	51	58
1 Hr	17	4	1	1	0	0	0	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	109	21	2	10	3	1	1	147	170
08:00	12	1	0	1	0	0	0	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	75	11	4	2	5	0	0	97	111
08:15	7	7	3	2	0	0	0	19	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	112	16	1	0	7	0	0	136	156
08:30	5	2	1	2	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	74	4	2	2	1	0	0	83	93
08:45	3	3	0	2	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	44	4	2	2	0	0	0	52	60
1 Hr	27	13	4	7	0	0	0	51	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	305	35	9	6	13	0	0	368	420
09:00	8	2	1	3	0	0	0	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	36	4	0	2	0	0	0	42	56
09:15	5	1	1	2	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	57	10	0	1	2	0	0	70	79
09:30	3	0	1	3	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	49	16	0	1	0	0	0	66	73
09:45	1	1	0	1	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	41	7	1	4	0	0	0	53	56
1 Hr	17	4	3	9	0	0	0	33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	183	37	1	8	2	0	0	231	264
10:00	3	1	1	1	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	37	12	2	2	0	0	0	53	59
10:15	7	1	0	2	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	45	12	1	4	1	0	0	63	73
10:30	1	0	0	3	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	42	10	2	1	0	0	0	55	59
10:45	3	0	0	1	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	43	8	0	4	0	0	0	55	59
1 Hr	14	2	1	7	0	0	0	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	167	42	5	11	1	0	0	226	250
11:00	2	2	0	1	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	36	5	1	3	1	0	0	46	51
11:15	5	0	0	2	0	0	0	7	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	41	7	1	4	0	0	0	53	61
11:30	1	0	1	3	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	36	8	4	1	1	0	0	50	55
11:45	6	2	0	2	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	41	6	2	5	0	0	0	54	64
1 Hr	14	4	1	8	0	0	0	27	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	154	26	8	13	2	0	0	203	231
12:00	4	1	0	5	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	54	14	0	3	0	3	0	74	84
12:15	3	0	0	3	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	48	18	4	4	1	0	0	75	81
12:30	3	0	1	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	42	5	2	0	0	0	0	49	53
12:45	2	2	0	2	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	46	4	3	3	0	0	1	57	63
1 Hr	12	3	1	10	0	0	0	26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	190	41	9	10	1	3	1	255	281
13:00	3	3	0	1	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	45	7	2	2	0	0	0	56	63
13:15	3	1	0	1	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	64	10	6	4	1	1	0	86	91
13:30	6	1	0	1	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	46	12	1	0	0	0	0	59	67
13:45	3	1	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	48	8	3	1	0	0	0	60	64
1 Hr	15	6	0	3	0	0	0	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	203	37	12	7	1	1	0	261	285
14:00	5	1	2	2	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	50	10	2	5	1	0	0	68	78
14:15	4	0	0	3	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	58	6	1	1	1	0	1	68	75
14:30	7	2	0	2	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	59	12	4	3	3	0	0	81	92
14:45	5	5	0	1	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	58	9	1	2	0	0	0	70	81
1 Hr	21	8	2	8	0	0	0	39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	225	37	8	11	5	0	1	287	326
15:00	10	2	0	3	0	0	0	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	79	11	1	1	3	0	0	95	110
15:15	5	1	0	1	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	104	10	2	2	1	0	0	119	126
15:30	12	5	1	2	0	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	59	7	3	1	4	0	0	74	94
15:45	7	4	2	3	0	0	0	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	70	4	2	3	0	0	0	79	95
1 Hr	34	12	3	9	0	0	0	58	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	312	32	8	7	8	0	0	367	425
16:00	14	5	0	0	0	0	0	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	76	9	2	2	1	1	1	92	111
16:15	10	1	0	0	0	0	0	11	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	67	8	1	0	4	1	0	81	93
16:30	9	1	2	3	0	0	0	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	71	16	1	3	1	1	0	93	108
16:45	5	4	1	1	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	86	7	0	3	0	0	0	96	107
1 Hr	38	11	3	4	0	0	0	56	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	300	40	4	8	6	3	1	362	419
17:00	8	7	0	0	0	0	0	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	77	14	0	0	0	0	0	91	106
17:15	8	4	0	2	0	0	0	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	71	16	2	2	0	0	0	91	105
17:30	7	2	0	1	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	66	13	1	2	1	0	0	83	93
17:45	6	2	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	75	9	0	1	0	1	0	86	94
1 Hr	29	15	0	3	0	0	0	47	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	289	52	3	5	1	1	0	351	398
18:00	3	0	1	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	67	8	1	2	0	1	0	79	83
18:15	4	1	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	68	10	0	2	1	0	0	81	86
18:30	6	1	0	1	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	68	7	1	3	0	0	0	79	87
18:45	2	1	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	68	7	1	0	0	0	0	76	79

Site 2 - M8 On Slip / R639(ESE) / M8 Off Slip / R639(WNW)

Origin Arm C M8 Off Slip

Destination : Arm A M8 On Slip

	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total
1 Hr	15	3	1	1	0	0	0	20
Total	253	85	20	70	0	0	0	428
07:00	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0
1 Hr	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0
1 Hr	0	0	0	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0
09:30	0	0	0	0	0	0	0	0
09:45	0	0	0	0	0	0	0	0
1 Hr	0	0	0	0	0	0	0	0
10:00	0	0	0	0	0	0	0	0
10:15	0	0	0	0	0	0	0	0
10:30	0	0	0	0	0	0	0	0
10:45	0	0	0	0	0	0	0	0
1 Hr	0	0	0	0	0	0	0	0
11:00	0	0	0	0	0	0	0	0
11:15	0	0	0	0	0	0	0	0
11:30	0	0	0	0	0	0	0	0
11:45	0	0	0	0	0	0	0	0
1 Hr	0	0	0	0	0	0	0	0
12:00	0	0	0	0	0	0	0	0
12:15	0	0	0	0	0	0	0	0
12:30	0	0	0	0	0	0	0	0
12:45	0	0	0	0	0	0	0	0
1 Hr	0	0	0	0	0	0	0	0
13:00	0	0	0	0	0	0	0	0
13:15	0	0	0	0	0	0	0	0
13:30	1	0	0	0	0	0	0	1
13:45	0	0	0	0	0	0	0	0
1 Hr	1	0	0	0	0	0	0	1
14:00	0	0	0	0	0	0	0	0
14:15	0	0	0	0	0	0	0	0
14:30	0	0	0	0	0	0	0	0
14:45	0	0	0	0	0	0	0	0
1 Hr	0	0	0	0	0	0	0	0
15:00	1	0	0	0	0	0	0	1
15:15	0	0	0	0	0	0	0	0
15:30	0	0	0	0	0	0	0	0
15:45	0	0	0	0	0	0	0	0
1 Hr	1	0	0	0	0	0	0	1
16:00	0	0	0	0	0	0	0	0
16:15	1	0	0	0	0	0	0	1
16:30	0	0	0	0	0	0	0	0
16:45	1	0	0	0	0	0	0	1
1 Hr	2	0	0	0	0	0	0	2
17:00	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0
1 Hr	0	0	0	0	0	0	0	0
18:00	0	0	0	0	0	0	0	0
18:15	0	0	0	0	0	0	0	0

Destination : Arm B R639(ESE)

	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total
1 Hr	0	0	0	0	0	0	0	0
Total	2	1	0	0	0	0	0	3
07:00	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0
07:30	0	0	0	1	0	0	0	1
07:45	0	0	0	1	0	0	0	1
1 Hr	0	0	0	2	0	0	0	2
08:00	0	1	0	0	0	0	0	1
08:15	0	0	0	1	0	0	0	1
08:30	2	1	0	0	0	0	0	3
08:45	1	0	0	1	0	0	0	2
1 Hr	3	2	0	2	0	0	0	7
09:00	1	0	0	0	0	0	0	1
09:15	1	0	0	0	0	0	0	1
09:30	1	0	0	0	0	0	0	1
09:45	1	1	0	0	0	0	0	2
1 Hr	4	1	0	0	0	0	0	5
10:00	1	0	0	0	0	0	0	1
10:15	2	0	0	0	0	0	0	2
10:30	1	1	0	0	0	0	0	2
10:45	0	0	0	3	0	0	0	3
1 Hr	4	1	0	3	0	0	0	8
11:00	1	0	1	0	0	0	0	2
11:15	0	0	0	0	0	0	0	0
11:30	1	0	0	1	0	0	0	2
11:45	2	2	0	0	0	0	0	4
1 Hr	4	2	1	1	0	0	0	8
12:00	0	0	0	2	0	0	0	2
12:15	0	0	0	2	0	0	0	2
12:30	1	2	1	0	0	0	0	4
12:45	2	0	0	0	0	0	0	2
1 Hr	3	2	1	4	0	0	0	10
13:00	1	0	0	1	0	0	0	2
13:15	0	0	0	0	0	0	0	0
13:30	2	1	0	0	0	0	0	3
13:45	2	1	0	0	0	0	0	3
1 Hr	5	2	0	1	0	0	0	8
14:00	0	1	0	1	0	0	0	2
14:15	1	0	0	0	0	0	0	1
14:30	3	0	0	1	0	0	0	4
14:45	2	2	0	2	0	0	0	6
1 Hr	6	3	0	4	0	0	0	13
15:00	1	0	0	2	0	0	0	3
15:15	3	0	1	1	0	0	0	5
15:30	3	0	0	0	0	0	0	3
15:45	2	1	1	0	0	0	0	4
1 Hr	9	1	2	3	0	0	0	15
16:00	2	0	0	1	0	0	0	3
16:15	3	1	0	0	0	0	0	4
16:30	0	0	0	0	0	0	0	0
16:45	2	2	0	0	0	0	0	4
1 Hr	7	3	0	1	0	0	0	11
17:00	3	0	1	0	0	0	0	4
17:15	3	0	0	1	0	0	0	4
17:30	0	1	0	0	0	0	0	1
17:45	4	0	0	0	0	0	0	4
1 Hr	10	1	1	1	0	0	0	13
18:00	4	0	0	0	0	0	0	4
18:15	2	0	0	0	0	0	0	2

Destination : Arm C M8 Off Slip

	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total
1 Hr	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0
07:00	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0
1 Hr	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0
1 Hr	0	0	0	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0
09:30	0	0	0	0	0	0	0	0
09:45	0	0	0	0	0	0	0	0
1 Hr	0	0	0	0	0	0	0	0
10:00	0	0	0	0	0	0	0	0
10:15	0	0	0	0	0	0	0	0
10:30	0	0	0	0	0	0	0	0
10:45	0	0	0	0	0	0	0	0
1 Hr	0	0	0	0	0	0	0	0
11:00	0	0	0	0	0	0	0	0
11:15	0	0	0	0	0	0	0	0
11:30	0	0	0	0	0	0	0	0
11:45	0	0	0	0	0	0	0	0
1 Hr	0	0	0	0	0	0	0	0
12:00	0	0	0	0	0	0	0	0
12:15	0	0	0	0	0	0	0	0
12:30	0	0	0	0	0	0	0	0
12:45	0	0	0	0	0	0	0	0
1 Hr	0	0	0	0	0	0	0	0
13:00	0	0	0	0	0	0	0	0
13:15	0	0	0	0	0	0	0	0
13:30	0	0	0	0	0	0	0	0
13:45	0	0	0	0	0	0	0	0
1 Hr	0	0	0	0	0	0	0	0
14:00	0	0	0	0	0	0	0	0
14:15	0	0	0	0	0	0	0	0
14:30	0	0	0	0	0	0	0	0
14:45	0	0	0	0	0	0	0	0
1 Hr	0	0	0	0	0	0	0	0
15:00	0	0	0	0	0	0	0	0
15:15	0	0	0	0	0	0	0	0
15:30	0	0	0	0	0	0	0	0
15:45	0	0	0	0	0	0	0	0
1 Hr	0	0	0	0	0	0	0	0
16:00	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0
1 Hr	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0
1 Hr	0	0	0	0	0	0	0	0
18:00	0	0	0	0	0	0	0	0
18:15	0	0	0	0	0	0	0	0

Destination : Arm D R639(WNW)

	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	Arm Totals
1 Hr	271	32	3	7	1	1	0	315	335
Total	2708	432	72	103	44	10	4	3373	3804
07:00	4	1	0	0	0	0	0	5	5
07:15	5	2	0	0	0	0	0	7	7
07:30	6	0	0	0	0	0	0	6	7
07:45	8	2	2	0	0	0	0	12	13
1 Hr	23	5	2	0	0	0	0	30	32
08:00	16	1	0	0	0	0	0	17	18
08:15	22	3	0	0	1	0	0	26	27
08:30	19	0	0	0	0	0	0	19	22
08:45	9	2	1	0	0	0	0	12	14
1 Hr	66	6	1	0	1	0	0	74	81
09:00	18	4	1	0	0	0	0	23	24
09:15	10	1	0	0	0	0	0	11	12
09:30	4	4	1	2	0	0	0	11	12
09:45	9	0	0	1	0	0	0	10	12
1 Hr	41	9	2	3	0	0	0	55	60
10:00	5	3	0	0	0	0	0	8	9
10:15	4	0	0	0	0	0	0	4	6
10:30	8	3	1	0	0	0	0	12	14
10:45	5	1	0	1	0	0	0	7	10
1 Hr	22	7	1	1	0	0	0	31	39
11:00	4	1	0	0	0	0	0	5	7
11:15	8	1	0	0	0	0	0	9	9
11:30	10	1	1	0	0	0	0	12	14
11:45	12	0	0	1	0	0	0	13	17
1 Hr	34	3	1	1	0	0	0	39	47
12:00	4	0	2	0	0	0	0	6	8
12:15	11	4	0	0	0	0	0	15	17
12:30	16	3	0	0	1	0	0	20	24
12:45	4	3	0	0	0	0	0	7	9
1 Hr	35	10	2	0	1	0	0	48	58
13:00	16	0	0	0	0	0	0	16	18
13:15	14	1	0	0	0	0	0	15	15
13:30	10	3	0	0	0	0	0	13	17
13:45	12	1	0	0	0	0	0	13	16
1 Hr	52	5	0	0	0	0	0	57	66
14:00	6	2	0	0	0	0	0	8	10
14:15	14	0	1	0	0	0	0	15	16
14:30	14	2	0	0	1	0	0	17	21
14:45	18	1	0	0	0	0	0	19	25
1 Hr	52	5	1	0	1	0	0	59	72
15:00	11	0	1	0	0	0	0	12	16
15:15	19	1	0	0	0	0	0	20	25
15:30	13	3	0	0	0	0	0	16	19
15:45	12	2	1	0	0	0	0	15	19
1 Hr	55	6	2	0	0	0	0	63	79
16:00	11	3	0	0	0	0	0	14	17
16:15	18	3	0	1	0	0	0	22	27
16:30	17	1	0	0	0	0	0	18	18
16:45	14	2	0	0	0	0	0	16	21
1 Hr	60	9	0	1	0	0	0	70	83
17:00	16	5	0	0	0	0	0	21	25
17:15	12	4	0	0	0	0	0	16	20
17:30	22	3	0	0	0	0	0	25	26
17:45	21	3	0	0	0	0	0	24	28
1 Hr	71	15	0	0	0	0	0	86	99
18:00	11	2	0	0	0	0	0	13	17
18:15	29	1	0	0	0	0	0	30	32

	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	Arm Totals
18:30	0	0	0	0	0	0	0	0	2	0	1	0	0	0	0	3	0	0	0	0	0	0	0	0	12	3	0	0	1	0	0	16	19
18:45	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	13	1	0	1	0	0	0	15	17
1 Hr	0	0	0	0	0	0	0	0	10	0	1	0	0	0	0	11	0	0	0	0	0	0	0	0	65	7	0	1	1	0	0	74	85
Total	4	0	0	0	0	0	0	4	65	18	6	22	0	0	0	111	0	0	0	0	0	0	0	0	576	87	12	7	4	0	0	686	801

Origin Arm D R639(WNW)

	Destination : Arm A M8 On Slip							Total	Destination : Arm B R639(ESE)							Total	Destination : Arm C M8 Off Slip							Total	Destination : Arm D R639(WNW)							Total	Arm Totals
	Car	LGV	OGV1	OGV2	PSV	MC	PC		Car	LGV	OGV1	OGV2	PSV	MC	PC		Car	LGV	OGV1	OGV2	PSV	MC	PC		Car	LGV	OGV1	OGV2	PSV	MC	PC		
07:00	0	0	0	0	0	0	0	0	78	14	2	1	2	0	0	97	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	97
07:15	0	0	0	0	0	0	0	0	59	18	4	2	1	0	0	84	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	85
07:30	1	0	0	0	0	0	0	1	51	15	3	3	3	0	0	75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	76
07:45	1	0	0	0	0	0	0	1	61	16	1	1	1	1	0	81	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	82
1 Hr	2	0	0	0	0	0	0	2	249	63	10	7	7	1	0	337	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	340
08:00	1	0	0	0	0	0	0	1	66	15	0	1	2	0	0	84	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	85
08:15	2	0	0	0	0	0	0	2	88	17	1	2	4	0	0	112	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	114
08:30	2	1	0	0	0	0	0	3	86	16	2	1	1	1	0	107	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	110
08:45	1	0	0	0	0	0	0	1	67	6	1	2	2	0	0	78	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	79
1 Hr	6	1	0	0	0	0	0	7	307	54	4	6	9	1	0	381	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	388
09:00	1	0	0	0	0	0	0	1	53	15	3	4	1	0	0	76	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	77
09:15	1	0	0	0	0	0	0	1	45	13	4	2	0	0	0	64	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	65
09:30	0	0	0	0	0	0	0	0	46	7	1	2	1	0	0	57	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	58
09:45	1	0	0	0	0	0	0	1	34	11	1	2	2	0	0	50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	51
1 Hr	3	0	0	0	0	0	0	3	178	46	9	10	4	0	0	247	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	251
10:00	0	0	0	0	0	0	0	0	51	10	1	4	1	0	0	67	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	67
10:15	0	0	0	0	0	0	0	0	48	12	0	1	0	0	0	61	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	61
10:30	1	0	0	0	0	0	0	1	48	11	0	3	1	0	0	63	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	64
10:45	0	0	0	0	0	0	0	0	51	13	3	3	0	0	0	70	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	70
1 Hr	1	0	0	0	0	0	0	1	198	46	4	11	2	0	0	261	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	262
11:00	1	0	0	0	0	0	0	1	59	11	4	1	0	0	0	75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	76
11:15	2	0	0	0	0	0	0	2	37	14	0	1	2	0	0	54	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	57
11:30	0	1	0	0	0	0	0	1	48	6	3	1	0	0	0	58	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	59
11:45	1	0	1	0	0	0	0	2	55	8	2	3	1	0	0	69	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	71
1 Hr	4	1	1	0	0	0	0	6	199	39	9	6	3	0	0	256	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	263
12:00	0	0	0	0	0	0	0	0	54	7	0	2	0	0	0	63	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	63
12:15	3	0	0	0	0	0	0	3	61	4	0	3	0	0	0	68	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	72
12:30	1	0	0	0	0	0	0	1	58	9	2	2	1	0	0	72	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	73
12:45	0	0	0	0	0	0	0	0	55	8	0	2	0	0	1	66	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	67
1 Hr	4	0	0	0	0	0	0	4	228	28	2	9	1	0	1	269	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2	275
13:00	2	0	0	0	0	0	0	2	70	10	1	1	1	0	1	84	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	86
13:15	0	0	0	0	0	0	0	0	61	10	1	1	0	0	0	73	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	73
13:30	2	0	0	0	0	0	0	2	55	13	3	1	1	1	0	74	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	76
13:45	0	0	0	0	0	0	0	0	51	16	0	2	0	0	0	69	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	69
1 Hr	4	0	0	0	0	0	0	4	237	49	5	5	2	1	1	300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	304
14:00	0	0	0	0	0	0	0	0	58	14	0	2	0	0	0	74	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	75
14:15	1	0	0	0	0	0	0	1	51	12	5	3	1	0	0	72	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	74
14:30	1	1	0	0	0	0	0	2	73	10	2	5	1	0	0	91	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	93
14:45	3	0	0	0	0	0	0	3	86	14	4	1	0	0	0	105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	108
1 Hr	5	1	0	0	0	0	0	6	268	50	11	11	2	0	0	342	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	350
15:00	0	0	0	0	0	0	0	0	54	14	4	1	0	0	0	73	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	73
15:15	2	0	0	0	0	0	0	2	65	9	2	1	1	0	0	78	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	80
15:30	4	1	0	0	0	0	0	5	108	18	0	0	0	0	0	126	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	132
15:45	5	0	0	0	0	0	0	5	128	12	2	1	12	0	0	155	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	161
1 Hr	11	1	0	0	0	0	0	12	355	53	8	3	13	0	0	432	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	446
16:00	3	0	0	1	0	0	0	4	74	15	0	3	2	0	0	94	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	98
16:15	3	0	1	0	0	0	0	4	67	10	1	2	0	0	0	80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	84
16:30	2	2	0	0	0	0	0	4	81	17	4	3	0	0	0	105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	109
16:45	0	0	0	0	0	0	0	0	69	2	0	2	1	1	0	75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	75
1 Hr	8	2	1	1	0	0	0	12	291	44	5	10	3	1	0	354	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	366
17:00	3	1	0	0	0	0	0	4	69	10	1	0	0	0	0	80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	84
17:15	3	0	0	1	0	0	0	4	64	7	0	2	1	0	0	74	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	78
17:30	2	1	0	0	0	0	0	3	79	7	1	1	0	0	0	88	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	91
17:45	2	0	0	0	0	0	0	2	68	10	1	1	1	0	0	81	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	83
1 Hr	10	2	0	1	0	0	0	13	280	34	3	4	2	0	0	323	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	336

3634-IRE Fermoy
Junction Turning Count
16/12/2021

Site 2 - M8 On Slip / R639(ESE) / M8 Off Slip / R639(WNW)

	Arm A M8 On Slip								Arm B R639(ESE)								Arm C M8 Off Slip								Arm D R639(WNW)								
	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	Origin Totals
18:00	0	0	0	0	0	0	0	0	66	4	1	2	0	0	0	73	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	73
18:15	1	0	0	0	0	0	0	1	67	8	2	2	0	1	0	80	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	82
18:30	1	1	0	0	0	0	0	2	55	9	1	3	0	0	0	68	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	70
18:45	2	0	0	0	0	0	0	2	58	5	2	0	1	0	0	66	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	70
1 Hr	4	1	0	0	0	0	0	5	246	26	6	7	1	1	0	287	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3	295
Total	62	9	2	2	0	0	0	75	3036	532	76	89	49	5	2	3789	0	0	0	0	0	0	0	0	10	2	0	0	0	0	0	12	3876

ORIGIN SUMMARY

	Arm A M8 On Slip								Arm B R639(ESE)								Arm C M8 Off Slip								Arm D R639(WNW)								
	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	Origin Totals
07:00	0	0	0	0	0	0	0	0	27	3	1	2	1	0	0	34	4	1	0	0	0	0	0	5	78	14	2	1	2	0	0	97	136
07:15	0	0	0	0	0	0	0	0	30	6	1	5	0	0	1	43	5	2	0	0	0	0	0	7	59	19	4	2	1	0	0	85	135
07:30	0	0	0	0	0	0	0	0	24	8	0	2	1	0	0	35	6	0	0	1	0	0	0	7	52	15	3	3	3	0	0	76	118
07:45	0	0	0	0	0	0	0	0	45	8	1	2	1	1	0	58	8	2	2	1	0	0	0	13	62	16	1	1	1	1	0	82	153
1 Hr	0	0	0	0	0	0	0	0	126	25	3	11	3	1	1	170	23	5	2	2	0	0	0	32	251	64	10	7	7	1	0	340	542
08:00	0	0	0	0	0	0	0	0	87	12	4	3	5	0	0	111	16	2	0	0	0	0	0	18	67	15	0	1	2	0	0	85	214
08:15	0	0	0	0	0	0	0	0	120	23	4	2	7	0	0	156	22	3	0	1	1	0	0	27	90	17	1	2	4	0	0	114	297
08:30	0	0	0	0	0	0	0	0	79	6	3	4	1	0	0	93	21	1	0	0	0	0	0	22	88	17	2	1	1	1	0	110	225
08:45	0	0	0	0	0	0	0	0	47	7	2	4	0	0	0	60	10	2	1	1	0	0	0	14	68	6	1	2	2	0	0	79	153
1 Hr	0	0	0	0	0	0	0	0	333	48	13	13	13	0	0	420	69	8	1	2	1	0	0	81	313	55	4	6	9	1	0	388	889
09:00	0	0	0	0	0	0	0	0	44	6	1	5	0	0	0	56	19	4	1	0	0	0	0	24	54	15	3	4	1	0	0	77	157
09:15	0	0	0	0	0	0	0	0	62	11	1	3	2	0	0	79	11	1	0	0	0	0	0	12	46	13	4	2	0	0	0	65	156
09:30	0	0	0	0	0	0	0	0	52	16	1	4	0	0	0	73	5	4	1	2	0	0	0	12	47	7	1	2	1	0	0	58	143
09:45	0	0	0	0	0	0	0	0	42	8	1	5	0	0	0	56	10	1	0	1	0	0	0	12	35	11	1	2	2	0	0	51	119
1 Hr	0	0	0	0	0	0	0	0	200	41	4	17	2	0	0	264	45	10	2	3	0	0	0	60	182	46	9	10	4	0	0	251	575
10:00	0	0	0	0	0	0	0	0	40	13	3	3	0	0	0	59	6	3	0	0	0	0	0	9	51	10	1	4	1	0	0	67	135
10:15	0	0	0	0	0	0	0	0	52	13	1	6	1	0	0	73	6	0	0	0	0	0	0	6	48	12	0	1	0	0	0	61	140
10:30	0	0	0	0	0	0	0	0	43	10	2	4	0	0	0	59	9	4	1	0	0	0	0	14	49	11	0	3	1	0	0	64	137
10:45	0	0	0	0	0	0	0	0	46	8	0	5	0	0	0	59	5	1	0	4	0	0	0	10	51	13	3	3	0	0	0	70	139
1 Hr	0	0	0	0	0	0	0	0	181	44	6	18	1	0	0	250	26	8	1	4	0	0	0	39	199	46	4	11	2	0	0	262	551
11:00	0	0	0	0	0	0	0	0	38	7	1	4	1	0	0	51	5	1	1	0	0	0	0	7	60	11	4	1	0	0	0	76	134
11:15	0	0	0	0	0	0	0	0	47	7	1	6	0	0	0	61	8	1	0	0	0	0	0	9	40	14	0	1	2	0	0	57	127
11:30	0	0	0	0	0	0	0	0	37	8	5	4	1	0	0	55	11	1	1	1	0	0	0	14	48	7	3	1	0	0	0	59	128
11:45	0	0	0	0	0	0	0	0	47	8	2	7	0	0	0	64	14	2	0	1	0	0	0	17	56	8	3	3	1	0	0	71	152
1 Hr	0	0	0	0	0	0	0	0	169	30	9	21	2	0	0	231	38	5	2	2	0	0	0	47	204	40	10	6	3	0	0	263	541
12:00	0	0	0	0	0	0	0	0	58	15	0	8	0	3	0	84	4	0	2	2	0	0	0	8	54	7	0	2	0	0	0	63	155
12:15	0	0	0	0	0	0	0	0	51	18	4	7	1	0	0	81	11	4	0	2	0	0	0	17	64	5	0	3	0	0	0	72	170
12:30	0	0	0	0	0	0	0	0	45	5	3	0	0	0	0	53	17	5	1	0	1	0	0	24	59	9	2	2	1	0	0	73	150
12:45	0	0	0	0	0	0	0	0	48	6	3	5	0	0	1	63	6	3	0	0	0	0	0	9	56	8	0	2	0	0	1	67	139
1 Hr	0	0	0	0	0	0	0	0	202	44	10	20	1	3	1	281	38	12	3	4	1	0	0	58	233	29	2	9	1	0	1	275	614
13:00	0	0	0	0	0	0	0	0	48	10	2	3	0	0	0	63	17	0	0	1	0	0	0	18	72	10	1	1	1	0	1	86	167
13:15	0	0	0	0	0	0	0	0	67	11	6	5	1	1	0	91	14	1	0	0	0	0	0	15	61	10	1	1	0	0	0	73	179
13:30	0	0	0	0	0	0	0	0	52	13	1	1	0	0	0	67	13	4	0	0	0	0	0	17	57	13	3	1	1	1	0	76	160
13:45	0	0	0	0	0	0	0	0	51	9	3	1	0	0	0	64	14	2	0	0	0	0	0	16	51	16	0	2	0	0	0	69	149
1 Hr	0	0	0	0	0	0	0	0	218	43	12	10	1	1	0	285	58	7	0	1	0	0	0	66	241	49	5	5	2	1	1	304	655
14:00	0	0	0	0	0	0	0	0	55	11	4	7	1	0	0	78	6	3	0	1	0	0	0	10	59	14	0	2	0	0	0	75	163
14:15	0	0	0	0	0	0	0	0	62	6	1	4	1	0	1	75	15	0	1	0	0	0	0	16	53	12	5	3	1	0	0	74	165
14:30	0	0	0	0	0	0	0	0	66	14	4	5	3	0	0	92	17	2	0	1	1	0	0	21	74	11	2	5	1	0	0	93	206
14:45	0	0	0	0	0	0	0	0	63	14	1	3	0	0	0	81	20	3	0	2	0	0	0	25	89	14	4	1	0	0	0	108	214
1 Hr	0	0	0	0	0	0	0	0	246	45	10	19	5	0	1	326	58	8	1	4	1	0	0	72	275	51	11	11	2	0	0	350	748
15:00	0	0	0	0	0	0	0	0	89	13	1	4	3	0	0	110	13	0	1	2	0	0	0	16	54	14	4	1	0	0	0	73	199
15:15	0	0	0	0	0	0	0	0	109	11	2	3	1	0	0	126	22	1	1	1	0	0	0	25	67	9	2	1	1	0	0	80	231
15:30	0	0	0	0	0	0	0	0	71	12	4	3	4	0	0	94	16	3	0	0	0	0	0	19	113	19	0	0	0	0	0	132	245
15:45	0	0	0	0	0	0	0	0	77	8	4	6	0	0	0	95	14	3	2	0	0	0	0	19	134	12	2	1	12	0	0	161	275
1 Hr	0	0	0	0	0	0	0	0	346	44	11	16	8	0	0	425	65	7	4	3	0	0	0	79	368	54	8	3	13	0	0	446	950
16:00	0	0	0	0	0	0	0	0	90	14	2	2	1	1	1	111	13	3	0	1	0	0	0	17	77	15	0	4	2	0	0	98	226
16:15	0	0	0	0	0	0	0	0	77	10	1	0	4	1	0	93	22	4	0	1	0	0	0	27	70	10	2	2	0	0	0	84	204
16:30	0	0	0	0	0	0	0	0	80	17	3	6	1	1	0	108	17	1	0	0	0	0	0	18	83	19	4	3	0	0	0	109	235
16:45	0	0	0	0	0	0	0	0	91	11	1	4	0	0	0	107	17	4	0	0	0	0	0	21	69	2	0	2	1	1	0	75	203
1 Hr	0	0	0	0	0	0	0	0	338	52	7	12	6	3	1	419	69	12	0	2	0	0	0	83	299	46	6	11	3	1	0	366	868
17:00	0	0	0	0	0	0	0	0	85	21	0	0	0	0	0	106	19	5	1	0	0	0	0	25	72	11	1	0	0	0	0	84	215
17:15	0	0	0	0	0	0	0	0	79	20	2	4	0	0	0	105	15	4	0	1	0	0	0	20	67	7	0	3	1	0	0	78	203
17:30	0	0	0	0	0	0	0	0	73	15	1	3	1	0	0	93	22	4	0	0	0	0	0	26	81	8	1	1	0	0	0	91	210

	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	
17:45	0	0	0	0	0	0	0	0	81	11	0	1	0	1	0	94	25	3	0	0	0	0	0	28	70	10	1	1	1	0	0	83	205
1 Hr	0	0	0	0	0	0	0	0	318	67	3	8	1	1	0	398	81	16	1	1	0	0	0	99	290	36	3	5	2	0	0	336	833
18:00	0	0	0	0	0	0	0	0	70	8	2	2	0	1	0	83	15	2	0	0	0	0	0	17	66	4	1	2	0	0	0	73	173
18:15	0	0	0	0	0	0	0	0	72	11	0	2	1	0	0	86	31	1	0	0	0	0	0	32	69	8	2	2	0	1	0	82	200
18:30	0	0	0	0	0	0	0	0	74	8	1	4	0	0	0	87	14	3	1	0	1	0	0	19	56	10	1	3	0	0	0	70	176
18:45	0	0	0	0	0	0	0	0	70	8	1	0	0	0	0	79	15	1	0	1	0	0	0	17	62	5	2	0	1	0	0	70	166
1 Hr	0	0	0	0	0	0	0	0	286	35	4	8	1	1	0	335	75	7	1	1	1	0	0	85	253	27	6	7	1	1	0	295	715
Total	0	0	0	0	0	0	0	0	2963	518	92	173	44	10	4	3804	645	105	18	29	4	0	0	801	3108	543	78	91	49	5	2	3876	8481

DESTINATION SUMMARY

	Destination : Arm A M8 On Slip							Total	Destination : Arm B R639(ESE)							Total	Destination : Arm C M8 Off Slip							Total	Destination : Arm D R639(WNW)							Total	Dest Totals
	Car	LGV	OGV1	OGV2	PSV	MC	PC		Car	LGV	OGV1	OGV2	PSV	MC	PC		Car	LGV	OGV1	OGV2	PSV	MC	PC		Car	LGV	OGV1	OGV2	PSV	MC	PC		
07:00	5	0	1	0	0	0	0	6	78	14	2	1	2	0	0	97	0	0	0	0	0	0	0	0	26	4	0	2	1	0	0	33	136
07:15	2	1	0	0	0	0	0	3	59	18	4	2	1	0	0	84	0	0	0	0	0	0	0	0	33	8	1	5	0	0	1	48	135
07:30	4	3	0	1	0	0	0	8	51	15	3	4	3	0	0	76	0	0	0	0	0	0	0	0	27	5	0	1	1	0	0	34	118
07:45	8	0	0	0	0	0	0	8	61	16	1	2	1	1	0	82	0	0	0	0	0	0	0	0	46	10	3	2	1	1	0	63	153
1 Hr	19	4	1	1	0	0	0	25	249	63	10	9	7	1	0	339	0	0	0	0	0	0	0	0	132	27	4	10	3	1	1	178	542
08:00	13	1	0	1	0	0	0	15	66	16	0	1	2	0	0	85	0	0	0	0	0	0	0	0	91	12	4	2	5	0	0	114	214
08:15	9	7	3	2	0	0	0	21	89	17	1	3	4	0	0	114	0	0	0	0	0	0	0	0	134	19	1	0	8	0	0	162	297
08:30	7	3	1	2	0	0	0	13	88	17	2	1	1	1	0	110	0	0	0	0	0	0	0	0	93	4	2	2	1	0	0	102	225
08:45	4	3	0	2	0	0	0	9	68	6	1	3	2	0	0	80	0	0	0	0	0	0	0	0	53	6	3	2	0	0	0	64	153
1 Hr	33	14	4	7	0	0	0	58	311	56	4	8	9	1	0	389	0	0	0	0	0	0	0	0	371	41	10	6	14	0	0	442	889
09:00	9	2	1	3	0	0	0	15	54	15	3	4	1	0	0	77	0	0	0	0	0	0	0	0	54	8	1	2	0	0	0	65	157
09:15	6	1	1	2	0	0	0	10	46	13	4	2	0	0	0	65	0	0	0	0	0	0	0	0	67	11	0	1	2	0	0	81	156
09:30	3	0	1	3	0	0	0	7	47	7	1	2	1	0	0	58	0	0	0	0	0	0	0	0	54	20	1	3	0	0	0	78	143
09:45	2	1	0	1	0	0	0	4	35	12	1	2	2	0	0	52	0	0	0	0	0	0	0	0	50	7	1	5	0	0	0	63	119
1 Hr	20	4	3	9	0	0	0	36	182	47	9	10	4	0	0	252	0	0	0	0	0	0	0	0	225	46	3	11	2	0	0	287	575
10:00	3	1	1	1	0	0	0	6	52	10	1	4	1	0	0	68	0	0	0	0	0	0	0	0	42	15	2	2	0	0	0	61	135
10:15	7	1	0	2	0	0	0	10	50	12	0	1	0	0	0	63	0	0	0	0	0	0	0	0	49	12	1	4	1	0	0	67	140
10:30	2	0	0	3	0	0	0	5	49	12	0	3	1	0	0	65	0	0	0	0	0	0	0	0	50	13	3	1	0	0	0	67	137
10:45	3	0	0	1	0	0	0	4	51	13	3	6	0	0	0	73	0	0	0	0	0	0	0	0	48	9	0	5	0	0	0	62	139
1 Hr	15	2	1	7	0	0	0	25	202	47	4	14	2	0	0	269	0	0	0	0	0	0	0	0	189	49	6	12	1	0	0	257	551
11:00	3	2	0	1	0	0	0	6	60	11	5	1	0	0	0	77	0	0	0	0	0	0	0	0	40	6	1	3	1	0	0	51	134
11:15	7	0	0	2	0	0	0	9	38	14	0	1	2	0	0	55	0	0	0	0	0	0	0	0	50	8	1	4	0	0	0	63	127
11:30	1	1	1	3	0	0	0	6	49	6	3	2	0	0	0	60	0	0	0	0	0	0	0	0	46	9	5	1	1	0	0	62	128
11:45	7	2	1	2	0	0	0	12	57	10	2	3	1	0	0	73	0	0	0	0	0	0	0	0	53	6	2	6	0	0	0	67	152
1 Hr	18	5	2	8	0	0	0	33	204	41	10	7	3	0	0	265	0	0	0	0	0	0	0	0	189	29	9	14	2	0	0	243	541
12:00	4	1	0	5	0	0	0	10	54	7	0	4	0	0	0	65	0	0	0	0	0	0	0	0	58	14	2	3	0	3	0	80	155
12:15	6	0	0	3	0	0	0	9	61	4	0	5	0	0	0	70	0	0	0	0	0	0	0	0	59	23	4	4	1	0	0	91	170
12:30	4	0	1	0	0	0	0	5	59	11	3	2	1	0	0	76	0	0	0	0	0	0	0	0	58	8	2	0	1	0	0	69	150
12:45	2	2	0	2	0	0	0	6	57	8	0	2	0	0	1	68	0	0	0	0	0	0	0	0	51	7	3	3	0	0	1	65	139
1 Hr	16	3	1	10	0	0	0	30	231	30	3	13	1	0	1	279	0	0	0	0	0	0	0	0	226	52	11	10	2	3	1	305	614
13:00	5	3	0	1	0	0	0	9	71	10	1	2	1	0	1	86	0	0	0	0	0	0	0	0	61	7	2	2	0	0	0	72	167
13:15	3	1	0	1	0	0	0	5	61	10	1	1	0	0	0	73	0	0	0	0	0	0	0	0	78	11	6	4	1	1	0	101	179
13:30	9	1	0	1	0	0	0	11	57	14	3	1	1	1	0	77	0	0	0	0	0	0	0	0	56	15	1	0	0	0	0	72	160
13:45	3	1	0	0	0	0	0	4	53	17	0	2	0	0	0	72	0	0	0	0	0	0	0	0	60	9	3	1	0	0	0	73	149
1 Hr	20	6	0	3	0	0	0	29	242	51	5	6	2	1	1	308	0	0	0	0	0	0	0	0	255	42	12	7	1	1	0	318	655
14:00	5	1	2	2	0	0	0	10	58	15	0	3	0	0	0	76	0	0	0	0	0	0	0	0	57	12	2	5	1	0	0	77	163
14:15	5	0	0	3	0	0	0	8	52	12	5	3	1	0	0	73	0	0	0	0	0	0	0	0	73	6	2	1	1	0	1	84	165
14:30	8	3	0	2	0	0	0	13	76	10	2	6	1	0	0	95	0	0	0	0	0	0	0	0	73	14	4	3	4	0	0	98	206
14:45	8	5	0	1	0	0	0	14	88	16	4	3	0	0	0	111	0	0	0	0	0	0	0	0	76	10	1	2	0	0	0	89	214
1 Hr	26	9	2	8	0	0	0	45	274	53	11	15	2	0	0	355	0	0	0	0	0	0	0	0	279	42	9	11	6	0	1	348	748
15:00	11	2	0	3	0	0	0	16	55	14	4	3	0	0	0	76	0	0	0	0	0	0	0	0	90	11	2	1	3	0	0	107	199
15:15	7	1	0	1	0	0	0	9	68	9	3	2	1	0	0	83	0	0	0	0	0	0	0	0	123	11	2	2	1	0	0	139	231
15:30	16	6	1	2	0	0	0	25	111	18	0	0	0	0	0	129	0	0	0	0	0	0	0	0	73	10	3	1	4	0	0	91	245
15:45	12	4	2	3	0	0	0	21	130	13	3	1	12	0	0	159	0	0	0	0	0	0	0	0	83	6	3	3	0	0	0	95	275
1 Hr	46	13	3	9	0	0	0	71	364	54	10	6	13	0	0	447	0	0	0	0	0	0	0	0	369	38	10	7	8	0	0	432	950
16:00	17	5	0	1	0	0	0	23	76	15	0	4	2	0	0	97	0	0	0	0	0	0	0	0	87	12	2	2	1	1	1	106	226
16:15	14	1	1	0	0	0	0	16	70	12	1	2	0	0	0	85	0	0	0	0	0	0	0	0	85	11	1	1	4	1	0	103	204
16:30	11	3	2	3	0	0	0	19	81	17	4	3	0	0	0	105	0	0	0	0	0	0	0	0	88	17	1	3	1	1	0	111	235
16:45	6	4	1	1	0	0	0	12	71	4	0	2	1	1	0	79	0	0	0	0	0	0	0	0	100	9	0	3	0	0	0	112	203
1 Hr	48	13	4	5	0	0	0	70	298	48	5	11	3	1	0	366	0	0	0	0	0	0	0	0	360	49	4	9	6	3	1	432	868
17:00	11	8	0	0	0	0	0	19	72	10	2	0	0	0	0	84	0	0	0	0	0	0	0	0	93	19	0	0	0	0	0	112	215

3634-IRE Fermoy
Junction Turning Count
16/12/2021

Site 2 - M8 On Slip / R639(ESE) / M8 Off Slip / R639(WNW)

17:15	11	4	0	3	0	0	0	18	67	7	0	3	1	0	0	78	0	0	0	0	0	0	0	0	83	20	2	2	0	0	0	107	203
17:30	9	3	0	1	0	0	0	13	79	8	1	1	0	0	0	89	0	0	0	0	0	0	0	0	88	16	1	2	1	0	0	108	210
17:45	8	2	0	0	0	0	0	10	72	10	1	1	1	0	0	85	0	0	0	0	0	0	0	0	96	12	0	1	0	1	0	110	205
1 Hr	39	17	0	4	0	0	0	60	290	35	4	5	2	0	0	336	0	0	0	0	0	0	0	0	360	67	3	5	1	1	0	437	833
18:00	3	0	1	0	0	0	0	4	70	4	1	2	0	0	0	77	0	0	0	0	0	0	0	0	78	10	1	2	0	1	0	92	173
18:15	5	1	0	0	0	0	0	6	69	8	2	2	0	1	0	82	0	0	0	0	0	0	0	0	98	11	0	2	1	0	0	112	200
18:30	7	2	0	1	0	0	0	10	57	9	2	3	0	0	0	71	0	0	0	0	0	0	0	0	80	10	1	3	1	0	0	95	176
18:45	4	1	0	0	0	0	0	5	60	5	2	0	1	0	0	68	0	0	0	0	0	0	0	0	83	8	1	1	0	0	0	93	166
1 Hr	19	4	1	1	0	0	0	25	256	26	7	7	1	1	0	298	0	0	0	0	0	0	0	0	339	39	3	8	2	1	0	392	715
Total	319	94	22	72	0	0	0	507	3103	551	82	111	49	5	2	3903	0	0	0	0	0	0	0	0	3294	521	84	110	48	10	4	4071	8481