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2023

Traffic Modelling
Proposed Active Travel Scheme, Kilbeggan, Co. Westmeath

Traffic Modelling
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Document Control Sheet

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1 Introduction

The purpose of this traffic modelling is to evaluate the potential impact of the proposed junction reconfiguration by the proposed active travel scheme which intends to enhance walking facilities along the R466 Dublin Road, Kilbeggan, Co. Westmeath. The report describes the development of a transport model based on the current year's data and explains the methodology used to forecast future traffic demands. Additionally, the report examines the proposed scheme's capacity and queue formation under various scenarios. **Figure 1.1** shows the location of the proposed scheme.

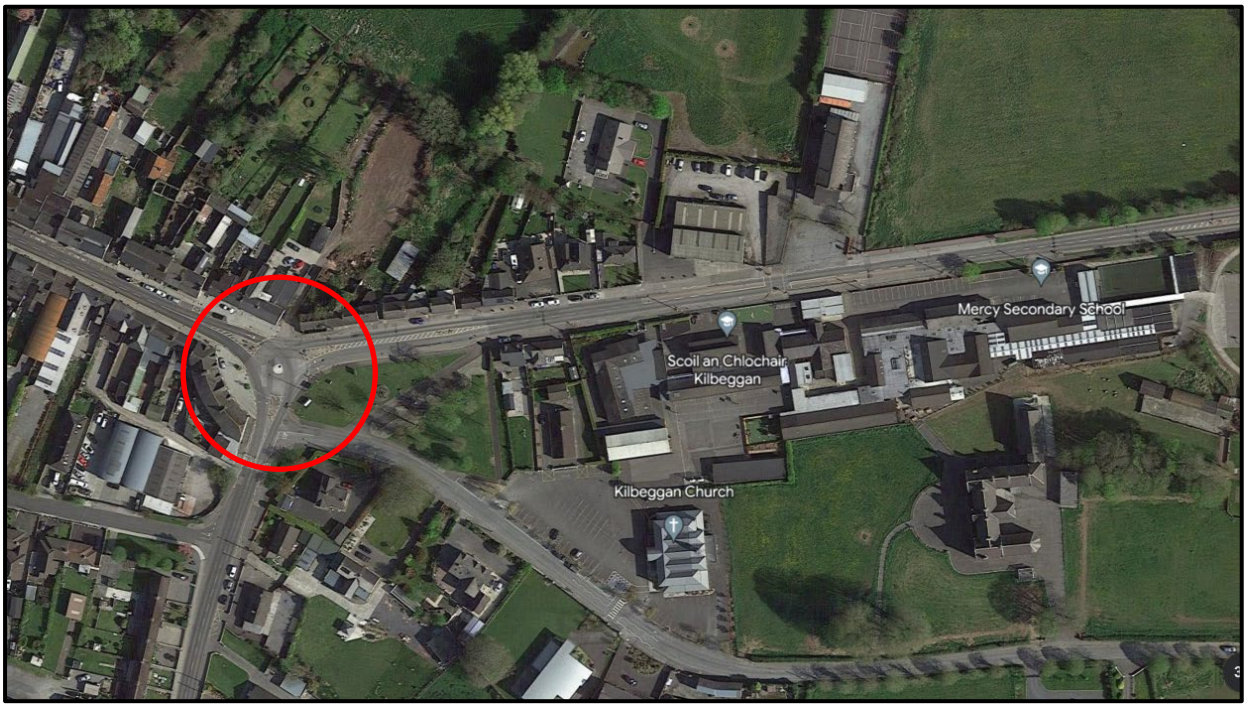

Figure 1.1: Site Location. Source: Google Earth

1.1 Objective of this Traffic Modelling Report

The objective of this Traffic Modelling Report is the examination of the potential impact on vehicle traffic caused by the creation of a T-junction with raised zebra crossing points and the subsequent changes in traffic flow pattern for the following scenarios:

1. **'Do Nothing'** scenario 2023 - The 'Do Nothing' scenario represents the current baseline and traffic and transport conditions of the study area without the proposed scheme in place. This scenario forms the reference case by which to compare the proposed scheme ('Do Something') for the qualitative assessment only.
2. **'Do Something'** scenario - The 'Do Something' scenario (Opening Year 2023, Design Year 2033) represents the anticipated traffic and transport conditions of the study area with the proposed scheme in place which will include the implementation of a T-junction and raised zebra crossing points along Dublin Road (R466), Tullamore Road (R389) and Upper Main Street (R446).

It is important to note that ORS Consultancy was requested to model the preferred option of the four proposed scenarios.

1.2 Methodology

The methodology that will be used in this assessment is as follows:

- In order to assess the impact of the generated traffic on the surrounding road network, analysis of the existing traffic conditions was based on 24-hour classified Junction Turning Counts (JTCs) and Pedestrian movements surveys undertaken by Innovative Data Solutions (IDASO), carried out in May 2023, which were provided to ORS by Westmeath County Council;

- A spreadsheet network model was developed to analyse the recorded turning counts and to determine the morning and evening peak hours on the road network for both junctions at each side of the bridge;

- The traffic counts were factored up using Transport Infrastructure Ireland (TII) central growth factors for Co. Westmeath for the current year (2023), and 10-years (2033) future scenario;

- The operational performance was assessed using Junctions 9 software developed by TRL Software Ltd (UK);

- The outputs of the assessment were the Ratio of Flow to Capacity (RFC) or Degree of Saturation (DOS) and Queue Length (Mean Maximum Queue) in passenger car units (PCUs). An RFC/DOS value of 0.85 is generally regarded as the practical limit for approaching roads at a junction. Junctions operating below this threshold should operate efficiently and within capacity; and

- The Level of Service (LOS) is the primary output for evaluating the performance of the existing road network. In traffic engineering and transportation planning, LOS is used to assess the quality of service provided by a transportation facility or system, such as a junction. It is a qualitative rating system that considers the overall level of traffic congestion, delay, and safety. Generally, a LOS of A or B is considered desirable, indicating low delay and good traffic flow, while a LOS of C or D is considered acceptable, indicating moderate delay and moderate traffic flow. Conversely, a LOS of E or F is considered poor, indicating high delay and poor traffic flow.

2 Capacity Analysis

2.1 Existing Traffic Flows

In order to assess the impact of the generated traffic on the surrounding road network, analysis of the existing traffic conditions was based on 24-hour classified Junction Turning Counts (JTCs) and Pedestrian movements surveys undertaken by Innovative Data Solutions (IDASO) on Wednesday 24th May 2023.

The 24-hour JTCs and pedestrian movements were recorded at 15-minute intervals. The recorded traffic counts for the study area have shown that the junctions peak hour follows a general peak trend and that the AM and PM peaks are within a peak i.e., from 08:15 – 09:15 in the morning and 17:00 – 18:00 during the evening peak hours. Likewise, the morning pedestrian peak hours follow the same trend as the traffic on the road, however, in the evening period the peak is between 13:00 – 14:00 followed by a second high peak at 15:15 – 16:15, which both are related to the end of school day.

A summary of the recorded AM and PM peak traffic and pedestrian flows at the existing roundabout are presented below in **Tables 2.1** & **2.2**.

Table 2.1 – 2023 AM and PM Traffic

Time Range	PCU
08:00-09:00	1161.8
17:00-18:00	1158.5

It was observed from traffic counts that the majority of traffic drives from and towards Tullamore Road, as can be seen in **Figure 2.1** below.

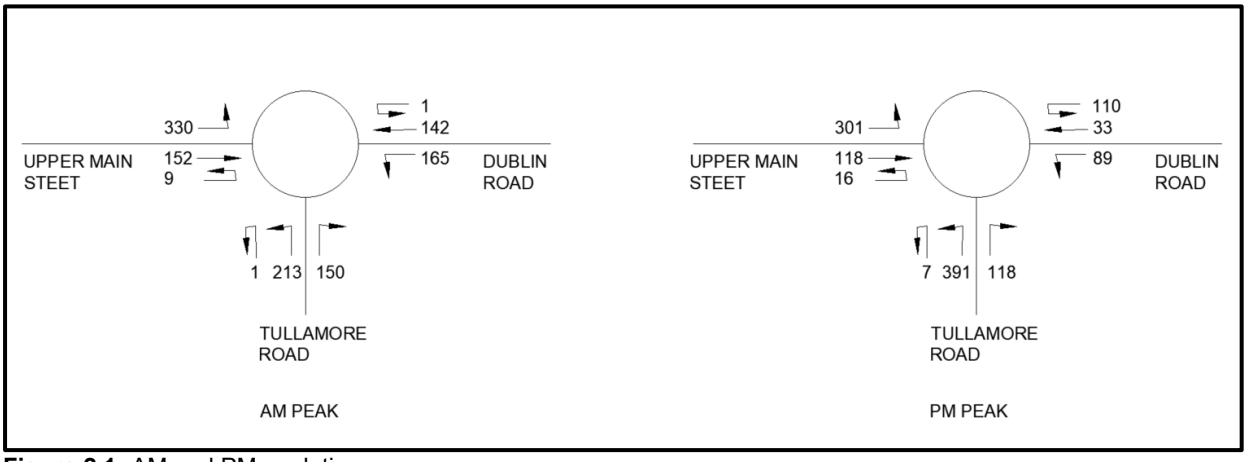

Figure 2.1: AM and PM peak times.

Table 2.2 – 2023 AM and PM Pedestrians	
Time Range	**Pedestrians**
08:00-09:00	773
13:00-14:00	506
15:15-16:15	445

Figure 2.2 below illustrate the pedestrian movement captured in the survey.

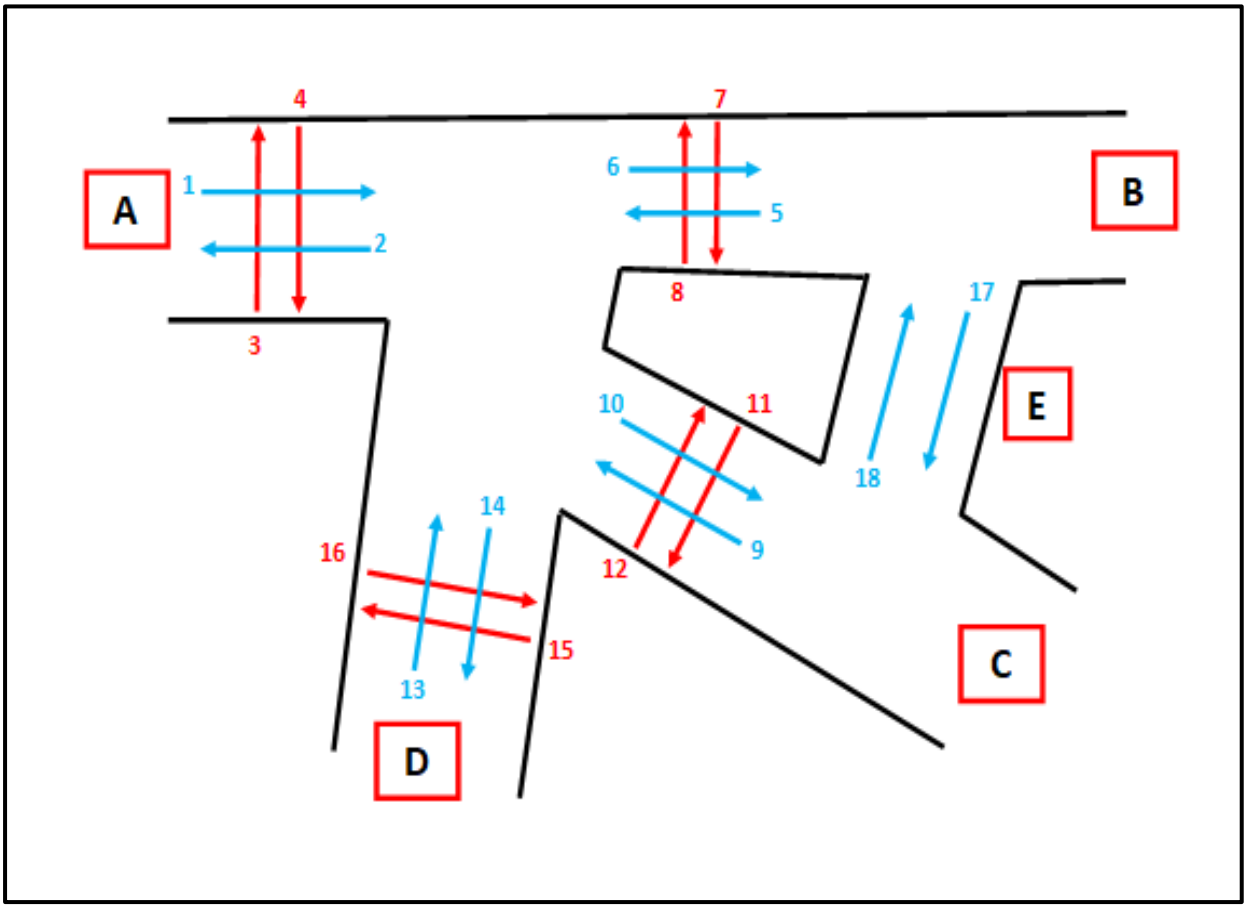

Figure 2.2: Pedestrian Movements Survey. Source: IDASO

2.2 Existing Layout

The land under consideration falls within the control of Westmeath County Council. The proposed scheme is located along Dublin Road from Mercy Secondary School and extends to the west encompassing the existing mini roundabout linked to Tullamore Road and Upper Main Street.

At present, the 3-arm mini roundabout has an inscribed circle diameter of approximately 24.0m and uncontrolled crossing points with refuge island on the 3 arms.

Dublin Road connects the roundabout from the east and it has the provision of a second lane of 62 meters in length on approach. Tullamore Road is connected to the south and has the provision of a flared second lane on approach. Upper Main Street is the western arm, and it is a single flared lane on approach. There is a private access located to the north of the roundabout. Please refer to **Figure 2.3** for current site arrangements.

Tullamore Road is the primary link road to the M6 motorway from traffic to and from Kilbeggan. The speed limit in the surrounds is 50km/h.

Figure 2.3: Current site arrangements. Source: Google Earth

2.3 Proposed Scheme

As part of the proposed Active Travel Scheme, it is proposed to improve road safety and especially towards pedestrian needs. The proposed works will construct a 4-meter-wide shared pedestrian and cycle facility along the carriageway of Dublin Road and formalise pedestrian footpath by means of a minimum footpath of 1.8 in width along the carriageway. Existing on-street car parking will be upgraded.

As stated above, the proposal also includes a new junction layout to provide for pedestrian and cyclist-friendly measures. A preferred option was chosen out of 4No. proposed layouts, and it was decided that a new T-junction with raised zebra crossing points falls under the requirements and needs of the wider community. The proposal layout will include road narrowing in order to facilitate crossing distances to pedestrians and also act as a traffic calming measure.

The proposed T-junction will consist of Upper Main Street and Tullamore Road as the major

arm providing free flow traffic for vehicles travelling in both directions. Dublin Road will tie into the proposed junction as a minor arm and will accommodate a stop road marking and signage, consequently, traffic on Dublin Road must stop for traffic on the main road which has priority.

The proposal will tie into the new Mercy Secondary school located to the east of the existing roundabout, which made provision for a 4m shared pedestrian and cycle facility along Dublin Road westbound (R466).

Figure 2.4 below illustrated the proposed works.

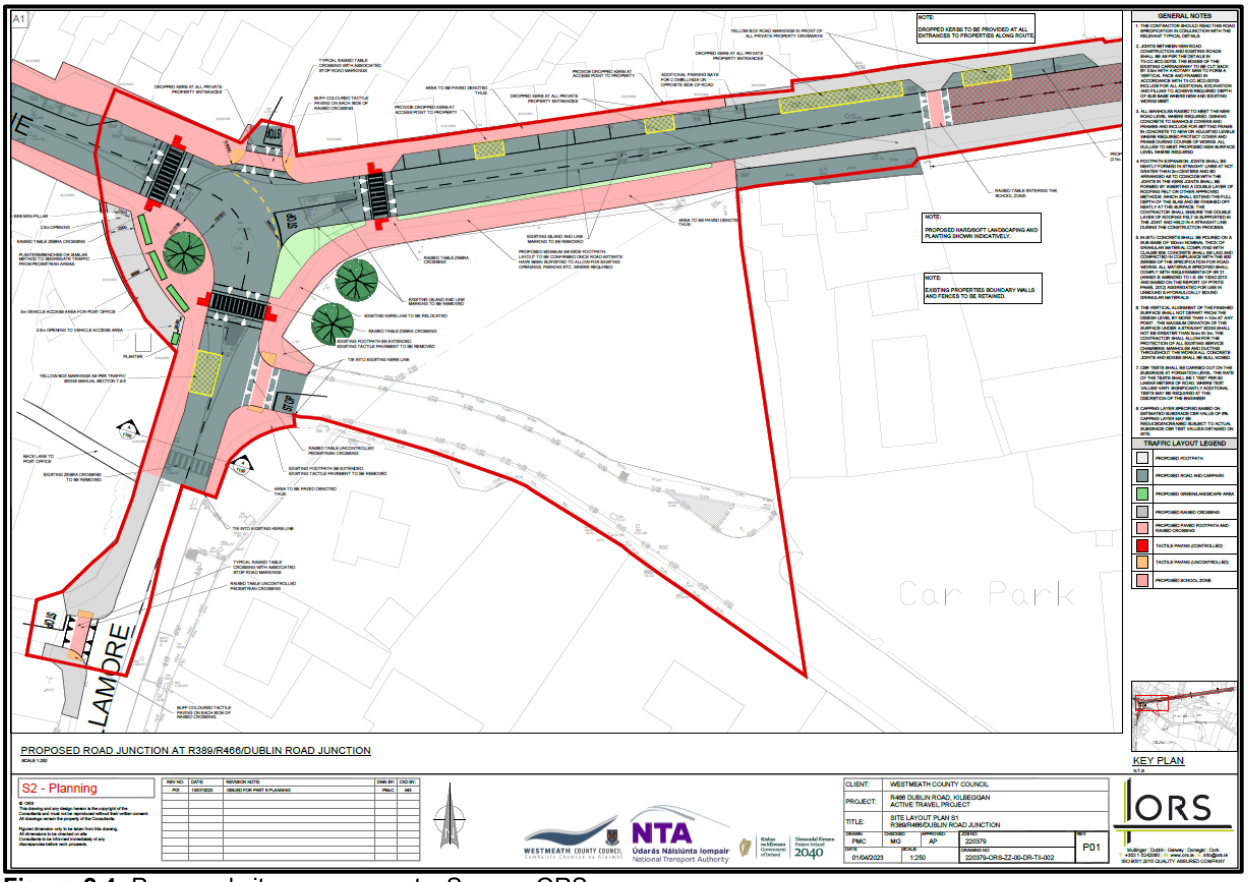

Figure 2.4: Proposed site arrangements. Source: ORS

2.4 Traffic Model

Traffic growth factors for future-year assessments were calculated from data obtained in the TII PE-PAG-02017 (October 2021) Project Appraisal Guidelines for National Roads Unit 5.3 which provides the recommended method of predicting future year traffic growth on Roads.

Consequently, the 2023 traffic counts were factored up using TII traffic growth rates for Co. Westmeath, extracted from the TII Publication PE-PAG-02017 Table 6.2 (Central Growth Rates: Annual Growth Factors, County Westmeath), to bring them in line with 2033, future design year. The AM and PM peak traffic from 2023 were factored by 1.139 to obtain the 2033 traffic data, as per **Table 2.3** to **Table 2.5**.

Table 2.3 – Development Location Information	
Location of Development	Westmeath
Sensitivity Area	Central
Year of Traffic Counts	2023
Year of Assessment	2023
Year of Development Construction	2023

Table 2.4 – TII Annual Growth Rates (Central Growth) for Co. Westmeath		
Year	**LGV**	**HGV**
2016 – 2030	1.0161	1.0316
2030 – 2040	1.0062	1.0147
2040 – 2050	1.0053	1.0176

Table 2.5 – Growth Factors for Future Design Years for Co. Westmeath			
	Counts	Completion	Completion +10
	2023	2023	2033
LGV	1.000	1.000	1.139
HGV	1.000	1.000	1.299

The evaluation was conducted using TII-approved software modelling techniques to evaluate the capacity of junctions within the network area of influence where an increase in traffic or an alteration of the traffic pattern is expected. This assessment included a comprehensive analysis of the capacity of the proposed T-junction with zebra crossings.

The TII-approved computer simulation model PICADY (Priority Intersection Capacity & Delay) was employed to evaluate the capacity queues and delay at the network (with the simulation of future junction layout), with the aim of confirming that adequate capacity exists to accommodate the existing and adjusted future flows.

An RFC below 0.85 (85%) implies that an approach road is operating satisfactorily well within capacity; between 0.85 to 1.0 RFC means the approach operates well within capacity but at less optimal efficiency; and an RFC above 1.0 means that demand and capacity are equal and no further traffic can progress through the junction.

Junctions 9 includes an estimate of delay and LOS (Level of Service) for the junction by calculating a demand-weighted average of the arm/stream results. In general, a LOS of A or B is considered desirable, indicating low delay and good traffic flow, while a LOS of C or D is considered acceptable, indicating moderate delay and moderate traffic flow. Conversely, a LOS of E or F is considered poor, indicating high delay and poor traffic flow. The queue levels are presented in Passenger Car Unit (PCU) and quantify the total number of vehicles queueing on each arm. This is shown in the Summary Result Tables below.

Table 2.6 & **2.7**– shows the maximum RFC and queue length for the current scenario and the maximum queue length in Passenger Car Equivalent (PCU) and Level of Service (LOS) obtained for the future scenarios.

For the 2023 Do-Nothing scenario which represents the current junction arrangements, the arms are named as follows:

- Arm A – Upper Main Street
- Arm B – Dublin Road
- Arm C – Tullamore Road

Table 2.6 – Junctions9 Results for the Existing Site Arrangements

Scenario	Arm	AM			PM		
		Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
1 – 2023, do-nothing	A	1.3	8.94	0.54	1.0	8.14	0.46
	B	0.3	3.68	0.23	0.2	3.51	0.15
	C	0.5	4.07	0.28	0.7	4.66	0.38

For Do-Something scenarios 2023 and 2033 where Dublin Road is the minor arm, the arms were named as follows:

- Arm A – Upper Main Street
- Arm B – Dublin Road
- Arm C – Tullamore Road

Table 2.7 – Junctions9 Results for the Proposed Scheme

Scenario	Arm	AM			PM		
		Queue (PCU)	Delay (s)	LOS	Queue (PCU)	Delay (s)	LOS
2 – 2023, do-something	A	0.0	0.03	A	0.0	0.04	A
	B	3.7	36.27	E	1.6	21.41	C
	C	0.9	9.01	A	0.6	5.35	A
3 – 2033, do-something	A	0.0	0.04	A	0.0	0.04	A
	B	5.8	57.10	F	2.2	29.87	D
	C	1.3	10.62	B	0.9	6.26	A

Analysis 1 was performed for the ‘do-nothing scenario’ (existing site arrangements) and indicates that the road networks are currently experiencing zero congestion during peak hours with a maximum RFC of 0.54 in arm C – Upper Main Street with a queue formation of 1.3 PCU and delay of 8.94 seconds, in the morning period as indicated in **Table 2.6**.

Moving to the results of Junctions 9 for the proposed scheme, Analysis 2 was conducted for the current year for the priority T-junction and Analysis 3 for the design year of 2033. Both analyses included zebra crossings on all approaches to the T-junction, giving priority to pedestrians as a result, opposite to the current environment with uncontrolled crossing points.

In **Table 2.7**, the proposed junction arrangements will experience higher delays and queuing formation compared to Analysis 1, attributed to the incorporation of controlled zebra crossings and the stop line in arm B – Dublin Road. It has been observed that the junction will operate with 57.10 seconds of delay, a queue length of 58 PCU, and a rated 'F' Level of Service, in arm B – Dublin Road during the peak hour in the morning. Arms A and C – Upper Main Street and Tullamore Road will operate to a maximum rated 'B' level of service considered desirable and functioning effectively.

Future scenarios were modelled using lane simulation mode and it is important to note that the Lane Simulation mode does not provide the Road Flow Capacity (RFC), the junctions are assessed by their level of service.

3 Summary and Conclusion

3.1 Summary

ORS has been appointed by Westmeath County Council to conduct a design for the R466 Dublin Road, Kilbeggan, Active Travel Project. As part of the proposal, it is included a junction reconfiguration in order to accommodate traffic calming and active travel measures related to the proposed improvements. Therefore, ORS performed traffic modelling on the proposed designed options and carry out a Traffic Modelling Report on the preferred design option.

This report has been prepared to summarise the modelling methodology adopted, the modelling parameters used for the preferred option, and the potential effects of the Local Plan on traffic.

The proposed development aims to improve safety and accessibility for pedestrians and cyclists by installing 4 meters shared pedestrian/ cycle facility along Dublin Road (R446), taking the frontage of Mercy Secondary School - currently under construction a new school in Kilbeggan on Dublin Road – and back towards the town. The proposed works also include a new junction layout with controlled crossing points to safely accommodate vulnerable users commuting to and from the school. The scheme also runs along the frontage of the Scoil an Chlochair.

Overall, this proposed development represents a positive step towards creating a more pedestrian-friendly and accessible urban environment, by prioritising the needs of pedestrians and implementing measures to improve safety and connectivity.

In summary, the junction analysis was carried out using 2023 traffic data, factored with central growth levels for Co. Westmeath in accordance with the TII publication PE-PAG-02017 October 2021. The approach involves factoring the traffic counts in a uniform manner across the study area.

The traffic analysis of the recorded traffic counts for the study area shows that the network peak hour follows a general peak trend and that the AM and PM peaks are within a peak i.e., from 08:15 – 09:15 in the morning and 17:00 – 18:00 during the evening peak hours. Pedestrian traffic counts were also obtained, and peak times occur between 08:00 – 09:00 in the morning and 13:00 – 14:00 in the evening period, a second pedestrian peak was observed between 15:15 – 16:15.

TII-approved modelling techniques have been employed to evaluate the capacity of junctions within the network area of influence, including two basic scenarios (‘do-nothing’ and ‘do-something’ scenarios). The TII-approved computer simulation model, PICADY was employed to evaluate the capacity queues and delays at the existing road network and proposed scheme, so as to verify that there is sufficient capacity to accommodate existing and future traffic as a consequence of the proposed development.

The outcomes of the modelling of the preferred option are outlined and displayed in **Tables 2.6** and **2.7** above. The remaining modelled options are attached in **Appendix A**.

According to the modelling results, it is evident that the current scenario without any modifications to the network, as presented in Analysis 1, yields the best results. The Level of Service (LOS) in this case is rated as 'A', indicating yield traffic flow arrangements to all arms without the presence of a controlled crossing. It is noteworthy that this outcome was achieved without any changes to the junction, highlighting the current capacity of the network.

Analysis 2 & 3 yielded worst results compared to Analysis 1. The results obtained from the proposed priority T-junction traffic simulation for the years 2023 and 2033 with the redesigned junctions which incorporate a stop road marking on Dublin Road and controlled zebra crossings along all arms, will experience increased queuing formations and delays.

A maximum queue length of 5.8 PCU and 57.10 seconds of delay is expected in arm B – Dublin Road, in the design year of 2033 during the morning peak. The arm will operate a rated ‘F’ Level of service.

3.2 Conclusion

Four different options of junction redesign were proposed for the existing mini roundabout between Dublin Road, Tullamore Road, and Upper Main Street which aim to maximise accessibility and pedestrian safety within the study area. ORS was requested to model the preferred option that would have the greatest impact on the road network, from the point of view of all road users. The proposed junction reconfiguration includes the alteration of the existing roundabout into a priority T-junction with the addition of controlled zebra crossing on each arm. The proposal layout will include road narrowing in order to facilitate crossing distances to pedestrians and also act as a traffic calming measure.

The traffic modelling results indicate that installing controlled crossing and a regulatory stop for cars arriving from Dublin Road would cause an increase in delays and queuing formation during the peak hour, with the road working at a level of service ‘F’. However, arms A – Upper Main Street and arm C – Tullamore Road, will operate satisfactorily during busy hours.

Overall, based on the findings, it can be concluded that the proposed enhancements will improve and provide a safer environment for pedestrians. Dublin Road will experience minor delays and queued formation in consequence that traffic will have to stop for traffic on the main road. Tullamore Road and Upper Street Road will not suffer any detrimental effects as a result of the proposed works. Therefore, there do not appear to be any significant traffic-related reasons that would prevent the incorporation of the proposal described in this capacity assessment.

Appendix A – Traffic Modelling

Note that arms notation may differ on each simulation on the documents attached.

T-Junction simulation – Arms Labels

- Arm A – Dublin Road
- Arm B – Tullamore Road
- Arm C – Upper Main Street

T-Junction simulation Dublin Road Minor Arm – Arms Labels

- Arm A – Upper Main Street
- Arm B – Dublin Road
- Arm C – Tullamore Road

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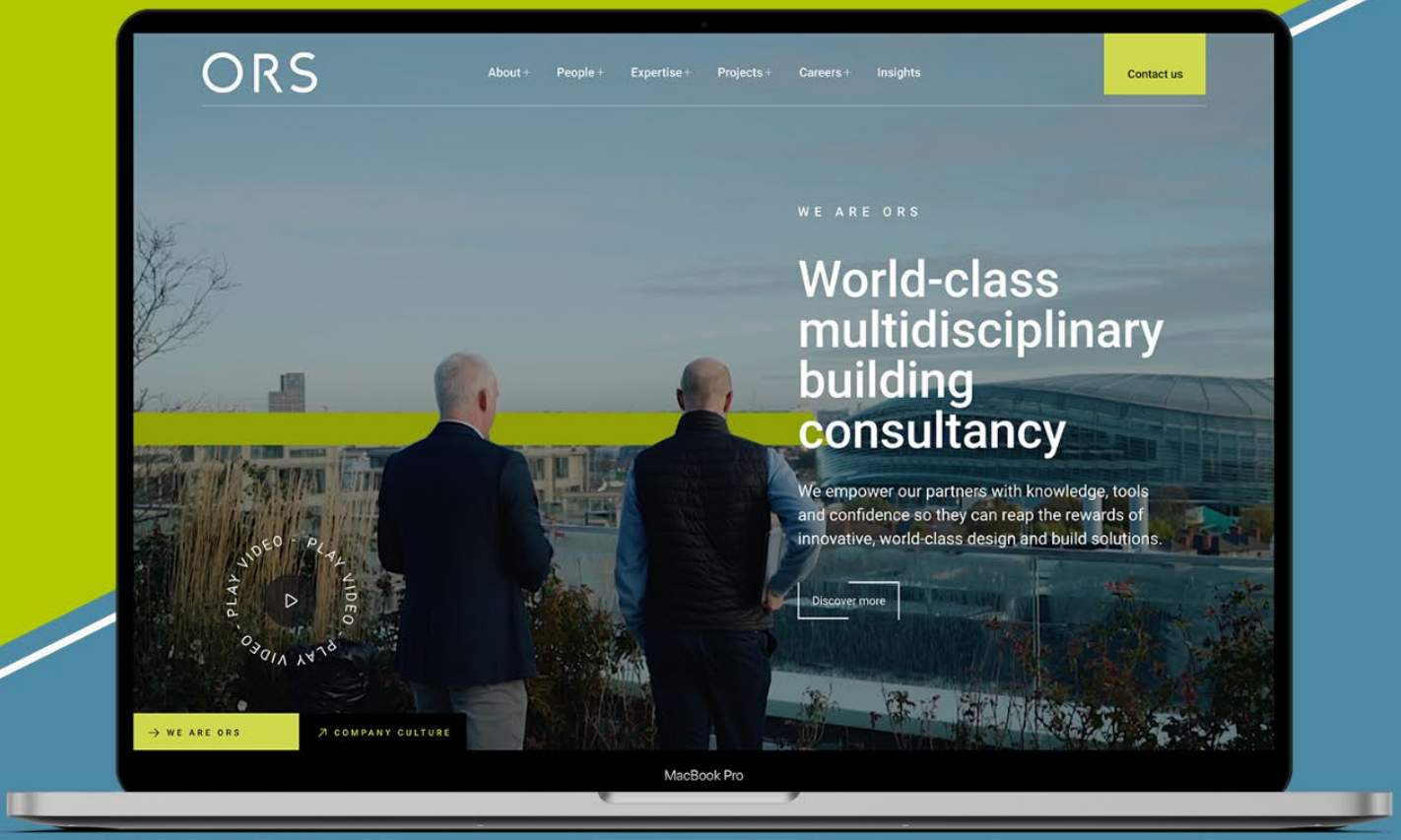

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Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.5.1.7462

For sales and distribution information, program advice and maintenance, contact TRL:
+44 (0)1344 379777 software@trl.co.uk www.trlsoftware.co.uk

Filename: T-Junction simulation mode.j9
Path: C:\Users\communallaptop\OneDrive - ORS\Desktop\J9 FILES\221379 - Kilbeggan_Active_Travel
Report generation date: 26/06/2023 15:13:30

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	[Lane Simulation] - 2023									
Arm A	D1	0.0	0.08		A	D2	0.0	0.08		A
Arm B		5.8	50.39		F		13.7	85.11		F
Arm C		4.3	29.37		D		2.6	20.22		C
	[Lane Simulation] - 2033									
Arm A	D3	0.0	0.08		A	D4	0.0	0.08		A
Arm B		18.9	138.89		F		51.4	280.82		F
Arm C		10.0	62.01		F		4.4	30.09		D

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. Arm and junction delays are averages for all movements, including movements with zero delay.

File summary

File Description

Title	
Location	
Site number	
Date	22/06/2023
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	AzureAD\communallaptop
Description	

Units

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

Analysis Options

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

Lane Simulation options

Criteria type	Stop criteria (%)	Stop criteria time (s)	Stop criteria number of trials	Random seed	Results refresh speed (s)	Individual vehicle animation number of trials	Average animation capture interval (s)	Use quick response	Do flow sampling	Suppress automatic lane creation	Last run random seed	Last run number of trials	Last run time taken (s)
Delay	1.00	100000	100000	-1	3	1	60	✓			2006809685	187	19.47

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D1	2023	AM	ONE HOUR	08:00	09:30	15	✓		
D2	2023	PM	ONE HOUR	16:45	18:15	15	✓		
D3	2033	AM	ONE HOUR	08:00	09:30	15	✓	Simple	D1*G2033
D4	2033	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D2*G2033

Growth Factors

ID	Description	Use TEMPRO	Growth Factor
G2033			1.1390

Growth factors are only active if the Demand Set references them in a Relationship.

Analysis Set Details

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

2023, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A1 - [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.
Warning	Pedestrian Crossing	Arm C - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		28.18	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Dublin Road to the east		Major
B	Tullamore Road		Minor
C	Upper Main Street		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	7.50			70.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	3.75	90	90

Zebra Crossings

Arm	Space between crossing and junction entry (Left) (PCU)	Space between crossing and junction entry (Right / All) (PCU)	Vehicles queueing on exit (Zebra) (PCU)	Central Refuge	Crossing data type	Crossing length (m)	Crossing time (s)
A		2.00	2.00		Distance	7.50	5.36
B	1.00		1.00		Distance	7.50	5.36
C		2.00	2.00		Distance	7.50	5.36

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	594	0.101	0.255	0.161	0.365
B-C	732	0.105	0.265	-	-
C-B	615	0.223	0.223	-	-

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.

Lanes

Arm	Side	Lane level	Lane	Destination arms	Has limited storage	Storage (PCU)	Has bottleneck	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)	Signalised
A	Entry	1	1	B, C	✓	2.00		0	99999	
		2	1	(B, C)		Infinity				
	Exit	1	1		✓	2.00				
		2	1			Infinity				
B	Entry	1	1	A, C	✓	1.00		0	99999	
		2	1	(A, C)		Infinity				
	Exit	1	1		✓	1.00				
		2	1			Infinity				
C	Entry	1	1	A, B	✓	2.00		0	99999	
		2	1	(A, B)		Infinity				
	Exit	1	1		✓	2.00				
		2	1			Infinity				

Summary of Entry Lane allowed movements

Arm	Lane Level	Lane	Destination arm		
			A	B	C
A	1	1		✓	✓
	2	1		✓	✓
B	1	1	✓		✓
	2	1	✓		✓
C	1	1	✓	✓	
	2	1	✓	✓	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2023	AM	ONE HOUR	08:00	09:30	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	307	100.000
B		ONE HOUR	✓	363	100.000
C		ONE HOUR	✓	482	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
A	[ONEHOUR]	17.00
B	[ONEHOUR]	103.00
C	[ONEHOUR]	4.00

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	165	142
	B	150	0	213
	C	152	330	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	20	12
	B	16	0	19
	C	6	14	11

Results

Results Summary for whole modelled period

Arm	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A	0.08	0.0	A	280	420
B	50.39	5.8	F	331	497
C	29.37	4.3	D	440	659

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	226	57	12.80	226	234	226	0.0	0.0	0.047	A
B	280	70	77.54	279	275	373	0.0	1.4	16.242	C
C	362	90	0.00	359	364	266	0.0	1.4	11.751	B

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	269	67	15.28	269	272	266	0.0	0.0	0.045	A
B	329	82	92.59	329	324	439	1.4	2.2	22.061	C
C	427	107	0.00	425	425	318	1.4	2.1	16.946	C

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	336	84	18.72	336	335	327	0.0	0.0	0.075	A
B	392	98	113.41	393	384	544	2.2	4.9	41.549	E
C	529	132	0.00	531	522	389	2.1	4.3	27.441	D

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	346	87	18.72	346	341	335	0.0	0.0	0.077	A
B	398	100	113.41	399	393	536	4.9	5.8	50.391	F
C	511	128	0.00	517	527	392	4.3	3.8	29.366	D

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	277	69	15.28	277	278	279	0.0	0.0	0.054	A
B	317	79	92.59	321	337	450	5.8	2.1	28.881	D
C	448	112	0.00	443	444	312	3.8	2.3	17.582	C

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	227	57	12.80	227	234	224	0.0	0.0	0.051	A
B	270	68	77.54	270	276	369	2.1	1.4	16.721	C
C	362	90	0.00	362	367	266	2.3	1.2	12.023	B

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	226		226	234	0.0	0.0	0.012	A
		2	1	(B, C)	226	12.80	226	234	0.0	0.0	0.035	A
	Exit	1	1		226	12.80	226	229	0.0	0.0	0.025	A
		2	1		226		226	229	0.0	0.0	0.000	A
B	Entry	1	1	A, C	280		279	275	0.0	0.7	7.542	A
		2	1	(A, C)	280	77.54	280	278	0.0	0.7	8.706	A
	Exit	1	1		373	77.54	373	375	0.0	0.0	0.133	A
		2	1		373		373	375	0.0	0.0	0.000	A
C	Entry	1	1	A, B	360		359	364	0.0	0.8	7.143	A
		2	1	(A, B)	362	0.00	360	367	0.0	0.5	4.585	A
	Exit	1	1		266	0.00	266	268	0.0	0.0	0.000	A
		2	1		266		266	268	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	269		269	272	0.0	0.0	0.014	A
		2	1	(B, C)	269	15.28	269	272	0.0	0.0	0.031	A
	Exit	1	1		266	15.28	266	266	0.0	0.0	0.036	A
		2	1		266		266	266	0.0	0.0	0.000	A
B	Entry	1	1	A, C	330		329	324	0.7	0.8	7.761	A
		2	1	(A, C)	329	92.59	330	324	0.7	1.4	14.269	B
	Exit	1	1		439	92.59	439	437	0.0	0.0	0.144	A
		2	1		439		439	437	0.0	0.0	0.000	A
C	Entry	1	1	A, B	425		425	425	0.8	1.0	7.968	A
		2	1	(A, B)	427	0.00	425	426	0.5	1.1	8.976	A
	Exit	1	1		318	0.00	318	317	0.0	0.0	0.000	A
		2	1		318		318	317	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	336		336	335	0.0	0.0	0.032	A
		2	1	(B, C)	336	18.72	336	335	0.0	0.0	0.044	A
	Exit	1	1		327	18.72	327	321	0.0	0.0	0.045	A
		2	1		327		327	321	0.0	0.0	0.000	A
B	Entry	1	1	A, C	392		393	384	0.8	0.9	8.323	A
		2	1	(A, C)	392	113.41	392	384	1.4	4.0	33.242	D
	Exit	1	1		544	113.41	544	537	0.0	0.0	0.191	A
		2	1		544		544	537	0.0	0.0	0.000	A
C	Entry	1	1	A, B	531		531	522	1.0	1.4	8.899	A
		2	1	(A, B)	529	0.00	531	523	1.1	2.9	18.510	C
	Exit	1	1		389	0.00	389	383	0.0	0.0	0.000	A
		2	1		389		389	383	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	346		346	341	0.0	0.0	0.024	A
		2	1	(B, C)	346	18.72	346	341	0.0	0.0	0.053	A
	Exit	1	1		335	18.72	335	334	0.0	0.0	0.048	A
		2	1		335		335	334	0.0	0.0	0.000	A
B	Entry	1	1	A, C	398		399	393	0.9	1.0	8.476	A
		2	1	(A, C)	398	113.41	398	393	4.0	4.8	41.903	E
	Exit	1	1		536	113.41	536	539	0.0	0.0	0.189	A
		2	1		536		536	539	0.0	0.0	0.000	A
C	Entry	1	1	A, B	516		517	527	1.4	1.3	8.961	A
		2	1	(A, B)	511	0.00	516	526	2.9	2.5	20.426	C
	Exit	1	1		392	0.00	392	388	0.0	0.0	0.000	A
		2	1		392		392	388	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	277		277	278	0.0	0.0	0.020	A
		2	1	(B, C)	277	15.28	277	278	0.0	0.0	0.034	A
	Exit	1	1		279	15.28	279	283	0.0	0.0	0.039	A
		2	1		279		279	283	0.0	0.0	0.000	A
B	Entry	1	1	A, C	321		321	337	1.0	0.8	7.906	A
		2	1	(A, C)	317	92.59	321	336	4.8	1.3	21.014	C
	Exit	1	1		450	92.59	450	453	0.0	0.0	0.154	A
		2	1		450		450	453	0.0	0.0	0.000	A
C	Entry	1	1	A, B	445		443	444	1.3	1.1	8.058	A
		2	1	(A, B)	448	0.00	445	443	2.5	1.1	9.535	A
	Exit	1	1		312	0.00	312	323	0.0	0.0	0.000	A
		2	1		312		312	323	0.0	0.0	0.000	A

09:15 - 09:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	227		227	234	0.0	0.0	0.016	A
		2	1	(B, C)	227	12.80	227	234	0.0	0.0	0.035	A
	Exit	1	1		224	12.80	224	232	0.0	0.0	0.036	A
		2	1		224		224	232	0.0	0.0	0.000	A
B	Entry	1	1	A, C	271		270	276	0.8	0.6	7.608	A
		2	1	(A, C)	270	77.54	271	275	1.3	0.7	9.145	A
	Exit	1	1		369	77.54	369	375	0.0	0.0	0.130	A
		2	1		369		369	375	0.0	0.0	0.000	A
C	Entry	1	1	A, B	362		362	367	1.1	0.8	7.360	A
		2	1	(A, B)	362	0.00	362	365	1.1	0.5	4.717	A
	Exit	1	1		266	0.00	266	270	0.0	0.0	0.000	A
		2	1		266		266	270	0.0	0.0	0.000	A

2023, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A1 - [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		46.18	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2023	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	199	100.000
B		ONE HOUR	✓	509	100.000
C		ONE HOUR	✓	419	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
A	[ONEHOUR]	26.00
B	[ONEHOUR]	63.00
C	[ONEHOUR]	7.00

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	89	110
	B	118	0	391
	C	118	301	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	25	24
	B	13	14	18
	C	20	22	19

Results

Results Summary for whole modelled period

Arm	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A	0.08	0.0	A	183	274
B	85.11	13.7	F	472	708
C	20.22	2.6	C	383	575

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	145	36	19.57	145	149	174	0.0	0.0	0.058	A
B	394	99	47.43	389	387	289	0.0	2.4	18.781	C
C	315	79	5.27	314	313	385	0.0	1.1	11.265	B

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	179	45	23.37	179	180	213	0.0	0.0	0.050	A
B	468	117	56.64	472	459	348	2.4	3.7	29.722	D
C	375	94	6.29	377	370	467	1.1	1.6	14.160	B

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	225	56	28.63	225	224	251	0.0	0.0	0.081	A
B	558	139	69.36	547	525	428	3.7	11.9	62.163	F
C	456	114	7.71	457	455	550	1.6	2.6	20.221	C

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	215	54	28.63	214	221	253	0.0	0.0	0.071	A
B	556	139	69.36	537	543	424	11.9	13.7	85.111	F
C	455	114	7.71	458	455	533	2.6	2.5	18.654	C

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	183	46	23.37	183	178	217	0.0	0.0	0.063	A
B	468	117	56.64	477	495	354	13.7	5.7	57.453	F
C	378	95	6.29	373	374	462	2.5	1.9	14.909	B

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	150	38	19.57	150	150	178	0.0	0.0	0.043	A
B	388	97	47.43	395	400	289	5.7	2.2	24.484	C
C	320	80	5.27	315	317	393	1.9	1.3	11.704	B

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	145		145	149	0.0	0.0	0.006	A
		2	1	(B, C)	145	19.57	145	149	0.0	0.0	0.052	A
	Exit	1	1		174	19.57	174	177	0.0	0.0	0.055	A
		2	1		174		174	177	0.0	0.0	0.000	A
B	Entry	1	1	A, C	390		389	387	0.0	0.9	6.605	A
		2	1	(A, C)	394	47.43	390	390	0.0	1.5	12.180	B
	Exit	1	1		289	47.43	289	292	0.0	0.0	0.096	A
		2	1		289		289	292	0.0	0.0	0.000	A
C	Entry	1	1	A, B	315		314	313	0.0	0.7	7.110	A
		2	1	(A, B)	315	5.27	315	316	0.0	0.4	4.148	A
	Exit	1	1		385	5.27	385	380	0.0	0.0	0.014	A
		2	1		385		385	380	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	179		179	180	0.0	0.0	0.004	A
		2	1	(B, C)	179	23.37	179	180	0.0	0.0	0.046	A
	Exit	1	1		213	23.37	213	213	0.0	0.0	0.044	A
		2	1		213		213	213	0.0	0.0	0.000	A
B	Entry	1	1	A, C	472		472	459	0.9	0.9	6.838	A
		2	1	(A, C)	468	56.64	472	459	1.5	2.7	22.860	C
	Exit	1	1		348	56.64	348	346	0.0	0.0	0.100	A
		2	1		348		348	346	0.0	0.0	0.000	A
C	Entry	1	1	A, B	376		377	370	0.7	0.8	7.593	A
		2	1	(A, B)	375	6.29	376	371	0.4	0.8	6.566	A
	Exit	1	1		467	6.29	467	451	0.0	0.0	0.016	A
		2	1		467		467	451	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	225		225	224	0.0	0.0	0.009	A
		2	1	(B, C)	225	28.63	225	224	0.0	0.0	0.073	A
	Exit	1	1		251	28.63	251	246	0.0	0.0	0.060	A
		2	1		251		251	246	0.0	0.0	0.000	A
B	Entry	1	1	A, C	546		547	525	0.9	1.1	6.988	A
		2	1	(A, C)	558	69.36	546	526	2.7	10.7	55.179	F
	Exit	1	1		427	69.36	428	427	0.0	0.0	0.126	A
		2	1		428		428	427	0.0	0.0	0.000	A
C	Entry	1	1	A, B	458		457	455	0.8	1.1	8.626	A
		2	1	(A, B)	456	7.71	458	456	0.8	1.5	11.597	B
	Exit	1	1		550	7.71	550	531	0.0	0.0	0.015	A
		2	1		550		550	531	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	214		214	221	0.0	0.0	0.010	A
		2	1	(B, C)	215	28.63	214	221	0.0	0.0	0.060	A
	Exit	1	1		253	28.63	253	255	0.0	0.0	0.064	A
		2	1		253		253	255	0.0	0.0	0.000	A
B	Entry	1	1	A, C	536		537	543	1.1	1.1	6.990	A
		2	1	(A, C)	556	69.36	536	543	10.7	12.5	78.130	F
	Exit	1	1		424	69.36	424	424	0.0	0.0	0.120	A
		2	1		424		424	424	0.0	0.0	0.000	A
C	Entry	1	1	A, B	458		458	455	1.1	1.2	8.296	A
		2	1	(A, B)	455	7.71	458	455	1.5	1.3	10.341	B
	Exit	1	1		533	7.71	533	540	0.0	0.0	0.020	A
		2	1		533		533	540	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	183		183	178	0.0	0.0	0.012	A
		2	1	(B, C)	183	23.37	183	178	0.0	0.0	0.051	A
	Exit	1	1		217	23.37	217	220	0.0	0.0	0.045	A
		2	1		217		217	220	0.0	0.0	0.000	A
B	Entry	1	1	A, C	477		477	495	1.1	1.0	6.929	A
		2	1	(A, C)	468	56.64	477	494	12.5	4.7	50.520	F
	Exit	1	1		354	56.64	354	351	0.0	0.0	0.101	A
		2	1		354		354	351	0.0	0.0	0.000	A
C	Entry	1	1	A, B	376		373	374	1.2	1.1	7.899	A
		2	1	(A, B)	378	6.29	376	374	1.3	0.9	7.015	A
	Exit	1	1		462	6.29	462	476	0.0	0.0	0.019	A
		2	1		462		462	476	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	150		150	150	0.0	0.0	0.005	A
		2	1	(B, C)	150	19.57	150	150	0.0	0.0	0.038	A
	Exit	1	1		178	19.57	178	184	0.0	0.0	0.042	A
		2	1		178		178	184	0.0	0.0	0.000	A
B	Entry	1	1	A, C	395		395	400	1.0	0.7	6.687	A
		2	1	(A, C)	388	47.43	395	399	4.7	1.5	17.802	C
	Exit	1	1		289	47.43	289	291	0.0	0.0	0.087	A
		2	1		289		289	291	0.0	0.0	0.000	A
C	Entry	1	1	A, B	317		315	317	1.1	0.7	7.272	A
		2	1	(A, B)	320	5.27	317	316	0.9	0.6	4.481	A
	Exit	1	1		393	5.27	393	392	0.0	0.0	0.013	A
		2	1		393		393	392	0.0	0.0	0.000	A

2033, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A1 - [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.
Warning	Pedestrian Crossing	Arm C - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		69.73	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D3	2033	AM	ONE HOUR	08:00	09:30	15	✓	Simple	D1*G2033

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	350	100.000
B		ONE HOUR	✓	413	100.000
C		ONE HOUR	✓	549	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
A	[ONEHOUR]	17.00
B	[ONEHOUR]	103.00
C	[ONEHOUR]	4.00

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	188	162
	B	171	0	243
	C	173	376	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	20	12
	B	16	0	19
	C	6	14	0

Results

Results Summary for whole modelled period

Arm	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A	0.08	0.0	A	319	479
B	138.89	18.9	F	378	567
C	62.01	10.0	F	503	755

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	255	64	12.80	254	262	260	0.0	0.0	0.046	A
B	308	77	77.54	307	301	423	0.0	1.9	19.757	C
C	420	105	0.00	417	414	295	0.0	2.1	16.031	C

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	321	80	15.28	321	316	304	0.0	0.0	0.056	A
B	367	92	92.59	358	360	512	1.9	4.2	31.876	D
C	496	124	0.00	500	492	362	2.1	3.1	22.250	C

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	383	96	18.72	383	382	355	0.0	0.0	0.074	A
B	465	116	113.41	427	417	613	4.2	14.0	80.556	F
C	600	150	0.00	591	576	433	3.1	9.2	46.747	E

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	385	96	18.72	385	383	378	0.0	0.0	0.081	A
B	452	113	113.41	434	434	626	14.0	18.9	138.888	F
C	599	150	0.00	613	604	427	9.2	10.0	62.007	F

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	312	78	15.28	313	310	328	0.0	0.0	0.062	A
B	359	90	92.59	403	418	506	18.9	6.8	100.277	F
C	488	122	0.00	496	514	377	10.0	3.8	35.054	E

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	261	65	12.80	261	266	259	0.0	0.0	0.042	A
B	314	79	77.54	320	330	424	6.8	1.9	29.740	D
C	415	104	0.00	414	420	311	3.8	1.7	16.352	C

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	254		254	262	0.0	0.0	0.014	A
		2	1	(B, C)	255	12.80	254	262	0.0	0.0	0.033	A
	Exit	1	1		260	12.80	260	256	0.0	0.0	0.038	A
		2	1		260		260	256	0.0	0.0	0.000	A
B	Entry	1	1	A, C	308		307	301	0.0	0.8	7.822	A
		2	1	(A, C)	308	77.54	308	304	0.0	1.2	11.937	B
	Exit	1	1		423	77.54	423	422	0.0	0.0	0.130	A
		2	1		423		423	422	0.0	0.0	0.000	A
C	Entry	1	1	A, B	417		417	414	0.0	1.0	7.850	A
		2	1	(A, B)	420	0.00	417	418	0.0	1.1	8.166	A
	Exit	1	1		295	0.00	295	300	0.0	0.0	0.000	A
		2	1		295		295	300	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	321		321	316	0.0	0.0	0.022	A
		2	1	(B, C)	321	15.28	321	316	0.0	0.0	0.034	A
	Exit	1	1		304	15.28	304	302	0.0	0.0	0.032	A
		2	1		304		304	302	0.0	0.0	0.000	A
B	Entry	1	1	A, C	358		358	360	0.8	1.0	8.144	A
		2	1	(A, C)	367	92.59	358	361	1.2	3.2	23.716	C
	Exit	1	1		511	92.59	512	506	0.0	0.0	0.154	A
		2	1		512		512	506	0.0	0.0	0.000	A
C	Entry	1	1	A, B	498		500	492	1.0	1.2	8.611	A
		2	1	(A, B)	496	0.00	498	494	1.1	1.8	13.633	B
	Exit	1	1		362	0.00	362	360	0.0	0.0	0.000	A
		2	1		362		362	360	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	383		383	382	0.0	0.0	0.028	A
		2	1	(B, C)	383	18.72	383	382	0.0	0.0	0.047	A
	Exit	1	1		355	18.72	355	351	0.0	0.0	0.048	A
		2	1		355		355	351	0.0	0.0	0.000	A
B	Entry	1	1	A, C	429		427	417	1.0	1.3	8.835	A
		2	1	(A, C)	465	113.41	429	418	3.2	12.7	71.689	F
	Exit	1	1		614	113.41	613	601	0.0	0.1	0.180	A
		2	1		613		613	601	0.0	0.0	0.000	A
C	Entry	1	1	A, B	592		591	576	1.2	1.7	9.725	A
		2	1	(A, B)	600	0.00	592	578	1.8	7.5	37.005	E
	Exit	1	1		433	0.00	433	422	0.0	0.0	0.000	A
		2	1		433		433	422	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	385		385	383	0.0	0.0	0.038	A
		2	1	(B, C)	385	18.72	385	383	0.0	0.0	0.044	A
	Exit	1	1		378	18.72	378	368	0.0	0.0	0.051	A
		2	1		378		378	368	0.0	0.0	0.000	A
B	Entry	1	1	A, C	434		434	434	1.3	1.2	9.063	A
		2	1	(A, C)	452	113.41	434	434	12.7	17.7	129.882	F
	Exit	1	1		626	113.41	626	622	0.1	0.0	0.186	A
		2	1		626		626	622	0.0	0.0	0.000	A
C	Entry	1	1	A, B	613		613	604	1.7	1.8	9.934	A
		2	1	(A, B)	599	0.00	613	604	7.5	8.2	52.076	F
	Exit	1	1		427	0.00	427	430	0.0	0.0	0.000	A
		2	1		427		427	430	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	312		313	310	0.0	0.0	0.021	A
		2	1	(B, C)	312	15.28	312	310	0.0	0.0	0.041	A
	Exit	1	1		329	15.28	328	338	0.0	0.0	0.042	A
		2	1		328		328	338	0.0	0.0	0.000	A
B	Entry	1	1	A, C	401		403	418	1.2	0.9	8.529	A
		2	1	(A, C)	359	92.59	401	417	17.7	5.8	91.808	F
	Exit	1	1		506	92.59	506	517	0.0	0.0	0.152	A
		2	1		506		506	517	0.0	0.0	0.000	A
C	Entry	1	1	A, B	496		496	514	1.8	1.3	9.144	A
		2	1	(A, B)	488	0.00	496	512	8.2	2.5	25.966	D
	Exit	1	1		377	0.00	377	387	0.0	0.0	0.000	A
		2	1		377		377	387	0.0	0.0	0.000	A

09:15 - 09:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	261		261	266	0.0	0.0	0.016	A
		2	1	(B, C)	261	12.80	261	266	0.0	0.0	0.026	A
	Exit	1	1		259	12.80	259	270	0.0	0.0	0.028	A
		2	1		259		259	270	0.0	0.0	0.000	A
B	Entry	1	1	A, C	319		320	330	0.9	0.8	7.787	A
		2	1	(A, C)	314	77.54	319	329	5.8	1.1	21.913	C
	Exit	1	1		425	77.54	424	429	0.0	0.0	0.134	A
		2	1		424		424	429	0.0	0.0	0.000	A
C	Entry	1	1	A, B	415		414	420	1.3	0.9	7.836	A
		2	1	(A, B)	415	0.00	415	418	2.5	0.8	8.554	A
	Exit	1	1		311	0.00	311	318	0.0	0.0	0.000	A
		2	1		311		311	318	0.0	0.0	0.000	A

2033, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A1 - [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.
Last Run	Lane Simulation	Arm B - Lane Simulation	Arm B: Queue at end of modelled period is greater than 10 PCU. Delay is likely to have been underestimated.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		137.95	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D4	2033	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D2*G2033

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	227	100.000
B		ONE HOUR	✓	580	100.000
C		ONE HOUR	✓	477	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
A	[ONEHOUR]	26.00
B	[ONEHOUR]	63.00
C	[ONEHOUR]	7.00

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	101	125
	B	134	0	445
	C	134	343	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	25	24
	B	13	0	18
	C	20	22	0

Results

Results Summary for whole modelled period

Arm	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A	0.08	0.0	A	211	316
B	280.82	51.4	F	533	800
C	30.09	4.4	D	437	655

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	168	42	19.57	168	171	200	0.0	0.0	0.058	A
B	434	108	47.43	433	421	337	0.0	3.1	21.383	C
C	362	90	5.27	363	356	426	0.0	1.4	13.083	B

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	210	52	23.37	210	204	240	0.0	0.0	0.056	A
B	519	130	56.64	511	497	395	3.1	8.2	48.062	E
C	424	106	6.29	421	424	507	1.4	2.2	18.131	C

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	251	63	28.63	251	248	277	0.0	0.0	0.082	A
B	642	161	69.36	552	544	491	8.2	31.2	135.595	F
C	523	131	7.71	528	517	563	2.2	4.3	28.385	D

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	259	65	28.63	259	251	276	0.0	0.0	0.074	A
B	641	160	69.36	545	552	495	31.2	51.4	269.154	F
C	524	131	7.71	526	528	560	4.3	4.4	30.085	D

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	205	51	23.37	205	204	253	0.0	0.0	0.068	A
B	517	129	56.64	573	575	405	51.4	37.6	280.825	F
C	427	107	6.29	433	438	554	4.4	1.9	19.693	C

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	171	43	19.57	170	172	217	0.0	0.0	0.062	A
B	445	111	47.43	522	536	336	37.6	13.4	140.283	F
C	361	90	5.27	360	361	500	1.9	1.4	13.254	B

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	168		168	171	0.0	0.0	0.007	A
		2	1	(B, C)	168	19.57	168	171	0.0	0.0	0.051	A
	Exit	1	1		200	19.57	200	199	0.0	0.0	0.046	A
		2	1		200		200	199	0.0	0.0	0.000	A
B	Entry	1	1	A, C	433		433	421	0.0	0.9	6.643	A
		2	1	(A, C)	434	47.43	433	425	0.0	2.2	14.727	B
	Exit	1	1		337	47.43	337	333	0.0	0.0	0.094	A
		2	1		337		337	333	0.0	0.0	0.000	A
C	Entry	1	1	A, B	361		363	356	0.0	0.8	7.549	A
		2	1	(A, B)	362	5.27	361	359	0.0	0.6	5.530	A
	Exit	1	1		426	5.27	426	416	0.0	0.0	0.013	A
		2	1		426		426	416	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	210		210	204	0.0	0.0	0.009	A
		2	1	(B, C)	210	23.37	210	204	0.0	0.0	0.047	A
	Exit	1	1		240	23.37	240	238	0.0	0.0	0.049	A
		2	1		240		240	238	0.0	0.0	0.000	A
B	Entry	1	1	A, C	511		511	497	0.9	1.1	7.097	A
		2	1	(A, C)	519	56.64	511	498	2.2	7.0	40.968	E
	Exit	1	1		395	56.64	395	395	0.0	0.0	0.095	A
		2	1		395		395	395	0.0	0.0	0.000	A
C	Entry	1	1	A, B	422		421	424	0.8	1.1	8.276	A
		2	1	(A, B)	424	6.29	422	425	0.6	1.1	9.844	A
	Exit	1	1		507	6.29	507	491	0.0	0.0	0.017	A
		2	1		507		507	491	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	251		251	248	0.0	0.0	0.014	A
		2	1	(B, C)	251	28.63	251	248	0.0	0.0	0.068	A
	Exit	1	1		277	28.63	277	271	0.0	0.0	0.069	A
		2	1		277		277	271	0.0	0.0	0.000	A
B	Entry	1	1	A, C	553		552	544	1.1	1.2	7.335	A
		2	1	(A, C)	642	69.36	553	545	7.0	30.0	128.266	F
	Exit	1	1		491	69.36	491	483	0.0	0.0	0.118	A
		2	1		491		491	483	0.0	0.0	0.000	A
C	Entry	1	1	A, B	528		528	517	1.1	1.4	8.958	A
		2	1	(A, B)	523	7.71	528	519	1.1	2.9	19.410	C
	Exit	1	1		563	7.71	563	555	0.0	0.0	0.016	A
		2	1		563		563	555	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	259		259	251	0.0	0.0	0.013	A
		2	1	(B, C)	259	28.63	259	251	0.0	0.0	0.061	A
	Exit	1	1		276	28.63	276	277	0.0	0.0	0.069	A
		2	1		276		276	277	0.0	0.0	0.000	A
B	Entry	1	1	A, C	544		545	552	1.2	1.2	7.395	A
		2	1	(A, C)	641	69.36	544	552	30.0	50.2	261.803	F
	Exit	1	1		494	69.36	495	493	0.0	0.0	0.121	A
		2	1		495		495	493	0.0	0.0	0.000	A
C	Entry	1	1	A, B	526		526	528	1.4	1.4	9.040	A
		2	1	(A, B)	524	7.71	526	528	2.9	3.0	21.051	C
	Exit	1	1		560	7.71	560	562	0.0	0.0	0.016	A
		2	1		560		560	562	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	205		205	204	0.0	0.0	0.008	A
		2	1	(B, C)	205	23.37	205	204	0.0	0.0	0.060	A
	Exit	1	1		253	23.37	253	255	0.0	0.0	0.055	A
		2	1		253		253	255	0.0	0.0	0.000	A
B	Entry	1	1	A, C	573		573	575	1.2	1.2	7.041	A
		2	1	(A, C)	517	56.64	573	575	50.2	36.4	273.858	F
	Exit	1	1		405	56.64	405	406	0.0	0.0	0.100	A
		2	1		405		405	406	0.0	0.0	0.000	A
C	Entry	1	1	A, B	433		433	438	1.4	1.0	8.237	A
		2	1	(A, B)	427	6.29	433	437	3.0	0.9	11.494	B
	Exit	1	1		554	6.29	554	555	0.0	0.0	0.017	A
		2	1		554		554	555	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	170		170	172	0.0	0.0	0.004	A
		2	1	(B, C)	171	19.57	170	172	0.0	0.0	0.059	A
	Exit	1	1		217	19.57	217	225	0.0	0.0	0.043	A
		2	1		217		217	225	0.0	0.0	0.000	A
B	Entry	1	1	A, C	521		522	536	1.2	1.1	6.818	A
		2	1	(A, C)	445	47.43	521	535	36.4	12.3	133.214	F
	Exit	1	1		336	47.43	336	337	0.0	0.0	0.073	A
		2	1		336		336	337	0.0	0.0	0.000	A
C	Entry	1	1	A, B	361		360	361	1.0	0.9	7.587	A
		2	1	(A, B)	361	5.27	361	360	0.9	0.6	5.681	A
	Exit	1	1		500	5.27	500	507	0.0	0.0	0.013	A
		2	1		500		500	507	0.0	0.0	0.000	A

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.5.1.7462

For sales and distribution information, program advice and maintenance, contact TRL:
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Filename: T-Junction simulation mode - Dublin Rd minor arm.j9
Path: C:\Users\communallaptop\OneDrive - ORS\Desktop\J9 FILES\221379 - Kilbeggan_Active_Travel
Report generation date: 26/06/2023 15:18:46

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	[Lane Simulation] - 2023									
Arm A	D1	0.0	0.03		A	D2	0.0	0.04		A
Arm B		3.7	36.27		E		1.6	21.41		C
Arm C		0.9	9.01		A		0.6	5.35		A
	[Lane Simulation] - 2033									
Arm A	D3	0.0	0.04		A	D4	0.0	0.04		A
Arm B		5.8	57.10		F		2.2	29.87		D
Arm C		1.3	10.62		B		0.9	6.26		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. Arm and junction delays are averages for all movements, including movements with zero delay.

File summary

File Description

Title	
Location	
Site number	
Date	22/06/2023
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	AzureAD\communallaptop
Description	

Units

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

Analysis Options

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

Lane Simulation options

Criteria type	Stop criteria (%)	Stop criteria time (s)	Stop criteria number of trials	Random seed	Results refresh speed (s)	Individual vehicle animation number of trials	Average animation capture interval (s)	Use quick response	Do flow sampling	Suppress automatic lane creation	Last run random seed	Last run number of trials	Last run time taken (s)
Delay	1.00	100000	100000	-1	3	1	60	✓			927744494	155	11.16

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D1	2023	AM	ONE HOUR	08:00	09:30	15	✓		
D2	2023	PM	ONE HOUR	16:45	18:15	15	✓		
D3	2033	AM	ONE HOUR	08:00	09:30	15	✓	Simple	D1*G2033
D4	2033	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D2*G2033

Growth Factors

ID	Description	Use TEMPRO	Growth Factor
G2033			1.1390

Growth factors are only active if the Demand Set references them in a Relationship.

Analysis Set Details

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

2023, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A1 - [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.
Warning	Pedestrian Crossing	Arm A - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		12.56	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Upper Main Street		Major
B	Dublin Road		Minor
C	Tullamore Road		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	7.50			70.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	3.75	70	90

Zebra Crossings

Arm	Space between crossing and junction entry (Left) (PCU)	Space between crossing and junction entry (Right / All) (PCU)	Vehicles queueing on exit (Zebra) (PCU)	Central Refuge	Crossing data type	Crossing length (m)	Crossing time (s)
A		2.00	2.00		Distance	7.50	5.36
B	2.00		2.00		Distance	7.50	5.36
C		1.00	1.00		Distance	7.50	5.36

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	586	0.100	0.252	0.159	0.360
B-C	732	0.105	0.265	-	-
C-B	615	0.223	0.223	-	-

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.

Lanes

Arm	Side	Lane level	Lane	Destination arms	Has limited storage	Storage (PCU)	Has bottleneck	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)	Signalised
A	Entry	1	1	B, C	✓	2.00		0	99999	
		2	1	(B, C)		Infinity				
	Exit	1	1		✓	2.00				
		2	1			Infinity				
B	Entry	1	1	A, C	✓	2.00		0	99999	
		2	1	(A, C)		Infinity				
	Exit	1	1		✓	2.00				
		2	1			Infinity				
C	Entry	1	1	A, B	✓	1.00		0	99999	
		2	1	(A, B)		Infinity				
	Exit	1	1		✓	1.00				
		2	1			Infinity				

Summary of Entry Lane allowed movements

Arm	Lane Level	Lane	Destination arm		
			A	B	C
A	1	1		✓	✓
	2	1		✓	✓
B	1	1	✓		✓
	2	1	✓		✓
C	1	1	✓	✓	
	2	1	✓	✓	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2023	AM	ONE HOUR	08:00	09:30	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	482	100.000
B		ONE HOUR	✓	306	100.000
C		ONE HOUR	✓	363	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
A	[ONEHOUR]	4.00
B	[ONEHOUR]	17.00
C	[ONEHOUR]	103.00

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	152	330
	B	141	0	165
	C	213	150	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	11	6	14
	B	12	0	20
	C	19	16	0

Results

Results Summary for whole modelled period

Arm	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A	0.03	0.0	A	442	663
B	36.27	3.7	E	283	425
C	9.01	0.9	A	334	500

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	369	92	0.00	369	369	264	0.0	0.0	0.012	A
B	232	58	12.80	236	231	236	0.0	0.9	13.742	B
C	277	69	77.54	276	272	382	0.0	0.4	5.691	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	437	109	0.00	437	434	327	0.0	0.0	0.019	A
B	280	70	15.28	282	270	265	0.9	1.6	19.092	C
C	324	81	92.59	327	329	453	0.4	0.5	6.733	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	527	132	0.00	527	530	399	0.0	0.0	0.035	A
B	352	88	18.72	342	331	342	1.6	3.7	32.349	D
C	403	101	113.41	409	401	538	0.5	0.9	8.789	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	517	129	0.00	517	528	391	0.0	0.0	0.034	A
B	330	83	18.72	335	337	330	3.7	3.5	36.269	E
C	398	99	113.41	401	399	533	0.9	0.9	9.009	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	436	109	0.00	436	437	322	0.0	0.0	0.025	A
B	278	70	15.28	275	287	272	3.5	1.8	21.002	C
C	328	82	92.59	330	335	448	0.9	0.6	7.141	A

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	364	91	0.00	364	363	269	0.0	0.0	0.017	A
B	226	56	12.80	226	231	223	1.8	0.9	15.295	C
C	272	68	77.54	272	271	371	0.6	0.5	6.118	A

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	369		369	369	0.0	0.0	0.011	A
		2	1	(B, C)	369	0.00	369	369	0.0	0.0	0.000	A
	Exit	1	1		264	0.00	264	261	0.0	0.0	0.000	A
		2	1		264		264	261	0.0	0.0	0.000	A
B	Entry	1	1	A, C	234		236	231	0.0	0.7	9.888	A
		2	1	(A, C)	232	12.80	234	234	0.0	0.2	3.841	A
	Exit	1	1		236	12.80	236	231	0.0	0.0	0.031	A
		2	1		236		236	231	0.0	0.0	0.000	A
C	Entry	1	1	A, B	276		276	272	0.0	0.2	3.298	A
		2	1	(A, B)	277	77.54	276	273	0.0	0.2	2.394	A
	Exit	1	1		382	77.54	382	380	0.0	0.0	0.126	A
		2	1		382		382	380	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	437		437	434	0.0	0.0	0.019	A
		2	1	(B, C)	437	0.00	437	434	0.0	0.0	0.001	A
	Exit	1	1		327	0.00	327	318	0.0	0.0	0.000	A
		2	1		327		327	318	0.0	0.0	0.000	A
B	Entry	1	1	A, C	282		282	270	0.7	0.9	11.378	B
		2	1	(A, C)	280	15.28	282	271	0.2	0.6	7.686	A
	Exit	1	1		265	15.28	265	274	0.0	0.0	0.032	A
		2	1		265		265	274	0.0	0.0	0.000	A
C	Entry	1	1	A, B	325		327	329	0.2	0.2	3.340	A
		2	1	(A, B)	324	92.59	325	329	0.2	0.2	3.394	A
	Exit	1	1		453	92.59	453	442	0.0	0.0	0.146	A
		2	1		453		453	442	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	527		527	530	0.0	0.0	0.032	A
		2	1	(B, C)	527	0.00	527	530	0.0	0.0	0.002	A
	Exit	1	1		399	0.00	399	384	0.0	0.0	0.000	A
		2	1		399		399	384	0.0	0.0	0.000	A
B	Entry	1	1	A, C	343		342	331	0.9	1.4	13.358	B
		2	1	(A, C)	352	18.72	343	333	0.6	2.4	18.959	C
	Exit	1	1		342	18.72	342	338	0.0	0.0	0.033	A
		2	1		342		342	338	0.0	0.0	0.000	A
C	Entry	1	1	A, B	407		409	401	0.2	0.4	3.566	A
		2	1	(A, B)	403	113.41	407	402	0.2	0.5	5.225	A
	Exit	1	1		538	113.41	538	540	0.0	0.0	0.184	A
		2	1		538		538	540	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	517		517	528	0.0	0.0	0.033	A
		2	1	(B, C)	517	0.00	517	528	0.0	0.0	0.002	A
	Exit	1	1		391	0.00	391	390	0.0	0.0	0.000	A
		2	1		391		391	390	0.0	0.0	0.000	A
B	Entry	1	1	A, C	334		335	337	1.4	1.4	13.698	B
		2	1	(A, C)	330	18.72	334	337	2.4	2.1	22.595	C
	Exit	1	1		330	18.72	330	331	0.0	0.0	0.045	A
		2	1		330		330	331	0.0	0.0	0.000	A
C	Entry	1	1	A, B	401		401	399	0.4	0.4	3.583	A
		2	1	(A, B)	398	113.41	401	399	0.5	0.5	5.425	A
	Exit	1	1		533	113.41	533	544	0.0	0.0	0.182	A
		2	1		533		533	544	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	436		436	437	0.0	0.0	0.024	A
		2	1	(B, C)	436	0.00	436	437	0.0	0.0	0.001	A
	Exit	1	1		322	0.00	322	327	0.0	0.0	0.000	A
		2	1		322		322	327	0.0	0.0	0.000	A
B	Entry	1	1	A, C	276		275	287	1.4	1.1	11.833	B
		2	1	(A, C)	278	15.28	276	285	2.1	0.7	9.225	A
	Exit	1	1		272	15.28	272	277	0.0	0.0	0.036	A
		2	1		272		272	277	0.0	0.0	0.000	A
C	Entry	1	1	A, B	329		330	335	0.4	0.3	3.443	A
		2	1	(A, B)	328	92.59	329	335	0.5	0.3	3.693	A
	Exit	1	1		447	92.59	448	455	0.0	0.0	0.166	A
		2	1		448		448	455	0.0	0.0	0.000	A

09:15 - 09:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	364		364	363	0.0	0.0	0.017	A
		2	1	(B, C)	364	0.00	364	363	0.0	0.0	0.000	A
	Exit	1	1		269	0.00	269	268	0.0	0.0	0.000	A
		2	1		269		269	268	0.0	0.0	0.000	A
B	Entry	1	1	A, C	227		226	231	1.1	0.7	10.283	B
		2	1	(A, C)	226	12.80	227	230	0.7	0.2	5.040	A
	Exit	1	1		223	12.80	223	223	0.0	0.0	0.029	A
		2	1		223		223	223	0.0	0.0	0.000	A
C	Entry	1	1	A, B	273		272	271	0.3	0.3	3.285	A
		2	1	(A, B)	272	77.54	273	271	0.3	0.2	2.840	A
	Exit	1	1		371	77.54	371	374	0.0	0.0	0.139	A
		2	1		371		371	374	0.0	0.0	0.000	A

2023, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A1 - [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		6.20	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2023	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	419	100.000
B		ONE HOUR	✓	199	100.000
C		ONE HOUR	✓	509	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
A	[ONEHOUR]	7.00
B	[ONEHOUR]	26.00
C	[ONEHOUR]	63.00

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	118	301
	B	110	0	89
	C	391	118	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	19	20	22
	B	24	0	25
	C	18	13	14

Results

Results Summary for whole modelled period

Arm	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A	0.04	0.0	A	388	582
B	21.41	1.6	C	183	275
C	5.35	0.6	A	469	704

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	307	77	5.27	307	320	381	0.0	0.0	0.013	A
B	155	39	19.57	156	152	182	0.0	0.5	12.502	B
C	389	97	47.43	387	381	287	0.0	0.5	3.603	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	366	91	6.29	366	381	459	0.0	0.0	0.028	A
B	188	47	23.37	188	182	204	0.5	0.9	16.564	C
C	459	115	56.64	457	458	348	0.5	0.4	3.924	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	469	117	7.71	469	469	557	0.0	0.0	0.045	A
B	224	56	28.63	222	216	263	0.9	1.3	20.841	C
C	561	140	69.36	565	561	437	0.4	0.6	5.327	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	462	116	7.71	462	463	552	0.0	0.0	0.035	A
B	216	54	28.63	213	222	257	1.3	1.6	21.414	C
C	557	139	69.36	558	560	424	0.6	0.6	5.345	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	384	96	6.29	384	384	443	0.0	0.0	0.028	A
B	169	42	23.37	170	179	208	1.6	0.9	15.968	C
C	453	113	56.64	452	458	355	0.6	0.4	4.052	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	340	85	5.27	340	323	387	0.0	0.0	0.018	A
B	148	37	19.57	149	154	189	0.9	0.6	13.010	B
C	396	99	47.43	394	388	307	0.4	0.5	3.329	A

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	307		307	320	0.0	0.0	0.006	A
		2	1	(B, C)	307	5.27	307	320	0.0	0.0	0.006	A
	Exit	1	1		381	5.27	381	375	0.0	0.0	0.013	A
		2	1		381		381	375	0.0	0.0	0.000	A
B	Entry	1	1	A, C	155		156	152	0.0	0.4	9.667	A
		2	1	(A, C)	155	19.57	155	154	0.0	0.1	2.841	A
	Exit	1	1		183	19.57	182	179	0.0	0.0	0.054	A
		2	1		182		182	179	0.0	0.0	0.000	A
C	Entry	1	1	A, B	388		387	381	0.0	0.2	1.815	A
		2	1	(A, B)	389	47.43	388	382	0.0	0.3	1.785	A
	Exit	1	1		287	47.43	287	300	0.0	0.0	0.087	A
		2	1		287		287	300	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	366		366	381	0.0	0.0	0.013	A
		2	1	(B, C)	366	6.29	366	381	0.0	0.0	0.015	A
	Exit	1	1		459	6.29	459	453	0.0	0.0	0.017	A
		2	1		459		459	453	0.0	0.0	0.000	A
B	Entry	1	1	A, C	188		188	182	0.4	0.7	11.208	B
		2	1	(A, C)	188	23.37	188	183	0.1	0.3	5.344	A
	Exit	1	1		204	23.37	204	212	0.0	0.0	0.045	A
		2	1		204		204	212	0.0	0.0	0.000	A
C	Entry	1	1	A, B	457		457	458	0.2	0.1	1.783	A
		2	1	(A, B)	459	56.64	457	458	0.3	0.3	2.147	A
	Exit	1	1		348	56.64	348	355	0.0	0.0	0.096	A
		2	1		348		348	355	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	469		469	469	0.0	0.0	0.015	A
		2	1	(B, C)	469	7.71	469	469	0.0	0.0	0.029	A
	Exit	1	1		557	7.71	557	552	0.0	0.0	0.019	A
		2	1		557		557	552	0.0	0.0	0.000	A
B	Entry	1	1	A, C	223		222	216	0.7	0.8	12.363	B
		2	1	(A, C)	224	28.63	223	216	0.3	0.5	8.438	A
	Exit	1	1		263	28.63	263	261	0.0	0.0	0.052	A
		2	1		263		263	261	0.0	0.0	0.000	A
C	Entry	1	1	A, B	564		565	561	0.1	0.2	1.909	A
		2	1	(A, B)	561	69.36	564	561	0.3	0.4	3.416	A
	Exit	1	1		437	69.36	437	433	0.0	0.0	0.117	A
		2	1		437		437	433	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	462		462	463	0.0	0.0	0.018	A
		2	1	(B, C)	462	7.71	462	463	0.0	0.0	0.017	A
	Exit	1	1		552	7.71	552	555	0.0	0.0	0.015	A
		2	1		552		552	555	0.0	0.0	0.000	A
B	Entry	1	1	A, C	215		213	222	0.8	0.9	12.359	B
		2	1	(A, C)	216	28.63	215	222	0.5	0.6	9.079	A
	Exit	1	1		257	28.63	257	261	0.0	0.0	0.060	A
		2	1		257		257	261	0.0	0.0	0.000	A
C	Entry	1	1	A, B	558		558	560	0.2	0.3	1.894	A
		2	1	(A, B)	557	69.36	558	561	0.4	0.3	3.451	A
	Exit	1	1		424	69.36	424	430	0.0	0.0	0.121	A
		2	1		424		424	430	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	384		384	384	0.0	0.0	0.011	A
		2	1	(B, C)	384	6.29	384	384	0.0	0.0	0.017	A
	Exit	1	1		443	6.29	443	452	0.0	0.0	0.018	A
		2	1		443		443	452	0.0	0.0	0.000	A
B	Entry	1	1	A, C	168		170	179	0.9	0.6	11.463	B
		2	1	(A, C)	169	23.37	168	177	0.6	0.3	4.529	A
	Exit	1	1		208	23.37	208	211	0.0	0.0	0.061	A
		2	1		208		208	211	0.0	0.0	0.000	A
C	Entry	1	1	A, B	452		452	458	0.3	0.2	1.831	A
		2	1	(A, B)	453	56.64	452	458	0.3	0.2	2.222	A
	Exit	1	1		355	56.64	355	358	0.0	0.0	0.104	A
		2	1		355		355	358	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	340		340	323	0.0	0.0	0.007	A
		2	1	(B, C)	340	5.27	340	323	0.0	0.0	0.012	A
	Exit	1	1		387	5.27	387	384	0.0	0.0	0.016	A
		2	1		387		387	384	0.0	0.0	0.000	A
B	Entry	1	1	A, C	149		149	154	0.6	0.4	10.099	B
		2	1	(A, C)	148	19.57	149	153	0.3	0.2	2.945	A
	Exit	1	1		189	19.57	189	182	0.0	0.0	0.042	A
		2	1		189		189	182	0.0	0.0	0.000	A
C	Entry	1	1	A, B	395		394	388	0.2	0.3	1.699	A
		2	1	(A, B)	396	47.43	395	388	0.2	0.2	1.632	A
	Exit	1	1		307	47.43	307	299	0.0	0.0	0.093	A
		2	1		307		307	299	0.0	0.0	0.000	A

2033, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A1 - [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.
Warning	Pedestrian Crossing	Arm A - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		18.36	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D3	2033	AM	ONE HOUR	08:00	09:30	15	✓	Simple	D1*G2033

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	549	100.000
B		ONE HOUR	✓	349	100.000
C		ONE HOUR	✓	413	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
A	[ONEHOUR]	4.00
B	[ONEHOUR]	17.00
C	[ONEHOUR]	103.00

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	173	376
	B	161	0	188
	C	243	171	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	6	14
	B	12	0	20
	C	19	16	0

Results

Results Summary for whole modelled period

Arm	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A	0.04	0.0	A	504	755
B	57.10	5.8	F	314	471
C	10.62	1.3	B	379	568

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	416	104	0.00	416	419	301	0.0	0.0	0.016	A
B	259	65	12.80	260	259	261	0.0	1.2	17.440	C
C	313	78	77.54	313	312	427	0.0	0.6	6.420	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	494	124	0.00	494	497	355	0.0	0.0	0.027	A
B	309	77	15.28	310	306	300	1.2	2.4	23.472	C
C	362	91	92.59	363	366	513	0.6	0.7	7.383	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	600	150	0.00	600	597	438	0.0	0.0	0.036	A
B	384	96	18.72	381	364	376	2.4	5.8	47.234	E
C	443	111	113.41	447	448	613	0.7	1.0	9.962	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	594	148	0.00	594	600	438	0.0	0.0	0.041	A
B	370	93	18.72	373	375	375	5.8	5.8	57.096	F
C	462	116	113.41	458	451	612	1.0	1.3	10.624	B

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	502	125	0.00	502	499	364	0.0	0.0	0.031	A
B	311	78	15.28	309	329	316	5.8	2.8	33.729	D
C	380	95	92.59	379	378	508	1.3	1.0	8.391	A

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	417	104	0.00	417	409	299	0.0	0.0	0.021	A
B	250	63	12.80	253	268	267	2.8	1.3	19.556	C
C	312	78	77.54	315	316	418	1.0	0.5	7.087	A

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	416		416	419	0.0	0.0	0.016	A
		2	1	(B, C)	416	0.00	416	419	0.0	0.0	0.000	A
	Exit	1	1		301	0.00	301	302	0.0	0.0	0.000	A
		2	1		301		301	302	0.0	0.0	0.000	A
B	Entry	1	1	A, C	259		260	259	0.0	0.7	10.797	B
		2	1	(A, C)	259	12.80	259	262	0.0	0.5	6.637	A
	Exit	1	1		261	12.80	261	260	0.0	0.0	0.027	A
		2	1		261		261	260	0.0	0.0	0.000	A
C	Entry	1	1	A, B	314		313	312	0.0	0.4	3.382	A
		2	1	(A, B)	313	77.54	314	314	0.0	0.2	3.043	A
	Exit	1	1		427	77.54	427	428	0.0	0.0	0.130	A
		2	1		427		427	428	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	494		494	497	0.0	0.0	0.027	A
		2	1	(B, C)	494	0.00	494	497	0.0	0.0	0.001	A
	Exit	1	1		355	0.00	355	355	0.0	0.0	0.000	A
		2	1		355		355	355	0.0	0.0	0.000	A
B	Entry	1	1	A, C	310		310	306	0.7	1.2	12.293	B
		2	1	(A, C)	309	15.28	310	308	0.5	1.2	11.161	B
	Exit	1	1		300	15.28	300	303	0.0	0.0	0.036	A
		2	1		300		300	303	0.0	0.0	0.000	A
C	Entry	1	1	A, B	363		363	366	0.4	0.3	3.351	A
		2	1	(A, B)	362	92.59	363	366	0.2	0.3	4.034	A
	Exit	1	1		513	92.59	513	510	0.0	0.0	0.153	A
		2	1		513		513	510	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	600		600	597	0.0	0.0	0.035	A
		2	1	(B, C)	600	0.00	600	597	0.0	0.0	0.001	A
	Exit	1	1		438	0.00	438	433	0.0	0.0	0.000	A
		2	1		438		438	433	0.0	0.0	0.000	A
B	Entry	1	1	A, C	381		381	364	1.2	1.7	14.410	B
		2	1	(A, C)	384	18.72	381	366	1.2	4.1	32.754	D
	Exit	1	1		376	18.72	376	370	0.0	0.0	0.036	A
		2	1		376		376	370	0.0	0.0	0.000	A
C	Entry	1	1	A, B	445		447	448	0.3	0.4	3.495	A
		2	1	(A, B)	443	113.41	445	448	0.3	0.5	6.463	A
	Exit	1	1		613	113.41	613	605	0.0	0.0	0.175	A
		2	1		613		613	605	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	594		594	600	0.0	0.0	0.039	A
		2	1	(B, C)	594	0.00	594	600	0.0	0.0	0.003	A
	Exit	1	1		438	0.00	438	439	0.0	0.0	0.000	A
		2	1		438		438	439	0.0	0.0	0.000	A
B	Entry	1	1	A, C	374		373	375	1.7	1.6	15.000	B
		2	1	(A, C)	370	18.72	374	375	4.1	4.2	42.129	E
	Exit	1	1		375	18.72	375	376	0.0	0.0	0.040	A
		2	1		375		375	376	0.0	0.0	0.000	A
C	Entry	1	1	A, B	459		458	451	0.4	0.5	3.660	A
		2	1	(A, B)	462	113.41	459	452	0.5	0.8	6.966	A
	Exit	1	1		613	113.41	612	612	0.0	0.1	0.181	A
		2	1		612		612	612	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	502		502	499	0.0	0.0	0.028	A
		2	1	(B, C)	502	0.00	502	499	0.0	0.0	0.003	A
	Exit	1	1		364	0.00	364	371	0.0	0.0	0.000	A
		2	1		364		364	371	0.0	0.0	0.000	A
B	Entry	1	1	A, C	310		309	329	1.6	1.2	13.109	B
		2	1	(A, C)	311	15.28	310	327	4.2	1.6	20.698	C
	Exit	1	1		316	15.28	316	312	0.0	0.0	0.035	A
		2	1		316		316	312	0.0	0.0	0.000	A
C	Entry	1	1	A, B	379		379	378	0.5	0.4	3.610	A
		2	1	(A, B)	380	92.59	379	377	0.8	0.6	4.788	A
	Exit	1	1		509	92.59	508	522	0.1	0.0	0.151	A
		2	1		508		508	522	0.0	0.0	0.000	A

09:15 - 09:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	417		417	409	0.0	0.0	0.021	A
		2	1	(B, C)	417	0.00	417	409	0.0	0.0	0.001	A
	Exit	1	1		299	0.00	299	310	0.0	0.0	0.000	A
		2	1		299		299	310	0.0	0.0	0.000	A
B	Entry	1	1	A, C	252		253	268	1.2	0.9	11.447	B
		2	1	(A, C)	250	12.80	252	267	1.6	0.4	8.132	A
	Exit	1	1		267	12.80	267	260	0.0	0.0	0.020	A
		2	1		267		267	260	0.0	0.0	0.000	A
C	Entry	1	1	A, B	314		315	316	0.4	0.3	3.412	A
		2	1	(A, B)	312	77.54	314	316	0.6	0.2	3.666	A
	Exit	1	1		418	77.54	418	425	0.0	0.0	0.132	A
		2	1		418		418	425	0.0	0.0	0.000	A

2033, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A1 - [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		8.10	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D4	2033	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D2*G2033

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	477	100.000
B		ONE HOUR	✓	227	100.000
C		ONE HOUR	✓	580	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
A	[ONEHOUR]	7.00
B	[ONEHOUR]	26.00
C	[ONEHOUR]	63.00

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	134	343
	B	125	0	101
	C	445	134	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	20	22
	B	24	0	25
	C	18	13	0

Results

Results Summary for whole modelled period

Arm	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A	0.04	0.0	A	440	661
B	29.87	2.2	D	209	313
C	6.26	0.9	A	537	805

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	366	91	5.27	366	371	439	0.0	0.0	0.028	A
B	165	41	19.57	162	170	202	0.0	0.8	14.294	B
C	446	112	47.43	444	443	332	0.0	0.5	3.631	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	433	108	6.29	433	427	511	0.0	0.0	0.023	A
B	208	52	23.37	211	204	240	0.8	0.9	18.271	C
C	505	126	56.64	506	506	400	0.5	0.8	4.856	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	515	129	7.71	515	528	653	0.0	0.0	0.038	A
B	251	63	28.63	247	243	289	0.9	2.2	26.311	D
C	668	167	69.36	674	651	495	0.8	0.9	6.256	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	536	134	7.71	535	525	628	0.0	0.0	0.035	A
B	254	63	28.63	254	255	307	2.2	2.1	29.867	D
C	640	160	69.36	639	645	494	0.9	0.9	5.669	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	432	108	6.29	432	429	510	0.0	0.0	0.031	A
B	204	51	23.37	205	206	240	2.1	1.1	20.882	C
C	521	130	56.64	519	522	406	0.9	0.8	4.722	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	360	90	5.27	360	359	432	0.0	0.0	0.017	A
B	170	43	19.57	168	170	205	1.1	1.0	15.494	C
C	442	111	47.43	442	443	332	0.8	0.5	3.896	A

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	366		366	371	0.0	0.0	0.012	A
		2	1	(B, C)	366	5.27	366	371	0.0	0.0	0.016	A
	Exit	1	1		439	5.27	439	438	0.0	0.0	0.018	A
		2	1		439		439	438	0.0	0.0	0.000	A
B	Entry	1	1	A, C	164		162	170	0.0	0.6	10.583	B
		2	1	(A, C)	165	19.57	164	173	0.0	0.2	3.711	A
	Exit	1	1		202	19.57	202	205	0.0	0.0	0.038	A
		2	1		202		202	205	0.0	0.0	0.000	A
C	Entry	1	1	A, B	445		444	443	0.0	0.2	1.767	A
		2	1	(A, B)	446	47.43	445	444	0.0	0.2	1.861	A
	Exit	1	1		332	47.43	332	342	0.0	0.0	0.100	A
		2	1		332		332	342	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	433		433	427	0.0	0.0	0.012	A
		2	1	(B, C)	433	6.29	433	427	0.0	0.0	0.011	A
	Exit	1	1		510	6.29	511	507	0.0	0.0	0.008	A
		2	1		511		511	507	0.0	0.0	0.000	A
B	Entry	1	1	A, C	211		211	204	0.6	0.7	11.957	B
		2	1	(A, C)	208	23.37	211	205	0.2	0.2	6.299	A
	Exit	1	1		240	23.37	240	236	0.0	0.0	0.046	A
		2	1		240		240	236	0.0	0.0	0.000	A
C	Entry	1	1	A, B	506		506	506	0.2	0.3	1.868	A
		2	1	(A, B)	505	56.64	506	507	0.2	0.4	2.990	A
	Exit	1	1		400	56.64	400	395	0.0	0.0	0.101	A
		2	1		400		400	395	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	515		515	528	0.0	0.0	0.017	A
		2	1	(B, C)	515	7.71	515	528	0.0	0.0	0.021	A
	Exit	1	1		653	7.71	653	630	0.0	0.0	0.021	A
		2	1		653		653	630	0.0	0.0	0.000	A
B	Entry	1	1	A, C	248		247	243	0.7	1.1	14.018	B
		2	1	(A, C)	251	28.63	248	245	0.2	1.1	12.239	B
	Exit	1	1		289	28.63	289	299	0.0	0.0	0.062	A
		2	1		289		289	299	0.0	0.0	0.000	A
C	Entry	1	1	A, B	673		674	651	0.3	0.3	1.941	A
		2	1	(A, B)	668	69.36	673	651	0.4	0.6	4.315	A
	Exit	1	1		494	69.36	495	493	0.0	0.0	0.107	A
		2	1		495		495	493	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	536		535	525	0.0	0.0	0.020	A
		2	1	(B, C)	536	7.71	536	525	0.0	0.0	0.015	A
	Exit	1	1		628	7.71	628	635	0.0	0.0	0.027	A
		2	1		628		628	635	0.0	0.0	0.000	A
B	Entry	1	1	A, C	254		254	255	1.1	1.1	14.372	B
		2	1	(A, C)	254	28.63	254	255	1.1	1.0	15.506	C
	Exit	1	1		307	28.63	307	297	0.0	0.0	0.059	A
		2	1		307		307	297	0.0	0.0	0.000	A
C	Entry	1	1	A, B	640		639	645	0.3	0.3	1.966	A
		2	1	(A, B)	640	69.36	640	644	0.6	0.6	3.704	A
	Exit	1	1		494	69.36	494	492	0.0	0.0	0.126	A
		2	1		494		494	492	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	432		432	429	0.0	0.0	0.015	A
		2	1	(B, C)	432	6.29	432	429	0.0	0.0	0.016	A
	Exit	1	1		510	6.29	510	515	0.0	0.0	0.014	A
		2	1		510		510	515	0.0	0.0	0.000	A
B	Entry	1	1	A, C	205		205	206	1.1	0.8	12.189	B
		2	1	(A, C)	204	23.37	205	204	1.0	0.4	8.761	A
	Exit	1	1		240	23.37	240	243	0.0	0.0	0.051	A
		2	1		240		240	243	0.0	0.0	0.000	A
C	Entry	1	1	A, B	520		519	522	0.3	0.3	1.872	A
		2	1	(A, B)	521	56.64	520	522	0.6	0.4	2.854	A
	Exit	1	1		407	56.64	406	399	0.0	0.0	0.107	A
		2	1		406		406	399	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	Entry	1	1	B, C	360		360	359	0.0	0.0	0.007	A
		2	1	(B, C)	360	5.27	360	359	0.0	0.0	0.010	A
	Exit	1	1		432	5.27	432	435	0.0	0.0	0.010	A
		2	1		432		432	435	0.0	0.0	0.000	A
B	Entry	1	1	A, C	170		168	170	0.8	0.7	11.031	B
		2	1	(A, C)	170	19.57	170	170	0.4	0.3	4.519	A
	Exit	1	1		205	19.57	205	203	0.0	0.0	0.048	A
		2	1		205		205	203	0.0	0.0	0.000	A
C	Entry	1	1	A, B	442		442	443	0.3	0.2	1.831	A
		2	1	(A, B)	442	47.43	442	442	0.4	0.3	2.062	A
	Exit	1	1		332	47.43	332	334	0.0	0.0	0.067	A
		2	1		332		332	334	0.0	0.0	0.000	A